

Certified Pulp Iron Ore Reference Material - GIOP-161

Certificate of Analysis

Analyte	Units	Average	Standard Deviation	Count	95% Confidence Interval
Fe	%	60.48	0.13	60	+/- 0.03
Fe Calc	%	60.483	0.076	49	+/- 0.022
SiO2	%	2.911	0.025	60	+/- 0.006
Al2O3	%	2.116	0.015	49	+/- 0.004
TiO2	%	1.63	0.056	58	+/- 0.015
Mn	%	0.2674	0.0042	60	+/- 0.0011
CaO	%	0.0234	0.0047	60	+/- 0.0012
P	%	0.0622	0.0018	60	+/- 0.0005
S	%	0.0189	0.0011	59	+/- 0.0003
MgO	%	0.174	0.014	59	+/- 0.004
K2O	%	0.00935	0.00088	38	+/- 0.00029
Zn	%	0.00369	0.00055	36	+/- 0.00019
Pb	%	0.0049			
Cu	%	0.0024			
Ba	%	0.0086	0.0027	44	+/- 0.0008
V	%	0.0382	0.0018	60	+/- 0.0005
Cr	%	0.0319	0.0013	48	+/- 0.0004
Cl	%	0.0092	0.0026	51	+/- 0.0008
As	%	0.0016			
Ni	%	0.0037	0.0012	38	+/- 0.0004
Co	%	0.00259	0.00099	40	+/- 0.00032
Sn	%	0.001			
Sr	%	0.0108	0.002	50	+/- 0.0006
Zr	%	0.00283	0.00087	30	+/- 0.00033
Na	%	0.01			
LOI140	%	0.199	0.04	50	+/- 0.011
LOI371	%	5.323	0.041	50	+/- 0.012
LOI425	%	5.499	0.04	50	+/- 0.012
LOI650	%	5.847	0.04	50	+/- 0.011
LOI1000	%	6.017	0.046	49	+/- 0.013

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.