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Information Circular 9035

Principal Deposits of Strategic and Critical Minerals in Nevada

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UNITED STATES DEPARTMENT OF THE INTERIOR
Donald Paul Hodel, Secretary

BUREAU OF MINES
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RUBY HILL—ZINC

Alternate names: Fad Shaft, Eureka Corporation Mine, Look Out Mine,
Locan Shaft

Commodities: Zn, Au, Ag,
Pb

LOCATION-OWNERSHIP

County	Eureka.	General location	About 2 km west of Eureka.
Mining district	Eureka.	Meridian	Mount Diablo.
Elevation	2,100 m.	Tract	Sec. 22, T 19 N, R 53 E.
Topography	Hilly.	Latitude	39°30'21" N.
Domain	Mixed; private and BLM administered.	Longitude	115°59'02" W.
Owner	Richmond-Eureka Corp., Miami Beach, FL, 75%; Silver Eureka Corp., Toronto, ON, Canada, 25% (1985). (Sharon Steel Corp., Miami Beach, FL, owns 82% of Richmond-Eureka Corp.)		

GEOLOGY

Type of ore body	Replacement, breccia fill.	Host formation	Eldorado Dolomite.
Origin	Hydrothermal.	Geologic age	Mid-Cambrian.
Shape of ore body	Irregular, pipelike.	Rock relationships	Limestone, encloses ore, replaced by ore.
Ore controls	Faulting, fracturing, lithology.		Dolomite, lies under ore.
Strike and dip of mineralized zone.	N 40° W: 60° NE (Ruby Hill Fault); N 90° E: 01° W (trend of deep sulfides).	Alteration	Intense pyritic alteration.
Mineralized zone aver- age dimensions, m:		Size	Medium.
Length	600.		
Width	370.		
Thickness	<245.		
Depth	730.		
Mineral names	Pyrite, sphalerite, galena, smithsonite, cerrusite, arsenopyrite, argentite, gold. (Gold is present in pyrite and arsenopyrite; silver is contained in solid solution with galena.)		

DEVELOPMENT

Current status	Inactive-standby; partially developed.	Distance to water supply ...	On-site.
Type of operation	Underground.	Road requirement	Existing paved road.
Mining method	Cut and fill.	Distance to power supply ...	<5 km to on-site substation.
Year of discovery	Late 1930's (deep sulfide ore body).	Mill location	On-site (building and infra- structure).
Discovery method	Diamond drilling.	Mill status	Equipment removed.
Initial production	1866 (Eureka district).		
Last production	1964 (estimated).		
Past production	None from deep sulfide deposit.		

PUBLISHED RESERVES-RESOURCES

Class	Quantity	Grade	Year	Reference
1..Indicated	3,132,000 tons	0.16 tr oz/ton Au; 5.65 tr oz/ton Ag; 3.7% Pb; 8.3% Zn.	1982	168

REFERENCES

50, 84, 105, 152, 168, 238, 255, 256, 257, 261, 326, 389, 450, 451, 518, 519, 520, 521, 593, 697, 722, 741.	USGS quad maps	Ely, 1:250,000. Eureka, 15'.
	USBM sequence number	0320110093.
	USGS MRDS number	M030021.
	Mid number	2600233.

Comments: There has been no commercial production from the deep sulfide ore body. In 1975, a 245-t sample was taken for metallurgical testing.
Excessive water and metallurgical problems have long hampered development of the deposit.