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Arizona Department of Mines and Mineral Resources Mining Collection

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PRINTED: 08-01-2006

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SENATOR MORGAN MINE GROUP

ALTERNATE NAMES:

PIMA COUNTY MILS NUMBER: 242

LOCATION: TOWNSHIP 18 S RANGE 12 E SECTION 1 QUARTER SW
LATITUDE: N 31DEG 53MIN 16SEC LONGITUDE: W 111DEG 04MIN 42SEC
TOPO MAP NAME: TWIN BUTTES - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER SULFIDE
SILVER
ZINC SULFIDE
LEAD SULFIDE
TUNGSTEN
GOLD LODE

BIBLIOGRAPHY:
AZBM BULL. 189, P. 138, 1974
ADMMR SENATOR MORGAN MINE FILE
USBM RI 5650, P. 85-92
USGS BULL. 725-J, P. 425
AZBM BULL. 148, P. 37
EAGLE-PICHER (GEO. FILE) G.W. FOWLER REPORT
ADMMR MAPS UPSTAIRS IN FLAT STORAGE -
DRAWER 5

Tom Butler Mining
& Smelting Co

229 E Wisconsin Ave
Milwaukee Wis

See U. S. Boy Dr.
Tucson

Wm. S. Foy.
~~Box 64~~
~~Tucson~~
or
R. Ely Stark Box 21
Tucson

SENATOR MORGAN MINE

PIMA DISTRICT

PIMA COUNTY

see REPORT TWIN BUTTES GROUP COPPER MINES by Howard H. Fields, dated March, 1950 - (Southern Group)

TWIN BUTTES MINES (file)

REFERENCES:

see: USBM RI 5650 pp 85-92
USGS Bull. 725-J p 425
Eagle-Picher (geology file) G.M.Fowler Report June 1938
ABM # 148 p. 37
ABM Bul. 189 p. 138
MILS Sheet sequence number 0040190392
Maps upstairs in flat storage area - Drawer 5

December 20, 1942

MEMORANDUM CHAS. M. TAYLOR

TO: Director, Dept. Mineral Resources

FROM: George A. Ballam

During the next week, when I hope to have a day or two in Tucson, I expect to prepare reports on the SENATOR MORGAN MINE at Twin Buttes and the MOHAWK SILVER MINE in the Rosemont district. Mr. Taylor is making application for a preliminary development loan on the former and a B loan on the latter. I have been over both properties and am waiting for the metallurgical results on 100 tons of Morgan ore milled at the Tucson Ore Milling Co. recently.

In addition, Dr. Eldred Wilson of the Arizona Bureau of Mines will make available for inclusion in the MOHAWK SILVER report information gained in his examination.

Mr. Taylor will not submit either application for a couple of weeks by which time my reports will be in. He is awaiting termination of a lease on the Morgan, and receipt of correspondence from Lewisohn on the Mohawk.

(Signed) G. A. Ballam

October 27, 1942 C

MEMORANDUM

MORGAN MINE

TO: George A. Ballam

FROM: Earl F. Hastings

The possibilities of obtaining a "B" loan on this property are not the best as the program leans more toward the prospecting side than that of strictly development. However, a well prepared application might turn the trick.

The only way to find out about this one would be to make the application and see if the RFC examining engineers could interpret it as development.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

REPORT BY:
A. BRODIE CAMPBELL

M S-94

Date May 7, 1942

1. Mine Senator Morgan Mine

2. Mining District & County Pima County

3. Former name None

4. Location Pima County - Pima Mining Dist.
Middle Buttes Mts.
27 miles S. E. Tucson

5. Owner Twin Buttes Mining & Smelting Co.

6. Address (Owner) ?

7. Operator C. M. Taylor

8. Address (Operator) County Assessors Office
Tucson, Arizona

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals Scheelite, copper & iron

14. Men Employed None

15. Production Rate

16. Mill: Type & Cap.

17. Power: Amt. & Type

18. Operations: Present Trenching & sampling work by the United States Bureau of Mines.

19. Operations Planned Depends on outcome of present sampling.

20. Number Claims, Title, etc.

21. Description: Topography & Geography Rolling hills in Tucson bolaa. Typical semi-arid country

22. Mine Workings: Amt. & Condition Senator Morgan Minehas been extensively worked as a copper producer in past. Opened to a depth of 900'. At present open to 165' level. Still evidence of considerable copper.

(over)

23. Geology & Mineralization Granite intrusion into sediments. Scheelite occurs on south end of metamorphosed section, in lime and silicified sandstone. Copper and iron minerals present in general ore zone. Vary in degrees of oxidation. Tungsten present in quartz veins as scheelite. Veins contain some sericite and garnet. Weak tungsten according to lamp.

24. Ore: Positive & Probable, Ore Dumps, Tailings None as far as tungsten is concerned. Some ore probably if test work shows commercial tungsten. There are not over 20,000 tons of quartz above water level if there is commercial tungsten present.

24-A Vein Width, Length, Value, etc. Very questionable. Vein is cut up too, badly. However, scheelite mostly occurs within 300' of contact.

25. Mine, Mill Equipment & Flow Sheet None

26. Road Conditions, Route Good to within one mile of property. Passable from there on. Go to Sahuarita on Nogales-Tucson road (18 mi.) Turn west 9 miles.

27. Water Supply Should be ample from old mine workings for small mill.

28. Brief History Large production of copper ore in past. All shipping grade. No tungsten production.

29. Special Problems, Reports Filed See U.S.B.M report when made.

30. Remarks It is very questionable if this property is a possible producer of tungsten. The grade is quite low and the conditions are too faulted to lend to cheap mining.

31. If property for sale: Price, terms and address to negotiate. Yes. See C. M. Taylor

32. Signed.....

33. Use additional sheets if necessary.

Oct. 21, 1942

DEPT. MINERAL RESOURCES
RECEIVED
OCT 23 1942
PHOENIX, ARIZONA

MEMORANDUM

Morgan Mine
(Scheelite)

To: Director, Dept. Mineral Resources
From: George A. Ballam

Maurice d'Autremont and David Richards, et al, of Tucson are leasing this property from Chas. Taylor. It is an old copper property situated about one-quarter mile south of the Contention (W. Foy) in Twin Buttes. Taylor has done considerable work on a number of quartz veins on the surface, and started a shaft about 38 ft. deep in one of the larger veins. This showing, on the surface, and six to twelve feet wide down the shaft, showed an average of 0.75% WO_3. This prospect shaft is about 90' southwest of Morgan shaft.

The above lessees are continuing development, and have hauled 75 tons of the ore in to the Jacobs mill for test run. Preliminary tests showed 70% recovery, but the larger test will be started in a day or so when the mill will be put in operation.

They have been anxious to secure a "B" loan. On the theory that the Morgan could be operated for copper with the scheelite being brought in also, we went into the old workings. They had proposed to continue a cross-cut to the quartz on the 165 level, started last year, and lacking about 45 ft. of cutting the quartz vein. There is no copper ore showing in this area. To the other side of the shaft, east, on this level, there has been extensive stoping, almost to the surface, and practically all of the ore has been taken out. Water stands about 60 ft. below the level, there being other levels at 300 and 400 ft. No information is available as to copper reserves below this level, but from the appearance of the workings, considerable work has been done, and if as thoroughly below as above, there is little chance of much production of copper from this property, and it must be considered on its merits as a tungsten producer exclusively.

In the new work on the 165 ft. level to the South west of the Morgan shaft, several small quartz stringers have been cut which show scheelite with the lamp. The proposed continuation of the cross-cut to the main vein will develop several thousand tons of ore, which the operators believe will also be of commercial grade.

Naturally the proposition resolves itself into one of prospecting and development. While I did not want to assume the responsibility of discouraging them from making application for a "B" loan, I believe further work should be done before applying. They have free access to a diamond drill with equipment, and I believe they could prove the orebody in size and values from the face most readily in this manner. I suggested this and they are considering it. d'Autremont estimated the cost of this operation at less than $400, and it would give them something concrete to base their loan application on, in the event it panned out as expected.

d'Autremont is in about $1000. If there is little possibility to get a "B" loan on the property, he can possibly get out on the ore developed - about 300 tons - by the prospect shaft, although Charlie Taylor is hot after a loan. Kindly advise whether loans are being made on this sort of set-up.

GA Ballam

January 4, 1942

C

MEMORANDUM

TO: George A. Ballam

FROM: Earl F. Hastings

The Senator Morgan application has been received by this office and is being returned with our approval tomorrow.

NAME OF MINE: SENATOR MORGAN

COUNTY: PIMA
DISTRICT: S
METALS: W

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	Charles M. Taylor Pima County Court House Tucson, Arizona	5/1/44	Closed

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DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date .....

1. Mine: SENATOR MORGAN
2. Location: Sec. ..... Twp. ..... Range ..... Nearest Town .....
   Distance ..... Direction ..... Road Condition .....
3. Mining District & County: .....
4. Former Name of Mine: .....
5. Owner: .....
   Address: .....
6. Operator: .....
   Address: .....
7. Principal Minerals: .....
8. Number of Claims: ..... Lode ..... Placer .....
   Patented ..... Unpatented .....
9. Type of Surrounding Terrain: .....

10. Geology & Mineralization: .....

11. Dimension & Value of Ore Body: .....

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Senator Morgan — Date Dec. 22, 1942

District Pima, (Twin Buttes) — Engineer George A. Ballam

Subject: Report on Possible Tungsten Production

The Senator Morgan mine is situated in Twin Buttes in the Pima Mining Dist., 29 miles southwest of Tucson. It is owned by the Twin Buttes Mining & Smelting Co., 229 E. Wisconsin Ave., Milwaukee. During the period 1906 - 13 the mine produced 132,000 tons of copper ores which with contained silver, had a gross value of over $2,000,000. It is reached by a graded highway from either Tucson or Sahuarita on the Tucson-Nogales highway.

Locally, the rocks are southwestward dipping quartzsite and shales, with considerable garnet, epidote, and some oxides of iron. Just west of the Morgan shaft a series of shattered white quartz veins, from one to nine feet in width and of a general northeastward strike, are distributed in echelon over a length of 600 to 700 feet. Near the center of the strike they are offset about 100 feet by each of two vertical faults about 80 feet apart. The veins themselves are dipping 75° to the northwest.

In February 1941, Mr. C. M. Taylor of Tucson, using a fluorescent lamp, found scheelite disseminated through these quartz veins. In April, he secured a five-year lease from the company on a ten per cent royalty basis. Test work included a 40-foot shaft on the main quartz vein which showed scheelite throughout its depth, the vein being from 5 to 9 feet in width, carrying 0.55% to 0.83% WO_3. 86 tons of ore taken from this shaft were hauled to the Tucson Ore Milling Co. mill and yielded a mill head of 0.6% WO_3.

For the purpose of getting greater depth on the ore body, an attempt was made to crosscut it from the 165 foot level of the Morgan shaft. Here, a drift extends inna southwesterly direction, and from this the crosscut was driven, under contract, some 150 feet, but diagonal to the vein. Some forty feet remains to be completed before contact can be made. Numerous quartz stringers were cut which lamped scheelite.

On the 265 foot level, and under 30 feet of water, there is a westerly drift 570 feet in length, which, according to the company's survey maps, cuts a large quartz vein at 90 feet from the shaft, and should cut successively the other veins in the series, although the smaller ones are not indicated on the map.

The 86 tons of ore milled was run before this mill was completely equipped to properly handle it, although such installation is now in progress. Using only one table, and without classification or middlings regrind, a concentrate of better than 62% WO_3 was obtained.

An estimated 9000 tons of ore is probable in the 80 foot section of the main vein developed by the 40 foot shaft. This is calculated to the 265 foot level over an average width of six feet. On the basis of 0.6% WO_3 a tungstic oxide

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Senator Morgan Date

District Engineer

Subject:

Content
of over 100,000# is indicated. The balance of the main vein has not been developed or sampled, nor have the parallel outcrops adjacent to the westward.

Three men have been working during the past few weeks, mining and hauling over three tons of ore to the mill daily. There is no equipment on the property. The shaft is in good repair to the 165 foot level where it is bulkheaded off, and nothing is known of the condition of the shaft to the water level about 70 feet below. There are extensive workings down to the 500 foot bottom and ample water is available for milling purposes.

J. A. Ballam

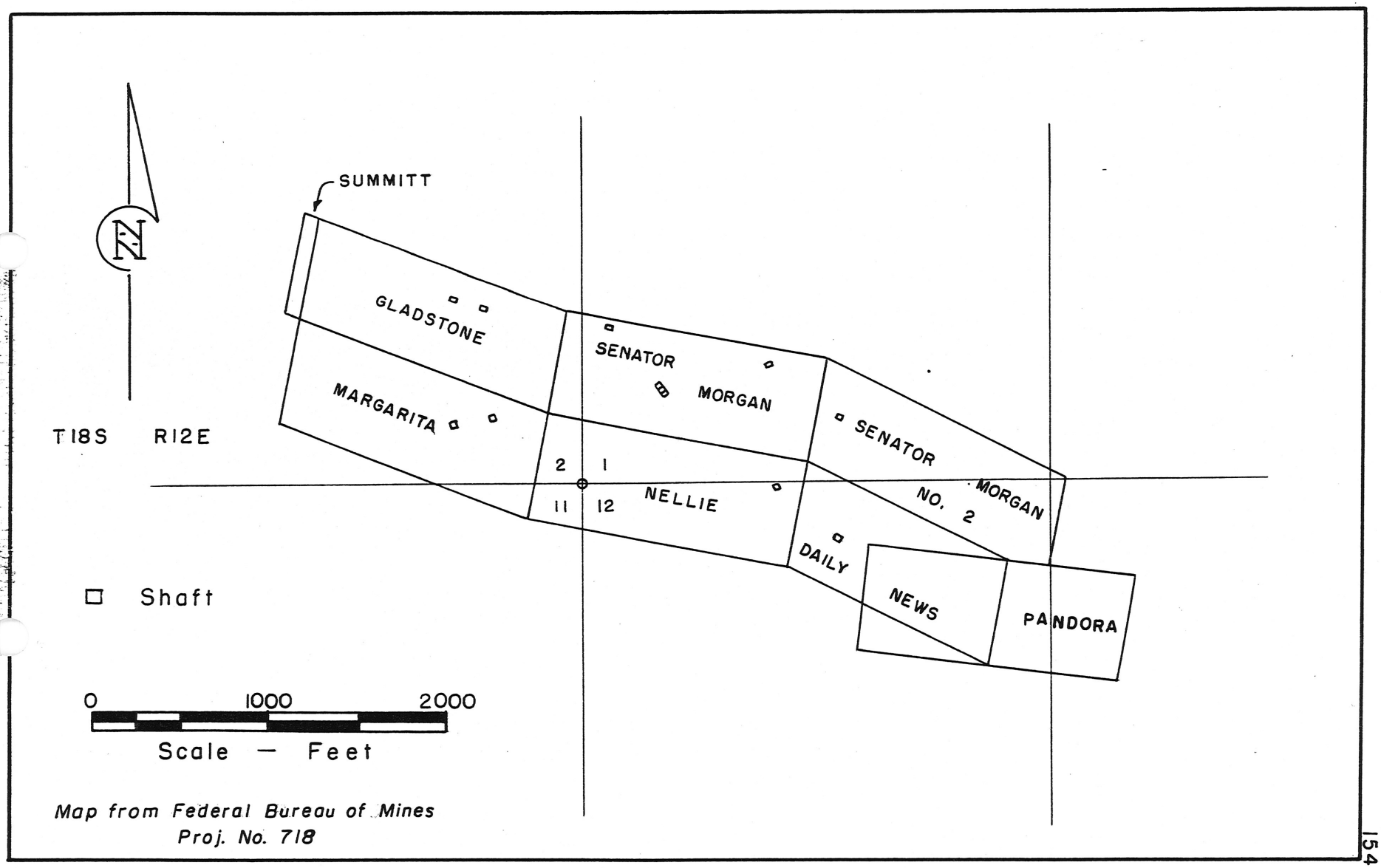
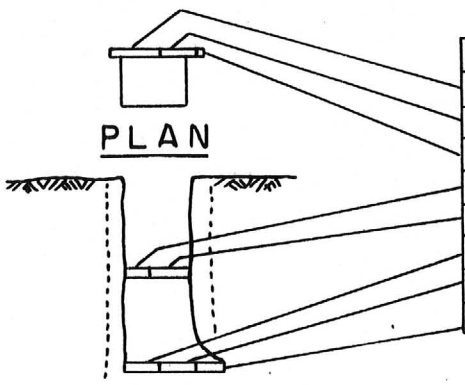


Fig. 30-Claim map, Morgan Group

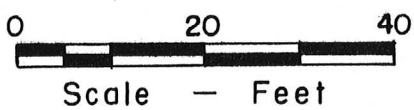


No.	Length	%WO_3
42	5.0	0.05
41	"	0.33
40	1.0	0.48
19	3.0	0.01
18	4.0	0.01
16	"	*0.01
15	3.5	*0.01
32	3.6	0.20

16-B
LOOKING NE

* Less than

Note: Length in feet



Map from Federal Bureau of Mines
Proj. No. 718

Fig. 35 - Test pit No. 16-B, Senator Morgan Mine

NOTE Length in feet.

CORRECTION 4

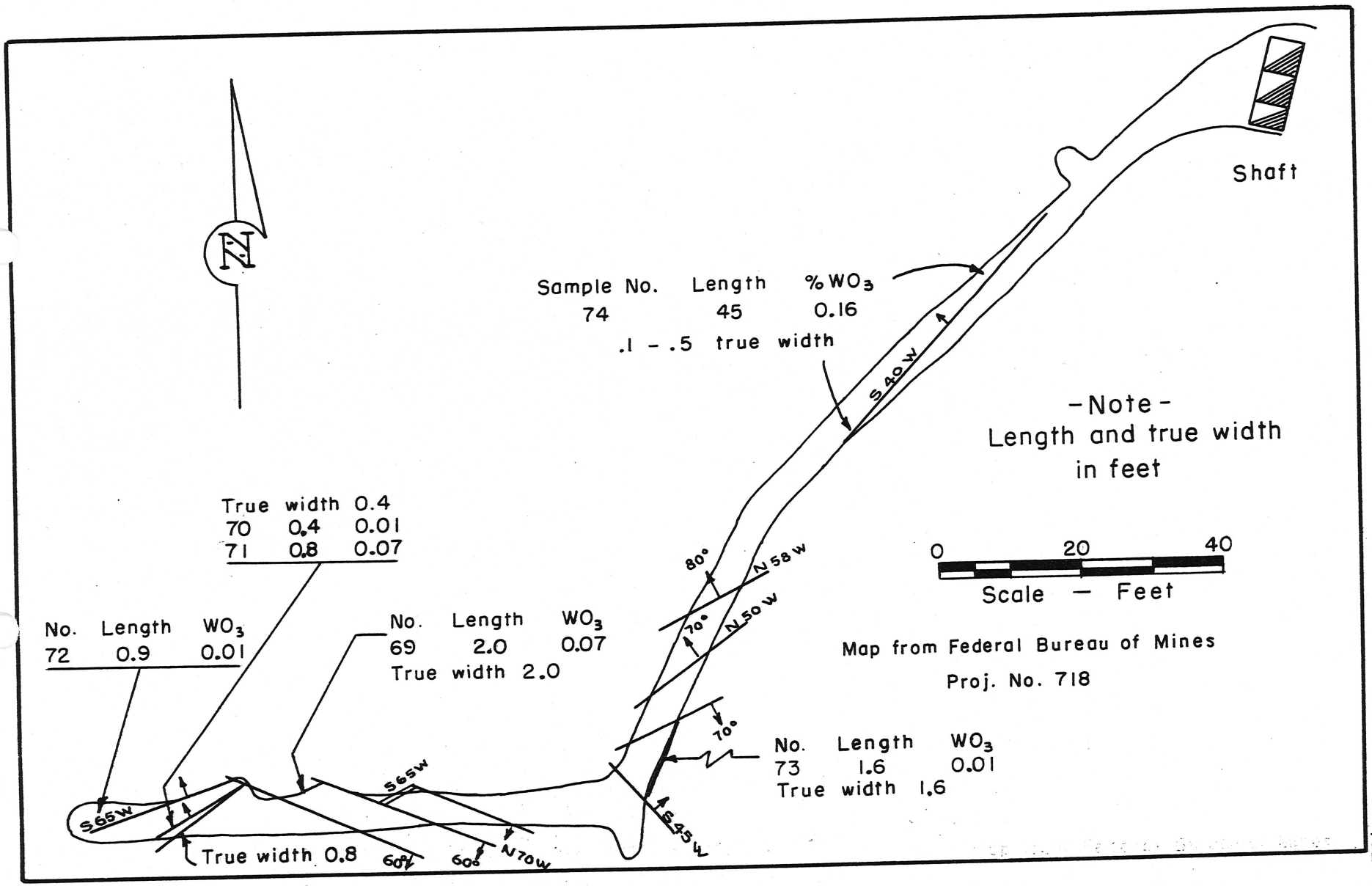


Fig. 36 - Senator Morgan Mine, Morgan (Old) Shaft 165' Level

note: Length & true width in feet.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

REPORT BY:
A. BRODIE CAMPBELL

M S-94

Date May 7, 1942

1. Mine Senator Morgan Mine

2. Mining District & County Pima County

3. Former name None

4. Location Pima County - Pima Mining Dist.
Middle Buttes Mts.
27 miles S. E. Tucson

5. Owner Twin Buttes Mining & Smelting Co.

6. Address (Owner) ?

7. Operator C. M. Taylor

8. Address (Operator) County Assessors Office
Tucson, Arizona

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals Scheelite, copper & iron

14. Men Employed None

15. Production Rate

16. Mill: Type & Cap.

17. Power: Amt. & Type

18. Operations: Present Trenching & sampling work by the United States Bureau of Mines.

19. Operations Planned Depends on outcome of present sampling.

20. Number Claims, Title, etc.

21. Description: Topography & Geography Rolling hills in Tucson bolaa. Typical semi-arid country

22. Mine Workings: Amt. & Condition Senator Morgan Minehas been extensively worked as a copper producer in past. Opened to a depth of 900'. At present open to 165' level. Still evidence of considerable copper.

(over)

23. Geology & Mineralization Granite intrusion into sediments. Scheelite occurs on south end of metamorphosed section, in lime and silicified sandstone. Copper and iron minerals present in general ore zone. Vary in degrees of oxidation. Tungsten present in quartz veins as scheelite. Veins contain some sericite and garnet. Weak tungsten according to lamp.

24. Ore: Positive & Probable, Ore Dumps, Tailings None as far as tungsten is concerned. Some ore probably if test work shows commercial tungsten. There are not over 20,000 tons of quartz above water level if there is commercial tungsten present.

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25. Mine, Mill Equipment & Flow Sheet None

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28. Brief History Large production of copper ore in past. All shipping grade. No tungsten production.

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30. Remarks It is very questionable if this property is a possible producer of tungsten. The grade is quite low and the conditions are too faulted to lend to cheap mining.

31. If property for sale: Price, terms and address to negotiate. Yes. See C. M. Taylor

32. Signed.....

33. Use additional sheets if necessary.

December 20, 1942

MEMORANDUM CHAS. M. TAYLOR

TO: Director, Dept. Mineral Resources

FROM: George A. Ballam

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(Signed) G. A. Ballam

October 27, 1942 C

MEMORANDUM

MORGAN MINE

TO: George A. Ballam

FROM: Earl F. Hastings

The possibilities of obtaining a "B" loan on this property are not the best as the program leans more toward the prospecting side than that of strictly development. However, a well prepared application might turn the trick.

The only way to find out about this one would be to make the application and see if the RFC examining engineers could interpret it as development.

Oct. 21, 1942

DEPT. MINERAL RESOURCES
RECEIVED
OCT 23 1942
PHOENIX, ARIZONA

MEMORANDUM

Morgan Mine
(Scheelite)

To: Director, Dept. Mineral Resources
From: George A. Ballam

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d'Autremont is in about $1000. If there is little possibility to get a "B" loan on the property, he can possibly get out on the ore developed - about 300 tons - by the prospect shaft, although Charlie Taylor is hot after a loan. Kindly advise whether loans are being made on this sort of set-up.

GA Ballam

January 4, 1942

MEMORANDUM

TO: George A. Ballam

FROM: Earl F. Hastings

The Senator Morgan application has been received by this office and is being returned with our approval tomorrow.

46

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date

1. Mine: SENATOR MORGAN
2. Location: Sec. Twp. Range Nearest Town
   Distance Direction Road Condition
3. Mining District & County:
4. Former Name of Mine:
5. Owner:
   Address:
6. Operator:
   Address:
7. Principal Minerals:
8. Number of Claims: Lode Placer
   Patented Unpatented
9. Type of Surrounding Terrain:

10. Geology & Mineralization:

11. Dimension & Value of Ore Body:

12. Ore "Blocked Out" or "In Sight":

Ore Probable:

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts		
Raises		
Tunnels		
Crosscuts		
Stopes		

14. Water Supply:

15. Brief History:

16. Signature:

17. If Property for Sale, List Approximate Price and Terms:

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Senator Morgan Date Dec. 22, 1942

District Pima, (Twin Buttes) Engineer George A. Ballam

Subject: Report on Possible Tungsten Production

The Senator Morgan mine is situated in Twin Buttes in the Pima Mining Dist., 29 miles southwest of Tucson. It is owned by the Twin Buttes Mining & Smelting Co., 229 E. Wisconsin Ave., Milwaukee. During the period 1906 - 13 the mine produced 132,000 tons of copper ores which with contained silver, had a gross value of over $2,000,000. It is reached by a graded highway from either Tucson or Sahuarita on the Tucson-Nogales highway.

Locally, the rocks are southwestward dipping quartzsite and shales, with considerable garnet, epidote, and some oxides of iron. Just west of the Morgan shaft a series of shattered white quartz veins, from one to nine feet in width and of a general northeastward strike, are distributed in echelon over a length of 600 to 700 feet. Near the center of the strike they are offset about 100 feet by each of two vertical faults about 80 feet apart. The veins themselves are dipping 75° to the northwest.

In February 1941, Mr. C. M. Taylor of Tucson, using a fluorescent lamp, found scheelite disseminated through these quartz veins. In April, he secured a five-year lease from the company on a ten per cent royalty basis. Test work included a 40-foot shaft on the main quartz vein which showed scheelite throughout its depth, the vein being from 5 to 9 feet in width, carrying 0.55% to 0.83% WO_3. 86 tons of ore taken from this shaft were hauled to the Tucson Ore Milling Co. mill and yielded a mill head of 0.6% WO_3.

For the purpose of getting greater depth on the ore body, an attempt was made to crosscut it from the 165 foot level of the Morgan shaft. Here, a drift extends inna southwesterly direction, and from this the crosscut was driven, under contract, some 150 feet, but diagonal to the vein. Some forty feet remains to be completed before contact can be made. Numerous quartz stringers were cut which lamped scheelite.

On the 265 foot level, and under 30 feet of water, there is a westerly drift 570 feet in length, which, according to the company's survey maps, cuts a large quartz vein at 90 feet from the shaft, and should cut successively the other veins in the series, although the smaller ones are not indicated on the map.

The 86 tons of ore milled was run before this mill was completely equipped to properly handle it, although such installation is now in progress. Using only one table, and without classification or middlings regrind, a concentrate of better than 62% WO_3 was obtained.

An estimated 9000 tons of ore is probable in the 80 foot section of the main vein developed by the 40 foot shaft. This is calculated to the 265 foot level over an average width of six feet. On the basis of 0.6% WO_3 a tungstic oxide

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Senator Morgan Date

District Engineer

Subject:

content
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J. A. Ballam

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine SENATOR MORGAN MINE Date May 7, 1942

District Pima, Pima County Engineer

Subject:

Location: Pima Mining District, Pima County, Arizona. Middle Buttes Mountains 27 miles S.E. Tucson.

Owner: Twin Buttes Mining and Smelting

Operator: C. M. Taylor

Address (Operator): County Assessors Office, Tucson, Arizona.

Principal Minerals: Scheelite, copper, iron.

Men Employed: None.

Operations: Present: Trenching and sampling work by the U. S. Bureau of Mines

Operations: Planned: Depends on outcome of present sampling.

Description: Topography & Geography: Rolling hills in Tucson bolsa. Typical semi-arid country.

Mine Workings: Amt. & Condition: Senator Morgan mine has been extensively worked as a copper producer in past. Opened to a depth of 900'. At present open to 165' level. Still evidence of considerable copper.

Geology & Mineralization: Granite intrusion into sediments. Scheelite occurs on south end of metamorphosed section, in lime and silicified sandstone. Copper and iron minerals present in general ore zone. Vary in degrees of oxidation.

Tungsten present in quartz veins as scheelite. Veins contain some sericite and garnet. Weak tungsten according to lamp.

Ore: Positive & Probable, Ore Dumps, Tailings: None as far as tungsten is concerned. Some probable ore if test work shows commercial tungsten. There is not over 20,000 tons of quartz above water level if there is commercial tungsten present.

Dimensions and Value of Ore body: Very questionable. Vein is cut up too badly. However scheelite mostly occurs within 300' of contact.

Mine, Mill Equipment & Flow-Sheet: None.

Road Conditions, Route: Good road to within one mile of property. Passable from there on. Go to Sahuarita on Nogales Tucson road. (18 miles) Turn west 9 miles.

Water Supply: Should be ample from old mine workings for small mill.

Brief:History: Large production of copper ore in past. All shipping grade. No tungsten production.

Special Problems, Reports Filed: See U. S. B. M. report when made.

Remarks: It is very questionable if this property is a possible producer of tungsten. The grade is quite low and the conditions are too faulted to lend to cheap mining.

If property for sale: Price, terms and address to negotiate: Yes. See C. M. Taylor.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine SENATOR MORGAN MINE Date May 7, 1942

District Pima, Pima County Engineer

Subject:

Location: Pima Mining District, Pima County, Arizona. Middle Buttes Mountains 27 miles S.E. Tucson.

Owner: Twin Buttes Mining and Smelting

Operator: C. M. Taylor

Address (Operator): County Assessors Office, Tucson, Arizona.

Principal Minerals: Scheelite, copper, iron.

Men Employed: None.

Operations: Present: Trenching and sampling work by the U. S. Bureau of Mines

Operations: Planned: Depends on outcome of present sampling.

Description: Topography & Geography: Rolling hills in Tucson bolsa. Typical semi-arid country.

Mine Workings: Amt. & Condition: Senator Morgan mine has been extensively worked as a copper producer in past. Opened to a depth of 900'. At present open to 165' level. Still evidence of considerable copper.

Geology & Mineralization: Granite intrusion into sediments. Scheelite occurs on south end of metamorphosed section, in lime and silicified sandstone. Copper and iron minerals present in general ore zone. Vary in degrees of oxidation.

Tungsten present in quartz veins as scheelite. Veins contain some sericite and garnet. Weak tungsten according to lamp.

Ore: Positive & Probable, Ore Dumps, Tailings: None as far as tungsten is concerned. Some probable ore if test work shows commercial tungsten. There is not over 20,000 tons of quartz above water level if there is commercial tungsten present.

Dimensions and Value of Ore body: Very questionable. Vein is cut up too badly. However scheelite mostly occurs within 300' of contact.

Mine, Mill Equipment & Flow-Sheet: None.

Road Conditions, Route: Good road to within one mile of property. Passable from there on. Go to Sahuarita on Nogales Tucson road. (18 miles) Turn west 9 miles.

Water Supply: Should be ample from old mine workings for small mill.

Brief:History: Large production of copper ore in past. All shipping grade. No tungsten production.

Special Problems, Reports Filed: See U. S. B. M. report when made.

Remarks: It is very questionable if this property is a possible producer of tungsten. The grade is quite low and the conditions are too faulted to lend to cheap mining.

If property for sale: Price, terms and address to negotiate: Yes. See C. M. Taylor.

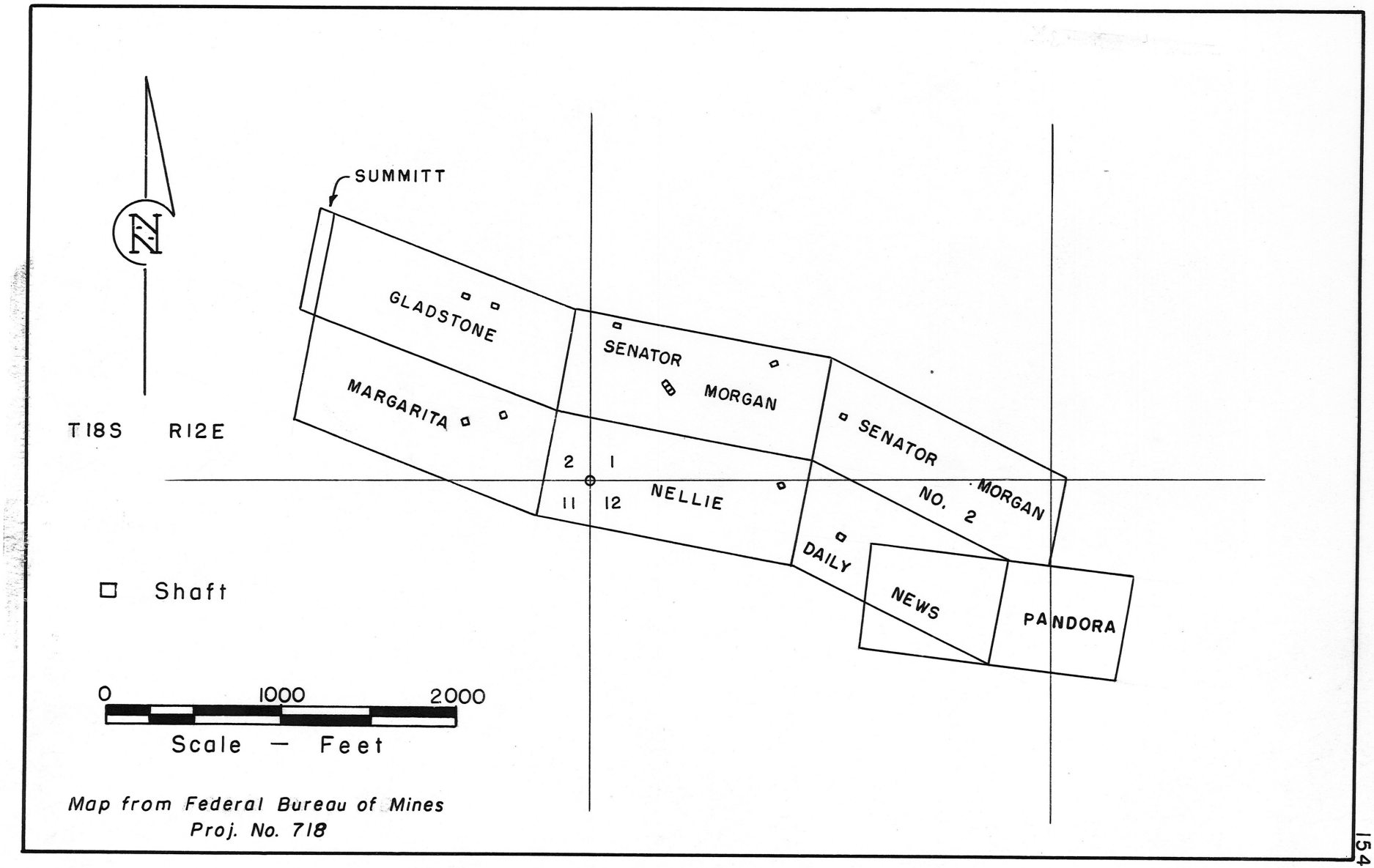


Fig. 30-Claim map, Morgan Group

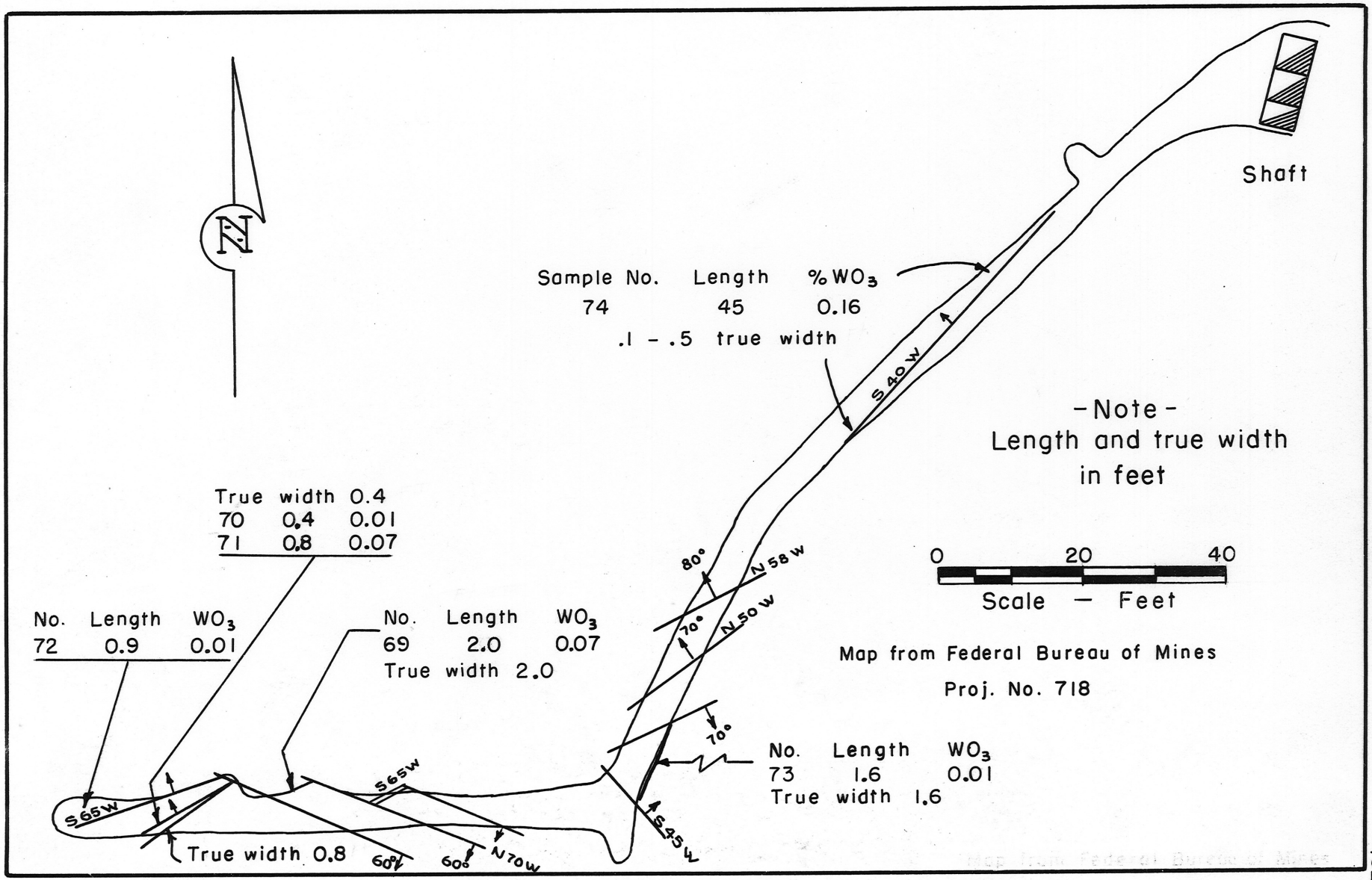
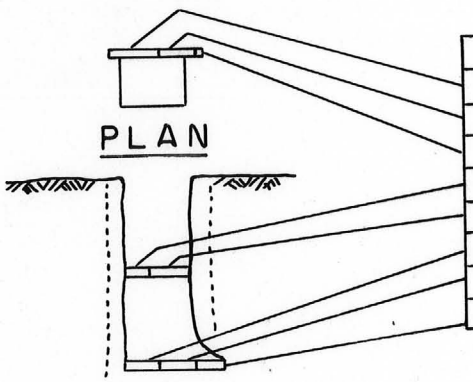


Fig. 36 - Senator Morgan Mine, Morgan (Old) Shaft 165' Level

Note: Length & true width in feet.

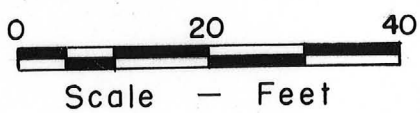


No.	Length	%WO_3
42	5.0	0.05
41	"	0.33
40	1.0	0.48
19	3.0	0.01
18	4.0	0.01
16	"	*0.01
15	3.5	*0.01
32	3.6	0.20

16-B
LOOKING NE

* Less than

Note: Length in feet



Map from Federal Bureau of Mines
Proj. No. 718

Fig. 35 - Test pit No. 16-B, Senator Morgan Mine

NOTE Length in feet.

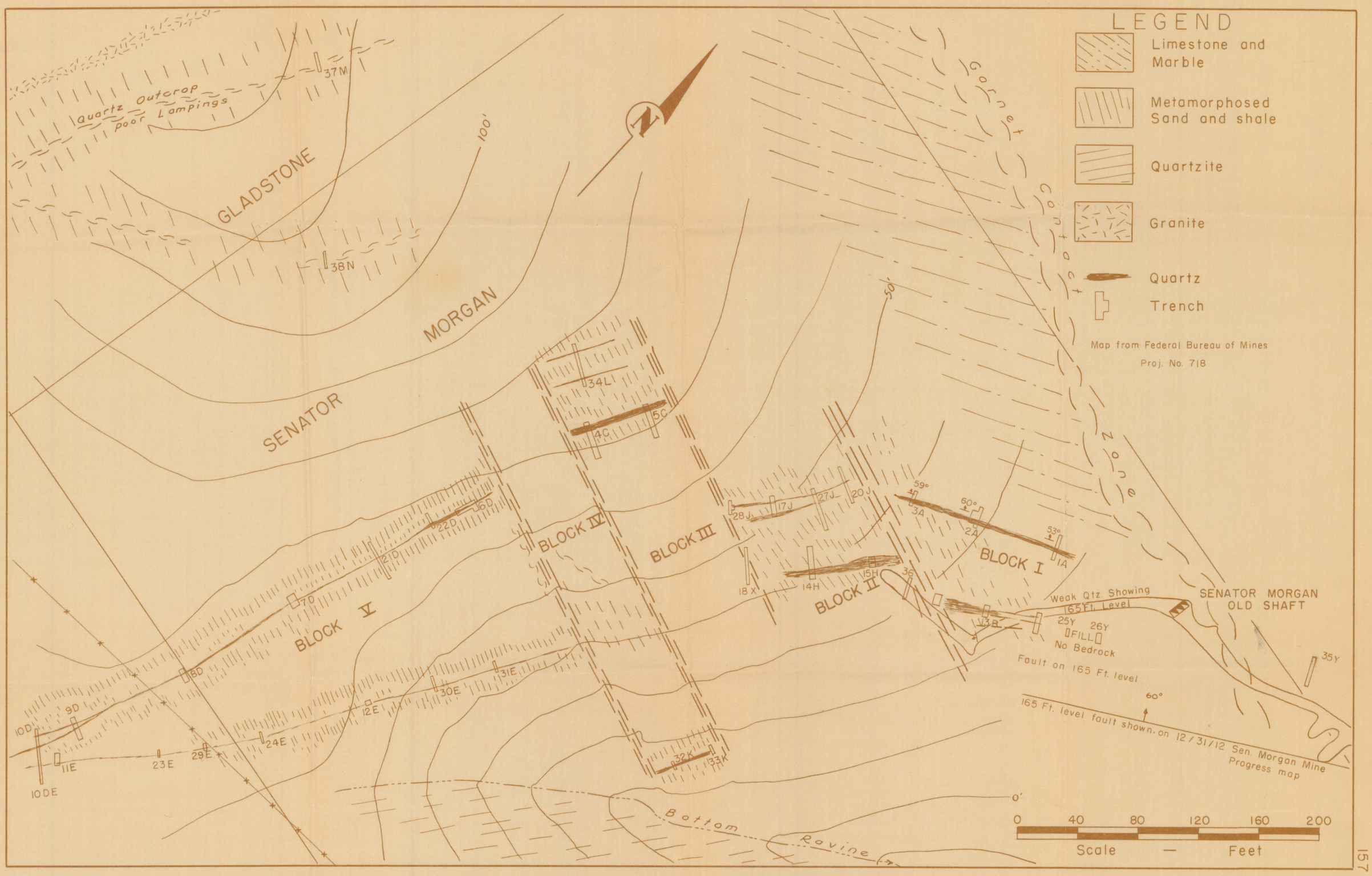


Fig. 31 - Quartz Area, Senator Morgan Mine (Composite)

Pima

REDUCE THIS

TO THIS

MICROFILMED JUN 11