

Fe ore, CRM State: primary, Matrix: banded jaspelite, Mineralisation Style: BIF-hosted

Art. ID OREAS-415-60G
Unit 60 g
Deliverydetails No Dangerous Good /not restricted

Description

SOURCE MATERIAL: OREAS-415 is a certified reference material composed of magnetite iron ore, obtained from the Hawks Nest Magnetite Project under an exploration license with Peak Iron Mines. The CRM contains approximately 67 % magnetite and 25 % hematite. The project site is situated approximately 120 kilometres south of Cooper Pedy in South Australia.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Iron (Fe)	[7439-89-6]	65,6	wt.%	Borate Fus ion XRF	
	FeO		20,3	wt.%	Classical Wet Chemis try	
	Iron(II,III) oxide (Fe ₃ O ₄)		56,81	wt.%	Satmagan 1 35	
	Al ₂ O ₃		1,06	wt.%	Borate Fus ion XRF	
	Arsenic (As)	[7440-38-2]	35,7	ppm	Borate Fus ion XRF	
	Arsenic (As)	[7440-38-2]	0,00357	%	Borate Fus ion XRF	
	CaO		0,276	wt.%	Borate Fus ion XRF	
	Chlorine (Cl)	[7782-50-5]	255	ppm	Borate Fus ion XRF	
	Chlorine (Cl)	[7782-50-5]	0,0255	%	Borate Fus ion XRF	
Iron normalised to 100% (wt.%)	Fe(III), calculated		65,09	wt.%	Borate Fus ion XRF	
	K ₂ O		0,032	wt.%	Borate Fus ion XRF	
	Manganese (Mn)	[7439-96-5]	0,057	wt.%	Borate Fus ion XRF	
	MgO	[1309-48-4]	0,55	wt.%	Borate Fus ion XRF	

Phosphorus (P)	[7723-14-0]	0,052	wt. %	Borate Fusion XRF
SiO ₂		4,67	wt. %	Borate Fusion XRF
Sulfur (S)	[7704-34-9]	0,51	wt. %	Borate Fusion XRF
TiO ₂		0,038	wt. %	Borate Fusion XRF
Zinc (Zn)	[7440-66-6]	49,1	ppm	Borate Fusion XRF
Zinc (Zn)	[7440-66-6]	0,00491	%	Borate Fusion XRF
Loss on Ignition (L.O.I.) (1000 °C)		-1	wt. %	Thermogravimetry
Loss on Ignition (L.O.I.) (371 °C)		-1,2	wt. %	Thermogravimetry
Loss on Ignition (L.O.I.) (425 °C)		-1,45	wt. %	Thermogravimetry
Loss on Ignition (L.O.I.) (650 °C)		-1,66	wt. %	Thermogravimetry
Aluminium (Al)	[7429-90-5]	0,566	wt. %	4-Acid Digestion
Antimony (Sb)	[7440-36-0]	12,6	ppm	4-Acid Digestion
Antimony (Sb)	[7440-36-0]	0,00126	%	4-Acid Digestion
Arsenic (As)	[7440-38-2]	33,6	ppm	4-Acid Digestion
Arsenic (As)	[7440-38-2]	0,00336	%	4-Acid Digestion
Barium (Ba)	[7440-39-3]	19	ppm	4-Acid Digestion
Barium (Ba)	[7440-39-3]	0,0019	%	4-Acid Digestion
Beryllium (Be)	[7440-41-7]	1,35	ppm	4-Acid Digestion
Beryllium (Be)	[7440-41-7]	0,000135	%	4-Acid Digestion

Bismuth (Bi)	[7440-69-9]	0,51	ppm	4-Acid Digestion
Bismuth (Bi)	[7440-69-9]	0,000051	%	4-Acid Digestion
Caesium (Cs)	[7440-46-2]	0,26	ppm	4-Acid Digestion
Caesium (Cs)	[7440-46-2]	0,000026	%	4-Acid Digestion
Calcium (Ca)	[7440-70-2]	0,191	wt. %	4-Acid Digestion
Cerium (Ce)	[7440-45-1]	18,2	ppm	4-Acid Digestion
Cerium (Ce)	[7440-45-1]	0,00182	%	4-Acid Digestion
Chromium (Cr)	[7440-47-3]	31,2	ppm	4-Acid Digestion
Chromium (Cr)	[7440-47-3]	0,00312	%	4-Acid Digestion
Cobalt (Co)	[7440-48-4]	31,2	ppm	4-Acid Digestion
Cobalt (Co)	[7440-48-4]	0,00312	%	4-Acid Digestion
Copper (Cu)	[7440-50-8]	52	ppm	4-Acid Digestion
Copper (Cu)	[7440-50-8]	0,0052	%	4-Acid Digestion
Dysprosium (Dy)	[7429-91-6]	1,47	ppm	4-Acid Digestion
Dysprosium (Dy)	[7429-91-6]	0,000147	%	4-Acid Digestion
Erbium (Er)	[7440-52-0]	0,87	ppm	4-Acid Digestion
Erbium (Er)	[7440-52-0]	0,000087	%	4-Acid Digestion
Gadolinium (Gd)	[7440-54-2]	1,52	ppm	4-Acid Digestion
Gadolinium (Gd)	[7440-54-2]	0,000152	%	4-Acid Digestion

Gallium (Ga)	[7440-55-3]	3,8	ppm	4-Acid Digestion
Gallium (Ga)	[7440-55-3]	0,00038	%	4-Acid Digestion
Germanium (Ge)	[7440-56-4]	1,24	ppm	4-Acid Digestion
Germanium (Ge)	[7440-56-4]	0,000124	%	4-Acid Digestion
Hafnium (Hf)	[7440-58-6]	0,3	ppm	4-Acid Digestion
Hafnium (Hf)	[7440-58-6]	0,00003	%	4-Acid Digestion
Holmium (Ho)	[7440-60-0]	0,31	ppm	4-Acid Digestion
Holmium (Ho)	[7440-60-0]	0,000031	%	4-Acid Digestion
Indium (In)	[7440-74-6]	0,086	ppm	4-Acid Digestion
Indium (In)	[7440-74-6]	0,0000086	%	4-Acid Digestion
Iron (Fe)	[7439-89-6]	63,79	wt. %	4-Acid Digestion
Lanthanum (La)	[7439-91-0]	12,1	ppm	4-Acid Digestion
Lanthanum (La)	[7439-91-0]	0,00121	%	4-Acid Digestion
Lead (Pb)	[7439-92-1]	7,01	ppm	4-Acid Digestion
Lead (Pb)	[7439-92-1]	0,000701	%	4-Acid Digestion
Lithium (Li)	[7439-93-2]	18,3	ppm	4-Acid Digestion
Lithium (Li)	[7439-93-2]	0,00183	%	4-Acid Digestion
Magnesium (Mg)	[7439-95-4]	0,303	wt. %	4-Acid Digestion
Manganese (Mn)	[7439-96-5]	0,053	wt. %	4-Acid Digestion

Molybdenum (Mo)	[7439-98-7]	4,91	ppm	4-Acid Digestion
Molybdenum (Mo)	[7439-98-7]	0,000491	%	4-Acid Digestion
Neodymium (Nd)	[7440-00-8]	7,47	ppm	4-Acid Digestion
Neodymium (Nd)	[7440-00-8]	0,000747	%	4-Acid Digestion
Nickel (Ni)	[7440-02-0]	37,7	ppm	4-Acid Digestion
Nickel (Ni)	[7440-02-0]	0,00377	%	4-Acid Digestion
Niobium (Nb)	[7440-03-1]	1,57	ppm	4-Acid Digestion
Niobium (Nb)	[7440-03-1]	0,000157	%	4-Acid Digestion
Phosphorus (P)	[7723-14-0]	0,05	wt. %	4-Acid Digestion
Potassium (K)	[7440-09-7]	0,03	wt. %	4-Acid Digestion
Praseodymium (Pr)	[7440-10-0]	1,97	ppm	4-Acid Digestion
Praseodymium (Pr)	[7440-10-0]	0,000197	%	4-Acid Digestion
Rhenium (Re)	[7440-15-5]	0,003	ppm	4-Acid Digestion
Rhenium (Re)	[7440-15-5]	0,0000003	%	4-Acid Digestion
Rubidium (Rb)	[7440-17-7]	1,94	ppm	4-Acid Digestion
Rubidium (Rb)	[7440-17-7]	0,000194	%	4-Acid Digestion
Scandium (Sc)	[7440-20-2]	1,35	ppm	4-Acid Digestion
Scandium (Sc)	[7440-20-2]	0,000135	%	4-Acid Digestion
Selenium (Se)	[7782-49-2]	2,08	ppm	4-Acid Digestion

Selenium (Se)	[7782-49-2]	0,000208	%	4-Acid Digestion
Silver (Ag)	[7440-22-4]	0,218	ppm	4-Acid Digestion
Silver (Ag)	[7440-22-4]	0,0000218	%	4-Acid Digestion
Sodium (Na)	[7440-23-5]	0,024	wt. %	4-Acid Digestion
Strontium (Sr)	[7440-24-6]	3,71	ppm	4-Acid Digestion
Strontium (Sr)	[7440-24-6]	0,000371	%	4-Acid Digestion
Sulfur (S)	[7704-34-9]	0,509	wt. %	4-Acid Digestion
Tantalum (Ta)	[7440-25-7]	0,42	ppm	4-Acid Digestion
Tantalum (Ta)	[7440-25-7]	0,000042	%	4-Acid Digestion
Tellurium (Te)	[13494-80-9]	< 0,050	ppm	4-Acid Digestion
Tellurium (Te)	[13494-80-9]	<0,000005	%	4-Acid Digestion
Thallium (Tl)	[7440-28-0]	0,063	ppm	4-Acid Digestion
Thallium (Tl)	[7440-28-0]	0,0000063	%	4-Acid Digestion
Thorium (Th)	[7440-29-1]	1,37	ppm	4-Acid Digestion
Thorium (Th)	[7440-29-1]	0,000137	%	4-Acid Digestion
Tin (Sn)	[7440-31-5]	21	ppm	4-Acid Digestion
Tin (Sn)	[7440-31-5]	0,0021	%	4-Acid Digestion
Titanium (Ti)	[7440-32-6]	0,02	wt. %	4-Acid Digestion
Tungsten (W)	[7440-33-7]	15,5	ppm	4-Acid Digestion

Tungsten (W)	[7440-33-7]	0,00155	%	4-Acid Digestion
Uranium (U)	[7440-61-1]	3,38	ppm	4-Acid Digestion
Uranium (U)	[7440-61-1]	0,000338	%	4-Acid Digestion
Vanadium (V)	[7440-62-2]	22,7	ppm	4-Acid Digestion
Vanadium (V)	[7440-62-2]	0,00227	%	4-Acid Digestion
Yttrium (Y)	[7440-65-5]	11	ppm	4-Acid Digestion
Yttrium (Y)	[7440-65-5]	0,0011	%	4-Acid Digestion
Zinc (Zn)	[7440-66-6]	40,8	ppm	4-Acid Digestion
Zinc (Zn)	[7440-66-6]	0,00408	%	4-Acid Digestion
Zirconium (Zr)	[7440-67-7]	13,4	ppm	4-Acid Digestion
Zirconium (Zr)	[7440-67-7]	0,00134	%	4-Acid Digestion
Mass Recovered (MassRecovery)		64,37	wt. %	Davis Tube Recovery
Specific Gravity		4,83		Gas / Liquid Pycnometry