

## Certificate of Certified Reference Material

NCS FC 28107a

Coal

Issued in 2020

Approved by China National Analysis Center for Iron and Steel

( Beijing China )

## Certified Values and Uncertainty

(Certified on Jan. 2020)

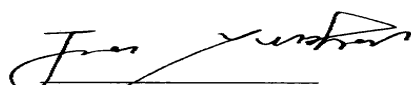
No.		Total Sulfur (%)	Ash (%)	Volatile matter(%)	Calorific Value (MJ/kg)	Carbon (%)	Hydrogen (%)	Nitrogen (%)	True Specific Gravity (20 °C)	Coal Type
NCS FC 28107a	Certified Value	0.70	10.96	15.62	31.12	79.17	3.82	1.14	1.45	bitumite
	Uncertainty	0.04	0.15	0.25	0.18	0.38	0.10	0.06	0.02	

Note:

- 1.All values are expressed on dry bases. Calorific value is high value of dry base.
- 2.Each certified value is the mean of analytical results of 8 independent laboratories.  
Uncertainty( $\Delta x$ ) is calculated by  $\Delta x = t_{\alpha(m-1)} S_T$ . In above formula,  $t_{\alpha(m-1)}$  is confidence coefficient of t-distribution,  $\alpha$  is confidence level and  $S_T$  is standard deviation.
- 3.The sample is powder with size <0.2mm packed in glass bottle.  
The minimum package is 50 grams. The minimum weight for analysis is: S 30 mg, Ash and Volatile matter 0.5g, Calorific value 0.5g, C,H,N 50mg.
- 4.The sample should be stored in cold and dry place.
- 5.The certified values are redetermined once every year and customers will be informed if there is any change in certified values.

## Analytical Methods

Item	Analytical Method
Total Sulfur	GB/T214—1996 Method of Determination of Total Sulfur in Coal
Ash and Volatile	GB212—2001 Analytical Method of Coal for Industry
Calorific Value	GB/T213—2003 Method of Determination of Calorific Value of Coal
Carbon , Hydrogen , Nitrogen	GB476—2001 Method of Determination of Elements in Coal, GB/T15460-2003 Method of Determination of Carbon and Hydrogen in Coal, Galvanometric-Gravimetric Method
True Specific Gravity	GB/T217—1996 Method of Determination of True Specific Gravity of Coal



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