

2940 0037

115

ITEM 39

## BLUE STAR—GOLD

Alternate names: Number 8, South Pit, East Pit, North Pit

Commodities: Au,  
turquoise

## LOCATION-OWNERSHIP

County .....	Eureka.	General location .....	About 43 km northwest of Carlin.
Mining district .....	Lynn.	Meridian .....	Mount Diablo.
Elevation .....	1,830 m.	Tract .....	Sec. 4, T 35 N, R 50 E.
Topography .....	Hilly.	Latitude .....	40°56'35" N.
Domain .....	Private.	Longitude .....	116°21'38" W.
Owner-operator .....	Carlin Gold Mining Co., Carlin, NV (subsidiary of Newmont Mining Corp., New York, NY) (1984).		

## GEOLOGY

Type of ore body .....	Disseminated.	Host formation .....	Vinini (in upper plate of Roberts Mountains Thrust Fault).
Origin .....	Hydrothermal.	Geologic age .....	Ordovician.
Shape of ore body .....	Irregular in plan.	Rock relationships .....	Sandy siltstone, ore in fractures, gangue, most favored host.
Ore controls .....	Faulting; fracturing; lithology.		Cherty shale, adjacent to ore.
Strike and dip of mineralized zone.	Northwest: unknown.		Quartzite sandstone, contains some ore.
Age of mineralization ...	Miocene (37.5 million yr).		Limestone, dolomitic limestone, sandy calcareous siltstone, beneath ore.
Mineralized zone average dimensions, m:			Dacite porphyry dikes, near ore.
Length .....	365.		Quartz diorite plug, about 3 km north.
Width .....	200.		Jasperoid, near ore.
Thickness .....	90.	Alteration .....	Silicification, sericitic kaolinitic
Mineral names .....	Quartz, clays, sericite, kaolinite, calcite, barite, pyrite, realgar, orpiment, stibnite, cinnabar, native gold, turquoise, chrysocolla, malachite, euchroite, montmorillonite, sphalerite.	Size .....	Small.

## DEVELOPMENT

Current status .....	Active-producer (intermittent).	Road requirement .....	8-km access road to Carlin Mine built in 1974.
Type of operation .....	Surface.	Mill location .....	Mill grade trucked 8 km to Carlin mill.
Mining method .....	Open pit; bench. Mining by Carlin Gold Mining Co. began in 1974 and consists of 3 pits.	Mill status .....	Active.
Year of discovery .....	1959 (first claimed for turquoise in 1929).	Milling method .....	Agitated cyanide leach, CCD; oxidation-chlorination pretreatment for carbonaceous ore; CCD wash; Merrill-Crowe zinc precipitation, smelting.
Discovery method .....	Unknown.	Product type .....	Dore bars, weighing about 34 kg.
Initial production .....	1975.		
Last production .....	Ongoing 1983.		
Past production .....	About 124 kg (4,000 tr oz) in 1980 (132).		

## PUBLISHED RESERVES-RESOURCES

Class	Quantity	Grade	Year	Reference
1..Not reported in reference <sup>1</sup> .....	1,800,000 tons .....	0.12 tr oz/ton Au .....	1974	517

## REFERENCES

59, 61, 90, 132, 182, 183, 319, 398, 458, 505, 517, 570, 593, 616.	USGS quad maps .....	Winnemucca, 1:250,000.
	USBM sequence number .....	Rodeo Creek NE, 7.5'.
	Mid number .....	0820110166.
		2600500.

Comments: This property was initially developed for its high-quality turquoise. In 1968, Newmont Mining Corp. acquired property and subsequent drilling defined 3 ore bodies (South, East, North) with reserves described above.

<sup>1</sup>Resource referred to as reserves.

Information Circular 9035

# Principal Deposits of Strategic and Critical Minerals in Nevada

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