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Mc Morris
Gila County

ARIZONA SILVER AND GOLD MINING PROJECT

Gila County, Arizona

In June 1985 I acquired a group of claims in the Richmond Basin near Globe, Arizona. In these claims was included The McMorris Mine, The La Plata Mine, The Jumbo and Helena and a vast lying flat mesa area with potential for bulk tonnage, low grade silver mineralization. Also included was a gold mine, last operated in the late 1800's.

In July 1985 I hired a crew, purchased equipment, back hoe, crane, compressors, generators, trailers, etc. and proceeded to reopen the McMorris Mine. The surface around the old shaft was leveled, the collar of the shaft was rock-bolted and wire meshed to 30 ft. The shaft which was plugged with about 3,000 tons of muck was cleared with a crane and a clam shell. A wood head frame was installed and the shaft was retimbered to the 170 ft. level where old timber was encountered. 150 ft. of drift was cleared of muck. 4 ft. by 8 ft. ties and 18 guage rail was installed for 150 ft. A raise was started at 150 ft. East from the shaft, where most of our sampling had been done. 4 tons of ore was removed from this raise at an average of 300 oz per ton silver. In December 1985 I started assay work conducted by the Central Arizona Assay Company. Certificates of assay in following report. I did very little sampling at the 100 ft. level. However, indications of high grade silver ore was found with grab samples, assaying 323 oz per ton. At the 200 ft. level I went 150 ft. from the shaft to the East. I took a 1 inch stringer that assayed up to 3,846 oz per ton. The ore is spattered throughout a 3 ft. to 4 ft. wide vein and commonly carries 300 to 400 oz per ton, ore running 4 ft. to 6 ft. wide crosscut channel samples run 62 oz to 130 oz per ton. Again, grab samples 4 inches wide assayed 1,733 oz to 1,834 oz per ton. With further geology work completed I can conservatively project a 6 ft. wide 30 oz mineable ore body. In June of 1986 my assay work was completed and by November 1986 work had been completed in line with the available funds I had to work with.

With everything looking positive, in March of 1987 I decided to seek out professional assistance in the Mining Engineering and Geology field. In April 1987 I hired a Mr. James R. Bosly, P.E., a Consulting Mining Engineer from the State of Nevada. I asked him to do a report on my property and to advise me on future development, if any. Mr. Bosly's report, all findings, assays, and recommendations, in following report.

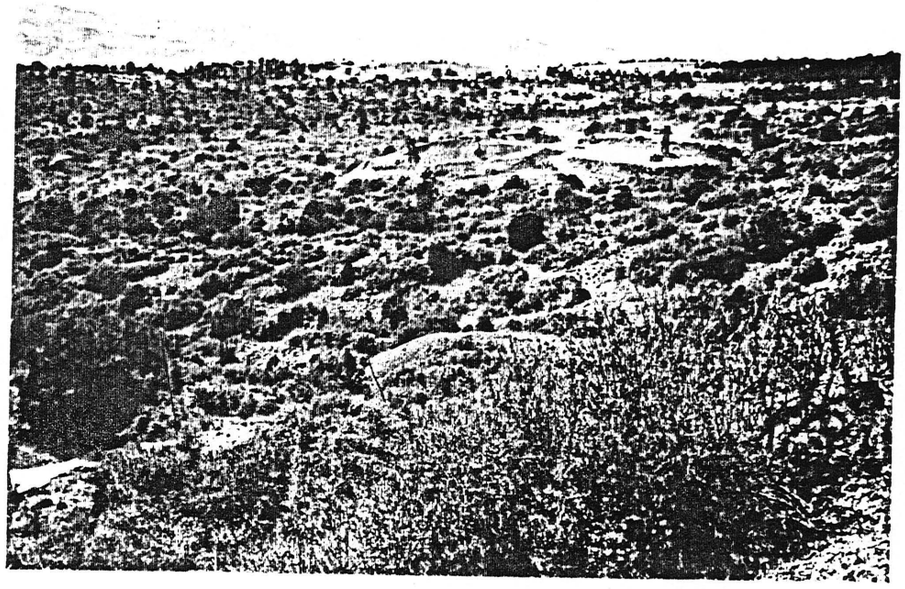
In May 1987 I proceeded to seek out, by recommendations, and extensive interviewing, a Mr. Arturo A. Ona, an associate of Western Metals Associates of Tucson, Arizona, formerly Lowell Mineral Exploration, a highly recommended geologist with an extensive background in mineral exploration and discoveries. On Mr. Ona's recommendations I then employed Mr. Daniel H. White, P.E. to do a Preliminary Engineering Study of the McMorris Mine. His Report dated May 3, 1987 is part of this report.

On July 20th 1987 a Canadian based company out of Vancouver, B.C. sent a very qualified geologist named Arthur S. Radtke of Cougar Metals International. Mr. Radtke's suggestions and conclusions are in this report.

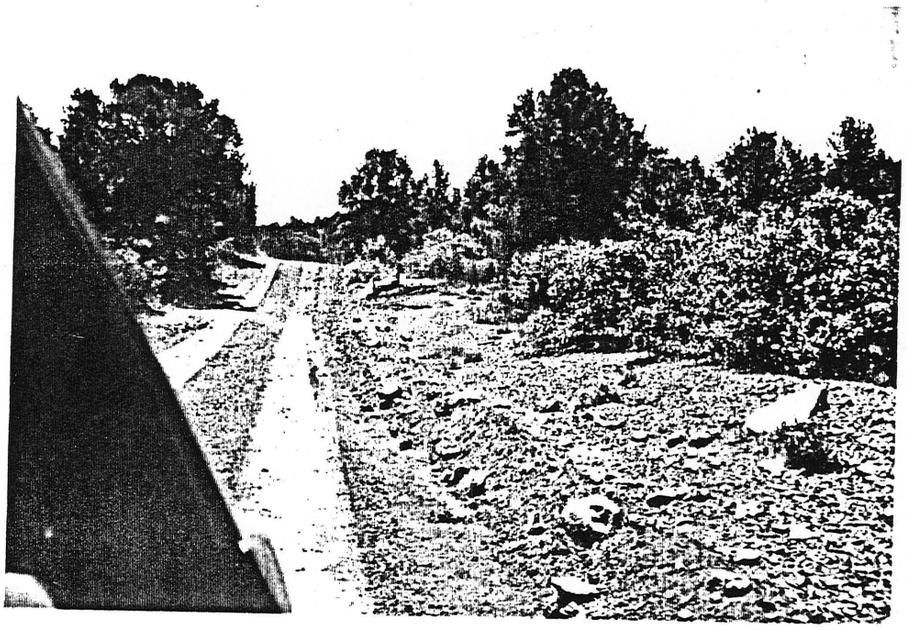
Mr. Ona's report concluded that a large potential exist in the area both in the high grade bonanza ore shoots (30 oz to 400 oz of silver) and in the bulk low grade (3 oz to 10 oz silver) in the flat mesa area. He also concluded that there is a high probability of developing sufficient grade and tonnage for an economical mining operation in these areas.

Charlie E. Claycomb

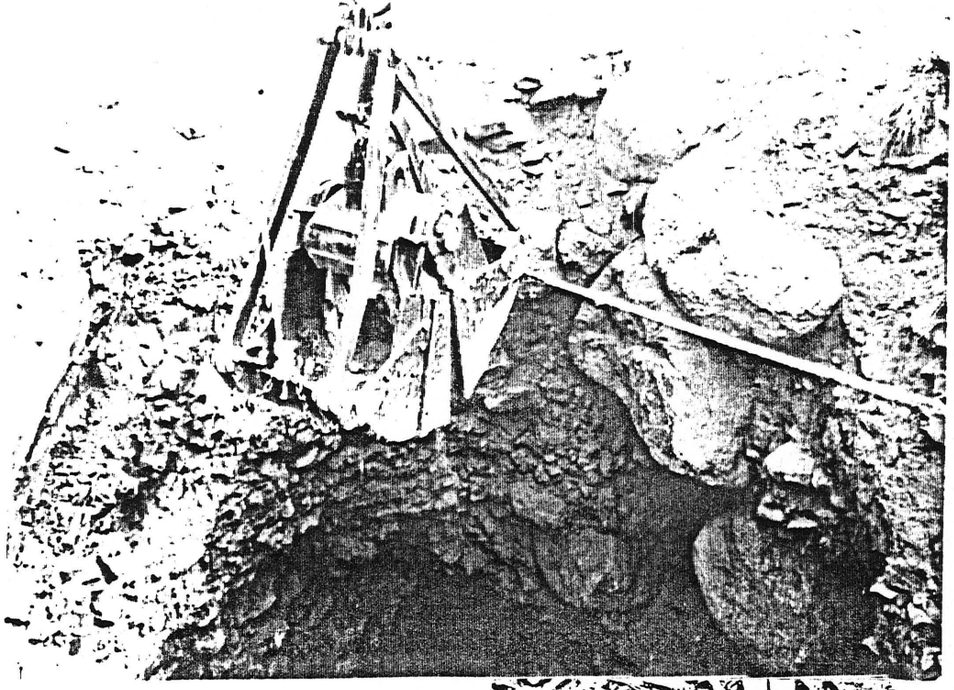
SOME OF FLAT MESA AREA
GOOD OPEN PIT AREA



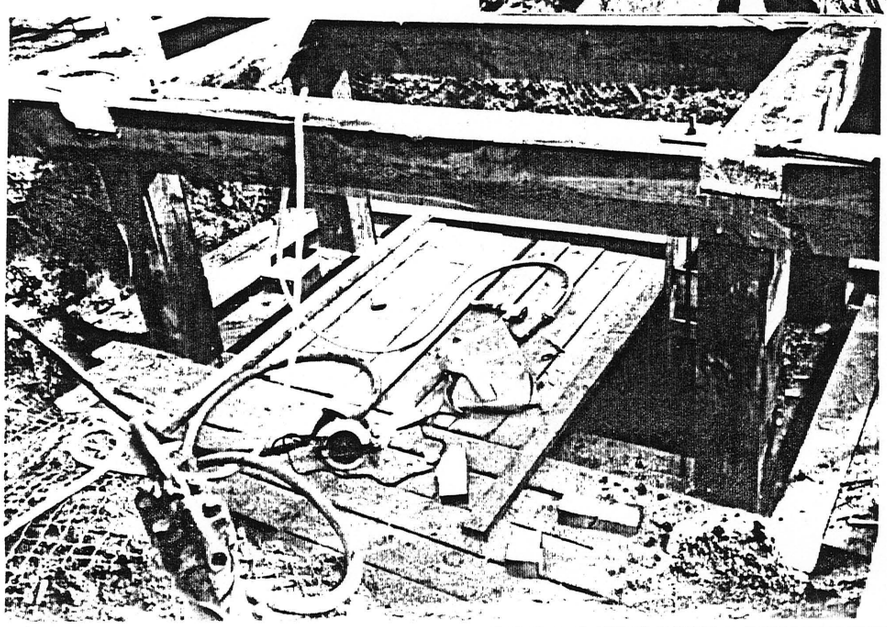
THE LAY OF THE LAND IS GENTLE AND ROLLING.
LOOK CLOSELY ON THE RIGHT TO SEE THE
MC MORRIS MINE.



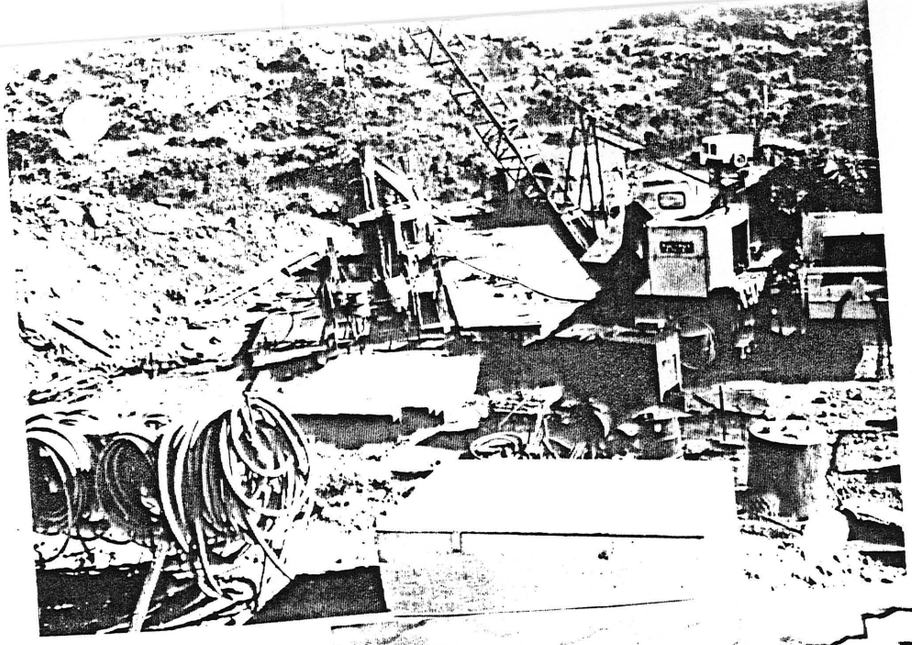
GOOD ACCESS ROADS (NOTE DEER CROSSING)



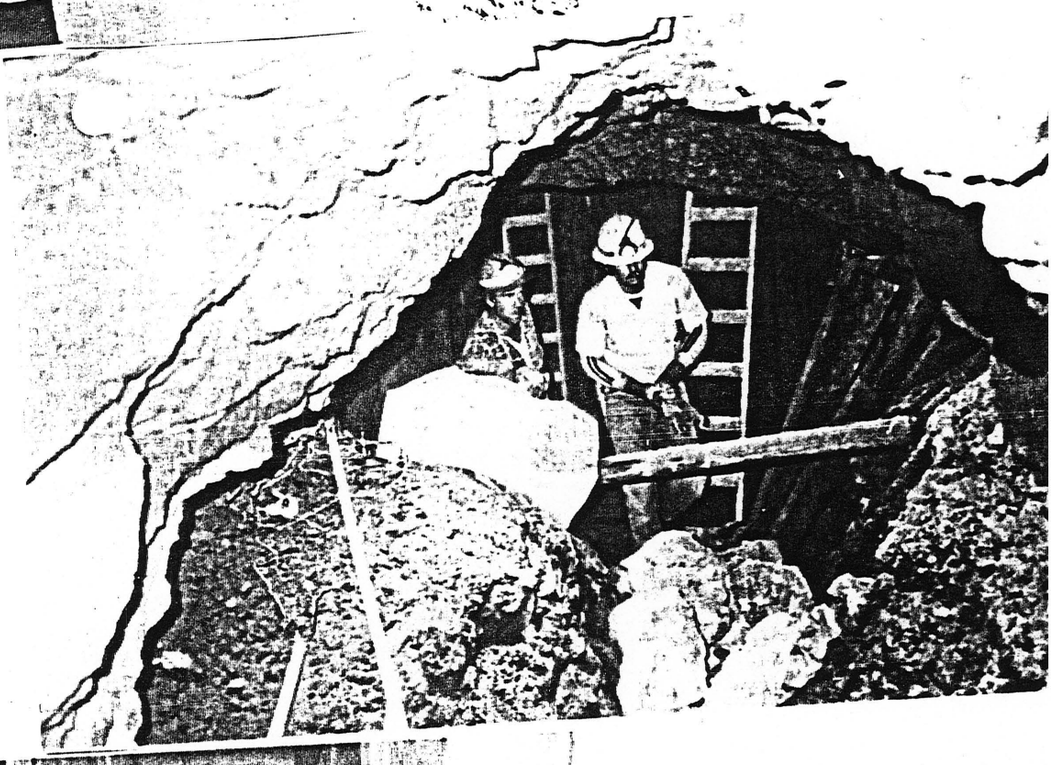
THE CLAM SHELL USED TO EXTRACT THIS 100 YR. OLD TIMBER.



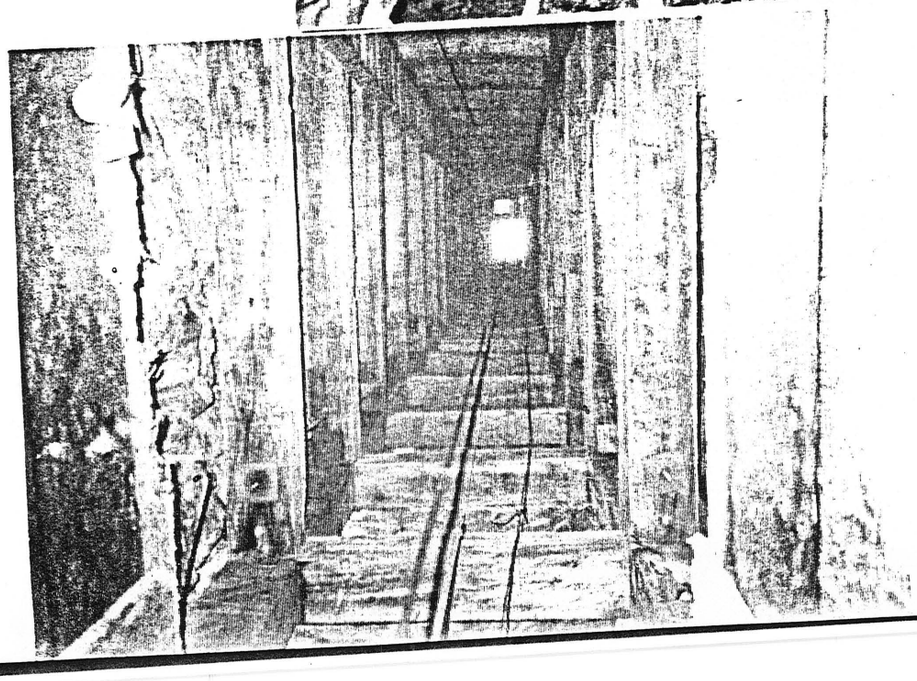
HEADFRAME IN EARLY STAGES



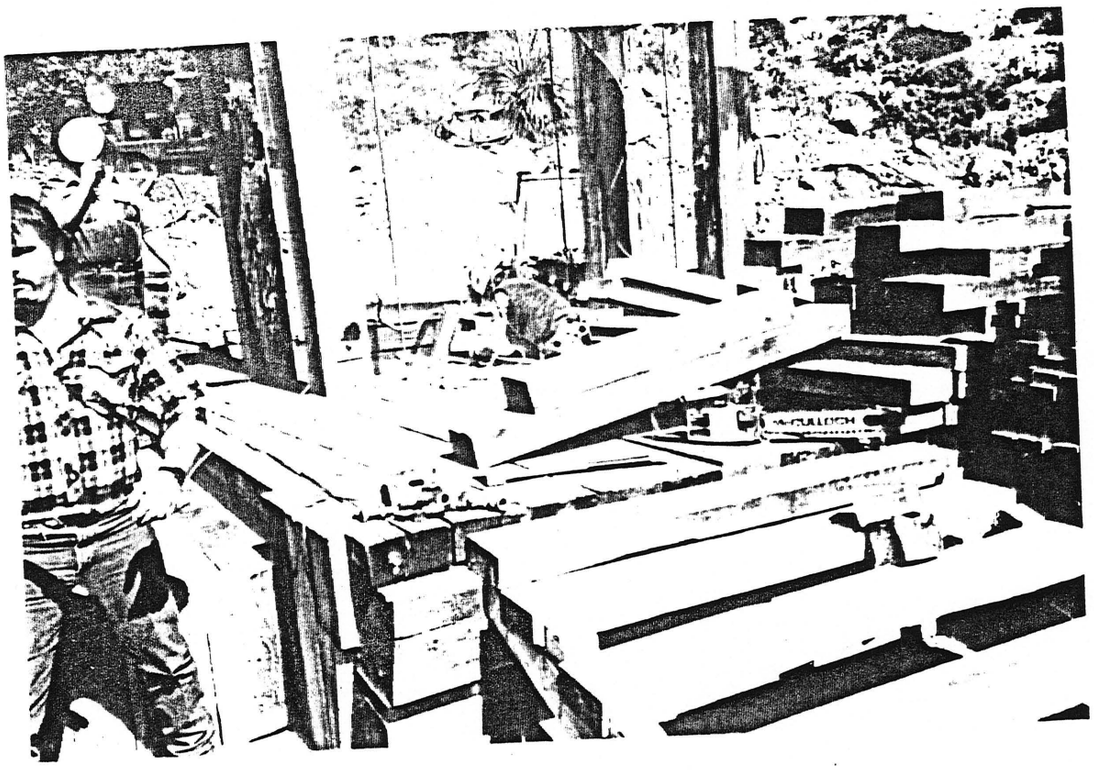
SOME OF THE EQUIPMENT ON STIE.



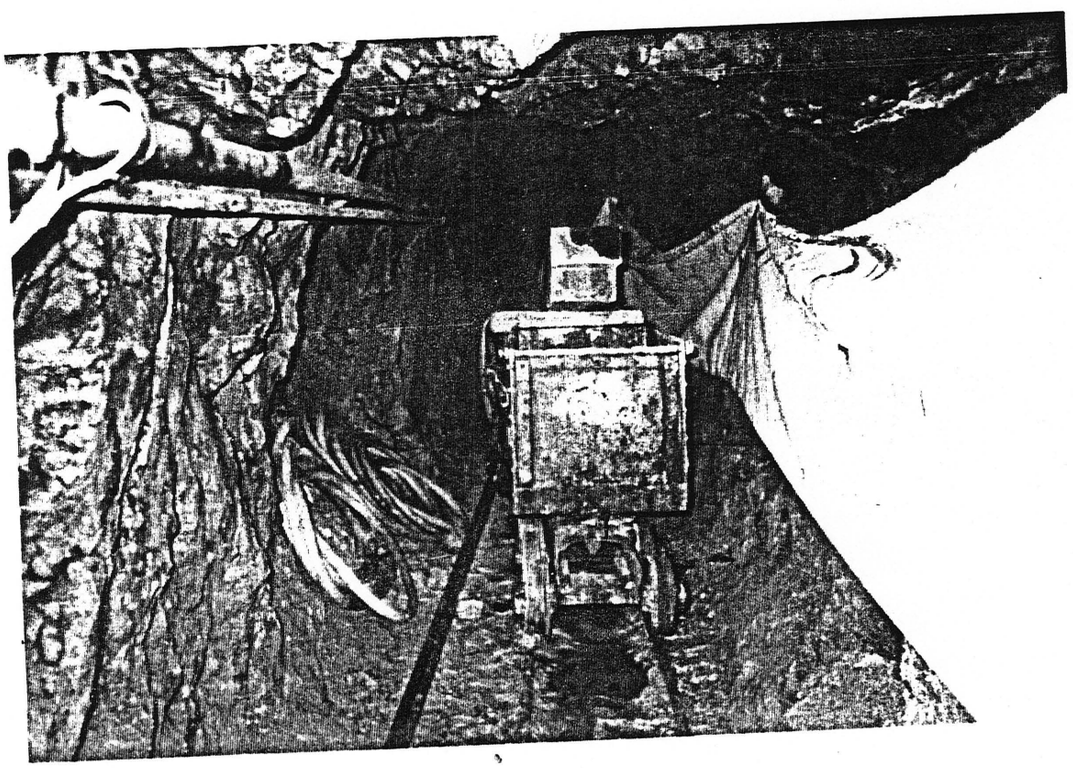
OVER 3000 TONS OF MUCK HAD TO BE CLEARED.



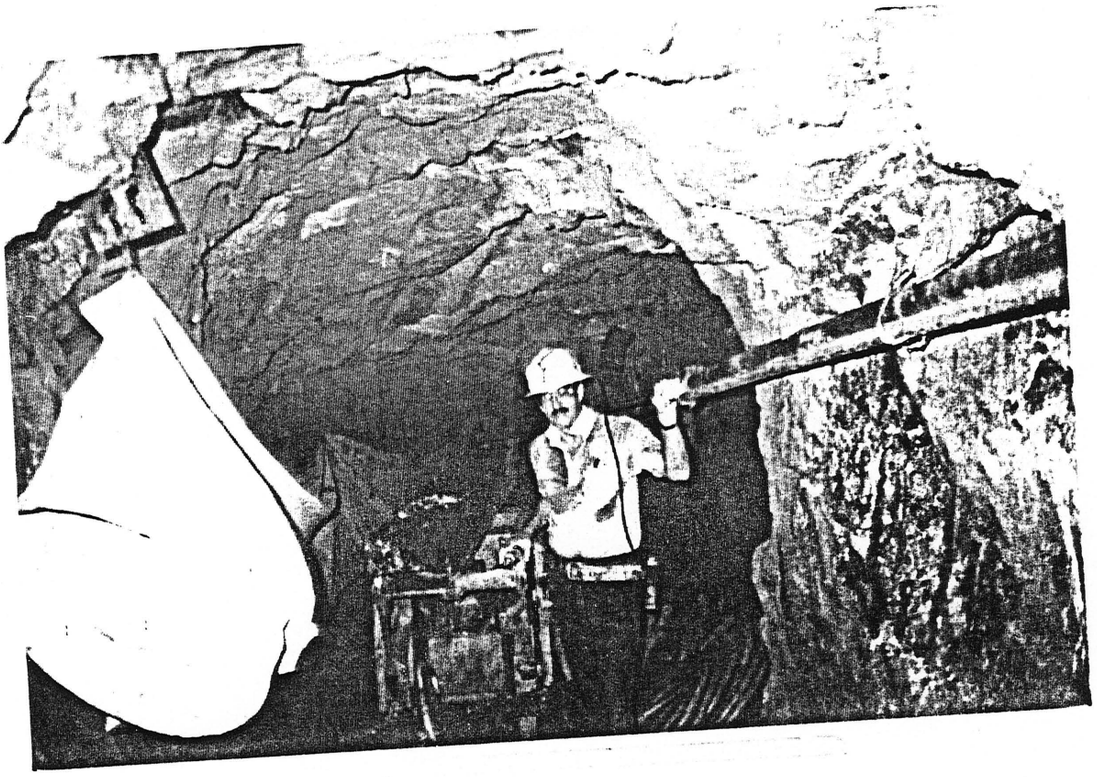
LOOKING UP FROM ABOUT THE 100 FOOT LEVEL.



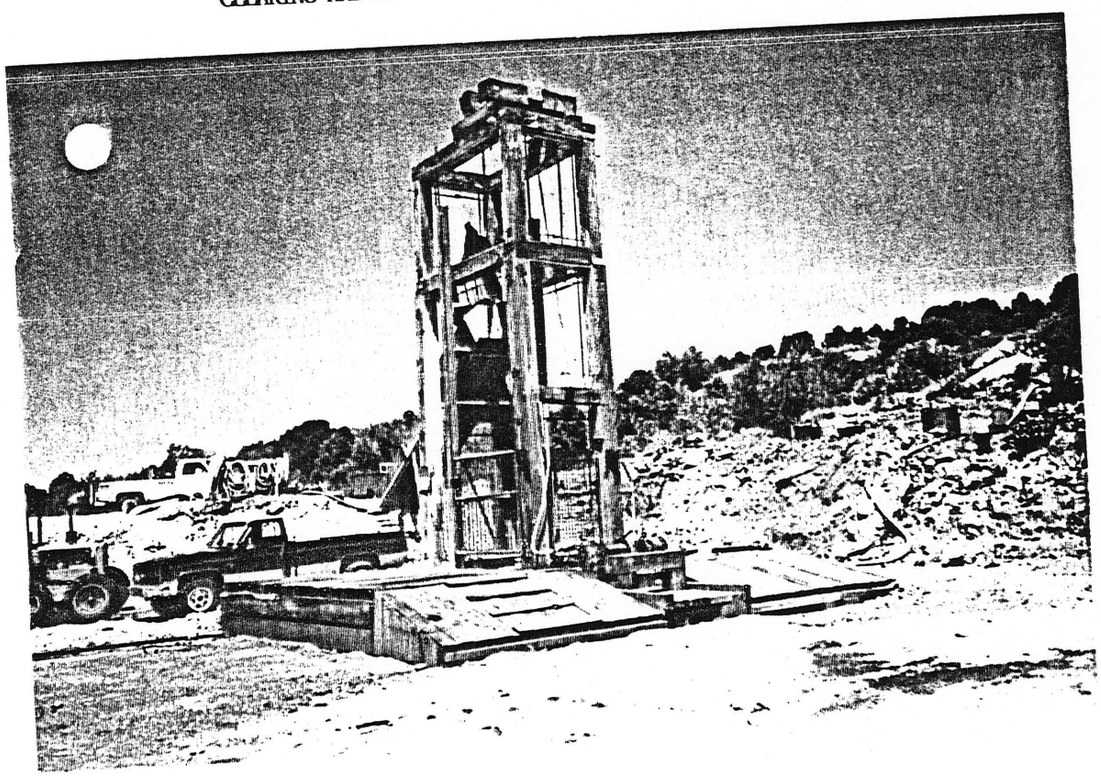
NEW TIMBER FOR SHAFT



SOME OF THE EQUIPMENT USED AT THE
200 FOOT LEVEL.

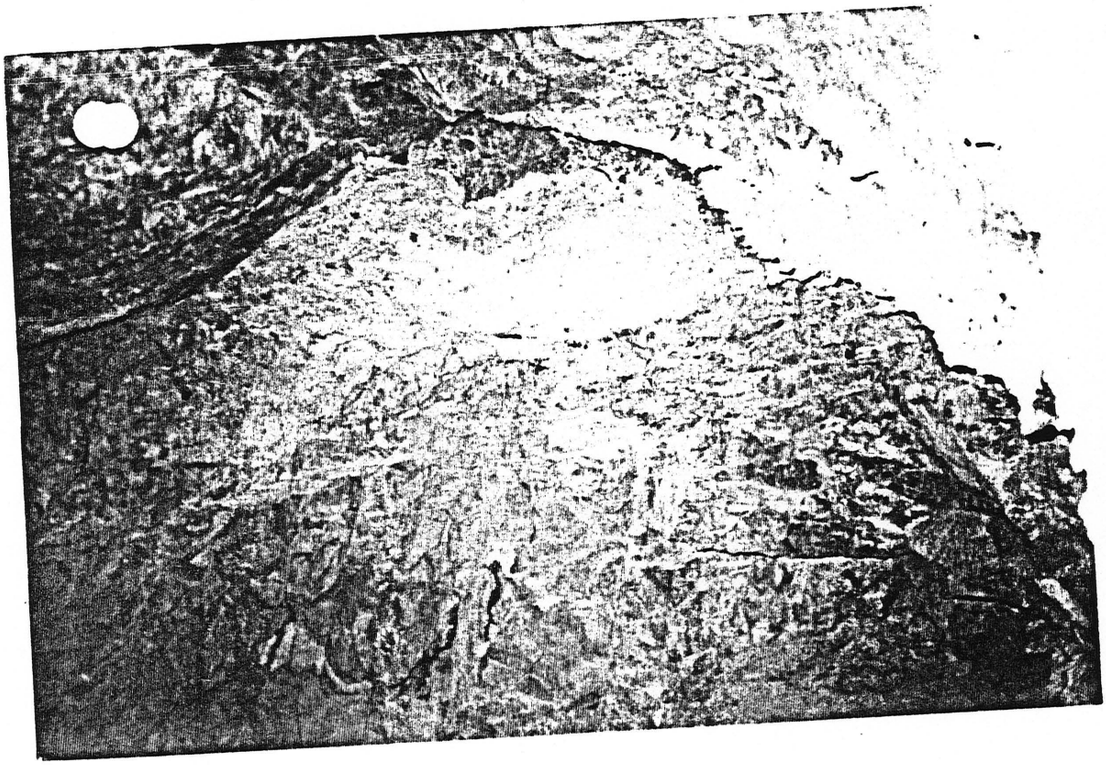


CLEARING AND SHORING UP AT THE 200 ' LEVEL



ALMOST FINISHED PRODUCT

BONANZA ORE SHOOTS 200 FOOT LEVEL
6' WIDE ASSAYS-300 TO 400 OZ. PER TON



WESTERN METALS ASSOCIATES
3013 N. First Avenue
Tucson, Arizona 85719
Tel. (602) 623-9780

Arturo A. Ona
Geologist

PROGRESS REPORT

MC MORRIS MINE AND RICHMOND BASIN AREAS

GLOBE, ARIZONA

GILA COUNTY

INTRODUCTION

This report summarizes the results of a 21 day fieldwork from May 10 to May 31, 1987, which included geologic reconnaissance, sampling, sampling, claim staking, drilling and records research. Also included is a section on recommended future work, and a summary of pre feasibility engineering work done by Dan White, a consulting professional engineer.

LOCATION

The Richmond Basin Area is approximately 10 miles north of the town of Globe, Arizona, in Gila County. The area can be reached via US Highway 60 to Claypool then 12 miles on State Highway 88, then to Horseshoe Bend Wash for 2 miles, then on to Wood Springs for 7 miles to Richmond Basin. The area is in sections 2,3,10 & 11 Township 2 North, Range 15½ E.

HISTORICAL BACKGROUND

The mining history of the area is well described in the reports of Dan White and J. Bosley, which are enclosed.

OWNERSHIP/CLAIM STATUS

Forty three (43) lode mining claims are currently held by Charles Claycomb. A map showing the claims are enclosed in the appendix. Additional data are also included.

GEOLOGY/SAMPLING/DRILLING

The general geology of the area is discussed fully in the enclosed May 5, 1987 report by James Bosley. Fig. 8 shows the surface geology between the Mc Morris and La Plata shaft area. This depicts the surface out crop of the main vein and it also

shows the location of the drill holes. Surface rock samples showed assays which are not ore grade.

The Ona vein (see Figs. 8,9,10 and 11) is the eastern-most outcrop of the main veiw. An adit has been driven along it for 115 ft. Sampling in this vein at 5 ft. intervals shows gold values ranging from Trace to a high of 0.020 oz/ton (Fig. 10). Silver assays are all below 1 oz/ton (Fig. 11).

Fig. 12 shows the sampling at the 100 ft. level of the Mc Morris Mine. Gold values range from trace (less than 0.002) to 0.012 oz/ton (Fig. 13). Silver showed very encouraging values up to 45.10 oz/ton (Fig. 14) and suggests that at least 30% of the drift is mineralized with silver.

Fig. 15 shows the sampling at all accessible places in the 200 ft. level of the Mc Morris Mine. Gold values (Fig. 16) in the 0.011 to 0.106 oz/ton range seems to occur east of the Mc Morris Shaft. Access farther to the east is blocked by a long caved in area. Previous workers (Mike Komula and Ron Murphy) say that very high grade ore is found behind and 30 feet east of this blocked area. Silver values shows some kind of erratic distribution but is generally found east of the shaft. Silver values ranging from 3.60 to 88.80 oz/ton are shown in Fig. 17. There is a noticeable affinity of the gold and silver. The gold "highs" are approximately at the same location as the silver "highs".

Drilling (Figs. 18,19,20,21, and 22) in the area totalled 500 ft. and is concentrated in the Mc Morris La Plata area. The drilling was done using an air trac rock drill which was not effective for the purpose of sampling shear zone and vein materials. The gold and silver values are shown in figs. 18 through 22. No ore grade gold/silver values are encountered.

AREAS OF INTEREST (Figs. 23, 24)

The general areas of interest in the Richmond Basin are divided into the following:

1. Mc Morris-La Plata Area
   Abundant high grade silver production from a vein that is at least 1500 ft. long. Ore was mined from the 100 to the 500 ft. level. Appreciable amount of gold presumably occurs with the mined ore.

2. Flat Mesa Area
   Numerous prospect pits exists. Assays from these workings show silver values from 2.35 oz/ton. One sample showed

detectable gold at 0.004 oz/ton. Silver appears to be on the flat lying schists, sandstones, conglomerates, and quartzite which in the area generally outcrops on the surface and exists up to 60 ft. below the surface. The area SE of the Flat Mesa has not been sampled but appears to be in the same geologic environment.

3. Windwill Area
Several flat lying mineralized zones have been observed here. Samples show assays in the range of 0.05 to 6.30 oz/ton silver and gold high of 0.031 oz/ton.

4. Persistance
A flat lying zone approximately 1 ft. thick was sampled here. Although the assays showed significant copper, very little gold and silver (0.006 oz/ton gold and 2.00 oz/ton silver) was detected.

5. Intersect Area
A flat lying zone (1 ft. thick) showed very good gold values from 0.008 to 0.283 oz/ton.

6. Phoenix Area
This area is west of the Intersect Area. It is reported that high grade silver has been mined in a North South structure. Gold is also reported to be present with the silver.

CONCLUSIONS

1. The Mc Morris La Plata Area is a very attractive exploration target. Of the exposed length of 1500 ft., no more than 700 ft. has been explored or mined. Past mining activities has been confined in the 100 to 500 ft. .evel. The potential for high grade silver ore exists below 500 ft. and the existence of 7 to 100 oz/ton Ag ore in the upper 500 ft. is highly probable.

2. The Flat Mesa Area and Intersect Area shows possible potential for an open pit gold/silver mine. Gold and silver are found from surface to 50 ft. below surface. The tonnage potential is very great considering the abundant and widespread occurence.

3. Some mine dumps showed sufficient silver values for possible leaching operations that can be started immediately.

4. Attractive gold and silver assays in the Windwill Area shows possible extension to the NW, NE and SE.

RECOMMENDATION

The following exploration/development program is recommended:

Proposed Exploration Program
Phase I

A. Geologic Mapping and Sampling

The main objective of this is to determine the geology extent, depth and grade mineralization. Additional prospective grounds will also be covered. Ultimately, data from this work will guide the drilling program.

1. Mc Morris Mine Area
   Surface: 6 days @ $300/day ($1,800.00)
   Underground: 6 days @ $300/day ($1,800.00) $3,600.00

2. Flat Mesa Area 9 days @ $300/day $2,700.00

3. Cherry Area 5 days @ $300/day $1,500.00

4. Windmill Area 4 days @ $300/day $1,200.00

5. Immediate Adjoining Areas
   12 days @ $300/day $3,600.00

   Total for Geologic Mapping and Sampling $12,600.00

B. Preliminary Bulk Sampling and Metallurgical Test $5,000.00

This sub phase of the program will include bulk samples (50 lbs to 300 lbs) from the at least 4 different ore zones in the project area. Data from this will determine the most efficient metallurgical processes that will be used to extract the silver/gold and other metal from the ore.

C. Topographic Mapping 10 days @ $500/day $5,000.00

A base map will ultimately result in this sub-phase. The base map will be used in detail geology and preliminary estimation of ore reserves.

D. Assaying 300 samples @ $12/sample $3,600.00

E. Drilling $100,000.00

1. Mc Morris Mine area 10 diamond drill holes
   total footage 2,000 @ $50/ft.

   Ten diamond drill holes is programmed to test 1,400 ft. of the 2,800 ft. strike length, where the Mc Morris and the La Plata shaft are located. The drilling program will also attempt to test grade and continuity below the 200 ft. level.

2. Flat Mesa Area 40 shallow reserve circulation drill holes at 100 ft. depth each, 4,000 ft total depth @ $10/ft. $40,000.00

Mineralization at the Flat Mesa Area is observed from the surface to a depth of 80 ft. These shallow reverse circulation drill holes will test the grade and lateral and vertical extent of mineralization.

3. Other areas (Intersect, Windmill and Adjoining areas) 10 drill holes @ 200 ft. each $20,000.00

Total for drilling $160,000.00

F. Underground Rehabilitation

1. Dewatering the Mc Morris shaft to the 300 ft. level, 200 ft. @ $50/ft $10,000.00

2. Rehabilitation of the 200 ft and 300 ft levels, clearing/timbering collapsed stoped area to the east and to the west of the McMorris Shaft, 200 ft @ $125/ft. $25,000.00

Total for Underground Rehabilitation $35,000.00

G. Permits/Forestry Cash Bonds $15,000.00

H. Supervision/Drill Logging 30 days 8,000.00

I. Others

1. Option payment to Bill Russel prior to drilling $15,000.00
2. Field Camp/Office and Maintenance $3,000.00
3. Field Equipment/Supplies $3,000.00
4. Mining Consultants 5 days $2,500.00
5. Metallurgical consultants 5 days $2,500.00

Total for other Expenses $16,000.00

TOTAL FOR PROPOSED EXPLORATION PROGRAM (PHASE I) $260,200.00

ORE POTENTIAL IN THE JOPACH CLAIM GROUP (JOPACH 1-43)
RICHMOND BASIN AREA
GILA COUNTY, ARIZONA

BULK LOW GRADE AREAS

Assume:

1. 40% correction factor for discontinuity grade discrepancy and variation
2. Average grade: 5 oz/ton Ag and 0.006 oz/ton Au
3. Ag value is $7/oz; Au value is $450/oz

FLAT MESA AREA

167,800,000 Cu ft. or 14,000,000 tons of ore

Assume:
Same as above (after 40% is applied)

Tonnage potential is	8,400,000 tons	
Ag potential is:	42,000,000 oz or	$294 million
Au potential is:	50,400 oz or	$ 22.6 million
		$316.60 million

BULK LOW GRADE POTENTIAL $316.60 million

FLAT "VEINS"

Assumptions:
1. Tonnage factor = 12 cu ft/t
2. Correction factor 40%
3. Average grade: Au = 0.200 oz/t; Ag = 1.0 oz/t
4. Value of Au = $450/oz: Ag = $7/oz

I. CHERRY AREA

1200' X 4500' X 2' 10,800,000 cu ft or 900,000 t

Au potential = 180,000 oz or $81.0 million
Ag potential = 900,000 oz or $ 6.3 million
TOTAL $87.3 million

II. WINDMILL AREA

1000' X 1100" X 2" 6,000,000 cu ft or 500,000 t

Same assumptions as above

Au potential = 100,000 oz or $45 million
Ag potential = 500,000 oz or $ 3.5 million
TOTAL $48.5 million

TOTAL FLAT 'VEINS" = $135.8 million

MC MORRIS AREA
High grade vein systems

2800' X 500' X 5' 7,000,000 cu ft or 600,000 t

Assume:

1. Correction factors
   mined out = 20%
   dilution = 5%
   others = 20%
   45%
2. Tonnage factor = 12 cu ft/t
3. Average grade shear zone: Ag = 10oz/t
   Au = 0
4. Average grade high grade Bonanza zone:
   Ag = 100 oz/t
   Au = 0.01 oz/t
5. High grade Bonanza is in 5% of length
6. Shear zone ore is 95% of length
7. Mineralization extends to 500 ft depth

After correction factor of 45% is applied:

Tonnage potential is 330,000 tons
High grade zone (100 oz/t Ag; 0.01 oz/t Au)
5% of 330,000 tons = 16,500 tons
Ag = 1,650, 000 oz or $11.5 million
Au = 3300 oz or $ 1.5 million
$13.0 million

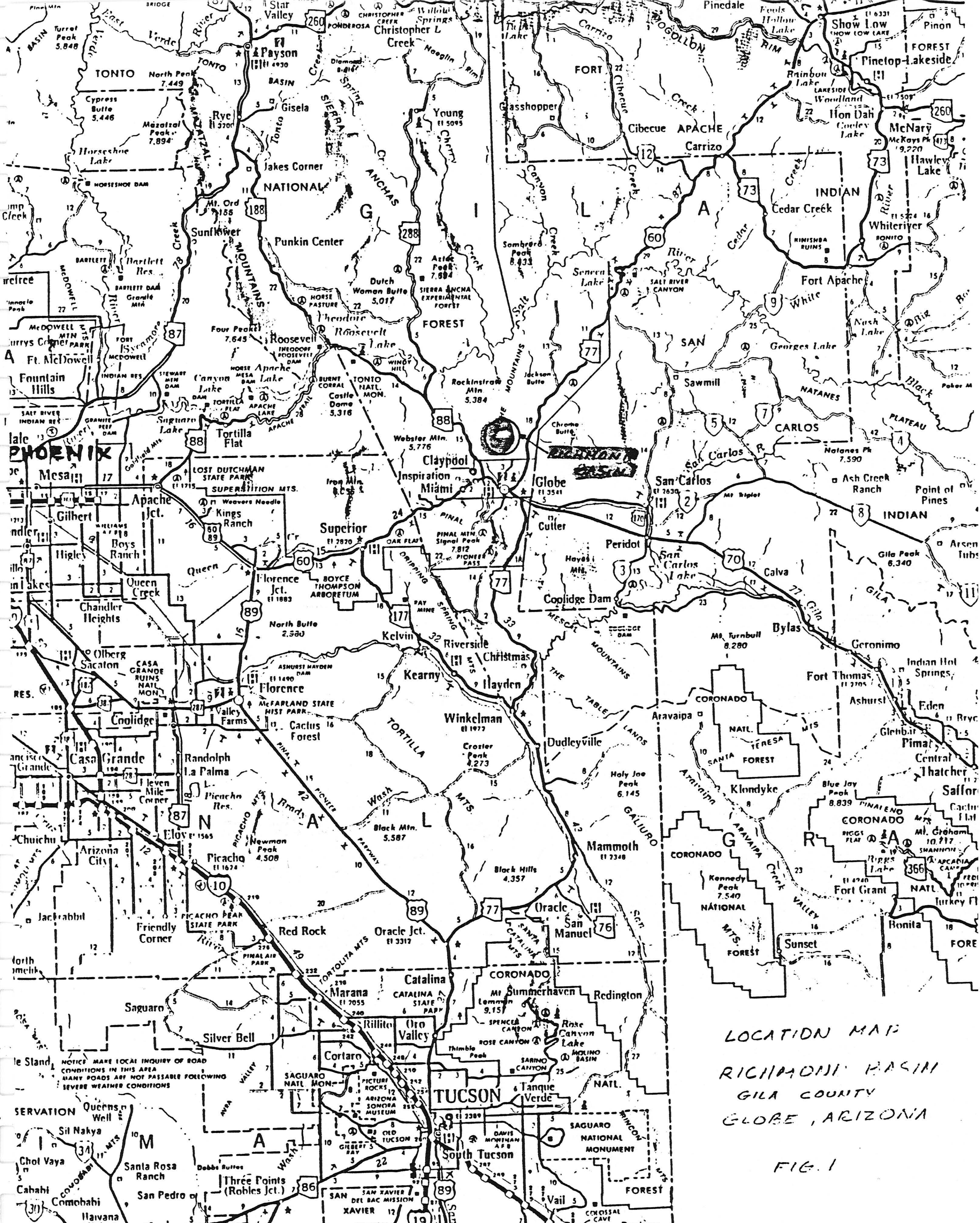
Shear zone (10 oz/ton Ag; no gold)
95% of 330,000 = 313,500 tons
Ag = 3,135,000 oz or $21.9
Au = nil

TOTAL MC MORRIS $34.9 million

PRESENT POTENTIAL JOPACH CLAIM GROUP $487.3 MILLION

Arturo A. Ona

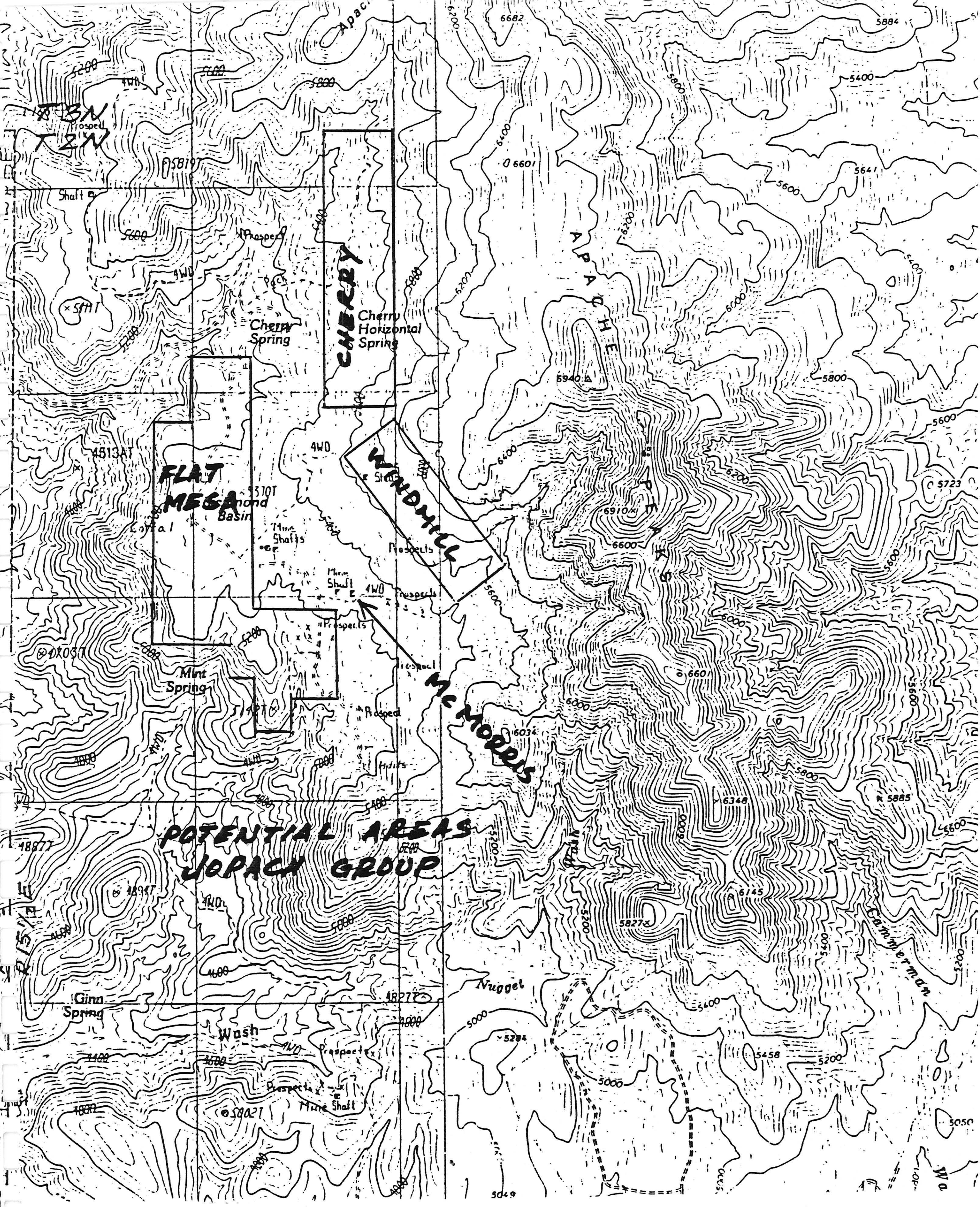
ARTURO A. ONA



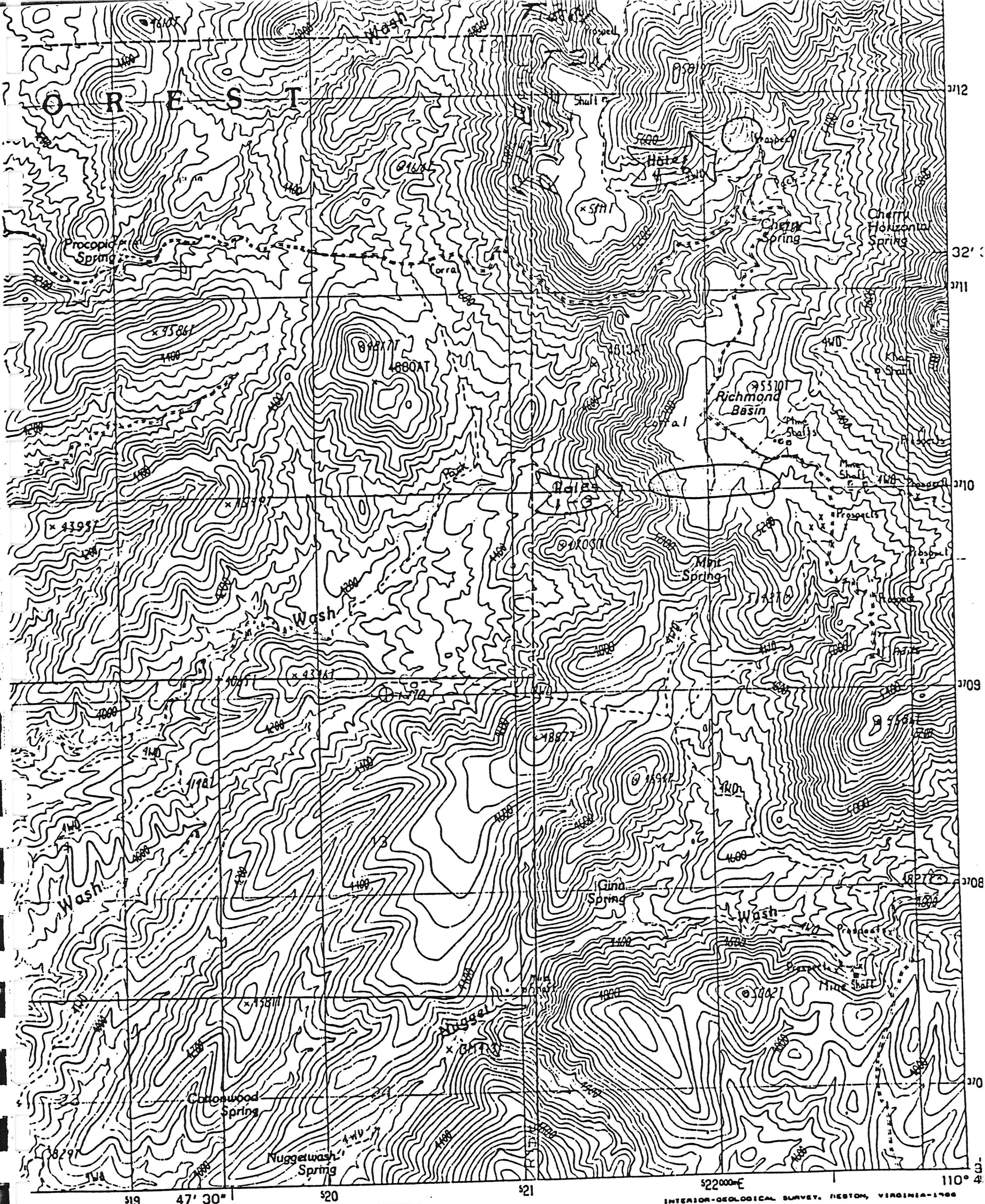
LOCATION MAP

RICHMOND BASIN
GILA COUNTY
GLOBE, ARIZONA

FIG. 1



T3N
T2N
CHERRY
Cherry Horizontal Spring
Cherry Spring
FLAT MESA
Diamond Basin
WINDMILL
McMORRIS
Mint Spring
POTENTIAL AREAS
JOPACH GROUP
APACHE PEAKS
Ginn Spring
Wash
Nugget
Cammerman
Prospects
Mine Shaft
Shaft
Prospect
Adits
4WD



ARIZONA

5. MAP

ROAD LEGEND

Improved Road . . . .

Unimproved Road . . . .

00 9000 10 000

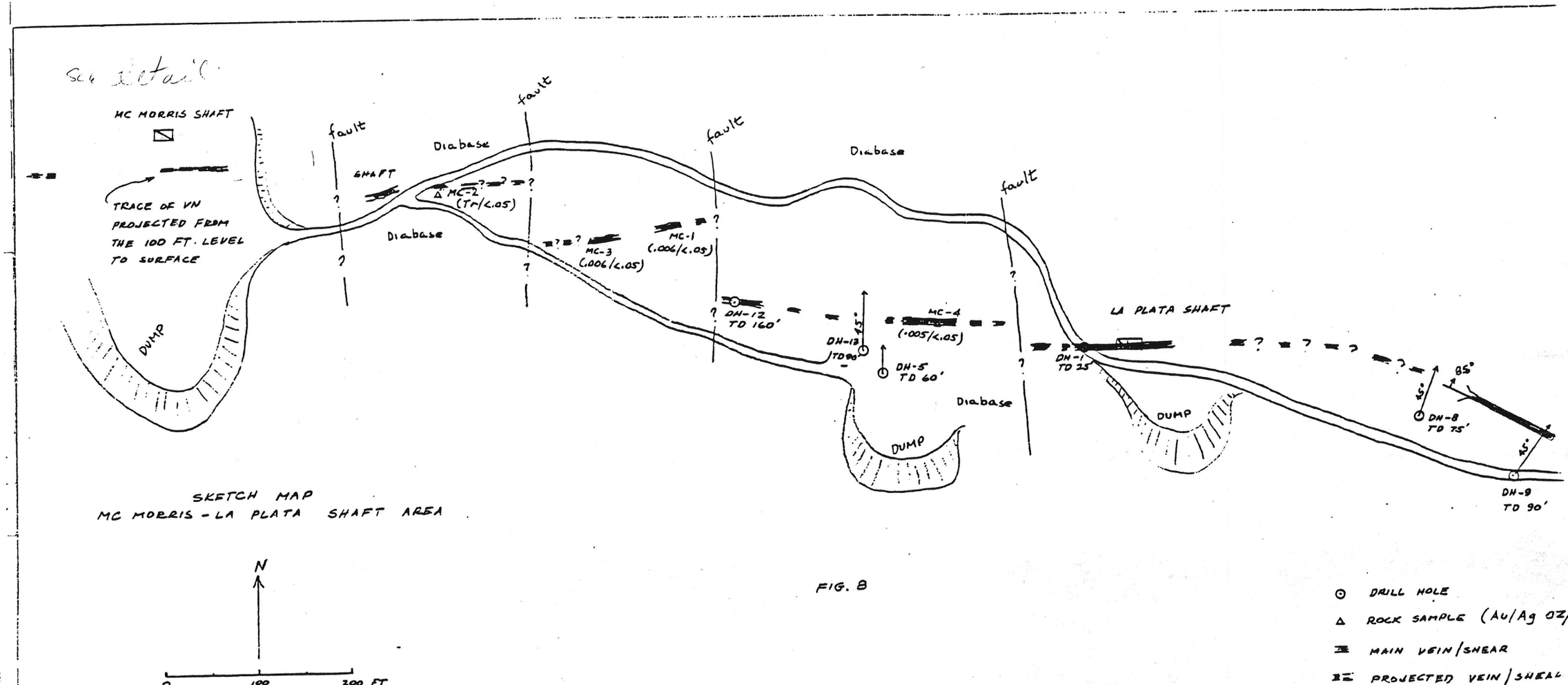
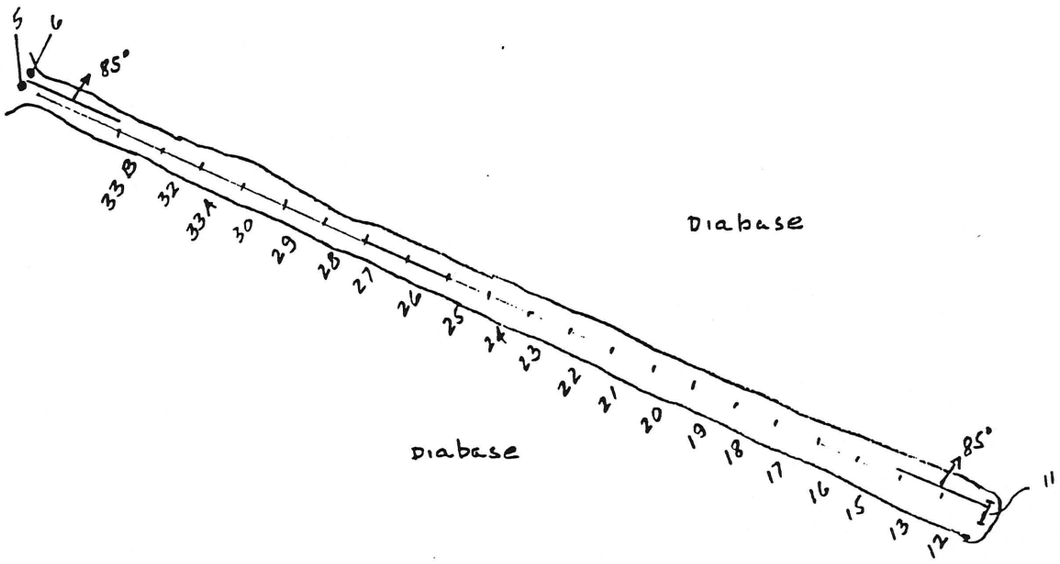

Sch detail
MC MORRIS SHAFT
TRACE OF VN PROJECTED FROM THE 100 FT. LEVEL TO SURFACE
fault
fault
fault
fault
Diabase
Diabase
Diabase
Diabase
SHAFT
MC-2 (Tr/<.05)
MC-3 (.006/<.05)
MC-1 (.006/<.05)
MC-4 (.005/<.05)
DH-12 TD 160'
DH-13 TD 90'
DH-5 TD 60'
DH-1 TD 25'
LA PLATA SHAFT
DH-8 TD 75'
DH-9 TD 90'
DUMP
DUMP
DUMP
45°
85°
45°
45°
SKETCH MAP
MC MORRIS - LA PLATA SHAFT AREA
N
0
100
200 FT
DRILL HOLE
ROCK SAMPLE (Au/Ag OZ/TON)
MAIN VEIN/SHEAR
PROJECTED VEIN/SHEAR

FIG. 8



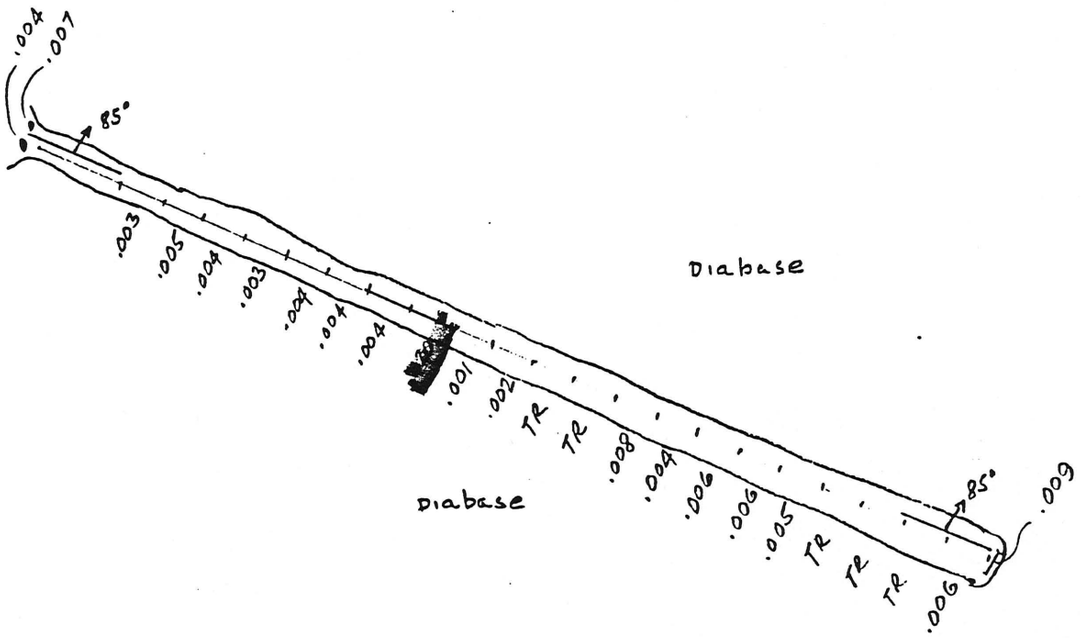
N

ONA VEIN
NE OF LA FLATA

1 INCH = 20 FT.

ONA VEIN
SAMPLE LOCATION MAP

FIG. 9



N

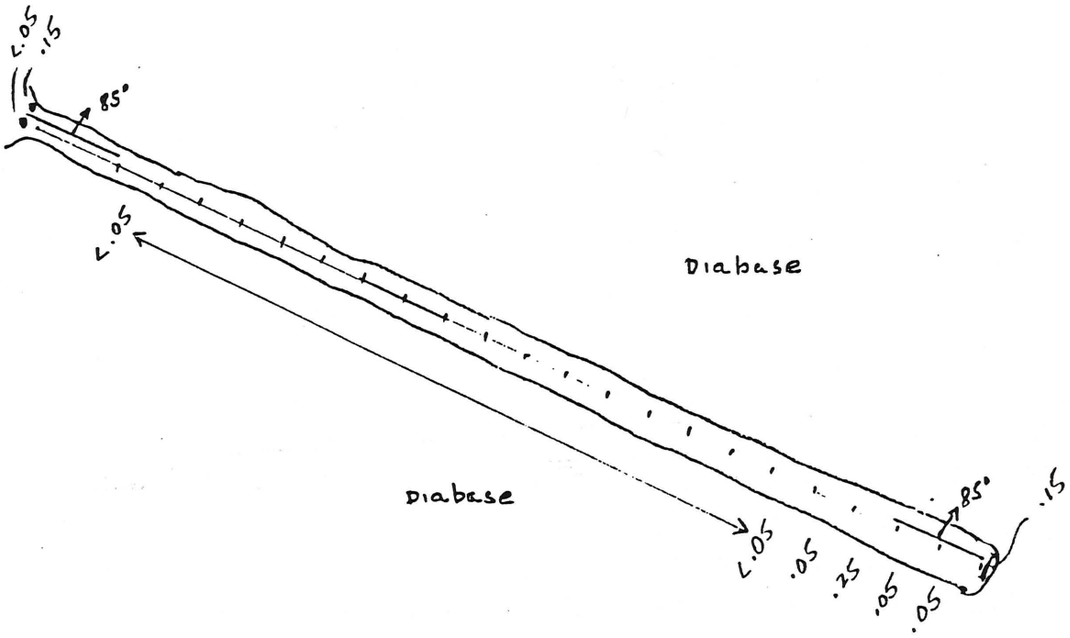
ONA VEIN
NE OF LA PLATA

1 INCH = 20 FT.

ONA VEIN

(OZ/TON)

FIG. 10



N

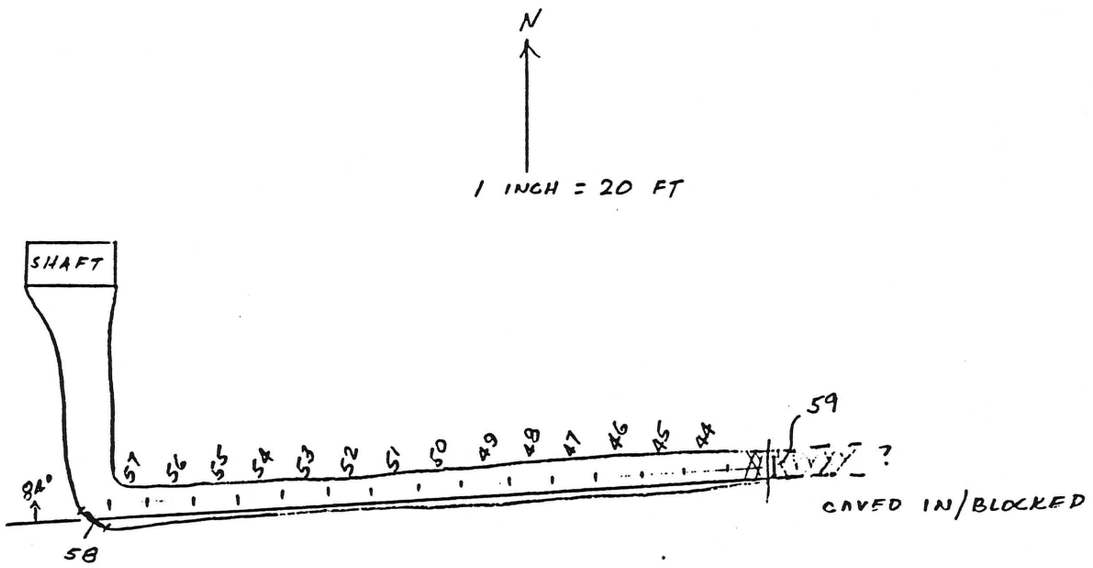
ONA VEIN
NE OF LA PLATA

1 INCH = 20 FT.

ONA VEIN

SILVER MAP
(OZ/TON)

FIG 11



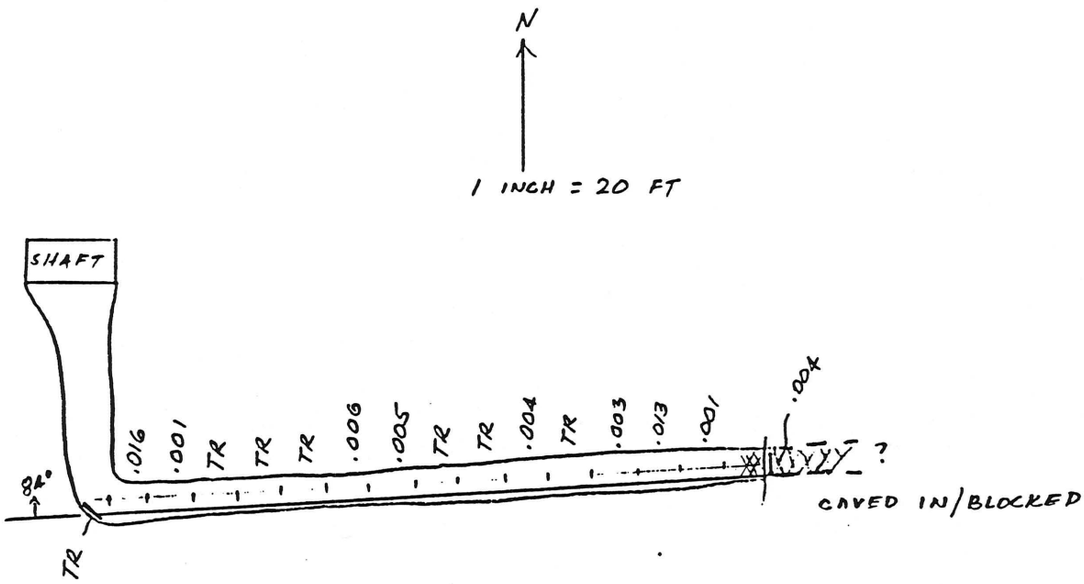
MC MORRIS · MINE

100-FT · LEVEL

SAMPLE LOCATION MAP

100-FT LEVEL (MC SERIES)

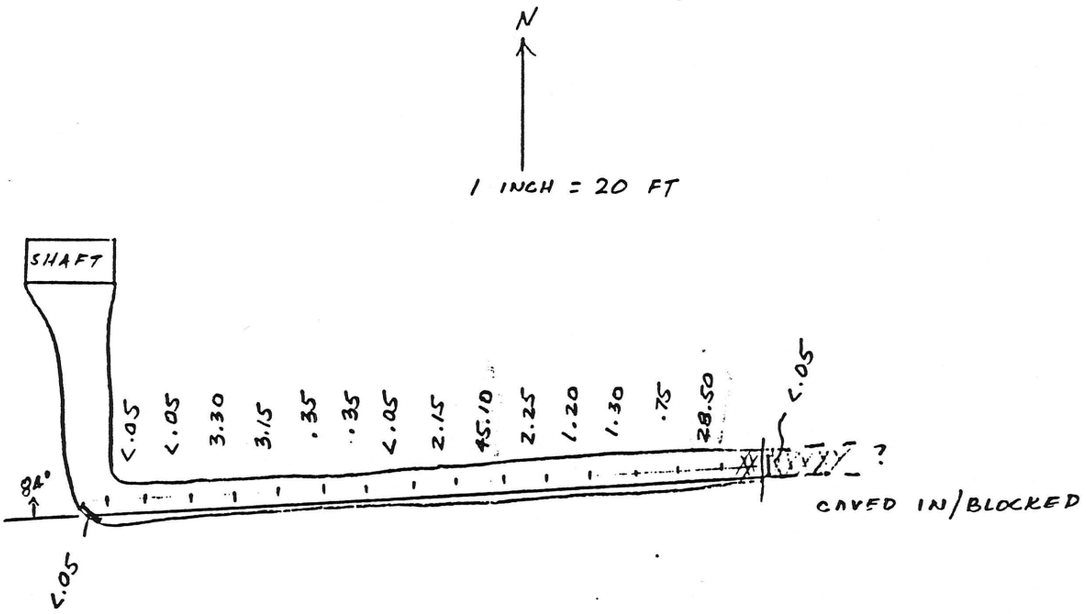
FIG. 12



MC MORRIS MINE
100-FT. LEVEL

GOLD MAP
(OZ/TON)

FIG. 13

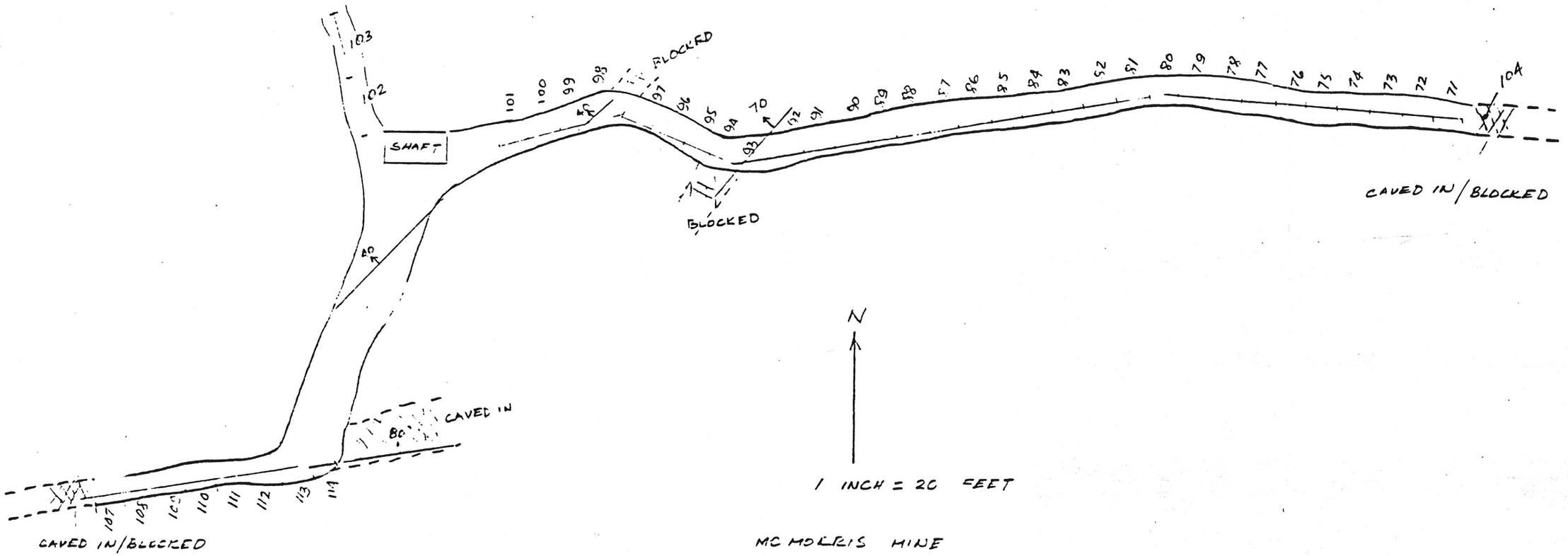


MC MORRIS MINE
100-FT. LEVEL

SILVER MAP
(OZ/TON)

FIG. 14

Ano.



N

1 INCH = 20 FEET

MC MORRIS MINE

200-FT LEVEL

SAMPLE LOCATION MAP

200-FT. LEVEL

MC SERIES

FIG 15

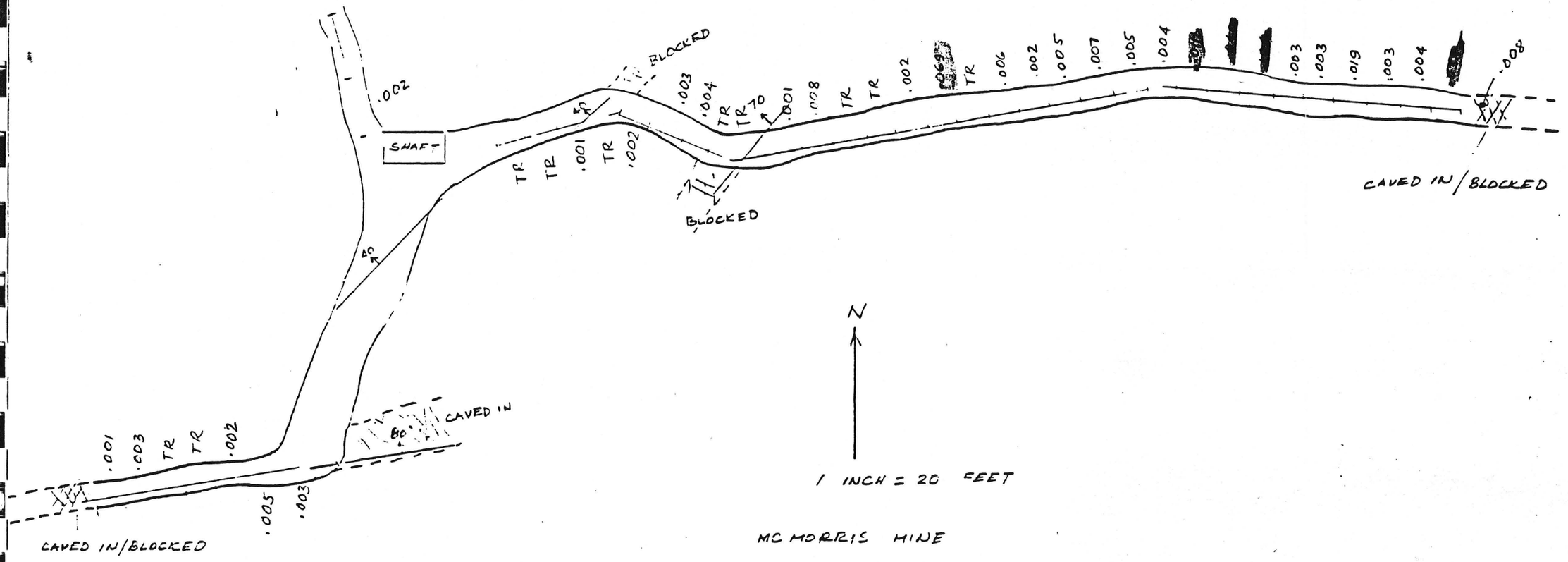
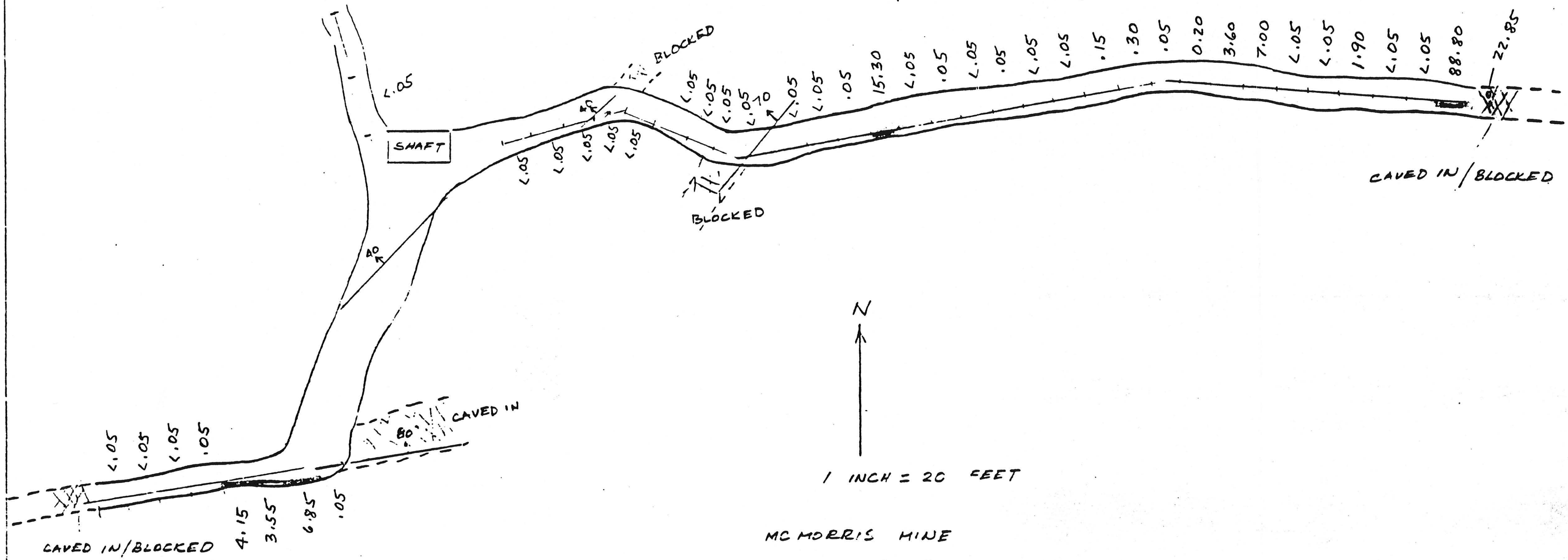

.002
SHAFT
BLOCKED
.003
.004
TR
TR
.001
TR
.002
TR
TR
.001
.008
TR
TR
.002
.064
TR
.006
.002
.005
.007
.005
.004
.003
.003
.019
.003
.004
.008
CAVED IN/BLOCKED
BLOCKED
40
.001
.003
TR
TR
.002
80'
CAVED IN
.005
.003
CAVED IN/BLOCKED
N
1 INCH = 20 FEET
MC MORRIS MINE
200-FT LEVEL
GOLD MAPS
(OZ/TON)

FIG. 16



MC MORRIS MINE
200-FT LEVEL
SILVER MAP
(OZ/TON)

FIG. 17

Ano

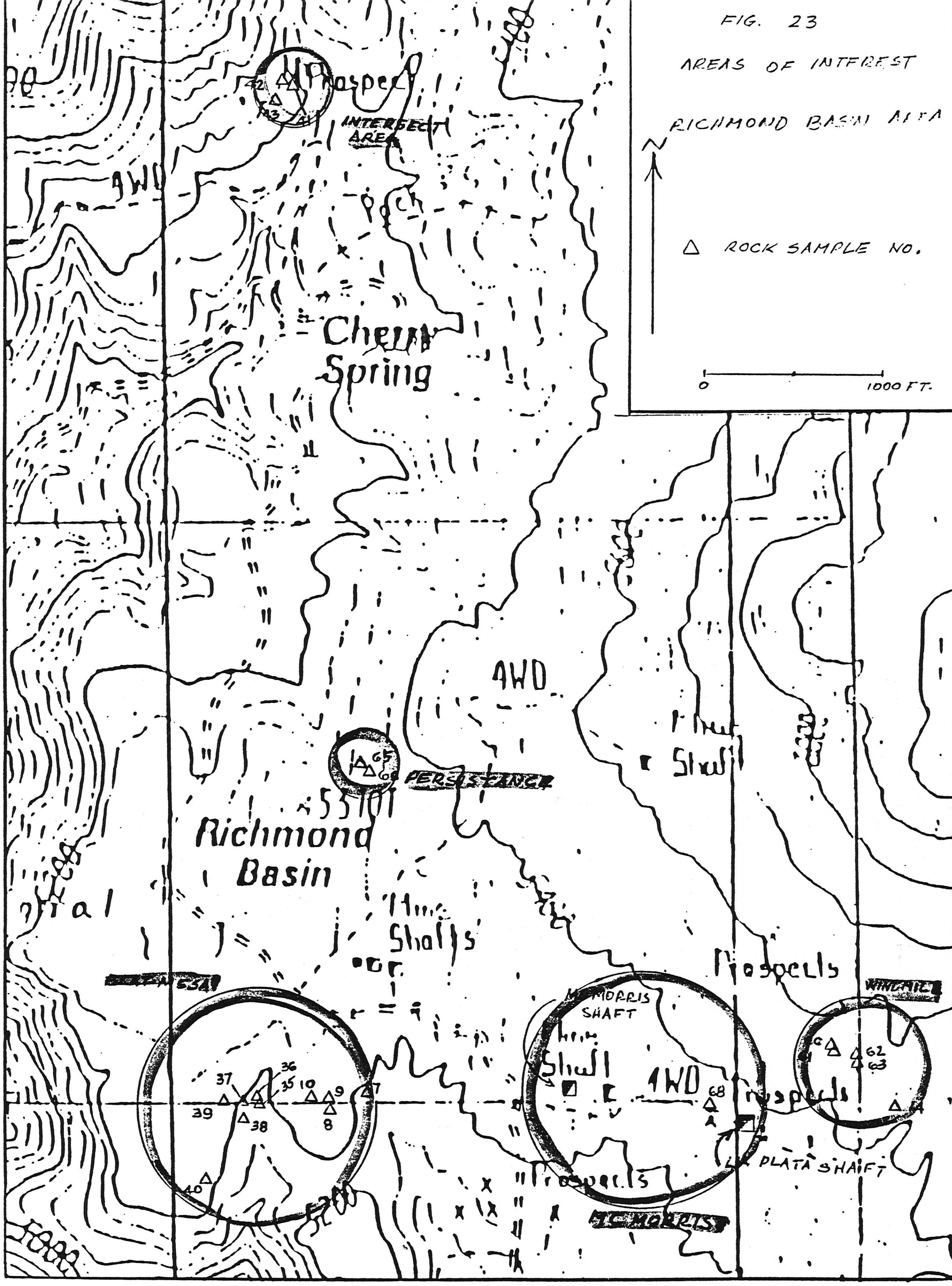
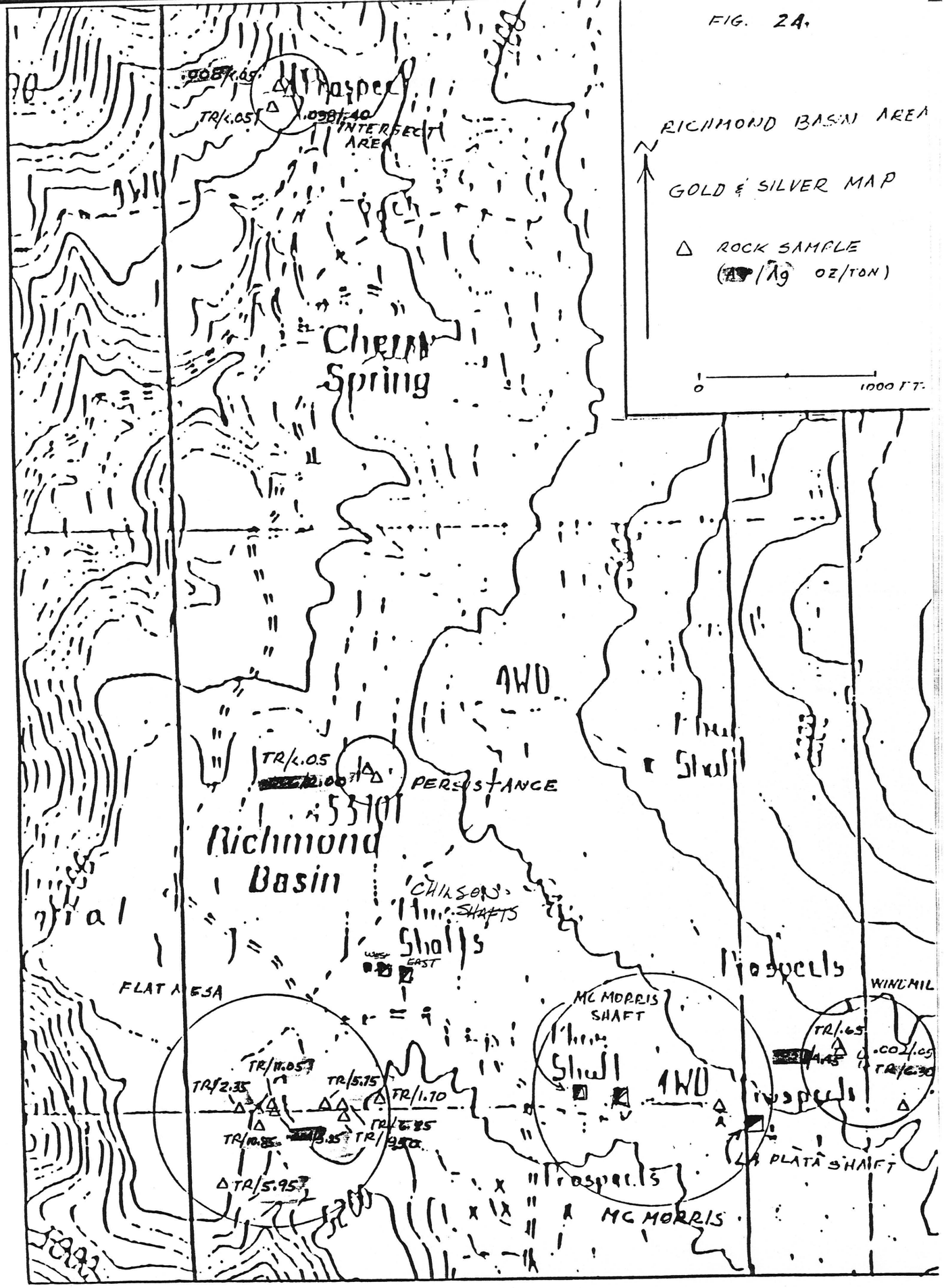


FIG. 23
AREAS OF INTEREST
RICHMOND BASIN AREA
N
ROCK SAMPLE NO.
0
1000 FT.
Prospect
INTERSECT AREA
Cherry Spring
4WD
Richmond Basin
Shafts
Shaft
Prospects
McMORRIS SHAFT
PLATA SHAFT
37
36
35
10
9
39
38
8
40
65
66
68
62
63

FIG. 24.


RICHMOND BASIN AREA
GOLD & SILVER MAP
△ ROCK SAMPLE
(Au/Ag OZ/TON)
0
1000 FT.
Prospect
TR/.05
.038/.40
INTERSECT AREA
Cherry Spring
4WD
Shaft
TR/.05
PERSISTANCE
Richmond Basin
CHILSON SHAFTS
Shafts
WEST
EAST
Prospects
FLAT MESA
TR/11.05
TR/2.35
TR/5.15
TR/1.70
TR/10.85
TR/5.95
MC MORRIS SHAFT
Shaft
4WD
Prospects
MC MORRIS
LA PLATA SHAFT
WINDMIL
TR/.65
.02/.05
TR/6.30
Prospects

cougar
metals
international

July 27, 1987

Mr. Chet Idziszek, President
Galveston Explorations Ltd.
P.O. 10108-Stock Exchange Tower
Suite 1590-609 Granville Street
Vancouver, B.C., V7Y-1C6, Canada

Dear Chet:

This is a summary report on the McMorris Mine area-Richmond Basin silver district, Gila County, Arizona. The work was done between July 24-26 including travel from Palo Alto, California to Globe, Arizona, and return.

Conclusions

There are two (2) distinct types of potential exploration targets in the district. Both should be considered as, and treated as, separate entities.

(1) Quartz vein-silver system (s). The principal composite quartz vein strikes about E-W, is 1-2 meters in width, and has a strike length of 1,000 meters (+). Several shafts (near vertical) have been sunk along the vein including the McMorris mine shaft (650 feet +) and the La Plata shaft (200 + feet), with levels at about 100 foot spacings. Most of the underground work (level and stoping) was apparently done within 200-250 feet horizontally from the McMorris shaft. More precise information is not possible at this time as we could not go underground and published recorded information is somewhat contradictory and unclear.

One ore chute was mined between the 100 level and the surface and probably produced 1-2 thousand tons containing 100 to > 500 ounces Ag/ton. Some of the ore contained 500 to 1,000 ounces Ag/ton. I would estimate the chute was 100 feet vertical, 10 feet wide, and 10-20 feet in strike length. This chute probably continues at least to the 200 level and stoping (raising was begun upward on it from the 200 level; statements by a man who did the work suggested at least 80 percent of this ore chute is still in place.

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Palo Alto, California 94306 USA

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Deeper levels include those at 300 and 400 feet, plus others at 600 and 650 (?) feet. Some reports suggest that a large amount of stoping was done between the 400 and 200 levels, but others say little or no work was done but the ore continues to depth.

The deepest levels (600-700(?)) feet reportedly didn't encounter ore for geologic reasons. Another plausable reason is that the high grade chutes represent supergene enrichment and below 600 feet (or shallower) the veins contain only low grade primary mineralization.

Wallrocks along the vein include diabase on the north (hanging wall side) and diorite, granite, and possibly some altered conglomerate units on the south (footwall side). Wallrocks of all types are weakly silicified for 0.5 meters or less away from the vein.

Most of the composite quartz vein system contains about 0.5 to 3 ounces Ag/ton across 1-2 meter widths. High grade ore chutes have sharp contacts (walls) and are made up of mixtures of acanthite, stromeyerite, native silver, and several silver sulfosalt minerals, plus quartz and minor amounts of pyrite. There is a good chance that these bonanza ore chutes, which can carry several thousand ounces Ag/ton, represent secondary enrichments of silver and are not primary. Surface (and near surface) samples also contain cerargyrite and small amounts of secondary copper oxide minerals.

(2) Plateau area low grade stockworks. The main vein system projects to the west and cuts a broad area with possible potential for bulk tonnage low grade silver mineralization. Numerous small prospect pits have been dug to depths of about 1 meter over an area of at least 1 sq. km. Surface samples collected by A. Ona, consulting geologist, contained anomalous amounts of silver at levels of 3 + ounces Ag/ton. Most of the mineralization is in the form of narrow silver-bearing quartz-Mn Fe oxide veinlets filling fractures and joints, and coating surfaces in locally silicified conglomerate rock.

It is not possible to determine whether the mineralization has any laterial continuity outside of the numerous pits or what any average grade would be. If the mineralization does have laterial continuity then the area does have good bulk tonnage potential.

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Suggestions

(1) Quartz vein-silver system(s). These systems have no obvious potential for large tonnage of ore but do have good potential to produce bonanza type silver ore from ore chutes within the vein(s) probably at or near intersections with N-S structures.

The McMorris mine should be de-watered to at least the 300 level and the shaft cleared to that level (from the 200 to the 300 level). The 200 E level should be cleaned out to a distance of 250 feet east of the shaft and the ore chute that presumably is there, should be mined out. This will cover all costs and then some.

Possible deeper extensions of the chute should be tested by underground drilling from the 200 level and examination of the vein on the 300 level; hopefully it hasn't been mined out. Exploration for new ore chutes should be done by driving in the vein within 200 feet of the surface with no wildcat angle core hole drilling from the surface. Information from a careful examination of the 100 and 200 levels (and 300 level), done at a very low cost, would be used to plan an exploration program to test the upper 200 feet of the vein both east and west from the McMorris workings.

(2) The Plateau low grade area could also be tested for a small cost. What should be done is to cut bulldozer trenches both N-S (to cut any concealed E-W structures) and E-W. These trenches would then be mapped and sampled to determine average grades, continuity of mineralization, etc. If the results are favorable a program of reverse circulation drilling should be done to test the grade continuity with depth. There is a good chance that most of the silver values are in conglomeratic-sedimentary rocks above barren granite and most of the drilling would be done to depth of <100 feet.

Other Comments

Available data indicates that most of the mineralization in the veins and the Plateau area is very low in gold and the Ag: Au ratio is very high. A flat lying zone of silicification 1-2 feet thick containing 3-6 grams Au/ton was examined; unfortunately the altitude of the vein and a high stripping ratio make it not too attractive a target at this time.

This report is only a summary of my observations and conclusions. I would be willing to go over this in more detail if you like.

Sincerely yours,

Art

Arthur S. Radtke

REPORT ON

THE McMORRIS PROJECT

GILA COUNTY, ARIZONA

on behalf of

Mr. Charles Claycomb
6992 El Canino Real
Ste 104 - 454
Carlsbad, CA 92009

by

James B. Bosley P.F
Mining Engineer
May 5, 1987

James B Bosley

REPORT ON THE MCMORRIS PROJECT

GILA COUNTY, ARIZONA

TABLE OF CONTENTS

FIGURES

1.0 Summary and Conclusion

Mr. Bill Russel of Carlsbad, CA holds title to 35 unpatented mineral claims located in the Richmond Basin Mining District, Gila County, Arizona.

Previous work has indicated the potential for the development of high grade silver ore on the McMorris vein and associated cross veins. There is potential to develop a low grade silver ore body in the Scanlan Conglomerate and a gold ore body on the Intersect claim.

The McMorris vein system is an east-west trending Zone of brecciation and silicification containing silver and copper mineralization. The main vein is 3 to 6 feet wide with a strike length of 3000 feet. Ore grade mineralization occurs in ore shoots and spurs of extensively high grade.

The McMorris group of claims represents an excellent exploration target to develop silver ore bodies. A program of exploration has been recommended. The program consists of aerial photography, geologic mapping, vein and fault mapping, drill sampling, outcrop sampling and preliminary metallurgical testing.

2.0 Introduction

Mr. Charles Claycomb, of Carlsbad, CA has retained me to evaluate and make recommendations on the silver and gold property known as the McMorris Mine in the Richmond Basin, Gila County, Arizona.

This report is based on a personal visit to the property and a study of previous reports. During the week of April 20th, the author met with Mr. Claycomb, Mr. Murphy, and Mr. Sumpter and reviewed the previous work and sampled safely accessible portions of the veins. Primary emphasis was placed on the vein near the McMorris shaft.

Recommendations have been made for the exploration and metallurgical testing program. An estimate of costs, has been prepared for the exploration program and the metallurgical testing. An estimate of mining and milling costs have been included.

3. Location and Access

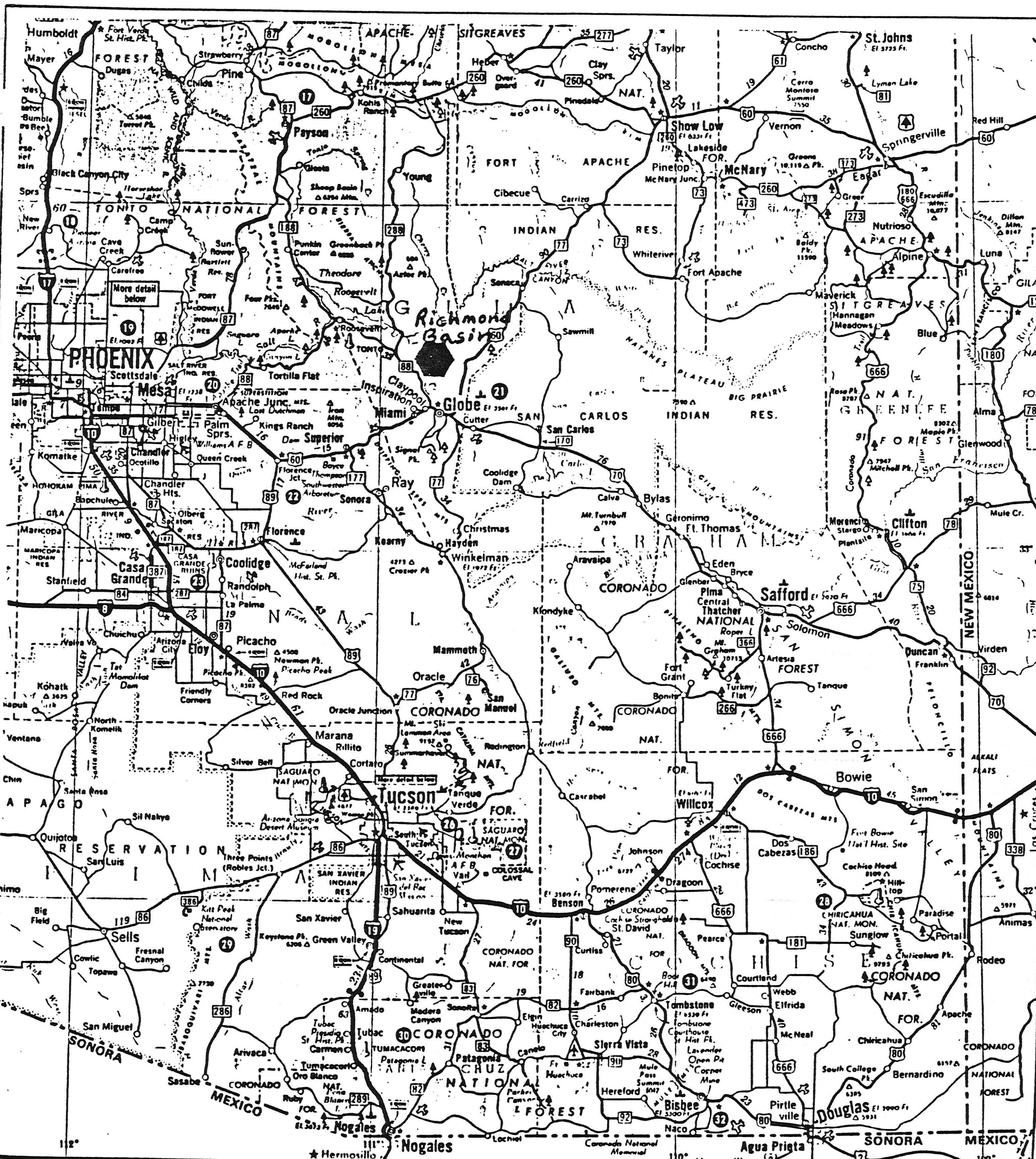
The McMorris precious metal property consists of 35 unpatented lode claims situated in Section 10, of T2N and R15½ E in Gila County, Arizona.

The McMorris mine is located in the Richmond Basin Mining District, in Gila County, Arizona. It is approximately 100 miles east of the city of Phoenix.

The McMorris property is reached from Phoenix via U.S. Highway 60 to Claypool then north 12 miles on state Highway 88, then cross Pinal Creek and follow Horseshoe Bend Wash 2 miles then turn right on Wood Springs Road for 5 miles and right on the Richmond Basin Rd. 1 3/4 miles. (See Figures 3A & 3B)

Commercial air service is available to Phoenix. Small aircraft can land in Globe.

The McMorris property is situated at an elevation of 5500 feet above sea level and has a moderate climate ameneable to year around operations.



McMorris Project

Fig. 3a

Location Map

by'- J.B. Bosley | Scale-

PG-3a

Scale: Escala 1:1.730.000

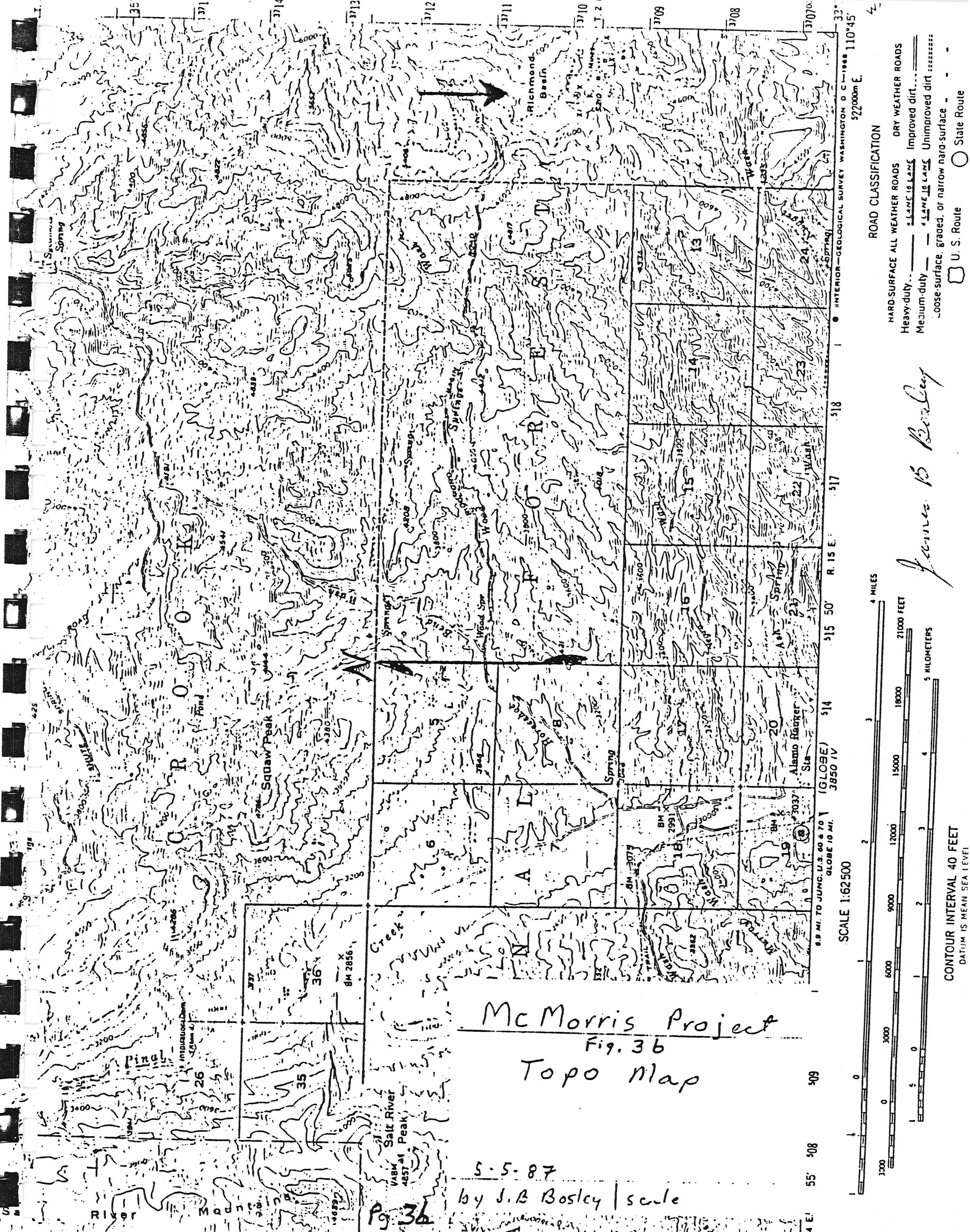
ONE CENTIMETER EQUALS ABOUT 17.3 KILOMETERS

0 10 20 30 40 50 60 70 80 90 100 110 120 Km.

0 5 10 20 30 40 50 60 70 80 Mi.

ONE INCH EQUALS ABOUT 27.3 MILES

James B. Bosley



McMorris Project
Fig. 3b
Topo Map

5-5-87
by J.B Bosley | scale

Pg. 36

James B Bosley

4.0 Claim Information

Bob McKusick staked the 13 Discovery group claims in October, 1964. Bill Russel acquired the claims through K & M mining in 1985.

Claims-Discovery

Discovery 1
Discovery 2
Discovery 3
Discovery 4
Discovery 5
Randolf

Silver Basin

Silver Basin 1
Silver Basin 2
Silver Basin 3
Silver Basin 4
Silver Basin 5
Rancolf 2

Bob McKusick staked the Persistance claims, Funny Bone, Intersect and B & M claims in 1970. Bill Russel acquired the claims through K & M Mining in 1985.

Claims Persistance 1
Persistance 2
Persistance 3
Persistance 4
Persistance 5
Persistance 6

Funny Bone
Intersect
B & M

Bill Russel acquired the 13 LaPlata claims by staking mineral claims in January 1986.

Claims-LaPlata 1
LaPlata 2
LaPlata 3
LaPlata 4
LaPlata 5
LaPlata 6
LaPalta 7

LaPlata 8
LaPlata 9
LaPlata 10
LaPlata 11
LaPlata 12
LaPlata 13

The claims appear to have been staked in accordance with Arizona and Federal Regulations. The yearly assessment work appears to have been performed and filed with Gila County and the BLM.

There appears to be some fractions which have not been staked. This open ground should be claimed and the Funny Bone, Intersect and B & M claims tied into the vest of the claims.

See Figure 4-a

The documents concerning the mineral claims mentioned above, are on file with Mr. Claycomb at his office.

5.0 History and Previous Work

The early history of the Richmond Basin has as many versions as authors illustrated by the following:

John L. Alexander "The mines in the Richmond Basin area were discovered in the year 1874 by a man named Chilson, who heard of the District from stories of Indians shooting silver bullets at the soldiers in a fight there."

Arizona Mining Journal, November, 1919
It's name was given by two pioneers from Virginia, Dickey and Alvaney, the original discoverers, who located the Mac Morris mine for a party by that name and the Richmond claim adjoining, for themselves, in the year 1876.

Ottey Stanley Bishop states, in 1875 "the McMorris Mine had been sunk to a depth of 300 ft. and had produced over $700,000."

Arizona Mining Journal, November, 1919
"Another famous mine the Nugget, located by a German prospector who made no attempt at development, but traded it for a mule, to the Chilson brothers. The Chilsons first shipment was made in 1876.

The original discovery probably was in the area of the Nugget Gulch where native Silver nuggets would have been found in the Placer gravels around 1873 to 1874.

A rush of prospectors followed quickly with claim-staking along Nugget Gulch and the washes that feed into it. This led to the discovery of the ore bodies in the Scanlon Conglomerate and the Nugget bend. Prospecting for vein deposits found the Richmond bend and McMorris vein. Other claims followed on the McMorris vein and the Helene lead and jumbo veins found.

The market and value of silver dropped in the 1880's and remained low until the Sherman Silver Act of 1890 which encouraged silver production until the act was repealed in 1893. Silver made a come-back between 1900 to 1910 then again in the 1920's when low prices and higher costs shut most of the mines down.

5. cont. I.e. McMorris Mine was previously named Mac Morris

Minor activity in the early 1950's revived interest in silver but was short-lived. Interest in silver has been active since the mid 1970's when silver began to rise in value.

The Richmond Basin is estimated to have produced in excess of 2 million dollars of silver produced. Approximately $200,000 was produced in nuggets and $1,750,000 produced from the major vein mines, McMorris, Jumbo and the Helene Lead. See Figure 5A.

1874	McMorris Mine Started.
1876	McMorris Company operated McMorris Mine.
1880	LaPlata Mine started sinking shaft.
1882	McMorris company acquires LaPlata Mine and sinks shafts on both properties. Appears they started the existing McMorris Shaft during this time.
1885	McMorris Mine sold to Fisk Stout and Co. of New York who operated the mine to the six hundred level.
1885-1917	Information sketchy on production. During this time the Newbould Brothers, and William Pohl worked the Jumbo Mine.
1917	Jumbo mine sold the Texas Bunch Company of Temple, Texas. They operated the Jumbo mill using cyanide.
1919	Gila Monster Mining Co. acquired 27 claims in the basin, including the MacMorris, La Plata and Richmond Mines. They erected a 50-ton per day cyanide mill below the LaPlata Shaft.
1922	Alexander Family of Phoenix, Az acquired the McMorris Group.
1964	Robert McKusick and W.A. McBride locate claims over the McMorris and Richmonds mines.

5. cont.

1985 K & M Mining acquired the claims of McKusick and McBride.

1986 K & M staked 13 claims on the eastern extension of the McMorris Mine. They rehabilitate the McMorris shaft to the 200 ft. level.

6.0 Geology

A. Regional

In the Globe-Ray area the Pinal Schist forms the basement in many areas. In the Richmond Basin the Pinal Schist has been intruded by the Ruin Granite, which forms the basement of the basin. The intrusion of the Ruin Granite formed mountains which were eroded down to the granite to a flat plain.

The granite surface was then covered by shallow water and the Scanlan Conglomerate formed with weathered granite and silica rich silt washed into the shallow sea.

The Scanlan Conglomerate is overlain by 265 feet of fine Arkosic quartzite, the basal member of the Pioneer Formation. The upper member of the Pioneer Formation is 375 feet thick, and consists of red, purple, and green shades.

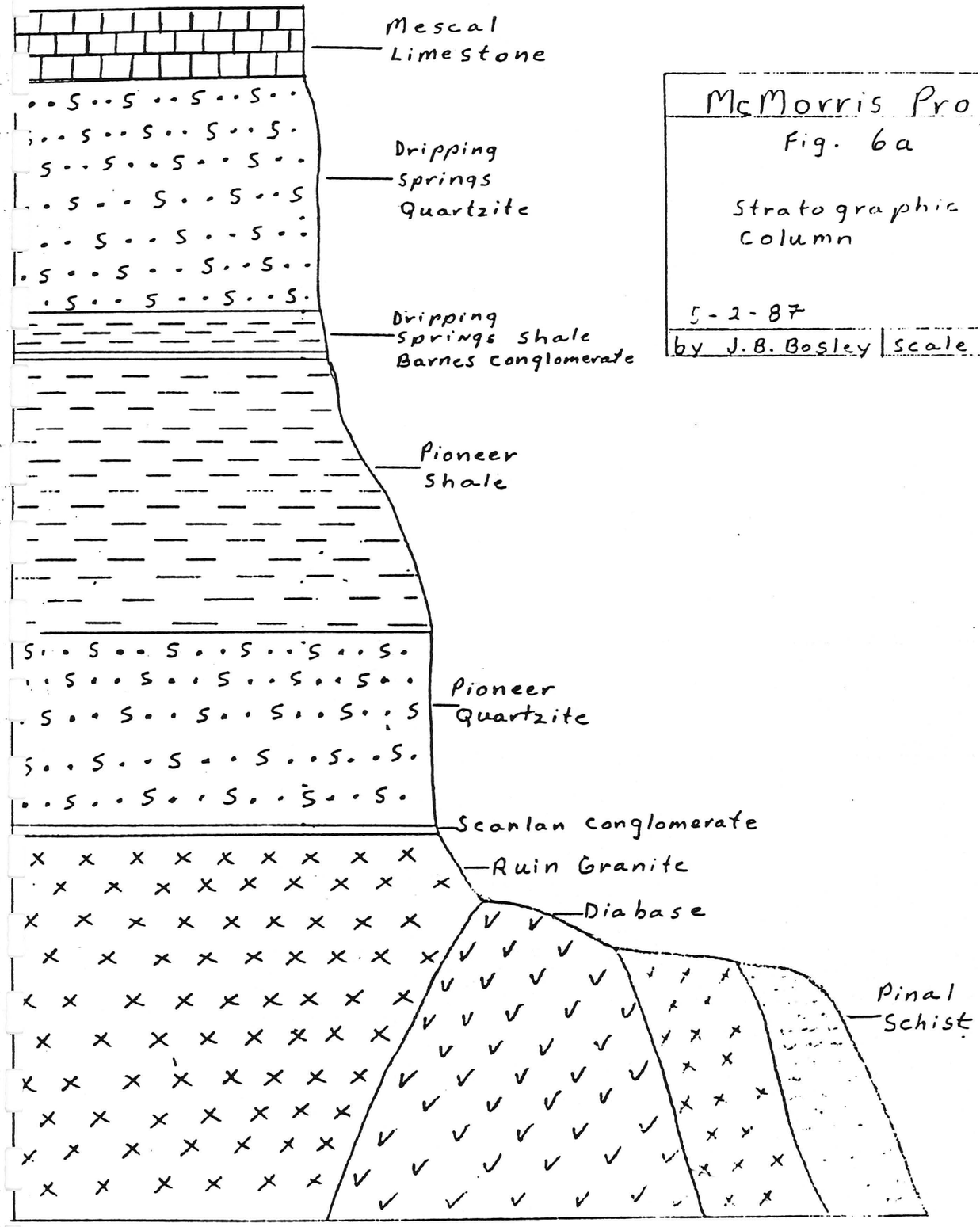
The Barnes Conglomerate overlies the Pioneer Shale, and appears to be of uniform thickness and composition. The pebbles are quartzite with an Arkosa matrix, white to pink.

The Dripping Springs Quartzite overlays the Barnes Conglomerate. The lower 50 feet are cross-bedded Arkose shades which contain occasional pebbles. The upper beds are composed of buff and pink quartzite which forms the crest of the highest peaks of the Apache Range. In the Globe quadrangle the total thickness of the formation is 400 feet. The mescal limestone which is the top member of (See Figure 6A Stagraphic column) The Apache group is missing in the Richmond Basin.

Diabase dikes are are widespread in central Arizona and one found over an area of at least 1600 square miles.

B. Geology-Richmond Basin

Ruin Granite. The Ruin Granite underlies the Apache Range and is the foundation on which, the Apache group was laid down. The ruin granite is the oldest rocks in in Richmond Basin. It is a coarse-grained pink rock, the color is due to the large amount of orthoclase.



McMorris Project

Fig. 6a

Stratographic Column

5-2-87

by J.B. Bosley | scale 1" = 200'

James B. Bosley

6. cont.

Fieldspar Present

Scanlan Conglomerate

The Scanlan Conglomerate appears to lie uncomformably on the Ruin Granite. This bed ranges from 0 to 9 feet within the Basin. The pebbles are imperfectly rounded which indicates their deposition is near their origin. In some places the Conglomerate is entirely missing and the Pioneer Formation rest on the Ruin Granite.

Pioneer Formation

The Pioneer Formation lies above the Scanlan Conglomerate. The basal member consists of 265 feet of Arkosic quartzite. The intrusion of the diabase and regional metamorphism from folding has altered the sediments.

The upper member of the Pioneer Formation consists of thin-bedded shades varying in color from red, brown, and purple. The lower member appears of land origin while the upper member was deposited in shallow water.

Barnes Conglomerate

The Barnes Conglomerate appears to lie conformable with the underlying Pioneer Formation. The Barnes Conglomerate is uniform in thickness and composition, and does not exceed 4' in the Richmond Basin.

Dripping Springs Quartzite

The lower beds look similar to the Barnes Conglomerate, but are thicker and composed of cross-bedded Arkose with lenses of pebbles. These shale beds grade from heavy pebble lenses in the lower beds to scatter pebbles in the upper beds.

Above the shale beds quartzite beds of buff to pink color with uniform composition. Hemitite occurs in sufficient amounts to give the formation a red color.

Diabase

Diabase is prominent in the Apache Mountains and the Richmond Basin. The diabase occurs as dikes and sills.

6. cont.

The diabase has intruded the Ruin Granite forming a dike 1000 to 2000 feet in width. The dike itself is cut by finer-textured diabase, aplite dikes and pegmatites of diabase.

In the Southern and Western portion of the Basin the diabase has intruded the Pioneer Formation forming sills. To the north and east, the diabase does not occur as sills, but as metamorphic alteration in the lower member of the Pioneer Formation.

Quartz Diorite

Quartz Diorite intrudes the diabase in the southeastern portion of the basin and forms a stock to the south. The diorite is composed of hernblend, plagioclase and biotite with minor amounts of quartz and hemitite.

Andesite Porphry

The Andesite porphry occurs as a sill in the Dripping Springs Quartzite in the northwest portion of the Basin. It also occurs as a dike in the northwestern Basin cutting through the granite, Scanlan Conglomerate, Pioneer Formation and the Diabase.

Structure

The structures of the Richmond Basin are controlled by--Northwestern Faulted anticline; normal faults parallel to the anticline normal faults radial to the anticline.

Northwestern Faulted Anticline

The Faulted anticline is the most important feature of the basin. A diabase dike intruded the anticline and now outlines the crest of anticline. On the northeast limb, the sediments dip N 12° - 15°E and the southwestern limb dips 55° - 10°W. The faulting has displaced the Apache Group 670 feet along the anticline. Faulting has occurred after the diabase intrusion along faults in the dike as well as parallel to it.

Normal Faults Parallel to Anticline

The Spring Canyon Fault (Fault #2 on map) is the largest with a displacement of 560 ft. It strikes N 51°W and dips 567°W. This has caused the Barnes Conglomerate and the Pioneer Shales to be repeated.

6. cont.

Fault #3 occurs northeast of Helene Peak, striking N 58° W and dips N 78° E. Along this fault the Ruin Granite forms the hanging wall and the diabase forms the footwall. This appears to form the eastern boundary of the dike. See Map.

Fault #4 marks the western boundary between the granite and the diabase. The fault shows 73 ft of vertical displacement at the Newbould's mine and 103 ft displacement 1400 ft south. The fault off-set the McMorris vein with the west side moving northerly 105 feet. See Map 6a.

Normal Faults Radial to the Anticline

The normal faults trend from N 70° W to 560°W radial from the intruded anticline. The faults are most easily observed on the west edge of the basin in the Scanlan Conglomerate. (Faults No. 6,7,8,9.10) See Map. Faults no. 5 and 11 are in the east central part of the basin. (See figures 6B & 6C)

7.0 Minerals

Native Silver (AG)

Native Silver is one of the prominent ore minerals in the districts. Native silver was mined in the Nugger lead, Nugget patchs McMorris vein, Jumbo vein and other smaller workings.

Argentite (Ag_2S)

Argentite occurs as scattered high grade blebs throughout the ores in the horizontal ore bodies and as one of the constituents of the banded McMorris and jumbo veins. Argentite is the chief hypogene silver mineral in the district.

Corargyrite (Agcl)

Nearly all ores in the Basin contain some silver chloride. In some workings this is the primary silver mineral. In the jumbo vein it is associated with the banded quartz and Argentite.

Tennantite (5 $Cu_2$5.2(cu,Fe,2n) s.2As_2s_3)

Small amounts of silver bearing tennantite can be found around the dumps of the Helene lead.

Chalcopyrite ($CuFeS_2$)

Chalcopyrite is limited and not noticed unless specimens are examined closely. Chalcopyrite can be found in a small pit on the Persistance claims within a vein of quartz and hemitite.

Gold (Au)

Gold occurs as a trace element in most of the ores. Economic values are rarely found in ore samples. A flat lying vein on the Intersect claim appears to contain economic values of gold.

The main gangue minerals in both the vein and horizontal deposits are quartz (SiO_2), Limonite (Fe_2O_3).nH_2o), scricite ($2H_2O.K_2O.3Al_2O_3.6SiO_2$), Barite ($BaSO_4$), Hematite ($Fe_2O_3$)

8.0 Ore Deposits.

There are three major mineralized systems in the Basin.

1. Ore deposits associated with the Scanlan Conglomerate or other flat lying structures.

2. Ore Deposits that occurs as veins in fault fissures.

3. Silver mineralization associated with the quartz Andesite Prophry. (See Figure *a)

Scanlan Type Deposit

Erosion had exposed portions of these flat lying structures and attracted early prospectors and miners to these ore bodies. Richmond Flat, Nugget Flat and the Flats in between were the most productive.

The entire Ruin Granite--Scanlan Conglomerate is mineralized, economic ore bodies were found where vertical mineralized fissures intersect the ore horizon.

The Intersect claim gold mineralization and the persistance silver mineralization appear to be similar in deposition and associated with a flat lying quartz vein.

Veins in Fault Fissures.

The McMorris, Richmond, Jumbo and Helene veins or leads were the most productive in the Basin.

The McMorris vein strikes east-west and dips 78°N and can be traced for a distance of 3000 ft: The Richmond vein is the Faulted offwestern extension of the McMorris vein. The McMorris-Richmond vein is three to six feet wide with 7-10 ounces per ton (Opt) Silver. Within this vein are high grade ore shoots and spurs which have historically averaged 200-300 Opt Silver.

The Jumbo vein is entirely in 4 parallels to the diabase dike dipping N 57°E. The mineralization occurs in as bands of Cerargyrite and argentite within a quartz-barite vein.

8.0 cont.

The Helene and Nugget veins are northeasterly trending vein in the quartz diorite. Mineralization is chiefly native silver and argentite. Very little work has been done on the Nugget vein since it lies in the bottom of the canyon.

Quartz Andesite Prophry

The quartz Andesite Prophry dike is strongly mineralize zone with values of 4.0 Opt silver. This low grade zone maybe a conduit that brought in the silver.

9.0 Recent Survey

During the week of April 20, 1987 this author visited and examined the McMorris property. (Claims listed in Section 4.0).

The McMorris Shaft was pumped down to the 170 ft. level. Samples were taken on the 100 ft. level. The results are listed below.

Sample No.	Opt Ag	Opt Au	PPm CU
JB 484	ND	0.005	
JB 485	ND	<.005	
JB 486	77.6	<.005	
JB 487	61.73	<.005	
JB 488	29.31	<.005	
JB 489	ND	<.005	

See Figure 9-a

The west adit on the Intersect claim was sampled where safe access to the flat lying vein was available. The results are listed below.

Sample No.	Opt Ag	Opt Au	PPM CU
JB 482	ND	0.108	
JB 483	ND	0.283	

See Figure 9b

Two 15' samples were taken across an alteration zone in the basement Ruin Granite. These samples are in the area of the intersect and Funny Bone Claims. The results are listed below.

Sample No.	Opt Ag	Opt Au	PPM CU
JB 473	ND	ND	
JB 474	ND	0.006	

See Figure 9-C

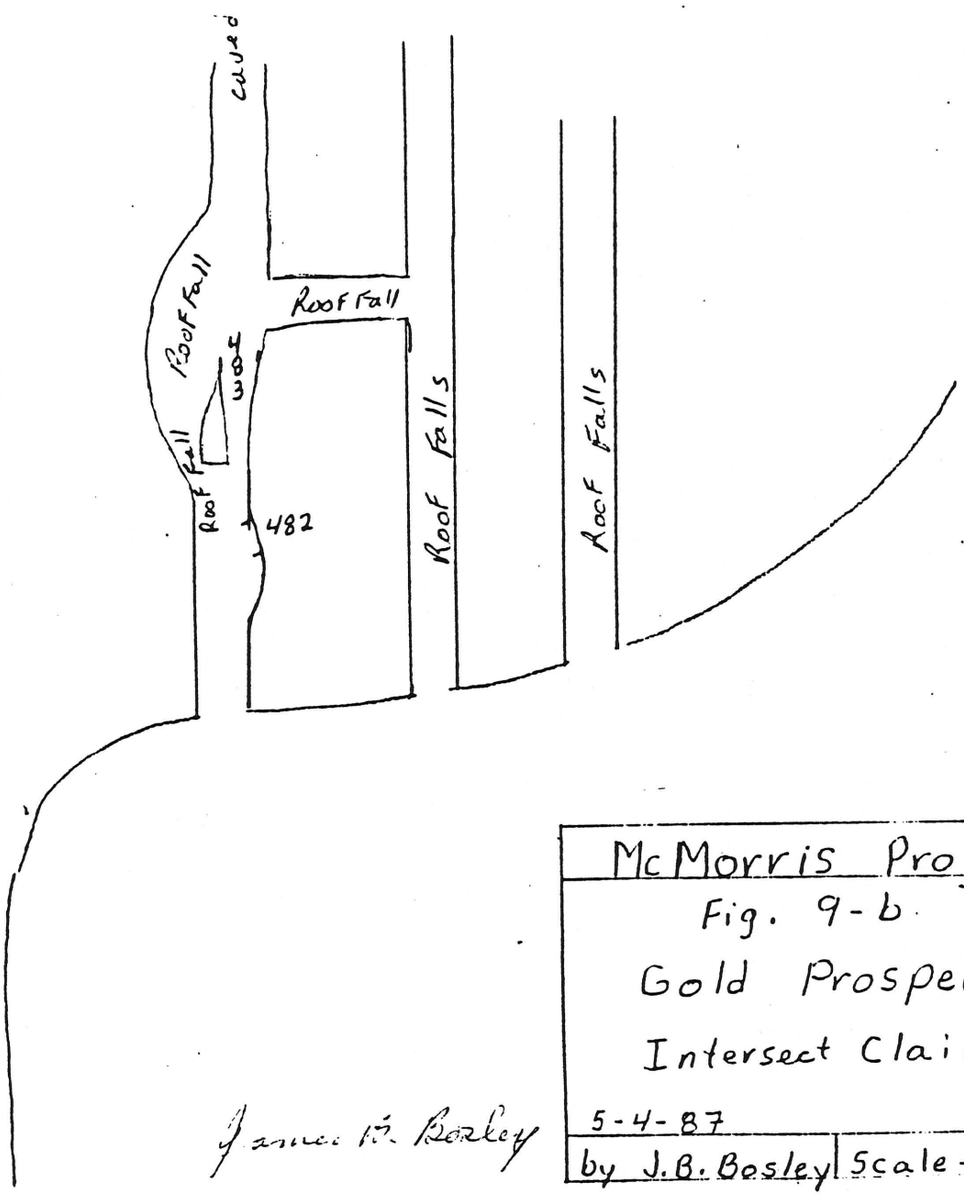
Three samples were taken at the LaPlata Shaft. Sample 490 was taken across a two foot altered zone. Sample 492 was a grab sample of vein material from the west wall of the shaft. Sample 491 was a grab sample of ore material off of the dump. The results are listed below.

Sample No.	Opt Ag	Opt Au	PPm CU
JB 490	ND	<0.006	
JB 491	2.33	<0.005	
JB 492	34.77	<0.005	

See Figure 9-D

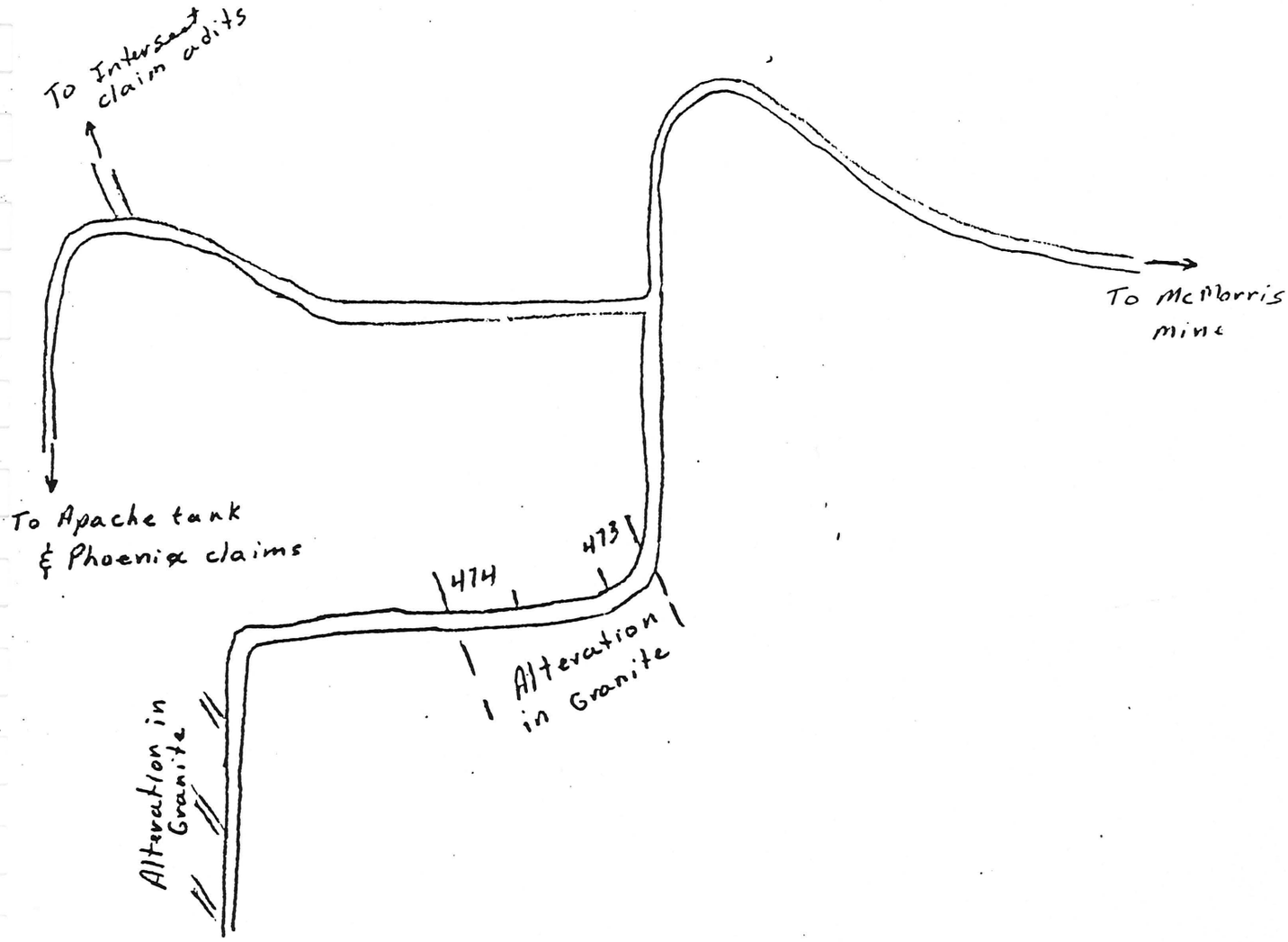
McMorris Project		
Fig. 9-a		
100 Level		
McMorris Shaft		
5-4-87		Scale 1" = 10'
by J.B. Bos		

James B. Bosley



McMorris Project
Fig. 9-b
Gold Prospect
Intersect Claim.
5-4-87
by J.B. Bosley | Scale - none

James B. Bosley



McMorris Project

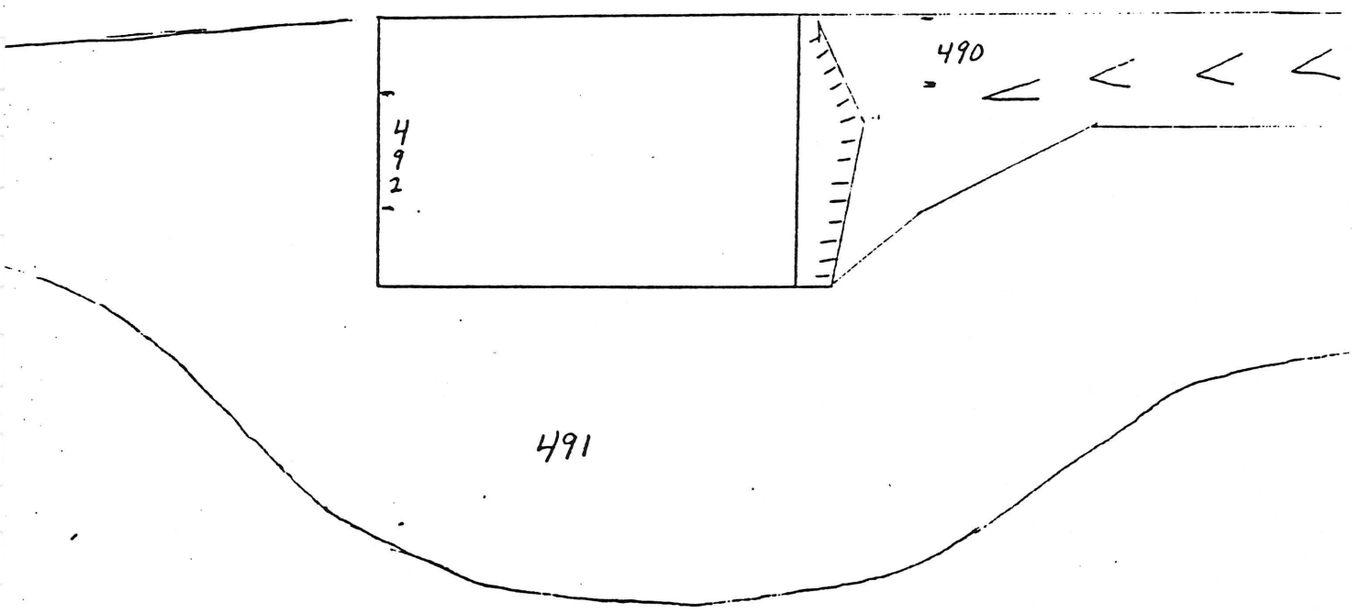
Fig. 9-C

Alteration Zones in Granite

5-4-87

by J.B. Bosley | Scale- none

James B. Bosley



McMorris Project
Fig. 9-d
La Plata Shaft

5-4-87
by J.B. Bosley scale 1" = 1'

James B. Bosley

9. cont.

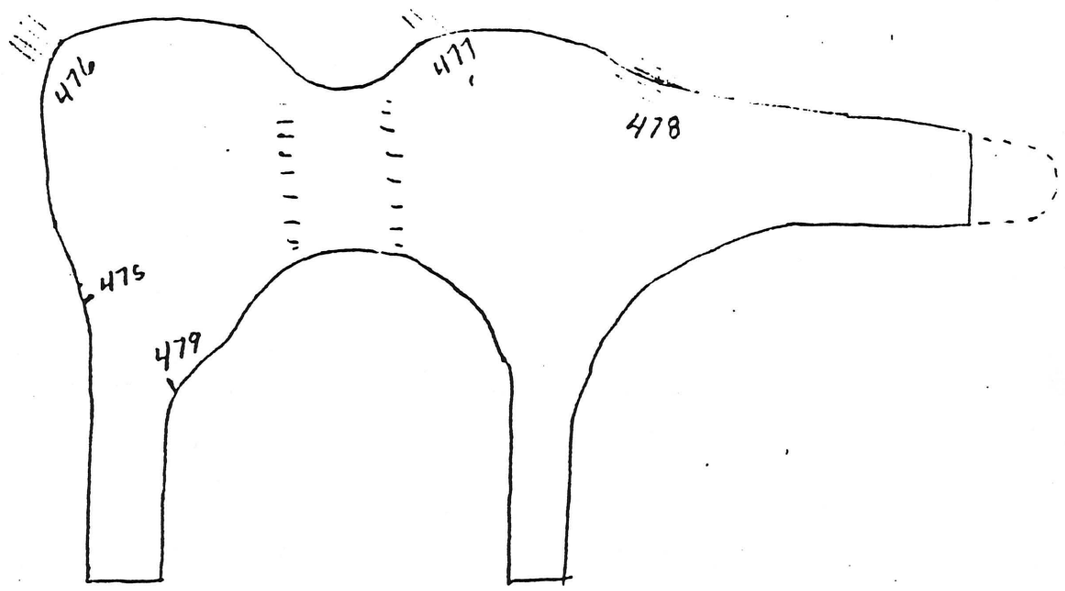
Since access was not available to the 200 ft. level of the McMorris, samples from stockpiled ore material. Sample 480 was taken from a low-grade stockpile of 200 level ore. Samples 493 and 494 were taken from hand sorted high stock pile. The results are listed below.

Sample No.	Opt. Ag	Opt Au	PPM CU
JB 480	4.8	<0.005	530
JB 493	771.9	<0.005	138,000
JB 494	555.0	<0.005	

The flat lying vein exposed on the Persistance claims was sampled along with several verticle fractures above the vein. The results are listed below.

Sample No.	Opt. Ag.	Opt.Au	PPM CU
JB 475	ND	<0.005	870
JB 476	ND	<0.005	
JB 477	ND	<0.005	
JB 478	ND	<0.005	11,800

See Figure 9-E



McMorris Project
Fig. 9-e Persistance Claims pit
5-21-87 by J.B. Bosley Scale 1" = 10'

James B. Bosley

9.0 cont.

Sample No.	Opt Ag	Opt Au	PPM CU
JB	ND	ND	

Sample taken 400' west of Jct. Apache tank and Richmond Basin Rd. Alteration zone-Feo_x +clay-over 100', 15' sample south side.

JB 474	ND	0.006	

Intensely altered to Kaolin Minor Feo_x

JB 475	ND	<0.005	870

2' sample across horizontal qtz vein with Feo_x and Cu

JB 476	ND	<0.005	

3' sample across 70° dipping east alteration zone, strike N

JB 477	ND	<0.005	

4' sample across altered fractured zone

JB 478	ND	<0.005	

3' sample across 70° dipping east altered zone

JB 479	ND	<0.005	11,800

1' sample across flat lying quartz vein-Cu oxide, Cu sulfides Hemite, Feo_x

JB 480	4.8	<0.005	530

15 lb. sample of low-grade stockpile from the 200 level

JB 481	ND	<0.005	

10' sample across alteration zone in the diabase 400' west of McMorris shaft.

JB 482	ND	0.108	

Sample across 2' qtz vein with red hemite stain 15' from Portal (Intersect Claim)

9. cont.

Sample No.	Opt Ag	Opt Au	PPm CU
JB 483	ND	0.283	
Sample across 1.5' qtz vein 40' from portal (Intersect Claim) McMorris Shaft			
JB 484	ND	0.005	
Grab Sample of muckpile end of 100 level old stope.			
JB 485	ND	<0.005	
2' Sample south half of drift			
JB 486	77.6	<0.005	
Sample across qtz vein in raise Feo_x Feo_x and Cuo_x			
JB 487	61.73	<0.005	
Sample Across drift 4'			
JB 488	29.3	<0.005	
Sample of Cross Vein 3'			
JB 489	ND	<0.005	
Sample of cross vein 2' LaPlata Shaft			
JB 490	ND	<0.005	
Sample NE Top edge of Shaft			
JB 491	2.3	<0.005	
Grab of Dump material			
JB 492	34.7	<0.005	11,900
Grab of vein west wall of shaft			
JB 493	771.9	<0.005	138,000
200 level high grade sample			
JB 494	555.9	<0.005	
200 level high grade sample			(See Figure 9f)

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FALLON, NEVADA
89406

WORK ORDER: 9234R-87

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK CHIP

SAMPLE NUMBER	ASSAY FIRE ASSAY AG OZ/TON	ASSAY FIRE ASSAY AU OZ/TON
JB:473	ND	<0.005
JB:474	ND	0.006
JB:475	ND	<0.005
JB:476	ND	<0.005
JB:477	ND	<0.005
JB:478	ND	<0.005
JB:479	ND	<0.005
JB:480	4.8	<0.005
JB:481	ND	<0.005
JB:482	ND	0.108
JB:483	ND	0.283
JB:484	ND	0.005
JB:485	ND	<0.005
JB:486	77.6	<0.005
JB:487	61.73	<0.005
JB:488	29.31	<0.005
JB:489	ND	<0.005
JB:490	ND	<0.005
JB:491	2.33	<0.005
JB:492	34.77	<0.005
JB:493	771.9	<0.005
MC:MORRIS ORE -SAMPLE	555.9	<0.005

Fig. 9F

Pg 19a

James R. Bosley

10. Ore Potential

On the 35 claims comprising the McMorris property, there are two types of ore bodies.

Type One

The ore bodies associated with the verticle veins. They occur as high-grade ore shoots within, the vein, intersections of cross faults (spurs) or the change in dip of the vein.

Veins in Fractures, Shear and Fault Zones.

A large portion of commercial mineral deposits are found in or closely associated. Deposits formed in these structures vary from tabular veins to pipelike bodies and shoots and may be regular or irregular, wide or narrow, continuous or discontinuous.

A fissure vein is a mineral mass that generally tabular in form with local irregularities. It fills or accompanies a fissure, or a series of closely set and intimately related parallel fractures in the enclosing rock, the mineral mass having been formed later than both the rocks and the fractures, either by filling of open spaces in the fracture zones or by chemical alteration of the fractured rock.

See Figure 10a

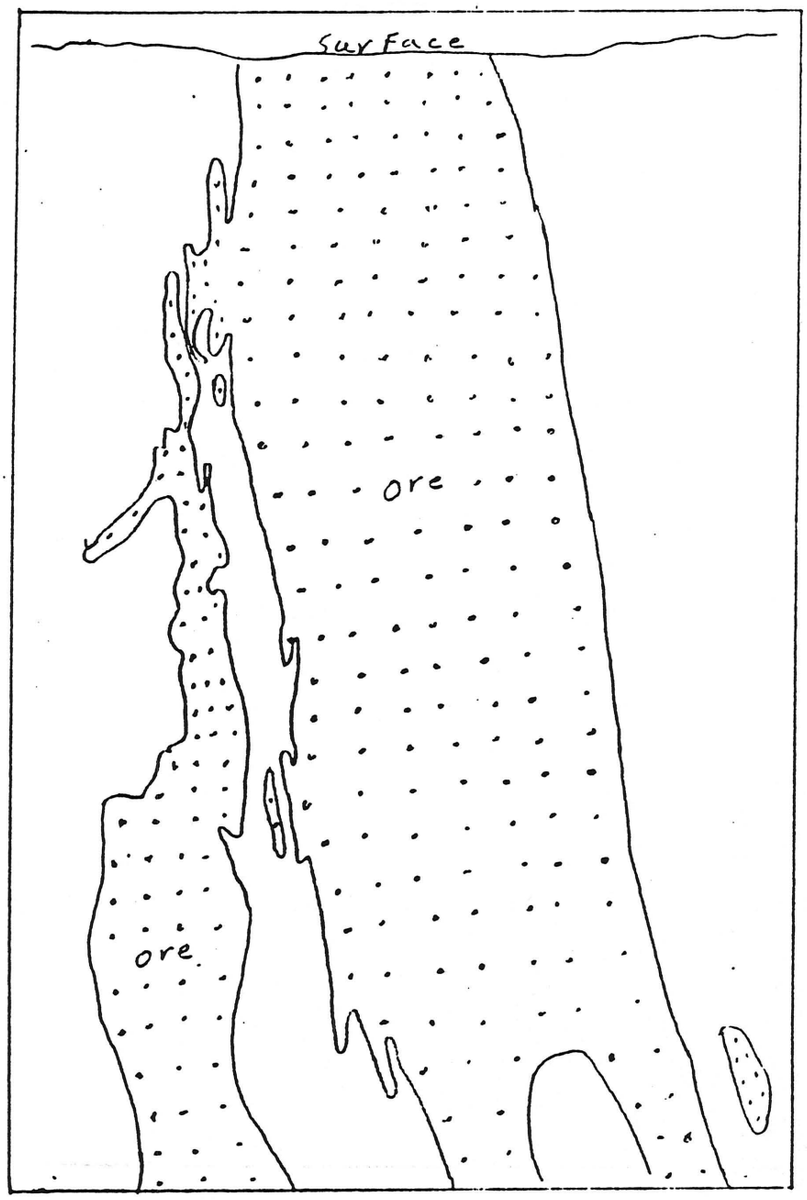
Pipes or chimneys are formed where the structural control guides the mineralization along channels of marked vertical continuity, out of relatively small horizontal dimensions. Fault intersections are typical. See Figure 10b

Branching veins may extend from the main vein either into the hanging wall or the footwall.

See Figure 10b

Faults and veins seldom follow straight lines, but change direction and angle. When a fault bends and changes direction an opening or intensely fractured zone is created. These open spaces provide sites for ore deposition, which is wider and higher in grade than occurs in the thinner straighter portions of the vein.

See Figure 10c



ore

waste

James B. Bosley

McMorris Project

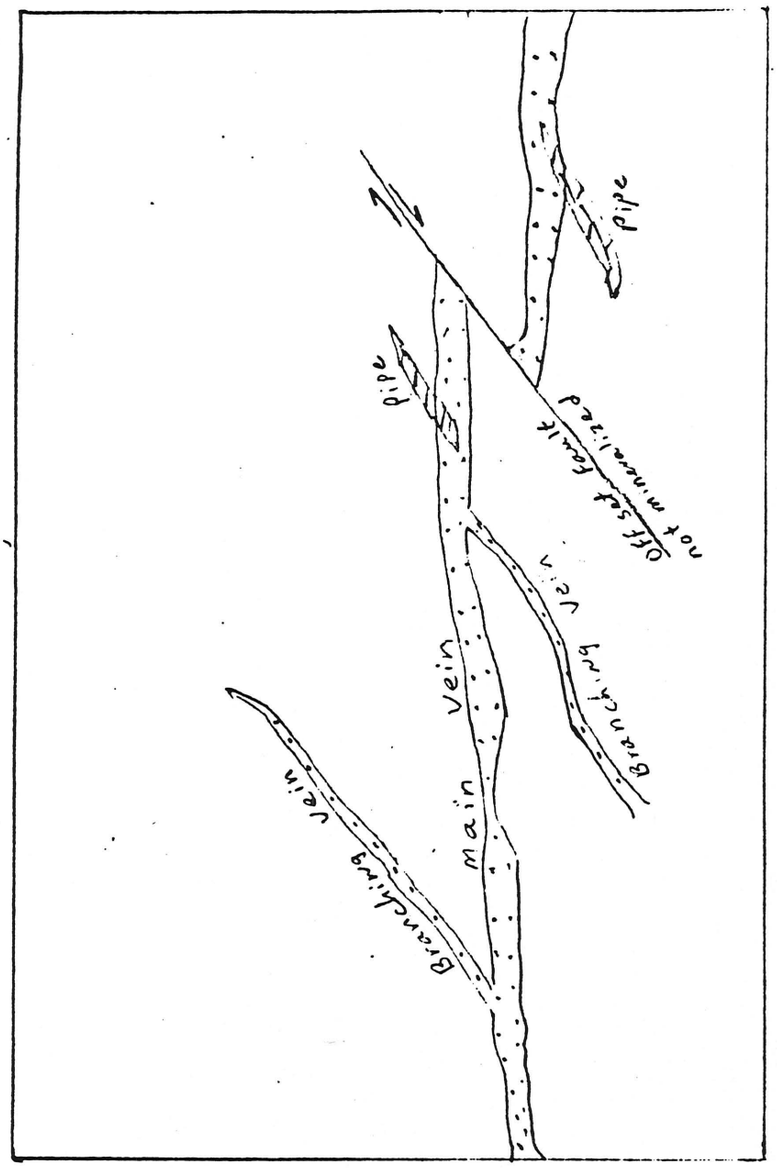
Fig. 10a

Idealized Long Section

Along a Vein

5-4-87

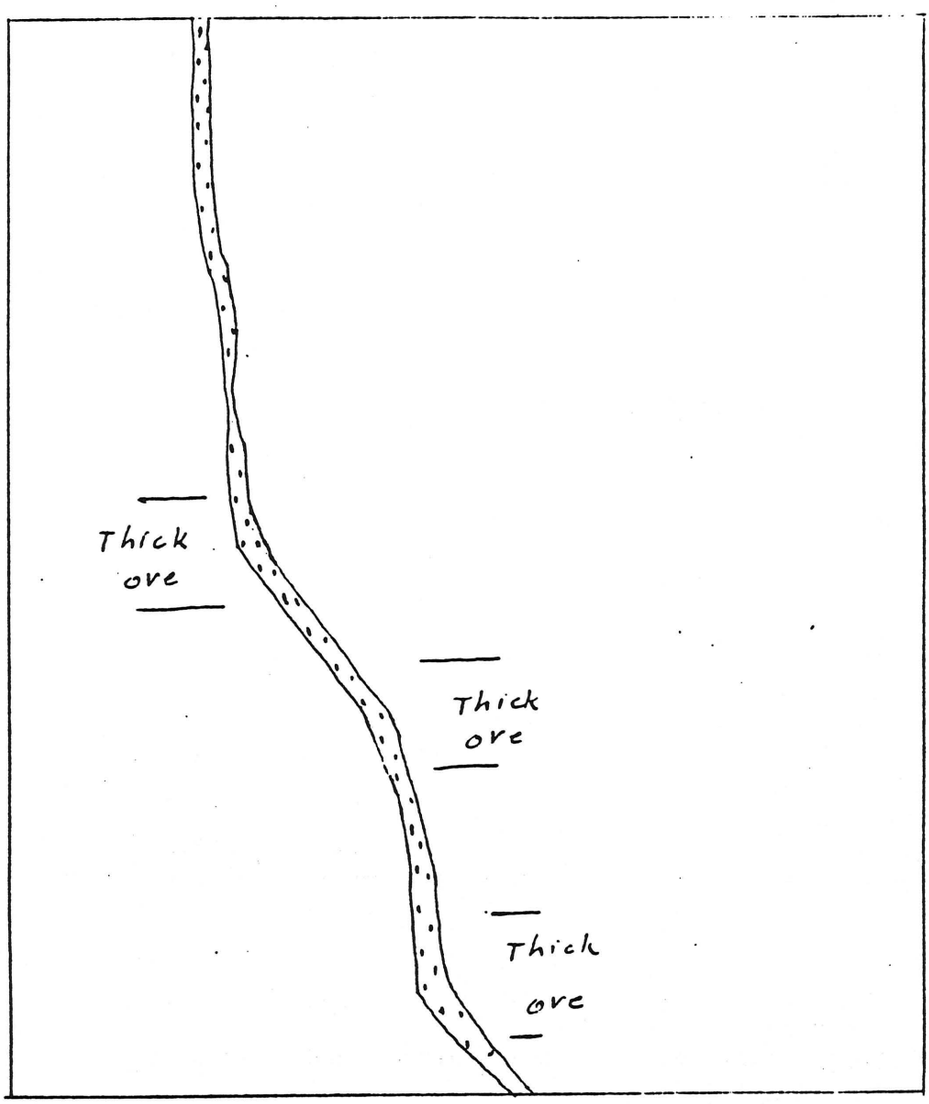
by J. B. Bosley | scale - none



McMorris Project
Fig. 10-b
Idealized vein
Plan view

5-4-87
by J.B. Bosley | scale - none

James B. Bosley



McMorris Project

Fig. 10-C

Idealized Vien

Cross Section

5-4-87

by J.B. Besley | scale - none

James B. Besley

Type Two

These ore bodies are associated with flat lying quartz veins, in which the deposit is controlled by the thickness and character of the favorable horizon which was mineralized or replaced. Mineral bearing solution migrated up through fractures, when favorable flat lying strata was encountered, the solutions spread out horizontally mineralizing the strata.

See Figure 10D

The verticle veins on the McMorris property have an excellent potential to find and develop high grade ore shoots, spurs and branching veins. Past production on the McMorris occurred primarily on a high grade ore shoot from the surface to 150 ft. in the area of the Grub Stake vein.

See Figure 5a

Figure 5a shows the approximate location of the veins which have been identified in the basin. These represent potential targets to develop ore, or primary interest is the intersection of the branching veins with the main McMorris vein. The second point of interest is the McMorris vein in the area of 200-400 depth where the vein changes angle. Mr. Alexander in his 1925 report indicates that the McMorris vein bends to the north. Mr. Murphy in 1986 observed the change of angle of the vein while working on the 200 level.

The Jumbo, Helene and the Quartz Andesite dike are other verticle structures that have the potential for ore to be developed.

The Scanlan Conglomerate, indicated in Figure 5a, represents an area with the potential for a large low-grade ore body. In the past the Scanlan Conglomerate was mined for the high-grade silver associated with the verticle faults. The structure exists for the whole formation to be a low-grade silver ore body.

The Intersect claim, represents the possibility to develop a flat lying gold vein, that is a seperate mineralized system from the silver in Richmond Basin. The alteration zones in the Granite near the Intersect Claim, show some potential for gold.

The contact between the diabase and the granite has potential for ore deposition. On the Phoenix claims, north of the Richmond Basin, the silver-copper mineralization in deposited on the contact. The contacts between the Ruin Granite and the diabase have not been investigated in the Richmond Basin.

11. Recommendations

An option on the McMorris group of claims should be acquired. Claims should be staked on open ground in the Richmond Basin. The Funny Bone, Intersect, and B.M. claims should be tied into the rest of the claims in the south end of the Basin. This offer should include an evaluation period to access the potential of the claims.

The property should be photographed from the air and a geologic interpretation of the Basin made. This will help delineate the faults and veins which control the silver deposits and help develop drill targets.

The Primary emphasis should be on the McMorris vein and associate veins. The drilling should be designed to test the vein intersections and the potential near the 200 ft. level.

Minor work should be conducted to check out the potential of the flat lying veins around Richmond Flat and on the Intersect claim.

Mr. Claycomb has been working on the costs needed for this first phase of work and have not been duplicated in this report. He has this information on file at his office.

As work progresses on the McMorris property a small budget should be allocated to the Search and Acquisition of other gold and silver properties. This is necessary to establish an on-going company and to minimize the effect of metal price fluctuation and the depletion of the ore available on the claims.

12. CERTIFICATE

I James B. Bosley of 325 Cindy Lane, in Fallon, Nevada, U.S.a.

DO HEREBY CERTIFY THAT:

1. I am a consulting Mining Engineer.

2. I am a graduate of the University of Idaho, Moscow, Idaho, where I obtained a B.S. in Mining Engineering.

3. I have practiced my profession since 1975.

4. I am a Registered Professional Engineer with the State of Nevada Board of Registered Professional Engineers.

5. I have personally visited the property in April, 1987.

6. I have no interest in the properties in the Richmond Basin.

7. I consent to the use of this report by Mr. Charles Claycomb, to distribute all or part of the report to interested parties, provided that the meaning is not altered by partial quotes.

James B. Bosley

James B. Bosley P.E.
325 Cindy Lane
Fallon, Nevada

ENGINEERING STUDY OF THE McMORRIS MINE

RICHMOND BASIN, GILA CO., AZ

Submitted by:

Daniel H. White, PE

P.O. Box 36985
Tucson, Arizona 85740
Telephone: (602) 293-1450

May 31,1987

5/30/87

1.0 INTRODUCTION

The McMorris Mine, Gila County, Arizona has been the subject of much interest since its closure in 1882. Recognized as a leading producer of silver ore in the Globe area, the mine produced $636,345 of silver during its short two year life. Most recently Mr. Charles Claycomb has directed efforts toward the evaluation and exploitation of this deposit.

The purpose of this report is to describe one possible mining concept suitable for the exploitation of the McMorris (and ancillary) Vein, and provide some preliminary cost estimates for mine/mill operation and construction. To accomplish these objectives, this report is divided into 7 parts:

1. General Information;
2. Mine and Mill Concept;
3. Capital Cost Estimates;
4. Operating Cost Estimates;
5. Manpower Requirements;
6. Mine Economics; and
7. Conclusions and Recommendations.

2.0 GENERAL INFORMATION

Details pertinent to existing mine development, previous production, and ore reserves are provided herein. Information on site vegetation, climate, topography, and geology is presented in Bosley (1987) and Bishop (1935) and will not be discussed here.

2.1 Historical Mine Development and Production

Early work at the McMorris mine (MacMorris mine) is best summarized by Johnson (1965):

1. McMorris Mining Co. operated the mine from 1875 to 1893, closing the mine when silver prices dropped to a point where it became unprofitable to work it. It was reported that the rich ore was found between the 200 ft level and the 600 ft level, and also that they lost the ore on the 600 ft level, or that they did not follow it because the vein turned north.

2. An attempt was made to reopen the mine again in World War I by another company, the work being from the 200 ft shaft (La Plata shaft). They were reported as unable to find direct shipping ore, and to have had a small mill which they used for concentrating ore (Cyanide plant ?).

3. The Blue Quail Mining Co. obtained a lease with option on the property two years ago (1963), and explored and operated the property until about one year ago (1964). This company first drilled two diamond drill holes at angles of 60°. The first one intersected the vertical vein at a distance of 85 ft, showing some silver values; and the second one intersected the vein at a distance of 135 ft, one sample taken showing 65 oz/ton silver. They then retimbered an old shaft , located about 1,000 ft west of the old McMorris shaft, sinking this shaft from a 40 ft depth to 150 ft in depth. They then drifted for 150 ft to the west to the vicinity of the two drill holes, and then put up a raise for 150 ft up to the surface. It is reported that this shaft sinking, drifting and raising was all in the vein (6-7 ft wide), but they did not find the ore values they had in the drill holes, the ore averaging about 7 oz/ton. Forty tons of ore is reported having been shipped to the Inspiration smelter in September, 1963, which averaged from 7 to 8 oz/ton silver.

Other accounts of the mining are provided by Grishkowsky (1984) and Alexander (19 ?); all of which are provided in Appendix A of this report. It is interesting to note the disparity in reasons for the mine closure (1882). Alexander cites litigation between owners, whereas Johnson cites the depressed price of silver.

Most recently (1986) work was begun to access underground workings through the McMorris shaft. This included clearing about 3,000 tons of muck from the shaft, construction of a wood headframe and retimbering of 170 ft of shaft. In addition, 150 ft

of drift was cleared and access to 100 ft and 200 ft levels obtained. Dewatering is underway to gain access to the 300 ft and 400 ft levels.

Mine Workings

Mine workings are best summarized by Johnson (1965) as follows:

1. 1 vertical shaft (McMorris shaft) -- 600 to 650 ft deep used by McMorris Mining Co., 1875-1893.

2. 1 vertical shaft (La Plata shaft) -- 200 ft deep, and about 1,000 ft east of the McMorris shaft. This shaft was last used 1916 to 1918, and is accessible to 30 ft.

3. 1 vertical shaft -- 150 ft deep, and about 1,000 ft west of the McMorris shaft. This was deepened by Quail Mining Co. from 40 ft to 150 ft. in 1963.

4. Drift 150 ft long, with raise from same at a distance of 150 ft from the shaft 3 (west-most shaft); this work done by Quail Mining Co.

5. Extensive underground workings by McMorris Mining Co. in 1875 to 1893 from shaft 1 (McMorris shaft) with stoping above the 400 ft level.

Other accounts of mining in the district state that the McMorris shaft was sunk to a depth of 785 ft in November, 1882. Several other underground workings are known to exist in the area as described by Alexander (19 ?).

Production

The total production of the McMorris mine (and adjacent claims) is largely conjectural. It is generally known that $636,345 in silver is credited to the McMorris Mine prior to 1883. This equates to about 558,000 oz silver at the prevailing price of 1.14/oz silver. If the average grade as suggested by Alexander (19 ?) was 250 oz/ton this would imply that less than 3,000 tons

of ore was mined. Conservatively assuming that the average grade was 20 oz/ ton, would imply that less than 30,000 tons of ore was mined. This, of course, is something that cannot be readily confirmed without access to mine workings or production reports. It is perhaps reasonable to assume that more recent mining has not significantly contributed to total mine production. Based on this reasoning the total mine production is estimated to range between 3,000 and 30,000 tons.

2.2 Orebody and Ore Reserves

According to Bishop (1935) "The greatest production in Richmond Basin has been from the McMorris, Richmond, Jumbo and Helene veins. The McMorris vein is an east-west striking vein which dips 78°N. It can be traced for almost 5,000 ft by the prospect shafts and mines that outline its course. The Richmond vein is a segment of the McMorris vein which has been offset." The Jumbo vein strikes roughly northwest, dipping N 57°E. The Helene vein is also NE striking. Other veins have also been recognized; most of which transect the McMorris vein. A "flat" vein is also reported to be mineralized with ore grade values at the intersection of the McMorris vein.

At this writing no proven ore reserves have been established from which to objectively assess the feasibility of mining. I have none-the-less developed cost estimates based on the existence of an orebody of suitable tonnage and grade that would support a 100 ton/day operation. The size and grade of the orebody are critically related to the economics of the project and as such

are discussed in greater detail later. The ore reserves are, of course, dependent on the geometry of the vein as shown in figure 1. Here it can be seen that a vein 5 ft wide yields 100,000 tons of ore given a strike length of 500 ft and dip length of 500 ft. The reserves are reduced by 50% when vein width, strike length or dip length is reduced by 50%.

For the purpose of this study I have assumed that the orebody is the McMorris vein and averages 5 ft in thickness. The mining concept as proposed should enable the extraction of the main and ancillary structures (stringer veins) assuming that all structures are steeply dipping (greater than 60°).

3.0 MINE AND MILL CONCEPT

A full feasibility study should encompass all aspects of mine development including 1. the orebody; 2. project economics; 3. mining method selection; 4. ore processing methods; and 5. capital and operating cost estimates (Figure 2). In that the project is in early stages of development much information is not yet available. The following discussions are therefore based on a brief visit to the property and estimates based on my experience and the experience of others. It should be emphasized that the design discussed is subject to considerable refinement pending the availability of additional information.

It is assumed here that geological assessment work is completed and permits (Appendix B) are secured prior to mine development. In addition, it is assumed that access roads are completed and full electric service is available at the mill site.

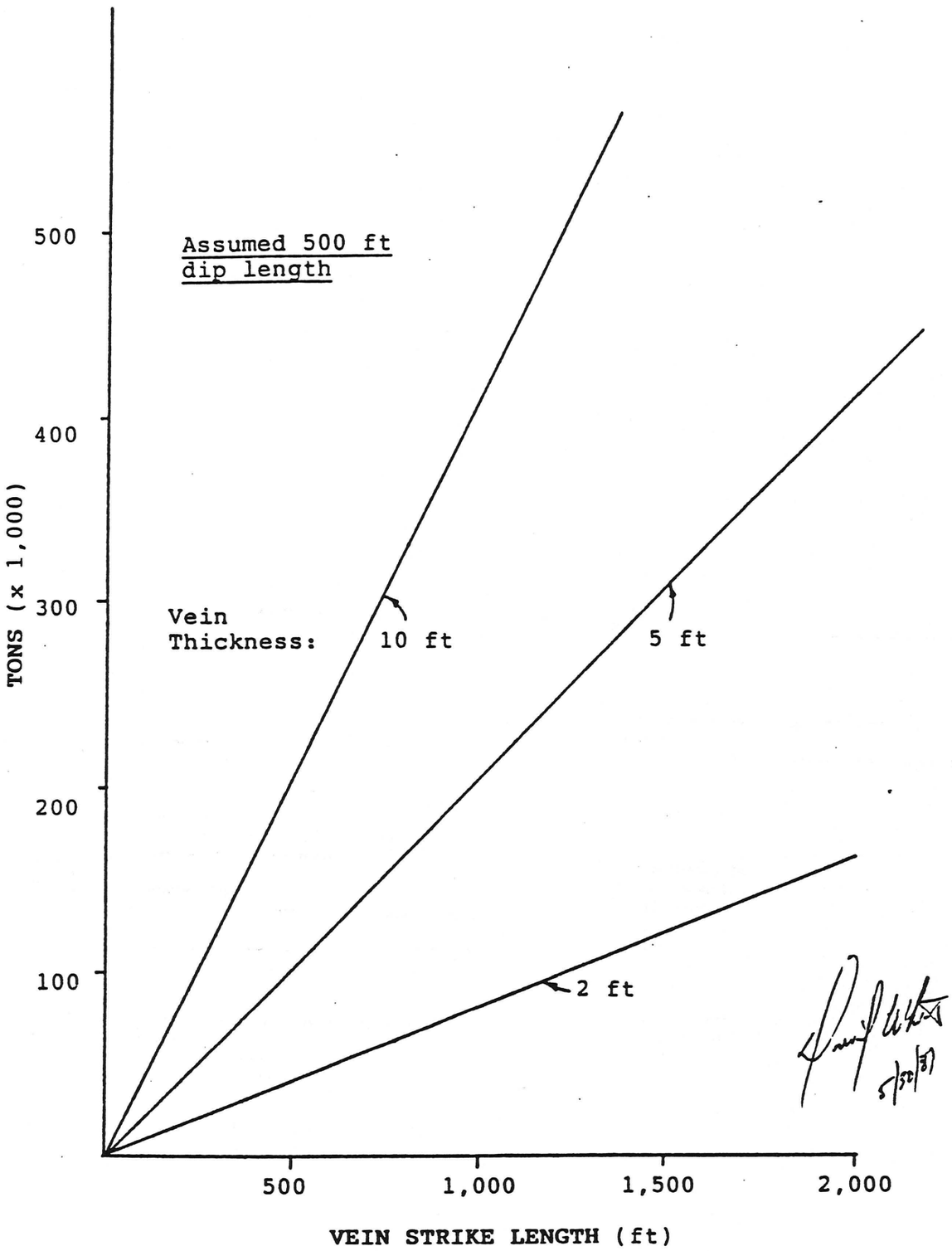


Figure 1 VEIN DIMENSIONS vs ORE TONNAGE

I. Information on Deposit

A. Geology
1. Mineralization — type, grade, uniformity
2. Geologic structure
3. Rock types — physical properties

B. Geometry
1. Size, shape, and attitude
2. Continuity
3. Depth

C. Geography
1. Location — proximity to towns, supply depots
2. Topography
3. Climatic conditions
4. Surface conditions — vegetation, stream diversion
5. Political boundaries

D. Exploration
1. Historical — district, property
2. Current program
3. Reserves — tonnage, distribution, classification
4. Sampling — types, procedures
5. Proposed program

II. Information on General Project Economics

A. Markets
1. Marketable form of product — concentrates, direct shipping ore, specifications
2. Market location and alternatives
3. Expected price levels and trends — supply-demand, competitive cost levels, new sources of product substitutions, tariffs

B. Transportation
1. Property access
2. Product transportation — methods, distance, costs

C. Utilities
1. Electric power — availability, location, ownership, right of way, costs
2. Natural gas — availability, location, costs
3. Alternatives — on site generation

D. Land and Mineral Rights
1. Ownership — surface, mineral, acquisition and option costs
2. Acreage requirements — concentrator site, waste dump location, tailings pond location

E. Water
1. Potable and process — sources, quantity, quality, availability, costs
2. Mine water — quantity, quality, depth and source, drainage method treatment

F. Labor
1. Availability and type — skilled/unskilled in mining
2. Rates and trends
3. Degree of organization
4. Local/District labor history

G. Governmental Considerations
1. Taxation — federal, state, local
2. Reclamation and operating requirements and trends
3. Zoning
4. Proposed and pending mining legislation

III. Mining Method Selection

A. Physical Controls
1. Strength — ore, waste, relative
2. Uniformity — mineralization, blending requirements
3. Continuity — mineralization
4. Geology — structure
5. Surface disturbance — subsidence
6. Geometry

B. Selectivity

C. Production Requirements
1. Relative production
2. Development — methods, quantity, time requirements
3. Capital requirements vs. availability

IV. Processing Methods

A. Mineralogy

B. Alternative processes

C. Product quality vs. specifications

D. Recoveries

V. Capital and Operating Cost Estimates

A. Capital Costs
1. Exploration (may also be considered operating cost)
2. Mining
a. Preproduction development (may also be considered operating cost)
b. Site preparation
c. Mine buildings
d. Mine equipment
3. Mill
a. Site preparation
b. Mill buildings
c. Mill equipment
d. Tailings pond

B. Operating Costs
1. Mining
a. Labor
b. Maintenance and supplies
c. Development
2. Milling
a. Labor
b. Maintenance and supplies
3. Administrative and supervisory

Figure 2 FACTORS REQUIRING CONSIDERATION IN A FEASIBILITY STUDY

3.1 Mine Concept

After a very cursory investigation of the mine, the McMorris vein appears amenable to mining by shrinkage stoping. Historically, tabular steeply dipping thin orebodies are most suited for extraction by this method. The hangingwall and footwall of the vein are in competent (strong) ground (where observed) which should minimize ground control and dilution problems during stope development and mining. Figure 3 shows one application of the shrinkage stoping method.

Access to the mine will be through the McMorris shaft which will also serve as the production shaft. The La Plata shaft will be developed to the 400 ft level and serve as a ventilation shaft and escape route. Early production will be from 100 ft and 200 ft levels using battery driven locomotives for haulage of mine product. Stopes will be developed every 200 ft along strike length and include service raises, draw holes, and chutes. Nominal dimensions of each stope is 200 ft long, 100 ft high and 5 ft wide.

An ongoing program of mine development will continue throughout the mine life to ensure continuity of production. This development is to consist of the driving of haulage drifts, services raises, and stope preparation. The mine will operate 2 shifts a day , 7 days a week, 350 days a year.

3.2 Mill Concept

Preliminary test work by Lateny (1986) indicates that the ore is most amenable to processing by flotation. The conceptual mill design is based on this premise and will include provisions

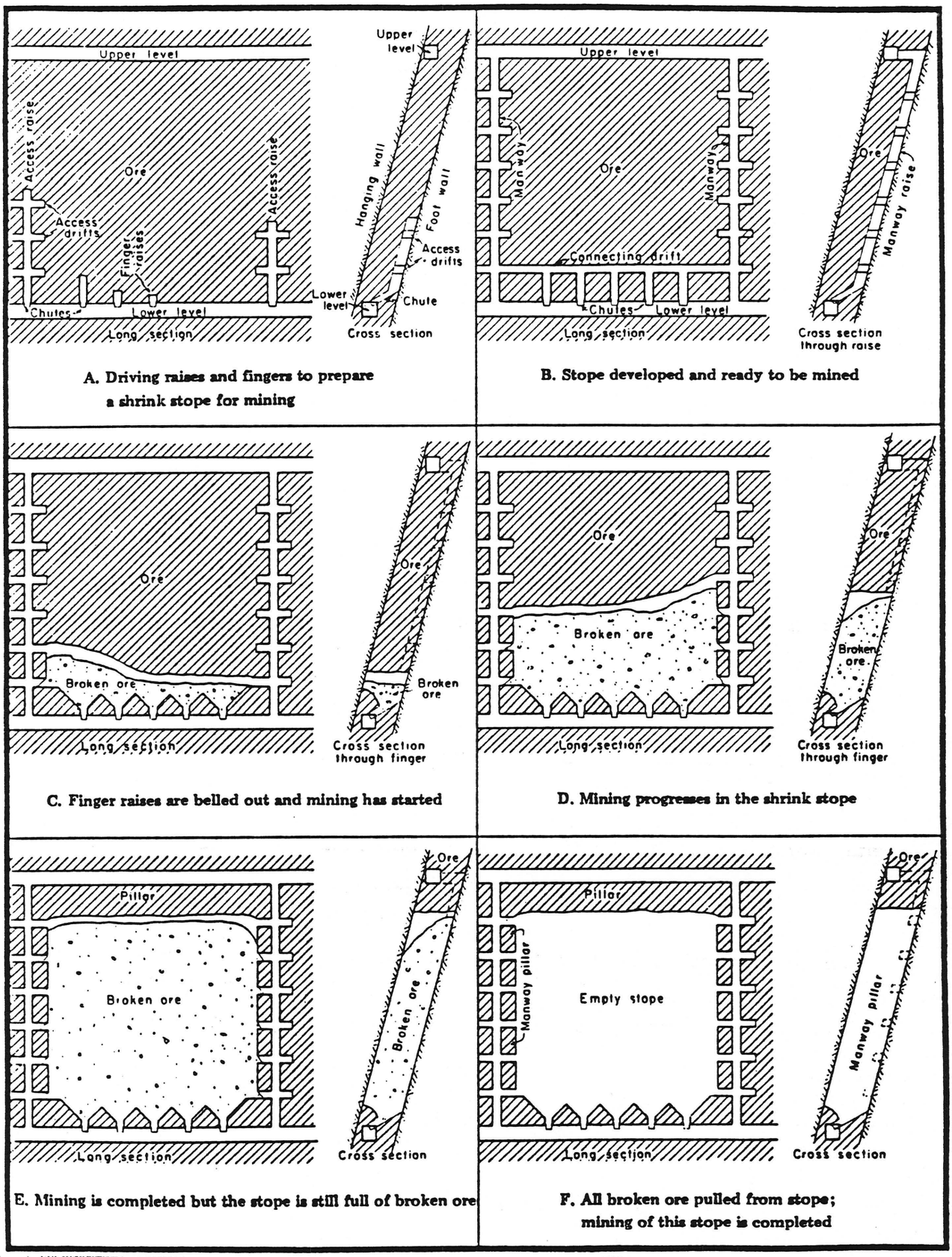


Figure 3 SHRINKAGE STOPING

for crushing, grinding, flotation, thickening, filtration and tailings disposal. Figure 4 shows a typical flow sheet for the proposed process. After the ore is hoisted to the surface it will be transported to the mill for processing. The process will produce a concentrate that is later shipped to a custom smelter for further refinement . The waste product of this process (tailings) will be deposited behind a dam for storage and water reclamation. Site locations for the proposed surface facilities are shown in Figure 5.

It is anticipated that the mill will operate 2 shifts a day, 7 days a week, 350 days a year. The mill will process 100 tons of mine product daily and produce about 10 tons of salable concentrate. No effort is made here to recover gold and copper from the mill feed.

4.0 CAPITAL COST ESTIMATES

This section provides some crude estimates of capital expenditures required for the development of a 100 Ton/day mine/mill. Certain costs are not included in following estimate. These are:

1. Exploration and ore body delineation;
2. Costs of permits, licenses, rights of way and land;
3. Feasibility and environmental studies;
4. Costs of bringing electric service to the property; and
5. Working Capital.

All cost estimates are based on data taken from U.S. Bureau of Mines OFR 10-78 and have been escalated according to the consumer price index and as such should provide a "ball park" idea as to what it takes to build and equip a mine of this capacity.

Based on this study a capital investment of about $3,870,000

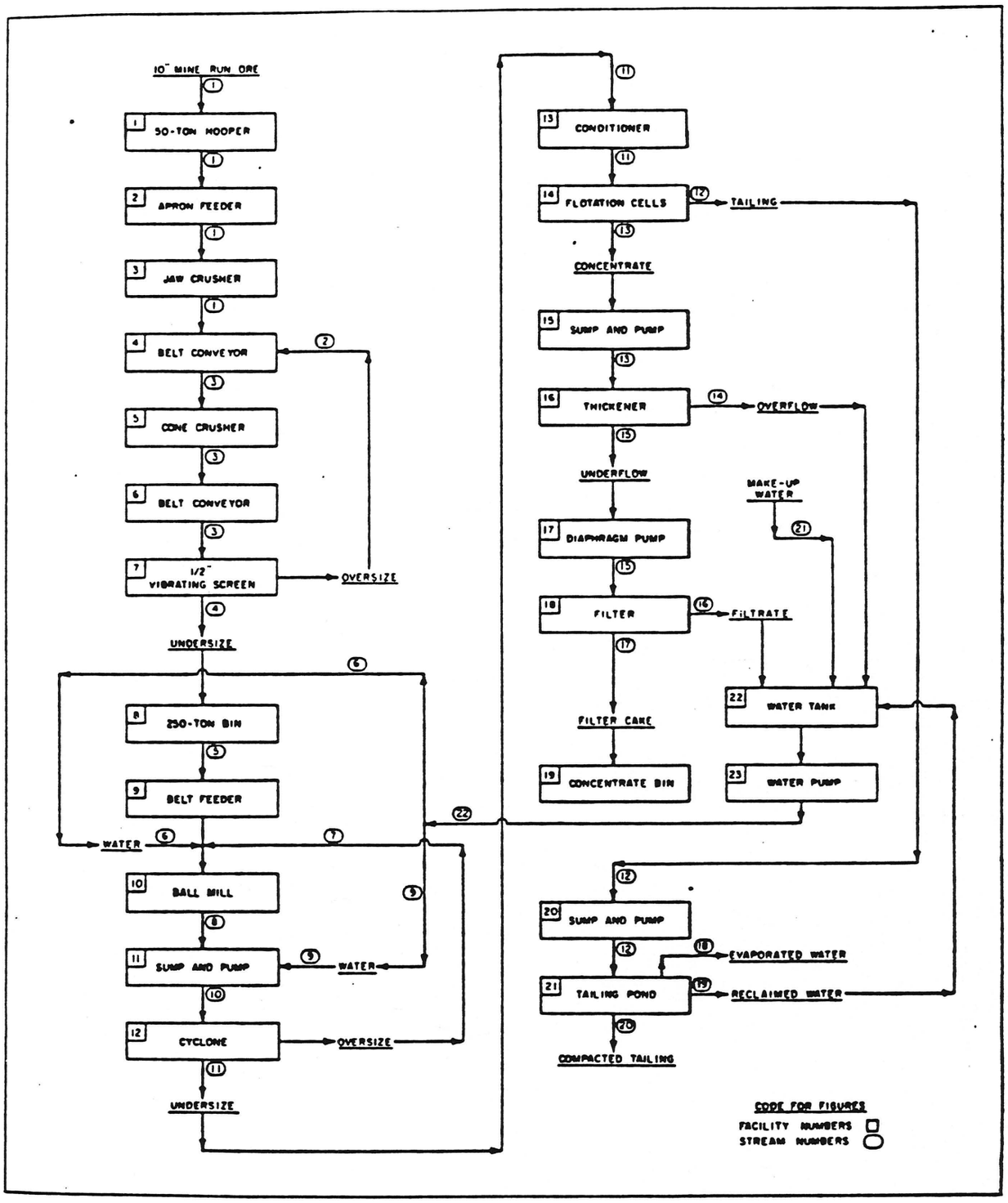


Figure 4 TYPICAL CONCENTRATOR FLOWSHEET - FLOTATION

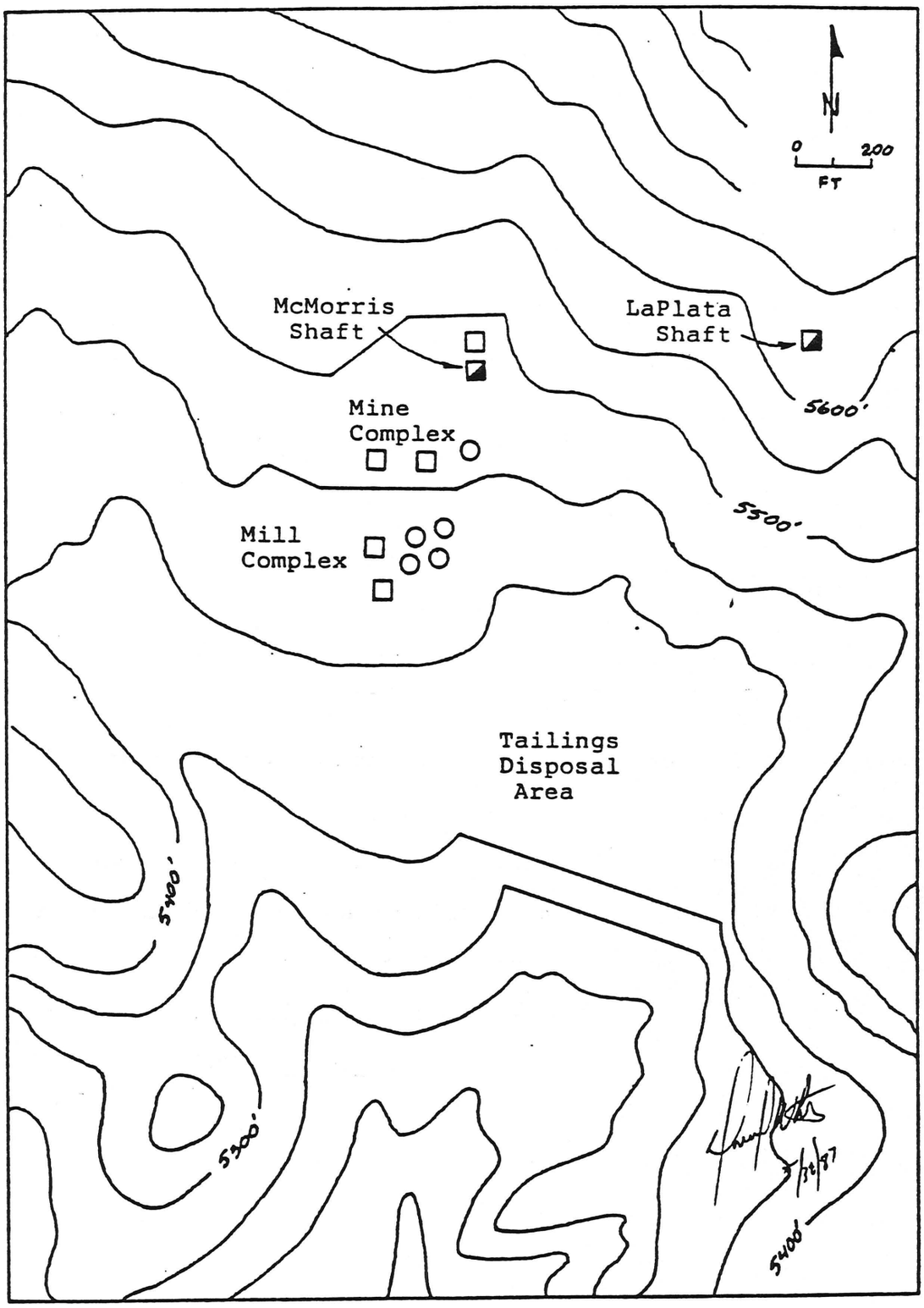


Figure 5 CONCEPTUAL SURFACE FACILITY LOCATIONS

is needed to construct and equip the mine and concentrator. Cost items are broken down into mine and mill categories and subdivide- labor, equipment, and materials/supplies.

4.1 Mine Capital Cost Estimates

Table 1 provides a detailed cost breakdown of capital requirements for the mine. Included are funds required to complete (retimber) the McMorris shaft to the 400 ft level; develop the La Plata shaft to the 400 ft level (although I believe this to be seriously underestimated in retrospect), develop and support 1,000' of drift (re-access mined areas), and prepare two shrinkage stopes (16,000 tons). In addition, mine plant construction, and equipment is included; compressed air facilities, hoisting facilities, ventilation system, water supply and drainage, communication, fueling systems, electrical systems, repair shops, warehouses, offices, surface buildings (change rooms, etc.), mine equipment, and engineering and construction management fees. It is assumed here that all drift, shaft and stope development will be done in-house (employees) and that the mine plant contractor that does the engineering will also do the construction.

It is estimated that expenditures of about $1,430,000 will be needed to develop and equip the mine.

4.2 Mill Capital Cost Estimates

Table 2 provides a detailed cost breakdown of capital requirements for the mill. Included are funds required for ore concentration facilities, tailings disposal facilities, buildings, utility stations, vehicles, equipment and site preparation. En-

TABLE 1 MINE CAPITAL COST ESTIMATES

	Equipment	Labor	Materials	Equipment Operation	Subtotal
Development					
Drifts		42,823	53,631	5,506	101,960
Hoist Shaft		55,851	24,602	14,683	95,136
Vent Shaft		59,636	14,575	13,771	87,982
Stope Prep		35,367	19,331	2,847	57,545
Mine Plant					
Compr. Air	51,473	8,795	7,190		67,458
Hoist Fac.	274,658	62,852			337,510
Ventilation	44,858	10,265			55,123
H_2O Supply	4,513	8,262	28,082		40,857
Drainage	7,200	1,648			8,848
Communication	15,459	3,537			18,996
Fuel Sys.	4,875	1,115			5,990
Electr. Sys.	34,346	16,929			51,275
Shops/Ware H.		8,774	39,809		48,583
Offices	8,875	13,821	17,709		40,405
Surface Bldgs.		17,106	45,764		62,870
Mine Eqpt.	212,251				212,251
	658,508	346,781	250,693	36,807	1,292,789
Engineering and Construction Management Fees					137,556
				TOTAL:	**1,430,345**

5/30/87

TABLE 2 MILL CAPITAL COST ESTIMATES

	Equipment	Labor	Materials	Other	Subtotal
Concentration					
Crushing	221,368	68,632	57,807		347,807
Grinding	250,896	69,593	50,686		371,175
Flotation	158,336	60,778	29,186		248,300
Thickening	20,669	4,730	4,342		29,741
Filtration	58,187	16,947	10,915		86,049
Tailings Fac.					
Dewatering	27,272	6,975	4,965		39,212
Xport/Placmnt	24,460	11,647	6,397		42,504
H_2O Reclam.	6,522	20,097	9,833		36,452
Dams/Dikes		64,498	2,314	44,320	111,132
Utilities/Bldgs.					
Site Prep		3,448	398	2,339	6,185
Electr. Sys.	132,403	34,139	15,984		182,526
Mill Bldgs.	112,533	52,440	33,127		198,100
Offices	30,387	47,323	60,637		138,347
H_2O Supply	14,474	3,217	2,560		20,251
Other					
Vehicles	106,174				106,174
Misc. Eqpt.	220,349				220,349
	1,384,030	464,464	289,151	46,659	2,184,304
Engineering and Construction Management Fees					258,333
				TOTAL:	**2,442,637**

5/30/87

gineering and construction management fees are again based on the assumption that the mill contractor that does the engineering will also do the construction. For costing purposes, tailings facilities are based on a 10 year mine life.

It is estimated that expenditures of about $2,440,000 will be needed to construct and equip the mill.

5.0 OPERATING COST ESTIMATES

Table 3 summarizes anticipated operating costs for the operation (mine and mill). The operating costs are divided into 3 categories: direct costs; fixed costs; and general expense. Direct costs are generally those originating directly from the operation, such as labor, supplies, equipment operation, and electric power. For this exercize I have included payroll burden (benefits, etc.) as part of labor direct costs. Fixed costs have been divided into depreciation and insurance. Property taxes are also a fixed cost but have not been included in this study. General expenses include administration, concentrate transport (mill to smelter) and smelter charges. Royalty charges have not been accounted for in this analysis (principally because it is an unknown at this time). Concentrate transport and smelter charges are guesses and need considerably more research to derive realistic numbers.

It is estimated that yearly operating costs will be roughly $2,600,000 which equates to $75.49 per ton of ore mined. A detailed breakdown of direct costs for mine and mill are given in the following paragraphs. It is important to emphasize that these are "ball park" estimates and are subject to considerable refine-

TABLE 3 OPERATING COST SUMMARY

	Cost per Year	Cost per Ton of Ore
Direct Costs		
Labor	1,042,944	29.80
Supplies	191,040	5.46
Equipment Operation	177,373	5.07
Electric Power	167,646	4.79
Fixed Costs		
Depreciation	325,318	9.29
Insurance	54,220	1.55
General Expense		
Administration	178,178	5.09
Concentrate Transport	155,400	4.44
Smelter Charges	350,000	10.00
	2,642,119	**75.49**

5/20/87

ment.

5.1 Mine Operating Cost Estimates

Mine operating costs are summarized in Table 4. Aspects of mine development, production and support are included in this estimate. Development is broken down into "primary" and "stope" categories. Primary development is the driving of haulage drifts and raises to ensure future mine access and production. Stope development is needed to keep apace of production to ensure that ample tons are available in the near future. Stope raises, ore chutes, finger raises are principal components of stope development. Production consists of stope mining, hauling and hoisting. Mine support consists of ventilation, compressed air supply, water supply, mine drainage and general considerations (housekeeping etc.). All cost figures in Table 4 are expressed in terms of dollars/ton of mine product. Information is further categorized as labor, supplies, electric power or equipment operation.

Direct costs for mine operation are estimated at $29.38 per ton of ore mined.

5.2 Mill Operating Cost Estimate

Mill operating costs are summarized in Table 5. This estimate includes expenses incurred in ore concentration and tailings disposal. Cost aspects of this operation include crushing, grinding, flotation, thickening, filtration, tailings dewatering, tailings transport and placement, water reclamation, compressed air and water supply, and general considerations. Each item is further broken down into labor, supply, electricity and equipment operation costs.

TABLE 4 MINE OPERATION COST ESTIMATES ($/ton)

	Labor	Supplies	Electric	Equipment Operation	Subtotal
Development					
Primary	.84	1.02	.05	.10	2.01
Stope	2.14	1.17		.17	3.49
Production					
Stope	13.10	1.45		.97	15.52
Haulage	1.20	.26	.02	.02	1.50
Hoisting	2.43	.18	.27	.20	3.08
Support					
Ventilation	.02	.01	.26	.08	.37
Compr. Air	1.12		.73	.13	1.99
H_2O Supply		.03			.03
Drainage	.01	.01	.16	.01	.18
General	.84	.16		.21	1.21
	21.70	4.29	1.49	1.90	**29.38**

5/30/87

TABLE 5 MILL OPERATION COST ESTIMATES ($/ton)

	Labor	Supplies	Electric	Equipment Operation	Subtotal
Concentration					
Crushing	.99		.18	.21	1.38
Grinding	2.79		.82	2.26	5.87
Flotation	2.00	.83	1.61	.37	4.82
Thickening	.06		.01*	.01*	.07
Filtration	1.13		.57	.01*	1.71
Tailings					
Dewatering	.08	.01*	.09	.03	.22
Transport	.38	.03	.01	.01*	.43
H_2O Reclam.	.01*	.01*	.01*	.01*	.01*
Support					
General	.62	.06		.20	.88
Compr. Air	.03		.02	.09	.14
H_2O Supply		.22			.22
	8.09	1.16	3.31	3.17	15.74

* less than 1¢/ton

5/9/87

All costs are expressed in terms of dollars per ton of ore milled. Direct costs for mill operation are estimated at $15.74 per ton. In all probability this is an underestimation of actual costs, but should suffice as a crude estimate.

6.0 MANPOWER REQUIREMENTS

A staff of about 31 will be required to operate the mine and mill. This is based on assumed operation of 2 shifts per day, 7 days a week, 350 days a year. The mill will have 2 crusher operators, 3 mill operators, 3 general laborers, a mechanic and an electrician, for a total of 10 employees.

The mine will have 21 employees consisting of a mine manager, a secretary/accountant, 5 miners, 2 development miners, 5 helpers, 3 hoistmen, 2 mechanics, and 2 electricians. In that is a small staff each individual will have to be prepared to perform several functions. This is common practice at most small mines.

7.0 MINE ECONOMICS

As stated earlier an investment of about $3.8 million is needed to develop/construct and equip the mine and mill. Operating costs of about $2.6 million are anticipated. This, of course, represents a sizable investment and requires a thorough knowledge of the ore reserves to justify the risks.

Small mining operations can prove very profitable if the ore grade is sufficiently high and the orebody is large enough. This is well illustrated in Figure 6 in which return on investment (ROI) is plotted against ore grade for reserves of 70,000; 140,000 and 350,000 tons (corresponding to mine lifes of 2, 4 and 10

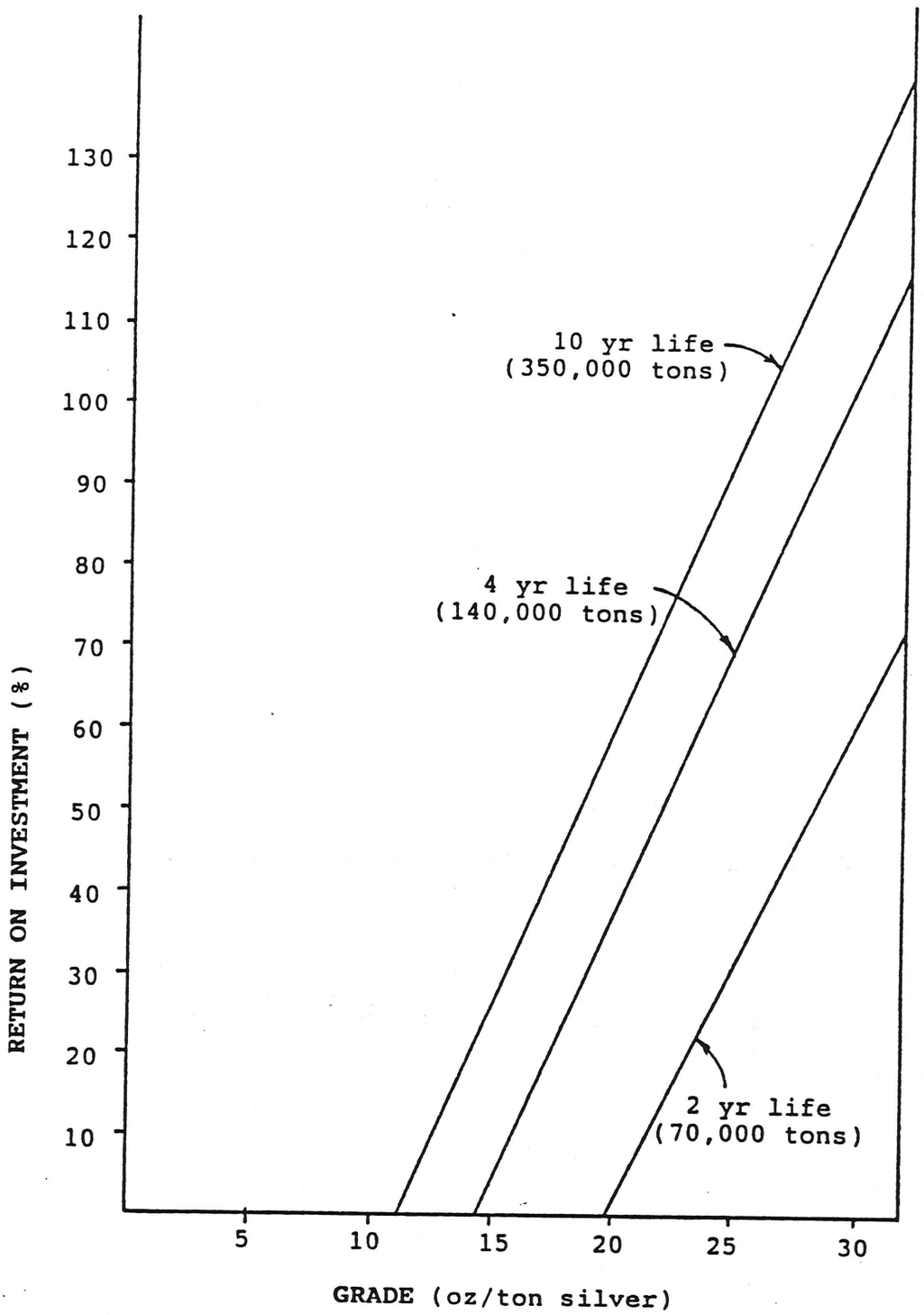


Figure 6 **ORE GRADE vs RETURN ON INVESTMENT**

5/30/87

years, respectively). As can be seen by the graph, the return on investment (ROI) is significantly affected by the ore grade and reserves (which ultimately govern mine life). For example, an average ore grade of 25 oz/ton Ag will result in an ROI of about 32% (or an annual equivalent of 32% interest for a $3.8 million investment) given ore reserves of 70,000 tons. If the reserves are adequate to support a 10 year mine life (ie. 350,000) the ROI would be about 93% for the same grade (25 oz/ton) of ore deposit. It becomes readily apparent that the McMorris project can prove to be a very profitable venture provided that high grade reserves of sufficient magnitude exist.

Conversely, a deposit of 20 oz/ton and reserves of 70,000 tons will essentially produce no return on investment over the 2 year life of the mine and the operation would probably not recover all of its initial investment. It, of course, is a subjective matter as to what an acceptable return on investment is. The curves are therefore intended to provide some insight about what ore grades are needed to support a mining operation of this size.

8.0 CONCLUSIONS AND RECOMMENDATIONS

Within preceding sections of this report I have endeavored to provide some insight into capital costs, operating costs, manpower requirements, and mining economics based on our limited knowledge of the McMorris deposit. The opinions and estimates are subject to change as our knowledge of the mine, geology and other factors increases.

To assess the feasibility of mining this deposit it is first necessary to quantify the ore reserves. This can be accomplished here by :

1. surface sampling of dumps and vein outcrops;
2. sampling of vein exposures in underground workings; and
3. surface/underground drilling.

All stockpiles/dumps should be surveyed once sampling has demonstrated that ore grade material exists. This will provide some estimate of tonnage. Reaccess of old stopes underground would facilitate the further sampling of veins and would help verify the amount of ore taken out by previous ventures. To accomplish this objective it will first be necessary to retimber caved drifts on 100 ft and 200 ft levels to expose the full length of drift developed. Dewatering , access and sampling of the lower mining levels are also recommended.

The deposit may hold some promise for open pit mining in that stringers, and cross-veins are evident in underground workings and well documented in early accounts of mining. This method is significantly less expensive than underground mining (on a cost per ton basis). The potential for open pit mining can best be evaluated once a preliminary surface drilling program has been completed.

I would also recommend that surface and underground rock exposures be mapped to provide a detailed account of site geology. Once sampling has verified that the prospect is a likely candidate for mining, a bulk sample of about 25 lbs can be prepared for metallurgical tests. Metallurgical tests will, of course, define

the process by which the metal will be taken from the rock.

Studies of land status, permits, government regulation, right of easement, environmental requirements and power availability should be undertaken at this time as these can have a serious effect on project viability. Once the above described information is collected, a more knowledgable assessment of the property can be made.

1435 S. 10th AVE.

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 65471

TUCSON, ARIZONA 85713 5/18/ 19 87

Sample Submitted By Mr. CHARLES CLAYCOMB PROJECT

SAMPLE MARKED		GOLD Ozs. per ton ore	~~GOLD Value per ton ore *~~	SILVER Ozs. per ton ore	LEAD ~~XXXXXX~~ ~~XXXXXX~~ p.p.m.	COPPER Per cent Wet Assay	~~Zn~~ ~~XXXXXX~~ ~~XXXXXX~~ p.p.m.	~~Per cent Wet Assay~~
MC	002	TRACE	$	< 0.05	< 10	700	230	
	003	0.006		< 0.05	< 10	30	260	
	004	0.005		< 0.05	< 10	1340	90	
	005	0.004		< 0.05	< 10	80	150	
	006	0.007		0.15	< 10	40	70	
	007	TRACE		1.70	60	370	590	
	008	TRACE		9.50	4240	1770	1460	
	009	TRACE		6.85	3400	1570	1600	
	010	TRACE		5.75	560	510	530	
	011	0.009		0.15	< 10	20	70	
	012	0.006		0.05	< 10	10	20	
	013	TRACE		0.05	< 10	30	50	
	014	TRACE		46.00	26000	8900	870	
	015	TRACE		0.25	520	150	50	
	016	TRACE		0.05	20	30	20	
	017	0.005		< 0.05	< 10	20	30	
	018	0.006		< 0.05	< 10	10	20	
	019	0.006		< 0.05	< 10	10	40	
	020	0.004		< 0.05	40	20	20	
	021	0.008		< 0.05	10	20	10	
	022	TRACE		< 0.05	10	20	10	
	023	TRACE		< 0.05	< 10	5	10	
	024	0.002		< 0.05	< 10	20	< 10	
	025	0.001		< 0.05	< 10	5	< 10	
	026	0.020		< 0.05	30	30	10	
	027	0.004		< 0.05	< 10	10	< 10	
	028	0.004		< 0.05	< 10	80	< 10	
	029	0.004		< 0.05	< 10	130	30	
	030	0.003		< 0.05	< 10	170	10	
	032	0.005		< 0.05	< 10	170	< 10	
	033A	0.004		< 0.05	10	110	10	
	033B	0.003		< 0.05	< 10	70	10	
	034	0.003		< 0.05	< 10	40	< 10	
	035	0.004		5.85	450	380	530	
	036	TRACE		11.05	1500	680	650	
	037	TRACE		10.80	2500	1300	1300	
	038	TRACE		10.85	6450	420	310	
	039	TRACE		2.35	1700	1450	590	
	040	TRACE		5.95	3600	660	560	

RE-ASSAY -GOLD & SILVER
ess than

Charges $ 546.00

11650

MICHAEL G. JACOBS

ISSUED 5/20/87

Arizona U. S. A.

Yours respectfully,

435 S. 10th AVE.

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 65496

TUCSON, ARIZONA 85713 06-04 19 87

Sample Submitted By Mr. CLAYCOMB

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	LEAD Per cent Wet Assay	COPPER Per cent Wet Assay	. . . . . Per cent Wet Assay	. . . . . Per cent Wet Assay
MC- 70	TRACE	$	-0 05				
71	0 038		88 80				
72	0 004		-0 05				
73	0 003		-0 05				
74	0 019		1 90				
75	0 003		-0 05				
76	0 003		-0 05				
77	0 106		7 00				
78	0 040		3 60				
79	0 011		0 20				
80	0 004		0 05				
81	0 005		0 30				
82	0 007		0 15				
83	0 005		-0 05				
84	0 002		-0 05				
85	0 006		0 05				
86	TRACE		-0 05				
87	0 069		0 05				
88	0 002		-0 05				
89	TRACE		15 30				
90	TRACE		0 05				
91	0 008		-0 05				
92	0 001		-0 05				
93	TRACE		-0 05				
94	TRACE		-0 05				
95	0 004		-0 05				
96	0 003		-0 05				
97	0 002		-0 05				
98	TRACE		-0 05				
99	0 001		-0 05				
100	TRACE		-0 05				

FIRE ASSAY

LESS THAN

REGISTERED ASSAYER CERTIFICATE NO. 11650 MICHAEL G. JACOBS DATE SIGNED Arizona U. S. A.

Very respectfully,

Charges $.....

1435 S. 10th AVE.

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 65472

TUCSON, ARIZONA 85713 5/19 1987

Sample Submitted By Mr. CHARLES CLAYCOMB PROJECT

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	LEAD P.P.m	COPPER P.P.m.	Zn P.P.m.	Per cent Wet Assay
MC 041	0.098	$	0.40	1250	190	490	
042	0.008		< 0.05	1200	50	1060	
043	TRACE		< 0.05	600	30	280	
044	0.001		28.50	10	410	140	
045	0.013		0.75	< 10	120	80	
046	0.003		1.30	10	300	340	
047	TRACE		1.20	< 10	210	280	
048	0.004		2.25	< 10	360	300	
049	TRACE		45.10	150	1760	990	
050	TRACE		2.15	220	590	380	
051	0.005		< 0.05	20	70	460	
052	0.006		0.35	10	160	130	
053	TRACE		0.35	< 10	300	270	
054	TRACE		3.15	10	170	130	
055	TRACE		3.30	< 10	130	270	
056	0.001		< 0.05	< 10	< 10	230	
057	0.016		< 0.05	10	< 10	250	
058	TRACE		< 0.05	10	< 10	240	
059	0.004		< 0.05	< 10	< 10	260	
060	TRACE		0.65	540	400	770	
061	0.031		.45	490	1530	640	
062	0.002		0.05	< 10	210	10	
063	TRACE		6.30	1660	1510	1020	
065	TRACE		< 0.05	< 10	10	20	
066	0.006		2.00	120	20600	640	
067	TRACE		< 0.05	10	380	10	
?	TRACE		< 0.05	20	5	10	

RE-ASSAY-GOLD & SILVER
ess than

Charges $ 378.00

MICHAEL G. JACOBS 5/19/87

Very respectfully,

1435 S. 10th AVE.

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 65497

TUCSON, ARIZONA 85713 06-04 19 87

Sample Submitted By Mr. CLAYCOMB

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	LEAD Per cent Wet Assay	COPPER Per cent Wet Assay	. . . . . Per cent Wet Assay	. . . . . Per cent Wet Assay
MC- 101	TRACE	$	-0 05				
102	0 002		-0 05				
104	0 008		22 85				
105	0 006		0 45				
106	0 340		0 55				
107	0 001		-0 05				
108	TRACE		-0 05				
109	0 003		-0 05				
110	TRACE		0 05				
111	TRACE		4 15				
112	0 002		3 55				
113	0 005		6 85				
114	0 003		0 05				
DH-5 10-15	0 004		0 05				
25-30	0 009		-0 05				
40-45	0 001		0 05				
DH-12 0-5	0 003		-0 05				
5-10	0 003		0 10				
DH-13 40-45	TRACE		0 05				
50-55	TRACE		0 05				
60-65	0 008		-0 05				
70-75	TRACE		0 05				
80-85	0 090		-0 05				

FIRE ASSAY
LESS THAN

Very respectfully,

REGISTERED ASSAYER CERTIFICATE NO. 11650 MICHAEL G. JACOBS DIVISION ARIZONA U.S.A.

Charges $.....

1435 S. 10th AVE.

Jacobs Assay Office
Registered Assayers

PHONE 622-0813

Certificate No. 65485

TUCSON, ARIZONA 85713 5-28 1987

Sample Submitted By Mr. CLAYCOMB PROJECT

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	LEAD Per cent Wet Assay	COPPER Per cent Wet Assay	..... Per cent Wet Assay	..... Per cent Wet Assay
H 1-5 DH-1 0-5	0 004	$	0 10				
~~1-10 DH-1 5-10~~	~~0 002~~		0 05				
~~1-15 DH-1 10-15~~	TRACE		0 10				
1-20 DH1 15-20	TRACE		-0 05				
~~DH 8 5-10~~	~~0 001~~		0 20				
10	0 004		-0 05				
15	0 001		-0 05				
20	0 004		-0 05				
25	0 001		-0 05				
30	TRACE		-0 05				
35	0 001		-0 05				
40	TRACE		0 05				
45	0 002		-0 05				
50	0 002		-0 05				
55	0 002		-0 05				
60	0 003		0 05				
65	0 004		0 05				
70-75	0 004		0 15				
DH-9 05	0 004		-0 05				
5	0 002		-0 05				
10	0 007		-0 05				
15	0 003		-0 05				
20	TRACE		-0 05				
25	0 002		-0 05				
30	TRACE		-0 05				
35	0 004		-0 05				
40	TRACE		-0 05				
45	TRACE		-0 05				
50	0 007		-0 05				
55	0 005		-0 05				
60	0 009		-0 05				
65	0 010		-0 05				
70	0 005		-0 05				
75-80	TRACE		-0 05				

FIRE ASSAY
LESS THAN

Very respectfully,

REGISTERED ASSAYER CERTIFICATE NO. 11550 MICHAEL G. JACOBS STATE OF ARIZONA U.S.A.

Charges $.....

1435 S. 10th AVE.

Jacobs Assay Office

Registered Assayers

PHONE 622-0813

Certificate No. 65495

TUCSON, ARIZONA 85713 06-04 1987

Sample Submitted by COM CLAYCOMB

SAMPLE MARKED	GOLD Ozs. per ton ore	GOLD Value per ton ore *	SILVER Ozs. per ton ore	LEAD Per cent Wet Assay	COPPER Per cent Wet Assay	. . . . . Per cent Wet Assay	. . . . . Per cent Wet Assay
DH 12		$					
0-5	0 002		-0 05				
5	0 003		-0 05				
10	0 003		-0 05				
15	0 003		-0 05				
20	0 043		-0 05				
25	0 001		-0 05				
30	0 013		-0 05				
35	TRACE		-0 05				
40	0 036		-0 05				
45	0 008		-0 05				
50	TRACE		-0 05				
55	0 013		-0 05				
60	0 002		-0 05				
65	0 012		-0 05				
70	0 013		-0 05				
75	0 012		-0 05				
80	0 002		-0 05				
85	0 012		-0 05				
90	0 004		-0 05				
95	0 005		-0 05				
100	0 002		-0 05				
105	0 007		1 00				
110	0 0009		-0 05				
120	0 013		7 20				
130	0 005		-0 05				
A 140 145	TRACE		-0 05				
B 140	0 003		-0 05				
150	0 007		-0 05				
155-160	0 003		-0 05				

FIRE ASSAY
LESS THAN

U.S. STATE ASSAYER
CERTIFICATE NO.
11050
MICHAEL G.
JACOBS
DATE SIGNED
STATE OF U.S.A.

Very respectfully

Charges $

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

1455 DEMING WAY, SUITE 15
SPARKS, NEVADA 89431
PHONE: (702) 358-1158

DATE: 10/ 2
PAGE: 1 OF 2
COPY: 1 OF 2

AUTHORITY: JAMES BOSLEY

JAMES BOSLEY
P.O. BOX 2166
FALLON, NEVADA
89406

WORK ORDER: 9336R-87

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK CHIP

SAMPLE NUMBER	ASSAY FIRE ASSAY AG OZ/TON	ASSAY FIRE ASSAY AU OZ/TON
JB:473	ND	<0.005
JB:474	ND	0.006
JB:475	ND	<0.005
JB:476	ND	<0.005
JB:477	ND	<0.005
JB:478	ND	<0.005
JB:479	ND	<0.005
JB:480	4.8	<0.005
JB:481	ND	<0.005
JB:482	ND	0.108
JB:483	ND	0.283
JB:484	ND	0.005
JB:485	ND	<0.005
JB:486	77.6	<0.005
JB:487	61.73	<0.005
JB:488	29.31	<0.005
JB:489	ND	<0.005
JB:490	ND	<0.005
JB:491	2.33	<0.005
JB:492	34.77	<0.005
JB:493	771.9	<0.005
MC:MORRIS ORE -SAMPLE	555.9	<0.005

Fig. 9F

Pg 19a

James B. Bosley

BARRINGER LABORATORIES INC.

15000 W. 6TH AVE., SUITE 300
GOLDEN, COLORADO 80401
PHONE: (303) 277-1687

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01 Nov 87
PAGE: 2 OF 2
COPY: 1 OF 2

AUTHORITY: JAMES BOSLEY

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P.O. BOX 2166
FALLON, NEVADA
89406

WORK ORDER: FBJAR-87

*** FINAL REPORT ***

GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROCK CHIP

SAMPLE NUMBER	CU PPM
JB:475	870.0
JB:479	11800.0
JB:480	530.0
JB:492	11500.0
JB:493	138000.0

SIGNED: V. K. Peterson

Vernon K. Peterson
LABORATORY SUPERVISOR

Fig 9F

James B. Bosley

Pg 196

FOOTNOTES:
P=QUESTIONABLE PRECISION; *=INTERFERENCE; TR=TRACE; ND=NOT DETECTED;
IS=INSUFFICIENT SAMPLE; NA=NOT ANALYZED; MS=MISSING SAMPLE

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 12/31/85

CERTIFICATE OF ASSAY

K & M Mining

	Ag oz/ton	Au oz/ton			
Empire Hi-grade	0.716	Trace			
Empire	2.600	Trace			
New Vein	1.168	0.093			
McMorris 100'	323.720	nil			
	Trace implies less than 0.002 oz/ton				

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR O.
POWER
Date Signed 1-1-
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 1/10/86

CERTIFICATE OF ASSAY

K & M Mining

	Ag/Oz/ton	Au oz/ton			
Newbold	4.831	0.008			
Side vein	0.016	Trace			
New vein	26.583	0.021			
Footwall	0.942	Trace			
	Trace implies less than .002 Oz/ton				

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR Q. POWER
Date Signed 1/10/86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 1/8/86

CERTIFICATE OF ASSAY

K & M Mining

	Ag oz/ton	Au oz/ton			
High grade dump sample	271.725	0.009			

CERTIFICATE NO. 5936
VICTOR D. POWER
Date Signed 1/8/86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 2/10/86

CERTIFICATE OF ASSAY

K & M Mining

	Ag oz/ton	Au oz/ton	Cu %	Pb %	
Black & White	584.344	Nil	less than 0.2	2.5	
Sulfides	20.590	Nil	—	—	

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR O. POWER
Date Signed 2/19/86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 3/31/86

CERTIFICATE OF ASSAY

K & M Mining

	Silver oz/ton	Gold oz/ton			
Black vein	1733.024	ND			
New Vein Mat'l	1843.510	ND			

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR O. POWER
Date Signed 3/31/86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 3/12/86

CERTIFICATE OF ASSAY

K&M Mining

	Silver oz/ton	Gold oz/ton			
McMorris 200' 8'Vein	0.772	N.D.			
Sulfide	0.578	N.D.			
Footwall, Grubstake	249.490	N.D.			
Vein, Grubstake	373.692	N.D.			
La Plata, shaft, vein	42.762	Trace			
La Plata muck in shaft	1.200	N.D.			

REGISTERED ASSAYER
CERTIFICATE NO. 16959
VICTOR D. POWER
Date Signed 3/12/86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 5/15/86

CERTIFICATE OF ASSAY

K & M Mining

	Silver oz/ton	Gold oz/ton			
Plastic Sack	7.398	ND			
Bucket	0.049	ND			
Table Cons	264.006	ND			

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR O. POWELL
Date Signed 5-15-86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 5/29/86

CERTIFICATE OF ASSAY

K & M Mining, McMorris Shaft

	Silver oz/ton	Gold oz/ton			
Silver Ball	0.150	0.031			
Plastic Sack	5.007	0.040			
McMorris Raise	56.628	Nil			

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR O. POWER
Date Signed 5-29-86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

DATE 6/5/86

CERTIFICATE OF ASSAY

K & M Mining. Mc Morris Shaft 200' level

	Ag oz/ton	Gold oz/ton			
muck pile (2 assays)	[illegible]	ND			
5/30/86 hi-grade (2 assays)	640.335	ND			

REGISTERED ASSAYER
CERTIFICATE NO.
16956
VICTOR D. POWER
Date Signed 6/5/86
ARIZONA, U.S.A.

CENTRAL ARIZONA ASSAY COMPANY

1860 EAST ASH • GLOBE, ARIZONA 85501 • (602) 425-0541

Assays on Target

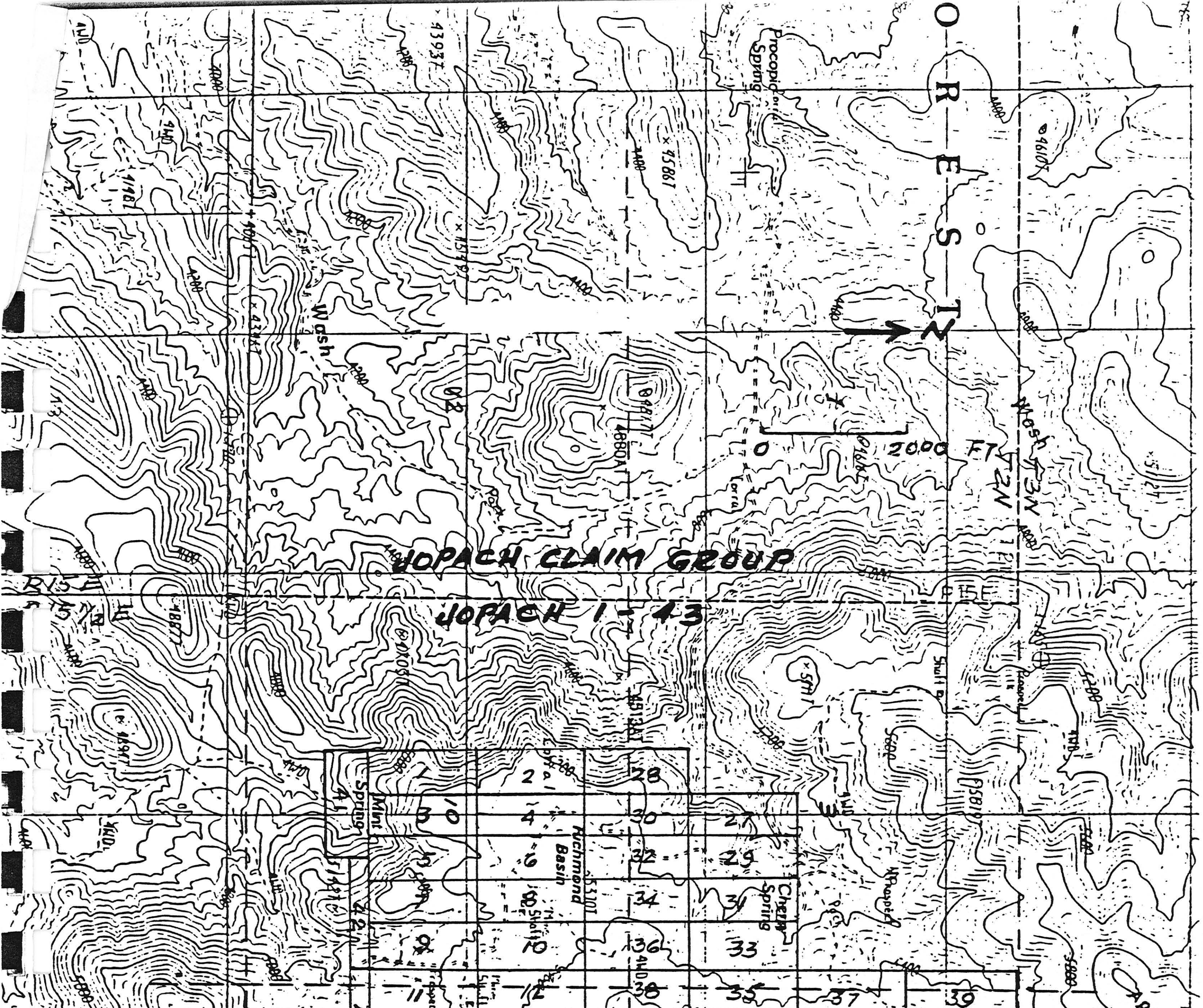
DATE 6/3/86

CERTIFICATE OF ASSAY

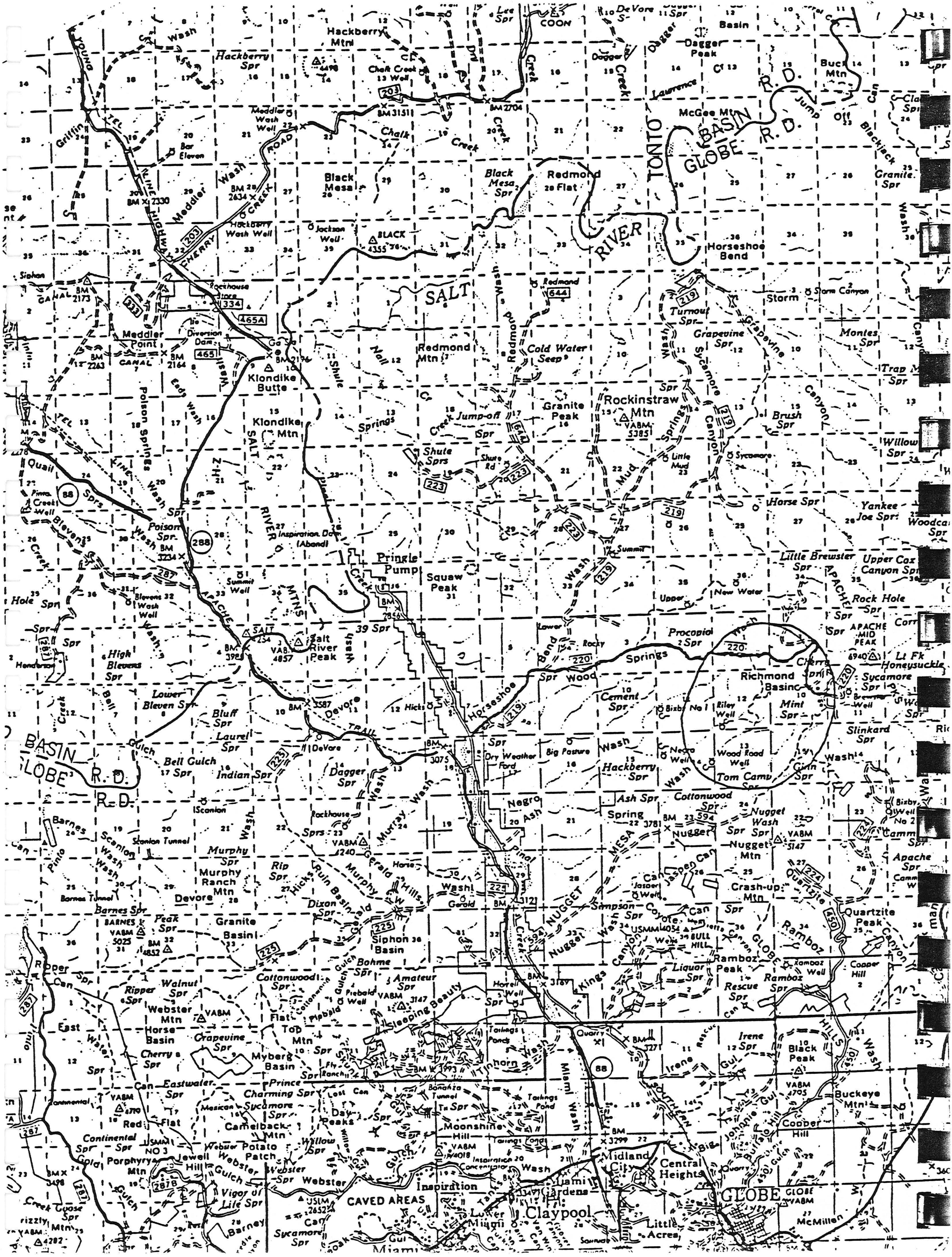
K & M Mining

	Silver oz/ton	Gold oz/ton			
Dough	352.140	ND			
Black Hunnet	3846.230	ND			
Conc. 1	[illegible]	ND			
Cleaner Tail 1	21.226	ND			
Rougher Tail 1	1.254	ND			
Conc. 2	5528.14	ND			
Cleaner Tail 2	267.662	ND			
Rougher Tail 2	7.586	ND			

REGISTERED ASSAYER
CERTIFICATE NO.
15956
VICTOR O. POWER
Date Signed 6/9/86
ARIZONA, U.S.A.



JOPACH CLAIM GROUP
JOPACH 1 - 43
0
2000 FT
Richmond Basin
Mint Spring
Cherry Spring
Cherry Horizontal Spring
Procopio Spring
Wash
Apache
T2N
T3N
R15E



Hackberry Mtn
Hackberry Spr
Chalk Creek
Meddler Wash Well
Bar Eleven
Griffin
Meddler Wash
Cherry Creek Road
Hackberry Wash Well
Black Mesa
Jackson Well
Black Mesa Spr
Redmond Flat
Tonto Basin R.D.
Globe R.D.
McGee Mtn
Jump Off
Blackjack
Granite Spr
Horseshoe Bend
Salt River
Rockhouse Store
Meddler Point
Diversion Dam
Klondike Butte
Klondike Mtn
Salt River
Redmond Mtn
Cold Water Seep
Redmond Wash
Turnout Spr
Grapevine Spr
Grapevine
Storm
Storm Canyon
Montes Spr
Trap Spr
Poison Springs
Shute Springs
Noll Creek
Creek Jump-off
Granite Peak
Rockinstraw Mtn
Sycamore Canyon
Brush Spr
Willow Spr
Quail Sprs
Shute Sprs
Mud Springs
Little Mud
Sycamore
Horse Spr
Yankee Joe Spr
Woodcamp Spr
Poison Spr
Inspiration Dam (Abond)
Pringle Pump
Squaw Peak
Summit
Little Brewster Spr
Upper Cox Canyon Spr
Eleven Creek
Summit Well
Blevens Wash Well
Apache
Salt River Mtns
Rock Hole Spr
Salt River Peak
39 Spr
Lower
Rocky
Procopio Spr
Apache Mid Peak
Lt Fk Honeysuckle
High Blevens Spr
Henderson
Lower Bleven Spr
Bluff Spr
Devore
Horseshoe Bend
Wood Springs
Cherry Spr
Richmond Basin
Sycamore Spr
Bell Creek
Laurel Spr
DeVore
Trail
Hicks
Cement Spr
Bixby No 1
Riley Well
Mint Spr
Stinkard Spr
Tonto Basin R.D.
Globe R.D.
Gulch
Bell Gulch Spr
Indian Spr
Dagger Spr
Dry Weather Ford
Big Pasture
Hackberry Spr
Negro Well
Wood Road Well
Tom Camp Spr
Ginn Spr
Scanlon
Murray Wash
Negro Ash
Ash Spr
Cottonwood Spr
Spring
Nugget Wash
Nugget Spr
Nugget Mtn
Barnes
Scanlon Wash
Scanlon Tunnel
Rockhouse Sprs
Gerald Wash
Pinal Creek
Apache Spr
Pinto
Murphy Spr
Murphy Ranch Mtn
Devore
Rip Spr
Hicks
Ruin Basin
Murphy
Horse
Hills
Nugget Mesa
Jasper Can
Jasper Well
Crash-up Mtn
Quartzite
Barnes Tunnel
Barnes Spr
Peak Spr
Granite Basin
Dixon Spr
Gerald
Siphon Basin
Simpson Spr
Coyote Can
Bull Hill
Kings Canyon
Quartzite Peak
Canyon
Ripper Spr
Ripper Can
Cottonwood Spr
Bohme Spr
Amateur Spr
Piebald Well
Liquor Spr
Ramboz Peak
Rescue Spr
Ramboz Spr
Ramboz Well
Copper Hill
Globe
Walnut Spr
Webster Mtn
Sleeping Beauty
Horrell Well
Quarry
East Water
Horse Basin
Grapevine Spr
Flat Top Mtn
Tinhorn Wash
Miami Wash
Irene Spr
Irene Gul
Black Peak
Cherry Spr
Myberg Basin
Prince Spr
Fly Ranch
Bonanza Tunnel
Tarkings Pond
Hills
Eastwater Spr
Charming Spr
Lost Can
Buckeye Mtn
Continental
Mexican
Sycamore Spr
Day Peaks
Red Flat
Camelback Mtn
Moonshine Hill
Big Johnnie Gul
Cooper Hill
Continental Spr
Webster Potato Patch
Willow Spr
Porphyry Mtn
Jewell Hill
Webster Gulch
Webster Spr
Inspiration
Wash
Midland City
Central Heights
Vigor of Life Spr
Miami Gardens
Caved Areas
Lower Miami
Claypool
Globe
McMillen
Goose Creek Spr
Grizzly Mtn
Sycamore Spr
Barney
Little Acres
Miami

The following article was copied from the May 15, 1926, issue of the Mining Journal and gives the discovery and history of the property up to about the year 1876:

MINE LOCATIONS OF THE CHILSON BROS

by

Sajas Carl W. Chilson

The authentic history of the mining activities of the Chilson Bros., who were active in the locating and developing of Arizona's mineral resources.

Steve L. Chilson left Bandera, Texas, with his family in the year 1868, bound for California.

He had, some years previously, made an agreement with the late Hon. John G. Downey, then governor of California, to deliver 125 yoke of oxen to the governor and his agents, for for which he was to receive 5,000 acres of Southern California land, which was located in and around the present thriving little city of Santa Ana, California, the oxen being valued at $100 per yoke and the land valued at $2.50 per acre. A great deal of time was required to work out the business details, as all mail was carried on horseback and stages.

After it was definitely decided to come to California, Chilson set about to make preparations. Two years were required to build a wagon. Hardwood timber had to be selected from the woods, worked out in the rough and seasoned.

Everything ready, several head of cattle rounded up for the long drive, the start was made. There were several other families with wagons, all of which made up a train, or caravan.

During the months that followed, the cattle and most of the horses were stolen by the Comanche Indians, and by the time he reached the Territory of Arizona, he had little, if anything left with which to guard off the ravages of hunger and starvation. Every article that could be spared, including personal effects, had been traded in for provisions at the various outposts along the trail. The long weary trip across the desert, with very little to feed and days without water, had worked an extreme hardship on the stock.

It was a happy and most welcome day when Chilson and family arrived at Col. King Wolsey's ranch at Agua Caliente Springs on the Gila River. Col. Wolsey was one of the early

pioneers of the territory, a man of honesty and integrity, a guide and Indian fighter, true to form, a developer of natural resources of the land, as far as his finances would permit him to develop, honored and esteemed by all who knew him, a real man of the first magnitude.

Chilson leased the Wolsey ranch for a period of three years, planted a crop, harvested and continued on to California with several members of his family, leaving his three eldest sons, D. G., known as "Gip", Emr E., known as Eme, and William H., known as Bill, to plant and harvest the second crop.

Eme and Bill then left for California with about 1,600 head of cattle, which belonged to Mr. Tanksley, leaving Gip with Col. Wolsey, to plant and harvest the third crop.

During the time the Chilson brothers were associated with Col. Wolsey they scouted the country far and wide, having many skirmishes and narrow escapes with the Apaches.

The colonel had told them many stories about the Indians and mining. Most of the colonel's mining experience, having been in the Bradshaw mountains and around Prescott, which was the capital. Indian attacks were daily expectations and nightly fireside discussions.

During one of Col. Wolsey's trips in the upper Salt River country and over in the Apache Peak country, he had a fight with a small bank of Apaches during which he lost several men and horses. It was discovered that the Indians were shooting hammered silver bullets. This was in the vicinity of what was later Globe.

Such stories told by the colonel, together with personal experiences and the wild excitement over the discovery of the "Vulture" mine in the Vulture Mountains gave the brothers mining fever.

During the fall of 1871, Gip came to California on horseback. Remaining in California until 1872, in which year he returned to Arizona and located the "William Penn" group of claims at Castle Dome. He worked this property for about one year. The ore was hauled to the Petote landing on the Colorado River. The landing and two steam barges were owned by Captain Paul Ames and Captain Ellis. The ore was shipped down the river to the Gulf of California, reloaded into coast steamers and shipped to the Melrose Sampling Works, San Francisco.

He returned to California in the fall of 1873, and remained until the spring, 1874, at which time he returned to Yuma. Upon his arrival in Yuma, he learned about the discovery of the Silver King Mine in Pinal county. A great deal of excitement was on over the strike and a rush was on for the new silver district. While at Yuma, he met Joe Kelly, who joined him on a trip to the "Silver King". Joe Kelly remained at the Silver King but Gip continued on to the Globe country, which had been discovered by Coplin, Billy Long and Riggin. There was another man in the party, whose name I do not recall, who was killed by the Indians at Bloody Tanks, as the boys were making their way to Florence.

Gip, recognizing the country, namely, the Apache Peaks, which were described by Col. Wolsey as being the country in which the colonel and his men had found the silver bullets, shot by the Indians as before mentioned, immediately set out to find the mine from which the silver came. While at Globe, which was beginning to look like a camp, he met a Dutchman, by the name of Henry Wagner, who knew little, if anything, about prospecting or mininhg. Although Wagner did not have any money or outfit, Gip, having taken a liking to Wagner, explained to him what he had in mind, asking Wagner to join him on his hunt for the silver mine.

They started for the Apache Peaks, about twelve miles distance from Globe. It will be remembered that the town of Globe had not been laid out or a district organized. The mine had been discovered and named "Globe" on account of the immense size of the property, and, as the locators said, "She's as big as the globe." By nightfall, Chilson and Wagner made camp in a small basin close to the Apache Peaks, and finding a fine spring of water, the outlook was favorable.

The next morning, Gip found native and born silver nuggetsfrom the size of small flakes up to ten and twelve pounds. He located a claim which he named the "Silver Nugget", in which he located Wagner for a one-half interest. During the day they saw a great deal of fresh Indian signs and at early evening saw several heads of Indian ponies in the distance. \shortly after dusk they saw a small campfire spring up in a canyon about one-half mile away. Gip, knowing the customs, habits and methods of Indians, felt sure that a small band of Indian scouts were working the country and had made camp for the night. However, to make sure as to whether they were prospectors or Indians, he decided to investigate more closely. He carefully made his way up to the ridges to a point opposite the fire and he saw, as they passed back and forth around the fire, that they were Indians. Returning

to inform Wagner they broke camp and went to the "Globe" mine that night. The following day or two Gip proposed to Wagner that they return to their rich discovery. Wagner was frightened to a frenzy, stating that they would not go back in there for all the mines in the country. Gip tried to convince him that they had a bonanza and that the Indians were probably scouts and were on the move. Wagner could not be convinced and said he would sell his interest for anything. Gip told him he had very little money. Wagner said, "I will take your pack, mule, and what money you have." Gip gave Wagner his mule, pack and $30.00 in cash, which was all the money he had.

The location notice for the "Silver Nugget" having not been recorded, as the nearest recorder's office was at Florence, it was therefore not necessary to draw up any agreement of transfer. A new location notice was posted which gave Gip the full ownership of the mine. He also located two additional claims, which he named "The Rifleman" and "The Hoodoo". He then returned to Florence.

At Florence he made the acquaintance of Mr Stiles. Gip showed them some silver nuggets and agreed to locate for them a claim, if they would furnish him a pack mule, provisions and a small sum of money with which to buy another bill of provisions when needed. Stiles and Mc Morris supplied the much needed necessities and Gip returned to the "Silver Nugget". He located the north and extension of the "Silver Nugget" for Stiles and Mc Morris, naming the claim the Silver Spring; there was a fine spring of water on the property to say the least of an exceptionally fine silver showing. It is obvious that Chilson's intentions toward those who had helped him in his hour of need were of the very best, inasmuch as he located for them one of the finest and best showing he had discovered. Stiles was very busy on his ranch and could not devote his time to the claim, so gave Mr. Cook one-half of his interest in the property to represent him. Shortly after the transaction, Cook sold his one-fourth interest to Mr. Baldwin for $10,000 cash. Later Stiles sold his one-fourth interest to Mr. Baldwin for $10,000; then about one year later Mc Morris sold his one-half interest to Baldwin for $50,000. Baldwin built a millat the Wheat Fields, about ten miles distant from the mine to mill the Silver Spring ore. This is the property which was known as the "Mc Morris Mine."

When Gip arrived at Florence, in search of pack animals and provisions, he wrote to his brothers, Eme and Bill, who were in California, to come to him at once, which they did. Several weeks were required to make the trip as the Indians were on a rampage throughout the country.

In the meantime, Gip had returned to the Silver Nugget and was gathering up all the nuggets he could find on the surface and burying them under his campfire until his brothers arrived. During the time Gip ran pretty low on provisions. One evening about sundown Bob Dicky rode up to find Gip scratching around among some ironwood chips. Gip asked Dicky to stop over with him, stating that they would have something to eat as soon as he could find some old bacon rinds he had thrown among the chips, as he needed them to season the beans; Dicky told about the incident later, stating that little did he realize that Gip had over $10,000 in silver nuggets buried under the old black bean pot on that campfire.

The small basin in which the Silver Nugget Mine was located was so rich that Gip Chilson then and there named it "Richman" basin. This basin was not named after anyone by the name of Richman, which seemed to be the popular opinion. The Chilson brothers rarely named any discovery after themselves;they almost always selected or coined a name due to some incident at the time of discovery, or a name in keeping with the local conditions. I know of one exception, in which George Chilson, a relative, blazed a 200 mile trail in Idaho, which bears his name. Bob Dicky, John Allvany located a claim adjoining the Silver Spring, which they named after the basin, calling it the Richman.

It is true that Mc Millan and Dory Harris discovered the "Stonewall Jackson" Mine, the original locations were known as the "Stonewall Jackson", "Hannibal", "Gen. Lee" and "Little Doctor. Mc Millan and Harris shipped about $25,000 worth of ore and later sold to Mr. Martin of Santa Rosa, California. Mr. Martin was a minister.

All of the shipping ore from the Silver Nugget Mine was packed to the Silver King Mine, and from there it was hauled to Wilmington, California, and shipped by a steamer to the Millrose Sampling Works at San Francisco.

The freight teams hauling supplies from California to the Silver King Mine and other Arizona points would return to California light, excepting for a small amount of ore. The Silver Nugget ore was very rich and tonnage was small. The teamsters

were glad to have the return freight. The first shipment from the mine amounted to about fifteen hundred pounds of ore, which was hauled by Gip, himself, after his brothers had arrived at the mine. That fifteen hundred pounds was worth over $10,000. The following shipments averaged about $400.00 per ton.

The winter of 1874-75, R. W. Chilson, better known as Chloride Dick, arrived at the Silver Nugget Mine, making four brothers at the property. By this time the mine was running full blast, making regular shipments to San Francisco. The ore was broken down by hand and closely assorted, sacked with double canvas sacks, which weighed about 50 pounds each ton closely tumped.

After about $200,000 worth of high grade ore had been shipped, the property was organized and incorporated under the laws of New York and known as the "Silver Nugget Mining Company". A fine stamp mill was erected to mill the old dumps. It is worth to mention, that the Silver Nugget was a small, high-grain (?) blanket vein, lying on the bedrock and confined to Richman basin, the deepest overburden was only 17 feet deep at the lower part of the basin, the vein came to the surface at the upper edge of the basin.

SUMMARY

A company with a $75,000.00 capital should repair the La Plata shaft, do the suggested amount of new development work, install a fifty ton mill and place the property on a paying basis. It is possible that the mine may be placed in operation for a smaller sum but the above program is more preferrable.

The present road should be rebuilt, then the La Plata Shaft repaired and this mine reopened. Then discounting all reports and old data of both high grade shipping ore and a large tonnage of milling ore already developed in the area of the La Plata Shaft, which seems well founded from all data available, being new development work to the West following the vein on the lowest level of the La Plata Shaft. This should be driven together with cross cuts and raises, a distance of about 1,000'. This work, for a considerable distance, would be in virgin ground and then would pass under the old stopes of the Mc Morris Mine and on into that area to the West of the Mc Morris Shaft, where it is reported excellent ore was encountered and left unmined because of water conditions. This work should show sufficient ore to justify the doing of an additional 1000' of work to the East of the La Plata Shaft to develop the ore body believed to lie in this direction.

This amount of work would undoubtedly disclose bodies of mill ore, together with a large amount of excellent grade shipping ore.

The Mc Morris Shaft in addition, could be unwatered and retimbered as a second working shaft with an estimated expenditure of about $12,000 additional to the sum shown under Capital Expenditure after the plant has been placed in operation.

The present old mill should then be remodeled and placed in operation, putting in whatever flow sheet the ore called for, probably flotattion and cyanidation. Tests to finally determine the exact flow sheet should be made

by a competent firm.

At this time the new proposed road connecting the mine with Highway 60 should be built so as to provide a good permanent road making low hauling costs. It is highly possible that through the cooperation of the County that this road could be built for considerably less than the sum of $2,500 allowed in Estimates for this work.

After the reopening of the Mc Morris Shaft and the connecting of the two shifts from the drift previously run on the vein from the La Plata Shaft at its lowest level, this area would then be ready for production and all ore handled through the one shaft and there placed into the mill with the high grade shipped direct to the smelter.

There has been such a large amount of high grade silver ore in the past taken from this property, and it has such excellent indications of having many more times as much rich ore left in unworked and even unprospected portions of the main vein, that I am sure a properly managed mining operation would be successful.

From this information, gathered over a period of several years, the Mc Morris group offers an excellent opportunity for a successful, financially profitable mining operation.

Signed:

John L. Alexander

HISTORY AND PRODUCTION:

The mines in the Richman Basin area were discovered in the year 1874 by a man named Chilson, who first heard of the district from stories of Indians shooting silver bullets at the soldiers in a fight there.

Approximately $200,000 in silver nuggets and rich ore were taken from off the surface from those areas known as the nugget patch, shown on the attached maps, up to the year 1876. Several small mills were built about this time and the mines operated very successfully.

Following the year 1876 and prior to 1880, the Mc Morris Company took over the property and worked same until June 1882, and during this time the company is reported to have milled some 3,000 tons of ore from which they recovered about $250.00 per ton, shipping a total of about $750,000 in bullion. In addition there was shipped, according to information received, about an equal amount of high grade shipping ore.

The La Plata claim was taken over and development work carried on during this period by other people and the main La Plata shaft was sunk. This was reported to have encountered sufficient ore that the Mc Morris Company bought the mine, paying, it is reported, $300,000 cash for it.

During 1882 the Mc Morris Company carried on work on both claims, sinking the Mc Morris shaft to the 700' level and the La Plata to the 500 or 600' levels. They are reported to have encountered some very rich ore in the La Plata on the 480' level, according to men now living who worked there. The Mc Morris vein changed its dip between the 400' and 700' levels and a crosscut was started to cut the ore, but had only been driven in, it is reported, some 10', when the properties were closed down. The owners became involved in litigation among themselves and pending the settling of this, all work ceased. The suit resulting from the trouble lasted many years and the properties were never reopened.

Finally it went in default for taxes and assessment work and was located by a man living near Globe. He eventually sold the property to a company about 1917, which due to gross mismanagement, personally known to the writer, soon encountered financial troubles and ceased operations. The mine then passed to the Alexander family and has been held by them since.

GEOLOGY AND DEVELOPMENT:

The main vein which is some 6'-8' wide occurrs along the contact of the diabase and Monzonite or altered granite and strikes almost East and West and is vertical in its dip for about the first 400' in depth and then inclines to the North with a slight dip. The diabase lies to the North and the monsonite on the South side. A short distance farther South the unaltered granite is exposed by erosion over a large area. There are many small spur veins making off the main vein, both to the North in the diabase and to the South in the monzonite and granite. These small veins all carry high grade ore, the values in their ore shoots proper being anything from 50 to several hundred ounces silver per ton. The main vein is a porphyry dyke containing considerable quartz.

There have been in the past several hundred thousand dollars of this high grade ore taken from these small veins according to my information. None of these small veins either to the North or South have, to my knowledge, been prospected or developed beyond the depth possible to reach easily by tunnel levels. The values in those inspected show every indication of continuing to much greater depths. Most of these veins have been worked by typical chloriders who took only such ore as was obtainable with little labor and cost. Three of the prinicipal South veins being the Helen, Empire, and Silver Thread. The two main North veins are the Brewster and Jumbo. The Jumbo and Silver Thread are no longer a part of this group of claims however.

There are two shafts and two tunnels on the Brewster vein --- Three tunnels on the Jumbo, 50' shaft on the Empire and some 2 or 3 tunnels on the Helen vein. Most of these workings were driven in ore, with the available high grade having been stoped out. The main vein is developed by some 4 shafts, and a tunnel some 300' long. On the extreme West, and there are 2 shafts about 500' apart sunk on this main vein on the Richman Claim about 200' deep with some drifting from each. The vein here was low grade with the exception of a small surface of a high grade. This Claim has little potential value.

The Mc Morris Claim adjoins the Richman on the East end, and on this claim is the famous old Mc Morris Mine. A 3-compartment vertical shaft was sunk on the main vein here for a total depth of 700'. This shaft followed the vein to the 400' level. At this point the vein dipped slightly to the North and as the shaft was sunk vertically, it left the vein. At the 700' level a crosscut was started to pick up the vein, but was only driven in some 10' before the mine became involved in litigation and closed down. Miners who worked there are relied on for this information and they state that from the dip of the vein that some 30' or more of crosscutting would have encountered the vein at this level.

It is reported that all stoping of this mine was to the East for some 200' and above the 400' level. Good ore was encountered to the West in development, but no ore was mined due to a larger flow of water being encountered there, than they had equipment to handle. The drifts to the West here bulkheaded off and no further work on that side of the shaft was done before the mine closed. From the surface indications as well as from reports, I believe that a larger shoot of ore lies to the West of this shaft. Immediately below this section of the claim, West of the main shaft, lies the Silver Nugget flat vein, from which many thousands of dollars has been taken by leasors and chloriders in the past, which was in my opinion formed from the same source as this western portion of the main vein. The ore taken from this property and milled averaged $250.00 silver per ton recovered. There had been only 3,000 tons milled at the time the mill was closed, in addition to what has been shipped as high grade smelting ore, so only a small portion of the ore shoot could have been mined. The high grade is reported as being 2' wide and with considerable ore of a lower grade along the side of this high grade.

From the size of the waste dump and knowing approximately the amount of ore taken from this mine, there could not be any very large amount of stoping or lateral development work done, so it should be a comparatively simple matter to unwater the mine and retimber the shaft to the 700' level. Considering the length of time the mine has been idle, the shaft is in good condition, but of

course would have to be retimbered. Modern equipment would make a small job of handling any water encountered in the West side ore body.

The La Plata shaft which I am led to believe was sunk to between 5' to 600' in depth is reported to be in a fair milling grade of ore and it is reported by Mr. Kinsman of Globe, who worked in this mine, that lateral development work encountered a good width of excellent grade shipping ore. The main value of which was, of course, silver. Considerable development was done on this claim. No stoping was done, however, the mine having been bought by the Mc Morris Company a short time before they closed, according to early reports. All work was stopped here when Mc Morris Company became involved in litigation and the property was never reopened. The shaft could be retimbered for a reasonable sum and the mine reopened. There was never, I am led to believe, any appreciable amount of water encountered in this shaft and I imagine there is very little water in this mine at present. While the collar of the shaft has caved somewhat, this may easily be caught up preparatory to retimbering the entire shaft.

This La Plata shaft is ideally located for the main working shaft for the property. There is ample room for all shops and mine buildings back from the collar of the shaft. The present mill is located just below the top of the shaft and here should be, I think, the mill constructed to handle the ore from the mine.

Some 500' East of this shaft three of the small rich veins join the main vein and at this point are as follows:

To the North, Brewster and Jumbo, and on the South the Empire vein. The Empire vein carries a high grade streak about 4" wide which averages 250 ounces per ton. The Jumbo vein were worked some 1,000' from its junction with the main vein, carried exceptionally rich ore from 6" to 16" wide --- The values being from several hundred to several thousand ounces per ton. There was mined here a streak of about 2" in width of pure horn silver with several

inches along side, this of rich native silver. The brewster vein were opened by short tunnels and shallow shifts shows also some very rich ore.

It is my opinion that where these veins make off the main vein so close together that here in the main vein must be encountered a large, extremely rich body of ore.

Where the Grubstake vein encountered the main vein just East of the Mc Morris shaft, (see sketch) the only place where such a condition was investigated, a very rich body of ore was found. Also, at this point only one vein made off while at the point East of the La Plata shaft, three known veins make off, all very rich.

At the present time, shipments of high grade ore are being made from adjacent claims to the South of this property, some few hundred feet distant. The ore is reported to average better than $1.00 per pound.

The following copied from Smelter Returns Statements represent a few of the shipments of ore made leasors since the property has been owned by the Alexander family, the bulk of the records having been lost:

Date	Smelter	Smelter #	Oz. Au.	Per Ton Assay Value Oz.Ag.
9-27-21	El Paso	882		84.5
4-21-22	El Paso	494		55.2
10-3-22	Selby	9882	.42	1021.0
10-9-22	O. D.	88		64.77
10-16-22	O. D.	83		147.84
10-30-22	O. D.	94		57.47
1-2-23	O. D.	131		150.28
3-2-23	O. D.	27		83.64
4-5-23	O. D.	53	.025	62.54
4-6-23	O. D.	52		64.12
4-24-23	Selby	1886	.07	1709.65
5-3-23	O. D.	68		64.28
12-10-23	O. D.	136		201.58
12-5-24	O. D.	137		166.15

The following copied from Smelter Return Statements represent a few of the shipments of ore made from the Jumbo vein, one of the side veins making off the main vein to the North. The junction of this vein with the Main Vein should be found East of the La Plata shaft on the La Plata Claim:

Date	Smelter	Smelter #	Per Ton Assay Value Oz. Au.	Oz. Ag.
3-17-17	Selby	8977		6124.29
3-17-17	Selby	8978		1218.89
5-12-17	Selby	6554		8595.49
5-12-17	Selby	6552		1866.99
5-12-17	Selby	6553		202.77
5-28-17	Selby	9511		2155.24
5-28-17	Selby	9510		2901.41
6-5-17	Selby	9583		121.80
7-5-17	A. S. & R.	70	.08	995.6
7-18-21	A. S. & R.	92		1226.5
8-4-17	A. S. & R.	124		767.6
8-16-17	A. S. & R.	144		844.7
8-21-17	A. S. & R.	146		35.4
8-27-17	A. S. & R.	161		967.6
9-6-17	A. S. & R.	200		948.7
9-20-17	A. S. & R.	225		48.5
9-20-17	A. S. & R.	232		415.7
10-20-17	A. S. & R.	251		402.0
10-11-17	Selby	548	.133	994.96
10-26-17	Selby	635	.07	1353.04