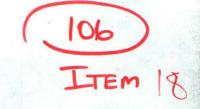
0250 0018



## **TONKIN SPRINGS—GOLD**

Alternate names: Rob Claim Group

Past production . . . . . None.

Commodities: Au

### LOCATION-OWNERSHIP

County	Antelope. 2,130 m. Hilly, mountainous.	General location  Meridian  Tract  Latitude  Longitude	Sec. 3, T 23-1/2 N, R 49 E. 39°54'27" N.
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Owner-operator Silver State Mine Corp., Denver, CO, 55% (1985).
Owner Precambrian Exploration, Inc., Lakewood, CO, 45% (1985).

#### GEOLOGY

Type of ore body Origin	Disseminated, replacement. Hydrothermal.	Host formation	Lower Vinini. Ordovician.
Shape of ore body	Stratiform: irregular in plan.	Rock relationships	Sandy dolomite limestone-jasperoid
Ore controls	Northwest-trending fractures, volcanic capping, sill-like intrusive.		replacement, contains ore.  Black carbonaceous shale, near ore.
Strike and dip of mineralized zone.	Northwest: nearly horizontal.		Calcarenite, jasperoid replacement contains ore (best host).
Age of mineralization	Tertiary.		Siltstones, near ore.
Mineralized zone average dimensions, m:			Chert, near ore. Intrusives (syenite), near ore.
	450		Tertiary volcanics, above ore.
Length		Alteration	Silicification (jasperoid develop- ment), calcification, carboniza-
Zone	95		tion.
Bed		Size	Small.
Depth	0 to 70.		
Mineral names	Pyrite (auriferous), arsenopyrite e gold, realgar, orpiment, stibnite, calcite, e gold is thought to occur in sulfides.)		

#### DEVELOPMENT

Type of operation Mining method  Year of discovery	Would be open pit.	Distance to water supply Road requirement Distance to power supply Mill status Milling method	Unknown. Unknown. Unknown. Feasibility. Would require an autoclave system or some type of pressure chlorination-pressure acidation treatment.
Initial production	No production schedule established.		

# PUBLISHED RESERVES-RESOURCES

Class	Quantity	Grade	Year	Reference
1Not reported in reference	4.000.000 tons	0.05 tr oz/ton Au	1976	616
2Indicated	2,500,000 tons	0.09 tr oz/ton Au; Upper Zone, stripping ratio = 2.4:1 (waste:ore).	1983	241
Indicated	500,000 tons	0.09 tr oz/ton Au; Lower Zone, stripping ratio = 14.7:1 (waste:ore).	1983	241
		REFERENCES		

#### REFERENCES

27, 241, 486, 593, 616.	USGS quad maps	Millett, 1:250,000. Roberts Creek Mountains, 15'.	
	USBM sequence number		

Comments: A northwest-trending set of high-angle normal faults, probably associated with basin and range rifting, is most important of two faulting patterns for mineralization. Gold distribution is homogeneous throughout microfractured rock along strike of mineral trend.

**Information Circular 9035** 

# Principal Deposits of Strategic and Critical Minerals in Nevada

By N. T. Lowe, Russell G. Raney, and John R. Norberg



UNITED STATES DEPARTMENT OF THE INTERIOR Donald Paul Hodel, Secretary

**BUREAU OF MINES**Robert C. Horton, Director