

CONTACT INFORMATION

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Roland B. Mulchay
Consulting Geologist
2732 Wren Road
Salt Lake City, Utah 84117

April 2, 1982

Mr. James G. Jones
Cassandra Resources, Inc.
720 N. Mann Avenue
Tucson, Arizona 85710

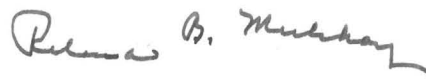
Dear Jones:

Since I returned to Salt Lake City I've been busy trying to keep the IRS satisfied and getting a report prepared for Virg Ostler on our visit to the Klondyke Prospect. It was a very pleasant trip and I want to thank you for an interesting and well conducted reconnaissance of the property.

On arrival here, I found that Mr. Ostler was to enter the hospital for a serious operation, and he has just returned home. I am not sure just when he will return to the office to get in touch with you. I described the narrow vein showings and their persistent exposures to him, but I doubt that his rather broad scale mining methods would be suitable for the Klondyke veins. As I mentioned to you there, it would be interesting to know just what mineralization might have occurred on those persistent fractures at depth.

I hope you have a lot of success in your mine search, and again my thanks for your personal kindness during our fine day last month.

Sincerely,



Roland B. Mulchay

RBM:m

all: (Krubel) KRUEGER

Silver Island

200 - 4²² 4³⁷

7000 T Good

359-5418

Morning or evening

EASTLICK
607-473-2473
MSP,

MSP

473-4000

3/24/82

1:40 PM.

Not there.

2:10

Was in Mont. - Hughesville - all
last week - Ammax doing work
on MoS_2 - he looked at some
Pb-Ag narrow veins.

He will look up Dajox prospects
in So. New Mexico. (CatF₂ district)

AL KRUBER

3/24/82

1:40 PM

SLC. 359-5418

Not there

3/25 10:10 AM Not there

12:15 PM " "

4:30 " "

3/26

D-G cat + loads by claims
jumper. Petro-chem leased
last year. Another claim
jumper shipped 2 loads (30T).

P-C shipped 475 T. of low
grade. P-D did air track ^{exit}
drilling - 40 ft, deep. 4.1

1 Shipped 200T 4.2 - 4.7

to Slim Garrett

Can see 8-10,000 T.

Need
Screening

To D. Seep.
N. on black
top turnoff.

20 mi. from
station
3 mi. past
S. Island
Pass.

Can in
2 wks.

Roland B. Mulchay
Consulting Geologist
2732 Wren Road
Salt Lake City, Utah 84117

March 17, 1982

Mr. V. F. Ostler
Rocky Mountain Refractories
2436 W. Andrew Avenue
Salt Lake City, Utah 84104

Dear Mr. Ostler:

Following is a statement of the fee and expenses incurred in examination and report on the Klondyke Barite Prospect, Graham County, Arizona, from March 3 - 5, 1982:

Fee: 1 day, Mar. 4, field	\$200.00
1 day, report and conferences	<u>100.00</u>
	\$300.00

Expenses:

Motel, Globe	\$ 79.04
Meals, Mar. 3-5	46.06
Mileage Tucson-Globe, Globe-Phoenix 205 mi. @ 25¢	<u>51.25</u>
	<u>\$176.25</u>

Total	476.35
-------	--------

Kindly have check forwarded to me at
2732 Wren Road, Salt Lake City, Utah, 84117.

Yours very truly,

Roland B. Mulchay

Roland B. Mulchay

RBM:m

Rec'd. payment 3/24 at R.M. Refract. office.
Dep. in T-C check. 3/25/82

Klamath, Re. P. 1910

Nov 3-5, '92

1 DAY EVAN

200.00

EXPENSES

Hotel

79.04

MEALS

46.06

3.31
11.20
3.70
22.50
5.32

46.03

MILEAGE

205 mi. @ 284

51.25

176.38

176.38

71910

71715

105
72
1035
410

2125

376.38

JAMES GEORGE JONES

QUALIFICATIONS

720 North Mann Avenue
Tucson, Arizona 85710

(602) 298-3576

OBJECTIVE:

Seeking a responsible and challenging position where education, experience and proven abilities will be effectively utilized.

SUMMARY OF CAPABILITIES:

****** Background encompasses related University Degree and years of successful experience in Mine Development resulting in expertise in the following areas:

- | | |
|-------------------------|-------------------------|
| - Economic Evaluation | - Cost Analysis |
| - Equipment Procurement | - Metallurgical Testing |
| - Production Forecasts | - Production Control |
| - Geological Mapping | - Crew Supervision |
| - Geophysical Survey | - Site Selection |
| - Contract Negotiations | - Research/Analysis |

****** A competent professional with proven abilities in geological and geophysical applications combined with a successful track record in the direction of profitable operations.

EDUCATION:

Arizona State University
- B.S. GEOLOGY (1971)

Idaho State University
- Geology Field Camp (1971)

EXPERIENCE: current

Lawrence Mining & Exploration Phoenix, AZ
MANAGER - Exploration & Development

- Primarily engaged in preliminary economic evaluation and site selection for barite and other industrial mineral exploration properties.
- Developed time/cost projections, prepared budgets, administered purchasing, supervised crews and on-site observation/evaluation of managerial staff.

1980 - 1981

Exploration & Development Associates Denver, CO
REGIONAL MANAGER

- Territory encompassed entire Southwest U.S. and involved all phases of planning, initiation and supervision of geologic programs for exploration, evaluation and development of mineral deposits.
- Prepared and monitored adherence to time schedules and budgets with successful results in completion of projects within limitations.

1977 - 1980

Wyoming Mineral Corporation ^{Washinghouse} Lakewood, CO
CHIEF GEOLOGIST

- Responsible for operations management for an new mine in Miami, Arizona including open pit and underground uranium mine designs, computation of geological and mineable ore reserves, selection and procurement of equipment, economic evaluation and on-site observation/direction of personnel engaged in drilling, drifting for bulk samples and metallurgical testing.

1974 - 1977

Mexicana de Cobre Sonora, Mexico
SENIOR PRODUCTION CONTROL ENGINEER

- Initiated/supervised geological mapping for porphyry copper/moly deposits, ore/production control programs, schedules and pre-production stripping plan for 80 Million tons for La Caridad Mine in Nacozari.

1971 - 1974

Inspiration Consolidated Copper Co.
SENIOR MINE GEOLOGIST Winkleman, AZ

- Headed geology department at 5000 TPD copper mine. Duties entailed the calculation and revision of mineable reserves, preparation/submittal of monthly ore production schedules, initiation of local geological exploration and supervision of ore control programs.
- Worked closely with engineers to define objectives and plan procedures for pit expansion.

GEOLOGIST

- Functioned as Production Foreman, Drill & Blast Foreman in a relief capacity. Primarily involved in geological mapping of open pits and liaison with engineers in the preparation of production schedules.

1971

Magma Copper Company Superior, AZ
UNDERGROUND MUCKER

- General Labor, Drift Crew Assistance and assigned duties.

1969 - 1970

Inspiration Consolidated Copper Co.
GEOLOGIST Winkleman, AZ

- In addition to duties as listed with this company, was responsible for logging diamond drill core from three drills in operation three shifts daily.

1963 - 1967

Miami Copper Company Miami, AZ
DRIVER/POWDERMAN/PITMAN

- Gained valuable experience in various mining operations through positions in these capacities.

MILITARY:
1959 - 1963

United States Navy
PETTY OFFICER

- Attended training schools and certified as an Aviation Electronics Technician. Responsible for the maintenance/repair of aviation communications and navigational equipment and components.
 - Honorable Discharge 1963.
-

AFFILIATIONS:

- Society of Mining Engineers of AIME
 - American Institute of Professional Geologists
-

PERSONAL DATA:

Date of Birth:	March 25, 1941
Height/Weight:	5'9"/170
Married	Excellent Health

AVAILABILITY:

Pending current notification. Resume in confidence.

REFERENCES:

Howard T. Urband
SENIOR PARTNER
Exploration & Development Assoc.
3110 S. Wadsworth Blvd.
Denver, Colorado 80229

Fred Hohne
GEOLOGICAL CONSULTANT
1051 Fawn Circle
Mesa, Arizona 85203

J.T. Avelar
MINE MANAGER
Quintana Minerals Corp.
P.O. Drawer 472
Truth or Consequences, NM 87901

Additional information/references furnished
on request

Roland B. Mulchay
Consulting Geologist
2732 Wren Road
Salt Lake City, Utah 84117

March 17, 1982

Mr. V. F. Ostler
Rocky Mountain Refractories
2436 W. Andrew Ave.
Salt Lake City, Ut. 84104

Dear Mr. Ostler:

Following a request by Ms. ~~Fake~~ Teiko Yoshizawa by telephone, I discussed the Klondyke Barite Prospect with Mr. James Jones in Tucson on Feb. 25, 1982. I received a copy of a report Mr. Jones had prepared, but not typed, describing the property, and this report accompanies this letter.

On March 3rd I drove to Globe in the afternoon, and visited the prospect with Mr. Jones the following day. On March 5th, I returned to Phoenix. Ownership and similar data has^e been obtained from Mr. Jones.

LOCATION AND PHYSICAL FEATURES

The property is located on Arizona State land in Sections 11, 12, 13, and 14, Township 8 South, Range 21 East in Graham County. State mineral prospecting permits are held in the name of Cassandra Resources, Inc., 720 N. Mann Avenue, Tucson, Arizona, 85710. This company is controlled by Mr. James G. Jones and Mr. Larry Goletz, who can^{be} reached at the above address. The mineral prospecting permits can be later converted to state mineral leases.

The permits cover an area of 1120 acres at the lower northwest end of the Graham Mountains, and can be reached over about 27 miles of county maintained, graded road which extends westerly from Highway 70 about 14 miles north of Safford. The Southern Pacific Railroad parallels Highway 70, and Pima station is about 6.5 miles southeast of the Kylondyke turnoff.

Numerous arroyos extend westerly across the area to Aravaipa Canyon which drains northerly and westerly to the San Pedro River. There is no water or power source available near the permit area. Vegetation is of typical desert type; temperatures are hot during the summer and cool in winter. Average rainfall is about 14 - 17 inches; the climate can be termed moderate, and year round operations could be planned. There is no equipment on the property.

GEOLOGY

The prospecting permits are within a large surface area of volcanic rocks, chiefly coarse agglomerates, with a few andesitic tuffs and latitic flows. The volcanics are generally fresh and unaltered with very little alteration near the vein structures. Large granite masses are found to the southeast near the main Graham Mountains and to the north.

Two weakly mineralized, persistent vein structures, steeply dipping and with N 30° - 50° W strikes, have been prospected. The most easterly "A" vein is reported to have been followed in cuts and outcrops for a distance of

more than 5000 ft. During our reconnaissance we traced it for about 2500 ft.; the southerly part of the vein is shown on the sketch map which accompanies this letter.

Near the southern end of the "A" vein exposures, a shaft, now caved at the collar, is reported to have been reopened to a depth of 138 ft. and some drifting done at that level in 1958. Barite is reported to a depth of 50 ft. with increasing fluorite below. Some gold assays are reported from the bottom, presumably in quartz material similar to a few pieces seen in the shaft dump. As shown on the map, narrow barite stringers are exposed in the shaft cut on the southeast end with stronger narrow veins in a ~~6.0 ft.~~ ^{at} 6.0 ft. zone ~~on~~ the northwest end. Sample #1 was taken ~~a~~ a grab from about 3 tons of sorted barite located about 40 ft. southeast of the shaft. The attached map shows the general strike of the vein, and separate 1 in. = 20 ft. sketches of several cuts show the narrow vein widths and stringery type of mineralized zones.

The "A" vein can be described as a remarkably persistent, steep dipping, northwest trending fracture with little movement. ~~along which~~ Barite stringers from an inch to two feet in thickness occur along the fracture in a zone from 1.0 to 6.0 ft. in width. As shown on the map, sample #2 was taken from a small pile of sorted barite at a cut about 200 ft. northwest of the shaft.

About 1800 ft. to the west a similar weak but persistent structure, called the "B" vein, is exposed at surface but has been little prospected. It generally

is parallel to the "A" vein, and weak stringery barite can be traced in scattered outcrops for several thousand feet. We traced it for about 1500 ft., and a sketch of a shallow cut about 900 ft. north of the road is shown on the map. The structure is of the same type as the "A" vein, but barite exposures are weaker than those of ^{that} ~~the~~ vein.

Sorted barite at the various cuts shows few specks of galena, little hematite and limonite, and possibly some fluorite through massive barite. Samples taken by Mr. Jones are reported to have ^{shown} high gravity barite. It might be expected from the trace lead content at surface that the base metal content would increase with depth.

CONCLUSIONS

The irregular, narrow barite ^{stringers} ~~showings~~ on the vein structures at the Klondyke Prospect do not indicate that large barite ore tonnages could be developed by additional work. There is no positive ore reserve developed, and it is very doubtful that the prospective 150,000 tons of reserve, envisioned by Mr. Jones, could be found by drilling. The vein ^{fractures} ~~structures~~ are weak, but remarkably persistent along strike in the volcanic rocks. Whether or not these structures, appearing at surface over considerable distances, might contain important base metal zones at great depth can only be conjectured.

The Klondyke prospect cannot be recommended ^m as an attractive barite mining venture.

Yours very truly,
Roland B. Mulchay

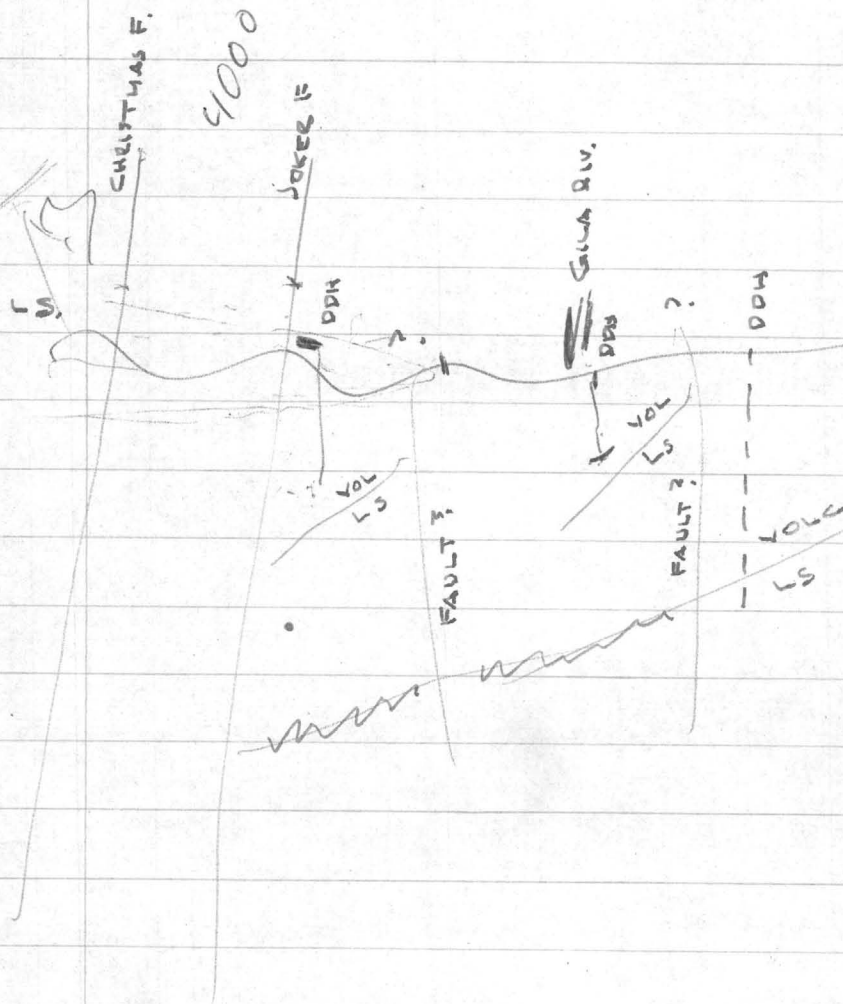
J. JONES

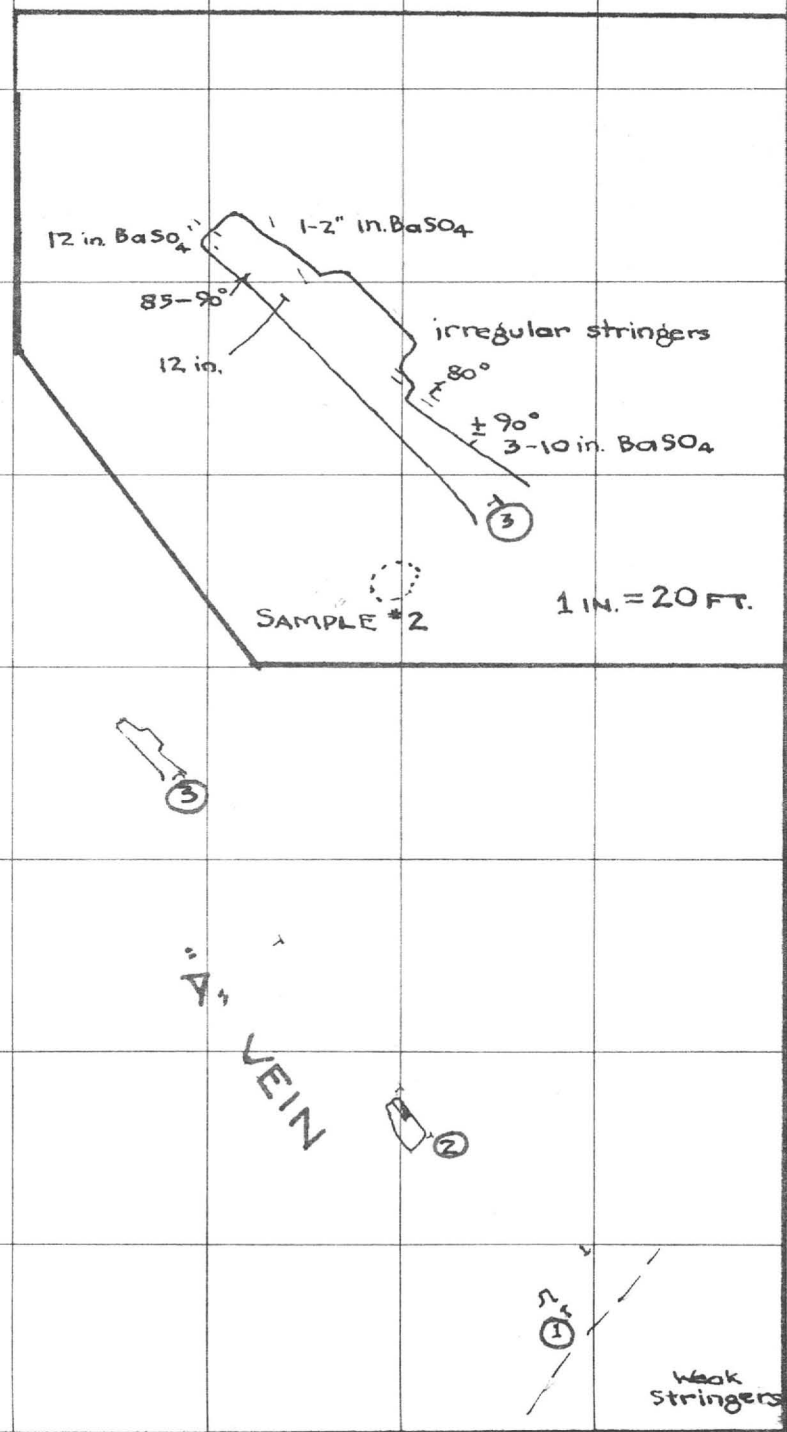
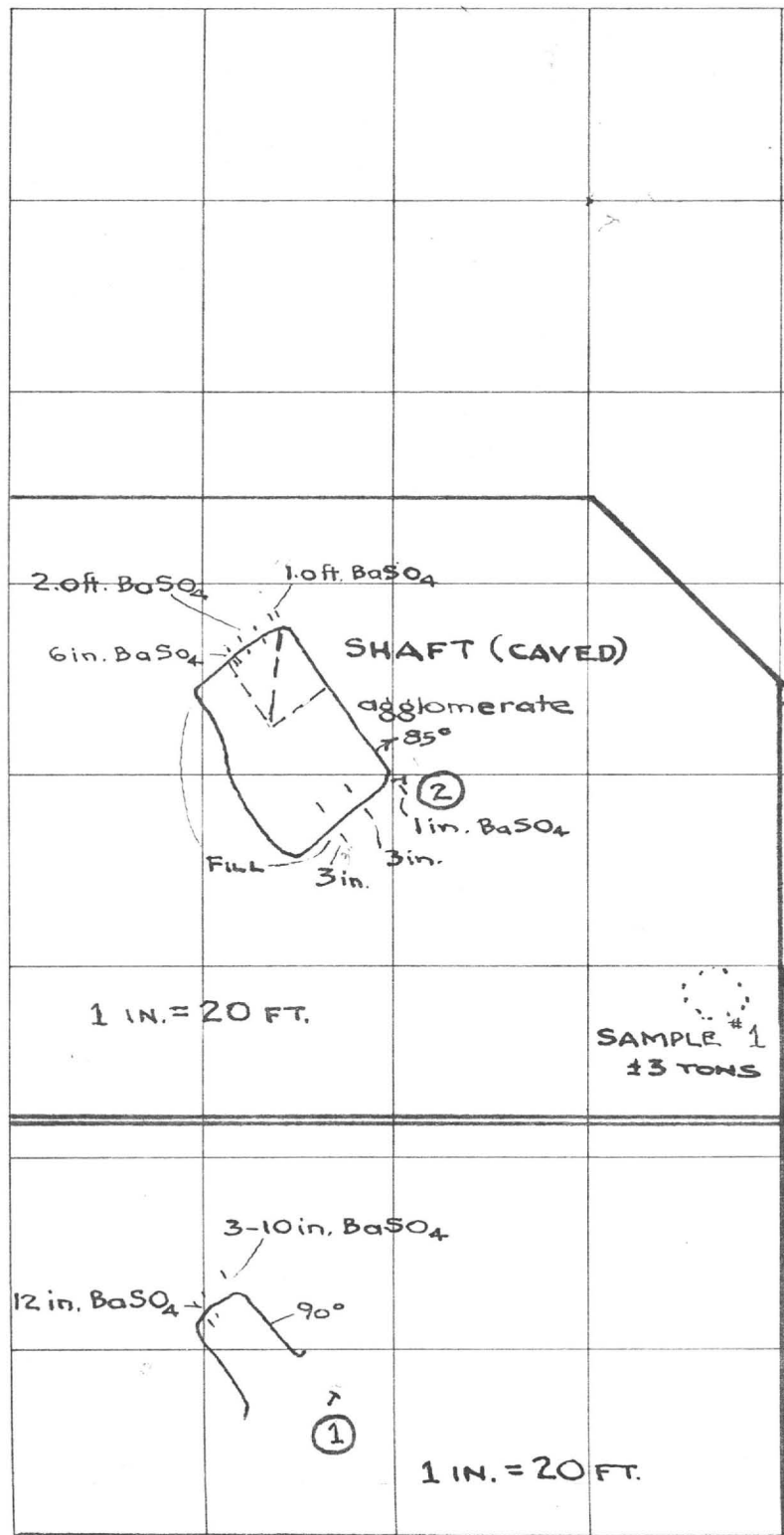
CHRISTMAS

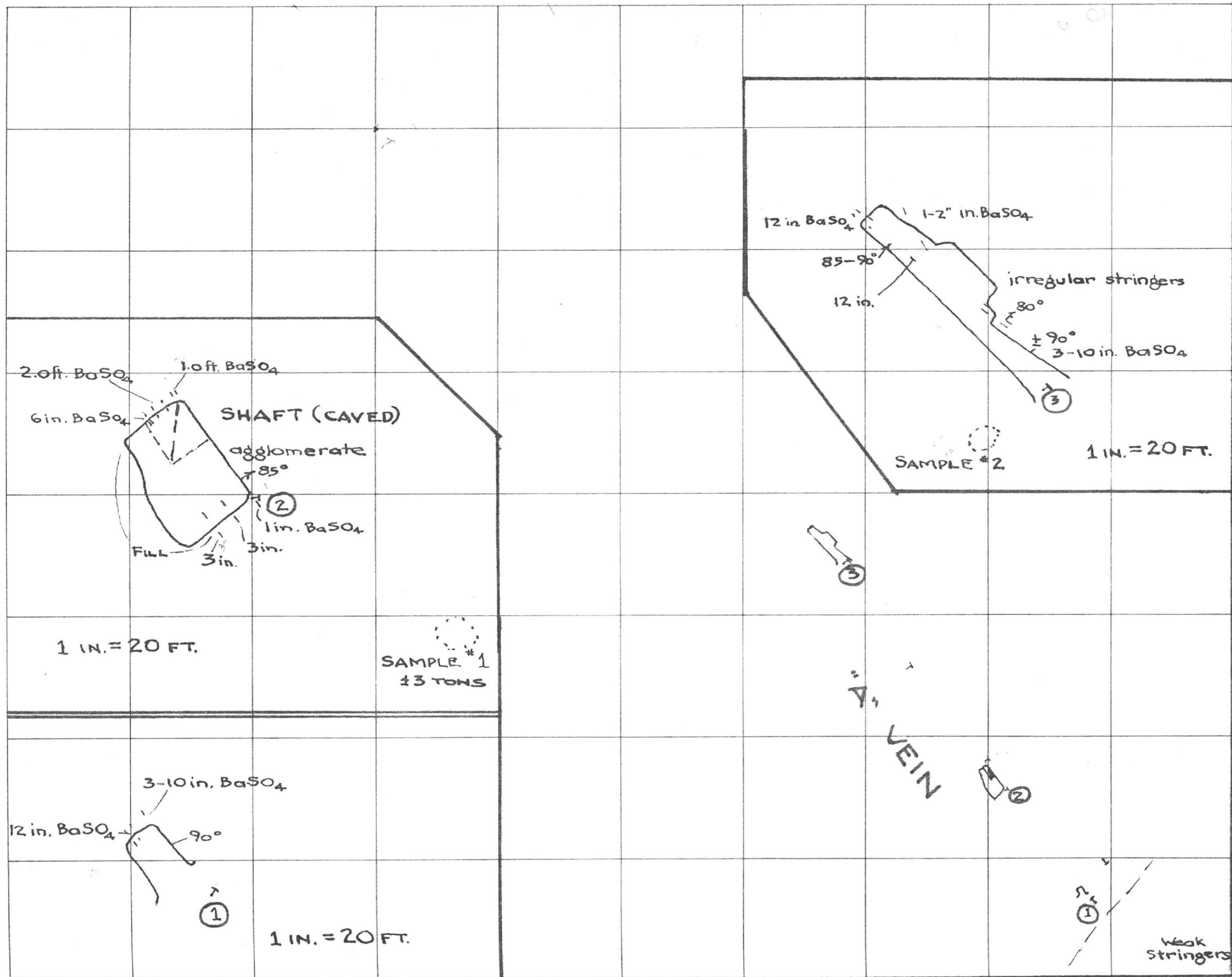
2/25/82

TUCSON

WORKED FOR T. DODGE.







SKETCH MAP

KLONDYKE PROSPECT

GRAHAM COUNTY
ARIZONA

1 IN. = 100 FT.

MAR. 17, 1982

APPROXIMATE
LOCATION

(4)

ARROYO

6-36 in. stringery BasO₄

(4)

1 IN. = 20 FT.

Cut 3-5 ft. deep
steep irregular
6 in - 36 in BasO₄
stringer zone along
weak fracture.

190°

"A" VEIN

18 in. BasO₄

"B" VEIN
Shallow Cut

90°

2-2 1/2 zone
BasO₄
stringers

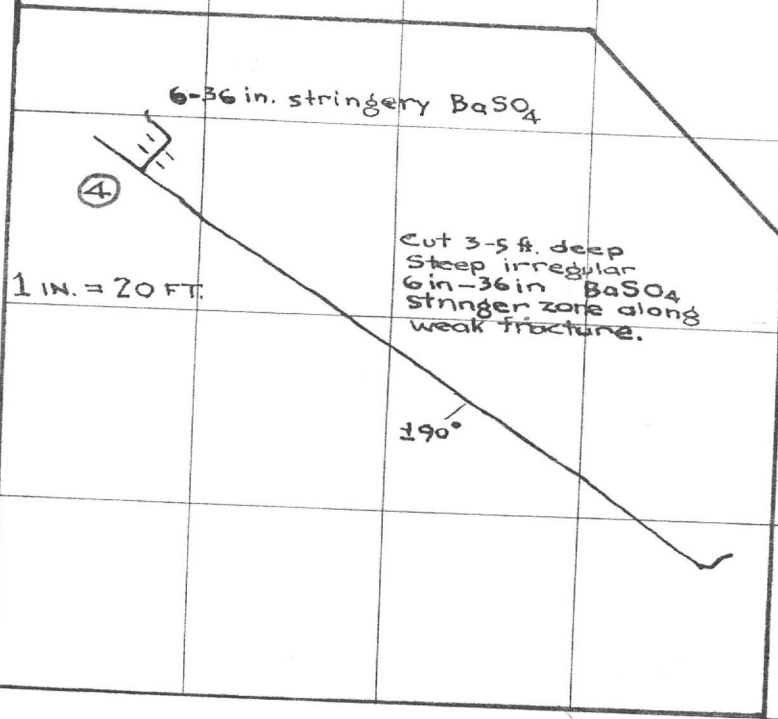
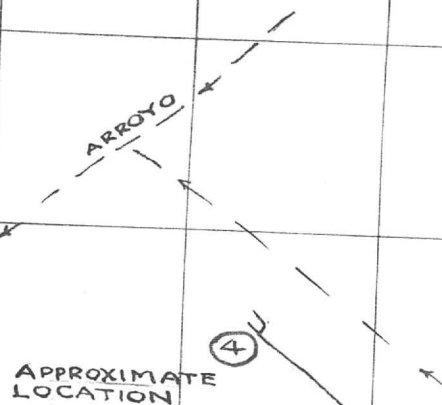
± 900 ft. North
of road.

1 IN. = 20 FT.

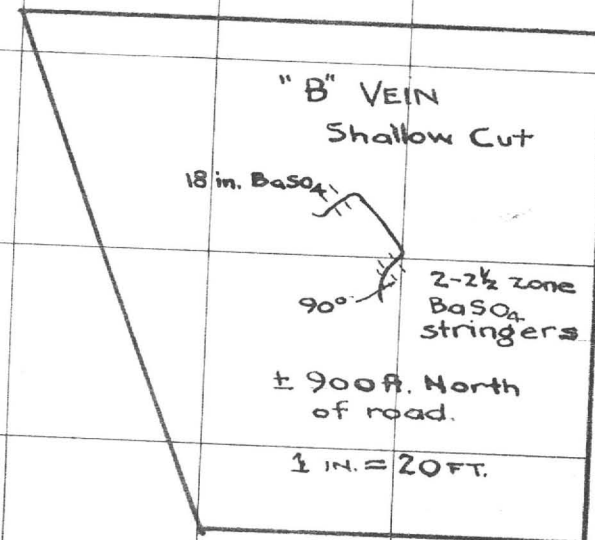
SKETCH MAP KLONDYKE PROSPECT GRAHAM COUNTY ARIZONA

1 IN. = 100 FT.

MAR. 17, 1982



"A" VEIN



Rev. B. Mulholland

SKETCH

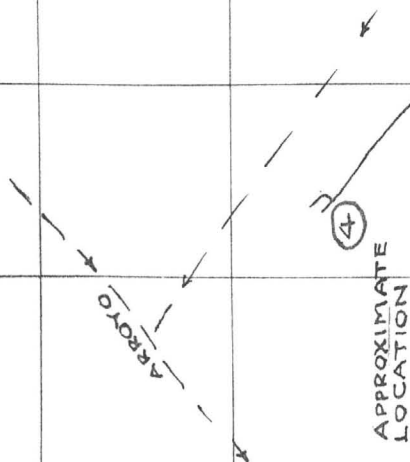
KLONDYKE

GRAHAM

ARIZ

1 IN. = 100 FT.

"A" VEIN



6-36 in. stringery BaSO_4

Cut 3-5 ft. deep
steep irregular
6 in - 36 in BaSO_4
stringer zone along
weak fracture.

190°

1 IN. = 20 FT.

SKETCH MAP

KLONDYKE PROSPECT

GRAHAM COUNTY
ARIZONA

1 IN. = 100 FT.

MAR. 17, 1982

APPROXIMATE
LOCATION

ARROYO

6-36 in. stringery BasO₄

1 IN. = 20 FT.

cut 3-5 ft. deep
steep irregular
6 in - 36 in BasO₄
stringer zone along
weak fracture.

190°

A. VEIN

18 in. BasO₄

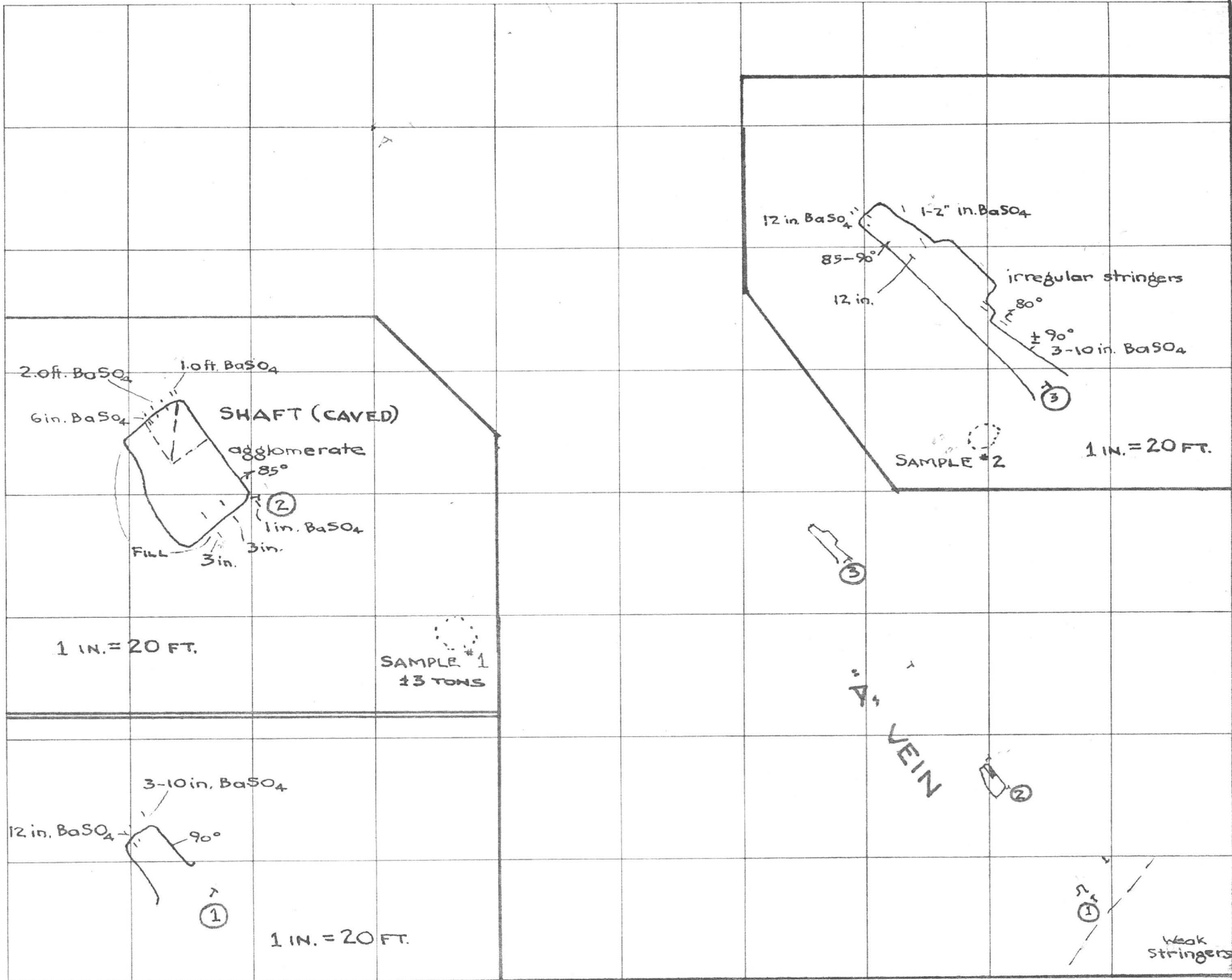
"B" VEIN
Shallow Cut

90°

2-2 1/2 zone
BasO₄
stringers

± 900 ft. North
of road.

1 IN. = 20 FT.



KLONDIKE PASSPORT
1" = 20'
RBM - JONES
214182

1300' NW of last cut
sharp strike zone. 75'
6" - 30" upper 10' zone
of 350' slope

1500' further NW - weak
W 100'

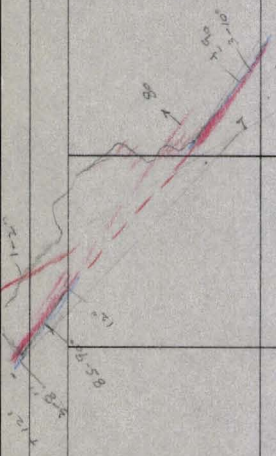
550 E 100'
-100'

#1 ST Sided
84504

84504
84504
84504

84504

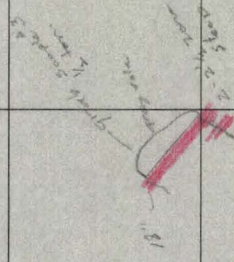
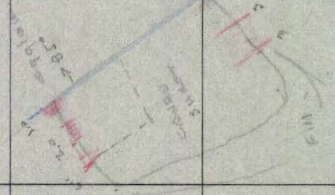
84504
84504
84504



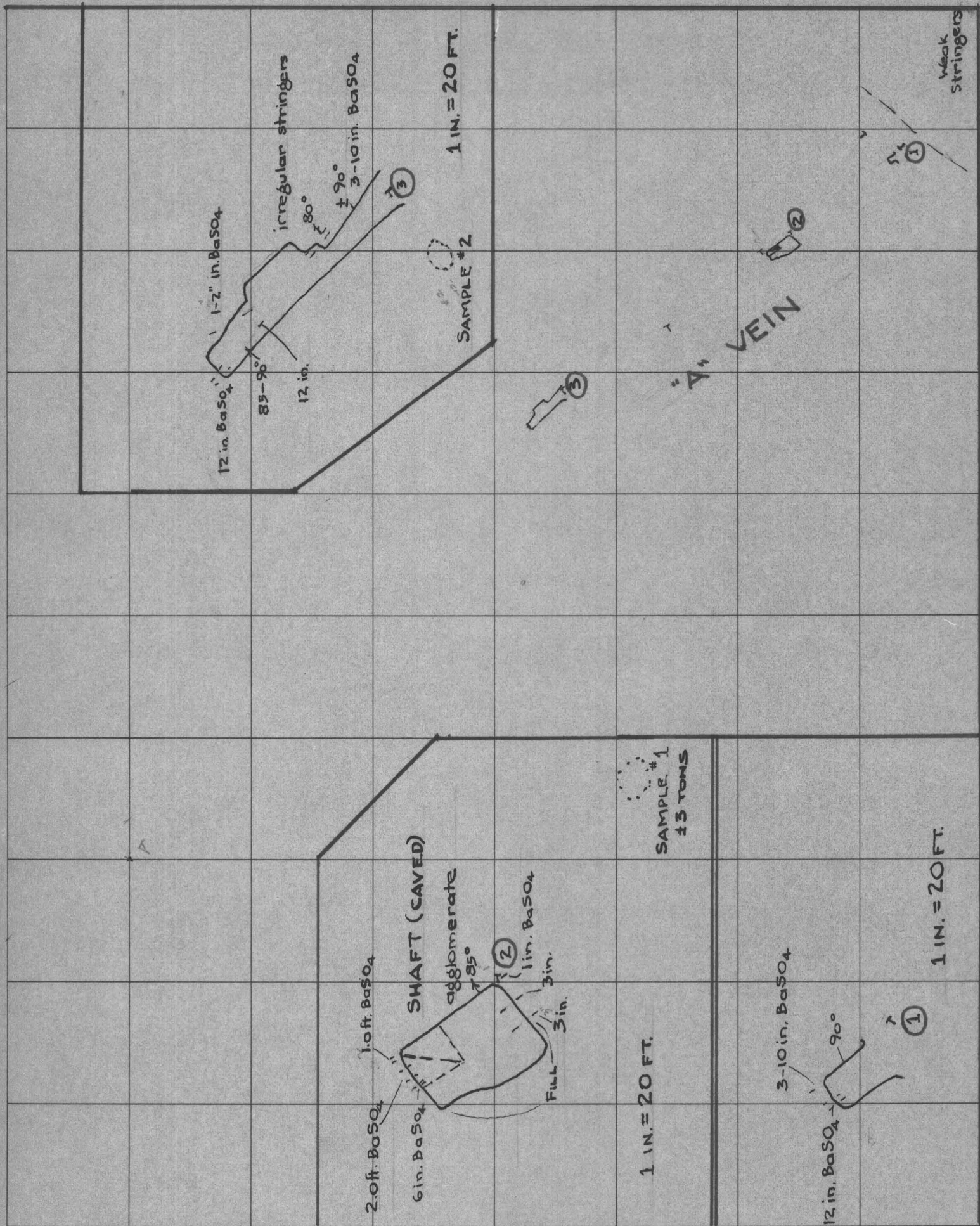
55-4 road
W 100'

55-4 road

55-4 road



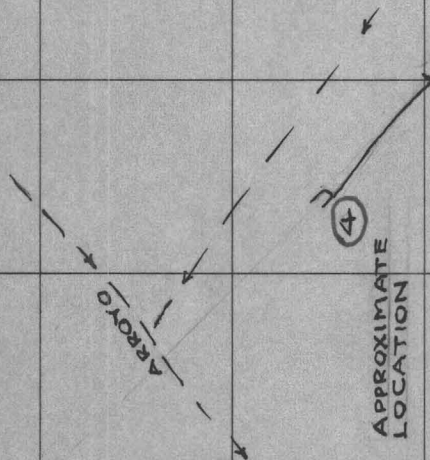
B vein
500' N of road



SKETCH MAP KLONDYKE PROSPECT

GRAHAM COUNTY
ARIZONA

1 IN. = 100 FT. MAR. 17, 1982



4" VEIN

6-36 in. stringery BaSO_4

Cut 3-5 ft. deep
Steep irregular
6 in - 36 in BaSO_4
stringer zone along
weak fracture.

190°

1 IN. = 20 FT.

"B" VEIN
Shallow Cut

18 in. BaSO_4

2-2 1/2 zone
 BaSO_4
stringers

90°

± 900 ft. North
of road.

1 IN. = 20 FT.