

Table 1. Minerals of the Saranovskoe Deposit

Mineral	Formula	Abundance	Some characteristics of specimens (for legend see footnote)	
Elements				
Gold (?)	Au	+		
Silver	Ag	+		
<i>Copper-bearing silver</i>		+		
Osmium**	Os	+		
Antimony (?)	Sb	+		
Sulfur**	S	+		
Sulfides, sulfosalts				
Pyrite	FeS ₂	++++	•	♦
Pyrrhotite (hex.)	Fe _{1-x} S	++		
Troilite (?)	FeS	+		
Marcasite**	FeS ₂	+		
Chalcopyrite	CuFeS ₂	++	•	♦
Bornite	Cu ₅ FeS ₄	+		
Cubanite (?)	CuFe ₂ S ₃	+		
Covellite**	CuS	++		
Chalcocite	Cu ₂ S	++		♦
Galena	PbS	+++		♦
Sphalerite**	ZnS	+		
Millerite	NiS	+++	•!!	♦
Pentlandite	(Fe,Ni) ₉ S ₈	+++	•	
Vaesite	NiS ₂	+		
<i>Bravoite</i>		+		
Siegenite**	(Ni,Co) ₃ S ₄	+		♦
<i>Fe-rich siegenite**</i>		+		
Heazlewoodite	Ni ₃ S ₂	+		
Violarite	FeNi ₃ S ₄	+	•	
Linnaeite (?)	CoCo ₂ S ₄	+		
Polydymite**	NiNi ₂ S ₄	++	•	
<i>Co-rich polydymite**</i>		+		
Gersdorffite**	NiAsS	+		
Tetrahedrite**	Cu ₁₀ Fe ₂ Sb ₄ S ₁₃	+		
Laurite	RuS ₂	++		
Erlichmanite**	OsS ₂	++		
Sperrylite**	PtAs ₂	+		
Borovskite (?)	Pd ₃ SbTe ₄	?		
Braggite (?)	(Pt,Pd,Ni)S	?		
Vysotskite (?)	(Pd,Ni)S	?		
Irarsite (?)	IrAsS	?		
Palladoarsenide (?)	Pd ₂ As	?		
Atheneite (?)	(Pd,Hg) ₃ As	?		
Stillwaterite (?)	Pd ₈ As ₃	?		
Oxides and hydroxides				
Gibbsite**	Al(OH) ₃	+		
Diaspore (<i>chromian: "saranite"</i>)	AlOOH	++	•!	♦
Brucite	Mg(OH) ₂	+++	•	
<i>Ferrobrucite</i> (?)		+		
Pyroaurite (?)	Mg ₆ Fe ³⁺ ₂ (CO ₃)(OH) ₁₆ • 4H ₂ O	+		
<i>Chromian pyroaurite (sjogrenite)</i> (?)		+	•	
Stichite (?)		+		
Quartz (including <i>halcedony</i>)	SiO ₂	+++	•	♦
Opal	SiO ₂ • nH ₂ O	+		
Magnetite	FeFe ₂ O ₄	+++	•	♦
<i>Titanomagnerite</i>		+++		
<i>Nickeloan Mg-bearing magnetite</i>		+++		

Table 1. Continuation

Mineral	Formula	Abundance	Some characteristics of specimens (for legend see footnote)	
<i>Karpinskite</i> (?)	(Mg,Ni) ₂ Si ₂ O ₅ (OH) ₂	+		
Nepouite**	Ni ₃ Si ₂ O ₅ (OH) ₄	+		
Pekoraite	Ni ₃ Si ₂ O ₅ (OH) ₄	+		
Amesite**	Mg ₂ Al(AlSiO ₃)(OH) ₄	+++	●	◆
Chromian amesite		+++	●!!	◆
Kaolinite	Al ₂ Si ₂ O ₅ (OH) ₄	+		
Clinochlore	(Mg,Al) ₆ (Si,Al) ₄ O ₁₀ (OH) ₈	+++	●	◆
<i>Pennite</i>		+++	●	◆
Chromian pennite (kämmererite)		+++	●!!	◆
<i>Leichtenbergite</i>		++	●	◆
<i>Chromian clinochlore (kochubeite)</i>		++	●	◆
Chromian sheridanite*		+++	●!!	◆
<i>Prochlorite</i>		++	●	
<i>Ripidolite</i> **		++	●	
<i>Aphrosiderite</i> **		++	●	
<i>Dellesite</i> ?		+		
<i>Diabantite</i> ?		+		
<i>Thuringite</i> ?		+		
Nimite	(Ni,Mg) ₆ Si ₄ O ₁₀ (OH) ₈	+	●!	
Montmorillonite**	(Na,Ca) _{0.3} (Al,Mg) ₂ Si ₄ O ₁₀ (OH) ₂ · nH ₂ O	+		
Beidellite (?)	(Na,Ca) _{0.3} Al ₂ (Si,Al) ₄ O ₁₀ (OH) ₂ · nH ₂ O	+		
Nontronite	Na _{0.3} Fe ³⁺ (Si,Al) ₄ O ₁₀ (OH) ₂ · nH ₂ O	++		
Saponite**	(Ca,Na) _{0.3} (Mg,Fe ²⁺) ₃ (Si,Al) ₄ O ₁₀ (OH) ₂ · 4H ₂ O	+		
Sepiolite**	Mg ₄ Si ₆ O ₁₅ (OH) ₂ · 6H ₂ O	+		
Stilpnomelane**	K(Fe,Mg,Al) ₈ (Si,Al) ₁₂ (O,OH) ₃₆ · nH ₂ O	++		
<i>Barian stilpnomelane</i>		+		
<i>Pb-bearing stilpnomelane</i>		+		
Ferristilpnomelane** (?)		++		
Chrysocolla	(Cu,Al) ₂ H ₂ Si ₂ O ₅ (OH) ₄ · nH ₂ O	+		
"Kerolite"***		+++	●	
"Ferrokerolite"***		++	●	
Rectorite	(NaK,Ca)(Al,Mg) ₄ (Al _{1.5} Si _{6.5} O ₂₀ (OH) ₄ · 35H ₂ O	+	●	
Tectosilicates				
Albite	NaAlSi ₃ O ₈	++	●	◆
<i>Andesine</i>		+		
<i>Labradorite</i>		++		
<i>Bitownite</i>		++		
Anorthite	CaAl ₂ Si ₂ O ₈	+++		
Orthoclase	KAlSi ₃ O ₈	+		
Microcline	KAlSi ₃ O ₈	+		

Mineral species and varieties whose occurrence at the deposit is not supported by reliable data:

Jadeite = tremolite; Cronstedtite = Ti-bearing phlogopite or ferristilpnomelane; Platinum ≈ laurite; Rhodochrosite = rhodochrome (misspelling name); Vesuvianite? = wrong geographical location (sample from the Bazhenovo deposit?); Diopside white? = wrong geographical location (sample from the Bazhenovo deposit?); Iridosmine = osmium.

Note. Mineral varieties are *italicized*; mineral species and varieties discovered at the Saranovskoe deposit are **bolded**. Minerals, which undoubtedly occurred at the deposit, but completely replaced at present (reconstructed based on pseudomorphs) are in brackets.

** – Minerals and mineral varieties described for first time for the deposit by author (or by author together with colleagues),

(?) Identification of a mineral seems doubtful.

Abundance of mineral:

(+++++) major gangue, rock-forming, or ore component; (++++) common; (+++) less-common; (++) rare; (+) extremely rare or accessory.

(●!!, ●!, ●) Minerals found at the deposit as specimens of high museum quality including:

(●!!) the top-quality samples, outstanding for their mineral species over the world,

(●!) high-quality specimens.

(◆) Minerals found at the deposit as megascopic well-formed crystals.