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ROCHESTER—SILVER

ITEM 43

Alternate names: Silver State, Nenzel Hill

Commodities: Ag, Au

LOCATION-OWNERSHIP

County	Pershing.	General location	About 30 km northeast of Lovelock.
Mining district	Rochester.	Meridian	Mount Diablo.
Elevation	1,829 m.	Tract	Sec. 15, 16, 21, 22, T 28 N, R 34 E.
Topography	Hilly, rugged.	Latitude	40°17'23" N.
Domain	Mixed; private, BLM administered (4 patented claims and 20 unpatented lode claims).	Longitude	118°12'00" W.
Owner	Royal Apex Silver, Inc., Wallace, ID (Coeur d'Alene Mines Corp. owns 49.8% of Royal Apex) (1983).		
Operator	Coeur d'Alene Mines Corp., Wallace, ID, lessee (acquired 85% of net operating property); ASARCO, Inc., New York, NY, holds a small royalty interest (1985).		

GEOLOGY

Type of ore body	Disseminated, stockwork.	Host formation	Koipato Group (Weaver, Rochester, Limerick Formations).
Origin	Hydrothermal.	Geologic age	Permian-Triassic.
Shape of ore body	Tabular, irregular.	Rock relationships	Rhyolite ash-flow tuffs, volcanoclastics, contains veins and disseminated silver (Weaver Formation).
Ore controls	Faults, fractures.	Alteration	Rhyolite flows and tuffs, contains veins and disseminated silver (Rochester Formation).
Strike of mineralized zone	Northeast.	Size	Silicification, pyritization, sericitic, oxidation.
Age of mineralization	Late Cretaceous (70 to 80 million yr).		Medium.
Mineralized zone average dimensions, m:			
Length	1,150.		
Width	750.		
Thickness	0 to >200.		
Depth	0.		
Mineral names	Argentian tetrahedrite, chlorargyrite, silver, acanthite, sphalerite, arsenopyrite, chalcopyrite, electrum, pyrite (95% of sulfides), quartz, sericite (numerous others).		

DEVELOPMENT

Current status	Active-past producer, feasibility.	Distance to water supply	Unavailable.
Type of operation	Possible surface.	Road requirement	Unavailable.
Mining method	Possible open pit.	Distance to power supply	Unavailable.
Year of discovery	1912 (high-grade silver ore).		
Initial production	1912.		
Last production	1961.		
Past production	District— >2,595 kg Au; 276,000 kg Ag; 12.7 t Cu; 152 t Pb; 30 t Zn (329).		

PUBLISHED RESERVES-RESOURCES

Class	Quantity	Grade	Year	Reference
1..Probable	70,000,000 tons }	1.39 tr oz/ton Ag; 0.0072 tr oz/ton Au	1980	159
Possible	30,000,000 tons }			
2..Not reported in reference	75,000,000 tons ...	1.5 tr oz/ton Ag	1981	61
3.. Do	>100,000,000 tons ...	1 to 2 tr oz/ton Ag; "small amounts of Au"	1981	745
4..Indicated	88,300,000 tons ...	1.5 tr oz/ton Ag; 0.007 tr oz/ton Au	1988	94

REFERENCES

61, 74, 93, 94, 159, 328, 329, 362, 618, 662, 745, 746, 756, 776, 777.	USGS quad maps	Lovelock, 1:250,000. Unionville, 15'.
	USBM sequence number	0320270678.

Comments: Coeur d'Alene Mines Corp. purchased ASARCO's interest in the property in 1983. Mineral zone dimensions represent disseminated silver grade higher than 34 g/t (>1 oz/ton). From 1969-82, ASARCO reportedly spent \$2.9 million in exploration costs on the property. Work in 1984 included large-scale leach testing and about 1,800 m of core drilling. In 1984, the drilling season expanded total mineralized material to 102.1 million t.

Information Circular 9035

Principal Deposits of Strategic and Critical Minerals in Nevada

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