



2019

Resources and reserves



Tenement schedule

At 30 June 2019

Permit ID	Location (region)	Minerals	Permit type	Permit operator	Bathurst interest
60194	Canterbury	Coal	Exploration Permit	Bathurst Coal Limited	100%
60146	Waikato	Coal	Exploration Permit	BT Mining Limited	65%
56233	West Coast	Coal	Mining Permit	Buller Coal Limited	100%
56220	Waikato	Coal	Exploration Permit	BT Mining Limited	65%
54846	Canterbury	Coal	Exploration Permit	Bathurst Coal Limited	100%
53614	Southland	Coal	Mining Permit	Bathurst Coal Limited	100%
52937	West Coast	Coal	Mining Permit	BT Mining Limited	65%
51279	West Coast	Coal	Mining Permit	Buller Coal Limited	100%
51260	Southland	Coal	Exploration Permit	Bathurst Coal Limited	100%
41821	Waikato	Coal	Mining Permit	BT Mining Limited	65%
41810	West Coast	Coal	Mining Permit	BT Mining Limited	65%
41456	West Coast	Coal	Mining Permit	Buller Coal Limited	100%
41455	West Coast	Coal	Mining Permit	Bathurst Coal Limited	100%
41372	Canterbury	Coal	Mining Permit	Bathurst Coal Limited	100%
41332	West Coast	Coal	Mining Permit	Buller Coal Limited	100%
41274	West Coast	Coal	Mining Permit	Buller Coal Limited	100%
40698	Waikato	Coal	Exploration Permit	BT Mining Limited	65%
40628	West Coast	Coal	Exploration Permit	Buller Coal Limited	100%
40625	Southland	Coal	Exploration Permit	New Brighton Collieries Limited	100%

Permit ID	Location (region)	Minerals	Permit type	Permit operator	Bathurst interest
40591	West Coast	Coal	Exploration Permit	Bathurst Coal Limited	100%
37161	West Coast	Coal	Coal Mining Licence	Bathurst Coal Limited	100%
3716101	West Coast	Coal	Ancillary Coal Mining Licence	Bathurst Coal Limited	100%
3716102	West Coast	Coal	Ancillary Coal Mining Licence	Bathurst Coal Limited	100%
3716103	West Coast	Coal	Ancillary Coal Mining Licence	Bathurst Coal Limited	100%
3716104	West Coast	Coal	Ancillary Coal Mining Licence	Bathurst Coal Limited	100%
37155	Waikato	Coal	Coal Mining Licence	BT Mining Limited	65%
3715501	Waikato	Coal	Ancillary Coal Mining Licence	BT Mining Limited	65%
37153	Waikato	Coal	Coal Mining Licence	BT Mining Limited	65%
3715301	Waikato	Coal	Ancillary Coal Mining Licence	BT Mining Limited	65%
37150	West Coast	Coal	Coal Mining Licence	BT Mining Limited	65%
3715002	West Coast	Coal	Ancillary Coal Mining Licence	BT Mining Limited	65%
3715003	West Coast	Coal	Ancillary Coal Mining Licence	BT Mining Limited	65%
60321	West Coast	Minerals	Exploration Permit	Bathurst Coal Limited	100%
60422	Waikato	Coal	Coal Mining Permit	BT Mining Limited	65%

Bathurst Resources permitting changes 1 July 2018 – 30 June 2019

Permit applications in past twelve months

Permit ID	Permit type	Operator	Location (region)	Applied date	Permit name	Bathurst interest
56233	Mining Permit	Buller Coal Limited	West Coast	13/12/2018	Coal Creek	100%
60520	Exploration Permit	Buller Coal Limited	West Coast	15/2/2019	Denniston	100%
60521	Exploration Permit	Buller Coal Limited	West Coast	15/2/2019	Millerton-Fly Creek	100%
60522	Exploration Permit	Buller Coal Limited	West Coast	15/2/2019	Blackburn	100%

Permits granted in past 12 months

Permit ID	Permit type	Operator	Location (region)	Applied date	Permit name	Bathurst interest
60422	Mining Permit	BT Mining Limited	Waikato	4/7/2018	Awaroa West	65%
60321	Exploration Permit	Bathurst Coal Limited	West Coast	7/10/2018	Denniston Gold	100%

Full Surrender

Permit ID	Permit type	Operator	Location (region)	Permit name	Bathurst interest
60047	Exploration Permit	Bathurst Coal Limited	Wellington	West Coast	100%
55401	Mining Permit	Buller Coal Limited	Rapid Stream	West Coast	100%

Expired

None

Coal resources and reserves

Resources

Table 1 – Resource tonnes

Area	Bathurst mineral ownership	2019 Measured resource (Mt)	2018 Measured resource (Mt)	Change (Mt)	2019 Indicated resource (Mt)	2018 Indicated resource (Mt)	Change (Mt)	2019 Inferred resource (Mt)	2018 Inferred resource (Mt)	Change (Mt)	2019 Total resource (Mt)	2018 Total resource (Mt)	Change (Mt)
Escarpment (1)	100%	3.4	3.4	0.0	2.2	2.2	0.0	1.1	1.1	0.0	6.7	6.7	0.0
Cascade (1)	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 (1 & 3)	100%	6.2	6.2	0.0	3.1	3.1	0.0	1.6	1.6	0.0	10.9	10.9	0.0
Coalbrookdale (1)	100%	0.0	0.0	0.0	3.4	3.4	0.0	4.7	4.7	0.0	8.1	8.1	0.0
Whareatea West (1)	100%	7.9	7.9	0.0	11.2	11.2	0.0	4.8	4.8	0.0	23.9	23.9	0.0
Sullivan (1)	100%	2.7	2.7	0.0	5.1	5.1	0.0	4.1	4.1	0.0	11.9	11.9	0.0
South Buller Totals (6)	100%	20.7	20.7	0.0	25.6	25.6	0.0	16.6	16.6	0.0	62.9	62.9	0.0
Stockton (2, 4 & 5)	65%	1.0	0.9	0.1	9.7	10.2	(0.5)	7.3	7.5	(0.2)	18.0	18.6	(0.6)
Upper Waimangaroa (Met) (2, 4 & 5)	65%	0.8	0.5	0.3	12.9	13.2	(0.3)	32.8	33.4	(0.6)	46.5	47.1	(0.6)
Upper Waimangaroa (Thermal) (2, 4 & 5)	65%	0.1	0.1	0.0	1.2	1.0	0.2	1.3	1.4	(0.1)	2.6	2.5	0.1
Stockton Totals	65%	1.9	1.5	0.4	23.8	24.4	(0.6)	41.4	42.3	(0.9)	67.1	68.2	(1.1)

Resources (continued)

Table 1 – Resource tonnes continued

Area	Bathurst mineral Ownership	2019 Measured resource (Mt)	2018 Measured resource (Mt)	Change (Mt)	2019 Indicated resource (Mt)	2018 Indicated resource (Mt)	Change (Mt)	2019 Inferred resource (Mt)	2018 Inferred resource (Mt)	Change (Mt)	2019 Total resource (Mt)	2018 Total resource (Mt)	Change (Mt)
Millerton North (1 & 3)	100%	0.0	0.0	0.0	1.9	1.9	0.0	3.6	3.6	0.0	5.5	5.5	0.0
North Buller (1 & 3)	100%	2.4	2.4	0.0	7.3	7.3	0.0	10.9	10.9	0.0	20.6	20.6	0.0
Blackburn (1 & 3)	100%	0.0	0.0	0.0	5.8	5.8	0.0	14.1	14.1	0.0	19.9	19.9	0.0
North Buller Totals ⁽⁶⁾	100%	2.4	2.4	0.0	15.0	15.0	0.0	28.6	28.6	0.0	46.0	46.0	0.0
Buller Coal Project Totals		25.0	24.6	0.4	64.4	65.0	(0.6)	86.6	87.5	(0.9)	176.0	177.1	(1.1)
Takitimu (1 & 4)	100%	0.3	0.9	(0.6)	2.1	1.6	0.5	0.3	0.2	0.1	2.7	2.7	(0.0)
New Brighton (1 & 8)	100%	0.2	0.2	0.0	0.2	0.4	(0.2)	0.2	1.3	(1.1)	0.6	1.9	(1.3)
Albury (1 & 10)	100%	0.0	0.0	0.0	0.7	0.7	0.0	0.1	0.1	0.0	0.8	0.8	0.0
Canterbury Coal (1, 4, 9 & 11)	100%	1.0	1.4	(0.4)	1.3	2.5	(1.2)	1.0	3.2	(2.2)	3.3	7.1	(3.8)
Southland/ Canterbury Totals ⁽⁶⁾	100%	1.5	2.5	(1.0)	4.3	5.2	(0.9)	1.6	4.8	(3.2)	7.4	12.5	(5.1)
Rotowaro (2, 4, 5 & 11)	65%	0.6	2.4	(1.8)	1.8	5.0	(3.2)	0.4	1.5	(1.1)	2.8	8.9	(6.1)
Rotowaro North ⁽⁷⁾	65%	0.5	0.0	0.5	3.8	0.0	3.8	0.1	0.0	0.1	4.4	0.0	4.4
Maramarua (4, 5, 8 & 12)	65%	2.4	1.7	0.7	0.2	1.5	(1.3)	0.0	0.0	0.0	2.6	3.2	(0.6)
North Island ⁽⁶⁾ Totals	65%	3.5	4.1	(0.6)	5.8	6.5	(0.7)	0.5	1.5	(1.0)	9.8	12.1	(2.3)
Total		30.0	31.2	(1.2)	74.5	76.7	(2.2)	88.7	93.8	(5.1)	193.2	201.7	(8.5)

All resources and reserves quoted in this release are reported in terms as defined in the 2004 and 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").

The measured and indicated mineral resources are inclusive of those mineral reserves modified to produce the ore 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 30 June 2019.

¹ Resource tonnages have been calculated using a density value calculated using approximated in-ground moisture values (Preston and Sanders method) and as such tonnages quoted in this report are wet tonnes (unless stipulated otherwise). All coal qualities quoted are on an Air-Dried Basis.

² Stockton, Upper Waimangaroa and Maramarua density values are based on air-dried ash density regressions. Stockton, Upper Waimangaroa, Rotowaro and Maramarua are reported on an air-dried basis.

Table 1 – Resource tonnes continued

³ No additional work has been undertaken on the coal resources for Deep Creek, Millerton North and Blackburn since originally reported. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

⁴ Resources were depleted by mining.

⁵ Stockton, Upper Waimangaroa, Rotowaro, Rotowaro North and Maramarua are owned by BT Mining Limited with Bathurst holding a 65 percent equity share.

⁶ South Buller, North Buller, Sullivan, Southland and Canterbury resources are 100 percent Bathurst Resources Limited ownership.

⁷ New resource.

⁸ Significant updates to geological model combined with a review of potential economic recovery.

⁹ Changes are due to an updated geology model (with updated historic extraction factors), mining depletion, and a review of potentially recoverable resources.

¹⁰ Mining depletion and a review of coal available with reasonable prospects of eventual economic extraction.

¹¹ Mining depletion and back filling against previously mined highwalls has required the review of potentially recoverable resources.

¹² Density is based on a fixed 1.3 tonnes per cubic metre due to insufficient data to support air dried ash density regression.

Table 2 – Average coal quality – measured

Area	Bathurst mineral 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%	3.4	16.8	0.7	33.0	49.3	7.0	1.0	5.6	28.6
Cascade	100%	0.5	15.5	1.7	39.3	42.6	4.5	2.6	7.6	30.8
Deep Creek	100%	6.2	11.0	2.5	32.9	53.9	-	2.2	5.2	29.7
Coalbrookdale	100%	0.0	-	-	-	-	-	-	-	-
Whareatea West	100%	7.9	24.9	0.8	24.0	50.4	7.0	0.6	6.3	26.5
Sullivan	100%	2.7	13.8	1.1	32.1	52.9	7.0	1.2	6.6	29.7
Stockton	65%	1.0	7.9	2.5	30.9	60.2	7.6	1.0	-	32.6
Upper Waimangaroa (Met)	65%	0.8	4.3	2.0	39.0	53.4	5.2	3.4	-	30.7
Upper Waimangaroa (Thermal)	65%	0.1	10.8	1.8	36.9	48.1	3.5	4.1	-	29.2
Millerton North	100%	0.0	-	-	-	-	-	-	-	-
North Buller	100%	2.4	8.6	4.7	43.1	45.4	4.5	2.9	11.4	29.7
Blackburn	100%	0.0	-	-	-	-	-	-	-	-
Takitimu	100%	0.3	12.5	0.3	35.5	37.2	N/A	14.8	24.8	20.8
New Brighton	100%	0.2	10.3	0.4	35.0	41.2	N/A	13.5	20.6	22.6
Albury	100%	0.0	-	-	-	-	-	-	-	-
Canterbury Coal	100%	1.0	9.6	0.9	35.0	37.2	N/A	18.2	26.7	21.1
Rotowaro	65%	0.6	4.5	0.3	35.0	46.1	N/A	14.4	-	22.7
Rotowaro North	65%	0.5	7.2	0.3	36.2	43.5	N/A	13.1	-	23.9
Maramarua	65%	2.4	5.9	0.2	37.5	38.8	N/A	17.8	-	22.3

Resources (continued)

Table 3 – Average coal quality – indicated

Area	Bathurst mineral 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%	2.2	12.6	1.2	34.9	51.4	7.5	1.2	5.5	30.0
Cascade	100%	0.6	14.8	1.8	38.3	44.5	4.0	2.4	8.0	29.3
Deep Creek	100%	3.1	9.7	2.7	34.7	53.6	-	2.0	4.8	30.3
Coalbrookdale	100%	3.4	12.0	1.8	35.9	50.4	5.0	1.7	5.6	29.8
Whareatea West	100%	11.2	28.5	1.1	22.3	48.5	6.0	0.7	6.3	25.0
Sullivan	100%	5.1	15.3	1.2	30.6	53.0	7.0	1.2	6.6	29.3
Stockton	65%	9.7	6.1	3.4	36.4	56.2	7.9	1.2	-	33.2
Upper Waimangaroa (Met)	65%	12.9	4.3	2.0	39.0	53.4	5.2	3.4	-	30.7
Upper Waimangaroa (Thermal)	65%	1.2	8.3	3.1	37.7	50.0	1.8	4.0	-	28.6
Millerton North	100%	1.9	9.7	4.9	36.9	52.4	10.0	1.0	6.1	31.1
North Buller	100%	7.3	8.8	5.1	42.6	46.3	5.0	2.3	9.4	30.0
Blackburn	100%	5.8	3.9	4.3	42.1	51.8	6.0	2.2	10.1	30.4
Takitimu	100%	2.1	11.2	0.3	35.2	37.8	N/A	15.8	25.4	21.0
New Brighton	100%	0.2	10.6	0.4	35.0	39.7	N/A	14.7	21.3	22.4
Albury	100%	0.7	7.2	1.0	30.9	24.5	N/A	37.4	41.2	15.6
Canterbury Coal	100%	1.3	9.4	0.9	35.1	37.4	N/A	18.1	26.7	21.2
Rotowaro	65%	1.8	5.2	0.3	35.5	44.9	N/A	14.4	-	23.4
Rotowaro North	65%	3.8	6.4	0.2	35.9	45.5	N/A	12.2	-	24.3
Maramarua	65%	0.2	8.8	0.2	37.0	36.1	N/A	18.0	-	21.8

Table 4 – Average coal quality – inferred

Area	Bathurst mineral 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%	1.1	12.5	1.6	35.2	51.0	7.0	1.3	5.4	29.9
Cascade	100%	0.3	16.5	2.2	36.7	44.7	4.0	2.1	6.7	27.6
Deep Creek	100%	1.6	10.1	2.4	29.7	57.8	-	2.4	7.1	29.7
Coalbrookdale	100%	4.7	12.7	1.8	35.7	49.8	5.0	1.8	5.7	29.5
Whareatea West	100%	4.8	29.5	0.9	22.0	47.8	6.0	0.7	6.4	24.5
Sullivan	100%	4.1	16.0	1.1	30.5	52.3	6.5	1.2	6.5	29.1
Stockton	65%	7.3	5.4	3.4	35.6	57.7	7.5	1.3	-	33.4
Upper Waimangaroa (Met)	65%	32.8	5.8	2.0	38.7	52.4	4.6	3.6	-	30.4
Upper Waimangaroa (Thermal)	65%	1.3	6.8	1.7	35.2	50.1	2.8	5.8	-	27.9
Millerton North	100%	3.6	12.0	5.5	35.3	51.6	9.0	1.1	7.2	30.2
North Buller	100%	10.9	9.9	5.1	45.6	42.3	5.0	2.2	9.6	29.5
Blackburn	100%	14.1	6.4	4.8	41.8	49.5	6.0	2.3	11.2	30.1
Takitimu	100%	0.3	13.5	0.3	36.4	34.5	N/A	15.6	25.3	20.6
New Brighton	100%	0.2	10.7	0.4	34.5	40.3	N/A	14.5	21.2	22.4
Albury	100%	0.1	7.3	0.8	30.2	23.4	N/A	39.1	43.1	15.6
Canterbury Coal	100%	1.0	9.9	1.0	35.1	37.3	N/A	17.7	26.6	21.2
Rotowaro	65%	0.4	5.4	0.3	35.2	44.6	N/A	14.7	-	22.6
Rotowaro North	65%	0.1	6.0	0.2	35.8	46.4	N/A	11.7	-	24.5
Maramarua	65%	0.0	-	-	-	-	N/A	-	-	-

Reserves

Table 5 – Coal reserves (ROM) tonnes

ROM coal area	Bathurst mineral ownership	Proved (Mt)			Probable (Mt)			Total (Mt)		
		2019	2018	Change	2019	2018	Change	2019	2018	Change
Escarpment Domestic (A, C, F & D)	100%	0.2	0.2	0.0	0.1	0.1	0.0	0.3	0.3	0.0
Escarpment Export (A, C, F & D)	100%	2.3	2.3	0.0	0.5	0.5	0.0	2.8	2.8	0.0
Whareatea West (A, C, F & D)	100%	0.0	0.0	0.0	15.8	15.8	0.0	15.8	15.8	0.0
Stockton (B, C, E & H)	65%	0.7	0.7	0.0	5.9	7.2	(1.3)	6.6	7.9	(1.3)
Upper Waimangaroa (Met) (B, C, E & H)	65%	0.8	0.5	0.3	2.5	2.8	(0.3)	3.3	3.3	0.0
Takitimu (A, C, F, G & D)	100%	0.1	0.4	(0.3)	1.2	1.1	0.1	1.3	1.5	(0.2)
Canterbury Coal (A, C, F, H & D)	100%	0.6	0.6	0.0	0.7	0.8	(0.1)	1.3	1.4	(0.1)
Rotowaro (B, C, E & H)	65%	0.5	0.6	(0.1)	1.4	1.9	(0.5)	1.9	2.5	(0.6)
Maramarua (B, C, E & J)	65%	2.4	1.5	0.9	0.1	1.4	(1.3)	2.5	2.9	(0.4)
Total		7.6	6.8	0.8	28.2	31.6	(3.4)	35.8	38.4	(2.6)

Table 6 – Marketable coal reserves tonnes

Product coal area	Bathurst mineral ownership	Proved (Mt)			Probable (Mt)			Total (Mt)		
		2019	2018	Change	2019	2018	Change	2019	2018	Change
Escarpment Domestic (A, C, F & D)	100%	0.2	0.2	0.0	0.1	0.1	0.0	0.3	0.3	0.0
Escarpment Export (A, C, F & D)	100%	1.9	1.9	0.0	0.4	0.4	0.0	2.3	2.3	0.0
Whareatea West (A, C, F & D)	100%	0.0	0.0	0.0	9.9	9.9	0.0	9.9	9.9	0.0
Stockton (B, C, E & H)	65%	0.6	0.6	0.0	4.6	5.7	(1.1)	5.2	6.2	(1.0)
Upper Waimangaroa (Met) (B, C, E & H)	65%	0.7	0.5	0.2	2.3	2.6	(0.3)	3.0	3.1	(0.1)
Takitimu (C, D, F, G & K)	100%	0.1	0.3	(0.2)	1.1	1.0	0.1	1.2	1.3	(0.1)
Canterbury Coal (C, D, F, H & K)	100%	0.6	0.6	0.0	0.6	0.7	(0.1)	1.2	1.3	(0.1)
Rotowaro (B, C, D, E & K)	65%	0.4	0.6	(0.2)	1.3	1.7	(0.4)	1.7	2.3	(0.6)
Maramarua (B, C, D, E, J & K)	65%	2.3	1.4	0.9	0.1	1.3	(1.2)	2.4	2.8	(0.4)
Total		6.8	6.1	0.7	20.4	23.4	(3.0)	27.2	29.5	(2.3)

Reserves (continued)

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

Deposit	Bathurst mineral ownership	Proved marketable						Probable marketable					
		(Mt)	Ash (%)	Sulphur (%)	VM (%)	CSN	CV (MJ/Kg)	(Mt)	Ash (%)	Sulphur (%)	VM (%)	CSN	CV (MJ/Kg)
Escarpment Domestic (A, C, F & D)	100%	0.2	12.9	1.9	35.0	6.8	28.9	0.1	14.5	1.5	34.0	6.1	28.4
Escarpment Export (A, C, F & D)	100%	1.9	8.9	0.5	35.1	8.5	31.3	0.4	7.1	0.6	36.4	8.5	32.0
Whareatea West (A, C, F & D)	100%	-	-	-	-	-	-	9.9	12.1	0.9	26.0	9.5	31.9
Stockton (B, C, E & H)	65%	0.6	4.8	2.3	31.0	8.0	33.8	4.6	3.8	3.1	36.0	8.0	34.2
Upper Waimangaroa (Met) (B, C, E & H)	65%	0.7	3.1	0.9	38.0	4.5	31.1	2.3	2.7	1.3	37.9	4.5	31.3
Takitimu (C, D, F, G & K)	100%	0.1	7.9	0.3	36.1	N/A	21.9	1.1	6.2	0.2	36.4	N/A	22.3
Canterbury Coal (C, D, F, H & K)	100%	0.6	9.5	0.8	35.2	N/A	21.3	0.6	9.2	0.9	35.4	N/A	21.4
Rotowaro (B, C, D, E & K)	65%	0.4	5.1	0.3	34.7	N/A	24.0	1.3	5.6	0.3	35.4	N/A	23.9
Maramarua (B, C, D, E, J & K)	65%	2.3	5.9	0.2	37.5	N/A	22.3	0.1	8.3	0.2	37.4	N/A	21.6

Table 8 – Marketable coal reserve – total average quality

Deposit	Bathurst mineral ownership	Coal type	Mining method	Total marketable					
				(Mt)	Ash (%)	Sulphur (%)	VM (%)	CSN	CV
Escarpment Domestic (A, C, F & I)	100%	Thermal	Open Pit	0.3	13.4	1.8	34.7	6.6	28.7
Escarpment Export (A, C, F & I)	100%	Met	Open Pit	2.3	8.6	0.5	35.3	8.5	31.4
Whareatea West (A, C, F & I)	100%	Met	Open Pit	9.9	12.1	0.9	26.0	9.5	31.9
Stockton (B, C, E & H)	65%	Met	Open Pit	5.2	3.9	3.0	35.5	8.0	34.1
Upper Waimangaroa (Met) (B, C, E & H)	65%	Met	Open Pit	3.0	2.8	1.2	37.9	4.5	31.2
Takitimu (A, C, F, G & I)	100%	Thermal	Open Pit	1.2	6.4	0.2	36.3	N/A	22.3
Canterbury Coal (A, C, F, H & I)	100%	Thermal	Open Pit	1.2	9.3	0.8	35.3	N/A	21.4
Rotowaro (B, C, E & H)	65%	Thermal	Open Pit	1.7	5.5	0.3	35.2	N/A	23.9
Maramarua (B, C, E & J)	65%	Thermal	Open Pit	2.4	6.0	0.2	37.5	N/A	22.3

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 mineral resources are inclusive of ore reserves. 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 30 June 2019.

^A 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.

^B Stockton, Upper Waimangaroa, Rotowaro and Maramarua density values are based on air-dried ash density regressions.

^C Coal reserve (Run of Mine (ROM) tonnes), include consideration of standard mining factors (JORC Code 2012).

^D ROM coal reserves are reported at a moisture content that is based on long-term average coal production data and as such all tonnages quoted in this report are wet tonnes.

^E Stockton, Upper Waimangaroa, Rotowaro and Maramarua are owned by BT Mining Limited in which Bathurst has a 65% equity share.

^F Escarpment Domestic reserves, Escarpment Export reserves, Whareatea West reserves, Takitimu reserves and Canterbury Coal reserves are 100 percent Bathurst Resources Limited ownership.

^G Decrease in coal reserves due to mining depletion offset against increased tonnage from a revised geological model.

^H Decrease in coal reserves due to mining depletion.

^I Marketable reserves are based on geologic modelling of the anticipated yield from ROM reserves. Total marketable coal reserves are reported at a product specific moisture content (10 – 12 percent for Escarpment Export and Whareatea West, 5 – 8 percent at Escarpment Domestic) for sale after the beneficiation of the total coal reserves, converted using ASTM D3180 ISO 1170. Reserve tonnages have been calculated using a density value calculated using approximated in-ground moisture values (Preston and Sanders method) and as such all tonnages quoted in this report are wet tonnes. All coal qualities quoted are on an Air-Dried Basis.

^J Decrease in coal reserves due to mining depletion and reduction in underlying resources.

^K Marketable reserves are based on reconciled yields from ROM reserves. Marketable coal reserves are reported at a product specific moisture content based on long term average coal production data and as such all tonnages quoted in this report are wet tonnes.



Resource quality

The Company 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 tables.

Further resource and reserve information can be found on the Company's website at 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 pre-feasibility, 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 2019 Annual Report have been reviewed by qualified internal and external Competent Persons, and internal management, prior to their inclusion.

Competent person statements

The information on this report that relates to mineral resources for Deep Creek and the mineral reserves for Escarpment Export, Stockton, Upper Waimangaroa and Whareatea West is based on information compiled by Sue Bonham-Carter, who is a full time employee of Golder Associates (NZ) Ltd 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 2004 Edition and 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 Escarpment Domestic, Escarpment Export, Cascade, Albury, Coalbrookdale, Whareatea West, Millerton North, North Buller, Blackburn, Takitimu, Canterbury Coal, New Brighton, Rotowaro, Rotowaro North, Sullivan and Maramarua is based on information compiled by Hamish McLauchlan as a Competent Person who is a full time employee of Bathurst Resources Limited and is a member of the Australasian Institute of Mining and Metallurgy. Mr McLauchlan has a BSc and MSc (Hons) majoring in geology from the University of Canterbury. Mr McLauchlan 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 2004 Edition and 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McLauchlan 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 and Upper Waimangaroa 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 Escarpment Domestic, Takitimu, Canterbury and Maramarua is based on information compiled by Terry Moynihan who is a full time employee of Bathurst Resources Limited and is a member of the Australasian Institute of Mining and Metallurgy. Mr. Moynihan has a Bachelor of Technology (Mining) from the Otago School of Mines. Mr. Moynihan 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 Moynihan 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 at Rotowaro is based on information compiled by Martin Bourke who is a full time employee of BT Mining Limited and is a member of the Australasian Institute of Mining and Metallurgy. Mr Bourke has a Bachelor of Engineering (Mining) from University of Auckland and BSc (Chemistry) from Massey University. Mr Bourke 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 Bourke consents to the inclusion in this report of the matters based on his information in the form and context in which it appears above.



Bathurst Resources Limited
Level 12, 1 Willeston Street
Wellington 6011
New Zealand
+64 4 499 6830

www.bathurst.co.nz