

Soil, CRM, Soil, Au Pd Pt fire assay, C S combustion, rest Fusion XRF, Powder

Art. ID OREAS-25a-10G
Unit 10 g (powder)
Deliverydetails No Dangerous Good /not restricted

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	Gold (Au)	[7440-57-5]	< 2	ppb	Pb Fire As say	
	Copper (Cu)	[7440-50-8]	0,00339	%	4-Acid Dig estion	
	Lead (Pb)	[7439-92-1]	0,00252	%	4-Acid Dig estion	
	Aluminium (Al)	[7429-90-5]	8,87	%	4-Acid Dig estion	
	Barium (Ba)	[7440-39-3]	0,0147	%	4-Acid Dig estion	
	Beryllium (Be)	[7440-41-7]	0,000102	%	4-Acid Dig estion	
	Bismuth (Bi)	[7440-69-9]	0,000035	%	4-Acid Dig estion	
	Calcium (Ca)	[7440-70-2]	0,309	%	4-Acid Dig estion	
	Cerium (Ce)	[7440-45-1]	0,00489	%	4-Acid Dig estion	
	Cobalt (Co)	[7440-48-4]	0,00082	%	4-Acid Dig estion	
	Chromium (Cr)	[7440-47-3]	0,0115	%	4-Acid Dig estion	
	Cesium (Cs)		0,000646	%	4-Acid Dig estion	
	Iron (Fe)	[7439-89-6]	6,6	%	4-Acid Dig estion	
	Gallium (Ga)	[7440-55-3]	0,00259	%	4-Acid Dig estion	
	Hafnium (Hf)	[7440-58-6]	0,000453	%	4-Acid Dig estion	
	Potassium (K)	[7440-09-7]	0,482	%	4-Acid Dig	

					estion
Lanthanum (La)	[7439-91-0]	0,00218	%	4-Acid Dig	estion
Lithium (Li)	[7439-93-2]	0,00367	%	4-Acid Dig	estion
Magnesium (Mg)	[7439-95-4]	0,327	%	4-Acid Dig	estion
Manganese (Mn)	[7439-96-5]	0,047	%	4-Acid Dig	estion
Molybdenum (Mo)	[7439-98-7]	0,000255	%	4-Acid Dig	estion
Sodium (Na)	[7440-23-5]	0,134	%	4-Acid Dig	estion
Niobium (Nb)	[7440-03-1]	0,00224	%	4-Acid Dig	estion
Nickel (Ni)	[7440-02-0]	0,00458	%	4-Acid Dig	estion
Phosphorus (P)	[7723-14-0]	0,048	%	4-Acid Dig	estion
Rubidium (Rb)	[7440-17-7]	0,0061	%	4-Acid Dig	estion
Sulfur (S)	[7704-34-9]	0,051	%	4-Acid Dig	estion
Antimony (Sb)	[7440-36-0]	0,000067	%	4-Acid Dig	estion
Scandium (Sc)	[7440-20-2]	0,00137	%	4-Acid Dig	estion
Tin (Sn)	[7440-31-5]	0,000406	%	4-Acid Dig	estion
Strontium (Sr)	[7440-24-6]	0,00485	%	4-Acid Dig	estion
Tantalum (Ta)	[7440-25-7]	0,00016	%	4-Acid Dig	estion
Thorium (Th)	[7440-29-1]	0,00158	%	4-Acid Dig	estion
Titanium (Ti)	[7440-32-6]	0,977	%	4-Acid Dig	estion
Thallium (Tl)	[7440-28-0]	0,000035	%	4-Acid Dig	

					estion
Uranium (U)	[7440-61-1]	0,000294	%	4-Acid Dig	estion
Vanadium (V)	[7440-62-2]	0,0157	%	4-Acid Dig	estion
Tungsten (W)	[7440-33-7]	0,00021	%	4-Acid Dig	estion
Yttrium (Y)	[7440-65-5]	0,00123	%	4-Acid Dig	estion
Zinc (Zn)	[7440-66-6]	0,00444	%	4-Acid Dig	estion
Aluminium (Al)	[7429-90-5]	5,85	%	Aqua Regia Digestion	
Barium (Ba)	[7440-39-3]	0,0056	%	Aqua Regia Digestion	
Bismuth (Bi)	[7440-69-9]	0,00003	%	Aqua Regia Digestion	
Calcium (Ca)	[7440-70-2]	0,15	%	Aqua Regia Digestion	
Cerium (Ce)	[7440-45-1]	0,00331	%	Aqua Regia Digestion	
Cobalt (Co)	[7440-48-4]	0,000572	%	Aqua Regia Digestion	
Chromium (Cr)	[7440-47-3]	0,0073	%	Aqua Regia Digestion	
Cesium (Cs)		0,000445	%	Aqua Regia Digestion	
Copper (Cu)	[7440-50-8]	0,00249	%	Aqua Regia Digestion	
Iron (Fe)	[7439-89-6]	5,99	%	Aqua Regia Digestion	
Gallium (Ga)	[7440-55-3]	0,00206	%	Aqua Regia Digestion	
Potassium (K)	[7440-09-7]	0,131	%	Aqua Regia Digestion	
Manganese (Mn)	[7439-96-5]	0,042	%	Aqua Regia Digestion	
Nickel (Ni)	[7440-02-0]	0,00269	%	Aqua Regia	

					Digestion
Phosphorus (P)	[7723-14-0]	0,037	%		Aqua Regia
					Digestion
Lead (Pb)	[7439-92-1]	0,0021	%		Aqua Regia
					Digestion
Scandium (Sc)	[7440-20-2]	0,000864	%		Aqua Regia
					Digestion
Tin (Sn)	[7440-31-5]	0,00027	%		Aqua Regia
					Digestion
Strontium (Sr)	[7440-24-6]	0,00173	%		Aqua Regia
					Digestion
Thorium (Th)	[7440-29-1]	0,00107	%		Aqua Regia
					Digestion
Thallium (Tl)	[7440-28-0]	0,00002	%		Aqua Regia
					Digestion
Uranium (U)	[7440-61-1]	0,000149	%		Aqua Regia
					Digestion
Vanadium (V)	[7440-62-2]	0,0117	%		Aqua Regia
					Digestion
Yttrium (Y)	[7440-65-5]	0,000456	%		Aqua Regia
					Digestion
Zinc (Zn)	[7440-66-6]	0,00301	%		Aqua Regia
					Digestion
Aluminium (Al)	[7429-90-5]	9,25	%		Borate / P eroxide Fu sion ICP
Barium (Ba)	[7440-39-3]	0,0151	%		Borate / P eroxide Fu sion ICP
Calcium (Ca)	[7440-70-2]	0,302	%		Borate / P eroxide Fu sion ICP
Cerium (Ce)	[7440-45-1]	0,0051	%		Borate / P eroxide Fu sion ICP
Cobalt (Co)	[7440-48-4]	0,000805	%		Borate / P eroxide Fu sion ICP

Chromium (Cr)	[7440-47-3]	0,0125	%	Borate / Peroxide Fusion ICP
Cesium (Cs)		0,000636	%	Borate / Peroxide Fusion ICP
Dysprosium (Dy)	[7429-91-6]	0,000431	%	Borate / Peroxide Fusion ICP
Erbium (Er)	[7440-52-0]	0,000276	%	Borate / Peroxide Fusion ICP
Europium (Eu)	[7440-53-1]	0,00008	%	Borate / Peroxide Fusion ICP
Iron (Fe)	[7439-89-6]	6,72	%	Borate / Peroxide Fusion ICP
Gallium (Ga)	[7440-55-3]	0,00254	%	Borate / Peroxide Fusion ICP
Gadolinium (Gd)	[7440-54-2]	0,000379	%	Borate / Peroxide Fusion ICP
Hafnium (Hf)	[7440-58-6]	0,00111	%	Borate / Peroxide Fusion ICP
Holmium (Ho)	[7440-60-0]	0,000092	%	Borate / Peroxide Fusion ICP
Potassium (K)	[7440-09-7]	0,493	%	Borate / Peroxide Fusion ICP
Lanthanum (La)	[7439-91-0]	0,00233	%	Borate / Peroxide Fusion ICP
Lutetium (Lu)	[7439-94-3]	0,000045	%	Borate / Peroxide Fusion ICP

					sion ICP
Magnesium (Mg)	[7439-95-4]	0,324	%		Borate / P eroxide Fu sion ICP
Manganese (Mn)	[7439-96-5]	0,049	%		Borate / P eroxide Fu sion ICP
Niobium (Nb)	[7440-03-1]	0,00265	%		Borate / P eroxide Fu sion ICP
Neodymium (Nd)	[7440-00-8]	0,002	%		Borate / P eroxide Fu sion ICP
Phosphorus (P)	[7723-14-0]	0,049	%		Borate / P eroxide Fu sion ICP
Praseodymium (Pr)	[7440-10-0]	0,000533	%		Borate / P eroxide Fu sion ICP
Rubidium (Rb)	[7440-17-7]	0,006	%		Borate / P eroxide Fu sion ICP
Scandium (Sc)	[7440-20-2]	0,00135	%		Borate / P eroxide Fu sion ICP
Silicon (Si)	[7440-21-3]	25,85	%		Borate / P eroxide Fu sion ICP
Samarium (Sm)	[7440-19-9]	0,00039	%		Borate / P eroxide Fu sion ICP
Tin (Sn)	[7440-31-5]	0,000483	%		Borate / P eroxide Fu sion ICP
Strontium (Sr)	[7440-24-6]	0,00494	%		Borate / P eroxide Fu sion ICP
Tantalum (Ta)	[7440-25-7]	0,000199	%		Borate / P

Table 1. Concentration of heavy metals in the soil (mg/kg)				
Element	Concentration (mg/kg)	Concentration (mg/kg)	Concentration (mg/kg)	Concentration (mg/kg)
Terbium (Tb)	[7440-27-9]	0,000066	%	Borate / Peroxide Fusion ICP
Thorium (Th)	[7440-29-1]	0,00164	%	Borate / Peroxide Fusion ICP
Titanium (Ti)	[7440-32-6]	1,14	%	Borate / Peroxide Fusion ICP
Thulium (Tm)	[7440-30-4]	0,000043	%	Borate / Peroxide Fusion ICP
Uranium (U)	[7440-61-1]	0,000351	%	Borate / Peroxide Fusion ICP
Vanadium (V)	[7440-62-2]	0,0164	%	Borate / Peroxide Fusion ICP
Tungsten (W)	[7440-33-7]	0,000289	%	Borate / Peroxide Fusion ICP
Yttrium (Y)	[7440-65-5]	0,00251	%	Borate / Peroxide Fusion ICP
Ytterbium (Yb)	[7440-64-4]	0,000289	%	Borate / Peroxide Fusion ICP
Zinc (Zn)	[7440-66-6]	0,00468	%	Borate / Peroxide Fusion ICP
Zirconium (Zr)	[7440-67-7]	0,0398	%	Borate / Peroxide Fusion ICP
Carbon (C)	[7440-44-0]	1,56	%	Infrared Combustion
Sulfur (S)	[7704-34-9]	0,044	%	Infrared C

				ombustion
Loss on Ignition (L.O.I) (1000 °C)		11,7	%	Thermograv imetry
Al ₂ O ₃		18,24	%	Borate Fus ion XRF
CaO		0,438	%	Borate Fus ion XRF
Fe ₂ O ₃		9,77	%	Borate Fus ion XRF
Potassium oxide (K ₂ O)		0,599	%	Borate Fus ion XRF
Manganese oxide (MnO)		0,063	%	Borate Fus ion XRF
Sodium oxide (Na ₂ O)	[1313-59-3]	0,191	%	Borate Fus ion XRF
Phosphorous(V) oxide (P 2O ₅)		0,117	%	Borate Fus ion XRF
Silicon dioxide (SiO ₂)	[7631-86-9]	56,7	%	Borate Fus ion XRF
Titanium dioxide (TiO ₂)	[13463-67-7]	1,93	%	Borate Fus ion XRF