Labmix24 GmbH
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Fe ore, CRM State: primary, Matrix: banded jaspelite, Mineralisation Style: BIF-hosted

Art. ID	OREAS-413-60G
Unit	60 g
Deliverydetails	No Dangerous Good /not restricted

Description

SOURCE MATERIAL: OREAS-413 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 43% Quartz, 35 % magnetite and 19 % 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]	43,04	wt.%	Borate Fusion XRF	
	FeO		12,32	wt.%	Classical Wet Chemistry	
	Iron(II,III) oxide (Fe3O4)		31,81	wt.%	Satmagan 135	
	Al2O3		0,615	wt.%	Borate Fusion XRF	
	Arsenic (As)	[7440-38-2]	25,6	ppm	Borate Fusion XRF	
	Arsenic (As)	[7440-38-2]	0,00256	%	Borate Fusion XRF	
	Barium (Ba)	[7440-39-3]	< 10,0	ppm	Borate Fusion XRF	
	Barium (Ba)	[7440-39-3]	<0,001	%	Borate Fusion XRF	
	CaO		0,29	wt.%	Borate Fusion XRF	
	Chlorine (Cl)	[7782-50-5]	153	ppm	Borate Fusion XRF	
	Chlorine (Cl)	[7782-50-5]	0,0153	%	Borate Fusion XRF	
Iron normalised to 100% (wt.%)	Fe(III), calculated		42,86	wt.%	Borate Fusion XRF	
	K2O		0,025	wt.%	Borate Fusion XRF	

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	Lead (Pb)	[7439-92-1]	< 10,0	ppm	Borate Fusion XRF
	Lead (Pb)	[7439-92-1]	<0,001	%	Borate Fusion XRF
	Manganese (Mn)	[7439-96-5]	0,06	wt.%	Borate Fusion XRF
	MgO	[1309-48-4]	0,277	wt.%	Borate Fusion XRF
	Phosphorus (P)	[7723-14-0]	0,078	wt.%	Borate Fusion XRF
	SiO2		36,98	wt.%	Borate Fusion XRF
	Sulfur (S)	[7704-34-9]	0,224	wt.%	Borate Fusion XRF
	Zinc (Zn)	[7440-66-6]	29,6	ppm	Borate Fusion XRF
	Zinc (Zn)	[7440-66-6]	0,00296	%	Borate Fusion XRF
	Loss on Ignition (L.O.I.) (1000 °C)		-0,283	wt.%	Thermogravimetry
	Loss on Ignition (L.O.I.) (371 °C)		-0,274	wt.%	Thermogravimetry
	Loss on Ignition (L.O.I.) (425 °C)		-0,459	wt.%	Thermogravimetry
	Loss on Ignition (L.O.I.) (650 °C)		-0,723	wt.%	Thermogravimetry
	Aluminium (Al)	[7429-90-5]	0,332	wt.%	4-Acid Digestion
	Antimony (Sb)	[7440-36-0]	7,67	ppm	4-Acid Digestion
	Antimony (Sb)	[7440-36-0]	0,000767	%	4-Acid Digestion
	Arsenic (As)	[7440-38-2]	23,1	ppm	4-Acid Digestion
	Arsenic (As)	[7440-38-2]	0,00231	%	4-Acid Digestion
	Barium (Ba)	[7440-39-3]	17,8	ppm	4-Acid Digestion

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	Barium (Ba)	[7440-39-3]	0,00178	%	4-Acid Digestion
	Beryllium (Be)	[7440-41-7]	1,04	ppm	4-Acid Digestion
	Beryllium (Be)	[7440-41-7]	0,000104	%	4-Acid Digestion
	Bismuth (Bi)	[7440-69-9]	0,33	ppm	4-Acid Digestion
	Bismuth (Bi)	[7440-69-9]	0,000033	%	4-Acid Digestion
	Caesium (Cs)	[7440-46-2]	0,17	ppm	4-Acid Digestion
	Caesium (Cs)	[7440-46-2]	0,000017	%	4-Acid Digestion
	Calcium (Ca)	[7440-70-2]	0,208	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]	32,6	ppm	4-Acid Digestion
	Chromium (Cr)	[7440-47-3]	0,00326	%	4-Acid Digestion
	Cobalt (Co)	[7440-48-4]	14,5	ppm	4-Acid Digestion
	Cobalt (Co)	[7440-48-4]	0,00145	%	4-Acid Digestion
	Copper (Cu)	[7440-50-8]	30,5	ppm	4-Acid Digestion
	Copper (Cu)	[7440-50-8]	0,00305	%	4-Acid Digestion
	Dysprosium (Dy)	[7429-91-6]	1,17	ppm	4-Acid Digestion
	Dysprosium (Dy)	[7429-91-6]	0,000117	%	4-Acid Digestion
	Erbium (Er)	[7440-52-0]	0,68	ppm	4-Acid Digestion

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	Erbium (Er)	[7440-52-0]	0,000068	%	4-Acid Digestion
	Europium (Eu)	[7440-53-1]	0,43	ppm	4-Acid Digestion
	Europium (Eu)	[7440-53-1]	0,000043	%	4-Acid Digestion
	Gadolinium (Gd)	[7440-54-2]	1,23	ppm	4-Acid Digestion
	Gadolinium (Gd)	[7440-54-2]	0,000123	%	4-Acid Digestion
	Gallium (Ga)	[7440-55-3]	2,07	ppm	4-Acid Digestion
	Gallium (Ga)	[7440-55-3]	0,000207	%	4-Acid Digestion
	Germanium (Ge)	[7440-56-4]	0,38	ppm	4-Acid Digestion
	Germanium (Ge)	[7440-56-4]	0,000038	%	4-Acid Digestion
	Hafnium (Hf)	[7440-58-6]	0,2	ppm	4-Acid Digestion
	Hafnium (Hf)	[7440-58-6]	0,00002	%	4-Acid Digestion
	Indium (In)	[7440-74-6]	0,095	ppm	4-Acid Digestion
	Indium (In)	[7440-74-6]	0,0000095	%	4-Acid Digestion
	Iron (Fe)	[7439-89-6]	42,37	wt.%	4-Acid Digestion
	Lanthanum (La)	[7439-91-0]	7,24	ppm	4-Acid Digestion
	Lanthanum (La)	[7439-91-0]	0,000724	%	4-Acid Digestion
	Lead (Pb)	[7439-92-1]	7,19	ppm	4-Acid Digestion
	Lead (Pb)	[7439-92-1]	0,000719	%	4-Acid Digestion
	Lithium (Li)	[7439-93-2]	11,4	ppm	4-Acid Digestion

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	Lithium (Li)	[7439-93-2]	0,00114	%	4-Acid Digestion
	Magnesium (Mg)	[7439-95-4]	0,16	wt.%	4-Acid Digestion
	Manganese (Mn)	[7439-96-5]	0,058	wt.%	4-Acid Digestion
	Molybdenum (Mo)	[7439-98-7]	8,04	ppm	4-Acid Digestion
	Molybdenum (Mo)	[7439-98-7]	0,000804	%	4-Acid Digestion
	Neodymium (Nd)	[7440-00-8]	5,43	ppm	4-Acid Digestion
	Neodymium (Nd)	[7440-00-8]	0,000543	%	4-Acid Digestion
	Nickel (Ni)	[7440-02-0]	22,6	ppm	4-Acid Digestion
	Nickel (Ni)	[7440-02-0]	0,00226	%	4-Acid Digestion
	Niobium (Nb)	[7440-03-1]	16,5	ppm	4-Acid Digestion
	Niobium (Nb)	[7440-03-1]	0,00165	%	4-Acid Digestion
	Phosphorus (P)	[7723-14-0]	0,077	wt.%	4-Acid Digestion
	Potassium (K)	[7440-09-7]	0,02	wt.%	4-Acid Digestion
	Praseodymium (Pr)	[7440-10-0]	1,38	ppm	4-Acid Digestion
	Praseodymium (Pr)	[7440-10-0]	0,000138	%	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]	1,33	ppm	4-Acid Digestion
	Rubidium (Rb)	[7440-17-7]	0,000133	%	4-Acid Digestion

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	Scandium (Sc)	[7440-20-2]	0,82	ppm	4-Acid Digestion
	Scandium (Sc)	[7440-20-2]	0,000082	%	4-Acid Digestion
	Selenium (Se)	[7782-49-2]	0,94	ppm	4-Acid Digestion
	Selenium (Se)	[7782-49-2]	0,000094	%	4-Acid Digestion
	Silver (Ag)	[7440-22-4]	0,186	ppm	4-Acid Digestion
	Silver (Ag)	[7440-22-4]	0,0000186	%	4-Acid Digestion
	Sodium (Na)	[7440-23-5]	0,017	wt.%	4-Acid Digestion
	Strontium (Sr)	[7440-24-6]	10,1	ppm	4-Acid Digestion
	Strontium (Sr)	[7440-24-6]	0,00101	%	4-Acid Digestion
	Sulfur (S)	[7704-34-9]	0,226	wt.%	4-Acid Digestion
	Tantalum (Ta)	[7440-25-7]	0,28	ppm	4-Acid Digestion
	Tantalum (Ta)	[7440-25-7]	0,000028	%	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]	0,051	ppm	4-Acid Digestion
	Thallium (Tl)	[7440-28-0]	0,0000051	%	4-Acid Digestion
	Thorium (Th)	[7440-29-1]	0,73	ppm	4-Acid Digestion
	Thorium (Th)	[7440-29-1]	0,000073	%	4-Acid Digestion
	Tin (Sn)	[7440-31-5]	13,8	ppm	4-Acid Digestion

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	Tin (Sn)	[7440-31-5]	0,00138	%	4-Acid Digestion
	Titanium (Ti)	[7440-32-6]	0,012	wt.%	4-Acid Digestion
	Tungsten (W)	[7440-33-7]	25,5	ppm	4-Acid Digestion
	Tungsten (W)	[7440-33-7]	0,00255	%	4-Acid Digestion
	Uranium (U)	[7440-61-1]	2,24	ppm	4-Acid Digestion
	Uranium (U)	[7440-61-1]	0,000224	%	4-Acid Digestion
	Vanadium (V)	[7440-62-2]	16,5	ppm	4-Acid Digestion
	Vanadium (V)	[7440-62-2]	0,00165	%	4-Acid Digestion
	Yttrium (Y)	[7440-65-5]	8,68	ppm	4-Acid Digestion
	Yttrium (Y)	[7440-65-5]	0,000868	%	4-Acid Digestion
	Zinc (Zn)	[7440-66-6]	27,8	ppm	4-Acid Digestion
	Zinc (Zn)	[7440-66-6]	0,00278	%	4-Acid Digestion
	Zirconium (Zr)	[7440-67-7]	7,35	ppm	4-Acid Digestion
	Zirconium (Zr)	[7440-67-7]	0,000735	%	4-Acid Digestion
	Mass Recovered (MassRec)		35,66	wt.%	Davis Tube Recovery
	Specific Gravity		3,76		Gas / Liquid Pycnometry