Mr. Frank McKinley
622 McKinley Ave
Kellogg, Idaho.

Dear Mr. McKinley:

We do not have time, for a detailed examination and report on the Golden Chest Mine, Shoshone County, Idaho., to have the report ready by May 30, 1951. The following presents the data obtained from a preliminary examination, with tentative recommendations. I will submit a report of further investigations of the Golden Chest scheelite deposits within the following 30 to 60 days.

PRELIMINARY REPORT ON THE

GOLDEN CHEST MINE

SHOSHONE COUNTY, IDAHO.

by

Robert M. Gammell

tungsten

Summary

The Golden Chest Mine is situated in the northern foothills of Pritchard Creek Valley, one and one half miles southeast of Murry Idaho. The Golden Chest Mine has been intermittently worked since about 1883. According to reports the mine has produced about $1,500,000.00, in gold and about 15,000 units of tungsten. The gold was obtained principally from the Katie-Dora and Klondike shoots, shown in Fig. 2. The tungsten was obtained principally from the tungsten stope shown in Fig. 3. The main adit tunnel is 3000(feet above sea level. Snowfall is seldom, if ever sufficient to seriously interfere with truck transport. According to Philip J. Sherman, Idaho Bureau of Mines and Geology, Pamphlet No. 47, ore deposits in this section of the Coeur d'Alene Mining District occurs principally as replacement veins and as fracture fillings in fractured Pritchard formation.

Because the object of the early prospecting and mining was looking for gold, the tungsten deposits have not been adequately explored. Nevertheless some very high grade tungsten ore was obtained from the tungsten stope shown in Fig. 3. Some sections of the old tunnel dumps, contain some sheelite. It will require considerable drifting, cross-cutting,

sinking, driving raises, bulldozer trenching and diamond drilling to adequately explore the known mineralized structure. It is estimated that the Golden Chest tungsten deposits may warrent the expenditure of $400,000.0 It is recommended that $400,000.00 be tentatively appropriated for the tungsten exploration at the Golden Chest Mine, subject to recommendations in subsequent report.

History

It is reported that scheelite was found at quite diverse points during past mining operations at the Golden Chest mine. The main production of tungsten was in 1918-1919. It is reported in the Pamphlet No. 47, Idaho Bureau of Mines and Geology 1938, that scheelite occurs in irregular bunches that range from the size of a man's fist to masses two feet thick, 5 feet wide and 10 to 12 feet long, just above the intermediate level.

Physical Features and Communications

The Golden Chest mine is situated between Readers Gulch and Dry Butte Gulch, in a rugged section of the Coeur d'Alene Mining District. The hills are steep and are covered with a heavy growth of timber and brush. The relief ranges from 3000 feet at the portal of the Idaho No. 3 level to 4250 feet one mile northeast of the mine. Crude ore or concentrates can be hauled by truck 20 miles to the rail road at Wallace, Idaho.

Labor and Living Conditions

The Golden Chest mine can probably obtain men from the labor markets in Wallace and Kellogg. Base wages in May 1951 were as follows.

Miners and timbermen.....	$13.45	per 8 hour shift
Mill operators.....	13.45	" " " "
Shift bosses.....	15.00	" " " "

Time and one half is paid for Saturday work

Room and board is available in Murray, Idaho, one and one half miles distant. Sufficient water and timber for operating purposes are available on the property.

Mine Workings and Plant

The mine workings are shown in Fig. 1. All the workings are inaccessable except the main adit level, Idaho No. 3 level. Thereeare two small wooden buildings on the property. Several hundred feet of mine rail, three small mine cars and three K.V.A. transformers are on the property.

Description of the Deposits

General Geology;

The rocks at the Golden Chest Mine were studied in considerable detail by Philip J. Shenon. U.S.G.S.. Shenon has classified the rocks at the Golden Chest mine as Dark gray argillite interbedded with white and grey quartzite and belongs to the Prichard formation. The rocks in places are cut by diabase dikes. Workings of the Golden Chest exposes two types of ore deposits- (1) quartz veins approximately parallel to the bedding of the argillite, and- (2) fine grained vein quartz, which with ankerite, sericite, pyrite, and small amounts of gold cements and replaces fractured quartzite.

The scheelite mineralization exposed in the small stope (see fig. 3) section A-A' occurs on a sharp fold on the limb of a pitching syncline. The strike and pitch of the fold axis is in a position, so that its projection upward, would only in part, be exposed by the stoping above the intermediate level. The formation is highly silicified along the folding.

The Ore Deposits;

The scheelite mineralization occurs associated with quartz. The scheelite exposed is in diseminations and more commonly in bunches and lenses in imbricated arrangement.

The Ore

The ore consists of scheelite in a gangue of quartz, calcite and highly altered argillite.

Potential Ore Tonnage

The possible or potential tonnage of tungsten from this mine could be important, but, until more exploration has been completed, there is no factual data on which to base an estimete.

Conclusions

1 The occurrance of scheelite in the sharp fold on the limb of the syncline fold at the Golden Chest mine, is believed to offer favorable structural conditions for the existance of commercial deposits of tungsten.

2 There appears to be a chance of discovering other tungsten deposits.

3 Further examination should be made of the Klondike raise and intermediate level, also examination of all dumps with mineral light at night should be completed, together with sampling of dumps.

4 The mine appears to arrant considerable exploration.

Further examination and sampling is being planned

Respectfully submitted

Robert M. Gammell

Robert M. Gammell
Reg. Mining Eng.

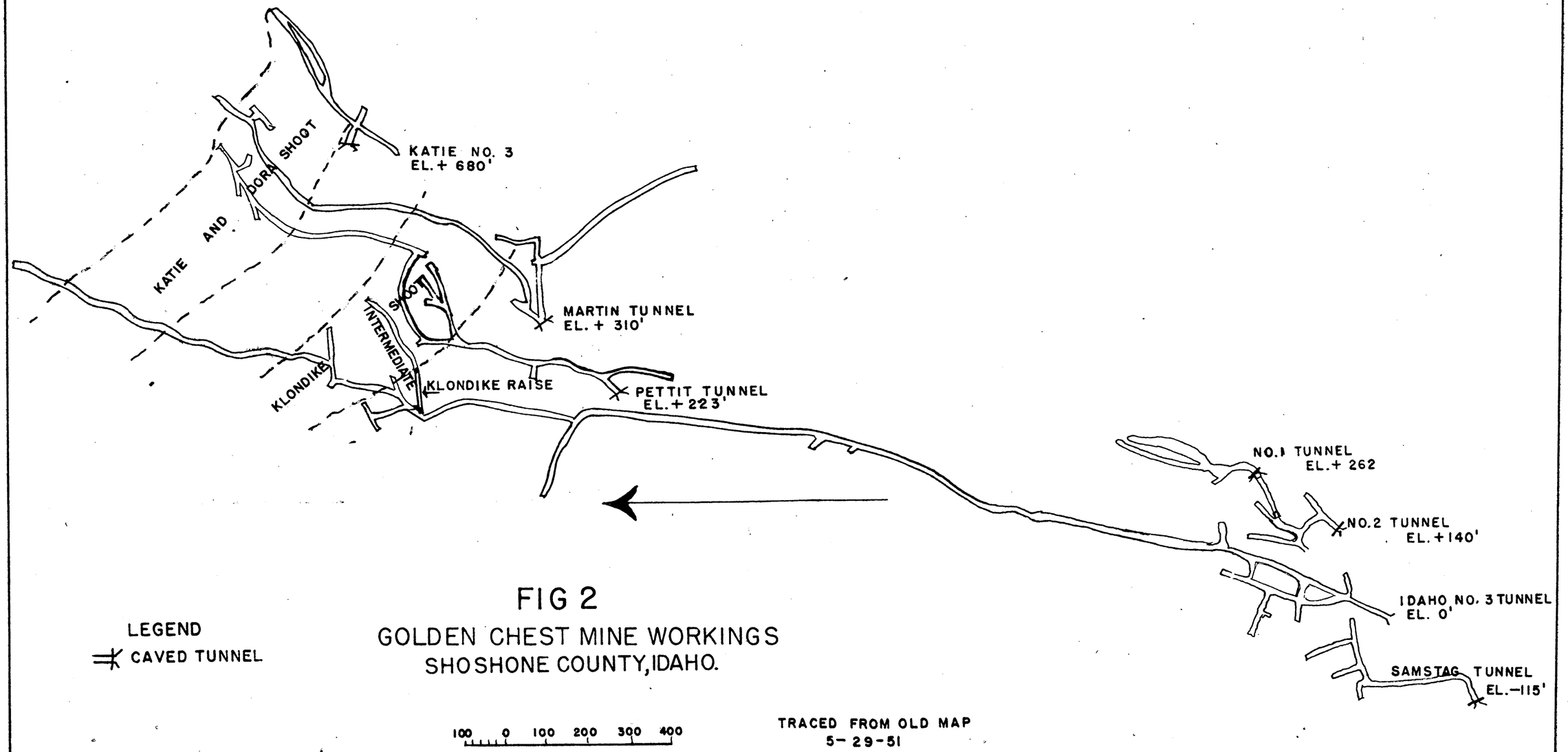


FIG 2

GOLDEN CHEST MINE WORKINGS
SHOSHONE COUNTY, IDAHO.

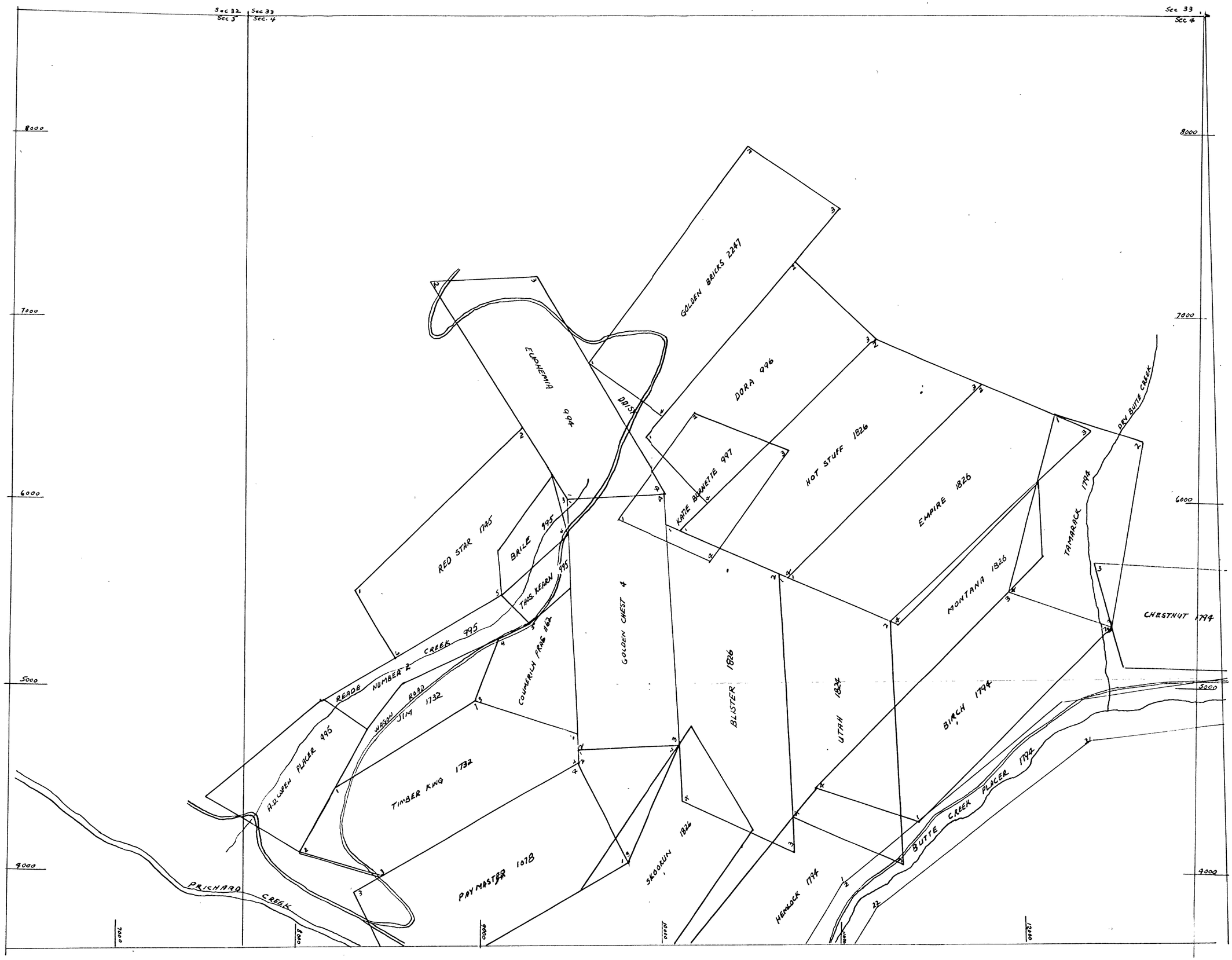
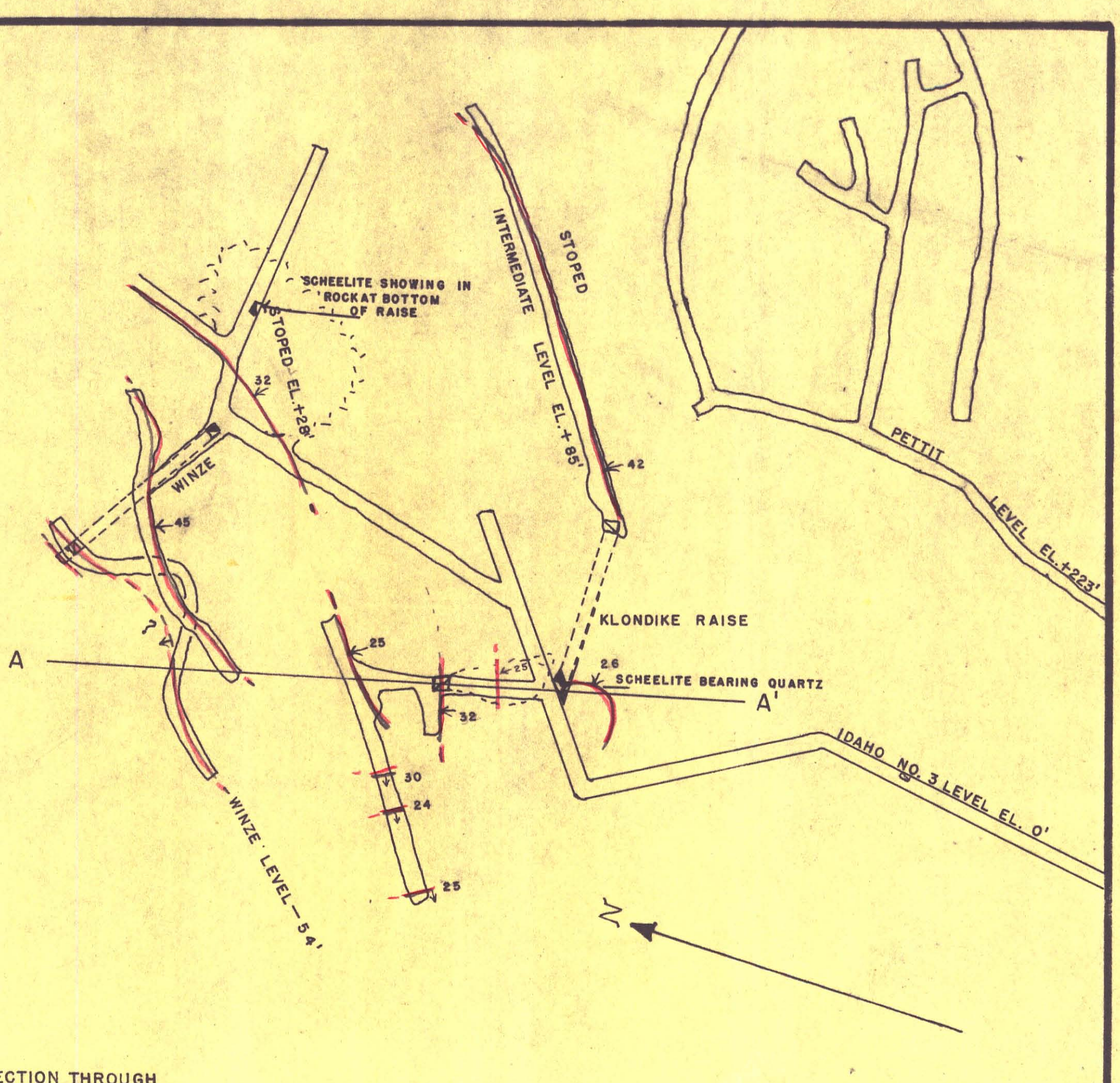


FIG I

CLAIM MAP - GOLDEN CHEST

FROM OLD SURVEY SCALE 1"=400'



CROSS SECTION THROUGH
CROSS CUT
ALONG A—A'

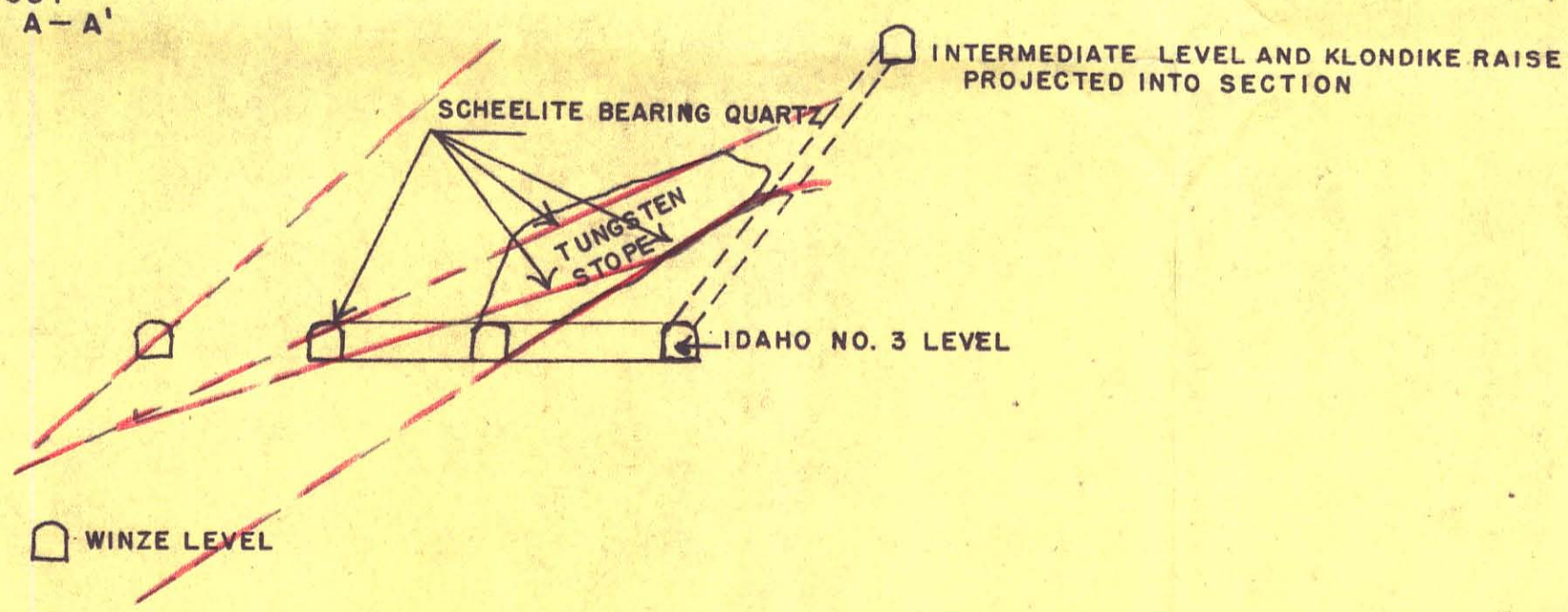


FIG 3

LEGEND

DIP & STRIKE OF QUARTZ

ADVANCE MAP

KLONDIKE WORKINGS
OF THE
GOLDEN CHEST MINE
MURRAY, IDAHO.
SCALE 1" = 50 FEET

COMPILED FROM VARIOUS MAPS AND CHECKED WHERE POSSIBLE BY ROBERT M. GAMMELL 5-28-51