

## ABSTRACT

### **The Stonehouse Gold Deposit, Humboldt County, Nevada**

by

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The Stonehouse gold deposit is in southeastern Humboldt County, Nevada, at the north end of the Marigold joint venture's land holdings. It is approximately 34 miles southeast of Winnemucca, and 4 miles northwest of the settlement of Valmy. Rayrock Mines Inc. is the operating partner. The ore body is immediately south of a prominent hill known as Lone Tree Hill, and about a mile south of the Stonehouse exit from Interstate Highway 80. The entire deposit was masked by alluvium; locally the cover was as thin as one foot.

The Stonehouse deposit was discovered by Marigold in 1988 when hole NM-592 was drilled in Section 14. This hole was designed to test the presumed intersection of two strong regional structural trends in a covered area, thought to be underlain by favorable strata. Subsequently, the main mineralized structure (known as NW-1) was proven to extend northward into Section 11, owned by Santa Fe Pacific Mining Inc. The area had been previously explored by several other companies; much of this earlier work had been directed towards a porphyry copper target.

The Stonehouse area is underlain by rocks of the Valmy, Battle, and Edna Mountain(?) Formations, as well as the Havallah sequence. The sedimentary sequences have been intruded and thermally metamorphosed by two suites of intrusive rocks, one of which has been dated nearby at 36 to 39 Ma. Gold mineralization has affected all rock types at least locally.

Structurally-controlled gold mineralization occurs in three main areas. The main structure (NW-1) has been defined over almost 1.5 miles, strikes generally NNW and dips 70 to 75 degrees west. East Zone mineralization lies east of NW-1, in its footwall. The East Zone is a series of horsetail structures that strike approximately N-S and have steep west to almost vertical dips. The Southeast area is still not well understood, but gold values have been encountered over a broad area, with some suggestion of a relatively flat body. Most efforts to date have been concentrated in the NW1--East Zone area.

As of April, 1991, the (preliminary) geologic resource, to a maximum depth of 680 feet from surface, for the Stonehouse deposit was 5.95 million tons of oxide ore, with an average grade of 0.072 oz Au/ton. This includes approximately 3.9 million tons of mill-grade ore with an average grade of 0.095 oz Au/ton, and 2.1 million tons of heap leach grade material averaging 0.029 oz Au/ton. A large but unknown tonnage of refractory sulfide mineralization is also present. Initial reserve calculations and a preliminary pit design were done by Pinson Mining Company, an affiliated company. Additional work to better define reserves is currently being conducted by Marigold Mining Company, and a test mining program was conducted in 1991 to better define controls on mineralization.

