

TABLE 1: MASAMA COAL RESOURCE ESTIMATE AS AT 31 OCTOBER 2019

Mining method	Resource classification	Seam	Geo-loss (%)	Mineable tonnes in situ (tonnes)	Seam thickness (m)	Raw coal qualities on an air dried basis						
						Raw RD (g/cm ³)	Raw CV (MJ/kg)	Raw ash (%)	Raw inherent moisture (%)	Raw volatile content (%)	Raw fixed carbon (%)	Raw total sulphur (%)
OC	Measured	A	5	13 121 309	4.80	1.51	22.5	19.1	5.73	25.5	49.7	2.10
	Indicated	A	8	49 814 962	5.02	1.57	22.3	19.6	5.69	25.1	49.6	1.75
	Indicated	E	8	19 327 250	1.55	1.55	21.6	24.3	4.83	25.9	45.0	2.26
	Inferred	AU	20	3 420 903	1.27	1.66	18.0	33.2	4.70	22.1	40.0	1.53
Opencastable Resource				85 684 424								
UG	Indicated	A	8	3 562 785	5.03	1.66	20.9	23.0	5.68	23.8	47.5	1.46
	Inferred	A	20	206 375 994	4.68	1.55	22.9	19.3	4.71	25.5	50.4	1.90
	Inferred	E	20	94 208 868	1.71	1.52	22.0	23.2	5.20	25.9	45.7	1.91
Underground Mineable Resource				304 147 647								
Total Coal Resource				389 832 071								

Mining method	Resource classification	Seam	Geo-loss (%)	Mineable tonnes in situ (tonnes)	Product coal quality and theoretical yields							
					Product float RD (g/cm ³)	Product CV (MJ/kg)	Product ash (%)	Product inherent moisture (%)	Product volatile content (%)	Product fixed carbon (%)	Product sulphur (%)	Product yield (%)
OC	Measured	A	5	13 121 309	1.53	26.2	9.6	6.54	26.9	57.0	0.39	63.0
	Indicated	A	8	49 814 962	1.59	25.4	11.1	6.47	26.3	56.1	0.33	67.0
	Indicated	E	8	19 327 250	1.71	26.2	11.3	5.58	30.7	53.2	0.55	77.7
	Inferred	AU	20	3 420 903	1.72	21.0	24.4	5.44	24.6	45.6	1.00	66.0
UG	Indicated	A	8	3 562 785	1.66	25.1	12.7	6.11	26.1	55.0	0.39	77.6
	Inferred	A	20	206 375 994	1.61	26.0	11.1	5.31	26.5	57.0	0.36	69.7
	Inferred	E	20	94 208 868	1.71	26.2	11.9	4.71	30.4	52.9	0.84	73.8

For notes and details of cut-offs applied see full CPR on www.minergycoal.com.

COAL RESERVES

The South African National Standard 10320 was applied as the guideline in reporting Masama Coal Mine's Coal Reserve. The Coal Reserves were estimated and signed off by Pivot Mining Consultants (Pty) Ltd Competent Person, Mr JJ Bornman, Pivot's Director Mining and Valuations in accordance with the SAMREC (2016) Code. The Reserve Statement is presented in Tables 3 and 4 below. The Coal Reserves are based upon the block model prepared by Mrs. Karin van Deventer, owner of Sugar Bush Consulting, the information which was originally sourced from the Minex model and the Life of Mine planning done by Mr. Dan Ferreira of Dan Ferreira Technical Services cc.

A Life of Mine plan has been developed by Minergy Coal and the modifying factors as shown in Table 2 have been considered and applied to the Coal Resource for the conversion to the Coal Reserve. The estimated ROM Coal Reserve of 74.18MT (as received basis) and the Saleable Coal Reserve of 43.61MT (air dried basis) is just for the opencast mine. The modifying factors include consideration of the mining, processing, metallurgical, infrastructure, economic, marketing, legal, environment, social and government factors in order to derive a Coal Reserve which is demonstrated to be economically extractable in present day conditions. The modifying factors were determined during early mining and processing start up and were applied throughout the Reserve.

Tables 3 and 4 below summarise Masama Coal Mine's ROM and Saleable Coal Reserves as at 31 October 2019. For ROM Coal Reserves, tonnages are reported on an as received basis and coal qualities on an air-dried contaminated basis, while for Saleable Coal Reserves, tonnages and coal qualities are reported on an air-dried product basis. The Coal Resources are inclusive of Coal Reserves.

The ROM Coal Reserve has been depleted by 455 234 tonnes of coal treated as at 30 June 2020.

The Saleable Coal Reserve has been depleted by 198 394 tonnes of coal sold as at 30 June 2020.

The Coal Reserves were estimated and signed off by Pivot's Competent Person, Mr JJ Bornman, Pivot's Director Mining and Valuations in accordance with the SAMREC (2016) Code. Mr Bornman is a qualified Mining Engineer, a Fellow of the Southern African Institute of Mining and Metallurgy ("SAIMM") (Registration no.700627) and registered with the Engineering Council of South Africa ("ECSA") as a Professional Engineer (Reg. No. 20090201). Mr Bornman's qualifications include a B. Eng. (Mining) and an MBA degree. He has 36 years' experience in mining, feasibility studies, mine valuation, risk assessment and the estimation of Mineral Reserves, including coal. Mr Bornman has co-authored over 50 feasibility studies, CPRs, Technical Reviews, Technical Due Diligence Reports and Mine Valuation Reports for both local and international companies and stock exchanges. Mr Bornman has the necessary experience in the nature and style of mineralisation to qualify as a CP as defined in terms of the SAMREC Code (2016 Edition). Mr Bornman is currently the Director Mining and Valuation for Pivot Mining Consultants (Pty) Limited located at Lower Ground Floor, Island House, Constantia Office Park, Cnr. 14th Avenue and Hendrik Potgieter Road, Weltevreden Park, Johannesburg, 1709, South Africa.

TABLE 2: MODIFYING FACTORS

FACTOR	UNIT	VALUE
Coal Seam Thickness Cut-Off	m	0.5
Geological loss — Measured	%	5
Geological loss — Indicated	%	8
Mining Loss	%	5
Contamination	%	2
Moisture Correction Factor	%	2
Plant Correction Factor	%	10
Predicted Practical Yield — Proved A Seam (Section A)	%	54.4
Predicted Practical Yield — Probable A Seam (Section A)	%	54.0
Predicted Practical Yield — Probable A Seam (Section B)	%	59.25
Predicted Practical Yield — Probable E Seam (Section A)	%	74.3
Predicted Practical Yield — Probable E Seam (Section B)	%	56.7
The following product targets were modelled:		
Section A: A Seam Calorific Value	MJ/kg	26.2
Section A: E Seam Calorific Value	MJ/kg	26.2
Section B: A Seam Calorific Value	MJ/kg	25.1
Section B: E Seam Calorific Value	MJ/kg	26.2
Pricing — Duff	US\$/t (FOT)	36
Pricing — Peas	US\$/t (FOT)	69
Pricing — Nuts	US\$/t (FOT)	52
Pricing — Metallurgical Nuts	US\$/t (FOT)	75

TABLE 3: MASAMA COAL MINE ROM COAL RESERVE (AS AT 31 OCTOBER 2019)

Mining block	Seam	Reserve category	Mineable in situ Reserve (Mt)	Contamination (%)	External moisture (%)	ROM tonnage (Mt) AR*	ROM CV (MJ/kg)†	ROM ash (%)†	ROM moisture (%)†	ROM volatile content (%)†	ROM fixed carbon (%)†	ROM sulphur (%)†
Section A	A	Proved	10.425	2	2	10.842	22.13	20.61	5.62	25.05	48.72	2.14
Section A total proved			10.425	2	2	10.842	22.13	20.61	5.62	25.05	48.72	2.14
Section A	A	Probable	15.093	2	2	15.697	22.04	21.14	5.41	24.89	48.57	2.17
	E	Probable	7.728	2	2	8.037	23.41	19.04	5.18	27.17	48.64	2.30
Section A total probable			22.820	2	2	23.733	22.50	20.43	5.33	25.66	48.59	2.21
Section A total proved and probable			33.245	2	2	34.575	22.39	20.48	5.42	25.47	48.64	2.19
Section B	A	Proved	—	—	—	—	—	—	—	—	—	—
Section B total proved			—	—	—	—	—	—	—	—	—	—
Section B	A	Probable	30.122	2	2	31.327	21.76	21.02	5.70	24.53	48.75	1.56
	E	Probable	7.963	2	2	8.281	19.55	30.59	4.43	23.97	41.02	2.15
Section B total probable			38.084	2	2	39.608	21.30	23.02	5.43	24.41	47.13	1.68
Section B total proved and probable			38.084	2	2	39.608	21.30	23.02	5.43	24.41	47.13	1.68
TOTAL PROVED AND PROBABLE			71.330	2	2	74.183	21.80	21.84	5.43	24.90	47.83	1.92

MASAMA COAL MINE SALEABLE COAL RESERVE (AS AT 31 OCTOBER 2019)

Mining block	Seam	Reserve category	ROM tonnage (Mt) AR*	Practical yield (%)	Saleable tonne (Mt)‡	Product CV (MJ/kg)‡	Product ash (%)‡	Product moisture (%)‡	Product volatile content (%)‡	Product fixed carbon (%)‡	Product sulphur (%)‡
Section A	A	Proved	10.842	54.40%	5.898	26.20	9.63	6.54	26.88	56.96	0.39
Section A total proved			10.842	54.40%	5.898	26.20	9.63	6.54	26.88	56.96	0.39
Section A	A	Probable	15.697	54.00%	8.481	26.20	9.98	6.31	26.77	56.94	0.37
	E	Probable	8.037	74.30%	5.973	26.20	11.37	5.67	29.33	53.64	0.64
Section A total probable			23.733	60.90%	14.455	26.20	10.55	6.05	27.82	55.58	0.48
Section A total proved and probable			34.575	58.90%	20.353	26.20	10.28	6.19	27.55	55.98	0.46
Section B	A	Proved	—	—	—	—	—	—	—	—	—
Section B total proved			—	—	—	—	—	—	—	—	—
Section B	A	Probable	31.327	59.30%	18.562	25.10	11.66	6.55	26.04	55.76	0.31
	E	Probable	8.281	56.70%	4.694	26.20	11.18	5.47	30.81	52.55	0.45
Section B total probable			39.608	58.72%	23.257	25.32	11.56	6.33	27.00	55.11	0.33
Section B total proved and probable			39.608	58.72%	23.257	25.32	11.56	6.33	27.00	55.11	0.33
TOTAL PROVED AND PROBABLE			74.183	59.37%	43.609	25.73	10.96	6.26	27.26	55.51	0.39

* 2% moisture and 2% contamination adjusted; AR — As received basis.

† Air dried contaminated basis.

‡ Air dried product basis.

The information presented here is an extract from a Competent Persons Report ("CPR") entitled "Independent CPR on the Masama Coal Mine", compiled by Pivot Mining Consultants (Pty) Ltd, and with an effective date of 31 October 2019. For full CPR go to www.minergycoal.com.