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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MCENARY TUNNEL

ALTERNATE NAMES:
ARIZONA TRIUMPH

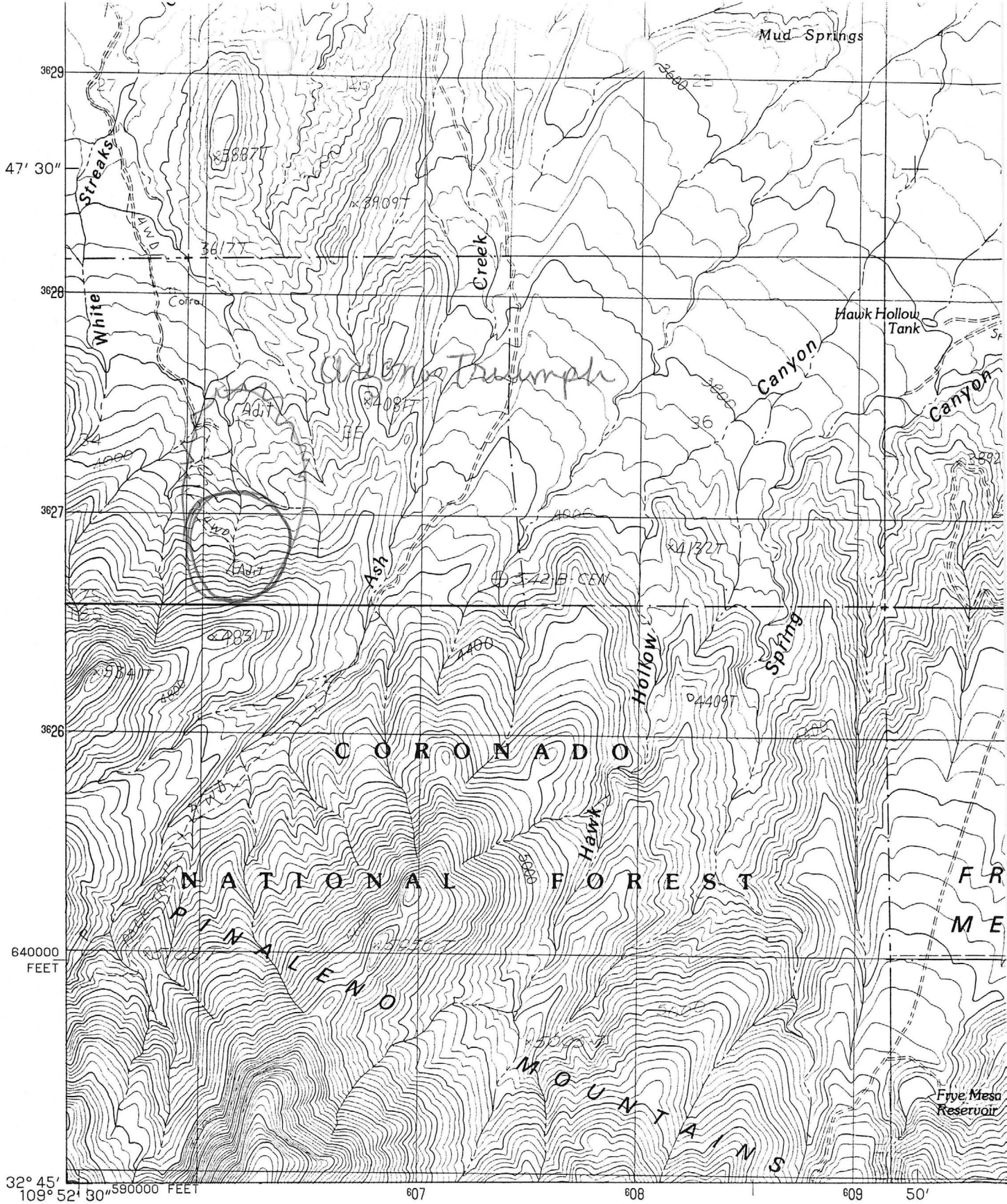
GRAHAM COUNTY MILS NUMBER: 132B

LOCATION: TOWNSHIP 7 S RANGE 24 E SECTION 35 QUARTER SW
LATITUDE: N 32DEG 46MIN 35SEC LONGITUDE: W 109DEG 51MIN 55SEC
TOPO MAP NAME: THATCHER - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
GOLD
FELDSPAR

BIBLIOGRAPHY:
ADMMR MCENARY TUNNEL FILE



PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY

CONTROL BY	USGS, NOS/NOAA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN	1957
PLANETABLE SURVEYS	1960
LIMITED REVISION FROM AERIAL PHOTOGRAPHS TAKEN	1981
FIELD CHECKED 1980	MAP EDITED 1985
PROJECTION	TRANSVERSE MERCATOR
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR	ZONE 12
10,000-FOOT STATE GRID TICKS	ARIZONA, EAST ZONE
UTM GRID DECLINATION	0°39' EAST
1985 MAGNETIC NORTH DECLINATION	12° EAST
VERTICAL DATUM	NATIONAL GEODETIC VERTICAL DATUM OF 1929
HORIZONTAL DATUM	1927 NORTH AMERICAN DATUM

To place on the predicted North American Datum of 1983, move the projection lines as shown by dashed corner ticks

NORTH

Thatcher 7.5

PROVISIONAL MAP

Produced from original manuscript drawings. Infor-

1

1000

Richard E. Mieritz
MINING CONSULTANT

October 29, 1956

Arizona Triumph Mines
650 N. 1st Avenue
Phoenix, Arizona

Gentlemen:

At the request of Mr. J. C. Kostolnik, a partner in your group, I completed a field examination of the Arizona Triumph Mine in Graham County, Arizona, as a means to determine the merit of the mine, provide conclusions and recommendations.

The time alloted permitted but a brief examination of the surface and underground workings. As a result, the report, although complete, has been prepared in broad terms, rather then in detail and complete accuracy with respect distances etc.

It is my pleasure to submit herewith the following Geologic Report on The Arizona Triumph Mine.

In the event further professional consultation is required either on this property or others, I would be pleased to serve again in the same capacity.

Very truly yours,

R. E. Mieritz

GEOLOGIC EXAMINATION

of

ARIZONA TRIUMPH MINE

in

GRAHAM COUNTY, ARIZONA

by

Richard E. Mieritz
Mining Consultant
Phoenix, Arizona

October 29, 1956

TABLE OF CONTENTS

Page

Introduction - - - - - - - - - - - - - - - - - 1

Property and Location - - - - - - - - - - - 1

Regional Geology - - - - - - - - - - - - - - 2

Mine Geology - - - - - - - - - - - - - - - - 3

Mineralization - - - - - - - - - - - - - - - 4

Early Exploration - - - - - - - - - - - - - 5

Economics - - - - - - - - - - - - - - - - - 6

Conclusions - - - - - - - - - - - - - - - - 7

Recommendations - - - - - - - - - - - - - - 8

Acknowledgements - - - - - - - - - - - - - - 9

Location Map - - - - - - - - - - - - Figure 1

Claim Map - - - - - - - - - - - - - Figure 2

Geologic Expression (Sketch of Surface)

Figure 3

Geologic Map (Upper and Lower Adits)

Figure 4

INTRODUCTION

Accompanied by Mr. J. C. Kostolnik, I personally examined the Arizona Triumph Mine on October 21, 1956. The purpose of the examination was to obtain information to determine (1) merit of the property with particular attention to possible precious metal mineralization, (2) to recommend limited but ample exploration if such is warranted and (3) to provide a written report of the examiners findings for the benefit of the owners as a basic guide for any future work or discussion.

Time alloted permitted an examination limited in scope to the observation and taped mapping of the two adits and observation of surface outcroppings pertinent to and influenced by the interpretation of the underground mapping.

PROPERTY AND LOCATION

The Arizona Triumph Mine consists of 12 unpatented lode mining claims, all 600 feet by 1500 feet in dimension. These claims are located in Crook National Forest, approximately in Sections ~~1, 2, 11~~ 35 and 12; T. ~~8~~ 7 S.; R. 24 E. of the Gila and Salt River Principal Meridian in Graham Mt. Mining District, Graham County, Arizona. (see figure 1 and 2)

Access to the property is over a graveled road from Pima, a small town on a branch of the Southern

Pacific Railroad and on U. S. highway 70, about 9 miles northwest of Safford, Arizona. The graveled road trends predominately south and a little west for 11.5 miles to the property, where it ends. The last two miles are not recommended for anything but "jeep" or pickup travel.

REGIONAL GEOLOGY

Rocks and structure within the scope of the property and that of the Pinaleno Mountain Range immediately to the south indicate considerable igneous activity had taken place primarily through cooling segregation of minerals to bring about the formation of the igneous rocks common to the area. Such rocks include the older Arkean? Schist, Precambrian granite and Cretaceous diorite and gabbro.

The characteristic light colored granite makes up the core of the Pinaleno Mountains with the diorite gabbro and Final? schist, in that order, flanking the north side. Cooling of the magma created tension fractures. Minerals including feldspar, quartz and barite were abundant and in excess in the magma and favored the tension fractures as an escape. Associated minerals containing copper, lead and precious metals accompanied the host minerals in varying quantities, in some instances, in sufficient quantities to be of economic importance.

MINE GEOLOGY

For the most part, rocks in the immediate area of the claims are limited to diorite, gabbro and schist. All three rock types are identifyable on the surface although considerable soil covers the diorite and gabbro. The schist, containing considerable silica, is most resistant to errosion and causes an apparent differential topographic relief in nearly vertical cliff faces and steeper hill side slopes as contrasted by more gentle slopes resulting from alteration and errosion of the diorite and gabbro. (see "cross section", figure 4)/

The various rock contacts as sketched on figure 3 indicate an approximate position only since float and soil coloration are the basis for their placement as such. Moreover, distances with relation to the portal of adits are purely estimates, consequently, the accuracy of such contacts cannot be vouched for except pictorially.

The underground workings expose both the diorite and gabbro. The gabbro is a dark colored medium grained rock containing an abundant percentage of hornblende and/or pyroxene(ferromagnesium minerals) and a minor amount of light colored feldspars (sodium aluminum silicates). The diorite is a lighter colored medium grained rock containing feldspars in amounts of

50% or more and lesser amounts of hornblende/pyroxene with some quartz.

No true contact between the two rock types was evidenced in the underground workings. However, a transitional grading from the gabbro exposed at the adit portal to the diorite exposed within the adit does occur and is so distinguished only by means of the decreasing amounts of the ferromagnesium minerals and a corresponding increase in the feldspars.

As depicted in the "cross section" sketch (figure 4), it is thought that the diorite-gabbro core has had a dome-like upheaval effect on the schist and thus caused considerable breaking of the schist at pressure points to permit complete schist errosion and removal in areas to expose the diorite and gabbro.

Generally speaking, diorites and gabbros are not particularly favorable host rocks for metalliferous or precious metal mineralization.

MINERALIZATION

Mineralization in the immediate mine area is confined to filling of the tension fractures. As the periphery of the diorite-gabbro magma cooled, the excess feldspar at near core center found its way trough the tension fractures. The feldspar was definitely void or at the most slightly contaminated with small amounts of gold and silver values.

A similar condition exists with the presence of a strong white quartz vein exposed by a shallow pit in a saddle approximately 1500 feet southwest of the adit portal and approximately 800 feet higher in elevation. This strong fissure bears N. 55° W. and dips 80°NE. An early sample taken by your group showed but a trace of gold value.

The S. 37° W. drill hole drilled in the face of the upper adit has fallen short of the quartz fissure objective by some 300 to 500 feet(estimated). Had the drill hole reached its objective, the writer feels sure the assay values would have been very disappointing. The hole was drilled to 591 feet.

EARLY EXPLORATION

Reasons for existing surface and underground workings on a property are always a prey for engineers and geologists and the reason for underground workings on this property are no exception. The recent work by the present owners indicates thoughts tended toward exploration of precious metal mineralization. These thoughts and work were justified since the writer also concluded during the examination that the objective of the upper adit was its intersection with the projected quartz fissure exposed in the saddle. A concentrated study of all available information however indicates the writer must admit a wrong conclusion and amend it to one which he believes coincides with that of the

individual responsible for the early work. The object of the early work without refutation was to explore and develop the feldspar mineralization so prominently exposed in the area. One of several reasons of economics may have prompted this work.

ECONOMICS

Although the present owners indicated the property was originally located for gold possibilities, it is doubtful that such mineralization exists within the area covered by the report; much less within the boundaries of the claims. Gold values in excess of $25.00 per ton would be required within the property to consider production. Th this end, geologically, there is no definite evidence that gold mineralization approaching this value has been exposed by existing exploration.

Mineralization of the second order, viz, feldspar, is abundantly exposed in the adits, drill hole and on the surface. The feldspar albite, as specifically identified by the University of Arizona, does have economic value but because of the discontinuity and narrowness of the fissures, an excessive production cost might erase any profit which might be derived from sale thereof to the limited eastern and west coast markets. Market quotations in the October issue of the Engineering and Mining Journal list a price range of $18.50 to $22.25 per ton for 200 mesh ceramic grade potassium or

sodium feldspar.

Although local copper smelters are constantly seeking silica flux material, their desires trend towards material with metallic or precious metal contents. Knowledge of continuity and strength of the barren quartz fissure exposed on the surface at the saddle is so limited that projection of its trend could be very misleading. Moreover, it is doubtful whether the silica content alone would support a mining charge much less the freight charge and a profit.

The various spectrographic analysis do not indicate common or rare metals exist in sufficient quantities to be of economic interest.

CONCLUSIONS

Knowledge obtained by the brief field examination, from assays and other pertinent information supplied by the owners and a study of same, the writer concludes;

(1) possibilities of gold mineralization in the quartz or feldspar fissures to the extent of economic values are extremely remote.

(2) mining and marketing of second order albite, a feldspar, is perhaps not economically possible because of excess anticipated costs to produce a product acceptable to the limited markets, and

(3) existance of any base metal or rare earth metal mineralization is extremely remote because of geologic conditions present even though limited

traces of base metal minerals were observed in the feldspar rich fissures.

RECOMMENDATIONS

By the same token considered for the above conclusions, the following recommendations are submitted.;

(1) no further funds should be expended on this property to explore for gold bearing fissures,

(2) even though I have concluded a non-profitable feldspar operation, inquiries should be made and samples sent to various feldspar purchasers to determine a market and the possible value that could be expected,

(3) if the inquiries prove discouraging, retain the property so long as present assessment work will legally hold the claims but no longer,

(4) if the inquiries prove engouraging, investigate processing proceedures, obtain ample information on type and costs of the necessary machinery for mine and mill operation and prepare a cost estimate,

(5) have a professional report prepared to include plans for development and exploitation, plans for processing and mill construction, and costs for development, exploitation, processing and mill construction.

(6) employ the services of a professional engineer qualified in exploration, development, mining

and milling proceedures to guide a possible operation.

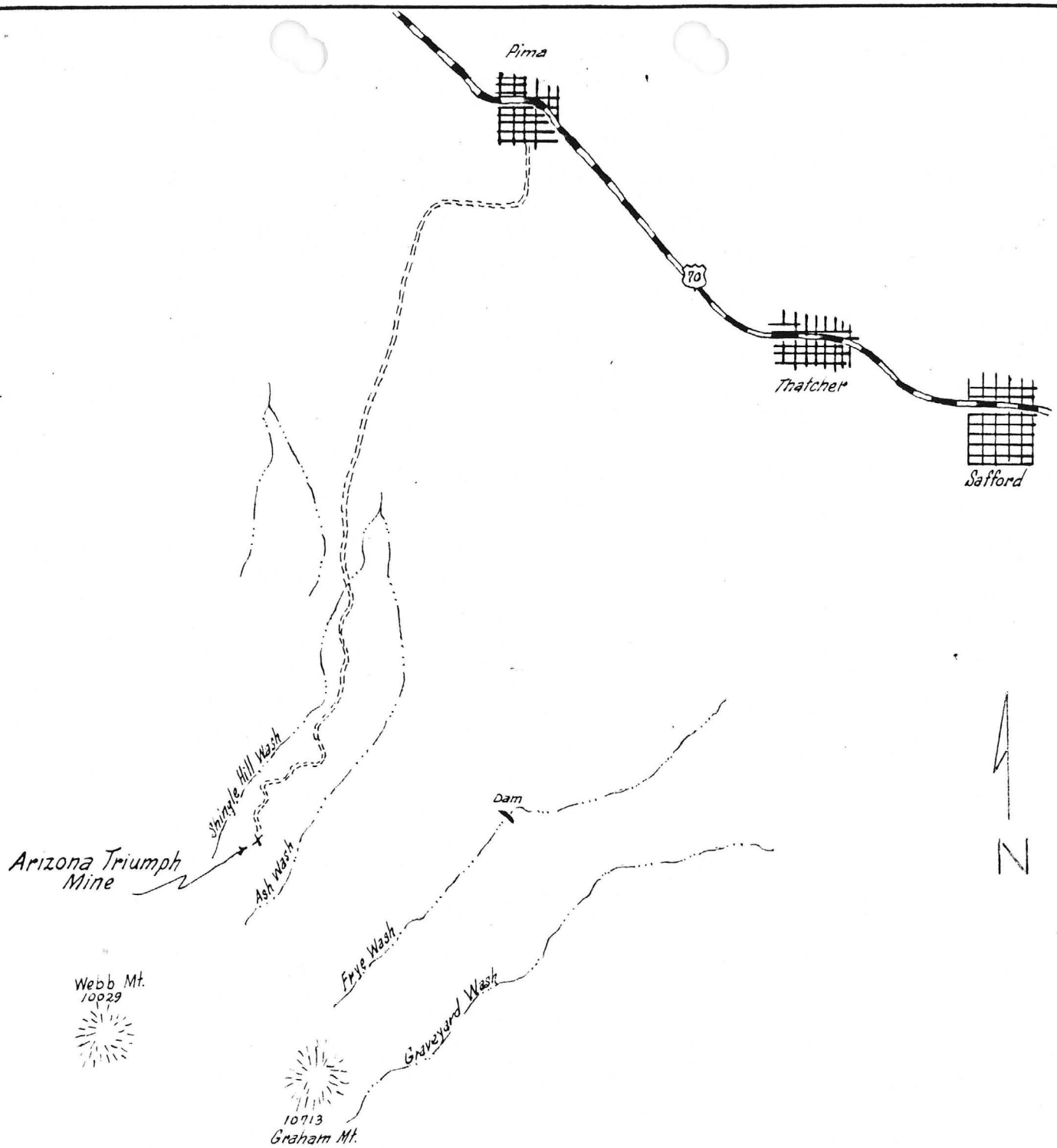
ACKNOWLEDGEMENTS

The writer is indebited to Mr. J. C. Kostolnik for his cooperation in forwarding verbal historical information, permitting access to property files of assays etc and his company during the examination.

Respectively submitted,

Richard E. Mieritz

October 29, 1956



NOTE

Property location assumed by intersection of bearings from Pima and Thacther.

LOCATION MAP

ARIZONA TRIUMPH MINE

Graham Mt. Mining District in

GRAHAM CO., ARIZONA

SCALE: 1" = 2 MI.

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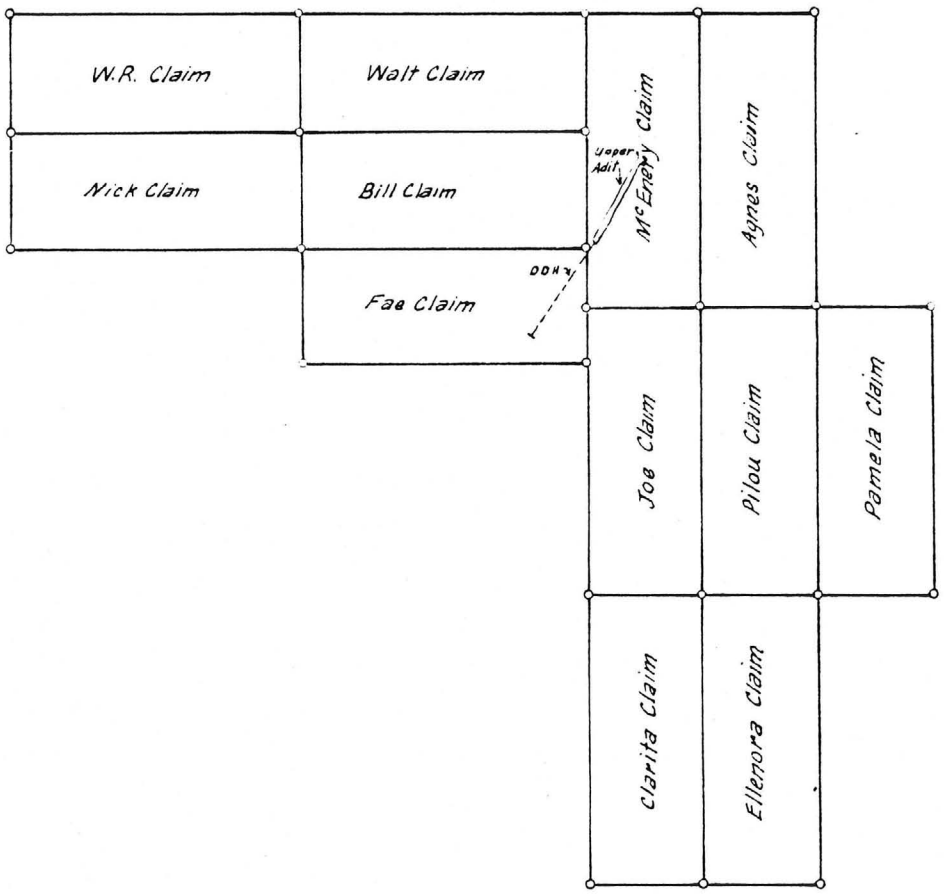
FIG. 1



CLAIM MAP

ARIZONA TRIUMPH MINE

GRAHAM COUNTY, ARIZONA

SCALE: 1" = 1000 Ft.

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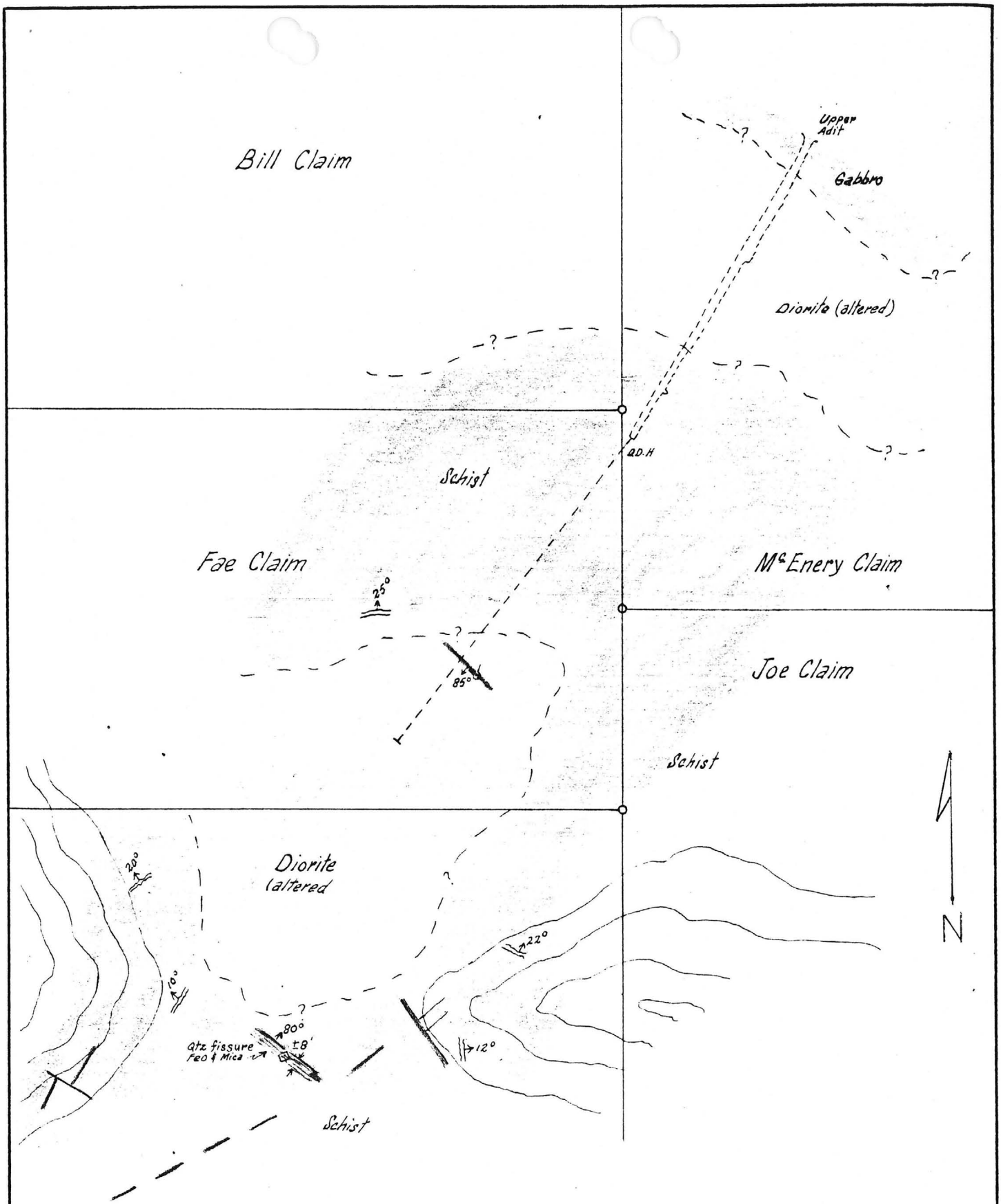
FIG. 2



NOTE

Location of surface geology are estimated distances with respect to Adit, Claim and drill hole positions

SKETCH of SURFACE

GEOLOGIC EXPRESSION

ARIZONA TRIUMPH MINE

GRAHAM COUNTY, ARIZONA

SCALE: 1" = 200 Ft.

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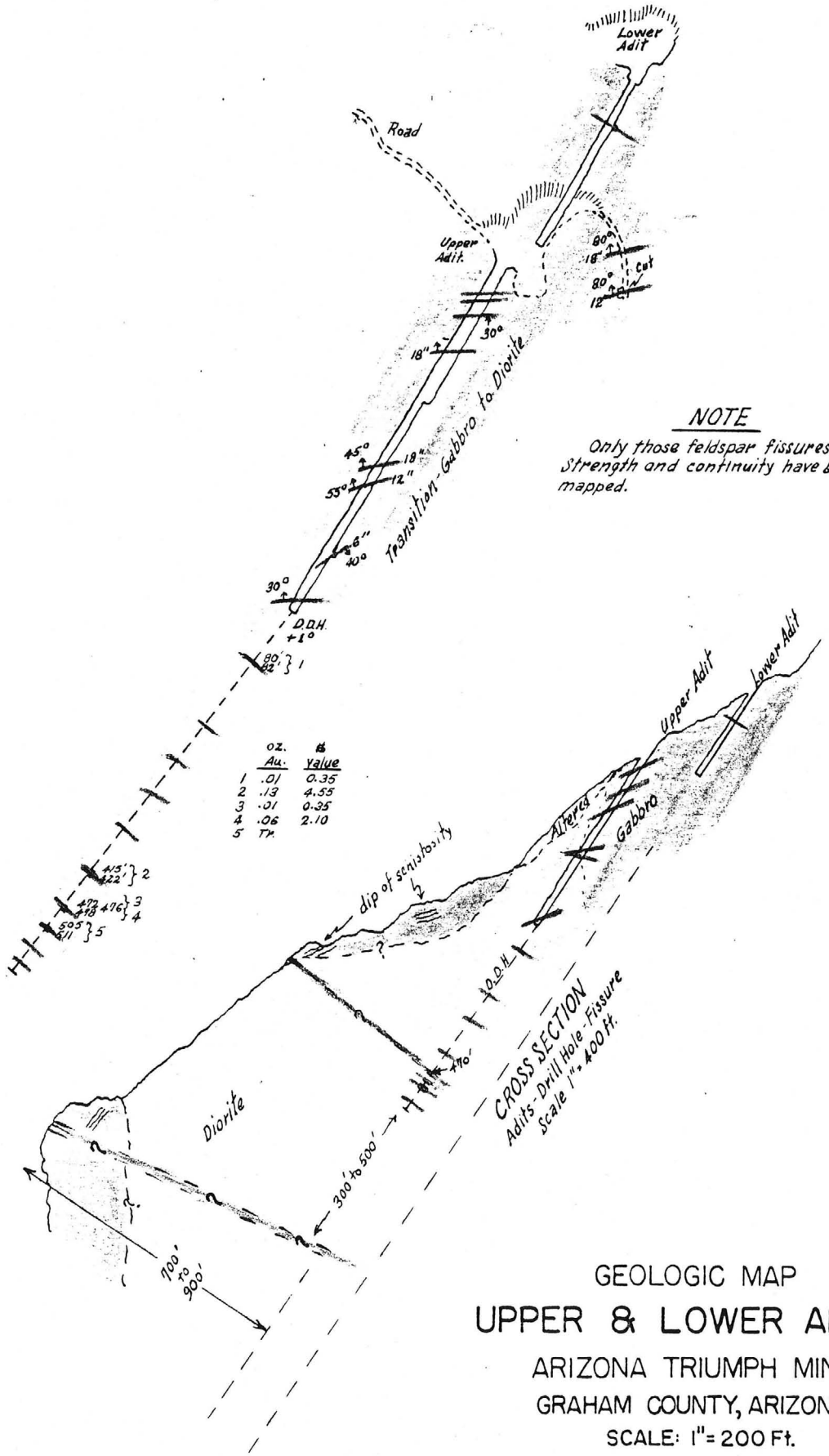
FIG. 3



GEOLOGIC MAP

UPPER & LOWER ADITS

ARIZONA TRIUMPH MINE

GRAHAM COUNTY, ARIZONA

SCALE: 1" = 200 Ft.

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FIG. 4