## SUBMITTED SAMPLE ANALYTICAL REPORT

SGS Reference:	RB21-07273 "a SANAS Accredited	Testing Laboratory, No. T0465".
Client Reference:	SULKEHOEK	Date Issued: 29 October 2021
Client Reference 2.:		Date(s) Tested: 27-28 October 2021
Sample Type:	Coal Sample	Principal: EPWORTH MINERALS PTY LTD
Sample Received From:	Epworth minerals	Address: 40 BOWLING ROAD
Sample Description:	1 x 20kg Raw sample	
Date Sample received:	26 October 2021	City, State, Postal: BEDFORDVIEW 2007
Seal Numbers:	None	Country: South Africa
		Attention: WELCOME@SANDAWANA.CO.ZA

The sample(s), to which the findings recorded herein (the "FINDINGS") relate, was (were) drawn and / or provided by the Client or a third party acting on Client's directions. The Findings constitute no warranty of the sample's representativity of all the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is /are said to be extracted.

#### Analysis performed in accordance with ISO Standards or other International Standards and SGS Procedures.

Analysis marked with:- \* denotes SGS accredited test; with # denotes SGS non-accredited test, with \*\* performed by a Third Party Laboratory - accredited test; with ## performed by Third Party Laboratory - non-accredited test. See METHODS PAGE for more details.

values are reported to relevant n	umber of significant decimal places. This can result in	i small roundin	g differences betw	een worsture Convers	sions.	
			As-Received	As-Determined	Dry Basis (db)	Dry Ash-Free
			Basis (ar)	Basis (ad)		Basis (daf)
						l
Brevimete Analysia	Moisture	0/	8.0	2.0		1
Proximate Analysis	woisture	%	8,0	3,8		
Moisture (Total) *	Ash *	%	7,4	7,7	8,0	
Moisture (as-determined) *	ISO Volatile Matter *	%	30,6	32,0	33,3	36,2
	Fixed Carbon (calculation by difference)	%	54,0	56,5	58,7	63,8
	Total Sulfur *	%	0,51	0,53	0,55	0,60

Gross Calorific Value *		kcal/kg	6708	7014	7291	7925
ISO 1928	Net CV, constant volume	kcal/kg	6465	6785	7075	

Iltimate Analysis	Moisture (Total) * Moisture (as-determined) *	As-Received Basis (ar)	As-Determined Basis (ad)	Dry Basis (db)	Dry Ash-Free Basis (daf)	
	Total Carbon *	%	69,2	72,4	75,3	81,8
	Total Hydrogen (includes H in moisture) *	%	4,94	4,65	4,39	4,77
	Total Nitrogen *	%	1,84	1,92	2,00	2,17
	Total Sulfur *	%	0,51	0,53	0,55	0,60
	Ash *	%	7,4	7,7	8,0	
	Oxygen by diff.(includes O in moisture)	%	16,11	12,80	9,76	10,66
	Total	%	100,00	100,00	100,00	100,00
	Moisture	%	(8)	(3,8)		
	Hydrogen (excludes H in moisture)	%	4,04	4,22	DB & DAF H & O val	
	Oxygen (excludes O in moisture)		9,01	9,43	mois	sture

Chlorine	%	0,005
Fluorine	ppm	104
Arsenic	ppm	0,210
Mercury	mg/kg	0,149
%P in Coal	%	0,011



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SGS Reference: Client Reference: Client Reference 2.: RB21-07273

"a SANAS Accredited Testing Laboratory, No. T0465".

SULKEHOEK

Date Issued: 29 October 2021 Date(s) Tested: 27-28 October 2021

Signed and dated RICHARDS BAY 29 October 2021 For and on behalf of SGS South Africa

SGS South Africa

Minerals Services PO BOX 341 Tel: +27(35)797 6500; Fax: +27(35)797 6532

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### METHODS

SGS Reference: RB21-07273 \*a SANAS Accredited Testing Laboratory, No. T0465".

Client Reference : SULKEHOEK Client Reference 2: Sample Review Coal Sample Sample Review of From: Epworth minerals Sample Description: 1 x 20kg Raw sample Date Sample received: 26 Crober 2021 Seal Numbers: None

# Date Issued: 29 October 2021 Date(s) Tested: 27-28 October 2021 Principal: EPW/ORTH MINERALS PTY LTD Address: 40 BOWLING ROAD

City, State, Postal: BEDFORDVIEW 2007 Country: South Africa Attention: WELCOME@SANDAWANA.CO.ZA

			ECT ## If analysis is performed a NON-Accredited Thi Name of Accreditation Body, Type, &	ACCREDITATION TEST STATUS * SGS Accredited Test; # SGS Non Accredited Test; ** Third Party Lab - Accredited, ## Third Party Lab - Non		
Method	Standard	Executing Laboratory	Registration No.	Accredited	Accreditation Test Status	Uncertainty of Measuremen
	ISO 589 & ASTM D 3302	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
	ISO 11722	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
	ISO 1171 & ASTM D 3174	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
SO Volatile Matter *	ISO 562 & ASTM 3175	SGS Richards Bay	ISO 17025 T0465		Accredited	
	ISO 17246 & ASTM D 7582	SGS Richards Bay	ISO 17025 T0465		Accredited	
otal Sulfur *	ISO 19579 & ASTM D 4239	SGS Richards Bay	ISO 17025 T0465		Accredited	
iross Calorific Value *	ISO 29541 & ASTM D 5373	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
Itimate Analysis (C,H,N, Oxygen calculation by difference)*	*ISO 29541/17247 & ASTM D 5373/D 3176	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
nlorine	ASTM D 4208	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
uorine	Based on In-House method - ASTM D3761	SGS Richards Bay	ISO 17025 T0465	•	Accredited	
rsenic	ASTM D6357	SGS Richards Bay	ISO 17025 T0465	#	Non Accredited Test	
ercury	ASTM D6722	SGS Richards Bay	ISO 17025 T0465	#	Non Accredited Test	
P in Coal	A\$ 1038.14.2:2003	SGS Richards Bay	ISO 17025 T0465			
hysical Attributes of Sample						
				* *		
tadditional information required by the Accreditation Body NOTE: ALL Tests subcontracted to a Third Party Laboratory (internal or external), or marked as * #, ## Not Accredited *, see not included in the SGS ISO 17025 Laboratory Accreditation.						
aned and dated ICHARDS BAY 9 October 2021						For and on behall SGS South Afr

SGS South Africa

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