



Supplied by:

Labmix24 GmbH

Industriestraße 18A

D-46499 Hamminkeln

Germany

Tel: +49 (0) 2852 96064 00

FAX: +49 (0) 2852 96064 24

Web: [www.labmix24.com](http://www.labmix24.com)

E-Mail: [info@labmix24.com](mailto:info@labmix24.com)

## Certificate of Certified Reference Material

NCS FC 28114

Coal

Reissued in 2017

Approved by China National Analysis Center for Iron and Steel

( Beijing China )

## Certified Values and Uncertainty

(Certified on Jan. 2017)

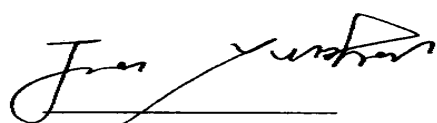
No.		Total Sulfur (%)	Ash (%)	Volatile matter(%)	Calorific Value (MJ/kg)	Carbon (%)	Hydrogen (%)	Nitrogen (%)	True Specific Gravity (20 °C)	Coal Type
NCS FC 28114	Certified Value	0.20	4.66	33.07	30.18	76.36	4.42	1.08	1.42	bitumite
	Uncertainty	0.04	0.12	0.36	0.15	0.38	0.12	0.06	0.02	

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.  
Uncertainty is expanded uncertainty at 95% confidence level.
- 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 in December and customers will be informed if there is any change in certified values.

## Analytical Methods

Item	Analytical Method
Total Sulfur	GB/T214—2007 Method of Determination of Total Sulfur in Coal
Ash and Volatile	GB212—2008 Analytical Method of Coal for Industry
Calorific Value	GB/T213—2008 Method of Determination of Calorific Value of Coal
Carbon , Hydrogen , Nitrogen	GB476—2008 Method of Determination of Carbon and Hydrogen in Coal, GB/T19227-2008 Method of Determination of Nitrogen in Coal,
True Specific Gravity	GB/T217—2008 Method of Determination of True Specific Gravity of Coal



**Jia Yunhai**

**Laboratory Director**