

## **Gold Ore (Cortez Mine, Nevada, USA), CRM**

Art. ID	OREAS-282-60G
Unit	60 g (powder)
Deliverydetails	No Dangerous Good /not restricted

### Description

Certified Reference Material (CRM) OREAS 282 was prepared from high-grade refractory gold ore from the Cortez Mine located in Lander and Eureka County, Nevada, USA. The mine is located on the Carlin Trend approximately 75 miles (120 km) southwest of Elko and is owned by Nevada Gold Mines (operated by Barrick).

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
± standard deviation	Gold (Au)	[7440-57-5]	13,71 ± 0,327	ppm	Pb Fire Assay	
± standard deviation	Gold (Au)	[7440-57-5]	13,41 ± 0,314	ppm	X-ray Photon Assay	
± standard deviation	Silver (Ag)	[7440-22-4]	0,611 ± 0,021	ppm	4-Acid Digestion	
± standard deviation	Aluminium (Al)	[7429-90-5]	2,95 ± 0,114	%	4-Acid Digestion	
± standard deviation	Arsenic (As)	[7440-38-2]	2328 ± 103	ppm	4-Acid Digestion	
± standard deviation	Barium (Ba)	[7440-39-3]	100 ± 3	ppm	4-Acid Digestion	
± standard deviation	Beryllium (Be)	[7440-41-7]	0,93 ± 0,056	ppm	4-Acid Digestion	
± standard deviation	Bismuth (Bi)	[7440-69-9]	0,93 ± 0,05	ppm	4-Acid Digestion	
± standard deviation	Calcium (Ca)	[7440-70-2]	17,47 ± 0,91	%	4-Acid Digestion	
± standard deviation	Cadmium (Cd)	[7440-43-9]	1,08 ± 0,051	ppm	4-Acid Digestion	
± standard deviation	Cerium (Ce)	[7440-45-1]	36,9 ± 1,89	ppm	4-Acid Digestion	
± standard deviation	Cobalt (Co)	[7440-48-4]	3,8 ± 0,248	ppm	4-Acid Digestion	
± standard deviation	Chromium (Cr)	[7440-47-3]	32,5 ± 6,3	ppm	4-Acid Digestion	
± standard deviation	Caesium (Cs)	[7440-46-2]	8,24 ± 0,387	ppm	4-Acid Digestion	

± standard deviation	Copper (Cu)	[7440-50-8]	19,2 ± 1,38	ppm	4-Acid Digestion
± standard deviation	Dysprosium (Dy)	[7429-91-6]	2,61 ± 0,121	ppm	4-Acid Digestion
± standard deviation	Erbium (Er)	[7440-52-0]	1,46 ± 0,058	ppm	4-Acid Digestion
± standard deviation	Europium (Eu)	[7440-53-1]	0,65 ± 0,032	ppm	4-Acid Digestion
± standard deviation	Iron (Fe)	[7439-89-6]	1,06 ± 0,04	%	4-Acid Digestion
± standard deviation	Gallium (Ga)	[7440-55-3]	7,15 ± 0,459	ppm	4-Acid Digestion
± standard deviation	Gadolinium (Gd)	[7440-54-2]	3,05 ± 0,197	ppm	4-Acid Digestion
± standard deviation	Hafnium (Hf)	[7440-58-6]	1,63 ± 0,141	ppm	4-Acid Digestion
± standard deviation	Holmium (Ho)	[7440-60-0]	0,51 ± 0,031	ppm	4-Acid Digestion
± standard deviation	Indium (In)	[7440-74-6]	0,059 ± 0,004	ppm	4-Acid Digestion
± standard deviation	Potassium (K)	[7440-09-7]	1,85 ± 0,093	%	4-Acid Digestion
± standard deviation	Lanthanum (La)	[7439-91-0]	20,5 ± 1,47	ppm	4-Acid Digestion
± standard deviation	Lithium (Li)	[7439-93-2]	21,6 ± 1,16	ppm	4-Acid Digestion
± standard deviation	Lutetium (Lu)	[7439-94-3]	0,19 ± 0,016	ppm	4-Acid Digestion
± standard deviation	Magnesium (Mg)	[7439-95-4]	3,39 ± 0,164	%	4-Acid Digestion
± standard deviation	Manganese (Mn)	[7439-96-5]	0,025 ± 0,001	%	4-Acid Digestion
± standard deviation	Molybdenum (Mo)	[7439-98-7]	13,5 ± 0,51	ppm	4-Acid Digestion
± standard deviation	Sodium (Na)	[7440-23-5]	0,065 ± 0,007	%	4-Acid Digestion
± standard deviation	Niobium (Nb)	[7440-03-1]	5,73 ± 0,307	ppm	4-Acid Digestion

± standard deviation	Neodymium (Nd)	[7440-00-8]	17,5 ± 0,73	ppm	4-Acid Digestion
± standard deviation	Nickel (Ni)	[7440-02-0]	21,8 ± 1,44	ppm	4-Acid Digestion
± standard deviation	Phosphorus (P)	[7723-14-0]	0,032 ± 0,002	%	4-Acid Digestion
± standard deviation	Lead (Pb)	[7439-92-1]	18,8 ± 1,14	ppm	4-Acid Digestion
± standard deviation	Praseodymium (Pr)	[7440-10-0]	4,6 ± 0,174	ppm	4-Acid Digestion
± standard deviation	Rubidium (Rb)	[7440-17-7]	126 ± 5	ppm	4-Acid Digestion
± standard deviation	Rhenium (Re)	[7440-15-5]	0,022 ± 0,002	ppm	4-Acid Digestion
± standard deviation	Sulfur (S)	[7704-34-9]	0,717 ± 0,049	%	4-Acid Digestion
± standard deviation	Antimony (Sb)	[7440-36-0]	15,2 ± 0,83	ppm	4-Acid Digestion
± standard deviation	Scandium (Sc)	[7440-20-2]	3,94 ± 0,246	ppm	4-Acid Digestion
± standard deviation	Selenium (Se)	[7782-49-2]	2,35 ± 0,48	ppm	4-Acid Digestion
± standard deviation	Samarium (Sm)	[7440-19-9]	3,33 ± 0,111	ppm	4-Acid Digestion
± standard deviation	Tin (Sn)	[7440-31-5]	1,46 ± 0,112	ppm	4-Acid Digestion
± standard deviation	Strontium (Sr)	[7440-24-6]	277 ± 13	ppm	4-Acid Digestion
± standard deviation	Tantalum (Ta)	[7440-25-7]	0,4 ± 0,03	ppm	4-Acid Digestion
± standard deviation	Terbium (Tb)	[7440-27-9]	0,44 ± 0,03	ppm	4-Acid Digestion
± standard deviation	Tellurium (Te)	[13494-80-9]	0,23 ± 0,03	ppm	4-Acid Digestion
± standard deviation	Thorium (Th)	[7440-29-1]	5,36 ± 0,22	ppm	4-Acid Digestion
± standard deviation	Titanium (Ti)	[7440-32-6]	0,161 ± 0,007	%	4-Acid Digestion

± standard deviation	Thallium (Tl)	[7440-28-0]	28,8 ± 1,06	ppm	4-Acid Digestion
± standard deviation	Thulium (Tm)	[7440-30-4]	0,2 ± 0,006	ppm	4-Acid Digestion
± standard deviation	Uranium (U)	[7440-61-1]	7,31 ± 0,356	ppm	4-Acid Digestion
± standard deviation	Vanadium (V)	[7440-62-2]	105 ± 5	ppm	4-Acid Digestion
± standard deviation	Tungsten (W)	[7440-33-7]	25,9 ± 1,62	ppm	4-Acid Digestion
± standard deviation	Yttrium (Y)	[7440-65-5]	16,6 ± 0,8	ppm	4-Acid Digestion
± standard deviation	Ytterbium (Yb)	[7440-64-4]	1,31 ± 0,065	ppm	4-Acid Digestion
± standard deviation	Zinc (Zn)	[7440-66-6]	121 ± 8	ppm	4-Acid Digestion
± standard deviation	Zirconium (Zr)	[7440-67-7]	58 ± 7	ppm	4-Acid Digestion
± standard deviation	Silver (Ag)	[7440-22-4]	0,577 ± 0,032	ppm	Aqua Regia Digestion
± standard deviation	Aluminium (Al)	[7429-90-5]	0,815 ± 0,074	%	Aqua Regia Digestion
± standard deviation	Arsenic (As)	[7440-38-2]	2320 ± 130	ppm	Aqua Regia Digestion
± standard deviation	Barium (Ba)	[7440-39-3]	29,8 ± 2,38	ppm	Aqua Regia Digestion
± standard deviation	Beryllium (Be)	[7440-41-7]	0,67 ± 0,044	ppm	Aqua Regia Digestion
± standard deviation	Bismuth (Bi)	[7440-69-9]	0,91 ± 0,026	ppm	Aqua Regia Digestion
± standard deviation	Calcium (Ca)	[7440-70-2]	16,35 ± 1,126	%	Aqua Regia Digestion
± standard deviation	Cadmium (Cd)	[7440-43-9]	1,09 ± 0,067	ppm	Aqua Regia Digestion
± standard deviation	Cerium (Ce)	[7440-45-1]	33,8 ± 2,08	ppm	Aqua Regia Digestion
± standard deviation	Cobalt (Co)	[7440-48-4]	3,61 ± 0,38	ppm	Aqua Regia Digestion

± standard deviation	Chromium (Cr)	[7440-47-3]	23,8 ± 1,73	ppm	Aqua Regia Digestion
± standard deviation	Caesium (Cs)	[7440-46-2]	4,23 ± 0,73	ppm	Aqua Regia Digestion
± standard deviation	Copper (Cu)	[7440-50-8]	18,6 ± 1,46	ppm	Aqua Regia Digestion
± standard deviation	Dysprosium (Dy)	[7429-91-6]	2,43 ± 0,203	ppm	Aqua Regia Digestion
± standard deviation	Erbium (Er)	[7440-52-0]	1,26 ± 0,072	ppm	Aqua Regia Digestion
± standard deviation	Europium (Eu)	[7440-53-1]	0,6 ± 0,054	ppm	Aqua Regia Digestion
± standard deviation	Iron (Fe)	[7439-89-6]	0,998 ± 0,042	%	Aqua Regia Digestion
± standard deviation	Gallium (Ga)	[7440-55-3]	2,99 ± 0,37	ppm	Aqua Regia Digestion
± standard deviation	Gadolinium (Gd)	[7440-54-2]	2,92 ± 0,226	ppm	Aqua Regia Digestion
± standard deviation	Germanium (Ge)	[7440-56-4]	< 0,10 ± IND	ppm	Aqua Regia Digestion
± standard deviation	Hafnium (Hf)	[7440-58-6]	0,35 ± 0,029	ppm	Aqua Regia Digestion
± standard deviation	Mercury (Hg)	[7439-97-6]	40,3 ± 2,02	ppm	Aqua Regia Digestion
± standard deviation	Holmium (Ho)	[7440-60-0]	0,45 ± 0,024	ppm	Aqua Regia Digestion
± standard deviation	Indium (In)	[7440-74-6]	0,056 ± 0,006	ppm	Aqua Regia Digestion
± standard deviation	Potassium (K)	[7440-09-7]	0,412 ± 0,025	%	Aqua Regia Digestion
± standard deviation	Lanthanum (La)	[7439-91-0]	18,2 ± 1,25	ppm	Aqua Regia Digestion
± standard deviation	Lithium (Li)	[7439-93-2]	12,3 ± 0,61	ppm	Aqua Regia Digestion
± standard deviation	Lutetium (Lu)	[7439-94-3]	0,15 ± 0,011	ppm	Aqua Regia Digestion
± standard deviation	Magnesium (Mg)	[7439-95-4]	2,8 ± 0,07	%	Aqua Regia Digestion

± standard deviation	Manganese (Mn)	[7439-96-5]	0,024 ± 0,002	%	Aqua Regia Digestion
± standard deviation	Molybdenum (Mo)	[7439-98-7]	13,1 ± 0,83	ppm	Aqua Regia Digestion
± standard deviation	Niobium (Nb)	[7440-03-1]	0,17 ± 0,05	ppm	Aqua Regia Digestion
± standard deviation	Neodymium (Nd)	[7440-00-8]	16,2 ± 1,61	ppm	Aqua Regia Digestion
± standard deviation	Nickel (Ni)	[7440-02-0]	21 ± 1,9	ppm	Aqua Regia Digestion
± standard deviation	Phosphorus (P)	[7723-14-0]	0,031 ± 0,003	%	Aqua Regia Digestion
± standard deviation	Lead (Pb)	[7439-92-1]	17,5 ± 1,1	ppm	Aqua Regia Digestion
± standard deviation	Praseodymium (Pr)	[7440-10-0]	4,21 ± 0,45	ppm	Aqua Regia Digestion
± standard deviation	Rubidium (Rb)	[7440-17-7]	39 ± 3,85	ppm	Aqua Regia Digestion
± standard deviation	Rhenium (Re)	[7440-15-5]	0,024 ± 0,002	ppm	Aqua Regia Digestion
± standard deviation	Sulfur (S)	[7704-34-9]	0,708 ± 0,056	%	Aqua Regia Digestion
± standard deviation	Antimony (Sb)	[7440-36-0]	10,5 ± 1,2	ppm	Aqua Regia Digestion
± standard deviation	Scandium (Sc)	[7440-20-2]	3,52 ± 0,324	ppm	Aqua Regia Digestion
± standard deviation	Selenium (Se)	[7782-49-2]	2,35 ± 0,4	ppm	Aqua Regia Digestion
± standard deviation	Samarium (Sm)	[7440-19-9]	3,13 ± 0,284	ppm	Aqua Regia Digestion
± standard deviation	Tin (Sn)	[7440-31-5]	1,02 ± 0,094	ppm	Aqua Regia Digestion
± standard deviation	Strontium (Sr)	[7440-24-6]	218 ± 18	ppm	Aqua Regia Digestion
± standard deviation	Tantalum (Ta)	[7440-25-7]	< 0,010 ± IND	ppm	Aqua Regia Digestion
± standard deviation	Terbium (Tb)	[7440-27-9]	0,42 ± 0,032	ppm	Aqua Regia Digestion

± standard deviation	Tellurium (Te)	[13494-80-9]	0,24 ± 0,03	ppm	Aqua Regia Digestion
± standard deviation	Thorium (Th)	[7440-29-1]	4,71 ± 0,232	ppm	Aqua Regia Digestion
± standard deviation	Titanium (Ti)	[7440-32-6]	0,02 ± 0,002	%	Aqua Regia Digestion
± standard deviation	Thallium (Tl)	[7440-28-0]	25,3 ± 1,46	ppm	Aqua Regia Digestion
± standard deviation	Thulium (Tm)	[7440-30-4]	0,17 ± 0,014	ppm	Aqua Regia Digestion
± standard deviation	Uranium (U)	[7440-61-1]	6,17 ± 0,335	ppm	Aqua Regia Digestion
± standard deviation	Vanadium (V)	[7440-62-2]	60 ± 5,1	ppm	Aqua Regia Digestion
± standard deviation	Tungsten (W)	[7440-33-7]	4,46 ± 0,55	ppm	Aqua Regia Digestion
± standard deviation	Yttrium (Y)	[7440-65-5]	15 ± 0,7	ppm	Aqua Regia Digestion
± standard deviation	Ytterbium (Yb)	[7440-64-4]	1,11 ± 0,055	ppm	Aqua Regia Digestion
± standard deviation	Zinc (Zn)	[7440-66-6]	112 ± 7	ppm	Aqua Regia Digestion
± standard deviation	Zirconium (Zr)	[7440-67-7]	12 ± 1,6	ppm	Aqua Regia Digestion