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Hard Rock Mine Waste

Art. ID	NIST-2780a
Unit	50 g
Deliverydetails	No Dangerous Good /not restricted

Description

This Standard Reference Material (SRM) is intended primarily for use in validation of chemical and instrumental methods of analysis used to determine elements in hard rock mine waste and materials of a similar matrix. It can be used to validate value assignment of in-house reference materials. NIST-2780a is composed of material collected from waste piles of abandoned mine sites in the mountains of central Colorado. A unit of NIST-2780a consists of approximately 50 g of material of which 90 % passes a 150 µm (No. 100) sieve. /// Sample value(s) - please ask for current certificate.

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
Certified value	Aluminium (Al)	[7429-90-5]	8,43	%		
Certified value	Barium (Ba)	[7440-39-3]	0,093	%		
Certified value	Calcium (Ca)	[7440-70-2]	0,247	%		
Certified value	Iron (Fe)	[7439-89-6]	8,75	%		
Certified value	Lead (Pb)	[7439-92-1]	0,665	%		
Certified value	Magnesium (Mg)	[7439-95-4]	0,465	%		
Certified value	Potassium (K)	[7440-09-7]	3,99	%		
Certified value	Silicon (Si)	[7440-21-3]	24,1	%		
Certified value	Sodium (Na)	[7440-23-5]	0,108	%		
Certified value	Sulfur (S)	[7704-34-9]	8,85	%		
Certified value	Titanium (Ti)	[7440-32-6]	0,643	%		
Certified value	Zinc (Zn)	[7440-66-6]	0,102	%		
Certified value	Antimony (Sb)	[7440-36-0]	18,3	mg/kg		
Certified value	Arsenic (As)	[7440-38-2]	65,9	mg/kg		
Certified value	Cerium (Ce)	[7440-45-1]	67,7	mg/kg		
Certified value	Cesium (Cs)		8,3	mg/kg		
Certified value	Chromium (Cr)	[7440-47-3]	205	mg/kg		
Certified value	Cobalt (Co)	[7440-48-4]	16,5	mg/kg		
Certified value	Copper (Cu)	[7440-50-8]	240	mg/kg		
Certified value	Gold (Au)	[7440-57-5]	6,6	mg/kg		
Certified value	Lanthanum (La)	[7439-91-0]	34,4	mg/kg		
Certified value	Manganese (Mn)	[7439-96-5]	490	mg/kg		
Certified value	Molybdenum (Mo)	[7439-98-7]	25	mg/kg		
Certified value	Neodymium (Nd)	[7440-00-8]	28,3	mg/kg		
Certified value	Nickel (Ni)	[7440-02-0]	95	mg/kg		
Certified value	Phosphorus (P)	[7723-14-0]	286	mg/kg		

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Certified value	Rubidium (Rb)	[7440-17-7]	220	mg/kg
Certified value	Samarium (Sm)	[7440-19-9]	4,7	mg/kg
Certified value	Scandium (Sc)	[7440-20-2]	15,6	mg/kg
Certified value	Silver (Ag)	[7440-22-4]	72,5	mg/kg
Certified value	Strontium (Sr)	[7440-24-6]	121	mg/kg
Certified value	Thorium (Th)	[7440-29-1]	12	mg/kg
Certified value	Uranium (U)	[7440-61-1]	4	mg/kg
Certified value	Vanadium (V)	[7440-62-2]	152	mg/kg
Certified value	Zirconium (Zr)	[7440-67-7]	206	mg/kg
Reference value	Beryllium (Be)	[7440-41-7]	1,1	mg/kg
Reference value	Bismuth (Bi)	[7440-69-9]	45	mg/kg
Reference value	Cadmium (Cd)	[7440-43-9]	4,8	mg/kg
Reference value	Dysprosium (Dy)	[7429-91-6]	3,1	mg/kg
Reference value	Erbium (Er)	[7440-52-0]	2	mg/kg
Reference value	Europium (Eu)	[7440-53-1]	0,9	mg/kg
Reference value	Gallium (Ga)	[7440-55-3]	21	mg/kg
Reference value	Gadolinium (Gd)	[7440-54-2]	3,2	mg/kg
Reference value	Hafnium (Hf)	[7440-58-6]	5,5	mg/kg
Reference value	Holmium (Ho)	[7440-60-0]	0,7	mg/kg
Reference value	Indium (In)	[7440-74-6]	1,65	mg/kg
Reference value	Lithium (Li)	[7439-93-2]	14	mg/kg
Reference value	Lutetium (Lu)	[7439-94-3]	0,33	mg/kg
Reference value	Niobium (Nb)	[7440-03-1]	20	mg/kg
Reference value	Praseodymium (Pr)	[7440-10-0]	8	mg/kg
Reference value	Tantalum (Ta)	[7440-25-7]	1,2	mg/kg
Reference value	Tellurium (Te)	[13494-80-9]	22	mg/kg
Reference value	Terbium (Tb)	[7440-27-9]	0,5	mg/kg
Reference value	Thallium (Tl)	[7440-28-0]	5,5	mg/kg
Reference value	Thulium (Tm)	[7440-30-4]	0,31	mg/kg
Reference value	Tin (Sn)	[7440-31-5]	7,2	mg/kg
Reference value	Tungsten (W)	[7440-33-7]	17,4	mg/kg
Reference value	Yttrium (Y)	[7440-65-5]	18	mg/kg
Reference value	Ytterbium (Yb)	[7440-64-4]	2	mg/kg
Reference value	Carbon (C)	[7440-44-0]	0,19	%
Reference value	Loss on ignition (950°C)		11,1	%