



CONTACT INFORMATION

Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 02/15/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MARCOTTE BARITE

ALTERNATE NAMES:
KLONDYKE BARITE

GRAHAM COUNTY MILS NUMBER: 241

LOCATION: TOWNSHIP 8 S RANGE 21 E SECTION 13 QUARTER C
LATITUDE: N 32DEG 44MIN 20SEC LONGITUDE: W 110DEG 09MIN 12SEC
TOPO MAP NAME: EUREKA RANCH - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
BARIUM BARITE
GOLD
SILVER
FLUORINE FLUORSPAR

BIBLIOGRAPHY:
ADMMR MARCOTTE BARITE FILE
AZBM BULL. 180, MINERAL AND WATER RESOURCES
OF AZ. 1969, P. 314, 352
ELEVATORSKI, E.A., AZ. FLUORSPAR, ADMMR 1971,
P. 20
STEWART, L.A. & PFISTER, BARITE DEPOSITS OF
AZ. USBM RI 5651, 1960, P. 19-24
CLAIMS EXTEND INTO SEC. 14 & 24
ADMMR U FILE
ADMMR FILE
ADMMR MAP FILES - MACOTTE BARITE MAP

MARCOTTE BARITE

GRAHAM COUNTY

Map in Brown Cabinet file - Section #4

DMS - Fluorspar p. 20

ABM Bull. 180, p. 314, 352

RI 5651 p. 19 - Barite

MARCOTTE BARITE

GRAHAM COUNTY

It is reported that U.S. Lime and Mining Co., Box 231, Silver City, New Mexico is interested in Marcotte Barite property. FTJ WR 2-18-66

NJN WR 1/15/82: Larry Goletz, formerly helicopter pilot for Laurence Mining visited. He reported Jim Jones (formerly geologist for Laurence Mining) and someone else have formed Casandra Mining Inc. They are interested in Marcotte Barite and other barite properties in that area of Graham County.



STATE OF ARIZONA
DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA



June 16, 1958

Information came to the attention of this Department re:

MINE: Marcotte - Aravapai District
Operating Company: Roberts & Associates
Agent: Bob Bush, P. O. Box 404
Thatcher, Arizona

Cleaning shaft now down 137' and this is believed to be bottom
New work in progress repairing and cleaning 138' shaft
Assays on quartz footwall of the vein, which is about 8" to 18"
wide, indicate \$32.00 in gold and $\frac{1}{4}$ oz of silver per ton. The
vein, otherwise, consists of 3-5' of barite down to 50' of depth
where the barite is beginning to show fluorite. The fluorite
is increasing with depth. The barite in the top 50' runs 97%
BaSO₄ and 4.25 gravity.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Marcotte Barite

Date June 11, 1958

District Clark Mining District, Graham County

Engineer Axel L. Johnson

Subject: Field Engineer's Report. Information from A.J. Marcotte and Bob Bush.

References: Report of March 5, 1958.

Location: Sec. 13 -- T 8 S -- R 21 E. For directions see report of March 5, 1958.

No. of Claims: 12 claims on State land. (type "a")

Owners: A. J. Marcotte, Box 52, Klondyke, Arizona, and H. R. Bogan, 326 W. Mitchell Drive, Scottsdale, Arizona.

Purchasers: Cummins-Roberts Company (part of Roberts & Associates), L. E. Broadhurst, Pres., 2037 East Rancho Drive, Phoenix, Arizona, Bob Bush, Field Representative, Thatcher, Arizona.

Price of sale was reported by Mr. Marcotte to be \$120,000.00 payable out of royalties of 50¢ per gross ton of minerals produced.

Principal Minerals: Barite ore.

Present Mining Activity: None. Work was discontinued on June 4, 1958 after five weeks of operation.

Geology: See report of March 5, 1958.

Milling and Mining Facilities: No mill on the property. Purchasers are reported to have an option on the Klondyke mill to be used for milling of the barite ore. Purchasers also are reported as having taken out a lease on the old Fort Thomas Depot to be used for the drying and sacking of the barite.

Old Mine Workings: The vertical shaft, which was reported previously as being 300' in depth, was found to be only about 125' deep.

New Mining Operations: Purchasers started operations on the property about 6 weeks ago. Since that time they have constructed a new road into the property for a distance of about 4 miles and also graded about 10 miles of old road. They have also retimbered the vertical shaft (8' x 15', 3 compartment) down to the 110' level.

Note: The old vertical shaft was found to be about 125' in depth instead of the depth previously reported.

Present Mining Operations: None.

Proposed Plans: Mr. Marcotte did not have any definite information regarding further operating plans of the purchasing company.

Bob Bush, the field representative of the company, reports running out of barite at from 60-65', but that below this depth there is fluorspar and some fairly good values in gold and silver. He states that the company is at present making samples and tests to determine the value of these minerals.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Marcotte Barite

Date Mar. 5, 1958

District Clark Mining District - Graham Co.

Engineer Axel L. Johnson

Subject: Field Engineers Report -- Personal Visit and Information from A.J. Marcotte

Location Sec. 13 -- T 8 S -- R 21 E Starting from Klondyke, drive 8.0 miles to the junction of Bonita-Willcox and Safford Roads. Continue on Bonita-Willcox Road for an additional 6.0 miles, turn left, (NE) and drive up Sheep Wash for 4.0 miles to the property.

Alternate route -- starting from Klondyke, drive 8.0 miles to the junction of the Bonita-Willcox and Safford Roads, turn left and drive on Safford Road for a distance of 10.0 miles, turn right (SE) and drive an additional 10.0 miles to the property. Roads are unimproved dirt roads and bad in places.

Number of Claims 12 claims on State land (Type A)

Owners A.J. Marcotte, Box 52, Klondyke H.R. Bogan, 326 West Mitchell Drive
Scottsdale, Arizona

Option to Purchase A.J. Marcotte and Harold Bogan to Dale Hutchison
Purchase price \$75,000.00 to be paid out of a royalty of 55¢ per ton. Option made
November 30, 1957, ends March 22, 1958.

Principal Minerals Barite Ore

Present Mining Activities None

Geology The country rock is a volcanic conglomerate, which contains large fragments of rock which appear to be Andesite. Three veins of Barite outcropping at the surface was noticed on the property. These veins were vertical and from 2½ to 4 feet in width. The Barite ore appeared to be of medium grade quality.

Ore in Sight and Probable Ore in sight is negligible due to lack of development. Probable ore appears to be considerable. It may be as much as 75,000 to 100,000 to each 100 feet of depth.

Milling and Mining Facilities No mill on the property. Owners expect to make arrangements with Athletic Mining Company for the milling of the Barite at the Klondyke Mill at Klondyke. This mill is now idle. Distance of haul mine to mill is about 20.0 miles. Concentrates would be hauled to Cork Siding for shipment. Distance of haul mill to shipping point about 36.0 miles. Material would be shipped to Barite producers principally in Texas.

Past History and Production A 300 ft. shaft was sunk many years ago, probably in search of other minerals. No ore shipments are indicated.

Old Mine Workings 1 - 300 ft. vertical shaft, open but appears to be in bad shape.

New Mine Workings Limited to location work and a few small open cuts.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Marcotte Barite (continued)

Date Mar. 5, 1958

District Clark Mining District - Graham Co.

Engineer Alex L. Johnson

Subject: Field Engineers Report -- Personal Visit and Information from A.J. Marcotte

Proposed Plans If the present option by Dale Hutchison is not exercised, the owner plans on selling or leasing the property to some other company for the milling of the ore at the Klondyke Mill and shipping of the concentrates as described above.

Special Difficulties Underground operation will be required with relatively high mining costs. Long haul of the ore to the mill (and concentrates to loading ramp) plus high freight rates to Texas and California Barite users.

Recommendations

- (1.) Exploration Recommend doing considerable surface exploration work by open cutting, trenching, and sampling to determine average grade of the ore, and mill tests to determine milling technique and recovery. Also recommend some diamond drill holes be put down to intersect the veins in a number of places.
- (2) Development If the above exploration shows favorable results, recommend to repair and timber the present 300 ft. vertical shaft and drifting on the ore vein in order to develop the ore body.

17

GEOLOGIC and ENGINEERING REPORT

on the

MARCOTTE BARITE PROPERTY

in the

CLARK MINING DISTRICT

in

GRAHAM COUNTY, ARIZONA

by

R. E. Mieritz, P. E.
Mining Consultant
Phoenix, Arizona

January 8, 1958

CONCLUSIONS

Having briefly examined the Marcotte Barite property in Graham County, Arizona, the writer can conclude the following:

- (1)-Geologic conditions in evidence indicate barite mineralization of good quality is available from the property,
- (2)-an estimated 900,000 tons of 90% barite is inferred based on the present surface exposures and inaccessible near vertical shaft,
- (3)-The property must be explored before a decision to operate or purchase is finalized, and
- (4)-Beneficiation of the material by processes other than those using water should be investigated.

PROPERTY

The Marcotte Barite property consists of 12 contiguous unpatented lode mining claims known as Marcotte Numbers 1 to 12 and are located in Sections 13, 14 and 24 of T. 8 S., R. 21 E. of the Gila and Salt River Base and Meridian, in the Clark Mining District, Graham County, Arizona.

These claims lie in the southwest foothills of the Graham Mountain Range, approximately 34 miles by road southwest of Pima, a railroad loading ramp eight miles northwest of Safford, County Seat, Arizona. Travel by car from Pima is over 7 miles of paved highway 70, then 13 miles over a good graded County maintained gravel road and 9 miles over a narrow ranch type road.

LOCAL GEOLOGY

Barium, occurring as the mineral barite, is observed as moderately defined vein stringers and fissures in a host of Tertiary volcanic rocks. The thickness of the volcanic rocks cannot be stated at this time but a vertical relief difference between the property and the nearby Aravaipa Valley to the southwest is some 400 to 500 feet.

MINERALIZATION

The barite mineralization is thought to occur as a fissure filling of the cooling cracks developed in the

volcanic flows in the area. Two prominent parallel "veins" striking N. 45° W. with near vertical dips outcrop naturally in several places along their strike and are exposed in a few more places by man made cuts and holes. The major and most northerly vein was traced on the surface by the writer for 2000 feet from southeast to northwest. Barite float was noticeable in the distance beyond this point but was not personally examined. The minor structure, some 700 feet south of the major vein, was traced for some 900 feet from southeast to northwest.

Surfacewise, the general expression of these veins is not overly impressive. Width, 4 to 24 inches, massiveness, solidity or completeness of mineralization, is for the most part lacking; the vein material assuming a network pattern within the walls of the cooling cracks. Inclusions of waste, volcanic fragmental horsts, were evidenced at least to a depth of 10 to 12 feet below the surface. The encouraging feature of the structures however, is the great continuity and consistent moderate strength along their strikes.

The depth to which this network condition might exist is not predictable. Erosional relief on the property suggests at least 75 feet. This is not a discouraging feature since the writer is of the opinion that the network is a reflection of the rapid cooling of the near surface portion of the flow, that is, the then existing surface very closely approximates the present surface. At depth, it is likely the network type mineralization can easily resolve itself into one of massiveness, one of sufficient width for proper mining and one of greater purity but with an occasional horse of waste.

Rumors have it that the near vertical shaft and its two (?) levels; sunk and drifted on the major vein near its eastern limit, encountered barite mineralization its full depth of 400 feet. Barite widths to 18 feet were also indicated. A caved shaft collar renders the shaft inaccessible at this time.

Except for the shaft described in the previous paragraph, additional development is limited to small, shallow trenches or pits, excavated primarily as the discovery shafts.

ORE RESERVES

Any ore reserves assigned to this property at this stage is dependent to a large extent on the unrealistic desire of the individual. With the evidence at hand as

a result of the brief examination, the writer can infer 877,000 tons of barite before beneficiation. This figure is a resulting tonnage from the two veins, the dimensions for the major and minor structures being as follows: 3000 feet long, 300 feet in depth and 6 feet wide; 1200 feet long, 100 feet depth and 6 feet wide. A cubic foot per ton factor of 7 was used. The barite content of this reserve should approximate 90% or better. This grade estimate is the writer's opinion, no samples had been taken.

EXPLORATION

Exploration of the property is definitely warranted and should be completed before any purchase or operation of the property is justified.

The objective of the initial exploration would be to determine and substantiate the existence and character of the barite mineralization at depth of the two prominent "veins" in evidence on the surface. The only penetration to depth is the near vertical inaccessible shaft whose rumored depth is 400 feet. Consequently, other penetrations or intersections must be made. Moreover, any exploration work completed within the confines of the dimensions indicated for the inferred reserve will, if successful, convert the inferred reserve to indicated, thus allowing added inference beyond the limit of indication.

Three avenues of exploration must be completed, they being in the order of their importance and prerequisite value, (1) repair the near vertical shaft collar and any additional repair necessary to permit accessibility for examination, (2) bulldoze intermittent trenches across the structures and (3) diamond drill large diameter angle holes from strategic locations along the strike to intersect the veins at depths of 200 and 400 feet.

Simultaneous with this program must be included the necessary surface geologic mapping and surveying for good control on direction and angles of drill holes for desired target intersections.

Some eight holes for a total footage of 3000 feet of drilling is necessary. Three shallow holes and two deep holes should be spaced at 500 foot intervals along the strike of the major structure. Two shallow and one deep hole should be spaced at 400 foot intervals along the strike of the secondary structure.

An estimated expenditure to complete the exploration

program as outlined may approach the following figures. The costs are based on normal rental and contract prices.

Shaft Repair--Labor & Materials	\$ 2,000.00
Trenching and some roads	
D-8 @ \$18.00/hr-2 weeks	\$ 2,000.00
Diamond drilling 3000 feet @ \$10.00/ft (Includes extras, sampling, core boxes)	\$ 30,000.00
Professional supervision-Mapping, etc	\$ 3,000.00
20% contingencies	\$ 7,500.00
	<hr/>
Total possible expenditure	\$ 44,500.00

Barring too frequent delays in diamond drilling with one drill, the entire program should be completed within two months to ten weeks. Two drills should of course cut the time in half, or nearly so, five to six weeks.

MINING

Mining of the ore should not present any great problem since the barite is readily distinguished from the waste rock and the walls of the veins are such that they should stand very well making for easy stoping and high daily production. The weight factor of barite may however require that timbering be done if a mining width of more than 6 or 7 feet is encountered.

Inspection of the shaft will render its fitness for use in a mining operation. It must be sufficiently sound to support a three ton pay-load per skip to attain and maintain a 6000 per month production.

Except for hoisting, the mining cost should not be excessive once the stoping areas have been prepared. A ton in the bin price on the surface should not exceed \$4.50 providing a minimum amount of timbering must be done. Excessive timbering will add approximately a dollar per ton.

MILLING

Beneficiation of the material here mined is a re-

quirement for production of a marketable product, particularly if the product is to be petroleum drilling mud.

Flotation test conducted by the Bureau of Mines in Tucson, Arizona indicated recoveries of 60 to 62 % with a resulting gravity of 4.3 to 4.45. Installation of a flotation mill at the property would require an expensive water development program. Water in the area is at a high premium and the cost of such development might be prohibitive. For this reason the writer suggests the material should be metallurgically tested by dry - gravity or sink - float processes to determine their adaptability as a means of a possible mill installation at the property for the production of a marketable product at the mine.

RECOMMENDATIONS

The following recommendations are herewith provided for your consideration.

- (1) Complete the exploration program as outlined.
- (2) If successful, conduct metallurgical tests employing processes which do not require substantial amounts of water, and
- (3) Lease or purchase the property on suitable terms and put into production if the marketing of the product has been investigated and found to be of an assured life for the next ten years.

Respectfully submitted,

B. E. MIERITZ

Richard E. Mieritz
Mining Consultant
Phoenix, Arizona

January 8, 1958



DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Marcotte Barite

Date November 27, 1957

District Araviapa District near Klondyke

Engineer Lewis A. Smith

Subject: Reported by Mr. Dale Huchinson

Location: Sec. 13, 14, 24, T8S, R21 E

Owner A. J. Marcotte, Klondyke, Graham County

Property: 12 claims (2 groups of 5 each and 2 connecting claims)

Work: 430' shaft, (6'x11') on vein and assessment cuts and pits.

Present Status: W. Dale Huchinson, 4691 North Central Ave., Phoenix, Arizona, is negotiating an option for a California firm.

Geology: The deposit consists of two barite veins in granite. The veins are parallel and are called No. 1 & No. 2. The No.1 vein is 6' wide and 4500 feet long. Its width is consistent to the bottom of the shaft. Huchinson, if he obtains the property, plans to drill at least two core-drillsholes along the strike of the vein so as to prove tonnage. He stated that he was sure of at least 500,000 tons, but would have to prove it. The barite runs between 4.1 and 4.45 gravity and 96.3% of BaSO_4 . The vein strike N 40 - 55°W and dip from vertical to NE, steeply. The No. 2 vein appears to be similar to No. 1, but has been little developed.

Access: 6 miles of country road and 16 miles of county graded road to railroad, both now being in good condition.

Market: The market is assured.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Marcotte Gypsum Claims

Date November 27, 1957

District Near Klondyke Arizona Graham County

Engineer Lewis A. Smith

Subject: Reported by R. Dale Huchinson

Location: Sec. 13, 14, 24 T8S R21E

Owner: A. J. Marcotte ✓

2 groups of 5 claims and two connecting ones, a total of 12 claims acquired by Marcotte in December 1956.

Two parallel veins striking N 45°W and dip steeply to the northeast, but many vary to vertical. The main, or No.2 vein is of most importance and has been developed over the length of 3 claims (4500 feet). The lesser, or parallel branching vein has been located but little prospected. The main vein has a 6X11 foot shaft which is down over 430'. The width of the vein, is 6' and it is consistent in width to the bottom of the shaft. The indicated grade, as established by shaft samples, is 4.3-4.45 gravity and 95% BaSO₄. It carries a little silver. Huchinson's people have offered a royalty proposition for the property of 35-40¢ per ton and he states that two holes placed along the ~~strip~~^{strike} for 2000 feet would show at least 1,000,000 tons if it ~~proves~~^{proves} out as far as grade and consistency ore ~~conceived~~ is concerned. The firm has a big market for the material if proper terms are reached.

DEPARTMENT OF MINERAL RESOURCES

Date 6-16-58

Mine Marcotte, (Graham Co.) Arvaipai Dist.

Location 8 miles SE of Klondyke

Owner Option by Roberts & Associates

Address Los Angeles

Operating Co. Roberts & Associates

Agent Bob Bush, P.O. Box 404
Thacher, Arizona

Pres. [illegible]

Genl. Mgr. [illegible]

Mine Supt. [illegible]

Mill Supt. [illegible]

Principal Metals Barite, fluorite, Au.

Men Employed [illegible]

Production Rate [illegible]

Mill, Type & Capacity [illegible]

Power, Amt. & Type [illegible]

Reported by Mr. Bush to

Signed *Lewis A. Smith*

Lewis A. Smith

(Over)

Present conditions Cleaning shaft now down 37 feet and this is believed to be bottom.

Date 8-10-28

Location of shaft (Graham No. 10)

Location of shaft

New Work Planned in progress Repairing and cleaning 138' shaft.

Operating Co. Robert & Associates
Theobald, Kansas

Misc. Notes Assays on quartz footwall of the vein, which is about 8" to 18" wide, indicate \$32.00 in gold and 1/4 oz. of silver per ton. The vein, otherwise, consists of 3-5' of barite down to 50' of depth where the barite is beginning to show fluorite. The fluorite is increasing with depth. The barite in the top 50' runs 97% BaSO₄ and 4.25 gravity.

of hand . . .

HOME . . .

MEMO

May 8, 1958

✓ Marcotte Barite

Not for Publication

Inf. Coloman O'Shea

Ref. Report of 3/5/58

Owner ✓ A. J. Marcotte & H.R. Bogan ✓

Lessees A California Company

Mr. O'Shea did not remember name.

Present Mining Activities Retimbering
the 300' vert. shaft. 8 men working.
Down 50' in the shaft now.

Additional Info.

✓ Leasing company has leased the
Athletic mill at Klondyke, to be used
for the milling of the barite.

Company has also leased the old
vacant S. P. depot at Ft. Thomas. This
is to be used for the drying and the
sacking of the barite (drying & sacking
plant).

✓ Bob Bush, Pima, Ariz. is reported
to be working for the Calif. Co.

Proposed Plans Haul the ore to Klondyke
for milling at the Athletic Mill.

Haul the concentrates to Ft. Thomas
for drying and sacking.

Ship the dried & sacked conc. to a
large Calif. oil company.

Remarks Visit will be made, letter with
report of same.

AXEL L. JOHNSON

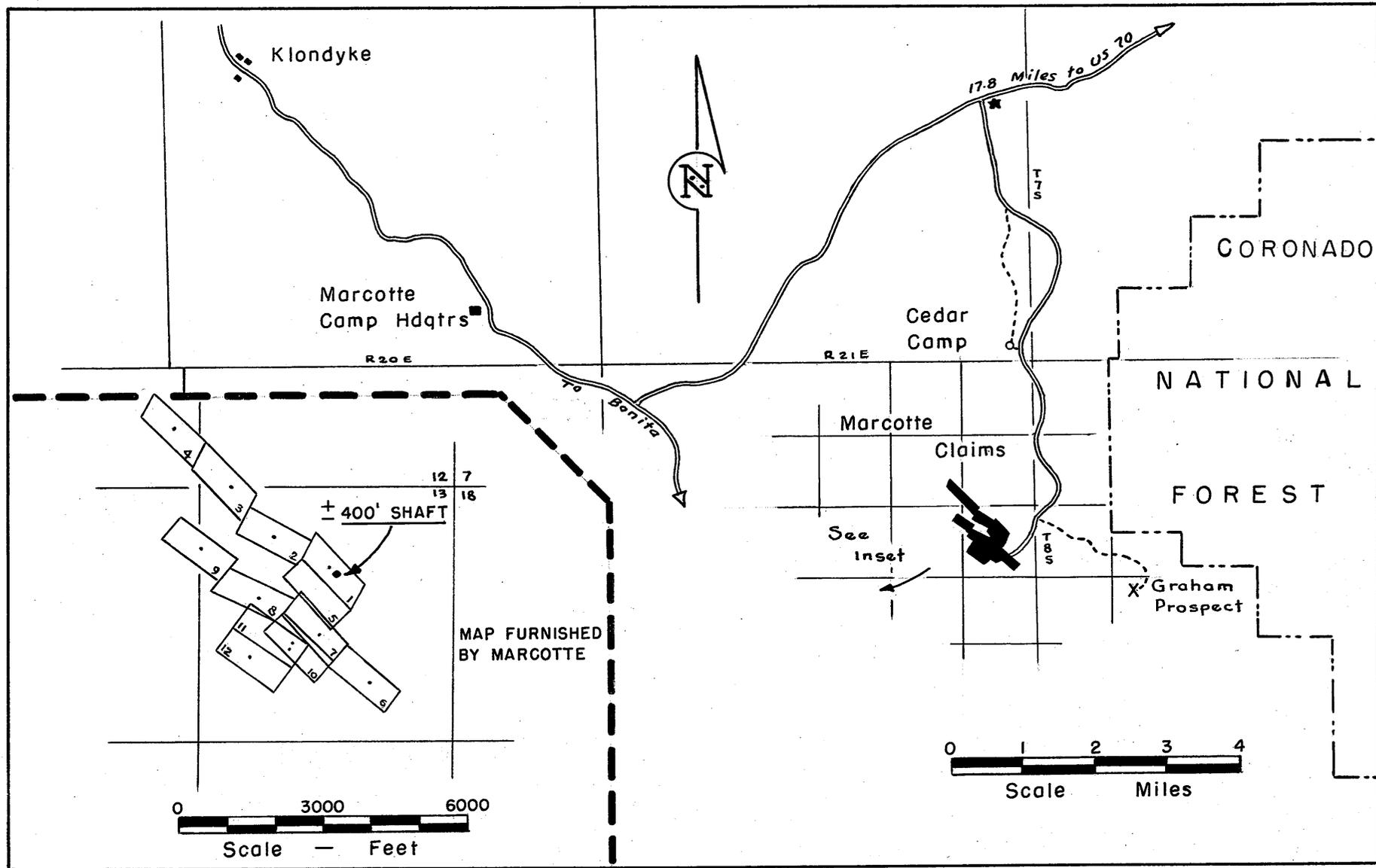
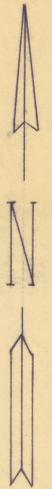


Fig. 5-Location and Claim Map, Marcotte Group ^{to}/₁₆

Fig 5

OK



CERTIFICATE OF SURVEY:
SURVEYED MAY 1-7 1957.



MARCOTTE BARITE MINING CLAIMS
CLARK MINING DISTRICT
SECTIONS 11-12-13 & 14
T. 8 S. R. 21 E. G. 4 J.R.B. & M.
W. SCOTT MERRILL, CONSULTING ENGINEER
SAFFORD, ARIZONA
SCALE 1 INCH = 300 FEET
DRAWN BY E. WILLIAMS
DATE 5-10-57
JOB NO. 241