Building 20 - Federal Center
Denver 25, Colorado

September 18, 1961

Memorandum

To: George C. Selfridge, Chief
Division of Field Operations, OME
Washington 25, D.C.

From: Acting Field Officer, OME, Region III

Subject: Docket OME 6151 (Gold)
Hugo C. Engelke
(Arnold, et al., Claims)
Teller County, Colorado

Enclosed are the original and two copies of my Report of Examination on the subject property.

Further exploration work on this property is not justified and I recommend that the application be denied.

Original signed by

Hugh M. Cosmore

HMC/lm
cc OME 6151
DFC Resources
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
STEWART L. UDALL, SECRETARY

OFFICE OF MINERALS EXPLORATION

REPORT OF EXAMINATION BY ACTING FIELD OFFICER
REGION III

OME-6151

Hugo C. Engelke

Arnold, et al., Claims

Teller County, Colorado

Gold

Engineering and Geologic Report

by

Hugh M. Conners, Mining Engineer

September 18, 1961

CONTENTS

	Page
Introduction and summary	1
Location, accessibility and physical features . . .	2
History and production	2
Ownership and extent	2
Geology	3
Proposed exploration	4
Conclusions and recommendations	4

ILLUSTRATIONS

Figure		Follows Page
1	Location map, Arnold, et al., Claims OMS-6151	2

OMM-6151
Hugo C. Hapelka
Arnold, et al., Claims
Teller County, Colorado

INTRODUCTION AND SUMMARY

On May 24, 1961 Hugo Hapelka, a jeweler in Colorado Springs, Colorado, applied for OME aid on the Arnold, American Eagle and Number Ninety One patented lode mining claims located about two miles south of Victor, Colorado. The Applicant proposed to drive an adit, from near the south end of the Arnold claim to a point about 215 feet below the bottom of the Arnold shaft, a distance of about 450 feet. His estimated total cost of the work was $80,000.00.

The property was examined September 8, 1961 by Hugh M. Cannaro, Acting Field Officer, OME, Region III, accompanied by the Applicant, Hugo Hapelka. The small fissure vein on which the Applicant proposed to drive the adit was examined in the Arnold shaft, in prospect holes, and, on the surface. This fissure vein at points examined varied in width from one inch to six inches and was composed mainly of quartz and gouge with a gold value of almost nil according to the Applicant's assay returns.

The claims lie about two miles out in the Pikes Peak granite from the basin containing the known ore deposits. The small fissure vein that the Applicant wishes to explore by driving an adit shows no more promise at the proposed portal site than it does at the bottom of the Arnold shaft which is 215 feet higher than the proposed portal.

There is no evidence that further exploration of this property is justified. I recommend that the application be denied.

LOCATION, ACCESSIBILITY AND PHYSICAL FEATURES

The Arnold, American Eagle, and Number Ninety One claims are located in Section 31, Township 15 South, Range 69 West. The claims are two miles south of Victor, Colorado and are reached from there by a good graveled road which extends through the Victor Cemetery to the shaft on the Arnold claim. South of the Arnold shaft the surface drops rapidly to Wilson Creek. North of the Arnold shaft, the ground slopes gradually upward to Victor, which is located at the base of Battle Mountain and on the south edge of the breccia basin.

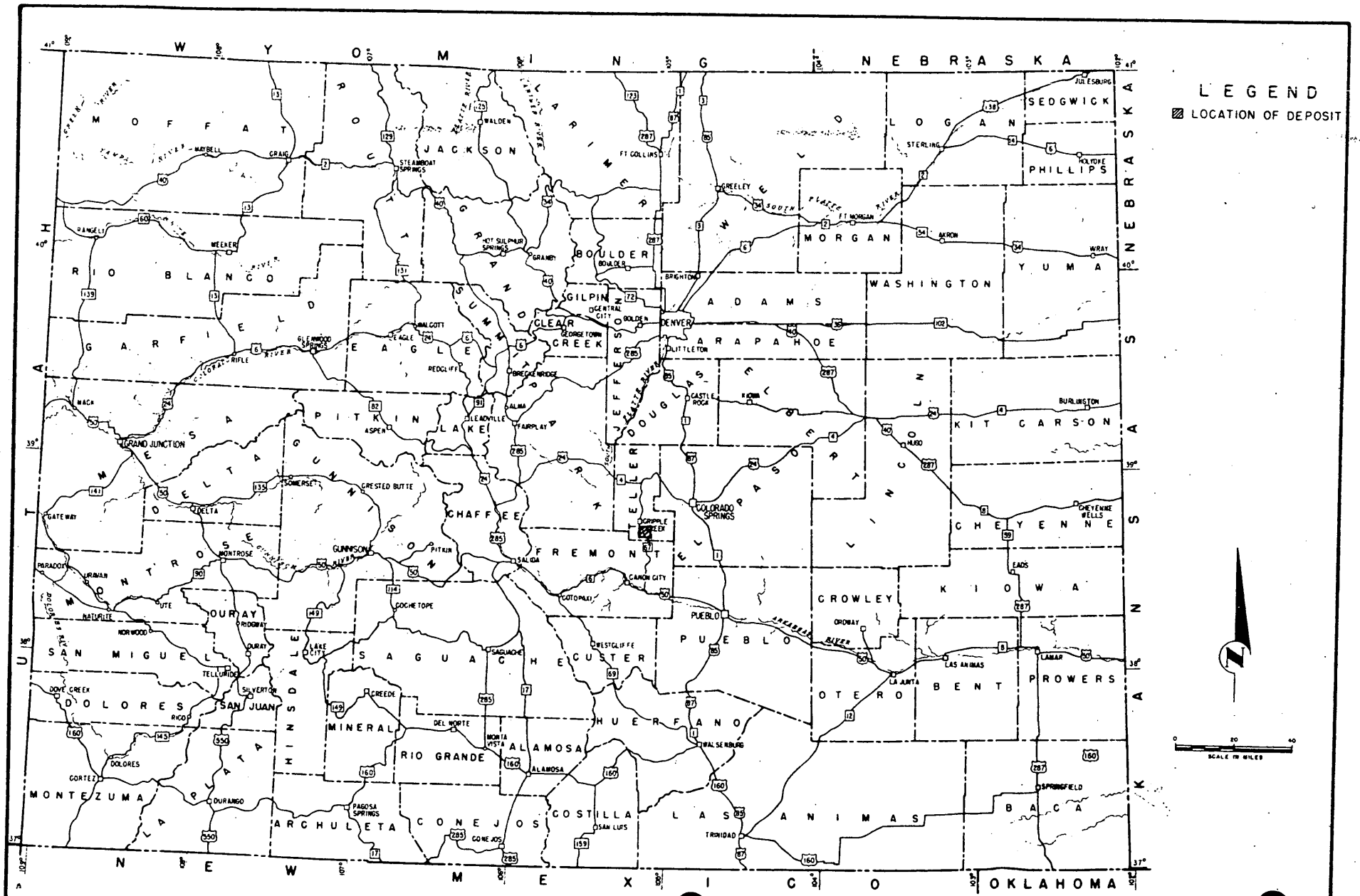
HISTORY AND PRODUCTION

Hundreds of claims were located in the area south of Victor during the boom days of the 90's, when little was known about the geology and ore deposits of the District. Such famous mines as the Portland, Ajax, and Elkton are in plain sight of this large, relatively flat, area located in the granite about two miles outside the gold belt. Many of these claims were brought to patent but none of them have had any production including the Applicant's claims.

OWNERSHIP AND EXTENT

The Arnold, American Eagle, and Number Ninety One claims, U. S. Survey No. 9543 are owned by Hugo Engelke and Walter F. Knorr. Rae E. Cross holds a chattel mortgage on the three claims.

There are many overlapping claims in this area, some of which cross the Applicant's claims. An search of the Bureau of Land Management records was made by the field examiner to determine how much, if any, of the Applicant's claims are excluded.



OME-6151 Hugo C. Kapelke Arnold, et al., Claims Teller County, Colorado

The Carlton drainage tunnel crosses the north end of the Arnold claim. Mel Salsbury [1] in a personal communication stated that a fissure vein was intersected in the tunnel and was thought to be the Arnold fissure. The vein contained only meager amounts of gold at that point. No ore was found in the Carlton drainage tunnel in the Pikes Peak granite.

GEOLOGY

According to Meacham [2] "The gold deposits of the Cripple Creek district occur within or at the margin of a mass of fragmental rocks of volcanic and nonvolcanic origin, collectively called 'breccia,' of Miocene age. The breccia occupies a steep-walled basin or caldera in pre-Cambrian granite, gneiss, and schist."

"Petrologic, structural, and fossil evidence indicates that the pit or basin occupied by the main mass of breccia was formed by intermittent subsidence along steeply dipping faults and is not a volcanic neck formed by a volcanic explosion, although igneous activity that occurred during and after subsidence tends to obscure the true relations. Development of the basin took place in several stages; the earliest predates the igneous activity that furnished the volcanic material of the breccia, and the latest is marked by the formation of the gold deposits."

All rock exposures of the Applicant's claims consist of Pikes Peak granite. Quartz, though present in varying amount, is accended

1/ Salsbury, Mel., Mining Engineer, U. S. Bureau of Mines - formerly Supt. of Mining Operations for the Carlton interests.

2/ Meacham, A. E., Structural Control of the Gold Deposits of the Cripple Creek District Teller County, Colorado. Geological Survey Bulletin 955-B.

in abundance only by microcline. These claims lie about two miles south of the breccia basin within which, or on the margin of which, the ore of the District has been produced.

PROPOSED EXPLORATION

The Applicant proposed to drive an adit, from a point above Wilson Creek and near the north end of the Arnold claim, on a very small fissure toward the Arnold shaft. The Arnold shaft is presently 35 feet deep but the Applicant stated that it formerly was 80 feet in depth. The fissure, about three inches wide, consisting of quartz and gouge is exposed in both ends of the shaft at a depth of 35 feet. The strike is due north and dips slightly to the West. The fissure can be traced on the surface to the point where the Applicant proposes to establish the portal of his adit which is 250 feet in elevation below the collar of the Arnold shaft. At no point where it is exposed is the fissure more than a few inches in width and is almost barren of gold as is indicated by the Applicant's assay certificates. The field examiner did not discuss any alternate proposals or costs because further exploration is not warranted on this property.

CONCLUSIONS AND RECOMMENDATIONS

The small fissure vein is exposed in the Arnold shaft, in three prospect holes, and on the surface. The fissure is also exposed in the Carlson tunnel at a depth of approximately 2500 feet below the surface. The vein has no economic value at any place where it is

exposed and is so narrow it would have to be high-grade to be mined at a profit.

Further exploration of the property is not justified and I recommend that the application be denied.