

31 October 2024

Market Announcements  
Australian Securities Exchange  
Level 4, 20 Bridge Street  
Sydney  
NSW 2000  
AUSTRALIA

### UPDATE ON RESOURCES AND RESERVES

Bathurst Resources Limited (ASX: BRL) advises an update to resources and reserves. Total New Zealand resources<sup>1</sup> have decreased from 162.1 million tonnes ("Mt") to 122.8 Mt at 11 September 2024.

Notable changes year-on-year have been:

- The surrender of the North Buller Permits has resulted in the reduction of the total resource by 45.4Mt (ref ASX: BRL Additional disclosure on material changes in resources 31 October 2024).
- Updated resource model for Deep Creek has decreased the resource by 5.1Mt (ref ASX: BRL Additional disclosure on material changes in resources 31 October 2024).
- The South Buller resource has increased by 6.2Mt due to an updated resource model, review of coal washability and further technical studies have resulted in the resource being reported to a revised ash cut-off (ref ASX: BRL Additional disclosure on material changes in resources 31 October 2024).
- Updated resource model for Mount Frederick South has increased the Upper Waimangaroa resource by 2.7Mt.
- Rotowaro resource has increased by 2.2Mt primarily due to the inclusion of Awaroa West resources.
- Updated resource model, following an extensive exploration program (48 drill holes), at Rotowaro North has increased the resource by 1.9Mt.
- The Stockton resource has been depleted by 1.0Mt.

The Whareatea West Coal Reserves are the subject of Pre- Feasibility study update that is ongoing. No reserves have been declared for 2024 while further technical evaluations are progressed. Total marketable reserves declared in 2023 were 3.0Mt (ref ASX: BRL Additional disclosure on material changes in resources 31 October 2024). The 0.6Mt decrease in Marketable Coal Reserve tonnes for the Upper Waimangaroa is due to mining depletion and an updated pit design, taking into account new geotechnical constraints. There have been no further significant changes to the reserve statement other than mining depletion.

The Tenas Projects Coal Resources were first announced following BRL's acquisition announcement (ref ASX: BRL 5 September 2023). The Coal Resources are based on the Allegiance Coal Ltd updated resource model published in 2018. The Company confirms that it is not aware of any new information or data that materially affects the information included in the June 2018 Announcement and that all material assumptions and technical

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<sup>1</sup> Resource values are presented here as the sum of 100 percent of Bathurst owned permits and 100 percent of BT Mining permits. In the supporting tables Bathurst's ownership percentage against each permit area is clearly documented.

parameters underpinning the estimates continue to apply and have not materially changed. Coal Reserves are not reported and BRL is undertaking an update to the DFS.

The documents appended<sup>2</sup> have been generated as JORC Table 1 disclosures as required under clause 5 of the JORC (2012) code. The Table 1 documents support both first release and materially changed mineral resources or ore reserves for significant Bathurst projects.  
On behalf of Bathurst Resources Limited.

A handwritten signature in blue ink, appearing to read 'R. Tacon', with a stylized flourish at the end.

Richard Tacon, CEO

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<sup>2</sup> Note that the image quality in the attached document has been reduced in order to meet file size limits set by the ASX. A copy of the high-resolution version of this document can be obtained by contacting Bathurst (subject to the requestor's email account file size restrictions).

# Coal resources and reserves

At 11 September 2024

Table 1 – Resource tonnes (rounded to the nearest million tonnes)

Area	Bathurst ownership	2024 Measured resource	2023 Measured resource	Change	2024 Indicated resource	2023 indicated resource	Change	2024 Inferred resource	2023 Inferred resource	Change	2024 Total resource	2023 Total resource	Change
Escarpment <sup>(5 &amp; 7)</sup>	100%	4.0	19	21	1.1	12	(0.1)	0.5	0.7	(0.2)	5.6	3.8	1.8
Cascade <sup>(5)</sup>	100%	0.5	0.5	0.0	0.6	0.6	0.0	0.3	0.3	0.0	1.4	1.4	0.0
Deep Creek <sup>(5 &amp; 7)</sup>	100%	0.0	6.2	(6.2)	0.6	3.1	(2.5)	5.2	1.6	3.6	5.8	10.9	(5.1)
Coalbrookdale <sup>(5)</sup>	100%	0.0	0.0	0.0	1.7	1.7	0.0	3.1	3.1	0.0	4.8	4.8	0.0
Whareatea West <sup>(5 &amp; 7)</sup>	100%	12.7	6.2	6.5	6.5	7.8	(1.3)	1.9	2.7	(0.8)	21.1	16.7	4.4
Sullivan <sup>(5)</sup>	100%	1.9	1.9	0.0	3.0	3.0	0.0	3.3	3.3	0.0	8.2	8.2	0.0
<b>South Buller totals</b>	<b>100%</b>	<b>19.1</b>	<b>16.7</b>	<b>2.4</b>	<b>13.5</b>	<b>17.4</b>	<b>(3.9)</b>	<b>14.3</b>	<b>11.7</b>	<b>2.6</b>	<b>46.9</b>	<b>45.8</b>	<b>1.1</b>
Stockton <sup>(1,3,4 &amp; 5)</sup>	65%	2.5	2.5	0.0	5.9	6.6	(0.7)	5.3	5.6	(0.3)	13.7	14.7	(1.0)
Upper Waimangaroa (Met) <sup>(1,3,4 &amp; 5)</sup>	65%	0.2	0.4	(0.2)	14.7	13.2	1.5	33.0	32.0	1.0	47.9	45.6	2.3
Upper Waimangaroa (Thermal) <sup>(1 &amp; 5)</sup>	65%	0.0	0.0	0.0	0.6	0.6	0.0	0.9	0.9	0.0	1.5	1.5	0.0
<b>Stockton totals</b>	<b>65%</b>	<b>2.7</b>	<b>2.9</b>	<b>(0.2)</b>	<b>21.2</b>	<b>20.4</b>	<b>0.8</b>	<b>39.2</b>	<b>38.5</b>	<b>0.7</b>	<b>63.1</b>	<b>61.8</b>	<b>1.3</b>
Millerton North <sup>(5)</sup>	100%	0.0	0.0	0.0	0.0	1.8	(1.8)	0.0	3.5	(3.5)	0.0	5.3	(5.3)
<b>North Buller Totals <sup>(5)</sup></b>	<b>100%</b>	<b>0.0</b>	<b>2.4</b>	<b>(2.4)</b>	<b>0.0</b>	<b>7.2</b>	<b>(7.2)</b>	<b>0.0</b>	<b>10.6</b>	<b>(10.6)</b>	<b>0.0</b>	<b>20.2</b>	<b>(20.2)</b>
Blackburn <sup>(5)</sup>	100%	0.0	0.0	0.0	0.0	5.8	(5.8)	0.0	14.1	(14.1)	0.0	19.9	(19.9)
<b>North Buller totals</b>	<b>100%</b>	<b>0.0</b>	<b>2.4</b>	<b>(2.4)</b>	<b>0.0</b>	<b>14.8</b>	<b>(14.8)</b>	<b>0.0</b>	<b>28.2</b>	<b>(28.2)</b>	<b>0.0</b>	<b>45.4</b>	<b>(45.4)</b>
<b>Buller Coal Project totals</b>	<b>100%</b>	<b>21.8</b>	<b>22.0</b>	<b>(0.2)</b>	<b>34.7</b>	<b>52.6</b>	<b>(17.9)</b>	<b>53.5</b>	<b>78.4</b>	<b>(24.9)</b>	<b>110.0</b>	<b>153.0</b>	<b>(43.0)</b>
Takitimu <sup>(2,3 &amp; 5)</sup>	100%	0.1	0.1	0.0	0.6	1.1	(0.5)	0.0	0.0	0.0	0.7	1.2	(0.5)
New Brighton <sup>(2 &amp; 5)</sup>	100%	0.1	0.1	0.0	0.2	0.2	0.0	0.2	0.2	0.0	0.5	0.5	0.0
<b>Southland/Canterbury totals</b>	<b>100%</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>0.8</b>	<b>1.3</b>	<b>(0.5)</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>	<b>1.2</b>	<b>1.7</b>	<b>(0.5)</b>
Rotowaro <sup>(1,2,3 &amp; 5)</sup>	65%	1.6	0.4	1.2	1.6	0.7	0.9	1.1	1.0	0.1	4.3	2.1	2.2
Rotowaro North <sup>(1,2,6 &amp; 7)</sup>	65%	0.9	0.3	0.6	3.5	0.9	2.6	0.9	2.2	(1.3)	5.3	3.4	1.9
Maramarua <sup>(1,2 &amp; 3)</sup>	65%	1.3	1.6	(0.3)	0.5	0.3	0.2	0.0	0.0	0.0	1.8	1.9	(0.1)
<b>North Island totals</b>	<b>65%</b>	<b>3.8</b>	<b>2.3</b>	<b>1.5</b>	<b>5.6</b>	<b>1.9</b>	<b>3.7</b>	<b>2.0</b>	<b>3.2</b>	<b>(1.2)</b>	<b>11.4</b>	<b>7.4</b>	<b>4.0</b>
<b>Total</b>		<b>25.8</b>	<b>24.5</b>	<b>1.3</b>	<b>41.1</b>	<b>55.8</b>	<b>(14.7)</b>	<b>55.7</b>	<b>81.8</b>	<b>(26.1)</b>	<b>122.6</b>	<b>162.1</b>	<b>(39.5)</b>

## Note

All resources and reserves quoted in this release are reported in terms as defined in the 2012 Editions of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("JORC").

In current resource assessments the JORC code is applied to coal by replacing terms such as 'minerals' by 'coal', and 'grade' by 'quality'. The measured and indicated coal resources are inclusive of those coal reserves modified to produce the Run of Mine (RoM) coal reserves. Rounding of tonnes as required by reporting guidelines may result in summation differences between tonnes and coal quality. All resources quoted are reported as of 11 September 2024.

# Coal resources and reserves

At 11 September 2024

**Table 1 – Resource tonnes (rounded to the nearest million tonnes) continued****Note**

- <sup>1</sup> Stockton, Upper Waimangaroa, Rotowaro, Ruawaro and Maramarua are owned by BT Mining Limited (65% Bathurst Resources Limited / 35% Talley's Energy Limited).
- <sup>2</sup> Resource tonnages have been calculated using a density value calculated using approximated in-ground moisture values (Preston and Sanders method).
- <sup>3</sup> Mining depletion offset by update to geological model.
- <sup>4</sup> Update to geological model combined with a review of potential economic recovery.
- <sup>5</sup> Stockton, Deep Creek, Upper Waimangaroa, Escarpment, Cascade, Coalbrookdale, Sullivan, Rotowaro, Takitimu and New Brighton density values are based on air-dried ash density regressions.
- <sup>6</sup> Resource classification upgraded following model update.
- <sup>7</sup> Resource model update.
- <sup>8</sup> Exploration permit surrendered.
- <sup>9</sup> Mining permit surrendered.

**Table 2 – Average coal quality - measured**

Area	Bathurst ownership	Measured resource (Mt)	Ash % (AD)	Sulphur % (AD)	Volatile matter % (AD)	Fixed carbon % (AD)	CSN	Inherent moisture	In situ moisture	Calorific value (AD)
Escarpment	100%	4.0	16.1	0.7	33.3	49.6	7.1	1.0	5.5	28.8
Cascade	100%	0.5	15.5	1.7	39.3	42.6	4.5	2.6	7.6	30.8
Deep Creek	100%	0.0	-	-	-	-	-	-	-	-
Coalbrookdale	100%	0.0	-	-	-	-	-	-	-	-
Whareatea West	100%	12.7	27.4	0.9	23.0	48.9	6.5	0.6	6.3	25.4
Sullivan	100%	1.9	4.0	1.1	31.7	59.2	8.5	1.0	6.6	34.3
Stockton	65%	2.5	25.1	2.0	26.7	46.5	7.5	1.6	-	27.2
Upper Waimangaroa (Met)	65%	0.2	3.6	0.8	38.6	49.9	5.6	3.3	-	31.4
Upper Waimangaroa (Thermal)	65%	0.0	-	-	-	-	-	-	-	-
Takitimu	100%	0.1	18.0	0.4	38.8	27.1	N/A	16.2	26.8	21.6
New Brighton	100%	0.1	10.7	0.4	32.6	39.7	N/A	17.0	23.0	21.7
Rotowaro	65%	1.6	6.8	0.3	36.7	43.9	N/A	12.7	17.4	23.9
Rotowaro North	65%	0.9	5.9	0.3	36.4	43.7	N/A	13.9	21.1	24.4
Maramarua	65%	1.3	5.0	0.2	36.7	38.2	N/A	20.1	24.0	21.8



# Coal resources and reserves

At 11 September 2024

Table 3 - Average coal quality - indicated

Area	Bathurst ownership	Indicated resource (Mt)	Ash % (AD)	Sulphur % (AD)	Volatile matter % (AD)	Fixed carbon % (AD)	CSN	Inherent moisture	In situ moisture	Calorific value (AD)
Escarpment	100%	1.1	12.6	1.2	35.2	51.1	7.2	1.2	5.5	29.8
Cascade	100%	0.6	14.8	1.8	38.3	44.5	4.0	2.4	8.0	29.3
Deep Creek	100%	0.6	3.8	1.6	35.2	58.8	8.7	2.2		30.3
Coalbrookdale	100%	1.7	12.7	1.6	35.6	50.1	5.0	1.7	5.3	29.7
Whareatea West	100%	6.5	30.5	1.0	21.1	47.8	6.0	0.7	6.1	24.2
Sullivan	100%	3.0	5.1	1.3	30.0	59.4	8.5	1.0	6.6	33.9
Stockton	65%	5.9	6.3	3.4	35.6	56.9	7.0	1.2	-	33.2
Upper Waimangaroa (Met)	65%	14.7	4.6	2.1	38.6	49.9	5.6	3.3	-	30.5
Upper Waimangaroa (Thermal)	65%	0.6	6.5	3.9	37.3	52.1	0.0	4.1	-	27.7
Takitimu	100%	0.6	10.2	0.3	36.6	35.6	N/A	17.7	26.0	22.1
New Brighton	100%	0.2	10.4	0.4	32.1	41.7	N/A	15.7	22.2	21.1
Rotowaro	65%	1.6	7.1	0.3	36.7	43.5	N/A	12.6	17.3	23.8
Rotowaro North	65%	3.5	5.7	0.3	36.8	44.6	N/A	12.9	20.5	24.6
Maramarua	65%	0.5	5.6	0.2	36.4	37.9	N/A	20.2	24.1	21.6

# Coal resources and reserves

At 11 September 2024

Table 4 - Average coal quality - inferred

Area	Bathurst ownership	Inferred resource (Mt)	Ash % (AD)	Sulphur % (AD)	Volatile matter % (AD)	Fixed carbon % (AD)	CSN	Inherent moisture	In situ moisture	Calorific value (AD)
Escarpment	100%	0.5	13.5	1.5	35.0	50.3	6.8	1.2	5.4	29.5
Cascade	100%	0.3	16.5	2.2	36.7	44.7	4.0	2.1	6.7	27.6
Deep Creek	100%	5.2	5.6	3.1	36.8	55.6	8.6	2.0	-	29.7
Coalbrookdale	100%	3.1	12.8	1.8	35.6	49.9	5.0	1.7	5.5	29.5
Whareatea West	100%	1.9	26.6	0.9	23.1	49.5	6.5	0.8	6.6	25.7
Sullivan	100%	3.3	5.6	1.3	30.6	59.4	8.5	1.0	6.5	33.7
Stockton	65%	13.7	5.9	3.4	34.4	58.4	8.0	1.2	-	33.2
Upper Waimangaroa (Met)	65%	33.0	5.9	2.2	38.9	52.2	4.8	3.5	-	30.4
Upper Waimangaroa (Thermal)	65%	0.9	4.1	1.6	34.7	54.7	2.3	6.6	-	27.8
Takitimu	100%	0.0	14.2	0.4	37.5	33.4	N/A	14.8	23.5	20.8
New Brighton	100%	0.2	11.0	0.4	33.6	39.6	N/A	15.9	22.2	22.0
Rotowaro	65%	1.1	7.1	0.3	36.8	43.3	N/A	12.8	17.4	23.8
Rotowaro North	65%	0.9	6.4	0.3	36.1	43.7	N/A	13.8	21.2	24.1
Maramarua	65%	0.0	9.1	0.2	37.1	36.4	N/A	17.5	21.2	21.5

# Coal resources and reserves

At 11 September 2024

Table 5 – Coal reserves (ROM) tonnes

ROM coal area	Bathurst ownership	Proved (Mt)			Probable (Mt)			Total (Mt)		
		2024	2023	Change	2024	2023	Change	2024	2023	Change
Whareatea West <sup>(G)</sup>	100%	0.0	0.0	0.0	0.0	4.7	(4.7)	0.0	4.7	(4.7)
Stockton <sup>(A,B,F &amp; D)</sup>	65%	0.2	0.2	0.0	3.2	3.4	(0.2)	3.4	3.6	(0.2)
Upper Waimangaroa <sup>(A,B,F,I &amp; J)</sup>	65%	0.2	0.4	(0.2)	1.1	1.6	(0.5)	1.3	2.0	(0.7)
Takitimu <sup>(C,E &amp; F)</sup>	100%	0.0	0.0	0.0	0.4	0.7	(0.3)	0.4	0.7	(0.3)
Rotowaro <sup>(A,C,D,E,F &amp; H)</sup>	65%	0.4	0.4	0.0	0.9	0.7	0.2	1.3	1.1	0.2
Maramarua <sup>(A,C &amp; E)</sup>	65%	0.9	1.1	(0.2)	0.2	0.1	0.1	1.1	1.2	(0.1)
<b>Total</b>		<b>1.7</b>	<b>2.1</b>	<b>(0.4)</b>	<b>5.8</b>	<b>11.2</b>	<b>(5.4)</b>	<b>7.5</b>	<b>13.3</b>	<b>(5.8)</b>

Table 6 – Marketable coal reserves tonnes

ROM coal area	Bathurst ownership	Proved (Mt)			Probable (Mt)			Total (Mt)		
		2024	2023	Change	2024	2023	Change	2024	2023	Change
Whareatea West <sup>(G)</sup>	100%	0.0	0.0	0.0	0.0	3.0	(3.0)	0.0	3.0	(3.0)
Stockton <sup>(A,B,F &amp; D)</sup>	65%	0.1	0.2	(0.1)	2.8	2.8	0.0	2.9	3.0	(0.1)
Upper Waimangaroa <sup>(A,B,F,I &amp; J)</sup>	65%	0.2	0.4	(0.2)	1.0	1.4	(0.4)	1.2	1.8	(0.6)
Takitimu <sup>(C,E &amp; F)</sup>	100%	0.0	0.0	0.0	0.3	0.7	(0.4)	0.3	0.7	(0.4)
Rotowaro <sup>(A,C,D,E,F &amp; H)</sup>	65%	0.4	0.4	0.0	0.8	0.6	0.2	1.2	1.0	0.2
Maramarua <sup>(A,C &amp; E)</sup>	65%	0.9	1.1	(0.2)	0.2	0.1	0.1	1.1	1.2	(0.1)
<b>Total</b>		<b>1.6</b>	<b>2.1</b>	<b>(0.5)</b>	<b>5.1</b>	<b>8.6</b>	<b>(3.5)</b>	<b>6.7</b>	<b>10.7</b>	<b>(4.0)</b>

Table 7 – Marketable coal reserves – proved and probable average coal quality

Area	Bathurst ownership	Proved marketable						Probable marketable					
		Mt	Ash %	Sulphur %	VM %	CSN	CV (MJ/Kg)	Mt	Ash %	Sulphur %	VM %	CSN	CV (MJ/Kg)
Whareatea West <sup>(G)</sup>	100%	0.0	-	-	-	-	-	0.0	-	-	-	-	-
Stockton <sup>(A,B,F &amp; D)</sup>	65%	0.1	6.8	3.0	33.2	6.5	33.2	2.8	4.2	3.3	35.3	8.0	34.1
Upper Waimangaroa <sup>(A,B,F,I &amp; J)</sup>	65%	0.2	2.9	0.7	37.5	4.5	31.7	1.0	3.2	1.2	37.6	4.0	31.6
Takitimu <sup>(C,E &amp; F)</sup>	100%	0.0	11.0	0.3	34.7	N/A	20.8	0.3	8.2	0.2	35.4	N/A	21.5
Rotowaro <sup>(A,C,D,E,F &amp; H)</sup>	65%	0.4	6.3	0.3	37.4	N/A	23.1	0.8	6.4	0.3	37.1	N/A	23.8
Maramarua <sup>(A,C &amp; E)</sup>	65%	0.9	5.1	0.2	37.5	N/A	22.1	0.2	5.9	0.2	37.3	N/A	21.9

# Coal resources and reserves

At 11 September 2024

**Table 8 – Marketable coal reserves – total average quality**

Area	Bathurst ownership	Coal type	Mining method	Mt	Ash %	Sulphur %	VM %	CSN	CV (MJ/Kg)
Whareatea West <sup>(G)</sup>	100%	Met	Open pit	0.0	-	-	-	-	-
Stockton <sup>(A, B, F &amp; D)</sup>	65%	Met	Open pit	2.9	4.4	2.9	34.1	8.0	33.7
Upper Waimangaroa (Met) <sup>(A, B, F, I &amp; J)</sup>	65%	Met	Open pit	12	3.2	1.1	37.6	4.0	31.6
Takitimu <sup>(C, E &amp; D)</sup>	100%	Thermal	Open pit	0.4	8.3	0.2	35.3	N/A	21.5
Rotowaro <sup>(A, C, D, E, F &amp; H)</sup>	65%	Thermal	Open pit	1.1	6.4	0.3	37.2	N/A	23.6
Maramarua <sup>(A, C &amp; E)</sup>	65%	Thermal	Open pit	1.1	5.3	0.2	37.5	N/A	22.1

**Note**

All reserves quoted in this release are reported in terms as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' as published by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("JORC").

The measured and indicated coal resources are inclusive of coal reserve (Run of Mine (ROM) tonnes), include consideration of standard mining factors. Rounding of tonnes as required by reporting guidelines may result in summation differences between tonnes and coal quality. All ore reserves quoted are reported as of 11 September 2024.

<sup>A</sup> Stockton, Upper Waimangaroa, Rotowaro and Maramarua are owned by BT Mining Limited in which Bathurst has a 65% equity share.

<sup>B</sup> Stockton and Upper Waimangaroa density values are based on air-dried ash density regressions.

<sup>C</sup> In-ground total moisture is based on long term average coal production data.

<sup>D</sup> Reserve tonnages have been calculated using a density value calculated using approximated in-ground moisture values (Preston and Sanders method) and as such reserve tonnages quoted in this report are wet tonnes.

<sup>E</sup> Decrease in Coal Reserves due to mining depletion.

<sup>F</sup> Variation due to model update.

<sup>G</sup> Reserves exclude previously reported Whareatea West Export. These have been removed as Pre-Feasibility Study is being updated.

<sup>H</sup> Coal Reserves increased due to a change in resource classification.

<sup>I</sup> Mining Depletion offset by updated financial assessment

<sup>J</sup> Mining Depletion offset by updated geotechnical assessment.

**Resource quality**

Bathurst is not aware of any information to indicate that the quality of the identified resources will fall outside the range of specifications for reserves as indicated in the above table. Further resource and reserve information can be found on Bathurst's website at [www.bathurst.co.nz](http://www.bathurst.co.nz).

**Mineral resource and ore reserves governance and estimation process**

Resources and reserves are estimated by internal and external personnel, suitably qualified as Competent Persons under the Australasian Institute of Mining and Metallurgy, reporting in accordance with the requirements of the JORC code, industry standards and internal guidelines.

All resource estimates and supporting documentation are reviewed by a Competent Person either employed directly by Bathurst or employed as an external consultant. If there is a material change in an estimate of a resource, or if the estimate is an inaugural resource, the estimate and all relevant supporting documentation is further reviewed by an external suitably qualified Competent Person.

All reserve estimates are prepared in conjunction with prefeasibility, feasibility and life of mine studies which consider all material factors.

All resource and reserve estimates are then further reviewed by suitably qualified internal management.

The resources and reserves statements included in Bathurst's 2024 Annual Report have been reviewed by qualified internal and external Competent Persons, and internal management, prior to their inclusion.

**Reporting date**

The resource and reserves have been reported at 11 September 2024 rather than 30 June 2024 due to the full surrender of the Buller Coal Limited exploration and mining permits in September. The surrender of the permits noted in the tenement schedule resulted in an overall reduction in resource and reserves of 45.4Mt from the 30 June balance of 168.0Mt.

# Competent person statements

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The information on this report that relates to mineral reserves for Whareatea West, Takitimu, Rotowaro and Maramarua is based on information compiled by Sue Bonham-Carter, who is a full time employee of BCP Associates (New Zealand) Limited and is a Chartered Professional and member of the Australasian Institute of Mining and Metallurgy and member of Professional Engineers and Geoscientists of British Columbia, Canada. Ms Bonham-Carter has a BSc Engineering (Mining) (Hons) from the Queen's University, Canada. Ms Bonham-Carter has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ms Bonham-Carter consents to the inclusion in this report of the matters based on her information in the form and context in which it appears above.

The information in this report that relates to exploration results and mineral resources for Takitimu, New Brighton, Rotowaro, Rotowaro North and Maramarua is based on information compiled by Eden Sinclair as a Competent Person who is a full time employee of Bathurst Resources Limited and is a Chartered Professional and member of the Australasian Institute of Mining and Metallurgy. Mr Sinclair has a BSc in geology from the University of Canterbury. Mr Sinclair has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Sinclair consents to the inclusion in this report of the matters based on his information in the form and context in which it appears above.

The information in this report that relates to exploration results and mineral resources for Stockton, Upper Waimangaroa, Deep Creek, Escarpment, Sullivan, Cascade, Coalbrookdale, Whareatea West, Millerton North, North Buller and Blackburn is based on information compiled by Mark Lionnet as a Competent Person who is a full time employee of BT Mining Limited and is a member of the Australasian Institute of Mining and Metallurgy. Mr Lionnet has a BSc (Hons) majoring in geology from the University of Witwatersrand. Mr Lionnet has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Lionnet consents to the inclusion in this report of the matters based on his information in the form and context in which it appears above.

The information on this report that relates to mineral reserves for Stockton and Upper Waimangaroa is based on information compiled by Ian Harvey who is a full time employee of Bathurst Resources Limited and is a member of the Australasian Institute of Mining and Metallurgy. Mr Harvey has a Bachelors in Mining Engineering from the University of Otago. Mr Harvey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Harvey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears above.

# Coal resources and reserves

At 11 September 2024

## Tenas Resource Statement

**Table 9 – Tenas Project coal resource and average coal quality**

Area	Class	Bathurst Mineral Ownership	Mt	Ash % (ADB)	Sulphur % (ADB)	Fixed Carbon % (ADB)	Inherent Moisture	Calorific Value (MJ/kg)
Tenas	Indicated	100%	9.4	16.8	1.4	57.7	1.0	28.5
Tenas	Measured	100%	27.1	16.7	1.4	57.8	1.0	28.5
<b>Tenas<sup>1</sup></b>	<b>Total</b>	<b>100%</b>	<b>36.5</b>	<b>16.7</b>	<b>1.4</b>	<b>57.8</b>	<b>1.0</b>	<b>28.5</b>

### Competent person statements

The information on this report that relates to mineral resources for Tenas deposit is based on information compiled by Ron Parent, who is a full time employee of Faultblock Geological and is a registered Professional Geoscientist (P. Geo.) of the Professional Engineers and Geoscientists of British Columbia, Canada. Ron Parent has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Ron Parent consents to the inclusion in this report of the matters based on his information in the form and context in which it appears above.

The Tenas Resource Statement is based on the October 2018 resource estimate by Telkwa Coal Ltd.

1. Reserves are under review following update to the 2019 Feasibility study.

# JORC Code, 2012 Edition – Table 1 Report for the Denniston Plateau 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Multiple campaigns of data acquisition have been carried out on the Denniston Plateau over the past century.</li> <li>Modern exploration campaigns include data from 2010: <ul style="list-style-type: none"> <li>341 PQ-HQ Triple Tube Core (TTC) holes.</li> <li>3 Large Diameter Triple Core holes.</li> <li>96 production blast holes.</li> <li>13 outcrop trenches.</li> <li>Down-hole geophysics are available for 211 of these modern drillholes.</li> </ul> </li> <li>Historic data includes: <ul style="list-style-type: none"> <li>Five reverse circulation holes 2009-2010.</li> <li>67 PQ-HQ TTC holes from 1984-2010.</li> <li>23 NQ TTC holes from 1975-1978.</li> <li>74 rotary wash drillholes from 1948-1961.</li> <li>Three outcrop trenches.</li> <li>49 historic drillholes of various drilling methods.</li> <li>40 holes of this dataset have down-hole geophysics data available.</li> </ul> </li> <li>Recent drilling has aimed to infill areas lacking data and to test reliability of historic data. Drilling has been concentrated on areas deemed closer to production, therefore tighter drill spacing exists in Cascade and Escarpment than Whareatea West and Coalbrookdale.</li> <li>Coal sampling is based on the standardised BRL coal sampling procedures.</li> <li>Coal quality ply samples have been selected on all coal logged by a geologist with 95% confidence that the ash will fall below 50%. Material with an estimated ash over 50% was not sampled unless the material was a sandstone parting of &lt; 0.1m in thickness within a coal seam whereby it would be included within a larger ply sample.</li> <li>Ply samples were generally taken over intervals no greater than 0.5m.</li> <li>All analytical data has been assessed and verified before inclusion into the resource model.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>All BRL managed drilling campaigns have utilised the following drilling methods: <ul style="list-style-type: none"> <li>Full PQ Triple Tube Core.</li> <li>HQ Triple Tube Core only where necessary.</li> <li>Open-holed overburden where applicable.</li> <li>Logged production blast holes using top head hammer blast rig.</li> </ul> </li> <li>Historic drilling techniques include: <ul style="list-style-type: none"> <li>PQ Triple Tube Core.</li> <li>HQ Triple Tube Core.</li> <li>NQ Triple Tube Core.</li> <li>Open-holed.</li> <li>Rotary wash.</li> <li>Reverse circulation.</li> </ul> </li> <li>All exploration drillholes were collared vertically.</li> <li>PQ sized drilling was utilised to maximise the core recovery.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Core recovery was measured by the logging geologist for each drillers' run (usually 1.5m) in each drillhole. If recovery of coal intersections dropped below 85% the drillhole was re-drilled. Drillers were paid an incentive if coal recovery was above 90%.</li> <li>In some instances the recovery of thin rider seams (&lt; 0.5m) was poor due to the soft friable nature of the coal. Therefore the sample dataset for the two rider seams was not as evenly spatially distributed as the main seam.</li> <li>Average total core recovery over the modern drilling campaigns was 95.6% with core recovery of coal at 93.6%.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Where small intervals of coal were lost, and were confirmed by geophysics, ash values were estimated using the results of overlying and underlying ply samples and the relative response of the open-hole density trace.</li> <li>Geochemical sampling for overburden characterisation was also completed by taking representative samples of core on a lithological basis with a maximum sample length of 5m.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>BRL has developed a standardised core logging procedure and all core logging completed by BRL and its contractors has followed this standard.</li> <li>All modern drill core has been geologically and geotechnically logged by geologists under the supervision and guidance of a team of experienced exploration geologists.</li> <li>As much data as possible has been logged and recorded including geotechnical and rock strength data.</li> <li>All core was photographed prior to sampling. Depth metre marks and ply intervals are noted on core in each photograph.</li> <li>The geophysical logging company maintained and calibrated all tools as per their internal calibration procedures. Additionally, geophysics equipment was calibrated and tested using a calibration hole on the plateau with known depth to coal, thickness and quality.</li> <li>BRL aimed to geophysically log every drillhole that intersected coal providing hole conditions and operational constraints allowed. The standard suite of tools run included density, dip meter, sonic, and natural gamma.</li> <li>Where drillhole conditions were poor or mine workings were intersected only in-rods density was acquired. In-rods density produced a reliable trace for use in seam correlation and depth adjustment but was not used for ash correlations.</li> <li>Down hole geophysical logs were used to aid core logging. Down hole geophysics were used to correlate coal seams, to confirm depths and thickness of coal seams and to validate drillers' logs. Geophysics were also used to accurately calculate recovery rates of coal.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>For all exploration data acquired by BRL, an in-house detailed sampling procedure is used. Sampling and sample preparation were consistent with international coal sampling methodology.</li> <li>Ply samples include all coal recovered for the interval of the sample. Core was not cut or halved. Ply sample intervals were generally 0.5m unless dictated by thin split or parting thickness.</li> <li>All drilling in the recent campaigns has been completed using triple tube cored holes. No chip or RC samples were taken in these campaigns. Some historic RC and wash drilled holes have poor sampling methods and are excluded from the coal quality model.</li> <li>Assay samples were completed at the core repository after transport from drill site in core boxes. Samples were taken as soon as practicable and stored in a chiller until transport to the coal quality laboratory.</li> <li>A series of random duplicate samples representing 1.3% of the total number of samples from Buller has been completed by Verum Group Ltd (Verum - previously CRL Limited). The results of this duplicate testing were comparable to that reported by SGS New Zealand Limited (SGS).</li> </ul>



## Criteria

## Commentary

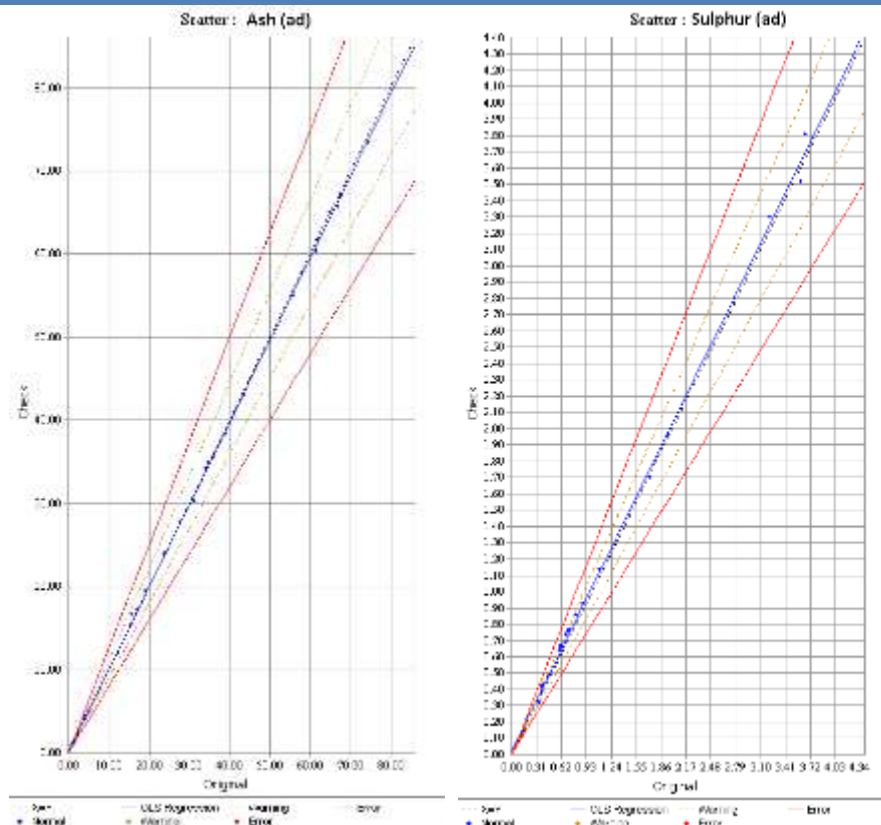


Figure 1 Scatter graphs showing the consistent results obtained for duplicate samples analysed at SGS (original) and Verum (check).

**Quality of assay data and laboratory tests**

- All coal quality testing completed for BRL has been carried out by accredited laboratory SGS.
- SGS have used the following standards for their assay test work:
  - Proximate Analysis is carried out to the ASTM 7582 standard.
  - Ash has used the standard ISO 1171.
  - Volatile matter has used the standard ISO 562.
  - Inherent moisture has used the standard ISO 5068.
  - Total sulphur analysis is carried out to the ASTM 4239 standard.
  - Crucible swell tests are completed using the ISO 501 standard.
  - Calorific value results are obtained using the ISO 1928 standard.
  - Loss on drying data is completed using the ISO 13909-4 standard.
  - Relative Density is calculated using the standard AS 1038.21.1.1.
- Verum completed much of the assay test work for samples collected prior to BRL taking over the projects.
- Verum used the following standards for their test work:
  - Inherent Moisture tests utilised the ISO 117221 standard.
  - Ash tests utilised the ISO 1171 standard.
  - Volatile matter tests utilised the ISO 562 standard.
  - Calorific value tests utilised the ISO 1928 standard.
  - Crucible swelling index testing was carried out using the ISO 501 standard.
- ALS Global have used the following standards for their analysis:
  - Hard Coal: Determination of the Crucible Swelling Number ISO 501
  - Hard Coal: Determination of Total Moisture ISO 589
  - Solid Mineral Fuels - Determination Of Ash ISO 1171
  - Solid Mineral Fuels - Determination Of Gross Calorific Value By The Bomb Calorimetric Method And Calculation Of Net Calorific Value ISO 1928
  - Hard Coals - Size Analysis By Sieving ISO 1953
  - Hard Coal - Determination And Presentation Of Float And Sink Characteristics ISO 7936
  - Solid Mineral Fuels - Hard Coal - Determination Of Moisture In The General Analysis Test Sample By Drying In Nitrogen ISO 11722

Criteria	Commentary																																				
	<ul style="list-style-type: none"> <li>○ Hard Coal And Coke - Mechanical Sampling - Part 1: General Introduction ISO 13909-01</li> <li>○ Hard Coal And Coke - Mechanical Sampling - Part 2: Coal - Sampling From Moving Streams ISO 13909-2</li> <li>○ Hard Coal And Coke - Mechanical Sampling - Part 3: Coal - Sampling From Stationary Lots ISO 13 909-3</li> <li>○ Hard Coal And Coke - Mechanical Sampling - Part 4: Coal - Preparation Of Test Samples ISO 13909-4</li> <li>○ Hard Coal And Coke - Mechanical Sampling - Part 7: Methods For Determining The Precision Of Sampling, Sample Preparation And Testing ISO 13909-7</li> <li>○ Hard Coal And Coke - Mechanical Sampling - Part 8: Methods Of Testing For Bias ISO 13909-8</li> <li>○ Coal – Proximate Analysis ISO 17246</li> <li>• SGS, Verum and ALS Global are accredited laboratories.</li> <li>• BRL has completed a total of 56 composite samples. Composite samples have been tested using the following standards:</li> </ul> <table> <tr> <th>Test Work</th><th>Standard Followed</th></tr> <tr> <td>Loss on air drying</td><td>(ISO 13909-4)</td></tr> <tr> <td>Inherent Moisture</td><td>(ASTM D 7582 mod)</td></tr> <tr> <td>Ash</td><td>(ASTM D 7582 mod)</td></tr> <tr> <td>Volatile Matter</td><td>(ASTM D 7582 mod)</td></tr> <tr> <td>Fixed Carbon</td><td>By difference</td></tr> <tr> <td>Sulphur</td><td>(ASTM D 4239)</td></tr> <tr> <td>Swelling Index</td><td>(ISO 501)</td></tr> <tr> <td>Calorific Value</td><td>(ISO 1928)</td></tr> <tr> <td>Mean Maximum Reflectance All Vitrinite (RoMax)</td><td>Laboratory Standard</td></tr> <tr> <td>Chlorine in Coal</td><td>(ASTM D4208)</td></tr> <tr> <td>Hardgrove grindability index</td><td>(ISO 5074)</td></tr> <tr> <td>Gieseler plastometer</td><td>(ASTM D 2639)</td></tr> <tr> <td>Audibert arnu dilatometer</td><td>(ISO 349)</td></tr> <tr> <td>Forms of sulphur</td><td>(AS 1038 Part 11)</td></tr> <tr> <td>Ash fusion temperatures</td><td>(ISO 540)</td></tr> <tr> <td>Ash constituents (xrf)</td><td>(ASTM D 4326)</td></tr> <tr> <td>Ultimate Analysis</td><td>(ASTM D3176-09)</td></tr> </table> <ul style="list-style-type: none"> <li>• All analysis was undertaken and reported on an air-dried basis unless stated otherwise.</li> </ul>	Test Work	Standard Followed	Loss on air drying	(ISO 13909-4)	Inherent Moisture	(ASTM D 7582 mod)	Ash	(ASTM D 7582 mod)	Volatile Matter	(ASTM D 7582 mod)	Fixed Carbon	By difference	Sulphur	(ASTM D 4239)	Swelling Index	(ISO 501)	Calorific Value	(ISO 1928)	Mean Maximum Reflectance All Vitrinite (RoMax)	Laboratory Standard	Chlorine in Coal	(ASTM D4208)	Hardgrove grindability index	(ISO 5074)	Gieseler plastometer	(ASTM D 2639)	Audibert arnu dilatometer	(ISO 349)	Forms of sulphur	(AS 1038 Part 11)	Ash fusion temperatures	(ISO 540)	Ash constituents (xrf)	(ASTM D 4326)	Ultimate Analysis	(ASTM D3176-09)
Test Work	Standard Followed																																				
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<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• Sample assay results have been cross referenced and compared against lithology logs and downhole geophysics data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Buller coalfield.</li> <li>• Anomalous assay results were investigated and, where necessary, the laboratory was contacted and a retest undertaken from sample residue.</li> <li>• Where holes were geophysical logged, verification of seam details is made through analysis of the geophysics. Otherwise this is done by physical assessment of the core and/or other drillhole samples. Assessments of coal intersections are undertaken by an internal or contract geologist, and by a senior geologist. Geophysics allows confirmation of the presence (or absence) of coal seams and accurate determination of contacts to coal seams. Density measurements are used to guide sampling and identify high ash bands.</li> <li>• 12 twinned holes have been drilled at the project with consistent results obtained between drillholes.</li> <li>• Laboratory data is imported directly into an acQuire database with no manual data entry at either the SGS laboratory or at BRL.</li> <li>• Assay results files are securely stored on a backup server.</li> <li>• Once validated, drillhole information is “locked” within the acQuire database to ensure the data</li> </ul>																																				

Criteria	Commentary
	<p>is not inadvertently compromised.</p> <ul style="list-style-type: none"> <li>Localised weathering of coal near fault zones or near outcrops can affect coal assay results. There are a number of instances where this has occurred and only ash data from these samples has been retained for modeling purposes.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Modern drillhole positions have been surveyed using Trimble RTK survey equipment.</li> <li>Some historic drill collars have been resurveyed. Some historic collars are not able to be located.</li> <li>Historic mine plans are georeferenced by locating and surveying historic survey marks, survey pegs and mine portals drawn on mine plans.</li> <li>New Zealand Trans Mercator 2000 Projection (NZTM) is used by BRL for most of its project areas. NZTM is considered a standard coordinate system for general mapping within New Zealand. Historic data has been converted from various local circuits and map grids using NZ standard cadastral conversions.</li> <li>A LiDAR survey was carried out over the Denniston Plateau in December 2011, with a repeat LiDAR survey flown over Cascade in January 2013. This LiDAR data provided very accurate topographic data used in the model. Contractors' specifications state that, for the choice of sensor and operating settings used for this project, the LiDAR sensor manufacturer's specification states 0.15m (1-sigma) horizontal accuracy and 0.1m (1-sigma) as the open ground elevation accuracy.</li> <li>Surveyed elevations of drillhole collars are validated against the LiDAR topography and ortho-corrected aerial photography.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for the Denniston Plateau project areas has been estimated by calculating the diameter required to fill the total area of the project divided by number of drillholes within that area.</li> <li>Escarpment has an average drillhole spacing of 114m.</li> <li>Whareatea West has an average drillhole spacing of 257m.</li> <li>Coalbrookdale has an average drillhole spacing of 198m.</li> <li>Cascade has an average drillhole spacing of 76m.</li> <li>Sullivan has an average drillhole spacing of 78m.</li> <li>Drillhole spacing is not the only measurement used by BRL to establish the degree of resource uncertainty and therefore the resource classification. BRL uses a multivariate approach to resource classification.</li> <li>The current drillhole spacing is deemed sufficient for coal seam correlation purposes.</li> <li>Geostatistics have been applied to the Denniston dataset with positive results being obtained. Variography results have been applied to grade estimation search parameters.</li> <li>The samples database is composited to 0.5m sample length prior to grade estimation. Any samples with composited length of less than 0.1m are not included in the estimation. Compositing starts at the top of seam and small samples are not distributed or merged.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>All exploration drilling has been completed at a vertical orientation. Deviation data was acquired by BRL during modern campaigns and showed little to no deviation in those holes. Holes without deviation plots are assumed to be vertical.</li> <li>Any deviation from vertical is not expected to have a material effect on geological understanding as the average drillhole depth in the dataset is 65m with the deepest coal intersection of 131m (at 60m depth a 1° deviation would produce a horizontal deviation at the end of hole of 1m with negligible vertical exaggeration).</li> <li>The majority of the deposit presents a shallow seam dip between 5° – 15°.</li> <li>Vertical drilling is considered to be the most suitable drilling method of assessing the coal resource on the Denniston Plateau.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Stringent sample preparation and handling procedures have been followed by BRL. Ply samples are collected and recorded from drill core, bagged and placed within a locked chiller prior to being dispatched for analysis.</li> <li>It is not considered likely that individual coal samples face a risk of theft or sabotage as coal is a bulk commodity with little value for small volumes of coal from drill core.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>BRL has reviewed the geological data available and considers the data used to produce the</li> </ul>

Criteria	Commentary
	<p>resource model is reliable and suitable for the purposes of generating a reliable resource estimate.</p> <ul style="list-style-type: none"> <li>Results of a duplicate sample testing program comparing SGS and Verum results for ply assays have shown a strong correlation with no laboratory bias.</li> <li>Senior geologists undertake audits of the sample collection and analysis.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary																														
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"><li>BCL owns and operates a number of coal exploration and mining permits on the Denniston Plateau, northwest of Westport, New Zealand.</li><li>BRL has 100% ownership in the following coal tenements on the Denniston Plateau:</li></ul>																														
	<table><tr><th>Tenement</th><th>Operation</th><th>Expiry</th></tr><tr><td>Mining Permit 51279</td><td>Escarpment</td><td>23/06/2047</td></tr><tr><td>Mining Permit 41456</td><td>Coalbrookdale</td><td>14/05/2017</td></tr><tr><td>Mining Permit 41332</td><td>Coalbrookdale</td><td>14/05/2015</td></tr><tr><td>Mining Permit 41274</td><td>Coalbrookdale</td><td>29/05/2035</td></tr><tr><td>Mining Permit 41455</td><td>Cascade</td><td>14/05/2017</td></tr><tr><td>Exploration Permit 40591</td><td>Whareatea West</td><td>19/12/2015</td></tr><tr><td>Exploration Permit 40628</td><td>Buller</td><td>10/01/2015</td></tr><tr><td>Coal Mining Licence 37161</td><td>Sullivan</td><td>31/03/2027</td></tr><tr><td>Exploration Permit 60520</td><td>Denniston</td><td>08/09/2027</td></tr></table>	Tenement	Operation	Expiry	Mining Permit 51279	Escarpment	23/06/2047	Mining Permit 41456	Coalbrookdale	14/05/2017	Mining Permit 41332	Coalbrookdale	14/05/2015	Mining Permit 41274	Coalbrookdale	29/05/2035	Mining Permit 41455	Cascade	14/05/2017	Exploration Permit 40591	Whareatea West	19/12/2015	Exploration Permit 40628	Buller	10/01/2015	Coal Mining Licence 37161	Sullivan	31/03/2027	Exploration Permit 60520	Denniston	08/09/2027
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	Exploration Permit 40628	Buller	10/01/2015																												
Coal Mining Licence 37161	Sullivan	31/03/2027																													
Exploration Permit 60520	Denniston	08/09/2027																													
<ul style="list-style-type: none"><li>BRL has submitted an application for a subsequent Mining Permit to replace EP40591 and it is reasonably expected that this permit application will be granted.</li><li>An extension of Land application for MP41332, MP51279, MP41456 and MP41455 extending the Escarpment MP51279 have been submitted to NZP&amp;M and the application is currently being processed.</li><li>A royalty payment to the Crown is payable on all coal mined from the Plateau at a rate of \$2 per tonne.</li><li>The acquisition of the Coalbrookdale permits includes a life of mine royalty based on a fixed percentage of FOB revenue.</li><li>The majority of the land on the Denniston Plateau is Crown land administered by the Department of Conservation as Stewardship Areas (Part V Section 25 Conservation Act 1987). These areas are managed to protect the natural and historic values of the region.</li><li>An access arrangement for the Escarpment project was granted by the Minister of Conservation in May 2013 and was renewed in 2023.</li><li>Coal Mining Licences confer access rights and land use consents to the Licence Holder.</li><li>Bathurst was granted resource consents for the Escarpment project by an independent panel of commissioners representing the local councils in August 2011. These resource consents were then the subject of a number of appeals. The final consents were granted in October 2013.</li><li>Production from Escarpment began in 2014 and the mine was placed in care and maintenance in May 2016.</li><li>The intent of the company is to continue to compete for other markets for this high quality coal and the company is continuing to develop plans for the export operation.</li></ul>																															
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"><li>Historic geological investigations and reports for Denniston exist, covering much of the past 125 years.</li><li>The Historic drilling database includes the following drillholes compiled from the historical data records.</li></ul>																														

**Table 1 Table listing historic drilling dataset.**

Years	Agency	Range of Collar ID	# Holes	Drilling Method	# Holes in structure model	# holes in quality model	# holes with Geophysics Available
<b>Multiple</b>	Various	200 - 254	49	Various	36	1	0
<b>1948 – 1950</b>	State Coal Mines	525 – 569A	47	Rotary wash drill	44	32	1
<b>1950 – 1951</b>	State Coal Mines	750 - 895	7	Rotary wash drill	5	3	0
<b>1957 – 1961</b>	State Coal Mines	916 - 984	20	Rotary wash drill	16	2	0
<b>1975 – 1978</b>	State Coal Mines	1070 - 1142	23	NQ triple tube core/open hole	20	12	0
<b>1984 – 1986</b>	Applied Geological Associates (AGA)	1270 - 1495	21	Open hole CSR and triple tube core	16	8	14
<b>1997</b>	Solid Energy NZ Ltd	1509 - 1512	4	PQ wash drill and triple tube core	2	2	4
<b>2005</b>	Eastern Corp	CC01 – CC07	7	PQ wash drill and triple tube core	2	1	1
<b>2005 – 2006</b>	Eastern Corp/ Restpine	WW01 – WW11	11	PQ wash drill and triple tube core	11	9	8
<b>2007</b>	L&M Coal	DEN01 – DEN05	5	HQ wash drill and triple tube core	5	4	4
<b>2008</b>	L&M Coal	DEN01A – DEN09	8	PQ wash drill and triple tube core	5	4	4
<b>2009 – 2010</b>	Eastern Corp	CC08 - CC12	5	RC	3	2	0
<b>2009 – 2010</b>	L&M Coal	DEN10 – DEN18	11	PQ wash drill and triple tube core	11	5	6
<b>2010</b>	L&M Coal	Various	3	Trenches	3	3	0

- All historic data has been checked and validated against original source documents by L&M, Golder Associates (NZ) Ltd and again by BRL staff post acquisition of the project. Where data was deemed unreliable it was removed from the relevant resource model dataset.
- Modern drilling completed by SENZ in the Sullivan Licence has been extensively validated before incorporation into the Resource model. SENZ used systems and processed in data capture that are very similar to those employed by BRL.

**Geology**

- The project is located in the Buller coalfield, New Zealand.
- The Denniston Plateau is a north west dipping plateau bounded to the west by the Papahaua Overfold/Kongahu Fault zone, and to the east by the Mt William Fault.
- The defined resource is contained within the Eocene aged Brunner Coal Measures. The coal measures consist of a fluvial sequence of fine to very coarse sandstones, siltstone, mudstone and coal seams. The deposit generally has a single extensive seam with some localised splitting of the seam. The coal thickness can be up to 12m but generally averages 4-5m vertical thickness.
- The dip of the plateau reflects the dip of the coal bearing sediments with localised exposures of basement units at structural highs and within incised gullies.
- Little to no Quaternary deposits or soils overlay the Brunner Coal Measures with overburden generally around 40-50m.
- A strong trend in coal rank exists across the deposit with coal rank increasing from east to west.

**Drillhole Information****Table 2 Table listing modern drilling dataset.**

Years	Agency	Range of Collar ID	# Holes	Drilling Method	# Holes in structure model	# Holes in quality model	# holes with Geophysics Available
<b>2010 - 2012</b>	Rochfort Coal	WW12 - WW25	14	PQ OH and Triple tube Core	14	13	12
<b>2011 - 2023</b>	Buller Coal	DEN19 - DEN291	269	PQ OH and Triple tube Core	250	231	181
<b>2011 - 2013</b>	Cascade Coal	CC13 - CC46	32	HQ/PQ OH and Triple tube Core	21	19	25
<b>2012</b>	Cascade Coal	CCT01 - CCT02	2	Trenches	2	2	0
<b>2012 - 2016</b>	Buller Coal	DENT01 – DENT29	29	Trenches	28	28	0
<b>2012-2016</b>	Cascade Coal	CCB16 – CCB60	59	Logged Production Blast holes	50	0	2
<b>2011</b>	SENZ	6000 series holes	46	PQ OH and Triple tube Core	46	46	46
<b>2013-2016</b>	Buller Coal	DENB001 – DENB184	184	Logged Production Blast holes	81	3	0
<b>2019</b>	Buller Coal	DEN272, DEN24 & DEN275	3	Large Diameter Wash Holes	3	0	3

- Exploration drilling results have not been reported in detail.
- The exclusion of this information from this report is considered not to be material to the understanding of the report.

Criteria	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>Exploration drilling results have not been reported in detail.</li> <li>The maximum ash cut off for the building the Denniston structure model was set at 50% however, some thin assay samples where ash is greater than 50% are included in the coal quality dataset due to the structure model including that interval within a coal seam.</li> <li>The Sullivan resource has been modelled applying the Stockton resource modelling procedure. An ash cut-off of 25% was used to build the structure model for Sullivan.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>All exploration drillholes have been drilled vertically and the coal seam is generally gently dipping. Therefore, seam intercept thicknesses are representative of the true seam thickness.</li> <li>Dip metre and deviation plots are available for some holes. For those without this data it is assumed that a vertical orientation is achieved and, as most coal intersections are less than 100m in depth, any deviation from vertical would produce only a very minor effect to the reported depth to coal and coal thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>The Appendix includes a number of plans that display the deposit geographically.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Exploration drilling results have not been reported. This has avoided any issues with unbalanced or biased reporting.</li> <li>The Competent Person does not believe that the exclusion of this comprehensive exploration data within this report detracts from the understanding of this report or the level of information provided.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Three PQ holes have been drilled in the south eastern corner of the Escarpment permit. These holes have been incorporated into the model update.</li> <li>Twelve PQ holes have been drilled in the Sullivan CML for the purpose of evaluating the washability of high ash feed samples. The washability results from these holes have been included in an updated wash algorithm in an updated model.</li> <li>Representative bulk samples have been collected and tested for: <ul style="list-style-type: none"> <li>Coking behavior</li> <li>Material handling properties</li> <li>Washability analysis</li> </ul> </li> <li>BRL has completed and compiled a total of 56 coal quality composite samples over the Denniston Plateau.</li> <li>A number of bulk marketing samples have been completed.</li> <li>BRL has tested 954 overburden samples for overburden classification for acid forming and neutralising potential.</li> <li>The first three large diameter drillholes in a washability program for the western margin of Whareatea West have been completed and washability test work has been finalised.</li> <li>A LIMN model was completed in February 2024 to predict performance of the Denniston coals using the current Stockton CHPP. Results from the LIMN model have been included in the update resource and mining model.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Further washability drilling and testing is planned for Whareatea West.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>All historic and legacy datasets have been thoroughly checked and validated against original logs and results tables.</li> <li>BRL utilises an acQuire database to store and maintain its geological exploration dataset.</li> <li>The acQuire database places explicit controls on certain data fields as they are entered or imported into the database such as overlapping intervals, coincident samples, prohibited sample values, standardised look-up tables for logging codes etc.</li> <li>Manual data entry of assay results is not required as results are imported directly.</li> <li>Drillhole and mapping data is exported directly into Vulcan from acQuire.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Mark Lionnet (the Competent Person) has worked for the past 17 years in the Buller coalfield.</li> <li>Mr. Lionnet is familiar with the local and regional geology and style of deposit within the South</li> </ul>



Criteria	Commentary
	Buller region.
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>BRL has confidence in the geological models and the interpretation of the available data. Confidence varies for different areas and this is reflected by the resource classification.</li> <li>BRL uses a multivariate approach to resource classification which takes into account a number of variables.</li> <li>BRL considers the amount of geological data sufficient to estimate the resource.</li> <li>Uncertainty surrounds the historic mine workings, both in the quality and quantity of coal extracted and surveying and positioning of underground workings. This is reflected in the resource classification.</li> <li>BRL has used a total of 16 synthetic holes in the structure model primarily to constrain seam thicknesses around the edges of coal pods that have been worked by historical underground mines.</li> <li>A Quaternary gravel deposit truncates the coal measures as an unconformity within the Cascade valley. This unconformity surface has been incorporated into the resource model. Some uncertainty surrounds the surface and therefore the coal resource within the area of influence. The Quaternary gravel deposit only covers an area of ~2.5Ha or &lt; 0.1% of the total resource area, much of which has already been extracted at the Cascade opencast mine.</li> <li>Effect of alternate interpretations is minimal when taken as a portion of total resources.</li> <li>A small number of digital interpretation strings are used to constrain the coal structure grids within the model. These strings are primarily located near fault boundaries.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The main coal seam varies in thickness from less than 1m thick up to 14m thickness locally.</li> <li>Depth of cover varies from 0m at outcrop to over 150m at the eastern margin of the Mt William Fault. Inferred and Indicated resources include coal up to 130m below surface, while the measured resource includes coal up to 75m below surface.</li> <li>The deposit roughly covers a 6.5km by 4.5km area. The model is bounded by the Escarpment Fault to the south, the Waimangaroa Gorge to the north, and the Mt William Fault to the east.</li> </ul>
<b>Estimation and modeling techniques</b>	<ul style="list-style-type: none"> <li>All available and reliable exploration data has been used to create geological block models which has been used for resource estimation and classification.</li> <li>All exploration drilling data is stored in acQuire and exported into a Vulcan drillhole database.</li> <li>Mapping data is stored in acQuire and exported into Vulcan.</li> <li>A horizon definition has been developed and is used in the stratigraphic modeling process.</li> <li>The model is subdivided into four distinct domains, each separated by large faults that dissect the project area. Each area is modelled for structure and grade separately.</li> <li>Vulcan is currently used to build the structure models. Grid spacing is 10m x 10m. This spacing was selected to be 1/5 of the minimum average point of observation spacing within a domain area.</li> <li>Vulcan's hybrid method was used to produce the structure model. This method triangulates a reference surface (coal roof) and then stacks the remaining horizons by adding structure thickness using inverse distance.</li> <li>The maximum triangle length for the reference surface was set to 1,400m.</li> <li>Based on geostatistics for full seam thickness the maximum search radius for inverse distance is 1,500m. The inverse distance power is set to 2, with maximum samples set to 8.</li> <li>Structure grids are checked and validated before being used to construct the resource block model.</li> <li>Vulcan is used to build the block models and to estimate coal qualities. The process is automated using a Lava script.</li> <li>The coal structure surfaces for each domain, along with LiDAR topography surface, Quaternary unconformity surface, and other mining related surfaces for Cascade and Escarpment are used to build the block model. The block dimensions are constructed at 10m x 10m. Vertical thickness for coal blocks is 0.5m, whilst overburden blocks are set to 5m maximum thickness.</li> <li>Overburden characterisation for AMD purposes is modelled in a separate estimation step utilising the same stratigraphic structure grids.</li> <li>Grade estimation is performed utilising Vulcan's Tetra Projection Model. The main seam, and</li> </ul>

Criteria	Commentary
	<p>two discontinuous rider seams in each domain is estimated for ash, sulphur, air-dried moisture and in situ moisture. Volatile matter, crucible swell index, and calorific value are estimated on the ash pass.</p> <ul style="list-style-type: none"> <li>• Geostatistics have been performed on the coal quality dataset to examine and define the estimation search parameters for each variable. The maximum search radius is set to the maximum range of influence found in the semi-variogram for each variable.</li> <li>• Grade estimation is computed using an inverse distance squared function.</li> <li>• Various methods have been used to check the validity of the block estimation. This includes manual inspection of the model, QQ plots of the model qualities vs coal quality database and other comparison tools.</li> <li>• Some mining reconciliation has been completed on the resource model to examine model accuracy within the Cascade and Escarpment mining areas. To date, the results are within the bounds of expected variability based on resource classification used and mining rates. No other bulk reconciliation has been completed.</li> <li>• Resource tonnages within the model have been discounted where the resource falls within an area of historic underground workings. The primary mining method utilised historically on the Denniston Plateau is bord and pillar mining. Some extraction used a water-based coal extraction (hydro mining) when pillaring. Historic extraction rates are estimated using mining extraction reports, interviews with miners, underground mine plans and tonnage reports. These factors were used in the resource classification confidence and for depleting the resource tonnages.</li> <li>• Behre Dolbear Australia Pty Limited (BDA) notes that Bathurst has adopted a procedure over old workings of discounting the estimated resources to account for the depletion of coal from underground mining and due to possible structures not identified by drilling. Based on reconciliations from mining to date at Takitimu and Cascade, this approach has been established as a reasonably reliable, if somewhat conservative, method of estimating resources where there are clearly areas of depletion. BDA accepts that this appears to be a reasonable approach but cautions there will be areas where the resources may differ from the estimates.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Resource tonnages are reported using natural moisture, calculated from air-dried relative density, air-dried moisture and in situ moisture using the Preston Sanders equation.</li> <li>• Block air-dried density is calculated from the block air-dried ash value using the ash-density relationship derived from the project dataset.</li> <li>• A fraction (&lt; 0.1%) of blocks were not estimated for moisture and have been assigned average values based on the permit in which the block is located.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• Structure grids have been developed based on a 50% ash cut-off (except for Sullivan that applied a 25% ash cut-off). Some higher ash samples are retained within the coal quality dataset to allow simplification of the seam model, especially in Whareatea West where higher ash partings become more abundant.</li> <li>• No lower cut-off has been applied. There is an inherent minimum limit to ash samples in modern results due to a laboratory detection limit of 0.17%.</li> <li>• Coal resources are reported down to a seam thickness of 0.5m (one block).</li> <li>• Ash cut-offs applied for resource reporting are: <ul style="list-style-type: none"> <li>○ 45% for Whareatea West</li> <li>○ 25% for Sullivan</li> <li>○ 45% for Escarpment</li> <li>○ 25% for Coalbrookdale</li> </ul> </li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Minimum seam thickness is set at 0.5m or one block in height.</li> <li>• No other mining factors such as, mining losses and dilutions have been applied when developing the resource models.</li> <li>• The development of the Escarpment, Whareatea West and Sullivan Coal Resources assumes mining methods consistent with similar or other BRL open pit mining operations. The preferred mining method is conventional truck and shovel open pit mining at an appropriate bench height.</li> <li>• The Coalbrookdale and remaining Cascade resource is considered to be an underground coal resource.</li> </ul>



Criteria	Commentary
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>BRL's current understanding of coal washability and yields on the Denniston Plateau has driven the ash cut-offs applied for resource reporting within the project area.</li> <li>All in situ coal extracted from the Whareatea West resource will require beneficiation.</li> <li>Contaminated and diluted coal from Sullivan, Deep Creek and Escarpment resources will require beneficiation.</li> <li>All coal requiring washing is assumed to be processed at the existing Stockton Coal Handling and Processing Plant (CHPP) located approximately 20km to the northeast.</li> <li>Processes used at the Stockton CHPP apply standard coal industry practice using proven technologies.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Open pit mining and coal transport will be conducted amid environmentally and culturally sensitive areas. The proposed mining sites are a likely habitat for endangered snail and kiwi species. High rainfall rates, acid-generating overburden and historical acid mine drainage are expected to be addressed with appropriate management tools.</li> <li>Mining within the Escarpment Mining permit has all necessary approvals in place to initiate mining. An extension of the current access agreement will be required to cover the full extent of the Mining Permit. Similar environmental values occur within the remainder of the Denniston Plateau. It is assumed that any constraints imposed on BRL in terms of environmental protection will not be prohibitive to economic resource extraction.</li> <li>A geochemical model has been developed for overburden acid mine drainage classification.</li> <li>Mine planning is in advanced stages taking into consideration detailed rehabilitation and water management controls.</li> <li>An updated Pre-Feasibility Study is in advanced stages including a mine closure plan resorting natural habitats. Any residual acid metal drainage and water contamination will be addressed by passive and engineered solutions.</li> <li>No other environmental assumptions have been applied in developing the resource model.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>A total of 580 relative density (air-dried) sample results are available for the Denniston project area.</li> <li>The samples are distributed throughout the project area and the sample set covers a complete range of ash values from &lt;0.17% to 93.5%.</li> <li>From this dataset an ash-density curve was generated with a co-efficient of determination of <math>R^2=0.9869</math>.</li> <li>After grade estimation, density was then calculated using the block ash value and the derived density equation.</li> <li>An in situ density value was then computed using the Preston Saunders method.</li> <li>In situ moisture determinations have been collected from drill core and from bulk samples.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>BRL classifies resources using a multivariate approach.</li> <li>Coal resources have been classified on the basis of geological and grade continuity balanced by relative uncertainties surrounding historic underground extraction and proximity to faults.</li> <li>Closely spaced drilling with valid samples increases the confidence in resource assessments.</li> <li>The confidence is reduced by: <ul style="list-style-type: none"> <li>A block being within an underground worked area due to extraction rate uncertainty.</li> <li>A block being within 20m of an underground worked area due to uncertainty with historic survey of the workings and georeferencing of mine plans.</li> <li>A block is in an area of steep structure dip, usually in areas of large faults.</li> <li>A block lies within an area of thin or splitting seam resulting in uncertainty of geological continuity.</li> </ul> </li> <li>If an area is within an area worked by historic underground mines the resource is considered as Inferred as a minimum.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>A comprehensive internal review of the resource model has been carried out by BRL.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Statistical comparisons between the resource block model and the coal quality data set have been carried out and are within expected ranges. Techniques utilised include QQ plots and probability plots.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• Cascade mine utilised the Denniston resource model for mine planning and scheduling. Production reconciliation for the last 12 months of production showed that ROM coal production was more than 10% in excess of that modelled.</li> </ul>

Appendix A:

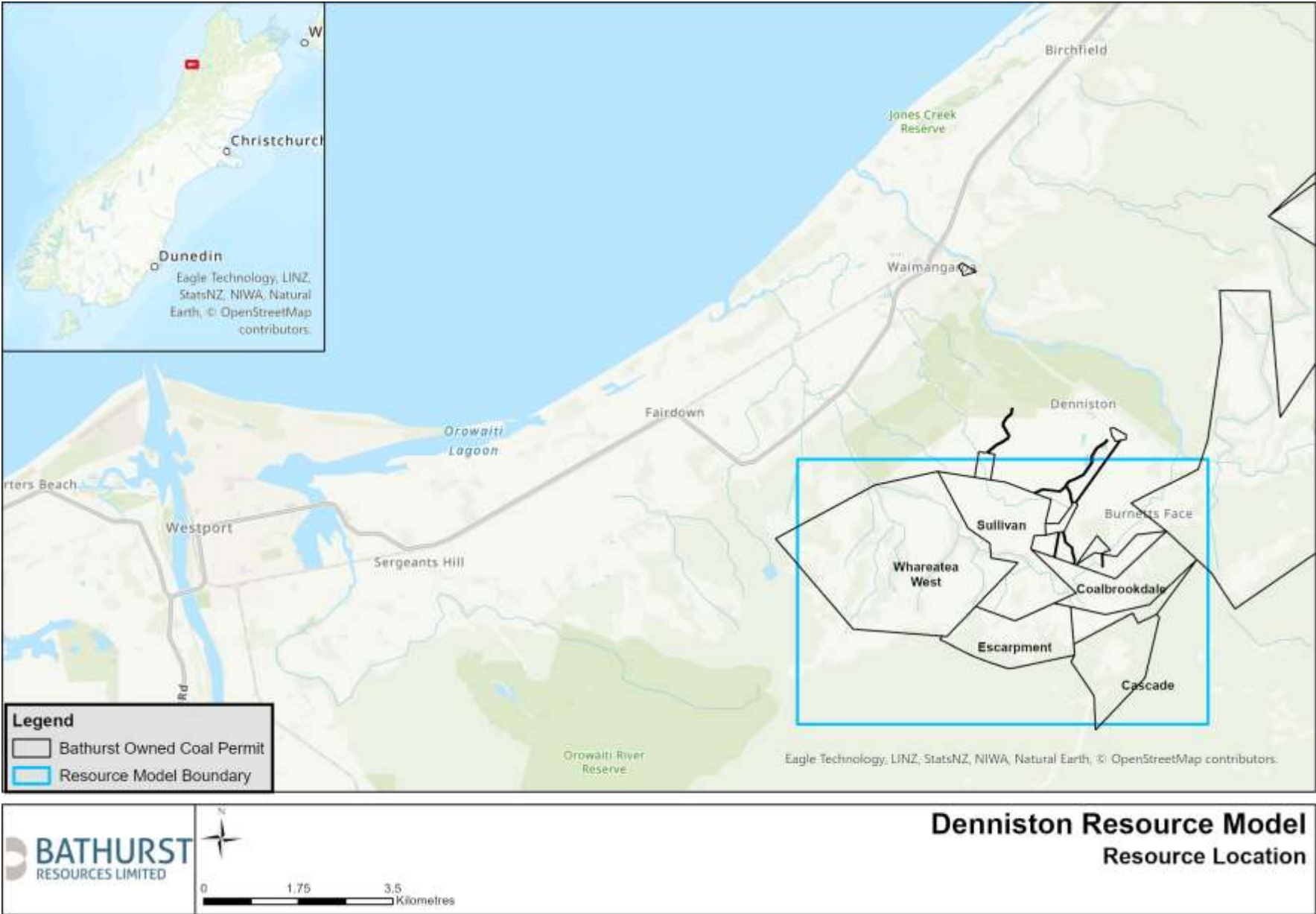


Figure 2: Location Plan

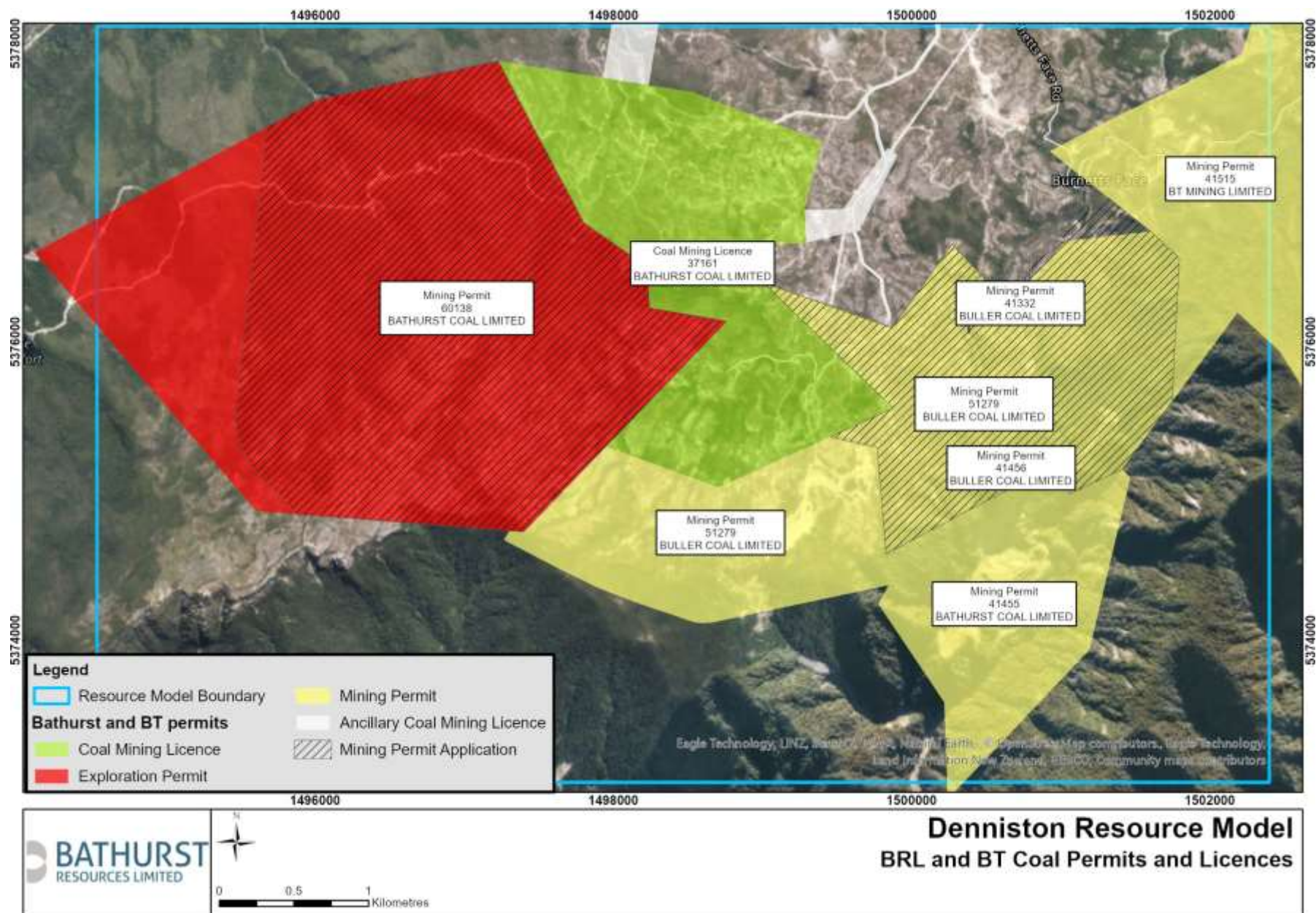


Figure 3: Denniston Plateau and the coal permits and licences within the resource model area







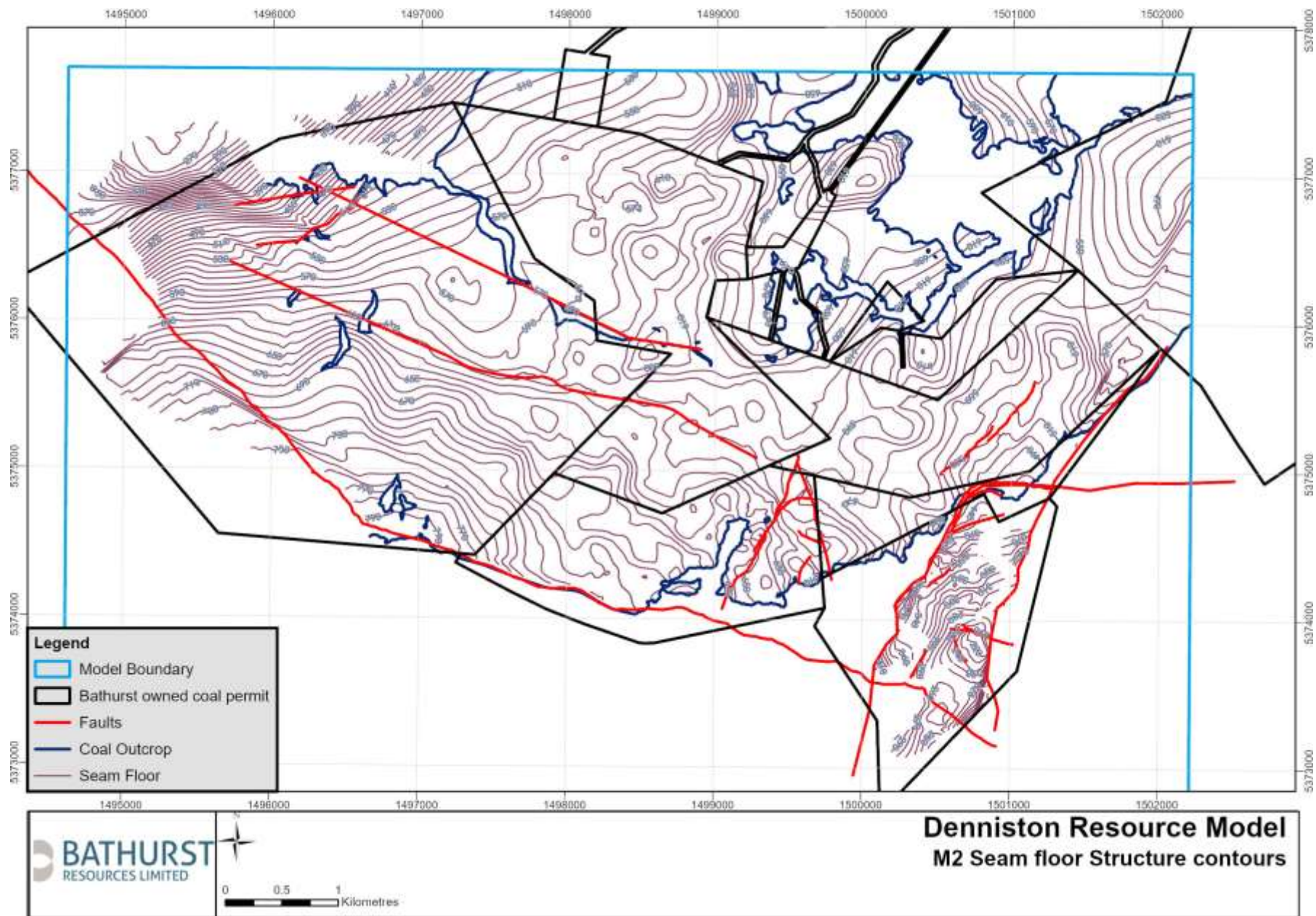


Figure 5: Plan showing the structure contours of coal seam floor

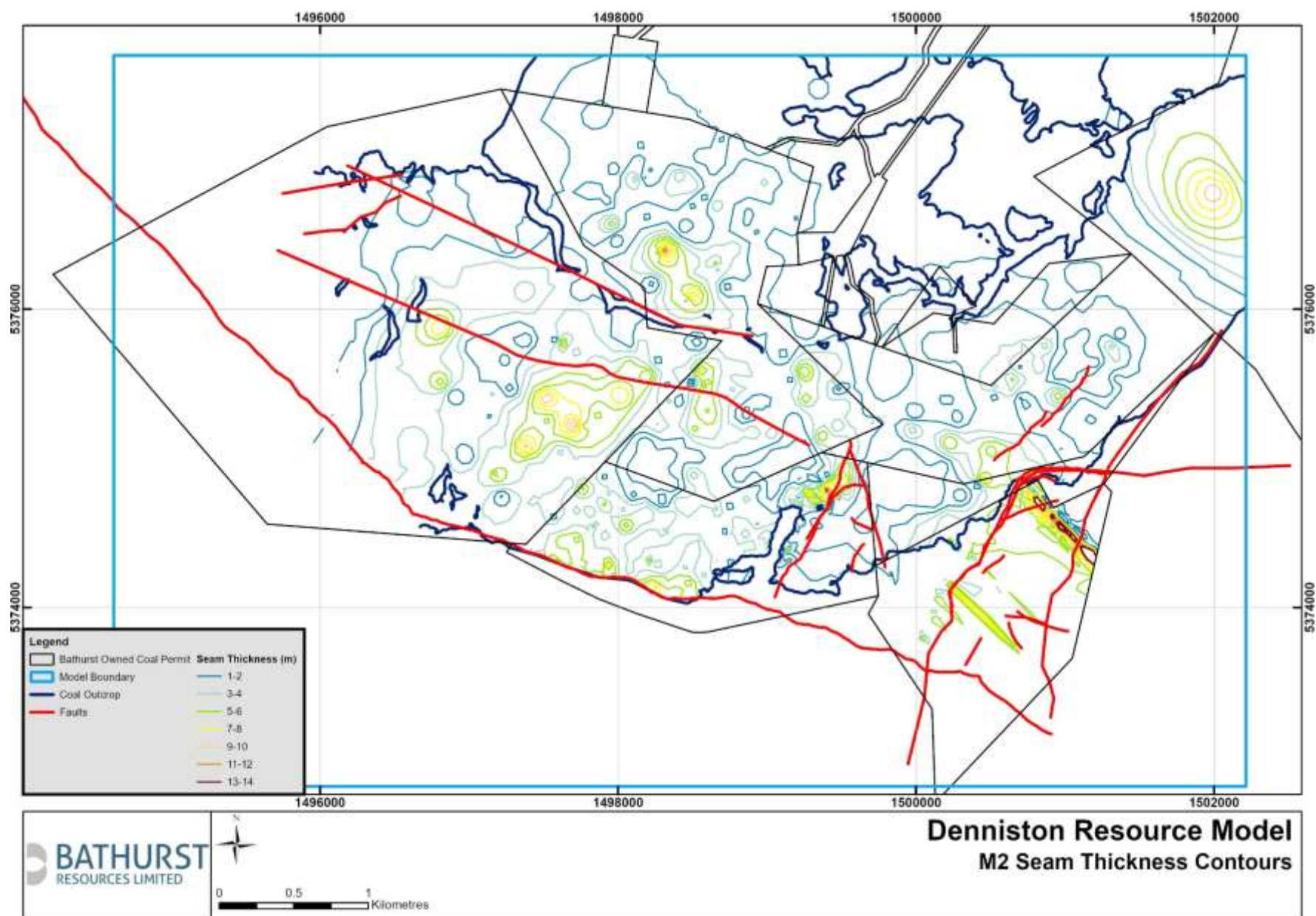


Figure 6: Plan showing full seam thickness for the M2 Seam



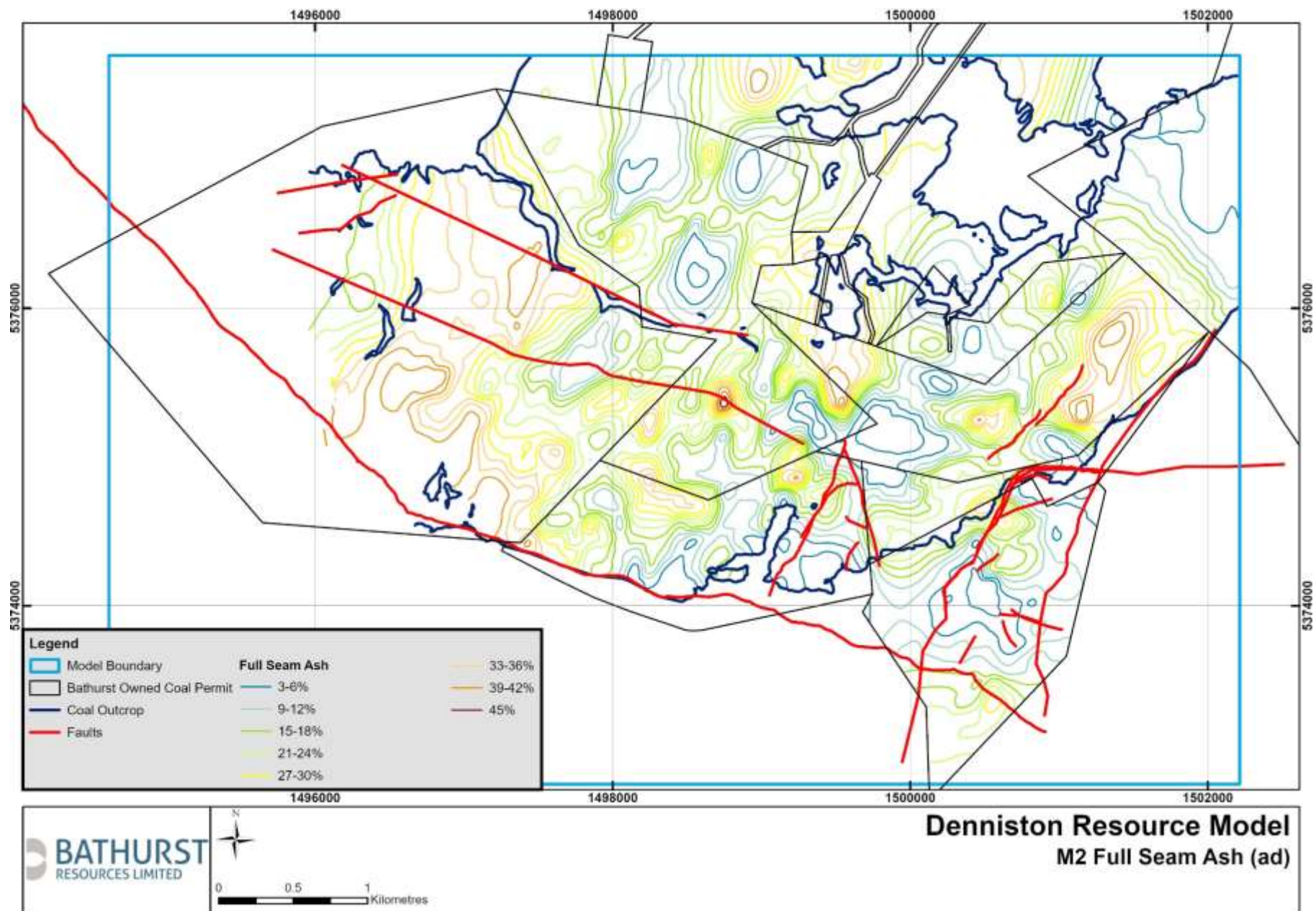


Figure 7: Plan showing in situ full seam ash on an air-dried basis for the M2 Seam



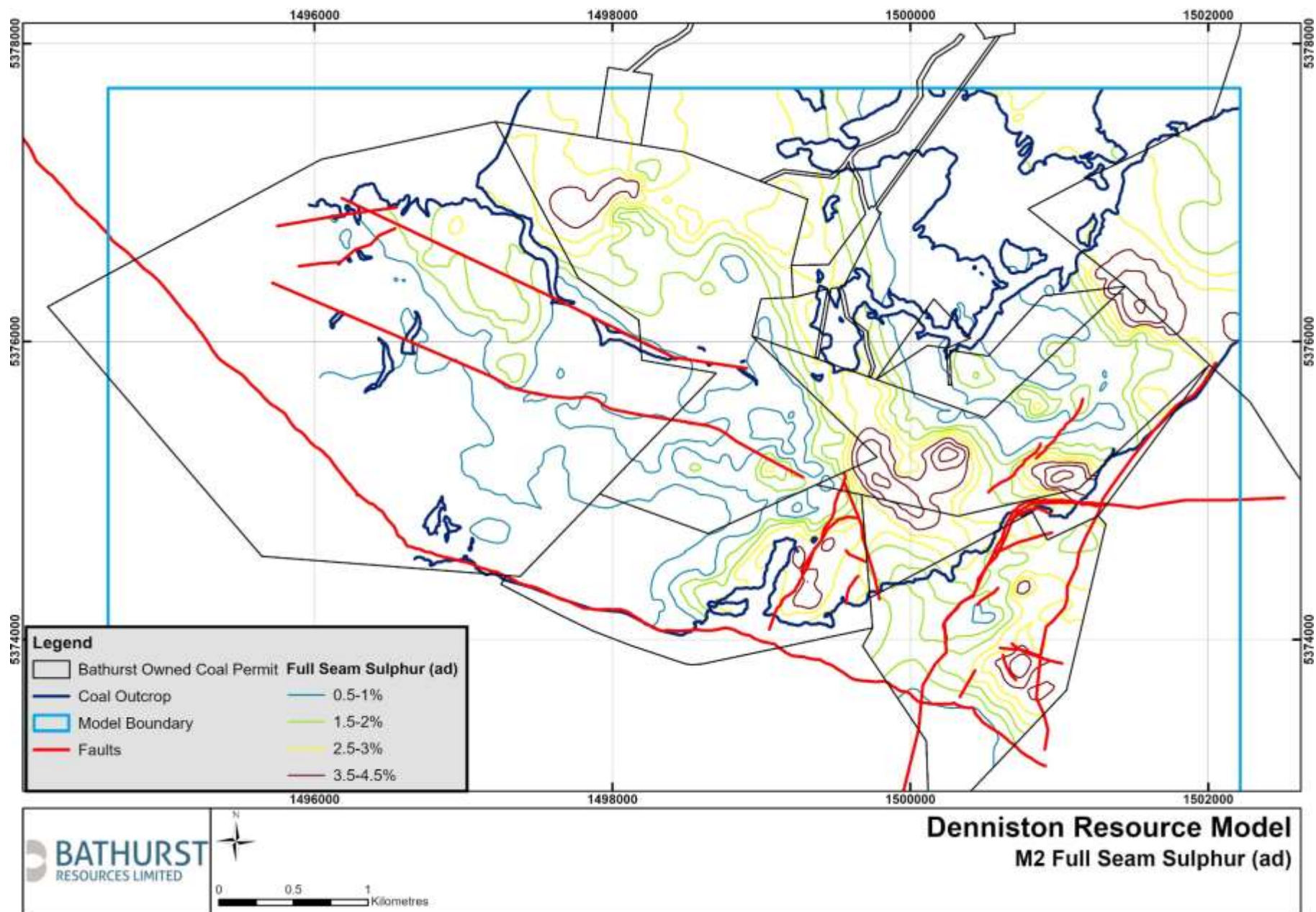


Figure 8: Plan showing full seam sulphur on an air-dried basis

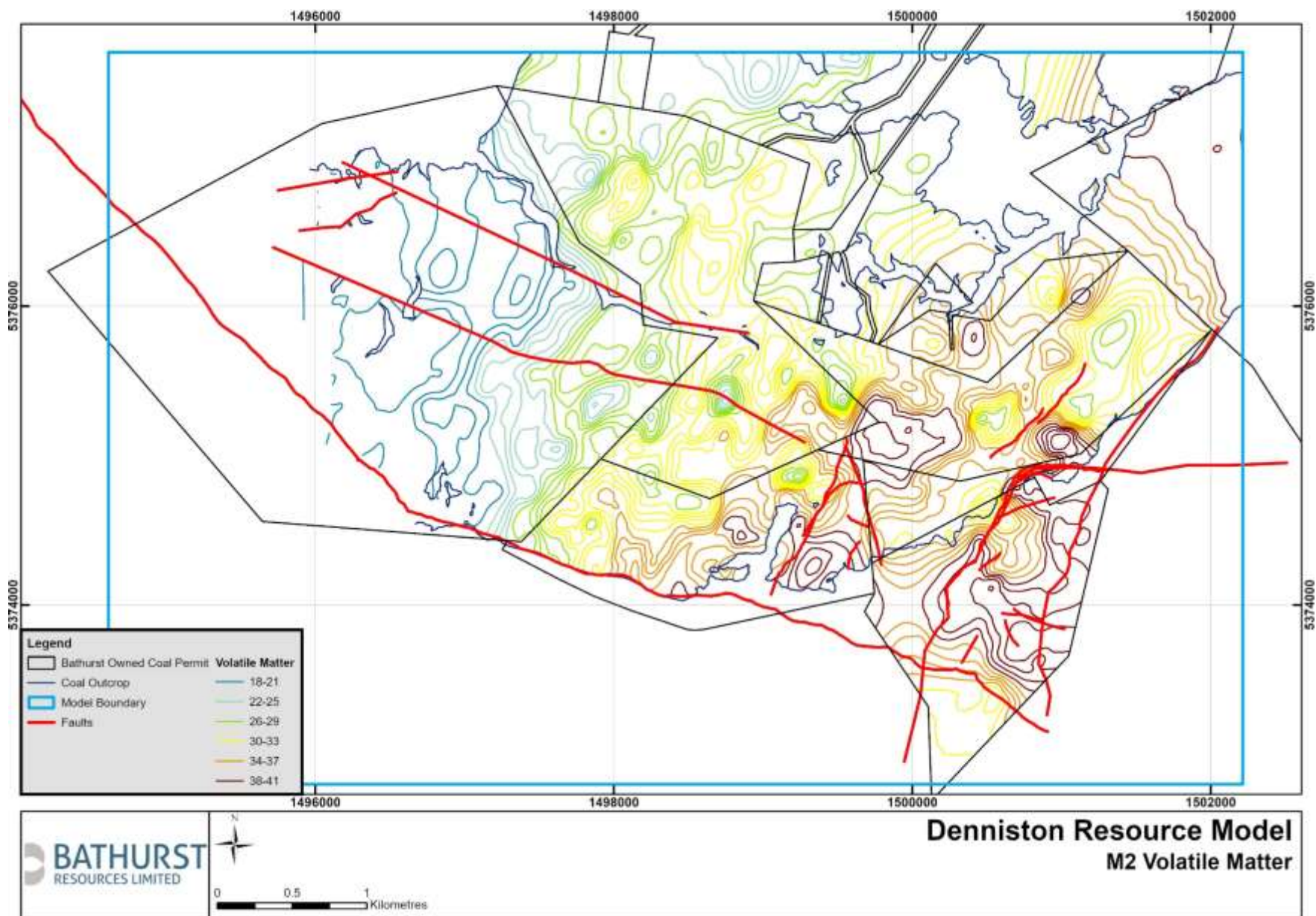


Figure 9: Plan showing full seam Volatile Matter on an air-dried basis



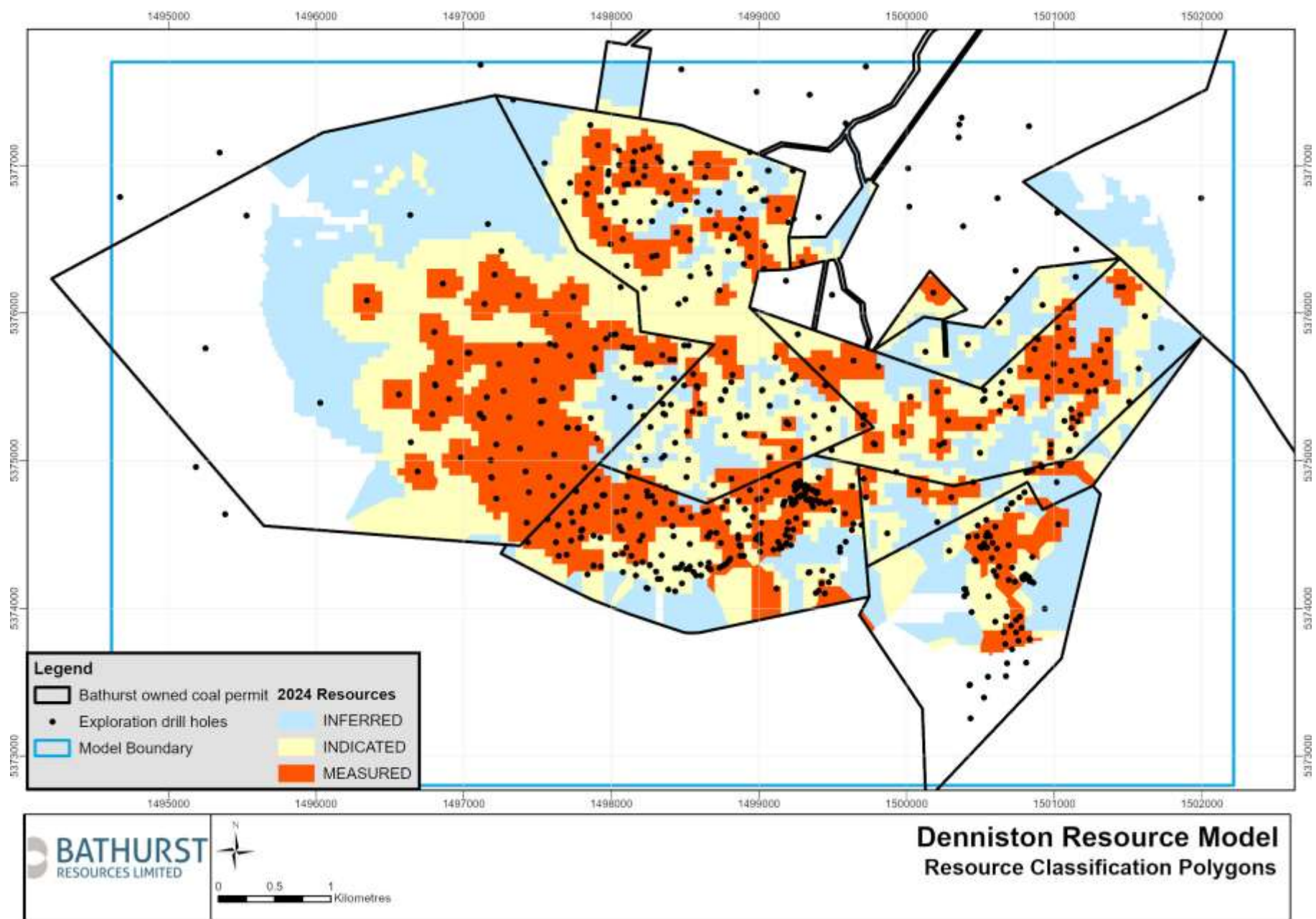


Figure 10: Plan showing the current resource classification polygons

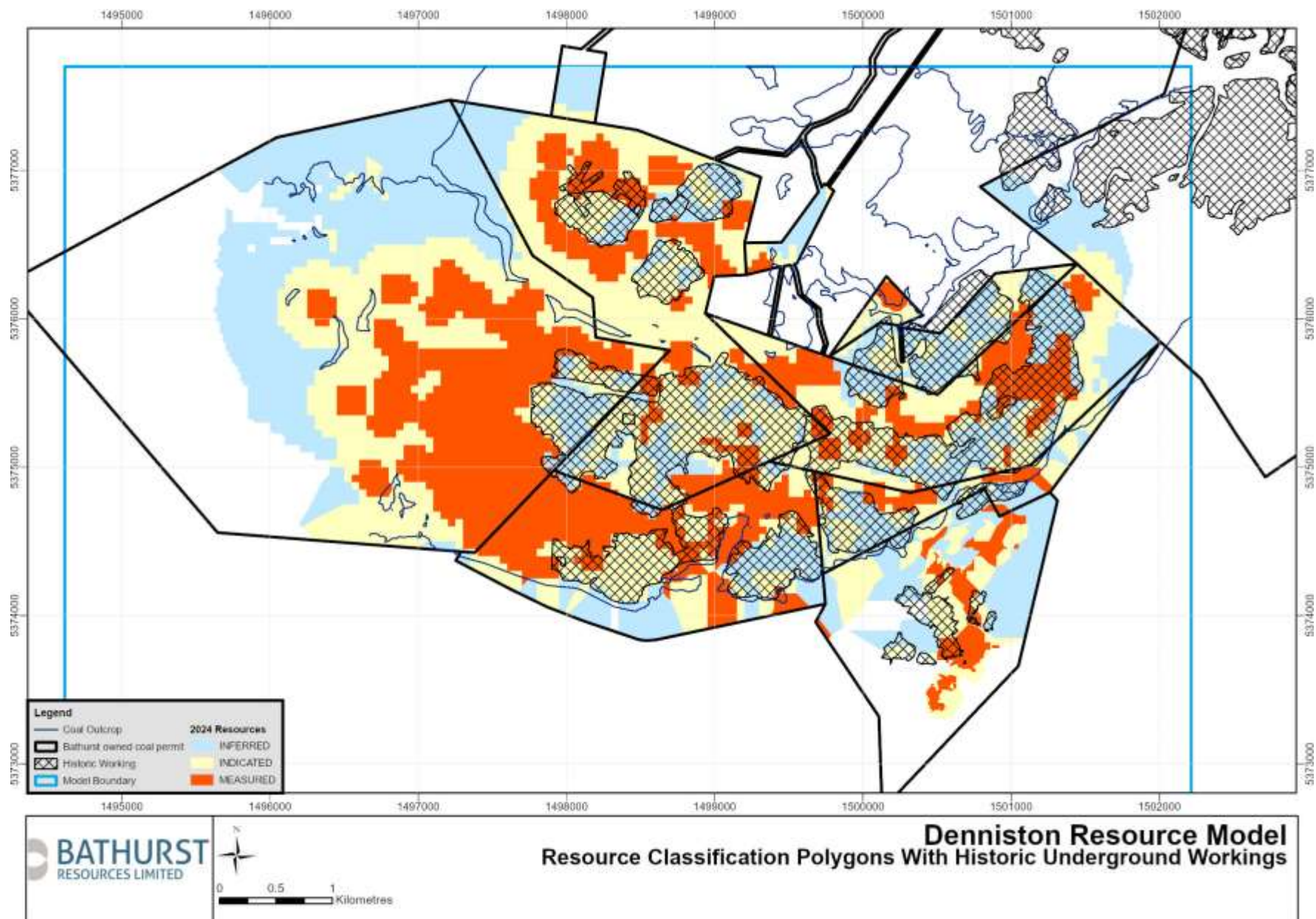


Figure 11: Extent of underground workings and resource classification

# JORC Code, 2012 Edition – Table 1 Report for Stockton 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Diamond Core (DC) drilling sampling for coal quality analysis took place using PQ (85mm) or HQ (64mm) coring methods for coal seams. The entire core is retained for analysis.</li> <li>DC sampling is carried out under Stockton Specific protocols and QAQC procedures as per industry best practice.</li> <li>Composited samples are created at the laboratory from individual plies that are thickness weighted. These composited samples are compiled for additional coal property test work.</li> <li>Reverse Circulation (RC) chip samples are collected via a cyclone attached to a reverse circulation percussion drill rig. Sampling is primarily undertaken on 0.5m intervals through the coal seam (~6kg), and indicative 1m rock samples (~70g). The entire coal sample is retained for analysis.</li> <li>Channel cut samples have been taken in areas of accessible outcrop, with an aim to obtaining sample intervals representing 0.5m of the true thickness.</li> <li>The quality of drill core, RC chip samples, and channel samples are continuously monitored by site geologists.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Multiple campaigns of data acquisition have been carried out on the Stockton site over the past century.</li> <li>Drilling has been undertaken using the following techniques: <ul style="list-style-type: none"> <li>Diamond Core (triple Tube, PQ core).</li> <li>Open hole (Tungsten drag bit, PQ size).</li> <li>Reverse Circulation (PQ sized face sampling bit).</li> <li>Blade bit.</li> </ul> </li> <li>Some drill collars had open hole pre-collars.</li> <li>The bulk of the drillholes have been drilled vertically due to the shallow dipping morphology of the deposit and due to its close proximity to the surface.</li> <li>No core has been orientated.</li> </ul>
<b>Drill sample recovery</b>	<p><b>Diamond Core</b></p> <ul style="list-style-type: none"> <li>Standard industry techniques are employed for recovering drilled core samples from drillholes. Core is obtained by PQ (83mm) diameter coring techniques, using triple tube operations, providing good core recovery, averaging &gt;80% over the entire drillhole (inclusive of non-coal lithologies). On average recovery of coal is 90%.</li> <li>PQ core diameter is considered to provide a sample of sufficient volume to be representative of the in situ material and provides adequate sample mass to undertake the variety of raw coal tests together with composited sample analysis when required.</li> <li>In poor ground conditions HQ sized rods, and therefore core was used to ensure that the drillhole was completed without affecting the integrity of the drill core and or loss of drilling equipment.</li> <li>Downhole geophysics has been undertaken on most of the diamond core holes. A combination of geophysical tools, including Density, Natural Gamma, Calliper, Sonic, Dimeter, Acoustic Scanner, and Verticality have been run down holes. All tools are calibrated on a regular and systematic basis. All geophysical logging work has been conducted by a contractor (currently Weatherford). Sample interval and recovery recorded in the field by drillers is validated and adjusted if required using geophysics during core logging and sampling.</li> <li>When drillholes are geophysically logged, the geophysical logs are correlated/validated against the core to determine core/chip recovery, while ensuring drill depths recorded in the field by the drillers are correct.</li> <li>Core photography is undertaken on all diamond core.</li> </ul> <p><b>Reverse Circulation Drilling Chips</b></p> <ul style="list-style-type: none"> <li>RC chip samples from the reverse circulation percussion drillholes is recovered directly from the rods using a cyclone system. The entire sample interval is retained for coal quality analysis. Sample interval of 0.5m produces a sample between 5 - 7kg.</li> <li>For non-coal lithologies an indicative sample (~70g) from each metre is retained for geological</li> </ul>



Criteria	Commentary
	<p>logging.</p> <ul style="list-style-type: none"> <li>• RC generated samples with poor recovery (&lt;3kg) are not submitted to the laboratory for analysis.</li> <li>• Should there be poor recovery for the entire coal seam the hole is re-drilled if there is no specific reason for the poor recovery (e.g. presence of underground workings within the coal seam).</li> <li>• BT Mining Ltd is satisfied that the RC holes have taken a sufficiently representative sample of the mineralisation and minimal loss of fines has occurred.</li> <li>• Downhole geophysics has been undertaken on some reverse circulation drillholes. A combination of geophysical tools, including Natural Gamma, Calliper, Dipmeter, and Verticality have been run down holes. All tools are calibrated on a regular and systematic basis. All geophysical logging work has been conducted by contractor (currently Weatherford). Sample interval and recovery recorded in the field by drillers is validated and adjusted if required using geophysics after core logging and sampling. Once drilled drillholes are geophysically logged, the geophysical logs are correlated/validated against the recorded lithological logs to ensuring drill depths recorded in the field by the drillers are correct.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• All diamond core samples are checked, measured, marked up and finally photographed before logged in a high level of detail.</li> <li>• All diamond core samples are geologically logged in a high level of detail down to centimetre scale. Intervals are logged for lithology, colour, weathering type, stratigraphy, texture, hardness, RQD and defects. Logging is conducted using a defined set of codes. All percussion drillholes chip samples are geologically logged as per the sampling frequency, with 1m samples used to define the non-coal lithologies (overburden), and 0.5m samples for coal and other non-coal lithologies surrounding or contained within coal seam partings. The geological logs are validated against laboratory results.</li> <li>• Every discrepancy between the measured length of the core and the driller's length marked on the core blocks is investigated. Discrepancies are resolved by site geologists prior to sampling with the use of geophysical logs.</li> <li>• The entire lengths of RC drillholes are logged. Where no sample was returned due to voids/cavities it is recorded as such.</li> <li>• Drillholes that have been geophysically logged with a suite of tools (as described above) are analysed extensively to validate, confirm and correct coal seam depths. Validation and, if required, correction of the geological logs against geophysics is undertaken to ensure accuracy and consistency. Verticality, calliper, density and natural gamma tools are checked regularly with standard calibration assemblies. The density calibrations are performed routinely - with blocks of known densities (aluminium and/or water).</li> </ul> <p><b>Trench samples</b></p> <ul style="list-style-type: none"> <li>• Trench samples have a basic geological lithological log with the lithology being validated against the coal ply result.</li> <li>• All trench, diamond drill and reverse circulation data is captured in a standardised BT Mining acQuire database.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<p><b>Diamond Core</b></p> <ul style="list-style-type: none"> <li>• No splitting of core is undertaken in the field or during sampling.</li> <li>• Sample selection is determined in-house and is documented in the Stockton core sampling procedure. Clean coal core has been sampled to a maximum of 0.5m plies and adjusted for core loss and lithological variations.</li> <li>• Associated high ash coal intervals and partings were sampled separately to assess potential dilution effects where they are &lt;0.5m thick. Intervals with non-coal material (&gt;50% Ash) are excluded from sampling.</li> <li>• Samples are placed into pre-labelled plastic bags to ensure proper Chain of Custody, and then transported by BT Mining personnel to the laboratory for testing. The laboratory continues with the Chain of Custody requirements. Sample preparation is undertaken according to Industry Standards.</li> </ul> <p><b>RC Chips</b></p> <ul style="list-style-type: none"> <li>• No splitting of coal interval chips is undertaken.</li> <li>• Non-coal intervals are sub sampled directly from the cyclone.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Sample selection is determined in-house and is documented in a core sampling procedure. Associated high ash coal intervals and partings are sampled separately to assess potential dilution effects where they are adjacent to coal seams. Intervals with non-coal material (&gt;50% Ash) are excluded from sampling.</li> <li>Samples are placed into pre-labelled plastic bags to ensure proper Chain of Custody, and then transported by BT Mining personnel to the laboratory for testing. The laboratory continues with the Chain of Custody requirements. Sample preparation is undertaken according to Industry Standards.</li> </ul> <p><b>Trench samples</b></p> <ul style="list-style-type: none"> <li>No sub-sampling is undertaken with trench samples.</li> </ul> <p><b>Other</b></p> <ul style="list-style-type: none"> <li>A laboratory generated repeat sample is submitted with every 20<sup>th</sup> sample submitted to the laboratory. This sample is provided a new sample ID with no reference to the original sample ID. The results of these repeat samples are reviewed monthly and any discrepancies investigation.</li> </ul>
<p><b>Quality of assay data and laboratory tests</b></p>	<ul style="list-style-type: none"> <li>SGS New Zealand Limited (SGS) in Ngakawau and CRL (ACIRL Australia and Newman Energy subcontracted for specific tests) laboratories are used to undertake physical and chemical testing and use Industry Standards for all coal tests and systematic QA/QC procedures for all work. Both laboratories hold accreditation by International Accreditation New Zealand (IANZ). The processes employed are considered to be appropriate for coal sample analysis. Results are reviewed in-house to ensure the accuracy of the data by a geologist and or a senior geologist. The laboratory has been inspected by the Company's personnel. Tests includes but are not limited to:</li> </ul> <p><b>Chemical Analysis</b></p> <ul style="list-style-type: none"> <li>Proximate analysis (ASTM D5142-2004 (modified)).</li> <li>Sulphur (ASTM D4239-04A).</li> <li>Total Moisture (ISO 589).</li> </ul> <p><b>Ultimate Analysis</b></p> <ul style="list-style-type: none"> <li>Carbon (AL038-in house).</li> <li>Hydrogen (ASTM D3176-09).</li> <li>Nitrogen (ASTM D3176-09).</li> <li>Oxygen (ASTM D3176-09 (by difference)).</li> <li>Sulphur (ASTM D3176-09).</li> <li>Forms of Sulphur (AS 1038 Part 11).</li> <li>Chlorine (ISO 587).</li> <li>Ash composition (X-Ray spectrometry (Spectrachem)).</li> <li>Ash fusion temperature (ISO 540:1995(E)).</li> <li>Trace Elements.</li> <li>Calorific Value (ISO 1928-1995).</li> </ul> <p><b>Rheological and Physical Analysis</b></p> <ul style="list-style-type: none"> <li>Gieseler Fluidity (ASTM D2639-90).</li> <li>Dilatational (Audibert-Arnu) (ISO 349:1975).</li> <li>Free Swelling Index (ISO 501:2003(E) D720-91(1999)).</li> <li>Hardgrove Grindability Index (ISO 5074, ASTM D409-02)</li> <li>Relative Density (AS 10382111-1994).</li> </ul> <p><b>Petrographic</b></p> <ul style="list-style-type: none"> <li>Maceral Analysis (c/- Newman Technologies), Vitrinite Reflectance (ASTM D2798-99).</li> </ul> <p><b>Other tests</b></p> <ul style="list-style-type: none"> <li>Washability testing as requested (AS 41561 using float-sink methods) (also used Boner gig shaker table process).</li> </ul> <p><b>Geochemical testing</b></p> <ul style="list-style-type: none"> <li>Total sulphur (CSA06V).</li> <li>Acid-Neutralising Capacity (CLA48V).</li> <li>Net Acid Generation (CLA49V).</li> <li>Paste pH / Conductivity (OI-L3-019-NZ-MIN-WPT-WI).</li> <li>Sulphide (CLA08V).</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>5% of all SGS analysed samples are retested by SGS, as part of their in-house QAQC process. These repeat test results are generally within a 5% of their original results. Results outside of set tolerances are investigated.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>Most holes are geophysically logged, and verification of seam contacts is made through analysis of the geophysics. Assessment of coal intersections are undertaken by a geologist. Geophysics allows confirmation of the presence (or absence) of coal seams, accurate determination of contacts to coal seams, density measurements are used to guide sampling and identify high ash bands and or seam partings.</li> <li>Geophysical logs (dual density and gamma) are analysed extensively and used to validate and, if required, correct geological and sample interval logs to ensure accuracy and consistency.</li> <li>Coal ply results are provided by the laboratory and reviewed internally. No adjustments or calibrations are made to any coal quality data. In instances where results are significantly different from what was observed in geophysical logs or outside of local or regional ranges defined by previous testing, sample results are retested.</li> <li>Since 2006 all coal quality data has been directly submitted and stored in electronic format using acQuire SQL database software.</li> <li>Historical data has been validated and entered into the acQuire SQL database, from the original paper logs. These geological and geophysical paper logs are housed in the fireproof library in Westport. Historical data was transferred and validated against the current logging codes to ensure the data was valid.</li> <li>A limited number of twin holes have been drilled and returned acceptable duplicates of the original holes.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Stockton data is surveyed in Buller 1949 grid coordinate system in New Zealand with mean sea level datum (MSL). However, the Geoid correction for elevation is not undertaken due to the elevation of the mine-site (+150mm). All on-site survey data used in the resource estimation does not have the Geoid correction as well.</li> <li>All drillholes post 1998 are surveyed using real time kinematic GPS technology and are located within +/- 20mm vertically and +/- 10mm horizontally. Older drillhole collars were surveyed using conventional methods with an unknown precision.</li> <li>Historical underground workings plans are based off old hand drawn plans that have been geo-rectified (in 2D only) by converting from cadastral links to the Buller 1949 geodetic grid.</li> <li>Topographic surfaces consists of "original", "cut", and "as-built" triangulations constructed from a combination of airborne LiDAR (accurate to within +/- 0.2m) collected for the whole of the Stockton site in June 2013, conventionally surveyed historical plans (unknown accuracy), GPS survey data (+/- 20mm) and GPS assisted laser scans using I-site laser scanner (+/-40mm).</li> <li>Drillholes with down-hole geophysics are surveyed for deviation with Weatherford verticality tool (+/- 15° azimuth and +/- 0.5° inclination).</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Exploration drillholes are variably spaced (&lt;75m to 150m) depending on target seam depth, geological structure, topographic constraints, down-hole conditions due to underground workings, and the location of other drillholes.</li> <li>Coal quality drilling is drilled on either a 15m, 20m, 30m or 40m grid, depending on structural and or coal quality complexity of the coal seam in the area.</li> <li>No sample compositing is undertaken prior to initial laboratory ply analysis. Should details coal analysis be required, compositing is undertaken at the laboratory on a length weighted basis.</li> <li>This drill spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate to support a JORC Code 2012 resource classification and is suitable for this style of deposit.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Majority of holes are drilled vertically, due to near horizontal coal seams.</li> <li>A small number of exploration holes have been inclined. The purpose of these holes was to define significant geological structures and not for coal seam geometry and quality.</li> <li>No drilling orientation and sampling bias has been recognised at this time and is not considered to have introduced a sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>RC chip samples are collected in uniquely numbered pre-labelled plastic bags. Three to five samples are then placed in a large plastic bag for delivery to the laboratory.</li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>Core samples are placed in uniquely numbered pre-labelled plastic bags. Three to five samples are then placed in a large plastic bag for delivery to the laboratory.</li> <li>Prior to submission to the laboratory, a standardised dispatch form is generated for each drillhole, within the acQuire SQL database software, which delineates the set of analysis to be undertaken and the logged sample numbers.</li> <li>Once samples and dispatch form are completed, the sample bags are validated and subsequently delivered to the secure laboratory sample receiving area by a BT Mining staff member. Once received at the laboratory, the consignment of samples is receipted against the sample dispatch documents.</li> <li>Any additional analysis is authorised by the site geologist.</li> <li>Sample residues are stored at the laboratory pending results and any possible repeat requests.</li> <li>Sample security is not considered a significant risk to the project.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Integrity of all data (drillhole, geological, survey, geophysical and CQ) is reviewed by the site geologist before being used to model either structure or qualities.</li> <li>Periodic internal reviews are conducted, to verify that both core and chips are logged in a consistent manner. These reviews are done by the Competent Person.</li> <li>The BT Mining acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> <li>The BT Mining acQuire database is considered to be of sufficient quality to carry out resource estimation.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Stockton CML37150 is a coal mining license, which is due to expire on 31 March 2027, and covers the majority of the deposit.</li> <li>MP 52937 and 41810 mining permits are adjacent to the main CML37150. MP 52937 expires on 4 November 2030 and MP 41810 expires on 8 September 2024.</li> <li>MP41810 has had an Extension of Duration application submitted to NZP&amp;M in March 2024. The permit remains “alive” until a decision is finalised by the regulator. BT Mining Ltd has no reason to expect the application to be declined.</li> <li>BT Mining Ltd has sole ownership of the operation, with ownership of the CML 37150 permit areas, and access rights to the Department of Conservation (DOC) owned MP 41810 and MP 52937.</li> <li>All operations at Stockton mine are currently undertaken within these CML boundaries.</li> <li>Royalties and Levies are applied to per tonne of coal produced.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Within the CML37150, Solid Energy Ltd undertook all exploration on the tenement from 1987 to 2017. However, there have been earlier periods of work that have contributed to the understanding of this Resource. These programs include early drillholes associated with mining dating back to the late 1800s through into the 1900s, with New Zealand Coal Resources Survey performing additional drilling in the 1980s.</li> <li>All historic data was checked and validated by the site geologist, on inclusion into the current acQuire database. All data is coded on usability for resource modelling.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Coal resources on the Stockton Plateau are restricted to the Middle to Late Eocene aged Brunner Coal Measures (BCM). The unconformably overlies the Ordovician aged Greenland Group greywacke's and argillite's, which has been extensively intruded by Cretaceous granites and porphyry (Berlins Quartz Porphyry). Due to the stratigraphic nature of coal measures, the coal seams generally lie in a horizontal or sub-horizontal plane. The resource has a dip to the northeast at the northern end of the deposit and to east along the western margin. Folding and faulting through the coal seams can create localised changes in dips up to 80°.</li> <li>The Mangatini coal seams are the main coal seams of the Stockton deposit. The seams have been given the abbreviation M. There are the three seams M1, M2, and the M3. The M2 seam is the predominant seam over the deposit and splits into four segregated seams in places. The M1 seam is thin and discontinuous stratigraphically below the M2 and not considered for</li> </ul>

Criteria	Commentary
	resource estimation. The M3 is a rider seam to the M2 however the seam is discontinuous and often not recovered during mining. The M3 is not considered during resource estimation.
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>No exploration results are reported, therefore there is no drillhole information. This section is not relevant to this report on resource and reserve estimations. Comments relating to drillhole information can be found in Section 1.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>No exploration results have been reported for the Stockton deposit.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>No exploration results have been reported for the Stockton deposit.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams can be found in the Appendix A for each of the following: <ul style="list-style-type: none"> <li>Location map</li> <li>Map showing Land rights</li> <li>Map showing Mining Permit</li> <li>Geological QMap</li> <li>Map showing drillhole type/distribution</li> <li>Map of underground workings</li> <li>Map of Resource Classification</li> <li>Map showing M2 Ash distribution</li> <li>Map showing M2 Sulphur distribution</li> <li>Map showing M2 CSN distribution</li> <li>Map showing M2 ROMAX distribution</li> <li>Map showing M2 floor contours distribution</li> <li>Map showing M2 apparent seam thickness</li> </ul> </li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>No exploration results are reported, therefore there is no further exploration results to report. This section is not relevant to reporting resource and reserve estimations.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Bulk samples to attain specific marketing related data have been taken as and when requested.</li> <li>The different stratigraphic units and rock defects have been assigned various strength parameters based on a mixture of recent and historic laboratory test data (UCS, shear box and ring shears), empirical classifications (RMR, GSI and Hoek Brown) and back analysis of existing cut slopes. Downhole in situ geophysical measurements have been undertaken to compare the strength variability with actual laboratory test data.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Deposit is currently being mined.</li> <li>Close spaced grade control drilling will continue as mining progresses while additional exploration and near mining resource development drilling will be undertaken to define geological structures, seam structure and coal quality.</li> </ul>

### Section 3 Estimation and Reporting of Coal Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>All GPS sourced and validated survey data recorded in the field is electronically transferred into the master BT Mining (BTM) acQuire SQL database.</li> <li>All drill core logging data is digitally entered directly into the BTM acQuire SQL database, with in-built enforced data validation rules. Drill chip geological logging data is manually entered into BTM acQuire SQL database, with in-built enforced data validation rules.</li> <li>The acQuire SQL database has been designed to ensure data is entered and stored in a consistent and accurate manner by using dropdown menus of standard logging codes to prompt and constrain inputs. The database highlights out of range coal quality values, duplicate records/intervals, prevents overlapping intervals or depths that extend beyond total drillhole depth. All changes to the database are tracked and archived. Data correction and validation checks are undertaken internally as defined by the BTM Data Validation Standard before the</li> </ul>

Criteria	Commentary
	<p>data is used for modelling purposes.</p> <ul style="list-style-type: none"> <li>All ply coal quality data is imported each night, using an automatic import of the laboratory generated electronic results (comma separated text file with a standardised format, saved to a secure shared server location).</li> <li>Once all validation is completed all drillhole data is signed off by the responsible geologist. On completion of the data sign-off process the data is locked in acQuire and cannot be adjusted unless requested by the resource geologist.</li> <li>The BTM acQuire SQL database is administered by a part-time geological database administrator who has an intimate knowledge and understanding of this dataset. Data validation checks are run routinely by the site geologist using acQuire software validation routines. All validation concerns are referred to the resource geologist and rectified accordingly.</li> <li>The BTM acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>The Competent Person, Mark Lionnet, has a full-time role with Bathurst Resource Limited as the Export Project Manager with a high level of interaction with the Stockton geologist.</li> <li>Regular visits have been undertaken by the Competent Person.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>There is sufficient confidence in interpretation of geological stratigraphy, structure and seam correlation/continuity though it is variable across the Stockton area. Mining activities supports a good confidence in the geological interpretation of the deposit.</li> <li>The data used in the geological interpretation included field mapping, drillhole data, core logging data, geophysical logs, sampling, coal quality laboratory testing and structural interpretations. Residual variability exists concerning geological structure along/within the major fault zones, resulting in a lower level of resource confidence. This variability will influence the local estimates rather than the global structural and coal quality estimates for these zones.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The Stockton resource area covers approximately 22.9km<sup>2</sup>, a roughly rectangular shape up to 3.5km wide (E-W), and 8km long (N-S).</li> <li>Within this area all seams are exposed in the operating mine, with in situ coal between 0m and 50m below the original ground surface.</li> <li>Coal thickness varies considerably over the deposit, from 28m (areas with structural thickening) down to &lt;0.5m (areas with coal seam poorly developed). On average the remaining coal resource has an average thickness of 8-10m.</li> <li>The M3 rider seam to the main M2 seams is on average 0.5m thick but can have local thicknesses of 3m.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>Modelling has been undertaken using Maptek's Vulcan Version 2024 software by a resource geologist experienced in its use, using a standardised set of validated automated scripts.</li> <li>17011 drillholes are utilised in modelling and resource estimation.</li> <li>All valid drilling data, mapping data, together with a number of structural interpretations are used as the source data for creating the coal seam surfaces (grids).</li> <li>Grids for the coal roof and floor (including seam splits) are developed over the entire CML. These coal surfaces are modelled using a stacking algorithm with the coal roof of the predominant coal seam (M2) used as the reference surface. This process is repeated for six geological domains of the deposit to ensure that the coal seams are modelled accurately.</li> <li>The grids are created by using a triangulation algorithm resulting in a 10m x 10m grid. This methodology of creating grids is common practice for the estimation of coal deposits</li> <li>Block model extends from 321500mE to 327010mE and 710500mN to 719510mN and elevation from 300mRL to 1100mRL.</li> <li>A standardised block model schema has been used, with a standardised set of variables, with associated default values.</li> <li>The latest validated survey "original", "cut" and "as-built" surfaces and grids are used to create an empty block model, with 10m x 10m blocks with a minimum thickness of 0.5m (for coal seams). The parent block size (10m x 10m) is half the drill spacing to ensure the mineralisation is well represented by the blocks.</li> <li>The drilling database is used to create a set of 0.5m thick composites, which is then used to estimate the coal qualities for the blocks within the coal seams. Multiple estimation runs are</li> </ul>

Criteria	Commentary
	<p>completed to ensure all blocks are populated.</p> <ul style="list-style-type: none"> <li>All coal blocks have been estimated using the inverse distance methodology, with a power of 2, for the standard set of coal qualities (ash, sulphur, swell, inherent moisture, volatile matter).</li> <li>Coal Quality Estimation parameters used during coal quality estimation are: <ul style="list-style-type: none"> <li>Search ranges used are 150x150x0.5m and 500x500x1m.</li> <li>Samples used are a minimum of 2 and a maximum of 8 in the first search radius, and a minimum of 1 and a maximum of 5 in the second search radius.</li> <li>A maximum of 2 samples from any one drillhole is allowed.</li> <li>Block discretisation of 4,4,1 was applied.</li> <li>Using the Vulcan "tetra unfolding" methodology, along the modelled coal seam surfaces.</li> </ul> </li> <li>Lithology of non-coal overburden, underburden and interburden blocks, are estimated using a probabilistic method, using the drillhole database. Once lithologies have been estimated, the ash, sulphur, swell, inherent moisture, and volatile matter are estimated. <ul style="list-style-type: none"> <li>Inverse distance estimation, with a power of 2, is used.</li> <li>Search ranges used are 60x60x1m and 200x200x1m.</li> <li>Samples used are a minimum of 1 and a maximum of 10.</li> <li>Block discretisation of 4,4,1 was applied.</li> <li>Using the Vulcan "tetra unfolding" methodology, along the modelled structural seam surfaces.</li> <li>Where insufficient data drillhole data is available, then default CQ values are assigned to un-estimated blocks.</li> </ul> </li> <li>At each stage of the process (initial data points, new surfaces, and final block model) the new data is validated back to the previous model, to ensure consistency.</li> <li>Standard Block model validation was completed using visual and numerical methods.</li> <li>No selective mining units were assumed in the estimate.</li> <li>Part of the deposit has been previously underground mined. A detailed review of the underground mine plans and production records produced depletion factors for underground mining panels. These factors were used in the resource classification confidence and for depleting the resource tonnages.</li> <li>Underground coal fires related to the underground workings have had impact on the coal quality and ground conditions. A detailed review of these fires and ground conditions have also identified areas with poor coal seam structural integrity (pillar collapse) and or have had their qualities altered due to the presence of fire. The factors have also been used to deplete and coal tonnage and or coal quality for the deposit affected by the presence of fires and or pillar collapse.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>All moisture values are reported on an air-dried basis, using air-dried ply results to estimated moisture. Inherent moisture is measured for all drillhole samples.</li> <li>Tonnages are estimated on a dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>A minimum seam thickness cut off for all modelled seams is 0.5m as this is what is currently considered as recoverable using open cast methods.</li> <li>A maximum ash cut-off of 25% has been applied to all coal seams except where seam continuity is required, which may include intervals with greater than 25% Ash.</li> <li>Coal with Ash &lt;8% is considered "bypass" coal and does not require any further processing. Coal with Ash &gt;8% needs to be processed through the company's Coal Handling and Processing Plant (CHPP).</li> <li>Coal tonnes are only reported from the M2 seam or its splits (no M3 and M1 tonnes are reported).</li> <li>All resources blocks have been limited to be within the 2018 Whittle pit optimisation revenue 2.0 factor (RF) pit shell.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>This declaration reports on a long-term operating site.</li> <li>Selected mining method/s chosen from long term experience of local conditions.</li> <li>A mined-out factor is assigned to each block based on the current site topography, or if within a set of mined out/signed off areas.</li> <li>Geotechnical parameters for cut slope design were developed based on historical cut slope performance, slope back analysis and laboratory testing of material strength parameters. Slopes are designed to comply with a Factor of Safety that exceeds 1.2 with its related probability of</li> </ul>

Criteria	Commentary
	<p>failure and potential failure dimensions.</p> <ul style="list-style-type: none"> <li>Minimum recoverable coal thickness is 0.5m. Final coal recovery percentages have been calculated using the degree of previous mining history, adjacent waste material, expected contamination, and expected mining losses.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>Contaminated coals from mining and/or from underground workings are processed via the company's Coal Handling and Processing Plant (CHPP) since 2010. The CHPP removes the dilatant material and a small portion of coal to provide a more saleable product. The plants performance has been routinely monitored since its inception.</li> <li>Although not included in the resource estimate, studies have been conducted on the properties of the coal pertaining to combustion potential, Ash fusion temperatures and Hardgrove Grindability Index.</li> <li>Small parcels of coal have been sent to customers for evaluation and test work.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>There are a number of Resource Consents regarding land use, air, and water quality that must be strictly adhered to for the Stockton site however these are unlikely to impact on the Mineral Resource Estimate.</li> <li>There are a number of lithological units exposed during the mining process which generate acid metal drainage. The water run-off across site is monitored and lime dosing is used at strategic sites to correct the water acidity.</li> <li>Due to high rainfall over the mine site the high content of suspended solid material is a concern to water quality. There is a series of drains and sumps that collect this 'dirty' water that allow for the settling of the suspended solids.</li> <li>Mined out areas are rehabilitated using a comprehensive system, which makes use of recovered soil, recovered vegetation, bio-solids, and dried grass.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>The relative density value is calculated using the available ash-density data (268 samples) to define an ash-density curve.</li> <li>Non-coal units are assigned default density value based upon the lithology type.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The resource has been classified into the Inferred/Indicated/Measured status by analysing eight factors upon which the geological confidence is based. <ul style="list-style-type: none"> <li>Presence of underground workings.</li> <li>Coal seam dip.</li> <li>Distance to nearest coal quality data.</li> <li>Ratio of coal seam thickness to the number of coal seams.</li> <li>Distance to reliable roof contact.</li> <li>Coal seam thickness (where less than one metre).</li> <li>Estimation passes need to estimate.</li> <li>Number of informing drillholes used.</li> </ul> </li> <li>The Competent Person will review the results of the semi-automated resource classification process and will be manually adjusted where necessary and/or required.</li> <li>The input data is comprehensive in its coverage of the coal seams and does not miss-represent the in situ coal seams.</li> <li>The results of the validation of the block model exhibit a good correlation of the input data to the estimated grades.</li> <li>All resources are within the 2023 Whittle pit optimisation revenue 2.0 factor (RF) pit shell.</li> <li>The Competent Person has taken into account all relevant factors in undertaking this estimation and considers the estimate to be a true reflection of the current understanding of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Definitive Feasibility Reports (PAG L5) for the Coal Handling and Processing Plant and Millerton Coal Resource have included external peer reviews of the geological databases and resource estimate methodology. No significant issues were identified in reviews. The database and geological resource model were also extensively peer reviewed internally by senior geologists and the Competent Person.</li> <li>Pre-Feasibility and Definitive Feasibility Reports for near deposits (Cypress and Mt William North) have included external peer reviews of the geological database. No significant issues were identified in reviews.</li> <li>Twin hole drilling programs have been undertaken to validate previous drillholes.</li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>During post mining reconciliation the drillhole ply results, and the associated estimated values, are compared to the mined coal to ensure that the drilling programs have been sufficient to predict the qualities of the mined coal.</li> <li>A geostatistical study undertaken by Golder and Associates into drillhole spacing was undertaken in 2006, that suggested grade control drillhole spacing should be on 15m or 20m grid spacing where coal quality parameters and coal geometry vary significantly.</li> <li>A review of the Stockton resource modelling process was undertaken by Palaris in 2013 as part of a Solid Energy New Zealand wide review.</li> <li>The BTM acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Based on the data available, the degree of accuracy of this statement is considered high for the Stockton deposit. The process for calculation has used: BTM Standards and procedures, BTM Resource and Reserve Guidelines and the 2012 JORC Code along with industry best practice where available to define the Resource estimates provided to confirm search estimation ranges and drillhole spacing for each resource classification.</li> <li>Regular mine area reconciliations are undertaken and show an acceptable correlation between mined coal and estimated coal.</li> </ul>

## Section 4 Estimation and Reporting of Coal Reserves

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>The Coal Resource estimates used are the Coal Resource estimates undertaken by the Stockton resource geologist as outlined in Section 1-3.</li> <li>Coal Resources are inclusive of Coal Reserves.</li> <li>The Coal Reserve estimates are for a long-term operating site.</li> <li>For the purpose of Reserve calculations, the mine is split into regions which are Millerton, Rockies, No2 South, A Drive, Webb, and Hope Lyons</li> <li>Drillholes are validated then coded to create a structural grid model using Vulcan™ software by BT Mining Limited. This structural model forms the framework that a 3D block model is created from by the site geologists. The model includes topography, seam structure and coal qualities used for in situ Coal Resource delineation.</li> <li>Coal quality values are estimated into the block model by BT Mining Limited. Coal Resources and Coal Reserves are derived from this model. The Company has robust and stable modelling processes modelling processes in place. Tonnages reported, model mining modifying factors including surface and historic underground mining extraction, loss and dilution, fire affected, plant yields and economics have been reviewed and reconciled against actual performance.</li> <li>A minor decrease in the previously reported Stockton Coal Reserves. Key decreases and gains are attributed to: <ul style="list-style-type: none"> <li>Decreases <ul style="list-style-type: none"> <li>Depletion by surface and stockpile mining.</li> <li>Decrease in Millerton reserve tonnes associated with update to modifying factors following March 2024 reconciliations.</li> </ul> </li> <li>Gains <ul style="list-style-type: none"> <li>A change in pit design – resulting in a net increase on Coal Reserves.</li> <li>The re-inclusion of high sulphur (&gt;5% adb) top seam ply across Millerton and Hope Lyons is based on observed proven ability to blend into saleable product.</li> </ul> </li> </ul> </li> <li>Other minor changes are as follows: <ul style="list-style-type: none"> <li>Additional coal tonnes recovered but not modelled, primarily from Millerton where mining proceeded through faulted or fire affected area.</li> </ul> </li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>The Competent Person for this Coal Reserve Statement is Ian Harvey, a full-time employee of BT Mining Limited based at Stockton.</li> <li>The Competent Person has almost 20 years' experience working at Stockton in various roles, including resource modelling and mine planning, as well as coal quality management and mine/market planning.</li> </ul>

Criteria	Commentary																								
Study status	<ul style="list-style-type: none"><li>Stockton mine is an operating mine.</li><li>Material Modifying Factors have been considered.</li><li>The reported Coal Reserve is based on actual site performance, costs and mine plans that have been determined to be economically viable in the BT Mining cashflow analysis.</li><li>No additional projects have been added in 2024 with Coal Reserves.</li></ul>																								
Cut-off parameters	<ul style="list-style-type: none"><li>A maximum ash cut-off of 25% has been applied to all coal seams except where seam continuity is required, which may include intervals with greater than 25% ash.</li><li>Coal with ash &lt;8% is considered “bypass” coal and does not require any further processing.</li><li>Coal with ash &gt;8% “wash” coal needs to be processed through the company’s Coal Handling and Processing Plant (CHPP). The feed cut-off grade depends on the ash source, being either &gt;8% and &lt;35% if ash is in situ, or &gt;8% and &lt;50% ash if contaminated with non-coal material (e.g. ash introduced due to previous underground extraction).</li><li>The minimum mineable seam thickness is 0.5m based on recovery by surface mining methods used at the site.</li><li>Coal Reserves are only reported from the M2 seam horizon.</li></ul>																								
Mining factors or assumptions	<ul style="list-style-type: none"><li>The mining method is conventional drill and blast, load and haul open pit mining operation. This utilises truck and excavator for waste movement, while coal is loaded using a combination of loaders and excavators with haulage to the run-of-mine (ROM) hopper CHPP, or stockpiles using dump trucks. The operations are supported by additional equipment including dozers, grader and watercarts. The selected mining method is based on long term experience of local conditions.</li><li>Minimum recoverable in situ thickness is 0.5m.</li><li>Coal Reserve tonnages have been estimated using a bulk density of coal determined by an ash and density relationship. The ash/density relationship was developed from a number of samples from all over the deposit and from different intervals within the seam.<ul style="list-style-type: none"><li>Density = (0.000001 * (ash ^3)) - (0.00006 * (ash ^2)) + (0.0095 * ash) + 1.2653</li></ul></li><li>All coal qualities quoted are on an Air-Dried Basis (ADB).</li><li>Geotechnical parameters are based on geotechnical studies undertaken by the Stockton engineering geologists. Specific parameters are applied to each pit. Pit designs have been based on geotechnical constraints and parameters. The typical highwall configuration is a batter height of 15m with batter angles between 30° - 76° using 8.5m wide benches. A maximum 10% gradient and 23m wide running surface is being used for in pit ramps and roads.</li><li>Pit limits have been updated based on pit optimisation studies with restrictions for current land and mineral access determined by mining permits and granted consent limits.</li><li>Pit optimisations used current cost and revenue assumptions. The latest pit optimisation study was completed by BT Mining Limited in December 2023.</li><li>Grade control drill is undertaken as defined in Sections 1 to 3. Allowances for mining dilution and recovery has been applied to the block model. The mining loss, contamination and dilution is based on the lithology above the coal roof and below the coal floor as follows in metres for each mineable horizon:<table><tr><td></td><td colspan="2">Thickness (m)</td></tr><tr><td></td><td>Roof</td><td>Floor</td></tr><tr><td>Mudstone Lost:</td><td>0.10</td><td>0.05</td></tr><tr><td>Mudstone Contaminated</td><td>0.05</td><td>0.10</td></tr><tr><td>Mudstone Dilution:</td><td>0.25</td><td>0.25</td></tr><tr><td>Other Lost:</td><td>0.05</td><td>0.05</td></tr><tr><td>Other Contaminated:</td><td>0.10</td><td>0.10</td></tr><tr><td>Other Dilution:</td><td>0.05</td><td>0.05</td></tr></table></li><li>Additional recovery factors for Millerton and Rockies mining block areas include losses for historical underground extraction, fire affected coal, and where the overburden material has collapsed into the coal seam.</li><li>Approximately 58% of total Coal Reserve tonnes require washing to make a marketable product.</li><li>Minimum mining widths are dependent on volumes to be excavated and the size of the fleet to be used. Typically for the bulk excavator and truck fleet this is approximately 30m. For the small</li></ul>		Thickness (m)			Roof	Floor	Mudstone Lost:	0.10	0.05	Mudstone Contaminated	0.05	0.10	Mudstone Dilution:	0.25	0.25	Other Lost:	0.05	0.05	Other Contaminated:	0.10	0.10	Other Dilution:	0.05	0.05
	Thickness (m)																								
	Roof	Floor																							
Mudstone Lost:	0.10	0.05																							
Mudstone Contaminated	0.05	0.10																							
Mudstone Dilution:	0.25	0.25																							
Other Lost:	0.05	0.05																							
Other Contaminated:	0.10	0.10																							
Other Dilution:	0.05	0.05																							

Criteria	Commentary
	<p>excavators and trucks this is approximately 15m.</p> <ul style="list-style-type: none"> <li>Current mining methods require the following infrastructure; haul roads, drainage, pumps, sumps and dam structures, lime dosing plants, coal stockpile areas, CHPP, coal load out and bins, aerial ropeway, train load out and bins, workshop, offices, and contractor facilities. Much of this infrastructure is in place with the main new infrastructure required being related to water management and access such as sumps, dams and water control as the mining progresses into new areas.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><b>Bypass Coal</b> is defined as coal recovered that is not contaminated by rock or other materials and which when mined, is a saleable product (ash &lt;8%).</li> <li><b>Wash Coal</b> is defined as coal that requires processing/washing prior to becoming a marketable product. The feed cut-off grade depends on the ash source, being either &gt;8% and &lt;35% if in situ ash, or &gt;8% and &lt;50% for coal contaminated with non-coal material.</li> <li>Approximately 55% of total Reserve coal tonnes require washing to make a marketable product.</li> <li>Stockton has a CHPP in operation to produce a marketable product.</li> <li>The CHPP has an online analyser for identifying coal that is out of specification.</li> <li>Additional samples are sent for petrographic analysis (Romax).</li> <li>The processes used are standard for the coal industry and so are well tested technologies. This has also been backed up by bulk samples being taken and tested for washability, yield and recovery factors.</li> <li>Historical plant performance was used to update wash yield factors in March 2024 and are minor changes incorporated in the model.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>All mining approvals, consents, permits and licenses to operate have been granted for Stockton Mine. These are CML37150, MP 41810 and MP 52937.</li> <li>MP 41810 has had an Extension of Duration application submitted to NZP&amp;M in March 2024. The permit remains “alive” until a decision is finalised by the regulator. BT Mining Ltd has no reason to expect the application to be declined.</li> <li>Environmental planning and management are fully integrated with coal mining at Stockton and the mine has annual rehabilitation targets.</li> <li>Due to high rainfall over the mine site the high content of suspended solid material is a concern to water quality. Stockton is developing an area for mining which includes systems to divert clean surface water around the disturbed area and for collection and channelling of mining contaminated water from the work site into the mine’s water treatment infrastructure.</li> <li>The mine waste rock has the potential to generate acid; therefore, mine water is treated by lime dosing prior to discharge into receiving environment.</li> <li>The mine has a Closure Plan that has been approved by regulatory authorities.</li> <li>Disturbed areas are progressively rehabilitated on completion of mining activities.</li> <li>Soil and vegetation, where practically accessible, are carefully lifted and taken to a holding area or immediately placed in an area (VDT methods) of the mine undergoing rehabilitation.</li> <li>Environmental impacts that have been identified can be mitigated to meet permitting requirements.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>Stockton is an operating site with existing infrastructure in place to support the operation. This includes a CHPP, ROM pads, water treatment plant, lime dosing plant, workshop, offices, access road, aerial ropeway, train load out, water treatment structures, weighbridge area, contractor’s laydown yard, power station and explosives storage.</li> <li>Labour is primarily sourced from the nearby town of Westport.</li> <li>Accommodation for the labour source is off-site in the small nearby towns but primarily in Westport.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>Stockton is an operating mine and the majority of required capital expenditure has already been spent. Some additional capital expenditure is required to maintain existing structures, mobile fleet replacement and to develop additional water infrastructure as required for future mining areas (e.g. Resource definition).</li> <li>Operating costs are reviewed annually. These are based on historical actuals and forecasting for the following financial year. Operating cost is made up of equipment costs, fuel consumption, construction, fixed costs, administration costs, environmental costs and transport costs. These</li> </ul>

Criteria	Commentary
	<p>include mining, processing, civils, administration, haulage, coal transport via road, aerial ropeway, rail freight and port storage and handling costs.</p> <ul style="list-style-type: none"> <li>• The CHPP is owned by BT Mining and costs are based on the demand for wash product in the annual budget. Historical data has been used to calculate CHPP costs.</li> <li>• Mine Rescue Levy, License and Inspection Levy, Energy Resources Levy, Crown Royalty, Coal Mining Licence fees, FME carbon and land rates are applied as per appropriate NZ legislation.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>• Coal prices – Hard Coking Coal (HCC) price estimate used was based on BT Mining Limited supplied pricing, PricewaterhouseCoopers (short-term forecast), and extrapolated for the long-term based on publicly available forecasts. These costs were documented by BT Mining and were reviewed and applied by BT Mining Limited for economic pit shell evaluation.</li> <li>• Foreign exchange rates, sourced from BT Mining, are based on consensus published short term rates, PricewaterhouseCoopers and other publicly available forecasts. Current rates assumed are NZ\$1.00 = US\$0.65.</li> <li>• All other prices derived from HCC based on agreed company ratios (generally SHCC 80%, SSCC 70% but can vary by mining area).</li> <li>• High sulphur coal products &gt; 4% adb are further discounted to 33% of the HCC benchmark estimate.</li> <li>• Price sensitivity to coal with sulphur &gt; 4% was included in the 2023 pit optimisation analysis.</li> <li>• Modelled thermal coal are uneconomic at the current sale price and excluded from the 2024 Coal Reserve tonnes.</li> <li>• Thermal coal extracted as part of mining process is taking advantage of current elevated thermal coal prices and being sold into the international markets.</li> <li>• Discount rate is reviewed annually based on an internal BT Mining real rate.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>• The supply and demand situation for coal is affected by a wide range of factors, and coal consumption changes with economic development and circumstances. BT Mining Limited has sales agreements in place with some existing customers. Established external forecast analysts have provided guidance to assess the long-term market and sales of coal.</li> <li>• Stockton sells coal into several markets; the Coal Reserve quality in the Stockton pit has been decreasing over the life of mine as the Coal Reserve is depleted. Particularly lower in rank or higher in sulphur coal remaining have resulted in changes over time to coal market requirements.</li> <li>• BT Mining Limited Marketing team is regularly in talks with new customers and investigate potential new markets.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>• For the optimisation study carried out December 2023 the following inputs have been taken into consideration: mining, processing, civils, administration, haulage, aerial ropeway, rail, port costs and licenses and levies as per appropriate NZ legislation.</li> <li>• Pit optimisation study developed a revenue factor (RF) with a range of 0.35 to 2.0 in 0.05 intervals.</li> <li>• The incremental RFs allow for the generation of different pit shells, allowing different stages to be chosen rather than just mining the ultimate pit. RFs &gt; 1 provide an indication of the possible size of a pit with potential price increases and designate likely infrastructure or waste rock storage areas.</li> <li>• Sensitivity analysis has been completed on commodity price variations which is the primary driver for the Stockton pits.</li> <li>• The updated pit optimisation study was carried out by BT Mining Ltd in December 2023 for the Stockton pit area has been used to determine the current Coal Reserve block extents.</li> <li>• The reported Coal Reserve is based on economic viability determined by BT Mining Ltd conducted cashflow analysis using actual site performance, costs, mine plans and BT's marketing studies for sales and pricing.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• BT Mining Limited currently holds the required permits for mining activities and landowner access to mine the current Coal Reserves reported.</li> <li>• The Millerton and Plateau Protection Society (MAPPS) is an Agreement between BT Mining and the residences of Millerton Township. In this agreement BT Mining has stated that they will not mine within the MAPPS area but have also stated that it retains all the rights to undertake activities covered under the Coal Mining Licence (CML) including coal mining.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>As a part of the resource consenting process and general site operations, regular communication and consultation has taken place with the local communities including the local Iwi.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>All material legal agreements, marketing arrangements and government approvals are in place and active for the existing operation.</li> <li>There are no currently identified material naturally occurring risks that could impact the project or estimated Coal Reserves.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>Coal Reserves are based upon Resources classified as either Measured or Indicated from the Resource estimation and classification process.</li> <li>The prospect is an operating site and assessed at or above a Pre-Feasibility Study (PFS) level.</li> <li>The Coal Reserve classification results appropriately reflect the Competent Persons view of the deposits.</li> <li>1% of Probable Coal Reserves are derived from Measured Coal Resources.</li> <li>Coal tonnes with &gt;4% sulphur require blending with low sulphur coals assumed from the Bathurst Resources Limited (BRL, parent company) owned projects or other unidentified external sources to make a marketable product and have been classified as Probable.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>In 2008 a study was undertaken to assess coal washability and based on the results the current CHPP constructed and remains in use at the site.</li> <li>In 2009 a Definitive Feasibility Study was undertaken for the Millerton Region.</li> <li>Palaris undertook a review of the Stockton reserve model in 2013 and 2016 as part of a Vender Due Diligence process for the previous owner Solid Energy New Zealand Limited.</li> <li>Internal review Pit Optimisation Study has been undertaken in 2014.</li> <li>Golder Associates (NZ) Limited has reviewed the economic pit limits as part of Pit Optimisation studies completed in June 2015 and July 2018 and September 2021.</li> <li>BT Mining Ltd has reviewed the economic pit limits as part of the Pit Optimisation study completed in December 2023.</li> <li>The mining and CHPP performance are reconciled annually.</li> <li>In March 2024 an internal review of underground and fire affected modifying factors within the Millerton Region was undertaken.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Coal Reserves have been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the basis of the categorisation reflects the accuracy of the coal reserve tonnes.</li> <li>The accuracy of the Coal Reserve estimate is dependent on the ability to sell the coal at the estimated prices and the site operating costs. Site operating costs are based on historic actual costs, the discount rates and the forecast long-term coal sale price have been reviewed internally by BT Mining and as part of a pit optimisation study by in 2023.</li> <li>The Modifying factors applied to the reserve model are global estimates of tonnes and grade.</li> <li>Accuracy and confidence of modifying factors are generally consistent with the current operation. Modifying factors applied to the Stockton Coal Reserve are mining losses, dilution and contamination to both roof and floor of the coal seam. The amount of losses, dilution and contamination are dependent on the lithology of the rock in the roof and floor. Additional modifying factors are applied for previous underground (UG) mined area (e.g. Millerton area).</li> <li>For the UG areas the accuracy of factors for mining losses, dilution and contamination is reflected in the Coal Reserve classification of Probable. The other modifying factor that affects the Millerton block is presence of historic and active UG fires. A fire affected surface is estimated from drillhole data and applied in the block model. The accuracy of this surface is reflected in assigned Coal Resource classification of Inferred. BT Mining conducted additional infill and improved resolution of the surface area in 2024. Updates to modelled modifying factors were undertaken following the March 2024 Millerton review.</li> <li>Marketable coal tonnes are reported on the basis of in-ground moisture only, further data and assessment is recommended in order to report total product moisture.</li> <li>There are an estimated 0.4 million tonnes of coal product with a sulphur content &gt;4% currently in the Stockton Coal Reserve (10.5% of Coal Reserve) that is recovered during the mining process and requires blending to make a marketable product. A high sulphur product (Granity) has been developed that contains a high proportion of high sulphur coal. This product has been</li> </ul>



Criteria	Commentary
	<p>accepted following a customer trial during FY22 and product sales continue in FY24, providing further confidence of market support. High sulphur tonnes (&gt;4%) are classified as a Probable Coal Reserve.</p> <ul style="list-style-type: none"> <li>• A review of the Millerton region was undertaken in March 2024. This was completed due to a variance to the recovery of modelled Millerton coal verses actual recovered tonnes. Adjustment was made for the Millerton Area in the reserve model.</li> </ul>

## Appendix A:

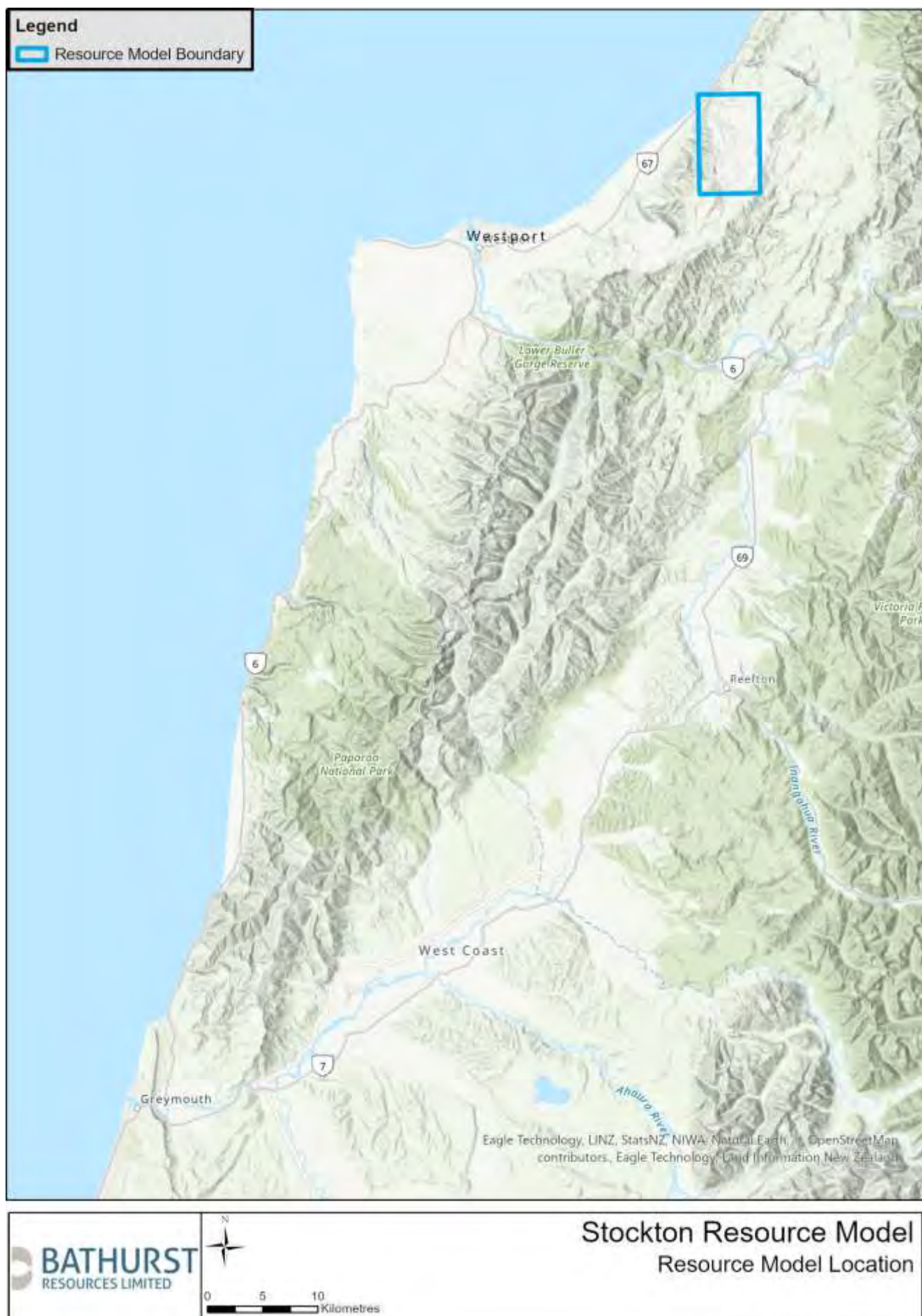


Figure 1: Location map of Stockton block model within Buller District



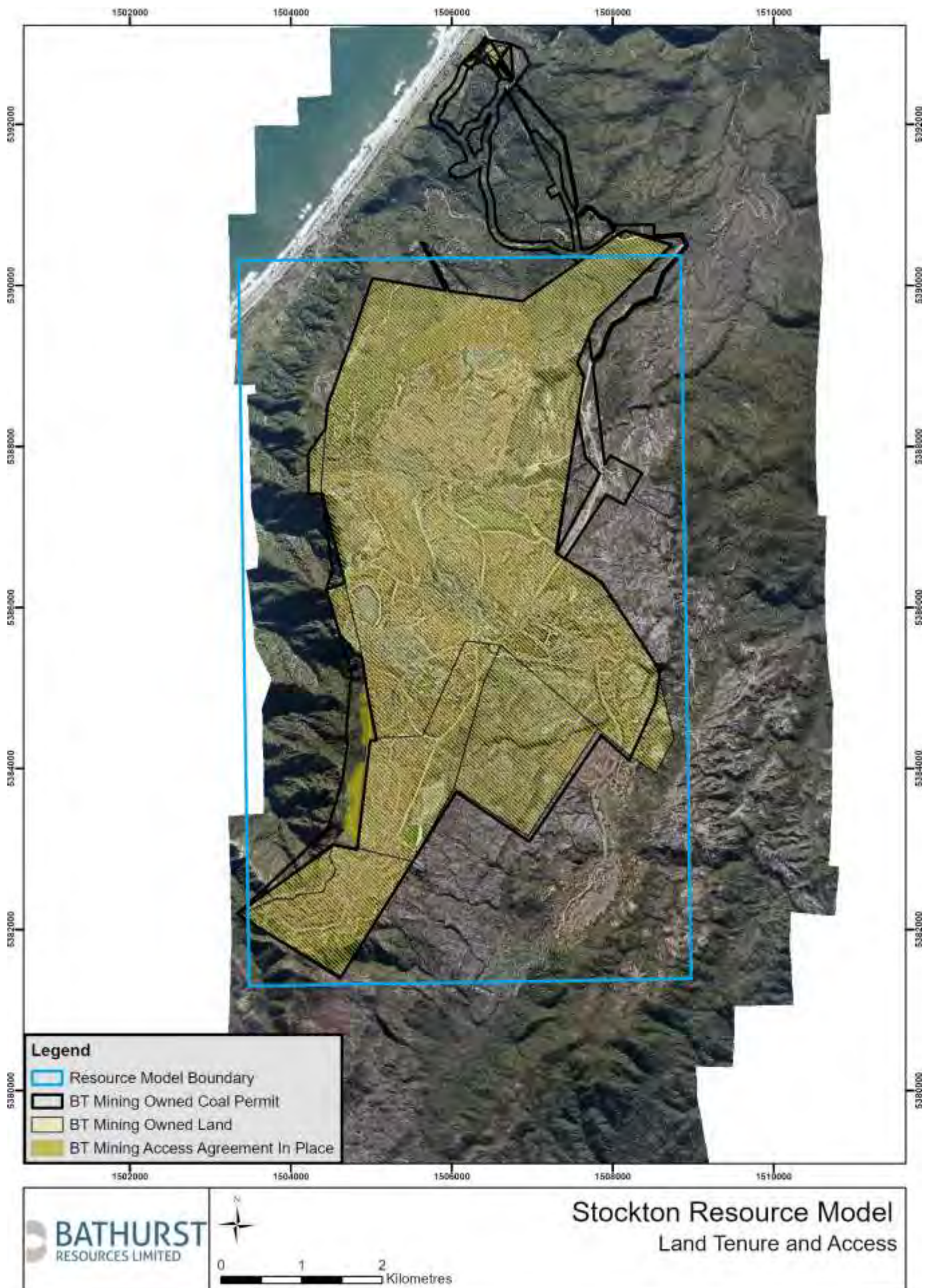


Figure 2: Map showing Land rights across the mine site



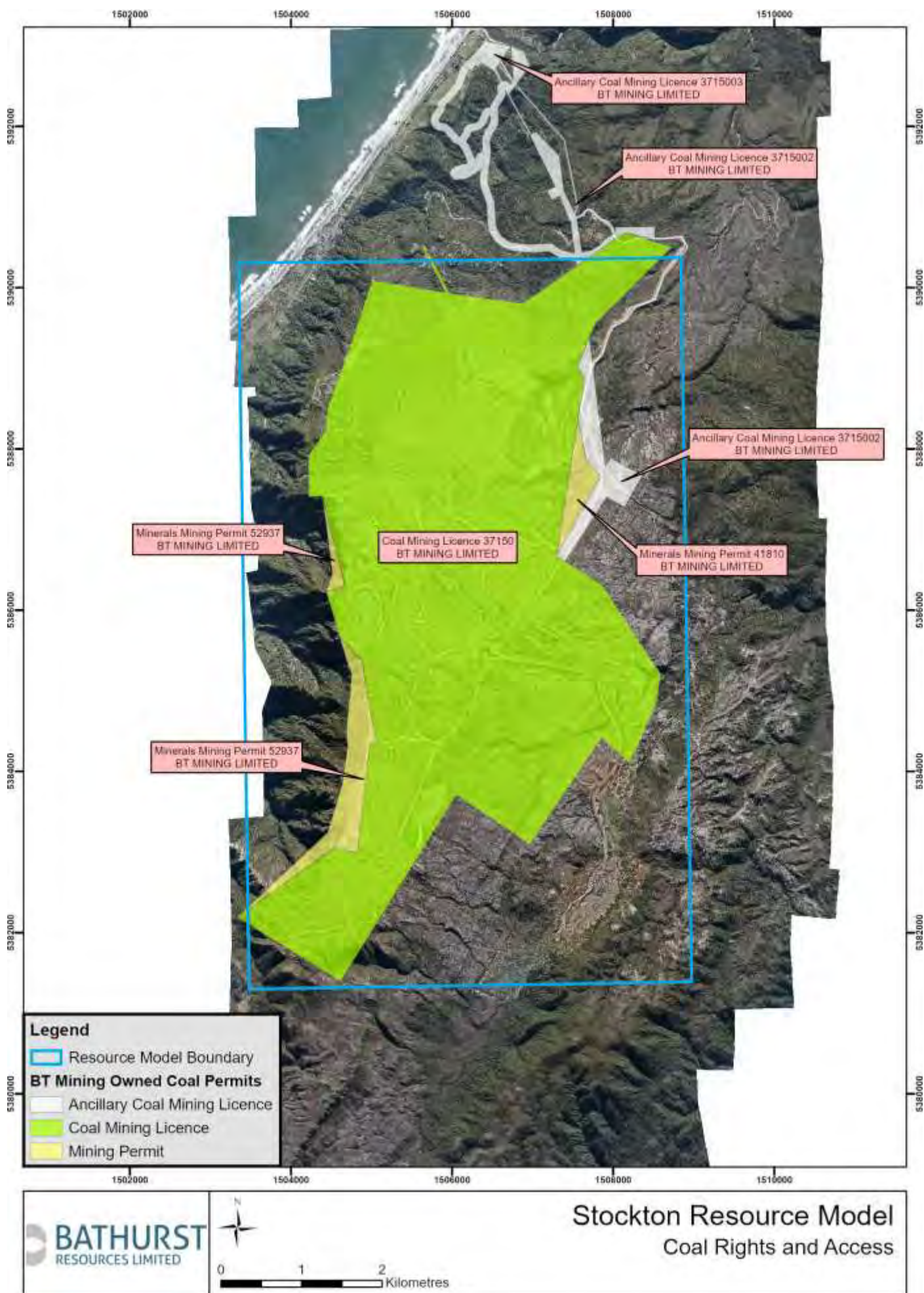


Figure 3: Map showing Mining Permit across mine site



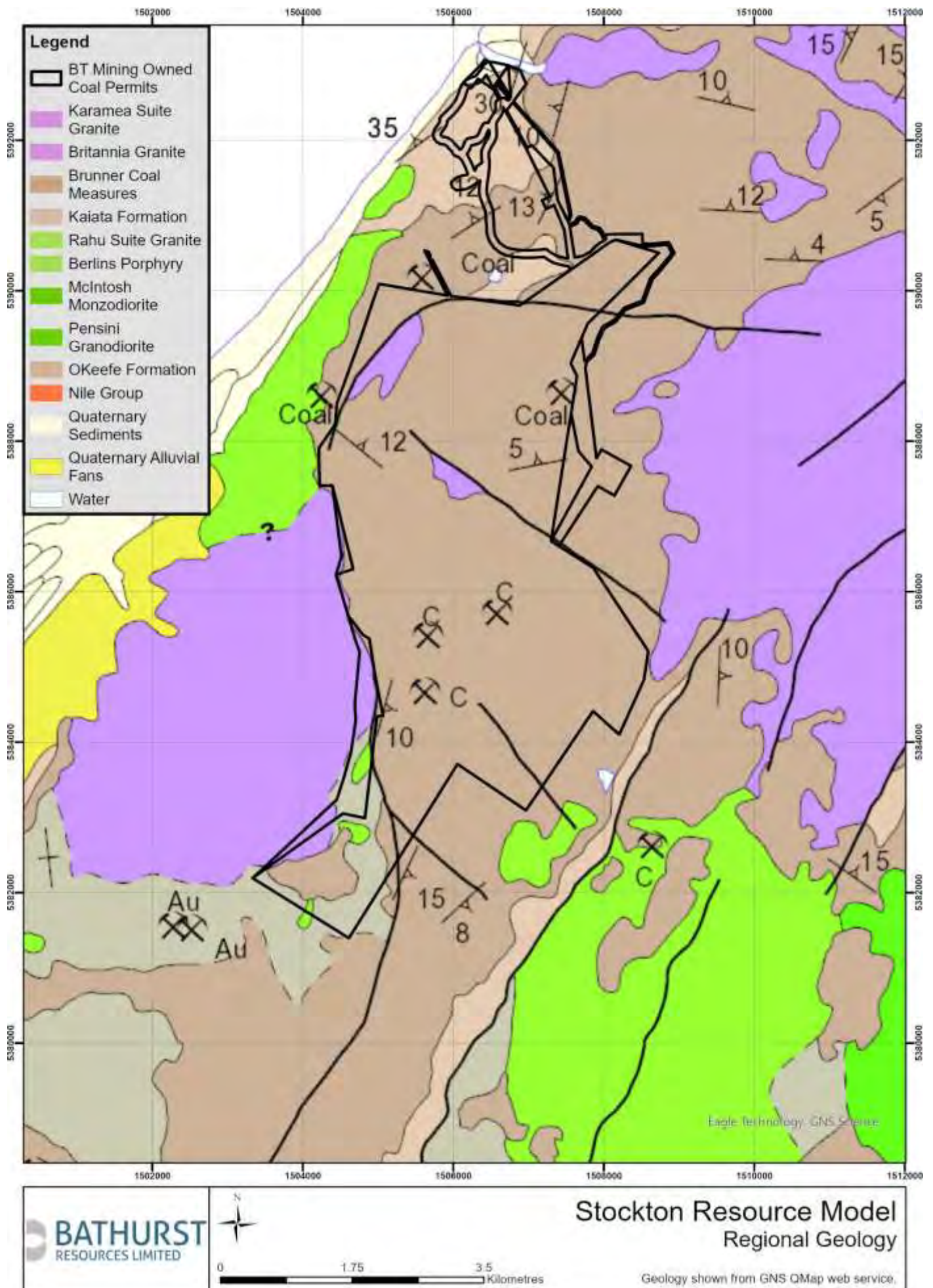


Figure 4: Geological QMap across the mine site



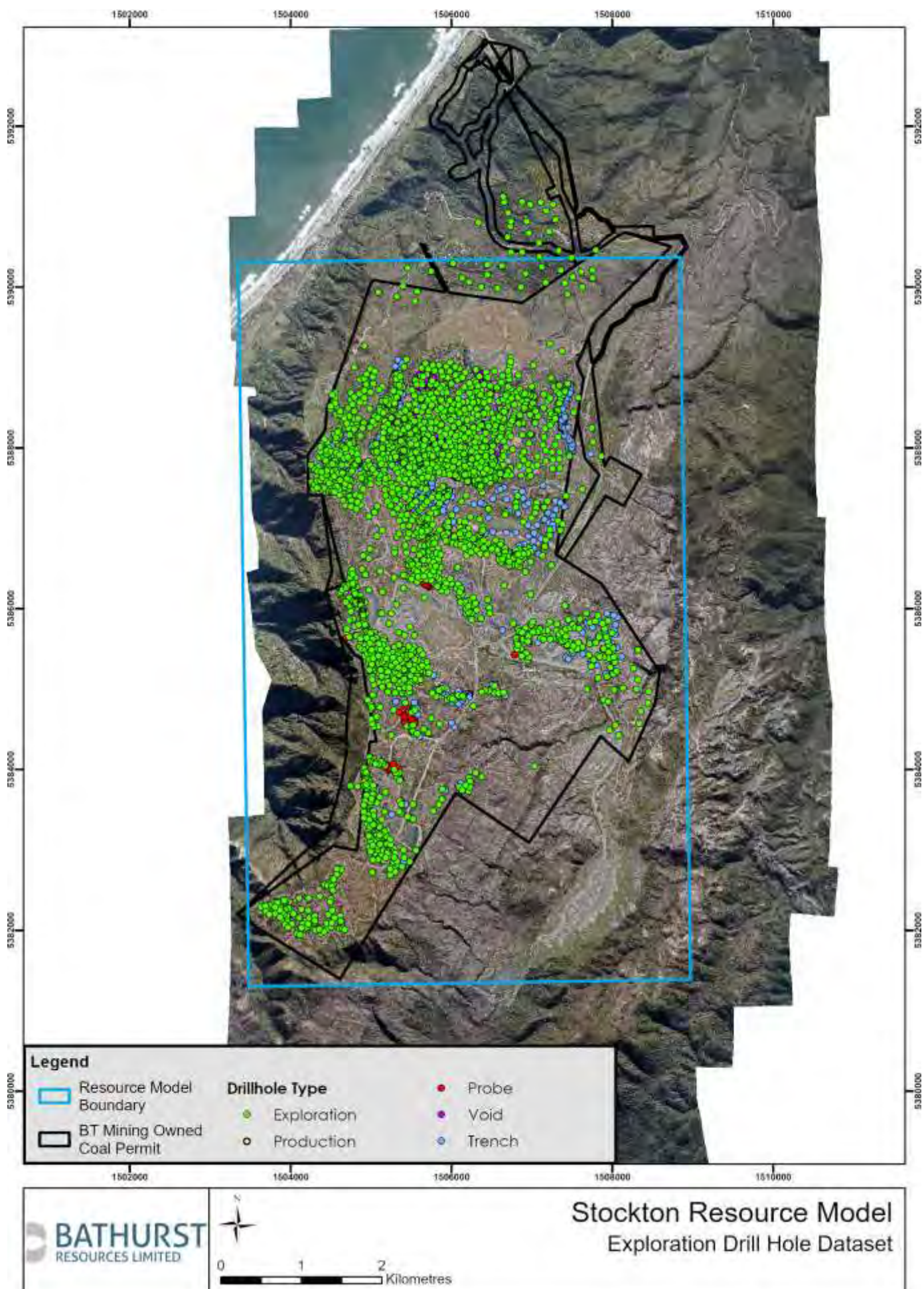


Figure 5: Map showing drillhole type/distribution

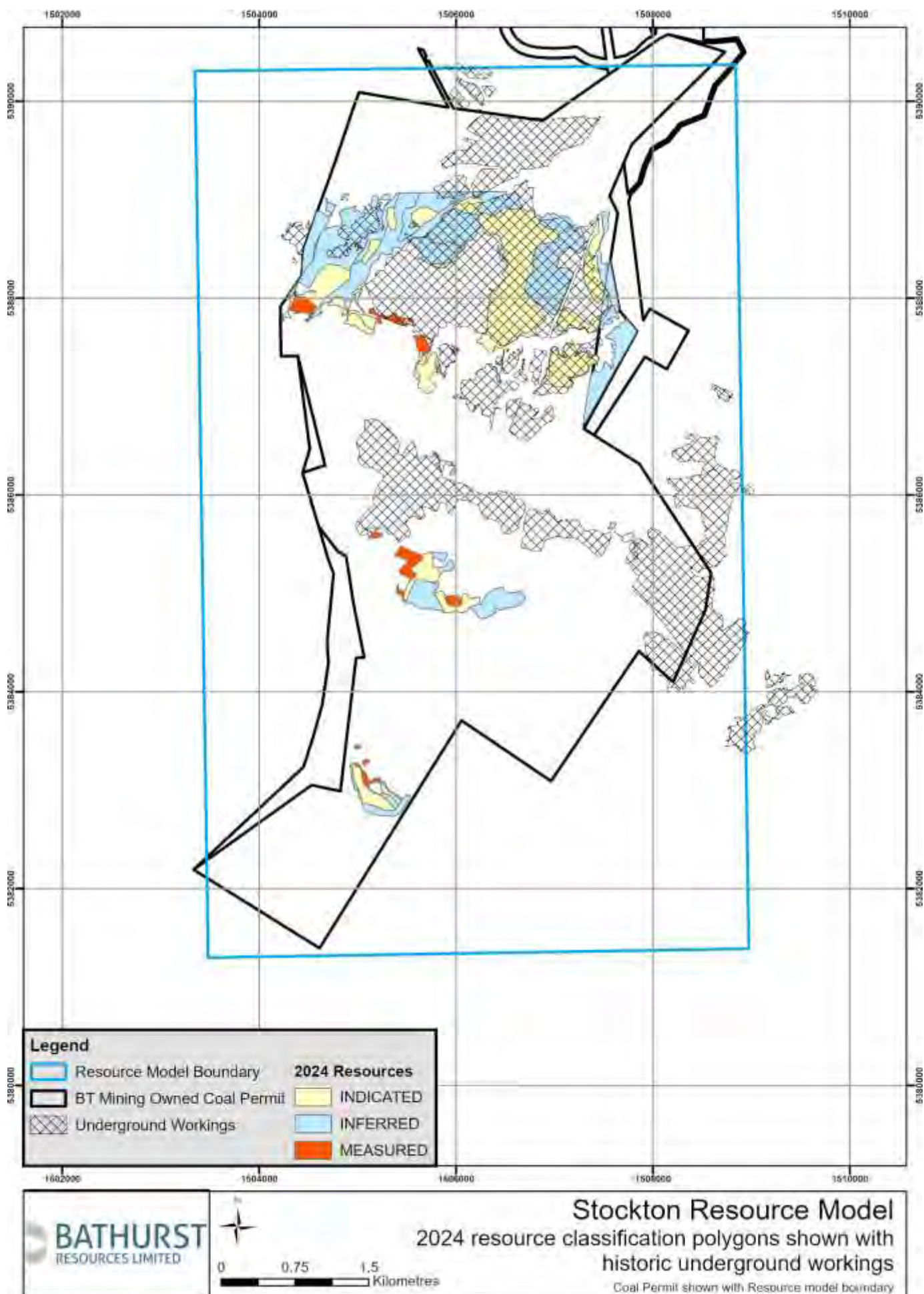


Figure 6: Map of underground workings across mine area



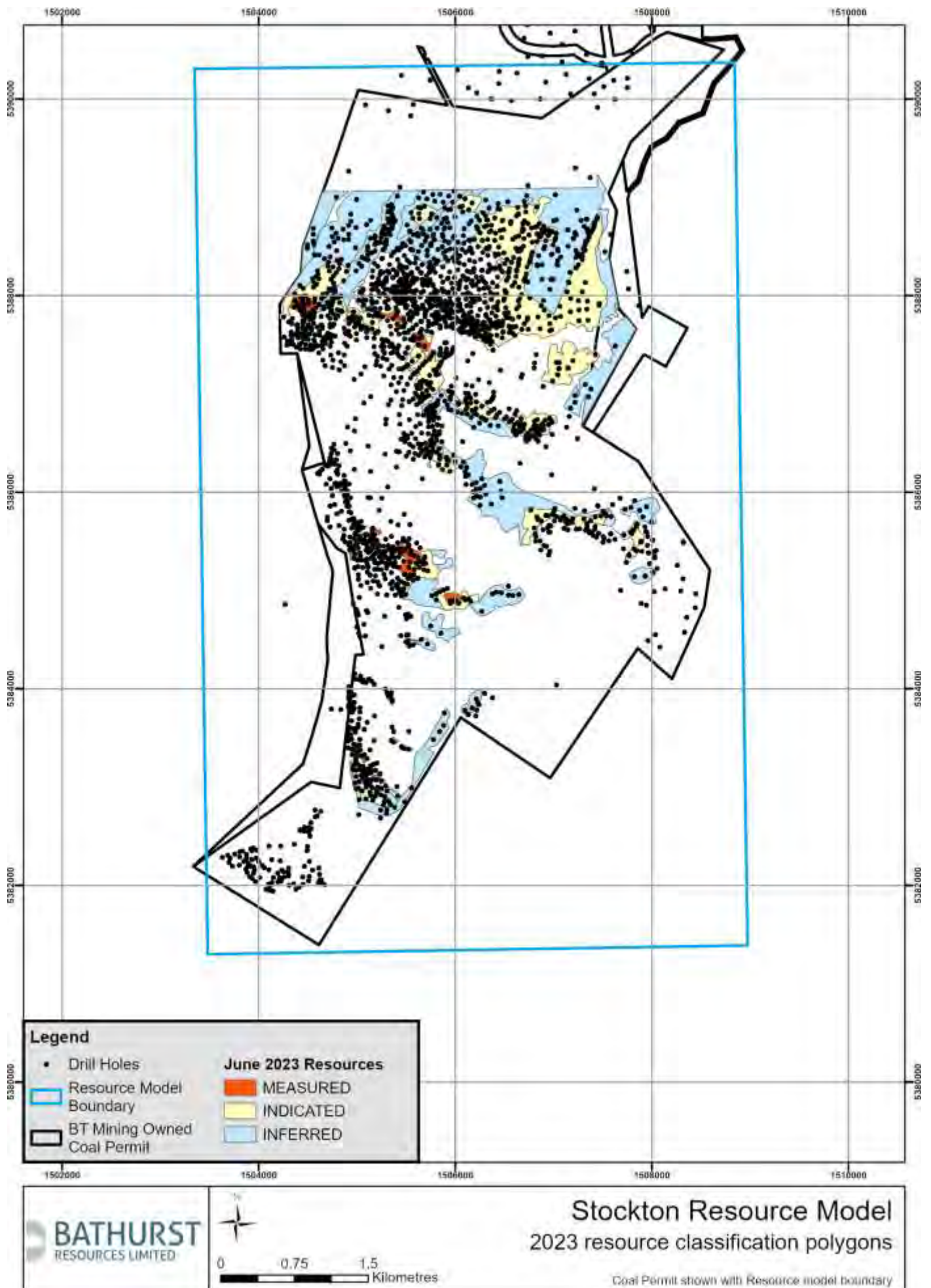


Figure 7: Map of Resource Classification



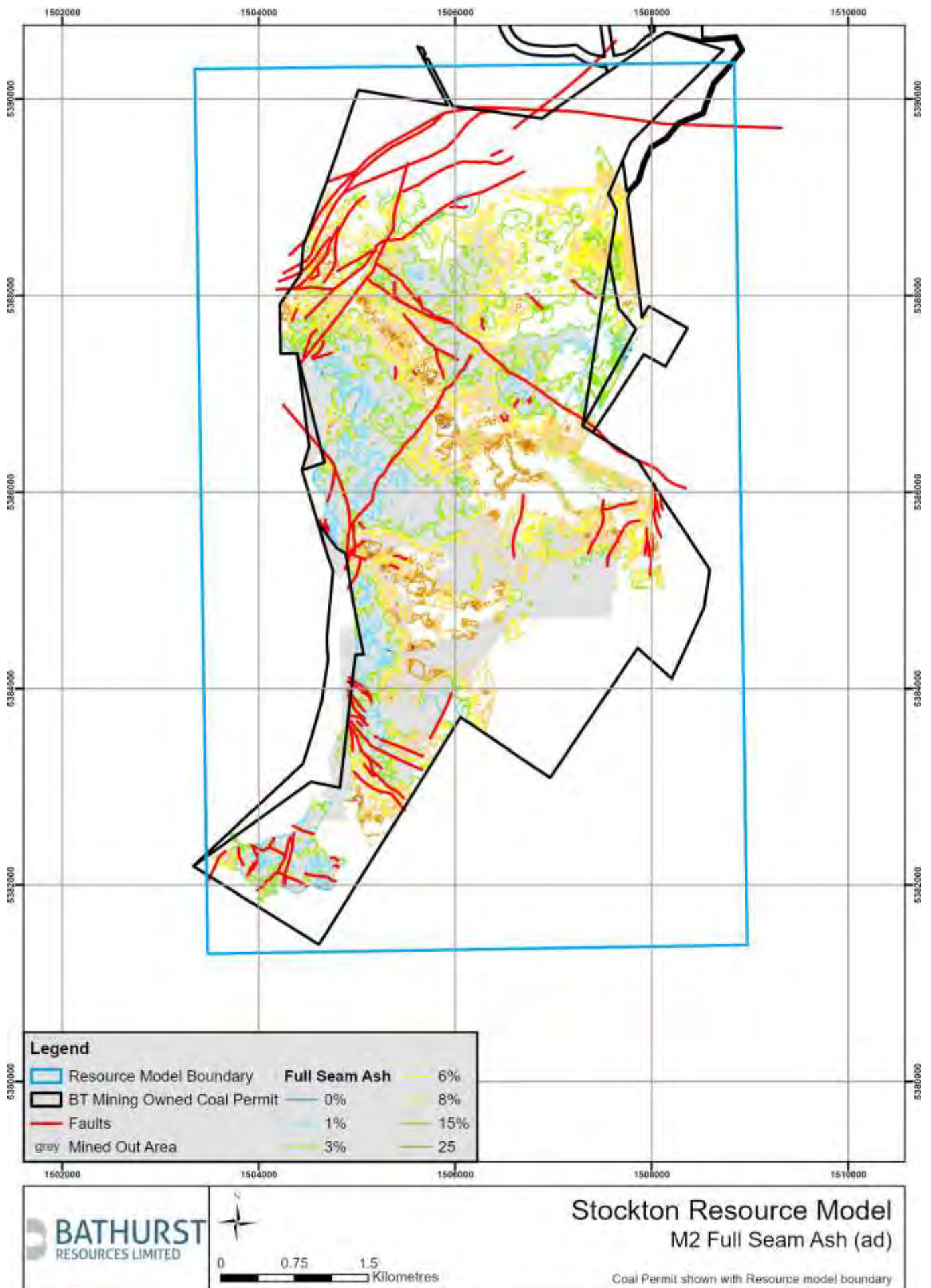


Figure 8: Map showing M2 Ash distribution

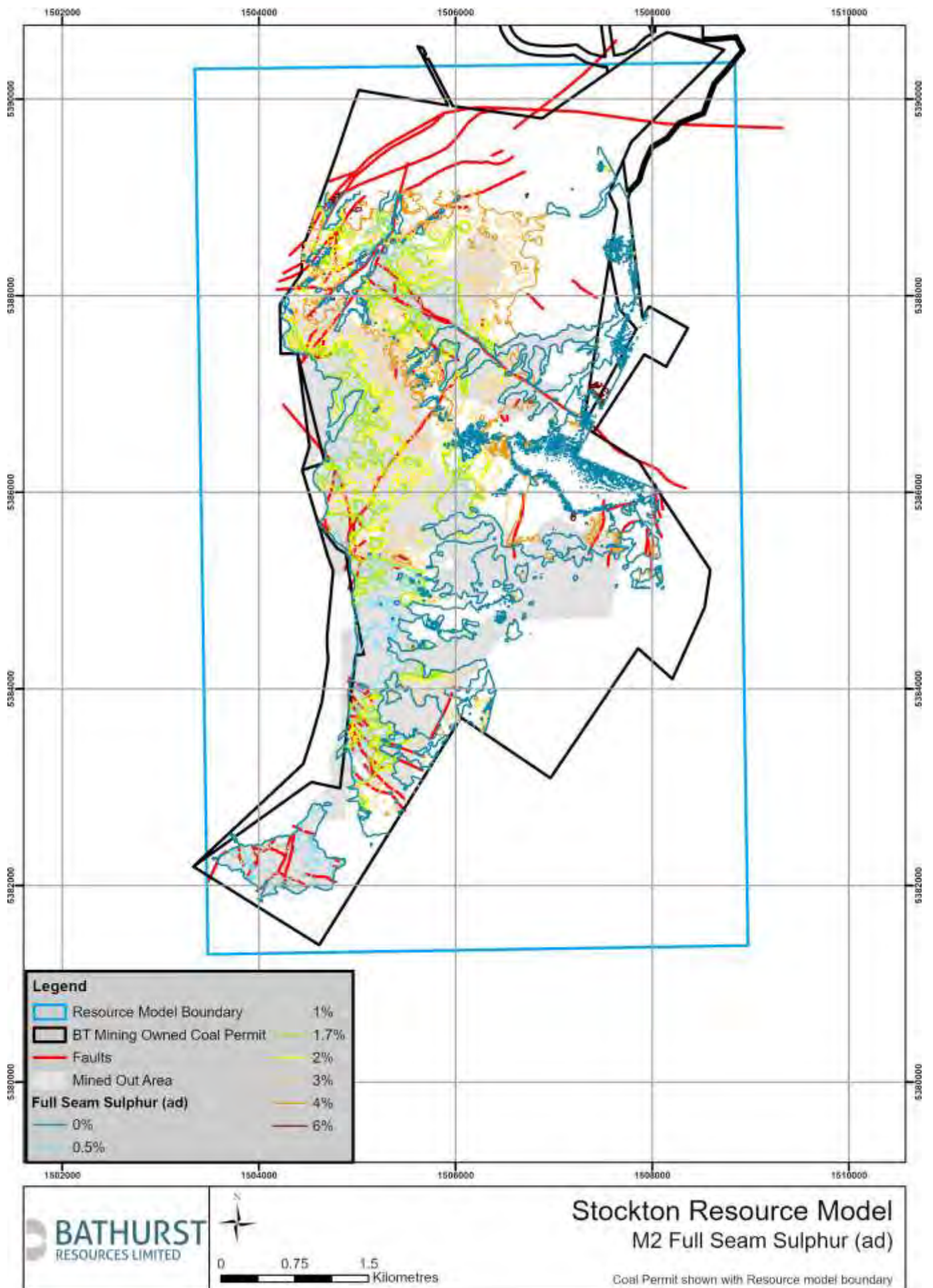


Figure 9: Map showing M2 sulphur distribution



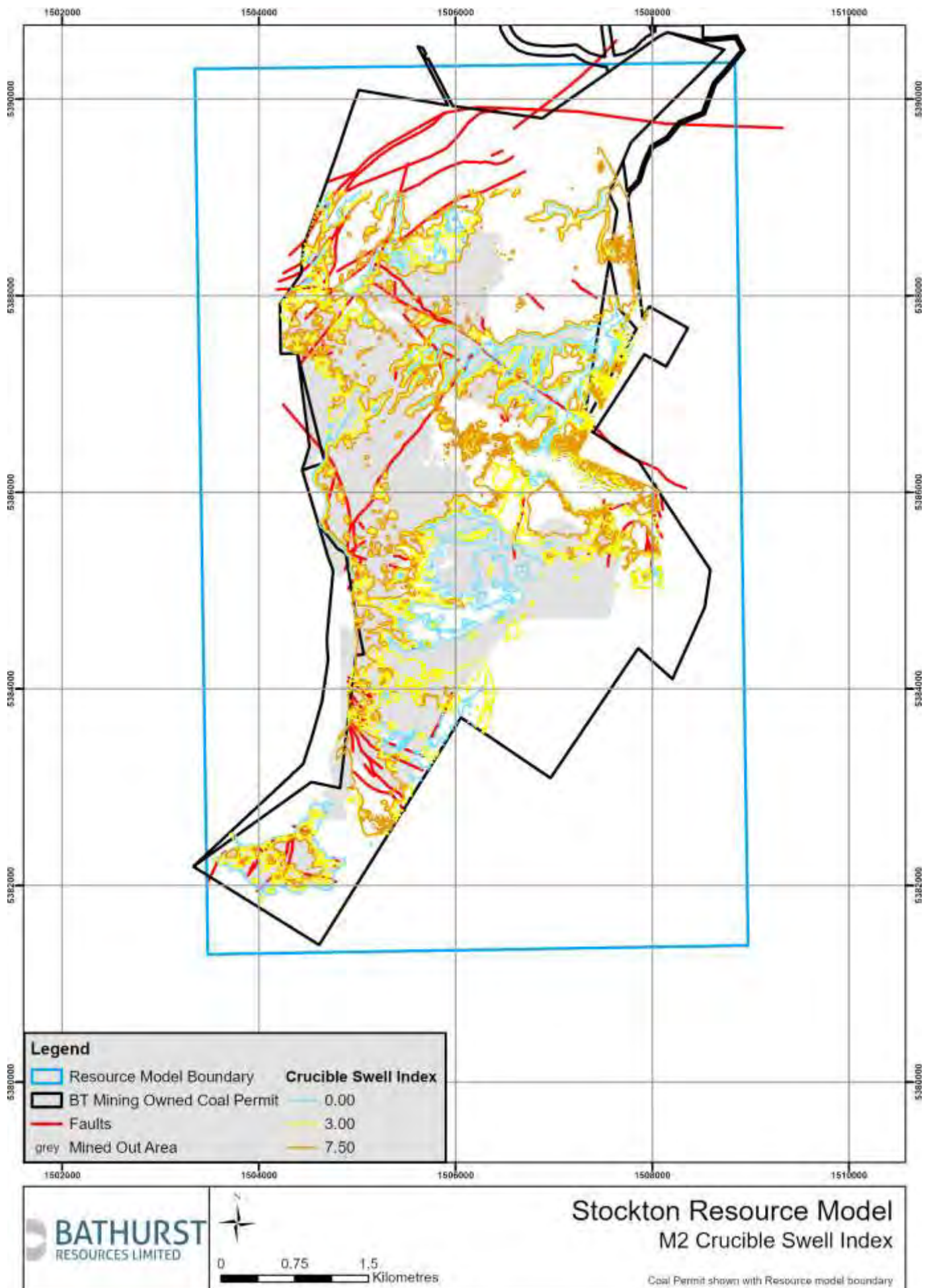


Figure 10: Map showing M2 Crucible Swell Number (CSN) distribution

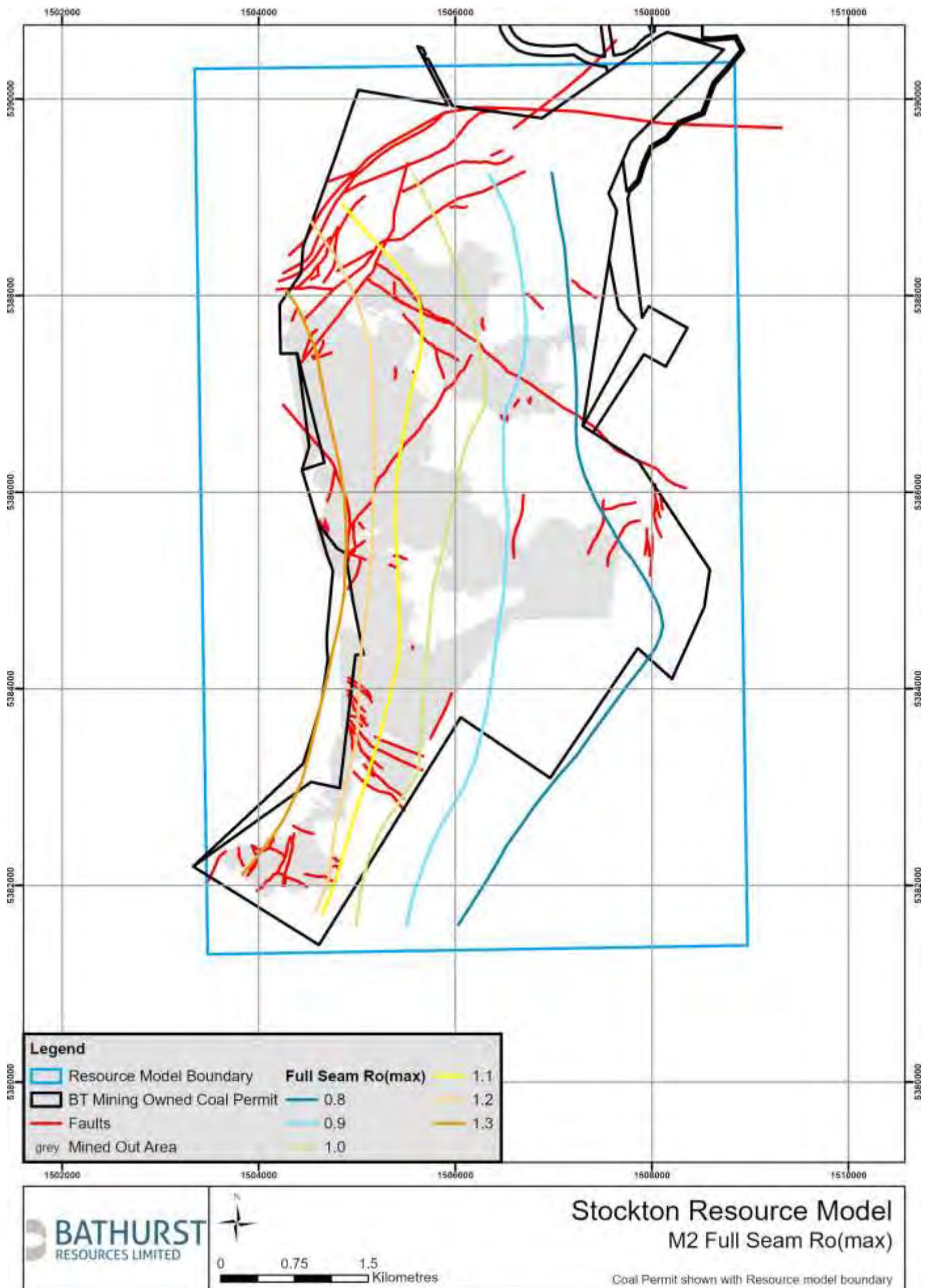


Figure 11: Map showing M2 RO(MAX) distribution



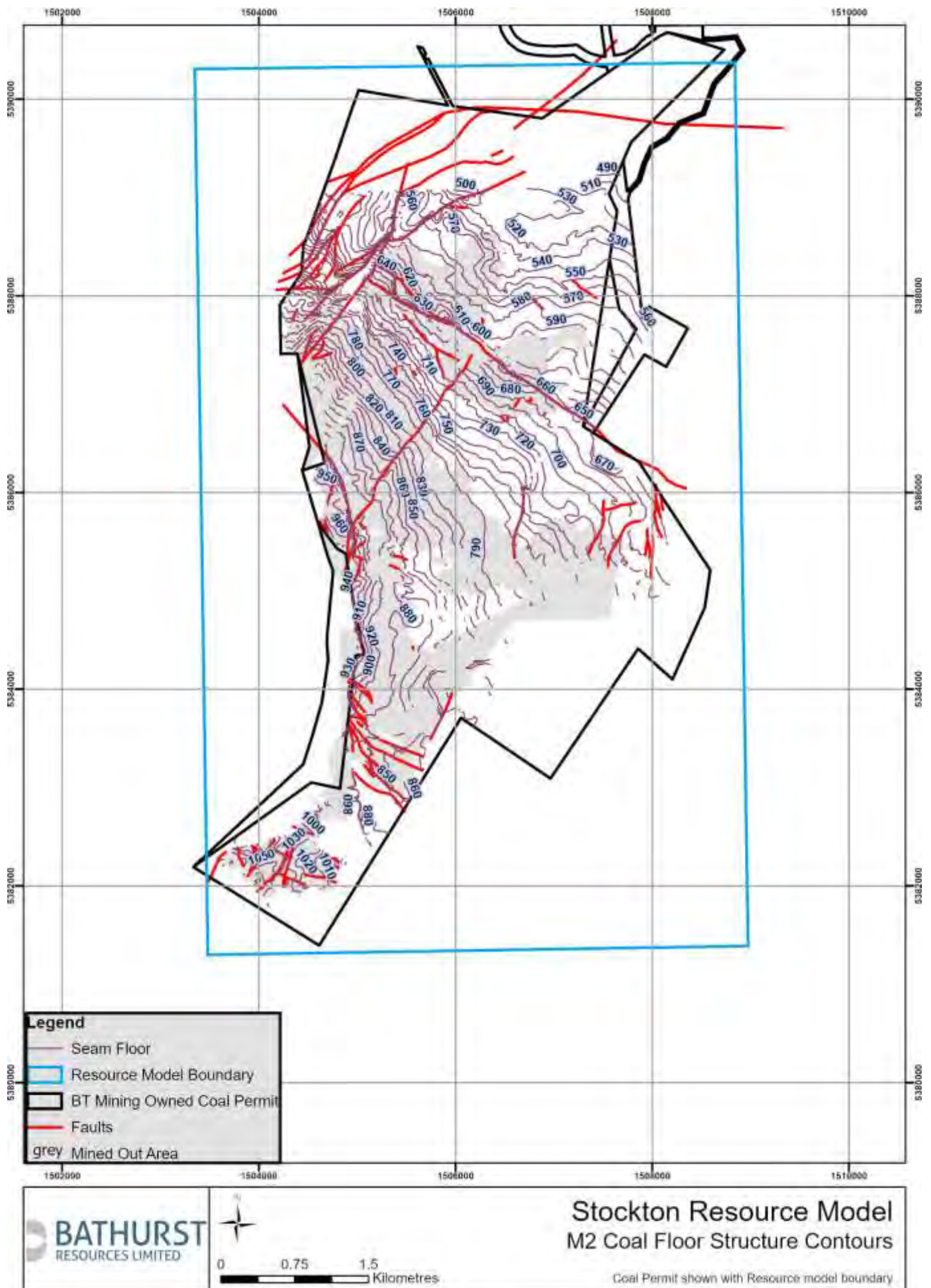


Figure 12: Map showing M2 floor contours distribution

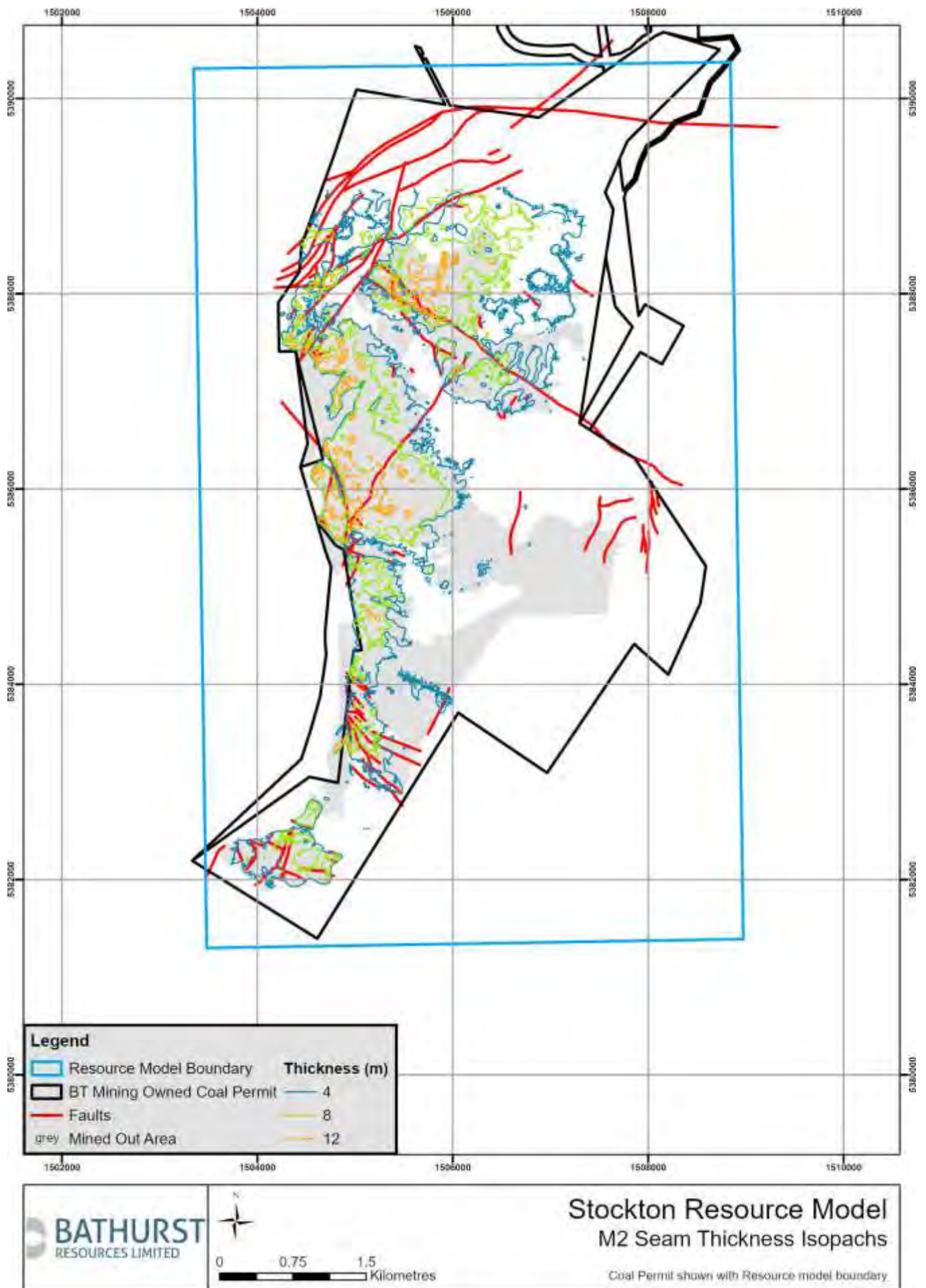


Figure 13: Map showing M2 apparent seam thickness





Figure 14: Stockton reserve pit shells

# JORC Code, 2012 Edition – Table 1 Report for Upper Waimangaroa 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Diamond Core (DC) drilling sampling for coal quality analysis took place using PQ (85mm) or HQ (64mm) coring methods for coal seams. The entire core is retained for analysis. Resource modelling has been undertaken over five individual areas of interest (Figure 3): <ul style="list-style-type: none"> <li>Mt. William North.</li> <li>Cypress.</li> <li>Mt. William South.</li> <li>Upper Waimangaroa South.</li> <li>Deep Creek</li> </ul> </li> </ul> <p>Individual resource model reports have been compiled for the individual areas of interest.</p> <ul style="list-style-type: none"> <li>DC sampling is carried out under Stockton specific protocols and QAQC procedures.</li> <li>Composited samples are created at the laboratory from individual plies that are thickness weighted. These composited samples are compiled for additional coal property testwork.</li> <li>Trench lithology and sampling data collection has been collected in a similar manner to drill core (i.e. 0.5m plies) and have had the same analysis completed.</li> <li>Reverse Circulation (RC) chip samples are collected via a cyclone attached to a reverse circulation percussion drill rig. Sampling is primarily undertaken on 0.5m intervals through the coal seam (~6kg), and indicative 1m rock samples (~70g). The entire coal sample is retained for analysis.</li> <li>The quality of drill core, RC chip samples and trench samples are continuously monitored and collected by geologists during drilling.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drilling has been undertaken using the following techniques: <ul style="list-style-type: none"> <li>Diamond Core (triple tube, PQ core).</li> <li>Open hole (Tungsten drag bit, PQ size).</li> <li>Reverse Circulation (PQ sized face sampling bit).</li> <li>Blade bit.</li> </ul> </li> <li>Some drill collars have had open hole pre-collars.</li> <li>The bulk of the drillholes have been drilled vertically due to the shallow dipping morphology of the deposit and due to its close proximity to the surface.</li> <li>No core has been orientated.</li> </ul>
<b>Drill sample recovery</b>	<p><b>Diamond Core</b></p> <ul style="list-style-type: none"> <li>Standard industry techniques are employed for recovering drilled core samples from drillholes. Core is obtained by HQ (63mm) diameter coring techniques, using triple tube operations, providing good core recovery, averaging &gt;80% over the entire drillhole (inclusive of non-coal lithologies). On average recovery of coal is 90%.</li> <li>HQ core diameter is considered to provide a sample of sufficient volume to be representative of the in situ material and provides adequate sample mass to undertake the variety of raw coal tests together with composited sample analysis when required.</li> <li>In poor ground conditions HQ sized rods, and therefore core were used to ensure that the drillhole was completed without affecting the integrity of the drill core and or loss of drilling equipment.</li> <li>Downhole geophysics has been undertaken on most of the diamond core holes. A combination of geophysical tools, including Density, Natural Gamma, Caliper, Sonic, Dipmeter, Acoustic Scanner, and Verticality have been run down holes. All tools are calibrated on a regular and systematic basis. All geophysical logging work has been conducted by a contractor (currently Weatherford). Sample interval and recovery recorded in the field by drillers is validated and adjusted if required using geophysics during core logging and sampling.</li> <li>When drillholes are geophysically logged, the geophysical logs are correlated/validated against the core to determine core/chip recovery, while ensuring drill depths recorded in the field by the</li> </ul>



Criteria	Commentary
	<p>drillers are correct.</p> <ul style="list-style-type: none"> <li>Core photography is undertaken on all diamond core.</li> </ul> <p><b>Reverse Circulation Drilling Chips</b></p> <ul style="list-style-type: none"> <li>RC chip samples from the reverse circulation percussion drillholes are recovered directly from the rods using a cyclone system. The entire sample interval is retained for coal quality analysis. A sample interval of 0.5m produces a sample between 5 - 7kg.</li> <li>For non-coal lithologies an indicative sample (~70g) from each meter is retained for geological logging.</li> <li>RC generated samples with poor recovery (&lt;3kg) are not submitted to the laboratory for analysis.</li> <li>Should there be poor recovery for the entire coal seam the hole is re-drilled if there is no specific reason for the poor recovery (e.g. presence of underground workings within the coal seam).</li> <li>The Competent Person is satisfied that the RC holes have taken a sufficiently representative sample of the mineralisation and minimal loss of fines has occurred.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>All diamond core samples are checked, measured, marked up and finally photographed before being logged in a high level of detail.</li> <li>All diamond core samples are geologically logged in a high level of detail down to centimetre scale. Intervals are logged for lithology, colour, weathering type, stratigraphy, texture, hardness, RQD and defects. Logging is conducted using a defined set of codes.</li> <li>Every discrepancy between the measured length of the core and the driller's length marked on the core blocks is investigated. Discrepancies are resolved by geologists prior to sampling with the use of geophysical logs.</li> <li>All percussion drillholes chip samples are geologically logged, with 1m samples used to define the non-coal lithologies (overburden), and 0.5m samples for coal and other non-coal lithologies surrounding or contained within coal seam partings. The geological logs are validated against laboratory results.</li> <li>The entire lengths of RC drillholes are logged. Where no sample was returned due to voids/cavities it is recorded as such.</li> <li>Drillholes that have been geophysically logged with a suite of tools (as described above) are analysed extensively to validate, confirm and correct coal seam depths. Validation and, if required, correction of the geological logs against geophysics is undertaken to ensure accuracy and consistency. Verticality, caliper, density and natural gamma tools are checked regularly with standard calibration assemblies. The density calibrations are performed routinely - with blocks of known densities (aluminum and/or water).</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>No splitting of core is undertaken in the field or during sampling.</li> <li>Sample selection is determined in-house and is documented in a core sampling procedure. Clean coal core has been sampled to a maximum of 0.5m plies, and adjusted for core loss and lithological variations.</li> <li>Associated high ash coal intervals and partings were sampled separately to assess potential dilution effects where they are &lt;0.5m thick. Intervals with non-coal material (&gt;50% ash) are excluded from sampling.</li> <li>Trench samples follow the same procedure as described for core samples.</li> <li>Samples are placed into pre-labeled plastic bags to ensure proper Chain of Custody, and then transported by BT Mining Limited personnel to the laboratory for testing. The laboratory continues with the Chain of Custody requirements. Sample preparation is undertaken according to Industry Standards.</li> <li>A laboratory generated repeat sample is submitted with every 20th sample submitted to the laboratory. This sample is provided a new sample ID with no reference to the original sample ID. The results of these repeat samples are reviewed monthly and any discrepancies investigated.</li> </ul> <p><b>RC Chips</b></p> <ul style="list-style-type: none"> <li>No splitting of coal interval chips is undertaken.</li> <li>Non-coal intervals are sub sampled directly from the cyclone.</li> <li>Sample selection is determined in-house and is documented in a core sampling procedure. Associated high ash coal intervals and partings are sampled separately to assess potential dilution effects where they are adjacent to coal seams. Intervals with non-coal material (&gt;50%</li> </ul>

Criteria	Commentary
	<p>ash) are excluded from sampling.</p> <ul style="list-style-type: none"> <li>• Samples are placed into pre-labelled plastic bags to ensure proper Chain of Custody, and then transported by Stockton personnel to the laboratory for analysis. The laboratory continues with the Chain of Custody requirements. Sample preparation is undertaken according to Industry Standards.</li> <li>• A laboratory generated repeat sample is submitted with every 20<sup>th</sup> sample submitted to the laboratory. Before submission this repeat sample is provided a new unique sample ID with no reference to the original sample ID. The results of these repeat samples are reviewed monthly and any discrepancies investigation.</li> <li>• Geochemical sampling for overburden characterization have been taken from relevant drillhole intersections.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• SGS in Ngakawau and CRL (ACIRL Australia and Newman Energy subcontracted for specific tests) laboratories are used to undertake physical and chemical testing and use Industry Standards for all coal tests and systematic QA/QC procedures for all work. Both laboratories hold accreditation by International Accreditation New Zealand (IANZ). The processes employed are considered to be appropriate for coal sample analysis. Results are reviewed in-house to ensure the accuracy of the data by a geologist and or a senior geologist. The laboratory has been inspected by the Company's personnel. Tests include but are not limited to: <ul style="list-style-type: none"> <li><b>Chemical Analysis</b> <ul style="list-style-type: none"> <li>○ Proximate analysis (ASTM D5142-2004 (modified)).</li> <li>○ Sulphur (ASTM D4239-04A).</li> <li>○ Total Moisture (ISO 589).</li> </ul> </li> <li><b>Ultimate Analysis</b> <ul style="list-style-type: none"> <li>○ Carbon (AL038-in house).</li> <li>○ Hydrogen (ASTM D3176-09).</li> <li>○ Nitrogen (ASTM D3176-09).</li> <li>○ Oxygen (ASTM D3176-09 (by difference)).</li> <li>○ Sulphur (ASTM D3176-09).</li> <li>○ Forms of Sulphur (AS 1038 Part 11).</li> <li>○ Chlorine (ISO 587).</li> <li>○ Ash composition (X-Ray spectrometry (Spectrachem)).</li> <li>○ Ash fusion temperature (ISO 540:1995(E)).</li> <li>○ Trace Elements.</li> <li>○ Calorific Value (ISO 1928-1995).</li> </ul> </li> <li><b>Rheological and Physical Analysis</b> <ul style="list-style-type: none"> <li>○ Gieseler Fluidity (ASTM D2639-90).</li> <li>○ Dilatational (Audibert-Arnu) (ISO 349:1975).</li> <li>○ Free Swelling Index (ISO 501:2003(E) D720-91(1999)).</li> <li>○ Hardgrove Grindability Index (ISO 5074, ASTM D409-02).</li> <li>○ Relative Density (AS 10382111-1994).</li> </ul> </li> <li><b>Petrographic</b> <ul style="list-style-type: none"> <li>○ Maceral Analysis (c/- Newman Technologies), Vitrinite Reflectance (ASTM D2798-99).</li> </ul> </li> <li><b>Other Tests</b> <ul style="list-style-type: none"> <li>○ Washability testing as requested (AS 41561 using float-sink methods) (also used Boner gig shaker table process).</li> </ul> </li> <li><b>Geochemical testing</b> <ul style="list-style-type: none"> <li>○ Total sulphur (CSA06V).</li> <li>○ Acid-Neutralising Capacity (CLA48V).</li> <li>○ Net Acid Generation (CLA49V).</li> <li>○ Paste pH / Conductivity (OI-L3-019-NZ-MIN-WPT-WI).</li> <li>○ Sulphide (CLA08V).</li> </ul> </li> </ul> </li> <li>• 5% of all SGS analysed samples from 2010 have been sent to CRL for re-analysis, and then subsequently re-tested at SGS. The result of these repeats are analysed by the database geologist and the resource geologist, on a monthly basis. Additionally 5% of all SGS analysed</li> </ul>

Criteria	Commentary
<b>Verification of sampling and assaying</b>	<p>samples are retested by SGS, as part of their in-house QAQC process. These repeat test results are generally within a 5% of their original results. Results outside of set tolerances are investigated.</p> <ul style="list-style-type: none"> <li>Results are reviewed on a regular basis by the project geologist.</li> </ul> <p>Most holes are geophysically logged, and verification of seam contacts are made through analysis of the geophysics. Assessment of coal intersections are undertaken by a geologist. Geophysics allows confirmation of the presence (or absence) of coal seams, accurate determination of contacts to coal seams. Density measurements are used to guide sampling and identify high ash bands and or seam partings.</p> <ul style="list-style-type: none"> <li>Geophysical logs (dual density and gamma) are analysed extensively and used to validate and, if required, correct geological and sample interval logs to ensure accuracy and consistency.</li> <li>Coal ply results are provided by the laboratory and reviewed internally. No adjustments or calibrations are made to any coal quality data. In instances where results are significantly different from what was observed in geophysical logs or outside of local or regional ranges defined by previous testing, sample results are retested.</li> <li>Since 2006 all coal quality data has been directly submitted and stored in electronic format using acQuire SQL database software.</li> <li>Historical data has been validated and entered into the acQuire SQL database, from the original paper logs. Historical data was transferred and validated against the current logging codes to ensure the data was valid. A limited number of twin holes have been drilled, and returned acceptable duplicates of the original holes.</li> <li>The Competent Person has inspected the sampling processes and inspected the laboratory.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Upper Waimangaroa data is surveyed in Buller 1949 grid coordinate system in New Zealand with mean sea level datum (MSL). However the Geode correction for elevation is not undertaken due to the elevation of the mine site. All on-site survey data used in the resource estimation does not have the Geode correction as well.</li> <li>All drillholes post 1998 are surveyed using real time kinematic GPS technology and are located within +/- 20mm vertically and +/- 10mm horizontal. Older drillhole collars were surveyed using conventional methods.</li> <li>Historical underground workings plans are based off old hand drawn plans that have been geo-rectified (in 2D only) by converting from cadastral links to the Buller 1949 geodetic grid.</li> <li>Topographic surfaces consists of triangulations constructed from a combination of airborne LiDAR (accurate to within +/- 0.2m) collected for the whole of the Upper Waimangaroa area in June 2013.</li> <li>Drillholes with down-hole geophysics are surveyed for deviation with Weatherford verticality tool (+/- 15° azimuth and +/- 0.5° inclination).</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Exploration drillholes are variably spaced (&lt;100m to 1,500m) depending on target seam depth, geological structure, topographic constraints, down-hole conditions due to underground workings, and the location of other drillholes.</li> <li>RC drillholes were spaced 40-80m apart to define a weathering profile.</li> <li>No sample compositing is undertaken prior to initial laboratory ply analysis. Should detailed coal analysis be required, compositing is undertaken at the laboratory on a length weighted basis.</li> <li>This drill spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate to support the resource classification and is suitable for this style of deposit.</li> <li>Further drilling will be required to upgrade resource classification as part of long term development plans for the greater Stockton Plateau.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>The majority of holes are drilled vertically, due to near horizontal coal seams.</li> <li>A small number of exploration holes have been inclined. The purpose of these holes were to define significant geological structures and/or for geotechnical purposes and not for coal seam geometry and quality.</li> <li>No drilling orientation and sampling bias has been recognised at this time and is not considered to have introduced a sampling bias.</li> </ul>

Criteria	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>RC chip samples are collected in uniquely numbered pre-labelled plastic bags. Three to five samples are then placed in a large plastic bag for delivery to the laboratory.</li> <li>Core and trench samples are placed in uniquely numbered pre-labelled plastic bags. Three to five samples are then placed in a large plastic bag for delivery to the laboratory.</li> <li>Prior to submission to the laboratory, a standardised dispatch form is generated for each drillhole, within the acQuire SQL database software, which delineates the set of analysis to be undertaken and the logged sample numbers.</li> <li>Once samples and dispatch form are completed, the sample bags are validated and subsequently delivered to the secure laboratory sample receiving area by a staff member. Once received at the laboratory, the consignment of samples is receipted against the sample dispatch documents.</li> <li>Any additional analysis is requested as required by the geological services superintendent or resource geologist.</li> <li>Sample residues are stored at the laboratory pending results and any possible repeat requests.</li> <li>Sample security is not considered a significant risk to the project.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Integrity of all data (drillhole, geological, survey, geophysical and CQ) is reviewed by the resource geologist before being used to model either structure or qualities.</li> <li>Periodic internal reviews are conducted, to verify that both core and chips are logged in a consistent manner. These reviews are done either by a senior geologist or by the resource geologist.</li> <li>The acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> <li>The acQuire database is considered to be of sufficient quality to carry out resource estimation</li> <li>Resource models have been externally reviewed by Palaris as part of Solid Energy's Vendor Due Diligence in April 2016.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Upper Waimangaroa MP 41515 is a Coal Mining Permit which is due to expire on 11 November 2038.</li> <li>BT Mining Ltd has sole ownership of the Cypress operation and Upper Waimangaroa area.</li> <li>BT Mining is a joint-venture between Bathurst Resources Limited (65%) and Talley's Energy Limited (35%).</li> <li>On 1 September 2017 BT Mining took control of Solid Energy assets including two operating mines Rotowaro and Maramarua in the Waikato region of the North Island, and the Stockton mine on the West Coast of the South Island.</li> <li>All operations at Cypress mine are currently undertaken within the Mining Permit boundaries.</li> <li>BT Mining Ltd does not own any land within the Upper Waimangaroa South resource. The land is owned by the Crown and administered by LINZ. BT Mining Limited has land access agreements with the Crown to access land. The agreements expire at a date after the life of MP 41515, to be determined by the Crown, to provide sufficient time for rehabilitation. The permit expires in 2038.</li> <li>Royalties and Levies are applied to per ton of coal produced.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Within the MP 41515, the previous owner (Solid Energy) has undertaken all exploration on the tenement since 1987. However, there have been earlier periods of work that have contributed to the understanding of this Resource. These programmes include early drillholes back to the late 1800s through into the 1900s, with New Zealand Coal Resources Survey performing additional drilling in the 1980s.</li> <li>Between 1927-47 28 drillholes were drilled by Westport Coal Company.</li> <li>In 1952-53 a further nine drillholes were drilled in the northwest area by the Mines Department.</li> <li>In 1976-77, 14 drillholes were drilled by the Ministry of Works.</li> <li>Three phases of drilling were completed by New Zealand Coal Resources Survey between 1982</li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>– 1985.</li> <li>State Coal Mines drilled 48 holes between 1985 - 1987.</li> <li>Solid Energy commenced further drilling from 1997 – 2012.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Coal resources on the Stockton Plateau are restricted to the Middle to Late Eocene aged Brunner Coal Measures (BCM). This unconformably overlies the Ordovician aged Greenland Group greywacke's and argillites, which has been extensively intruded by Cretaceous granites and porphyry (Berlins Quartz Porphyry). Due to the stratigraphic nature of coal measures, the coal seams generally lie in a horizontal or sub-horizontal plane. The resource has a dip to the NE at the northern end of the deposit and to the east along the western margin. Folding and faulting through the coal seams can create localised changes in dips up to 80°.</li> <li>The Mangatini coal seams are the main coal seams of the Upper Waimangaroa Deposit. The seams have been given the abbreviation M. There are the three seams M1, M2, and the M3. The M1 and M2 seams are the predominant seams over the deposit. Seam splitting is common across the deposit and can lead to correlation complications. No distinct marker horizons are present between the seams. Correlations are based on detailed cross sections completed across the deposit. The M1 and M2 seams are the dominant seams targeted for mining and can vary in thickness. The M2 seam overlies the M1 seam. The M3 is a rider seam to the M2. The M3 seam is considered for resource classification in the Cypress consented area where it exceeds the minimal mining cut-off of 0.5m. The M3 seam is characterised by having high sulphur (&gt;4%) and is generally poorly developed.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>No exploration results are reported. Comments relating to drillhole information can be found in Section 1.</li> <li>The exclusion of this information from this report is considered not to be material to the understanding of the report.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>The maximum ash cut-off for building the Upper Waimangaroa structure models was set at 25% (ad).</li> <li>Resources have been reported with an ash cut-off of 25%(ad).</li> <li>Seams have been sampled on a ply-by-ply basis with ply boundaries determined by reconciliation against down hole geophysics.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>All exploration drillholes have been drilled vertically and the coal seams are generally gently dipping. Therefore the reported seam intercept thickness is representative of the true seam thickness.</li> <li>Dip meter and deviation plots are available for some holes. For those without this data it is assumed that a vertical orientation is achieved and, as most coal intersections are less than 100m in depth, any deviation from vertical would produce only a very minor effect on the reported depth to coal and coal thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams can be found in the Appendix A for each of the following: <ul style="list-style-type: none"> <li>Location plan</li> <li>Regional geology</li> <li>Resource model areas</li> <li>Schematic diagram illustrating coal seam naming convention</li> <li>Map showing drillhole type/distribution</li> <li>Map of 2024 Resource Classification</li> <li>Map of underground workings and 2024 Resource Classification</li> <li>Map showing M2 RO(MAX) distribution</li> <li>Map showing full M2 seam thickness</li> <li>Map showing structural contours of M2 seam (Cypress)</li> <li>Map showing full M2 seam ash (Cypress)</li> <li>Map showing full M2 seam sulphur (Cypress)</li> <li>Map showing full M2 seam Volatile Matter (Cypress)</li> <li>Map showing structural contours of M2 seam (Deep Creek)</li> <li>Map showing full M2 seam ash (Deep Creek)</li> <li>Map showing full M2 seam sulphur (Deep Creek)</li> <li>Map showing full M2 seam Volatile Matter (Deep Creek)</li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Map showing M1 seam floor contours</li> <li>○ Map showing M1 Coal seam thickness (Upper Waimangaroa South)</li> <li>○ Map showing M1 Ash distribution (Upper Waimangaroa South)</li> <li>○ Map showing M1 seam sulphur (Upper Waimangaroa South)</li> <li>○ Map showing M1 seam Volatile Matter (Upper Waimangaroa South)</li> <li>○ Upper Waimangaroa Reserve Pit Shells</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• No exploration results are reported.</li> <li>• The Competent Person does not believe that the exclusion of this comprehensive exploration data within this report detracts from the understanding of this report or the level of information provided.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Historically a number utilisation and specialist marketing testing has been undertaken.</li> <li>• The different stratigraphic units and rock defects have been assigned various strength parameters based on historic laboratory test data (UCS, shear box and ring shears), empirical classifications (RMR, GSI and Hoek Brown). Downhole in situ geophysical measurements have been undertaken to compare the strength variability with actual laboratory test data.</li> <li>• BT has tested 941 samples, from 98 drillholes, for overburden classification for acid forming and neutralizing potential, from the Cypress consented mining area. Additional grab samples are taken during mining to confirm rock classification aligns with modelled horizons.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• Additional exploration and resource development drilling has been proposed to better define geological structures, seam structure, thickness and coal quality of the deposit.</li> </ul>

### Section 3 Estimation and Reporting of Coal Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• All GPS sourced and validated survey data recorded in the field is electronically transferred into the master BT Mining (BTM) acQuire SQL database.</li> <li>• All drill core logging data is digitally entered directly into the acQuire SQL database, with in-built enforced data validation rules. Drill chip geological logging data is manually entered into the acQuire SQL database, with in-built enforced data validation rules.</li> <li>• The acQuire SQL database has been designed to ensure data is entered and stored in a consistent and accurate manner by using dropdown menus of standard logging codes to prompt and constrain inputs. The database highlights out of range coal quality values, duplicate records/intervals, prevents overlapping intervals or depths that extend beyond total drillhole depth. All changes to the database are tracked and archived. Data correction and validation checks are undertaken internally as defined by the Data Validation Standard before the data is used for modeling purposes.</li> <li>• Once all validation is completed all drillhole data is signed off by both the responsible geologist, and the resource geologist. On completion of the data sign-off process the data is locked in acQuire and cannot be adjusted unless requested by the site geologist.</li> <li>• Data validation checks are run routinely by the site geologist using acQuire software validation routines. All validation concerns are rectified by the site geologist.</li> <li>• The acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• The Competent Person, Mark Lionnet, has a full time role with Bathurst Resource Limited as the Export Project Manager with a high level of interaction with the Stockton geologist.</li> <li>• The Competent Person has worked for five years at Stockton and has extensive knowledge of the project area.</li> <li>• Regular visits have been undertaken by the Competent Person.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• There is sufficient confidence in interpretation of geological stratigraphy, structure and seam correlation/continuity though it is variable across the Upper Waimangaroa area.</li> <li>• The data used in the geological interpretation included field mapping, drillhole data, core logging data, geophysical logs, sampling, coal quality laboratory testing and structural interpretations. Residual variability exists concerning geological structure along/within the major fault zones,</li> </ul>

Criteria	Commentary
<b>Dimensions</b>	<p>resulting in a lower level of resource confidence. This variability will influence the local estimates rather than the global structural and coal quality estimates for these zones.</p> <ul style="list-style-type: none"> <li>• The Upper Waimangaroa resource area covers approximately 4km<sup>2</sup>, a roughly rectangular shape up to 2km wide (ESE-WNW), and 10km long (NNE-SSW).</li> <li>• Within this area all seams are exposed at outcrop along the western margin of the MP. With the bulk of the in situ coal between 0 and 150m below the original ground surface.</li> <li>• Coal thickness varies considerably over the deposit, from over 20m (areas with structural thickening) down to &lt;3m (areas with coal seam poorly developed). On average the cumulative (M1 and M2) coal resource has an average thickness of 8m.</li> <li>• The M3 seam is on average 0.5m thick.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• Modelling has been undertaken using Maptek's Vulcan Version 9.1 software by resource geologists experienced in its use, using a standardised set of validated scripts and the structural modeling module integrated into the software package.</li> <li>• Resource models have been produced across five prospective areas: <ul style="list-style-type: none"> <li>○ Mt. William North.</li> <li>○ Cypress.</li> <li>○ Mt. William South.</li> <li>○ Upper Waimangaroa South.</li> <li>○ Deep Creek</li> </ul> </li> <li>• Mt William North is based on a resource model utilising a combination of 111 drillholes, reverse circulation and trench intersections.</li> <li>• 514 drillholes and trenches are utilised in modelling and resource estimation for the Cypress model.</li> <li>• The Upper Waimangaroa model has utilised 192 exploration drillholes and 24 trench intersections.</li> <li>• Mt. William South has been interpreted using 23 exploration drillholes.</li> <li>• Deep Creek has been interpreted using 71 drillholes.</li> <li>• All valid drilling data, mapping data, together with a number of structural interpretations are used as the source data for creating the coal seam surfaces (grids).</li> <li>• Grids for the coal roof and floor (including seam splits) are developed over the entire MP within the five model boundary areas. These coal surfaces are modeled using a stacking algorithm with the coal roof of the predominant coal seam (M1 and or M2) used as the reference surface. This process is repeated for six geological domains of the deposit to ensure that the coal seams are modelled accurately. The major fault blocks each have separate interpretation data points, to guide interpretation process, with a hard data boundary with the surrounding fault blocks.</li> <li>• The structural grids are created by using a triangulation algorithm. Grid sizes vary across the four models but are dependent on data support. The methodology of creating structural grids is common practice for the estimation of coal deposits. Fault blocks have been modelled separately, and then appended together along three-dimensional fault surfaces.</li> <li>• Block model extends vary depending on modelling extents and can overlap.</li> <li>• A standardised block model schema has been used, with a standardised set of variables, with associated default values.</li> <li>• The latest validated survey "original" topo surfaces and structural grids are used to create an empty block model. Block dimensions vary across the deposit depending on the level of data observation points available for estimation. The parent block size is approximately one fifth the average drill spacing to ensure the mineralisation is well represented by the blocks. For Mt. William North a standardised block model was created, with a standardised set of variables, with associated default values that has been used for the nearby Stockton and Cypress deposits. The topography surface and grids surfaces were used to flag blocks within the model. The seam blocks are 10m (x) by 10m (y) by 0.5m (z) blocks with a minimum thickness of 0.5m (for coal seams). The 2024 Deep Creek resource model has used a 25m x 25m x 0.5m block size for coal estimation purposes.</li> <li>• The drilling database is used to create a set of 0.5m thick composites from the assay results, which is then used to estimate the coal qualities for the blocks within the coal seams. Multiple</li> </ul>



Criteria	Commentary
	<p>estimation runs are completed to ensure all blocks are populated.</p> <ul style="list-style-type: none"> <li>All coal blocks have been estimated using the inverse distance methodology, with a power of 2, for the standard set of coal qualities (ash, sulphur, swell, inherent moisture, volatile matter).</li> <li>Coal Quality Estimation parameters used during coal quality estimation have been standardised between models: <ul style="list-style-type: none"> <li>Search ranges used are 250 x 250 x 0.5m, 500 x 500 x 0.5m, 1000 x 1000 x 0.5m.</li> <li>Samples used are a minimum of 2 and a maximum of 5.</li> <li>A maximum of 2 samples from any one drillhole is allowed.</li> <li>Block discretisation of 4,4,1 was applied.</li> <li>Using the Vulcan "tetra unfolding" methodology, along the modelled coal seam surfaces.</li> </ul> </li> <li>At each stage of the process (initial data points, new surfaces, and final block model) the new data is validated back to the previous model, to ensure consistency.</li> <li>Standard Block model validation was completed using visual and numerical methods.</li> <li>No selective mining units were assumed in the estimate.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>All moisture values are reported on an air-dried basis, using air-dried ply results to estimated moisture. Inherent moisture is measured for all drillholes samples.</li> <li>Tonnages are estimated on an air-dried dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>A minimum seam thickness cut-off for all modelled seams is 0.50m. As this is what is currently considered as recoverable using open cast methods.</li> <li>A maximum ash cut-off of 25% (ad) has been applied to all coal seams except where seam continuity is required, which may include intervals with greater than 25% (ad) ash.</li> <li>Coal with ash &lt;8% (ad) is considered "bypass" coal and does not require any further processing. Coal with ash &gt;8% (ad) needs to be processed through the company's Coal Handling and Processing Plant (CHPP).</li> <li>Coal tonnes are only reported from the M1 and M2 seams and their respective splits (no M3 tonnes are reported with the exception of the Cypress resource).</li> <li>All resources blocks are reported within the 2022 Whittle pit optimisation 1.2 revenue factor (RF) pit shell.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Selected mining method chosen from long term experience of local conditions at nearby Cypress and Stockton mines.</li> <li>Geotechnical parameters for cut slope design were developed based on historical cut slope performance, slope back analysis and laboratory testing of material strength parameters. Slopes are designed to comply with a Factor of Safety that exceeds 1.2 with its related probability of failure and potential failure dimensions.</li> <li>Minimum recoverable coal thickness is 0.5m, with the expectation to extract 100% of the in situ coal.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>Contaminated coal from mining will be processed via the company's Coal Handling and Processing Plant (CHPP). The CHPP removes the dilutant material and a small portion of coal to provide a more saleable product. The plants performance has been routinely monitored since its inception.</li> <li>Although not included in the resource estimate, studies have been conducted on the properties of the coal pertaining to combustion potential, ash fusion temperatures and Hardgrove Grindability Index.</li> <li>Small parcels of coal have been sent to customers for evaluation and testwork.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Cypress and Mt. William North are fully consented.</li> <li>Currently no Resource Consents exist for the southern portion of the Upper Waimangaroa deposit.</li> <li>Any open pit mining and coal transport within the southern portion of the Upper Waimangaroa deposit will be conducted amid environmentally and culturally sensitive areas. The project area is a likely habitat for endangered snail and kiwi species. High rainfall rates, potentially acid-generating overburden and historical acid mine drainage are all items that will have to be considered in future prefeasibility studies.</li> <li>Environmental values of the project area ranges are considered high. Areas of high</li> </ul>

Criteria	Commentary
	<p>environmental values incorporate the DoC managed Ecological Areas (Section 21 Conservation Act 1987).</p> <ul style="list-style-type: none"> <li>• Acid Mine Drainage (AMD) models have been developed for the Cypress and Deep Creek areas. The models have applied internationally accepted AMD classification schemes.</li> <li>• PFS studies are progressing within the Deep Creek area to ensure an acceptable mine closure plan can be implemented to restore natural habitats.</li> <li>• Cypress is an operating mine and has best practice engineering solutions in place to actively and passively control water contamination and treatment,</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• The relative density value is calculated using the available ash–density data (248 samples) to define an ash–density curve.</li> <li>• Non-coal units are assigned default density value based upon the lithology type.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• The resource has been classified into the Inferred/Indicated/Measured status by analysing three factors upon which the geological confidence is based: <ul style="list-style-type: none"> <li>○ Number of informing drillholes used.</li> <li>○ Proximity to major faults.</li> <li>○ Proximity to sub crop position.</li> <li>○ Historical worked areas.</li> </ul> </li> <li>• The Competent Person has reviewed the results of the resource classification process and made adjustments where necessary and or required.</li> <li>• The input data is comprehensive in its coverage of the coal seams and does not mis-represent the in situ coal seams.</li> <li>• The results of the validation of the block model exhibit a good correlation of the input data to the estimated grades.</li> <li>• All resources are within the 2022 Whittle pit optimisation 1.2 revenue factor (RF) pit shell.</li> <li>• The Competent Person has taken into account all relevant factors in undertaking this estimation and considers the estimate to be a true reflection of the current understanding of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• Regular internal reviews of the resource modelling process have been undertaken internally by the Competent Person; all issues raised have been addressed.</li> <li>• Palaris completed an external review of this estimation in May 2016 as part of Solid Energy's Vendor Due Diligence process. No substantial issues were raised. No further estimation has taken place within this part of the Mining Permit since this review.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• Based on the data available, the degree of accuracy of this statement is considered high for the Upper Waimangaroa deposit. The process for calculation has used: Standards, Guidelines and the JORC Code along with industry best practice where available to define the Resource estimates provided to confirm search estimation ranges and drillhole spacing for each resource classification.</li> </ul>

## Section 4 Estimation and Reporting of Coal Reserves

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>• The Mineral Resource estimates are those undertaken by Stockton Geology Team employed by BT Mining Limited at the Cypress Mine located within the Upper Waimangaroa Mining Permit area (MP 41515) as outlined in Section 1-3.</li> <li>• Coal Resources are inclusive of Coal Reserves.</li> <li>• The Coal Reserve estimates are for a long-term operating site.</li> <li>• Drillholes are validated then coded to create a structural grid model using Vulcan software by BT Mining Limited. This structural model forms the framework that a 3D block model is created from by the site geologists. The resource block model includes topography, seam structure and coal qualities used for in situ Coal Resource delineation. BT Mining Limited has a robust and stable modelling process in place.</li> <li>• Tonnages reported, model mining modifying factors including surface mining extraction, loss and dilution, plant yields and economics have been reviewed and reconciled against actual performance.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>An overall decrease in the previously reported run of mine Coal Reserves is attributed to an update to the Pit Designs taking to account new geotechnical constraints. Also model depletion due to mining.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>The Competent Person for this Coal Reserve Statement is Ian Harvey, a full-time employee of BT Mining Limited based at Stockton.</li> <li>The Competent Person has more than 20 years' experience working at Stockton in various roles, including resource modelling and mine planning, as well as coal quality management and mine/market planning.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>Cypress mine is an operating mine.</li> <li>Material Modifying Factors have been considered.</li> <li>The reportable Coal Reserve is based on actual site performance and costs that have been determined to be economically viable in a cashflow analysis conducted by BT Mining.</li> <li>There are other Coal Resources under evaluation in the MP 41515 area; however these studies are at a scoping or preliminary assessment level and therefore been excluded from the Coal Reserves.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>A maximum ash cut-off of 25% has been applied to all coal seams except where seam continuity is required, which may include intervals with greater than 25% ash.</li> <li>Coal with ash &lt;8% is considered "bypass" coal and does not require any further processing.</li> <li>Coal with ash &gt;8% "wash" coal needs to be processed through the company's Coal Handling and Processing Plant (CHPP). The CHPP feed cut-off grade is &lt;35% ash.</li> <li>The minimum mineable seam thickness is 0.5m based on recovery by surface mining methods used at the site.</li> <li>Coal Reserves are only reported from the M2 and M3 coal seam horizons.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The mining method is conventional drill and blast, load and haul open pit mining operation. This utilises truck and excavator for waste movement, while coal is loaded using a combination of loaders and excavators with haulage to the Run of Mine (ROM) stockpiles, directly to the CHPP, or to other intermediate stockpiles using dump trucks. The operations are supported by additional equipment including dozers, graders and watercarts.</li> <li>Geotechnical parameters are based on geotechnical studies undertaken by the Stockton engineering geologists. Different parameters are applied. Pit designs have been based on geotechnical constraints and parameters. The typical highwall configuration is a batter height of 15m with batter angles between 30°- 63° using minimum 8.5m wide benches. Maximum of 10% gradient and a 23m wide running surface is being used for in pit ramps and roads.</li> <li>Minimum recoverable in situ thickness is 0.5m.</li> <li>Reserve tonnages have been estimated using a density value calculated using approximated in-ground moisture values (Preston and Sanders method). As such, all tonnages quoted in this report are wet tonnes.</li> <li>All coal qualities quoted are on an Air-Dried Basis (adb).</li> <li>Pit design extents were established using standard Lerchs-Grossman (LG) pit design techniques and based on preliminary economic and geotechnical inputs.</li> <li>Pit limits are based on pit optimisation studies with restrictions for current land and mineral access determined by mining permits and granted consent limits.</li> <li>BT Mining completed an updated Whittle optimisation assessment in September 2022, the updated pit designs have been published for this years report.</li> <li>Mine design strips by bench were applied to develop a mine schedules and used as a basis for reporting reserves.</li> <li>Reserve estimates include consideration of material modifying factors including: the status of environmental approvals; other governmental factors and infrastructure requirements for selected open pit mining methods and coal transportation to market (per JORC Code 2012).</li> <li>Grade control drill is undertaken as defined in Section 1 to 3.</li> <li>Allowances for mining dilution and recovery has been applied to the block model. The mining loss, contamination and dilution is based on the rock mass lithology above the coal roof and below the coal floor as follows in metres for each mineable horizon:</li> </ul>



Criteria	Commentary																								
	<table><thead><tr><th></th><th colspan="2">Thickness (m)</th></tr><tr><th></th><th>Roof</th><th>Floor</th></tr></thead><tbody><tr><td><b>Mudstone Lost:</b></td><td>0.10</td><td>0.05</td></tr><tr><td><b>Mudstone Contaminated</b></td><td>0.05</td><td>0.10</td></tr><tr><td><b>Mudstone Dilution:</b></td><td>0.25</td><td>0.25</td></tr><tr><td><b>Other Lost:</b></td><td>0.05</td><td>0.05</td></tr><tr><td><b>Other Contaminated:</b></td><td>0.10</td><td>0.10</td></tr><tr><td><b>Other Dilution:</b></td><td>0.05</td><td>0.05</td></tr></tbody></table> <ul style="list-style-type: none"><li>An additional modifying factor was added in 2017 to the Cypress North pit area to account for mining dilution introduced from a combination of sheeting and soft seam floor contacts. The dilution is estimated at the bench level on 3m mining horizons, this factor was extended into the Cypress South Pit area in 2018.</li><li>Minimum mining widths are dependent on volumes to be excavated and the size of the fleet to be used. Typically for the bulk excavator and truck fleet this is approximately 30m. For the small excavators and trucks this is approximately 15m.</li><li>Current mining methods require the following infrastructure: Haul Roads, Drainage, dewatering and transfer pumps, sumps and dam structures, Lime Dosing Plants, coal stockpile areas, CHPP, coal load out and bins, aerial ropeway, train load out and bins, workshop, offices, store, maintenance and contractor facilities. Most of this infrastructure is in place with the main new infrastructure required being sumps, dams and water control as the mine expands into undisturbed areas.</li></ul>		Thickness (m)			Roof	Floor	<b>Mudstone Lost:</b>	0.10	0.05	<b>Mudstone Contaminated</b>	0.05	0.10	<b>Mudstone Dilution:</b>	0.25	0.25	<b>Other Lost:</b>	0.05	0.05	<b>Other Contaminated:</b>	0.10	0.10	<b>Other Dilution:</b>	0.05	0.05
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<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"><li>Coal with ash &lt;8% is considered “bypass” coal and does not require any further processing.</li><li>Coal with ash &gt;8% “Wash” coal needs to be processed through the company’s Coal Handling and Processing Plant (CHPP). The feed cut-off grade depends on the ash source, being either &gt;8% and &lt;35% if ash is in situ, or &gt;8% and &lt;50% ash, if contaminated with non-coal material (e.g. ash introduced due to previous underground extraction).</li><li>An estimated 25% of total ROM Coal Reserve tonnes require washing to make a marketable product.</li><li>Wash coal won is processed at the adjacent Stockton mine that has a CHPP in operation to produce a marketable product.</li><li>Online analysers are utilised for identifying coal that is out of specification.</li><li>Additional samples are sent for petrographic analysis (Romax).</li><li>The processes used are standard for the coal industry and so are well tested technologies.</li><li>This has also been backed up by bulk samples being taken and tested for washability, yield and recovery factors.</li><li>Historical plant performance were used to review these factors applied in the model, and these modifying factors updated in the block model.</li></ul>																								
<b>Environmental</b>	<ul style="list-style-type: none"><li>All mining approvals, consents, permits and license to operate have been granted for Cypress Mine area in MP 41515.</li><li>The Cypress mine operates in a sensitive environment and has a complex set of consent conditions that require diligent management. Environmental planning and management is fully integrated with coal mining at Cypress and the mine has annual rehabilitation targets.</li><li>Developing an area for mining includes systems to divert clean surface water around the area and ensure any water from the work site which is carrying sediment is collected and channelled into the mine’s water treatment infrastructures.</li><li>Soil and vegetation are carefully lifted and taken to a holding area or immediately placed in an area of the mine undergoing rehabilitation.</li><li>Red tussock and Herb fields are carefully lifted and transported to specially design storage areas to allow them to be transplanted back in Cypress pit once the pit has been mined then backfilled to the original ground level.</li><li>Environmental impacts that have been identified can be mitigated to meet permitting requirements.</li></ul>																								
<b>Infrastructure</b>	<ul style="list-style-type: none"><li>Cypress is an operating satellite mine area of the greater Stockton mine with existing infrastructure in place to support the operation. Most of this is based at the nearby Stockton mine</li></ul>																								

Criteria	Commentary
	<p>(CML37150). This includes a network of haul roads, CHPP, ROM stockpile area, water treatment plant, lime dosing plant, workshop, offices, aerial ropeway, train load out facility, water treatment structures and intermediate coal stockpiles, waste rock dumps, weighbridge area, contractors laydown yard, power station and explosives storage.</p> <ul style="list-style-type: none"> <li>• Labour is primarily sourced from the nearby town of Westport.</li> <li>• Accommodation for the labour source is off-site in the small nearby towns but primarily in Westport.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>• Cypress is an operating mine and majority of the capital has already been spent. Some additional capital expenditure is required to maintain existing structures, mobile fleet replacement and also to develop additional water infrastructure as required for future mining areas (e.g. Resource definition).</li> <li>• Operating costs are reviewed annually. These are based on historical actual's and forecasting for the following financial year. This is made up of equipment costs, fuel consumption, construction, fixed costs, administration costs, environmental costs and transport costs.</li> <li>• Annual Budget prices for major consumables and infrastructure is used.</li> <li>• The CHPP is owned by BT Mining Limited and costs are based on the demand for wash product in the annual budget.</li> <li>• Mine Rescue levy, License and Inspection levy, Energy Resources levy, Crown royalty, Coal Mining Licence fees, FME carbon and land rates are applied as per appropriate NZ legislation.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>• BT Mining conducted an optimisation in May 2019 based on prices derived from consensus on published benchmark HCC sale price and agreed updated company ratios (SHCC 78%, SSCC 62%, coal with sulphur &gt;2% discounted to 38%) and using consensus published short term exchange rates, PricewaterhouseCoopers and other publicly available forecasts.</li> <li>• BT Mining conducted an updated optimisation in September 2022, the costs and prices were kept at the 2019 study values/rates, the major changes to the optimisation where variation to the geotechnical overall slope angles, by region and seam, due to updated geotechnical drilling and associated analysis.</li> <li>• Modelled thermal coal is assumed uneconomic at the current sale price and is excluded from the 2023 Coal Reserve tonnes.</li> <li>• Thermal coal extracted as part of mining process is currently taking advantage of current elevated Thermal coal prices and being sold into the international markets.</li> <li>• Discount rate is reviewed annually based on BT Mining company real rate.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>• The supply and demand situation for coal is affected by a wide range of factors, and coal consumption changes with economic development and circumstances. BT Mining has sales agreements in place with some existing customers. Established external forecast analysts have provided guidance to assess the long term market and sales of coal.</li> <li>• Coal product types are classified into Semi-hard and Semi-soft based on product specifications and further separated into low sulphur &lt; 4% adb and high sulphur &gt; 4% adb. Approximately 1% of the Cypress Coal Reserve has a sulphur content &gt; 4% and requires a blend partner to make a marketable product.</li> <li>• BT Mining Limited Marketing team is regularly in talks with new customers and investigate potential new markets.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>• Pit optimisation was carried out using a revenue factor (RF) range of 0.6 to 1.2 in 0.02 intervals. The incremental RFs allow for the generation of different pit shells, allowing different stages to be chosen rather than just mining the ultimate pit. RFs &gt; 1 provide an indication of the possible size of a pit with potential price increases and designate likely infrastructure or waste rock storage areas.</li> <li>• Sensitivity analysis has been completed by Golder Associates (NZ) Limited in 2015 and by BT Mining in May 2019 on commodity price variations.</li> <li>• An update to the 2019 study was undertaken in September 2022 to assess the sensitivity of the analysis to geotechnical parameters. Geotechnical slope angle, and permit boundary are primary constraints for the Cypress and Cypress South pits.</li> <li>• For the optimisation carried out in September 2022 the following inputs have been taken into consideration: mining, processing, civils, administration, haulage, aerial ropeway, rail, port costs</li> </ul>

Criteria	Commentary
	<p>and licences and levy's as per appropriate NZ legislation, revised geotechnical parameters, AMD and rehabilitation.</p> <ul style="list-style-type: none"> <li>The reported Coal Reserve is based on economic viability determined by BT Mining, conducted cashflow analysis using actual site performance, costs, mine plans and BT's marketing studies for sales and pricing.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>BT Mining Limited currently holds the required DOC permits for mining and access to mine the Cypress Region.</li> <li>The Cypress region requires additional permits to operate covering vegetation disturbance, wild life (kiwis, etc.), water discharge</li> <li>As a part of resource consenting process and general site operations, regular communication and consultation has taken place with the local communities including the local Iwi.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>BT Mining Limited acquired the Cypress deposit and adjacent Stockton Mine assets from Solid Energy New Zealand Ltd on 1 September 2017.</li> <li>All material legal agreements, marketing arrangements and government approvals are in place and active for the existing operation.</li> <li>Geotechnical stability can impact Coal Reserves if not continually managed</li> <li>Refinements to the Cypress South Pit design as a result of further geotechnical drilling and associated analysis, and a revised pit optimisation 2022, have resulted in a decrease in 495 thousand tonnes from the coal reserve.</li> <li>The mine employs specific geotechnical staff and has well defined geotechnical standards to mitigate the risk. The highwall requires ongoing monitoring.</li> <li>There are no other currently identified material naturally occurring risks that could impact the project or estimated Coal Reserves.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>Coal Reserves are based upon resources classified as either Measured or Indicated from the Coal Resource estimation and classification process.</li> <li>The Coal Reserve classification results appropriately reflect the Competent Persons view of the deposits.</li> <li>Coal tonnes with &gt;4% sulphur require blending with low sulphur coal from the Bathurst Resources Limited (BRL, parent company) owned projects or other unidentified external sources to make a marketable product and have been classified as Probable.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>In 2008 a study was undertaken to assess coal washability and based on the results the current CHPP constructed and remains in use at the site.</li> <li>Palaris undertook a review of the Cypress reserve model in 2013.</li> <li>Internal review of the Pit Optimisation Study was undertaken in 2014.</li> <li>A Pit Optimisation study was completed in June 2015 by Golder Associates.</li> <li>Palaris Pty undertook a review of the Cypress reserve model in 2016 as part of a vendor due diligence for Solid Energy New Zealand Ltd.</li> <li>The mining and CHPP performance were reconciled in 2017 with actuals. Golder recommends that at a minimum there is annual reconciliation performed.</li> <li>A 2019 reconciliation on a mined block in Cypress North pit area by the BT Mining site coal senior geologist, showed the overall marketable coal recovery was consistent with that modelled even though the actual proportion of Bypass to Wash coal won was lower than modelled by approximately 10%.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>Mineral Resources have been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resource estimates.</li> <li>The statements relate to global estimates of tonnes and grade.</li> <li>Accuracy and confidence of modifying factors are generally consistent with the current operation. Modifying factors applied to the Cypress Reserves are Mining Losses, Dilution and Contamination to Roof, Floor and at 3m bench intervals of the coal seam. The amount of losses, dilution and contamination are dependent on the lithology of the rock in the roof and floor, weather and mining method. Dilution requires careful management and can result in higher percentages of coal that requires beneficiation to make a saleable product. There is a coal wash</li> </ul>



Criteria	Commentary
	<p>plant available. Plant performance data sets are still limited and require reconciliation on at least an annual basis.</p> <ul style="list-style-type: none"> <li>• Marketable coal tonnes are reported on the basis of in-ground moisture only, further data and assessment is required to report product on a total moisture basis.</li> <li>• The accuracy of the Coal Reserve estimate is primarily dependent on the ability to sell the coal at the estimated prices and the actual site operating costs. Site operating costs have been reviewed internally and reconciled against actual performance.</li> </ul>

## Appendix A:

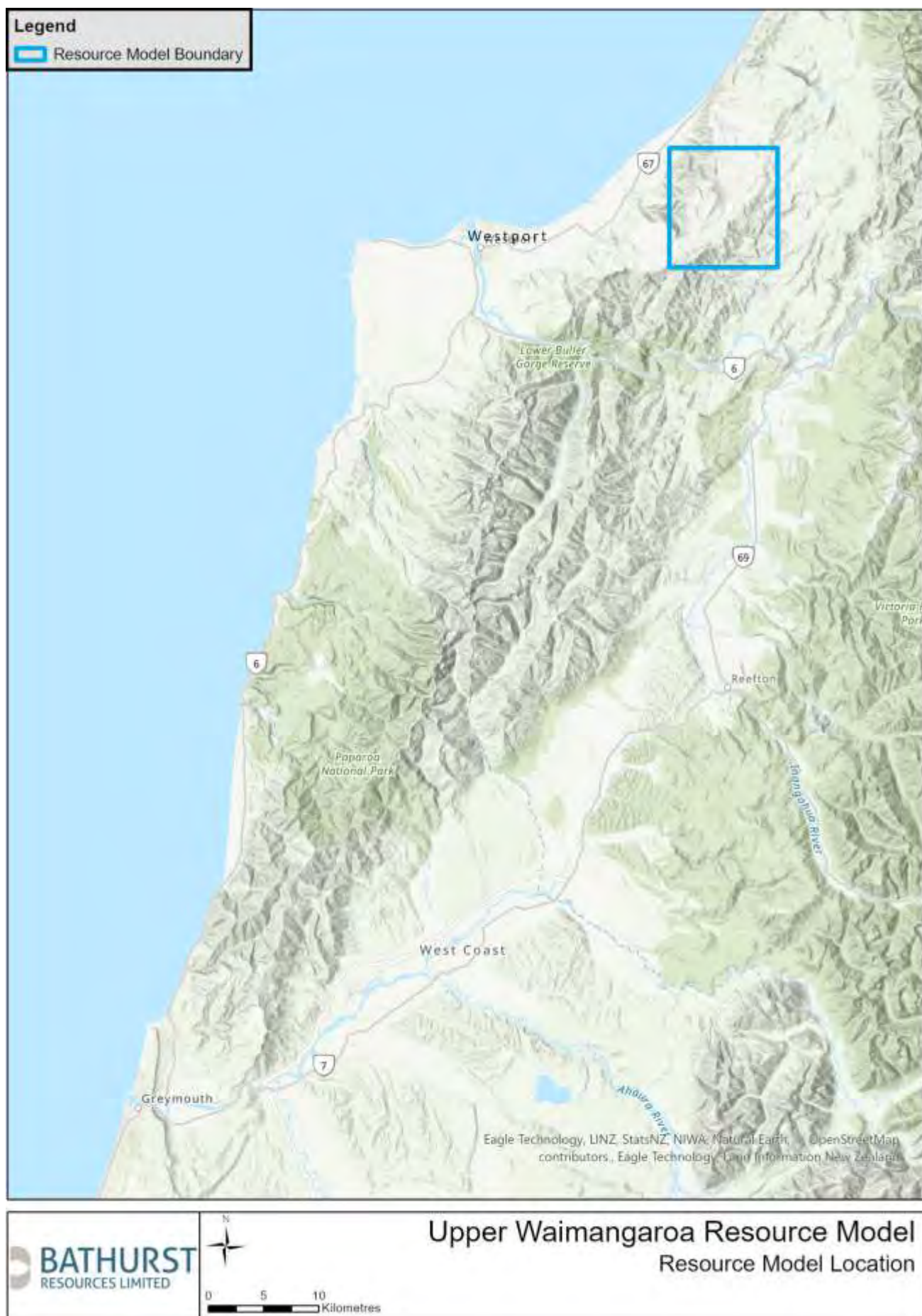


Figure 1: Location Plan

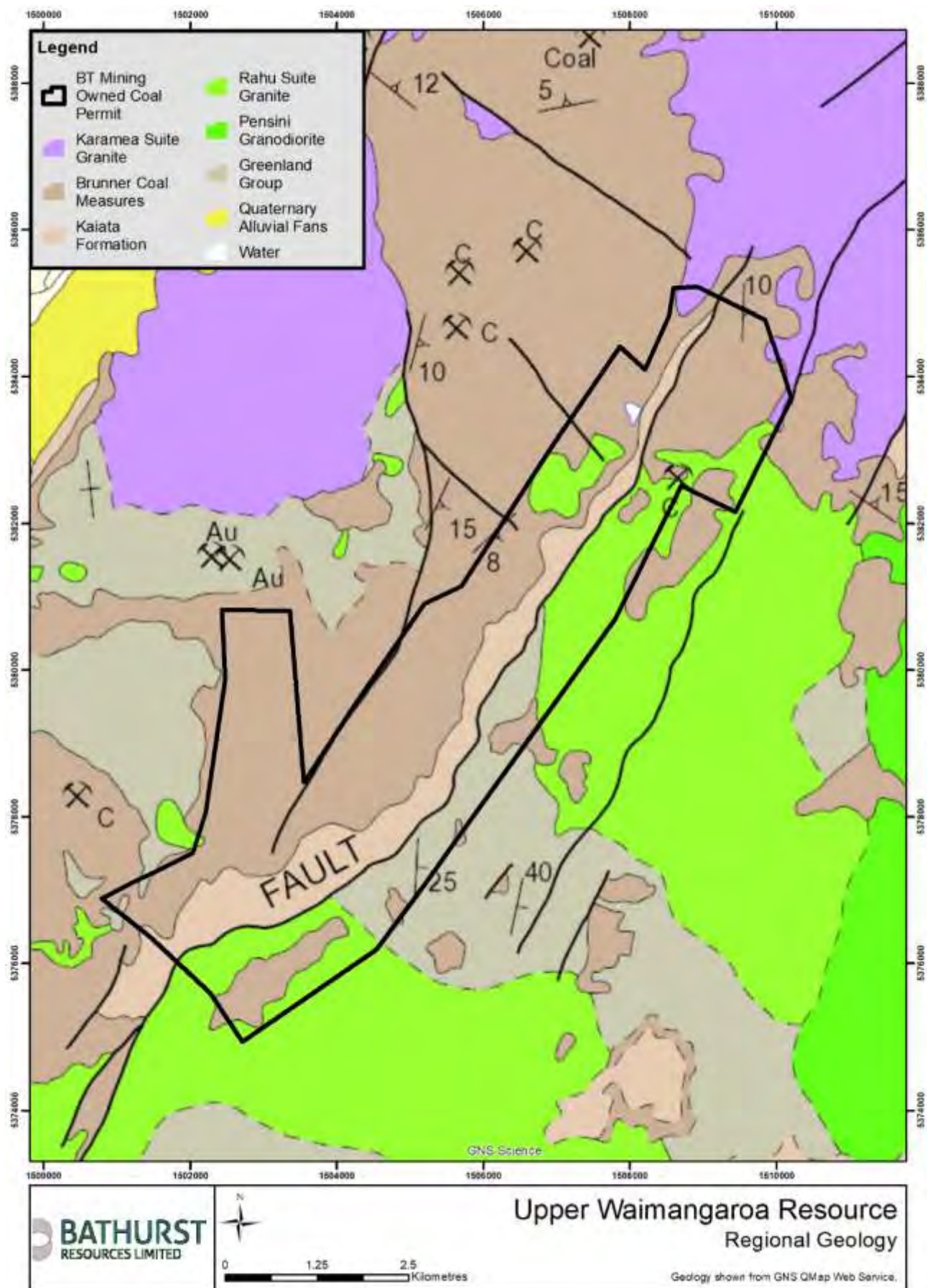


Figure 2: Regional Geology



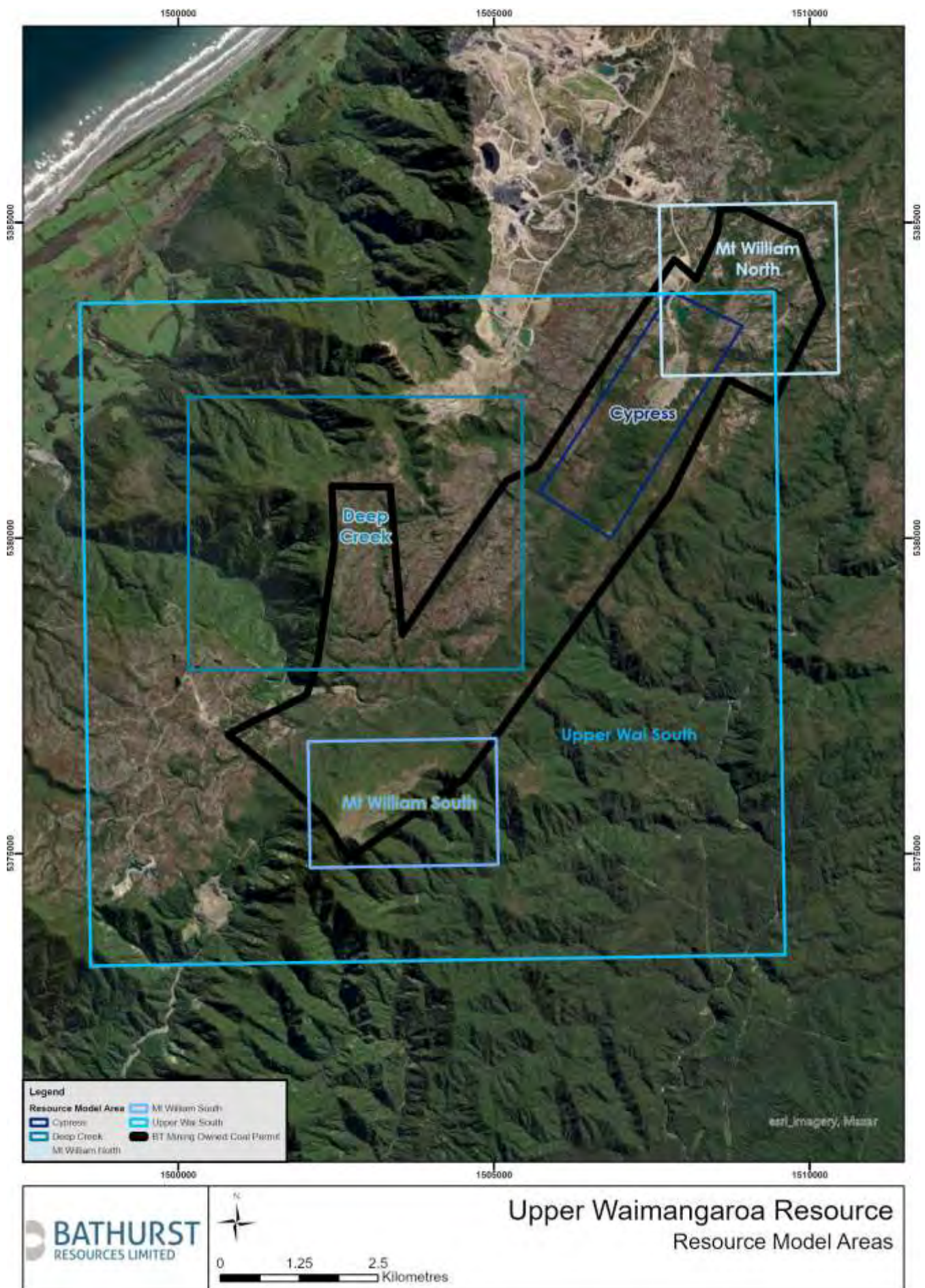


Figure 3: Resource Model Areas



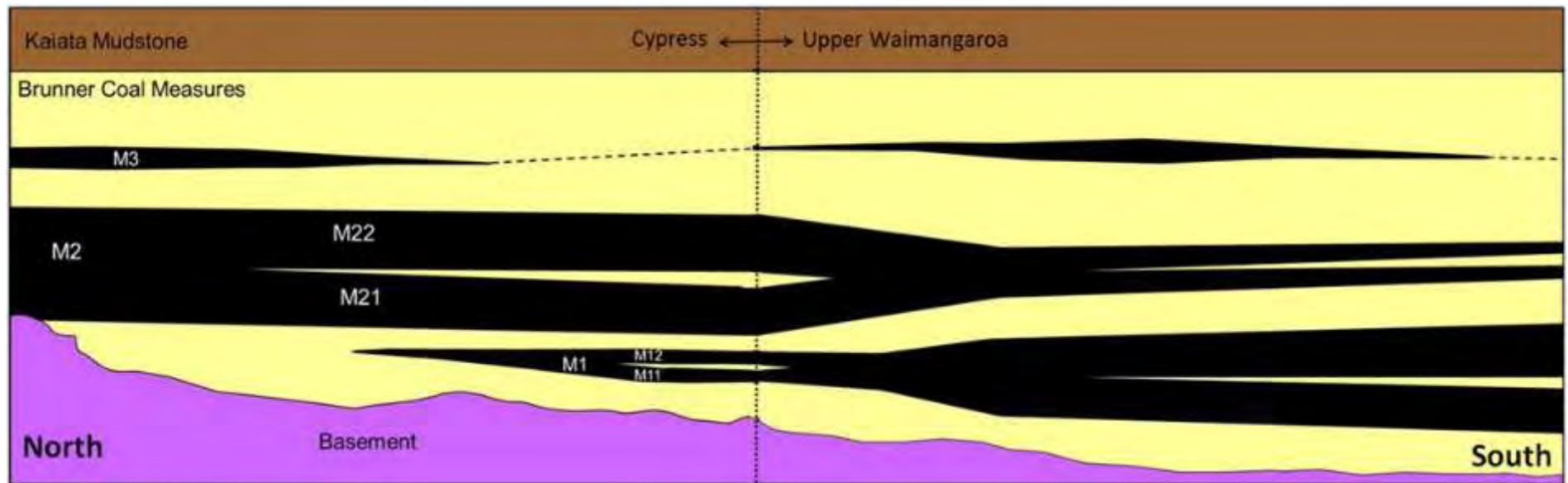


Figure 4: Schematic diagram of Upper Waimangaroa Coal Seam naming convention and correlation alongside that of the Cypress deposit to the north

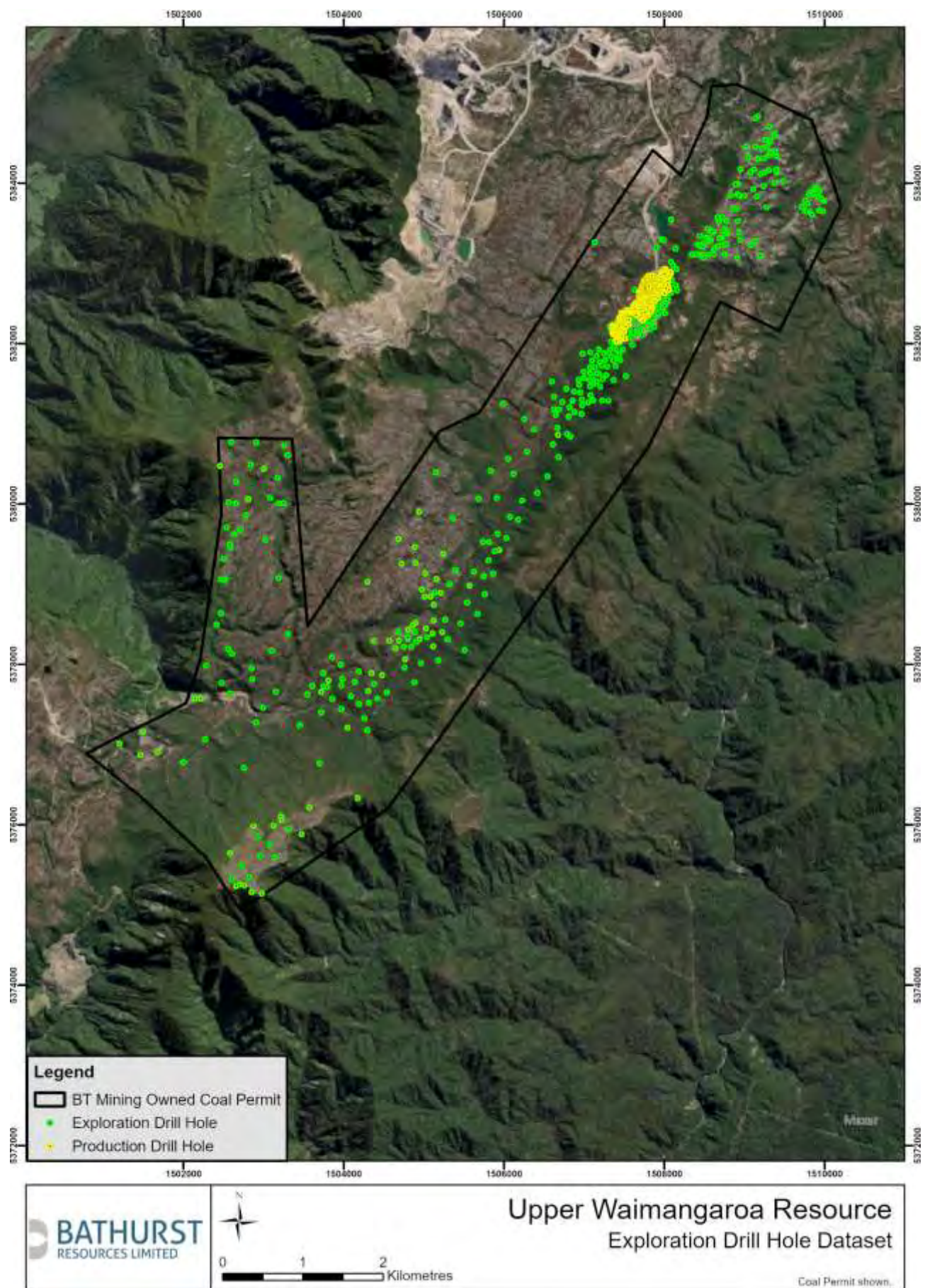


Figure 5: Plan showing the drilling dataset used to produce the resource model



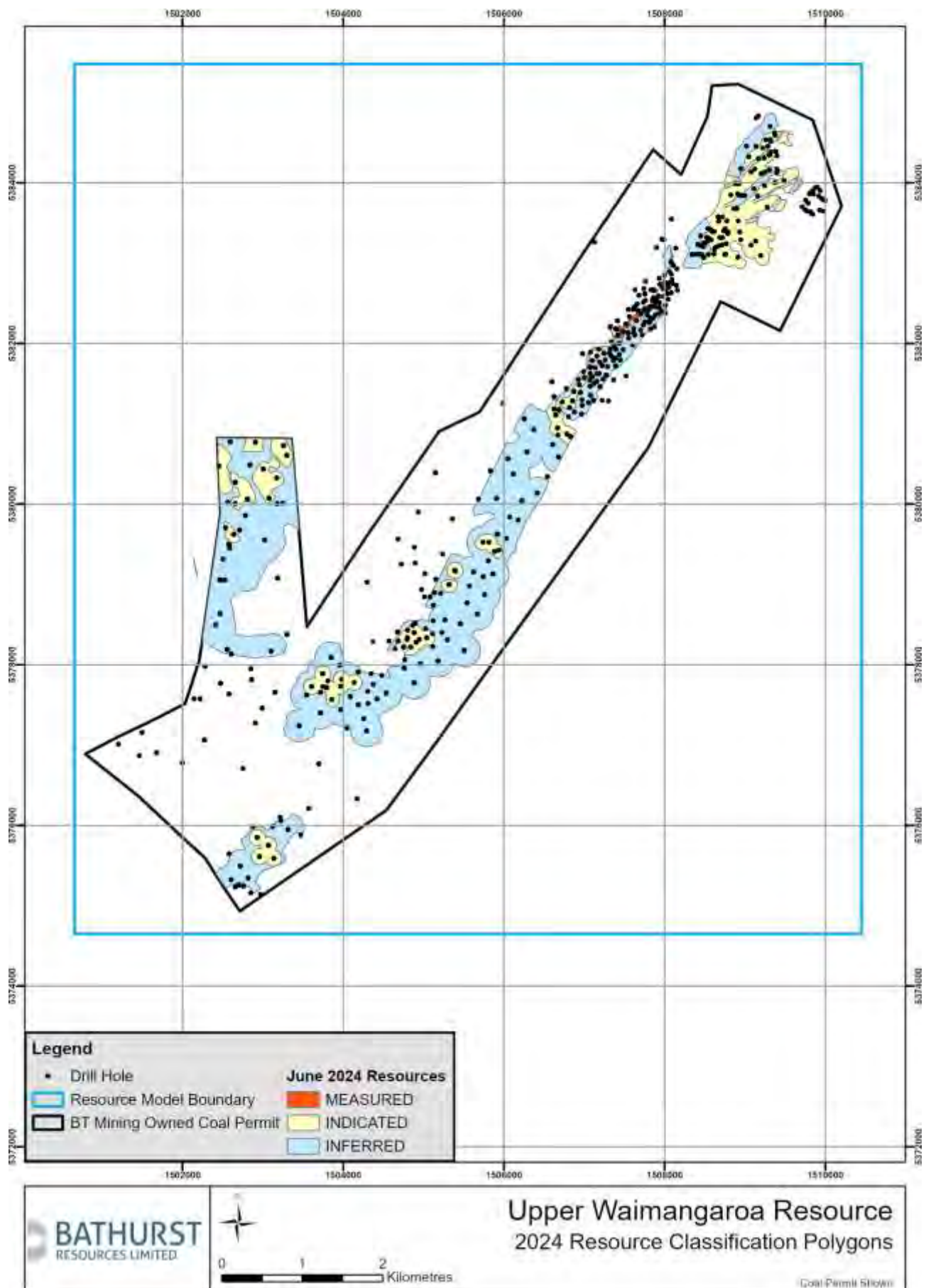


Figure 6: Plan showing the 2024 resource classification polygons



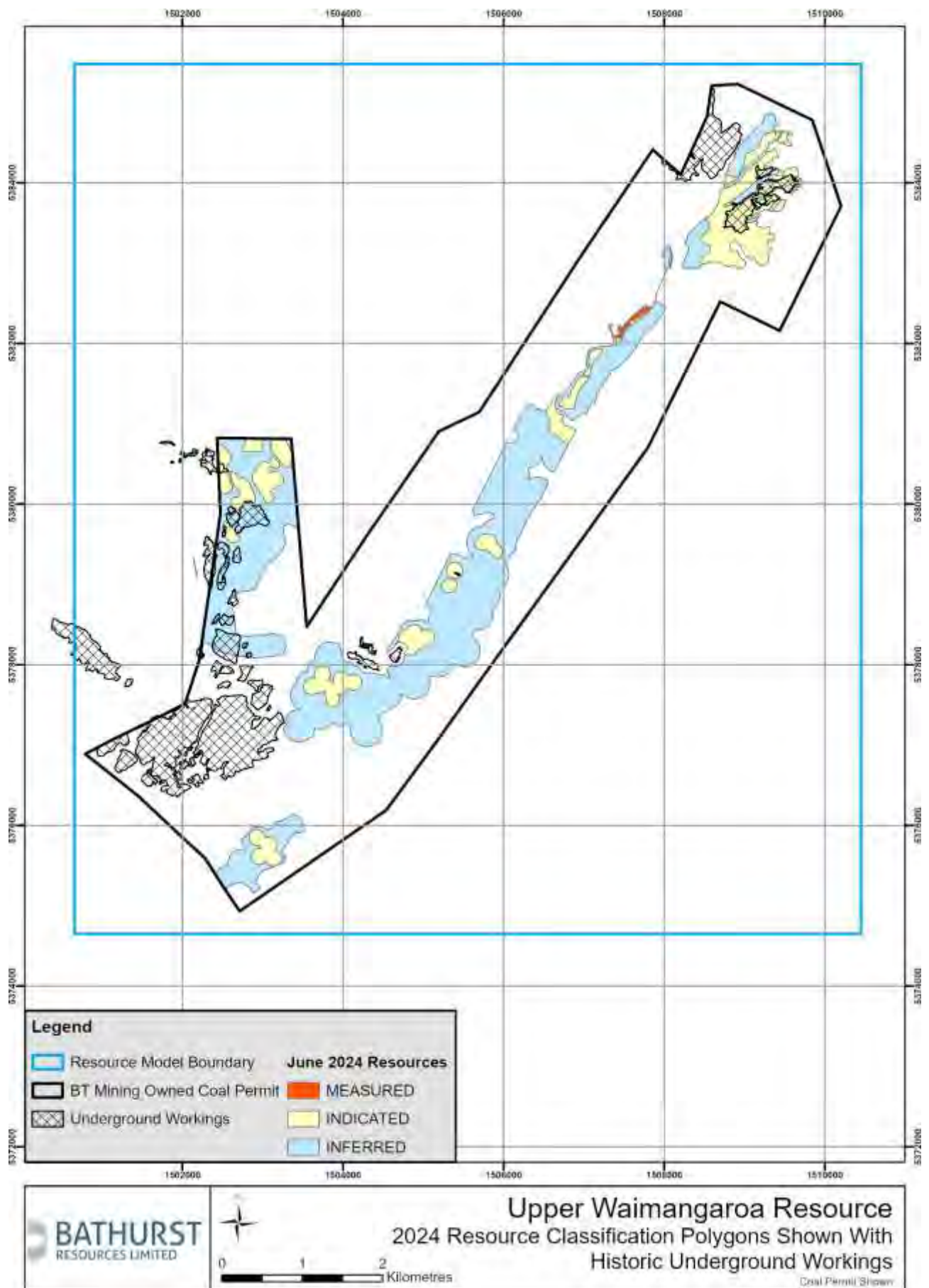


Figure 7: Extent of Underground Workings and 2024 resource classification

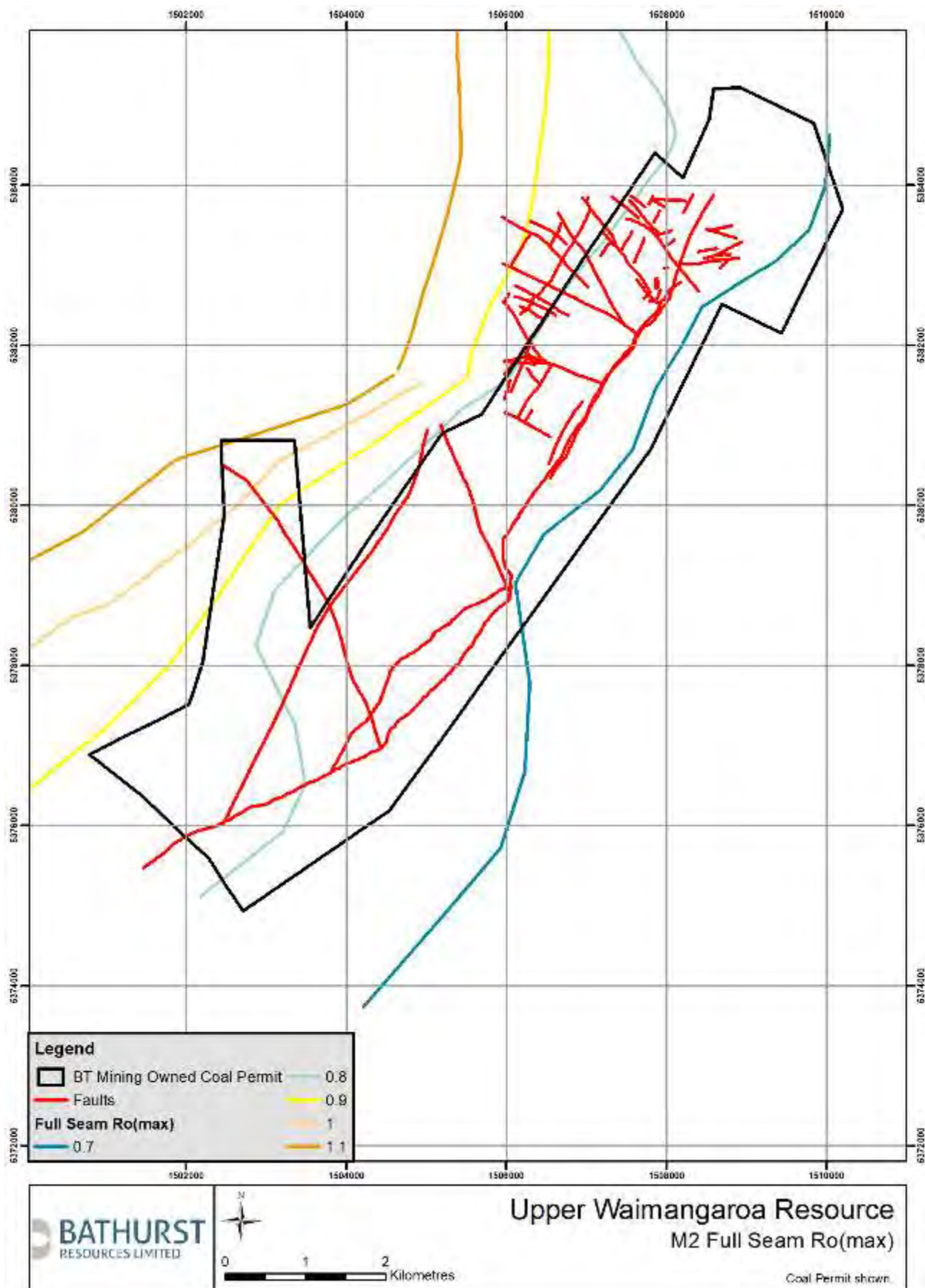


Figure 8: Plan showing the Ro(max) for the M2 Coal Seam



Figure 9: Plan showing full seam thickness (M2 Coal Seam) contours





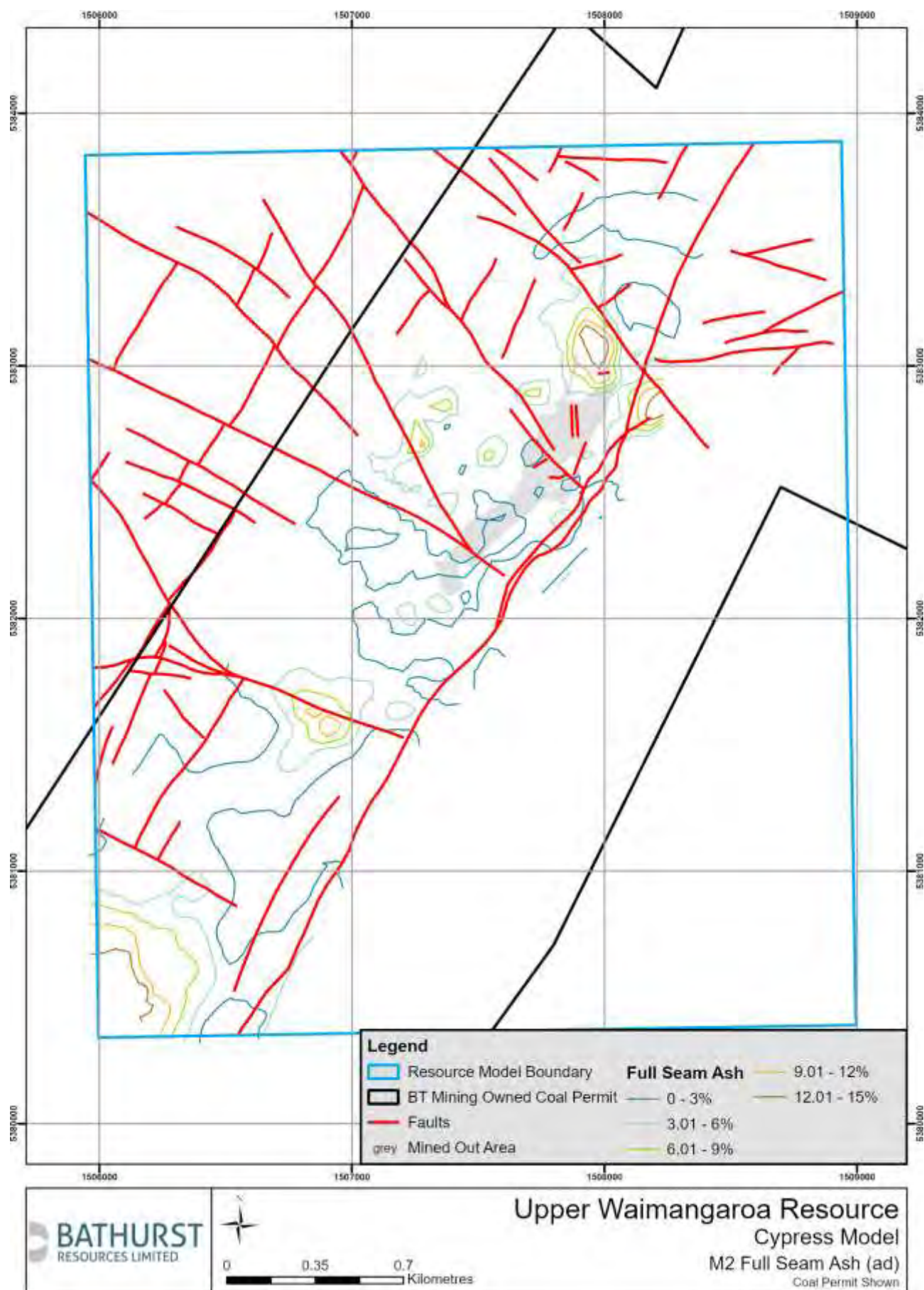


Figure 11: Plan showing in-situ full M2 seam ash on an air dried basis across the Cypress resource area





Figure 12: Plan showing full M2 seam sulphur on an air dried basis across the Cypress resource





Figure 13: Plan showing full M2 seam Volatile Matter on an air dried basis across the Cypress resource

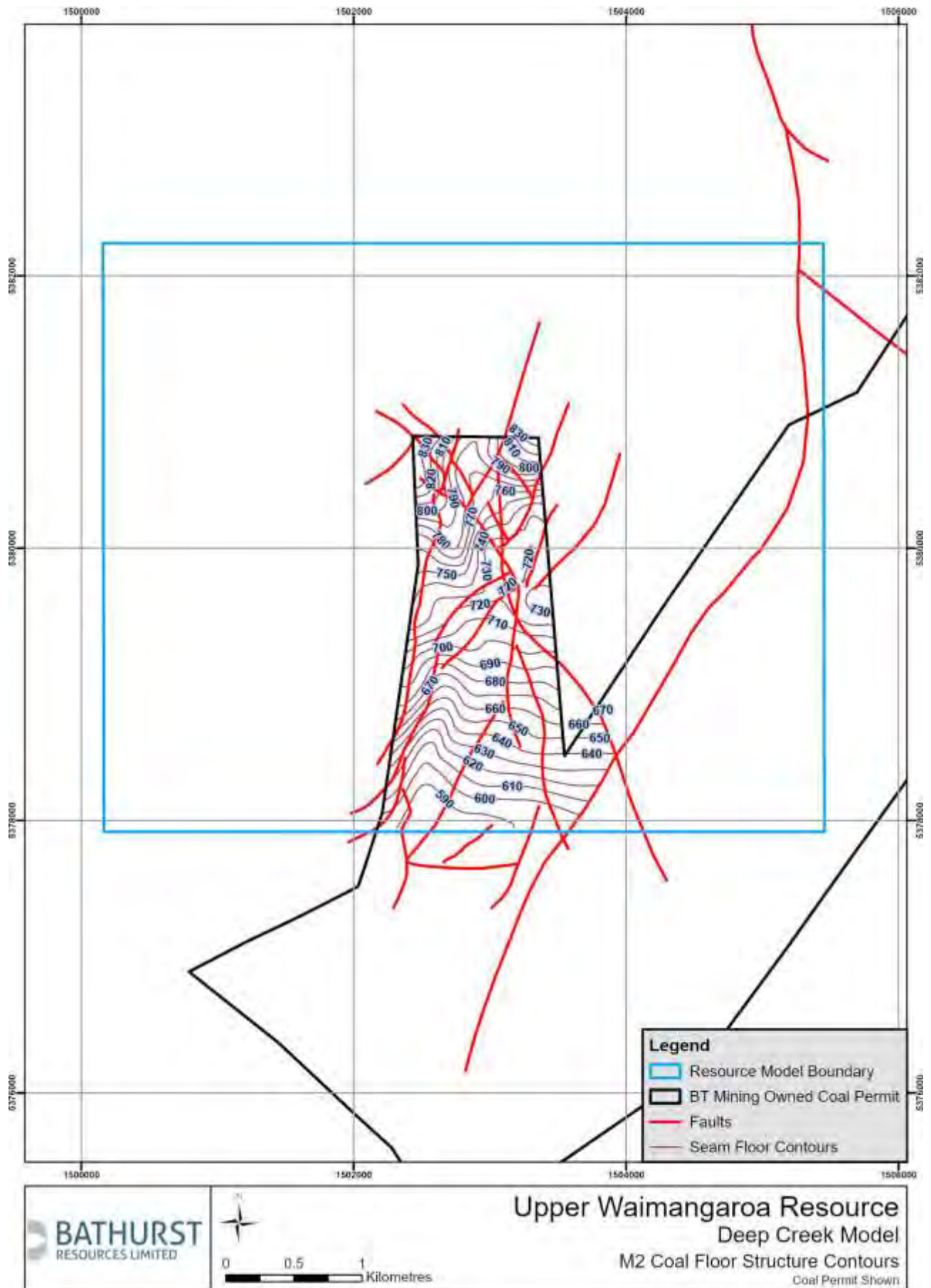


Figure 14: Plan showing the structure contours of M2 coal seam floor (Deep Creek)

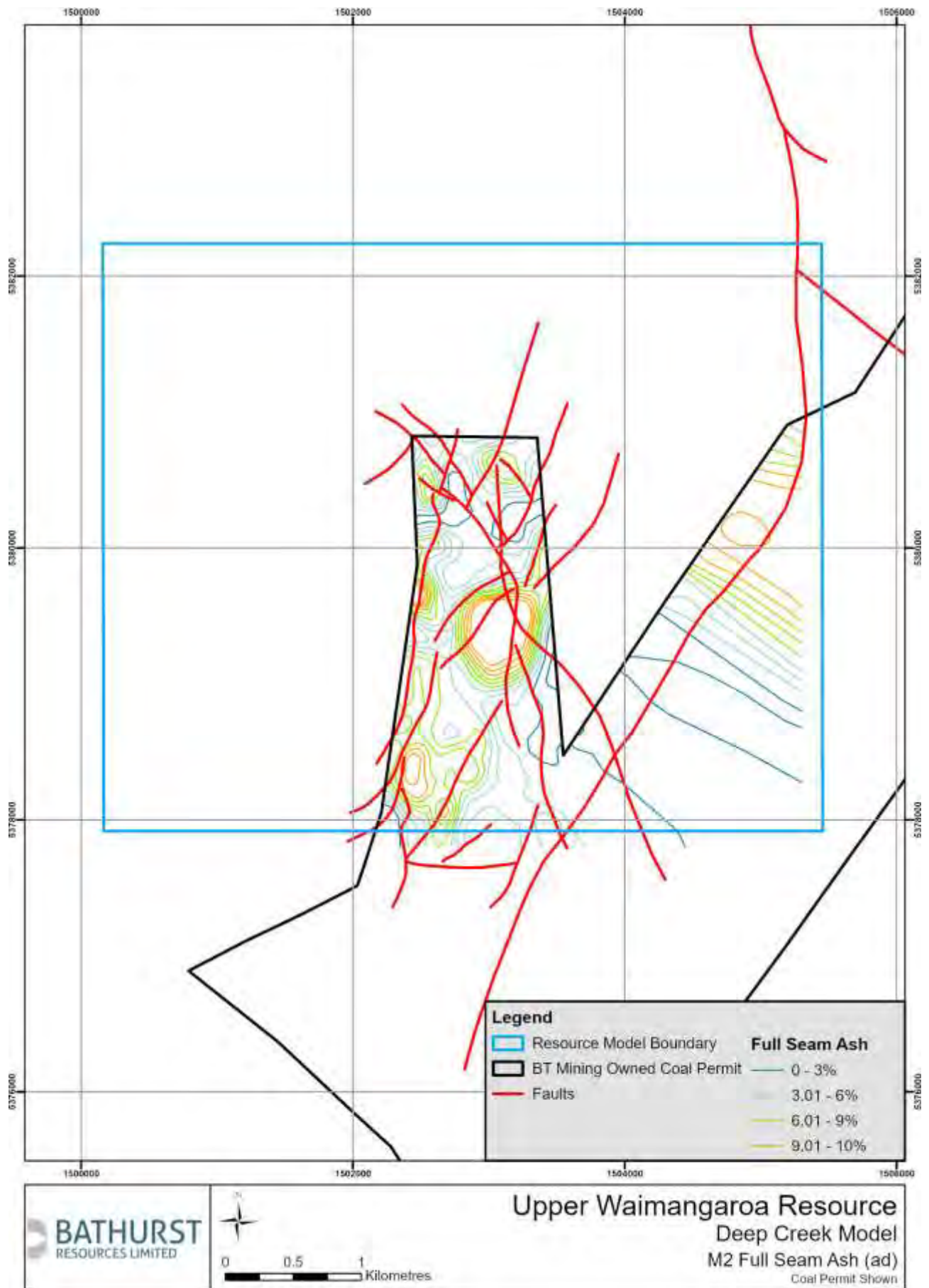


Figure 15: Plan showing Full Seam Ash on an air dried basis for the M2 Coal Seam (Deep Creek)



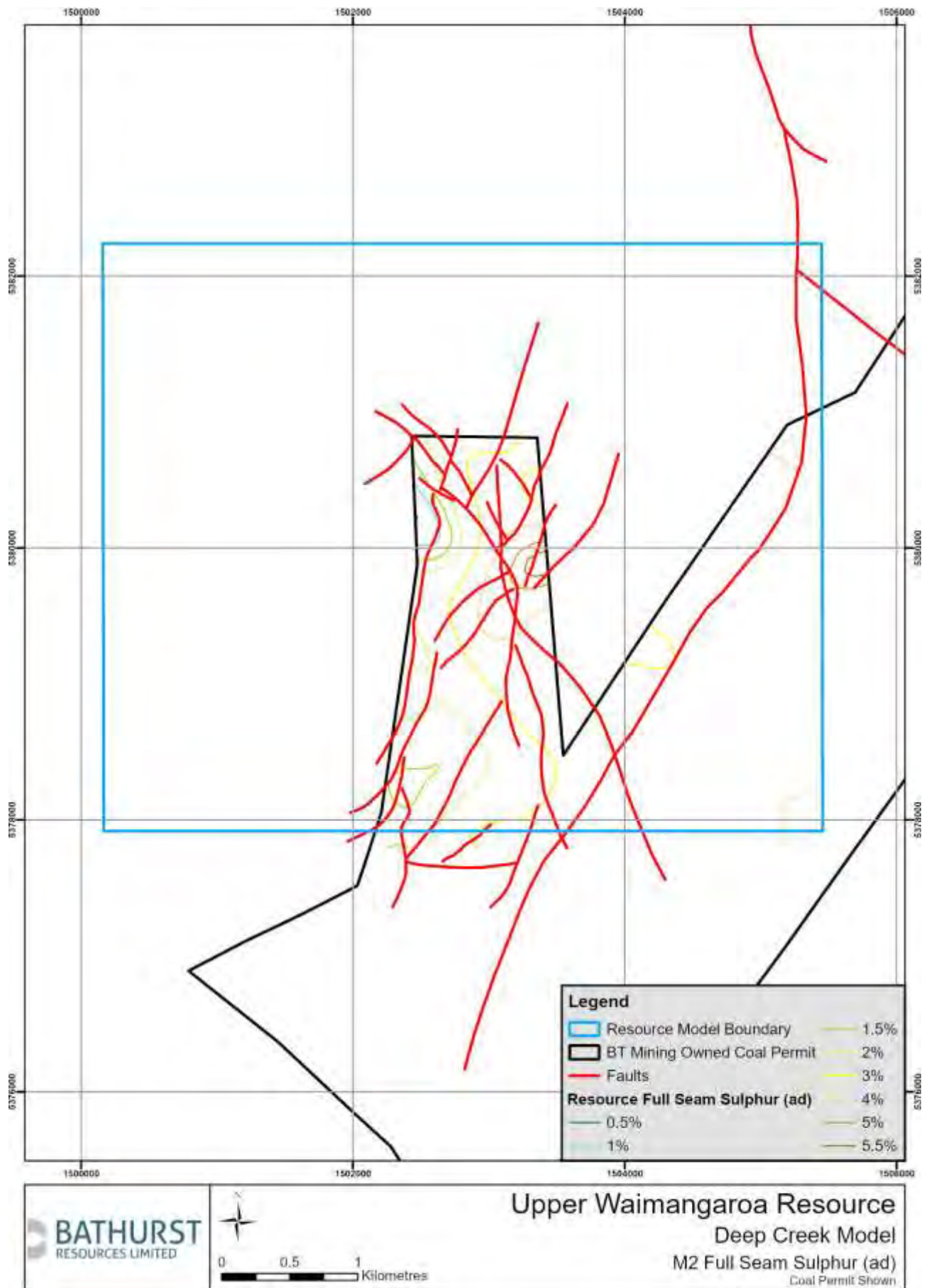


Figure 16: Plan showing Full Seam Sulphur on an air dried basis for the M2 Coal Seam (Deep Creek)

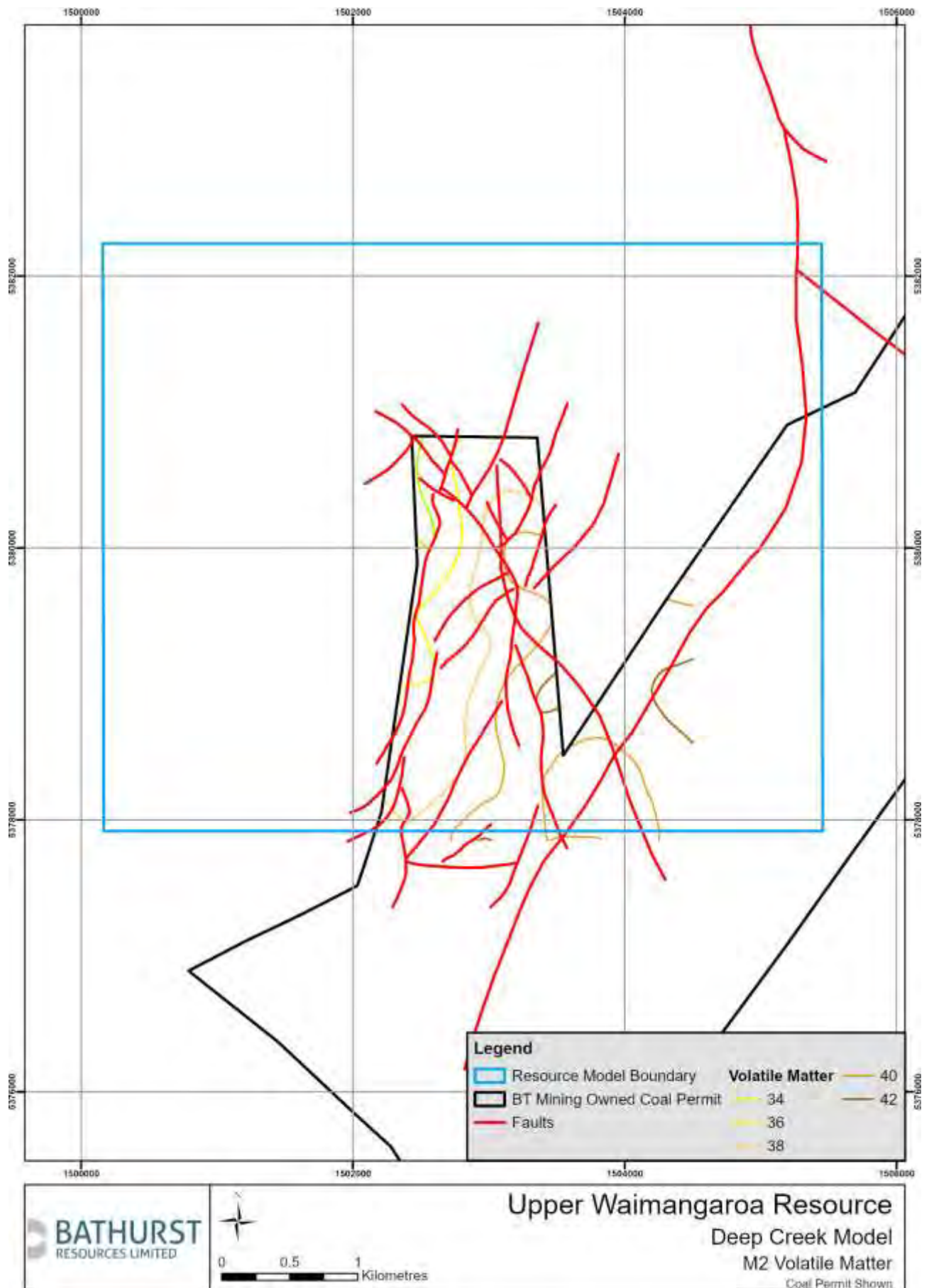


Figure 17: Plan showing Full Seam Volatile Matter on an air dried basis for the M2 Coal Seam (Deep Creek)

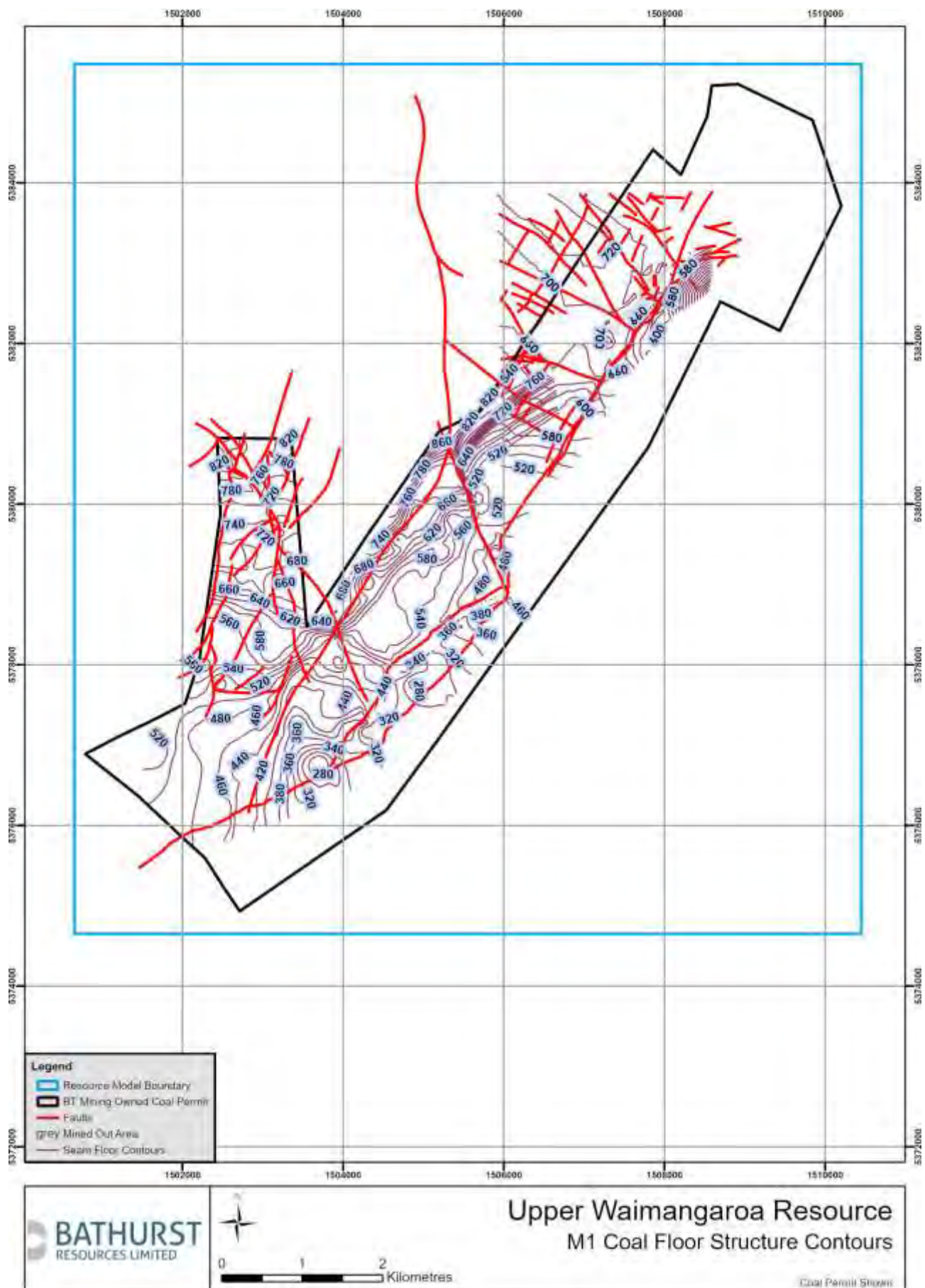


Figure 18: Plan showing the structure contours of M1 coal seam floor



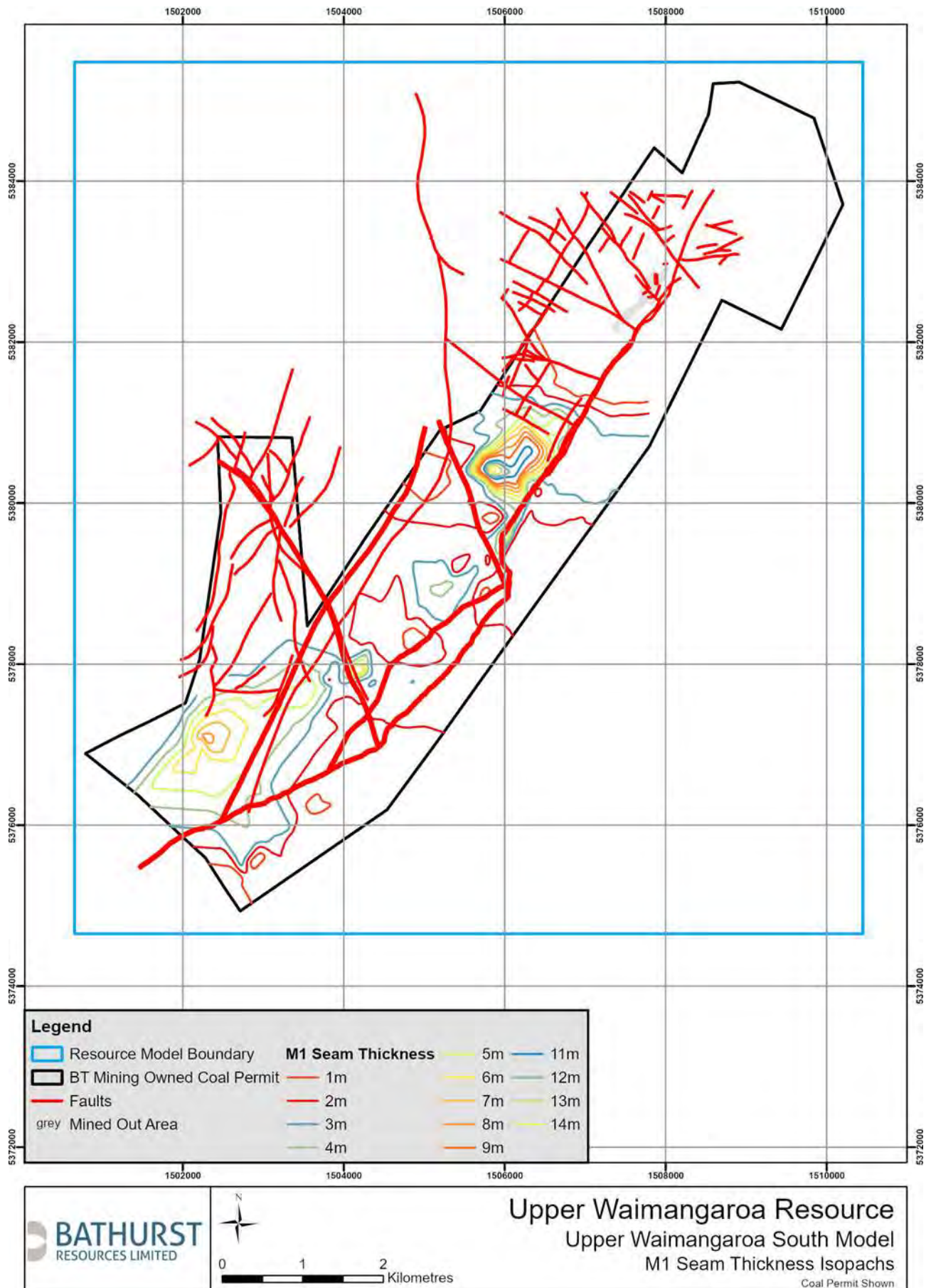


Figure 19: Plan showing full seam thickness (M1 Coal Seam) contours for the Upper Waimangaroa South area

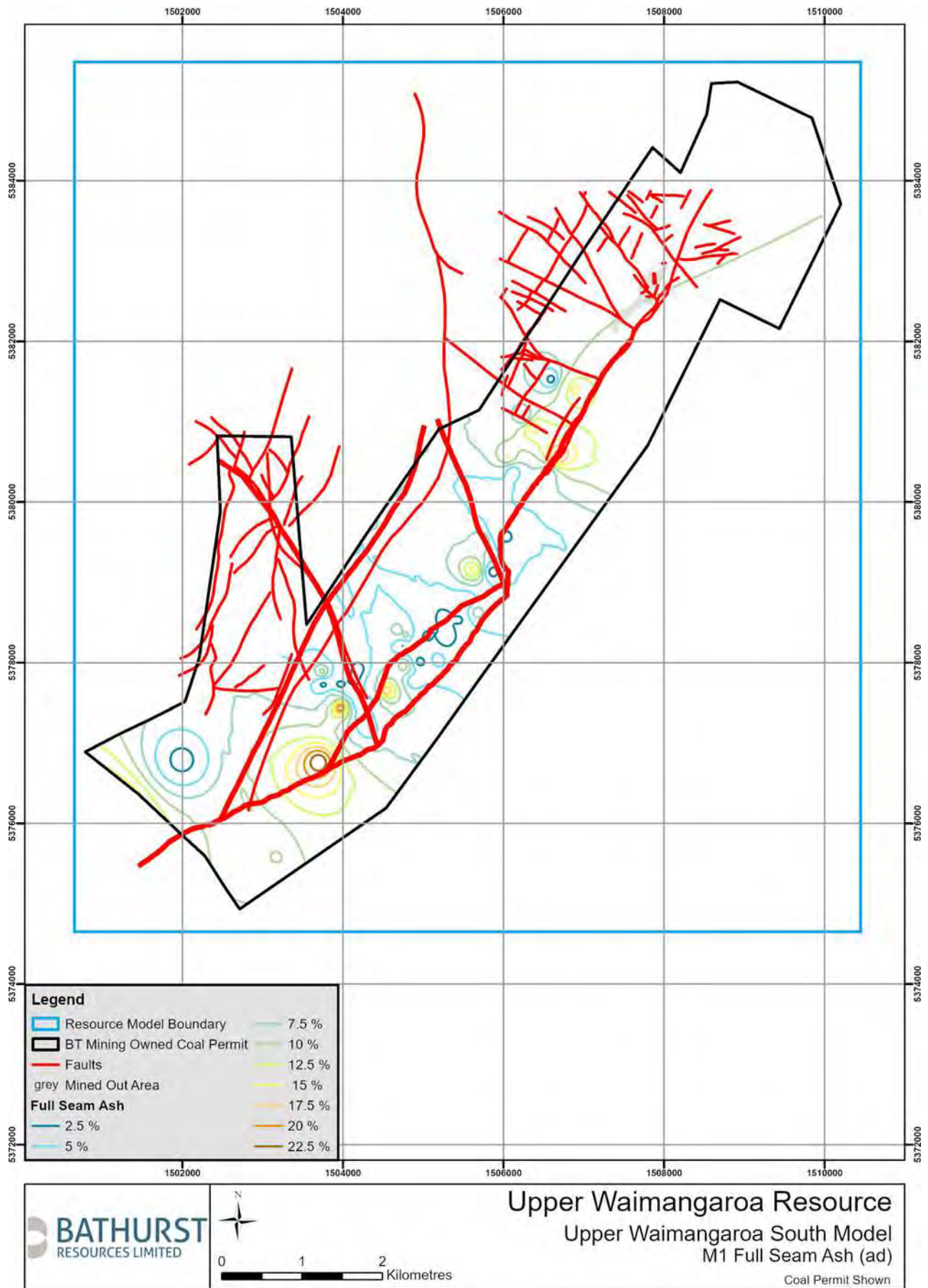


Figure 20: Plan showing in-situ full M1 seam ash on an air dried basis across the Upper Waimangaroa South resource



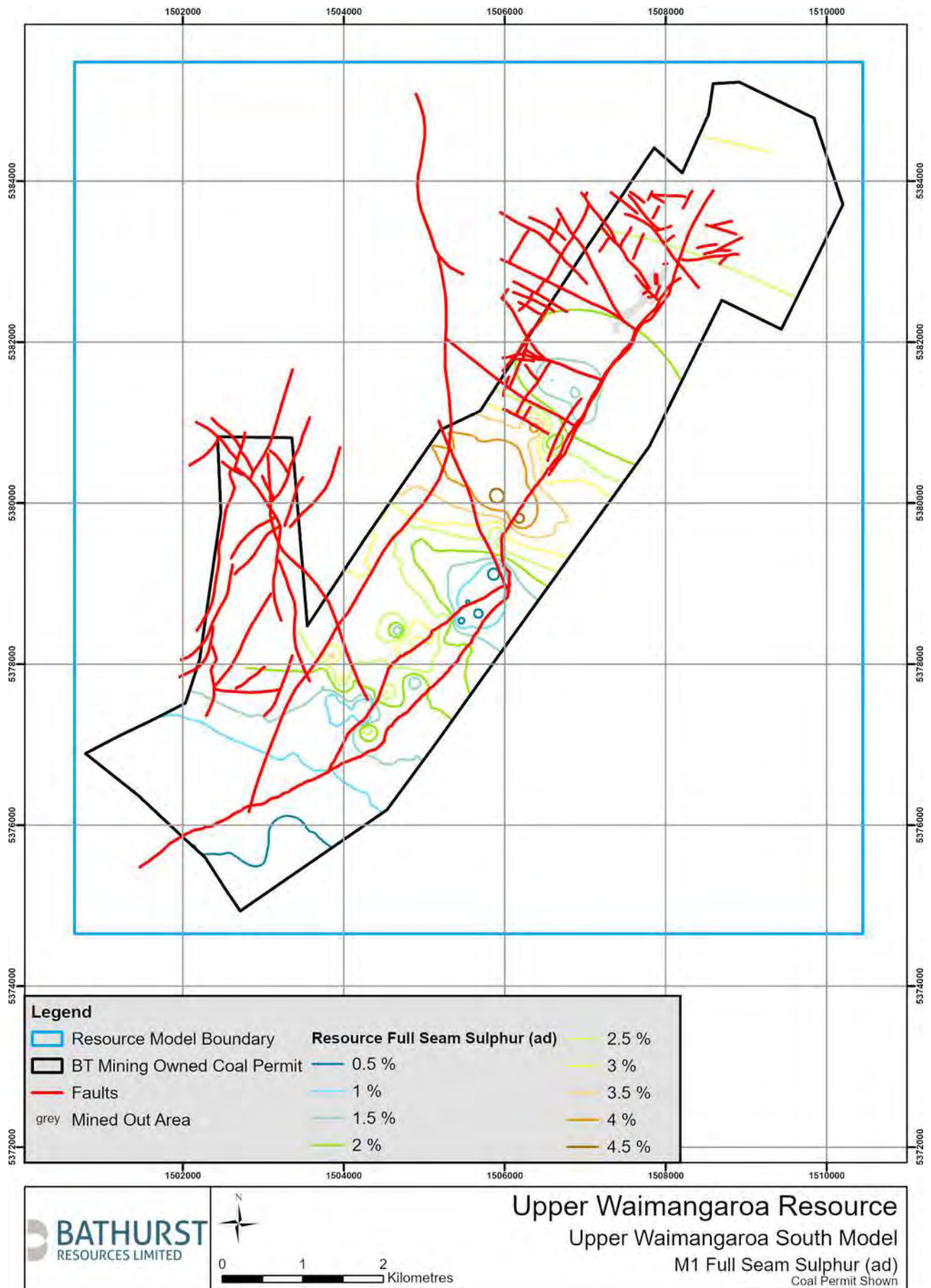


Figure 21: Plan showing full M1 seam sulphur on an air dried basis across the Upper Wiamangaroa South resource



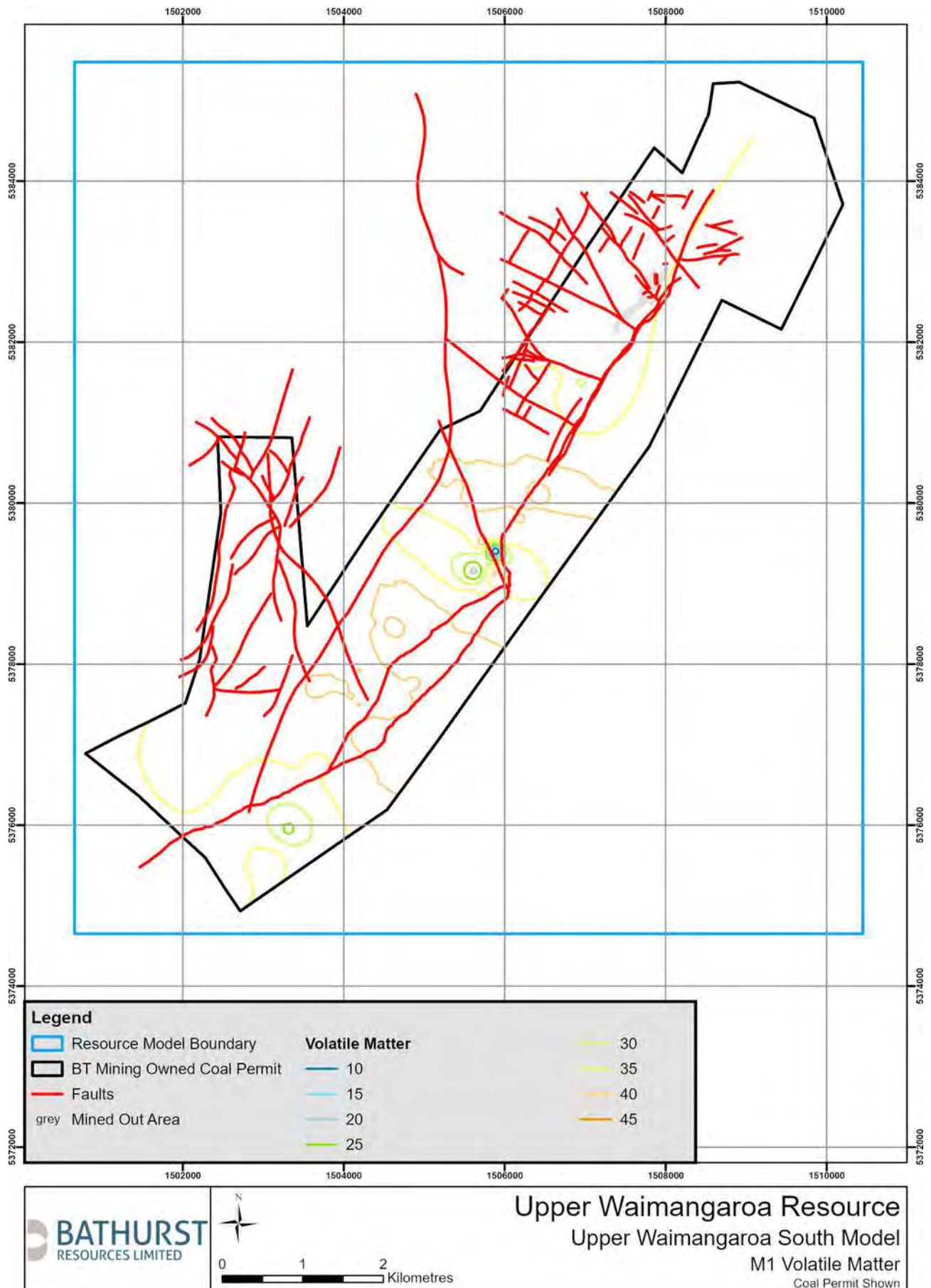


Figure 22: Plan showing full M1 seam Volatile Matter on an air dried basis across the Upper Wiamangaroa South resource



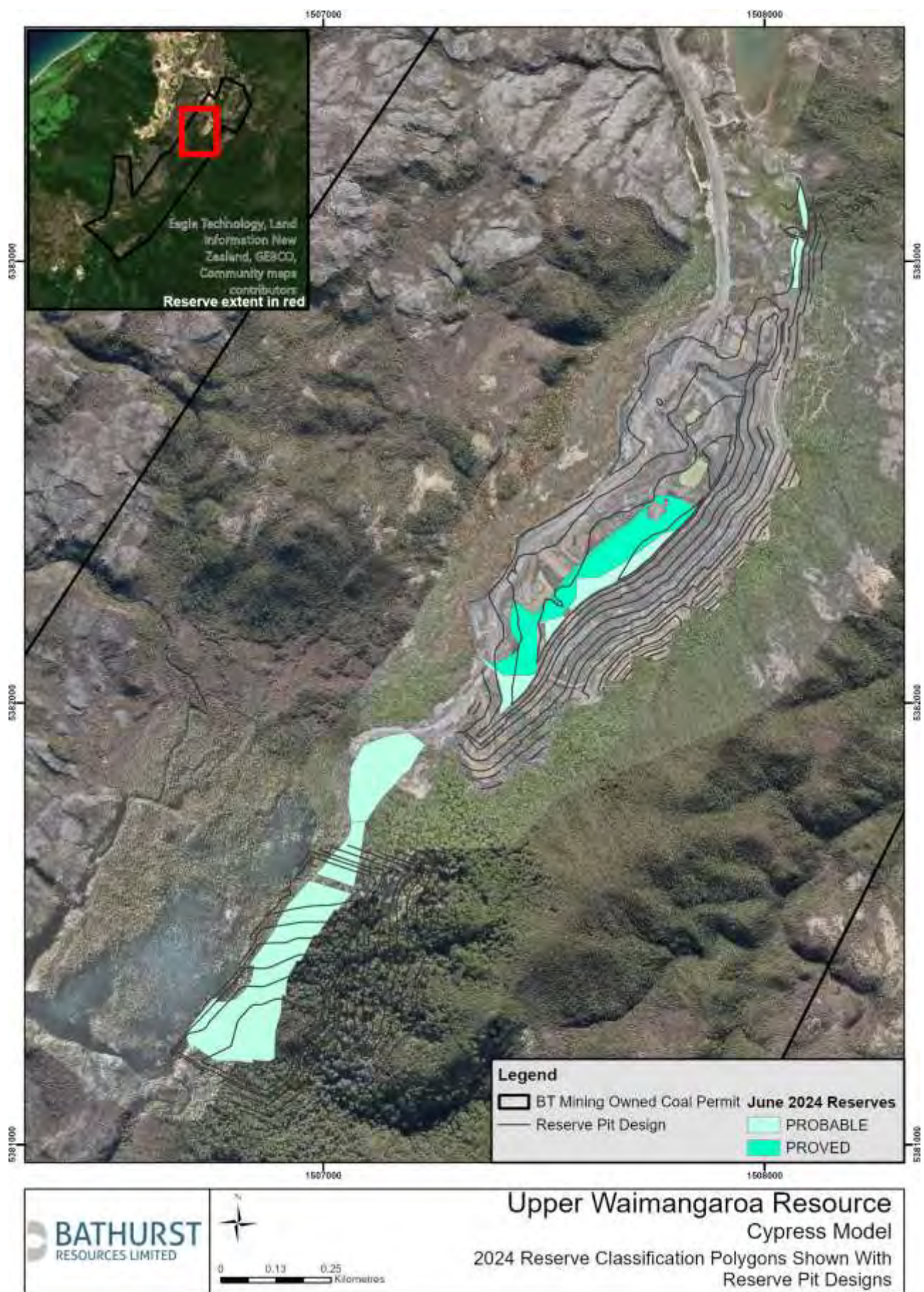


Figure 23: Upper Waimangaroa reserves pit shells

# JORC Code, 2012 Edition – Table 1 Report for Deep Creek 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Diamond Core (DC) drilling sampling for coal quality analysis took place using PQ (85mm) or HQ (64mm) coring methods for coal seams. The entire core is retained for analysis.</li> <li>DC sampling is carried out under Bathurst Resources Limited (BRL) specific protocols and QAQC procedures.</li> <li>Composited samples are created at the laboratory from individual plies that are thickness weighted. These composited samples are compiled for additional coal property testwork.</li> <li>Trench lithology and sampling data collection has been collected in a similar manner to drill core (i.e. 0.5m plies) and have had the same analysis completed.</li> <li>The quality of drill core and trench samples are continuously monitored and collected by geologists during drilling.</li> <li>All analytical data has been assessed and verified before inclusion into the resource model.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>BRL managed drilling campaigns have utilised the following drilling methods: <ul style="list-style-type: none"> <li>Full PQ triple tube core (TTC), in many cases overlying strata was open-holed through.</li> <li>HQ triple tube core only where necessary.</li> <li>Washed drilled overburden where applicable.</li> </ul> </li> <li>Historic drilling techniques included: <ul style="list-style-type: none"> <li>PQ triple tube core.</li> <li>HQ triple tube core.</li> <li>NQ triple tube core.</li> <li>Washed drilled.</li> </ul> </li> <li>All exploration drillholes were collared vertically.</li> <li>Recent drilling campaigns utilised PQ sized drilling to maximize core recovery. Some drill collars have had open hole pre-collars.</li> <li>The bulk of the drillholes have been drilled vertically due to the shallow dipping morphology of the deposit and due to its close proximity to the surface.</li> <li>No core has been orientated.</li> </ul>
<b>Drill sample recovery</b>	<p><b>Diamond Core</b></p> <ul style="list-style-type: none"> <li>Standard industry techniques are employed for recovering drilled core samples from drillholes. Core is obtained by HQ (64mm) and PQ (85mm) diameter coring techniques, using triple tube operations, providing good core recovery, averaging &gt;80% over the entire drillhole (inclusive of non-coal lithologies).</li> <li>HQ core diameter is considered to provide a sample of sufficient volume to be representative of the in situ material and provides adequate sample mass to undertake the variety of raw coal tests together with composited sample analysis when required.</li> <li>In poor ground conditions PQ sized rods, and therefore core were used to ensure that the drillhole was completed without affecting the integrity of the drill core and or loss of drilling equipment.</li> <li>Downhole geophysics has been undertaken on most of the diamond core holes. A combination of geophysical tools, including Density, Natural Gamma, Caliper, Sonic, Dipmeter, Acoustic Scanner, and Verticality have been run down holes. All tools are calibrated on a regular and systematic basis. All geophysical logging work has been conducted by a contractor. Sample interval and recovery recorded in the field by drillers is validated and adjusted if required using geophysics during core logging and sampling.</li> <li>When drillholes are geophysically logged, the geophysical logs are correlated/validated against the core to determine core/chip recovery, while ensuring drill depths recorded in the field by the drillers are correct.</li> <li>Core recovery was measured by the logging geologist for each drillers run (usually 1.5m) in each drillhole. If recovery of coal intersections dropped below 85% the drillholes required a re-drill.</li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>Core photography is undertaken on all diamond core.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>BRL has developed a standardised core logging procedure and all core logging completed by BRL has followed this standard.</li> <li>All modern drill core has been geologically and geotechnically logged by geologists under the supervision and guidance of a team of experienced exploration geologists.</li> <li>As much data as possible has been logged and recorded including geotechnical and rock strength data.</li> <li>All core was photographed prior to sampling. Depth metre marks and ply intervals are noted on core in each photograph.</li> <li>Down-hole geophysical logs were used to aid core logging.</li> <li>BRL aimed to geophysically log every drillhole that intersected coal providing that downhole conditions and operational constraints allowed. The standard suite of tools run included density, dip meter, sonic, and natural gamma.</li> <li>Where drillhole conditions were poor or mine workings were intersected only in-rods density was acquired. In-rods density produced a reliable trace for use in seam correlation and depth adjustment but was not used for ash correlations.</li> <li>Down-hole geophysics were used to correlate coal seams, to confirm depths and thickness of coal seams and to validate drillers' logs. Geophysics were also used to accurately calculate recovery rates of coal.</li> <li>The geophysical logging company maintained and calibrated all tools as per their internal calibration procedures. Additionally, geophysics equipment was calibrated and tested using a calibration hole on the Denniston Plateau with known depth to coal, thickness and quality. These calibration methods are deemed to be sufficient as both sites host the same Brunner Coal Measures.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>For all exploration data acquired by BRL, an in-house detailed sampling procedure was used.</li> <li>Sampling and sample preparation are consistent with international coal sampling methodology.</li> <li>Ply samples include all coal recovered for the interval of the sample. Core was not cut or halved. Ply sample intervals were generally 0.5m unless dictated by thin, split or parting thickness.</li> <li>All drilling in the recent campaigns have been completed using triple tube cored holes. No chip or RC samples were taken in these campaigns.</li> <li>Assay samples were completed at the core repository after transport from drill site in core boxes. Coal intervals were wrapped at the drill site prior to transport.</li> <li>Samples were taken as soon as practicable and stored in a chiller until transported to the coal quality laboratory.</li> <li>Geochemical sampling for overburden characterisation has been completed by taking representative samples of core above the coal seam in a subset of drillholes.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>SGS in Ngakawau and CRL (ACIRL Australia and Newman Energy subcontracted for specific tests) laboratories are used to undertake physical and chemical testing and use Industry Standards for all coal tests and systematic QA/QC procedures for all work. Both laboratories hold accreditation by International Accreditation New Zealand (IANZ). The processes employed are considered to be appropriate for coal sample analysis. Results are reviewed in-house to ensure the accuracy of the data by a geologist and or a senior geologist. The laboratory has been inspected by the Company's personnel. Tests include but are not limited to: <ul style="list-style-type: none"> <li><b>Chemical Analysis</b> <ul style="list-style-type: none"> <li>Proximate analysis (ASTM D5142-2004 (modified))</li> <li>Sulphur (ASTM D4239-04A)</li> <li>Total Moisture (ISO 589)</li> </ul> </li> <li><b>Ultimate Analysis</b> <ul style="list-style-type: none"> <li>Carbon (AL038-in house)</li> <li>Hydrogen (ASTM D3176-09)</li> <li>Nitrogen (ASTM D3176-09)</li> <li>Oxygen (ASTM D3176-09 (by difference))</li> <li>Sulphur (ASTM D3176-09)</li> <li>Forms of Sulphur (AS 1038 Part 11)</li> </ul> </li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Chlorine (ISO 587)</li> <li>○ Ash composition (X-Ray spectrometry (Spectrachem))</li> <li>○ Ash fusion temperature (ISO 540:1995(E))</li> <li>○ Trace Elements</li> <li>○ Calorific Value (ISO 1928-1995)</li> </ul> <p><b>Rheological and Physical Analysis</b></p> <ul style="list-style-type: none"> <li>○ Gieseler Fluidity (ASTM D2639-90)</li> <li>○ Dilatational (Audibert-Arnu) (ISO 349:1975)</li> <li>○ Free Swelling Index (ISO 501:2003(E) D720-91(1999))</li> <li>○ Hardgrove Grindability Index (ISO 5074, ASTM D409-02)</li> <li>○ Relative Density (AS 10382111-1994)</li> </ul> <p><b>Petrographic</b></p> <ul style="list-style-type: none"> <li>○ Maceral Analysis (c/- Newman Technologies), Vitrinite Reflectance (ASTM D2798-99)</li> </ul> <p><b>Other Tests</b></p> <ul style="list-style-type: none"> <li>○ Washability testing as requested (AS 41561 using float-sink methods) (also used Boner gig shaker table process).</li> </ul> <ul style="list-style-type: none"> <li>• 5% of all SGS analysed samples from 2010 have been sent to CRL for re-analysis, and then subsequently re-tested at SGS. The result of these repeats are analysed by the database geologist and the resource geologist, on a monthly basis. Additionally 5% of all SGS analysed samples are retested by SGS, as part of their in-house QAQC process. These repeat test results are generally within a 5% of their original results. Results outside of set tolerances are investigated.</li> <li>• Results are reviewed on a regular basis by the project geologist.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• Sample assay results have been cross referenced and compared against lithology logs and downhole geophysics data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Buller coalfield. Anomalous assay results were investigated, and where necessary the laboratory was contacted and a retest undertaken from sample residue.</li> <li>• No adjustments or calibrations are made to any coal quality data. In instances where results are significantly different from what was observed in geophysical logs or outside of local or regional ranges defined by previous testing, sample results are retested.</li> <li>• Most holes are geophysically logged, and verification of seam contacts are made through analysis of the geophysics. Assessment of coal intersections are undertaken by a geologist. Geophysics allows confirmation of the presence (or absence) of coal seams, accurate determination of contacts to coal seams, density measurements are used to guide sampling and identify high ash bands and or seam partings.</li> <li>• Geophysical logs (dual density and gamma) are analysed extensively and used to validate and, if required, correct geological and sample interval logs to ensure accuracy and consistency.</li> <li>• Since 2006 all coal quality data has been directly submitted and stored in electronic format using acQuire SQL database software.</li> <li>• Laboratory data is imported directly into an acQuire database with no manual data entry at either the SGS laboratory or at BRL.</li> <li>• Historical data has been validated and entered into the acQuire SQL database, from the original paper logs. These geological and geophysical paper logs are housed in the fire proof library in Westport. Historical data was transferred and validated against the current logging codes to ensure the data was valid. A limited number of twin holes have been drilled, and returned acceptable duplicates of the original holes.</li> <li>• Assay results files are securely stored on a backup server. Once validated, drillhole information is 'locked' in an acQuire database to ensure the data is not inadvertently compromised.</li> <li>• The Competent Person has inspected the sampling processes and inspected the laboratory.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Upper Waimangaroa data is surveyed in Buller 1949 grid coordinate system in New Zealand with mean sea level datum (MSL). However the Geode correction for elevation is not undertaken due to the elevation of the mine-site. All on-site survey data used in the resource estimation does not have the Geode correction as well.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>All drillholes post 1998 are surveyed using real time kinematic GPS technology and are located within +/- 20mm vertically and +/- 10mm horizontal. Older drillhole collars were surveyed using conventional methods.</li> <li>Historical underground workings plans are based off old hand drawn plans that have been geo-rectified (in 2D only) by converting from cadastral links to the Buller 1949 geodetic grid.</li> <li>Topographic surfaces consists of triangulations constructed from a combination of airborne LiDAR (accurate to within +/- 0.2m) collected for the whole of the Upper Waimangaroa area in June 2013.</li> <li>Drillholes with down-hole geophysics are surveyed for deviation with Weatherford verticality tool (+/- 15° azimuth and +/- 0.5° inclination).</li> <li>Surveyed elevations of drillholes collars are validated against the LiDAR topography and ortho-corrected aerial photography. Historic hole collar elevations have been compared to the LiDAR surface and most are within 1m to 2m of the surface. There are however a small number of historic holes with a large discrepancy in the RL of the collar and the LiDAR surface. This discrepancy may be due in part to earthworks.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Exploration drillholes are variably spaced (&lt;100m to 1,500m) depending on target seam depth, geological structure, topographic constraints, down-hole conditions due to underground workings, and the location of other drillholes.</li> <li>No sample compositing is undertaken prior to initial laboratory ply analysis. Should detailed coal analysis be required, compositing is undertaken at the laboratory on a length weighted basis.</li> <li>Exploration drilling within MP41515 has been included in the Deep Creek resource model to provide the require data support,</li> <li>This drill spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate to support the resource classification and is suitable for this style of deposit.</li> <li>Further drilling will be required to upgrade resource classification as part of long term development plans for the greater Stockton Plateau.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Majority of holes are drilled vertically, due to near horizontal coal seams.</li> <li>A small number of exploration holes have been inclined. The purpose of these holes were to define significant geological structures and/or for geotechnical purposes and not for coal seam geometry and quality.</li> <li>No drilling orientation and sampling bias has been recognised at this time and is not considered to have introduced a sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Core and trench samples are placed in uniquely numbered pre-labelled plastic bags. Three to five samples are then placed in a large plastic bag for delivery to the laboratory.</li> <li>Prior to submission to the laboratory, a standardised dispatch form is generated for each drillhole, within the acQuire SQL database software, which delineates the set of analysis to be undertaken and the logged sample numbers.</li> <li>Once samples and dispatch form are completed, the sample bags are validated and subsequently delivered to the secure laboratory sample receiving area by a staff member. Once received at the laboratory, the consignment of samples is receipted against the sample dispatch documents.</li> <li>Any additional analysis is requested as required by the resource geologist.</li> <li>Sample residues are stored at the laboratory pending results and any possible repeat requests.</li> <li>Sample security is not considered a significant risk to the project.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Integrity of all data (drillhole, geological, survey, geophysical and CQ) is reviewed by the resource geologist before being used to model either structure or qualities.</li> <li>Periodic internal reviews are conducted, to verify that both core and chips are logged in a consistent manner. These reviews are done either by a senior geologist or by the resource geologist.</li> <li>The acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> <li>The acQuire database is considered to be of sufficient quality to carry out resource estimation.</li> </ul>



## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>BRL has an Exploration Permit application (EPA 61157) pending approval over the Deep Creek Resource and reasonably expects that this permit application will be granted</li> <li>The land covered by this application was recently covered by EP40628.</li> <li>The acquisition of the EP 40628 permit (and any subsequent permits over the same area) from L&amp;M includes a life of mine royalty based on a fixed percentage of FOB revenue.</li> <li>The majority of the land is Crown land administrated by the Department of Conservation (DoC).</li> <li>LINZ administrates a section of land adjacent to the Northwest boundary of MP 41515.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Earliest exploration in the Deep Creek area was conducted by the Westport Coal Company. Drillholes from this era are recorded with 200 series numbers. There are no 200 series holes within the EPA61157 but 5 holes within this series have been included to assist the structural interpretation.</li> <li>Subsequent exploration was conducted by the State Coal Mines. Seven holes within this series are located within the Deep Creek Resource.</li> <li>L&amp;M drilled seven exploration holes in 2009 and a further eight holes in 2010.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The Deep Creek Resource is located within the Stockton Plateau of the Buller Coalfield.</li> <li>Coal resources on the Stockton Plateau are restricted to the Middle to Late Eocene aged Brunner Coal Measures (BCM). This unconformably overlies the Ordovician aged Greenland Group greywacke's and argillites, which has been extensively intruded by Cretaceous granites and porphyry (Berlins Quartz Porphyry). Due to the stratigraphic nature of coal measures, the coal seams generally lie in a horizontal or sub-horizontal plane. The Brunner coal measures are present as a series of structurally disrupted dip slopes that dip at 5 degrees – 15 degrees to the southwest. The coal measures are bounded by the Papahaua Overfold /Kongahu fault to the northeast, the Mt. William fault to the Southwest and the Cedar Fault to the East.</li> <li>The upper part of the Brunner Coal Measures is dominated by massive-bedded quartz sandstones, mostly coarse to very coarse grained. There are also minor thin siltstone and mudstone beds and rare, thin coal seams.</li> <li>The Mangatini coal seams are the main coal seams of the Deep Creek Deposit. The seams have been given the abbreviation M. There are the three seams M1, M2, and the M3. The M1 and M2 seams are the predominant seams over the deposit. The M2 seam overlies the M1 seam. The M3 is a rider seam to the M2. Seam splitting is common across the deposit and can lead to correlation complications. No distinct marker horizons are present between the seam. Correlations are based on detailed cross sections completed across the deposit using Vulcan Geology Core correlation module. The M2 seam is the dominant seam at Deep Creek which is targeted for mining and can vary in thickness. The M2 seam has a maximum thickness of 9-metres and averages about 4-metres.</li> <li>Resource estimates for the Deep Creek deposit are only estimated for the predominant M2 seam.</li> <li>The basal coal measures are usually about 30-metres thick and mostly comprise coarse grained quartz sandstones overlying pebble conglomerate.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li>No exploration results are reported. Comments relating to drillhole information can be found in Section 1.</li> <li>The exclusion of this information from this report is considered not to be material to the understanding of the report.</li> <li>Individual drillhole results are not tabulated and presented in this report; however, all drillhole data that pertains to the target coal seams has been loaded and modelled in the geological computer model used to estimate coal resources.</li> <li>The exclusion of this information from this report is considered to not be material to the understanding of the deposit.</li> <li>Incorporation of deviation data is not considered necessary, due to the gentle dips found in the area and shallow drilling methods resulting in insignificant deviation recorded in the exploration boreholes.</li> </ul>

Criteria	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>The maximum ash cut-off (air-dried) for building the Deep Creek structure models was set at 25%.</li> <li>Resources have been reported with an ash cut-off of 25% (ad).</li> <li>Seams have been sampled on a ply-by-ply basis with ply boundaries determined by reconciliation against down hole geophysics.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>All exploration drillholes have been drilled vertically and the coal seams are generally gently dipping. Therefore the reported seam intercept thickness is representative of the true seam thickness.</li> <li>Dip meter and deviation plots are available for some holes. For those without this data it is assumed that a vertical orientation is achieved and, as most coal intersections are less than 100m in depth, any deviation from vertical would produce only a very minor effect on the reported depth to coal and coal thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams can be found in the Appendix A for each of the following: <ul style="list-style-type: none"> <li>Location map</li> <li>Deep Creek Coal Mineral Ownership</li> <li>Deep Creek Land Tenure and Access Ownership</li> <li>Geological QMap</li> <li>Map showing drillhole distribution and resource modelling area</li> <li>Map of Resource Classification</li> <li>Map illustrating Resource Classification polygons and historic underground workings</li> <li>Map showing floor contours distribution</li> <li>Maps showing M2 Coal thickness isopachs</li> <li>Maps showing M2 Ash distribution</li> <li>Maps showing M2 Sulphur distribution</li> <li>Map showing M2 Volatile Matter distribution</li> <li>Map showing M2 Inherent Moisture distribution</li> <li>Map showing M2 ROMAX distribution</li> </ul> </li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>No exploration results are reported.</li> <li>The Competent Person does not believe that the exclusion of this comprehensive exploration data within this report detracts from the understanding of this report or the level of information provided.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Geotechnical logs and samples were taken by the geologist during all exploration by BRL. Geotechnical logs identified defect types, angles and character through cored intervals.</li> <li>BRL has tested 87 samples for overburden classification for acid forming and neutralising potential. These tests indicate that the majority of overburden is acid neutralising.</li> <li>Further overburden characterisation testing will be conducted prior to any mining proposal.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Additional exploration and resource development drilling has been proposed to better define geological structures, seam structure, thickness and coal quality of the deposit.</li> </ul>

### Section 3 Estimation and Reporting of Coal Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>All GPS sourced and validated survey data recorded in the field is electronically transferred into the master BRL acQuire SQL database.</li> <li>All drill core logging data is digitally entered directly into the acQuire SQL database, with in-built enforced data validation rules. Drill chip geological logging data is manually entered into the acQuire SQL database, with in-built enforced data validation rules.</li> <li>The acQuire SQL database has been designed to ensure data is entered and stored in a consistent and accurate manner by using dropdown menus of standard logging codes to prompt and constrain inputs. The database highlights out of range coal quality values, duplicate records/intervals, prevents overlapping intervals or depths that extend beyond total drillhole depth. All changes to the database are tracked and archived. Data correction and validation checks are undertaken internally as defined by the Data Validation Standard before the data is used for modeling purposes.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Once all validation is completed all drillhole data is signed off by both the responsible geologist, and the senior geologist. On completion of the data sign-off process the data is locked in acQuire and cannot be adjusted unless requested by the site geologist.</li> <li>Data validation checks are run routinely by the site geologist using acQuire software validation routines. All validation concerns are rectified by the site geologist.</li> <li>The acQuire database was last externally audited in 2008 by Advanced DataCare. Suggested actions were reviewed and actioned where necessary.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Competent Person, Mark Lionnet, has a full time role with Bathurst Resource Limited as the Export Project Manager.</li> <li>The Competent Person has worked for five years at Stockton and has extensive knowledge of the project area managing exploration programs at Deep Creek.</li> <li>Regular visits have been undertaken by the Competent Person.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>BRL has confidence in the geological model and the interpretation of the available data. Confidence varies for different areas and this is reflected by the resource classification.</li> <li>The data used in the geological interpretation included field mapping, drillhole data, core logging data, geophysical logs, sampling, coal quality laboratory testing and structural interpretations. Residual variability exists concerning geological structure along/within the major fault zones, resulting in a lower level of resource confidence. This variability will influence the local estimates rather than the global structural and coal quality estimates for these zones.</li> <li>BRL considers the amount of geological data sufficient to estimate the resource.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The Deep Creek resource area covers approximately 915 ha.</li> <li>Within this area all seams are exposed at outcrop along the northern margin of the MP. With the bulk of the in situ coal between 0 and 150m below the original ground surface.</li> <li>Coal thickness varies considerably over the deposit. The M2 seam averages 4m with a maximum thickness of 9m.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>All available and reliable exploration data has been used to create a geological block model which has been used for resource estimation and classification.</li> <li>All exploration drilling data is stored in acQuire and exported into a Vulcan drillhole database. All mapping data is stored in acQuire and exported in various Vulcan layers. Interpretive data is stored within Vulcan in various layers.</li> <li>A coal horizons definition has been developed and is used in the stratigraphic modeling process.</li> <li>Modelling has been undertaken using Maptek's Vulcan Version 2024.3 software.</li> <li>All valid drilling data, mapping data, together with structural interpretations are used as the source data for creating the coal seam surfaces (grids).</li> <li>Grids for the coal roof, floor (including seam splits), basal conglomerate and basement horizon are developed over the block model area. These coal surfaces are modeled using a stacking algorithm with the basement surface used as the reference surface. The grid spacing is 20m x 20m.</li> <li>The structural grids are created by using a triangulation algorithm. The methodology of creating structural grids is common practice for the estimation of coal deposits.</li> <li>Vulcan's stacking method was used to produce the structure model. This method triangulates a reference surface (basement roof) and then stacks the remaining horizons by adding structure thickness using inverse distance.</li> <li>A standardised block model schema has been used, with a standardised set of variables, with associated default values.</li> <li>The latest validated survey "original" topo surfaces and structural grids are used to create an empty block model, with 25m by 25m blocks with a minimum thickness of 0.5m (for coal seams). The parent block size is approximately one fifth the average drill spacing to ensure the mineralisation is well represented by the blocks.</li> <li>The drilling database is used to create a set of 0.5m thick composites from the assay results, which is then used to estimate the coal qualities for the blocks within the coal seams.</li> <li>Grade estimation is performed utilising Vulcan's Tetra Projection Model. The main M2 and M1 seams are estimated for ash, sulphur, air-dried moisture and in situ moisture, volatile matter,</li> </ul>



Criteria	Commentary
	<p>crucible swell index, and calorific value. All qualities are estimated simultaneously. A total of 18 search passes are used to grade estimate the model.</p> <ul style="list-style-type: none"> <li>• All coal blocks have been estimated using the inverse distance methodology, with a power of 2, for the standard set of coal qualities (ash, sulphur, swell, inherent moisture, volatile matter).</li> <li>• Geostatistics has been performed on the coal quality dataset to examine and define the estimation search parameters for each quality. The maximum search radius is set to the maximum range of influence found in the semi-variogram for each variable.</li> <li>• Grade estimation is computed using an inverse distance squared function. Coal Quality Estimation parameters used during coal quality estimation: <ul style="list-style-type: none"> <li>○ Ranges used are 250 x 250 x 0.5m, 500 x 500 x 0.5m, 1000 x 1000 x 0.5m.</li> <li>○ Samples used are a minimum of 2 and a maximum of 5.</li> <li>○ A maximum of 2 samples from any one drillhole is allowed.</li> <li>○ Block discretisation of 4,4,1 was applied.</li> </ul> </li> <li>• At each stage of the process (initial data points, new surfaces, and final block model) the new data is validated back to the previous model, to ensure consistency.</li> <li>• Standard Block model validation was completed using visual and numerical methods.</li> <li>• No selective mining units were assumed in the estimate.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• All moisture values are reported on an air-dried basis, using air-dried ply results to estimated moisture. Inherent moisture is measured for all drillholes samples.</li> <li>• Tonnages are estimated on an air-dried dry basis.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• A minimum seam thickness cut-off for all modelled seams is 0.50m, as this is what is currently considered as recoverable using open cast methods.</li> <li>• A maximum ash cut-off of 25% (ad) has been applied to all coal seams.</li> <li>• Coal with ash &lt;8% (ad) is considered "bypass" coal and does not require any further processing. Coal with ash &gt;8% (ad) needs to be processed through the company's Coal Handling and Processing Plant (CHPP).</li> <li>• Coal tonnes are only reported from the M2 seams and their respective splits (no M3 and M1 tonnes are reported).</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Selected mining method chosen from long term experience of local conditions at nearby Cypress and Stockton mines.</li> <li>• Minimum recoverable coal thickness is 0.5m, with the expectation to extract 100% of the in situ coal.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Contaminated coal from mining will be processed via the company's Coal Handling and Processing Plant (CHPP). The CHPP removes the dilutant material and a small portion of coal to provide a more saleable product. The plants performance has been routinely monitored since its inception.</li> <li>• Although not included in the resource estimate, studies have been conducted on the properties of the coal pertaining to combustion potential, ash fusion temperatures and Hardgrove Grindability Index.</li> <li>• Small parcels of coal have been sent to customers for evaluation and testwork.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Currently no Resource Consents exist for the Deep Creek Resource.</li> <li>• Any open pit mining and coal transport will be conducted amid environmentally and culturally sensitive areas. The project area is a likely habitat for endangered snail and kiwi species. High rainfall rates, potentially acid-generating overburden and historical acid mine drainage are all items that will have to be considered in future prefeasibility studies.</li> <li>• Environmental values of the project area ranges are considered high. Areas of high environmental values incorporate the DoC managed Ecological Areas (Section 21 Conservation act 1987).</li> <li>• An Acid Mine Drainage (AMD) model has been developed for the Deep Creek area. The model has identified a correlation with geological lithological units and internationally accepted AMD classification schemes.</li> <li>• Current overburden characterisation testing has shown that selective mining of non-acid and potentially acidic forming horizons can be affectively managed. Any residual acid metal drainage</li> </ul>

Criteria	Commentary
	<p>will require engineering of water and contaminant treatment.</p> <ul style="list-style-type: none"> <li>• PFS studies are progressing to ensure an acceptable mine closure plan can be implemented to restore natural habitats.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• The relative density value is calculated using the available ash–density data (248 samples) to define an ash–density curve.</li> <li>• Non-coal units are assigned default density value based upon the lithology type.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• Resource estimates for the Deep Creek deposit are only estimated for the predominant M2 seam.</li> <li>• Coal resources have been classified on the basis of geological and grade continuity balanced by relative uncertainties surrounding historic underground extraction and proximity to faults.</li> <li>• The resource has been classified into the Inferred/Indicated/Measured status by analysing four factors upon which the geological confidence is based: <ul style="list-style-type: none"> <li>○ Number of informing drillholes used.</li> <li>○ Proximity to major faults.</li> <li>○ Proximity to outcrop position.</li> <li>○ Historical worked areas (if an area is within an historically worked area the resource is considered as Inferred as a minimum).</li> </ul> </li> <li>• The Competent Person has taken into account all relevant factors in undertaking this estimation and considers the estimate to be a true reflection of the current understanding of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• Internal reviews of the resource modelling process have been undertaken; all issues raised have been addressed.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• Based on the data available, the degree of accuracy of this statement is considered relevant for the Deep Creek deposit. The process for calculation has used: Standards, Guidelines and the JORC Code along with industry best practice where available to define the Resource estimates provided to confirm search estimation ranges and drillhole spacing for each resource classification.</li> </ul>

Appendix A:

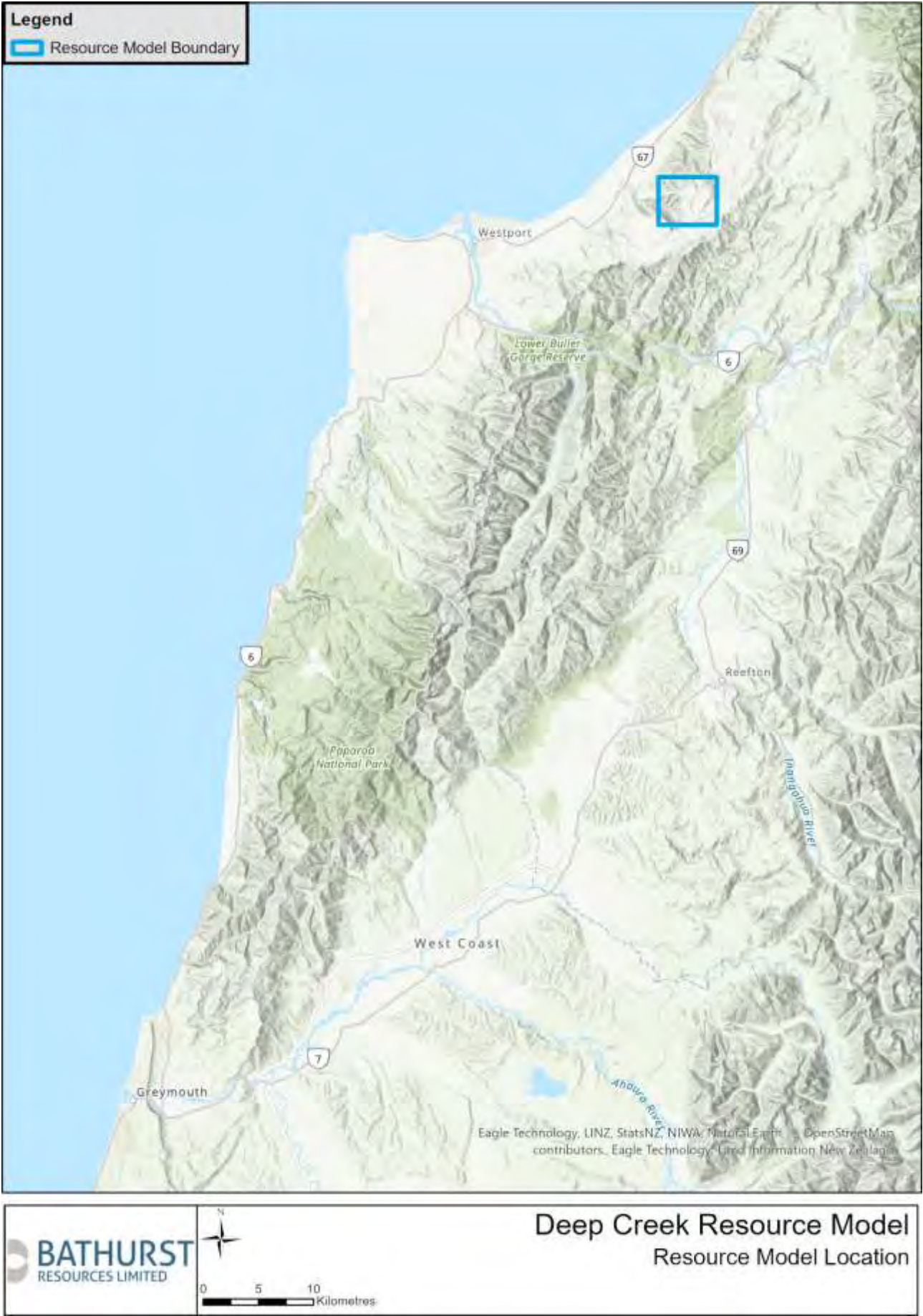


Figure 1: Location Plan



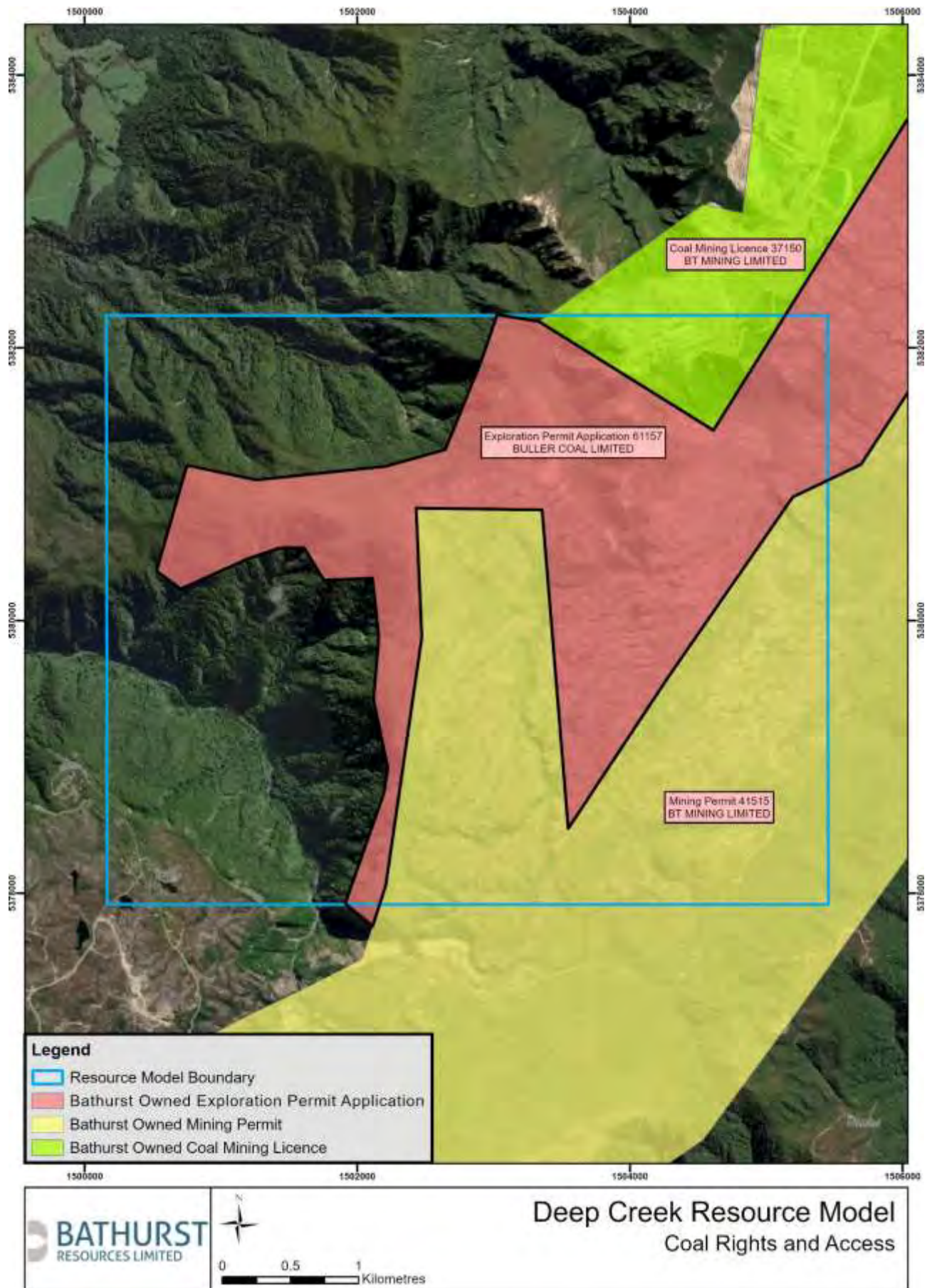


Figure 2: Deep Creek Coal Coal Mineral Ownership



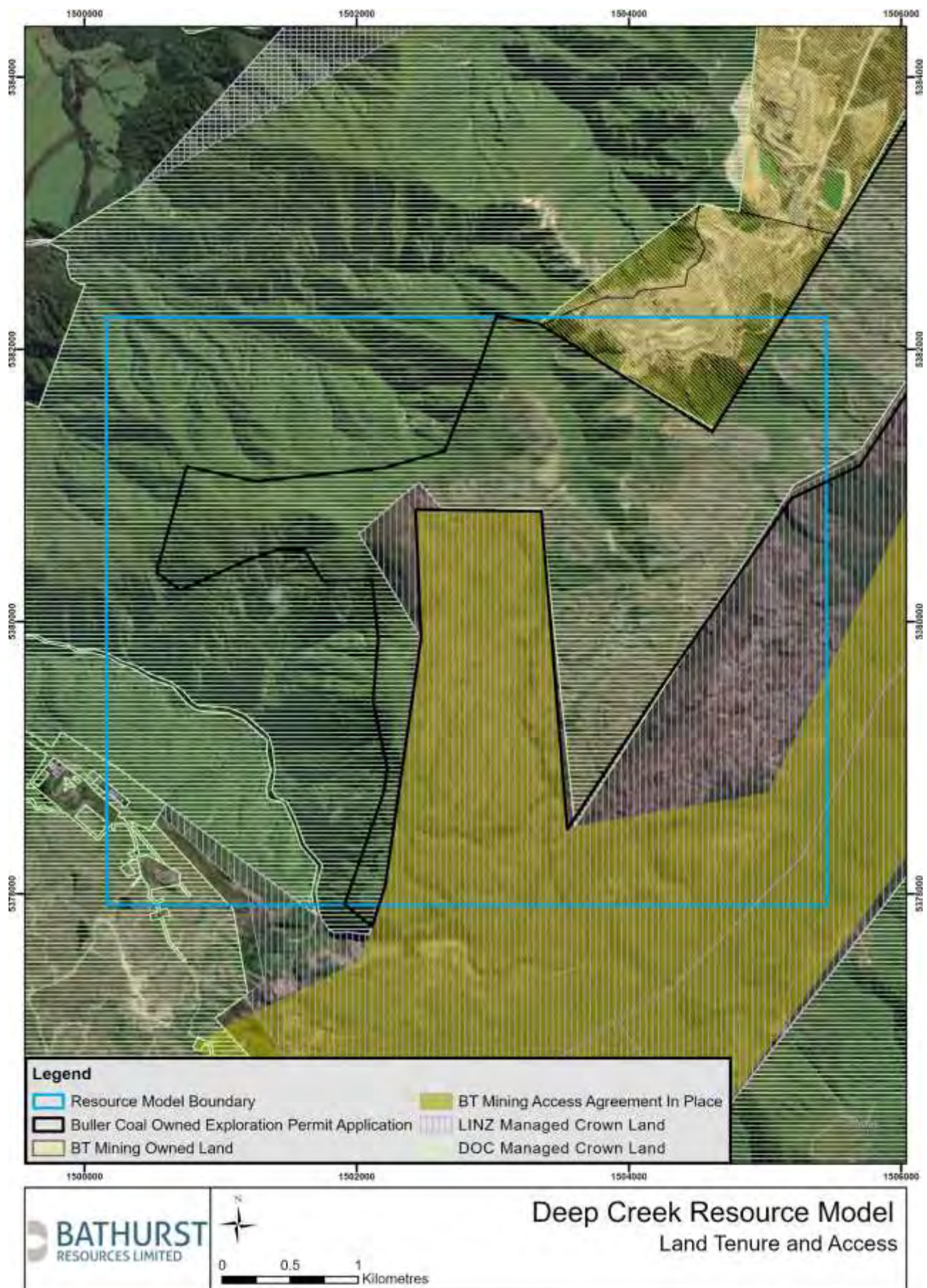


Figure 3: Deep Creek Coal Land Tenure and Access Ownership



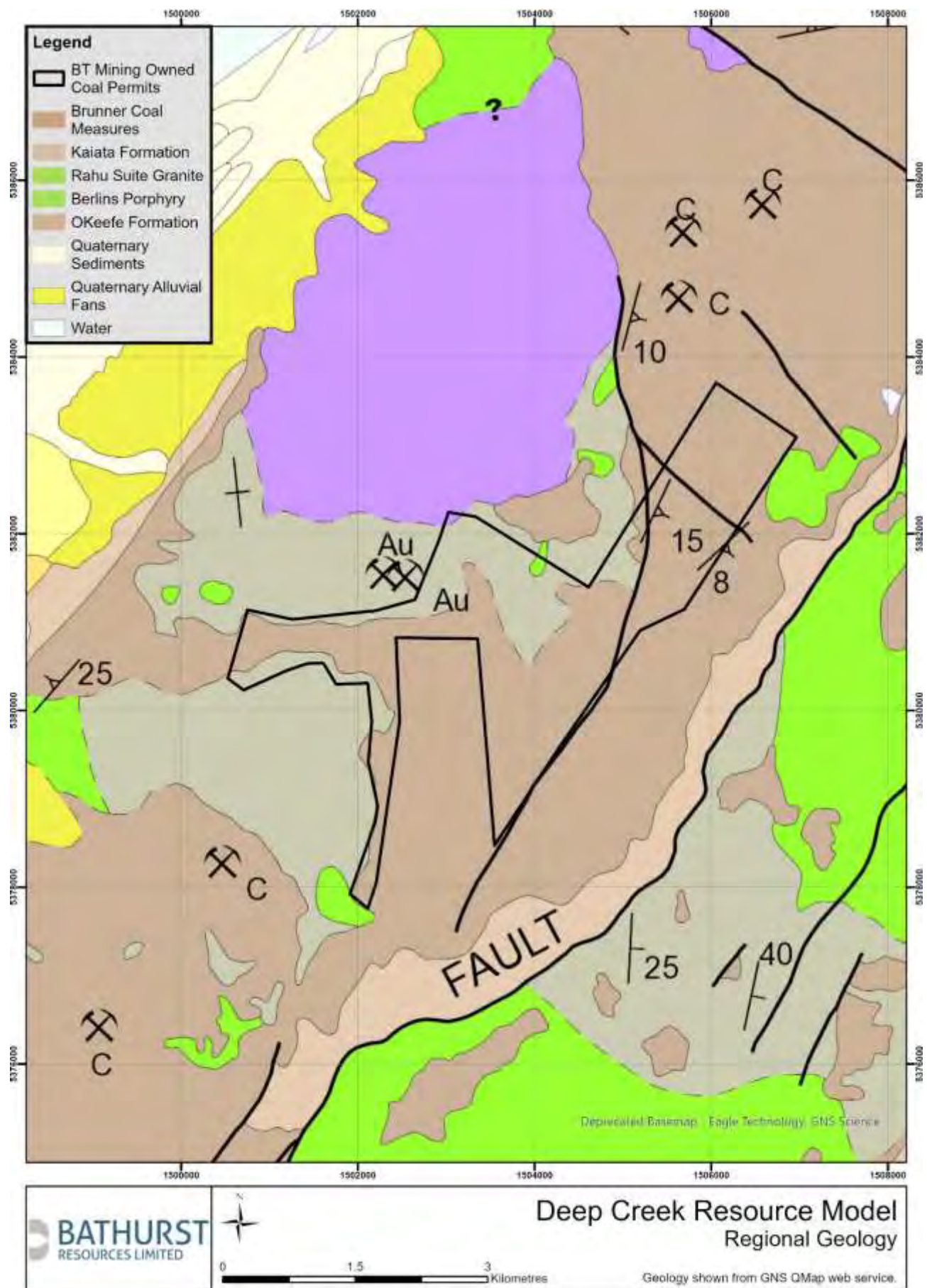


Figure 4: Regional Geology



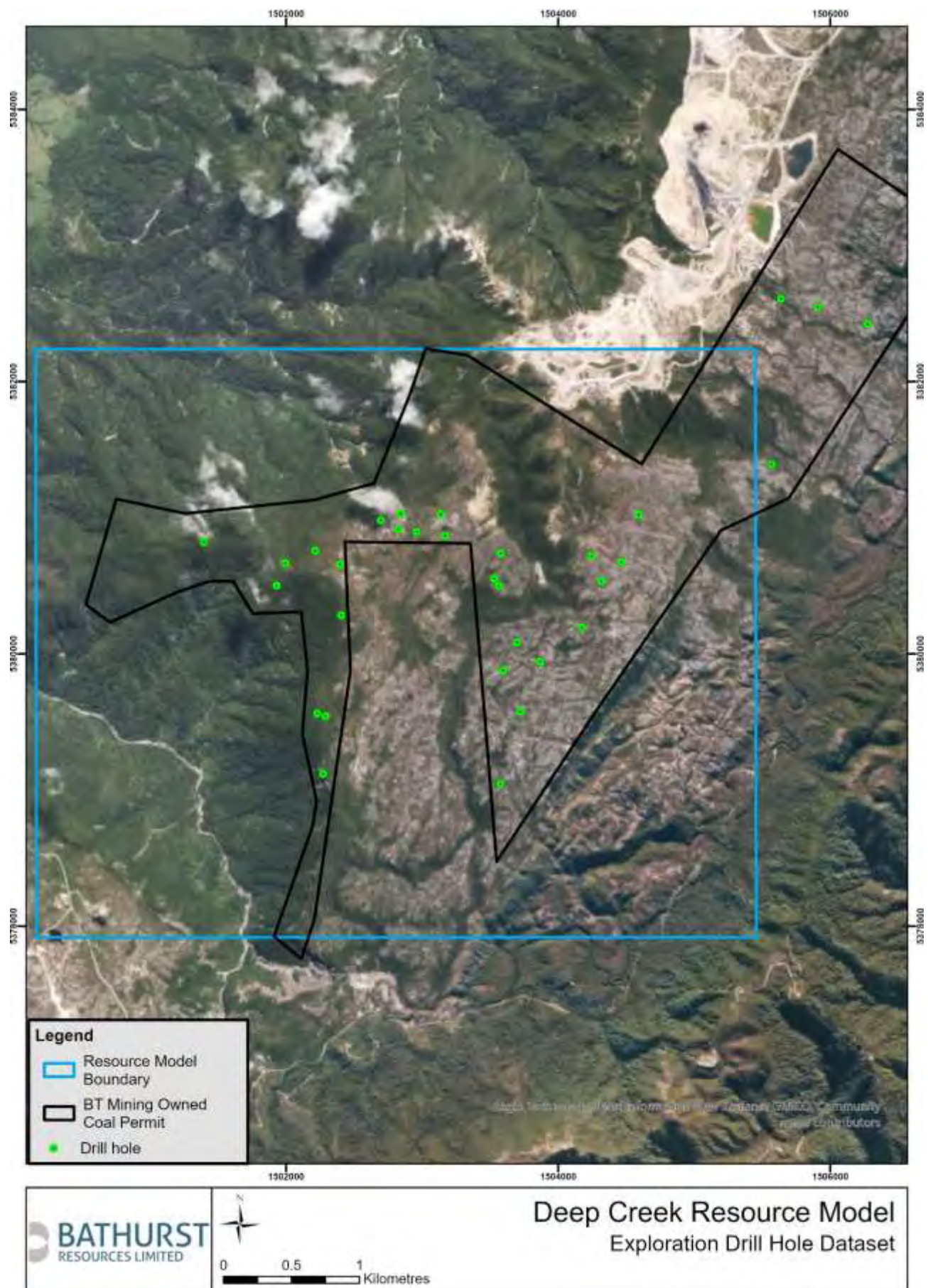


Figure 5: Plan showing the drilling dataset and resource model boundary used to produce the resource model

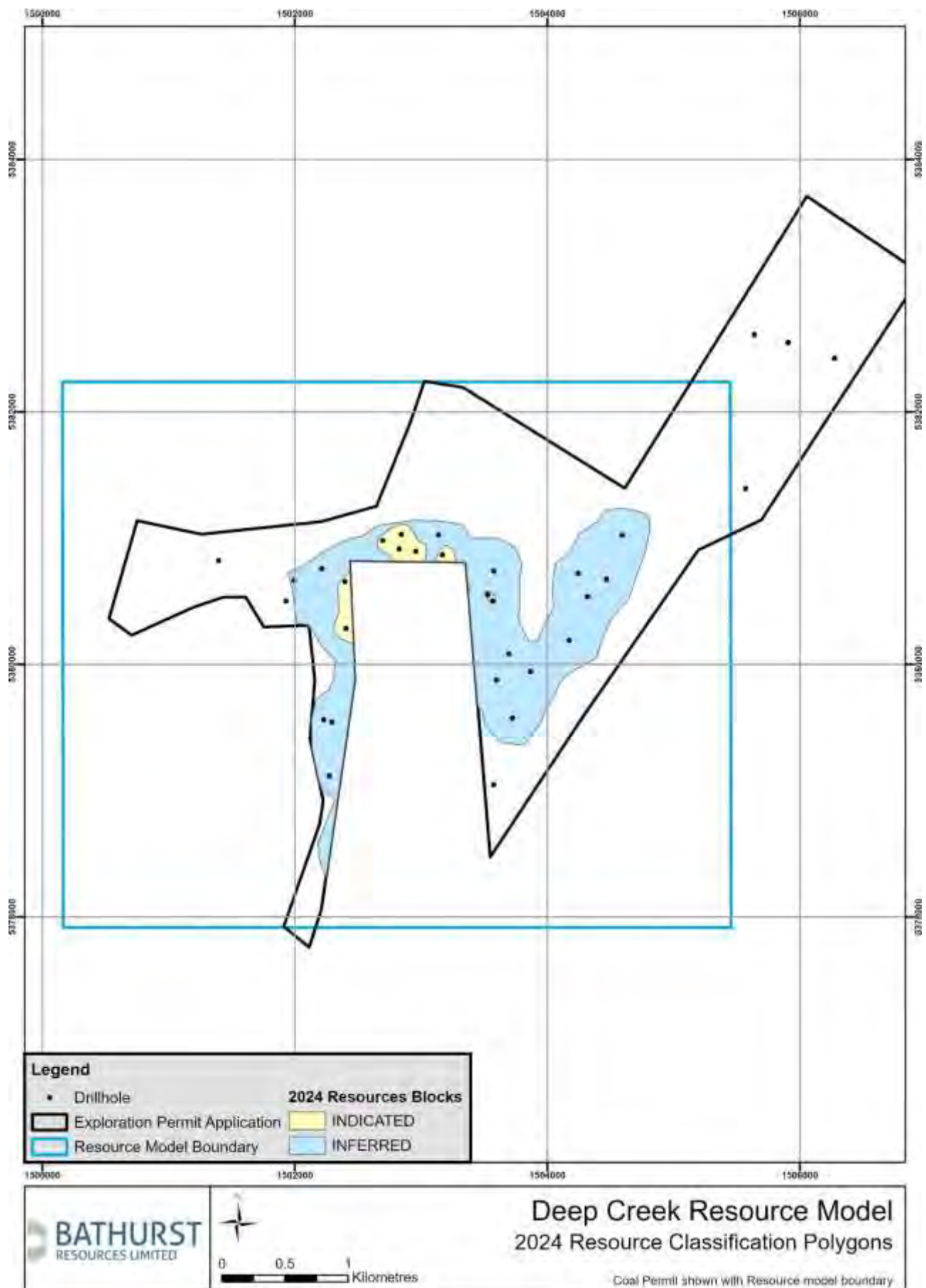


Figure 6: Plan showing the 2024 Deep Creek resource classification polygons



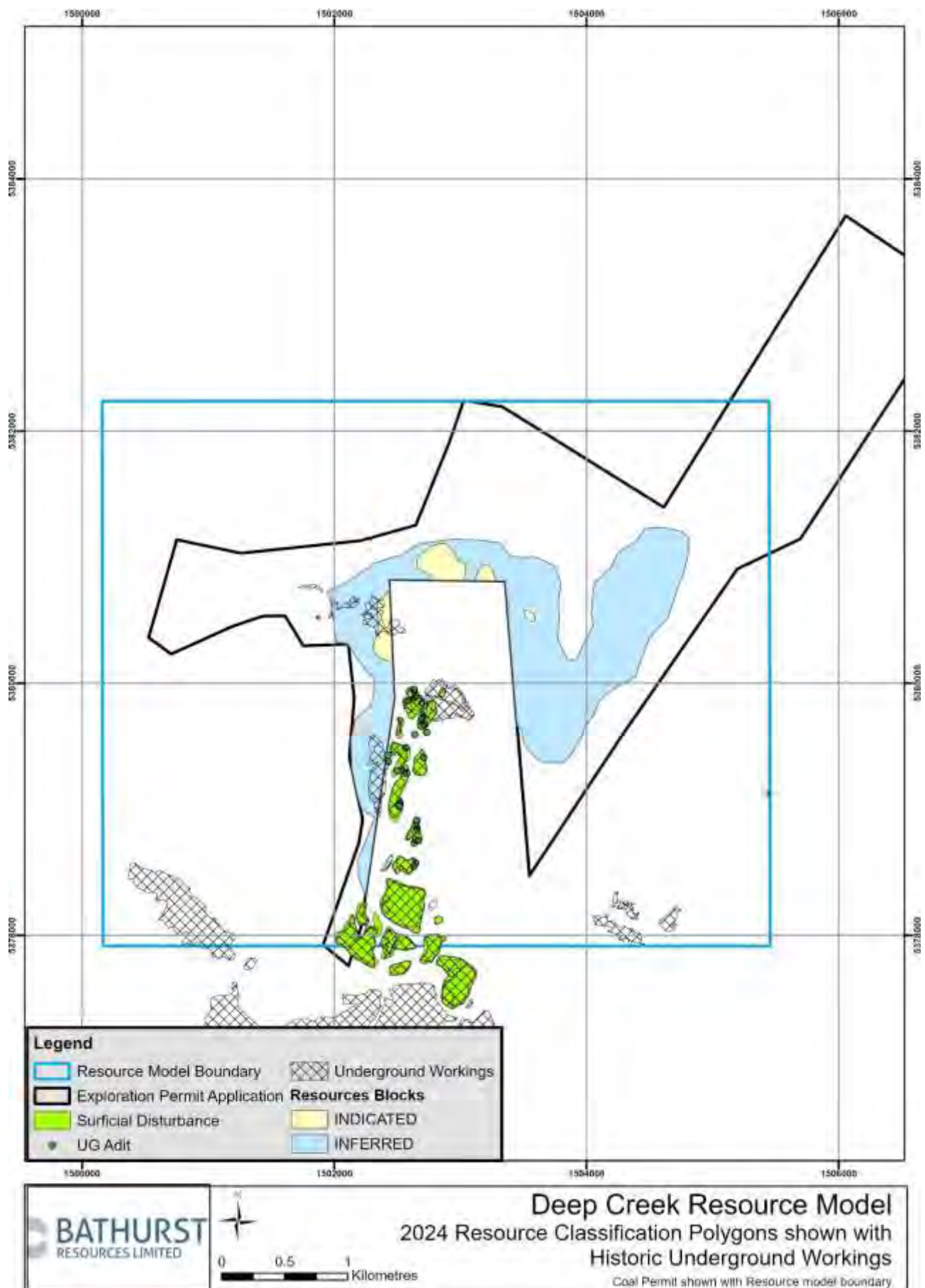


Figure 7: Map illustrating Resource Classification polygons and historic underground workings



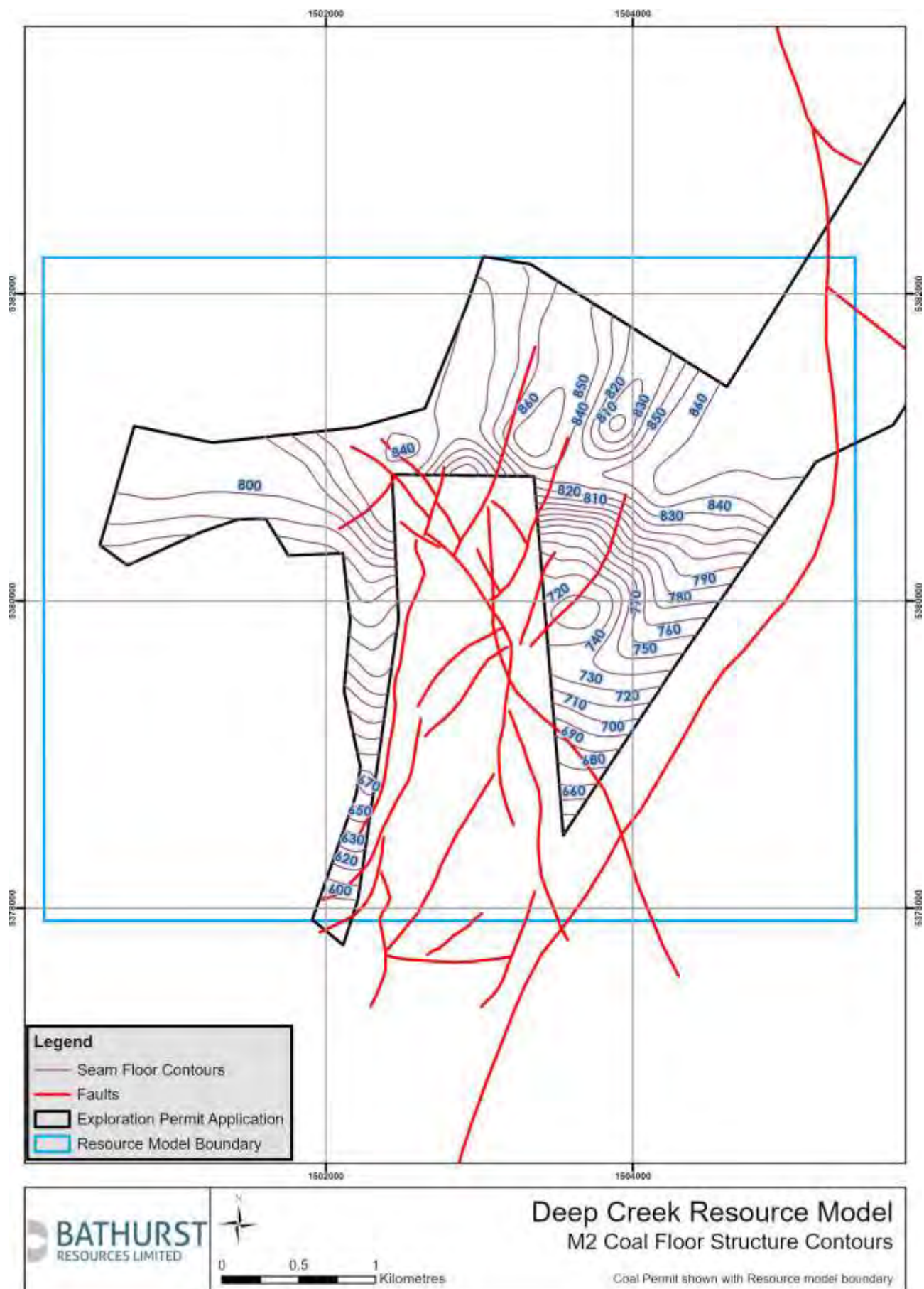


Figure 8: Plan showing the structure contours of the M2 coal seam floor



Figure 9: Plan showing full seam thickness (M2 Coal Seam) contours for the Deep Creek area



Figure 10: Plan showing in-situ full M2 seam ash on an air-dried basis across the Deep Creek resource area



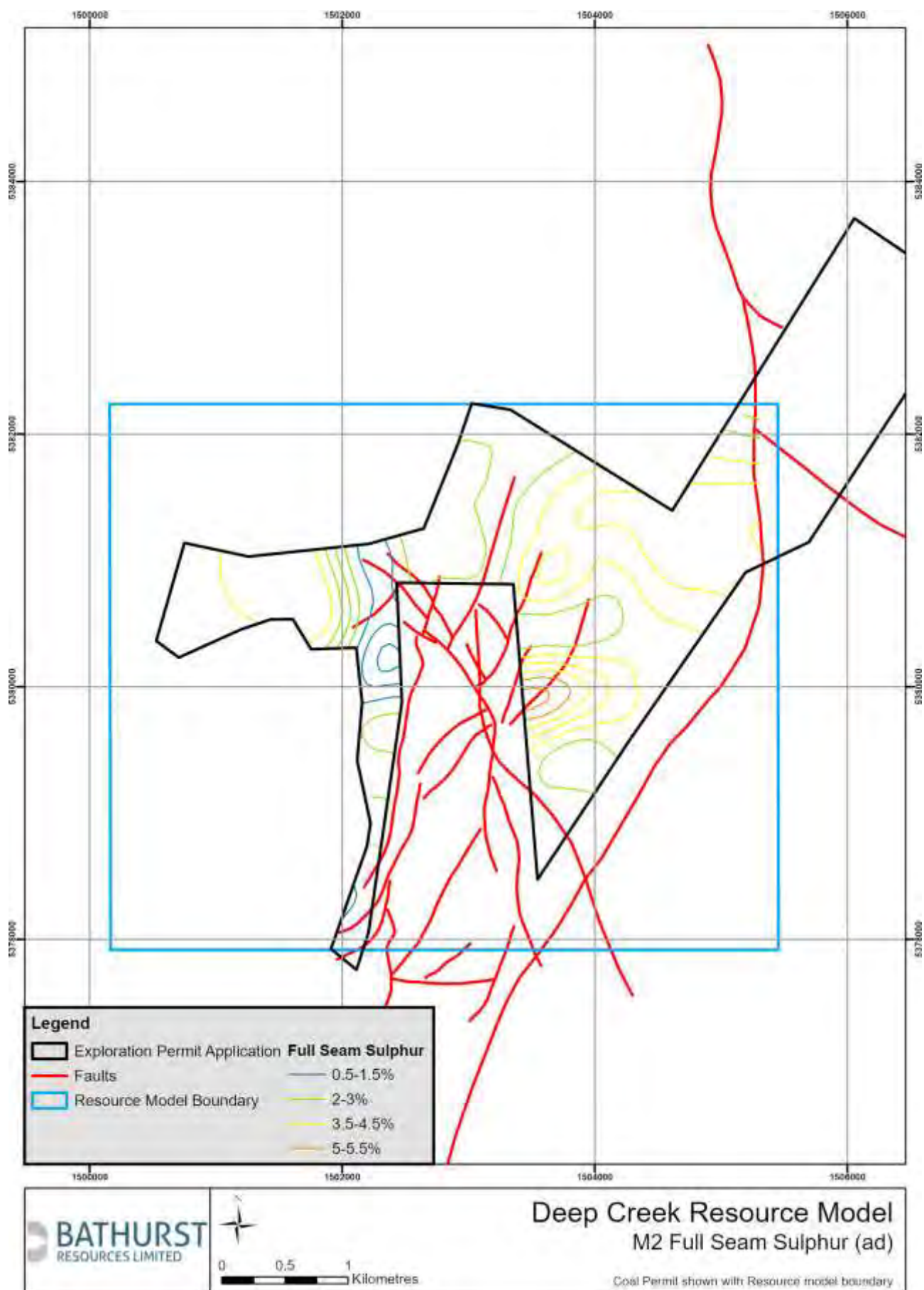


Figure 11: Plan showing full M2 seam sulphur on an air-dried basis across the Deep Creek resource

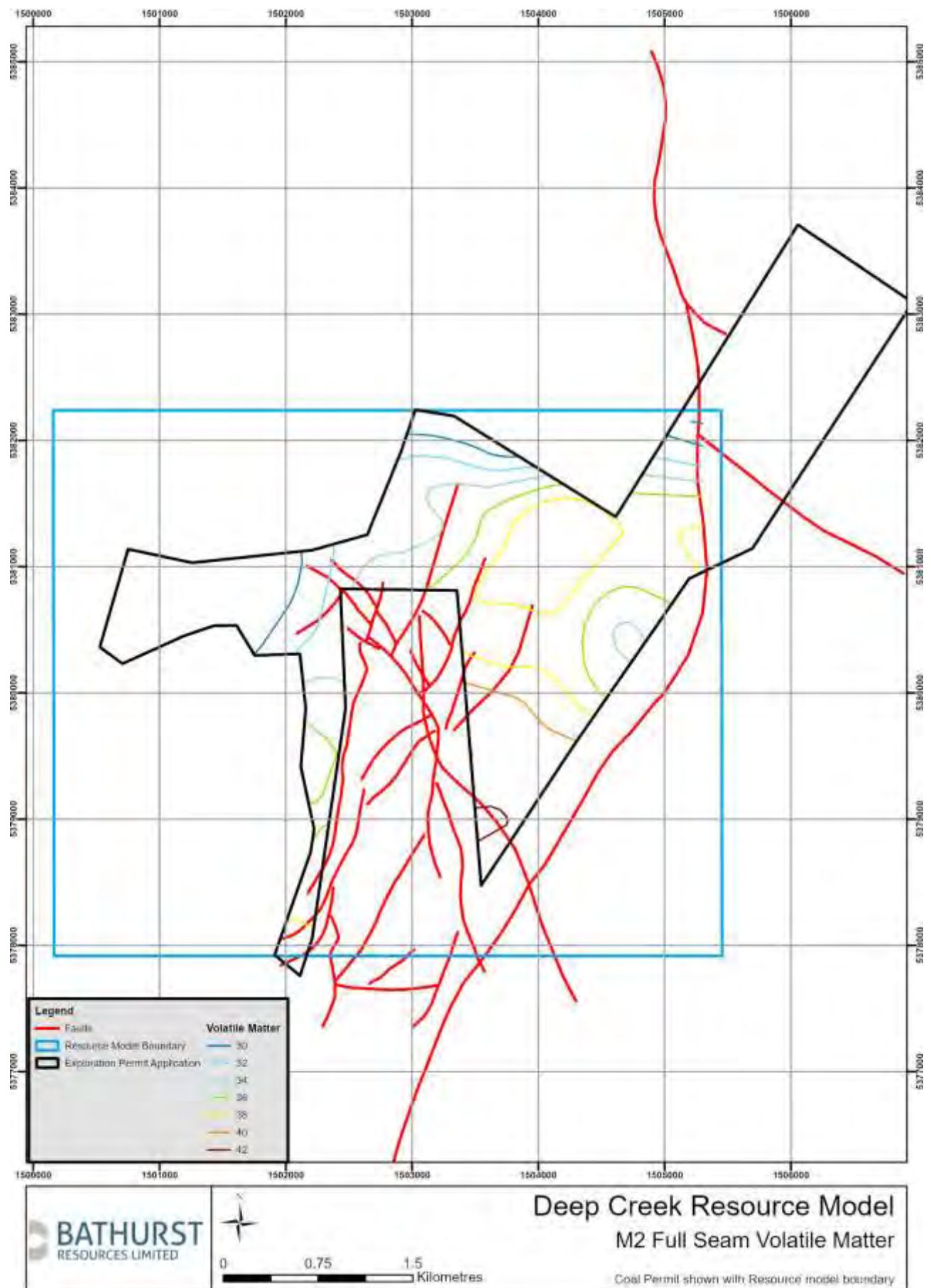


Figure 12: Plan showing full M2 seam Volatile Matter on an air-dried basis across the Deep Creek resource

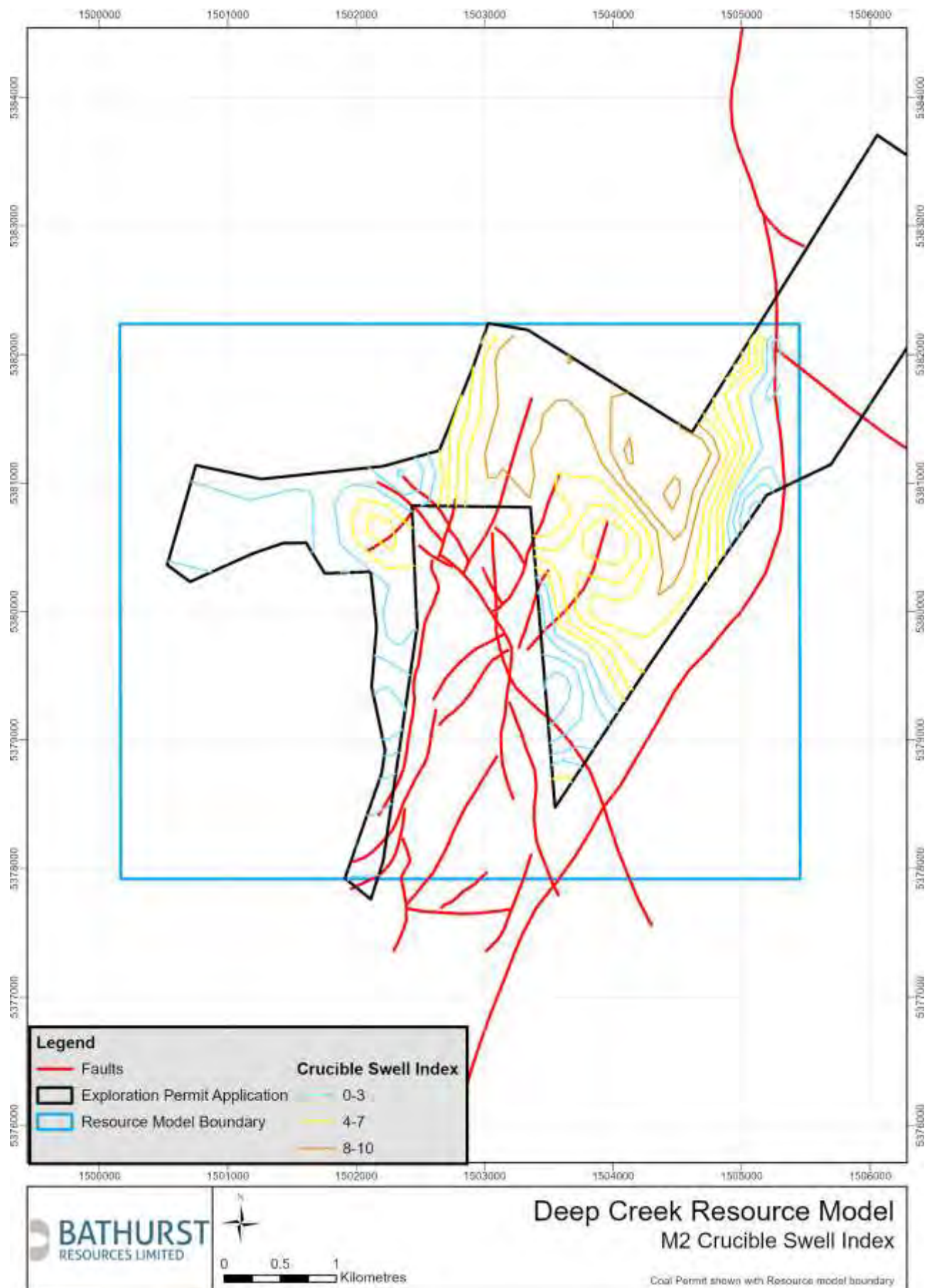


Figure 13: Plan showing full M2 seam Crucible Swell Index an air-dried basis across the Deep Creek resource



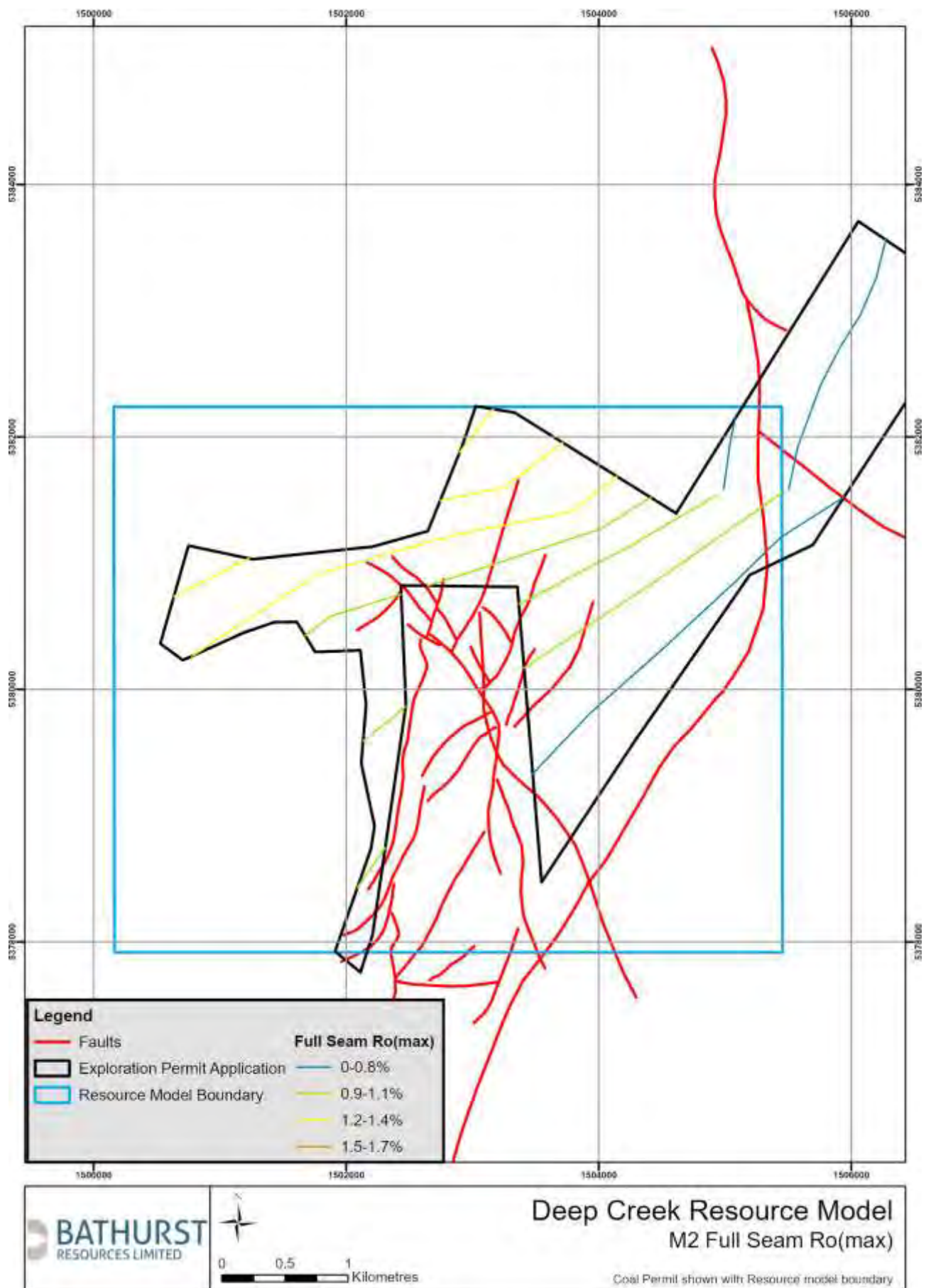


Figure 14: Plan showing the Romax for the M2 Coal Seam

# JORC Code, 2012 Edition – Table 1 Report for the New Brighton Project 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Multiple campaigns of data acquisition have been conducted in the Ohai Coalfield over the past century.</li> <li>Drillholes included within the New Brighton exploration dataset include drillholes drilled outside of Mining Permit (MP) 60400.</li> <li>A combination of open hole (wash drilled), Reverse Circulation (RC), and cored drilling techniques has been used. Some logged and sampled trenching (channel sampling) has also been used.</li> <li>Bathurst Resources Ltd (BRL) managed exploration campaigns include data from 2013, 2015, 2019 and 2021. Drilling consists of: <ul style="list-style-type: none"> <li>9 Wash Drilled (WD) drillholes.</li> <li>26 HQ/PQ (63.5/85 mm) triple tube core (TTC) diamond drillholes.</li> <li>17 Trenches.</li> </ul> </li> <li>Previous drilling dataset includes: <ul style="list-style-type: none"> <li>JY Series (2011) – 8 holes</li> <li>MR Series (2011) – 5 holes</li> <li>NBC Series (2011) – 11 holes</li> <li>TWB drillhole (2009) – 1 hole</li> <li>NBR Series (2007, 2008) – 5 holes</li> <li>ECMBDH Series (2007) – 4 holes</li> <li>OM Series (2005, 2007, 2009, 2011) – 7 holes</li> <li>LMC Series (2005, 2007, 2008) – 19 holes</li> <li>LMR Series (2005) – 15 holes</li> <li>PIT Series (2005) – 19 trenches</li> <li>TP Series (1995) – 2 holes</li> <li>300 Series (1984, 1986) – 9 holes</li> <li>800 Series (1986) – 5 holes</li> <li>Historical data of various vintages – 45 holes</li> </ul> </li> <li>Recent BRL managed drilling has aimed to infill areas to improve confidence and to test the reliability of the legacy dataset. Two drillholes were drilled as twins to LMC Series drillholes to obtain coal for marketing purposes.</li> <li>Downhole geophysical logs are available for 11 of the BRL managed drillholes.</li> <li>Where available, downhole geophysical logs were used to correlate coal seams, confirm depths and thickness of coal seams, and to validate drillers' logs. Downhole geophysical logs were also used to accurately calculate recovery rates of coal intersections.</li> <li>Coal samples were generally taken over intervals no greater than 0.5m in length and included the full core sample.</li> <li>Outcrop trench and channel data is entered into the drilling database in a form that replicates a drillhole at that location. Coal seam thickness and partings between coal seams were measured vertically.</li> <li>All analytical data has been assessed and verified prior to inclusion in the resource model. Unreliable data was omitted.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>All BRL managed drilling campaigns have utilised the following drilling methods: <ul style="list-style-type: none"> <li>Full PQ TTC.</li> <li>Full HQ TTC.</li> <li>Combination WD/TTC.</li> </ul> </li> <li>Legacy drilling techniques include: <ul style="list-style-type: none"> <li>HQ TTC.</li> <li>RC 133 mm.</li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ WD using tricone/blade/strata bits.</li> <li>○ Rotary wash, fishtail bit.</li> <li>• Excavated trenches with logged intersections comprise a small proportion of the primary sample dataset.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• Core recovery was measured as the length of core recovered divided by the length of the driller's run (typically 1.5m in length) and noted by the core logging geologist.</li> <li>• If recovery of coal intersections dropped below 90% the drillhole required a re-drill. For the 2013 drilling program drillers were paid an incentive if coal recovery was above 90%.</li> <li>• Mean total core recovery over BRL managed drilling campaigns was 93.21% with core recovery of coal at 90.0% (this increases to 94.1% when drillhole NC085 is excluded, which may have intersected the edge of underground mine workings).</li> <li>• Where downhole geophysical logging indicated that coal was lost, raw ash values were estimated using the results of overlying and underlying coal ply samples and the relative response of the downhole density trace.</li> <li>• Little core recovery data is available for historical drillholes and those of previous operators.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• BRL has developed standardised core logging procedures (BRL Coal Logging Procedures), and all core logging completed by BRL has followed these procedures. <ul style="list-style-type: none"> <li>○ All recent drill core has been geologically and geotechnically logged by logging geologists under the supervision and guidance of a team of experienced exploration and geotechnical geologists.</li> <li>○ Drill core was photographed prior to sampling. Depth meter marks and coal ply intervals are noted on the drill core in each photograph.</li> <li>○ Down-hole wireline geophysical logs were used to aid core logging to ensure true downhole depths were recorded where applicable.</li> </ul> </li> <li>• The standard of logging varies for legacy drilling campaigns.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• For all exploration data acquired by BRL, an in-house detailed sampling procedure was used (BRL Coal Sampling Procedures). Sampling and sample preparation are consistent with internationally accepted coal sampling and sample preparation methodologies. <ul style="list-style-type: none"> <li>○ Ply samples include all coal recovered for the interval of the sample. Core was not cut or halved.</li> <li>○ The TTC core was lithologically logged and the lithology intervals were used to determine actual coal ply sample depth at the drill site or in the core shed.</li> <li>○ All TTC core samples were collected as soon as practicable after drilling and double bagged then sent to the SGS New Zealand Limited (SGS) Minerals Laboratory in Ngakawau where they were crushed and split.</li> </ul> </li> <li>• Some legacy campaigns did cut/halve coal ply samples.</li> <li>• The legacy drilling campaigns vary in the standard of sampling processes, some of which are unknown.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• SGS has been the predominant IANZ accredited laboratory used by BRL for coal quality testing on exploration drillholes used in the resource model.</li> <li>• SGS has used the following standards for their assay test work: <ul style="list-style-type: none"> <li>○ Proximate Analysis is carried out to the ASTM 7582 standard.</li> <li>○ Ash has also used the standard ISO 1171.</li> <li>○ Volatile matter has also used the standard ISO 562.</li> <li>○ Inherent moisture has also used the ISO 5068.</li> <li>○ Total sulphur analysis is carried out to the ASTM 4239 standard.</li> <li>○ Calorific value results are obtained using the ISO 1928 standard.</li> <li>○ Loss on drying data is completed using the ISO 13909-4 standard.</li> <li>○ Relative Density is calculated using the standard AS 1038.21.1.1.</li> </ul> </li> <li>• CRL Energy Ltd (CRL) are an IANZ accredited laboratory which completed much of the assay test work for samples collected prior to BRL's acquisition of the projects.</li> <li>• CRL used the following standards for their assay test work: <ul style="list-style-type: none"> <li>○ Inherent Moisture tests utilised the ISO 117221 standard.</li> <li>○ Ash tests utilised the ISO 1171 standard.</li> </ul> </li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Volatile matter tests utilised the ISO 562 standard.</li> <li>○ Calorific value tests utilised the ISO 1928 standard.</li> <li>• All analysis was carried out and reported on an air-dried basis unless stated otherwise.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• Sample coal quality results have been cross-referenced and compared against lithology logs and downhole geophysical data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Nightcaps/Ohai Coalfield.</li> <li>• Anomalous assay results are investigated, and where necessary the laboratory is contacted and a re-test was undertaken from sample residue.</li> <li>• Laboratory data is imported directly into an acQuire database with no manual data entry at either the laboratory or at BRL.</li> <li>• Geophysical data has been used to establish coal seam thickness and depths on the margins of coal seams in RC drillholes, where sampling uncertainty inherent in RC drilling made coal sample and intersection depths less reliable.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• New Zealand Transverse Mercator 2000 Projection (NZTM) is used by BRL for the New Brighton project area. NZTM is considered a standard co-ordinate system for general mapping within New Zealand. Historical data has been converted from various local circuits and map grids using NZ standard cadastral conversions.</li> <li>• LiDAR and digital imagery was acquired in April 2013 using an Optech M200 LiDAR system and CS8900 medium format digital camera.</li> <li>• The data was collected flying 1,300m above the lowest ground and using a scanner field of view of 44°. Outgoing pulse rate was set at 70kHz and minor scan frequency 33.5Hz.</li> <li>• The topographic surface used to build the model is derived from a combination of LiDAR data, and LINZ topographical data where LiDAR coverage in outer areas is unavailable.</li> <li>• Historical data has been converted from various local circuits and map grids to NZTM.</li> <li>• Surveyed elevations of drillhole collars are validated against the LiDAR topography.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• The project has an average primary sample spacing of 230m however, New Brighton Central has an average primary sample spacing of 108m.</li> <li>• Drillhole spacing is not the only measurement used by BRL to establish the degree of resource uncertainty and therefore resource classification. BRL uses a multivariate approach to resource classification which is explained further in Section 3: Classification.</li> <li>• The current drillhole spacing is sufficient for coal seam correlation purposes in the majority of the project areas. Difficulties lie in seam correlation due to the abundant seams and often complex structural mechanisms such as faults and unconformities.</li> <li>• Many drillholes have not been to sufficient depth to intersect all coal seams in the stratigraphic sequence or have not completed diagnostic tests confirming Ohai Group or Nightcaps Group coal measures.</li> <li>• Only 75% of drillholes have had downhole geophysical logging completed, which is important for coal seam correlations.</li> <li>• The samples database is composited to 0.4m sample length prior to grade estimation. This is the mean sample length from BRL managed drilling.</li> <li>• Compositing starts at the top of the coal seam and small samples (&lt;0.1m) are not distributed or merged.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• All modern exploration drilling has been completed on a vertical orientation.</li> <li>• All historical drillholes are vertical except one. Those without deviation plots are assumed to be vertical. OM07b was drilled as a coal seam gas drillhole and was deviated towards horizontal to drill through a thick coal seam to intersect OM05. OM07b is not used in the resource modelling process.</li> <li>• Any deviation from vertical is not expected to have a material effect on shallow, open pit resources. Average drillhole total depth in the dataset is 96m; however, 18 drillholes have a total depth &gt;200m.</li> <li>• Most of the deposit presents a moderate seam dip between 10 and 20°, although some localised steep dips do exist near fault traces.</li> <li>• Vertical drilling is the most suitable drilling method of assessing the coal resource at the New Brighton Project.</li> </ul>

Criteria	Commentary
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Rigorous sample preparation and handling procedures have been followed by BRL. Coal samples are taken and recorded from drill core, sealed in plastic bags, and securely stored prior to being dispatched to the laboratory for analysis.</li> <li>It is not considered likely that individual coal samples face a risk of theft or sabotage as coal is a bulk commodity with little value for small volumes of coal from drill core.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Golder and BRL have reviewed the geological data available and consider the data used to produce the resource model reliable and suitable for the purposes of generating a Coal Resource estimate to the extent that the Coal Resource estimate has been classified.</li> <li>BRL senior geologists have undertaken audits of the sample collection and analysis processes.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary																								
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"><li>The New Brighton Project resource model includes a Mining Permit owned by New Brighton Collieries Limited, an exploration permit owned by BRL and privately held land coal rights attached to land titles in and around the Ohai Township. An area of open ground exists to the south, west, and north of MP 60400 and is included in the resource model area. Coal Resources have only been reported within MP 60400.</li><li>Exploration Permit (EP) 60642 covers an area of 690.51 hectares and contains a portion of the resource model area.</li><li>MP 60400 covers an area of 250 hectares and all reported resources lie within this permit.</li><li>An exploration permit application (EPA 61031) was lodged in July 2023 and surrounds MP60400 to the north and south.</li></ul> <table><tr><th colspan="3">Permit/Rights</th><th>Operation</th><th>Mining Type</th><th>Expiry</th></tr><tr><td>Exploration Permit 61031</td><td>Application</td><td></td><td>Mossbank</td><td>N/A</td><td>N/A</td></tr><tr><td colspan="3">Exploration Permit 60642</td><td>Ohai Exploration</td><td>Opencast,</td><td>15/04/2028</td></tr><tr><td colspan="3">Mining Permit 60400</td><td>New Brighton</td><td>Opencast,</td><td>20/06/2035</td></tr></table> <p>It is considered that there are reasonable prospects to negotiate access arrangements for mining with landowners covering the reported resource areas.</p>	Permit/Rights			Operation	Mining Type	Expiry	Exploration Permit 61031	Application		Mossbank	N/A	N/A	Exploration Permit 60642			Ohai Exploration	Opencast,	15/04/2028	Mining Permit 60400			New Brighton	Opencast,	20/06/2035
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Exploration Permit 61031	Application		Mossbank	N/A	N/A																				
Exploration Permit 60642			Ohai Exploration	Opencast,	15/04/2028																				
Mining Permit 60400			New Brighton	Opencast,	20/06/2035																				
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"><li>Exploration drilling for the New Brighton Project was carried out by the L&amp;M Group of companies between 2005 and 2011.</li><li>Historical data has been traced back to original reports and logs held at Archives NZ storage centres. Historical data has been thoroughly investigated for reliability and quality and where the integrity of the data is limited it has been omitted from the resource model. Historical data includes historical underground mine workings plans, geological reports and drilling logs.</li></ul>																								
<b>Geology</b>	<ul style="list-style-type: none"><li>The project is located in the Ohai Coalfield, New Zealand.</li><li>The Ohai Coalfield is a fault bounded basin containing Cretaceous sub-bituminous coal.</li><li>The defined Coal Resource is contained within the New Brighton, Morley and Beaumont Formations.</li><li>The Cretaceous Ohai Group contains three formations – the Wairio, New Brighton and Morley Formations.</li><li>The Eocene Nightcaps Group contains two formations – the Beaumont and Orauea Formations.</li><li>The two groups are separated by an unconformity clearly distinguishable by micro-flora.</li><li>The majority of historical production has come from coal seams in the Morley Formation, which tend to contain higher quality coal. Coal seams are faulted and folded into complex structures. Coal seam thickness and extent varies as coal seams are often lenticular and split or washed out by fluvial sand channels and syndepositional faulting and folding are indicated.</li><li>Morley Coal Measures of the Ohai Group have a combined vertical coal seam thickness which averages 4.1m; however, 50m thick coal seams have been recorded in drillhole OM05, located 250m west of the permit.</li><li>Coal ranks range from sub-bituminous A to high volatile bituminous C.</li></ul>																								

Criteria	Commentary																																																																																																																																																																																															
	<ul style="list-style-type: none"><li>Eocene Beaumont Coal Measures of the Nightcaps Group have a combined vertical coal seam thickness which averages 1.4m; however, 7m thick coal seams have been recorded within the Coaldale Pit. The Coal rank varies from sub bituminous C to sub bituminous B.</li><li>The Nightcaps Group Beaumont Formation Coal Measures are conformably overlain by Eocene Orauea Formation mudstone.</li></ul>																																																																																																																																																																																															
Drillhole Information	Table 1 Showing summary of drilling data available within the resource model area																																																																																																																																																																																															
	Years	Agency	Range of Collar ID	Number of Holes	Drilling Method	# Holes in Structure Model	# Holes in Coal Quality Model	Geophysics Available	1923 - 1955	Various	Various	45	unknown	24	2	0	1984	State Coal Mines	351 - 355	3	TTC	3	1	3	1986	Lime & Marble Ltd	371 - 379	6	TTC	6	5	6	1986	Mines Department	882 - 886	5	TTC, OH	5	5	5	1995	Southgas Resources Ltd	TP05-06	2	OH	2	0	2	2005	Kenham Holdings Ltd (L&M)	PIT01 - PIT18, PIT_4m	19	Trench	8	3	0	2005	L&M	LMR05 - LMR19	15	RC	14	8	9	2005	L&M	LMC01 - LMC03	3	HQ TTC	3	3	0	2005	L&M	OM1	1	TTC, OH	1	1	0	2007	Eastern Corporation	ECMBDH01 - ECMBDH05	4	Trench	4	0	4	2007	L&M	LMC04 - LMC11	8	TTC, OH, RC	8	7	8	2007 - 2011	L&M	OM2 - OM7, OM7a, OM7b	6	OH	3	0	3	2007 - 2008	L&M	NBR01 - NBR06	5	TTC	5	1	0	2008	L&M	LMC13 - LMC21	8	TTC	8	4	6	2009	L&M (Nightcaps Contracting)	TWB-01	1	OH	1	0	1	2011	L&M	NBC11-1 to NBC11-23	11	HQ TTC	9	4	6	2011	L&M	MR1 - MR5	5	TTC	5	1	5	2011	L&M	JY2 - JY9	8	TTC	8	6	6	2013	Bathurst Resources Ltd	NC079 - NC085	7	TTC	5	5	3	2015	Bathurst Resources Ltd	NBT001 - NBT008	8	Trench	2	2	0	2015	Bathurst Resources Ltd	NC119 - NC129	11	TTC, OH	7	6	8	2019	Bathurst Resources Ltd	NC220- NC221	2	TTC, OH	2	2	0	2021	Bathurst Resources Ltd	NC264 - NC279	15	TTC, OH	15	10	12
	Years	Agency	Range of Collar ID	Number of Holes	Drilling Method	# Holes in Structure Model	# Holes in Coal Quality Model	Geophysics Available																																																																																																																																																																																								
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		<ul style="list-style-type: none"><li>Exploration drilling results for individual drillholes have not been reported.</li><li>As coal is a bulk commodity the exclusion of detailed exploration data from this document is considered to not be material to the understanding of the Table 1.</li></ul>																																																																																																																																																																																														
Data aggregation methods	<ul style="list-style-type: none"><li>The nominal cut-off for ash (adb) for constructing the New Brighton structure model is set at 35%.</li><li>The resource model is built as a block model with 0.5m block thicknesses for coal. Coal ply data is used to grade estimate the block model.</li></ul>																																																																																																																																																																																															



Criteria	Commentary
	<ul style="list-style-type: none"> <li>Coal ply data is composited into 0.4m samples for estimation and are length weighted</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>All exploration drillholes have been drilled vertically and the coal seam is generally moderately dipping.</li> <li>Seam intercept thickness is representative of vertical seam thickness which is used to construct the stratigraphic model.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams can be found in the Appendix A for each of the following: <ul style="list-style-type: none"> <li>Location map.</li> <li>Map showing regional geology of the resource area.</li> <li>Map showing coal ownership rights and optimised shell used for resource reporting.</li> <li>Map showing exploration drillholes.</li> <li>Map showing historical mine workings.</li> <li>Resource classification, coal quality isopach plots and coal structure contour plots for New Brighton, Morley and Beaumont coal seams.</li> </ul> </li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>As coal is a bulk commodity detailed exploration drilling results and coal intersections have not been reported.</li> <li>The exclusion of this information from this report is considered to not be material to the understanding of the deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Exploration drilling results have not been reported in detail.</li> <li>Some coal composite samples for full seam, minable sections have been taken for thorough analysis including ash constituents, forms of sulphur, ash fusion temperatures, and ultimate analysis. These composite samples are not used in grade estimation.</li> <li>A bulk sample of ~5,000 tonnes was taken in 2013 from the New Brighton Central prospect. Coal quality results from this sample on an as received basis were 4.7% ash and CV of 21.6 MJ/kg.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Project evaluation is currently being undertaken.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>BRL utilises an acQuire database to store and maintain its exploration dataset.</li> <li>All historical and legacy datasets have been thoroughly checked and validated against original logs and results tables.</li> <li>The acQuire database places explicit controls on certain data fields as they are entered or imported into the database, such as overlapping intervals, coincident samples, out of range sample values, standardised look-up tables for logging codes.</li> <li>Manual data entry of coal quality results is not required as results are imported directly from laboratory results files.</li> <li>The database is automatically backed up on an offsite server.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Eden Sinclair (the Competent Person) has visited the area on numerous occasions including undertaking a number of exploration campaigns at the site and is familiar with the geology of the Ohai and Nightcaps Coalfields, and processes used to estimate coal resources for the site.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Golder has conducted external reviews of the modelling processes in use by BRL to develop their resource model and Coal Resource estimates.</li> <li>The competent person has confidence in the methodologies used for geological modelling and the interpretation of the available Nightcaps Project data. Confidence varies for different areas, and this is reflected in the resource classification.</li> <li>Dry, mineral matter and sulphur free volatile matter is the principal quality used to differentiate and correlate Beaumont and Morley coal seams.</li> <li>BRL considers the quantity of geological data sufficient to estimate and report Coal Resources; however, an increased data density may increase confidence in some areas.</li> <li>Uncertainty surrounds the historical mine workings, both in the quality and quantity of coal extracted and the surveying/positioning of underground workings. This is reflected in the</li> </ul>

Criteria	Commentary
<b>Dimensions</b>	<p>resource classification.</p> <ul style="list-style-type: none"> <li>Some residual uncertainty of quality and confidence of legacy drilling data remains despite thorough evaluation of the logs and drill locations.</li> </ul> <p>Several coal seams are present in the stratigraphic sequence. Up to three coal seams exist in each of the Beaumont, Morley and New Brighton Formations, with one existing in the Wairio Coal Measures. The total combined coal thickness varies from less than 1m thick up to 50m locally (coal seam gas drillhole OM05).</p> <ul style="list-style-type: none"> <li>The resource model covers an area 2.05km by 1.7km.</li> <li>A single primary prospect area exists within MP 60400. The New Brighton Central area covers an approximate area of 1.5km by 0.5km.</li> <li>The deepest Coal Resources estimated and reported are located 60m below surface. All Coal Resources are contained within a Revenue Factor (RF) 1.2 optimised pit shell using current mining costs at Takitimu and based on appropriate economics for the New Zealand domestic coal market.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>All available exploration data has been validated and, where considered reliable, has been used to develop a 3D geological block model for Coal Resource estimation and classification.</li> <li>All exploration drilling data is stored in an acQuire database and exported to a Maptek Vulcan™ (Vulcan) drillhole database.</li> <li>Interpretive design data is stored within Vulcan in various design layers.</li> <li>Due to the presence of two unconformable coal bearing formations, the model is sub-divided into two separate domains for modelling (Ohai Group and Nightcaps Group). The Ohai Group coal seams are truncated by the overlying unconformable Beaumont Coal Measures.</li> <li>A horizons definition was developed and used to define the coal seams to be modelled in the stratigraphic modelling process.</li> <li>Vulcan is used to build the structure model. Grid spacing is 10m x 10m.</li> <li>Maptek's Integrated Stratigraphic Model (ISM) module is used to produce the structure model. The stacking method is used which triangulates a reference surface and then stacks the remaining horizons by adding structure thickness. Thickness grids are created using an inverse distance (ID) modelling algorithm. Design data from other horizons is incorporated into the final grid structure.</li> <li>Modelling parameters for the two structural modelling passes are as follows: <ul style="list-style-type: none"> <li>Ohai Group - Reference grid surface (BOB Floor) by Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1 (Linear).</li> <li>Smoothing is 9.</li> <li>The maximum triangle length is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Ohai Group - Reference grid thickness modelling by Stacking: <ul style="list-style-type: none"> <li>Method is Inverse Distance.</li> <li>Power is 2.</li> <li>Maximum number of interpretive points is 10.</li> <li>Trend Order is 0 (Horizontal Planar).</li> <li>Smoothing is 9.</li> <li>Search Radius is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Nightcaps Group - Reference grid surface (UM11 floor) by Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1 (Linear).</li> <li>Smoothing is 9.</li> <li>The maximum triangle length is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Nightcaps Group - Reference grid thickness modelling by Stacking: <ul style="list-style-type: none"> <li>Method is Inverse Distance.</li> <li>Power is 3.</li> </ul> </li> </ul> </li> </ul>

Criteria	Commentary						
	<ul style="list-style-type: none"> <li>Maximum number of interpretive points is 8.</li> <li>Trend Order is 0 (Horizontal Planar).</li> <li>Smoothing is 9.</li> <li>Search Radius is 1,500m.</li> <li>Surfaces are splined.</li> </ul> <ul style="list-style-type: none"> <li>Structure grid models are checked and validated visually before being used to construct the resource block model.</li> <li>Vulcan is used to build the resource block model and to estimate grade. The process is automated using a Lava script.</li> <li>The stratigraphic structure grid models for each domain, along with LiDAR topographic surface, and Beaumont unconformity surface were used to build the block model. The block dimensions were constructed at 10m x 10m. Vertical thickness for the coal blocks is 0.5m.</li> <li>Block Grade estimation is performed in Vulcan using the Tetra Projection unfolding methodology.</li> <li>Coal qualities are estimated on an air-dried basis except bed moisture. Ash, sulphur, inherent and total moisture, volatile matter, and calorific value are estimated simultaneously.</li> <li>Grade estimation is computed using an ID function with power of 2.5.</li> <li>Three estimation passes are used to populate the grades in the model. Search ranges are circular at 150m, 400m, and 1,000m.</li> <li>Various methods have been used to check the validity of the block estimation. This includes manual inspection of the model, Quantile Quantile (QQ) plots of the model qualities vs coal quality database and other comparison tools.</li> <li>Resource tonnages within the model have been discounted where the resource falls within historical underground workings areas. The primary mining method utilised historically in the New Brighton and Mossbank areas is bord and pillar mining and opencast mining. Historical extraction rates are estimated using historical mining extraction reports, and tonnage reports. The extraction rates used to discount coal tonnages in the resource model are as follows: <table border="1"> <thead> <tr> <th>Mining Method</th><th>Extraction Rate</th></tr> </thead> <tbody> <tr> <td>Underground</td><td>38% of targeted UM/ON seam horizons, 50% of targeted NB seam horizons</td></tr> <tr> <td>Opencast</td><td>100% of all seams</td></tr> </tbody> </table> </li> </ul>	Mining Method	Extraction Rate	Underground	38% of targeted UM/ON seam horizons, 50% of targeted NB seam horizons	Opencast	100% of all seams
Mining Method	Extraction Rate						
Underground	38% of targeted UM/ON seam horizons, 50% of targeted NB seam horizons						
Opencast	100% of all seams						
	<ul style="list-style-type: none"> <li>In a previous review, Behre Dolbear Australia Pty Limited (BDA) noted that BRL has adopted a procedure over historical mine workings of discounting the estimated resources to account for the depletion of coal from underground mining and to account for possible structures not identified by drilling. Based on reconciliations from mining to date at Takitimu, this approach has been established as a reasonably reliable, if somewhat conservative, method of estimating resources where there are clearly areas of depletion. BDA accepts that this appears to be a reasonable approach but cautions there will be areas where the resources may differ from the estimates.</li> <li>No acid mine drainage (AMD) is thought to occur within the Ohai Coalfield due the non-acid forming lacustrine depositional environment of the coal measures and only a single drillhole has tested the acid generation potential which exhibited the same non-acid forming behaviour.</li> </ul>						
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Moisture, both on an air-dried and total moisture basis, is estimated in the resource model from the sample database after using a cut-off envelope to cut samples that vary excessively from the norm. Natural variability in bed moisture is amplified by excessive variability in the sampling process, and laboratory testing methods between labs and over time.</li> <li>Where ply sample results do not include moisture, moisture is calculated using a derived relationship of moisture vs ash.</li> <li>Coal Resource tonnages are reported using natural bed moisture, calculated using the Preston and Sanders equation.</li> </ul>						
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>Structure grid models have been developed based on a 35% ash cut-off. Some higher ash intervals are retained within the coal quality dataset to allow simplification of the seam model.</li> <li>No lower ash cut-off has been applied.</li> </ul>						



Criteria	Commentary
	<ul style="list-style-type: none"> <li>Coal Resources are reported down to a seam thickness of 0.5m (one block) with an ash cut-off of 25%.</li> <li>Coal Resources have been defined as economic by using a breakeven Lerchs-Grossman optimised opencast pit shell. The RF1.2 shell from the optimisation has been used. No Coal Resources have been reported outside of this pit shell. This optimised pit shell is used to determine Reasonable Prospects for Eventual Economic Extraction (RPEEE).</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>No mining factors such as mining losses and dilutions have been applied when developing the resource model.</li> <li>Current economic and mining parameters for domestic coal sales were used to define the RF1.2 optimised pit shell which was used to define coal that has RPEEE.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>No metallurgical assumptions have been applied in estimating the resource. It is not known if a wash plant would be required for coal processing.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>No environmental assumptions have been applied in developing the resource model.</li> <li>It is assumed that overburden is not acid forming as is the case at other mines in the Ohai coalfield.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>At the time of development of the resource model, a total of 66 relative density (air-dried) sample results are available for the New Brighton Project.</li> <li>The samples are distributed throughout the project area and the sample set covers a range of ash values from 1.7 to 56.2%.</li> <li>From this dataset an ash-density curve was generated with a coefficient of determination of <math>R^2=0.98</math> for New Brighton coal, <math>R^2=0.92</math> for Morley coal, and <math>R^2=0.84</math> for Beaumont coal.</li> <li>Air-dried density is calculated using the air-dried block ash value and the derived density equations. <ul style="list-style-type: none"> <li>New Brighton coal: <math>\text{Density (ad)} = (0.0091 * \text{ash}) + 1.3181.</math></li> <li>Morley coal: <math>\text{Density (ad)} = (0.0097 * \text{ash}) + 1.2944.</math></li> <li>Beaumont coal: <math>\text{Density (ad)} = (0.0105 * \text{ash}) + 1.25.</math></li> </ul> </li> <li>An in situ bulk density value is computed using the Preston and Sanders method; <math display="block">\text{Density (ps)} = (\text{RD} * (100 - \text{mo\_ad})) / (100 + \text{RD} * (\text{mo\_ar} - \text{mo\_ad}) - \text{mo\_ar})</math> </li> <li>Where RD is relative density on an air-dried basis, mo_ad is inherent moisture, and mo_ar is total moisture.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>BRL classifies resources using a multivariate approach.</li> <li>Coal Resources have been classified on the basis of geological and grade continuity balanced by relative uncertainties surrounding historical underground extraction and proximity to faults and unconformities.</li> <li>Closely spaced drillholes with valid coal quality samples (points of observation) increase the confidence in resource assessments.</li> <li>The confidence is reduced by: <ul style="list-style-type: none"> <li>A block being within an area of historical underground workings due to extraction rate uncertainty.</li> <li>A block being within 20m of historical underground workings due to uncertainty with historical survey of the workings and georeferencing of mine plans.</li> <li>A block is in an area where structure dip is greater than 20° due to proximity to large faults. Faulting can impact coal thickness and quality and some faults are poorly constrained.</li> <li>A block lying within an area with thin seams resulting in uncertainty of geological continuity. Where a seam is thin or is splitting, a small change in thickness can have a large impact to reported coal tonnages and qualities.</li> <li>A block being within an area close to a possible erosional 'washout' of Morley coal as indicated by historical underground mine plans and extents.</li> <li>A block is less than 2m below the modelled regional unconformity between Beaumont and Morley formations due to uncertainties in unconformity surface topology.</li> </ul> </li> <li>Essentially, in an area that is not affected by the above conditions, a distance to nearest sample of less than 75m would be classified as Measured, less than 120m is classified as Indicated and less than 300m would be classified as Inferred.</li> </ul>

Criteria	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• Previous iterations of the model were reviewed by BRL geological and mine engineering staff.</li> <li>• The currently reported model has been reviewed by the Competent Person.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• The Competent Person has reviewed the Coal Resource estimates and has visited the New Brighton project area. The Competent Person has examined the methodology used to estimate the resources and reserves and is satisfied that the processes have been properly conducted. The estimation methodology is generally in accordance with industry practice and the estimates can be regarded as requirements under the JORC 2012 code.</li> <li>• Statistical comparisons between the resource block model and the coal quality data set have been carried out and are within expected ranges. Techniques utilised include QQ plots and probability plots.</li> </ul>

## Appendix A:



Figure 1: Location of New Brighton Project



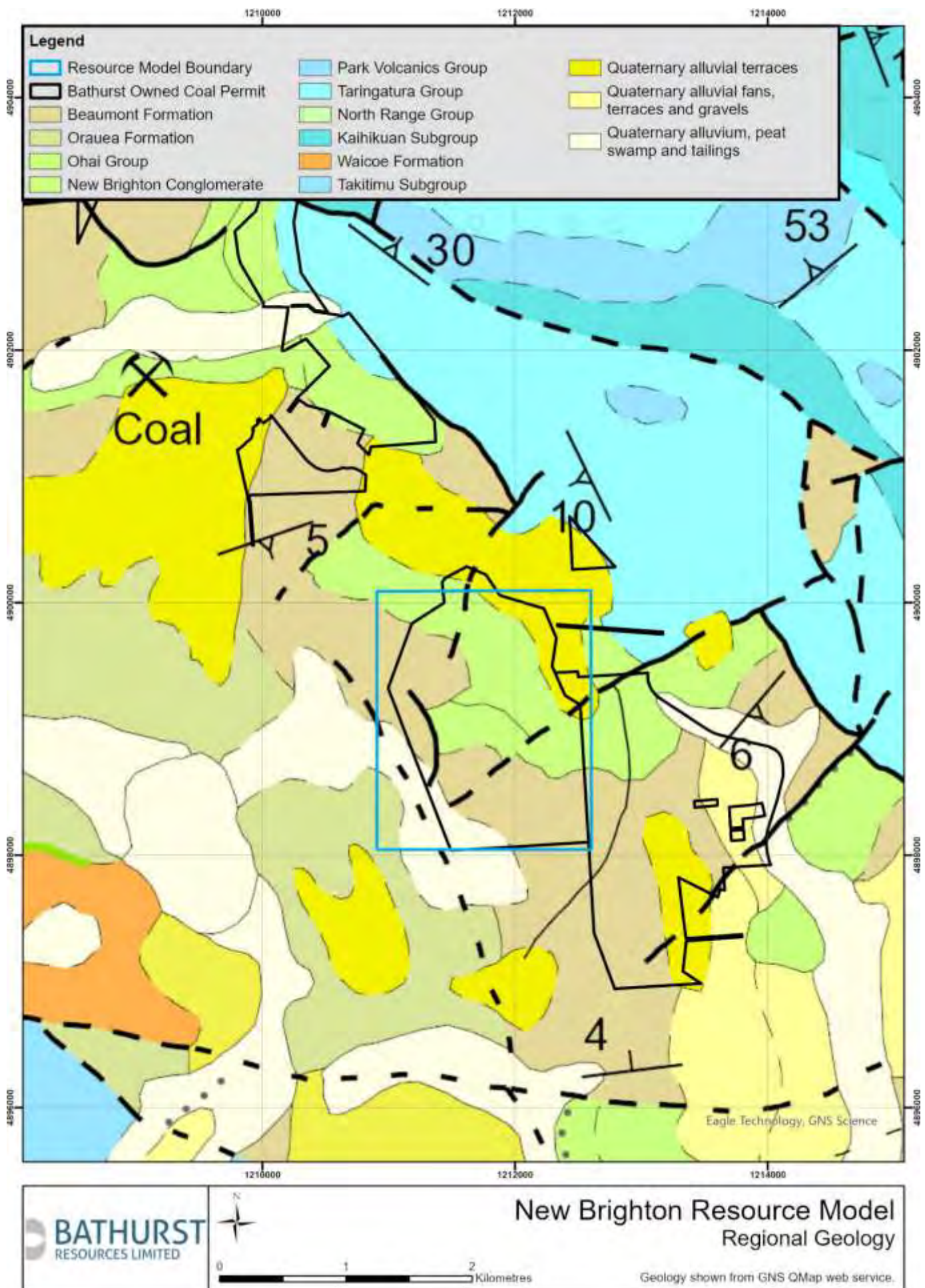


Figure 2: Regional Geology

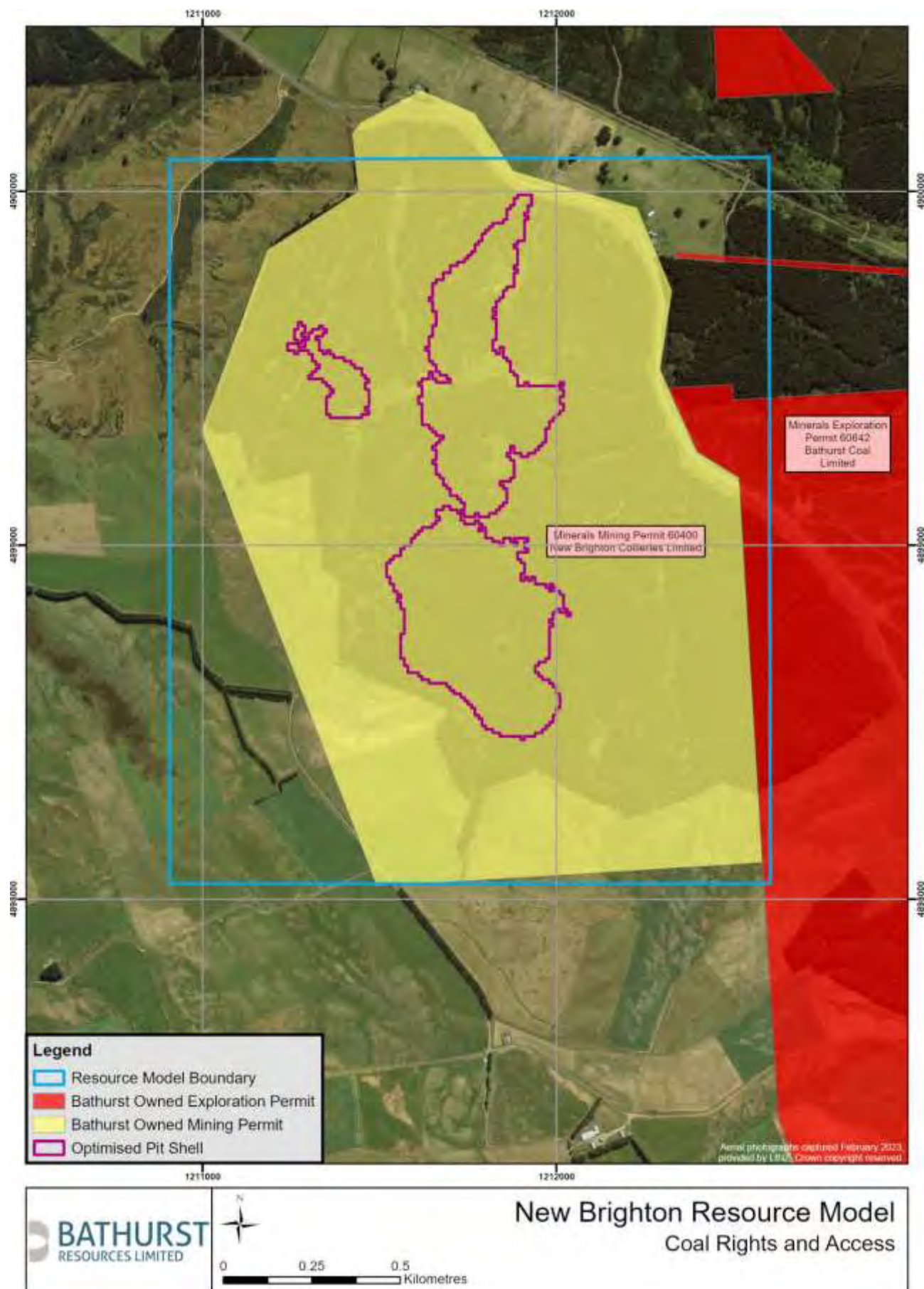


Figure 3: Figure showing coal rights, and optimised pit shell used for reasonable prospects test for reported resources



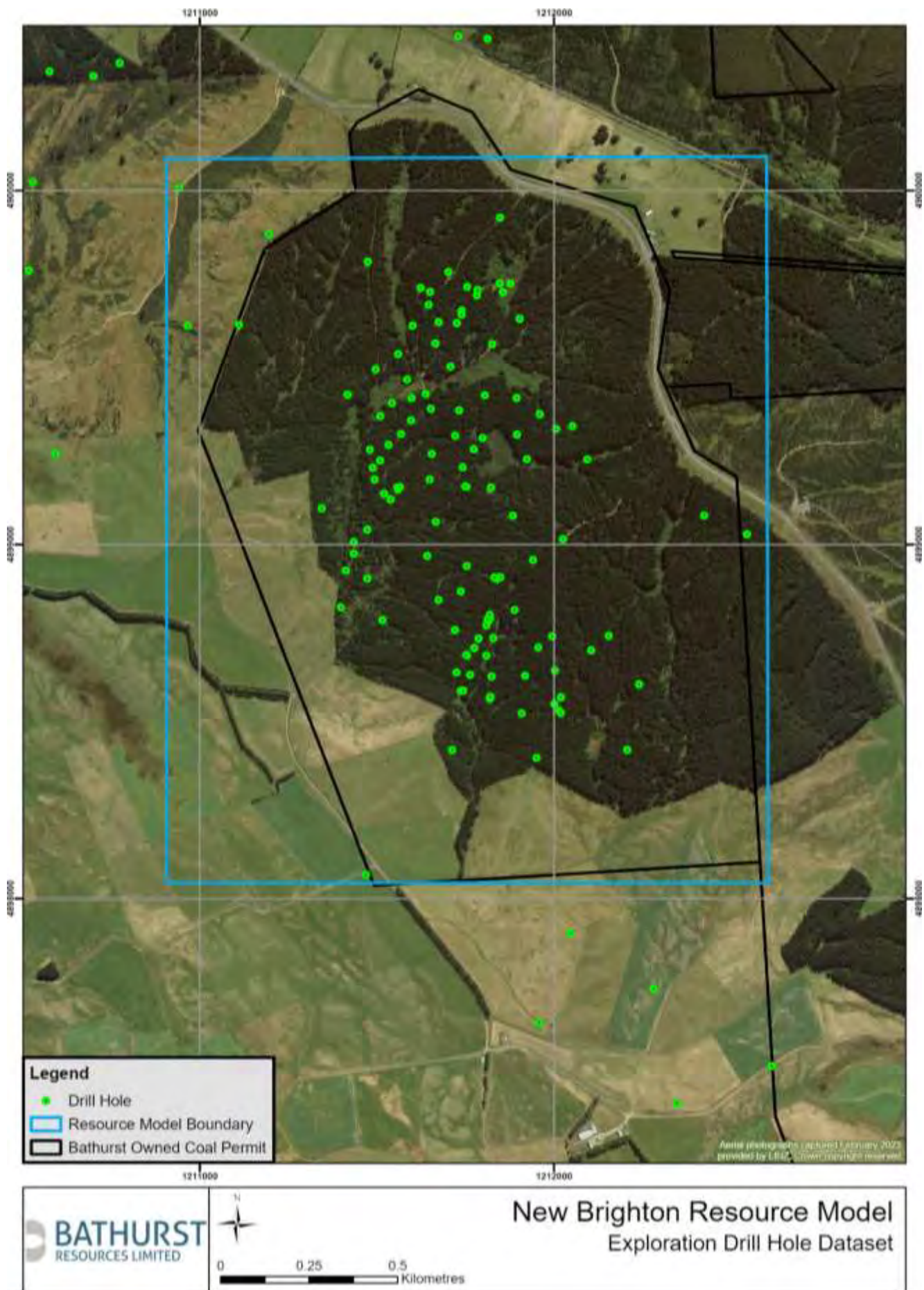


Figure 4: Location of drilling within Coal Resource area



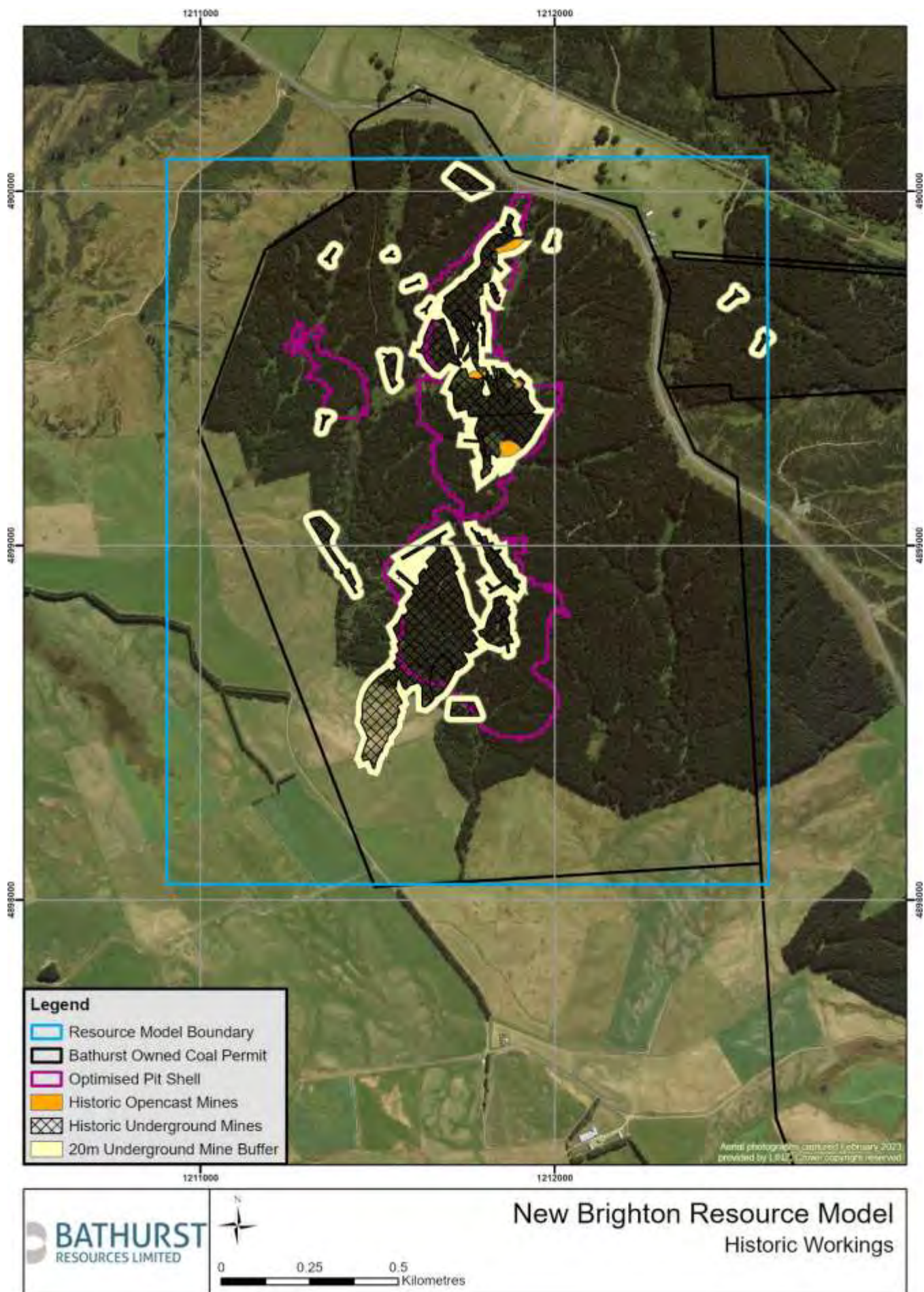


Figure 5: Location of historical mine workings. Note: recent opencast mined areas are not shown

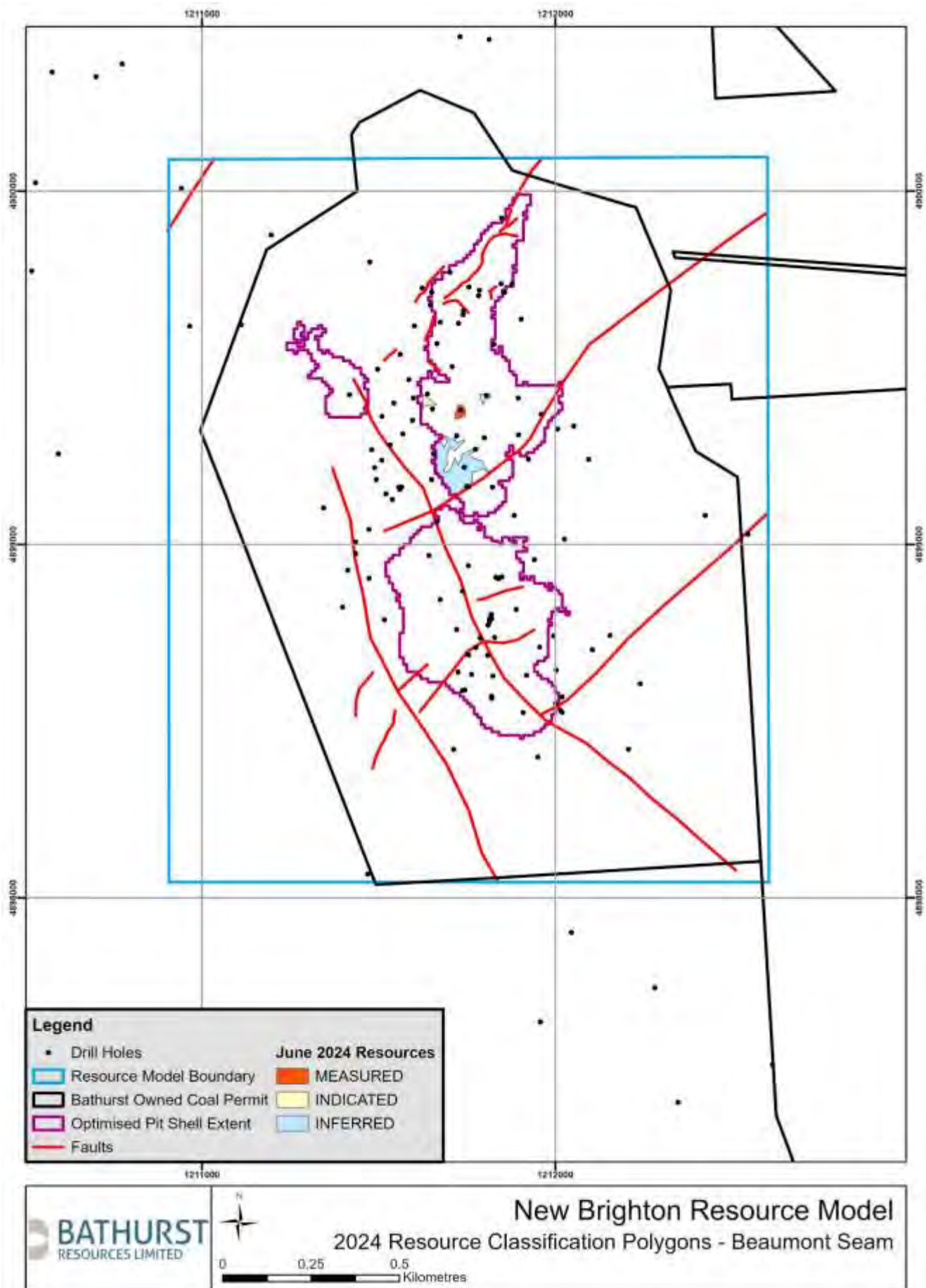


Figure 6: Beamont Seam resource classification



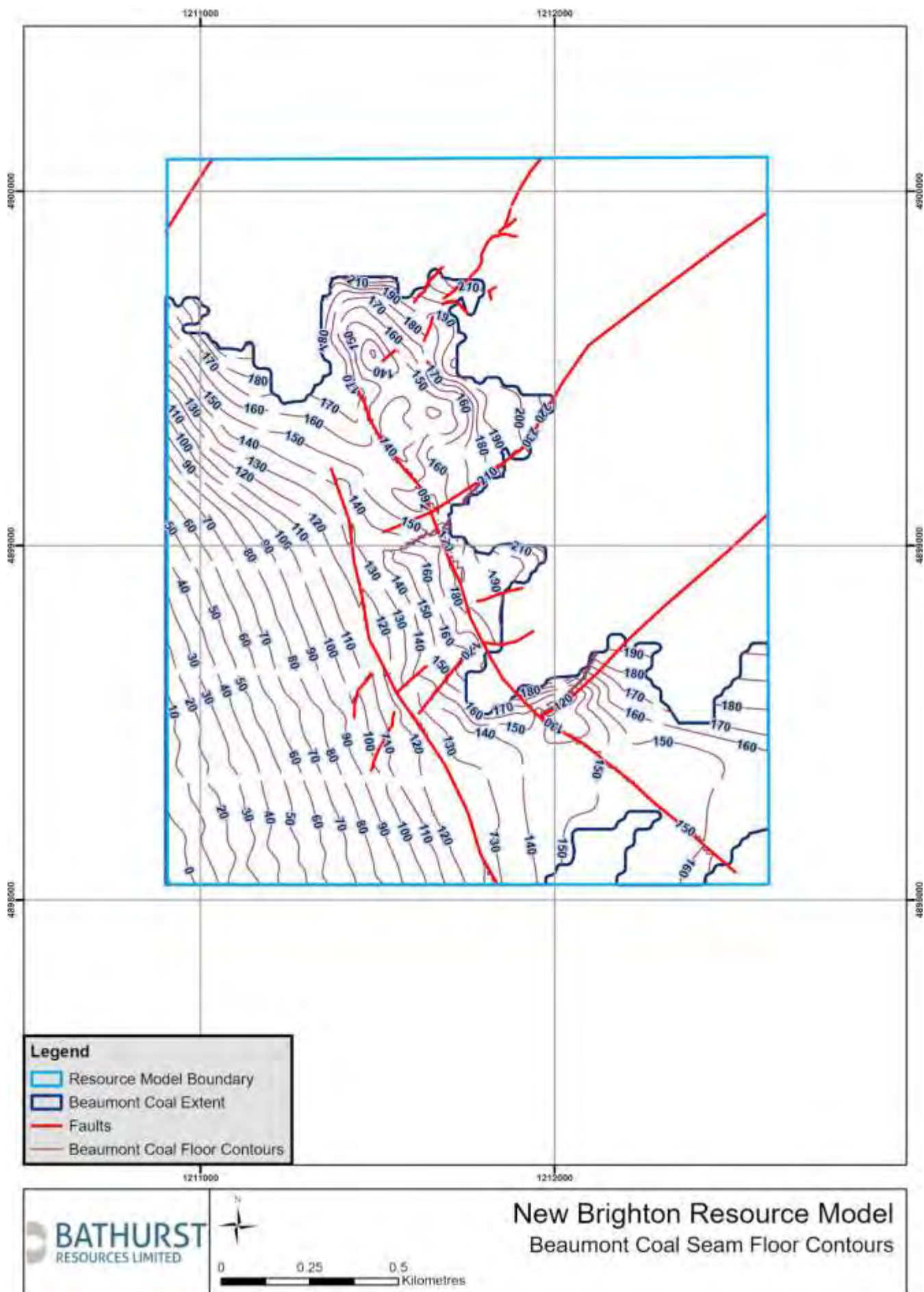


Figure 7: Beaumont Formation coal floor contours



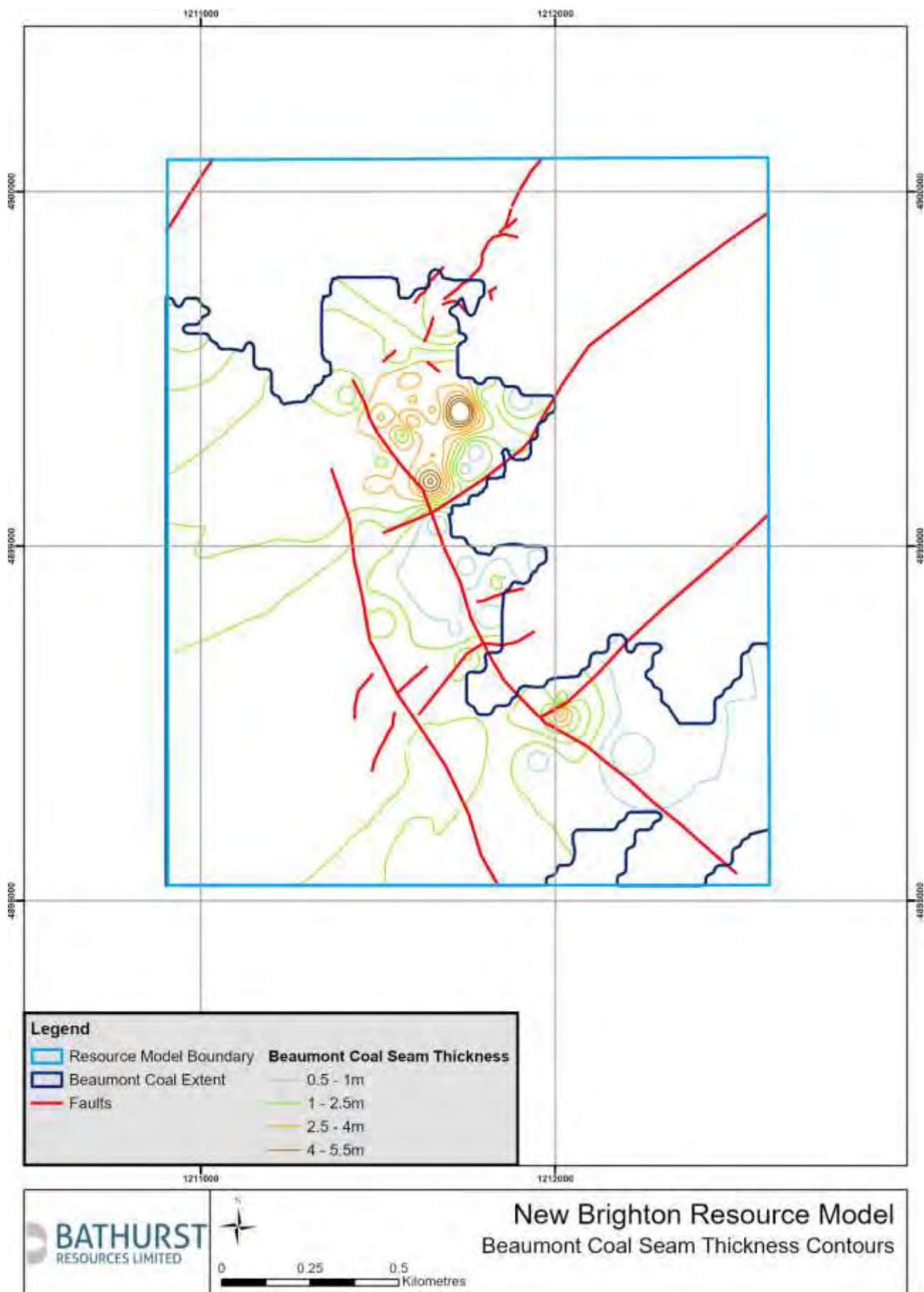


Figure 8: Beaumont Formation full seam cumulative thickness isopachs

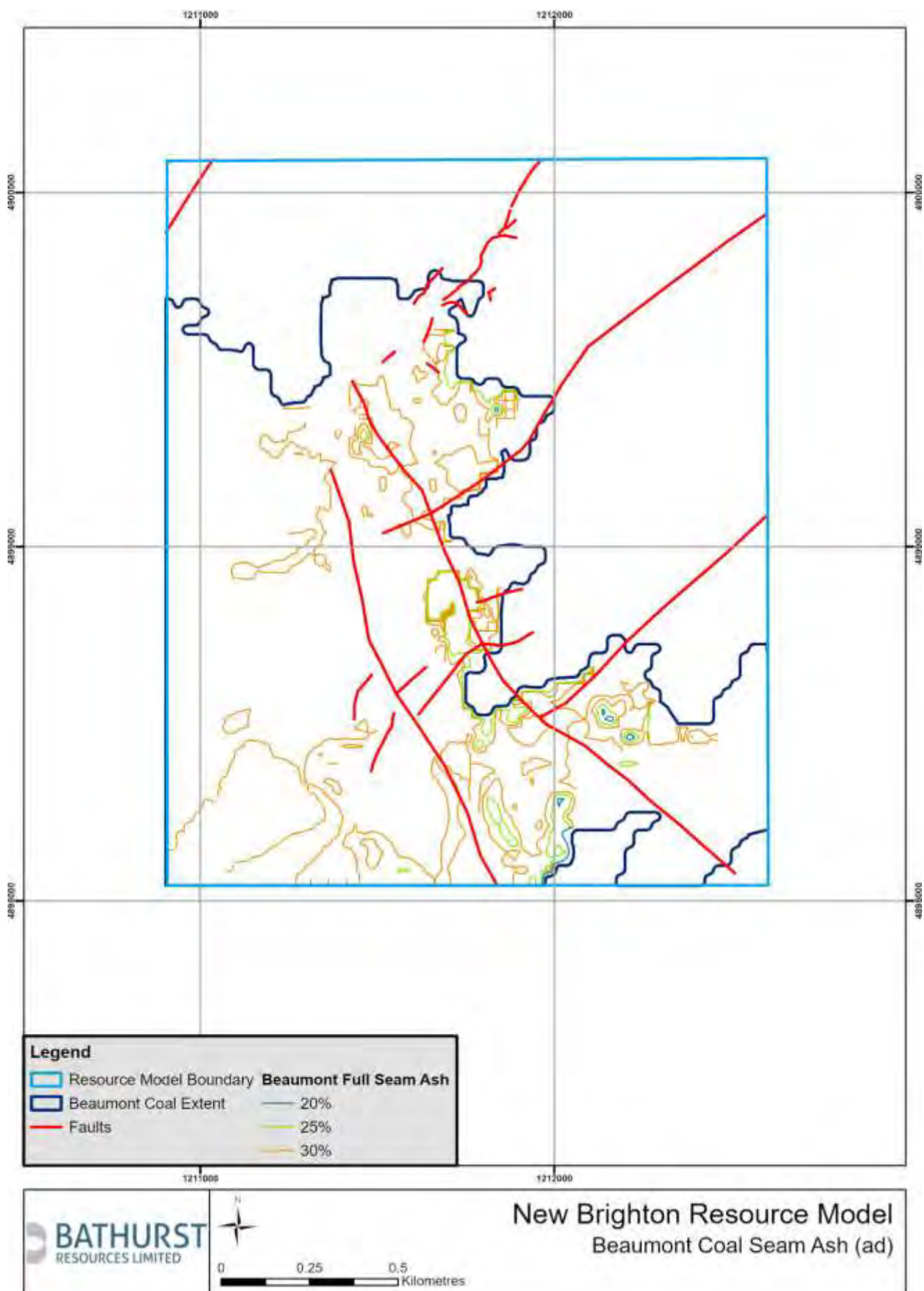


Figure 9: Beaumont Formation full seam ash isopachs

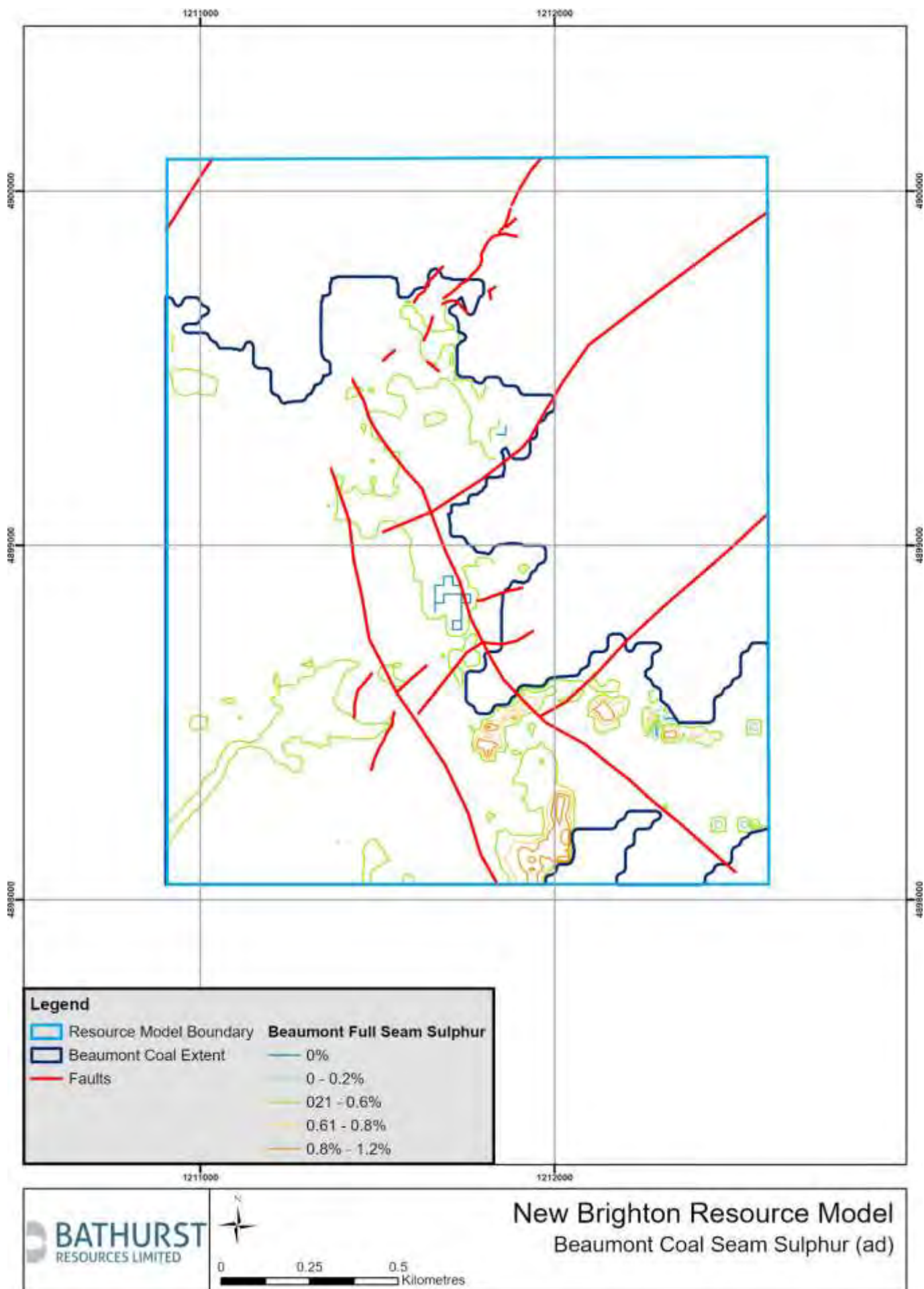


Figure 10: Beaumont Formation full seam sulphur isopachs



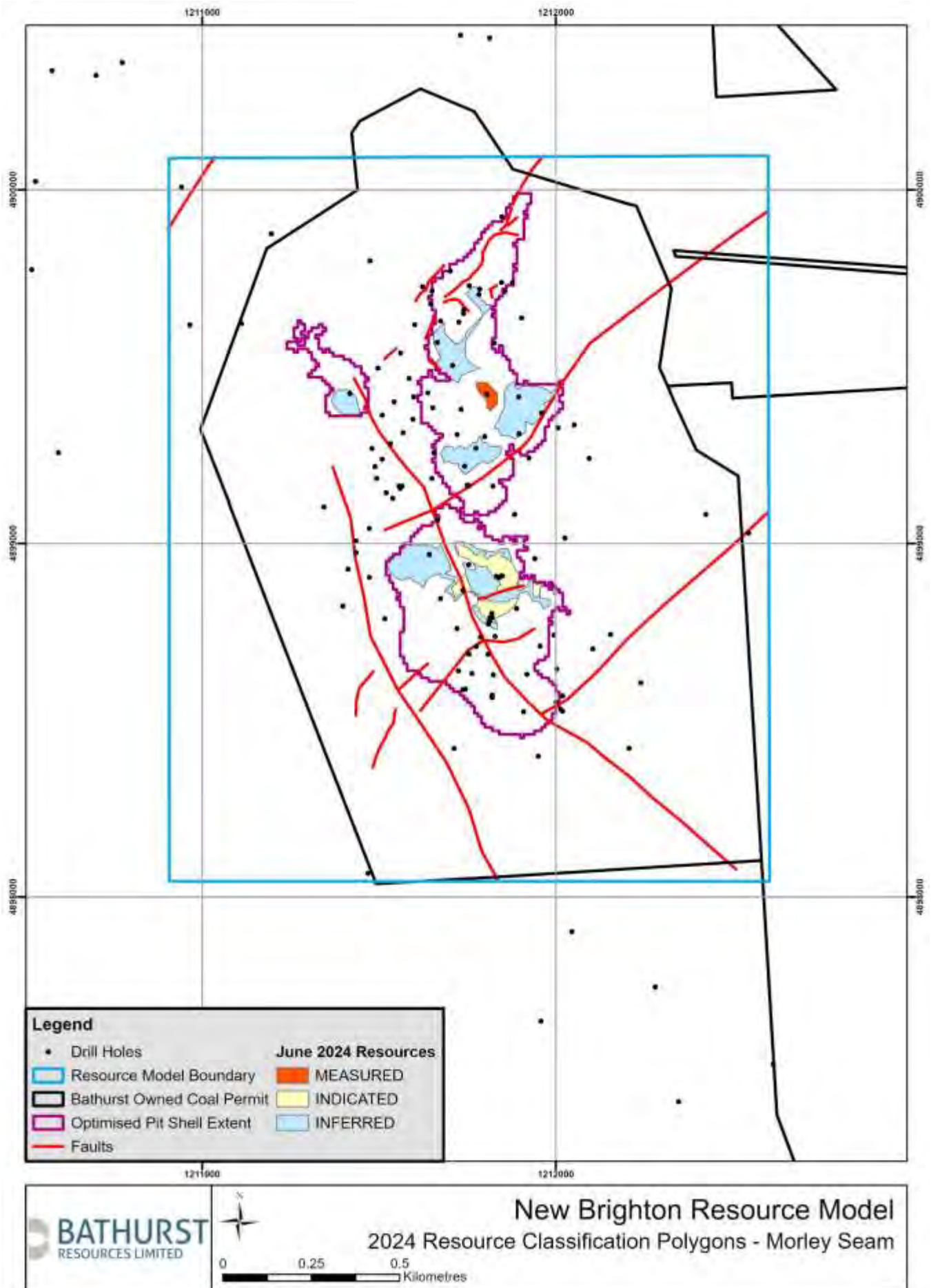


Figure 11: Morley Seam resource classification

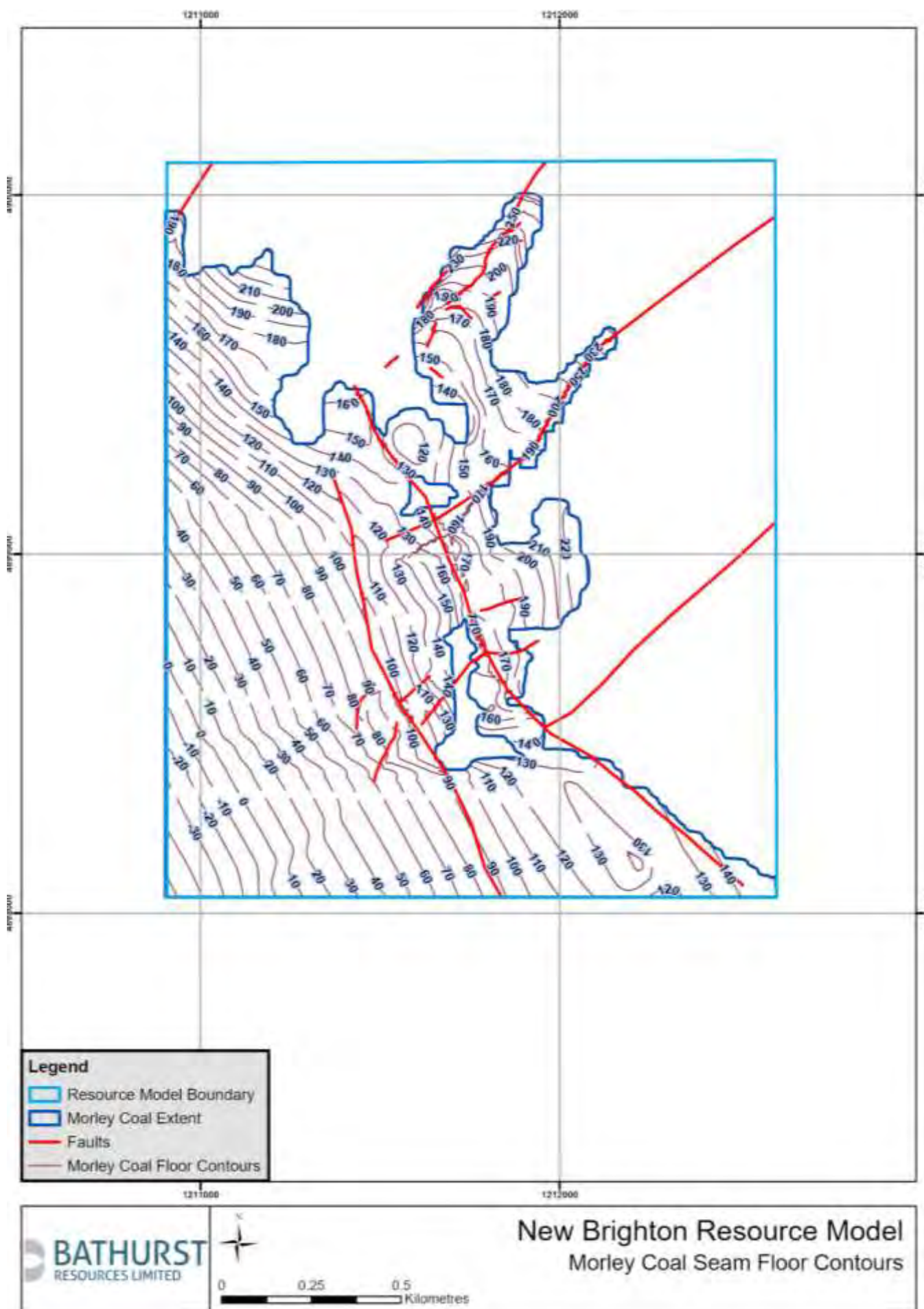


Figure 12: Morley UM1 seam coal floor contours

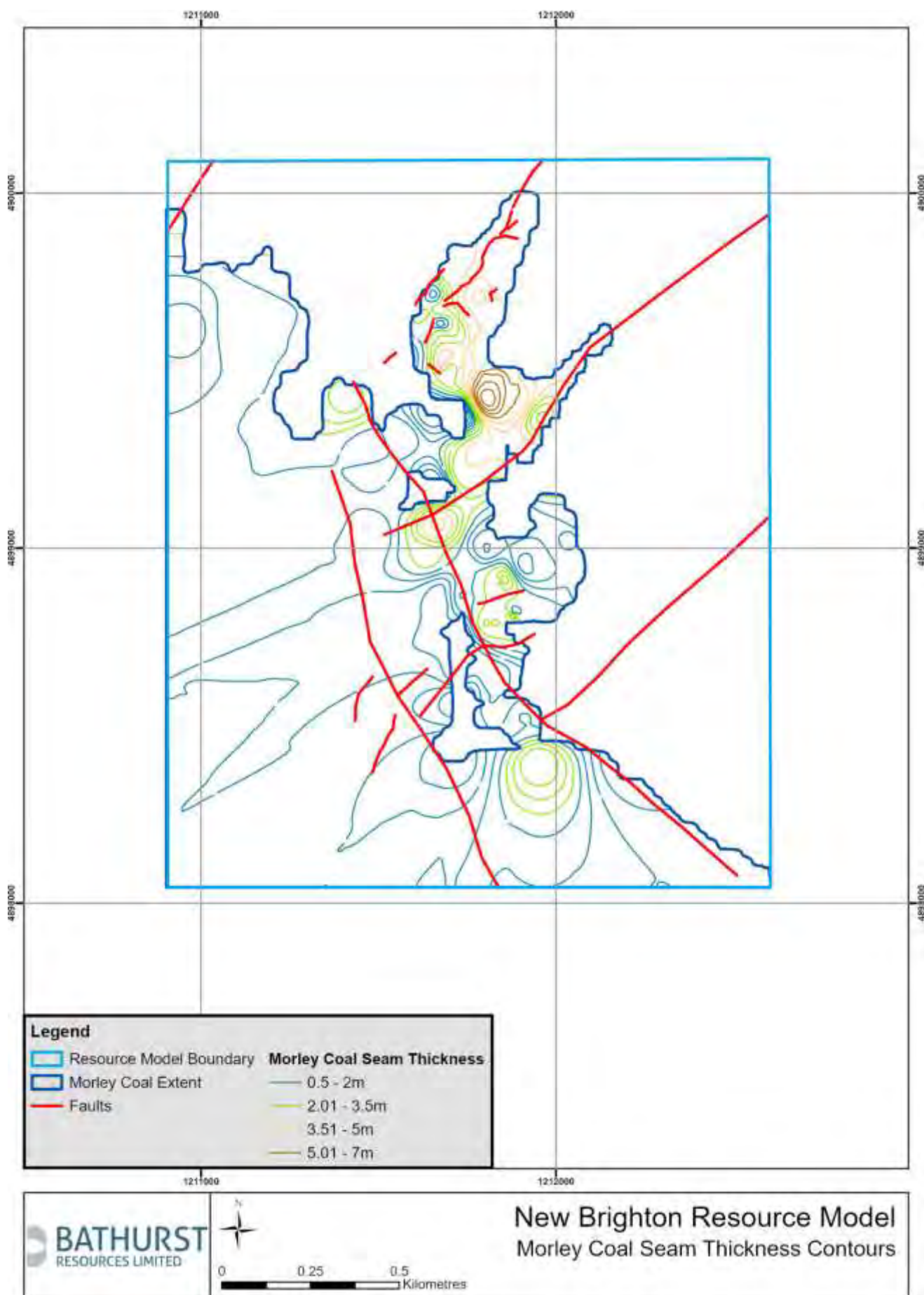


Figure 13: Morley Formation full seam cumulative coal thickness isopachs



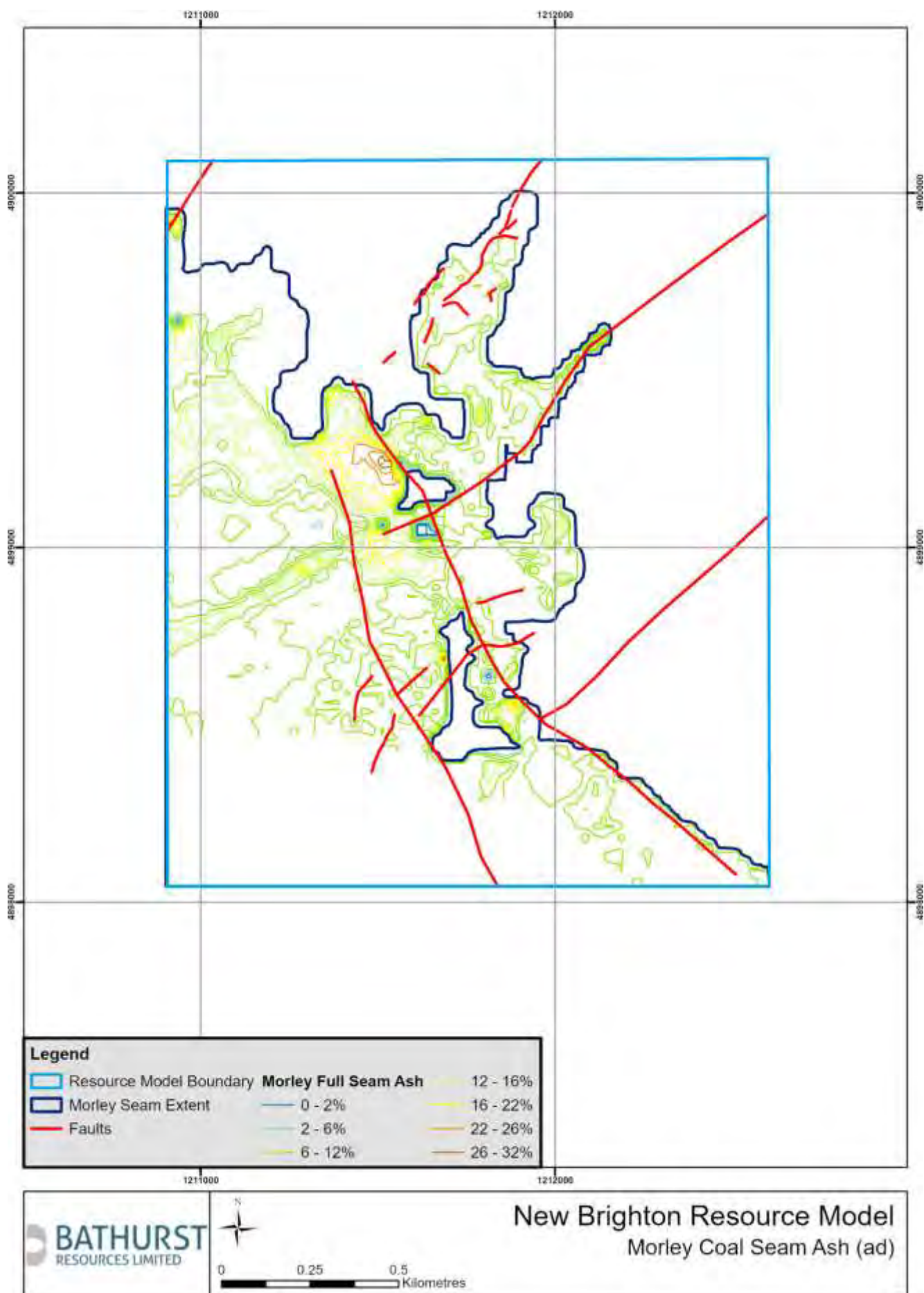


Figure 14: Morley Formation full seam ash isopachs

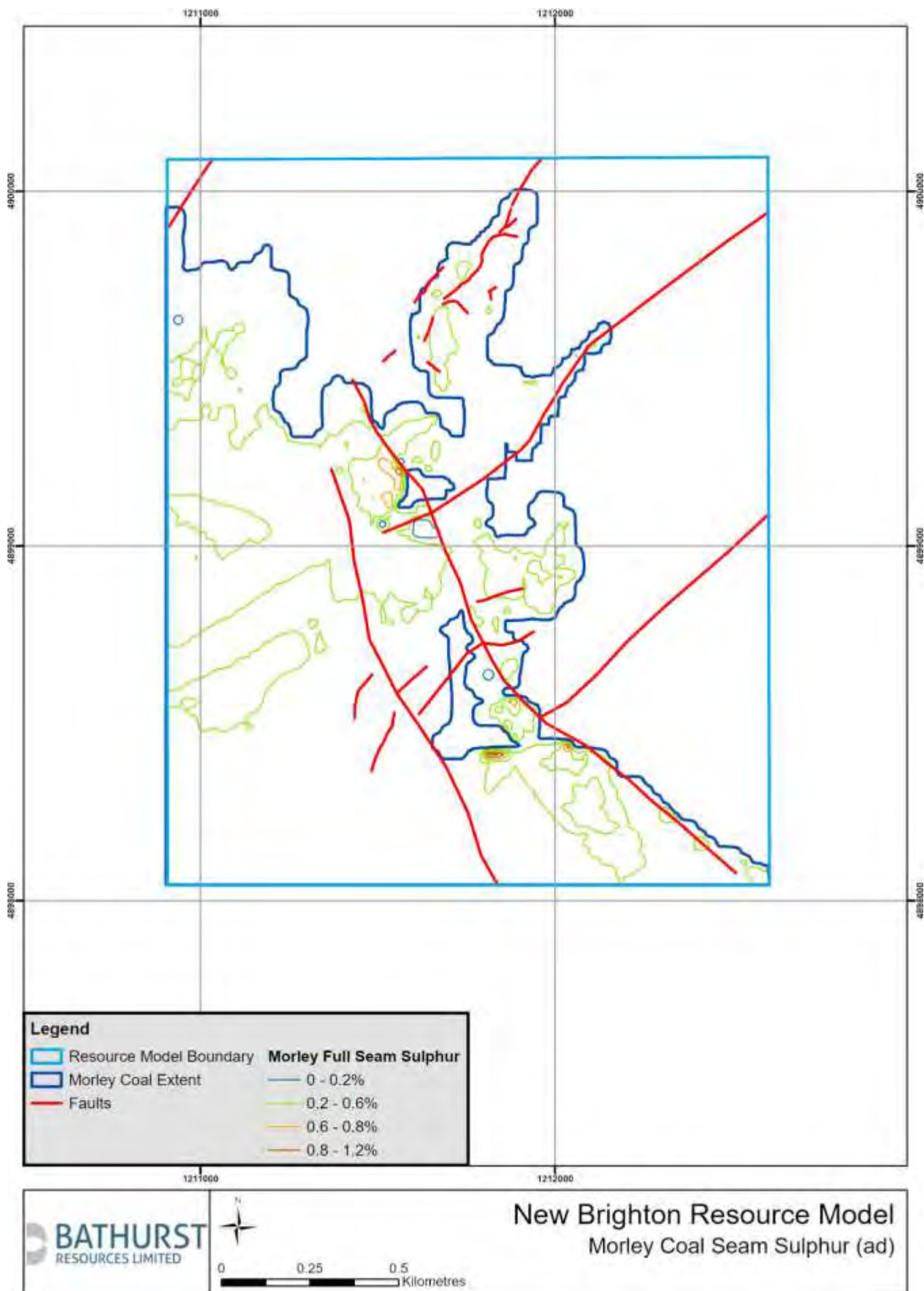


Figure 15: Morley Formation full seam sulphur isopachs

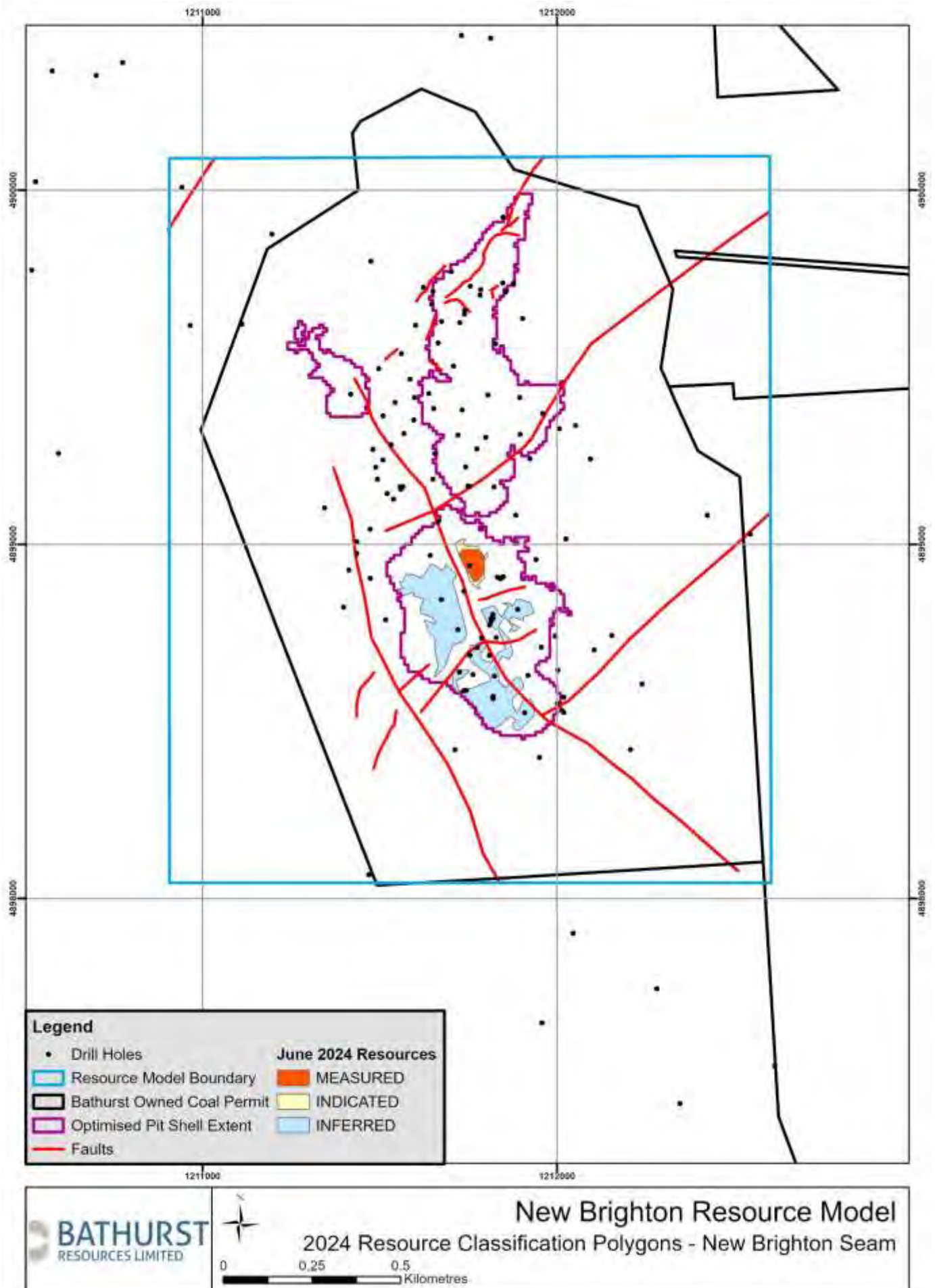


Figure 16: New Brighton Seam resource classification



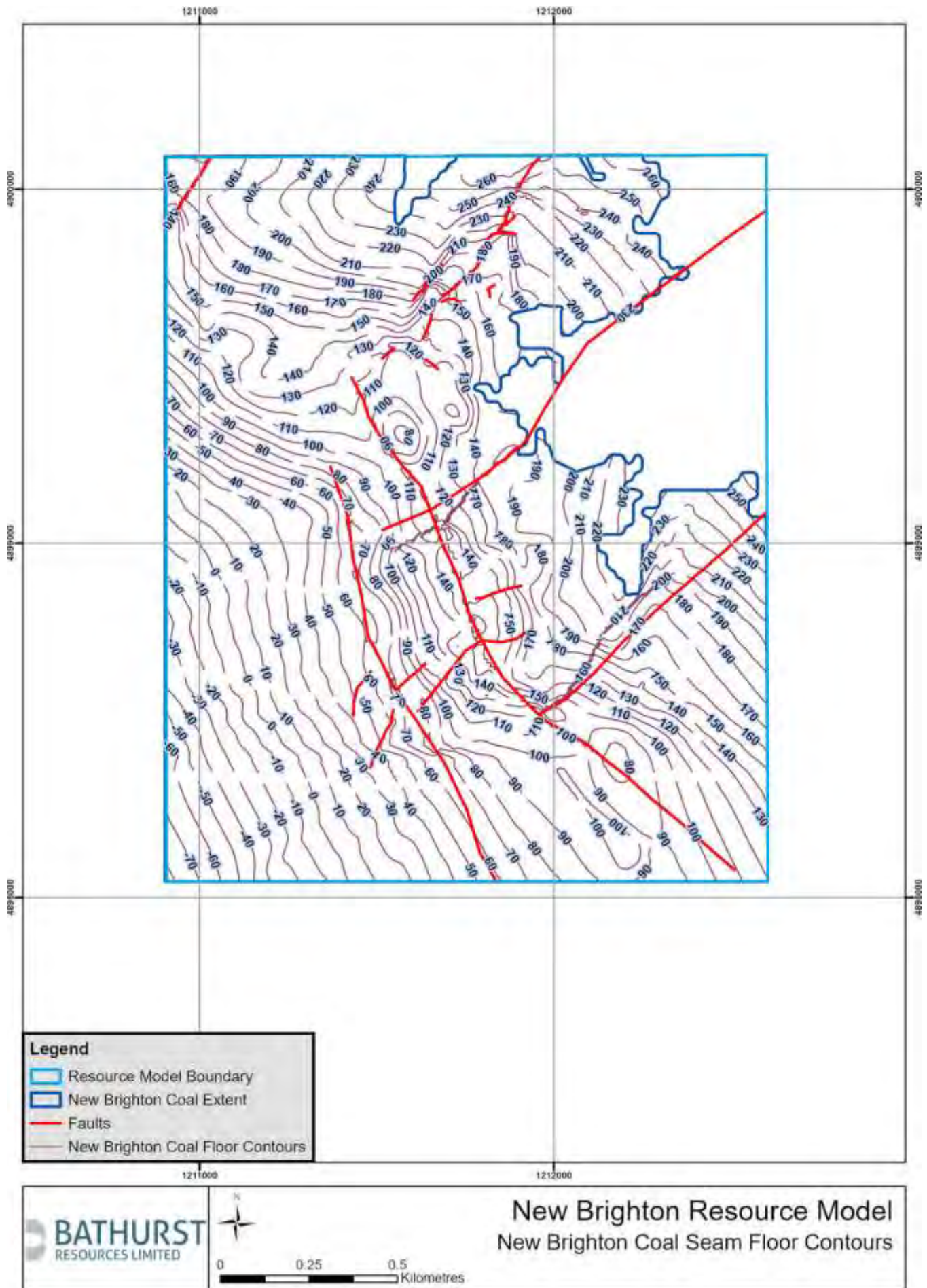


Figure 17: New Brighton (ON2 seam) coal floor contours

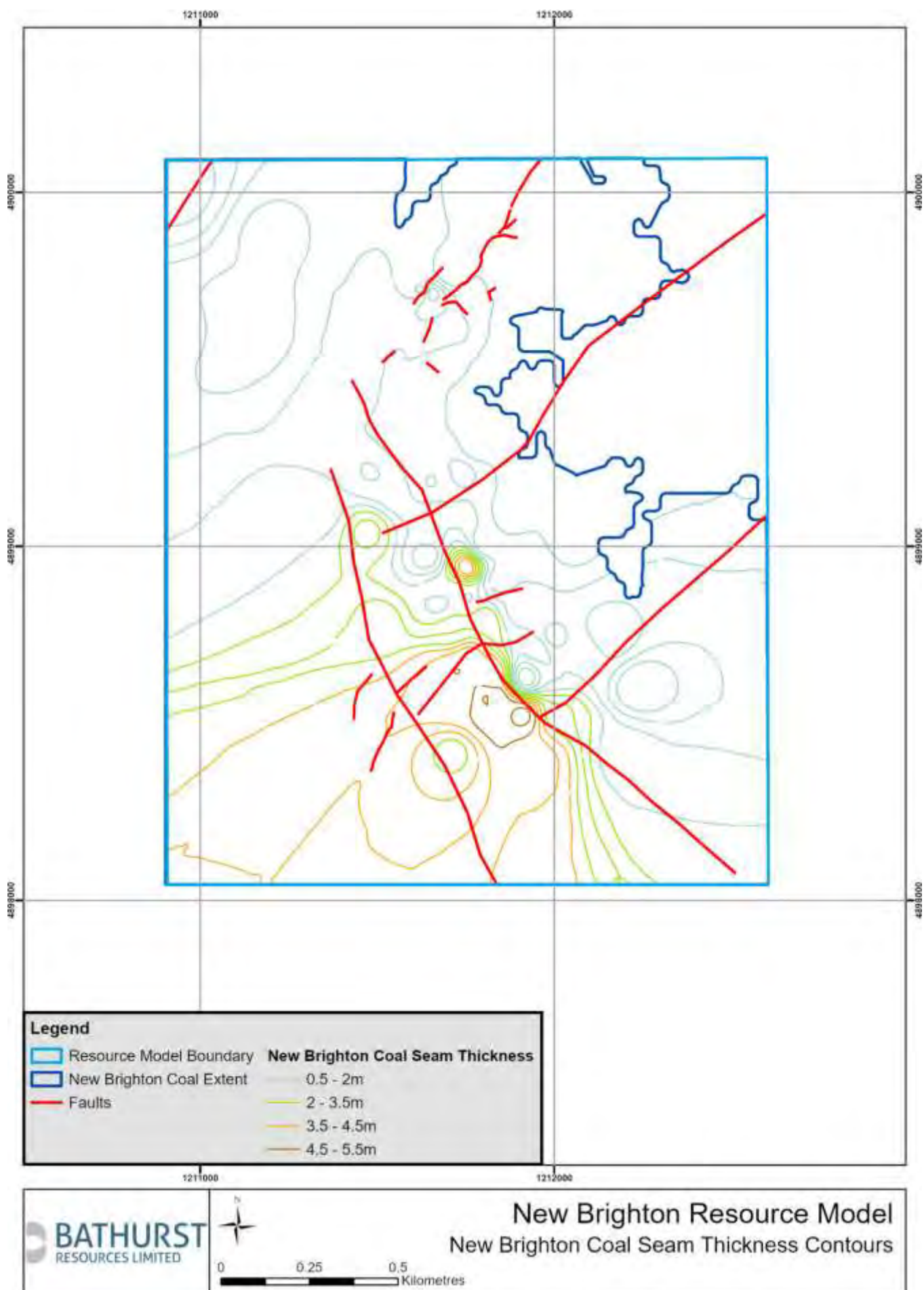


Figure 18: New Brighton Formation cumulative coal thickness isopachs

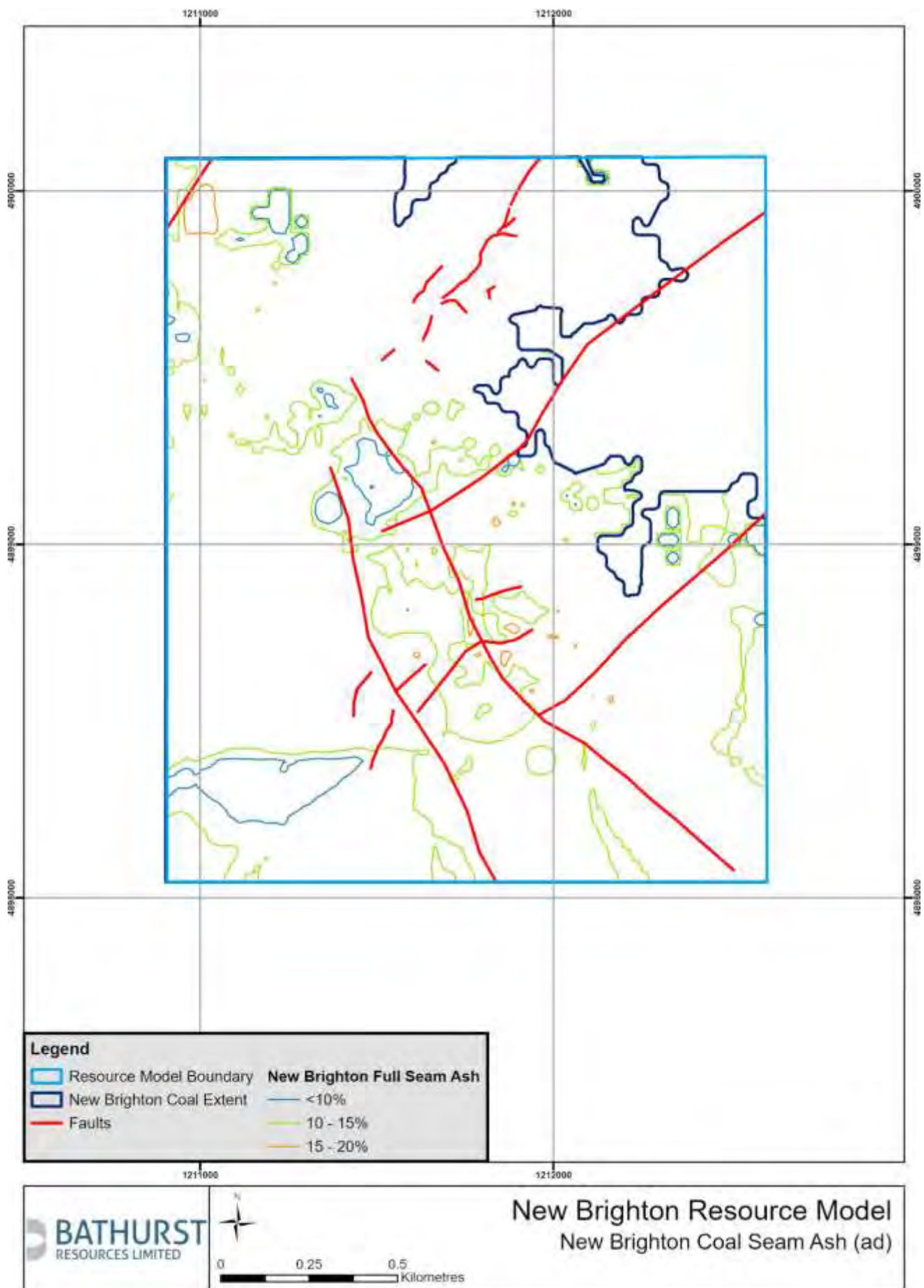


Figure 19: New Brighton Formation full seam ash isopachs



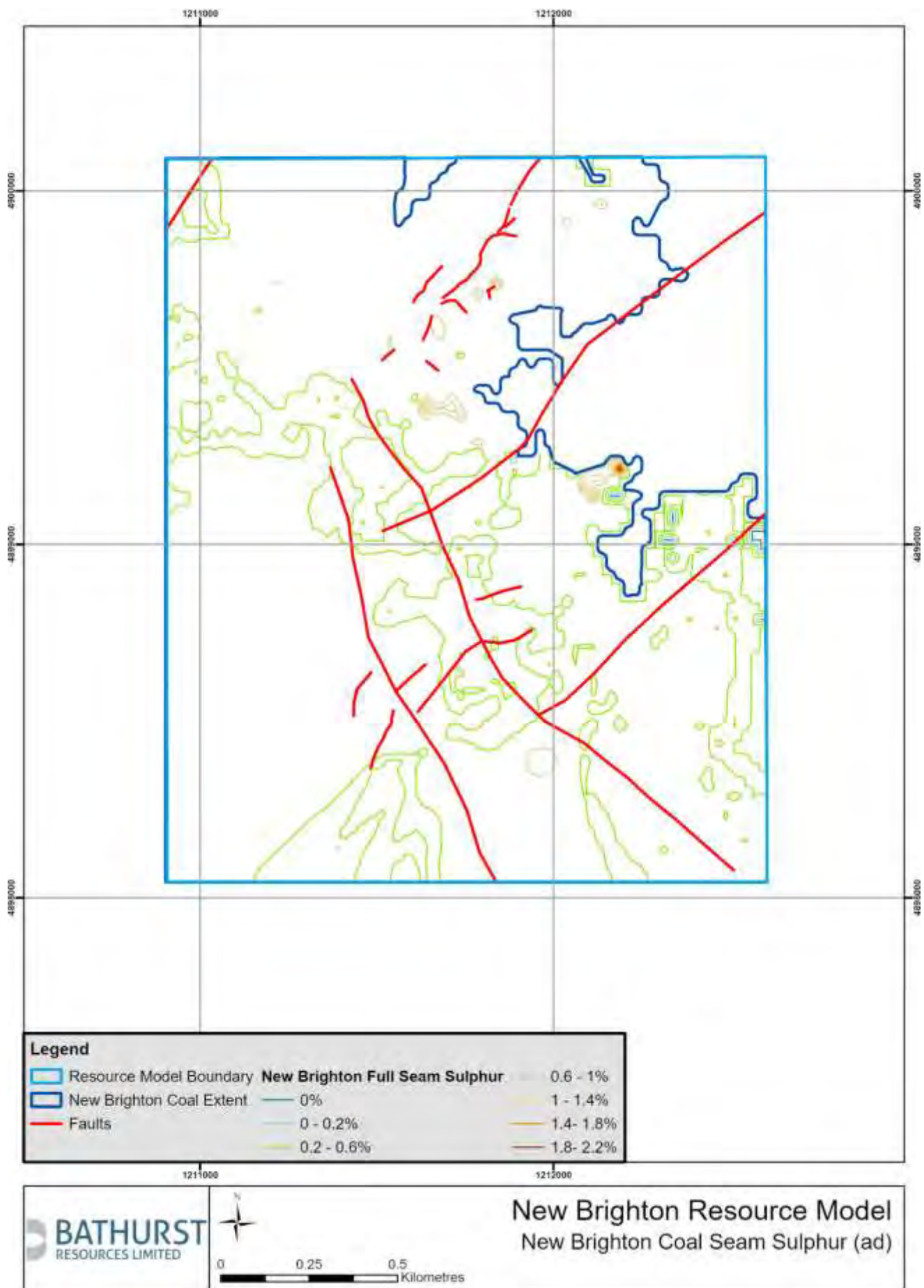


Figure 20: New Brighton Formation full seam sulphur isopachs

# JORC Code, 2012 Edition – Table 1 Report for Takitimu Mine 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>The Takitimu Mine Resource Model covers the Takitimu, Coaldale and Black Diamond pits.</li> <li>The Ohai Coalfield of Western Southland is a historical mining district, with mining beginning in 1879.</li> <li>Multiple campaigns of data acquisition have been conducted in the Ohai Coalfield over the past century.</li> <li>A combination of open-hole (OH), Reverse Circulation (RC), and cored drilling techniques have been used. Extensive logged and sampled trenching (channel sampling) has also been employed.</li> <li>Modern exploration campaigns include data from 2006: <ul style="list-style-type: none"> <li>38 RC hammer drillholes.</li> <li>41 NQ (47.6 mm core diameter) RC blade drillholes.</li> <li>23 wash drilled (OH) drillholes.</li> <li>137 HQ/PQ (63.5/85 mm core diameter) Triple Tube Core (TTC) cored holes.</li> <li>283 logged channel samples and trenches.</li> </ul> </li> <li>Historical drilling includes: <ul style="list-style-type: none"> <li>35 drillholes drilled between 1944 and 1962.</li> <li>14 drillholes completed in the 1980's.</li> <li>No downhole wireline geophysical data is available for these drillholes.</li> </ul> </li> <li>Recent drilling has aimed to infill areas to improve resource confidence and to test the reliability of historical data. Drilling has concentrated on areas deemed closer to production.</li> <li>Downhole wireline geophysical logs are available for 79 of the recent drillholes.</li> <li>Recent exploration drillholes were ordinarily geophysically logged if drillhole conditions and operational constraints permitted. The standard suite of tools run includes density, dip meter, sonic, and natural gamma.</li> <li>In rod density logs have produced a reliable trace for use in coal seam correlation and depth adjustment and is used to correlate coal seams, to confirm depths and thickness of coal seams and to validate drillers' logs. Downhole wireline geophysics was also used to accurately calculate core recovery rates across coal intersections.</li> <li>RC drillholes drilled in 2009-2010 and 2020 were geophysically logged for natural gamma with an Auslog Model A051 combination natural gamma/single-point resistivity/spontaneous potential sonde (43 mm diameter). Calibration method used a gamma test source jig, model P6721.</li> <li>Diamond drillholes were geophysically logged for density with a 9034 sidewall density tool. The tool was calibrated for use in 9239 using a concrete block and water tank.</li> <li>Outcrop trench and channel samples provide a significant proportion of the sample dataset. Coal seam thickness and partings between coal seams were measured vertically. Trench data is entered into the drilling database in a form that replicates a drillhole at that location.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>All Bathurst Resources Limited (BRL) managed drilling campaigns have utilised the following drilling methods: <ul style="list-style-type: none"> <li>Full PQ TTC.</li> <li>Full HQ TTC.</li> <li>Combination OH / TTC.</li> <li>133 mm RC.</li> </ul> </li> <li>Historic drilling techniques include: <ul style="list-style-type: none"> <li>HQ TTC Rotary wash, fishtail bit.</li> </ul> </li> <li>All drillholes (with the exception of three geotechnical drillholes) were drilled vertically.</li> <li>Channel sampling of faces is utilised extensively at the Nightcaps projects.</li> </ul>
<b>Drill sample</b>	<ul style="list-style-type: none"> <li>Core recovery was measured as the length of core recovered divided by the length of driller's</li> </ul>

Criteria	Commentary
<b>recovery</b>	<p>run and noted by the core logging geologist. If recovery of coal intersections dropped below 90%, the drillhole required a re-drill.</p> <ul style="list-style-type: none"> <li>• Mean total core recovery over the recent drilling campaigns was 97.3%, with core recovery of coal at 98.8%.</li> <li>• Where small intervals of coal were lost, and geophysical logging indicated strongly that coal was lost, raw ash values were estimated using the results of overlying and underlying ply samples and the relative response of the downhole density trace.</li> <li>• Little core recovery data is available for historical drillholes.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• BRL has developed standardised core logging procedures (BRL Coal Logging Procedures), and all core logging completed by BRL has followed these procedures.</li> <li>• All recent drill core has been geologically and geotechnically logged by logging geologists under the supervision and guidance of experienced exploration and geotechnical geologists.</li> <li>• All drill core was photographed prior to sampling. Depth meter marks and coal ply intervals were noted on the drill core in each photograph.</li> <li>• Downhole wireline geophysical logs were used to aid core logging and to ensure true downhole depths were recorded where applicable.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• For all exploration data acquired by BRL, an in-house detailed sampling procedure was used (BRL Coal Sampling Procedures). Sampling and sample preparation are consistent with internationally accepted coal sampling and sample preparation methodologies.</li> <li>• Drill core ply samples include all coal recovered for the interval of the sample. Core was not cut or halved. Ply sample intervals were generally 0.5m in length, unless dictated by thin split or parting thickness. Coal sample size is considered adequate to be representative of the coal seam quality.</li> <li>• For historical data, sample preparation processes are unknown. No historical drillhole coal quality results were used for Mineral (Coal) Resource estimation.</li> <li>• Trench samples were taken representatively from excavated and cleaned outcrop, preventing sampling of weathered coal and other contamination of the sample. Sample intervals were measured vertically and were generally 0.5m or less in length, however thicker sample intervals of up to 4m in length were used for thick coal seams. No field sample duplicates have been taken or analysed. Sample sizes generally aim to be at least 1kg of coal per 0.5m length sampled.</li> <li>• All diamond core samples, and RC chip samples were collected as soon as practicable after drilling, bagged and dispatched to the SGS New Zealand Limited (SGS) minerals laboratory in Ngakawau, where they were crushed and split.</li> <li>• Some grade control drillholes and channel samples have been analysed at the on-site laboratory for raw ash and total sulphur using standards in accordance with ISO 17025 requirements for laboratory practices.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• All coal quality testing completed for BRL has been conducted by either SGS or CRL Energy Ltd (CRL) and both are IANZ accredited laboratories.</li> <li>• SGS have used the following standards for coal quality testing: <ul style="list-style-type: none"> <li>◦ Proximate analysis (ASTM 7582).</li> <li>◦ Ash (ISO 1171).</li> <li>◦ Volatile Matter (ISO 562).</li> <li>◦ Inherent Moisture (ISO 5068).</li> <li>◦ Total Sulphur (ASTM 4239-04A).</li> <li>◦ Calorific Value (ISO 1928).</li> <li>◦ Loss on Drying (ISO 13909-4).</li> <li>◦ Relative Density (AS 1038.21.1.1).</li> </ul> </li> <li>• CRL completed much of the assay test work for samples collected prior to BRL taking over the projects.</li> <li>• CRL used the following standards for their test work: <ul style="list-style-type: none"> <li>◦ Inherent Moisture (ISO 117221).</li> <li>◦ Ash (ISO 1171).</li> <li>◦ Volatile Matter (ISO 562).</li> </ul> </li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Calorific Value (ISO 1928).</li> <li>• All analysis was carried out and reported on an air-dried basis (adb) unless stated otherwise.</li> <li>• Some coal quality testing completed for BRL on in pit channel samples and grade control drillholes used in the resource model has been conducted by the onsite laboratory, which uses the following standards in accordance with ISO 17025 requirements laboratory practices:               <ul style="list-style-type: none"> <li>○ Sample preparation is carried out as per ISO 5063/2 brown coal and lignite's – Principles of sampling.</li> <li>○ All coal is crushed to -3mm and a minimum of 650g of coal is extracted using a rotary divider.</li> <li>○ Coal is dried, the loss on air drying determined and ground to -212 microns (µm) in a ring mill.</li> <li>○ Coal is representatively spot sampled into a lab sample bottle and is then tested for inherent moisture, ash, and sulphur.</li> <li>○ LOD carried out as per ISO 5068-1.</li> <li>○ Inherent moisture is carried out using the ISO 5068-2.</li> <li>○ Ash has been analysed using the standard ISO 1171-1997.</li> </ul> </li> <li>• Duplicate results from the onsite laboratory are compared to results tested at SGS; results are comparable between the two laboratories, however some differences between inherent and total moisture have been observed. No Total or Inherent moisture results from the onsite lab are used for resource estimation, however ash and sulphur (ad) results from three grade control drillholes and 190 channel samples have been used for grade estimation.</li> <li>• SGS reviewed onsite sampling and calibration procedures in 2013 as part of the initial setup of the laboratory in 2009. Reviews and audits are completed routinely by an external party.</li> <li>• Onsite coal sampling procedures were audited and tested by consultant Trevor Daly Consulting (TDC) in 2010, 2013, 2016 and in 2019 by SGS.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• Sample coal quality results have been cross-referenced and compared against lithology logs and downhole geophysical data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Nightcaps Coalfield.</li> <li>• Anomalous assay results were investigated, and where necessary the laboratory was contacted and a re-test was undertaken from sample residue.</li> <li>• Six twinned drillholes have been drilled at the project, but no field duplicate trench samples have been conducted.</li> <li>• In pit channel samples have been collected for grade control purposes. These have been used to cross-validate historical OH/TTC and modern RC drilling and to provide an increased density of coal quality data for modelling and estimation in close proximity to active mining areas.</li> <li>• Laboratory data is imported directly into an acQuire database, with no manual data entry at either the laboratory or BRL.</li> <li>• Coal quality results files are securely stored on a backup server. Once validated, drillhole information is 'locked' in an acQuire database to ensure data is not inadvertently compromised.</li> <li>• Geophysical data has been used to establish coal seam thickness and depths on the margins of coal seams in RC drillholes, where sampling uncertainty inherent in RC drilling made coal sample and intersection depths less reliable.</li> <li>• In 2014, BRL commissioned a series of duplicate samples to be completed by CRL. These samples have repeated tests performed by SGS on a subset of ply samples selected at random. The results are shown in Figure 1.</li> </ul>

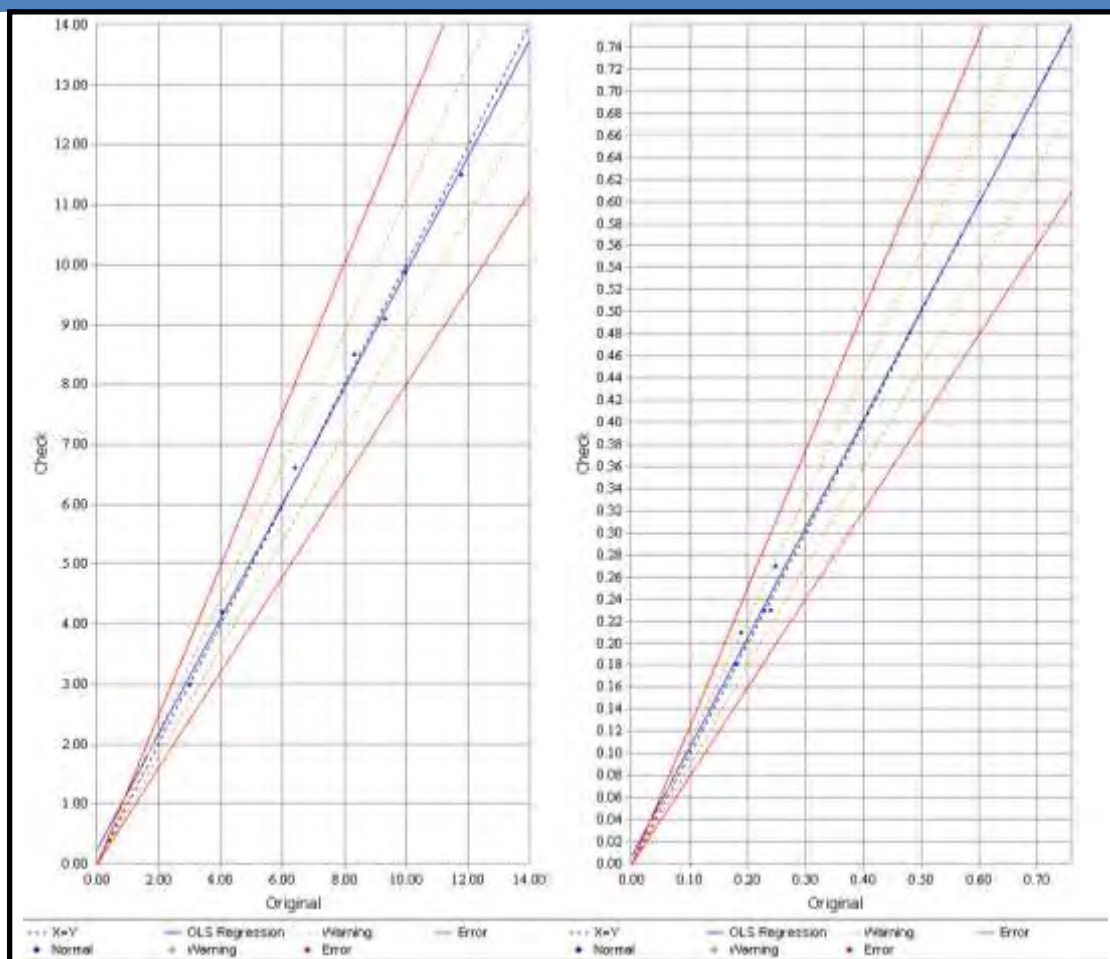


Figure 1: Air-dried ash (ash ad) (left) and sulphur (right) duplicate results comparing SGS and CRL laboratories

#### Location of data points

- The site currently uses the Bluff Circuit 1949 Geodetic Datum.
- LiDAR and digital imagery were acquired on 10 April 2013 using an Optech M200 LiDAR system and CS8900 medium format digital camera.
- The data was collected flying 1,300m above the lowest ground and using a scanner field of view of 44°. Outgoing pulse rate was set at 70kHz and minor scan frequency 33.5Hz.
- The topographic surface used to build the model is derived from a combination of LiDAR data and Land Information New Zealand (LINZ) topographical data (where LiDAR coverage in outer areas is unavailable). The topographic surface is updated with end of month mine surveys for active mining and dumping areas.
- The Takitimu Mine has completed its own site survey since 2014, and exploration data is surveyed by qualified surveyors combined with in-house trained surveyors and survey technicians. Prior to 2014, surveying was completed by BTW South Limited (BTW) based in Cromwell.
- End of Month (EOM) surveys are completed by trained drone pilots and qualified BRL staff.
- All in-pit surveying of coal roof and floor and channel samples has been conducted by trained BRL staff.
- Historical data has been converted from various local circuits and map grids to the Bluff Circuit 1949 Geodetic Datum.
- Surveyed elevations of drillhole collars are validated against the LiDAR topography and EOM survey surfaces.

Criteria	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Drillhole spacing for the Black Diamond pit area has been calculated by finding the radius required to fill the total area of the project divided by the number of drillholes within that area.</li> <li>The project has an average drillhole spacing of approximately 100m and channel sampling reduces this average sample spacing to approximately 70m.</li> <li>Drillhole spacing is not the only measurement used by BRL to establish the degree of resource uncertainty and therefore the resource classification. BRL uses a multivariate approach to resource classification which is explained further in Section 3.</li> <li>The current drillhole spacing is deemed sufficient for coal seam correlation and grade estimation purposes.</li> <li>Geostatistical analysis has been undertaken on the Nightcaps Project dataset. Ranges derived from variograms results have been utilised in the grade estimation search parameters.</li> <li>The samples database is composited to 0.5m sample length prior to grade estimation.</li> <li>Composite samples are not weighted.</li> <li>Any samples with composited length of less than 0.1m are not utilised during estimation. Compositing starts at the top of seam and small samples are not distributed or merged.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>All recent exploration drilling has been completed on a vertical orientation. The exception to this is three diamond drillholes that have been drilled with a dip of 45° and azimuth of 286°. These drillholes were drilled to assess the geotechnical properties of the western Coaldale highwall and were intended to intersect a fault.</li> <li>All historical drillholes are vertical. Those without deviation plots are assumed to be vertical.</li> <li>Any deviation from vertical is not expected to have a material effect on geological understanding due to the shallow nature of deposit. Average drillhole depth in the dataset is 47.7m, with the deepest coal intersection being at a depth of 86.4m.</li> <li>Most of the deposit presents a shallow seam dip between 3 and 15° although some localised steep dips do exist near fault margins.</li> <li>Vertical drilling is the most suitable drilling method of assessing the coal resource in the Nightcaps Coalfield.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Rigorous sample preparation and handling procedures have been followed by BRL.</li> <li>Coal samples are taken and recorded from drill core, sealed in plastic bags, and securely stored prior to being dispatched to the laboratory for analysis.</li> <li>It is not considered likely that individual coal samples face a risk of theft or sabotage as coal is a bulk commodity with little value for small volumes of coal from drill core.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Golder Associates (NZ) Limited (Golder) and BRL have reviewed the geological data available and consider the data used to produce the resource model is reliable and suitable for the purposes of generating a Coal Resource estimate to the extent that the Coal Resource estimate has been classified.</li> <li>BRL senior geologists have undertaken audits of the sample collection and analysis processes.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary																
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"><li>The Takitimu Mine resource model includes two coal permits and a privately held land parcel with coal rights attached that are wholly owned by Bathurst Coal Ltd (BCL).</li><li>Exploration Permit (EP) 60642 covers an area of 690.51 hectares (ha) and contains a portion of the resource area.</li><li>Mining Permit 53614 (MP 53614) covers the Black Diamond pit and is entirely included within the bounds of the resource model.</li></ul> <table><tr><th>Permit/Rights</th><th>Operation</th><th>Mining Type</th><th>Expiry</th></tr><tr><td>Exploration Permit 60642</td><td>Ohai</td><td>N/A</td><td>N/A</td></tr><tr><td>Mining Permit 53614</td><td>Coaldale</td><td>Opencast</td><td>04 Jun 2032</td></tr><tr><td>Private Coal Lot 1 DP 4505</td><td>Coaldale/Takitimu</td><td>N/A</td><td>N/A</td></tr></table>	Permit/Rights	Operation	Mining Type	Expiry	Exploration Permit 60642	Ohai	N/A	N/A	Mining Permit 53614	Coaldale	Opencast	04 Jun 2032	Private Coal Lot 1 DP 4505	Coaldale/Takitimu	N/A	N/A
Permit/Rights	Operation	Mining Type	Expiry														
Exploration Permit 60642	Ohai	N/A	N/A														
Mining Permit 53614	Coaldale	Opencast	04 Jun 2032														
Private Coal Lot 1 DP 4505	Coaldale/Takitimu	N/A	N/A														



Criteria	Commentary																																
	<ul style="list-style-type: none"><li>Royalties are paid to the Crown on coal mined from within MP 53614 and an Energy Resources Levy is paid to the Crown on all coal extracted from private and Crown owned coal.</li><li>A deferred consideration payment of 5% of gross sales revenue at mine gate is payable on all coal produced by the company in the Ohai area. The deferred consideration is for the acquisition of the New Brighton EP 40625 as announced in March 2015.</li><li>An access arrangement (AA) is in place to access a small parcel of private land in the southern portion of MP 53614. There are no royalty payments included as part of this agreement.</li><li>An AA is in place to access parcels of private land in the northeastern portion of MP 53614. There are royalty payments included as part of this agreement. The royalty is adjusted to the Price Producer Index (PPI) and Labour Cost Index (LCI).</li><li>BRL owns the remaining area of the Black Diamond opencut pit.</li><li>BRL has a lease agreement with the Southland District Council over a large land parcel covering the Takitimu pit area and mine infrastructure. The lease includes rights to explore for, extract and sell coal from within the parcel.</li><li>Figure 7 and Figure 8 show BRL's land ownership and access, and mineral rights within the project area.</li></ul>																																
Exploration done by other parties	<ul style="list-style-type: none"><li>All exploration post 2011 has been conducted by BRL.</li><li>Before 2011 and BRL taking responsibility for exploration, modern exploration was conducted by CRL for Takitimu Coal Limited (TCL) prior to the purchase by BRL.</li><li>Historical data has been traced back to original reports and logs held at Archives NZ storage centres.</li><li>Historical data has been thoroughly investigated for reliability and quality and, where the integrity of the data is limited, it has been omitted from the resource model.</li></ul>																																
Geology	<ul style="list-style-type: none"><li>The project is located in the Ohai Coalfield, New Zealand.</li><li>The Ohai Coalfield is a fault bounded basin containing Cretaceous sub-bituminous coal.</li><li>The defined Coal Resource is contained within the Morley and Beaumont formations.</li><li>The Cretaceous Ohai Group contains three formations – the Wairio, New Brighton and the Morley Formations.</li><li>The Eocene Nightcaps Group contains two formations – the Beaumont and Orauea Formations.</li><li>The two groups are separated by an unconformity, clearly distinguishable by micro-flora.</li><li>Most of the historical production has come from seams in the Morley Formation, which tend to contain higher quality coal. Coal seams are faulted and folded into complex structures. Coal thickness and extent varies as coal seams are often lenticular and split or washed out by fluvial sand channels and syn-depositional faulting and folding are indicated.</li><li>Morley Coal Measures of the Ohai Group have a combined vertical seam thickness which averages 8.2m; however, 23m thick seams have been recorded.</li><li>Beaumont Coal Measures of the Nightcaps Group have a combined vertical seam thickness which averages 0.5m; however, 7m thick seams have been recorded. Coal ranks from sub-bituminous C-B rank.</li><li>The Nightcaps Group Beaumont Formation Coal Measures are conformably overlain by Eocene Orauea Formation mudstone.</li><li>Coal rank ranges from sub-bituminous A to high-volatile bituminous C.</li></ul>																																
Drillhole Information	<p>Table 1: Showing summary of drilling data available within the model area</p> <table><tr><th>Years</th><th>Agency</th><th>Range of Collar ID</th><th># Holes</th><th>Drilling Method</th><th># Holes in structure Model</th><th># Holes in Quality Model</th><th>Geophysics Available</th></tr><tr><td>1944-1947</td><td>Various</td><td>d133 - d144</td><td>9</td><td>unknown</td><td>3</td><td>0</td><td>0</td></tr><tr><td>~1955</td><td>Various</td><td>236-245, 247-250, 255, 372, 376</td><td>17</td><td>unknown</td><td>13</td><td>0</td><td>0</td></tr><tr><td>1962</td><td>Black Diamond Collieries</td><td>280A - 285A</td><td>6</td><td>WD</td><td>6</td><td>0</td><td>0</td></tr></table>	Years	Agency	Range of Collar ID	# Holes	Drilling Method	# Holes in structure Model	# Holes in Quality Model	Geophysics Available	1944-1947	Various	d133 - d144	9	unknown	3	0	0	~1955	Various	236-245, 247-250, 255, 372, 376	17	unknown	13	0	0	1962	Black Diamond Collieries	280A - 285A	6	WD	6	0	0
Years	Agency	Range of Collar ID	# Holes	Drilling Method	# Holes in structure Model	# Holes in Quality Model	Geophysics Available																										
1944-1947	Various	d133 - d144	9	unknown	3	0	0																										
~1955	Various	236-245, 247-250, 255, 372, 376	17	unknown	13	0	0																										
1962	Black Diamond Collieries	280A - 285A	6	WD	6	0	0																										

Criteria	Commentary							
	1981 - 1984	Coal and Energy NZ Ltd	SC101 - SC111	11	Wash drilled, core	10	10	0
	1989	Downer Mining	DMDH01 - DMDH03	3	Wash drilled	0	0	0
	2006	Takitimu Coal Ltd	NC001 - NC012	14	HQ Triple Tube, OH	12	7	14
	2007	Takitimu Coal Ltd	T001	1	Trench	1	0	0
	Mar 2009	Takitimu Coal Ltd	NC013 - NC027	15	HQ Triple Tube, RC hammer, RC blade	15	15	11
	Feb 2010	Takitimu Coal Ltd	NC028 - NC044	17	RC hammer	16	12	16
	2010	Takitimu Coal Ltd	T002 - T004	3	Trench	2	0	0
	Aug 2010 - Sep 2010	Takitimu Coal Ltd	NC045 - NC060	16	Triple Tube Core, OH, RC hammer	11	9	8
	2012 - 2014	Takitimu Coal Ltd	NC061 - NC078, NC086 - NC117	50	Triple Tube Core, Open holed	48	29	13
	2013	Takitimu Coal Ltd	T005 - T011	7	Trench	7	3	0
	2013 - 2014	Takitimu Coal Ltd	CS001 - CS107	107	Trench	93	86	0
	2015	Takitimu Coal Ltd	BKDT001 - BKDT057	56	Trench	11	6	0
	2014 - 2020	Takitimu Coal Ltd	CS107- CS222	109	Trench	102	101	0
	2015 - 2020	Takitimu Coal Ltd	NC130- NC263	127	Triple Tube Core	127	80	23
	<ul style="list-style-type: none"><li>• Exploration drilling results have not been reported in detail.</li><li>• The exclusion of detailed exploration data from this document is considered to not be material to the understanding of the Table 1.</li></ul>							
Data aggregation methods	<ul style="list-style-type: none"><li>• The nominal cut-off for ash (adb) for constructing the Takitimu resource structure model is set at 35%.</li><li>• The resource model is built as a block model with 0.5m block thicknesses for coal. Coal ply data is used to grade estimate the block model.</li><li>• Coal ply data is composited into 0.5m samples for estimation. No weighting is used in the compositing.</li><li>• Some composite samples have been analysed by SGS as full seam minable sections for additional attributes including ash constituents, forms of sulphur, ash fusion temperatures, and ultimate analysis.</li><li>• Composite samples are not used in grade estimation.</li></ul>							
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"><li>• All exploration drillholes have been drilled vertically, and the coal seams are generally gently dipping.</li><li>• Reported and modelled seam intercept thickness is representative of the true seam thickness.</li></ul>							
Diagrams	<ul style="list-style-type: none"><li>• Diagrams can be found in the Appendix A for each of the following:<ul style="list-style-type: none"><li>○ Location map.</li><li>○ Regional Geology plan.</li><li>○ Plan showing coal ownership rights.</li><li>○ Plan showing access arrangement and land ownership status.</li><li>○ Plan showing exploration drillholes.</li><li>○ Plan showing historical mine workings.</li><li>○ Plan showing Morley Coal Resource classification areas.</li><li>○ Plan showing Morley Coal Reserve classification areas.</li></ul></li></ul>							

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Plan showing Beaumont Coal Resource classification areas.</li> <li>○ Plan showing Beaumont Coal Reserve classification areas.</li> <li>○ Plan showing Beaumont Formation coal seam floor contours.</li> <li>○ Plan showing Beaumont Formation full seam cumulative thickness isopachs.</li> <li>○ Plan showing Beaumont Formation full seam ash isopachs.</li> <li>○ Plan showing Beaumont Formation full seam sulphur isopachs.</li> <li>○ Plan showing Morley Formation coal seam floor contours.</li> <li>○ Plan showing Morley Formation full seam cumulative coal thickness isopachs.</li> <li>○ Plan showing Morley Formation full seam air dried ash isopachs.</li> <li>○ Plan showing Morley Formation full seam air dried sulphur isopachs.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• No exploration results are being presented in this Table 1, rather this document is focused on an advanced project that has been defined by geological models with associated Coal Resource estimates completed.</li> <li>• The exclusion of this information from this report is considered to not be material to the understanding of the deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Exploration drilling results have not been reported in detail.</li> <li>• The Black Diamond pit is in commercial production. Production in the Coaldale pit is completed with all coal resources mined out and the area is currently being backfilled.</li> <li>• Substantial ash constituent data has been compiled on coal samples and coal composite samples for the Coaldale and Black Diamond pit areas.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• No further work is currently planned on the Black Diamond mining area, however some further geological investigations may take place proximal to the current mining infrastructure.</li> </ul>

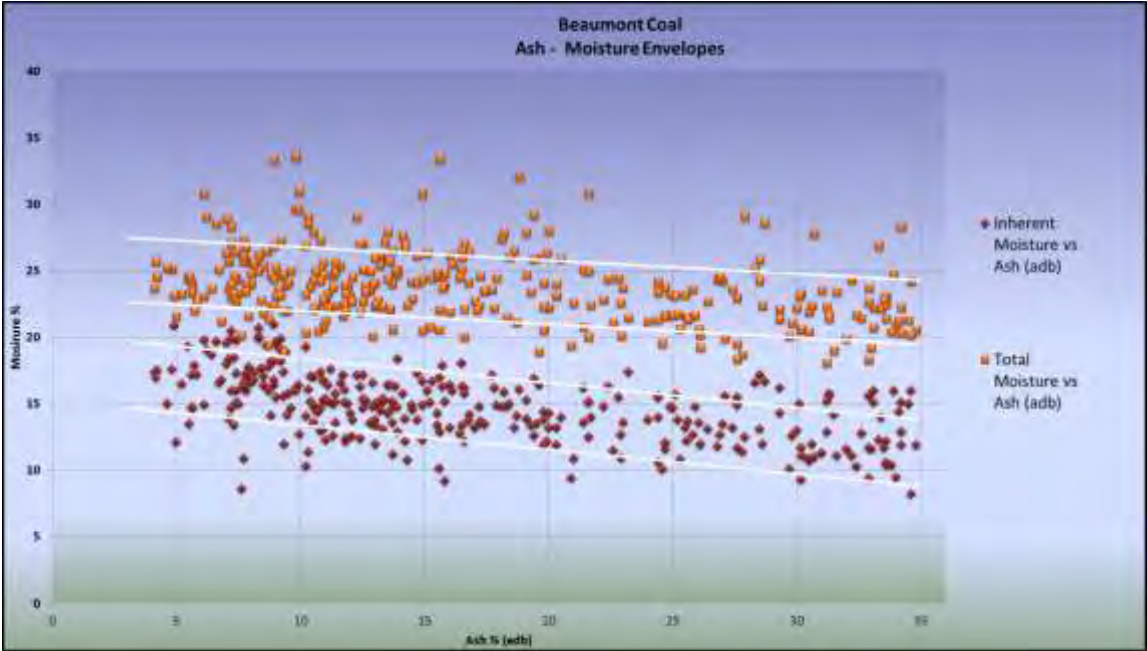
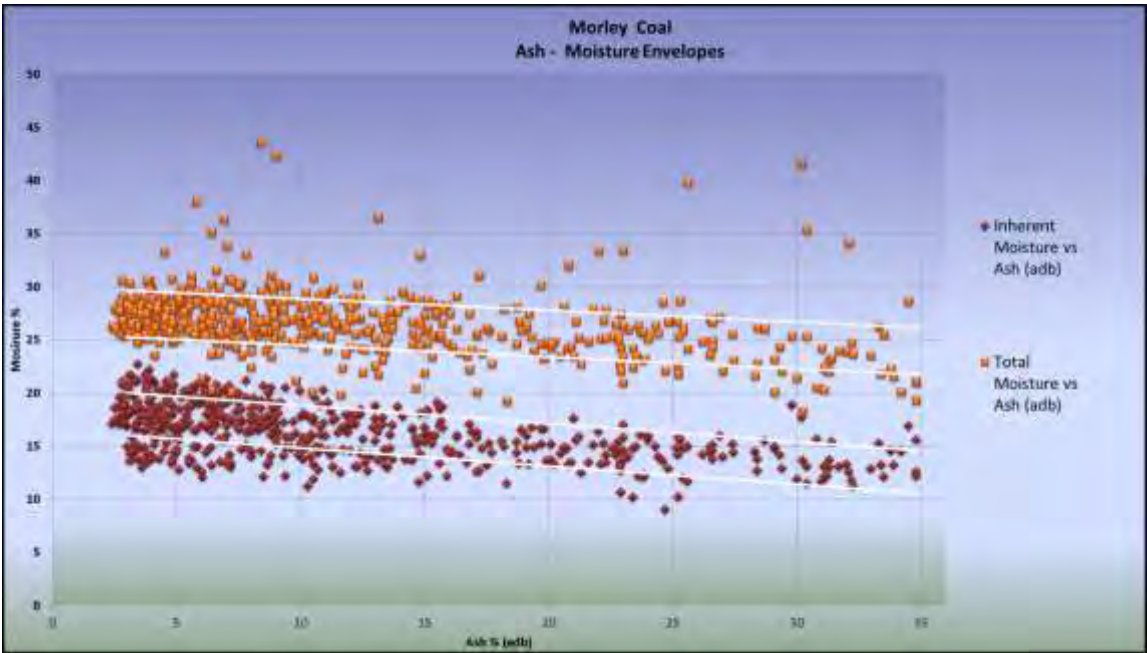
### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• BRL utilises an acQuire database to store and maintain its exploration dataset.</li> <li>• All historical and legacy datasets have been thoroughly validated against original logs and results tables. Where reliability of the data is poor, the data is excluded from the the resource modelling dataset.</li> <li>• The acQuire database places explicit controls on certain data fields as they are entered or imported into the database, such as overlapping intervals, coincident samples, out of range sample values, standardised look-up tables for logging codes.</li> <li>• Manual data entry of coal quality results is not required as results are imported directly from laboratory results files.</li> <li>• The database is automatically backed up on an offsite server.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• Eden Sinclair (the Competent Person) has visited the site on numerous occasions over the past 10 years conducting multiple exploration programmes and is familiar with the site.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• Golder has reviewed the modelling processes in use by BRL to develop their resource model and Coal Resource estimates.</li> <li>• Golder has confidence in the methodologies used by BRL for geological modelling and the interpretation of the available Takitimu Mine data. Confidence varies for different areas, and this is reflected in the resource classification.</li> <li>• Dry, mineral matter and sulphur free volatile matter is the principal quality used to differentiate and correlate Beaumont and Morley coal seams.</li> <li>• BRL uses a multivariate approach to resource classification, which considers a number of variables.</li> <li>• The Competent Person considers the quantity of geological data sufficient to estimate Coal Resources.</li> <li>• Uncertainty surrounds the historic underground and opencast workings, both in the quality and quantity of coal extracted and the surveying of underground workings. This is reflected in the resource classification.</li> <li>• Some residual uncertainty of quality and confidence of historic drilling data remains despite</li> </ul>



Criteria	Commentary
	thorough evaluation of the historic logs and drill locations.
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>Several coal seams are present in two main seams in the Beaumont Formation and up to four in the Morley Formation. The total combined coal thickness varies from less than 1m thick up to 25m locally.</li> <li>The model covers an area 2.4km in width by 3.6km in length.</li> <li>The deposit resource consists of the Black Diamond pit which covers an area approximately 80ha.</li> <li>The deposit is bounded by the Nightcaps Fault to the northeast and the Fern Fault to the northwest.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>All available exploration data has been validated and, where reliable, has been used to develop a 3D geological block model for Coal Resource estimation and classification.</li> <li>All exploration drilling data is stored in an acQuire database and exported to a Maptek Vulcan™ (Vulcan) drillhole database.</li> <li>Interpretive design data is stored within Vulcan in various layers.</li> <li>Due to the presence of two unconformable coal bearing formations, the model is sub-divided into two separate formation domains for modelling (Morley and Beaumont). The Morley coal seams are truncated by the overlying unconformable Beaumont coal measures.</li> <li>The model is domained further into four fault blocks (Basement, Black Diamond, Coaldale and South) using the large Trig E, Black Diamond, Fern, and the Tinker/Nightcaps faults as bounding surfaces.</li> <li>Each domain is modelled for structure and grade separately.</li> <li>A horizons definition was developed and used to define the coal seams to be modelled in the stratigraphic modelling process.</li> <li>Vulcan 12 is used to build the structure model. Grid spacing is 10m x 10m.</li> <li>Maptek's Integrated Stratigraphic Model module is used to produce the structure model. The 'Hybrid Method' was used to develop the structure model. This method triangulates a reference surface and then stacks the remaining horizons by adding structure thickness grids. Thickness grids are created using an inverse distance (ID) modelling algorithm. Design data from other horizons is incorporated into the final grid structure.</li> <li>Modelling parameters for the two structural modelling passes are as follows: <ul style="list-style-type: none"> <li>Beaumont Formation - Reference grid surface (NB21 roof) by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1 (Linear).</li> <li>Smoothing is 9.</li> <li>The maximum triangle length is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Beaumont Formation - Reference grid thickness modelling by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 0 (Horizontal Planar).</li> <li>Smoothing is 9.</li> <li>Search Radius is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Morley Formation - Reference grid surface (UM211 roof) by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 0 (Horizontal Planar).</li> <li>Smoothing is 9.</li> <li>The maximum triangle length is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Morley Formation - Reference grid thickness modelling by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1 (Linear).</li> <li>Smoothing is 9.</li> <li>Search Radius is 1,500m.</li> <li>Surfaces are splined.</li> </ul> </li> </ul> </li> </ul>

Criteria	Commentary						
	<ul style="list-style-type: none"> <li>Structure grids are checked and validated visually before being used to construct the resource block model.</li> <li>Vulcan is used to build the block model and to estimate grade. The process is automated using a Lava script.</li> <li>The stratigraphic structure grids for each domain, along with end of month site survey combined with LiDAR topography surface, Beaumont unconformity surface, and other mining related surfaces for Black Diamond, Coaldale and Takitimu pit areas were used to build the block model. The block dimensions are constructed at 10m x 10m. Vertical thickness for coal blocks is 0.5m.</li> <li>Block Grade estimation is performed in Vulcan using the Tetra Projection unfolding methodology.</li> <li>The Beaumont seams and Morley seams are estimated in the three fault domains. <ul style="list-style-type: none"> <li>Proximate and sulphur coal qualities are estimated on an air-dried basis.</li> <li>Ash, moisture, volatile matter, and are estimated simultaneously.</li> <li>Calorific value is estimated on a dry ash free basis (daf) and converted to an air-dried basis based on the block ash and moisture estimates. This enables changes in coal rank across the area to be accurately modelled.</li> </ul> </li> <li>Sulphur is estimated using a different search ellipse as indicated by geostatistics. Variability in sulphur may be related to post depositional fluid flow in NE-SW trending fault structures. Sulphur is shown to be elevated in close proximity to these fault zones.</li> <li>Geostatistics of the coal quality dataset has been examined to determine any spatial relationships and define the estimation search parameters for each coal seam quality and thickness. The maximum search radius is set to the maximum range of influence found in the semi-variogram for ash dependent variables and for sulphur.</li> <li>Grade estimation is computed using an inverse distance squared function for ash dependent qualities, and inverse distance squared function for sulphur.</li> <li>Various methods have been used to check the validity of the block estimation. This includes manual inspection of the model, Quantile Quantile (QQ) plots of the model qualities vs coal quality database and other comparison tools.</li> <li>Mining reconciliation has been completed on the resource model to check model accuracy within the mining area. To date the results are within the bounds of expected variability based on resource classification used with mining factors applied. No other bulk reconciliation has been completed.</li> <li>Resource tonnages within the model have been discounted where the resource falls within historical underground workings areas.</li> <li>The primary underground mining method utilised historically in the Nightcaps area is bord and pillar mining. Extraction rates using this type of mining generally reduce as seam thickness increases. Historic extraction rates are estimated using mining extraction reports, and work completed by Yardley <i>et al.</i> 1986. <math>Ug\_extract = (-0.0276 * um\_tk + 0.6411) * 100</math>.</li> <li>Previous opencast mining was also undertaken in the Takitimu Mine area.</li> <li>The extraction rates used to discount coal tonnages in the resource model are as follows: <table> <tr> <th>Mining Method</th><th>Extraction Rate</th></tr> <tr> <td>Underground workings</td><td> Morley coal discounted at rate shown in the equation above with a minimum rate of 25% extracted  Beaumont coal discounted by 10% due to collapsed ground. </td></tr> <tr> <td>Opencast</td><td>100% of all coal seams</td></tr> </table> </li> <li>Reconciliation data from the Black Diamond pit supports these extraction rates on a medium to long term basis, and for the FY24 year reconciliation resulted in production within 4% of that modelled.</li> <li>No acid mine drainage occurs at the Takitimu Mine due to the non-acid forming lacustrine</li> </ul>	Mining Method	Extraction Rate	Underground workings	Morley coal discounted at rate shown in the equation above with a minimum rate of 25% extracted Beaumont coal discounted by 10% due to collapsed ground.	Opencast	100% of all coal seams
Mining Method	Extraction Rate						
Underground workings	Morley coal discounted at rate shown in the equation above with a minimum rate of 25% extracted Beaumont coal discounted by 10% due to collapsed ground.						
Opencast	100% of all coal seams						

Criteria	Commentary
	depositional environment of the coal measures and therefore acid generation models have not been completed.
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Moisture, both on an air-dried and total moisture basis, is estimated into the resource model from the sample database after using a cut-off envelope to cut samples that vary excessively from the norm. Natural variability in bed moisture is amplified by excessive variability in the sampling process and laboratory testing methods.</li> <li>The cut-off envelope used was derived from <math>\pm 0.67</math> times the standard deviation of the dataset. Figure 2 and Figure 3 show the envelope used for Morley and Beaumont coal.</li> </ul>
	 <p>Figure 2: Inherent moisture and total moisture cut-off envelopes for Beaumont coal</p>
	 <p>Figure 3: Inherent moisture and total moisture cut-off envelopes for Morley coal</p>
	<ul style="list-style-type: none"> <li>This technique compares favourably to the Run of Mine coal sampling data from the Takitimu Mine and provides a more accurate representation of coal bed moisture than using a single value for total moisture across the deposit and estimating qualities on a dry basis.</li> <li>Resource tonnages are reported using natural bed moisture, calculated using the Preston and Sanders equation.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>Structure grids have been developed based on a 35% ash cut-off. Some higher ash intervals</li> </ul>



Criteria	Commentary
	<p>are retained within the coal quality dataset to allow simplification of the seam model.</p> <ul style="list-style-type: none"> <li>No lower ash cut-off has been applied.</li> <li>Moisture data has an upper and lower cut-off applied as described in the previous section.</li> <li>Coal resources are reported down to a seam thickness of 0.5m (one block) with an ash cut-off of 25%.</li> <li>Resources have been defined as economic by using a Lerchs-Grossman optimised pit shell using budgeted mining costs and contracted coal sales values. The 1.0 Revenue Factor (RF) shell from the optimisation has been used. No resources have been reported outside of this pit shell. This optimised pit shell is used to determine Reasonable Prospects for Eventual Economic Extraction (RPEEE).</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The Black Diamond open pit is in commercial production utilising truck and excavator mining.</li> <li>Long term coal sales contracts are tied to inflation (Labour Cost Index, Producers Price Index) for the mining industry.</li> <li>No other mining factors such as mining losses and dilutions have been applied when developing the resource model.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>No metallurgical assumptions have been applied in estimating the resource.</li> <li>Currently no wash plant is used at the Takitimu Mine. Run-of-Mine (ROM) coal produced is processed through a crushing/screening plant where losses are minimal.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>No environmental assumptions have been applied in developing the resource model.</li> <li>The Black Diamond pit is currently in commercial production and there is a large area available for waste disposal.</li> <li>Overburden has been shown to be non-acid forming.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>A total of 89 relative density (air-dried) sample results are available for the Morley coal, and 38 samples are available for Beaumont coal.</li> <li>The samples are distributed throughout the Takitimu Mine area and the sample set covers a range of ash values from 3.8% to 50.3%.</li> <li>From this dataset an ash-density curve was generated with a coefficient of determination of <math>R^2=0.87</math> for Morley Coal, and <math>R^2=0.94</math> for Beaumont coal (Figure 4).</li> </ul>
	<p>Figure 4: Graph showing Ash (adb) - Relative Density (adb) relationship for both Morley and Beaumont coal</p> <ul style="list-style-type: none"> <li>Air dried relative density (RD<sub>ad</sub>) is calculated using the air-dried block ash (Ash<sub>ad</sub>) value and the derived density equations.</li> </ul> <p style="text-align: center;">Morley coal: <math>RD_{ad} = (0.00006 * Ash_{ad}^2) + (0.0065 * Ash_{ad}) + 1.3595</math></p>

Criteria	Commentary
	<p>Beaumont coal: <math>RD_{ad} = (0.00009 * Ash_{ad}^2) + (0.005 * Ash_{ad}) + 1.3085</math></p> <ul style="list-style-type: none"> <li>An in situ bulk density (<math>RD_{ps}</math>) value is computed using the Preston Saunders method;  <math>RD_{ps} = (RD_{ad} * (100 - mo_{ad})) / (100 + RD_{ad} * (mo_{ar} - mo_{ad}) - mo_{ar})</math></li> <li>Where <math>RD_{ad}</math> is relative density on an air-dried basis, <math>mo_{ad}</math> is inherent moisture, and <math>mo_{ar}</math> is total bed moisture.</li> <li>The Black Diamond pit is in commercial production and reconciliations have confirmed density estimates.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>BRL classifies resources using a multivariate approach.</li> <li>Coal resources have been classified on the basis of geological and grade continuity balanced by relative uncertainties surrounding historical underground extraction, historical fire-affected areas and proximity to faults and unconformities.</li> <li>Closely spaced drillholes with valid coal quality samples (point of observation) increase the confidence in resource assessments.</li> <li>The confidence is reduced by: <ul style="list-style-type: none"> <li>A block being within an area of historical underground workings due to extraction rate uncertainty.</li> <li>A block being within 20m of historical underground workings due to uncertainty with historical survey of the workings and georeferencing of mine plans.</li> <li>A block lying in an area where structure dip is greater than 20° due to proximity to large faults. Faulting can impact coal thickness and quality.</li> <li>A block lying within an area with thin or splitting seams resulting in uncertainty of geological continuity. Where a seam is thin or is splitting, a small change in thickness can have a large impact to reported vs actual coal tonnages and qualities.</li> <li>A block being within an area close to a possible erosional 'washout' of Morley coal as indicated by historic underground mine plans and extents.</li> <li>A block lying within an area identified to be affected by historical underground mine fires.</li> <li>A block is less than 2m below the modelled regional unconformity between Beaumont and Morley formations due to uncertainties in unconformity surface topology.</li> </ul> </li> <li>Essentially, in an area that is not affected by the above conditions, a distance to nearest sample of less than 75m would be classified as Measured, less than 150m is classified as Indicated and less than 400m would be classified as Inferred.</li> <li>Figure 11 and Figure 13 present the resource classification polygons for Morley and Beaumont Coal. Economic resources are reported from within these polygons provided they lie within the Lerchs-Grossman optimised opencast pit shell.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Previous iterations of the model were reviewed by BRL mine engineering staff and the Domestic Resources Manager as part of the mine planning for the Black Diamond pits.</li> <li>The currently reported model has been reviewed by the Competent Person.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>The Competent Person has reviewed the Coal Resource estimates and has visited the existing operations. The Competent Person has examined the methodology used to estimate the resources and reserves and is satisfied that the processes have been properly conducted. The estimation methodology is generally in accordance with industry practice and the estimates can be regarded as consistent with the requirements of JORC 2012.</li> <li>Statistical comparisons between the resource block model and the coal quality data set have been carried out and are within expected ranges.</li> <li>The Takitimu mine utilises the resource model modified to a reserve model for mine planning and scheduling. Production reconciliation for the Black Diamond production completed until June 2022 shows that ROM coal produced reconciles to within 10% of the expected coal resources defined by the model. Classification of mined coal in this period was split evenly between Measured and Indicated coal.</li> </ul>

## Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>The Coal Resource estimates used are the Coal Resource estimates undertaken by the Competent person as outlined in Section 1-3.</li> <li>Drillholes are validated then coded to create a structural grid model using Vulcan™ software by BRL. This structural model forms the framework that a 3D block model is created by BRL geologists. The model includes topography, seam structure and coal qualities used for in situ Coal Resource estimation.</li> <li>A 3D Resource Block model of topography, structure and quality are used for in situ Resource definition. Coal quality values are estimated into the block model by BRL.</li> <li>The model mining includes mining modifying factors including factors that account for previous surface and underground mining extraction and fires, coal recovery and economics.</li> <li>Coal Resources are inclusive of Coal Reserves.</li> <li>The Coal Reserve estimates are for Takitimu Mine, a long-term operating site. Remaining Coal Reserves are within the active Black Diamond pit area,</li> <li>A decrease in the previously reported Takitimu Coal Reserves is primarily attributed to the following changes: <ul style="list-style-type: none"> <li>Depletion by surface and stockpile mining.</li> <li>Mining modifying factors adjusted to account for lower recoveries following reconciliation for the Black Diamond pit previously worked underground areas in the UM2 seam.</li> </ul> </li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Sue Bonham-Carter (the Competent Person) is a consultant to BT Mining</li> <li>Ms. Bonham-Carter has over 23 years' experience working in New Zealand coalfields, including a term as General Manager of Resource Development January 2023 to July 2023 for BRL.</li> <li>Ms Bonham-Carter visited the site on several occasions during the period from 30 June 2023 to 30 June 2024.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>Takitimu is an operating mine with the Black Diamond pit currently in production.</li> <li>The reportable Coal Reserve is based on actual site performance, costs on the life of mine (LOM) plan and has determined a mine plan that is technically achievable and economically viable, and that material modifying factors have been considered.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>Lerch Grossman techniques were applied using standard industry software (Whittle) to determine the economic pit extents, updated in December 2020.</li> <li>A maximum ash cut off of 25% (arb) is applied.</li> <li>Coal Reserves are only reported from the Beaumont and Morely seam horizons.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The Takitimu mining area has been operational since 2007, with the current Black Diamond pit starting in 2017. Costs and prices are derived from actual and budget.</li> <li>In 2018 a significant review of mining recovery factors was undertaken. Allowance was made in the reserves for coal to be contract washed offsite at the Ohai coal plant. Variable clean coal recovery factors were estimated for sections of the remaining Coaldale and Black Diamond pit areas. Recovery factors were based on the presence of coal workings and the presence of Beaumont sediment intrusions into Morley coal seams.</li> <li>Different mining loss is applied to the in situ coal for different areas of historic mining. Periodically, the ROM coal production is reconciled against depletion of the mining model. The FY24 reconciliation showed 4% gain vs modelled. The estimated underground extraction is calculated using the following data from Yardley ug_extr = <math>(-0.0276 * um\_tk + 0.6411) * 100</math>.</li> <li>The Takitimu Mine utilises small scale mining truck and excavator methods for waste and coal movement. The operations are supported by additional equipment including dozers, graders, loaders and water carts.</li> <li>Geotechnical parameters are based on geotechnical studies undertaken by BRL engineering staff, studies have been completed for active pit areas and a slope stability monitoring program in place.</li> <li>Moisture Adjustments: Moisture is modified during both the mining and processing operations. In situ moisture is determined by the process described in Section 3 and is the base point for</li> </ul>



Criteria	Commentary
	<p>all moisture adjustments. Recoverable Coal Reserves are stated on a ROM moisture basis, as received by the processing plant. Marketable Coal Reserves are stated on a product moisture basis, as sold.</p> <ul style="list-style-type: none"> <li>Current mining methods require the following infrastructure; haul roads, drainage, pumps, sumps and ponds, coal stockpile areas, crushing and screening processing plant, coal load out and bins, weighbridge, workshop, offices, ablutions, and security and first aid. New infrastructure required is limited to water management and access such as sumps, drains and diversions as the mining progresses into new blocks.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The ROM coal produced at Takitimu is crushed and screened on site prior to sale. A process recovery of 95% is used based on a processing reconciliation study.</li> <li>There is currently no coal washery.</li> <li>Product coal specifications include ash, sulphur, moisture and calorific value.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>All mining approvals, consents, permits and licences are currently in place to operate the mine.</li> <li>Waste rock characterisation results show that the material is non-acid or metal producing, as such it does not require special placement requirements or procedures in the dumps.</li> <li>Disturbed areas are progressively rehabilitated to the specified end land use (primarily pasture) on completion of mining activities.</li> <li>Soil and vegetation is salvaged and either directly place on completed landforms or taken to a holding stockpile.</li> <li>There is a shortfall in topsoil available for rehabilitation with approximate amount of 125kbcm. To cover the rehabilitation liability soil is being imported from offsite (just over 15,000 tonnes imported to date) and a spray on seed and mulch trial planned.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>All necessary infrastructure is in place and operational for the current operation.</li> <li>Manpower and accommodation for labour is sourced from nearby towns and villages.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>All infrastructure is in place at Takitimu. The primary ongoing capital requirements are and related to site rehabilitation, tools and minor equipment replacement, and this is included in the economic model.</li> <li>All operating costs were based on the Takitimu three-year budget estimates developed by BRL and include allowances for royalties and levies, commissions, mining costs, rehabilitation, train loading and administration.</li> <li>A deferred consideration payment of 5% of gross sales revenue at mine gate is payable on all coal produced by the company in the Ohai area.</li> <li>An access arrangement (AA) is in place to access a small parcel of private land in the southern portion of MP 53614. There are no royalty payments included as part of this agreement.</li> <li>An AA is in place to access parcels of private land in the northeastern portion of MP 53614. There are royalty payments included as part of this agreement. The royalty is adjusted to the Price Producer Index (PPI) and Labour Cost Index (LCI).</li> <li>Mine Rescue Levy, Energy Resources Levy, Crown Royalty, permit fees, FME carbon and land rates are applied as per appropriate NZ legislation prices at the mine gate. Customers pay for transport.</li> <li>Product specifications and penalties for failure to meet specification were applied.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>Prices are at the mine gate. Customers pay for transport.</li> <li>Product specifications and penalties for failure to meet specification were applied.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>Long term supply contracts are in place for the remaining mine life.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>Takitimu is an operating mine.</li> <li>The reported Coal Reserve is based on economic viability determined by BRL conducted cashflow analysis using actual site performance, costs, mine plans and BRL's long term contracts for sales and pricing.</li> <li>Detailed mine design and schedules are generated annually. This work includes identifying the mining sequence and equipment requirements.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>BRL have required approvals and key stakeholder agreements in place for operations.</li> <li>New Zealand is transitioning to low carbon future, some customers planning to reduce coal</li> </ul>

Criteria	Commentary
	use. The mine life and economic assumptions are based on the coal reserve depletion, existing coal supply contracts and the BRL long term marketing plan based on an estimated decarbonisation schedule.
<b>Other</b>	<ul style="list-style-type: none"> <li>All mining projects operate in an environment of geological uncertainty. The Competent Person is not aware of any other potential factors, legal, marketing or otherwise, that could affect the planned operations viability.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources only.</li> <li>For the Takitimu operation, Measured Coal Resources are classified as Proved Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the mine is currently operating and the level of mine planning adequate.</li> <li>The Inferred Coal Resources have been excluded from the Coal Reserve estimates.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Internal peer review and reconciliation by BRL of the Reserves estimate has been completed. Reconciliation of modelled verses actual of the last 12 months coal recovery was 2%.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Annually, the ROM coal production is reconciled against depletion of the mining model. Accuracy and confidence of modifying factors are generally consistent with the current operation, there is uncertainty in estimation of seam thickness near faulting, underground extraction and fire losses in the UM2 seam.</li> </ul>

Appendix A:



Figure 5: Location of resource



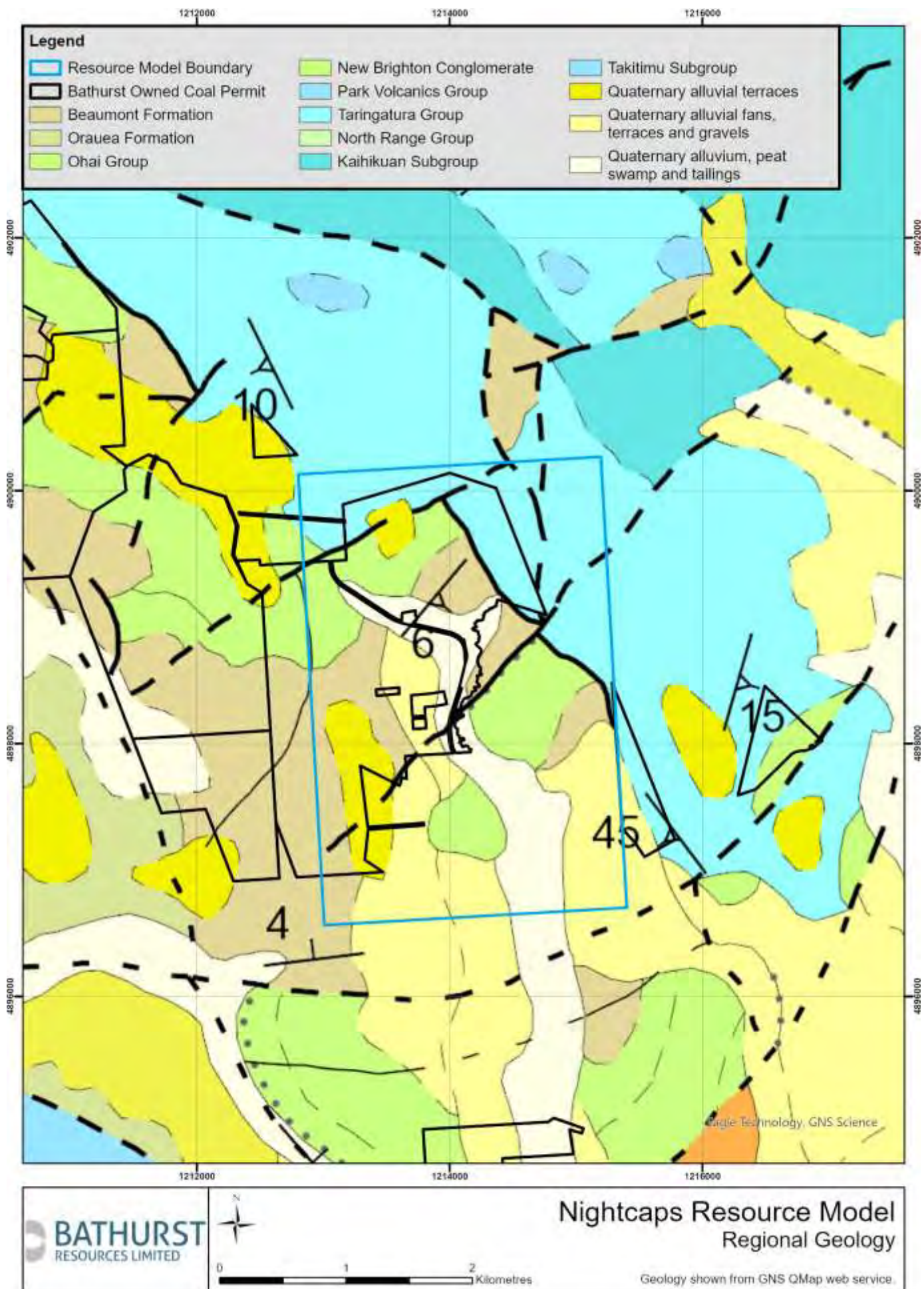


Figure 6: Regional Geology within the project area



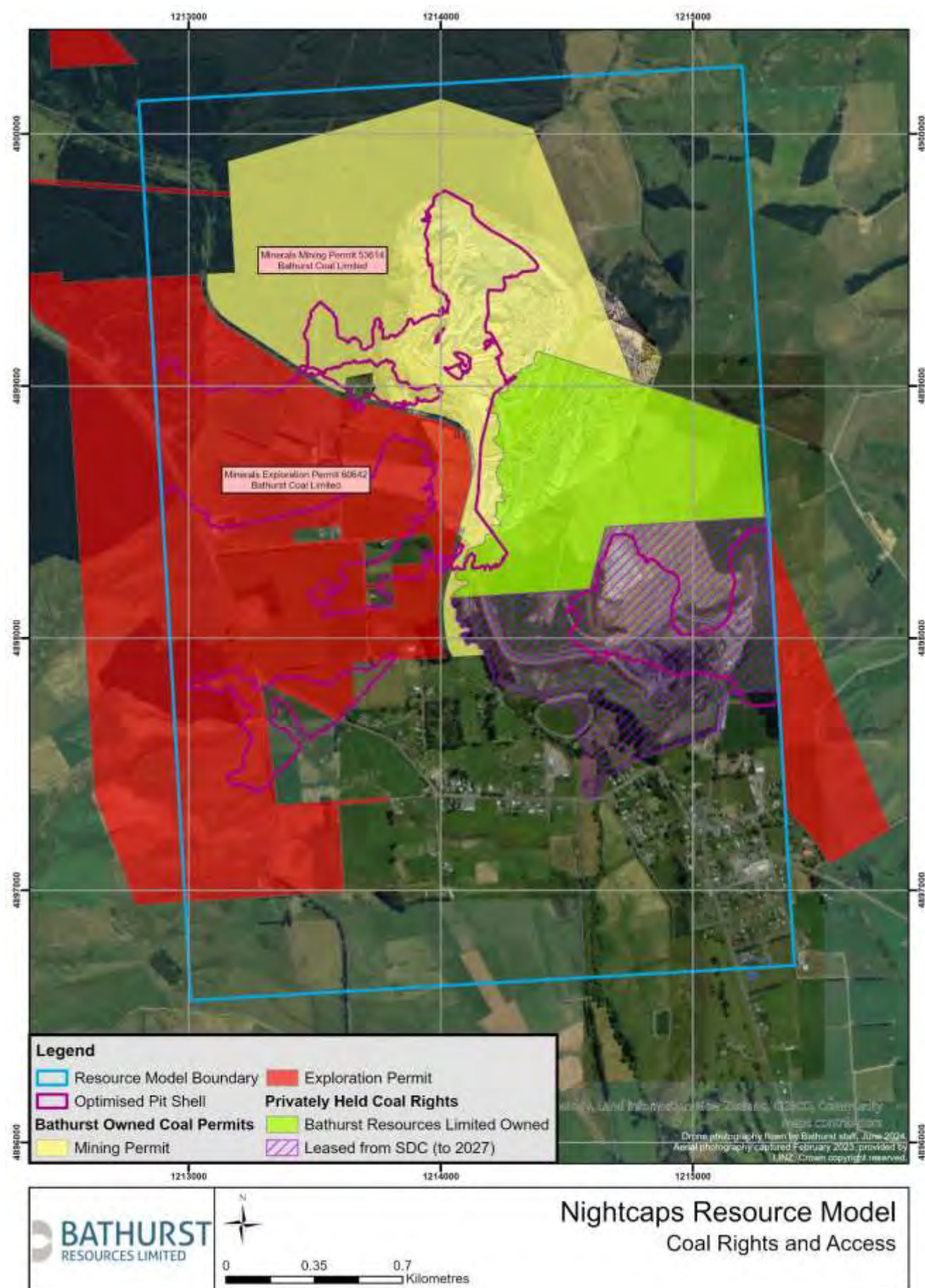


Figure 7: Land areas that BRL holds coal ownership rights



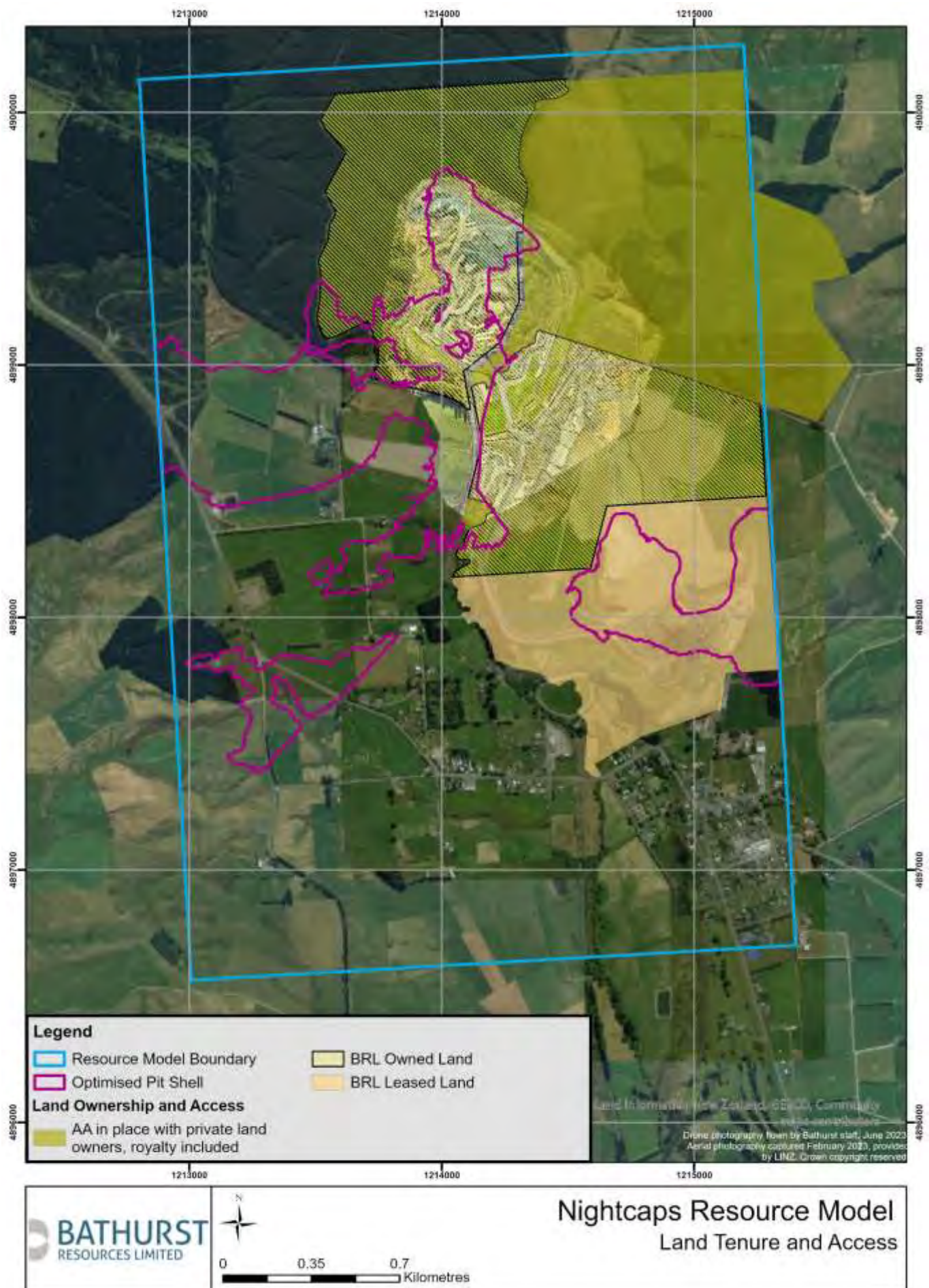


Figure 8: Access arrangement and land ownership status of land parcels within the project areas



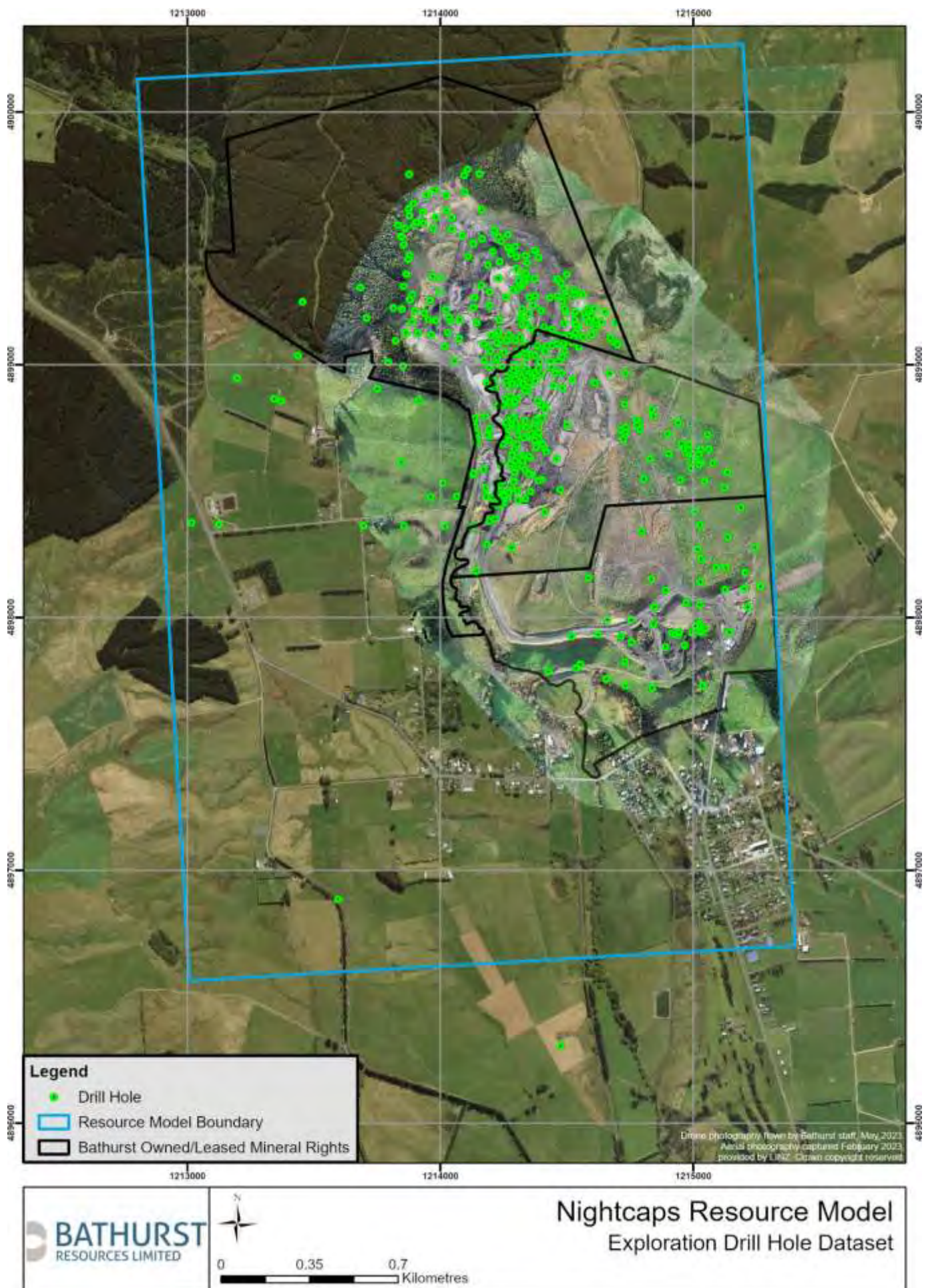


Figure 9: Location of drilling around Resource Area



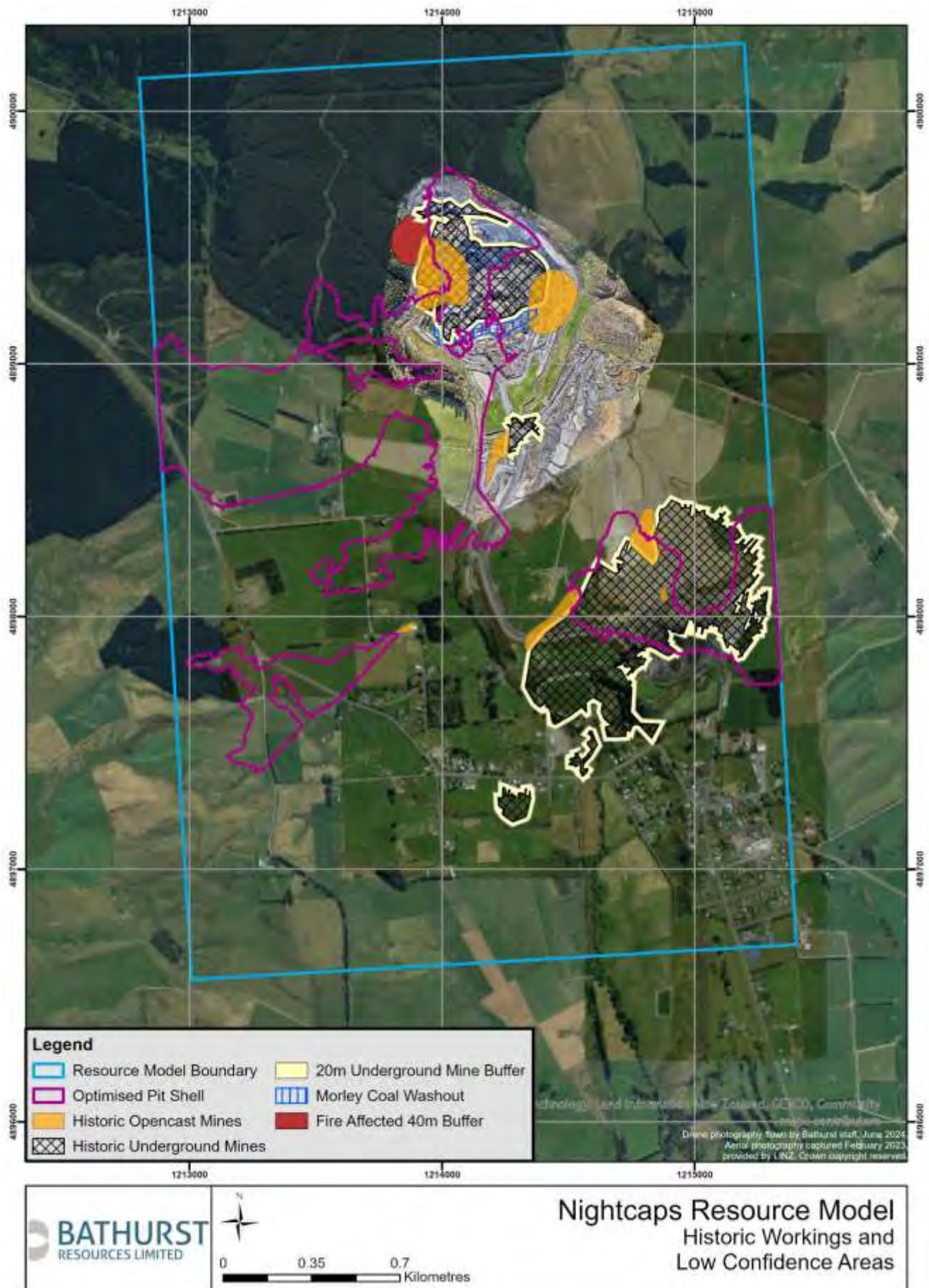


Figure 10: Location of historic mine workings and areas of low confidence  
Note: Recent opencast mined areas are not shown.

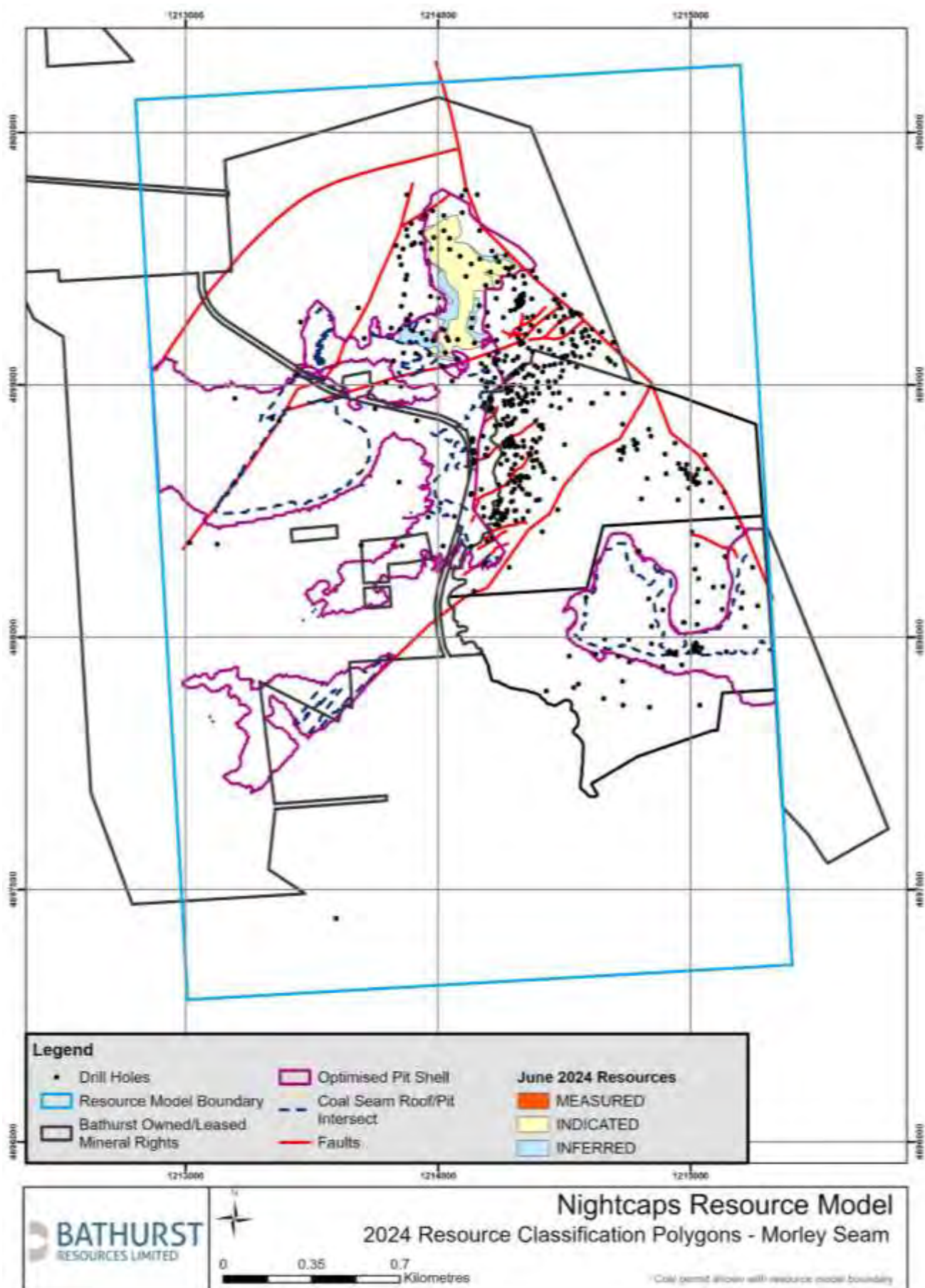


Figure 11: Morley Coal Resource classification areas



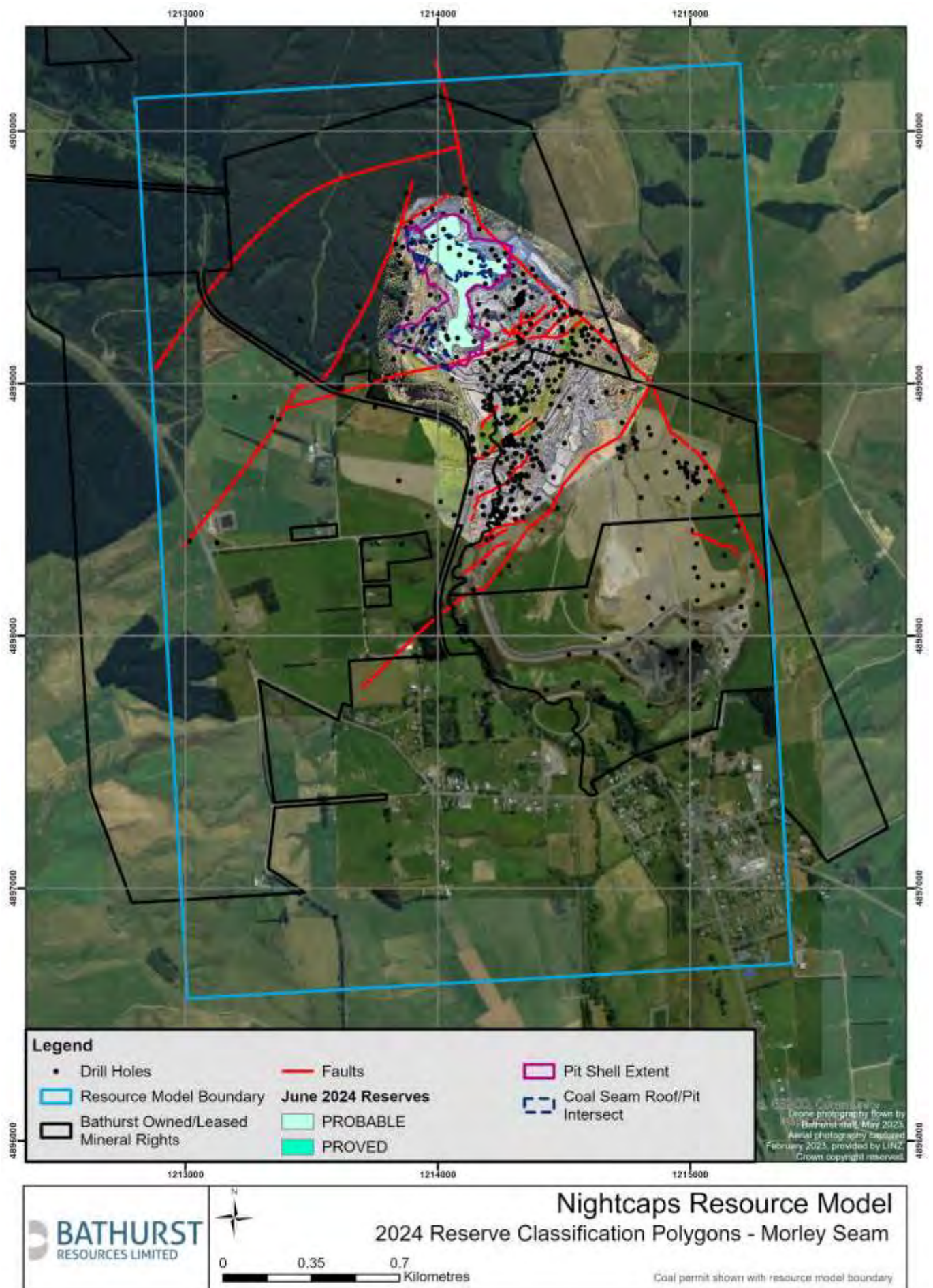


Figure 12: Morley Coal Reserve classification areas

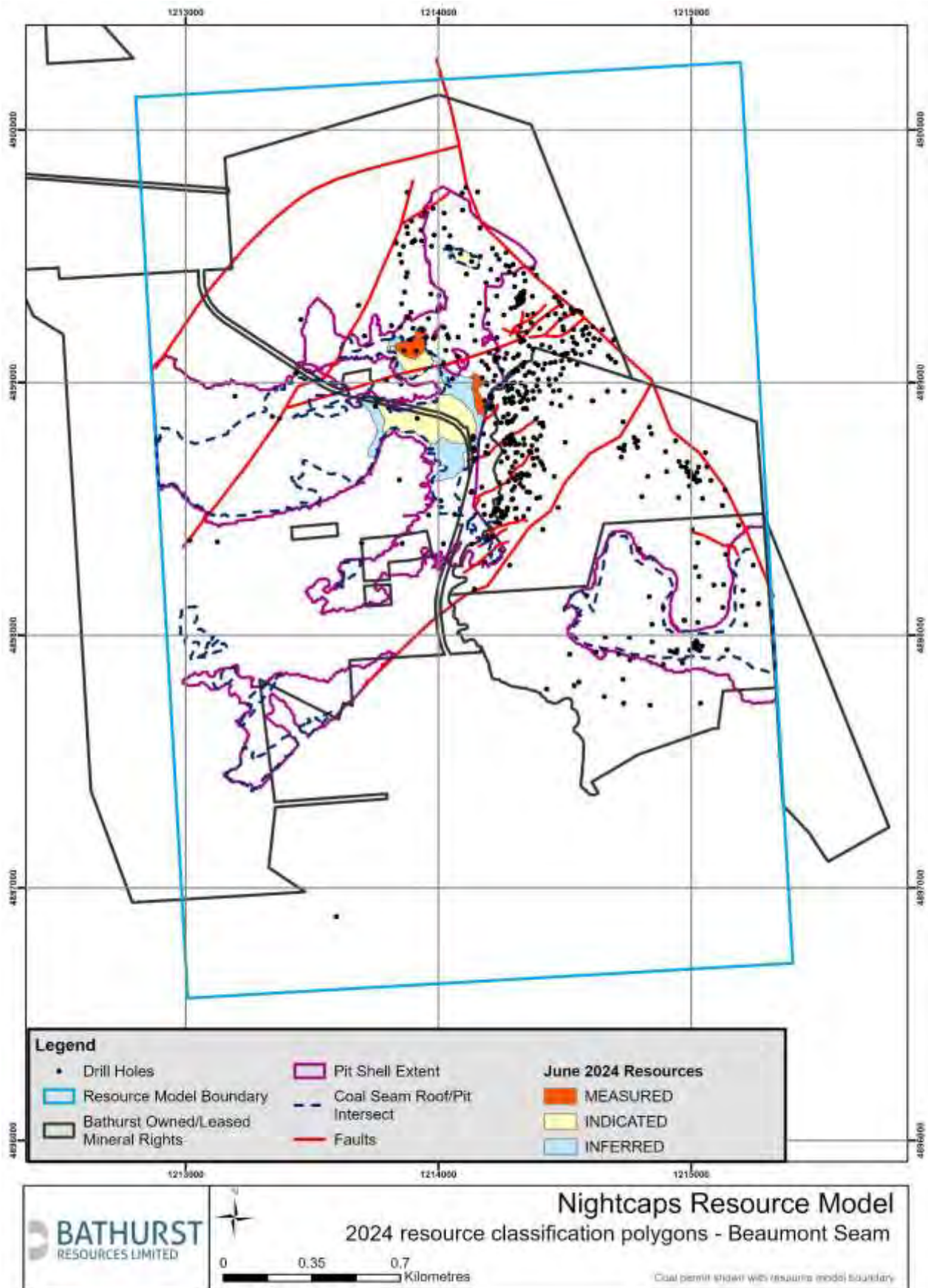


Figure 13: Beaumont Coal Resource classification areas



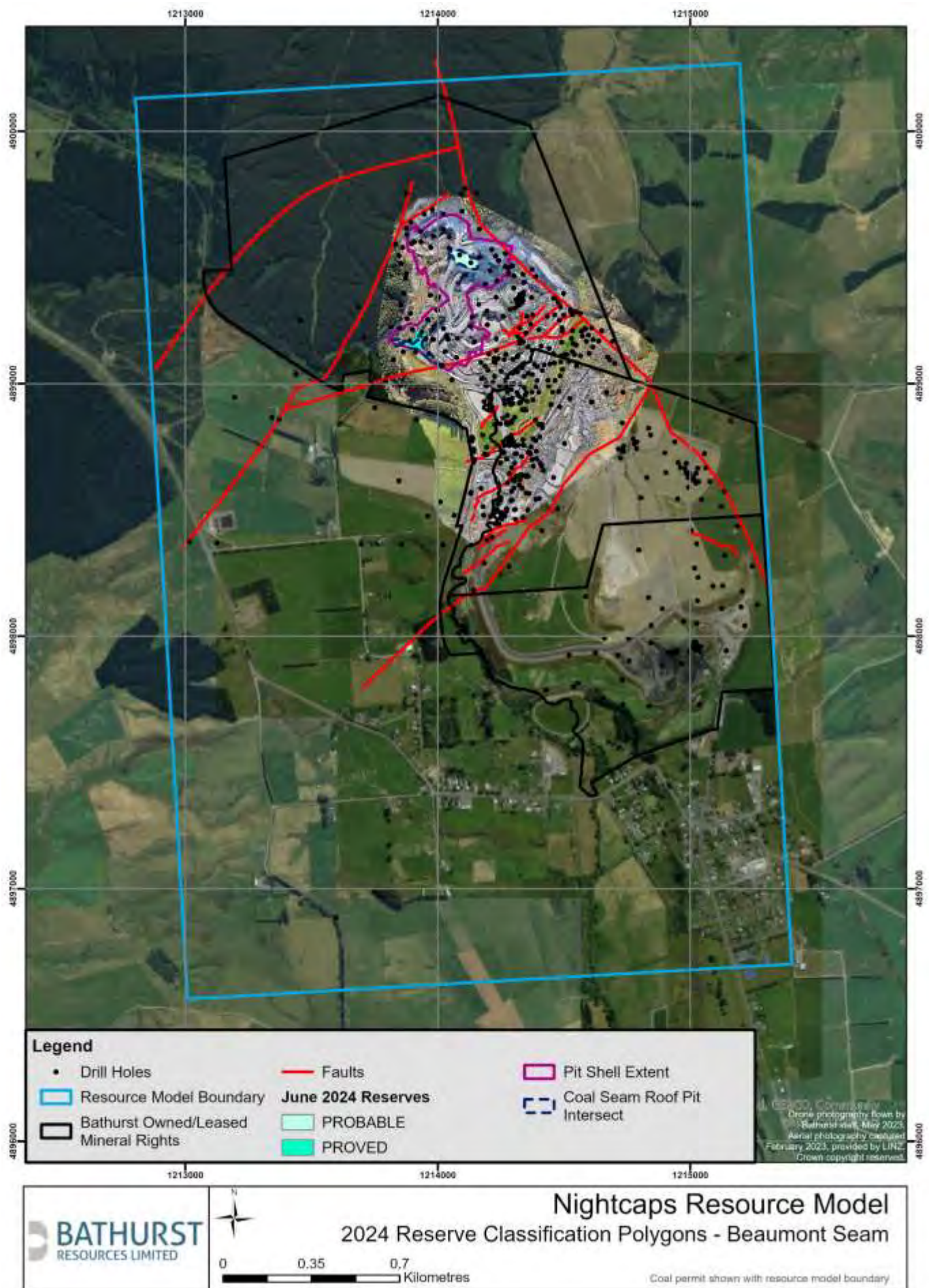


Figure 14: Beaumont Coal Reserve classification areas



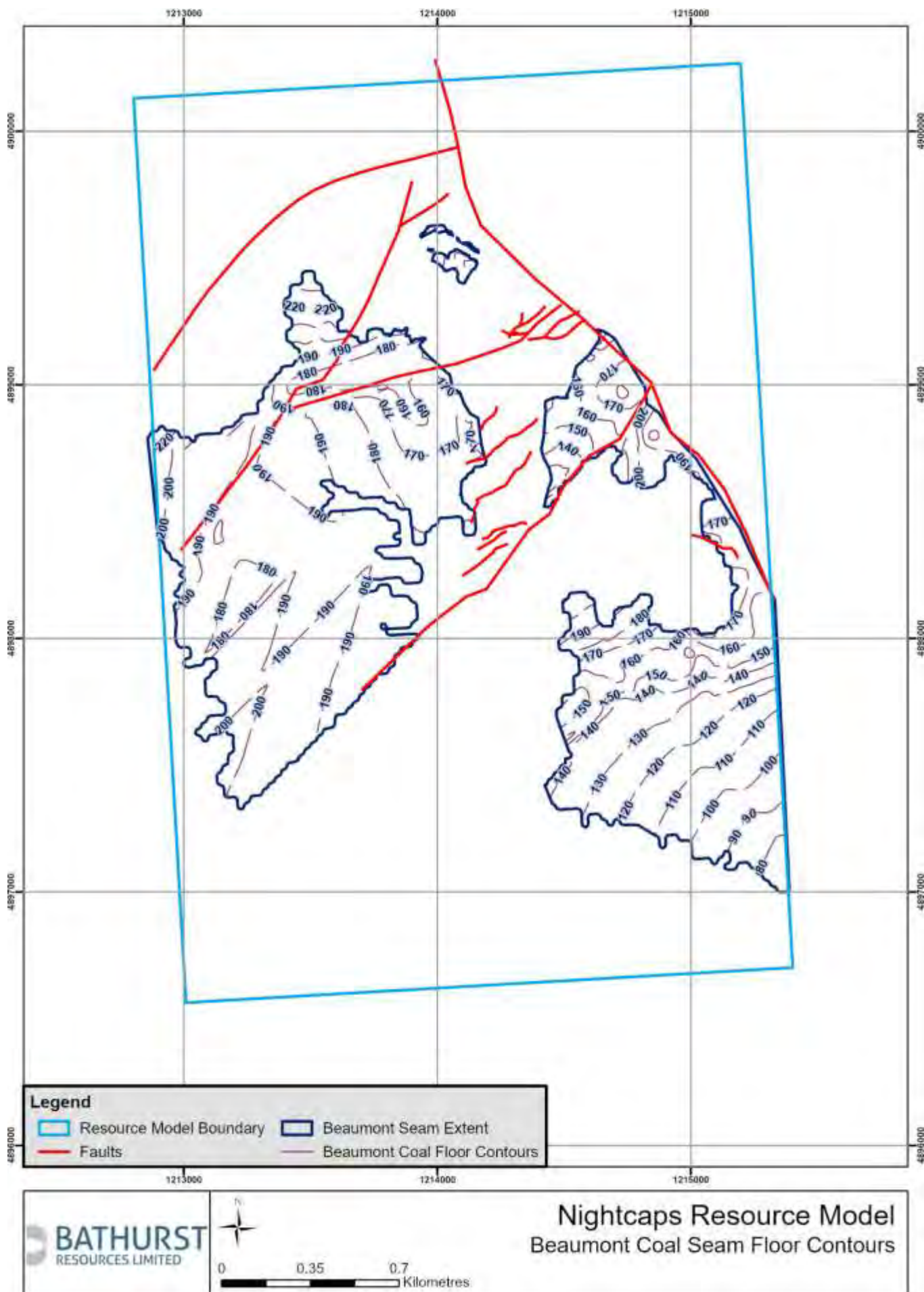


Figure 15: Beaumont Formation coal floor contours

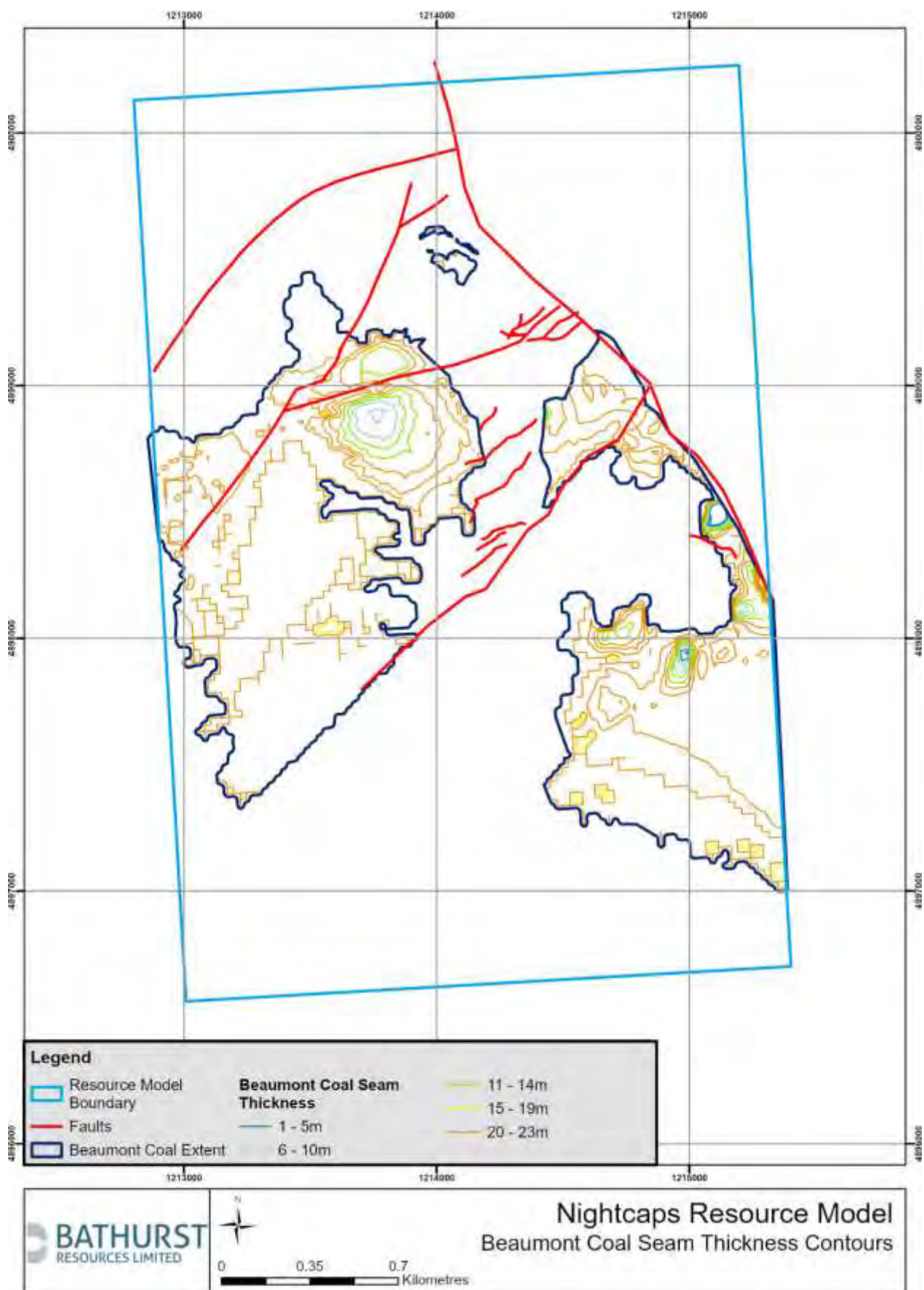


Figure 16: Beaumont Formation full seam cumulative thickness isopachs

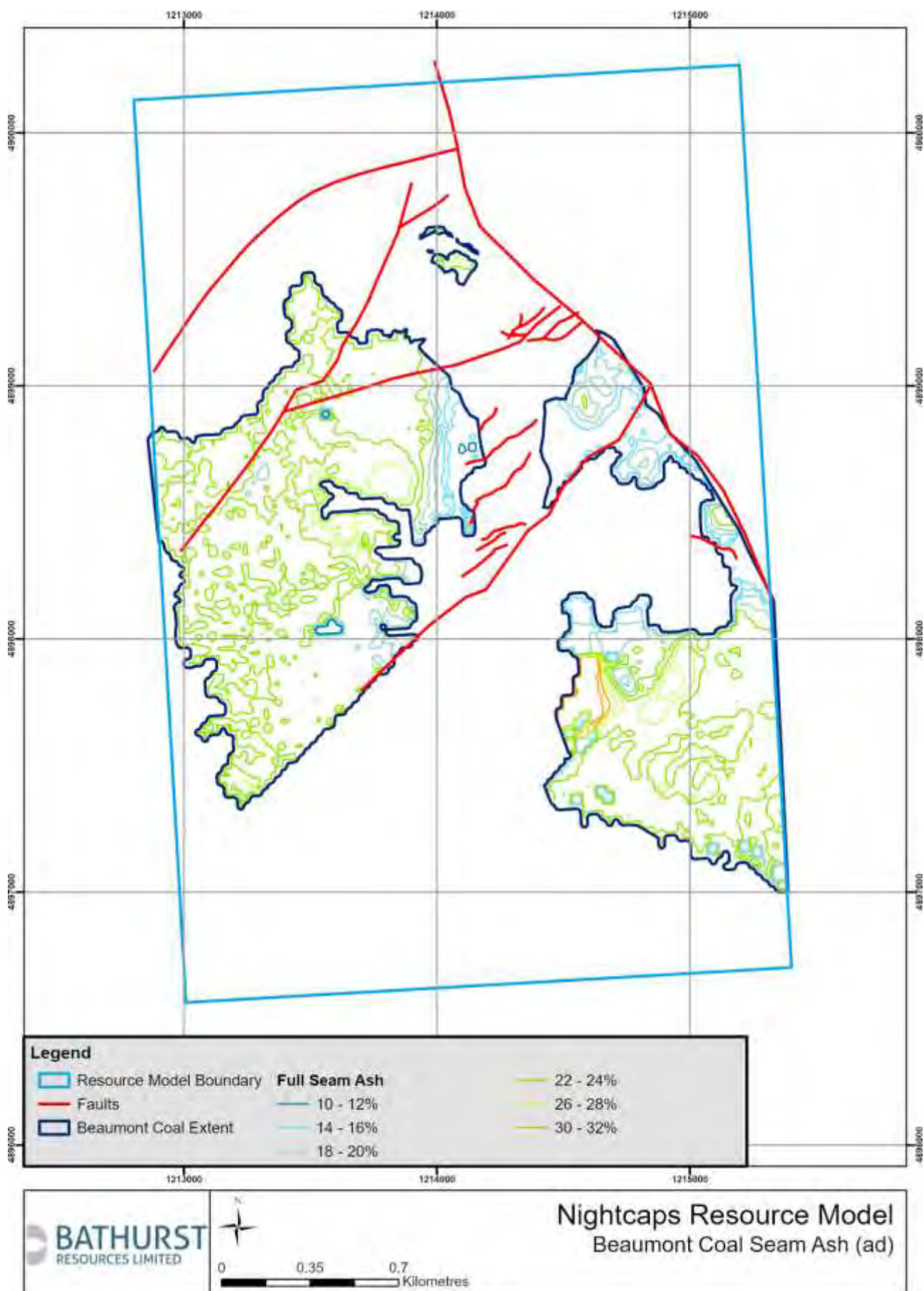


Figure 17: Beaumont Formation full seam ash isopachs



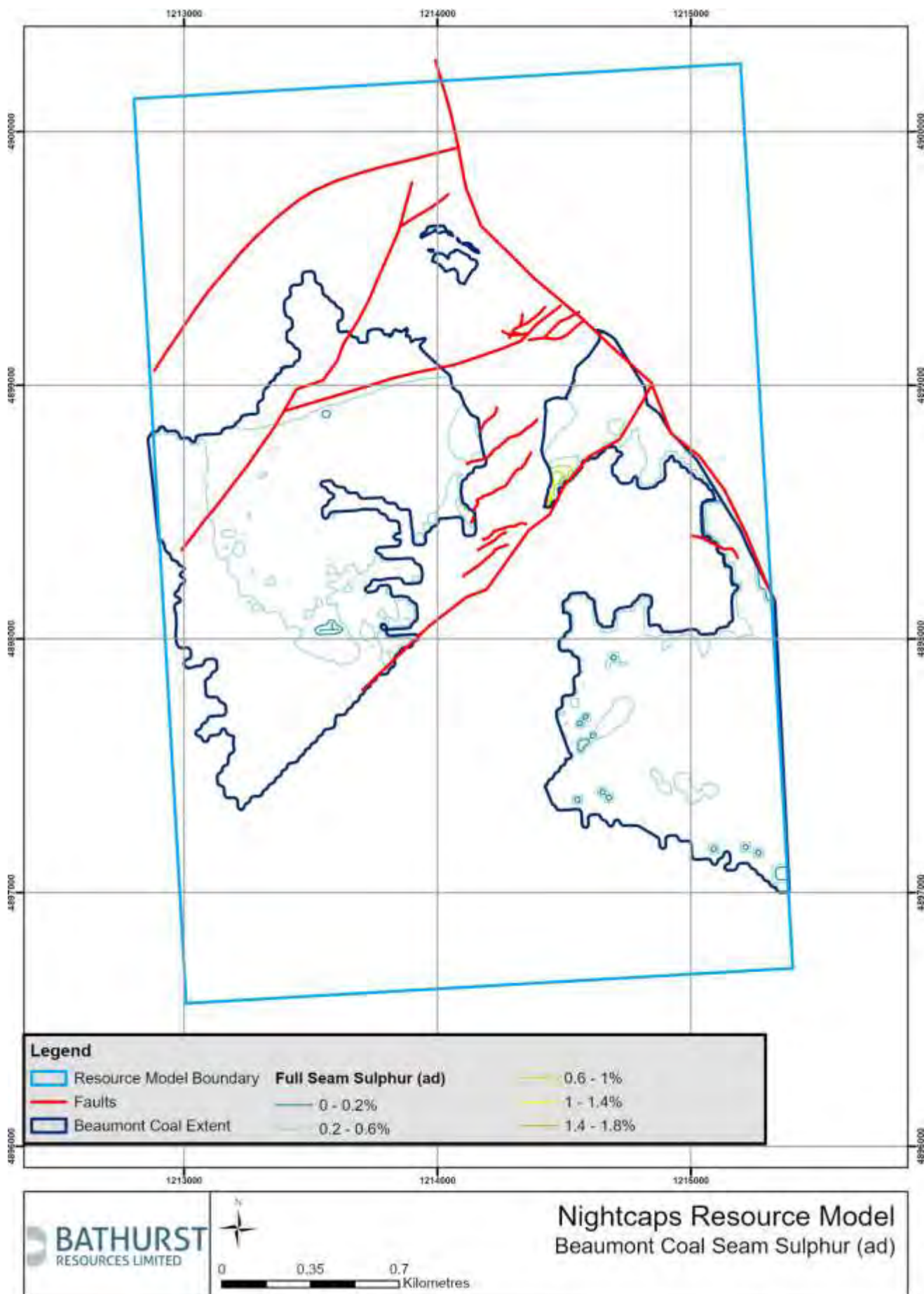


Figure 18: Beaumont Formation full seam sulphur isopachs

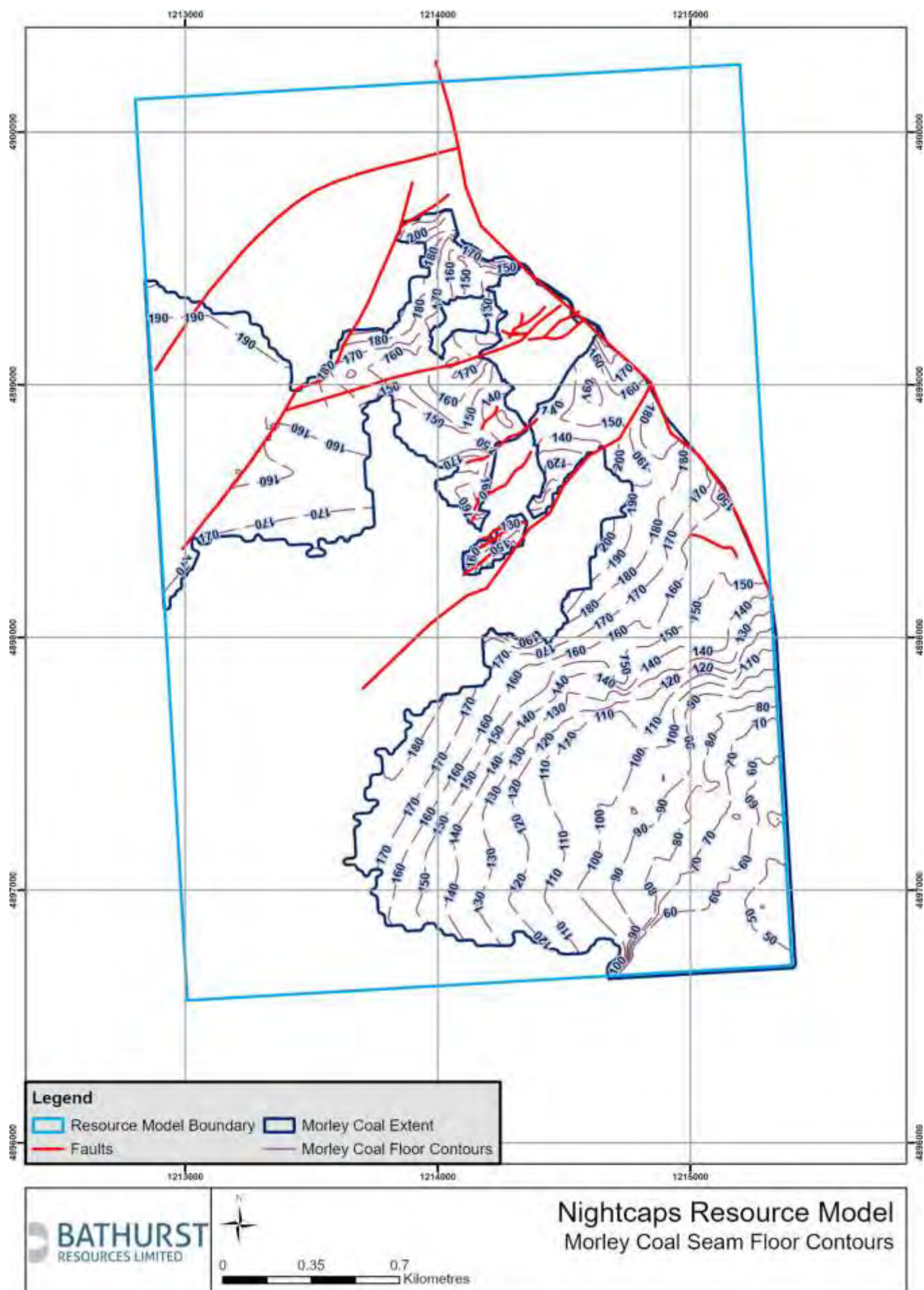


Figure 19: Morley Formation coal floor contours



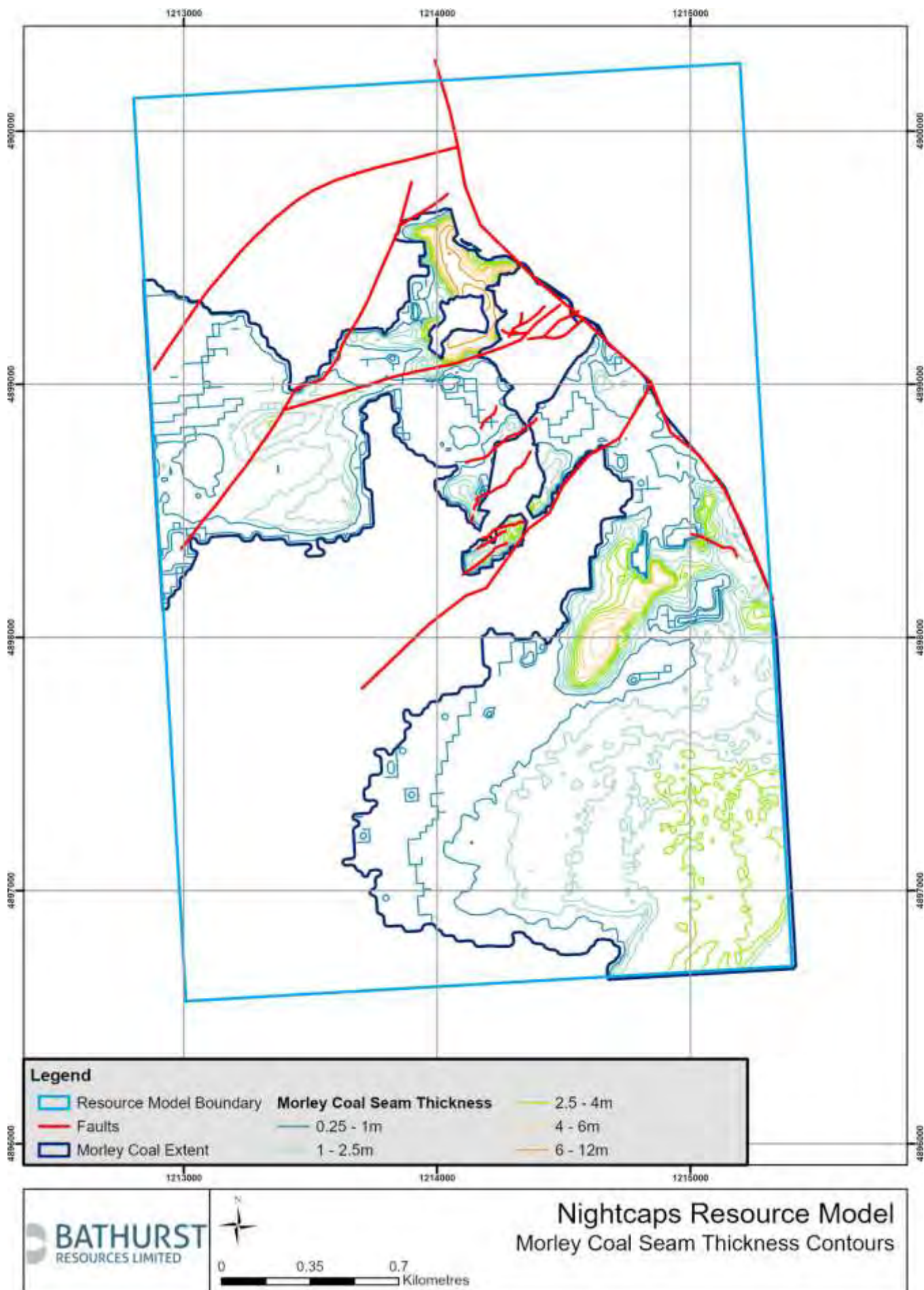


Figure 20: Morley Formation full seam cumulative coal thickness isopachs



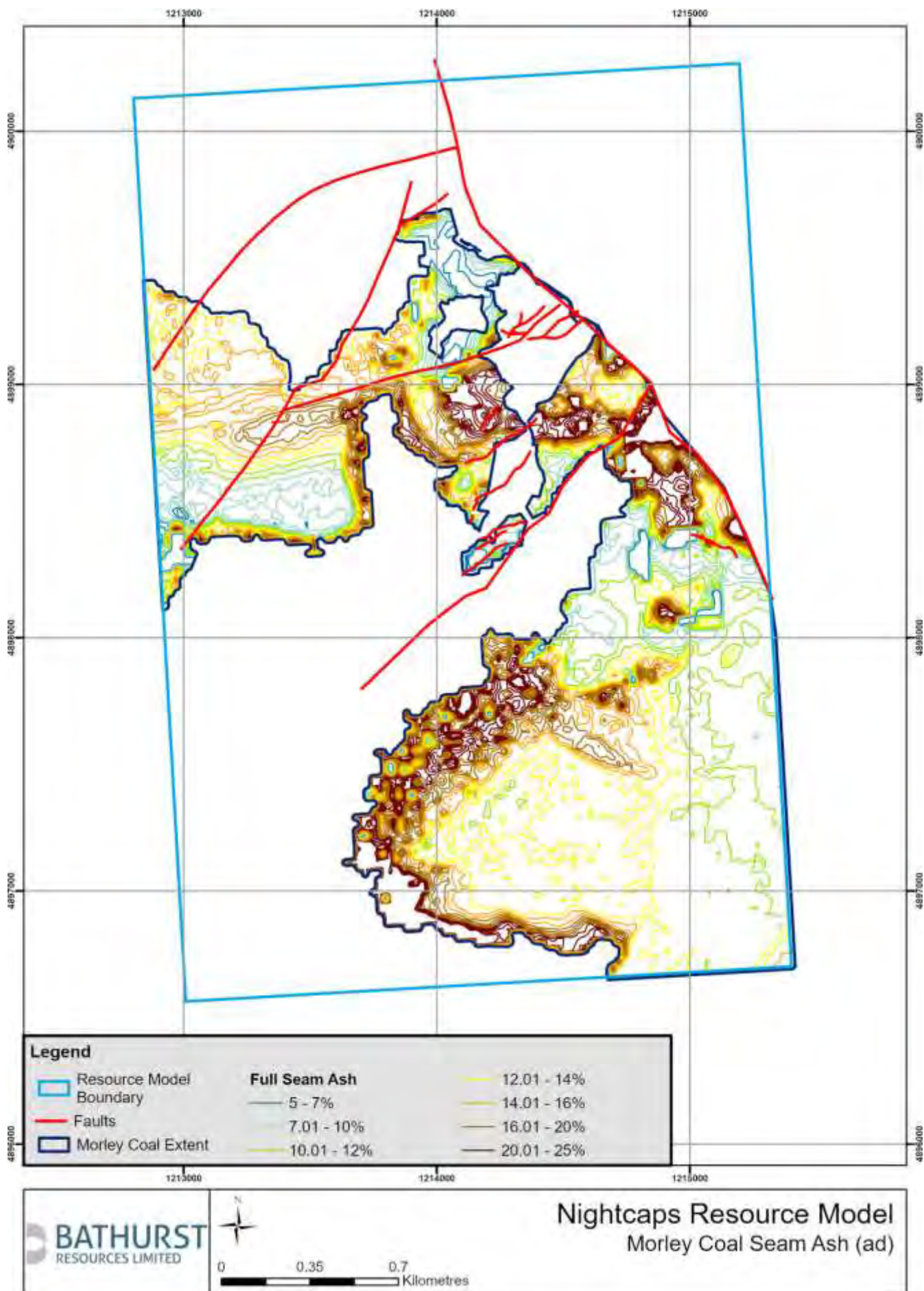


Figure 21: Morley Formation full seam air dried ash isopachs

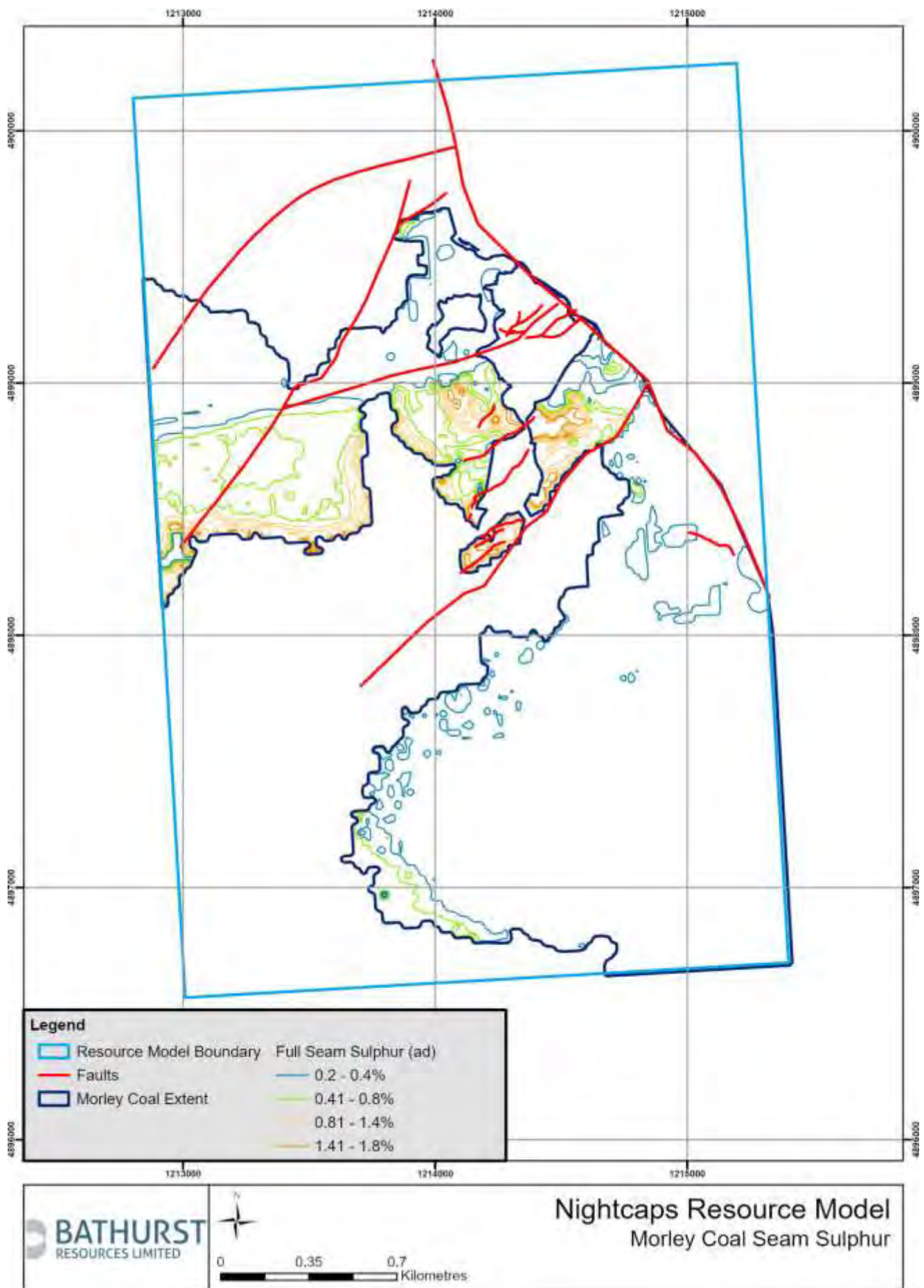


Figure 22: Morley Formation full seam air dried sulphur isopachs

# JORC Code, 2012 Edition – Table 1 Report for Rotowaro 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Multiple campaigns of data acquisition have been carried out in the Waikato Coalfield over the past century.</li> <li>2023-2024 diamond core sampling for coal quality sampling is undertaken using PQ (85mm core diameter) Triple Tube Coring (TTC) methods. Coal core samples are assigned unique identifiers and are dispatched to the laboratory with Chain of Custody tracking using paper, e-mail and/or acQuire software. Core recovery recorded in the field is validated and adjusted if required using downhole geophysical logs during core logging and sampling. Composite samples are generated from individual coal plies at the laboratory that are thickness weighted.</li> <li>The 2023-2024 drilling programmes utilised downhole natural gamma tool for coal seam correlations and coal recoveries. For some previous drilling campaigns, a suite of downhole wireline geophysical logs, including density, natural gamma, calliper, sonic, dip meter, acoustic scanner, and verticality were generally run in drillholes completed since 1989. All tools were calibrated on a regular and systematic basis. Natural gamma is the most widely used tool to confirm stratigraphic intersections.</li> <li>A small number of trench / channel samples have been completed at outcrops and active faces of the mine pit to improve data density and resource confidence. All depths are measured vertically.</li> <li>All analytical data has been assessed and verified before inclusion in the resource model.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Tungsten drag bits have been used to wash drill fully open-holes (OH) and open-hole sections.</li> <li>The 2023-2024 drilling programme utilised TTC methods to recover coal core to established industry standards. Core diameters are PQ for this programme.</li> <li>No core has been orientated.</li> <li>In recent times, diamond drillholes have been infilled with air-core (AC) drilling. AC samples are logged onsite and provide coal seam roof and floor intercepts.</li> <li>Numerous historical drillholes are included in the resource modelling database for the areas modelled. Drillholes that have no verifiable location, lithology log or survey, or contradict adjacent reliable data, are considered unreliable and excluded from the Coal Resource modelling database.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Core recovery was measured as the length of core recovered divided by the length of driller's run and noted by the core logging geologist. In recent drilling campaigns, if recovery of coal intersections dropped below 90%, the drillhole required a re-drill. Downhole geophysics data was used to help determine core recovery where available.</li> <li>Standard industry techniques are employed for recovering core samples from PQ core diameter TTC drillholes.</li> <li>For open-holes and open-hole sections, cuttings are sampled in intervals five metres in length or when there is a change in lithology and logged.</li> <li>Core is obtained by PQ TTC techniques providing good core recovery, averaging 96% in recent drilling campaigns. On average, core recovery of target coal seams is 90%.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Bathurst Resources Limited (BRL) has developed standardised core logging procedures (BRL Coal Logging Procedures), and all core logging completed by BT Mining has followed these procedures.</li> <li>All recent drill core has been geologically and geotechnically logged by logging geologists under the supervision and guidance of experienced exploration and geotechnical geologists.</li> <li>All drill core was photographed prior to sampling. Depth meter marks and coal ply intervals are noted on the drill core in each photograph.</li> <li>All TTC core samples are logged in detail (centimetre scale).</li> <li>Quantitative logging for lithology, stratigraphy, texture, hardness, Rock Quality Designation (RQD) and defects is conducted using defined material code types based on characterisation</li> </ul>



Criteria	Commentary
	<p>studies and mineralogical assessments. Colour and any other additional qualitative comments are also recorded.</p> <ul style="list-style-type: none"> <li>In conjunction with geological logging, drillholes are generally geophysically logged with natural gamma or a suite of tools used (as described above). Downhole geophysical logs are analysed extensively and used to confirm and correct depth measurements on geological logs and sample locations. Validation and, if required, correction of the geological logs against downhole geophysical logs is undertaken to ensure accuracy and consistency. Verticality, caliper, density and natural gamma tools are checked regularly with standard calibration assemblies. Density calibrations are performed routinely with blocks of material of known densities (aluminium and/or water). A quality report is generated by the logging technician for each drillhole.</li> <li>Downhole geophysical logs were used to aid core logging. Downhole geophysics is used to correlate coal seams, to confirm depths and thickness of coal seams and to validate drillers' logs. Downhole geophysical logs were also used to inform recovery rates of coal cored and recovered.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>For all exploration data acquired by BT, in-house detailed sampling procedures were used (BRL Coal Sampling Procedures). Sampling and sample preparation are consistent with internationally accepted coal sampling and sample preparation methodologies.</li> <li>No splitting of core is undertaken in the field or during sampling. Sample interval and core recovery recorded in the field by drillers is validated and adjusted if required using downhole geophysical logs during core logging and sampling.</li> <li>Sample selection is determined in-house according to the BRL Coal Sampling Procedures. Clean coal core has been sampled in plies targeting 0.5m in length, depending also on core loss intervals and lithological variations.</li> <li>Sampling and sample preparation are consistent with international coal sampling methodology.</li> <li>Associated high ash coal intervals and partings were sampled separately to assess potential dilution effects where they are &lt;0.5m thick. Composite horizons were determined by the ash yield of the plies.</li> <li>Ply thickness weighted compositing is conducted by SGS.</li> <li>Samples are placed into labelled bags to ensure proper Chain of Custody and transported to the laboratory for testing. The laboratory continues with the Chain of Custody requirements. Sample preparation is undertaken according to industry standards.</li> <li>PQ and HQ core diameter is considered to provide a sample of sufficient volume to be representative of the in situ material and provides adequate sample mass to undertake the variety of raw coal tests together with composite testing when required. Where the testing regime requires additional sample volume, PQ (85mm) core size is employed.</li> <li>For surface trenches, coal samples of at least 2kg are obtained for each 0.5m ply interval approximately equivalent weight of 0.5m of HQ core length. Trenches were sampled by hand ensuring all highly weathered and contaminated material are excluded from the sample.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>SGS and Verum (Formerly CRL, with ACIRL Australia and Newman Energy subcontracted for specific tests) laboratories are used to undertake physical and chemical testing and use Industry Standards for all coal tests and systematic Quality Assurance/Quality Control (QA/QC) procedures for all work. Both laboratories hold accreditation by International Accreditation New Zealand (IANZ). The processes employed are considered appropriate for coal quality analysis. Results are reviewed in-house by a senior geologist to ensure the accuracy of the data. The laboratory has been inspected by the BT personnel. Tests include: <ul style="list-style-type: none"> <li><b>Chemical Analysis</b> <ul style="list-style-type: none"> <li>Loss on air drying (ISO 13909-4).</li> <li>Inherent moisture (ASTM D 7582 mod).</li> <li>Ash (ASTM D 7582 mod).</li> <li>Volatile matter (ASTM D 7582 mod).</li> <li>Fixed carbon (by difference).</li> <li>Sulphur (ASTM D 4239).</li> <li>Swelling index (ISO 501).</li> <li>Calorific value (ISO 1928).</li> <li>Mean maximum reflectance all vitrinite (RoMax) (Laboratory Standard).</li> </ul> </li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Chlorine in Coal (ASTM D4208).</li> <li>○ Gieseler plastometer (ASTM D 2639).</li> <li>○ Forms of sulphur (AS 1038 Part 11).</li> <li>○ Ash fusion temperatures (ISO 540).</li> <li>○ Ash constituents (xrf) (ASTM 4326).</li> <li>○ Ultimate analysis (ASTM D3176-09).</li> </ul> <p><b>Rheological and Physical</b></p> <ul style="list-style-type: none"> <li>○ Hardgrove grindability index (ISO 5074, ASTM D409-02).</li> <li>○ Relative density (AS 10382111-1994).</li> </ul> <ul style="list-style-type: none"> <li>• All analysis was undertaken and reported on an air-dried basis unless stated otherwise.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• All diamond core samples are checked, measured and marked up before being logged in detail.</li> <li>• Every discrepancy between the measured length of the core and the driller's length marked on the core blocks is investigated. Discrepancies are resolved by geologists using downhole geophysical logs prior to sampling.</li> <li>• All drill core was photographed prior to sampling. Depth meter marks and coal ply intervals are noted on the drill core in each photograph.</li> <li>• Quantitative logging for lithology, stratigraphy, texture, hardness, RQD and defects is conducted using defined material code types based on characterisation studies and mineralogical assessments to the nearest centimetre. Colour and any other additional qualitative comments are also recorded.</li> <li>• Raw logs, as well as sample dispatch details, are recorded on paper then transferred into the acQuire database in accordance with BRL standards or logged directly into the database via Arena software.</li> <li>• Assessments of coal intersections is undertaken by an internal or contract geologist, and by a senior geologist. Downhole geophysical logs allow confirmation of the presence (or absence) of coal seams and accurate determination of the locations of coal seam roof and floor contacts. Downhole geophysical density and natural gamma measurements are used to guide sampling and identify high ash bands.</li> <li>• Downhole geophysical logs are analysed and used to validate or correct geological and sample interval logs to ensure accuracy and consistency, where required.</li> <li>• Sample sheets are developed in-house and receive a final check by the laboratory prior to testing. BRL/BT geologists with input from marketing technical experts provide guidance on the specific testing regime to be undertaken on both ply and composite samples.</li> <li>• Since 2006, all coal quality data has been directly submitted and stored in electronic format using acQuire database software. All data provided by the coal laboratory is reviewed before acceptance into the database.</li> <li>• Sample coal quality results have been cross-referenced and compared against lithology logs and downhole geophysical data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Waikato Coalfield. Anomalous assay results were investigated, and where necessary the laboratory was contacted, and a re-test was undertaken from sample residue. Erroneous and/or contaminated results are excluded from grade estimation.</li> <li>• Twin drillholes have not been used.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• Rotowaro data is presented in Mt Eden 1949 grid co-ordinate system in New Zealand, with Auckland 1946 mean sea level datum (MSL).</li> <li>• All drillholes post-1997 have been surveyed using GPS technology and are located within +/- 40mm in three dimensions. Older drillhole collars were surveyed using conventional methods with an unknown precision.</li> <li>• The topographic dataset consists of a digital terrain model (DTM) constructed from an airborne LiDAR survey (accurate to +/- 0.2m) collected for the whole of the Rotowaro site in December 2012, and 2019. The DTM has been supplemented by GPS survey data (+/- 40mm accuracy), aerial drone photogrammetric survey, and 1:150k LINZ topographic contours.</li> <li>• Surveyed elevations of drillhole collars are validated against the site topographic surface and ortho-corrected aerial photography.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Historical underground mine workings plans are based on historical hand drawn plans that have been geo-rectified (in 2D only) by converting from cadastral links to the Mt Eden 1949 geodetic grid.</li> <li>Drillholes logged with a full suite of downhole geophysics are surveyed for deviation with a verticality tool (+/- 15° azimuth and +/- 0.5° inclination). Some drillholes have been surveyed with natural gamma only. Those holes with no deviation data are assumed to be vertical.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Drillholes are variably spaced (from 25m to 100m in easting and northing) depending on target seam depth, geological structure, topographic constraints, down hole conditions due to historical underground mine workings, and degree of existing data density in immediate surrounds.</li> <li>Average drillhole spacing of reliable drillholes found within the Waipuna West model extents is 85m.</li> <li>Average drillhole spacing of reliable drillholes found within the Awaroa West model extents is 96m.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Orientation/spacing/density of drillholes is driven by both coal quality and geological structure.</li> <li>Historically, geological structure was the main factor determining drillhole spacing and orientation.</li> <li>The low angle of strata dips means vertical drillholes are the most successful in achieving desired high angle intercepts of the coal seams.</li> <li>The modelling of the deposit uses drillholes both with and without reliable verticality data. Drillholes without verticality data are considered to be vertical.</li> <li>Vertical drilling is the most suitable drilling method for assessing the resource at Rotowaro.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Rigorous sample preparation and handling procedures have been followed by BT. Core is removed from the drillhole and put into core splits. Core is wrapped in clear-wrap to retain natural moisture and placed into core boxes.</li> <li>Core is transported to the core shed, unwrapped, logged, sampled and then re-wrapped or sealed in plastic sample bags.</li> <li>Chip samples are put into bags with marked intervals by drillers and transported to the core shed for logging. Chip samples are disposed of once logged.</li> <li>All coal quality analysis results are approved for import directly into the acQuire database by the resource geologist.</li> <li>It is not considered likely that individual coal samples face a risk of theft or sabotage as coal is a bulk commodity with little value for small volumes of coal from drill core.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Golder have reviewed the geological data available in 2020 and consider the data used to produce the resource model to be reliable and suitable for the purposes of generating a Coal Resource estimate to the extent that the Coal Resource estimate has been classified.</li> <li>BRL senior geologists have undertaken audits of the sample collection and analysis processes and reviewed the resource model.</li> <li>Integrity of all data (drillhole, geological, survey, geophysical and coal quality) is reviewed by the resource geologist prior to being used in the resource model.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>The Rotowaro resource area includes a mixture of Crown and privately-owned coal.</li> <li>The Rotowaro resource area has been split into two distinct project areas, the actively mined Waipuna West area, and the Awaroa West area.</li> <li>Rotowaro Coal Mining Licence (CML) 37155 covers approximately 2,423.8 hectares in area and is due to expire on 31 March 2027. All current mining operations at Rotowaro, including the Waipuna West Extension pits, are currently undertaken within the CML. BT has sole ownership of the operation. BT holds long term leases over the land underlying the operations.</li> <li>BT holds Exploration Permit (EP) 56220 and Mining Permit (MP) 60422, which cover Crown-owned coal and straddle the western side of the CML. These permits hold the majority of the Awaroa West resource.</li> </ul>



Criteria	Commentary																
	<table><tr><th>Permit/Rights</th><th>Operation</th><th>Mining Type</th><th>Expiry</th></tr><tr><td>CML 37155</td><td>Rotowaro</td><td>Open Cut</td><td>31 Mar 2027</td></tr><tr><td>EP 56220</td><td>Awaroa West</td><td>N/A</td><td>16 Dec 2024</td></tr><tr><td>MP 60422</td><td>Awaroa West</td><td>Open Cut</td><td>03 Jul 2024</td></tr></table> <ul style="list-style-type: none"><li>There are two mineral owners of the coal resources in the Rotowaro resource area. These are the Crown in the north of Rotowaro (and subsequently BT Mining via the permits listed above) and the Ralph Estate.</li><li>The Royalty Mortgage 17836 is a lease arrangement between the Crown and the Ralph Estate whereby BT pays the Crown royalty for opencast coal (\$0.50/tonne) and the Crown, subsequently pays the Ralph Estate. The Ralph Estate (WJ and SM Ralph) owns the balance by way of Coal Leases 4092 and 199268.</li></ul>	Permit/Rights	Operation	Mining Type	Expiry	CML 37155	Rotowaro	Open Cut	31 Mar 2027	EP 56220	Awaroa West	N/A	16 Dec 2024	MP 60422	Awaroa West	Open Cut	03 Jul 2024
Permit/Rights	Operation	Mining Type	Expiry														
CML 37155	Rotowaro	Open Cut	31 Mar 2027														
EP 56220	Awaroa West	N/A	16 Dec 2024														
MP 60422	Awaroa West	Open Cut	03 Jul 2024														
Exploration done by other parties	<ul style="list-style-type: none"><li>The previous owner Solid Energy New Zealand Limited (SENZ) and its predecessors have conducted all exploration in the area from 1986 to 2017. However, there have been earlier periods of work that have contributed to the understanding of the Coal Resource.</li><li>Early data collection is based on drillhole logs recorded by drillers.</li><li>From the 1970's drillholes were also logged by geologists, which had the effect of increasing the accuracy, the level of detail, and ultimately the reliability of the exploration data.</li><li>The addition of downhole geophysical logging in the late 1980's further added to reliability.</li></ul>																
Geology	<ul style="list-style-type: none"><li>The regional dip is generally to the northwest at the northern end of the deposit and to the southwest along the western margin.</li><li>There are a series of northwest-southeast trending anticlines and synclines in the central and east of the deposit. Rotowaro is bounded to the southwest by the Mangakotukutuku Monocline, with a net throw of 90m down to southwest, and to the northeast by the extension of the Waipuna Fault scarp. The Awaroa West deposit sits within a faulted graben structure bounded to the east by the Mangakotukutuku Monocline.</li><li>For the Waipuna West resource area, there are only minor faults identified, with throws less than 10m in height. These faults are either recorded on historical underground mine plans or interpreted from structure contour plans derived from drillholes. For Awaroa West, large north-south trending faults cut the deposit into two major portions with additional minor faults also identified.</li><li>The Rotowaro area is underlain by indurated siltstones, with common sandstones, of the Mesozoic Newcastle Group, which is weathered to a depth of 5-30m. This unit is referred to as "Basement" and has no economic significance.</li><li>The Waikato Coal Measures (WCM) lie unconformably on the basement and form the lower part of the Te Kuiti Group. The WCM consist mainly of mudstones and siltstones, often referred to collectively as "fireclay", with common siderite concretions, referred to as "hardbars".</li><li>There are three major coal seam groups within the WCM: Renown, Kupakupa and Taupiri.</li><li>The Taupiri seams are only represented in the Callaghan's sector of the Rotowaro Coalfield, where they are confined to the structural trough between the Mangakotukutuku Monocline and the Waipuna Fault scarp.</li><li>Thickness patterns of seams lying close to basement are influenced by the paleo-relief developed on the basement contact, with thickening and thinning over basement valleys and ridges respectively.</li><li>The upper part of the Te Kuiti Group consists of marine to marginal marine claystones, mudstones, sandstones and siltstones which conformably overly the WCM. There is a regional unconformity at the top of the Te Kuiti Group, above which lie the Quaternary deposits of the Tauranga Group, consisting of interlayered alluvial clays, muds and highly weathered volcanic ashes of the Hamilton Formation.</li></ul>																
Drillhole Information	<ul style="list-style-type: none"><li>For the Waipuna West resource area, in summary: 3,559 resource drillholes are located across the Rotowaro prospect.</li><li>However, 1,224 lie within the Waipuna West Model boundaries and only 1,112 of these drillholes have been used for structural modelling and Coal Resource estimation. A summary of the drilling information is shown in Table 1 below for the Waipuna West model area:</li></ul>																

**Table 1 Drill hole summary for the Waipuna West area**

Years	Agency	Collar ID Series	Number of Holes in Model Extent	Drilling Method	# of holes in Structure Model	# of Holes in Coal Quality Model	Geophysics Available
unknown	State Coal	0 - 999	127	unknown	124	0	0
1949	State Coal	1000 - 1999	140	unknown	139	0	0
1952	State Coal	2000 - 2999	161	unknown	158	0	0
unknown	State Coal	3000 - 3999	26	unknown	26	0	0
1958	State Coal	4000 - 4999	26	unknown	26	0	0
1958	State Coal	5000 - 5999	31	unknown	31	0	0
1964 - 1976	State Coal	6000 - 6999	80	RWD/DDH	73	45	0
1976 - 1984	State Coal	7000 - 7999	33	RWD/DDH	33	23	0
1984 - 1986	State Coal	8000 - 8999	25	RWD/DDH	24	12	20
1986 - 1996	Coal Corp	15000 - 15999	324	RWD/DDH	281	119	22
1997 - 2017	Solid Energy	17000 - 17552	160	RWD/DDH	124	94	19
2017 - 2021	BT Mining	17553 - 17628	40	RWD/DDH	4	37	0
				AC	34		16
2023	BT Mining	17651 - 17673	23	DDH	10	10	11
				Blast	0	0	0
2023	BT Mining	RT001 - RT007	7	Trench	7	7	0
2023	BT Mining	" DUM03-DUM06, ANG17580, ANG17598	6	Synthetic	3	0	0
2024	BT Mining	17733-17737	5	DDH	5	5	5
2024	BT Mining	"RT008 - RT014, RT016 - RT018"	10	Trench	10	10	0
Total – Waipuna West			1,224		1,112	362	93

- For the Awaroa West project area, 1,359 lie within the area and 1,174 holes are used in the structure model. A summary of the drilling information is shown below in Table 2 for the Awaroa West project area:

**Table 2 Drill hole summary for the Awaroa West area**

Years	Agency	Collar ID Series	# Holes in Project Area	Drilling Method	# Holes in Structure Model	# Holes in Coal Quality Model	Geophysics Available
Unknown	Glen Afton Collieries	GA460-GA475	8	unknown	8	0	0
1910's - 1940's	Unknown	000 - 999	111	unknown	101	0	0
1950's	Unknown	1000 - 1999	276	unknown	184	0	0
Unknown	Unknown	2000 - 2999	113	unknown	112	0	0
Unknown	Unknown	3000 - 3999	144	unknown	124	0	0
1920's - 1950's	Unknown	4000 - 4999	37	unknown	27	0	0
Unknown	Unknown	5000 - 5999	10	unknown	10	0	0
1970's	Unknown	6000 - 6999	60	TTC, WD	54	43	0
1980's	Unknown	7000 - 7999	18	TTC, WD	12	0	0
1983 - 1986	Coal Resources Survey	8000 - 8999	51	TTC, WD	50	17	39

[illegible]



Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Map showing Renown seam floor contours Awaroa West.</li> <li>○ Map showing Renown seam thickness isopachs Awaroa West.</li> <li>○ Map showing Renown seam ash isopachs Awaroa West.</li> <li>○ Map showing Renown seam sulphur isopachs Awaroa West.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• No detailed exploration results are being presented in this Table 1 document, rather this document is focussed on advanced projects that have been defined by geological models with associated Coal Resource estimates completed.</li> <li>• The exclusion of this information from this Table 1 document is considered to not be material to the understanding of the Rotowaro deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Groundwater has been encountered in most drillholes. A total of 418 piezometers have been installed at various depths in 256 different drillholes in order to monitor changes in ground water levels for geotechnical purposes. The different stratigraphic units and rock defects have been assigned various strength parameters based on a mixture of recent and historical laboratory test data (UCS, shear box and ring shears), empirical classifications (RMR, GSI and Hoek Brown) and back analysis of existing cut slopes. Downhole in situ geophysical measurements have been undertaken to compare the strength variability with actual laboratory test data.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• No significant drilling programs are currently planned within the Rotowaro Coal Mining Licence or adjacent permits.</li> <li>• Work programmes to extend agreements for access to land and minerals and for compiling applications to extend or replace environmental consents and permits are ongoing across the Rotowaro project.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>• BRL utilises an acQuire database to store and maintain its exploration dataset.</li> <li>• All historical and legacy datasets have been thoroughly checked and validated against original logs and results tables.</li> <li>• For new exploration campaigns data recorded in the field is input into field books and later transcribed into the acQuire database, or logged directly into the acQuire database via Arena software on a mobile tablet.</li> <li>• The acQuire database places explicit controls on certain data fields as they are entered or imported into the database, such as overlapping intervals, coincident samples, out of range sample values, standardised look-up tables for logging codes.</li> <li>• Manual data entry of coal quality results is not required as results are imported directly from laboratory results files.</li> <li>• Validation of historical wash drilled drillholes has been conducted by comparing coal seam depths and thicknesses with those of adjacent more reliable cored drillholes in cross-section. Coal quality data and downhole geophysical logs have been used to validate more recent (post-1977) drillholes, to provide confidence in coal seam depths and thicknesses.</li> <li>• All historical and legacy datasets have been thoroughly validated against original logs and results tables. Where reliability of the data is poor the data is excluded from the modelling process.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• Eden Sinclair (the Competent Person) regularly visits the Rotowaro mine site, and is familiar with the site's geology, the geological data sets used to estimate resources, and the processes used to construct the Rotowaro resource models.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• Confidence in interpretation of geological stratigraphy, structure and coal seam correlation/continuity is variable across the Rotowaro area. Coal seam correlations are difficult to interpret in some areas due to the discontinuous nature, and rapid variation in thickness of the coal.</li> <li>• Seam correlation was reviewed and updated using coal seam floor survey data from the open cut operation and improved Stratigraphic Correlation tools available in Maptek software.</li> <li>• While the Waikato Coal Measures are entirely conformable, part way through deposition movement on the Mangakotuku Fault ceased, which lead to preferential deposition of mudstone</li> </ul>

Criteria	Commentary
	<p>dominated coal measures between Taupiri and Kupakupa coal seams which thickens with proximity to the Mangakotuku Fault. This also presents as different structural trends between the Taupiri and Kupakupa seams.</p> <ul style="list-style-type: none"> <li>Variations in geological confidence are reflected in the reported resource classifications.</li> <li>Residual uncertainty exists concerning geological structure along the Mangakotuku fault zone and along other fault structures within modelled areas. All the past interpretations of these large fault zones involving highly complex faulting have been proven inaccurate as the geology is exposed through previous mining. Currently the Mangakotuku fault zone is modelled as a large steeply dipping monocline within the Awaroa West model area.</li> <li>The data used in the geological interpretation included surveyed field mapping, LiDAR, drillhole data, core logging data, geophysical logs, sampling, coal quality laboratory testing and assessments, historic mining records and survey data.</li> <li>Coal seam ash content can vary locally due to the occurrence of siderite concretions and calcite veining in the coal seams. The resource model does not predict these occurrences well which leads to very localised increases in ash.</li> <li>Other factors affecting continuity of coal seams are basement ridges (causing thin coal) and faulting. The Taupiri Lower seam can thin and onlap against basement highs and ridges due to peat “onlap” during deposition. It can be difficult to predict whether the Taupiri Lower seam is merged with the Taupiri Main seam over basement highs, as is sometimes the case, or whether it terminates against the basement at a lower stratigraphic level. This can lead to a want zone where the Taupiri Lower coal seam is absent.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>At Rotowaro, the Waipuna West resource model covers approximately 734ha.</li> <li>Within this area all seams are exposed in the operating mine. Prior to mining the Renown seam roof was as close as 6m below the surface and the floor of the Taupiri Bottom seam is as deep as 290m (-200m RL) below the surface.</li> <li>The Awaroa West resource model covers 539ha and is adjacent to areas mined out in the old Awaroa and Awaroa NW pits.</li> <li>Coal seam thickness of the different seams varies considerably throughout the Rotowaro area, from 28m down to &lt;0.5m.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>Two geological models are used to define the geology within the Rotowaro resource areas being the Awaroa West and Waipuna West models.</li> <li>Modelling has been undertaken using Maptek's Vulcan™ (Vulcan) software by geologists and mining engineers trained and experienced in its use.</li> <li>The Tauranga Group (Quaternary sediments and soils) structural floor is modelled using a triangulation algorithm and thickness points interpreted from drill hole intercepts, outcrop information, and undisturbed topography data.</li> <li>Structural surfaces for coal seam roof and floors are modelled using a triangulation algorithm to produce grids on a 10 x 10m basis in order to best define the structure in the project area. From these grid models a 10 x 10m block model is produced.</li> <li>Maptek's Integrated Stratigraphic Model (ISM) module is used to produce the structure models.</li> </ul> <p><b>Waipuna West Model</b></p> <ul style="list-style-type: none"> <li>The Hybrid stacking method is used which triangulates a reference surface and then stacks the remaining horizons by adding structure thickness. Thickness grids are created using a triangulation modelling algorithm. Design data from other horizons is incorporated into the final grid structure.</li> <li>Grid modelling of the stratigraphic sequence is completed in two stages. One pass models the upper coal seams of the Kupakupa and Renown seams and a second pass models Taupiri group of seams.</li> <li>Upper stratigraphic units (Marine sediments, Renown and Kupakupa seams) and lower units (Taupiri seams) are modelled separately.</li> <li>Modelling parameters for the structural modelling are as follows: <ul style="list-style-type: none"> <li>Kupakupa and Renown Groups - Reference grid surface (KK22 Floor) by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1.</li> </ul> </li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Smoothing is 9.</li> <li>○ The maximum triangle length is 750m.</li> <li>○ Surfaces are splined.</li> <li>• Kupakupa and Renown Groups - Grid thickness modelling by Hybrid Stacking: <ul style="list-style-type: none"> <li>○ Method is Triangulation.</li> <li>○ Trend Order is 0.</li> <li>○ Smoothing is 9.</li> <li>○ The maximum triangle length is 750m.</li> <li>○ Surfaces are splined.</li> </ul> </li> <li>• Taupiri group - Reference grid surface (TM22 Floor) by Hybrid Stacking: <ul style="list-style-type: none"> <li>○ Method is Triangulation.</li> <li>○ Trend Order is 1.</li> <li>○ Smoothing is 9.</li> <li>○ The maximum triangle length is 750m.</li> <li>○ Surfaces are splined.</li> </ul> </li> <li>• Taupiri group - Grid thickness modelling by Hybrid Stacking: <ul style="list-style-type: none"> <li>○ Method is Triangulation.</li> <li>○ Trend Order is 0.</li> <li>○ Smoothing is 9.</li> <li>○ The maximum triangle length is 750m.</li> <li>○ Surfaces are splined.</li> </ul> </li> </ul>
	<p><b>Awaroa West Model</b></p> <ul style="list-style-type: none"> <li>• The Stacking method is used which triangulates a reference surface and then stacks the remaining horizons by adding structure thickness. Thickness grids are created using an inverse distance modelling algorithm. No additional design data has been used to constrain the model.</li> <li>• Grid modelling of the stratigraphic sequence is completed in one pass with the Kupakupa, Renown seams and Taupiri group of seams modelled concurrently.</li> <li>• Marine stratigraphic units and the top basement contact surfaces are also modelled in the single pass.</li> <li>• Modelling parameters for the structural modelling are as follows: <ul style="list-style-type: none"> <li>• Reference grid surface (RM22 Floor) by Stacking: <ul style="list-style-type: none"> <li>○ Method is Triangulation.</li> <li>○ Trend Order is 1.</li> <li>○ Smoothing is 9.</li> <li>○ The maximum triangle length is 1,500m.</li> <li>○ Surfaces are splined.</li> </ul> </li> <li>• Grid thickness modelling by Stacking: <ul style="list-style-type: none"> <li>○ Method is Inverse Distance.</li> <li>○ Power is 2.5, maximum interpolative points is 8</li> <li>○ Trend Order is 0.</li> <li>○ Smoothing is 9.</li> <li>○ The maximum search distance is 500m.</li> <li>○ Surfaces are splined.</li> </ul> </li> </ul> </li> <li>• No cropping of grid surfaces is undertaken. This is completed during construction of the resource block model.</li> <li>• Validation of data during modelling occurs at different stages: <ul style="list-style-type: none"> <li>○ Review of historical drillhole datasets prior to modelling to ensure that the original dataset is in order.</li> <li>○ Review of drillhole data using Vulcan data validation tools.</li> <li>○ Review of drillhole coal seam codes to ensure correct seam code correlations across the model area.</li> <li>○ Once structural grids have been produced from drillhole data, the slice viewer tool is used to run sections through the grids both across and along dip to check for any anomalies.</li> <li>○ Finally, once structural grids have been produced from drillhole data contour plans are</li> </ul> </li> </ul>



Criteria	Commentary
	<p>produced to ensure modelled values represent original data.</p> <ul style="list-style-type: none"> <li>The unclipped triangulations generated by the ISM tools are used to create the resource block model using the Stratigraphic Block Model tool along with topography, basement, mined out surfaces, and stratigraphic surfaces for Whaingaroa, Glen Massey, and Mangakotuku Formation's (marines), and the Tauranga Group quaternary unconformity.</li> <li>Coal quality data is estimated into the block models using inverse distance squared block estimation with coal quality samples normalised into 0.5m intervals.</li> <li>Five coal quality attributes are modelled simultaneously. Ash, Sulphur, Calorific Value, and Volatile Matter are estimated on a dry basis (db) and Inherent Moisture is estimated on air-dried basis (adb).</li> <li>For Waipuna West model the estimation is completed over three runs for each coal seam with increasing circular search distances (80m, 250m, 500m), and for the Awaroa West model the estimation is completed over four runs for each coal seam with increasing circular search distances (80m, 250m, 500m, 1,500m), with the minor axis for both models (across the coal seam from roof to floor) controlled using Vulcan's Tetra projection unfolding tool.</li> <li>The Awaroa West model is split into three distinct fault domains which are grade estimated separately.</li> <li>Estimated block values are determined as part of modelling workflow which are reviewed by a senior geologist to ensure no anomalies exist and that original data is honoured. The grade estimations were checked using Quartile-Quartile (QQ) Plots and Swath Plots to examine global and local normalised coal quality data to block value comparisons.</li> <li>The Rotowaro resource was underground mined from 1919 to 1986. The Rotowaro No's.1, 3, 5, and 6, Callaghans, and Mahons all operated within the Rotowaro Coal Mining Licence. The Awaroa West exploration and mining permits has been underground mined by Awaroa No. 4, and Puke, and Summit mines as well as smaller peripheral mines on the edges of the project area. Underground Mining studies for the site have been conducted with historical plans digitised and extraction factors estimated based on mining techniques. From this the resources are depleted based on estimated recoveries as detailed below under mining factors or assumptions.</li> <li>The Rotowaro resource has also been mined by numerous open cut mines. Rotowaro 1, 2, and 3, Maori Farm 1, 2, and 3, Waipuna, Callaghans, Boundary, and the currently operating mine (Rotowaro) have all operated in the Rotowaro Coal Mining Licence. Numerous historic open pit mines have also operated in the Awaroa West model area, including McDougals, Summit, Boundary, and Devlins mines.</li> <li>Mining has been occurring continuously at Rotowaro since 1919 with no record of acid mine drainage although some neutral metalliferous drainage has been identified.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Test work has been undertaken to determine moisture levels from all core with Inherent Moisture being measured in the 8000, 15000, and 17000 series drillholes. Total Moisture is also measured.</li> <li>Total moisture is modelled using a constant 5.3% loss on drying (LOD) across the deposit.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>A minimum coal seam daughter thickness cut-off for all modelled daughter seams is 0.5m, with maximum parting thickness of 0.1m.</li> <li>The coal has been classified as high volatile sub-bituminous B rank and is marketed as suitable for iron sand metallurgical processing and thermal coal.</li> <li>A maximum ash cut-off of 20%(db) has been applied to all samples used in grade estimation of the Waipuna West resource model, and a 30%(db) cutoff used when grade estimating the Awaroa West resource model.</li> <li>Coal Resources have been defined as economic by using a Lerchs-Grossman optimised pit shell using budgeted mining costs and contracted coal sales values.</li> <li>The 0.9 revenue factor (RF) shell from the optimisation has been used for reserve shell design updates at Waipuna West operating pit which has been used to report resources and reserves for that model area.</li> <li>A 0.80RF shell is used to report resources for the Awaroa West model area which is used to determine Reasonable Prospects for Eventual Economic Extraction (RPEEE).</li> </ul>

Criteria	Commentary
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>This report is for a long-term operating site.</li> <li>The site operates using traditional truck and excavator open cut mining methods with mining parameters selected from long term experience of local conditions.</li> <li>Underground extraction from historic mines has been factored into resource estimates with extraction rates estimated from 15-40% for first worked workings, and 55-65% extraction for pillared areas.</li> <li>Only coal that falls within an optimised pit shell as described above is reported as Coal Resources. Costs and revenue parameters used in the pit optimisation study include allowances for royalties, commissions, mining costs, coal processing and administration, and basic mining and processing losses.</li> <li>Geotechnical parameters for cut slope design were developed based on historical cut slope performance, slope back-analysis and laboratory testing of material strength parameters. Slopes are designed to comply with a Factor of Safety that exceeds 1.2 and within BRL risk volume criteria which is a function of the probability of failure and potential failure dimensions.</li> <li>Resource tonnages do not account for mining factors such as dilution, losses, and wash yield. These factors are discussed in Section 4 and are accounted for in reserves.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>Although not included in the resource model, studies have been conducted on the properties of the coal pertaining to combustion potential, ash fusion temperatures and Hardgrove Grindability Index (HGI).</li> <li>Washability of the coal is expected to perform within the ranges of the current wash feed to the Rotowaro wash plant.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>There are several Resource Consents in place at Rotowaro regarding land use, air, and water quality that must be strictly adhered to for the Rotowaro site including the Waipuna West area. Some further consents would be required to bring the Awaroa West area into production, and it is reasonably expected that these could be obtained in due course.</li> <li>Rotowaro mine site has no rock types that generate acid rock drainage.</li> <li>Suspended solids are treated through a series of drains and sumps that collect turbid water which is pumped through the central water treatment plant where dosing with flocculants can occur if necessary, before being discharged into the Rotowaro stream.</li> <li>Waste material is rehabilitated using soils recovered before overburden removal. The soil is spread and then sown in grass seed before final rehabilitation outcomes are implemented.</li> <li>The Rotowaro site has resource consent to use bio-solids as a soil conditioner to help with re-establishing vegetation as part of the rehabilitation of certain areas of the site.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>After grade estimation density is calculated using a density-ash relationship (air-dried basis) derived using the Rotowaro dataset. <ul style="list-style-type: none"> <li>Density (adb) = ((0.0001 x (as_ad<sup>2</sup>)) + (0.0087 x as_ad) + 1.2715).</li> </ul> </li> <li>In situ moisture across all seams in the model is calculated using a LOD of 5.3% which is the average ROM coal moisture at the mine.</li> <li>An in situ density value is then computed using the Preston Sanders method.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>BRL classifies resources using a multivariate approach.</li> <li>Coal Resources have been classified based on geological and grade continuity balanced by relative uncertainties surrounding historical underground extraction. The result reflects the Competent Person's view of the deposit.</li> <li>Closely spaced drillholes with valid coal quality samples (point of observation) increase the confidence in resource assessments.</li> <li>The confidence is reduced by: <ul style="list-style-type: none"> <li>A block being within an area of historical underground workings due to extraction rate uncertainty.</li> <li>A block lying in an area where structure dip is greater than 20° due to proximity to large faults. Faulting can impact coal thickness and quality.</li> <li>A coal block lying within close proximity to an overlying unconformity or mined out surface due to low confidence on the surface position, erosional channels or unsurveyed historic mining.</li> </ul> </li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Areas of thin coal seams area also reduced in confidence (&lt;2m thickness) resulting in uncertainty of geological continuity or economic recovery. Where a seam is thin or is splitting, a small change in thickness can have a large impact to reported vs actual coal tonnages and qualities.</li> <li>• Essentially, in an area that is not affected by the above conditions, a distance to nearest sample of less than 75m would be classified as Measured, less than 150m is classified as Indicated and less than 500m would be classified as Inferred.</li> <li>• All resources reported lie within the respective optimised pit shell for each model area.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• In 2020, Golder was engaged to review and rebuild the geology resource model and several updates to seam correlation in the model were completed and have been retained for the 2024 resource model.</li> <li>• Several internal reviews have been completed during the various project stages. No further external audits or reviews have been undertaken on this resource estimation.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• Based on the data available, the degree of accuracy of this statement is considered high for the Rotowaro resource. The process for calculation has used: Standards, Guidelines and the JORC Code along with best practice where available to define the Resource estimates provided to confirm search estimation ranges and drillhole spacing for each resource classification.</li> <li>• Coal Resources have been defined as economic by using a Lerchs-Grossman optimised pit shell using budgeted mining costs and contracted coal sales values. No resources have been reported outside of the pit shell for each model area. This optimised pit shell is used to determine RPEEE.</li> </ul>

## Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>• Coal Reserves are calculated from Measured and Indicated Coal Resources. Criteria listed in preceding sections also apply to this group (Sections 1-3 above).</li> <li>• A 3D Resource block model, using Vulcan™ software, of topography, structure and quality are used for in situ Coal Resource definition.</li> <li>• Coal Resources are reported inclusive of the Coal Reserves.</li> <li>• Coal Reserves increased overall as of 30 June 2024 compared to 30 June 2023, attributed to: <ul style="list-style-type: none"> <li>○ Resource model update and reclassification of some Inferred Coal Resources to Indicated Coal Resources.</li> <li>○ Update of the Waipuna West and Extension ultimate pit shell designs.</li> <li>○ Increases were partially offset by mining and stockpile depletion.</li> </ul> </li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• Sue Bonham-Carter (the Competent Person) is a Mining Engineering contractor to BT Mining and visits the project area on a regular basis.</li> <li>• Ms. Bonham-Carter has over 30 years' experience working in surface coal mines.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>• Rotowaro is an operating open pit coal mine project. The reportable Coal Reserve is based on the life of mine (LOM) plan and has determined a mine plan that is technically achievable and economically viable, and that material modifying factors have been considered.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• A minimum coal seam daughter thickness cut-off for all modelled daughter seams is 0.5m, with maximum parting thickness of 0.1m. Thin seam cut-off limit is determined from long term site experience and quality information related to customer coal supply sales product specifications.</li> <li>• A minimum mining width of 30m is assumed based on equipment fleets using standard hydraulic excavator and truck mining methods</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Lerchs-Grossman techniques, using industry Vulcan™ software Optimizer tool, were applied in 2024 to determine the economic pit shell extents based on actual performance and the budgeted mining costs, licence boundary, preliminary slope parameters and contracted coal sales values. The selected RF0.9 shell was used to update the WW pit designs and subsequently modified following further detailed slope stability analyses and with access incorporated into pit designs.</li> <li>• Standard truck and hydraulic excavator have been determined to be most cost-effective mining method given the multiple coal seams and is the proven mining method in terms of past and</li> </ul>



Criteria	Commentary
	<p>present operations at site.</p> <ul style="list-style-type: none"> <li>Geotechnical parameters for cut slope design were developed based on historical cut slope performance, slope back-analysis and laboratory testing of material strength parameters. Highwall design criteria include slopes in Waikato Coal Measures (fireclay and coal) and 'softs' (marine sediments, quaternary clays and old backfill). Slopes are designed to comply with a Factor of Safety that exceeds 1.2. Consideration is also given of the stability effects where underground workings may have weakened the rock mass above worked coal seams. The design criteria allow for both limit equilibrium analyses as well as probabilistic or sensitivity assessment to incorporate variability in material parameters and groundwater pressures.</li> <li>Modifying factors applied include a minimum mining thickness, seam compositing factors, losses associated with previous surface and underground mining and a coal processing plant washery yield.</li> <li>Mining modifying factors are: <ul style="list-style-type: none"> <li>Minimum mining seam thickness of 0.5m, parting 0.2m,</li> <li>Roof/floor losses 0.15m (combined) per recoverable seam. Roof/floor contamination on 0.04m (combined).</li> <li>Roof dilution of 0.01m and floor dilution of 0.04m.</li> </ul> </li> <li>Coal Resource tonnes (refer to Section 3 above) are estimated using seam depletion quantities derived from historical surface and underground production records and survey data (if available). <ul style="list-style-type: none"> <li>Blocks containing underground extraction are also applied in the mining model with varying levels of losses, dilutions and contamination depending on the underground worked seam and area. Mining modifying factors for roof and floor loss, contamination and dilution in the previously underground worked areas were reconciled and updated to better reflect actuals in 2024.</li> </ul> </li> <li>ROM coal tonnes are estimated by taking mining losses away from coal resource tonnage with the diluted and contaminated ROM coal fraction sent to the onsite coal washery for beneficiation and bypass coal sent directly to the onsite blending plant.</li> <li>The washery yield is currently modelled at 62% based on actual plant performance.</li> <li>Coal quality values are weighted averages of wash and bypass coal quality, adjusted for washed contamination qualities.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>Product coal specifications include ash, sulphur, fixed carbon, moisture and calorific value.</li> <li>Product specifications are adequate to meet contractual sales requirements.</li> <li>The only material that could be considered by-product that is recovered from the Rotowaro resource is contaminated coal. This comes from collapsed underground workings and seam contact roof and floor cleanings. It is washed at the coal washery at an estimated 62% product yield.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>All regulatory consents and land access agreements required for an operating mine are in place and current. If future regulatory approvals or renewals are required to achieve the LOM production, including the current Mining Licence (CML 37155, refer to Section 2 above) which expires in 2027, it is expected that these can be obtained in a timely manner under current regulatory consenting pathways. The site is currently in the process of renewing existing Waikato Regional Council resource consents.</li> <li>Reserves include the extension of Waipuna West Pit to the south and east.</li> <li>Waste rock characterisation results show that the material is non-acid producing, as such it does not require special placement requirements or procedures in the waste rock dumps.</li> <li>The excavation of overburden at Rotowaro however can increase sediment and specifically Boron concentrations in surface runoff, therefore site water is managed through a series of diversions, ponds and a treatment plant prior to discharge. The site is compliant with consents.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>All necessary infrastructure is in place and operational for the current operation.</li> <li>Labour and accommodation is sourced for nearby towns and cities.</li> <li>Access to site is on well-formed and established roads/highway.</li> <li>Coal is sold at the gate and the site has adequate stockpile room for the planned production rate and established coal transportation systems including rail, conveyance or trucking loadout</li> </ul>

Criteria	Commentary
	facilities.
<b>Costs</b>	<ul style="list-style-type: none"> <li>Rotowaro is an existing operating mine and as such all major infrastructure is in place. Capital requirements for the reported Coal Reserves are limited to mainly sustaining capital for equipment replacement and is included in the economic model.</li> <li>All operating costs were based on the three-year budget estimates and include allowances for Crown and private royalties, levies, commissions, mining costs, infrastructure, coal handling and processing, rehabilitation and mine closure, train loading and administration.</li> <li>Coal product specifications and penalties for failure to meet specification are included.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>Long term coal supply sales contracts are in place.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>The pit is an existing operating mine with long term sales contracts in place.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>Rotowaro is a long term operating mine. Economics for estimation and reporting of Coal Reserves purposes, detailed mine design and schedules are generated. This work includes identifying the mining sequence and equipment requirements.</li> <li>Lerchs-Grossman pit optimisation is used as a tool to identify the pit extents of coal resources that may have the potential to be converted to reserve. The latest pit optimisation study was completed in July 2024.</li> <li>BRL generates detailed cash flow schedules and identifies incremental and sustaining capital.</li> <li>Long term domestic coal sales contracts are in place.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>All regulatory resource consents and licences required for operating the mine are current.</li> <li>The site has iwi and stakeholder engagement management plans.</li> <li>BT Mining provides support annual to local community organisations.</li> <li>Updating of approvals is an ongoing process and it is reasonably expected that any modifications to existing approvals or additional approvals that may be required can be obtained in a timely manner.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>The New Zealand government is phasing out coal as part of meeting international commitments to reducing greenhouse gas emissions climate change and the goal for transition to a net zero carbon economy, decarbonisation of coal supply customers is expected to reduce future sales volumes. This has been considered in market forecasts, schedules and economic model.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>Confidence is based on the Coal Resource model assessment.</li> <li>Results fairly reflect the Competent Person's understanding of the deposit.</li> <li>Classification of Coal Reserves has been derived by considering the Measured and Indicated Resources and the level of mine planning.</li> <li>For the Rotowaro operation, Measured Coal Resources are classified as Proven Coal Reserves and Indicated Resources classified as Probable Coal Reserves, as the mine is currently operating and the level of mine planning adequate.</li> <li>Coal Reserves increased in 2024 due to updates to the resource model and reclassification of some Inferred Coal Resources to Indicated.</li> <li>The Inferred Coal Resources have been excluded from the Reserve estimates.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Several internal reviews have been completed during the various project stages and during purchase of the site by BT Mining for due diligence in 2016.</li> <li>An internal review of mining modifying factors for dilution and recovery was undertaken in 2024 and roof and floor loss contamination and dilution factors for the previously underground worked areas updated to better reflect actuals.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Coal Reserves have been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the basis of the categorisation reflects the accuracy of the coal reserve tonnes.</li> <li>Confidence in the result is reinforced by reviewing the long-term performance of the sites history verses actual coal production. Reconciliation of the current model continues to demonstrate a 0-10% improvement in coal product mined versus model.</li> <li>The longer-term results show good correlation between actual tonnes sold and the model and therefore it shown that the current modifying factors are performing adequately.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>• The confidence is reduced by:               <ul style="list-style-type: none"> <li>○ A block being within an area of historical underground workings due to extraction rate uncertainty.</li> <li>○ A block lying in an area where structure dip is greater than 20° due to proximity to large faults. Faulting can impact coal thickness and quality.</li> </ul> </li> </ul>



Appendix A:

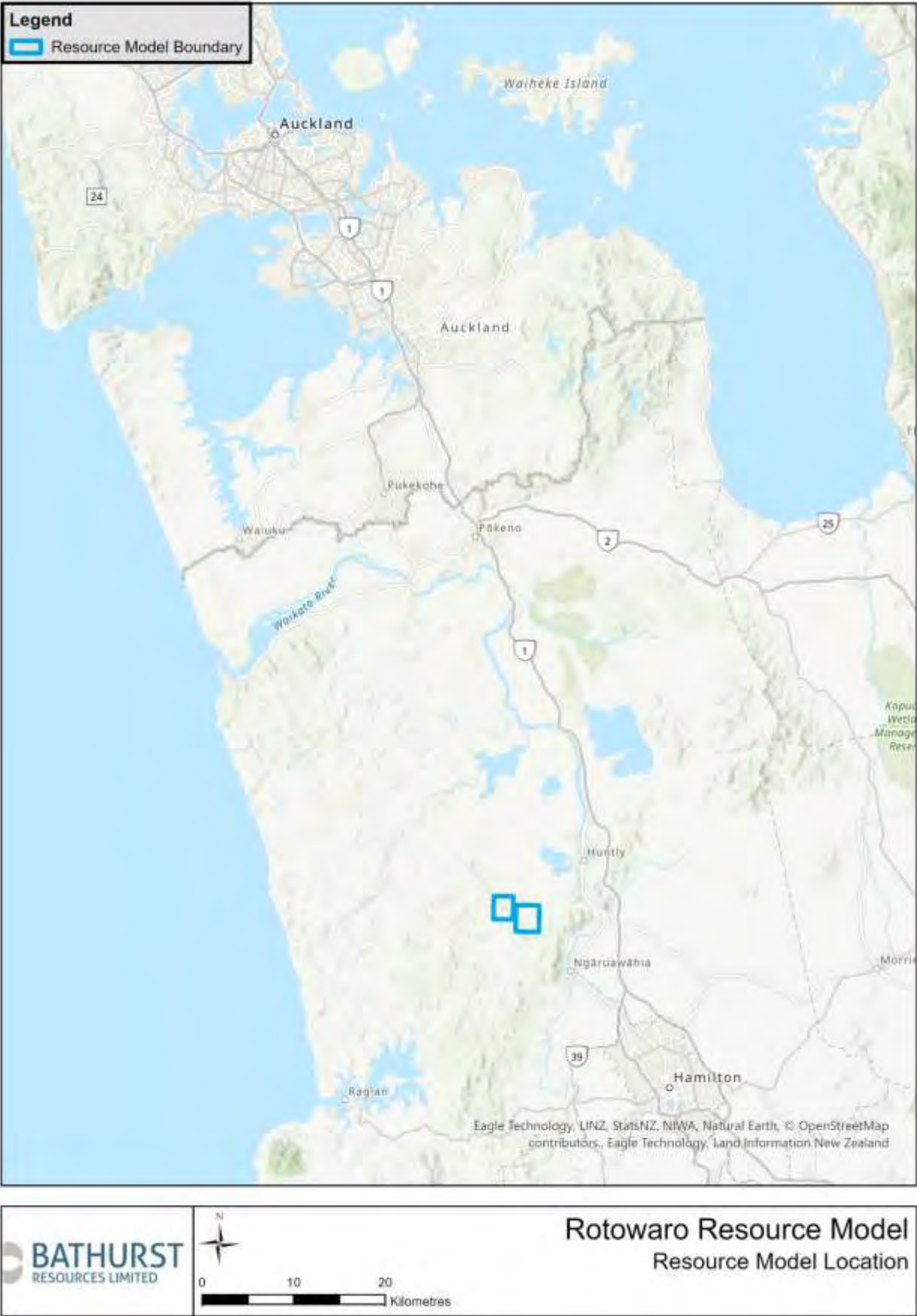


Figure 1: Location map of Rotowaro

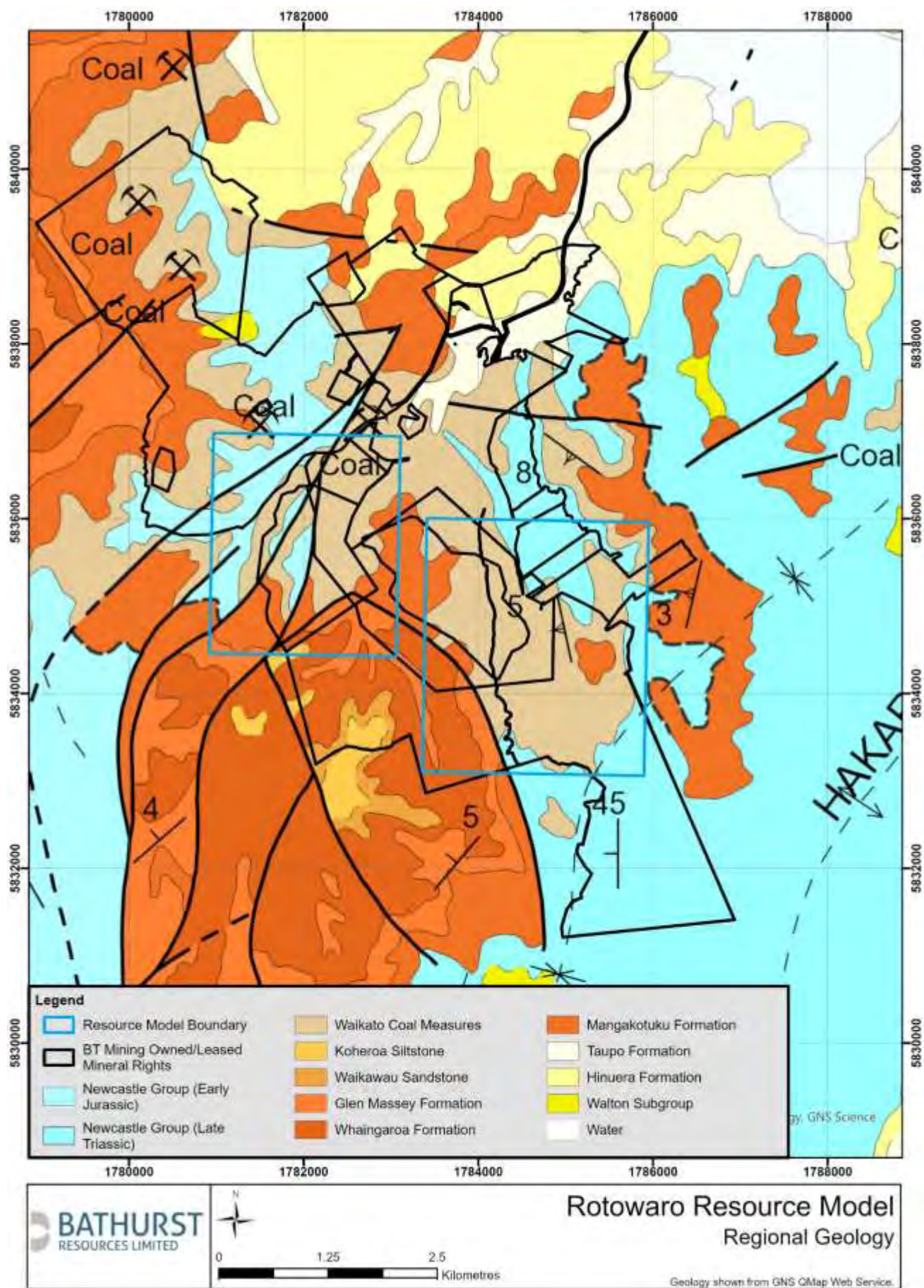


Figure 2: Regional Geology



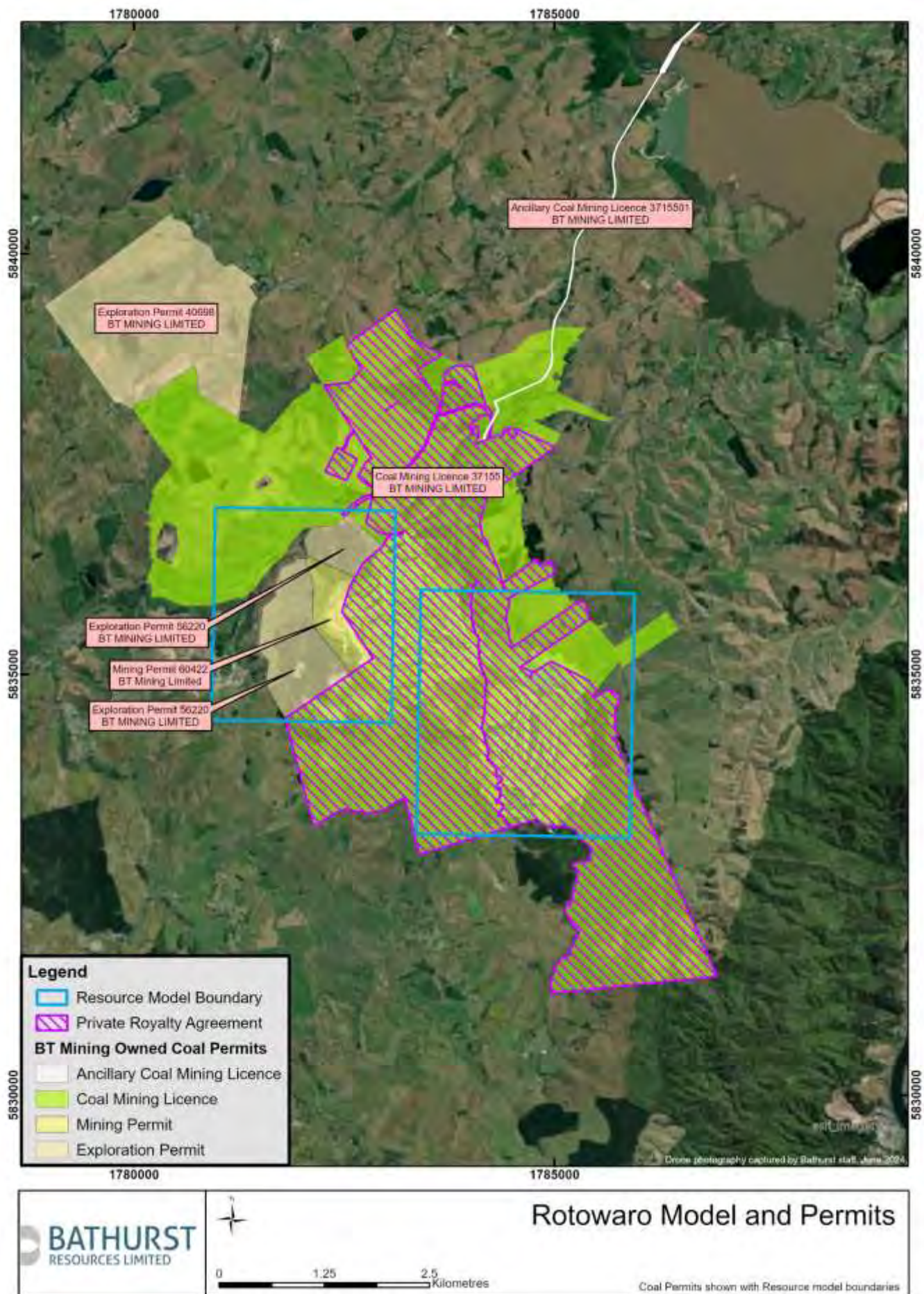


Figure 3: Rotowaro and the Coal Licences and permits within the resource model area



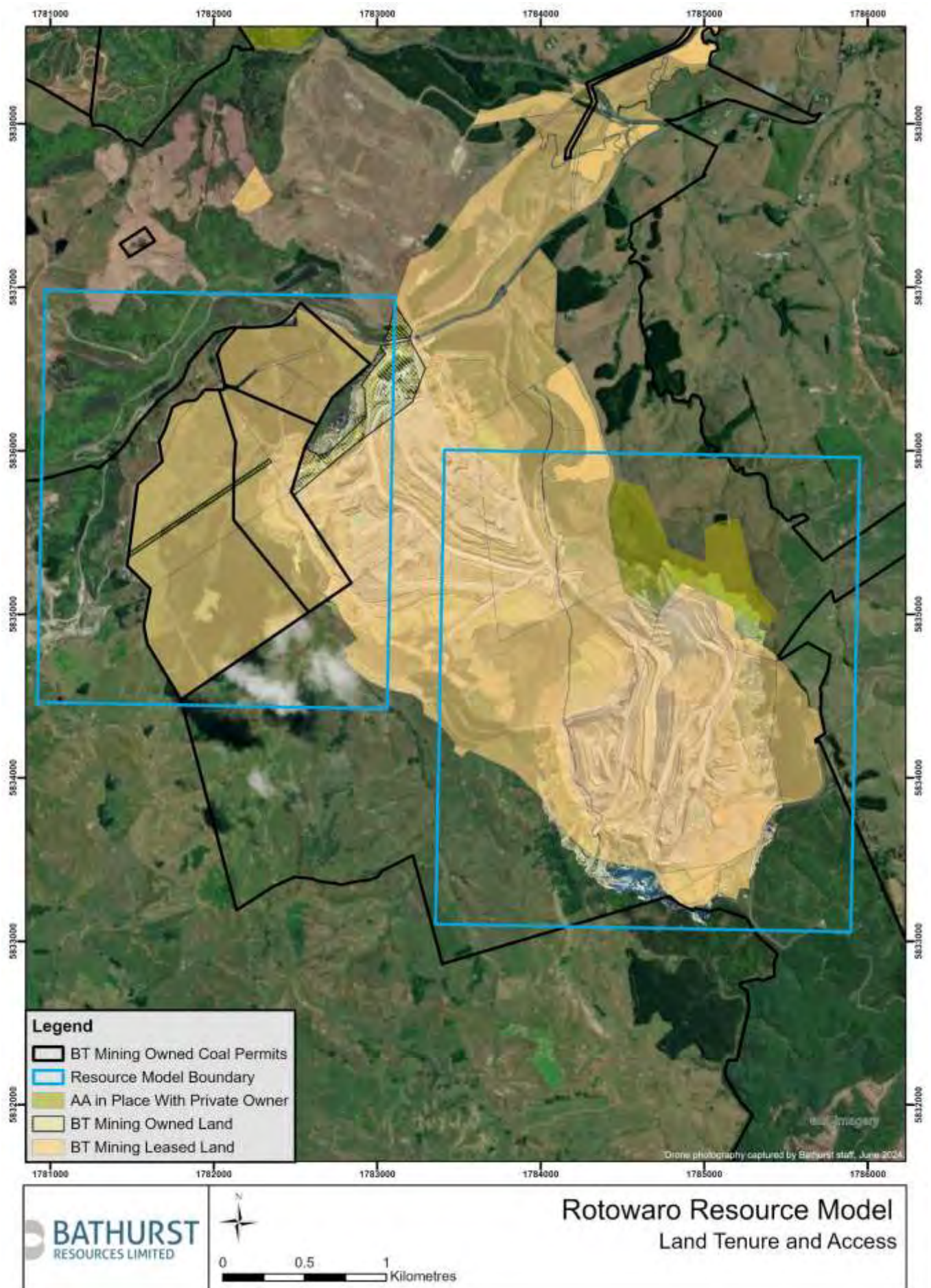


Figure 4: Rotowaro Land Access plan



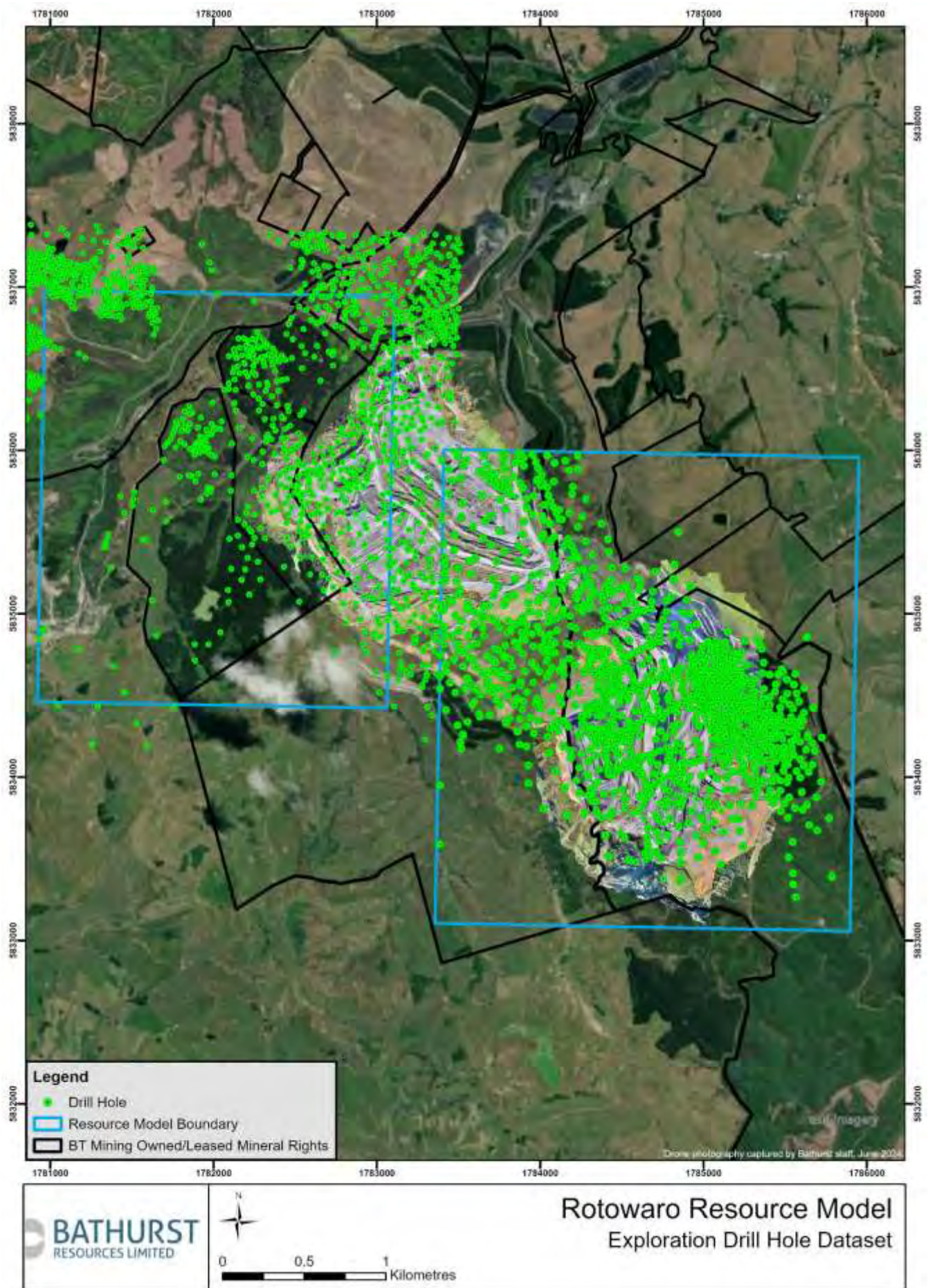


Figure 5: Plan showing the drilling dataset used to produce the resource model



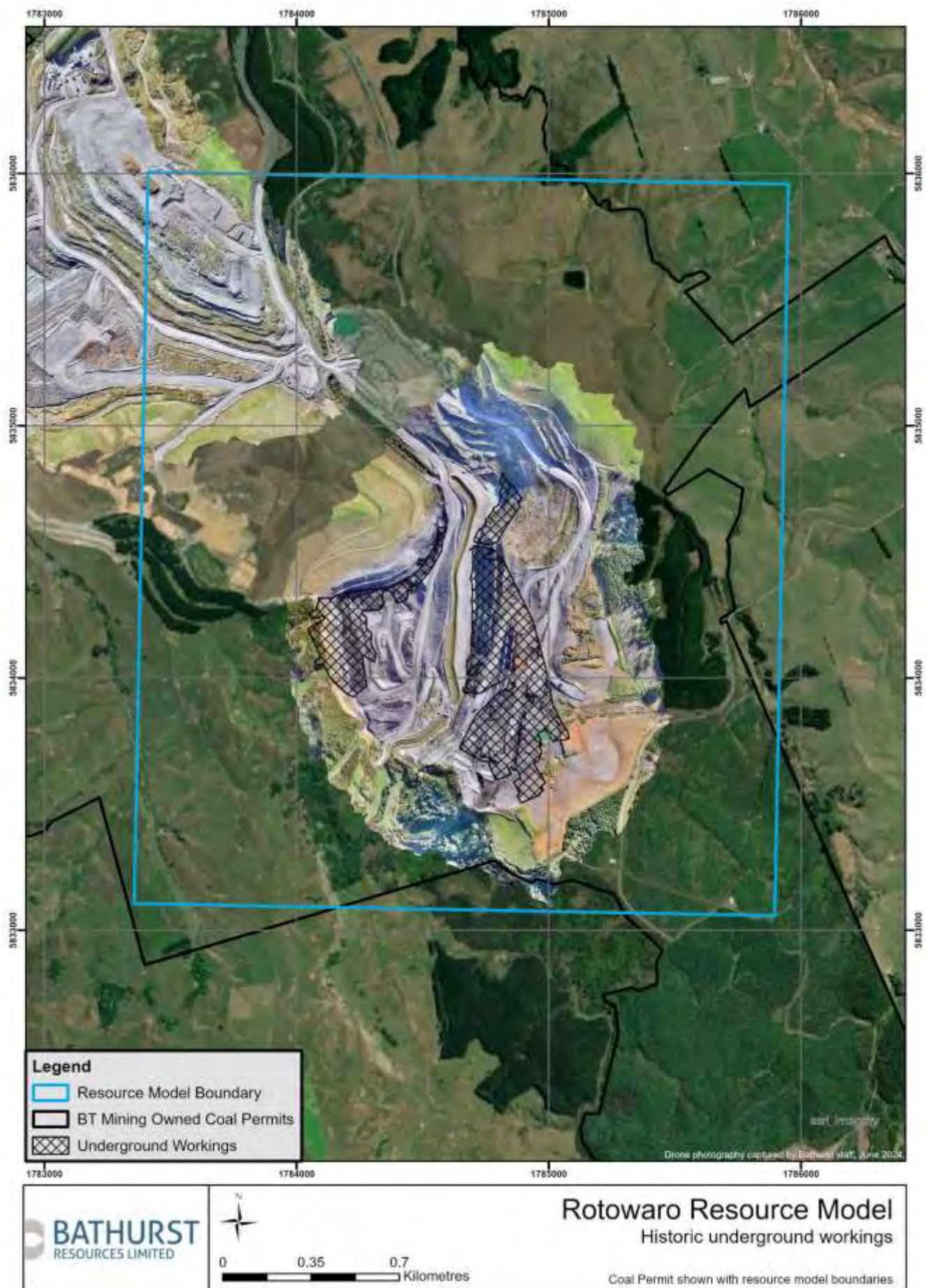


Figure 6: Plan showing the extent of remaining Underground Workings.



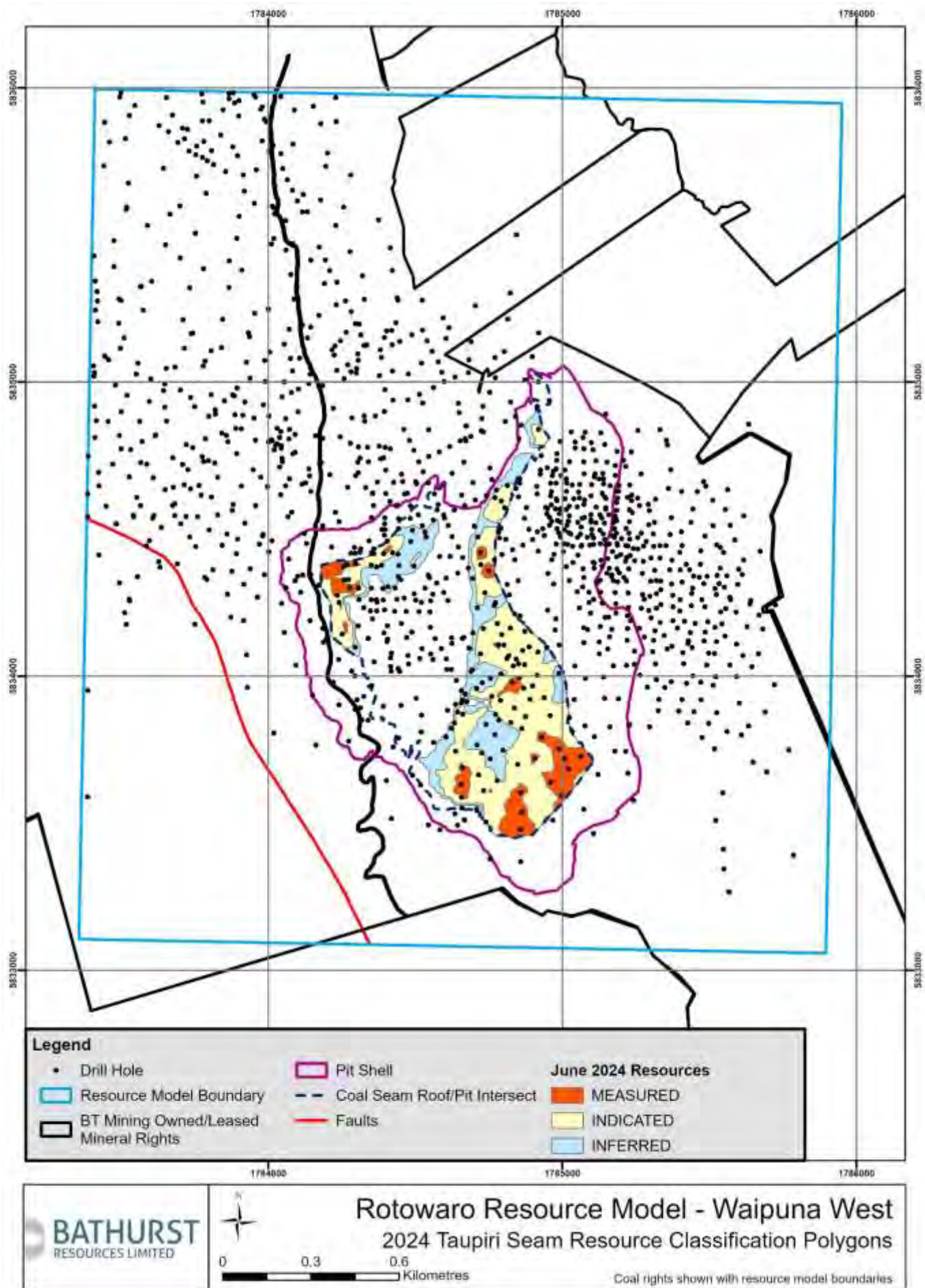


Figure 7: Plan showing the resource classification polygons for the Taupiri Main seam at Waipuna West



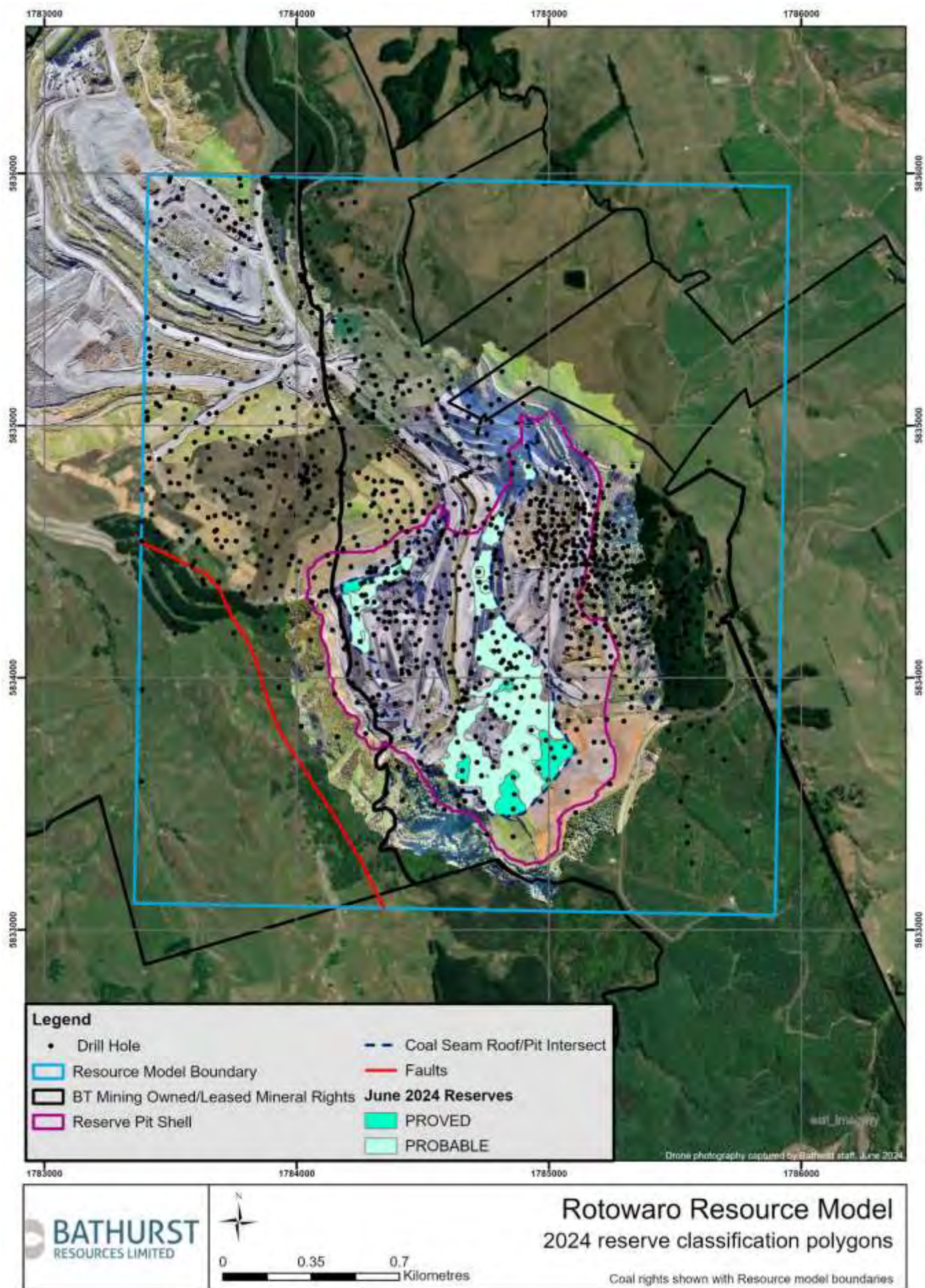


Figure 8: Plan showing the reserve classification polygons for the Taupiri Main seam at Waipuna West



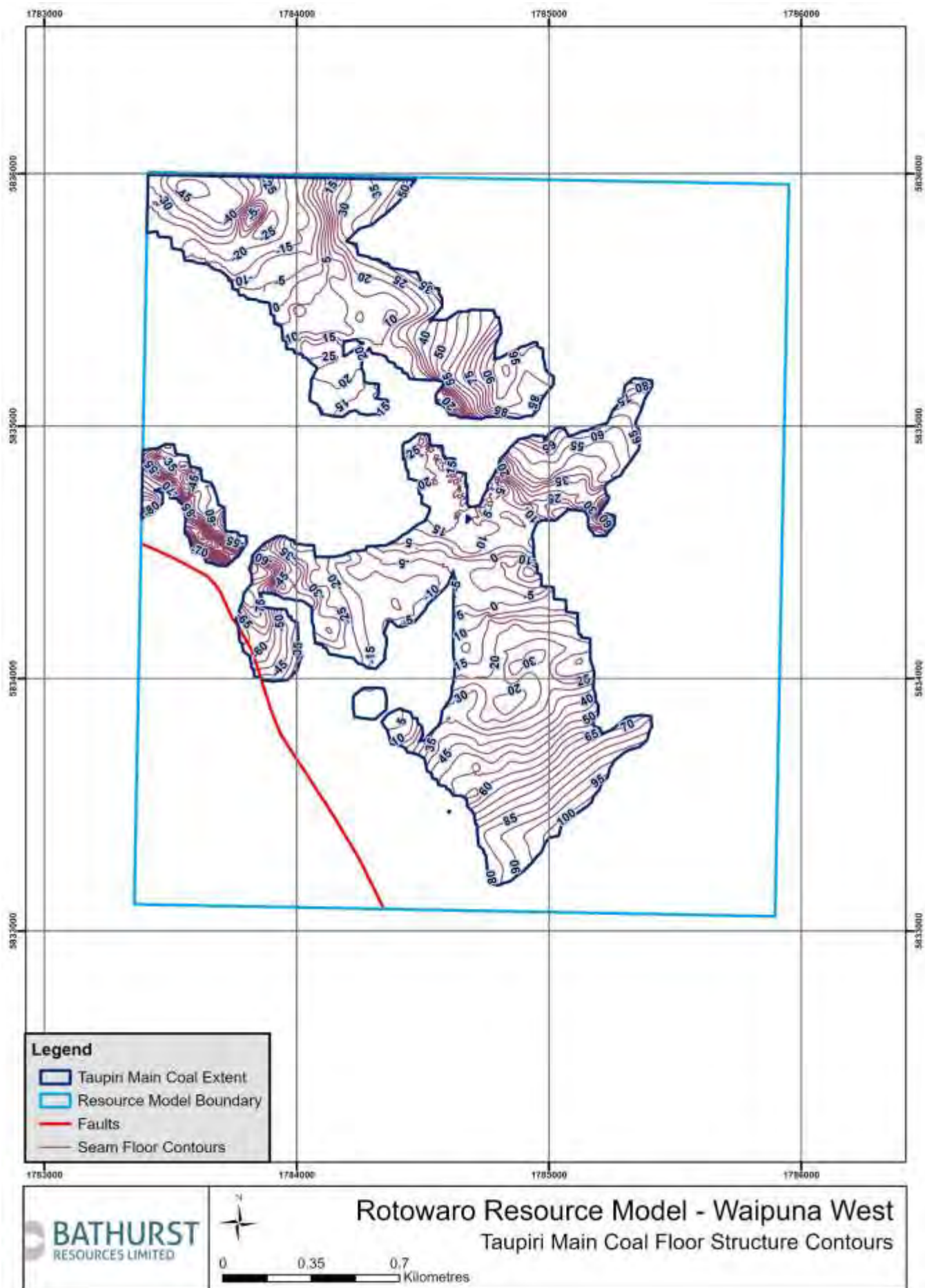


Figure 9: Plan showing the structure contours of the Taupiri coal seam floor at Waipuna West



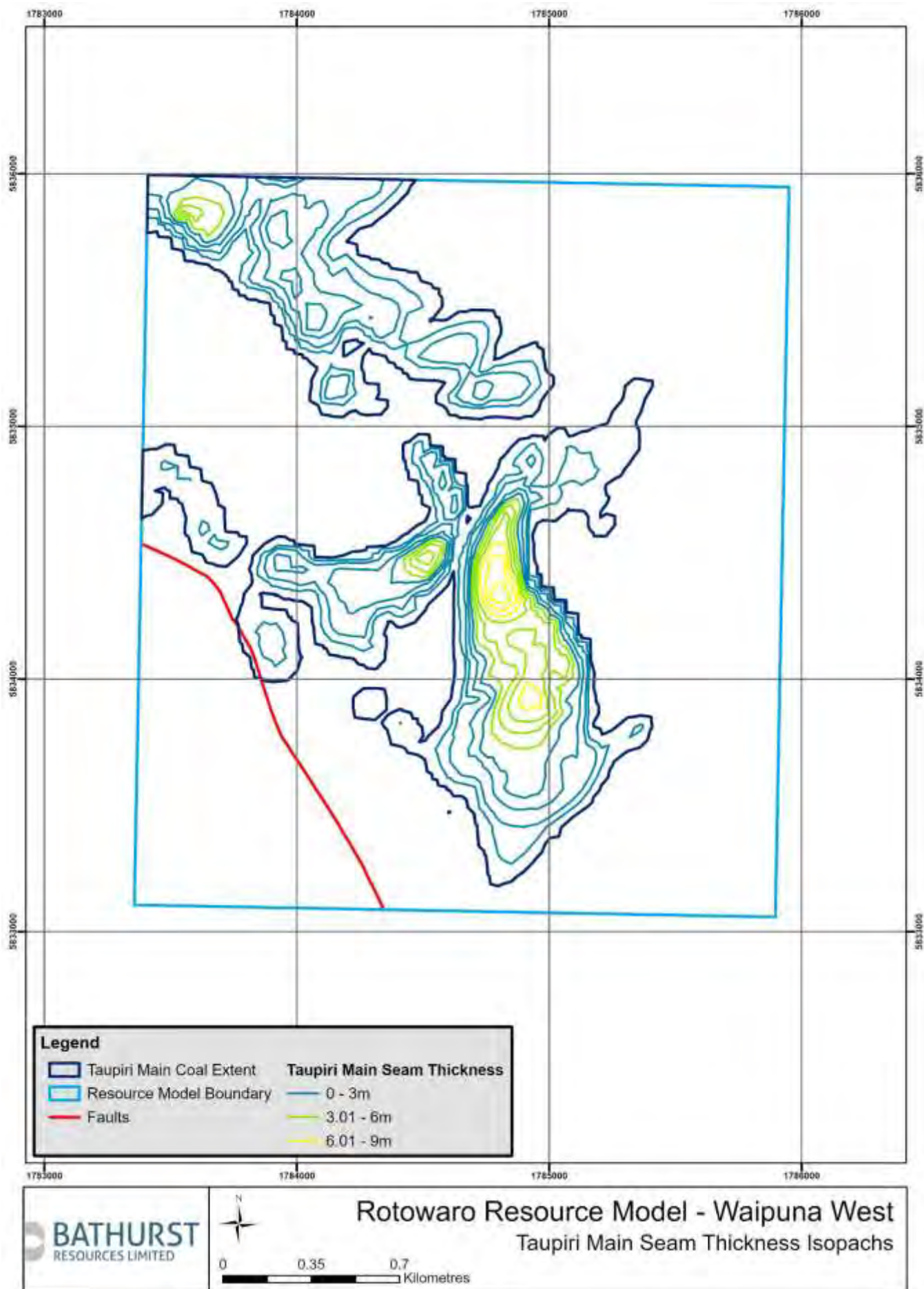


Figure 10: Plan showing Taupiri seam thickness contours over the Waipuna West resource area

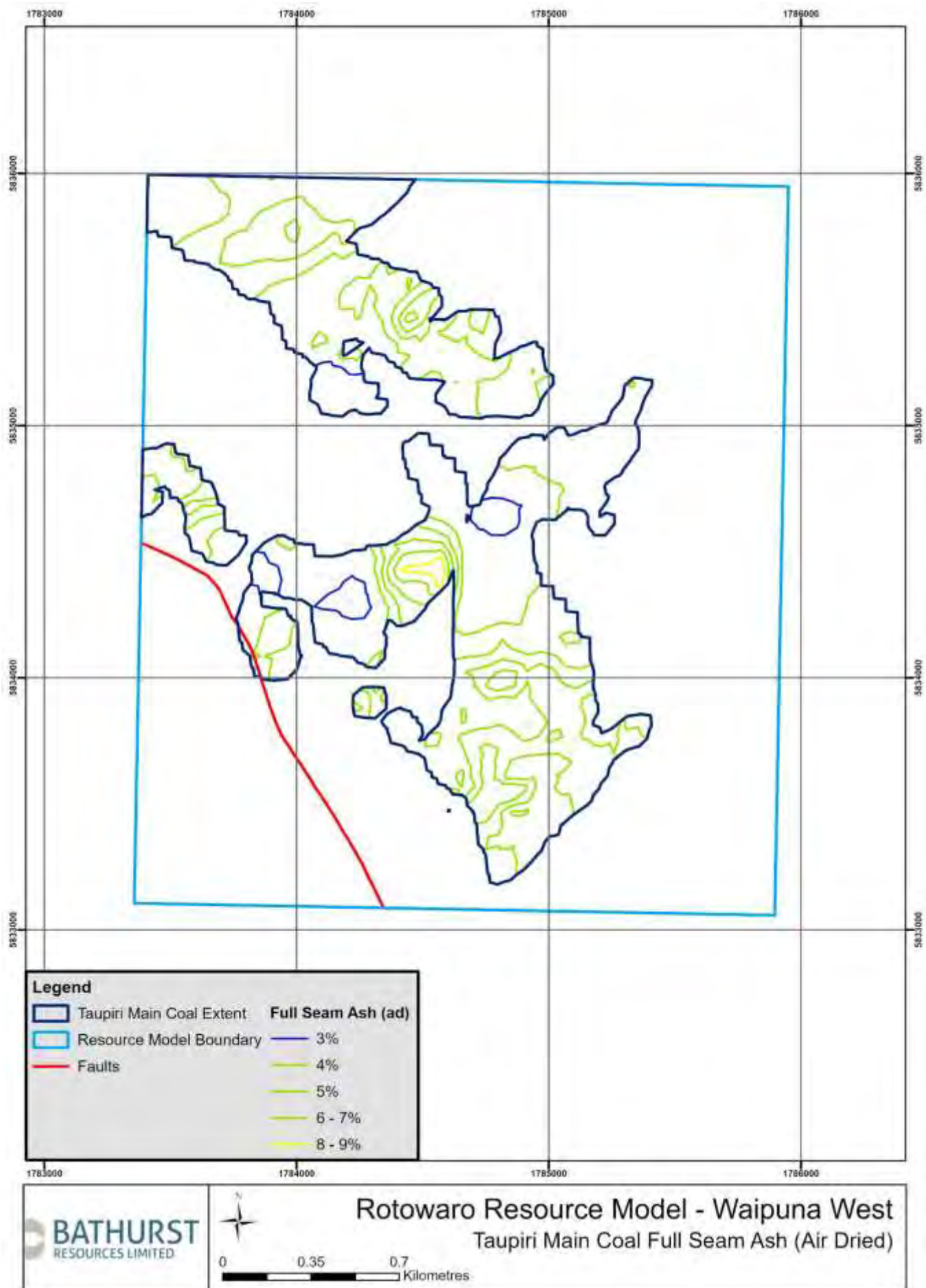


Figure 11: Plan showing in situ Taupiri seam ash on an air-dried basis as modelled over the Waipuna West resource area

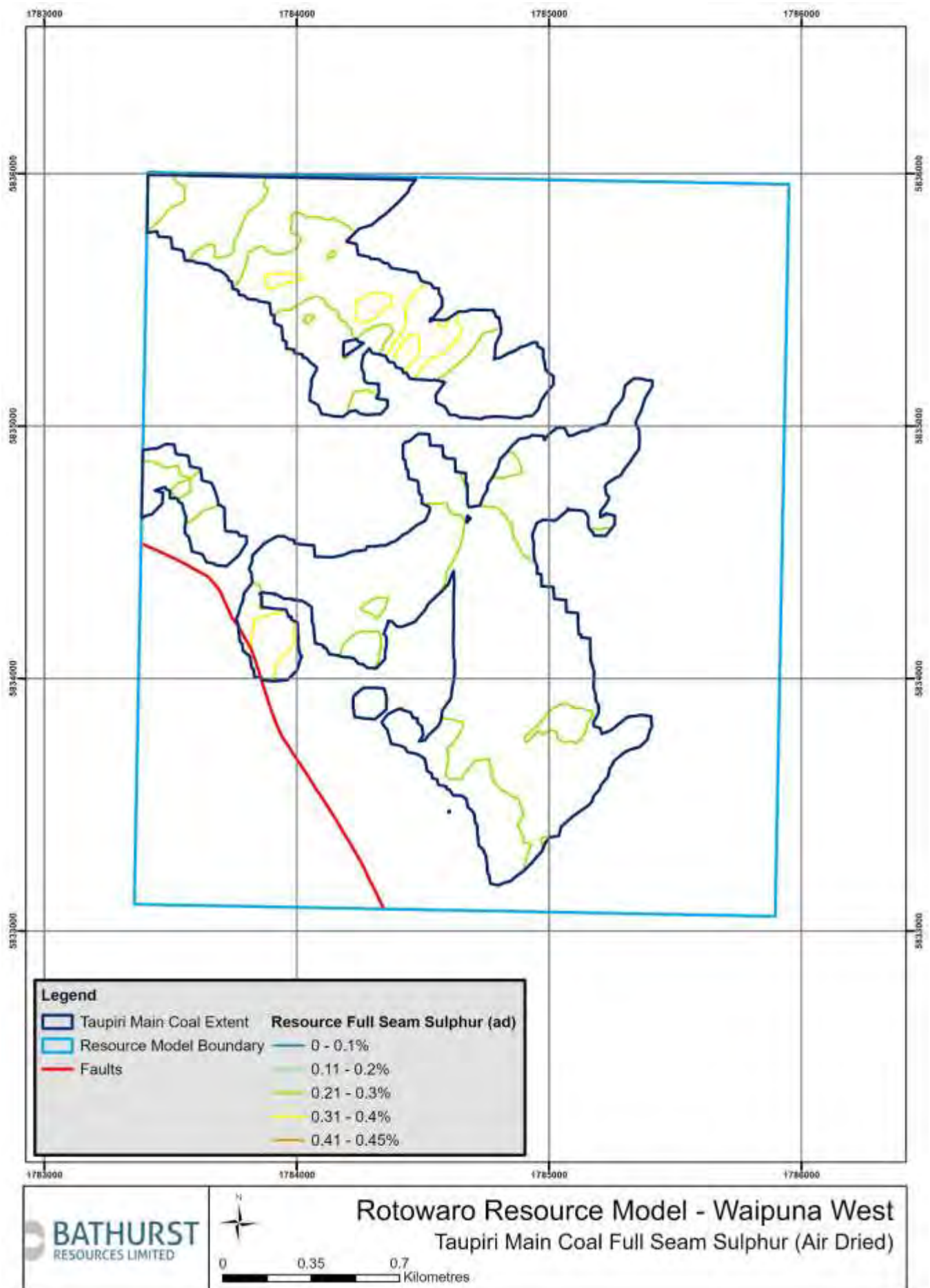


Figure 12: Plan showing Taupiri seam sulphur on an air-dried basis across the Waipuna West resource area



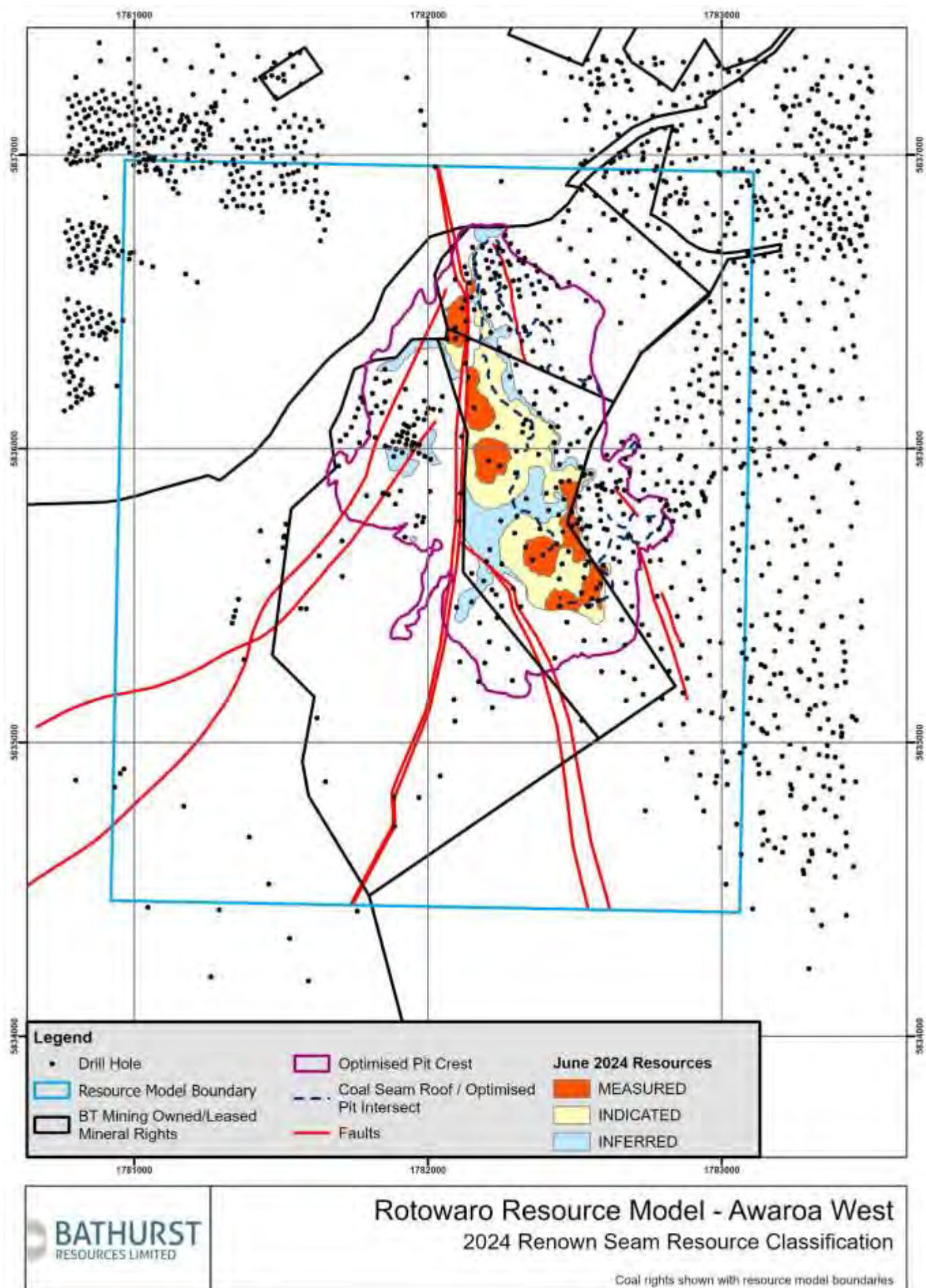


Figure 13: Plan showing the resource classification polygons for the Renown Main seam at Awaroa West

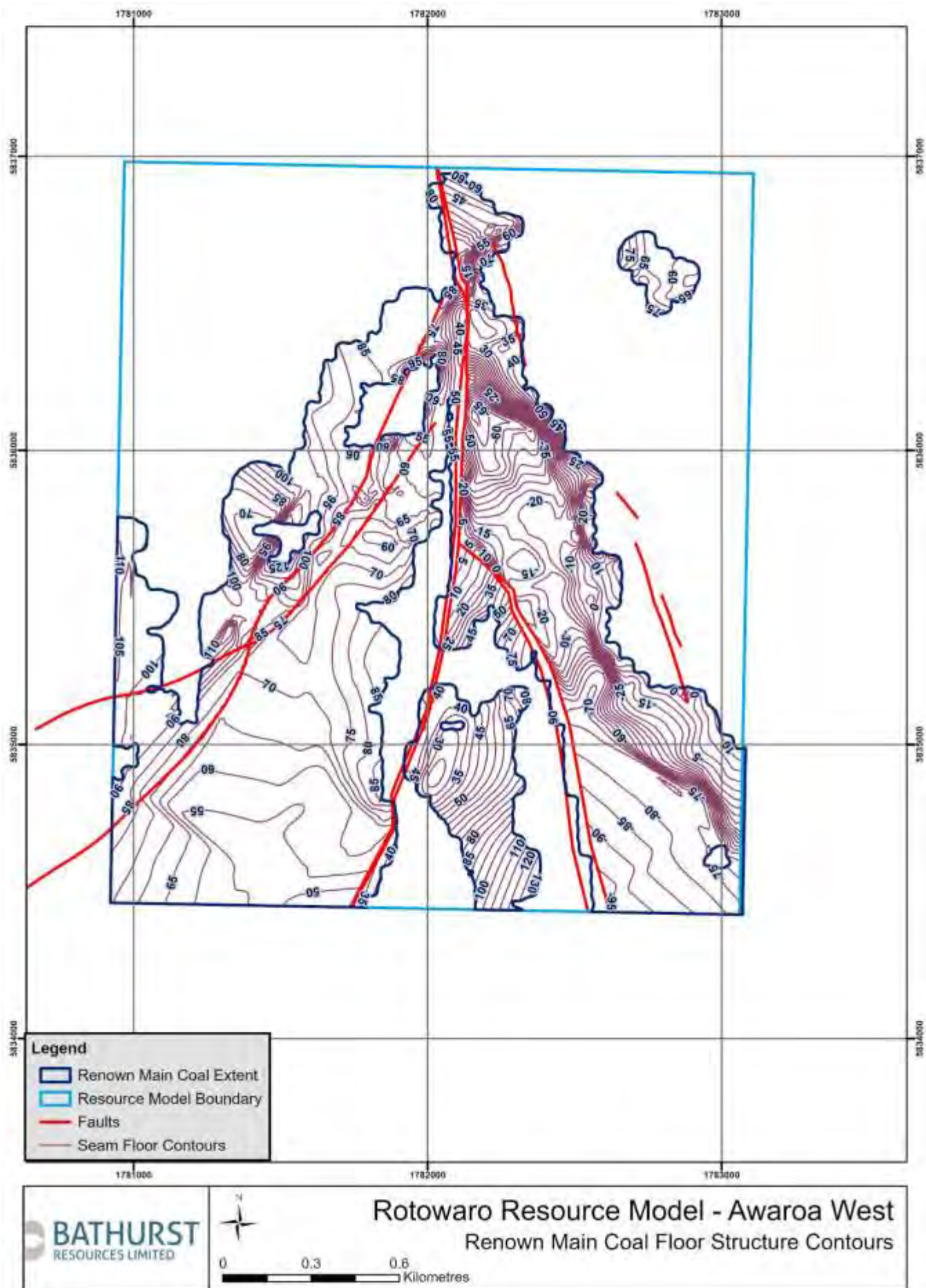


Figure 14: Plan showing the structure contours of the Renown coal seam floor at Awaroa West



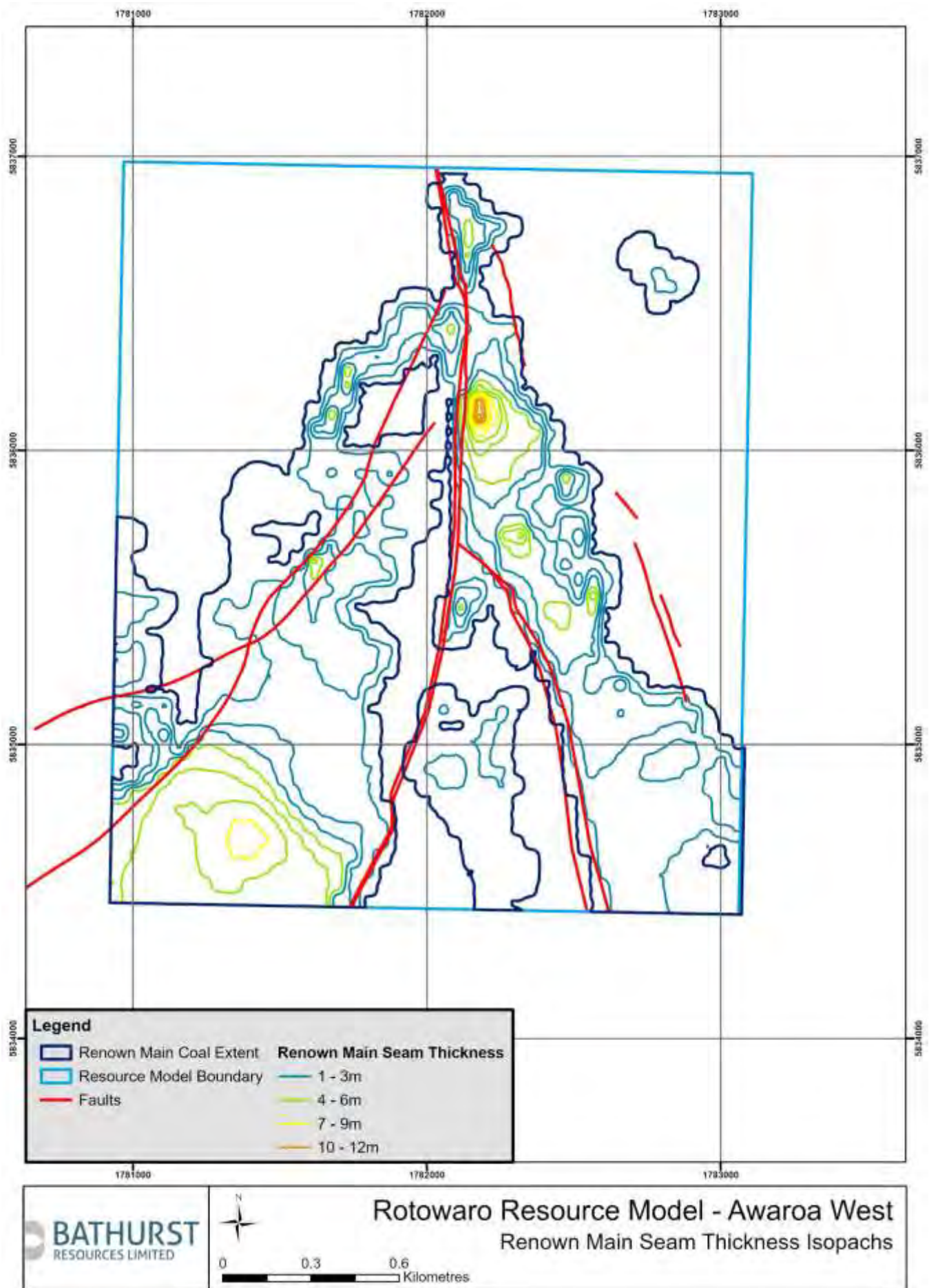


Figure 15: Plan showing Renown seam thickness contours over the Awaroa West resource area



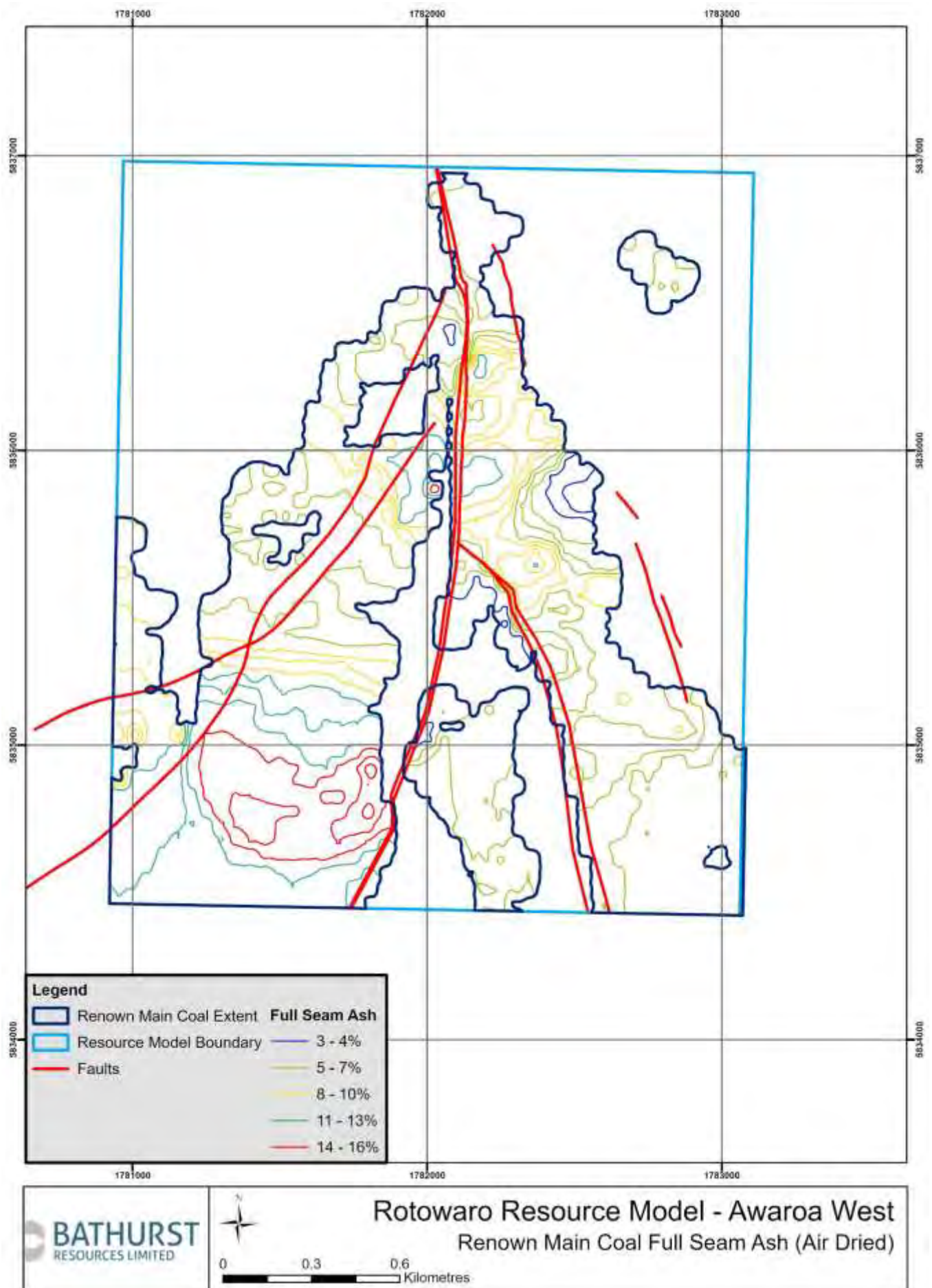


Figure 16: Plan showing in situ Renown seam ash on an air-dried basis as modelled over the Awaroa West resource area

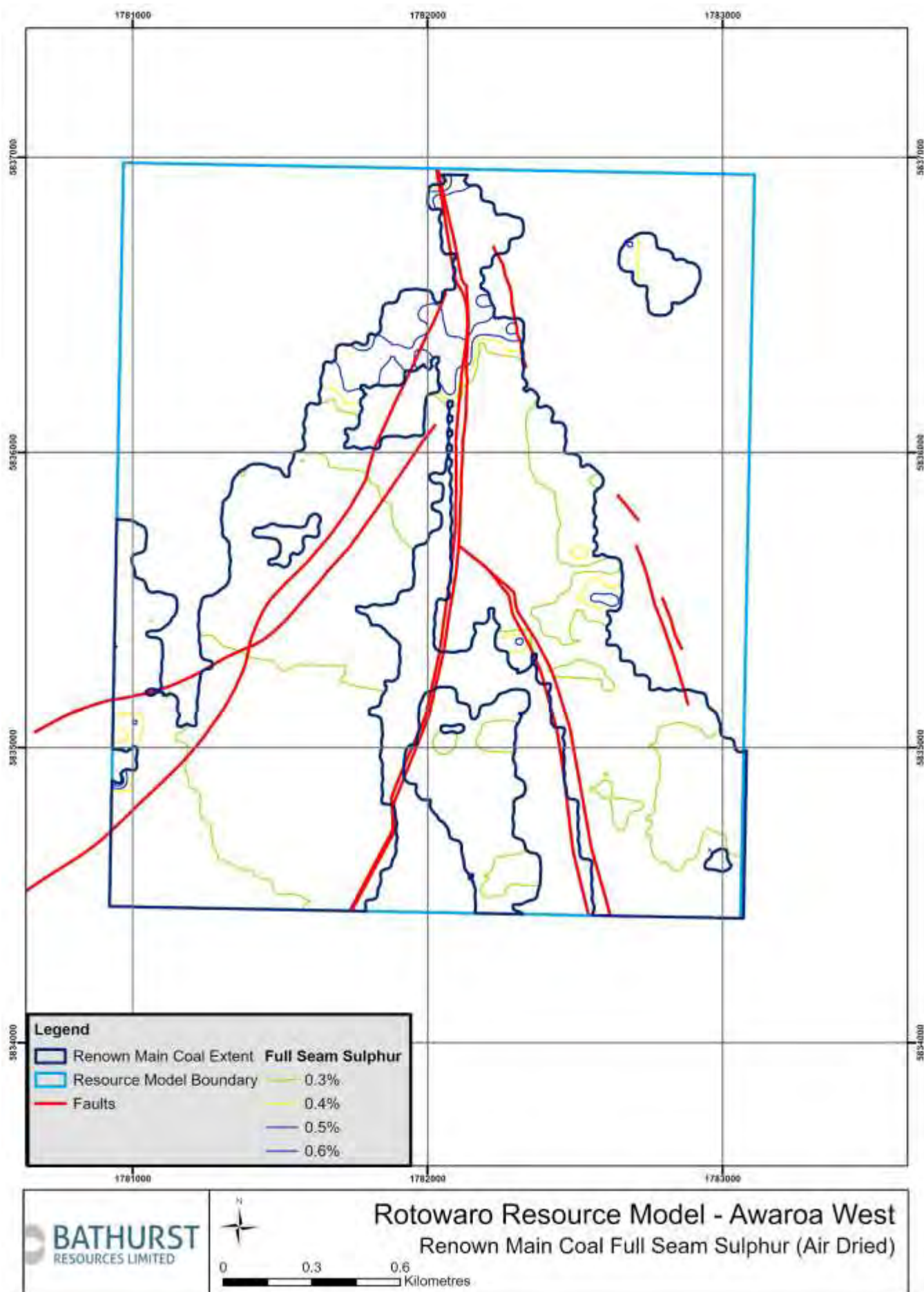


Figure 17: Plan showing Renown seam sulphur on an air-dried basis across the Awaroa West resource area



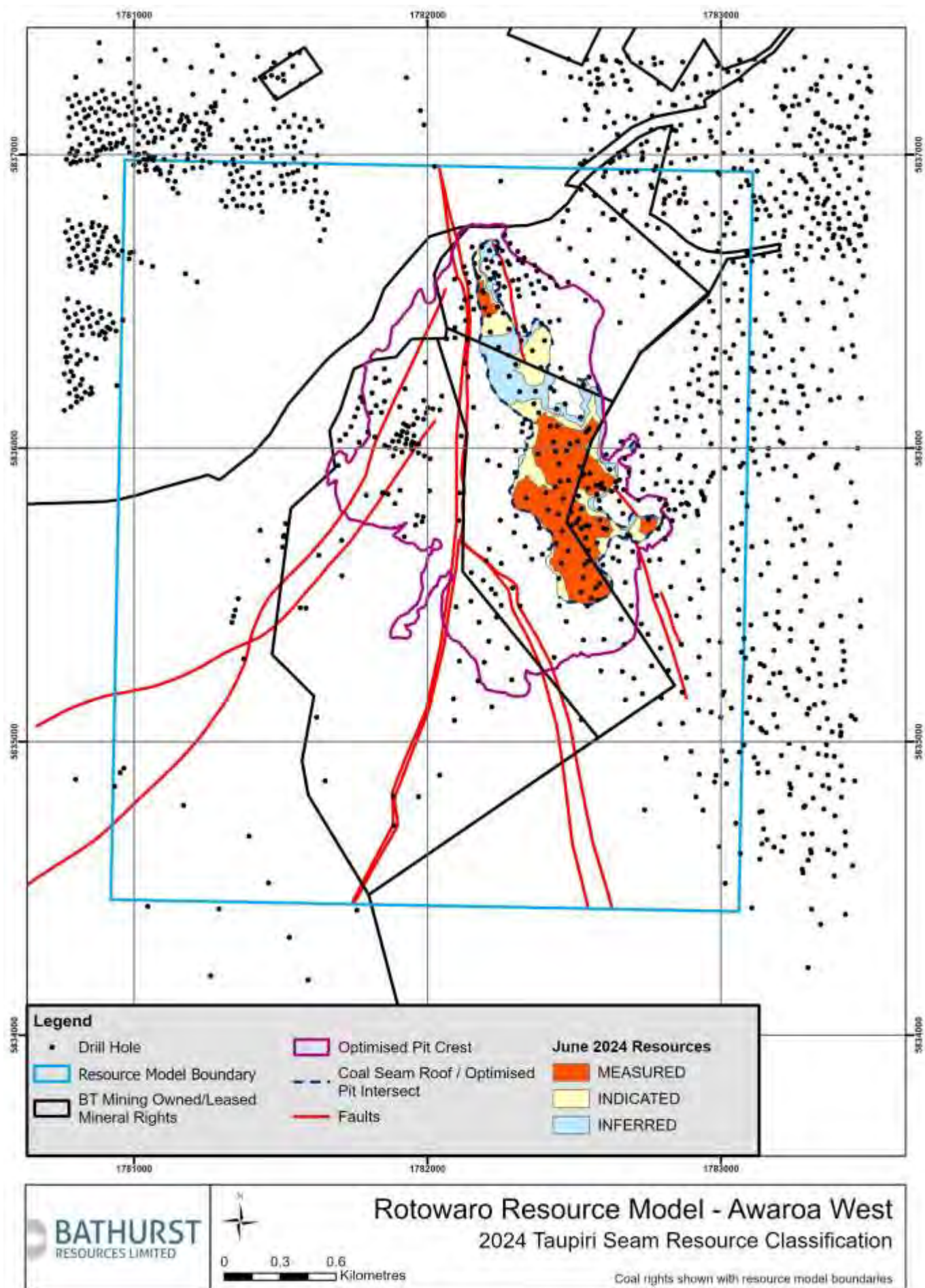


Figure 18: Plan showing the resource classification polygons for the Taupiri Main seam at Awaroa West



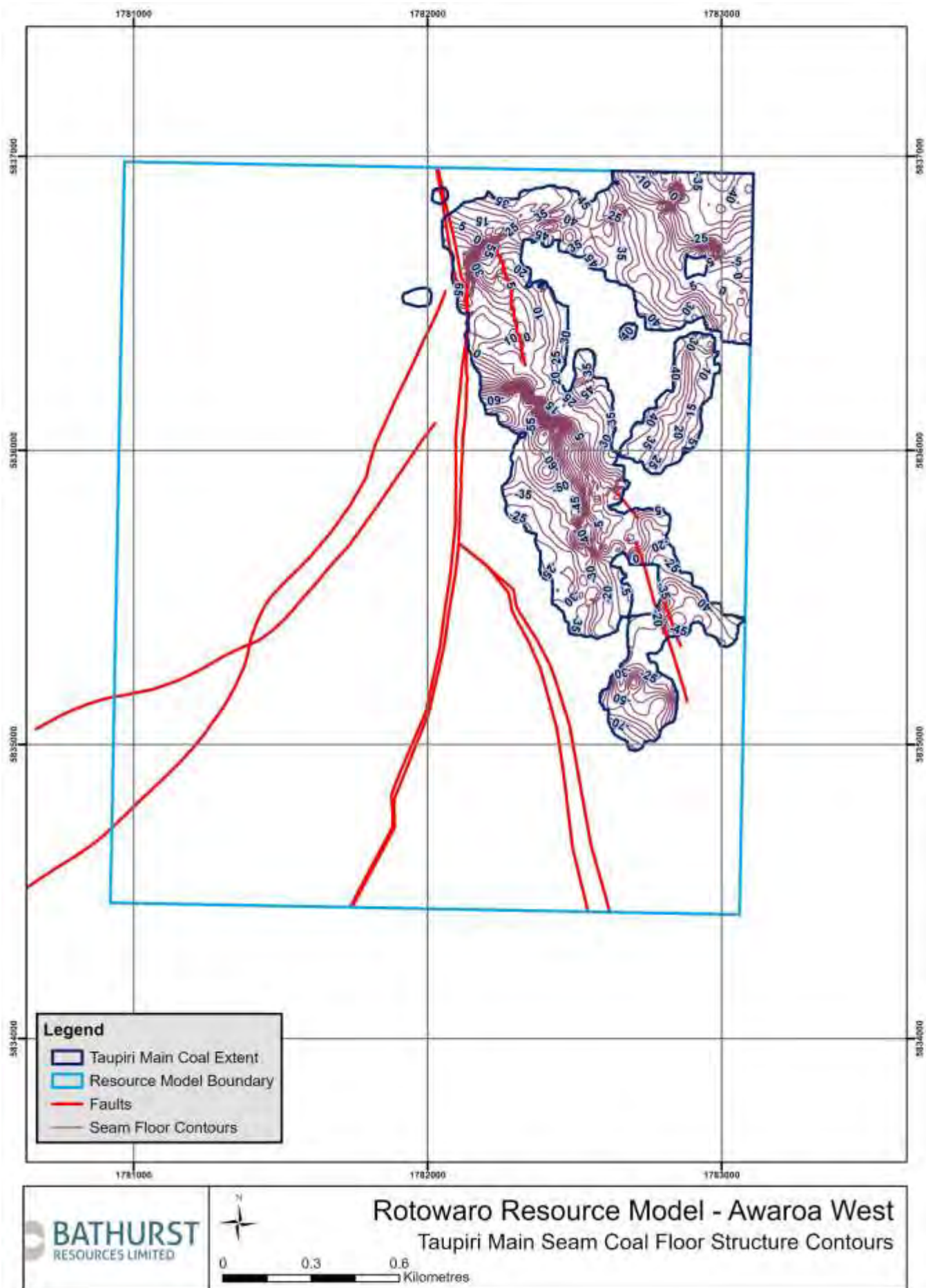


Figure 19: Plan showing the structure contours of the Taupiri coal seam floor at Awaroa West

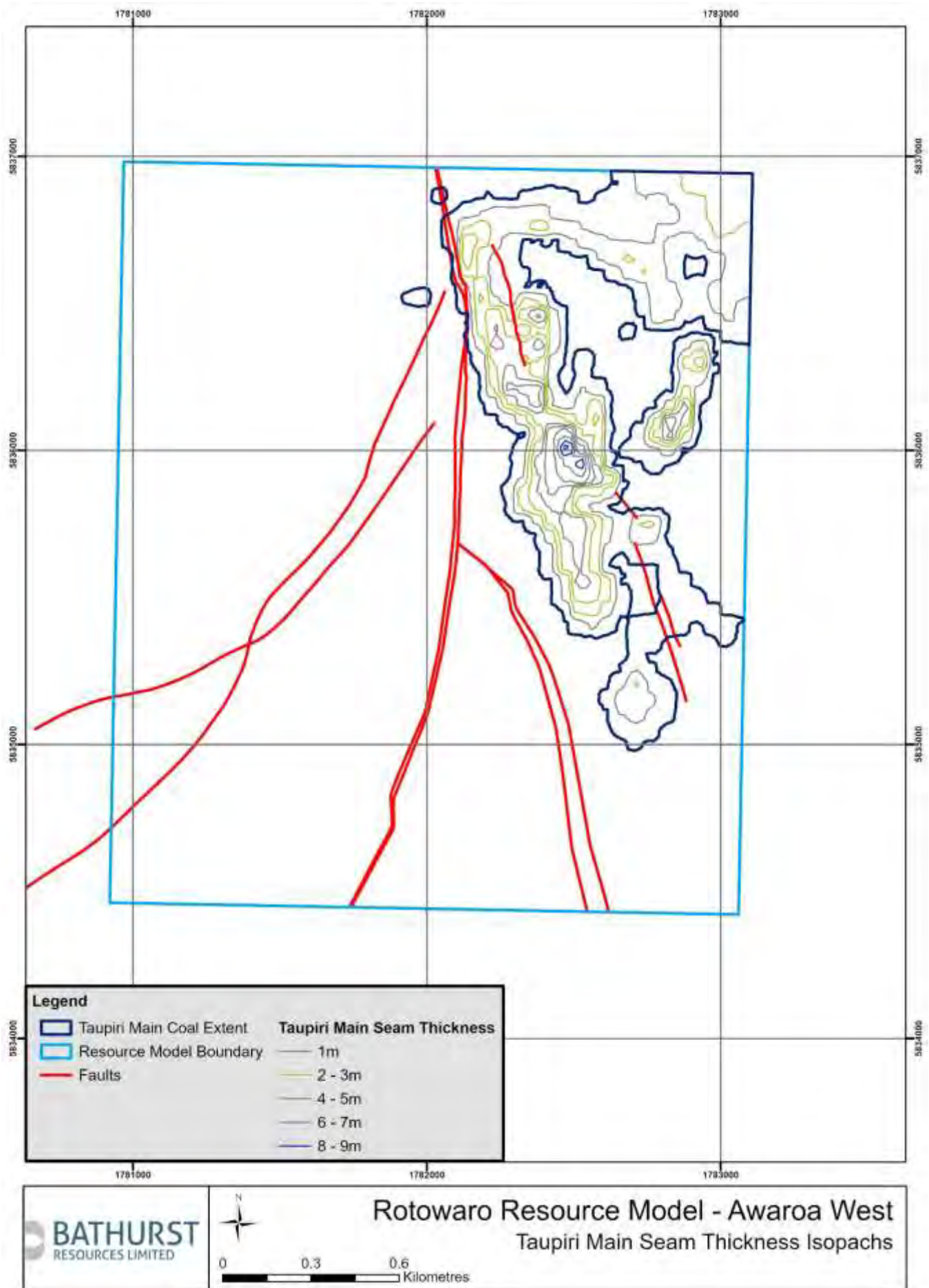


Figure 20: Plan showing Taupiri seam thickness contours over the Awaroa West resource area

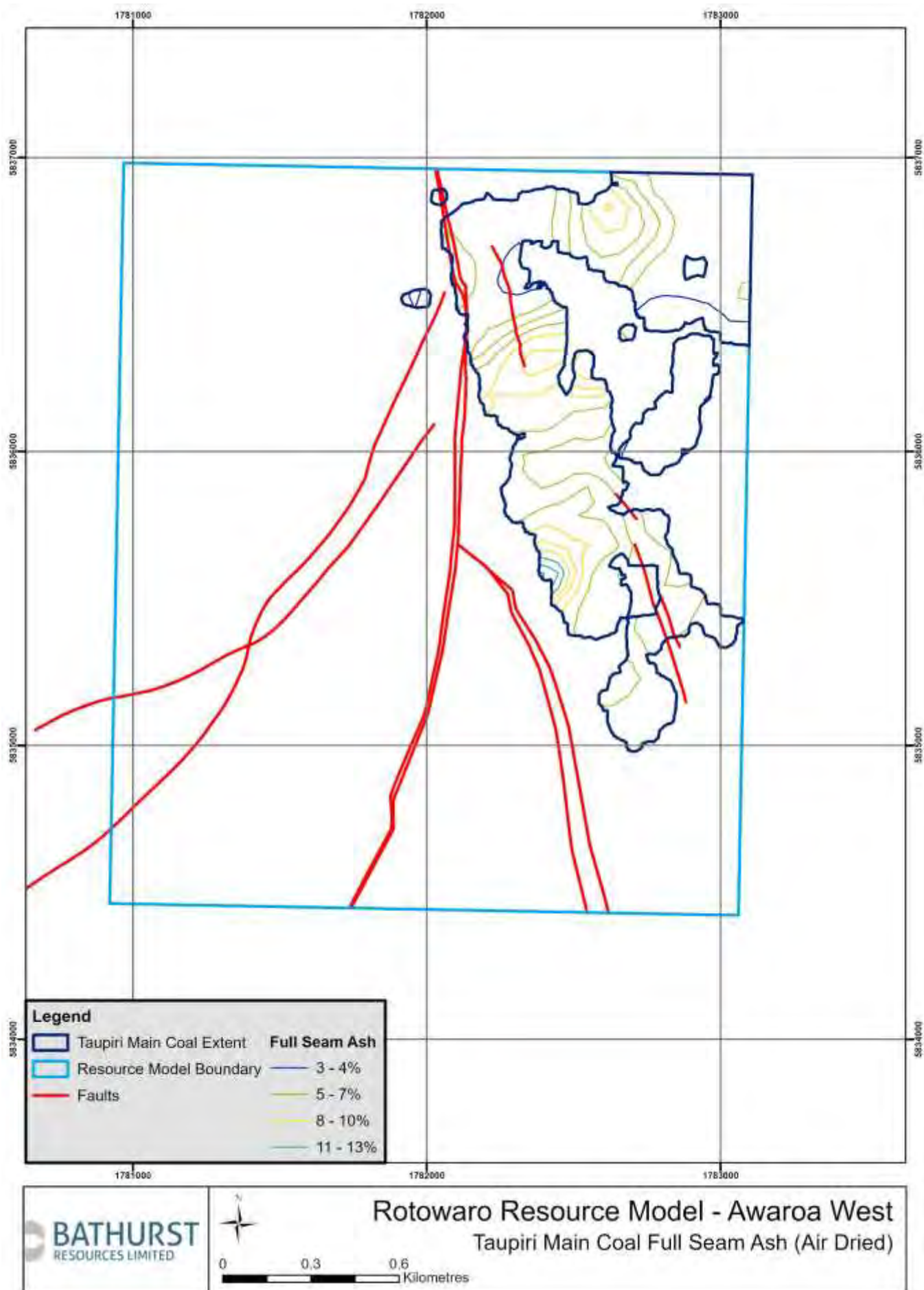


Figure 21: Plan showing in situ Taupiri seam ash on an air-dried basis as modelled over the Awaroa West resource area



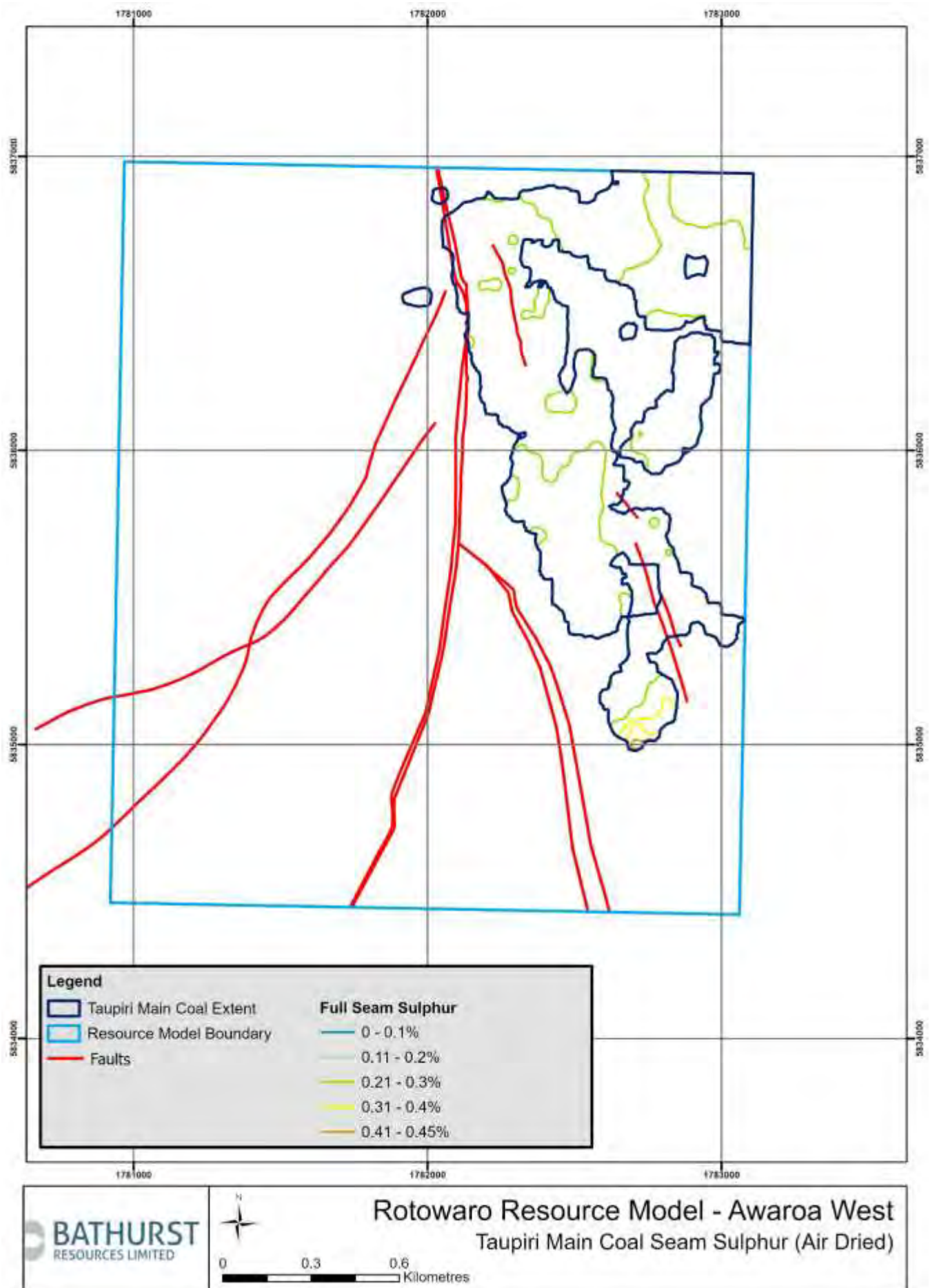


Figure 22: Plan showing Taupiri seam sulphur on an air-dried basis across the Awaroa West resource area

# JORC Code, 2012 Edition – Table 1 Report for Rotowaro North Extension 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Multiple campaigns of data acquisition have been conducted in the Waikato Coalfield, and at the Rotowaro North Extension project area over the past century.</li> <li>2023-2024 diamond core drilling for coal quality sampling was undertaken using PQ Triple Tube Coring (TTC) methods. Coal core samples are assigned unique identifiers and dispatched to the laboratory with Chain of Custody tracked using paper, e-mail and/or acQuire software. Core recovery recorded in the field is validated and adjusted if required using downhole geophysical logs during core logging and sampling. Composite samples are generated from individual coal plies at the laboratory that are thickness weighted.</li> <li>The 2023-2024 drilling programme utilised downhole natural gamma tool for coal seam correlations and coal recoveries. For some previous drilling campaigns a suite of downhole wireline geophysical logs, including density, natural gamma, caliper, sonic, dip meter, acoustic scanner, and verticality were often run in drillholes drilled in the last 15 years. All tools were calibrated on a regular and systematic basis.</li> <li>All analytical data has been assessed and verified before inclusion in the resource model.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Historically, Tungsten drag bits have been used to wash drill fully open holes (OH) and open hole sections. This drilling method is the primary method used within the drilling dataset.</li> <li>The 2023-2024 drilling programme utilised TTC methods to recover coal core to established industry standards. Core diameters are PQ (85mm).</li> <li>No core has been orientated.</li> <li>Some recent drilling has utilised air-core (AC) holes. AC samples are logged onsite and provide coal seam roof and floor intercepts.</li> <li>A large number of historical drillholes are included in the resource modelling database for the area modelled. Drillholes that have no verifiable location, lithology log or survey, or contradict adjacent reliable data, are considered unreliable and are excluded from the Coal Resource modelling process.</li> <li>A drillhole dataset from a previous operator of the project area has been added to the resource modelling database after data verification against original logs.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Core recovery was measured as the length of core recovered divided by the length of driller's run and noted by the core logging geologist. If recovery of coal intersections dropped below 90%, the drillhole required a re-drill in recent TTC drilling campaigns.</li> <li>Standard industry techniques are employed for recovering core samples from HQ and PQ diameter TTC drillholes.</li> <li>Mean total core recovery over recent drilling campaigns was over 90%, with core recovery of coal at 90%.</li> <li>For open holes and open hole sections, cuttings are sampled in intervals five metres in length or when there is a change in lithology and logged.</li> <li>Little core recovery data is available for historical cored drillholes.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Bathurst Resources Limited (BRL) has developed standardised core logging procedures (BRL Coal Logging Procedures), and all core logging completed by BT Mining (BT) has followed these procedures.</li> <li>All recent drill core has been geologically and geotechnically logged by logging geologists under the supervision and guidance of experienced exploration and geotechnical geologists.</li> <li>All drill core was photographed prior to sampling. Depth meter marks and coal ply intervals are noted on the drill core in each photograph.</li> <li>All TTC core samples are logged in detail (centimetre scale).</li> <li>Quantitative logging for lithology, stratigraphy, texture, hardness, Rock Quality Designation (RQD) and defects is conducted using defined material code types based on characterisation</li> </ul>

Criteria	Commentary
	<p>studies. Colour and any other additional qualitative comments are also recorded.</p> <ul style="list-style-type: none"> <li>In conjunction with geological logging, many drillholes are geophysically logged with natural gamma or a suite of tools (as described above). Downhole geophysical logs, particularly natural gamma, are analysed and used to confirm and correct depth measurements on geological logs and sample locations. Validation and, if required, correction of the geological logs against downhole geophysical logs is undertaken to ensure accuracy and consistency. Verticality, calliper, density and natural gamma tools are checked regularly with standard calibration assemblies. Density calibrations are performed routinely with blocks of material of known densities (aluminium and/or water). Downhole geophysical logs were used to aid core logging. Downhole geophysics was used to correlate coal seams, to confirm depths and thickness of coal seams and to validate drillers' logs. Downhole geophysical logs were also used to accurately calculate recovery rates of coal.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>For all exploration data acquired by BT, in-house detailed sampling procedures were used (BRL Coal Sampling Procedures). Sampling and sample preparation are consistent with internationally accepted coal sampling and sample preparation methodologies.</li> <li>No splitting of core is undertaken in the field or during sampling.</li> <li>Typically, recovery from TTC drilling is &gt;90%. Sample interval and core recovery recorded in the field by drillers is validated and adjusted if required using downhole geophysical logs during core logging and sampling.</li> <li>Sample selection is determined in-house according to the BRL Coal Sampling Procedures. Clean coal core has been sampled in plies generally 0.5m in length, depending also on core loss intervals and lithological variations.</li> <li>Sampling and sample preparation are consistent with international coal sampling methodology.</li> <li>Associated high ash coal intervals and partings were sampled separately to assess potential dilution effects where they are &lt; 0.5m thick. Composite horizons for further composite sample analysis were determined by the ash yield of the plies.</li> <li>Samples are placed into labelled bags to ensure proper Chain of Custody and transported to the laboratory for testing. The laboratory continues with the Chain of Custody requirements. Sample preparation is undertaken according to industry standards.</li> <li>HQ core diameter is considered to provide a sample of sufficient volume to be representative of the in situ material and provides adequate sample mass to undertake the variety of raw coal tests together with composite testing when required, however drilling with PQ core has been undertaken for the 2023-2024 campaign to aid in coal recovery and sample representativeness particularly around areas with historic underground coal mining.</li> <li>Coal ply thickness weighted compositing is conducted by SGS New Zealand Limited (SGS).</li> <li>Core samples have also been collected for Acid Base Accounting (ABA) purposes. These samples take the full core from a section with no sample split or core cutting.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>SGS and Verum Group (ACIRL Australia and Newman Energy subcontracted for specific tests) laboratories are used to undertake physical and chemical testing and use Industry Standards for all coal tests and systematic Quality Assurance/Quality Control (QA/QC) procedures for all work. Both laboratories hold accreditation by International Accreditation New Zealand (IANZ). The processes employed are considered appropriate for coal quality analysis. Results are reviewed in-house by a senior geologist to ensure the accuracy of the data. The laboratory has been inspected by the BT personnel. Tests include: <ul style="list-style-type: none"> <li><b>Chemical Analysis</b> <ul style="list-style-type: none"> <li>Loss on air drying (ISO 13909-4).</li> <li>Inherent moisture (ASTM D 7582 mod).</li> <li>Ash (ASTM D 7582 mod).</li> <li>Volatile matter (ASTM D 7582 mod).</li> <li>Fixed carbon (by difference).</li> <li>Sulphur (ASTM D 4239).</li> <li>Swelling Index (ISO 501).</li> <li>Calorific value (ISO 1928).</li> <li>Mean maximum reflectance all vitrinite (RoMax) (Laboratory Standard).</li> </ul> </li> </ul> </li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Chlorine in Coal (ASTM D4208).</li> <li>○ Gieseler plastometer (ASTM D 2639).</li> <li>○ Forms of sulphur (AS 1038 Part 11).</li> <li>○ Ash fusion temperatures (ISO 540).</li> <li>○ Ash constituents (xrf) (ASTM 4326).</li> <li>○ Ultimate Analysis (ASTM D3176-09).</li> </ul> <p><b>Rheological and Physical</b></p> <ul style="list-style-type: none"> <li>○ Hardgrove grindability index (ISO 5074, ASTM D409-02).</li> <li>○ Relative density (AS 10382111-1994).</li> </ul> <ul style="list-style-type: none"> <li>● All analysis was undertaken and reported on an air-dried basis unless stated otherwise.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>● Sample coal quality results have been cross-referenced and compared against lithology logs and downhole geophysical data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Waikato Coalfield.</li> <li>● Anomalous coal quality analytical results were investigated, and where necessary the laboratory was contacted and a re-test was undertaken from sample residue, or results excluded from use in the resource model.</li> <li>● Generally, drillholes are geophysically logged, and verification of coal seam details is made through analysis of downhole geophysical logs. Assessments of coal intersections is undertaken by an internal or contract geologist. Downhole geophysical logs allow confirmation of the presence (or absence) of coal seams, accurate determination of contacts to coal seams, and density measurements are used to guide sampling and identify high ash bands.</li> <li>● Downhole geophysical logs (dual density and gamma) are analysed extensively and used to validate and, if required, correct geological and sample interval logs to ensure accuracy and consistency.</li> <li>● All diamond core samples are checked, measured, and marked up before being logged in detail.</li> <li>● Every discrepancy between the measured length of the core and the driller's length marked on the core blocks is investigated.</li> <li>● Quantitative logging for lithology, stratigraphy, texture, hardness, RQD and defects is conducted using defined material code types based on characterisation and mineralogical assessments to the nearest centimetre. Colour and any other additional qualitative comments are also recorded.</li> <li>● Raw logs, as well as sample dispatch details, are recorded on paper then transferred into the acQuire database or logged directly into the database using Arena software on tablets in accordance with BRL standards.</li> <li>● All drill core was photographed prior to sampling. Depth meter marks and coal ply intervals are noted on the drill core in each photograph.</li> <li>● Sample sheets are developed in-house and receive a final check by the laboratory prior to testing.</li> <li>● All data is provided by the coal laboratory and reviewed internally. In instances where results are significantly different from what was observed in downhole geophysical logs or outside of local or regional ranges defined by previous testing, sample results are queried and/or retested.</li> <li>● Since 2006, all coal quality data has been directly submitted and stored in electronic format using acQuire database software. Historical data is stored electronically either in Excel spreadsheets or scanned documents.</li> <li>● Twin drillholes have not been used to evaluate historic holes or drilling method representativity.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>● Rotowaro North data is presented in Mt Eden 1949 grid co-ordinate system in New Zealand, with Auckland 1946 mean sea level datum (MSL).</li> <li>● All drillholes post-1997 have been surveyed using GPS technology and are located within +/- 40mm in three dimensions. Older drillhole collars were surveyed using conventional methods with an unknown precision.</li> <li>● The topographic dataset consists of a digital terrain model (DTM) constructed from an airborne photogrammetry survey (accurate to +/- 0.5m) collected for the whole of the Rotowaro North site in December 2014, with parts of the project resurveyed using lidar in 2019.</li> <li>● Surveyed elevations of drillhole collars are validated against the topographic surface and ortho-corrected aerial photography.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Historical underground mine workings plans are based on historical hand drawn plans that have been geo-rectified (in 2D only) by converting from cadastral links to the Mt Eden 1949 geodetic grid. Historic open pit mine plans have been digitised and used to estimate mined out areas and model the base of any backfilled areas. Historic topographic contours have been digitised from some georeferenced historic mine plans and utilised to help define the mined out surface model.</li> <li>Early generation CAD files for pit designs and rehab surfaces have been sourced from previous operators and used to update model with historic extraction.</li> <li>Drillholes with a full suite of downhole geophysics are surveyed for deviation with a verticality tool (+/- 15° azimuth and +/- 0.5° inclination) but does not account for many of the drill holes in the dataset. It is assumed that vertical holes without deviation logs have not deviated significantly.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Drillholes are variably spaced (&lt;30m to &gt;500m in easting and northing directions) depending on target seam depth, geological structure, topographic constraints, downhole conditions due to historical underground mine workings, and degree of existing data density in immediate surrounds.</li> <li>Drillholes are concentrated on two areas containing historic underground mines and focused on the areas with the shallowest coal seams that were targets for historic open pit extraction.</li> <li>190m average spacing within the model extents, and 120m within the target areas based on proportional area of coverage for each drillhole.</li> <li>Drilling data is concentrated on areas that have already been exhausted through previous open pit mining.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Vertical drilling is the most suitable drilling method of assessing the resource at Rotowaro North. The low angle of strata dips means vertical drillholes are the most successful in achieving desired high angle intercepts of the coal seams.</li> <li>Orientation/spacing/ density of drillholes is driven by both coal quality and geological structure.</li> <li>Drillhole spacing is biased by design, aiming to delineate areas of elevated and low sulphur and ash, as well as high structural complexity throughout the mining areas in addition to targeting areas where lower strip ratios are expected (i.e. where coal seams are shallower).</li> <li>The modelling of the deposit uses drillholes both with and without reliable verticality or deviation data. Drillholes without verticality data are assumed to be vertical, and any minor deviation is not expected to be material to the resource estimation.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Rigorous sample preparation and handling procedures are followed by BT. Core is removed from the borehole and put into core splits. Core is wrapped in clear-wrap to retain natural moisture and put into core boxes.</li> <li>Core is transported to the core shed, unwrapped, logged, sampled and then re-wrapped or bagged.</li> <li>Aircore chip samples are put into bags with marked intervals by drillers and transported to the core shed for logging. Chip samples are disposed of once logged.</li> <li>All coal quality analysis results are approved for input directly into the acQuire database by the resource geologist.</li> <li>It is not considered likely that individual coal samples face a risk of theft or sabotage as coal is a bulk commodity with little value for small volumes of coal from drill core.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>BRL have reviewed the geological data available and consider the data used to produce the resource model as reliable and suitable for the purposes of generating a Coal Resource estimate to the extent that the Coal Resource estimate has been classified.</li> <li>BRL senior geologists have undertaken audits of the sample collection and analysis processes. Integrity of all data (drillhole, geological, survey, geophysical and CQ) is reviewed by a resource geologist before being used in the resource model.</li> <li>Golder associates completed an external audit and review of the geological data and resource modelling process in 2021.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary								
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"><li>The Rotowaro North Extension resource area includes a mixture of Crown and privately-owned coal.</li><li>BT is a joint venture between BRL (65%) and Talley’s Energy Limited (35%).</li><li>Rotowaro North Mining Permit (Ruawaro) (MP 60915) is 362.44 hectares in area, with an expiry date of 16 January 2044.</li></ul> <table><tr><th>Permit/Rights</th><th>Operation</th><th>Mining Type</th><th>Expiry</th></tr><tr><td>MP 60915</td><td>Ruawaro</td><td>N/A</td><td>16 January 2044*</td></tr></table> <ul style="list-style-type: none"><li>The Ruawaro MP shares its southern boundary with the Rotowaro Coal Mining Licence (CML) 37155.</li><li>There are two coal owners accounting for Coal Resources in the Rotowaro North resource area. These are the Crown in the south, and Tapp Estate in the central region. BT has entered into an access arrangement for coal exploration with the Tapp Estate, and negotiations with the Tapp Estate to gain access to the Coal Resource for mining in the central region are ongoing. BT consider there are reasonable prospects that mining access arrangements with the mineral and landowners can be finalised.</li></ul>	Permit/Rights	Operation	Mining Type	Expiry	MP 60915	Ruawaro	N/A	16 January 2044*
Permit/Rights	Operation	Mining Type	Expiry						
MP 60915	Ruawaro	N/A	16 January 2044*						
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"><li>The previous project owners, Solid Energy New Zealand Limited (SENZ), Glencol Ltd (Glencol) and their predecessors, have conducted a significant proportion of the exploration completed in the area. However, there have been earlier periods of work that have contributed to the understanding of the Coal Resource.</li><li>Historic data collection is based on drillhole logs generally recorded by drillers.</li><li>From the 1970’s, drillholes were also logged by geologists, which had the effect of increasing the accuracy, the level of detail, and ultimately the reliability of the exploration data.</li></ul>								
<b>Geology</b>	<ul style="list-style-type: none"><li>The Rotowaro North Extension deposit is located in the Waikato Coalfield.</li><li>The Rotowaro North Extension deposit generally dips 3 to 7° to the north. Local dip variations occur adjacent to faults and folds, and seam dip variations are related to differential compaction within the coal seams.</li><li>Major faults in the Rotowaro Coalfield were active in the basement rocks before the deposition of the Tertiary units began, several faults continued activity during early coal measure deposition. Faults vary in displacement with the displacement generally increasing northward.</li><li>The north-south trending faults tend to be up-thrown to the west and east-west trending faults tend to be up-thrown to the south (Kirk, 1986).</li><li>During the late Miocene, the Kaikoura tectonism re-activated many of the late Cretaceous and early Paleogene faults, leading to extensive sub-rectangular block faulting of the Te Kuiti Group.</li><li>The Renown Fault is a north-northeast trending fault developed along the western margin of the coalfield, up-thrown to the west with displacement varying from approximately 50m in the south up to approximately 150m in the north.</li><li>The Waikokowai Fault is a north trending fault that defines the eastern coalfield boundary. This fault also shows an increase in displacement northward. The fault appears to have been active during the deposition of Tertiary marine formations, as these units appear to be thicker on the downthrown side (Kirk, 1986).</li><li>The Hetherington Fault is small scale northeast trending fault that joins the Waikokowai and Renown Faults. The Bain Fault is an east trending fault that increases from approximately 50m displacement near the Waikokowai Fault, to approximately 150m displacement near the Renown Fault.</li><li>The area is underlain by indurated siltstones, with common sandstones, of the Mesozoic Newcastle Group, weathered to a depth of 5-30m. This unit is referred to as “Basement”.</li><li>The Waikato Coal Measures (WCM) lie unconformably on the basement and form the lower part of the Te Kuiti Group. The WCM consist mainly of mudstones and siltstones, often referred to collectively as “fireclay”, with common siderite concretions, referred to as “hardbars”. There are two major coal seam groups within the WCM in the Project area, Renown and Kupakupa.</li><li>The upper part of the Te Kuiti Group consists of marine to marginal marine claystones, mudstones, sandstones, limestones and siltstones which conformably overlie the WCM.</li></ul>								



Criteria	Commentary																																																																																																																																																																
	<ul style="list-style-type: none"><li>A regional unconformity at the top of the Te Kuiti Group limits the vertical extent of this unit.</li><li>Quaternary deposits of the Tauranga Group unconformably overly the Te Kuiti Group and consists of interlayered alluvial clays, muds and highly weathered volcanic ashes of the Hamilton formation.</li></ul>																																																																																																																																																																
<b>Drillhole Information</b>	<ul style="list-style-type: none"><li>In summary, 692 drillholes are located across the Rotowaro North Extension prospect of which, 660 lie within the extent of the area modelled.</li><li>625 drillholes have been used to develop the geological structure model.</li><li>175 drillholes provide validated coal quality data and have been used to grade estimate the resource model.</li><li>Most drillholes were drilled between 1990 and 2010.</li><li>Many of the drillhole coal intercept information are obtained from coal contact information from historical maps and mine plans and do not have geological logs.</li></ul> <table><tr><th>Years</th><th>Agency</th><th>Collar ID Series</th><th># Holes in Project Extent</th><th>Drilling Method</th><th># Holes in Structure Model</th><th># Holes in Coal Quality Model</th><th>Geophysics Available</th></tr><tr><td>Unknown</td><td>Glen Afton Collieries</td><td>GA431 - GA536</td><td>48</td><td>unknown</td><td>28</td><td>0</td><td>0</td></tr><tr><td>1950's</td><td>Unknown</td><td>1000 - 1999</td><td>3</td><td>unknown</td><td>3</td><td>0</td><td>0</td></tr><tr><td>1950's</td><td>Unknown</td><td>2000 - 2999</td><td>64</td><td>unknown</td><td>64</td><td>0</td><td>0</td></tr><tr><td>1950's</td><td>Unknown</td><td>3000 - 3999</td><td>44</td><td>unknown</td><td>44</td><td>0</td><td>0</td></tr><tr><td>1920's - 1980's</td><td>Unknown</td><td>4000 - 4999</td><td>204</td><td>unknown</td><td>183</td><td>0</td><td>0</td></tr><tr><td>1920's - 1970's</td><td>Unknown</td><td>5000 - 5999</td><td>54</td><td>unknown</td><td>40</td><td>0</td><td>0</td></tr><tr><td>Unknown</td><td>Unknown</td><td>6000 - 6999</td><td>2</td><td>unknown</td><td>2</td><td>0</td><td>0</td></tr><tr><td>Unknown</td><td>Unknown</td><td>7000 - 7999</td><td>4</td><td>unknown</td><td>4</td><td>0</td><td>0</td></tr><tr><td>1979 - 1980</td><td>Coal Resources Survey</td><td>8000 - 8999</td><td>12</td><td>unknown</td><td>12</td><td>3</td><td>3</td></tr><tr><td>1990's - 2000's</td><td>Glencol</td><td>14000 - 14999</td><td>122</td><td>TTC, WD</td><td>117</td><td>85</td><td>0</td></tr><tr><td>1990's - 2000's</td><td>Glencol</td><td>20000 - 20999</td><td>58</td><td>TTC, WD</td><td>55</td><td>26</td><td>0</td></tr><tr><td>Unknown</td><td>Unknown</td><td>HIST_DH001 - 003</td><td>3</td><td>unknown</td><td>2</td><td>0</td><td>2</td></tr><tr><td>2000's</td><td>Solid Energy</td><td>17248</td><td>1</td><td>unknown</td><td>1</td><td>0</td><td>0</td></tr><tr><td>2011 - 2013</td><td>Solid Energy (2013)</td><td>17474 - 17491</td><td>8</td><td>TTC</td><td>8</td><td>8</td><td>8</td></tr><tr><td>2018</td><td>BT Mining (2018)</td><td>17569 - 17573</td><td>5</td><td>Aircore</td><td>5</td><td>4</td><td>3</td></tr><tr><td>1994</td><td>Glencol</td><td>IJB07 - IJB10</td><td>4</td><td>unknown</td><td>3</td><td>0</td><td>0</td></tr><tr><td>2023 - 2024</td><td>BT Mining</td><td>17674 - 17732</td><td>54</td><td>TTC</td><td>54</td><td>49</td><td>54</td></tr><tr><td>2024</td><td>BT Mining</td><td>RT015, RT019</td><td>2</td><td>Trench</td><td>0</td><td>0</td><td>0</td></tr><tr><td colspan="3">Total</td><td>692</td><td></td><td>625</td><td>175</td><td>70</td></tr></table>	Years	Agency	Collar ID Series	# Holes in Project Extent	Drilling Method	# Holes in Structure Model	# Holes in Coal Quality Model	Geophysics Available	Unknown	Glen Afton Collieries	GA431 - GA536	48	unknown	28	0	0	1950's	Unknown	1000 - 1999	3	unknown	3	0	0	1950's	Unknown	2000 - 2999	64	unknown	64	0	0	1950's	Unknown	3000 - 3999	44	unknown	44	0	0	1920's - 1980's	Unknown	4000 - 4999	204	unknown	183	0	0	1920's - 1970's	Unknown	5000 - 5999	54	unknown	40	0	0	Unknown	Unknown	6000 - 6999	2	unknown	2	0	0	Unknown	Unknown	7000 - 7999	4	unknown	4	0	0	1979 - 1980	Coal Resources Survey	8000 - 8999	12	unknown	12	3	3	1990's - 2000's	Glencol	14000 - 14999	122	TTC, WD	117	85	0	1990's - 2000's	Glencol	20000 - 20999	58	TTC, WD	55	26	0	Unknown	Unknown	HIST_DH001 - 003	3	unknown	2	0	2	2000's	Solid Energy	17248	1	unknown	1	0	0	2011 - 2013	Solid Energy (2013)	17474 - 17491	8	TTC	8	8	8	2018	BT Mining (2018)	17569 - 17573	5	Aircore	5	4	3	1994	Glencol	IJB07 - IJB10	4	unknown	3	0	0	2023 - 2024	BT Mining	17674 - 17732	54	TTC	54	49	54	2024	BT Mining	RT015, RT019	2	Trench	0	0	0	Total			692		625	175	70
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<b>Data aggregation methods</b>	<ul style="list-style-type: none"><li>A minimum coal thickness of 0.5m has been used as a lower limit to report resources.</li><li>Coal ply data is composited (normalised) into 0.5m samples for grade estimation. Composites are length weighted.</li><li>The resource model is built as a block model with 0.5m block thicknesses for coal. Composited coal ply data is used to grade estimate the block model.</li></ul>																																																																																																																																																																
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"><li>The stratigraphic nature of coal measures means that the coal seams generally lie in a horizontal or sub-horizontal plane. The resource discussed throughout this Table 1 document has a generally low angle dip to the north. Folding and faulting through the coal seams create localised dips in different directions due to the orientation of the faults.</li><li>All of the drillholes used in the resource estimation were drilled vertically, making coal seam intercepts orthogonal to mineralisation.</li></ul>																																																																																																																																																																

Criteria	Commentary
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams can be found in Appendix A for each of the following: <ul style="list-style-type: none"> <li>Location map.</li> <li>Regional geological map (QMap).</li> <li>Map showing Mining Licenses and Permits.</li> <li>Map showing Land access.</li> <li>Map showing exploration drillholes.</li> <li>Map of underground workings.</li> <li>Map of Coal Resource classification for Kupakupa seam.</li> <li>Map of Coal Resource classification for Renown seam.</li> <li>Map showing Kupakupa seam floor contours.</li> <li>Map showing Kupakupa seam thickness distribution.</li> <li>Map showing Kupakupa seam ash isopachs.</li> <li>Map showing Kupakupa seam sulphur isopachs.</li> <li>Map showing Renown seam floor contours.</li> <li>Map showing Renown seam thickness distribution.</li> <li>Map showing Renown seam ash isopachs.</li> <li>Map showing Renown seam sulphur isopachs.</li> </ul> </li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>No detailed exploration results are being presented in this Table 1 document, rather this document is focussed on an advanced project that has been defined by geological models with associated Coal Resource estimates completed.</li> <li>The exclusion of this information from this Table 1 document is considered to not be material to the understanding of the deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Groundwater has been encountered in most drillholes, with saturated conditions encountered when there has been intersection with historically underground mined areas.</li> <li>Mine plans and production data from the historic underground and open pit operations within the project area have been used to determine areas of remaining coal resource, underground extraction rates, and provide a basis for coal quality estimates.</li> <li>Fault layers used to control the structural model have been derived by using regional geological maps and digitised from underground mine plans.</li> <li>The 2023-2024 exploration programme also included data acquisition on ABA characterisation of overburden, geotechnical analysis of core samples, and groundwater data including piezometer installation.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Pre-feasibility studies (PFS) are ongoing at the Rotowaro North Extension project.</li> <li>Further land and mineral access agreements are in discussions with land and mineral owners.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

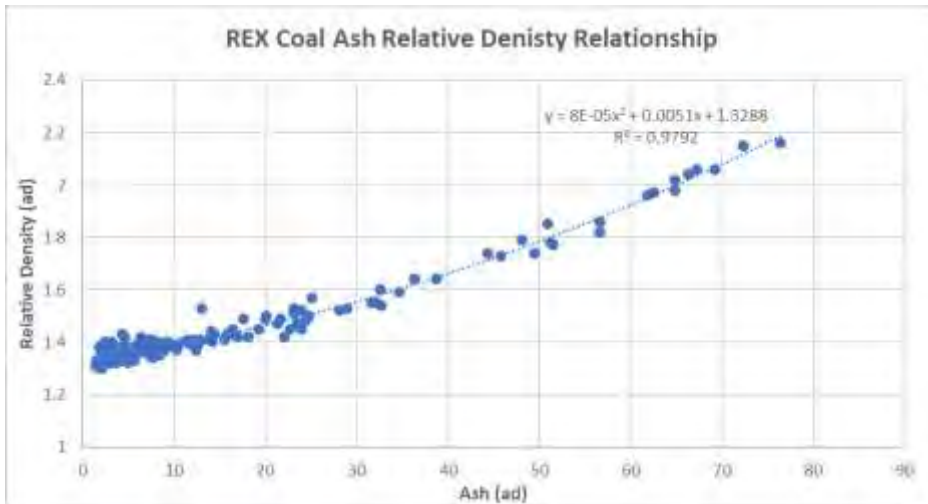
Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>BRL utilises an acQuire database to store and maintain its exploration dataset.</li> <li>All historical and legacy datasets have been thoroughly checked and validated against original logs and results tables where available.</li> <li>For new exploration campaigns data recorded in the field is input into field books and later transcribed into the acQuire database, or logged directly into the acQuire database via Arena software on a mobile tablet.</li> <li>The acQuire database places explicit controls on certain data fields as they are entered or imported into the database, such as overlapping intervals, coincident samples, out of range sample values, standardised look-up tables for logging codes.</li> <li>Manual data entry of coal quality results is not required as results are imported directly from laboratory results files.</li> <li>Validation of historical wash drilled drillholes has been conducted by comparing coal seam depths and thicknesses with those of adjacent more reliable cored drillholes in cross-section. Coal quality data and downhole geophysical logs have been used to validate more recent (post-1977) drillholes, to provide confidence in coal seam depths and thicknesses.</li> </ul>

Criteria	Commentary
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Eden Sinclair (the Competent Person) has regularly visited the project area as part of the ongoing infill resource drilling and is familiar with the site and with the geology of the Waikato Coalfield.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in interpretation of geological stratigraphy, structure and coal seam correlation/continuity is high across the Rotowaro North Extension area, as the coal seams have a consistent thickness, there are only two main coal seams and underground mine workings plans provide detail on coal seam continuity and extent.</li> <li>Residual uncertainty exists concerning the major fault structures in the deposit and their precise location and local effects on coal seams. These structures have been defined using regional geological maps and interpretation of the drillhole data sets in cross-section, and underground workings plans where some faults are shown.</li> <li>The data used in the geological interpretation included field mapping, regional geological maps, drillhole data, geophysical logs, sampling, and coal quality laboratory testing.</li> <li>Some uncertainty surrounds the historical mine workings, both in the quality and quantity of coal extracted and therefore remaining in ground, and the surveying and positioning of underground workings. This is reflected in the resource classification with areas containing underground workings having a reduced resource confidence.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The Rotowaro North Extension resource model covers approximately 1,870ha.</li> <li>Within this area, both the Kupakupa and Renown seams have been mined via underground methods (Renown in the north and Kupakupa in the south) as well as subsequent open cut mining methods in areas of historically first worked coal. A total area of 420ha has been worked via these methods.</li> <li>Coal thickness varies across the Rotowaro North Extension area, generally ranging from 9m down to less than 0.5m.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>One single geological model is used to define the geology within the resource area.</li> <li>Modelling has been undertaken using Maptek's Vulcan™ (Vulcan) software by geologists and mining engineers trained and experienced in its use.</li> <li>Structural surfaces for coal seams roof and floor are modelled using a triangulation algorithm to produce grids on a 10 x 10m basis in order to best define the structure in the project area.</li> <li>Maptek's Integrated Stratigraphic Model (ISM) module is used to produce the structure model. The Stacking method is used which triangulates a reference surface using the KK coal floor, and then stacks the remaining horizons by adding structure thickness. Thickness grids are created using an inverse distance modelling algorithm.</li> <li>No additional Design data or points are incorporated into the final grid structure.</li> <li>Modelling parameters for the structural modelling are as follows: <ul style="list-style-type: none"> <li>Reference grid surface (KK22 Floor) by Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1 (Linear).</li> <li>Smoothing is 9.</li> <li>The maximum triangle length is 1500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Grid thickness modelling by Stacking: <ul style="list-style-type: none"> <li>Method is Inverse Distance.</li> <li>Power is 1.5, maximum interpolative points is 10.</li> <li>Trend Order is 0 (Linear).</li> <li>Smoothing is 9.</li> <li>The maximum search distance is 1,200m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Validation of data during modelling occurs at different stages: <ul style="list-style-type: none"> <li>Review of historical drillhole datasets prior to modelling to ensure that the original dataset is in order.</li> <li>Review of drillhole data using Vulcan and Geology Core data validation tools.</li> <li>Review of drillhole coal seam codes to ensure correct seam code correlations in Vulcan and Geology Core using seam correlation tools.</li> <li>Once structural grids have been produced from drillhole data, the slice viewer tool is</li> </ul> </li> </ul> </li> </ul>



Criteria	Commentary
	<p>used to run sections through the grids both across and along dip to check for any anomalies.</p> <ul style="list-style-type: none"> <li>○ Finally, once structural grids have been produced from drillhole data, contour plans are produced to ensure modelled values represent original data.</li> <li>• Resource coal quality is grade estimated using inverse distance squared block estimation with coal quality samples composited into 0.5m intervals.</li> <li>• Five coal quality attributes are modelled simultaneously. Ash, Sulphur, Calorific Value, and Volatile Matter are estimated on a dry basis (db) and Inherent Moisture is estimated on air dried basis (adb).</li> <li>• The estimation is completed over five runs for each coal seam with increasing circular search distances (30m, 80m, 200m, 500m, 1,500m) with the minor-axis of the search ellipse (across the coal seam from roof to floor) controlled using Vulcan's Tetra projection unfolding tool.</li> <li>• The resources within the Rotowaro North project area were underground mined by the MacDonalds Mine from 1930 to 1971, and the Renown Mine from 1927 to 1972. Studies and reviews of underground mining for the site have been conducted with historical plans digitised and void size estimated based on mining techniques. From this the Coal Resources are depleted based on estimated recoveries as detailed below (see <i>Mining factors or assumptions</i>).</li> <li>• The area has also been mined in the past by numerous opencast mines that have mainly targeted the regions of underground mines with first worked coal. The resource model has depleted these areas completely where open pit mining has taken place.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Test work has been undertaken to determine moisture levels from cored coal samples with Inherent Moisture being measured in the 8000, 15000, and 17000 series drillholes. Total Moisture is also measured in these drill hole coal quality results.</li> <li>• Total moisture is modelled using a constant 8.83% loss on drying (LOD) across the deposit based on the mean LOD in the current dataset.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• A minimum coal seam thickness cut off for all modelled seams is 0.5m.</li> <li>• The coal has been classified as high volatile sub-bituminous B rank and is likely to be marketed as suitable for iron sand metallurgical processing and as thermal coal. A 30% ash cut-off is applied when building the resource model, however resources have been reported using a 20% block ash (adb) cut off.</li> <li>• A Lerchs-Grossman pit optimisation is used as a tool to identify Coal Resources that have reasonable prospects for future economic extraction. A 0.85 revenue factor shell has been used.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>• Geotechnical parameters for cut slope design were developed based on the Rotowaro Mine's historical cut slope performance, slope back analysis and laboratory testing of material strength parameters. Slopes are designed to comply with a Factor of Safety (FoS) that exceeds 1.2 and within BT risk volume criteria, which is a function of the probability of failure and potential failure dimensions. Stable overall slope angles are defined for each domain and material type prior to running a Lerchs-Grossman pit optimisation using Vulcan Pit Optimiser tool.</li> <li>• Minimum coal seam thickness is set at 0.5m.</li> <li>• Only coal that falls within an optimised 0.85 revenue factor pit shell is reported as Coal Resources.</li> <li>• Resource tonnages within the model have been discounted to account for underground mining extraction where the resource falls within historical underground workings areas.</li> <li>• The primary underground mining method utilised historically in the Renown and MacDonald underground mines is bord and pillar mining. Extraction rates using this type of mining generally reduce as seam thickness increases. Historic extraction rates are estimated using mining extraction reports, and work completed by Yardley <i>et al.</i> 1986 and Yardley 2001, 2006.</li> <li>• The following mining recovery parameters have been assumed for estimating coal resources: <ul style="list-style-type: none"> <li>○ Minimum recoverable coal thickness 0.5m.</li> <li>○ Unworked coal seam recovery 100%.</li> <li>○ First worked coal is depleted by 25% underground extraction.</li> <li>○ Pillared coal is depleted depending on coal thickness using the following equation where <math>x</math> represents coal seam thickness.</li> </ul> </li> </ul>

$$ug\_extract = -0.0015x^2 - 0.0008x + 0.558$$

Criteria	Commentary
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>Limited test work has been conducted to date on the properties of the coal pertaining to combustion potential, ash fusion temperatures and Hardgrove Grindability Index (HGI). This will be determined during the current infill drilling and PFS project but it is currently assumed the coal properties are in line with that produced at the adjacent Rotowaro mine.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>There are a number of Resource Consents regarding land use, air, and water quality that will be sought at the end of the PFS, and any issues will have mitigation factors applied in the application process.</li> <li>Mining has occurred at Rotowaro North Extension between 1927 and 2004, with no record of acid rock drainage (ARD).</li> <li>It is not anticipated that the Rotowaro North Extension area will have rock types capable of generating acid rock drainage (ARD) based on historical compliance when the area was in operation and looking at the discharges currently occurring on the site.</li> <li>In consultation with planning and legal experts the Competent Person believes there are reasonable prospects for the project to meet all relevant legislation to achieve regulatory approvals to allow for economic extraction of the resource.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Bulk density has been estimated using the relative density (adb) dataset for Rotowaro North Extension area (199 samples), <math display="block">\text{Density (ad)} = 0.0008x^2 + 0.0051x + 1.3288</math> </li> </ul>
	
	<ul style="list-style-type: none"> <li>An in situ bulk density (RD_ps) value is computed using the Preston Sanders method; <math display="block">\text{RD}_{ps} = (\text{RD}_{ad} * (100 - \text{mo}_{ad})) / (100 + \text{RD}_{ad} * (\text{mo}_{ar} - \text{mo}_{ad}) - \text{mo}_{ar})</math> </li> <li>Where RD_ad is relative density on an air-dried basis, mo_ad is inherent moisture, and mo_ar is total bed moisture.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>BT classifies resources using a multivariate approach.</li> <li>Coal Resources have been classified based on geological and grade continuity balanced by relative uncertainties surrounding historical underground extraction, and proximity to faults. The result reflects the Competent Person's view of confidence of the deposit.</li> <li>Closely spaced drillholes with valid coal quality samples (point of observation) increases confidence in resource assessments.</li> <li>The confidence is reduced by: <ul style="list-style-type: none"> <li>A block being within an area of historical underground workings due to extraction rate uncertainty.</li> <li>A block lying in an area where structure dip is greater than 20° due to proximity to large faults. Faulting can impact coal thickness and quality.</li> <li>A coal block lying within close proximity to an overlying unconformity or mined out surface due to low confidence on the surface position, erosional channels or unsurveyed historic mining.</li> <li>Areas of thin coal seams area also reduced in confidence (&lt;2m thickness) resulting in uncertainty of geological continuity or economic recovery. Where a seam is thin or is</li> </ul> </li> </ul>

Criteria	Commentary
	<p>splitting, a small change in thickness can have a large impact to reported vs actual coal tonnages and qualities.</p> <ul style="list-style-type: none"> <li>Essentially, in an area that is not affected by the above conditions, a distance to nearest sample of less than 75m would be classified as Measured, less than 150m is classified as Indicated and less than 500m would be classified as Inferred.</li> </ul>
<b><i>Audits or reviews</i></b>	<ul style="list-style-type: none"> <li>The current resource model used for Coal Resource estimation and reporting has been reviewed by the Competent Person.</li> </ul>
<b><i>Discussion of relative accuracy/confidence</i></b>	<ul style="list-style-type: none"> <li>Based on the data available, the degree of accuracy of this resource statement is considered moderate for the Rotowaro North resource.</li> <li>No reconciliations have been carried out due to no recent production figures being available.</li> </ul>



## Appendix A:

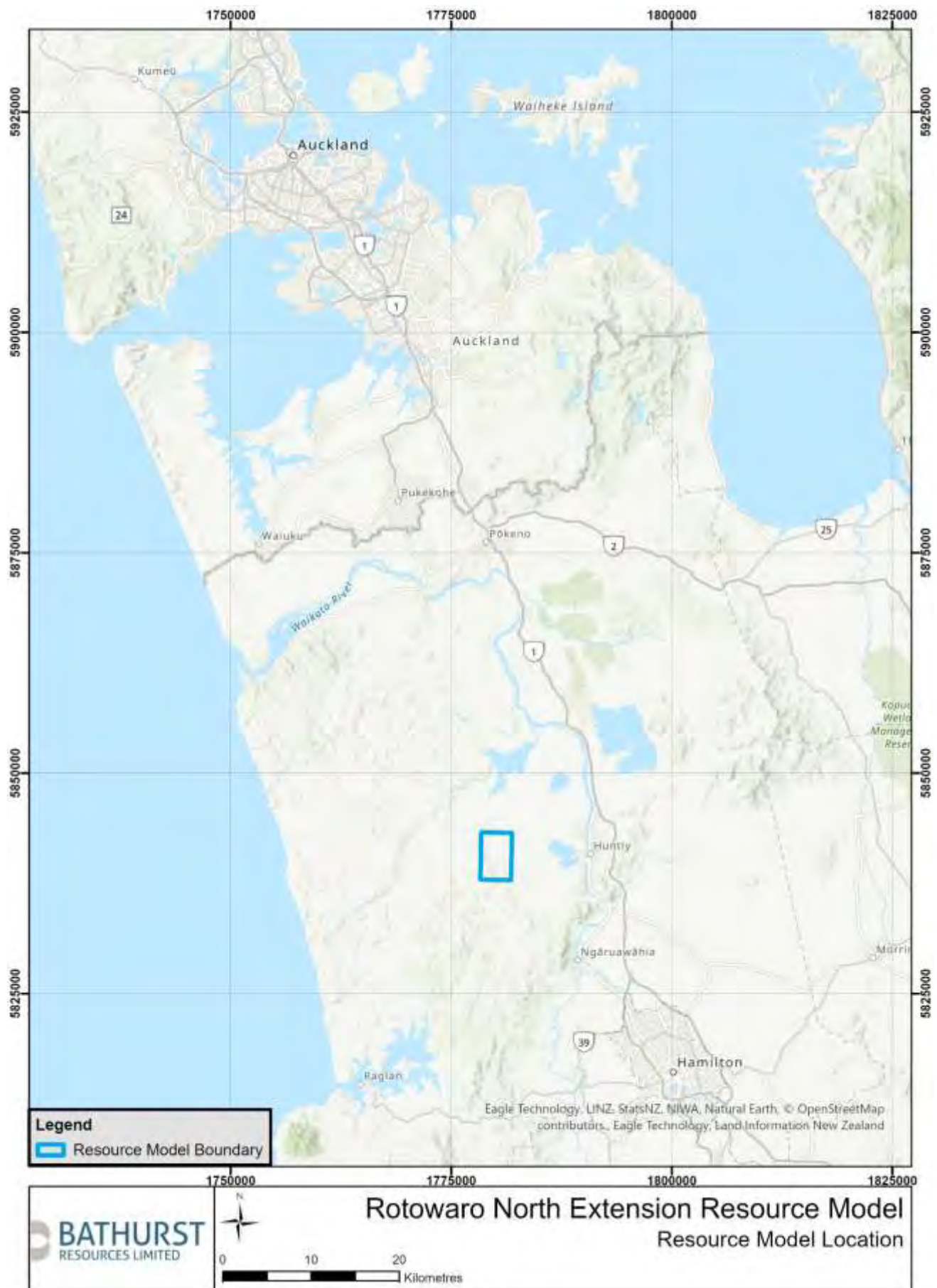


Figure 1: Location map of Rotowaro North

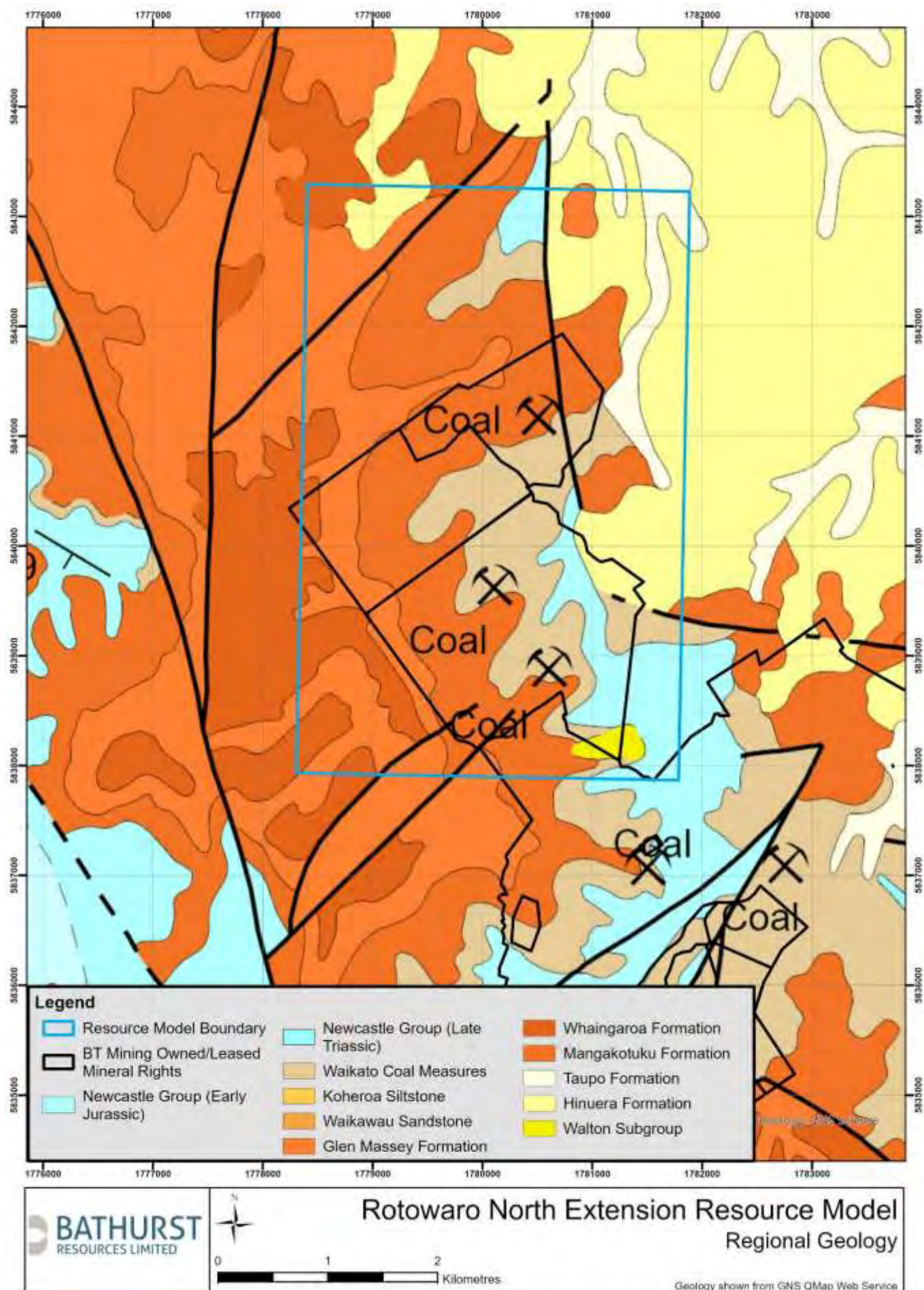


Figure 2: Regional Geology



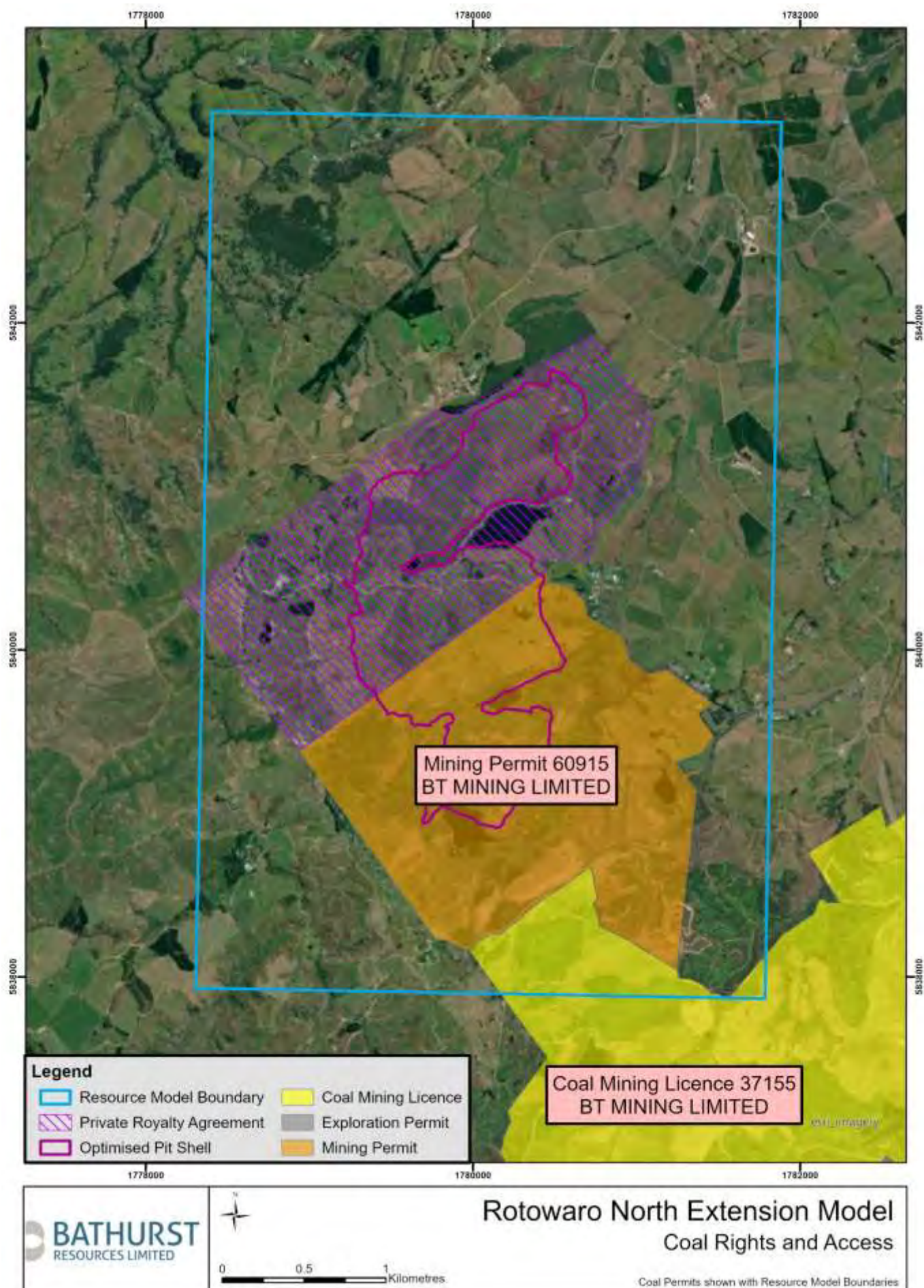


Figure 3: Rotowaro North permits within the resource model area, and agreements to explore for private minerals



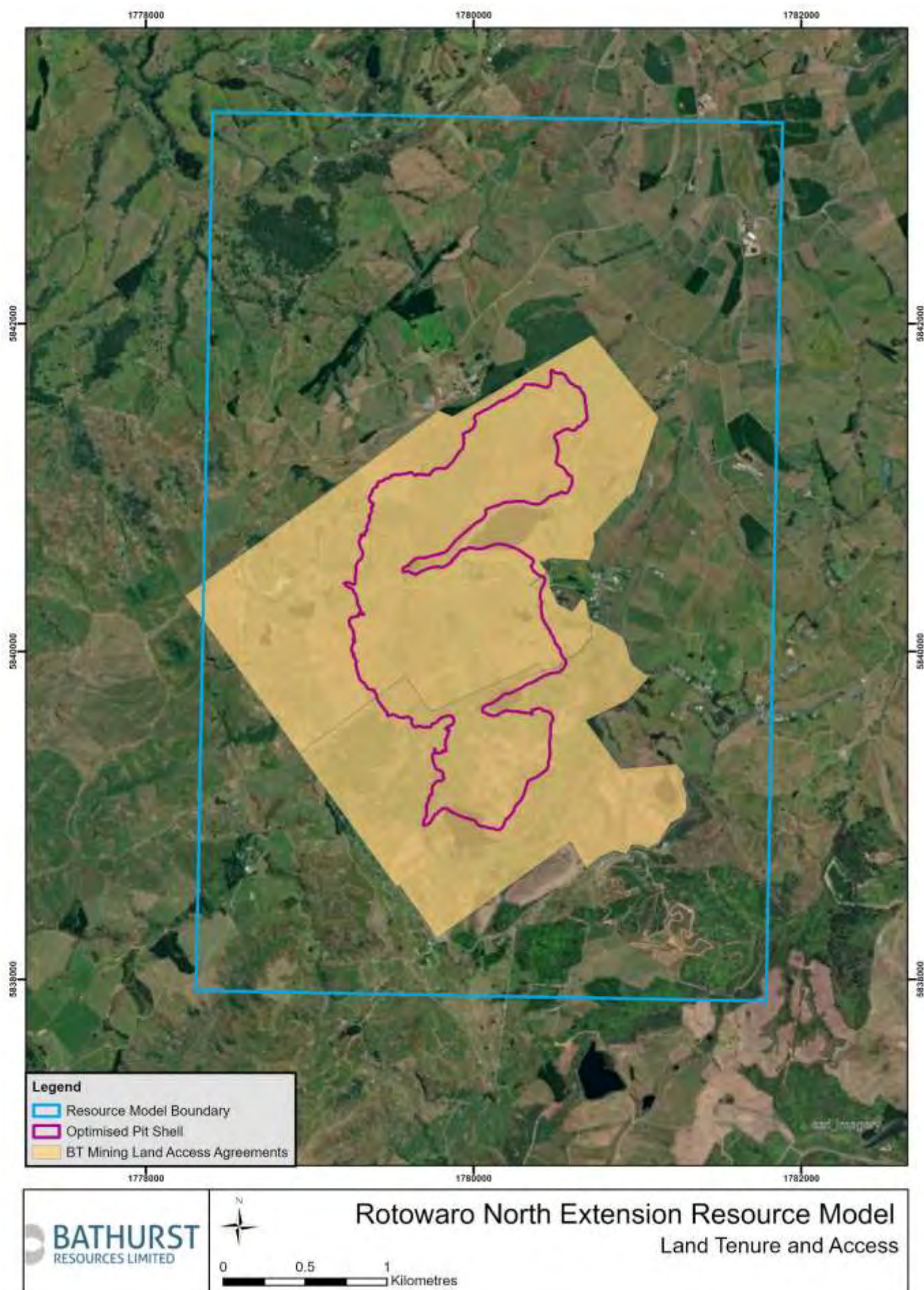


Figure 4: Land Access arrangements in place to allow coal exploration.



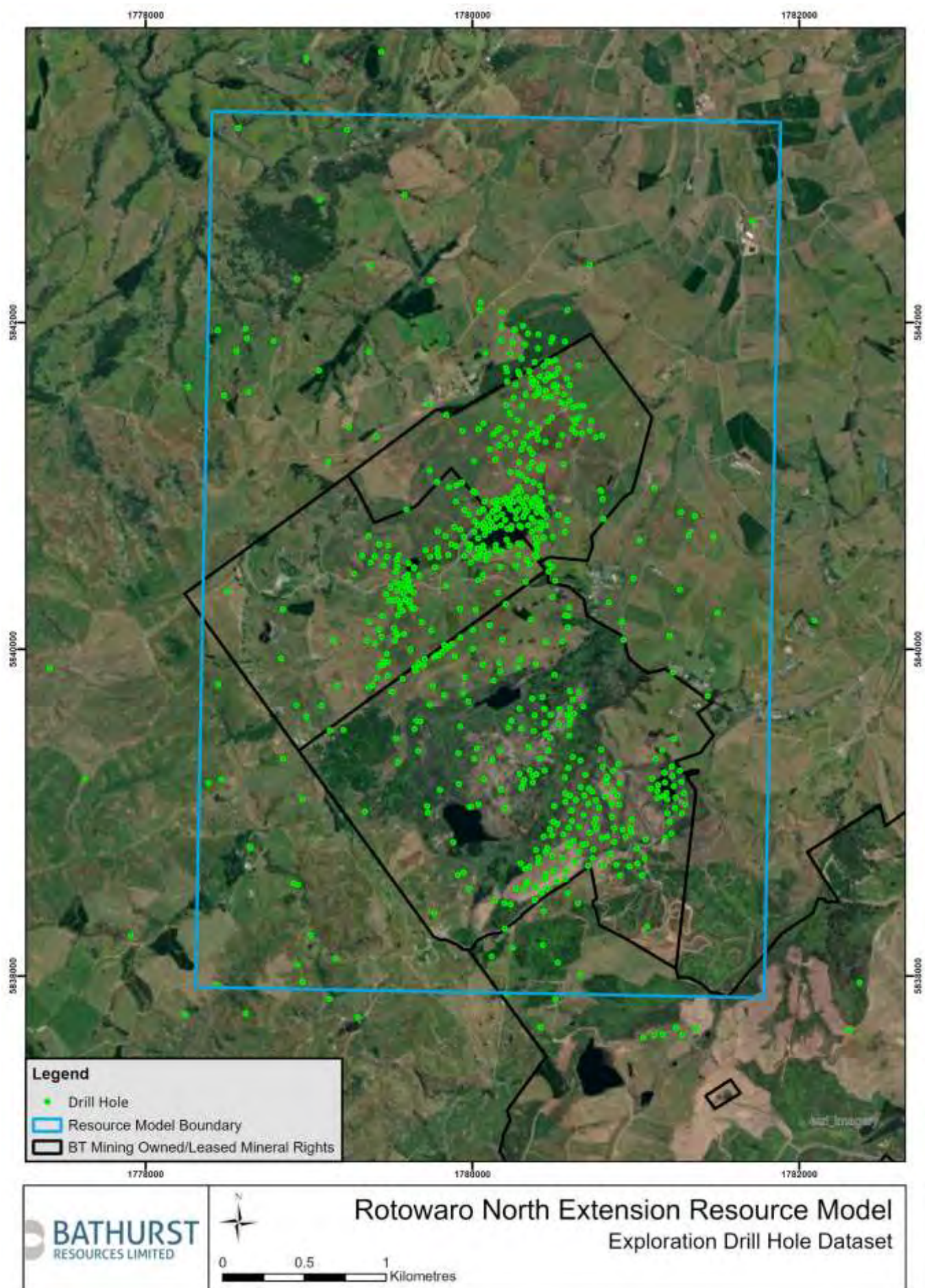


Figure 5: Plan showing the drilling dataset used to produce the resource model



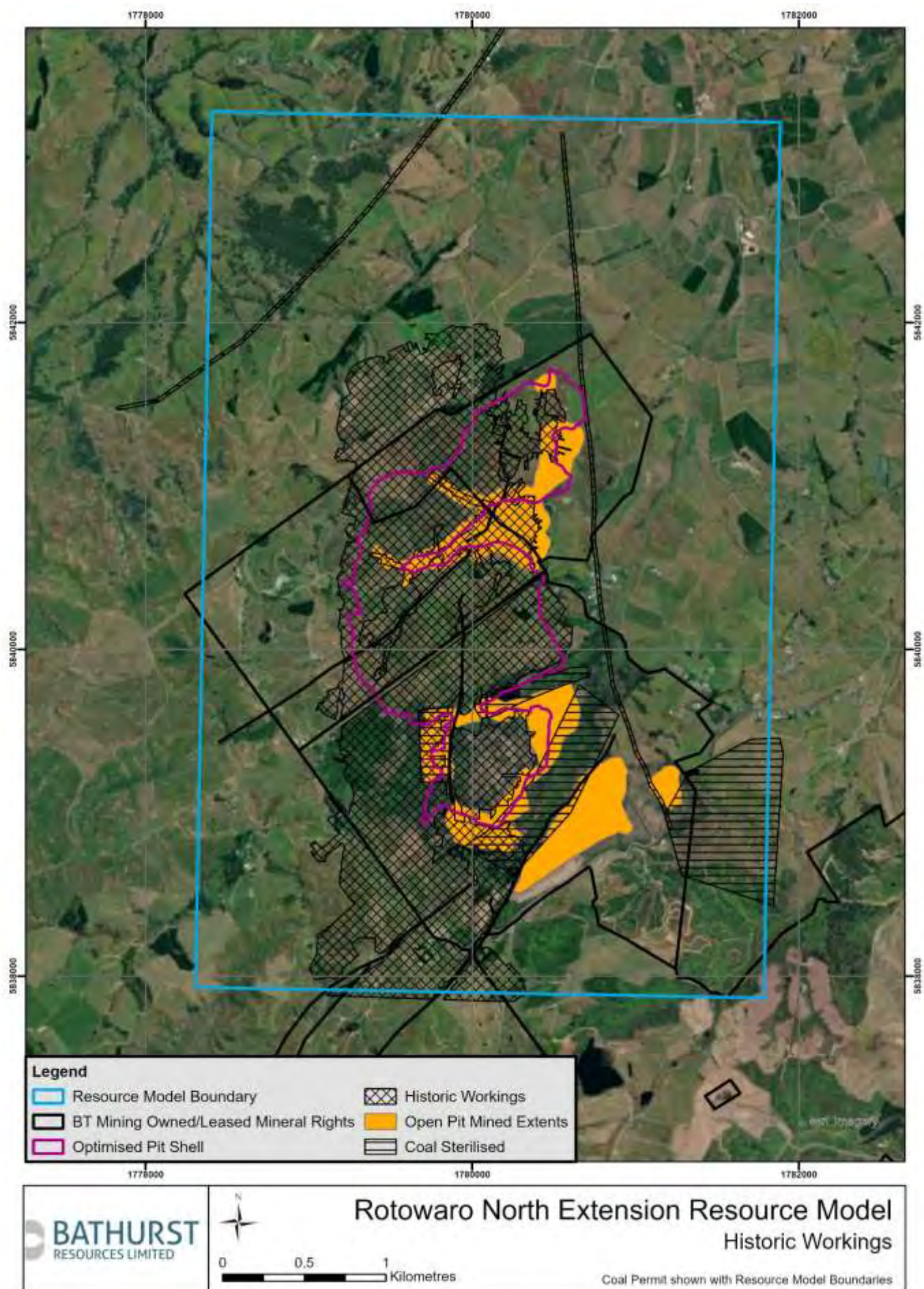


Figure 6: Historic underground workings and sterilisation polygons



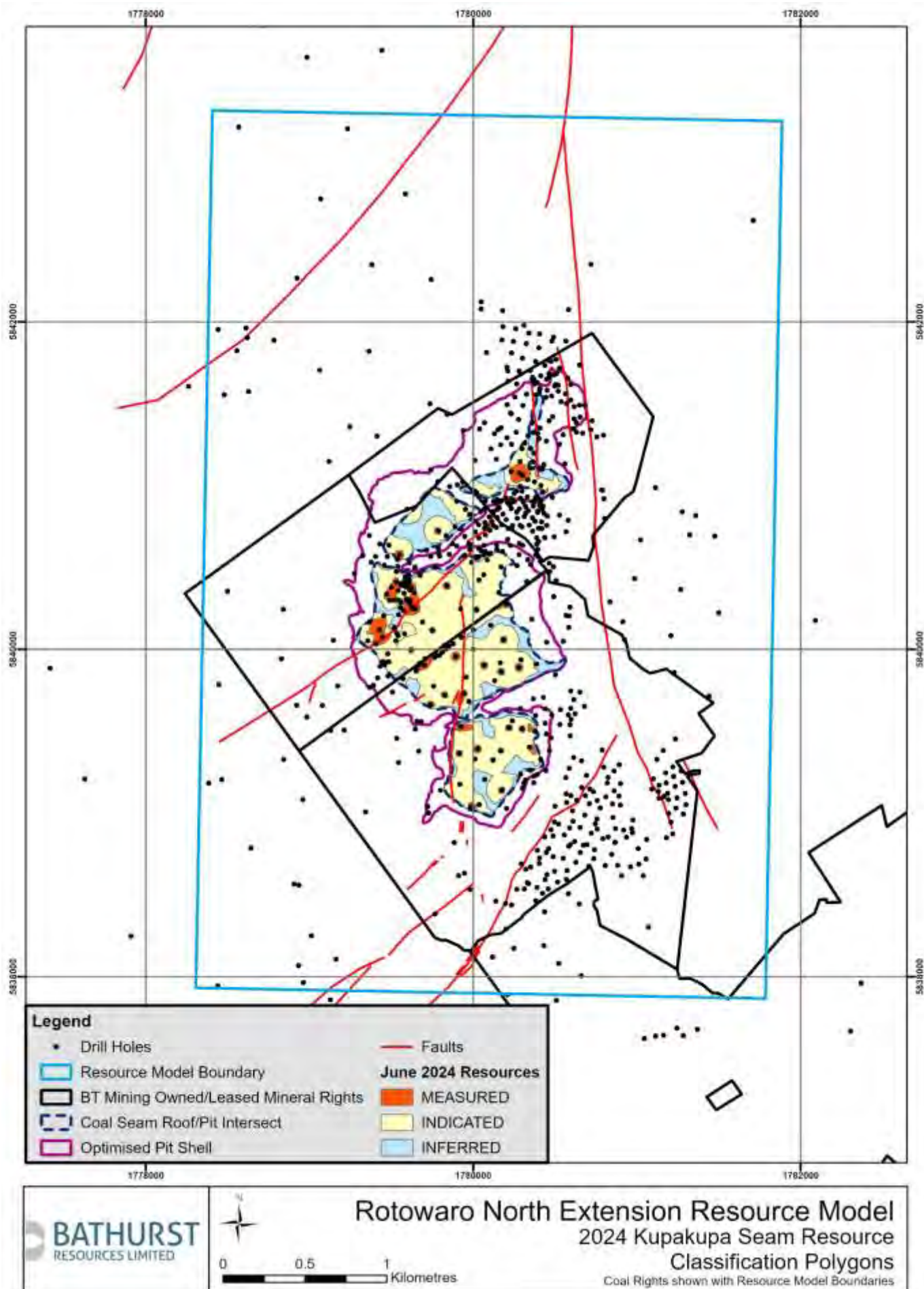


Figure 7: Plan showing the resource classification polygons for the KK seam

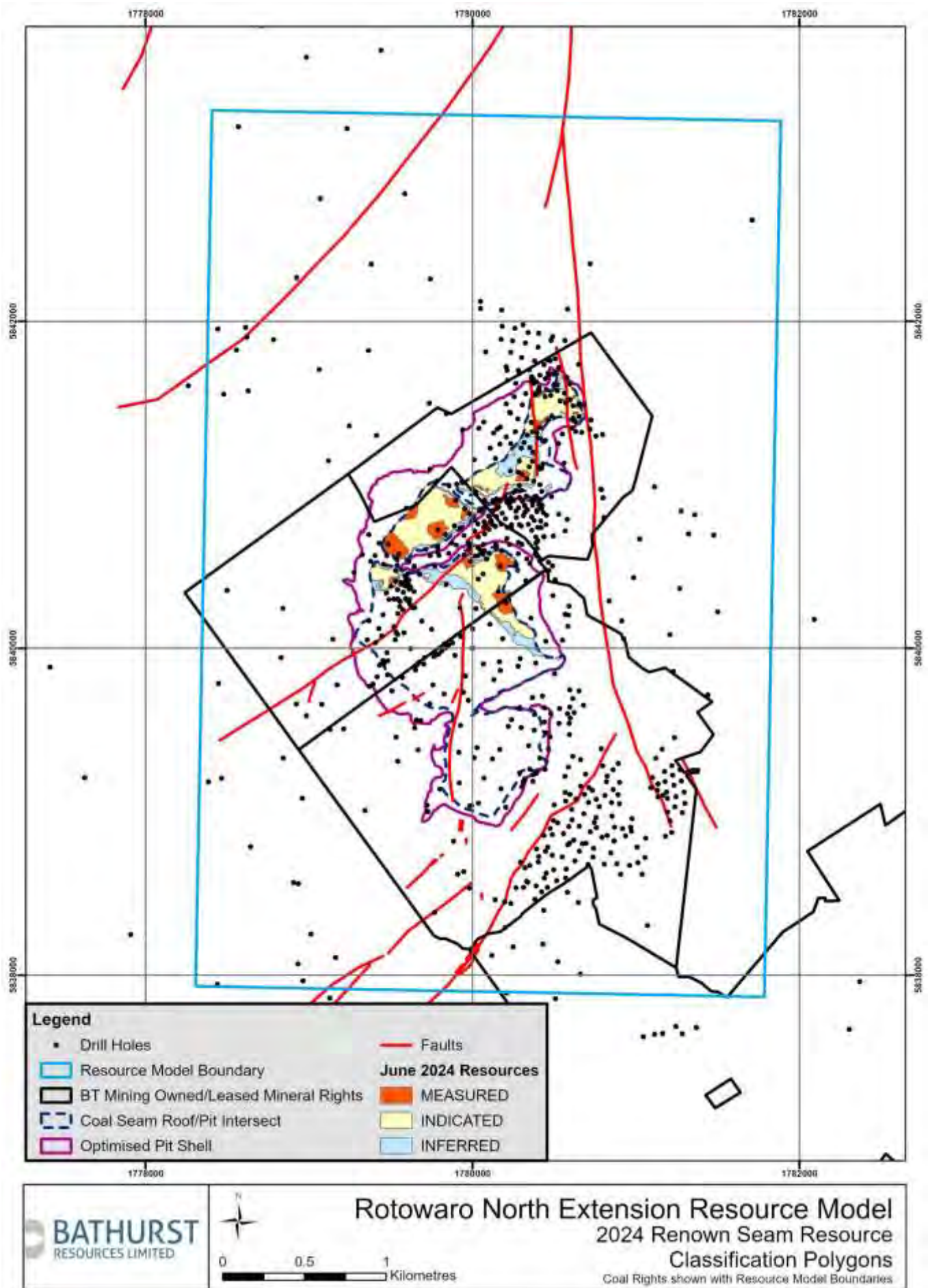


Figure 8: Plan showing the resource classification polygons for the RM seam



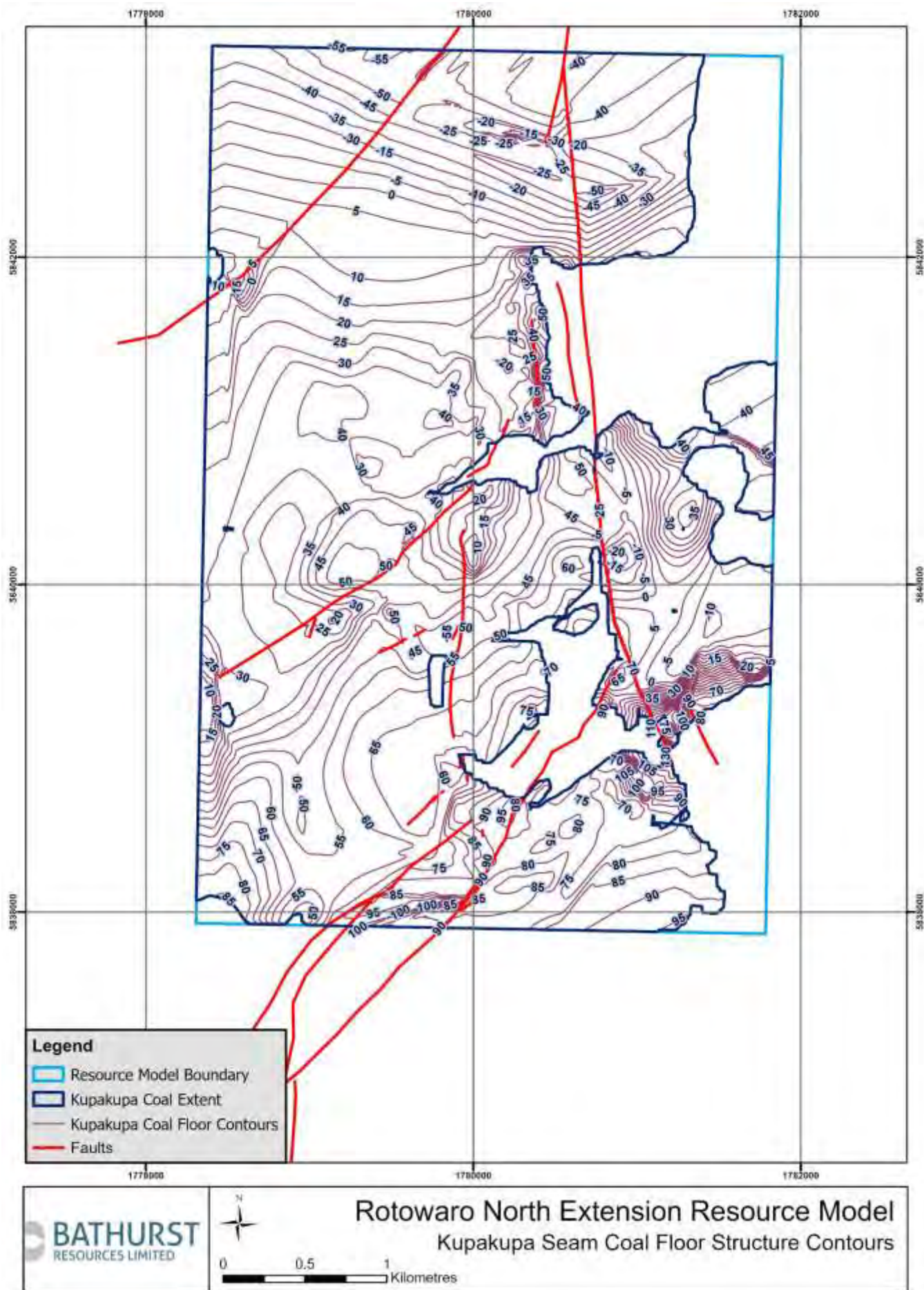


Figure 9: Plan showing the structure contours of the KK coal seam floor



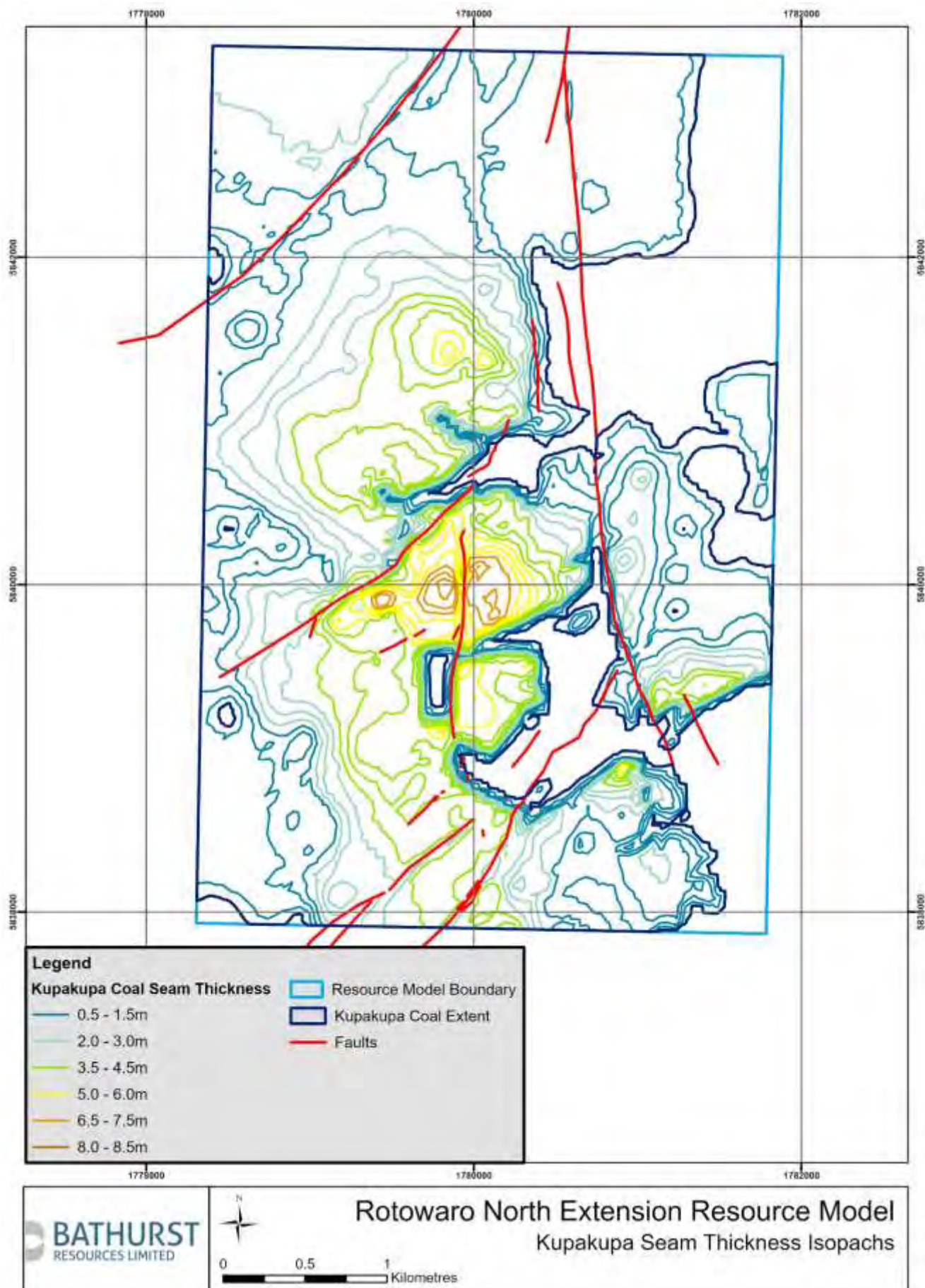


Figure 10: Plan showing Kupakupa seam thickness contours over the model area

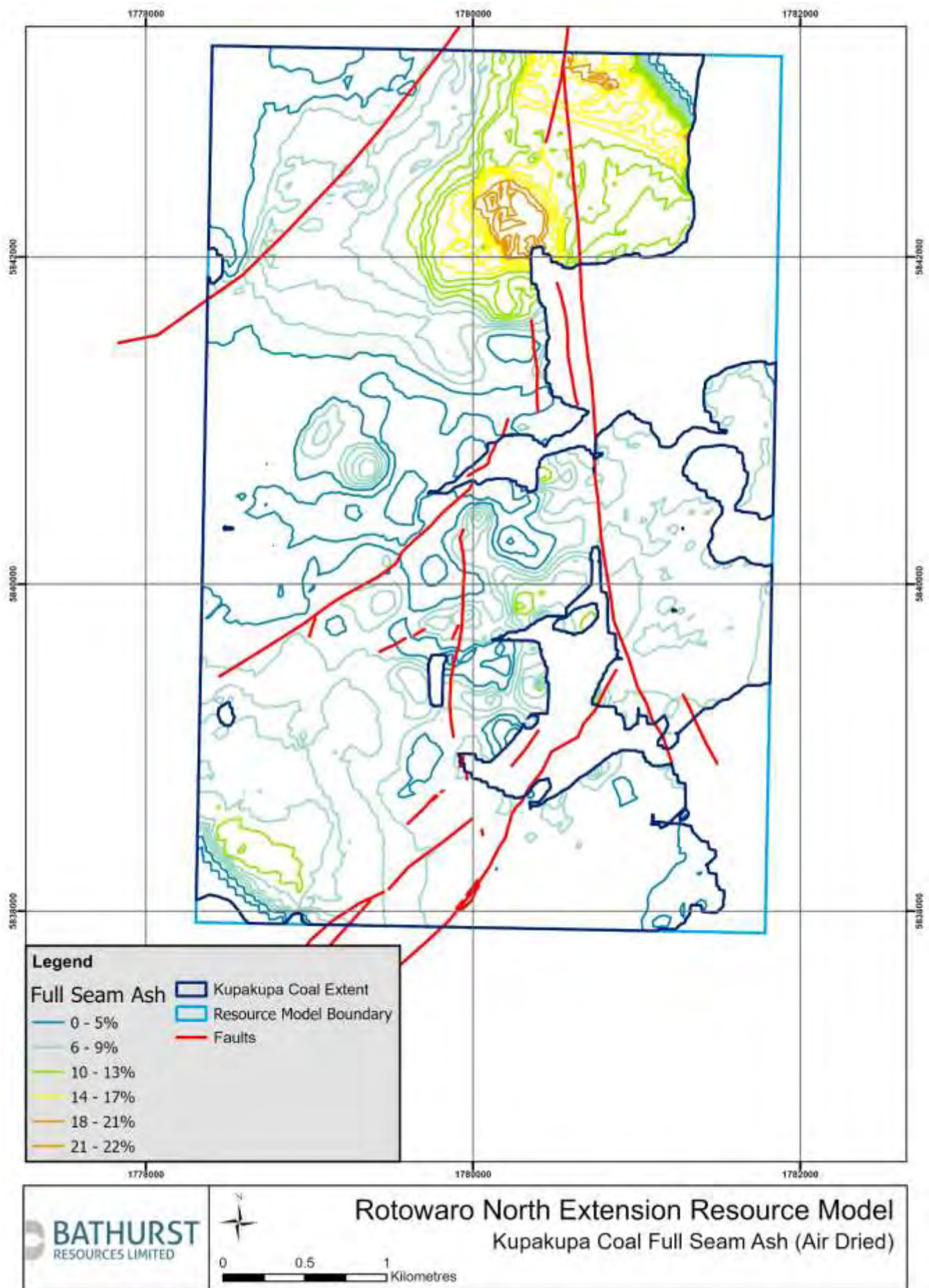


Figure 11: Plan showing the full seam ash isopachs of the KK coal seam



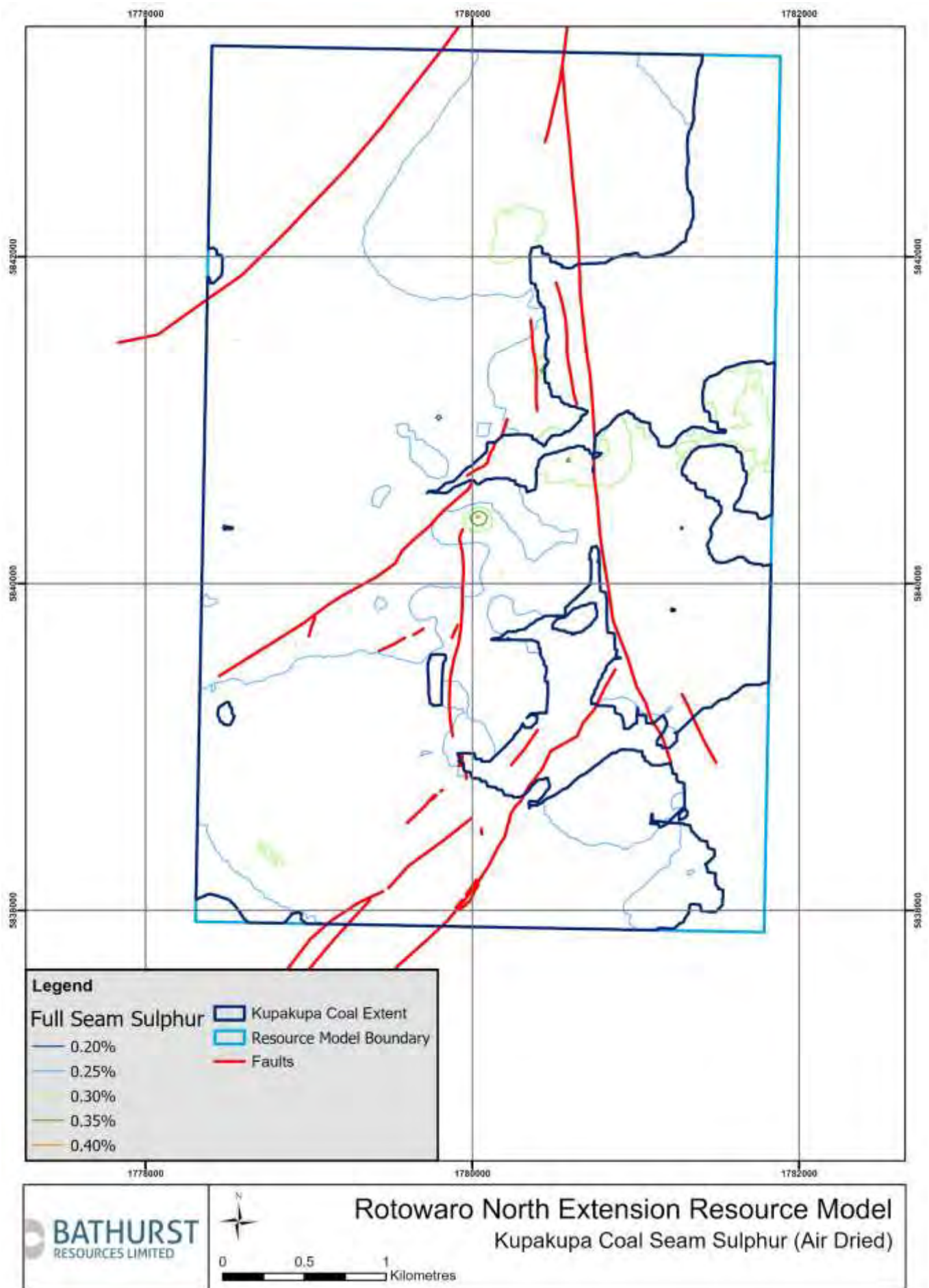


Figure 12: Plan showing the full seam sulphur isopachs of the KK coal seam



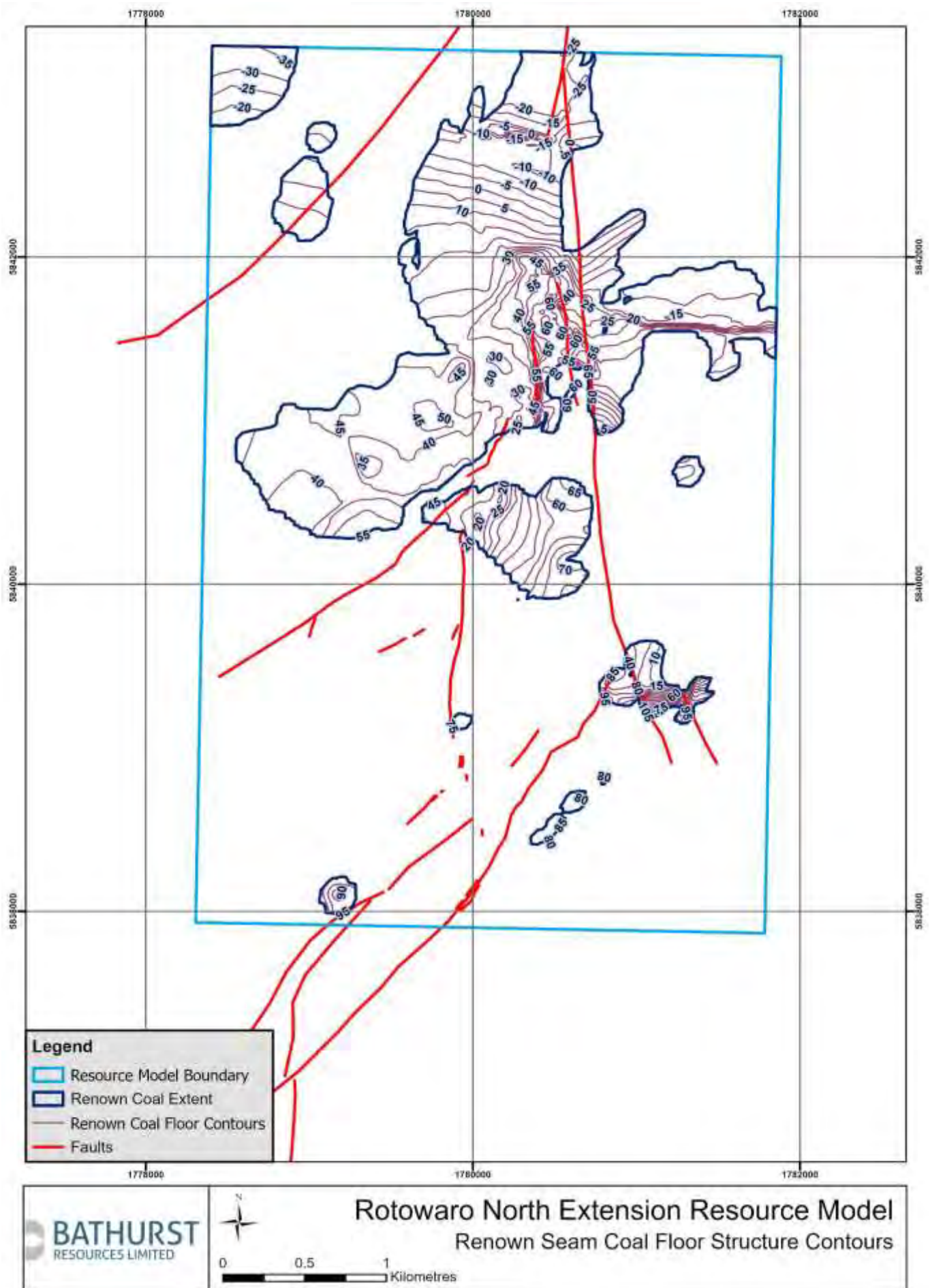


Figure 13: Plan showing the structure contours of the RM coal seam floor

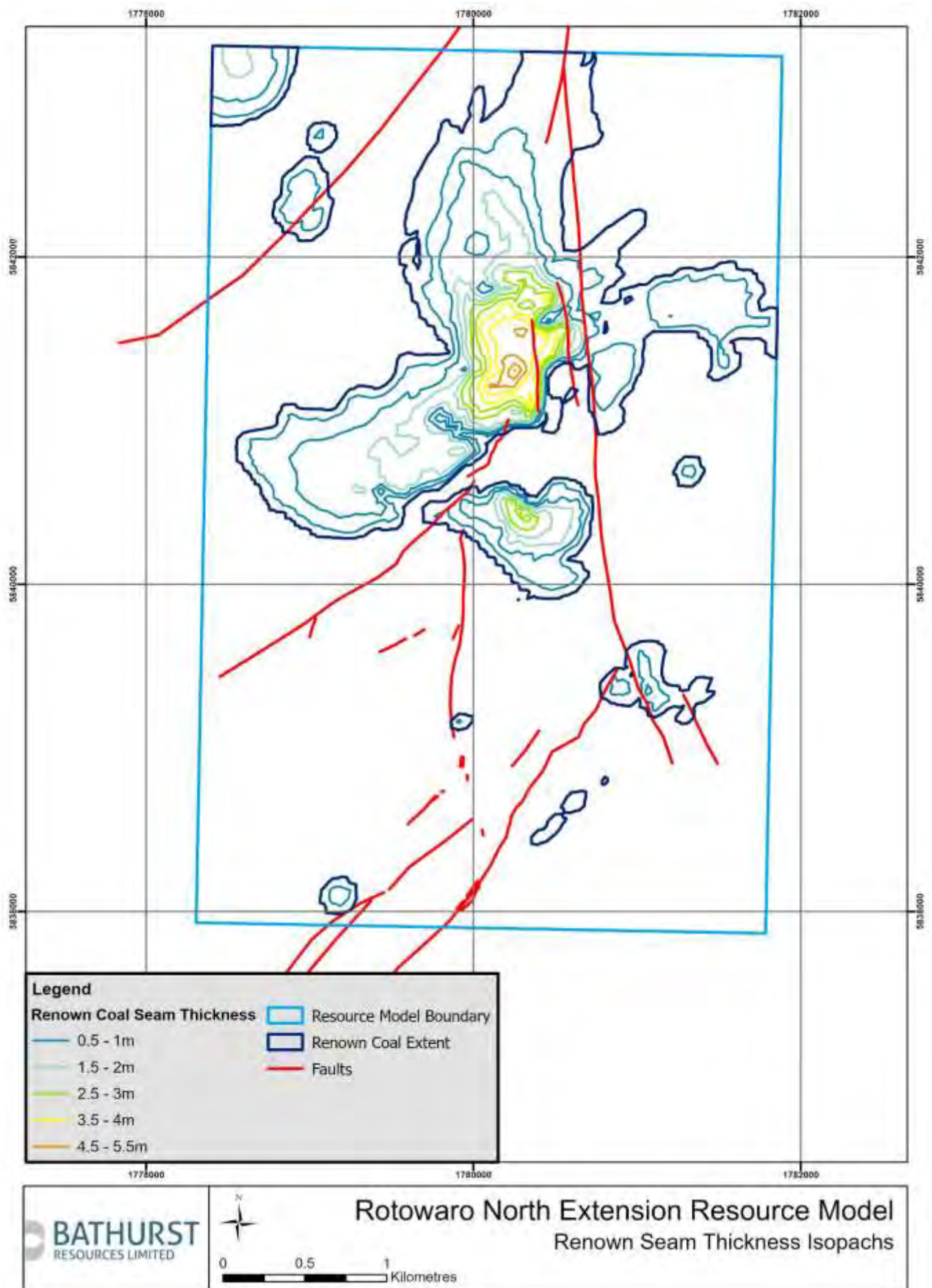


Figure 14: Plan showing Renown seam thickness contours over the model area



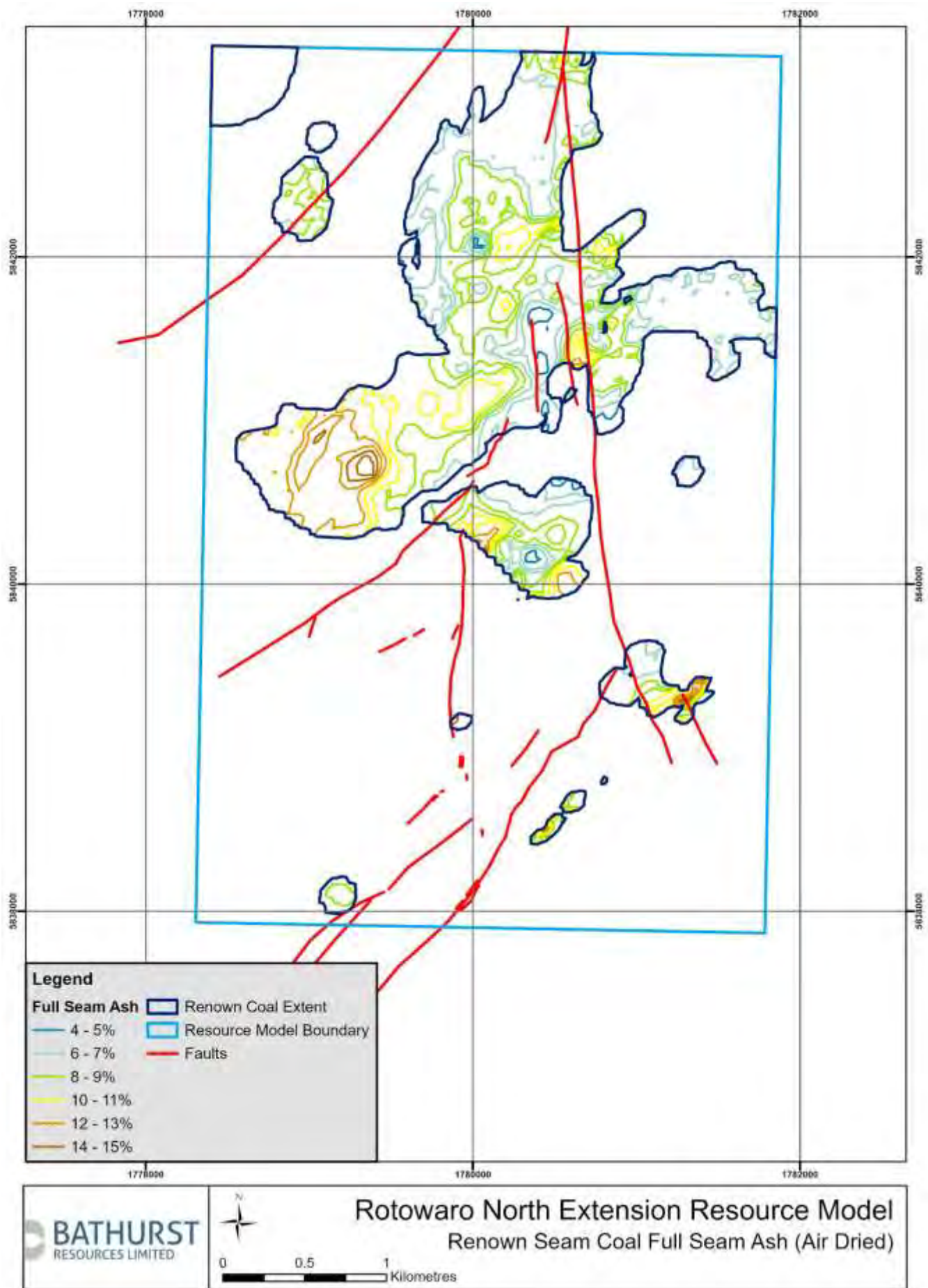


Figure 15: Plan showing the full seam ash isopachs of the RM coal seam



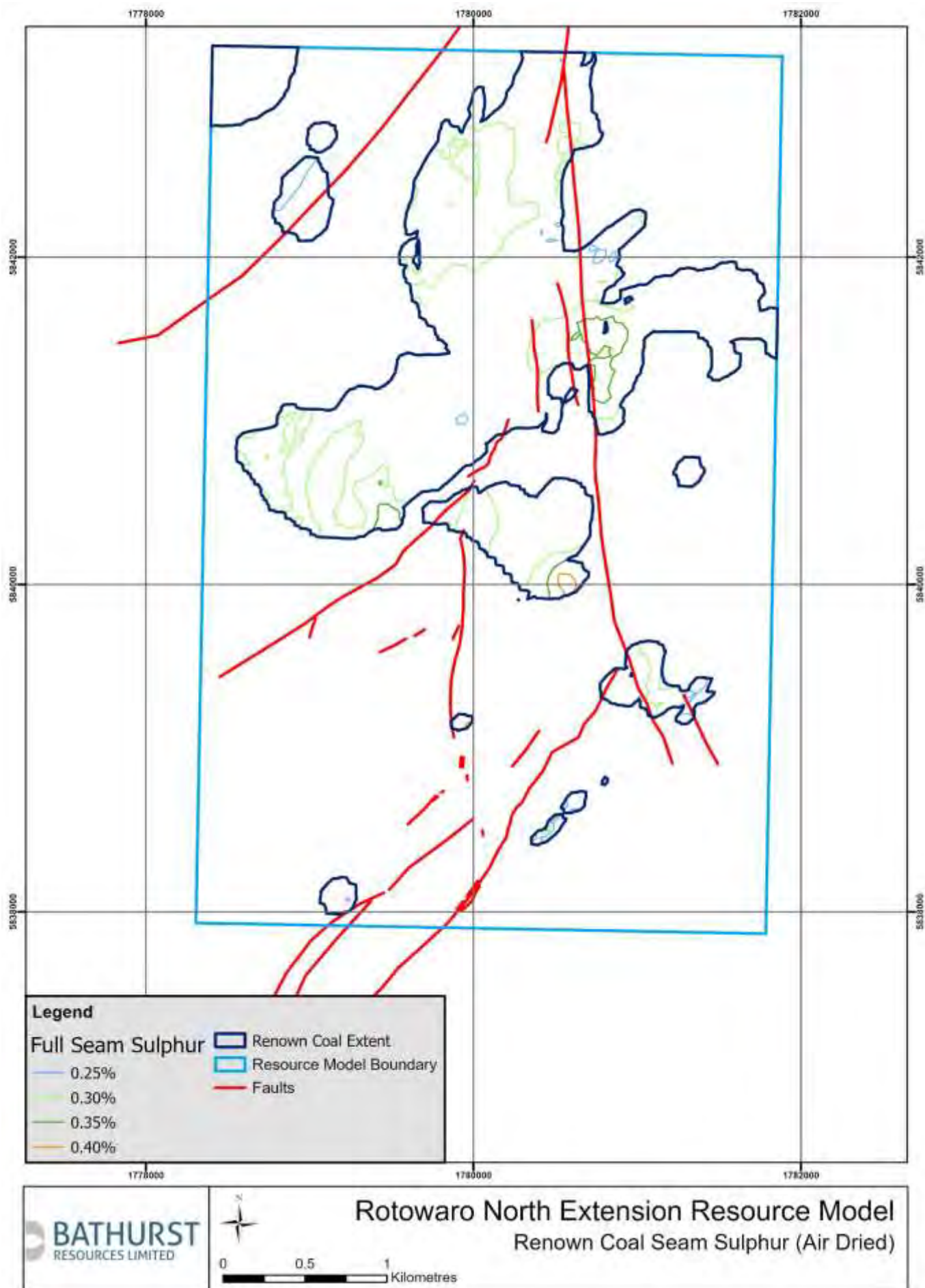


Figure 16: Plan showing the full seam sulphur isopachs of the RM coal seam

# JORC Code, 2012 Edition – Table 1 Report for Maramarua 2024

## Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Multiple campaigns of data acquisition have been conducted in the Waikato Coalfield over the past century.</li> <li>The resource modelling drillhole database contains 1,046 drillholes. 663 of these drillholes are contained within the resource model area. <ul style="list-style-type: none"> <li>432 drillholes were drilled between 1945 and 1960 and were wash drilled, with chip samples being logged by the driller.</li> <li>Since 1977, the majority of drillholes have had coal seams cored. Overburden and interburden was typically wash drilled. Coal core was logged by geologists.</li> <li>Sampling of coal core for coal quality testing has been conducted since 1977, typically using HQ (63.5 mm diameter) coring techniques.</li> <li>Since 2014 air-core (AC) drilling has been used to infill areas to obtain more detailed structural information, complemented by diamond core for reliable coal quality analysis.</li> </ul> </li> <li>Coal samples are assigned unique identifiers and are sent to the laboratory with a chain-of-custody note and tracked using paper, e-mail and acQuire software.</li> <li>Core recovery recorded in the field is validated and adjusted if required using downhole geophysical logs during core logging and sampling. In some cases, intervals of lost core (coded as NR - Not Recovered, or LC – Lost Core) have been included inside coal quality samples.</li> <li>Composite samples by the laboratory are produced from individual coal plies that are thickness weighted.</li> <li>Ply samples were generally taken over intervals no greater than 0.5m in length, as per BRL sampling standards.</li> <li>All analytical data has been assessed and verified before inclusion into the resource model. A suite of downhole geophysical logs including density, natural gamma, calliper, sonic, dipmeter, acoustic scanner and verticality have been run in most drillholes since the late 1970's. All tools are calibrated on a regular and systematic basis. All geophysical logging work has been conducted by a contractor (Weatherford and its predecessors).</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Open hole (OH) drilling, with a 4" or 6" tungsten drag bit, was typically used to drill through overburden, and triple tube core (TTC) barrels were used to recover HQ sized (63.5mm diameter) coal core.</li> <li>In recent times, diamond drillholes have been infilled with AC drillholes. AC samples are logged onsite and provide coal seam roof and floor intercepts.</li> <li>The 1950's (pre-opencast) drillholes were entirely OH drilled.</li> <li>Core is not oriented. Downhole strata orientations are taken from downhole wireline geophysical logs.</li> <li>Several historical drillholes are included in the resource modelling database.</li> <li>Drillholes that have no verifiable location, lithology log or survey, or contradict adjacent reliable data, are considered unreliable and are excluded from the resource modelling fixed database.</li> <li>Angled drilling has been used at Maramarua to target various high angle structures. These angled drillholes are excluded from modelling, however vertical synthetic holes are used to provide data of the geology intersected in the angled holes. A total of synthetic 16 holes are used in the structure model.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Core recovery was measured by the logging geologist for each driller's run (typically 1.5m in length) in each drillhole.</li> <li>In open holes and open hole sections, cuttings are typically sampled at 5m intervals in overburden lithologies, or when there is a change in lithology noted by the driller. Cuttings are logged, and stratigraphic logs for these intervals are corrected using downhole wireline geophysical logs.</li> <li>Core was obtained by HQ TTC (63.5mm) diameter coring techniques providing good core</li> </ul>

Criteria	Commentary
<b>Logging</b>	<p>recovery (averaging approximately 90%).</p> <ul style="list-style-type: none"> <li>Recovery standards for target horizons are generally high and are typically greater than 90%. Re-drills are required if there is less than 90% recovery in the coal seam when drilling with TTC.</li> <li>Bathurst Resources Limited (BRL) has developed standardised core logging procedures (BRL Coal Logging Procedures), and all core logging completed by BT has followed these procedures.</li> <li>All recent drill core has been geologically and geotechnically logged by logging geologists under the supervision and guidance of experienced exploration and geotechnical geologists.</li> <li>All TTC samples are logged in a high level of detail, down to a centimetre scale. Quantitative logging for lithology, stratigraphy, texture, hardness, Rock Quality Designation (RQD) and defects is conducted using defined material code types based on characterisation studies and mineralogical assessments. Colour and any other qualitative comments are also recorded.</li> <li>All drill core was photographed prior to sampling. Depth meter marks and coal ply intervals were noted on the drill core in each photograph.</li> <li>Wash drill samples are washed in a sieve to leave rock chips, which are quantitatively logged by assessing lithology. Samples were photographed.</li> <li>Where drillholes were geophysically logged, the logs were used to confirm and correct geological logs. Validation and, if required, correction of geological logs against geophysics is undertaken to ensure accuracy and consistency. Verticality, calliper, density, and natural gamma tools are checked regularly with standard calibration assemblies. The density calibrations are performed routinely with blocks of known densities (aluminium and/or water). A geophysical log quality report is usually generated by the logging technician for each drillhole.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>For all exploration data acquired by BT, an in-house detailed sampling procedure was used (BRL Coal Sampling Procedures). Sampling and sample preparation are consistent with internationally accepted coal sampling and sample preparation methodologies.</li> <li>No splitting of core is undertaken in the field or during sampling. Typically, recovery from TTC is greater than 90%.</li> <li>Sample interval and recovery recorded in the field by drillers is validated and adjusted if required using geophysical logs during core logging and sampling.</li> <li>Bagged OH samples are washed in a sieve to remove drilling mud, leaving rock chips for logging. OH samples are not sent to the laboratory for coal quality analysis.</li> <li>Sample selection is determined in-house and is documented in a core sampling procedure. Clean coal has generally been sampled in plies 0.5m in length (some thicker plies have been sampled in older drillholes).</li> <li>Where potentially high ash coal intervals and partings are noted in core or in geophysical logs, these were sampled separately.</li> <li>Samples are placed into labelled bags to ensure proper chain of custody, and then transported to the laboratory for testing. The laboratory continues with the chain of custody requirements. Sample preparation is undertaken according to laboratory and ISO or ATM standards.</li> <li>HQ core diameter is considered to provide a sample of sufficient volume to be representative of the in situ material and provides adequate sample mass to undertake the variety of raw coal tests together with composite testing when required.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>SGS and Verum (Formerly CRL, with ACIRL Australia, Newman Energy and Eurofin ELS Ltd subcontracted for specific tests) laboratories are used to undertake physical and chemical testing and use Industry Standards for all coal tests and systematic Quality Assurance/Quality Control (QA/QC) procedures for all work. Both laboratories hold accreditation by International Accreditation New Zealand (IANZ). The processes employed are appropriate for coal sample analysis. Results are reviewed in-house to ensure the accuracy of the data by the Project Geologist. The laboratories have been inspected by BT's personnel. Tests include: <ul style="list-style-type: none"> <li><b>Chemical Analysis</b> <ul style="list-style-type: none"> <li>Loss on air drying (ISO 13909-4).</li> <li>Inherent moisture (ASTM D 7582 mod).</li> <li>Ash (ASTM D 7582 mod).</li> <li>Volatile matter (ASTM D 7582 mod).</li> <li>Fixed carbon (ASTM D 7582 mod).</li> </ul> </li> </ul> </li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li>○ Sulphur (ASTM D 4239).</li> <li>○ Swelling index (ASTM D 4239).</li> <li>○ Calorific value (ISO 1928).</li> <li>○ Mean maximum reflectance all vitrinite (RoMax) (laboratory standard).</li> <li>○ Chlorine in coal (ASTM D4208).</li> <li>○ Gieseler plastometer (ASTM D 2639).</li> <li>○ Forms of sulphur (AS 1038 Part 11).</li> <li>○ Ash fusion temperatures (ISO 540).</li> <li>○ Ash constituents (XRF) (ASTM D 4326).</li> <li>○ Ultimate analysis (ASTM D3176-09).</li> </ul> <p><b>Rheological and Physical</b></p> <ul style="list-style-type: none"> <li>○ Hardgrove grindability index (ISO 5074, ASTM D409-02).</li> <li>○ Relative density (AS 10382111-1994).</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• All diamond core samples are checked, measured, and marked up before being logged to a high level of detail.</li> <li>• Every discrepancy between the measured length of core and the driller's length marked on the core blocks is investigated and corrected prior to sampling, if necessary.</li> <li>• Quantitative logging for lithology, stratigraphy, texture, hardness, RQD and defects is conducted using defined material code types based on characterisation studies and mineralogical assessments to the nearest centimetre. Colour and other additional qualitative comments are also recorded.</li> <li>• Raw logs, as well as sample dispatch details, are logged onto paper then transferred into the acQuire database in accordance with BRL standards.</li> <li>• Assessments of coal intersections are undertaken by an internal or contract geologist, and by a senior geologist. Geophysical logs allow confirmation of the presence (or absence) of coal seams and accurate determination of coal seam roof and floor contact. Geophysical natural gamma or density measurements are used to guide sampling and identify high ash bands.</li> <li>• Downhole wireline geophysical logs (dual density and gamma) are analysed and used to validate or correct geological and sample interval logs to ensure accuracy and consistency, where required.</li> <li>• Samples for CV, sulphur and proximate analysis are split into two samples to provide a duplicate sample for laboratory QAQC. The duplicates are tested with a repeatability level in accordance with the standard method. Reference standards are used to confirm the calibration of each test. The reference standards are plotted by the laboratory to correct any biases or trends. The laboratory also participates in external quality control auditing on a regular basis. The results of these audits are shared with BT.</li> <li>• Sample sheets are developed in-house and receive a final check by the laboratory prior to testing. BRL/BT geologists with input from marketing technical experts provides guidance on the specific testing regime to be undertaken on both ply and composite samples.</li> <li>• Since 2006, all coal quality data has been directly submitted and stored in electronic format using acQuire database software. All data provided by the coal laboratory is reviewed before acceptance into the database.</li> <li>• Sample assay results have been cross-referenced and compared against lithology logs and downhole geophysical data. Results are also inspected by experienced geologists and compared with expected values utilising known coal quality relationships for the Waikato Coalfield.</li> <li>• Anomalous assay results were investigated and, where necessary, the laboratory was contacted, and a re-test was undertaken from sample residue.</li> <li>• Where drillholes were geophysically logged, verification of seam depths and quality is made through analysis of the geophysics. Where no geophysical logs are available, this is done by physical assessment of the core and/or other drillhole samples.</li> <li>• Historical data is stored electronically, in addition to incorporation into the acQuire database. All coal quality data has been validated and transferred into the acQuire database.</li> <li>• Twin drillholes have not been used to test reliability and repeatability of historic drilling.</li> </ul>

Criteria	Commentary
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>All recent drillholes have been surveyed by BT qualified professional surveyors.</li> <li>Holes drilled prior to 1997 were surveyed using conventional survey methods with unknown precision. Since 1997, drillhole collars have been surveyed using GPS technology and are located within +/- 40mm in three dimensions.</li> <li>All Maramarua drillhole collars are surveyed in Mt Eden 1949 co-ordinate system, with Auckland 1946 mean sea level datum (MSL).</li> <li>The topographic dataset consists of a digital terrain model (DTM) constructed from an airborne LiDAR survey (accurate to +/- 0.2m) collected for the whole of the Maramarua site in May 2012. The DTM has been supplemented by GPS survey data (+/- 40mm accuracy) and aerial drone photogrammetric survey.</li> <li>Surveyed elevations of drillhole collars are validated against the LiDAR topography and ortho-corrected aerial photography. A number of historic drillholes drilled prior to accurate survey have had the collar RL updated to match the lidar topography.</li> <li>Drillholes with downhole geophysics are surveyed for deviation with the verticality tool (+/- 15° azimuth and +/- 0.5° inclination).</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Drillholes are variably spaced (less than 50m to greater than 300m) depending on target seam depth, geological structure, and topographical constraints.</li> <li>Average drillhole spacing within the modelled area is 128m.</li> <li>Within the areas containing report resources the drillhole spacing reduces to 70m spacing.</li> <li>The current drillhole spacing is deemed sufficient for coal seam correlation purposes, with resource confidence reflected in the classification.</li> <li>Samples are normalised into 0.5m composites in Maptek's Vulcan™ software prior to grade estimating the coal quality model.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>In the Maramarua area the strata dips approximately 10 to 15°, with localised increases, particularly adjacent to faults. All drillholes are designed to intercept the target coal seams or some other key geological structure (i.e. faults). Several inclined drillholes have been completed to intercept normal faults in the area.</li> <li>Targeted infill drilling is utilised in areas of prospective mining to decrease coal quality sample spacing.</li> <li>The low angle of strata dips means vertical drillholes are the most successful in achieving desired high angle intercepts of the coal seams.</li> <li>The modelling of the deposit uses holes both with and without reliable verticality data. Drillholes without verticality data are considered to be vertical.</li> <li>Vertical drilling is the most suitable drilling method of assessing the Coal Resource at Maramarua.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Sampling was conducted in accordance with the BRL standard 'Coal Quality Sampling and Analysis'.</li> <li>Core is removed from the drillhole and put into core splits. Core is wrapped in clear-wrap to retain natural moisture and put into core boxes. Additionally, coal core is wrapped in cling film before placing in clear-wrap to assist moisture retention.</li> <li>Core is removed from the clear-wrap at the core logging facility where it is photographed, logged, sampled and then re-wrapped.</li> <li>Coal samples are placed into labelled bags that are transported directly to the laboratory accompanied by soft and hard copies of the sample submission to insure proper chain of custody.</li> <li>Chip samples are placed into bags labelled with drilling intervals by the driller and transported to the core logging facility for logging. Chip samples are disposed of once logged.</li> <li>It is not considered likely that individual coal samples face a risk of theft or sabotage as coal is a bulk commodity with little value for small volumes of coal from drill core.</li> <li>Laboratory data is imported directly into an acQuire database, with no manual data entry at either the laboratory or BRL.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Internal and external reviews (Golder and BRL) have reviewed the geological data available and consider the data used to produce the resource model is reliable and suitable for the purposes of generating a Coal Resource estimate to the extent that the Coal Resource estimate has been</li> </ul>

Criteria	Commentary
	<p>classified.</p> <ul style="list-style-type: none"> <li>Integrity of all data (drillhole, geological, survey, geophysical and laboratory information) is reviewed by the resource geologist before being incorporated into the BT's centralised database system.</li> <li>Internal audits are conducted to verify that samples are being logged and sampled in accordance with BRL standards and procedures. All corrections and changes made to the database are recorded.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>The Maramarua resource area includes a mixture of Crown and privately owned coal rights.</li> <li>Coal Mining Permit (MP) 41821 held by BT in the Maramarua Coalfield at Kopako comprises 274.3 hectares and was granted on 21 February 2005. It is due to expire 31 March 2037. BT Mining is 65% owned by BRL. Historical Solid Energy NZ Limited (SENZ) mining operations such as the KCQ1, K1 and K2 opencast pits are located within this MP. The minerals underlying MP 41821 are owned by the Crown, and BT owns or has access to the majority of the land.</li> <li>BT currently leases land adjacent to MP 41821 from the landowners.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>The previous owner SENZ and its predecessors completed all exploration in the area from 1986 to 2017. However, there have been earlier periods of work that have contributed to the understanding of the Coal Resource. These exploration programs include an extensive OH programme undertaken between 1952 and 1957 prior to the commencement of open cut mining.</li> <li>The New Zealand Coal Resources Survey (NZCRS) drilled 122 holes in the Maramarua Coalfield between 1977 and 1980. The majority of the NZCRS drillholes were also geophysically logged and the campaign included two seismic reflection programmes.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The stratigraphy of the Maramarua Coalfield is similar to that of other northern Waikato Coalfields, being dominated by thick, Cenozoic, Te Kuiti Group sediments which unconformably overlie Mesozoic basement rock of the Newcastle Group. The Waikato Coal Measures, and later Te Kuiti Group sediments, were deposited in a broad north to north-northwest trending elongated trough which appears to have been controlled by structural trends within the underlying Newcastle Group basement rock.</li> <li>The Waikato Coal Measures are present over the entire coalfield with a thickness of up to 134m.</li> <li>The Kupakupa main seam (KK) is located near the base of the coal measures, is the most widespread and thickest seam, and ranges in thickness ranging from less than 1m to 15m.</li> <li>The Kupakupa seam has up to two upper seams (KU1, KU2) above the main KK seam. These seams are discontinuous and generally less than 1m thick and are not included in the resources reported.</li> <li>The Kupakupa seam also has up to four lower seams (KL1, KL2, KL3, KL4) located 1m to 3m below the main KK seam. These lower seams like the upper seams are discontinuous and generally less than a metre thick.</li> <li>The Kupakupa seam is overlain by carbonaceous shales, siltstones and claystones of the upper Te Kuiti Group.</li> <li>The generalised structure of the coalfield dips at 15° north-northwest and flattens out towards the Miranda Fault due to fault drag effects on the hanging wall.</li> <li>Two major faults dominate the deposit: <ul style="list-style-type: none"> <li>The Foote Fault zone is interpreted to be a large displacement fault striking north-northeast that is downthrown to the southeast with an estimated throw of 150m.</li> <li>The Miranda Fault is a northeast striking fault, with displacements of up to 60m to the southeast.</li> </ul> </li> <li>Several other smaller displacement faults (less than 10m), which generally strike parallel to the two major faults, are interpreted to exist throughout the coalfield. Fault dips have been interpreted to be 65°, based on fault zone intercepts in drillholes.</li> <li>The main Kupakupa (KK) seam is low ash, low fixed carbon and very low sulphur coal. There is</li> </ul>



Criteria	Commentary																																																																																																																																																										
	some evidence of higher phosphorous coal (greater than 0.06% phosphorous in coal) at the base of the KK seam. The coal resource is sub-bituminous C rank.																																																																																																																																																										
<b>Drillhole Information</b>	<ul style="list-style-type: none"><li>1019 drillholes are located within the Maramarua area, with 27 synthetic holes making up 1,046 holes in total within the project area. 547 of the drillholes pass validity measures and are used to build the structure model.</li><li>A summary of the drilling database is shown below</li></ul> <table><tr><th>Years</th><th>Collar ID Series</th><th># Holes in Project Area</th><th>Drilling Method</th><th># Holes in Structure Model</th><th># Holes in Coal Quality Model</th><th>Geophysics Available</th></tr><tr><td>1945-60</td><td>1, 3, 1735-5408</td><td>568</td><td>W</td><td>290</td><td>0</td><td>0</td></tr><tr><td>1977-80</td><td>8004-8445; 9000-9124</td><td>149</td><td>W/C</td><td>56</td><td>64</td><td>35</td></tr><tr><td>1982-1984</td><td>9125-9160</td><td>20</td><td>W/C</td><td>0</td><td>9</td><td>9</td></tr><tr><td>1986-1987</td><td>9161-9214</td><td>54</td><td>W/C</td><td>21</td><td>14</td><td>51</td></tr><tr><td>1993-1994</td><td>9215-9248</td><td>34</td><td>W/C</td><td>26</td><td>29</td><td>0</td></tr><tr><td>1996</td><td>9249-9252</td><td>4</td><td>C</td><td>2</td><td>0</td><td>0</td></tr><tr><td>1996</td><td>9278-9290</td><td>13</td><td>W/C</td><td>12</td><td>11</td><td>0</td></tr><tr><td>2002</td><td>9253-9264</td><td>12</td><td>W/C</td><td>5</td><td>0</td><td>0</td></tr><tr><td>2005-2006</td><td>9265-9271; 9272-9277; 9291-9298</td><td>19</td><td>W/C</td><td>5</td><td>11</td><td>19</td></tr><tr><td>2007 and 2012</td><td>9299-9328</td><td>23</td><td>W/C</td><td>16</td><td>17</td><td>16</td></tr><tr><td>2008 and 2011</td><td>9321-9322; 9303; 9323-9324</td><td>5</td><td>W/C</td><td>2</td><td>1</td><td>4</td></tr><tr><td>2009</td><td>K2sump</td><td>1</td><td>W/C</td><td>0</td><td>0</td><td>0</td></tr><tr><td>2014</td><td>9329</td><td>1</td><td>W/C</td><td>1</td><td>1</td><td>0</td></tr><tr><td>2015</td><td>9330-9341</td><td>12</td><td>W/C</td><td>10</td><td>8</td><td>0</td></tr><tr><td>2017-18</td><td>9342 - 9383</td><td>42</td><td>AC</td><td>37</td><td>0</td><td>0</td></tr><tr><td>2018</td><td>9384 - 9396</td><td>13</td><td>AC/C</td><td>10</td><td>9</td><td>0</td></tr><tr><td>2019</td><td>17599 - 17605</td><td>7</td><td>AC/C</td><td>3</td><td>6</td><td>2</td></tr><tr><td>2020</td><td>17606 - 17625</td><td>20</td><td>W/C</td><td>18</td><td>4</td><td>19</td></tr><tr><td>2022</td><td>17629 - 17650</td><td>22</td><td>AC/C</td><td>12</td><td>0</td><td>0</td></tr><tr><td>Synthetic</td><td>Numerous</td><td>27</td><td>SYN</td><td>19</td><td>0</td><td>0</td></tr><tr><td>Total</td><td></td><td>1046</td><td></td><td>545</td><td>183</td><td>155</td></tr></table>	Years	Collar ID Series	# Holes in Project Area	Drilling Method	# Holes in Structure Model	# Holes in Coal Quality Model	Geophysics Available	1945-60	1, 3, 1735-5408	568	W	290	0	0	1977-80	8004-8445; 9000-9124	149	W/C	56	64	35	1982-1984	9125-9160	20	W/C	0	9	9	1986-1987	9161-9214	54	W/C	21	14	51	1993-1994	9215-9248	34	W/C	26	29	0	1996	9249-9252	4	C	2	0	0	1996	9278-9290	13	W/C	12	11	0	2002	9253-9264	12	W/C	5	0	0	2005-2006	9265-9271; 9272-9277; 9291-9298	19	W/C	5	11	19	2007 and 2012	9299-9328	23	W/C	16	17	16	2008 and 2011	9321-9322; 9303; 9323-9324	5	W/C	2	1	4	2009	K2sump	1	W/C	0	0	0	2014	9329	1	W/C	1	1	0	2015	9330-9341	12	W/C	10	8	0	2017-18	9342 - 9383	42	AC	37	0	0	2018	9384 - 9396	13	AC/C	10	9	0	2019	17599 - 17605	7	AC/C	3	6	2	2020	17606 - 17625	20	W/C	18	4	19	2022	17629 - 17650	22	AC/C	12	0	0	Synthetic	Numerous	27	SYN	19	0	0	Total		1046		545	183	155
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<b>Data aggregation methods</b>	<ul style="list-style-type: none"><li>Coal ply samples are numerically normalised into 0.5m long composite samples for Coal Resource estimation.</li><li>The resource model is built as a block model with 0.5m block thicknesses for coal blocks. Normalised coal sample data is used to grade estimate the block model.</li><li>Some full seam composite samples have been analysed at the laboratory for thorough analysis of marketing attributes including ash constituents, forms of sulphur, ash fusion temperatures, and ultimate analysis. These composite samples are not used in grade estimation.</li><li>No seam thickness cut-offs have been applied.</li></ul>																																																																																																																																																										
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"><li>The stratigraphic nature of coal measures presents the coal seams in a horizontal or sub horizontal plane.</li><li>The Maramarua Resource has a general dip of 10 to 15° to the north-northwest.</li><li>Drillholes are generally oriented vertically (90°) and are designed to intercept target seams at a high angle for drilled seam thickness to represent true seam thickness as closely as possible. Several drillholes have been inclined to target the major fault zones but have been excluded from the structure model.</li><li>Drillholes can deviate from the vertical. Drillhole deviation is measured during downhole geophysical logging using the verticality tool and incorporated into modelling workflows where this data was acquired.</li></ul>																																																																																																																																																										

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Algorithms used for modelling coal thickness utilise vertical thickness.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Diagrams can be found in the Appendix A for each of the following: <ul style="list-style-type: none"> <li>Location map.</li> <li>Geological QMap.</li> <li>Map showing coal rights.</li> <li>Map showing land rights and pit shell boundaries.</li> <li>Map showing exploration drillholes.</li> <li>Map showing resource classification within the optimised pit shell.</li> <li>Map showing reserve classification within pit shell designs.</li> <li>Map showing Kupakupa Floor contour distribution.</li> <li>Map showing Kupakupa thickness contour distribution.</li> <li>Map showing Kupakupa ash distribution.</li> <li>Map showing Kupakupa sulphur distribution.</li> </ul> </li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>No exploration results are being presented in this Table 1, rather this report is focused on advanced projects that have been defined by geological models with associated Coal Resource estimates completed.</li> <li>The exclusion of this information from this report is considered to not be material to the understanding of the deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>The Coal Resources reported in this report relate to the area in and around and existing operating coal mine.</li> <li>Groundwater has been encountered in most drillholes. Piezometers have been installed in 40 drillholes to monitor changes in groundwater levels through various stages of the mine life.</li> <li>Relative density of coal has been determined for 615 samples from the Maramarua project area. The median density (on an air-dried basis) is 1.36t/m<sup>3</sup>. The KK and KL seams use a relationship between ash (adb) and relative density to calculate the air-dried density.  <math display="block">\text{Density}_{ad} = 1.3012 + 0.00834 \times \text{as}_{ad}</math> </li> <li>The Preston Sanders equation is used to determine in ground density of coal. Any KU seam blocks that do not have ash values estimated adopt the default relative in situ coal density of 1.28t/m<sup>3</sup> (1.3t/m<sup>3</sup> air dried density).</li> <li>Geotechnical and rock characteristics of the overburden units have been calculated using laboratory test data to determine strength parameters (such as UCS, shear box and ring shear tests) and empirical classifications (RMR, GSI and Hoek-Brown) and back analysis of existing cut slopes.</li> <li>A program of drilling has recently been undertaken targeting basement rock at the site to test its potential use as an aggregate but have not been used in the coal resource model.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>Future exploration drilling is proposed to infill spatial gaps in coal quality data and further delineate fault locations and displacements within the proposed mining areas.</li> <li>Further environmental studies and subsequent consent application work is expected to be undertaken around the proposed M2 pit area.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>All historical and legacy datasets have been thoroughly validated against original logs and results tables. Where reliability of the data is poor the data is excluded from the modelling process.</li> <li>BRL utilises an acQuire database to store and maintain its geological exploration dataset.</li> <li>All core logging data is generally recorded on paper logs then transferred directly into a central database using acQuire software.</li> <li>The acQuire database places explicit controls on certain data fields as they are entered or imported into the database, such as overlapping intervals, coincident samples, out of range sample values, standardised look-up tables for logging codes.</li> <li>All changes to the database are tracked and archived. Data correction and validation checks are undertaken internally before the data is used for modelling purposes.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>Manual data entry of coal quality results is not required as results are imported directly from laboratory results files.</li> <li>Validation of historical wash drilled drillholes has been carried out by comparing coal seam depths and thicknesses with those of adjacent more reliable cored drillholes in cross-section. Coal quality data and geophysical logs have been used to validate more modern (post 1977) drillholes, to provide confidence in coal seam depths and thicknesses.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Eden Sinclair (the Competent Person) has visited the Maramarua site and is familiar with the site's geology, the geological data used in the resource estimate and the processes used to build the resource model.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>External consultants (Golder Associates) have reviewed the modelling processes in use by BRL to develop their resource model and Coal Resource estimates.</li> <li>Golder has confidence in the methodologies used by BRL for geological modelling and the interpretation of the available Maramarua Project data.</li> <li>Confidence in interpretation of geological stratigraphy, structure and seam correlation/continuity is variable across the permit area, and differing seam correlation interpretations exist in some areas. This is typically a result of the complex structural environment, rather than the presence of numerous seam splits and discontinuous seams. Some residual uncertainty of quality and confidence of historical drilling data remains despite thorough evaluation of the historical logs and drill locations.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The Maramarua Resource model is approximately 2.6km in length and 2.6km in width, covering approximately 680 hectares. Within this area there are two main areas of focus for future mining – K1 and M1 areas. As discussed above, the coal seams are generally laterally continuous, however thickness can vary over short lateral distances due to the highly faulted nature of the deposit.</li> <li>The main Kupakupa (KK) seam is the target in this area. Seam thickness ranges from 1m to 15m. There are also isolated areas of KL seam which have been identified as an economic resource within the RF1.0 pit shell.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>All available exploration data has been validated and, where reliable, has been used to create a 3D geological block model for Coal Resource estimation and classification.</li> <li>All exploration drilling data is stored in an acQuire database and exported to a Maptek Vulcan™ (Vulcan) drillhole database.</li> <li>Interpretive design data is stored within Vulcan in various layers.</li> <li>The model is domained further into four fault blocks using the large faults as bounding surfaces.</li> <li>Each domain is modelled for structure and grade separately.</li> <li>Vulcan is used to build the structure model. Grid spacing is 10m x 10m.</li> <li>Maptek's Integrated Stratigraphic Model (ISM) module is used to produce the structure model.</li> <li>Structural surfaces for coal seams, Te Kuiti Group rocks (Pukemiro Sandstone, Glen Afton Claystone, Mangakotuku Siltstone and Whaingaroa Siltstone) and the Waitemata Group roof and floor are modelled using an algorithm to produce grids on a 10m-by-10m basis, in order to best define the structure in the project area.</li> <li>The 'Hybrid Method' is used to develop the structure model. This method triangulates a reference surface and then stacks the remaining horizons by adding structure thickness grids. Thickness grids are created using a triangulation modelling algorithm. Design data from other horizons is incorporated into the final grid structure by back propagation of surfaces.</li> <li>Modelling parameters for the structural modelling are as follows: <ul style="list-style-type: none"> <li>Reference grid surface (KK floor) by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Triangulation.</li> <li>Trend Order is 1 (Linear).</li> <li>Smoothing is 9.</li> <li>The maximum triangle length is 500m.</li> <li>Surfaces are splined.</li> </ul> </li> <li>Grid thickness modelling by Hybrid Stacking: <ul style="list-style-type: none"> <li>Method is Inverse Distance.</li> </ul> </li> </ul> </li> </ul>



Criteria	Commentary
	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>○ Trend Order is 0 (Horizontal Planar).</li> <li>○ Smoothing is 9.</li> <li>○ Power 2.0.</li> <li>○ Max number of interpolative points 10.</li> <li>○ Search Radius is 500m.</li> <li>○ Number of search sectors 0.</li> <li>○ Sector angle offset 0.</li> </ul> </li> <li>• Design data is applied by the Hybrid method with a zone of influence generally 50m horizontally, and 20m vertically.</li> <li>• Structural grids are not cropped.</li> <li>• Structure grids are checked and visually validated before being used to construct the resource block model.</li> <li>• A conventional block model is generated using the stratigraphic structure grids for each fault domain, along with end of month site survey combined with lidar topography surface, and other mining related surfaces. The block dimensions are constructed at 10m x 10m. The maximum vertical thickness for coal blocks is 0.5m.</li> <li>• Vulcan is used to build the block model and to estimate grade. The process is automated using a Lava script.</li> <li>• Grade estimation is performed utilising Vulcan's Tetra Projection Model via the Univariate Estimation editor. Coal quality data is modelled using inverse distance squared block estimation. The estimation is completed over three runs with increasing search distances for all coal seams of 80m, 200m, and 600m.</li> <li>• The coal seams are grade estimated in four fault domains. <ul style="list-style-type: none"> <li>○ Volatile matter, ash, moisture and sulphur coal qualities are estimated on an air-dried basis.</li> <li>○ Ash, moisture, volatile matter, and sulphur are estimated simultaneously.</li> </ul> </li> <li>• Estimated block values are determined as part of the modelling workflow and are reviewed by a senior geologist to ensure no anomalies exist and that original data is honoured.</li> <li>• Historical coal winning limits produced following mining of pits are available, and these have been considered when modelling resource areas.</li> <li>• Geological interpretation, including the modelling of both major and minor faulting in the area has been considered when building structural grids. Allowances are made in the surfaces for coal loss through fault zones, with the volume of coal loss dependent on the dip and displacement of the fault.</li> <li>• It is expected other, currently unmapped, minor faults will be discovered during further mining; with their expected small displacements resulting in minimal change to the resource estimation.</li> <li>• No deleterious elements with economic significance have been identified in Maramarua coal.</li> <li>• Over the past three years, the mine has consistently produced coal products suitable for iron sand metallurgical processing and thermal processing heat. No other by-products have been considered at this stage.</li> <li>• Validation of data during modelling occurs at different process stages: <ul style="list-style-type: none"> <li>○ Review of historical drillhole datasets prior to modelling to ensure that the original dataset is in order.</li> <li>○ Review of drillhole data using Vulcan data validation tools.</li> <li>○ Review of drillhole coal seam codes to ensure correct seam code correlations.</li> <li>○ Structural grids are checked in cross section both along strike and down dip to check the grids are honouring drillhole data.</li> <li>○ Once structural grids have been produced from drillhole data they are analysed to ensure they honour drillhole data. Contour plans are produced to ensure modelled values represent original data.</li> <li>○ Various methods have been used to check the validity of the block estimation. This includes manual inspection of the model, Quantile Quantile (QQ) plots of block model qualities vs the coal quality database and visual comparison tools.</li> </ul> </li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• Testing work has been undertaken to determine moisture levels in drillhole core with total</li> </ul>

Criteria	Commentary
	<p>moisture and inherent moisture typically being measured.</p> <ul style="list-style-type: none"> <li>Total moisture is modelled using a constant 5.0% loss on drying (LOD) across the deposit.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The coal has been classified as sub-bituminous C rank and is marketed and sold as coal products suitable for iron sand metallurgical processing and thermal coal. A maximum ash cut-off of (20% air-dried basis for KK and 50% air-dried basis for KU &amp; KL seams) has been applied to all samples used in grade estimation of the resource model.</li> <li>No lower ash cut-off has been applied.</li> <li>Coal Resources have been defined as economic by using a Lerchs-Grossman optimised pit shell using budgeted mining costs and contracted coal sales values. The revenue factor (RF) 1.0 shell from the optimisation has been used. No resources have been reported outside of this pit shell. This optimised pit shell is used to determine Reasonable Prospects for Eventual Economic Extraction (RPEEE).</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The target (KK) seam is considered suitable for opencast operations due to seam depth, thickness and dip. The selected mining method has been chosen based on long term experience of opencast mining the KK seam. Roof and floor losses are not accounted for in the Coal Resource estimate.</li> <li>Only coal that falls within an optimised RF1.0 pit shell is reported as Coal Resources. Costs and revenue parameters used in the pit optimisation are based on the 2020 Maramarua budget and include allowances for royalties, commissions, mining costs, coal processing and administration, and basic mining and processing losses. Recent cost and revenue escalations are expected to result in a similar optimised pit shell.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The KK and KL seams at Maramarua will provide coal products suitable for iron sand metallurgical processing and thermal coal. This has been determined by past performance of coal from the area for thermal purposes, and by average coal quality values.</li> <li>Studies have been carried out in the past to analyse combustion potential, ash fusion temperatures and Hardgrove Grindability Index (HGI), to confirm the suitability of the coal for thermal uses.</li> <li>Currently no wash plant is used at the Maramarua operation. The Run-of-Mine (ROM) coal produced is processed through a crushing/screening plant where losses and dilutions are minimal.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>At Maramarua, waste rock is transported and stored in an engineered landform to backfill a historical opencast pit. The low sulphur levels in the coal measures indicates acid or metalliferous drainage will not occur. Neutral metalliferous drainage is observed at Maramarua, with dissolved boron elevated in some sites but within environmental limits set by existing consents.</li> <li>BRL (through BT) hold resource consents regarding land use, air and water quality for the current operations. It is reasonably expected that any modifications to existing agreements or additional agreements required to operate in this area can be obtained in a timely manner.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>The KK and KL seams use a relationship between ash (adb) and relative density to calculate the air-dried density. The Preston Sanders equation is used to determine in ground density of coal.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>BRL classifies Coal Resources at Maramarua using a multivariate approach.</li> <li>Coal Resources have been classified on the basis of geological and grade continuity balanced by relative uncertainties surrounding, proximity to faults and thinning coal.</li> <li>Closely spaced drillholes with valid coal quality samples (point of observation) increases the confidence in resource assessments.</li> <li>The confidence is reduced by: <ul style="list-style-type: none"> <li>A block lying in an area where structure dip is greater than 15° due to proximity to large faults. Faulting can impact coal thickness and quality.</li> <li>A block lying within an area with thin or splitting seams resulting in uncertainty of geological continuity. Where a seam is thin or is splitting, a small change in thickness can have a large impact to reported vs actual coal tonnages and qualities.</li> </ul> </li> <li>Closely spaced drilling with valid samples increases the confidence for each seam in resource assessments.</li> </ul>

Criteria	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The resource model reported has been reviewed by the Competent Person.</li> <li>In 2020, Golder was engaged to review and rebuild the geology resource model.</li> <li>The model has since had further review and refinement with additional data acquired from exploration projects.</li> <li>This review included adding grade estimation for the KL and KU seams and added in further detail around the E-W trending fault in the KCQ pit including the use of design data. Coal quality estimation processes have also been improved, along with adding density data to the model.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>The Competent Person has reviewed the Coal Resource estimates and has visited the existing operations. The Competent Person has examined the methodology used to estimate the resources and is satisfied that the processes have been properly conducted. The estimation methodology is generally in accordance with industry practice and the estimates can be regarded as consistent with the requirements of JORC 2012.</li> <li>Geostatistics has been used on the Maramarua dataset in the past to review geospatial relationship of coal thickness and quality data.</li> <li>The Resource is declared as coal in-ground and potentially mineable resources. The current resource model has generally been in line with production data to date. Reconciliation of the KCQ pit for the FY24 year resulted in coal production within 12% of that estimated by the model. No coal quality reconciliation has been undertaken.</li> </ul>

## Section 4 Estimation and Reporting of Ore Reserves

Criteria	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>The Coal Resource estimates used are the Coal Resource estimates undertaken by the Maramarua Mine BRL geologist as outlined in Section 1-3.</li> <li>A 3D Resource block model, using Vulcan™ software, of topography, structure and quality are used for in situ Resource definition.</li> <li>Coal Resources are inclusive of Coal Reserves.</li> <li>Maramarua is an operating open pit coal mine.</li> <li>A decrease in the previously reported Maramarua Coal Reserves is primarily attributed to the following changes: <ul style="list-style-type: none"> <li>Depletion by surface and stockpile mining.</li> <li>Minor structural changes to the geological model.</li> <li>Offset by an increase in coal that what was won outside the 2023 Reserve shell.</li> </ul> </li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Sue Bonham-Carter (the Competent Person) is a consultant to BT Mining and visits the project area on a regular basis.</li> <li>Ms. Bonham-Carter has over 30 years' experience working in surface coal mines,</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>Maramarua is an operating mine project. The reportable Coal Reserve is based on the life of mine (LOM) plan and has resulted in a mine plan that is technically achievable and economically viable, and that material modifying factors have been considered.</li> <li>In FY24 the geology and geotechnical models were updated however reserve pit shells which are still relied upon to report Coal Reserves are derived from FY21 optimisation studies.</li> <li>A pit optimisation study is planned for FY25 as part of the M2 pit development study.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>No additional quality cut-offs have been used in the determination of Coal Reserves in addition to what has been used in the declaration of Coal Resources (Section 3).</li> <li>Minimum mining seam thickness is 0.5m.</li> <li>Economic pit extents were determined using Lerchs-Grossman techniques based on site budgeted mining costs, geotechnical slope parameters and contracted coal sales values.</li> <li>All seams are reported. The KU and KL seams are only present where there they have been grade estimated. The Kupakupa (KK) seam is the primary target seam, KL coal is also targeted within the M1 pit.</li> </ul>



Criteria	Commentary
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Pit limits have been determined using pit optimisation techniques, with restrictions for current land and mineral access.</li> <li>All mining is via open cut methods. Mining equipment is hydraulic backhoes/mechanical drive rigid body trucks and articulated trucks.</li> <li>Pit slopes for the revised K1 design and the M1 pit have been geotechnically assessed and found to be in accordance with BRL stability criteria.</li> <li>Coal is present in a thick seam and is easily distinguishable from the surrounding waste rock. Coal quality has been shown to be consistent both laterally and within the seam.</li> <li>Applied mining factors, updated in 2024, are: <ul style="list-style-type: none"> <li>Coal losses 0.10m of coal from the roof and 0.15m from the floor (0.25m in total).</li> <li>Contaminated 0.05m roof and 0.10m floor (0.15m total).</li> <li>Dilution 0.01m roof and 0.05m floor (0.06m).</li> </ul> </li> <li>Minimum mining widths are to suit up to 200t class excavators and 90t capacity trucks and are typically &gt;50m.</li> <li>Inferred Coal Resources have not been included in the Coal Reserves.</li> <li>The selected mining method requires simple infrastructure to support mobile open-cut mining equipment (i.e. workshop, stockpiles, fuel farm, site ablution and offices).</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The ROM coal produced at Maramarua is crushed and screened on site. No processing losses are assumed which is in line with processing reconciliations.</li> <li>Product coal specifications include ash, sulphur, moisture and calorific value.</li> <li>Some parts of the Coal Reserve show the base of the seam with elevated phosphorous levels. This can be effectively blended out within the entire seam thickness; however, care will need to be taken not to mine the seam floor as a discrete entity.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>The current operating pits K1, KCQ and M1 are fully consented and licences required to operate have been granted.</li> <li>All water related consents are in place for current activities.</li> <li>The M2 areas of the reported Coal Reserve require additional consents to allow for mining, these approval processes are underway and there are reasonable expectations that these will be granted in a timely manner.</li> <li>Disturbed areas are progressively rehabilitated on completion of mining activities.</li> <li>Environmental impacts that have been identified can be mitigated to meet permitting requirements.</li> <li>Updating of approvals is an ongoing process and it is reasonably expected that any modifications to existing approvals or additional approvals that may be required can be obtained in a timely manner.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>All necessary infrastructure is in place and operational for the current operation.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>All infrastructure is in place at Maramarua. The primary ongoing capital requirements are for equipment replacement and progressive water management elements for mining of M1 and M2 pits, there is a planned fuel tank upgrade in 2025, and these are included in the economic model.</li> <li>Costs are based on historical actuals and forecasting for the following financial year. All operating costs were based on the 3-year budget estimates developed by BT Mining and include allowances for royalties, commissions, mining costs, road haulage loading and administration.</li> <li>Contracted product specifications and penalties for failure to meet specification are included in the cost model. Levies and royalties have been applied as per the appropriate NZ legislation (Crown AVR/APR royalty, Mines Rescue Levy and Energy and Resources Levy).</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>Revenues are as per the current domestic coal supply sales contracts.</li> <li>Revenues are based on the as-received calorific value which is in turn determined by the dry-basis calorific value of the coal and the total moisture as delivered to the customer.</li> <li>Coal Resource model estimates are used to determine the dry calorific value estimates, and actual production calorific value data from the bulk sample deliveries to customers.</li> <li>Coal Reserves are reported within pit designs that are based on a FY21 RF0.85 optimised shell.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>The supply and demand situation for coal is affected by a range of factors, and coal consumption changes with regulatory and customer circumstances. Annual sales volumes are as per BRL</li> </ul>

Criteria	Commentary
	internal market forecasts and within the quantities allowed in long term sales contracts. Thermal coal sales estimates take into consideration decarbonisation of the domestic dairy manufacturing market, with sales to be phased out by 2037.
<b>Economic</b>	<ul style="list-style-type: none"> <li>To demonstrate the Reserve as economic it has been evaluated as part of the annual budgeting cycle through a standard financial model. All capital, operating and closure costs as well as current sales contract revenue factors were included in the financial model. This model has shown that the Maramarua Coal Reserve has a positive NPV.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>As part of the resource consenting process and general site operations, regular communication and consultation has taken place with the local communities, regulatory authorities and local iwi.</li> <li>BT Mining Limited currently holds the required landowner access to mine the current Coal Reserves reported.</li> <li>BT Mining Limited provide some annual support to local community groups and have an iwi and stakeholder engagement plan.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>All mining projects operate in an environment of geological uncertainty.</li> <li>Updating of approvals is an ongoing annual process and it is reasonably expected that any modifications to existing approvals or additional approvals that may be required can be obtained in a timely manner.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The Reserve coal within the K1, KCQ, M1 and M2 pits has been categorised based on the underlying Coal Resource categories, where Measured Coal Resources have mapped to Proven Coal Reserves and Indicated Coal Resources to Probable Coal Reserves.</li> <li>These categorisations reflect the Competent Person's view of the deposit.</li> <li>Coal Resources are inclusive of Coal Reserves.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Several internal reviews have been completed during the various project stages.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>Coal Reserves have been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the basis of the categorisation reflects the accuracy of the coal reserve tonnes.</li> <li>The accuracy of the Coal Reserve estimate is primarily dependent on the accuracy of the Coal Resource model, the ability to sell the coal at the estimated prices and the site operating costs.</li> <li>The Competent Person has reviewed the Coal Reserve estimates and has visited the existing operations on numerous occasions. In the opinion of the Competent Person, the modifying factors and long-term cost and revenue assumptions used in the Coal Reserve are reasonable. Some risk is associated with: <ul style="list-style-type: none"> <li>Long term market demand for this coal.</li> <li>Obtaining Resource Consents for the M1 Pit.</li> <li>Obtaining Resource Consents that are yet to be applied for (M2 pit).</li> <li>Some areas of geotechnical instability with the active pit, these are monitored by BRL geotechnical staff.</li> </ul> </li> <li>Reconciliation for the FY23 year resulted in coal production within 12% of that estimated by the model for the KCQ pit. The K1 pit has not been reconciled. No coal quality reconciliation has been undertaken but sold coal has been within customer contract specifications.</li> </ul>

## Appendix A:

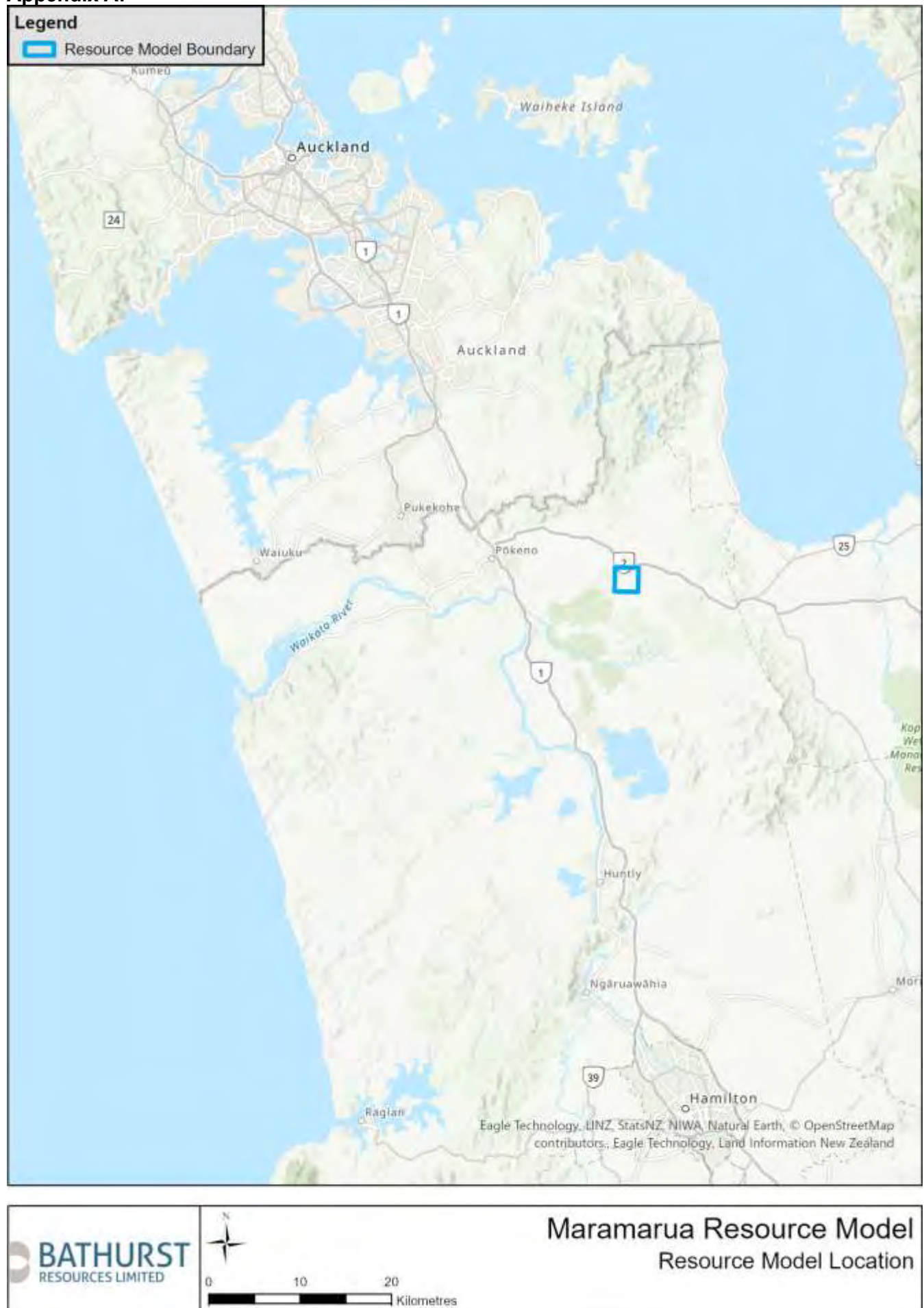


Figure 1: Location Plan



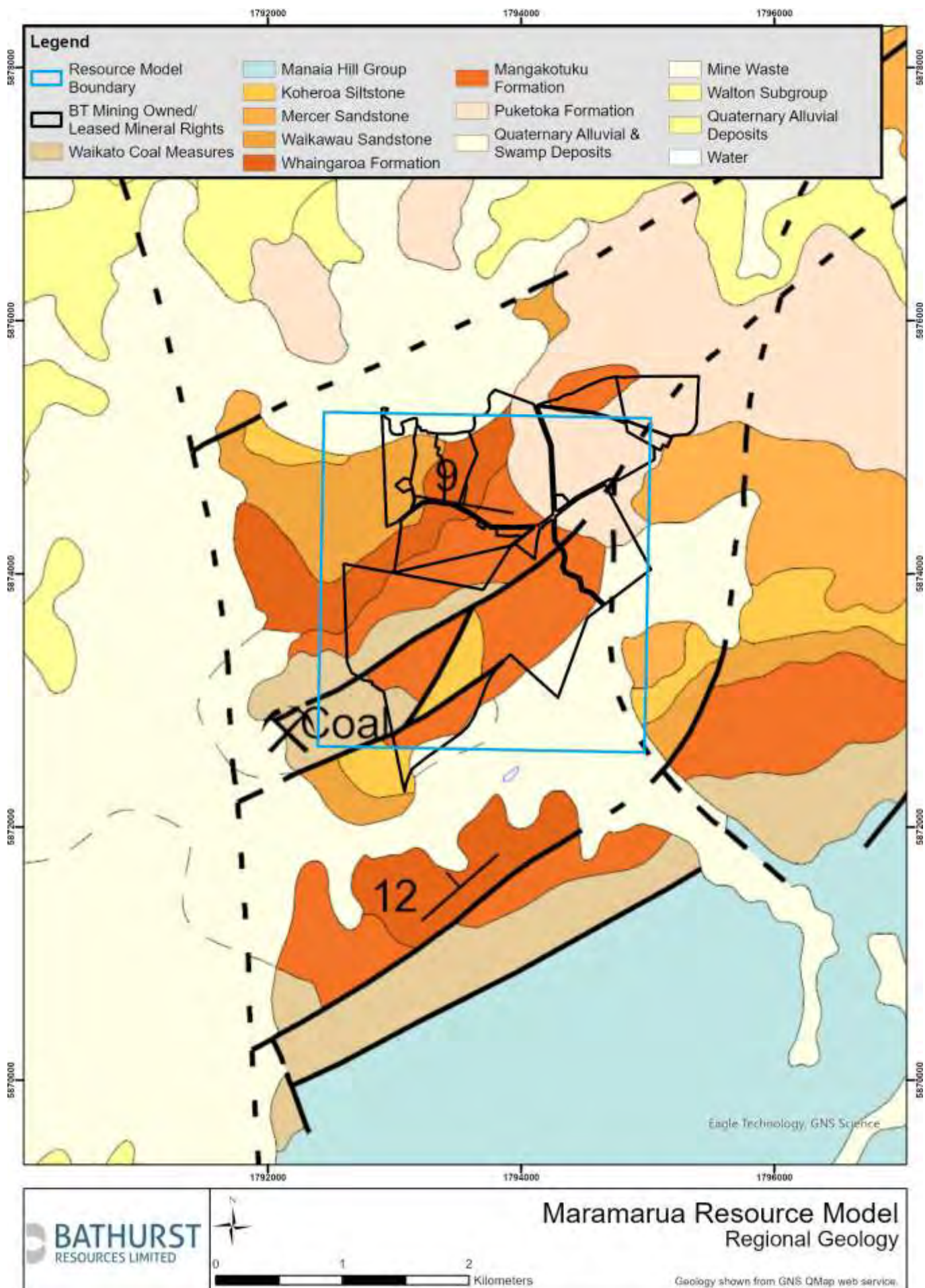


Figure 2: Regional Geology



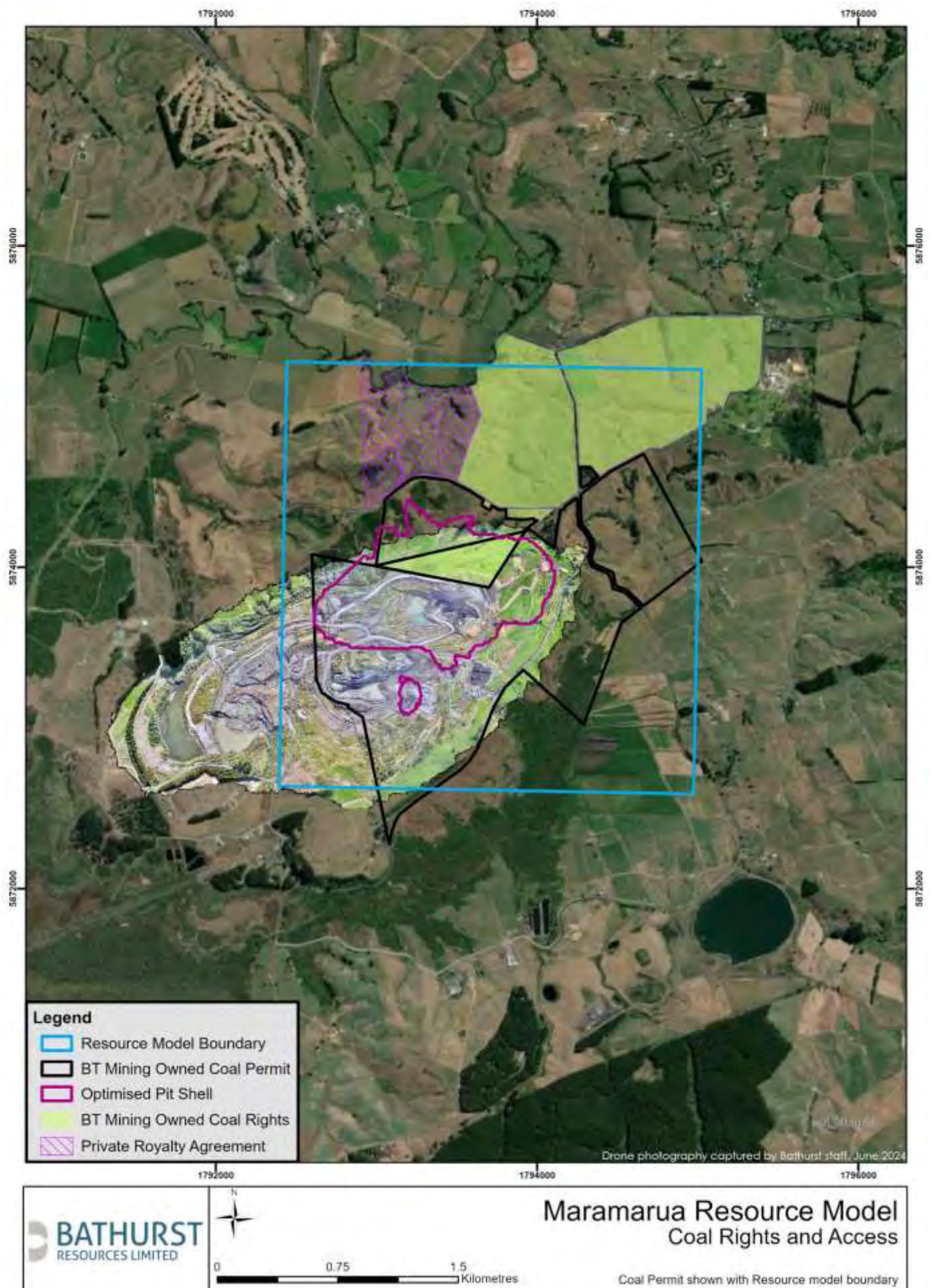


Figure 3: Maramarua Coal rights within the resource area



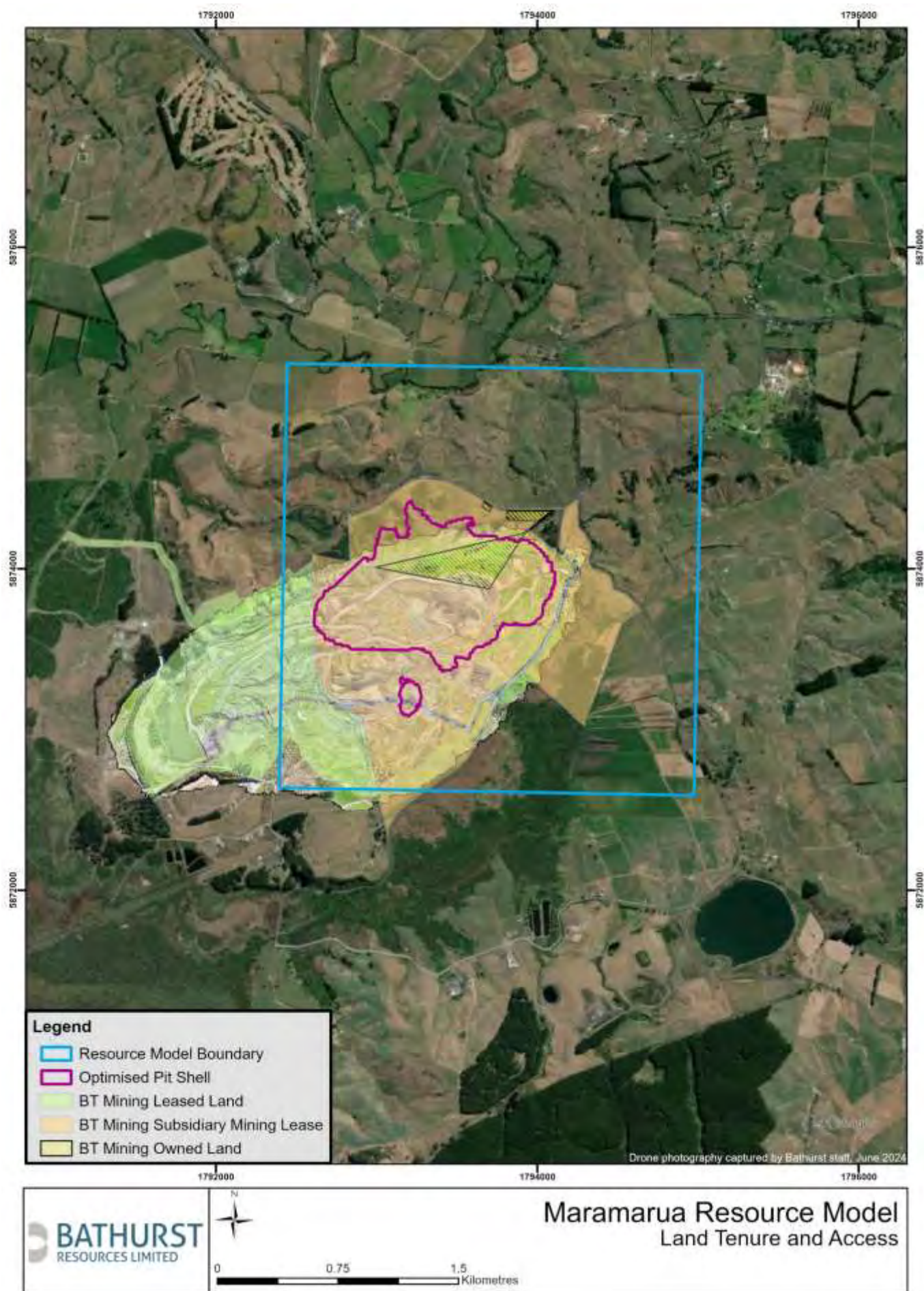


Figure 4: Maramarua land rights



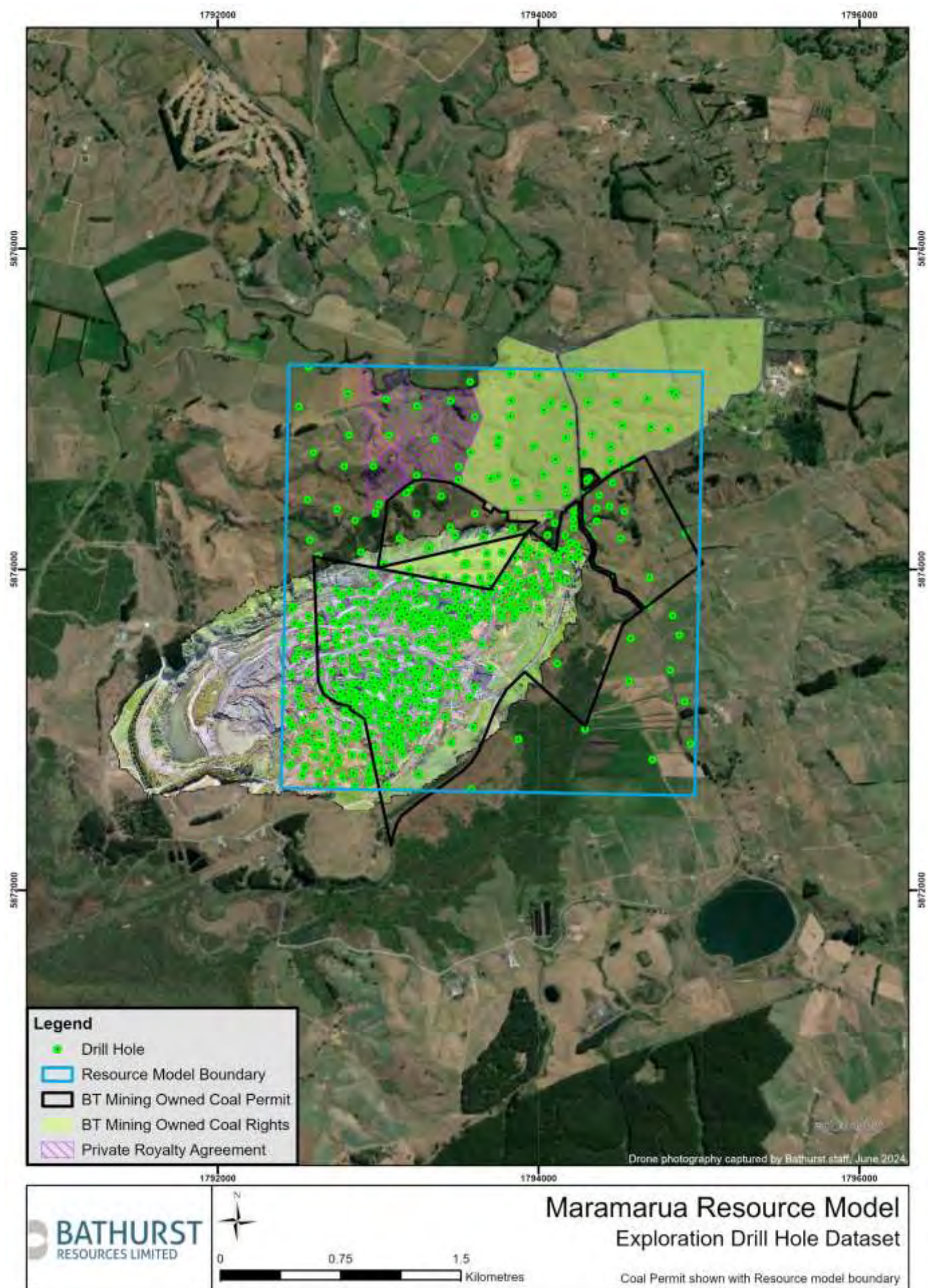


Figure 5: Plan showing the drilling dataset



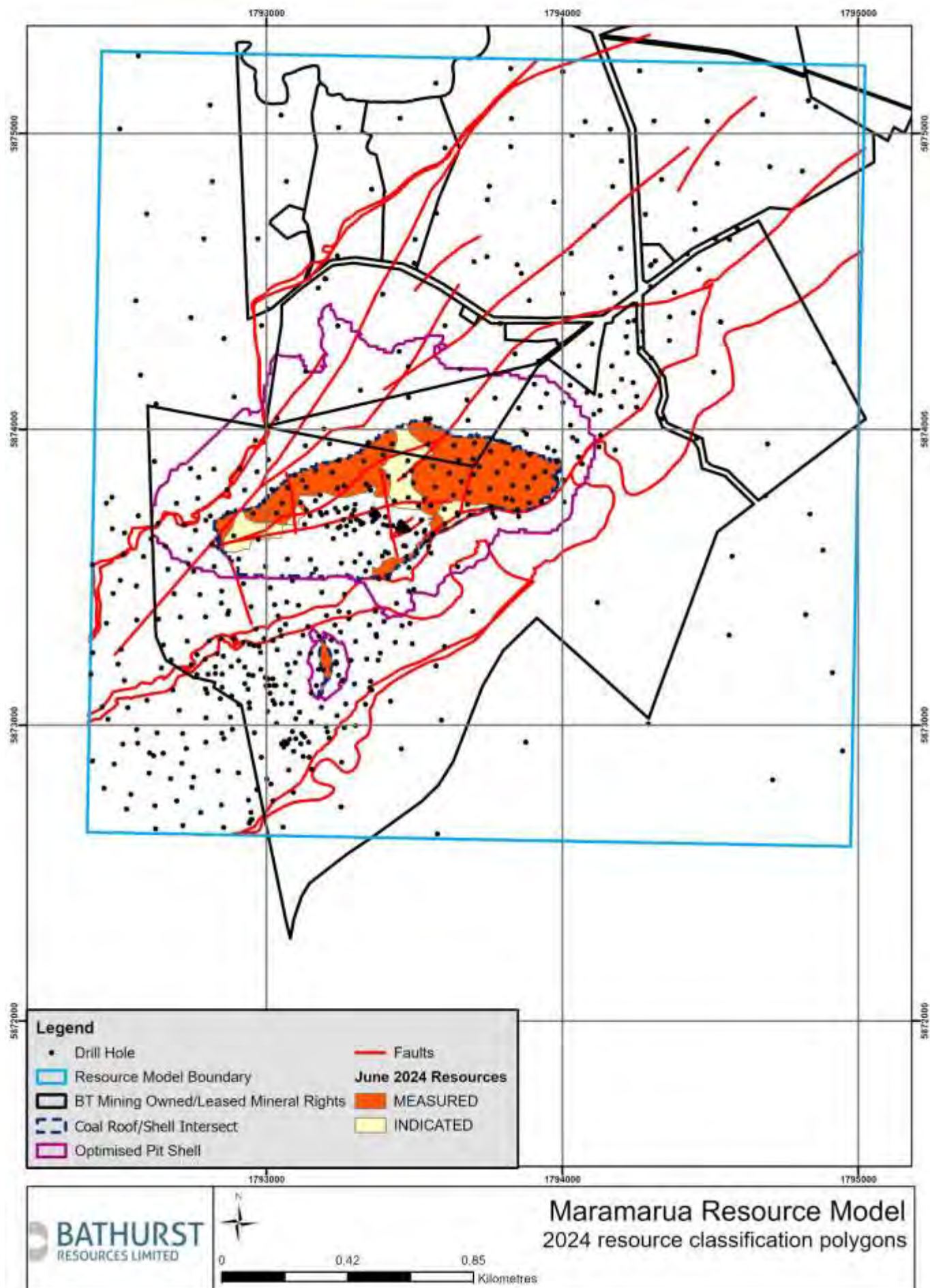


Figure 6: Maramarua resource classification polygons within optimised shell extents



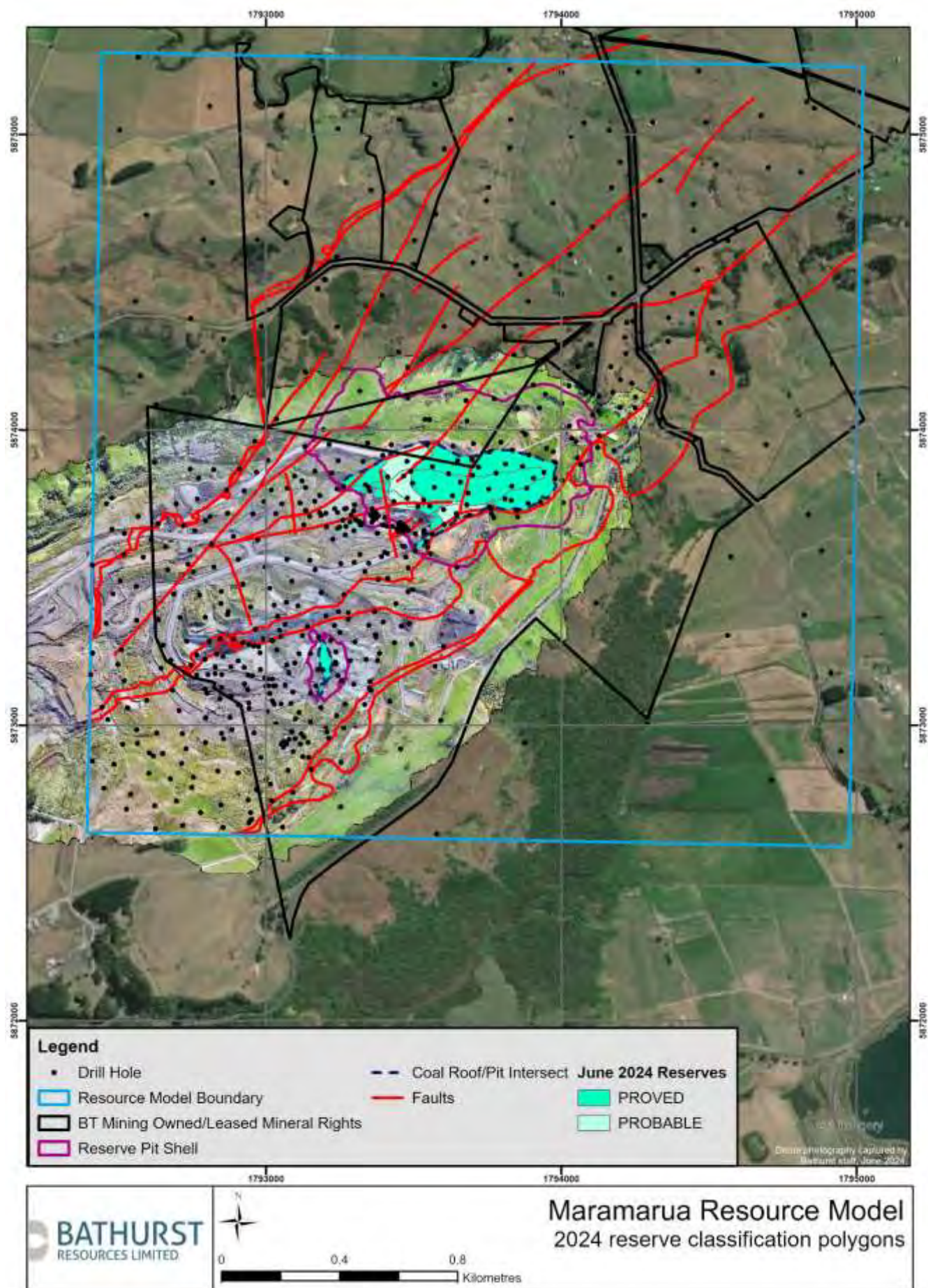


Figure 7: Maramarua reserve classification polygons with pit shell extents







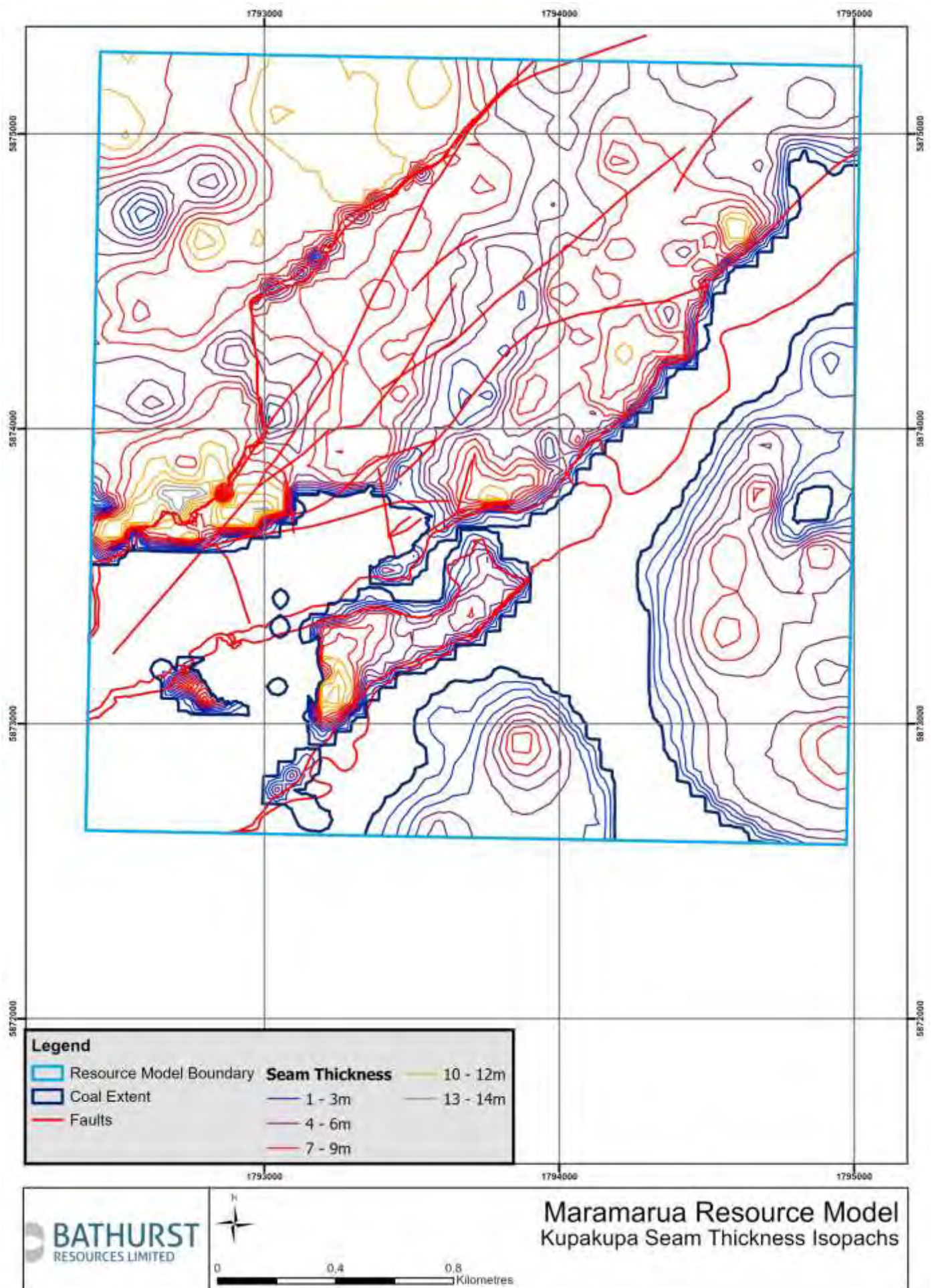


Figure 9: Plan showing full seam thickness contours for the KK seam

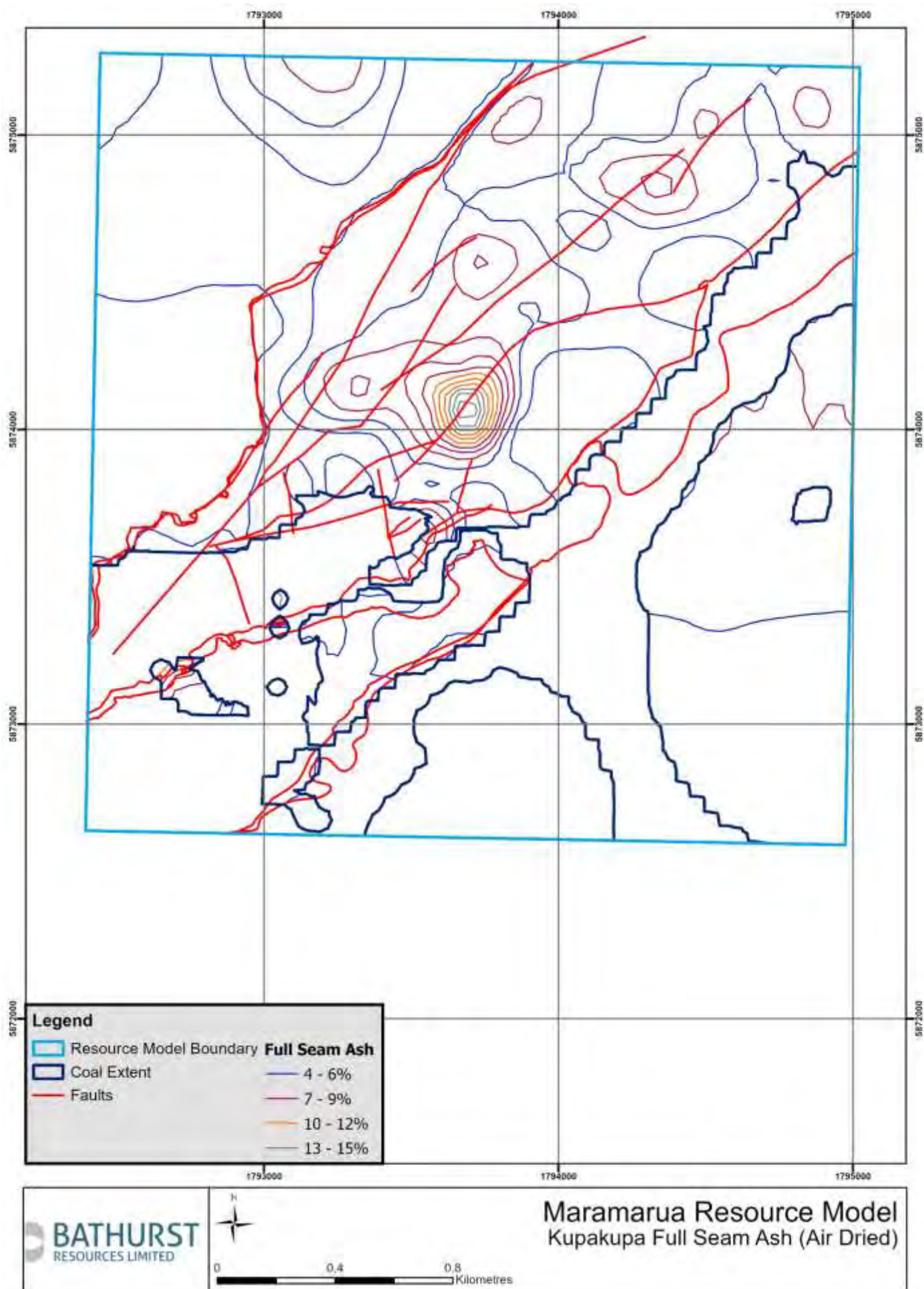


Figure 10: Plan showing in situ full seam ash on an air-dried basis as modelled for the KK seam



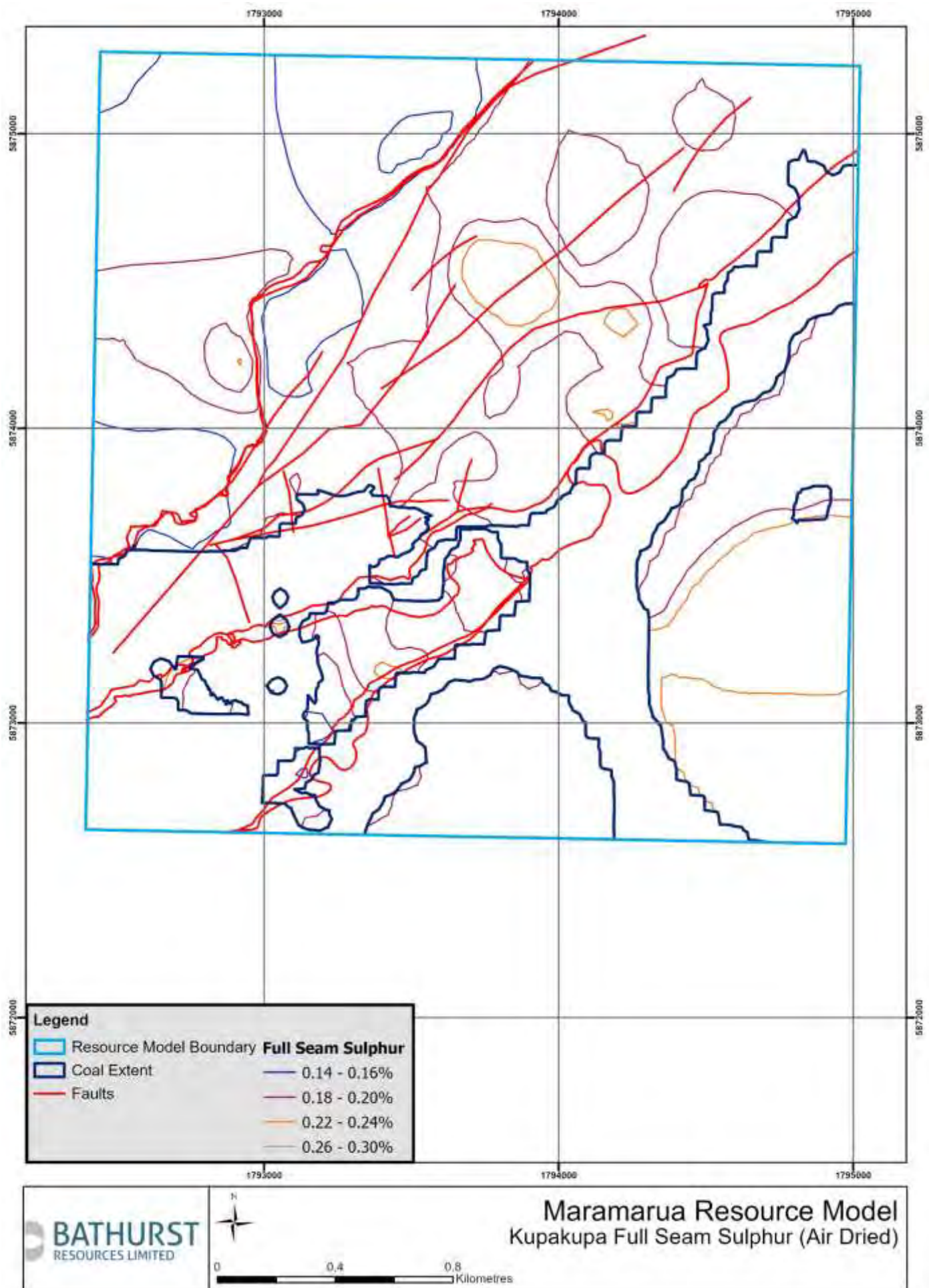


Figure 11: Plan showing full seam sulphur on an air-dried basis for the KK seam

## JORC Code, 2012 Edition – Table 1 Report for the Tenas Project 2024

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>All boreholes, where conditions permitted, were geophysically logged with some or all of the following tools: deviation, gamma, density, caliper, neutron, dip.</li> <li>Geophysical logging operators routinely calibrated their tools between programs.</li> <li>Core holes were sampled, where core recovery permitted, as whole core collected for coal quality analysis and rock geochemistry.</li> <li>The results from the geophysical logging were used to determine the lithology of the strata in the hole.</li> <li>The cored intervals are compared to the geophysical log in order to determine sample intervals and core loss.</li> <li>Samples from these programs were sent to the Crowsnest Resources Limited (CNRL) company laboratory and to Loring Laboratories in Calgary.</li> <li>A bulk sampling test pit was also excavated with a 219 tonne sample collected from 7 seams. The samples from this test pit were tested by Birtley Laboratory in Calgary.</li> <li>A further coal quality drilling program was conducted in 2018 that consisted of four PQ core holes and a bulk sample comprised of 14, 6 inch core holes. The PQ holes were tested at the Birtley Labortory in Calgary, AB while the 6 inch holes were tested by the SGS Laboratory in Delta, BC</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<ul style="list-style-type: none"> <li>A variety of drilling techniques were utilized on this project including mainly core, air rotary or a combination of both.</li> <li>From 1979 to 1989 the drilling was done for CNRL using top-head drive Ingersoll Rand (IR) rotary rigs and Longyear 38 diamond core rigs. Core diameter was 1 7/8" NQ core plus some 6" diameter cores.</li> <li>From 1992 to 1998 the drilling was done for Manalta using top-head drive Failing 1250 and IR rotary rigs and an Acker diamond core rig. Core diameter was 1 7/8" NQ core. Sampling of coal was done by the diamond core rig. Rotary coring to obtain 10 cm (4") diameter core was also used.</li> <li>Core was not orientated.</li> <li>A drilling program was completed in 2018 consisting of PQ diamond core holes which were logged plus a bulk sample obtained from 6 inch air rotary holes.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>The cored intervals were compared to the geophysical log in order to determine sample intervals and core loss.</li> <li>The drilling contractor was responsible for ensuring that core recovery was maximized.</li> <li>Due to the nature of the deposit, core quality was generally not affected by coal recovery.</li> <li>Core recovery records were reported on the written core description sheets for each core hole. The average recovery from 1992 to 1998 was typically in the 80% to 100% range and was typically better than that achieved during the CNRL tenure period</li> <li>Core recovery for the 2018 program was between 80 and 100% for the PQ core holes and 95 to 100% for the 6 inch core holes.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource</li> </ul>	<ul style="list-style-type: none"> <li>All core was logged using similar logging criteria included lithology, weathering, core quality/hardness and observation of structural features.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>estimation, mining studies and metallurgical studies.</p> <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The logging with respect to the down hole logs is quantitative and core photographs are available in some instances.</li> <li>All boreholes, where conditions permitted, were geophysically logged with some or all of the following tools: deviation, gamma, density, caliper, neutron, dip.</li> <li>Geophysical logging operators routinely calibrated their tools between programs.</li> <li>The geophysical logs were used to determine the lithological intervals in rotary holes where no core was retrieved. In general, coal was determined by its low response on the density tool (<math>\sim 1.8</math> g/cc). Once determined if the interval was coal or not, a lithotype for rock intervals was determined by observing the gamma log response, which had the lowest response in clean sandstones with little clay content and the highest response in shales due to the high clay content, which contained K that emits radiation.</li> <li>All holes in 2018 were logged geophysically and dipmeter was run on holes. The 6 inch core holes were only logged geologically.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>All samples taken were of whole core.</li> <li>Of the few rotary sampled holes, none of the analytical data were used in the resource estimate.</li> <li>Quality control was provided via referencing the geophysical log. The analytical results were checked for reasonableness against the gamma and density results. There should be a direct relationship between density and ash content.</li> <li>Whole core material of each seam or ply, either as single samples or a series of samples by depth increments, were sent to the laboratory for analysis. All coal core samples were bagged on site before being transported to Loring and Birtley Laboratories in Calgary for coal quality test work.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Loring, SGS, and Birtley Laboratories are ISO 9001 certified, adhere to ASTM preparation and testing specifications and have quality control processes in place.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>The verification in terms of coal quality was by comparison of analytical results with the geophysical log. The sampling and analytical results were overseen and reviewed by qualified geologists.</li> <li>Anomalous thick intersections in the dataset were checked to ensure correctness.</li> <li>Twinning of holes is generally not required except in the absence of a geophysical log.</li> <li>In general all core logs and intervals were recorded using handwritten logs, some of which were transcribed into spreadsheets or other software.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Data prior to 1992 have paper geophysical logs, however all hole drilled from 1992 – 1998 have log asci (.las) files in digital format.</li> <li>All of the data has been stored in an MSAccess database.</li> <li>2018 data was compared to historical information and the geophysical logs to validate the results obtained</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All historical drillholes have been surveyed using total station survey equipment. Extensive documentation of survey traverses is available as part of the record.</li> <li>All historical data points used in the resource estimate were surveyed in NAD27. These were converted to NAD83 for the purposes of this study and future work.</li> <li>Topographic contours at 2 m intervals provide appropriate topographic control.</li> <li>2018 drill holes were surveyed using GPS with RTK corrections resulting in accuracies of +/- 5 cm in NAD83</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied</li> </ul>	<ul style="list-style-type: none"> <li>Average drillhole spacing for Tenas is 110 m, 125 m for Goathorn and 135 m for Telkwa North. The average core hole spacing (with quality data) is 237 m in Tenas, 173 m in Goathorn, and 157 m in Telkwa North.</li> <li>The resource classification is based on an assessment of the geological (seam thickness) and coal quality continuity. This has then been summarised using the distance from nearest acceptable data point (drillhole) for coal seam thickness identification and an assessment of the confidence in coal seam continuity / correlation. The drillhole spacing and continuities are considered appropriate to define Measured, Indicated and Inferred Resources on the following basis: <ul style="list-style-type: none"> <li>Measured = within 75 m of drillhole utilized in the model (that is, holes identified as appropriate for use in the current resource estimate);</li> <li>Indicated = within 75 m to 150 m of drillhole;</li> <li>Inferred = within 150 m to 300 m of drillhole.</li> </ul> </li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling was oriented on cross sections at 25 m spacing oriented perpendicular to local trend.</li> <li>Drilling was vertical and coal seams dip at between 0 and 65 degrees. Seam thickness intercepts are corrected to true from apparent thickness using the locally interpreted seam dip.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No known special sample security measures were applied at the time of sample submission to the laboratories,</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Extensive checks and comparisons between data has been undertaken to verify and validate data for this resource estimate</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties, such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>Coal tenure is held in the form of coal licenses (22 parcels for 5579 Ha) and freehold coal (5 parcels for 1301 Ha). The coal licenses are held by Telkwa Coal Limited and Bulkley Valley Coal Limited (BVCL).</li> <li>The BVCL license ownership are under an agreement signed between CDC and BVCL and this agreement has been assigned to Telkwa Coal Limited..</li> <li>The tenure is secure and maintenance payments are all up to date.</li> <li>The freehold areas are owned by Telkwa Coal Limited</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The only known impediment to obtaining a license to operate will be negotiations with select private land holders in the area for development.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>In the period from 1979 to 1998 a total of 867 documented drillholes were completed on the Telkwa property by CNRL and Manalta. Of those, 525 were drilled using conventional rotary methods, while 310 were cored. In 47 of the drill-holes, 59 piezometers were selectively installed at various stratigraphic levels. 32 surficial bore-holes have also been completed to date on the property. In addition, there are reports of about 30 holes being drilled by Cyprus and Canex sporadically in the period from 1969 to 1978; this data has not been compiled due to the poor quality of the records.</li> <li>Additionally, surface geophysics has been conducted periodically by both CNRL and Manalta with the intention of tracing coal seams on surface.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>These medium to high volatile bituminous coal deposits are part of the Red Rose formation of the Skeena Group.</li> <li>The Skeena Group sediments of the Telkwa Coalfield are an erosional remnant of Lower Cretaceous sedimentary rock which were initially deposited within a large deltaic complex along the southern flanks of the Bowser Basin. Throughout late Jurassic and early Cretaceous time the Bowser Basin was the focus of rapid sedimentation, subsidence and increased tectonic activity, which resulted in thick accumulations of coal-bearing sedimentary rock.</li> <li>The geology type classification for Canadian coal deposits is "complex". Minimum open pit mineable thickness for complex coal deposits is 0.8 m.</li> <li>The main economic seams range from a minimum mineable thickness of 0.8 m to 9 m in thickness.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results, including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>Easting and Northing of the drill hole collar</li> <li>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>Dip and azimuth of the hole</li> <li>Down hole length and interception depth</li> <li>Hole length</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material, and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Modern exploration of the Telkwa Project started with Cyprus Anvil Mining in 1978 and since then over 800 exploration drillholes and 3 bulk samples have been carried out on the property.</li> <li>Other ancillary activities such as trenching, geological mapping and surface geophysics have also been carried out.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>All compositing was length based.</li> <li>Seams consist of minimum 2:1 coal to rock ratio with a maximum internal "parting" of 0.3 m for Tenas complex and 0.5 m for Goathorn and Telkwa North complex.</li> <li>Seam composites were made from compositing of lithological intervals (Coal or Parting) honouring the seam code.</li> <li>Coal quality intervals are cross referenced with the seam composites</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this</li> </ul>	<ul style="list-style-type: none"> <li>Composited seam intervals were assigned a dip from a geological section and the true thickness of the intervals was established</li> </ul>

Criteria	JORC Code explanation	Commentary
	effect (e.g. 'down hole length, true width not known').	
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Diagrams have been developed for the project by Telkwa Coal Limited in accordance with JORC Code requirements.</li> <li>Diagrams include location maps, drillhole plots and geology cross-sections.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable. While full details of all the exploration results have not been released, there are no significant or material issues not summarised in this Table 1.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported, including (but not limited to): <ul style="list-style-type: none"> <li>Geological observations</li> <li>Geophysical survey results</li> <li>Geochemical survey results</li> <li>Bulk samples – size and method of treatment</li> <li>Metallurgical test results</li> <li>Bulk density, groundwater, geotechnical and rock characteristics</li> <li>Potential deleterious or contaminating substances</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Bulk samples have contributed considerably to the understanding of the quality characteristics of the Telkwa coals and have been extracted from each of the three main resource areas. On each, a complete suite of coal quality analyses was performed, including testing on a variety of simulated preparation plant products.</li> <li>In 1983, a 219 tonne bulk sample was collected from 7 major seams within the Goathorn East (Pit 3) area. In 1989, a bulk sample was extracted from the Bowser (Telkwa North – East Pit) area via a large-diameter coring program. And, in 1996, an 80 tonne bulk sample was collected from the three mineable seams in Tenas area.</li> <li>Total sulphur and three forms of sulphur (organic, inorganic, and sulphate) have been estimated for the various seams so as to determine the potential for water treatment.</li> </ul>
<b>Future work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions, or large-scale step-out drilling).</li> </ul>	<ul style="list-style-type: none"> <li>Any additional future work will involve drilling mainly in support of acid rock drainage, structural understanding, hydrogeology, and geotechnical evaluations.</li> <li>Some 2d seismic programs may also happen to aid with fault locations and overburden depths and material types.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>By overlaying the geophysical log density data on the lithological intervals, the coal intercepts were assigned a density value which was then checked for reasonableness (i.e. density from geophysics should be between 1.30 and 1.80 g/cc).</li> <li>Downhole geophysical data was used to validate and verify seam intercepts and to assist with seam correlation and stratigraphy.</li> <li>Other data validation included visual inspection of every seam intersection on cross section to allow for proper seam correlations and to look for anomalies in the stratigraphic interval.</li> <li>For Data capture and current database storage MS Access is utilized, along with cataloguing and electronic filing of all pertinent data stored on the SRK server.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	<ul style="list-style-type: none"> <li>A site visit was conducted on April 11, 2017 by: <ul style="list-style-type: none"> <li>Ron Parent – Resource Competent Person (Independent)</li> <li>Bob McCarthy – Reserve Competent Person (SRK)</li> <li>Ed Saunders – Geotech (SRK)</li> <li>David Maarse – Water Lead (SRK)</li> <li>Karl Haase – Processing (Sedgman)</li> </ul> </li> <li>The visit consisted of an aerial tour via helicopter and a ground tour on accessible roads. The core storage facility was observed as well as several outcrops.</li> <li>Ron Parent also spent five weeks on site supervising the 2018 exploration program.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> </ul>	<ul style="list-style-type: none"> <li>There is a high level of confidence in the geological interpretation, especially in areas of the resource that have been included in the reserves.</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Stratigraphic sequence is well understood and correlations are relatively straightforward: the current interpretation has modified the seam nomenclature in places.</li> <li>Structure and faulting are commonly shallow dipping with predominantly normal faulting up to 100m displacement. Local thrust faulting is observed in the Goathorn area.</li> <li>Limits of the deposits need to be better defined; since some of the sub-crop or structurally controlled boundaries have not been fully defined.</li> <li>No alternative interpretations are considered as the current interpretation is well supported by available data.</li> <li>The geological model is a thickness model, whose data is composited from drillhole seam intersections and confirmed by geophysical log intercepts.</li> <li>The coal quality parameters do not affect the quantity of coal, but the recovery and generation of a suitable product.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The Tenas deposit is approximately 3 km north-south by 2 km east-west, reaching a maximum depth of 400 m for the lowermost 1Le Seam.</li> <li>Goathorn East is 5 km by 2 km reaching a maximum depth of 650 m for lowermost 1 Seam.</li> <li>Goathorn West is 1.5 km by 800 m reaching a maximum depth of 300 m lowermost 1 Seam.</li> <li>Telkwa North is 1.6 km by 3.6 km reaching a maximum depth of 300 m for the lowermost 2 Seam.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed</li> <li>Any assumptions behind modelling of selective mining units.</li> </ul>	<ul style="list-style-type: none"> <li>Coal quality and seam thickness parameters were estimated using inverse distance squared within the seam wireframes which control the distribution of interpolated values in 3D</li> <li>The model is of the coal seams only and the interburden has been modelled by default but to sufficient detail to assist with waste rock characterisation and waste rock management.</li> <li>The current resource estimate is comparable with previous resource estimates completed in 1989, 1997, and 2015</li> <li>Sulphur (total, organic, inorganic, and sulphate) have been interpolated in the model where data was available</li> <li>The model block size ranges from 5 to 25 m along strike (Tenas and Telkwa North are rotated), 5 to 10 m down dip and 5 m in height.</li> <li>Average drillhole spacing for Tenas is 110 m, 125 m for Goathorn and 135 m for Telkwa North. The average core hole spacing (with quality data) is 237 m in Tenas, 157 m in Telkwa North and 173 m in Goathorn.</li> </ul>
<b>Estimation and modelling techniques (continued)</b>	<ul style="list-style-type: none"> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>A key assumption utilized in the resource estimate was the relationship between ash content on an air dried basis and bulk density used for conversion of volume to tonnes using the formula <math>1.2713 + 0.0092 \times \text{ash\% (adb)}</math>, which was developed from the relationship between ash and bulk density presented in GSC Paper 88-21.</li> <li>The geological interpretation is based on the "stacking" of seam bottoms along 25 m spaced cross sections from the lowermost seam upward.</li> <li>The main validation method used was a comparison between wireframe solids volume and volume generated from the 3D block model after coding.</li> <li>The model accurately represents the drilled seam true thicknesses to +/- 0.1 m at a given XY location. The elevations may vary up to 3 m at any drillhole intercept. This is due to the sectional nature of the modelling process, projecting all seam intersections a maximum of 12.5 m to the nearest cross section.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>The tonnages are estimated on an air-dried basis, while the moisture content measurements are available within the coal quality testing results.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>All coal quality parameters modelled were on an air-dried basis.</li> <li>To assist in developing the coal reserves, coal yields were based on washability testing at a cut-point of 1.65 g/cc.</li> <li>Clean coal objective of the process will be 9.50% with a target saleable product at the port at 10% moisture.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Minimum coal ply thickness = 0.80 m for Tenas, Goathorn, and Telkwa North.</li> <li>Maximum included parting thickness = 0.30 m for Tenas and 0.50 m for Goathorn and Telkwa North</li> <li>Minimum coal:rock ratio = 2:1</li> <li>The resources are all considered potentially surface mineable, and restricted to a 20:1 BCM:in place coal tonne cut-off strip ratio depth. Despite there being previous underground mining on the property, no underground resources are considered at this time for this table.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Metallurgical amenability was simulated from testwork using industry standard models for coal beneficiation</li> <li>Ash content of dilution is assumed 80%, sizing of Ash is similar to sizing of coal and with a density of 2.50 g/cc. This was based off results of the bulk sample completed in 1996 which used completed dilution analysis.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Potential for ARD was studied extensively in the 1990s to support feasibility studies and environmental assessments</li> <li>The Property hosts both non-PAG and PAG seam interburden and overburden rock. Tenas, Goathorn and Telkwa North have been characterized to estimate non-PAG and PAG rock in each phase.</li> <li>The ratio of NP to MPA, NPR was used as the basis for classifying each interburden and the overburden zone as non-PAG or PAG. Much of the rock is non-PAG while all of the overburden material and material excavated in the management ponds is non-PAG</li> <li>Methods used to estimate NP and MPA in the 1990s are different from those used currently and to varying degrees over-estimate both NP and MPA resulting in uncertainty in the threshold NPR used to delineate PAG and non-PAG strata. Based on the exploration program conducted in 2018, modern testing methods were used to measure NP and MPA and also allowed the historical data to be correlated to modern values which allowed a reduction in the amount of uncertainty in NP and MPA values and which threshold NPR value to use.</li> <li>The ratio selected to define PAG rock is NPR&lt;2.0 which still allows for the uncertainty in NP. A lower value may be suitable as understanding of the mineralogical characteristics of the rock improves.</li> <li>To assign estimated volumes to non-PAG or PAG, the samples within each phase and seam interburden / overburden were binned into two NPR groups, &lt;2.0, and &gt;2.0.</li> <li>The intent of the mine plan was to schedule and place all PAG rock into designated management ponds that are flooded with water to prevent rock oxidation and acid generation.</li> <li>There is no Tailings Management Facility. Both CCR and fines rejects will be placed in designated surface storage piles, and periodically capped with compacted overburden covers to prevent acid rock drainage.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>A flocculation system will be used for water prior to discharge to meet regulatory requirements for total suspended solids.</li> <li>Further optimization of PAG management including blending PAG rock into non-PAG rock and /or using a lower cut off to segregate PAG rock from non-PAG rock should be investigated in the operations phase of the project.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>The bulk density (BD) was assumed based on an empirical relationship with the air dried ash for high volatile bituminous coal. This empirical formula was extracted from Table 1 of Geological Survey of Canada Paper 88-21:   <math display="block">BD (adb) = 1.2713 + 0.0092 \times ASH (adb)</math> </li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>The resource classification is based on an assessment of the geological (seam thickness) and coal quality continuity.</li> <li>This has then been summarised using the distance from nearest acceptable data point (drillhole) for coal seam thickness identification and an assessment of the confidence in coal seam continuity / correlation.</li> <li>The drillhole spacing and continuities are considered appropriate to define Measured, Indicated and Inferred Resources on the following basis: <ul style="list-style-type: none"> <li>Measured = within 75 m of drillhole utilized in the model (that is holes identified as appropriate for use in the current resource estimate);</li> <li>Indicated = 75 m to 150 m of drillhole;</li> <li>Inferred = 150 m to 300 m of drillhole.</li> </ul> </li> <li>The surface resources (those resources considered to have prospects to be open pit mineable) are restricted to within a 20:1 COSR bcm/tonne coal from surface, which is considered reasonable for coal of this type.</li> </ul>
<b>Audits or reviews.</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Peer review by SRK personnel was carried out on the geological interpretation. No external audit or review of the resource estimate for this model was carried out. The resource estimates are similar to those from previous studies performed with the same data and any differences are not deemed to be material.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The resources estimates are assumed to be within +/- 10% to 15% on a global basis (or over an assumed annual mining volume) and this accuracy is considered appropriate for the classification classes of Indicated and Measured Coal Resources, and appropriate to support at least a FS level of study and reserve assessment.</li> </ul>



#### Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	<ul style="list-style-type: none"> <li>The Tenas, Goathorn and Telkwa North resource estimates were carried out following the guidelines of the JORC Code (2012) by SRK Consulting (Canada) Ltd. and reported in June 2017. The Tenas resource estimate was updated and reported by Telkwa Coal Ltd. in October 2018</li> <li>The Mineral Resources are inclusive of the Ore Reserves.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken, indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>The Competent Person for the Ore Reserves estimation is Bob McCarthy. Mr. McCarthy visited the site on April 11, 2017 along with Allegiance Coal personnel.</li> <li>The visit consisted of an aerial tour via helicopter and a ground tour on accessible roads. The core storage facility was observed as well as several outcrops and water courses.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</li> </ul>	<ul style="list-style-type: none"> <li>Telkwa Coal Limited completed two prefeasibility studies on the Telkwa Coal Project in 2017.</li> <li>The Ore Reserves were reported in conjunction with those studies in June and September 2017.</li> <li>An updated ore reserve for the Tenas deposit is based upon a feasibility level study where geological confidence is sufficient and mine planning has been completed to a level required to determine technical and economic viability.</li> <li>Modifying factors considered material to the development and economic extraction of the coal resource have been taken into account.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li> <li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul style="list-style-type: none"> <li>The Tenas project uses a combination truck and shovel open cut mining as well as dozer pushing to execute an up-dip mining method for areas of shallower dipping coal seam (&lt;22°). At steeper dips (three of the nine phases), more conventional bench mining of waste and coal is performed.</li> <li>The basis of design is a lerch-grossman economic pit optimization combined with a cut-off strip ratio analysis to determine the ultimate pit limits. The ultimate pit shell was then developed into a detailed pit design and broken into practical pit phases and mining cuts.</li> <li>Conventional mobile equipment (excavators and haul trucks) is used for overburden and waste rock mining. non-PAG interburden is dozer pushed on to mined out footwalls whenever possible.</li> <li>For the Tenas project, water management ponds are excavated to allow sub-aqueous storage of PAG rock hauled from the pit.</li> <li>Coal loss and dilution were modelled as skins on the hanging wall and footwall of each seam. The total coal loss and dilution skin thickness applied to the Tenas deposit was 15cm for 1/U-seam and 20cm for C-seam (through-seam blasting involved). Dilution and coal loss for the Goathorn and Telkwa North pit were set at 20cm total.</li> <li>The minimum seam thickness for mining was set at 0.80 m for all deposits.</li> <li>Pit slope criteria were updated by SRK as part of the FS for Tenas and were largely driven by the slope of the bedding seams in each sector of the pit. Many pit walls are simply foot walls daylighting into the overburden and topography. Where high wall benching is required the bench face angles are determined by the slope of the bedding plane and 8m benches are required over a maximum height of 45m. Thus, pit slopes vary between 35-60 degrees. Pit slopes in areas with identified faults that reduce the rock mass strength were adjusted appropriately.</li> <li>Coal resources with limited geological certainty are classified as inferred and cannot be converted to coal reserves. Thus, any inferred coal resources are considered as waste in this study and there are no inferred resources included in the production schedule or coal reserve estimate. The Tenas deposit has no Inferred resources</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>The financial evaluation of the proposed mine plan is sufficient to support economic viability of the coal reserve.</li> <li>The primary infrastructure required for the development of the open cuts at Telkwa are water containment and management facilities. Numerous ditches are required for both containing contact water and diverting some non-contact water from the mining areas. Contact water is collected in sedimentation ponds before discharge.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul style="list-style-type: none"> <li>Process flowsheet is a traditional 2-circuit approach with customised equipment sizing to allow for nominal throughput for this specific coal</li> <li>All metallurgical processes and technology have been used extensively within the coal industry worldwide</li> <li>Testwork to date was completed under Australian Standard methods at the time of the testwork and is suitable for this level of study</li> <li>It has been assumed that the organic liquids used for float-sink has had no effect on the coal properties</li> <li>2 Bulk samples have been completed in the past with one pilot scale testwork being completed. Pilot testwork was completed on a 19mm x 0mm size fraction using a DSM heavy media cone for 19mm x 0.6mm and 2 stage spiral/water only cyclone for below 0.6mm fraction. Due to the testwork practices this pilot wash was not suitable for use as a framework for this study and the results were not used in the analysis.</li> <li>A further coal quality and washability program was completed in 2018 using current lab techniques and a bulk sample wash was performed by SGS at their Lakefield lab located in Ontario, Canada.</li> <li>1998, 1996 Bulk samples and 2018 test work were used in the process simulations and it is believed from these results that the coal is fairly homogeneous within seams.</li> <li>The current proposed plant will produce a clean coal which is of marketable specification</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	<ul style="list-style-type: none"> <li>For geochemistry data, refer to section titled "Environmental factors or assumptions"</li> <li>Existing data on background surface and ground water quality and flow has allowed for the development of a conceptual site water balance and preliminary water quality modelling. These will be revised to a detailed site water balance and final water quality modelling prior to the submission of regulatory applications.</li> <li>The results indicate that due to background levels already exceeding BCWQG that a site-specific water quality objective will need to be developed for aluminium.</li> <li>In addition, due to the conservativeness of the water quality model utilizing MDL where measurements were below MDL, a number of parameters were predicted to exceed BCWQG. It is anticipated that with better water quality data using lower MDLs that the model can be refined and the parameters could achieve compliance</li> <li>If necessary, a water treatment plant may need to be introduced for the co-precipitation of elements.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	<ul style="list-style-type: none"> <li>The Telkwa Site is served by the following infrastructure for the development: <ul style="list-style-type: none"> <li>A 138-kV power line to the east and a 25-kV powerline to the north of the property</li> <li>A high capacity main rail line owned and operated by CN rail which is already in use for the transport of coal unit trains is approximately 7 kilometers east of the property. Initial discussion between Allegiance and CN rail have occurred and CN has agreed that the rail capacity is sufficient for this project</li> <li>The port of Prince Rupert is located 375 km to the west and has sufficient capacity for this project</li> </ul> </li> </ul>

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		<ul style="list-style-type: none"> <li>The project is located to nearby towns of Smithers, Telkwa, and Houston for the supply and accommodation of labour</li> <li>The site is currently serviced by a Forestry Service Road and current topography will allow the construction of a dedicated coal haul road between the rail and the proposed plantsite</li> <li>The proposed plant site will be on crown land with a coal license owned by the proponent</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal minerals and co- products.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul style="list-style-type: none"> <li>The costing of the Tenas FS has assumed an owner-operated approach, wherein, all infrastructure and equipment is leased or purchased by TCL and operated by TCL.</li> <li>Costs are developed from first principles wherever possible, utilizing inputs from engineering firms and vendors. The designs upon which these costs are based are to feasibility / class 3 level.</li> <li>Engineering work has been undertaken to establish the capital cost requirement for the project, including the mine, processing plant, rail and roads, as well as other supporting infrastructure.</li> <li>Capital costs for the project are supported by work by: <ul style="list-style-type: none"> <li>SRK Consulting – mining, geochemistry, water management, hydrogeology</li> <li>Sedgman –process plant</li> <li>Hooper Engineering and Morch Engineering Inc. – rail infrastructure</li> <li>Bulkley Electric – powerline and substation construction</li> </ul> </li> <li>Operating costs are based on work by: <ul style="list-style-type: none"> <li>SRK Consulting – all mining costs inclusive of mobile equipment, support services and labour</li> <li>SRK Consulting – water management</li> <li>Sedgman – processing and coal handling</li> <li>TCL – site general &amp; administrative costs,</li> <li>Hooper Engineering –rail</li> <li>IEG - reclamation</li> </ul> </li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>ACL plans to produce a mid-volatile semi-soft coking quality coals at a nominal rate of 750,000 clean tonnes per annum.</li> <li>Mid-volatile semi-coking coals are scarce in supply and are priced at a premium to the more common high-volatile semi-coking coals.</li> <li>Commodity pricing for the project was advised by ACL based on the study conducted by Kobie Koornhof &amp; Associates.</li> <li>An average price of US\$120/t coal product was assumed for the Tenas project for 2021 and 2022, and 2023 onwards, US\$114/t</li> <li>According to Kobie Koornhof and Assoc, current pricing for Telkwa coal is US\$132.5/t.</li> <li>An exchange rate of 1.33 CA\$:US\$ was applied to calculate the revenue.</li> <li>Private royalty to Altius Mineral was applied at a rate of 3.0% on revenue.</li> <li>Itochu Corporation of Japan is the company's sole sales and marketing agent and receives a sales fee of 3% of the FOB price, 1.5% on sale, and 1.5% after EBITDA assuming EBITDA is positive.</li> </ul>
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul style="list-style-type: none"> <li>Per Kobie Koornhof and Assoc, demand for hard coking coal is continuing at robust levels as steel industry fundamentals remain a strong driver for seaborne coking coal imports. The current constraints to supply availability for high quality coking coals is likely to remain for the foreseeable future, since global coking coal supply is not coming on line at a pace that will upset the current supply/demand balance. In the medium term, the biggest risk to metallurgical coal pricing lies in a possible global economic slowdown, fuelled by the fear of burgeoning trade wars.</li> <li>Per Kobie Koornhof and Assoc., the coal to be produced at Telkwa can be classified as a medium volatile semi-soft</li> </ul>



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		<p>coking coal (MV SSCC) and as such is expected to find a market in the international steel industry.</p> <ul style="list-style-type: none"> <li>• Telkwa MV SSCC is expected to be well received due to limited availability of MV SSCC on the seaborne market, in contrast to the more readily available high volatile SSCC coals from NSW. The market should react favourably to the introduction of a new MV SSCC, not only as diversification from Australia, but also due to the fact that Canadian SSCC supplies have largely been eliminated with the closure of the Coal Mountain operation.</li> <li>• Competitor coals are: <ul style="list-style-type: none"> <li>○ HV SSCC from Hunter Valley in NSW, Australia; and</li> <li>○ MV SSCC from Centrl Queensland, Australia.</li> </ul> </li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li> <li>• NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul style="list-style-type: none"> <li>• An after-tax economic model was prepared by the Company, substantially at monthly rests, to test the economic viability of the Coal Reserve.</li> <li>• The economic model took into account project revenue, freight and selling costs, marketing fee to Itochu, royalty to Altius Minerals, capital costs, operating costs and administrative costs.</li> <li>• Allowance was made in the economic model for financing the mobile fleet by way of lease for the start-up and early operational phases.</li> <li>• The project economics were evaluated using a standard discounted cash flow method at a nominal mid-period discount rate of 8%. No allowance was made for inflation.</li> <li>• The economic analysis was conducted in Canadian dollars.</li> <li>• Results are reported in US dollars using an exchange rate of 1.33 CAD:USD and in Australian dollars using an exchange rate of 1.06 AUD:CAD..</li> <li>• Based on the economic analysis, the current mine plan results in a positive post-tax NPV8% of US\$185M and an IRR of 45%.</li> <li>• Sensitivity analyses showed that the project can withstand a 30% decrease in commodity prices resulting in positive post tax NPV8% of \$22M and post tax IRR of 12%. The project would also sustain positive return with a 30% increase of both capital and operating costs resulting in a post-tax NPV8% of \$80M and 19% post-tax IRR.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• The status of agreements with key stakeholders and matters leading to social licence to operate.</li> </ul>	<ul style="list-style-type: none"> <li>• The Property is within the traditional territory of the Wet'suwet'en (OW). In April 2017, the company signed a Communication and Engagement Agreement with the OW.</li> <li>• The company shares all its raw data collected by environmental monitoring with the OW, and actively involves the OW in all key decisions and developments.</li> <li>• The company has commenced engagement with several of the land owners, stakeholder groups and local and provincial government. A comprehensive community engagement strategy has been developed and being implemented.</li> <li>• The company has engaged local community (including holding two public open houses in Telkwa), Smithers and Telkwa environmental expertise to carry out the baseline data programs</li> <li>• The company has established communication protocols with the Government regulators as it progresses through the environmental assessment and permitting stage.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>• Any identified material naturally occurring risks.</li> <li>• The status of material legal agreements and marketing arrangements.</li> <li>• The status of governmental agreements and approvals critical to the viability of the project, such</li> </ul>	<p>The key risks in relation to the Tenas Project are summarized below:</p> <ul style="list-style-type: none"> <li>• <b>Environment:</b> The impact of mining on the environment is always an issue irrespective of the type of mine and its location. Once the Company has completed its environmental affects assessment of the Project, targeted for Q3 2019, the Company will have a solid understanding of what the effects might be.</li> </ul>

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	<p>as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</p>	<ul style="list-style-type: none"> <li>• <b>Water Management:</b> Related to the first point of environmental impact, one area of particular concern to the Company is water management. The Project has several creeks within its vicinity which all feed into a major river system. Ensuring that the Project discharges clean surface water back into the river system is a matter of high priority to the Company.</li> <li>• <b>Acid Rock Management:</b> The Project has some waste rock and rock separated in coal washing process that has potential to generate acid leaching of metals when mined and exposed to air and water. The DFS assumes this rock will be permanently stored under a water cover in management ponds constructed in the first 10 years of mining. This plan will prevent oxidization of the rock which in turn will eliminate the requirement for treatment of acidic water. There is a risk that the water balance will not be positive requiring water to be pumped from a watercourse to maintain the water cover, and/or active ongoing water treatment and/or lining of the management ponds.</li> <li>• <b>Water Discharge Quality:</b> The Government provides thresholds for water quality discharge. Until an effects assessment of the Project on water quality being discharged into the receiving environment is completed, and which is part of the environmental assessment process, it will not be known for certain whether the treatment of water prior to discharge is required.</li> <li>• <b>Permitting:</b> There is no guarantee that the Project will be granted all permits required to operate a mine at whatever stage of planned production. Whilst British Columbia is in a first world country, with a very prescriptive mine permitting regime, there is always uncertainty and doubt as to whether Government ministries will support a particular mining activity.</li> <li>• <b>Finance:</b> Notwithstanding the Company's confidence in this regard, there is no guarantee that if and when the Project is permitted and ready for development, there will be funding available to do so. Whilst the Project is very low down the cost curve and can withstand a material drop in the price of coal, the volatility of commodity prices in a downward trend often dampens the interest of investors in a particular commodity, such that funding may be difficult to secure.</li> <li>• <b>Coal performance:</b> unless and until a particular coal has been tested for its performance in a blast furnace, there remains an uncertainty as to how it will actually perform, and this may have an impact on coal pricing.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>• Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul style="list-style-type: none"> <li>• Proved and probable ore reserves are declared based on the measured and indicated mineral resources contained within the pit design and scheduled in the LOM plan.</li> <li>• The financial analysis showed that the economics of the Tenas project are positive.</li> <li>• No probable ore reserves have been derived from measured mineral resources.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Ore Reserve estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• No external review or audits have been completed on this coal reserve estimate as of the issue date of this table 1.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> </ul>	<ul style="list-style-type: none"> <li>• The relative accuracy and confidence level of the ore reserve estimate is inherent in the reserve classification.</li> <li>• The accuracy of the reserve estimate is subject to geological data and modelling procedures to estimate the coal resource and to modifying factor assumptions for dilution and loss. The accuracy can only truly be confirmed when reconciled against actual production. While Telkwa is not in production and such reconciliation is not possible, the assumptions are based on sound principles and experience from mines with similar conditions.</li> </ul>

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	<ul style="list-style-type: none"> <li>• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>• Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> <li>• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>• Modifying factors such as mining dilution, mining recovery, ROM ash and density, and coal yield have been estimated using accepted techniques.</li> </ul>