CHART OF ANALYSES OF MINERALS OF COMMERCIAL IMPORTANCE.

PART II.

Metal	Principal Ores	Composition Approximate Per Cent.	Hardness	Spec. Grav	Color	Uses
Lithium..... $1.50 pound	Lepidolite.....	Litha 5; silica 49; alumina 27; potash, flourine.....	3 ..	2.3..	Lilac and white..	
	Amblygonite....	Lithium phosphate.....	6 ..	3 ..	White, green, etc	
Magnesium.... 1¼c. pound	Epsomite.....	Magnesia 16; water 51; sulphur tri-oxide 32.....	2.5..	1.7..	White.....	
	Brucite.....	Magnesia 69; water 31.....	2.5..	2.4..	White and green	
	*Magnesite.....	Magnesia 47; carbon di-oxide 53.....	4 ..	3 ..	Various, light....	
	*Asbestos.....	Magnesia, silica, lime, etc....	5 ..	3 ..	Green and brown	
	*Meerschaum....	Magnesia 27; silica 60; water	2 ..	2 ..	Whitish.....	
Manganese.... Ore 20c. unit	*Pyrolusite.....	Manganese 63; oxygen 37...	2 ..	5 ..	Iron black.....	Iron manufacture, good demand at increasing prices for higher grade ores.
	*Rhodochrosite...	Manganese protoxide 62; carbonic acid 38.....	4 ..	3.5..	Rose red.....	
Mercury..... 53c. pound	*Cinnabar.....	Mercury 86; sulphur 14.....	2 ..	9 ..	Red.....	Milling by amalgamation.
	Native.....	(Liquid).....		13.5..	Tin white.....	
Molybdenum... $1.75 pound	*Molybdenite....	Molybdenum 59; sulphur 41	1.5..	4.5..	Lead gray.....	Steel manufacture for certain tools, wire, gun, etc.
	*Wulfenite.....	Molybdenum tri-oxide 34; lead protoxide 65.....	4.5..	6 ..	Iron black.....	
Nickel..... 50c. pound	Niccolite.....	Nickel 44; arsenic 56.....	5 ..	7.5..	Copper red.....	Nickel steel, coinage, plating, etc.
	Millerite.....	Nickel 44; sulphur 36.....	3 ..	5.6..	Brass yellow.....	
	Ullmannite.....	Nickel, antimony; sulphur..	5 ..	6.5..	Silver gray.....	
Niobium.....	*Columbite.....	Niobium pentoxide 79; iron, manganese, lead, copper, tantalum.....	5 ..	6 ..	Iron black.....	Manufacturing electric and incandescent lamps.
Platinum..... $20.50 oz.	Native.....	Usually alloyed with one or more following metals: Ruthenium, Iridium, Rodium, Palladium and Osmium.....				In chemical, electrical apparatus, jewelery, etc.
	Sperrylite.....	Platinum; arsenic.....	6 ..	10.6..	Tin white.....	
Potassium.....	*Nitre.....	Nitrogen; potash 47.....	2 ..	2 ..	White.....	Gunpowder, medicine, etc.
	Sylvite.....	Potassium 52; chlorine 47..	2 ..	2 ..	White.....	Medicine.
Selenium.....	Clausthalite. ...	Selenium 28; lead.....	2.5..	8 ..	Lead gray.....	
	Tiemannite.....	Selenium 29; mercury, etc...	2.5..	8.2..	Blackish.....	
Silver..... 65c. oz.	*Argentite.....	Silver 87; sulphur 13.....	2 ..	7 ..	Black and gray..	Coinage, tableware, jewelry, photography and medicine.
	Hessite.....	Silver 62; tellurium 37.....	2.5..	8.5..	Gray.....	
	Pyrargyrite(ruby)	Silver 60; antimony 16; sulphur 17.....	2 ..	5.7..	Black and red...	
	Stephanite.....	Silver 68; antimony 16; sulphur 16.....	2 ..	6 ..	Iron black.....	
	Cerargyrite.....	Silver 75; chlorine 25.....	2 ..	5.5..	Gray, green, etc..	
Sodium.....	*Halite (common salt).....	Sodium 39; chlorine 61.....	2 ..	2 ..	White.....	
Strontium.... 7c. pound	*Celestite.....	Strontia 56; sulphur.....	3 ..	4 ..	White and red...	
	*Strontianite.....	Strontia 70; carbon di-oxide.	4 ..	3.8..	Greenish.....	
Sulphur..... 2½c. pound	Native and combined in many ores, forming sulphides and sulphates.....					Manufacturing sulphuric acid etc.
Tellurium... .	Native and combined in few ores		2.5..	6.2..	Tin white.....	
Thallium.....	Crookestite.....	Thallium 19; copper, silver, selenium.....	2.5..	6.9..	Lead gray.....	
	Lorandite.....	Thallium 60; arsenic, sulphur	2.5..	5.5..	Carmine red.....	
Thorium..... $4.50 pound	*Thorite.	Thorium 48 to 72; silica.....	5	5 ..	Yellow and brown	Gas mantles.
Tin ..... 42c. pound	*Stannite	Tin 27; sulphur 30; copper, iron, etc.....	4	4.5..	Dark gray.....	Tin plating, bell metal, bronze
	*Cassiterite	Tin 78; oxygen 22.....	6 ..	6.5..	Brown and black	
Titanium.....	*Rutile.....	Titanium 61; oxygen 39....	6 ..	4.2..	Reddish.....	Artificial teeth, etc.
Tungsten.. ... 90c. pound	*Wolframite.....	Tungsten tri-oxide 76; iron, manganese.....	5.5..	7.2..	Black.....	Tungsten steel for high speed tools, armor plate alloys, etc.
	*Scheelite.....	Tungsten 64; calcium 14; oxygen 22.....	4.5..	6 ..	Yellow, green and various.....	
	*Hubnerite	Tungsten 60; manganese, oxygen	5 .	7 ..	Brown to black..	
Uranium .... $3.40 pound	Uraninite.. .. .	Uranium oxide 75; variable	5 ..	9 ..	Black (pitch blende).....	Steel and iron alloys, source of radium.
	Gummite.... ..	Uranium oxide 61; lead calcium; barium, etc.....	3 .	4 ..	Yellow and brown	
	Torbernite.....	Uranium oxide 60; copper phosphorous.....	2.5..	3.5..	Apple green.....	
	*Carnotite.....	Uranium oxide 65; vanadium potassium				
Vanadium. ..	*Vanadanite.....	Vanadium, lead, chloride....	3 ..	7 ..	Red and yellow..	
	*Descloizite. ...	Vanadium, lead, zinc.....	3.5..	6 ..	Brown and red...	
Zinc ..... 6c. pound	*Sphalerite..	Zinc 67; sulphur 33.....	3.5.	4 ..	Yellow and black	Galvanizing, electric batteries paint, alloys, medicine, metallurgy, etc.
	*Zincite...	Zinc 80; oxygen 20.	4 ..	5.6..	Yellow and red..	
	Goslarite....	Zinc oxide 28; sulphur, water, etc.....	2.5..	2 ..	White.....	
	*Willemite.....	Zinc oxide 73; silica 27.....	5 ..	4 ..	Various.....	
Zirconium $10.00 pound	*Zircon.....	Zirconium 67; silica.....	7.5..	4.7..	Various.	