

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

Art. ID OREAS-411-60G
Unit 60 g
Deliverydetails No Dangerous Good /not restricted

Description

SOURCE MATERIAL: OREAS-411 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 % Quartz, 16 % hematite and 15 % magnetite. 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]	25,87	wt.%	Borate Fus ion XRF	
	FeO		7,29	wt.%	Classical Wet Chemis try	
	Iron(II,III) oxide (Fe ₃ O ₄)		16,07	wt.%	Satmagan 1 35	
	Al ₂ O ₃		0,47	wt.%	Borate Fus ion XRF	
	CaO		0,244	wt.%	Borate Fus ion XRF	
Iron normalised to 100% (wt.%)	Fe(III), calculated		25,77	wt.%	Borate Fus ion XRF	
	K ₂ O		0,033	wt.%	Borate Fus ion XRF	
	MgO	[1309-48-4]	0,167	wt.%	Borate Fus ion XRF	
	Manganese (Mn)	[7439-96-5]	0,088	wt.%	Borate Fus ion XRF	
	Phosphorus (P)	[7723-14-0]	0,07	wt.%	Borate Fus ion XRF	
	Sulfur (S)	[7704-34-9]	0,056	wt.%	Borate Fus ion XRF	
	SiO ₂		61,48	wt.%	Borate Fus ion XRF	
	Zinc (Zn)	[7440-66-6]	0,00222	%	Borate Fus ion XRF	

Zinc (Zn)	[7440-66-6]	22,2	ppm	Borate Fusion XRF
Loss on Ignition (L.O.I.) (1000 °C)		0,297	wt. %	Thermogravimetry
Aluminium (Al)	[7429-90-5]	0,25	wt. %	4-Acid Digestion
Antimony (Sb)	[7440-36-0]	3,62	ppm	4-Acid Digestion
Antimony (Sb)	[7440-36-0]	0,000362	%	4-Acid Digestion
Arsenic (As)	[7440-38-2]	11,9	ppm	4-Acid Digestion
Arsenic (As)	[7440-38-2]	0,00119	%	4-Acid Digestion
Barium (Ba)	[7440-39-3]	36,1	ppm	4-Acid Digestion
Barium (Ba)	[7440-39-3]	0,00361	%	4-Acid Digestion
Beryllium (Be)	[7440-41-7]	0,89	ppm	4-Acid Digestion
Beryllium (Be)	[7440-41-7]	0,000089	%	4-Acid Digestion
Bismuth (Bi)	[7440-69-9]	0,17	ppm	4-Acid Digestion
Bismuth (Bi)	[7440-69-9]	0,000017	%	4-Acid Digestion
Caesium (Cs)	[7440-46-2]	0,12	ppm	4-Acid Digestion
Caesium (Cs)	[7440-46-2]	0,000012	%	4-Acid Digestion
Calcium (Ca)	[7440-70-2]	0,179	wt. %	4-Acid Digestion
Cerium (Ce)	[7440-45-1]	12,1	ppm	4-Acid Digestion
Cerium (Ce)	[7440-45-1]	0,00121	%	4-Acid Digestion
Chromium (Cr)	[7440-47-3]	37,1	ppm	4-Acid Digestion

Chromium (Cr)	[7440-47-3]	0,00371	%	4-Acid Digestion
Cobalt (Co)	[7440-48-4]	6,67	ppm	4-Acid Digestion
Cobalt (Co)	[7440-48-4]	0,000667	%	4-Acid Digestion
Copper (Cu)	[7440-50-8]	22,2	ppm	4-Acid Digestion
Copper (Cu)	[7440-50-8]	0,00222	%	4-Acid Digestion
Dysprosium (Dy)	[7429-91-6]	1,02	ppm	4-Acid Digestion
Dysprosium (Dy)	[7429-91-6]	0,000102	%	4-Acid Digestion
Erbium (Er)	[7440-52-0]	0,55	ppm	4-Acid Digestion
Erbium (Er)	[7440-52-0]	0,000055	%	4-Acid Digestion
Gadolinium (Gd)	[7440-54-2]	1,2	ppm	4-Acid Digestion
Gadolinium (Gd)	[7440-54-2]	0,00012	%	4-Acid Digestion
Gallium (Ga)	[7440-55-3]	1,21	ppm	4-Acid Digestion
Gallium (Ga)	[7440-55-3]	0,000121	%	4-Acid Digestion
Indium (In)	[7440-74-6]	0,093	ppm	4-Acid Digestion
Indium (In)	[7440-74-6]	0,0000093	%	4-Acid Digestion
Iron (Fe)	[7439-89-6]	25,59	wt. %	4-Acid Digestion
Lanthanum (La)	[7439-91-0]	5,57	ppm	4-Acid Digestion
Lanthanum (La)	[7439-91-0]	0,000557	%	4-Acid Digestion
Lead (Pb)	[7439-92-1]	7,2	ppm	4-Acid Digestion

Lead (Pb)	[7439-92-1]	0,00072	%	4-Acid Digestion
Lithium (Li)	[7439-93-2]	7,29	ppm	4-Acid Digestion
Lithium (Li)	[7439-93-2]	0,000729	%	4-Acid Digestion
Magnesium (Mg)	[7439-95-4]	0,096	wt. %	4-Acid Digestion
Manganese (Mn)	[7439-96-5]	0,085	wt. %	4-Acid Digestion
Molybdenum (Mo)	[7439-98-7]	6,72	ppm	4-Acid Digestion
Molybdenum (Mo)	[7439-98-7]	0,000672	%	4-Acid Digestion
Neodymium (Nd)	[7440-00-8]	5,8	ppm	4-Acid Digestion
Neodymium (Nd)	[7440-00-8]	0,00058	%	4-Acid Digestion
Nickel (Ni)	[7440-02-0]	15,3	ppm	4-Acid Digestion
Nickel (Ni)	[7440-02-0]	0,00153	%	4-Acid Digestion
Niobium (Nb)	[7440-03-1]	53	ppm	4-Acid Digestion
Niobium (Nb)	[7440-03-1]	0,0053	%	4-Acid Digestion
Phosphorus (P)	[7723-14-0]	0,068	wt. %	4-Acid Digestion
Potassium (K)	[7440-09-7]	0,03	wt. %	4-Acid Digestion
Praseodymium (Pr)	[7440-10-0]	1,47	ppm	4-Acid Digestion
Praseodymium (Pr)	[7440-10-0]	0,000147	%	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]	1,21	ppm	4-Acid Digestion
Rubidium (Rb)	[7440-17-7]	0,000121	%	4-Acid Digestion
Scandium (Sc)	[7440-20-2]	0,71	ppm	4-Acid Digestion
Scandium (Sc)	[7440-20-2]	0,000071	%	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]	< 0,100	ppm	4-Acid Digestion
Silver (Ag)	[7440-22-4]	<0,00001	%	4-Acid Digestion
Strontium (Sr)	[7440-24-6]	27,4	ppm	4-Acid Digestion
Strontium (Sr)	[7440-24-6]	0,00274	%	4-Acid Digestion
Sulfur (S)	[7704-34-9]	0,059	wt. %	4-Acid Digestion
Tantalum (Ta)	[7440-25-7]	0,25	ppm	4-Acid Digestion
Tantalum (Ta)	[7440-25-7]	0,000025	%	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]	0,029	ppm	4-Acid Digestion
Thallium (Tl)	[7440-28-0]	0,0000029	%	4-Acid Digestion
Thorium (Th)	[7440-29-1]	0,52	ppm	4-Acid Digestion
Thorium (Th)	[7440-29-1]	0,000052	%	4-Acid Digestion

Tin (Sn)	[7440-31-5]	10,8	ppm	4-Acid Digestion
Tin (Sn)	[7440-31-5]	0,00108	%	4-Acid Digestion
Titanium (Ti)	[7440-32-6]	0,01	wt. %	4-Acid Digestion
Tungsten (W)	[7440-33-7]	25,4	ppm	4-Acid Digestion
Tungsten (W)	[7440-33-7]	0,00254	%	4-Acid Digestion
Uranium (U)	[7440-61-1]	1,41	ppm	4-Acid Digestion
Uranium (U)	[7440-61-1]	0,000141	%	4-Acid Digestion
Vanadium (V)	[7440-62-2]	17,4	ppm	4-Acid Digestion
Vanadium (V)	[7440-62-2]	0,00174	%	4-Acid Digestion
Yttrium (Y)	[7440-65-5]	6,38	ppm	4-Acid Digestion
Yttrium (Y)	[7440-65-5]	0,000638	%	4-Acid Digestion
Zinc (Zn)	[7440-66-6]	19,8	ppm	4-Acid Digestion
Zinc (Zn)	[7440-66-6]	0,00198	%	4-Acid Digestion
Zirconium (Zr)	[7440-67-7]	5,61	ppm	4-Acid Digestion
Zirconium (Zr)	[7440-67-7]	0,000561	%	4-Acid Digestion
Mass Recovered (MassRec)		17,11	wt. %	Davis Tube Recovery
Specific Gravity		3,24		Gas / Liquid Pycnometry