

Certified Pulp Iron Ore Reference Material - GIOP-146

Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	57.65	0.14	60	+/- 0.04
Fe Calc	%	57.65	0.083	49	+/- 0.024
SiO2	%	5.777	0.04	58	+/- 0.011
Al2O3	%	3.716	0.06	59	+/- 0.016
TiO2	%	0.2016	0.0056	59	+/- 0.0015
Mn	%	0.1401	0.0012	47	+/- 0.0003
CaO	%	0.0486	0.0047	60	+/- 0.0012
P	%	0.0457	0.0011	47	+/- 0.0003
S	%	0.02603	0.00097	50	+/- 0.00028
MgO	%	0.102	0.012	60	+/- 0.003
K2O	%	0.0179	0.0024	59	+/- 0.0006
Zn	%	0.00308	0.00068	38	+/- 0.00023
Pb	%	0.0044			
Cu	%	0.0023			
Ba	%	0.0036			
V	%	0.0039	0.00062	50	+/- 0.00018
Cr	%	0.00388	0.00054	43	+/- 0.00017
Cl	%	0.0105	0.0021	52	+/- 0.0006
As	%	0.0016			
Ni	%	0.0013			
Co	%	0.0017	0.0011	31	+/- 0.0004
Sn	%	0.003			
Sr	%	0.0034	0.0013	31	+/- 0.0005
Zr	%	0.00397	0.00095	35	+/- 0.00033
Na	%	0.015	0.0049	56	+/- 0.0013
LOI140	%	0.247	0.043	49	+/- 0.013
LOI371	%	6.272	0.05	50	+/- 0.014
LOI425	%	6.537	0.057	49	+/- 0.017
LOI650	%	7.093	0.051	50	+/- 0.015
LOI1000	%	7.347	0.05	49	+/- 0.015

Control Statistic Details

Control values for this material were determined during a certification program. LOI results are based on drying at 105

Certification Date

This material was certified with the above values on: 8/09/2015

Source Material

20 Hines Road, O'Connor
Western Australia 6163
Phone +618 93142566 Fax +618 93143699
Email info@geostats.com.au
Website <http://www.geostats.com.au>

<p>GEOSTATS PTY LTD Mining Industry Consultants Reference Material Manufacture and Sales</p>

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

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.