

1280 0037

HORSE CANYON—GOLD

ITEM 35

123

Alternate names: None

Commodities: Au

LOCATION-OWNERSHIP

County Eureka.
Mining district Cortez-Mill Canyon.
Elevation 2,530 m.
Topography Rugged.
Domain BLM administered.

General location About 100 km southwest of Elko.
Meridian Mount Diablo.
Tract Sec. 3, T 26 N, R 48 E (unsurveyed).
Latitude 40°08'50" N.
Longitude 116°32'45" W.

Owners Placer U.S., Inc., San Francisco, CA (subsidiary of Placer Development, Ltd., Vancouver, BC, Canada); Kennecott Copper Corp., Salt Lake City, UT; Vernon F. Taylor, Jr. (1984).
Operator Cortez Gold Mines (operational entity of Placer U.S., Inc.) (1984).

GEOLOGY

Type of ore body Disseminated.
Origin Hydrothermal.
Ore controls Faults, fractures, lithology.
Planned pit size 27 ha (68 acres).
Mineral names Native gold, quartz, iron oxides, clays, barite, jasperoid, jarosite.

Host formation Vinini (upper plate of Roberts Mountains Thrust Fault).
Geologic age Ordovician.
Rock relationships Shale, in part cherty and carbonaceous, ore host.
Siltstone, ore host.
Rhyolite dikes, near ore, intrudes host (Miocene).
Silicified jasperoid breccia, hosted in Vinini.
Alteration Silicification, iron staining, bleaching.
Size Small.

DEVELOPMENT

Current status Active-producer.
Type of operation Surface, mine rate about 660,000 t/a ore; stripping ratio is about 3:1 (waste:ore).
Mining method Open pit.
Initial production February 1983 (mining); May 1983 (milling).
Annual production rate 600 kg (20,000 tr oz) Au (1983); then 1,200 kg (40,000 tr oz) Au thereafter.

Distance to water supply On-site at Cortez.
Road requirement About 22 km to Cortez mill.
Distance to power supply Existing to Cortez mill.
Mill location Cortez mill (22 km haulage from mine).
Mill status Active.
Milling method Agitated tank cyanide leach (CIL-carbon in leach), carbon columns, pressure stripping, electrolysis-steel wool, smelting.
Process rate 1,800 t/d (2,000 ton/d).
Product type Dore buttons.

PUBLISHED RESERVES-RESOURCES

Class	Quantity	Grade	Year	Reference
1..Not reported in reference	3,121,000 t	1.89 g/t Au	1982	564
2.. Do	3,400,000 tons	0.055 tr oz/ton Au	1983	169

REFERENCES

27, 84, 90, 100, 169, 170, 219, 426, 513, 564, 593, 692, 780, 781, 785.

USGS quad maps Winnemucca, 1:250,000.
Cortez, 15'.
USBM sequence number 0320110228.

Comments: The Horse Canyon ore is milled at the Cortez mill. The Cortez gold deposit was mined until 1973 when mining operations shifted west to Placer Amex's Gold Acres gold deposit across the valley. Mining and milling continued until February 1976. Cortez and Gold Acres dumps were leached to 1980. In 1980, mining on other Cortez and Gold Acres dumps began; Cortez material was leached and Gold Acres material milled. Horse Canyon ore replaced output from Gold Acres low-grade dumps in May 1983. The Cortez dumps were still actively being mined and leached in late 1983. Company reported mine life is less than 5 yr from 1983.

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