

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

Art. ID OREAS-412-60G
Unit 60 g
Deliverydetails No Dangerous Good /not restricted

Description

SOURCE MATERIAL: OREAS-412 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 54% Quartz, 23 % magnetite and 21 % hematite. The project site is situated approximately 120 kilometres south of Coober Pedy in South Australia.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Iron (Fe)	[7439-89-6]	35,97	wt.%	Borate Fus ion XRF	
	FeO		9,01	wt.%	Classical Wet Chemis try	
	Iron(II,III) oxide (Fe ₃ O ₄)		22,11	wt.%	Satmagan 1 35	
	Al ₂ O ₃		0,36	wt.%	Borate Fus ion XRF	
	Arsenic (As)	[7440-38-2]	25,5	ppm	Borate Fus ion XRF	
	Arsenic (As)	[7440-38-2]	0,00255	%	Borate Fus ion XRF	
	Barium (Ba)	[7440-39-3]	< 10,0	ppm	Borate Fus ion XRF	
	Barium (Ba)	[7440-39-3]	<0,001	%	Borate Fus ion XRF	
	CaO		0,334	wt.%	Borate Fus ion XRF	
	Chlorine (Cl)	[7782-50-5]	111	ppm	Borate Fus ion XRF	
	Chlorine (Cl)	[7782-50-5]	0,0111	%	Borate Fus ion XRF	
Iron normalised to 100% (wt.%)	Fe(III), calculated		35,87	wt.%	Borate Fus ion XRF	
	K ₂ O		0,014	wt.%	Borate Fus ion XRF	

Manganese (Mn)	[7439-96-5]	0,044	wt. %	Borate Fus ion XRF
MgO	[1309-48-4]	0,129	wt. %	Borate Fus ion XRF
Phosphorus (P)	[7723-14-0]	0,105	wt. %	Borate Fus ion XRF
SiO ₂		47,4	wt. %	Borate Fus ion XRF
Sulfur (S)	[7704-34-9]	0,095	wt. %	Borate Fus ion XRF
Vanadium (V)	[7440-62-2]	< 10,0	ppm	Borate Fus ion XRF
Vanadium (V)	[7440-62-2]	<0,001	%	Borate Fus ion XRF
Zinc (Zn)	[7440-66-6]	23,4	ppm	Borate Fus ion XRF
Zinc (Zn)	[7440-66-6]	0,00234	%	Borate Fus ion XRF
Loss on Ignition (L.O.I) (650 °C)		-0,382	wt. %	Thermograv imetry
Aluminium (Al)	[7429-90-5]	0,193	wt. %	4-Acid Dig estion
Antimony (Sb)	[7440-36-0]	6,01	ppm	4-Acid Dig estion
Antimony (Sb)	[7440-36-0]	0,000601	%	4-Acid Dig estion
Arsenic (As)	[7440-38-2]	22,2	ppm	4-Acid Dig estion
Arsenic (As)	[7440-38-2]	0,00222	%	4-Acid Dig estion
Barium (Ba)	[7440-39-3]	9,13	ppm	4-Acid Dig estion
Barium (Ba)	[7440-39-3]	0,000913	%	4-Acid Dig estion
Beryllium (Be)	[7440-41-7]	0,91	ppm	4-Acid Dig estion
Beryllium (Be)	[7440-41-7]	0,000091	%	4-Acid Dig estion

Bismuth (Bi)	[7440-69-9]	0,29	ppm	4-Acid Digestion
Bismuth (Bi)	[7440-69-9]	0,000029	%	4-Acid Digestion
Caesium (Cs)	[7440-46-2]	0,14	ppm	4-Acid Digestion
Caesium (Cs)	[7440-46-2]	0,000014	%	4-Acid Digestion
Calcium (Ca)	[7440-70-2]	0,241	wt. %	4-Acid Digestion
Cerium (Ce)	[7440-45-1]	7,03	ppm	4-Acid Digestion
Cerium (Ce)	[7440-45-1]	0,000703	%	4-Acid Digestion
Chromium (Cr)	[7440-47-3]	29,5	ppm	4-Acid Digestion
Chromium (Cr)	[7440-47-3]	0,00295	%	4-Acid Digestion
Cobalt (Co)	[7440-48-4]	7,25	ppm	4-Acid Digestion
Cobalt (Co)	[7440-48-4]	0,000725	%	4-Acid Digestion
Copper (Cu)	[7440-50-8]	19,6	ppm	4-Acid Digestion
Copper (Cu)	[7440-50-8]	0,00196	%	4-Acid Digestion
Dysprosium (Dy)	[7429-91-6]	0,96	ppm	4-Acid Digestion
Dysprosium (Dy)	[7429-91-6]	0,000096	%	4-Acid Digestion
Erbium (Er)	[7440-52-0]	0,6	ppm	4-Acid Digestion
Erbium (Er)	[7440-52-0]	0,00006	%	4-Acid Digestion
Gadolinium (Gd)	[7440-54-2]	0,98	ppm	4-Acid Digestion
Gadolinium (Gd)	[7440-54-2]	0,000098	%	4-Acid Digestion

Gallium (Ga)	[7440-55-3]	1,29	ppm	4-Acid Digestion
Gallium (Ga)	[7440-55-3]	0,000129	%	4-Acid Digestion
Hafnium (Hf)	[7440-58-6]	0,1	ppm	4-Acid Digestion
Hafnium (Hf)	[7440-58-6]	0,00001	%	4-Acid Digestion
Indium (In)	[7440-74-6]	0,1	ppm	4-Acid Digestion
Indium (In)	[7440-74-6]	0,00001	%	4-Acid Digestion
Iron (Fe)	[7439-89-6]	35,69	wt. %	4-Acid Digestion
Lanthanum (La)	[7439-91-0]	4,2	ppm	4-Acid Digestion
Lanthanum (La)	[7439-91-0]	0,00042	%	4-Acid Digestion
Lead (Pb)	[7439-92-1]	7,83	ppm	4-Acid Digestion
Lead (Pb)	[7439-92-1]	0,000783	%	4-Acid Digestion
Lithium (Li)	[7439-93-2]	9,18	ppm	4-Acid Digestion
Lithium (Li)	[7439-93-2]	0,000918	%	4-Acid Digestion
Magnesium (Mg)	[7439-95-4]	0,072	wt. %	4-Acid Digestion
Manganese (Mn)	[7439-96-5]	0,044	wt. %	4-Acid Digestion
Molybdenum (Mo)	[7439-98-7]	11,7	ppm	4-Acid Digestion
Molybdenum (Mo)	[7439-98-7]	0,00117	%	4-Acid Digestion
Neodymium (Nd)	[7440-00-8]	3,33	ppm	4-Acid Digestion
Neodymium (Nd)	[7440-00-8]	0,000333	%	4-Acid Digestion

Nickel (Ni)	[7440-02-0]	15,2	ppm	4-Acid Digestion
Nickel (Ni)	[7440-02-0]	0,00152	%	4-Acid Digestion
Niobium (Nb)	[7440-03-1]	2,09	ppm	4-Acid Digestion
Niobium (Nb)	[7440-03-1]	0,000209	%	4-Acid Digestion
Phosphorus (P)	[7723-14-0]	0,101	wt. %	4-Acid Digestion
Potassium (K)	[7440-09-7]	0,013	wt. %	4-Acid Digestion
Praseodymium (Pr)	[7440-10-0]	0,8	ppm	4-Acid Digestion
Praseodymium (Pr)	[7440-10-0]	0,00008	%	4-Acid Digestion
Rhenium (Re)	[7440-15-5]	0,004	ppm	4-Acid Digestion
Rhenium (Re)	[7440-15-5]	0,0000004	%	4-Acid Digestion
Rubidium (Rb)	[7440-17-7]	1,06	ppm	4-Acid Digestion
Rubidium (Rb)	[7440-17-7]	0,000106	%	4-Acid Digestion
Scandium (Sc)	[7440-20-2]	0,51	ppm	4-Acid Digestion
Scandium (Sc)	[7440-20-2]	0,000051	%	4-Acid Digestion
Selenium (Se)	[7782-49-2]	< 1,00	ppm	4-Acid Digestion
Selenium (Se)	[7782-49-2]	<0,0001	%	4-Acid Digestion
Silver (Ag)	[7440-22-4]	0,226	ppm	4-Acid Digestion
Silver (Ag)	[7440-22-4]	0,0000226	%	4-Acid Digestion
Sodium (Na)	[7440-23-5]	0,013	wt. %	4-Acid Digestion

Strontium (Sr)	[7440-24-6]	3,86	ppm	4-Acid Digestion
Strontium (Sr)	[7440-24-6]	0,000386	%	4-Acid Digestion
Sulfur (S)	[7704-34-9]	0,096	wt. %	4-Acid Digestion
Tantalum (Ta)	[7440-25-7]	0,18	ppm	4-Acid Digestion
Tantalum (Ta)	[7440-25-7]	0,000018	%	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]	0,056	ppm	4-Acid Digestion
Thallium (Tl)	[7440-28-0]	0,0000056	%	4-Acid Digestion
Thorium (Th)	[7440-29-1]	0,36	ppm	4-Acid Digestion
Thorium (Th)	[7440-29-1]	0,000036	%	4-Acid Digestion
Tin (Sn)	[7440-31-5]	11,4	ppm	4-Acid Digestion
Tin (Sn)	[7440-31-5]	0,00114	%	4-Acid Digestion
Titanium (Ti)	[7440-32-6]	0,007	wt. %	4-Acid Digestion
Tungsten (W)	[7440-33-7]	35	ppm	4-Acid Digestion
Tungsten (W)	[7440-33-7]	0,0035	%	4-Acid Digestion
Uranium (U)	[7440-61-1]	1,85	ppm	4-Acid Digestion
Uranium (U)	[7440-61-1]	0,000185	%	4-Acid Digestion
Vanadium (V)	[7440-62-2]	10,4	ppm	4-Acid Digestion

Vanadium (V)	[7440-62-2]	0,00104	%	4-Acid Digestion
Yttrium (Y)	[7440-65-5]	8,48	ppm	4-Acid Digestion
Yttrium (Y)	[7440-65-5]	0,000848	%	4-Acid Digestion
Zinc (Zn)	[7440-66-6]	20,7	ppm	4-Acid Digestion
Zinc (Zn)	[7440-66-6]	0,00207	%	4-Acid Digestion
Zirconium (Zr)	[7440-67-7]	3,81	ppm	4-Acid Digestion
Zirconium (Zr)	[7440-67-7]	0,000381	%	4-Acid Digestion
Mass Recovered (MassRec)		25,38	wt. %	Davis Tube Recovery
Specific Gravity		3,54		Gas / Liquid Pycnometry