

## **Gold Ore (Frogs Leg Gold Mine, Western Australia), CRM**

Art. ID	OREAS-230-1KG
Unit	1 kg (powder)
Deliverydetails	No Dangerous Good /not restricted

### Description

OREAS 230 was prepared from a blend of gold-bearing ore and barren greenstone. The ore was sourced from the Frogs Leg Gold Mine located 19km west of Kalgoorlie in Western Australia. The Cambrian greenstone was sourced from a quarry 145km north of Melbourne, Australia.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
± standard deviation	Gold (Au)	[7440-57-5]	0,337 ± 0,013	ppm	Pb Fire Assay	
± standard deviation	Gold (Au)	[7440-57-5]	0,318 ± 0,015	ppm	Aqua Regia Digestion (sample weights 10-50g)	
± standard deviation	Gold (Au)	[7440-57-5]	0,321 ± 0,022	ppm	Cyanide Leach	
± standard deviation	Gold (Au)	[7440-57-5]	0,323 ± 0,024	ppm	X-ray Photon Assay	
± standard deviation	Silver (Ag)	[7440-22-4]	0,13 ± 0,014	ppm	Aqua Regia Digestion	
± standard deviation	Aluminium (Al)	[7429-90-5]	3,49 ± 0,171	%	Aqua Regia Digestion	
± standard deviation	Arsenic (As)	[7440-38-2]	17,1 ± 1,14	ppm	Aqua Regia Digestion	
± standard deviation	Boron (B)	[7440-42-8]	19,1 ± 2,4	ppm	Aqua Regia Digestion	
± standard deviation	Barium (Ba)	[7440-39-3]	16,7 ± 1,59	ppm	Aqua Regia Digestion	
± standard deviation	Beryllium (Be)	[7440-41-7]	0,19 ± 0,018	ppm	Aqua Regia Digestion	
± standard deviation	Calcium (Ca)	[7440-70-2]	2,68 ± 0,419	%	Aqua Regia Digestion	
± standard deviation	Cadmium (Cd)	[7440-43-9]	0,22 ± 0,017	ppm	Aqua Regia Digestion	
± standard deviation	Cerium (Ce)	[7440-45-1]	7,09 ± 0,426	ppm	Aqua Regia	

± standard deviation	Cobalt (Co)	[7440-48-4]	30,6 ± 1,63	ppm	Digestion Aqua Regia
± standard deviation	Chromium (Cr)	[7440-47-3]	12,4 ± 1,3	ppm	Digestion Aqua Regia
± standard deviation	Caesium (Cs)	[7440-46-2]	0,27 ± 0,016	ppm	Digestion Aqua Regia
± standard deviation	Copper (Cu)	[7440-50-8]	169 ± 8	ppm	Digestion Aqua Regia
± standard deviation	Dysprosium (Dy)	[7429-91-6]	2,1 ± 0,31	ppm	Digestion Aqua Regia
± standard deviation	Erbium (Er)	[7440-52-0]	1,2 ± 0,14	ppm	Digestion Aqua Regia
± standard deviation	Europium (Eu)	[7440-53-1]	0,34 ± 0,024	ppm	Digestion Aqua Regia
± standard deviation	Iron (Fe)	[7439-89-6]	5,58 ± 0,18	%	Digestion Aqua Regia
± standard deviation	Gallium (Ga)	[7440-55-3]	10,1 ± 1,1	ppm	Digestion Aqua Regia
± standard deviation	Gadolinium (Gd)	[7440-54-2]	1,87 ± 0,25	ppm	Digestion Aqua Regia
± standard deviation	Germanium (Ge)	[7440-56-4]	0,13 ± 0,02	ppm	Digestion Aqua Regia
± standard deviation	Hafnium (Hf)	[7440-58-6]	0,48 ± 0,08	ppm	Digestion Aqua Regia
± standard deviation	Holmium (Ho)	[7440-60-0]	0,41 ± 0,04	ppm	Digestion Aqua Regia
± standard deviation	Indium (In)	[7440-74-6]	0,025 ± 0,004	ppm	Digestion Aqua Regia
± standard deviation	Potassium (K)	[7440-09-7]	0,081 ± 0,009	%	Digestion Aqua Regia
± standard deviation	Lanthanum (La)	[7439-91-0]	2,79 ± 0,142	ppm	Digestion Aqua Regia
± standard deviation	Lithium (Li)	[7439-93-2]	9,45 ± 0,672	ppm	Digestion Aqua Regia
± standard deviation	Lutetium (Lu)	[7439-94-3]	0,16 ± 0,02	ppm	Digestion Aqua Regia
± standard deviation	Magnesium (Mg)	[7439-95-4]	1,69 ± 0,046	%	Digestion Aqua Regia

± standard deviation	Manganese (Mn)	[7439-96-5]	0,074 ± 0,004	%	Digestion Aqua Regia
± standard deviation	Molybdenum (Mo)	[7439-98-7]	0,64 ± 0,042	ppm	Digestion Aqua Regia
± standard deviation	Sodium (Na)	[7440-23-5]	0,102 ± 0,009	%	Digestion Aqua Regia
± standard deviation	Neodymium (Nd)	[7440-00-8]	4,95 ± 0,54	ppm	Digestion Aqua Regia
± standard deviation	Nickel (Ni)	[7440-02-0]	54 ± 2,2	ppm	Digestion Aqua Regia
± standard deviation	Phosphorus (P)	[7723-14-0]	0,038 ± 0,002	%	Digestion Aqua Regia
± standard deviation	Lead (Pb)	[7439-92-1]	8,24 ± 0,424	ppm	Digestion Aqua Regia
± standard deviation	Praseodymium (Pr)	[7440-10-0]	1,04 ± 0,11	ppm	Digestion Aqua Regia
± standard deviation	Platinum (Pt)	[7440-06-4]	15,4 ± 1,4		Digestion Aqua Regia
± standard deviation	Rubidium (Rb)	[7440-17-7]	2,69 ± 0,31	ppm	Digestion Aqua Regia
± standard deviation	Rhenium (Re)	[7440-15-5]	0,002 ± 0,001	ppm	Digestion Aqua Regia
± standard deviation	Sulfur (S)	[7704-34-9]	0,187 ± 0,012	%	Digestion Aqua Regia
± standard deviation	Antimony (Sb)	[7440-36-0]	0,32 ± 0,08	ppm	Digestion Aqua Regia
± standard deviation	Scandium (Sc)	[7440-20-2]	5,56 ± 0,57	ppm	Digestion Aqua Regia
± standard deviation	Samarium (Sm)	[7440-19-9]	1,38 ± 0,066	ppm	Digestion Aqua Regia
± standard deviation	Tin (Sn)	[7440-31-5]	0,47 ± 0,11	ppm	Digestion Aqua Regia
± standard deviation	Strontium (Sr)	[7440-24-6]	36,8 ± 5,6	ppm	Digestion Aqua Regia
± standard deviation	Tantalum (Ta)	[7440-25-7]	< 0,010 ± IND	ppm	Digestion Aqua Regia
± standard deviation	Terbium (Tb)	[7440-27-9]	0,31 ± 0,03	ppm	Digestion Aqua Regia

± standard deviation	Tellurium (Te)	[13494-80-9]	0,049 ± 0,009	ppm	Digestion Aqua Regia
± standard deviation	Thorium (Th)	[7440-29-1]	0,34 ± 0,04	ppm	Digestion Aqua Regia
± standard deviation	Titanium (Ti)	[7440-32-6]	0,333 ± 0,064	%	Digestion Aqua Regia
± standard deviation	Thulium (Tm)	[7440-30-4]	0,17 ± 0,014	ppm	Digestion Aqua Regia
± standard deviation	Uranium (U)	[7440-61-1]	0,093 ± 0,006	ppm	Digestion Aqua Regia
± standard deviation	Vanadium (V)	[7440-62-2]	139 ± 15	ppm	Digestion Aqua Regia
± standard deviation	Tungsten (W)	[7440-33-7]	5,44 ± 0,86	ppm	Digestion Aqua Regia
± standard deviation	Yttrium (Y)	[7440-65-5]	11,6 ± 1,03	ppm	Digestion Aqua Regia
± standard deviation	Ytterbium (Yb)	[7440-64-4]	1,12 ± 0,13	ppm	Digestion Aqua Regia
± standard deviation	Zinc (Zn)	[7440-66-6]	85 ± 5,3	ppm	Digestion Aqua Regia
± standard deviation	Zirconium (Zr)	[7440-67-7]	16 ± 1,37	ppm	Digestion Aqua Regia
± standard deviation	Silver (Ag)	[7440-22-4]	0,128 ± 0,014	ppm	Digestion 4-Acid
± standard deviation	Aluminium (Al)	[7429-90-5]	7,35 ± 0,206	%	Digestion 4-Acid
± standard deviation	Arsenic (As)	[7440-38-2]	17,3 ± 1,53	ppm	Digestion 4-Acid
± standard deviation	Barium (Ba)	[7440-39-3]	79 ± 3,6	ppm	Digestion 4-Acid
± standard deviation	Beryllium (Be)	[7440-41-7]	0,34 ± 0,029	ppm	Digestion 4-Acid
± standard deviation	Calcium (Ca)	[7440-70-2]	7,74 ± 0,401	%	Digestion 4-Acid
± standard deviation	Cadmium (Cd)	[7440-43-9]	0,26 ± 0,03	ppm	Digestion 4-Acid
± standard deviation	Cerium (Ce)	[7440-45-1]	10,2 ± 0,63	ppm	Digestion 4-Acid

± standard deviation	Cobalt (Co)	[7440-48-4]	44,7 ± 2,47	ppm	estion 4-Acid Dig
± standard deviation	Chromium (Cr)	[7440-47-3]	106 ± 12	ppm	estion 4-Acid Dig
± standard deviation	Caesium (Cs)	[7440-46-2]	0,38 ± 0,019	ppm	estion 4-Acid Dig
± standard deviation	Copper (Cu)	[7440-50-8]	172 ± 5	ppm	estion 4-Acid Dig
± standard deviation	Dysprosium (Dy)	[7429-91-6]	3,79 ± 0,163	ppm	estion 4-Acid Dig
± standard deviation	Erbium (Er)	[7440-52-0]	2,32 ± 0,113	ppm	estion 4-Acid Dig
± standard deviation	Europium (Eu)	[7440-53-1]	0,92 ± 0,043	ppm	estion 4-Acid Dig
± standard deviation	Iron (Fe)	[7439-89-6]	8,04 ± 0,287	%	estion 4-Acid Dig
± standard deviation	Gallium (Ga)	[7440-55-3]	15,7 ± 0,98	ppm	estion 4-Acid Dig
± standard deviation	Gadolinium (Gd)	[7440-54-2]	3,35 ± 0,261	ppm	estion 4-Acid Dig
± standard deviation	Hafnium (Hf)	[7440-58-6]	1,58 ± 0,094	ppm	estion 4-Acid Dig
± standard deviation	Holmium (Ho)	[7440-60-0]	0,8 ± 0,037	ppm	estion 4-Acid Dig
± standard deviation	Indium (In)	[7440-74-6]	0,07 ± 0,006	ppm	estion 4-Acid Dig
± standard deviation	Potassium (K)	[7440-09-7]	0,265 ± 0,016	%	estion 4-Acid Dig
± standard deviation	Lanthanum (La)	[7439-91-0]	4,08 ± 0,352	ppm	estion 4-Acid Dig
± standard deviation	Lithium (Li)	[7439-93-2]	10,5 ± 0,85	ppm	estion 4-Acid Dig
± standard deviation	Lutetium (Lu)	[7439-94-3]	0,33 ± 0,016	ppm	estion 4-Acid Dig
± standard deviation	Magnesium (Mg)	[7439-95-4]	3,99 ± 0,166	%	estion 4-Acid Dig
± standard deviation	Manganese (Mn)	[7439-96-5]	0,137 ± 0,004	%	estion 4-Acid Dig

± standard deviation	Molybdenum (Mo)	[7439-98-7]	0,72 ± 0,07	ppm	estion 4-Acid Dig
± standard deviation	Sodium (Na)	[7440-23-5]	1,68 ± 0,075	%	estion 4-Acid Dig
± standard deviation	Niobium (Nb)	[7440-03-1]	3,39 ± 0,253	ppm	estion 4-Acid Dig
± standard deviation	Neodymium (Nd)	[7440-00-8]	7,56 ± 0,343	ppm	estion 4-Acid Dig
± standard deviation	Nickel (Ni)	[7440-02-0]	86 ± 5,8	ppm	estion 4-Acid Dig
± standard deviation	Phosphorus (P)	[7723-14-0]	0,04 ± 0,002	%	estion 4-Acid Dig
± standard deviation	Lead (Pb)	[7439-92-1]	8,54 ± 0,656	ppm	estion 4-Acid Dig
± standard deviation	Praseodymium (Pr)	[7440-10-0]	1,5 ± 0,093	ppm	estion 4-Acid Dig
± standard deviation	Rubidium (Rb)	[7440-17-7]	6,37 ± 0,455	ppm	estion 4-Acid Dig
± standard deviation	Sulfur (S)	[7704-34-9]	0,188 ± 0,016	%	estion 4-Acid Dig
± standard deviation	Antimony (Sb)	[7440-36-0]	0,56 ± 0,05	ppm	estion 4-Acid Dig
± standard deviation	Scandium (Sc)	[7440-20-2]	43,7 ± 2,36	ppm	estion 4-Acid Dig
± standard deviation	Samarium (Sm)	[7440-19-9]	2,39 ± 0,137	ppm	estion 4-Acid Dig
± standard deviation	Tin (Sn)	[7440-31-5]	0,77 ± 0,11	ppm	estion 4-Acid Dig
± standard deviation	Strontium (Sr)	[7440-24-6]	231 ± 10	ppm	estion 4-Acid Dig
± standard deviation	Tantalum (Ta)	[7440-25-7]	0,23 ± 0,03	ppm	estion 4-Acid Dig
± standard deviation	Terbium (Tb)	[7440-27-9]	0,57 ± 0,033	ppm	estion 4-Acid Dig
± standard deviation	Tellurium (Te)	[13494-80-9]	0,074 ± 0,021	ppm	estion 4-Acid Dig
± standard deviation	Thorium (Th)	[7440-29-1]	0,5 ± 0,038	ppm	estion 4-Acid Dig

± standard deviation	Titanium (Ti)	[7440-32-6]	0,639 ± 0,026	%	estion 4-Acid Dig
± standard deviation	Thallium (Tl)	[7440-28-0]	0,08 ± 0,008	ppm	estion 4-Acid Dig
± standard deviation	Thulium (Tm)	[7440-30-4]	0,34 ± 0,012	ppm	estion 4-Acid Dig
± standard deviation	Uranium (U)	[7440-61-1]	0,15 ± 0,02	ppm	estion 4-Acid Dig
± standard deviation	Vanadium (V)	[7440-62-2]	292 ± 11	ppm	estion 4-Acid Dig
± standard deviation	Tungsten (W)	[7440-33-7]	8,14 ± 0,633	ppm	estion 4-Acid Dig
± standard deviation	Yttrium (Y)	[7440-65-5]	20,6 ± 1,02	ppm	estion 4-Acid Dig
± standard deviation	Ytterbium (Yb)	[7440-64-4]	2,26 ± 0,133	ppm	estion 4-Acid Dig
± standard deviation	Zinc (Zn)	[7440-66-6]	98 ± 5,1	ppm	estion 4-Acid Dig
± standard deviation	Zirconium (Zr)	[7440-67-7]	50 ± 3	ppm	estion 4-Acid Dig