

Certified Pulp Iron Ore Reference Material - GIOP-139

Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	22.43	0.23	60	+/- 0.06
Fe Calc	%	22.39	0.27	60	+/- 0.07
SiO2	%	53.76	0.31	50	+/- 0.09
Al2O3	%	4.974	0.043	60	+/- 0.011
TiO2	%	0.1922	0.0046	60	+/- 0.0012
Mn	%	0.068	0.0029	59	+/- 0.0008
CaO	%	1.316	0.016	55	+/- 0.004
P	%	0.0995	0.0018	60	+/- 0.0005
S	%	0.39	0.022	60	+/- 0.006
MgO	%	1.978	0.034	60	+/- 0.009
K2O	%	2.617	0.017	59	+/- 0.004
Zn	%	0.0155	0.0024	60	+/- 0.0006
Pb	%	0.0054	0.0011	40	+/- 0.0004
Cu	%	0.0041	0.0011	47	+/- 0.0003
Ba	%	0.0183	0.0041	59	+/- 0.0011
V	%	0.00332	0.00073	42	+/- 0.00023
Cr	%	0.0023			
Cl	%	0.006			
As	%	0.0075	0.0013	50	+/- 0.0004
Ni	%	0.0019			
Co	%	0.0017			
Sn	%	0.0065			
Sr	%	0.0101	0.0045	57	+/- 0.0012
Zr	%	0.0081	0.0033	40	+/- 0.0011
Na	%	0.5068	0.0096	60	+/- 0.0025
LOI425	%	0.167	0.055	56	+/- 0.015
LOI650	%	0.803	0.073	57	+/- 0.02
LOI1000	%	1.63	0.14	59	+/- 0.04

Control Statistic Details

Control values for this material were determined during a certification program.

Certification Date

This material was certified with the above values on: 15/08/2014

Source Material

Prior to homogenisation and testing, this material was sourced from Composite of Pilbara ore

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**Mining Industry Consultants
Reference Material Manufacture and Sales**

Usage

This product is for use in the mining industry as a reference material for monitoring and testing the accuracy of laboratory assaying.

Preparation and Packaging

This certified reference material was dried in an oven for a minimum of 8 hours at 105°C. The dry material was pulverised in a "puck and bowl" and then homogenised in a vee-blender. The material is then packaged into 10g plastic packets, ready for shipment.

Certification Testwork

This certified reference material was tested in a dedicated certification program. 10 samples were sent to 6 laboratories for XRF analyses. Assay distributions are checked and processed statistically, producing monitoring statistics for these standards. Materials are tested regularly to ensure stability and homogeneity.