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PRINTED: 01/14/2004

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: DIXIE

ALTERNATE NAMES:
UNCLE JOHN
SETH PARKER
RED MOUNTAIN

MARICOPA COUNTY MILS NUMBER: 495

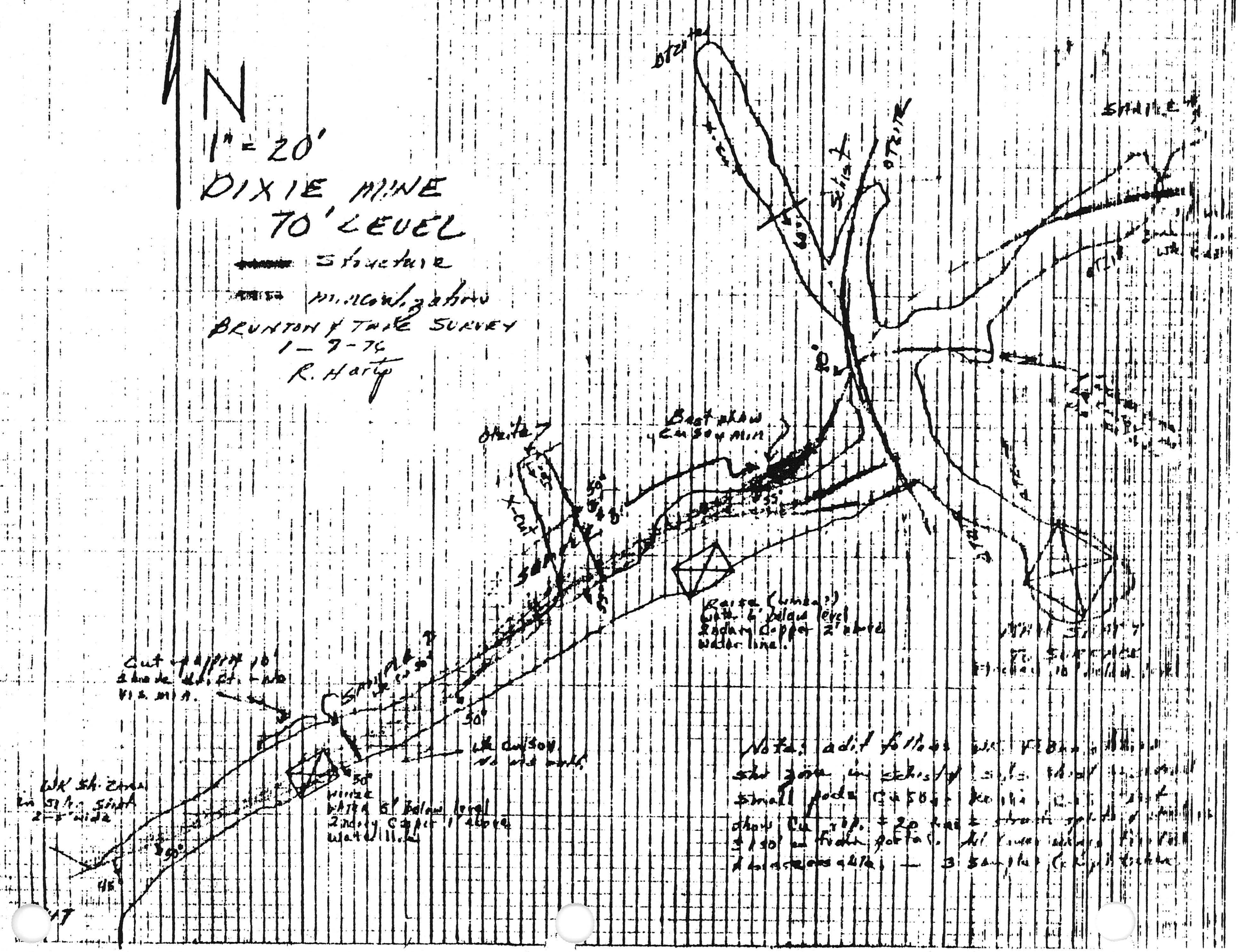
LOCATION: TOWNSHIP 4 N RANGE 5 E SECTION 25 QUARTER SW
LATITUDE: N 33DEG 39MIN 15SEC LONGITUDE: W 111DEG 47MIN 10SEC
TOPO MAP NAME: MCDOWELL PEAK - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:
COPPER OXIDE
SILVER
GOLD LODE
TIN

BIBLIOGRAPHY:
USGS MCDOWELL PEAK QUAD
ADMMR DIXIE MINE FILE
ADMMR "U" FILE
US DEPT. OF INTERIOR DECLARED CLAIMS NULL & VOID
ADMMR RED MTN CONSOLIDATED COPPER MINES CO. FILE

ATTACHMENT No. 13



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine	Dixie Mine	Date	June 29, 1962
District	McDowell Dist., Maricopa Co.	Engineer	Lewis A. Smith

Subject: Interview with A. Ben Shallit, 4841 E. Redrock Drive, Phoenix, 6-28-62.
Location: T. 4 N., R. 6 E., S 30 (6 miles W of Fort McDowell)

Mr. Shallit, who retired from the R.F.C. recently, visited the mine and reported that the mineralization was apparently controlled by pre-mineral cross-fractures intersecting the shear veins. This caused localization of the better ore into lenses. The area consists of schist (host rock) intruded by porphyry and the ore lying in sheared and silicified zones trending generally close to "quartz-porphyry" dikes which have apparently caused severe shearing. These zones trend generally NE-SW. The dip is 40 to 50 degrees SW. Sometimes the outcrop can be traced for 5000 feet on the strike and the mineralized belt is up to 100' wide locally.

Meyers, in an early report, mentioned that the mineralized area contained a gossanlike impregnation of iron oxides. The rock at or near the surface is cellular and pitted which Meyers attributes to leaching out of former sulphides.

Mr. Shallit stated that he had seen several assays which showed as much as 2 percent of tin, in addition to copper, silver, and gold. However, the mineralization, on the whole, excluding the tin, was low grade with local better concentrations. He was interested in checking the tin assays, since tin analyses are difficult to run properly.

The property has a 240 ft. vertical shaft, a 300 foot tunnel and a 125 foot drift at or near the bottom of the shaft. The shaft and drift were unwatered during 1960 by Sam M. Serrine and W. W. Serrine, but they soon afterward gave up the lease and left.

MD-27

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date: 6-22-1942

1. Mine: Dixie Tufa

2. Location: Ft. McDowell - 38 miles N.E. of Phoenix.

3. Mining District & County: Dixie Mining Dist. - Maricopa Co.

4. Formmer name:

5. Owner: C. A. Gillespie

6. Address (Owner) 1708 S. 1st St., Phoenix

7. Operator

8. Address (Operator)

9. President, Owning Co.

9A. President, Operating co.

10. Gen. Mgr.

14. Principal Minerals: Tufa Rock

11. Mine Supt.

15. Production Rate

12. Mill Supt.

16. Mill - Type & Cap.

13. Men Employed:

17. Power - Amt. & Type:

18. Operations - Present: None

19. Operations - Planned: None

20. Number Claims, Title, etc.: 2 - Clear - Located in 1940. Has filed intention to hold for 1942-43.

21. Description - Topography & Geography: About 2500 ft. elevation - located on one side of dry wash - with from 30 to 40 ft. from creek bed to top of mesa. Tufa exposed on straight face of creek bed - desert vegetation.

22. Mine Workings - Amt. & Condition: Only location holes - Outcrop exposed on face of bank of creek bed.

(over)

23. Geology & Mineralization: Tufa rock.

24. Ore - Positive & Probably, Ore Dumps, Tailings:

24A. Dimensions and Value of Ore body: Have unlimited supply. Bank is 30 to 40 ft. traced for 1700 ft. along creek bed.

25. Mine, Mill Equipment & Flow-Sheet:

26. Road Conditions, Route: Graded highway to within 6 mi. of property. The six mi. is ordinary mine road. They will have to be a half a mile road to be made to reach Tufa.

27. Water Supply: Have plenty of water from shaft from mining property I own. About 2500 or 3,000 ft. from Tufa

28. Brief History:

29. Special Problems, Reports Filed:

30. Remarks: The property is virgin property. Has never been worked, and has very little overburden.

31. If property for sale - Price, terms and address to negotiate.

32. Signature C. A. Gillespie

mD-27

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date 6-22-1942

1. Mine Dixie Tufa
2. Location Ft. McDowell - 38 mi. north east of Phoenix
3. Mining District & County Dixie Mining District Maricopa County
4. Former name
5. Owner C.A. Gillespie
6. Address (Owner) 1708 So. 12th St. Phoenix Ariz.
7. Operator
8. Address (Operator)
9. President, Owning Co.
9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals Tufa Rock
11. Mine Supt.
15. Production Rate
12. Mill Supt.
16. Mill: Type & Cap.
13. Men Employed
17. Power: Amt. & Type
18. Operations: Present None

19. Operations: Planned None

20. Number Claims, Title, etc. 2- Clear - Located in 1940.
Have filed intention & held for 1942-43

21. Description: Topography & Geography - Abt 2500 ft elevation - located on ne side of dry wash - with from 20 to 40 ft. from creek bed to top of mesa - ~~the~~ Tufa Exposed in straight face nw of creek bed - Desert Vegetation.

22. Mine Workings: Amt. & Condition
Only location holes - Outcrop exposed in face of bank of creek bed.

(over)

23. Geology & Mineralization Limestone -

24. Ore: Positive & Probable, Ore Dumps, Tailings

24A. Dimensions and Value of Ore body Have unlimited Supply. Bank is 30 & 40 ft. Need for 1700 ft. along Creek Rd.

25. Mine, Mill Equipment & Flow-Sheet

26. Road Conditions, Route Graded highway to within 6 miles of property. This six miles is ordinary mine road. They will have to be a half a mile road to be made to reach Supai.

27. Water Supply
Have plenty of water from shaft from mining property I own. about 2500 or 3000 feet from Supai

28. Brief History

29. Special Problems, Reports Filed

30. Remarks The property is virgin property has never been worked and has very little overburden.

31. If property for sale: Price, terms and address to negotiate.

32. Signature E. A. Gillespie

33. Use additional sheets if necessary.

C.A. Gillespie 170 So. First St

Tufa –

Dixie Mine

38 miles from Phoenix

near Fort McDowell.

Tel – 38391.

List

DIXIE MINE

MARICOPA COUNTY
McDOWELL DIST.
Winifred

Info. received that Wilfred W. Sirrine and Sam M. Sirrine, 2334 W. Monroe, Phoenix, Arizona, own the copper property DIXIE MINE near McDowell, Pinacle Peak Dist., Maricopa County.

LEWIS A. SMITH - 6-26-60 - Memo

C. H. S. says Gillespie owns this property 3-1-61
Sporadic activity - shipping to Superior 3-12-62 % Andrade

NJN WR 4/22/83: Alan Rabinoff with the BLM's Geologist Training Center called. He reported that the BLM uses the Dixie Mine in the McDowell Mountains as part of their training school. The students map a 200 foot drift in Pinal Schist. The surface has been patented to Maricopa County for use as a park but the minerals were reserved to the Federal Government. Recently some citizen was hurt in the drift so Alan was looking for guidelines for constructing a door at the portal of the drift. He was referred to the Mine Inspector's office to check for any special safety requirements.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date Aug 10th 1940

Mine Dixie

District McDowell — Location 8 miles West of McDowell

Former name Nyara Group

Owner C. H. Gallispie & Gertrude Barkley — Address Phoenix & Mesa.

Operator — — Address

President — — Gen. Mgr. —

Mine Supt. — — Mill Supt. —

Principal Metals Gold, Silver & Copper — Men Employed —

Production Rate — — Mill: Type & Cap. —

Power: Amt. & Type 240 ft Chicago Pneumatic Comp. & 65 H.P. Gas Hoist

Operations: Present —

Operations Planned Dewater & develop.

Number Claims, Title, etc. Nine - held by location

Description: Topog. & Geog. Large shear zone in porphyry schist.

Mine Workings: Amt. & Condition 240' Vertical shaft, 300' tunnel, short drift on 125' level in sulphide mineralization. Tunnel area is oxidized with gold & silver content.

(over)

Geology & Mineralization Minerals - Chalcopyrite, Bornite & Tetrahedrite

Ore: Positive & Probable, Ore Dumps, Tailings To be determined by further development, though showings are very promising for large tonnage.

Mine, Mill Equipment & Flow Sheet —

Road Conditions, Route Good - Via Scottsdale, Fort McDowell, thence 8 miles west.

Water Supply From shaft, except for domestic purposes which must be hauled from Verde River 8 miles distant.

Brief History

Special Problems, Reports Filed

Remarks water should be taken out @ 240' present depth. Crosscutting & drifting should be done at this point. All sulphide mineral is high grade for concentration.

If property for sale: Price, terms and address to negotiate.

Property for sale at $65,000.00 to be paid on a 10% royalty basis, all in five years.

address:
Route 9, Box 874, Phoenix, Ariz.

Signed E. A. Gillespie

Use additional sheets if necessary.

MD-14

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date August 10, 1940

Mine Dixie

Mining District & County - McDowell Dist. Maricopa County.

Location - 8 miles west of McDowell

T 4N R 5E

Former Name - Weyora Group

Owner - C. A. Gillespie
Gertrude Backley

Address - Phoenix, Arizona
Mesa, Arizona

Operator

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals - Gold, Silver and Copper

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type - 240 ft. Chicago Pneumatic Compressor and 50 HP Gas Hoist

Operations: Present

Operations Planned - Dewater and develop.

Number Claims, Title, etc. - 9 claims held by location

Description: Topography & Geography - Large shear zone in porphyry schist.

Mine Workings: Amt. & Condition - 240 ft. vertical shaft, 300 ft. tunnel, short drift on 125 ft. level in sulphide mineralization. Tunnel area is oxidized with gold and silver content.

Geology & Mineralization - Minerals - chalcopyrite, barite and tetrahedrite.

Ore: Positive & Probable, Ore Dumps, Tailings - To be determined by further development through showings. Ore very promising for large tonnage.

Vein Width, Length, Value, etc. -

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route - Good - via Scottsdale, Fort McDowell, thence 8 miles west.

Water Supply - From shaft, except for domestic purposes which must be hauled from Verde river, 8 miles distant.

Brief History

Special Problems, Reports Filed

Remarks - Water should be taken out to 240 ft. present depth. Crosscutting and drifting should be done at this point. All sulphide mineral is high grade for concentration.

If property for sale: Price, terms and address to negotiate - Property for sale at $65,000 to be paid on a 10% royalty basis, all in five years.
Address - Route 9, Box 974, Phoenix, Arizona.

SIGNED - C. A. Gillespie

Form 3980–1
(September 1970)
(formerly 3820–1)

Dixie (f)

Serial Number

A-7071

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

State Arizona

MINERAL REPORT

Validity Examination

Of

Mining Claims

In The

Dixie Mining District

(Title)

LANDS INVOLVED

South ½, Section 25
T. 4 N., R. 5 E., G&SRM

January 23, 1976

(Date)

By

Richard Harty

Technical Review

Management Review

GPO 830-392

Introduction

On June 13, 1972, the City of Scottsdale filed an application for a Recreation and Public Purpose Lease/Purchase on 960 acres of public domain land in T. 4 N., R. 5 E., G&SRM for use as a city park. Mineral and land reports were prepared on the area and the lands were classified for transfer on June 27, 1973. One tract of land (640 acres) was clear of any alternate land use conflicts and was leased to Scottsdale on May 2, 1975. A mineral conflict was noted on the remaining 320-acre tract. A mineral report by T. L. Rowley, dated March 1, 1973, recommended that adverse proceedings be initiated against the mining claims in this tract under the following charges:

a. Mineral has not been found within the limits of the claims in sufficient quantity and quality to constitute a valid discovery.

b. The land embraced within the claims is non-mineral in character.

c. The claim locations were not distinctly marked on the ground so that their boundaries could be readily traced.

Contest of Mining Claims Complaints A-7071-1 through A-7071-7 were issued on June 7, 1973. The complaints were timely answered by the Contestees and a request for a hearing date was transmitted to the Administrative Law Judge. Subsequent to this action Mr. Rowley died and the hearing was postponed pending a new examination of the claims by a Bureau of Land Management geologist.

Between December 3, 1975 and the present date, I conducted a field investigation of the area and examined pertinent court house records. This report is based on my findings.

Lands Involved

T. 4 N., R. 5 E., G&SRM, Section 25, S½ (320 Acres), and other parcels related thereto.

Location and Accessibility

The tract is located on the southeast slope of the McDowell Mountains approximately 30 miles northeast of Phoenix and about 3 miles northwest of Fountain Hills.

Access is attained by traveling approximately 3 miles west on an unimproved dirt road from the western city limits of Fountain Hills (attachment no. 2). Roads cross along the south and west boundaries of the tract but are very limited within the tract.

The tract was readily identified by the location of the southeast and southwest section corners for section 25 and the quarter corners for sections 25-26 and 25-36. (Photos No.

Topography and Vegetation

The tract lies along the eastern slope of the McDowell Mountains and is characterized by extremely rough topography. Elevations range from about 2500 to over 3000 feet above sea level. A series of east west trending ridges cross through the center of the tract. Fairly well developed drainages, flowing in an easterly direction, cross along the northern and southern boundaries of the tract with feeder streams extending north and south from the higher peaks. Water flows only during periods of heavy rain. The annual precipitation averages 8-10 inches.

Vegetation is typical of the Lower Sonoran Desert Region consisting of creosote bush, sparse palo verde and mesquite and abundant cacti of various types.

Geology

The general region is composed of Precambrian granite, older Precambrian schist and Quarternary alluvium (Arizona Bureau of Mines, Geologic Map of Maricopa County, 1957). The alluvial material is the erosional product from the surrounding rocks.

Locally the area is made up of silicified schist cut by quartz and quartzite dikes, shears and faults. These generally trend in a northeasterly-southwesterly direction and dip to the southeast. The faulting and shearing appears to be pre-mineral and the mineralization that was noted occurs along the fracture planes in these zones. Gossans occur in the mineralized areas, these being highly iron stained outcrops in the sheared and silicified schist.

Mining History

The area as a whole has no record of any significant mineral production. The Dixie mine is the only workings of any note in the McDowell Mountains and no records were found of any ore shipments from this property.

The date of earliest activity in the Dixie district could not be determined, however, a report by C. E. Miller in 1917 indicates that the majority of the work at the Dixie mine had been done prior to that date (Attachment No. 3- Miller Report).

Mining Claims

The Myora Mining Corporation, incorporated in Arizona on July 21, 1964, asserts ownership of 48 lode mining claims in the Dixie Mining District as noted on the Affidavit of Labor filed by that Corporation on August 29, 1973 (See Attachment No. 1, pp. 1 and 2). A review of the Maricopa County records indicates that some of these claims are held under lease by that Corporation but ownership is held by individuals, some of whom are officers of the Corporation.

It was difficult to ascertain which of the claims were located within the S½ of Section 25. The location notices were not specific in the description of the discovery points and corners and in many instances the claims could not be readily identified on the ground. Information was requested from the claimants by both telephone and letter as to the location of the claims, discovery points and other pertinent information but no reply was received (Attachment No. 4, pp. 1 thru 5, correspondence).

A claim map was submitted to Mr. Rowley by Mr. Homer Gillespie, one of the claimants, in 1973 as the best available information on claim locations (Attachment No. 5). A copy of this map was also contained in a mineral report by Percy Wright in the 1940's, as obtained from the files at the Arizona Department of Mineral Resources (Attachment No. 6, pp. 1 thru 4).

On the basis of the claim map, descriptions given on location notices and field observations, the following claims are considered to be located, all or in part, in the South ½ of section 25, T. 4 N., R. 5 E.:

Seth Parker
Uncle John
Raymond
Summit
Clipper
Silver Horn #4, #5 and #6
Bertha Extension
Bertha Extension #2
Aztec #5
Surprise #1 and #2
Myora #1 through #11
Red Mountain
Surpirze #1 through #7
Pink Pup
Jenell #1
Supprize #2
Supprise #2

Ownership of these claims, as established from the Maricopa County records, is described by ownership groups, as follows:

Group No. 1

Claims	Date Located	Docket	Page	Date Recorded
Jenell #1	9-17-61	3848	14	9-18-61
Surprize #4 thru #7	9-17-61	3848	21 thru 24	9-18-61

The above claims were located by Lee Nicholson, Homer Gillespie, Robert Gillespie and Donald Pruitt (Attachment No. 1, pp 3-7).

The Jenell #1 claim was described as being located about ½ mile in a western direction from the Dixie Mine.

The Surprize #4 and #5 claims were described as being located about 3/4 mile in a western direction from the Dixie Mine.

The Surprize #6 and #7 claims were described as being located 1 mile in a western direction from the Dixie Mine.

There were no recorded transfer for these claims however the Myora Mining Corporation filed assessment work in 1973 as owners of the Surprize #4 through #7 claims (Attachment No. 1, pg. 2).

The southwest corner of the Jennel #1 claim was located in the field but varied somewhat from the claim map and location notice description (Illustration No. 1, Overlay #1, point 5).

The Surprize #4 through #7 claims could not be located in the field and do not show on the claim map.

Group No. 2

Claim	Date Located	Docket	Page	Date Recorded
Pink Pup	2-4-61	3588	327	2-15-61

This claim was located by Carl J. Peterson and Homer Gillespie and described as being located about 1½ miles in a north direction from Thompson Peak and ½ mile west of the Dixie Mine (Attachment No. 1, pg. 8).

There were no subsequent transfers of the claim found of record and the claim could not be identified on the ground.

Group No. 3

Claims	Date Located	Docket	Page	Date Recorded
Aztec #5	9-17-61	3848	16	9-18-61
Supprise #2	9-17-61	3848	19	9-18-61
Myora #1 thru #11	9-4-63	4728	40 thru 50	9-12-63

The Aztec #5 claim was located by Robert Gillespie, John Pine and Homer Gillespie and described as being located about 1 mile in a north direction from Thompson Peak and 3/4 mile west of the Dixie Mine (Attachment No., p. 9). A Quit Claim Deed, dated December 1, 1964, transferred all of the Locator's interest to the Myora Mining Corporation (Attachment No. 1, p. 10). The claim could not be located in the field and does not show on the claim map.

The Supprise #2 claim was located by Donald D. Pruitt and Robert Gillespie and described as being located about 3/4 mile in a west direction from the Dixie Mine (Attachment No. 1, p. 11). A Quit Claim Deed, dated December 1, 1964 transferred title to the Supprise claim (referencing the docket and page of the Supprise #2) to the Myora Mining Corporation (Attachment No. 1, p. 10). The Affidavit of Labor filed by the Myora Mining Corporation in 1973 list the Surprize #2 claim as under their ownership, again referencing the docket and page where the Supprise #2 claim was recorded (Attachment No. 1, p. 2).

There was no field evidence found of a Supprise #2, Supprise or Surprize #2 claim and no indication of such on the claim map.

The Myora #1 through #11 claims were located by Fred Lane and Richard Dunwoody (Attachment No. 1, pp. 12-22) and transferred to the Myora Mining Corporation on December 1, 1964 (Attachment No. 1, p. 10).

The Myora #1 thru #3 claims were described as being located about 1½ miles in a northern direction from Thompson Peak and ½ mile west of the Dixie Mine.

The Myora #4 and #5 claims were as above only 3/4 mile west of the Dixie Mine.

The Myora #6 was as above only 1 mile west of the Dixie Mine.

The Myora #7 thru #11 were as above only 1¼ miles west of the Dixie Mine.

Two small handwritten notes located in the field denoted southeast corner and the south center of the Myora #7 claim (Illustration No. 1, Overlay No. 1, points 1 and 2 and photo). The notices were approximately 1800 feet apart, however, and do not fit a logical claim pattern.

Two location notices were found in the field for the Myora claims. These were they Myora #2 (Illustration No. 1, Overlay No. 1, point 3) and the Myora #15 (Illustration No. 1, Overlay No. 1, point 9). These location notices were signed by Fred Lane, Ernest Gendron and Richard Dunwoody and were dated August 3, 1963. They do not match the notices filed at the County Recorders Office on September 12, 1963.

A series of white-washed rock monuments could be followed along the south boundary of Section 25 and conform fairly well to the location of the Myora claims as shown on the claim map submitted to Mr. Rowley (Illustration No. 1, Overlay No. 1). One descrepency noted, however, is that the monuments run in an east-west direction while the location notices describe the claims as having a southeast-northwest orientation.

Group No. 4

Claims	Date Located	Book	Page	Date Recorded
Uncle John (Formerly Montana)	5-4-37	40	72	5-8-37
Raymond (Formerly Colorado)	7-1-37	40	130	7-12-37
Summit (Formerly Devide)	7-1-37	40	127	7-12-37
Clipper (Formerly Acid)	7-1-37	40	133	7-12-37
Seth Parker (Formerly Pittsburg)	5-4-37	40	71	5-8-37

The above claims were located by H. E. Ayersman and were all described as being located about 1½ miles northerly from Thompson Peak (Attachment No. 1, pp. 23-27).

Amended Notices of Location were filed for the Uncle John, Clipper and Seth Parker claims by C. A. Gillespie and Gertrude Barkley. The amended locations were dated May 27, 1937 but were not recorded until July 1, 1952 (Attachment No. 1, pp. 28-30). There is some confusion with regard to the Clipper claim which was apparently amended prior to the date of its location.

By Mining Deed, dated May 27, 1937, Mr. H. E. Ayerman transferred all of his interest in the claims to Clarence A. Gillespie and Gertrude Barkley (Attachment No. 1, p. 31). Again there is some confusion in the records since the Raymond, Summit and Clipper claims were not located until July 1, 1937, over a month after the date of this sale.

A mining deed and option, dated June 6, 1968, stated that Anna Hansen and Ethel Westlake were sole heir of Clarence A. Gillespie and that they Quit Claim all of their interest in the above claims to Homer and Robert Gillespie. By this same instrument, Homer and Robert Gillespie and Gertrude Barkley leased the claims to the Myora Mining Corporation (Attachment No. 1, pp. 32-38).

A will, dated July 9, 1972, lists Nancy McCollough as heir to the estate of Gertrude Barkley (Attachment No. 1, pp. 39-40).

A location notice was found in the field for the Raymond claim and corner monuments for the Seth Parker and Uncle John Claims (Illustration No. 1, Overlay No. 1, points 4, 7 and 8).

Group No. 5

Claims	Date Located	Book	Page	Date Recorded
Silver Horn #4 Thru #6	11-3-39	42	155-157	11-6-39
Bertha Extension	10-1-40	42	511	11-19-40
Berthan #2	10-1-40	42	512	11-19-40

The above claims were located by C. A. Gillespie and Charles Grissler (Attachment No. 1, pp. 41-45).

The Silver Horn #4 and #6 claims were said to be located about 2 miles northerly from Thompson Peak in the SE¼, Section 25, T. 4 N., R. 5 E.

The Silver Horn #5 claim was described as being 2 miles northeasterly from Thompson Peak.

The Bertha Extension and Bertha #2 were described as being located 1 mile and 3/4 mile, respectively in a northerly direction from McDowell Peak.

By Quit Claim Deed, dated November 23, 1948, Mr. Grissler transferred his interest in the Silver Horn #4 thru #6 claims to C. A. Gillespie (Attachment No. 1, pp. 46-47).

An amended Notice of Location was filed for the Silver Horn #4 claim on January 1, 1963 and the location of the claim was given as being about 2 miles northerly from Thompson Peak in the SW¼, Section 30, T. 4 N., R. 6 E. (Attachment No. 1, p. 48).

By Quit Claim Deed, dated December 4, 1964, Anna Hansen and Ethel Westlake, heir of C. A. Gillespie, transferred their interest in the above claims to Homer and Robert Gillespie (Attachment No. 1, p. 49).

The Myora Mining Corporation filed an Affidavit of Labor as owner of all of the Group 5 claims on August 29, 1973 (Attachment No. 1, p. 2).

By a Relinquishment of Mining Claims statement dated January 13, 1976, Mrs. Agnes Grissler, wife and heir of Charles Grissler abandoned all rights, title and interest to the claims (Attachment No. 1, p. 50).

The Silver Horn #4 - #6 claims are shown on the claim map of the Dixie Mine group as submitted to Mr. Rowley (Illustration No. 1, Overlay No. 1) but could not be located in the field.

The Bertha Extension and Bertha #2 could not be identified in the field.

Group No. 6

Claim	Date Located	Docket	Page	Date Recorded
Surprize #1	9-17-61	3848	18	9-18-61

This claim was located by Robert Gillespie, Lee Nicholson, Homer Gillespie and Robert Pruitt and described as being located 1½ miles northwest of Thompson Peak and 1 mile west of the Dixie Mine (Attachment No. 1, p. 51).

The location notice description conform with that of the Surprise #1 claim shown on the claim map submitted to Mr. Rowley but no evidence of the claim could be found in the field. It differs from the description of the Surprize #1 claim described below as part of Group No. 7.

Group No. 7

Claims	Date Located	Docket	Page	Date Recorded
Surpize #1	2-11-61	3588	329	2-15-61
Supprise #2	2-11-61	3588	328	2-15-61
Surprize #3	9-17-61	3848	20	9-18-61

The above claims were located by Robert Gillespie and Donald Pruitt (Attachment No. 1, pp. 52-54).

The Surprize #1 was said to be located about 3/4 mile in a western direction from the Dixie Mine and 2½ miles northwest of Tompson (sic) Peak.

The Supprise #2 was described as being about 3/4 mile west of the Dixie Mine.

The Surprize #3 claim was said to be located about 1 mile north from Thompson Peak and 3/4 mile west of the Dixie Mine.

By Quit Claim Deed, dated December 1, 1964, Robert Gillespie and Donald Pruitt transferred their interest in the Surprize claim (using a reference to the Docket and Page where the Surprize #3 claim was recorded) to the Myora Mining Corporation (Attachment No. 1, p. 10).

An Affidavit of Labor filed by the Myora Mining Corporation on August 29, 1973 lists the Surprize #3 claim and under their ownership.

None of the Group No. 7 claims could be identified in the field.

Mineral Examination

Approximately 15 days were spent in making a field examination of the tract. Since the claimant chose not to be present during this examination the time was utilized in an attempt to locate claim corners, discovery points, site

of exploration or development and any other data revelant to the determination of the validity of the claims. Access roads cross the south and west boundaries of the tract but there is no vehicular access within the tract. A number of traverses were made within and along the fringes of the tract to locate points of past or present mining activity. Illustration No. 1, Overlay No. 2 shows the location of the sites where evidence of workings were observed. These are discussed below chronologically:

Site No. 1: At this point there was a cut into the side hill on an iron stained silicified schist showing some quartz veining. The cut extended into the hill about 6 feet in a due north direction and exposed some weak shearing within the schist (Photo No.). This site lies approximately 50 feet in a N 35° W direction from a marker indicating the SE corner, Myora #7. A chip sample was taken across a 5' width of the shear zone, and gave the following assay results: 1/

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value
Dixie #8	13 lb	5'	Tr	.05	Tr	--

Site No. 2: At this point there was 6' long cut into the side hill on a light colored, weakly iron stained schist. There was no evidence of mineralization or significant structure.

Site No. 3: At this point an adit extends into the side hill for about 45' in a N 05° W direction. A side drift, starting about 7 feet in from the portal runs 22 feet in a N 55° W direction (Attachment No. 8 and Photo No.) This adit is collared in a conglomerate which comes in contact with limestone approximately 10' in from the portal. The limestone is highly silicified at the face of the main adit. There was no evidence of structure or mineralization. This site lies south of the tract area but the heading is towards the tract and represented one of the more extensive area of activity in the district. A sample was taken of the silicified limestone, across the back, at the face of the main drift and gave the following results:

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value
Dixie #7	9.5 lb	4'	.005	.10	Tr	--

Site No. 4: At this point there is a 5' deep pit in relatively unaltered and unstained schist. There was no evidence of structure or mineralization. Vegetative regrowth was well developed on the dump and in the pit indicating that the work was quite old.

1/ This, and all samples referenced in this report, were taken in the following manner: The surface area was cleaned of possible contaminants, a tarp was placed below the sample point, the sample material was cut by weighted chip or channel sample method perpendicular to the bedding or structure, collected on the tarp, placed in a clean sample bag, given a numerical designation and retained in my possession until delivered to the Jacobs Assay Office in Tucson, Arizona. Sample results are listed in Attachment No. 7.

Sites No. 5 and 6: At these two points there are two old cuts into the sidehill trending in a southerly direction. Soils have been washed into the cuts and there is well developed vegetative regrowth. There was no evidence of structure or mineralization.

Site No. 7: At this point there is a shaft down about 35' with a 5' drift extending in a southerly direction from the base of the shaft (Photo No.). It is collared in an iron stained schist with some quartz veining. The shaft lies approximately 500 feet west of the tract but represents one of the more extensive areas of activity in the Dixie District. There was no evidence of mineralization or significant structure. A chip sample was taken across a 4' width of weak shearing at the face of the drift at the base of the shaft and gave the following results:

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value
Dixie #1	5 lb	4'	Tr	.05	.02	---

Site No. 8: At this point there is a caved pit or shaft lying just above the road. Soils covered the entire area with much vegetative regrowth and no rocks were observed in place. There was some coarse, lightly iron stained white quartz on the dump but no evidence of mineralization.

Site No. 9: At this point there is what appears to be a caved adit or cut into the sidehill trending in a due south direction. A narrow 6" wide white quartz vein on the west wall of the cut was the only rock observed in place and showed no evidence of mineralization.

Site No. 10: This point lies along the crest of the ridge. A cut, approximately 10 feet wide and 8 feet deep was made through a highly silicified and iron stained schist or quartzite (Photo No.). There was no evident mineralization or significant structure but it was one of the few sites of comparatively recent development observed. A random chip sample was taken across and 8' width on the east wall of the cut and gave the following results:

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value
Dixie #9	11 lb	8'	Tr	.05	.02	---

Site No. 11: At this point there is a 5' deep pit on a 3.5 foot wide white quartz vein that trends in a N 50° E direction and dips approximately 60° southeast (Photo No.). There was no visible mineralization in the vein. A light colored fine grained igneous rock was noted on the west side of the pit.

Site No. 12: At this point there is an incline shaft extending in a southeasterly direction toward the Dixie shaft (Photo No.). It is collared in a weakly sheared silicified schist and it is estimated to be from 20-30 feet in extent. The collar of the shaft was partially caved and unsafe to enter. There was no mineralization observed at the collar or on the dump.

Site No. 13: At this point there is an adit extending northerly into the sidehill for approximately 15 feet (Photo No.). It follows a 3-foot wide shear zone in highly silicified, iron stained schists. A sample was taken across the 3-foot width of the shear and gave the following results:

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value
Dixie #5	6½lb	3'	Tr	.05	.02	---

Site No. 14: At this point there is a cut into the sidehill in a N 60° E direction following a 4' wide shear zone in iron stained silicified schist. The excavation lies immediately adjacent to the location monument for the Raymond claim (Photo No.). A channel sample was taken across the 4-foot width of the shear zone and gave the following results:

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value
Dixie #6	8 lb	4'	Tr	.05	Tr	---

Site No. 15: At this point there is a small cut into the sidehill trending in a westerly direction. It is about 6' wide and 6' deep and exposes a 4' wide white quartz vein in schist. There was no visible mineralization and the work appears to be quite old with much vegetative regrowth in the cut and on the dump.

Site No. 16: At this point there is an adit extending approximately 8' into the sidehill, in a southwesterly direction, in silicified schist (Photo No.). There was no visible mineralization or significant structure.

Site No. 17: At this point there is an adit entering the sidehill in a N 35° E direction (Photo No.). It extends in about 10 feet and was widened out to about 12 feet at the face. There was no evident structure or visible mineralization.

Site No. 18: At this point there is an adit extending 120 feet in a S60° W direction along a shear zone in silicified schist (Photo No.). The workings lies south of the tract but are located on the Seth Parker claim which may extend into the tract (Attachment No. 9). A descrepency was noted here, in that the claim map submitted to Mr. Rowley depicts the claim as being 700 feet in width rather than the 600 feet described in the location notice. The workings lie along the southwesterly extension of the structure exposed in the Dixie Mine workings (Site No. 19).

Approximately 80 feet from the portal some copper sulfate (Chalcanthite) mineralization occurs along fracture planes in the 4-5 foot wide shear zone (Attachment No. 10). At the face of the drift a number of narrow shears extend into the footwall and hanging wall and contain some weak copper sulphate mineralization. The drift was partially caved and unstable and was not considered safe for sampling. The copper sulphate mineralization exposed did not appear as extensive as that noted and sampled in the Main Dixie Mine workings (Site No. 19).

Site No. 19: This is the site of the Dixie Mine workings located on the Uncle John Claim (Attachment No. 9 and Photo No.). The mine is developed by a shaft, two sublevels and two raises or winzes.

A report by C. E. Meyers in 1917 (Attachment No. 3) states that the mine was at that time developed by 500 feet of working such as tunnels cuts and shafts, the deepest being 240 feet. Two maps by Charles A. Rasor, dated January 2, 1943 show two levels of development (Attachments No. 11 and 12). A tunnel level, located 70 feet below the shaft collar, extended for 220 feet and had two cross cuts into the footwall and one cross cut into the hanging wall which connected with the shaft. A second level, 120 feet below the collar of the shaft extended for 100 feet. A 50-foot raise connected the two levels.

At the time of my examination all workings below the 70 foot tunnel level were filled with water and inaccessible. A map constructed by the 70-foot tunnel level conformed fairly well with the map of that level by Charles Rasor, with one exception (Attachment No. 13). A winze or raise was noted 100 feet in from the portal that does not show on the Rasor map and indicates that some work was performed since 1943.

The 70-foot tunnel level exposes a 3-5' wide shear zone in silicified and iron stained schist trending in a N 60° E direction and dipping 45-50' southeast. Some quartz veining was noted in the shear and some dark colored fine grained igneous rock was noted in the footwall in a cross cut running north approximately 90 feet in from the portal. Copper sulphate (Chalcanthite) mineralization occurs irregularly along the shear zone, primarily on the fracture planes. A quartzite dike crosses the structure approximately 140 feet in from the portal and the shear zone horsetails or diverges into several smaller fractures. A 2.5 foot zone of shearing with some copper sulphate mineralization was noted at the face.

Three channel samples were taken along the shear zone. The first, Dixie #2, was taken at a point 50 feet in from the portal across a 5.5 foot width of the shear containing some copper sulphate mineralization. The second sample (Dixie #3) was taken approximately 130 feet in from the portal, across a 3.5 foot width on the best visual showing of copper sulphate mineralization in the mine. A third sample (Dixie #4) was taken over a 2.5 foot width of shearing with some copper sulphate mineralization at the face of the drift, approximately 220 feet in from the portal.

Sample results were as follows:

Sample No.	Weight	Width	Au/Oz	Ag/Oz	Cu/%	Value*
Dixie #2	11 lb	5.5'	.01	1.10	.24	6.78
Dixie #3	13 lb	3.5'	.005	.45	1.03	14.14
Dixie #4	12 lb	2.5'	.005	.10	.35	5.06

*Calculated at June, 1973 prices: Copper @ 60¢/lb., Gold @ $120/Oz and Silver @ $2.62/Oz. Values based on 100% recovery of all metals.

None of these samples can be considered as indicative of ore grade material. The best sample, Dixie #3, represents less than 50 tons of potential material. A report by the Arizona Bureau of Mines in 1966 estimates a minimum "break even" value for copper ores from small mine operations at $31.50 (Attachment No. 14). The best of the samples obtained contained less than one-half of this value.

The Chalcanthite observed on the 70 foot level is a secondary copper mineral resulting from supergene enrichment. It is not amenable to the reduction methods normally applied to copper sulphide ores.

A report by C. E. Meyers in 1917 (Attachment No. 3) mentioned some copper sulphide mineralization in the lower levels of the mine. A few shows of pyrite (iron sulphide) were noted on the 70 foot tunnel level and on the mine dump but no copper sulphide mineralization was found in place in the mine. Assay results reported by Meyers have little validity as they were not taken by him, were not documented, and gave no information as to location, size, weight, assayer, etc.

Conclusion

A review of the Maricopa County records and a reconnaissance of the tract failed to provide sufficient data to identify all of the mining claims on the ground.

An investigation and sampling of the past working areas in and adjacent to the tract failed to disclose any evidence of a mineral discovery within the meaning of the mining law.

I concur with the findings of Mr. Rowley in 1973 that:

a. Mineral has not been found within the limits of the claims in sufficient quantity or quality to constitute a valid discovery.

b. The land embraced within the claims is non-mineral in character.

c. The claim locations were not distinctly marked on the ground so that their boundaries could be readily traced.

Recommendations

I recommend that the charges set forth in the Contest of Mining Claims Complaint A-7071-1 through A-7071-7 be allowed to stand as written with one exception. The name Charles Grissler should be deleted from Contest Action A-7071-5. I further recommend that the hearing proceedings on these complaints, scheduled for February 4, 1976, be allowed to proceed as scheduled and that Government's case be presented on the basis of this report.

United States Department of the Interior

OFFICE OF HEARINGS AND APPEALS
INTERIOR BOARD OF LAND APPEALS
4015 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22203

Abstract, place copy in appropriate mine file. Make add notations on cards and in files

UNITED STATES
v.
LEE NICHOLSON, ET AL.

IBLA 77-77 Decided July 7, 1977

Appeal from decision of Administrative Law Judge John R. Rampton, declaring certain mining claims null and void. Arizona 7071-1 through 7.

1. Mining Claims: DISCOVERY--Nature of Requirement--determination of validity--marketability requirement--profitability--prudent man test--Proof.

> There has been no discovery of a valuable mineral deposit within a mining claim where the evidence provides no basis for a reasonable expectation that minerals from the deposit can be mined, removed and marketed at a profit.

2. Mining Claims: DISCOVERY--Nature of Requirement--burden of proof--determination of validity--Proof; PRACTICE AND PROCEDURE--Contests--burden of proof--determination of validity--evidence--Determination of Validity--Evidence.

> Past evidence of successful mining activity has limited probative value in determining whether there is a present discovery of a valuable mineral deposit on a mining claim, and assay reports can be given little weight when they are not supported by evidence as to who took the sample assayed, where it was taken, and what procedures were followed in taking the sample.

APPEARANCES: Thayer S. Lindauer, Esq., Phoenix, Arizona, for appellants; Fritz L. Goreham, Esq., Office of the Field Solicitor, U.S. Department of the Interior, Phoenix, Arizona (at the hearing).

INDEX CODE:
none

OPINION BY ADMINISTRATIVE JUDGE THOMPSON

This is an appeal from the November 15, 1976, decision of Administrative Law Judge John R. Rampton finding null and void all of the claims involved in a consolidated contest against certain lode mining claims in Maricopa County, Arizona. 1/

Among other matters, the contest complaints against the claims charged that minerals have not been found within the limits of the claims in sufficient quantities and qualities to constitute a valid discovery. Judge Rampton found that there was not a discovery of a valuable mineral deposit within any of the claims.

The Judge summarized the Government's evidence as follows:

> The evidence presented by the contestant consisted primarily of the testimony of Richard Harty, a graduate geologist employed by the Bureau of Land Management, U.S. Department of the Interior. Mr. Harty spent, by his own estimate, approximately seventeen days examining

1/ This contest was a consolidation of the following contests against the designated claims situated in whole or in part within section 25, T. 4 N., R. 5 E., GSR Meridian, Arizona:

Contest Numbers	Contestees	Mining Claims
Arizona 7071-1	Lee Nicholson, Homer Gillespie, Robert Gillespie, and Donald Pruitt	Jenell, Surprize #4, Surprize #5, Surprize #6, and Surprise #7
Arizona 7071-2	Homer Gillespie and Carl J. Peterson	Pink Pup and Myora #1
Arizona 7071-3	Myora Mining Corporation Hale C. Tognoni, Statutory Agent	Aztec #5, Supprise #2, Myora #'s 1 through 8, 10, 12, & 13
Arizona 7071-4	Nancy McCollough, Homer Gillespie and Robert Gillespie	Clipper (Amended), Raymond, Seth Parker (Amended), Summit, and Uncle John (Amended)
Arizona 7071-5	Homer Gillespie, Robert Gillespie, and Chas. Grissler	Silver Horn #'s 4, 5, and 6; Bertha Extension; and Bertha Extension #2
Arizona 7071-6	Myora Mining Corporation; Hale C. Tognoni, Statutory Agent; and Lee Nicholson	Wilma #'s 1 and 2
Arizona 7071-7	Donald Pruitt and Robert Gillespie	Suprize #1 (or Surprize #1), Supprize #2, Suprize #3 (or Surprize #3)

the claims on the ground between the period from early September, 197[5], until mid-January, 1976; again immediately prior to the hearing as scheduled in February and prior to the hearing as held in April. The claims had been previously examined by Mr. Thomas Rowley for the Bureau of Land Management, but Mr. Rowley died prior to the hearing and the examination by Mr. Harty was independent of the previous examination. Because Mr. Harty was unable to effectuate a meeting with any of the mining claimants to conduct a joint examination or to have them point out to him the location of the claims on the ground, he used a map (Gov. Ex. D) previously furnished to Mr. Rowley by the mining claimants as a guide. He found few corner monuments and was unable to verify the location of the claims as shown on the map and from the descriptions contained in the claim notices. He, therefore, walked the entire South one-half of Section 25, searching for outcroppings or evidence of mineralization in numerous cuts, pits, and particularly in the workings known as the Dixie mine, which has been developed on the South one-half of Section 25.

He testified that the entire area consisted of Precambrian granite, Precambrian schist and Quaternary alluvium, and erodent product of the granites and schists, with some quartzite dikes, quartz veins and relatively narrow shear zones. (Tr. 54) Some areas showed evidence of iron oxide appearing as gossan and what mineralization he found was related to these iron oxidized areas. (Tr. 54)

In the literature available he found that there were no productive properties in the area and no mineral developed except for the Dixie mine, which was developed prior to 1917. (Tr. 55)

Some of the cuts and pits showed no visible evidence of mineralization or significant structures exposed and no samples were taken at these points. Where he found silicified iron stained schist rock with minor quartz veins or fracturing and in the workings of the old Dixie mine where he found showings of copper sulphate, a precipitate mineralization caused by percolation of acidic water through surface rock, samples were taken and assayed. Although the map of the workings on the Dixie mine (Exs. DD, GG and 2-MC) showed the shaft extending to 220 feet in depth with secondary tunnels, he was unable to go below the 70-foot level because the workings deeper than this point were filled with water.

Of a total of nine samples taken and assayed for gold, silver, and copper, six showed only a trace or insignificant amounts of these minerals. One sample taken from the Dixie mine, approximately 50 feet in from the portal, assayed .01 ounces gold, 1.10 ounces silver per ton, and .24 percent copper, which he computed had a total recovery value, as of prices quoted in 1973, of $6.78 per ton. A sample taken approximately 130 feet in from an adit leading from the 70-foot level, assayed values of .005 gold, .45 silver per ton, with 1.03 percent copper, for a total recoverable value of $14.14. The third sample taken from the face of the main drift at the 70-foot level in the Dixie mine assayed .005 gold, .10 ounces silver per ton, and .35 percent copper, for a total recoverable value of $5.06 per ton.

Mr. Harty, quoting from an Arizona Bureau of Mines' publication of 1966, stated the break-even point for small underground mines was $31.50 per ton. (Tr. 127) Since that time, the costs have increased considerably and he estimated the values would have to exceed $50 per ton for a profit to be made. (Tr. 144)

Mr. Harty stated that he knows of no mine in the United States where precipitated copper, such as he saw in the Dixie mine, is being mined economically; that Chile is the only area where a large blanket of high percentage copper deposit is being mined. (Tr. 126)

Based upon his examination and the results of the assays received from the samples taken, Mr. Harty was of the opinion that there were no valuable minerals exposed on any of the claims situated in the South one-half of Section 25 which would warrant further expenditure by a prudent man with a reasonable expectation of developing a paying mine.

Mr. Robert A. McColly, the senior mineral examiner with the Bureau of Land Management in Arizona, visited the claims with Mr. Harty on two occasions. He was shown where and how the samples were taken, and as a result of the assays made, he concurred with the testimony and conclusions given by Mr. Harty.

(Decision, 3-5).

Appellants concede that the government had made a prima facie case against the validity of the claims and that the burden of proof to establish the validity of the claims fell upon them. Foster v. Seaton, 271 F.2d 836 (D.C. Cir. 1959). However, appellants assert

that they met this burden with respect to the "approximately 8 claims consisting of the 'Dixie Mine.'" 2/ The thrust of appellants' contentions on appeal go to the Judge's weighing and analysis of contestees' evidence. The Judge summarized that evidence as follows:

> In rebuttal, the evidence presented by the contestees consisted mainly of documentary evidence in the possession of Mr. Homer Gillespie, an officer of Myora Corporation. Exhibit 1-MC is a map of the claims as plotted by the claimants sometime after Mr. Rowley's examination in 1973. This map was not made available to Mr. Harty and it does vary from the map used by Mr. Harty in the location of certain of the claims in relationship to each other and as to several claim names.
>
> The location certificate descriptions are so vague as to preclude using these descriptions as more than a general guide. It was, therefore, agreed by the parties that Exhibit 1-MC be accepted as correctly portraying the claims as they were located on the ground and the claim names. The claims as listed in the caption have been corrected to reflect this agreement.
>
> Exhibit 2-MC is a mapping of the adits on the 75- and 125-foot levels on the Dixie mine drawn by R. Wagnon, a mining engineer who operated on the property in 1961 and 1962. Exhibit 4-MC is an assay report from a sample ostensibly taken from the Adams tunnel on the Uncle John claim in 1972, which shows silver values of 79.3 ounces per ton. Exhibit 5-MC is an assay report obtained from H. Gratton Lynch, who leased the mining claims at one time. Mr. Gillespie testified that he assumed the assay is from samples taken from the Dixie mine, but does not know where and at what level. Exhibit 6-MC is an assay report of a sample presumably taken from the Dixie mine, on which someone unknown had added the words "200-foot level." Exhibits 7- and 8-MC are smelter returns of some 12-1/2 tons, again presumably from the Dixie mine. These exhibits were received in evidence as corporate records and do show substantial and possibly marketable values of ore. At the present time, however, because the mine is

2/ The record does not clearly establish that the Dixie mine extends to eight claims. The record tends to show that the Dixie mine is primarily within the Uncle John Claim but may continue into the Seth Parker claim and another claim. (See, e.g., Tr. 109, 199, 205, 270.) There is insufficient evidence to support any inferences that the mine extends into other claims.

flooded, no verification can be made of the mineralization below the 70-foot level in the Dixie mine.

Mr. Gillespie testified that he has been on the 200-foot level of the Dixie mine and has seen a 14-foot wide vein exposed. He further testified as to a hole being drilled by North American Mining Company on the Uncle John claim and that he knows the assay results of the core sample, but does not know where the assay is now. He stated he has had assays of samples taken from the Dixie mine, but had none available with him at the hearing. It might be further noted that Mr. Gillespie makes no claim to have mining experience or to a mining degree.

Mr. Donald F. Reed, a graduate consulting mining engineer, testified that he had examined the claims for Maricopa County in 1966. He looked at all of the assay records and smelter runs available, and as a result, advised the County that the claims were valid. He based this opinion on the fact that the property is on a broad mineralized belt and that although no known mining operations have existed within close proximity, the presence of the minerals shown in the adit and underground workings on the Dixie mine indicates that primary mineralization was formed from ascending solutions and, therefore, there is a possibility of ore bodies at depth. (Tr. 263)

Mr. Reed admitted he made no thorough investigation and he did not examine the Dixie mine. No examination was made of Section 25 because the County was not interested in that section.

In his opinion, there is a good possibility the structures and mining values on the Dixie mine would extend into Section 25, but the only way to tell would be to do extensive diamond drill work. When asked what work would be necessary to determine the value, he stated that if he had an interest in the mine, he would first dewater the Dixie mine and explore further on the lower workings. (Tr. 267)

(Decision, 5-6).

Judge Rampton then discussed the law concerning discovery of a valuable mineral deposit and burden of proof. He concluded that the Government had made a prima facie case of lack of discovery, and that the contestees had failed to overcome that case. Specifically, he stated:

The evidence presented by the mining claimants was woefully inadequate to meet their burden. The assay reports and results of the mill-run tests ostensibly taken from material removed from the lower levels of the mine are strictly hearsay, can be given little or no weight, and could be received in evidence only as an exception to the hearsay rule. The Government had no opportunity through cross-examination to determine the places and methods of sampling and the amounts of ore present. All of these factors must be determined before conclusions can be reached as to whether there is even a possibility of working the Dixie mine at a profit.

Although Mr. Gillespie stated that he had taken samples from the claims and that drilling work had been done, he was unable to offer any assay reports of his own samples or assays to the drill cores. Viewed in its most favorable light, the testimony of the contestees consisted of hopes and beliefs based on work done by their predecessors in interest that valuable ore exists at depth. In the case of Henault Mining Company v. Tysk, 419 F.2d 766 (1969)[a]; cert. denied, 398 U.S. 950 (1970), the court said:

> . . . A reasonable prediction that valuable minerals exist at depth will not suffice as a "discovery" where the existence of these minerals has not been physically established. (Emphasis added)

It appears clear that the mining claimants are still in an exploratory stage at this point. The testimony of the mining claimants' own expert witness, Donald F. Reed, at pages 265-266 of the transcript illustrates this finding:

> Q. Well, now, in terms of the Dixie mine and the claims very close to it, would a reasonable and prudent man be justified in expending his labor and means with a reasonable prospect of developing a paying mine there?
>
> A. I would say that a reasonable and prudent man would be justified in spending a limited amount of money, say $25,000 or $50,000, in doing this exploratory work. If that exploratory work was disappointing, of course, he would have simply lost that money, I mean this is speculation.

a) GFS(MIN) JD-3(1970) GFS(MIN) 42(1977)

> If it proved that there was, that there did exist ore bodies at depth along this structure then, of course, he would be justified in spending more money and more time and labor.
>
> This is a thing that you do step by step.

And at pages 266-267:

> A. The things that I've just explained to you, the potentiality of the property. There is a potential there. Now, whether the mineral is there or not in sufficient value on volume to make a profitable mining operation I can't tell you and no one else can tell you until this exploratory work has been done.

It is clear from the evidence available at the present time that no prudent man would proceed to the development of any of the claims in contest without: (1) dewatering the mine, (2) doing further drillings to ascertain whether and to what extent values exist at depth, and (3) further sampling the lower workings. That work, as recommended by the mining claimants' own witness, is not in the nature of development of a discovered ore body, but a search for values which would justify development.

The mining claimants contend that work necessary to prove the existence of ore was not done because it is impossible to obtain investment money when the claims are under contest and, further, that the lease and option to purchase to North American was not carried out solely because the principal of North American died at the outset of the transaction. However, that transaction was to be entered into in 1968 (Ex. 9-MC), and the contest proceedings were not brought until 1973. However, the original locations of mining claims on this property date back many years, and the claims were either acquired by the contestees or located in the period 1961 through 1963. Given this length of time between the acquisition of the claims and the filing of the contest, I find little merit to the argument that the mining claimants have been unable to do the necessary work to establish that they do have valid discoveries on the claims in accordance with the established case law.

(Decision, 8-10).

[1] The real question presented in this appeal is whether contestees' evidence is sufficient to establish the existence of a

valuable mineral deposit on the claims or at least rebut the Government's prima facie case that no such valuable deposit has been discovered. The standards for discovery of a valuable mineral deposit are well established. A discovery of a valuable mineral deposit has been made "where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine * * *." Castle v. Womble, 19 L.D. 455, 457 (1894)[b] approved in Chrisman v. Miller, 197 U.S. 313, 322 (1905). Implicit in this condition is the concept that the mineral material may be mined, removed and marketed at a profit. United States v. Coleman, 390 U.S. 599 (1968);[c] Converse v. Udall, 399 F.2d 616 (9th Cir. 1968),[d] cert. denied, 393 U.S. 1025 (1969). Where further exploratory work is necessary to demonstrate either the extent of the mineral deposit or that it can probably be exploited profitably, there is no discovery. United States v. Winters, 2 IBLA 329, 78 I.D. 193 (1971).[e] As Judge Rampton pointed out, the testimony of the contestees' own expert witness (Tr. 265-67) fully supports the conclusion that there can be no basis for a reasonable expectation of profit until further exploratory work has indicated whether or not there is a large enough volume of ore to sustain a profitable mining operation. Appellant has been unable to show adequately the existence of a valuable mineral deposit on any of the claims containing minerals in sufficient quantity and of sufficient quality to support a mining operation.

[2] Nevertheless, despite the opinion of their own expert witness concerning the present condition of the workings of the Dixie mine and the need for further exploration to establish if there are, in fact, minerals within the mine, appellants contend that documentary evidence submitted at the hearing establishes a discovery of a valuable mineral deposit. They assert that Judge Rampton failed to give appropriate evidentiary weight to certain exhibits which "conclusively establish the presence of substantial tonnages in ores and that from the ores present a profitable mine can be worked." (Statement of Reasons, 4.) These exhibits consist of assays made in 1968 (Ex. 4-MC) and 1962 (Exs. 5-MC and 6-MC) along with mill runs from 1940 (Exs. 7-MC and 8-MC). Appellants contend that these exhibits indicate the presence of values which exceed the cost of mining the ore.

Appellants take issue with Judge Rampton's stated reason for giving little weight to this evidence, i.e., that it was hearsay and not subject to cross-examination. Appellants fail to recognize the gravamen of the Judge's reason why the evidence should be given little weight: that there was no foundation testimony, subject to cross-examination, which tended to show that the samples or past production represent the material that can now be mined from the claims.

The exhibits which are the subject of appellants' argument do not, by themselves, establish the existence of a valuable mineral deposit

b) GFS(MIN) Supp. No.1
c) GFS(MIN) JD-1(1968)
d) GFS(MIN) JD-4(1968) 31 IBLA 232
e) GFS(MIN) 16(1971)

on the claims, nor are they sufficient to rebut the government's prima facie case, so as to require dismissal of the contest. See generally, United States v. Taylor, 19 IBLA 9, 82 I.D. 68 (1975).[f] The present and prospective value of any mine consists in what is in the earth, not in what has been taken from it. Assay results have no probative value without further evidence establishing how each sample was taken and where the sample was taken from so that the fact-finder can determine how accurately the sample represents what remains in the ground. By themselves, the assay reports do not tell us whether the samples were taken from areas of isolated mineral occurrences or from areas of continuous mineralization. They tell us nothing about the size or extent of the deposit from which they were taken. Without such information, it is impossible to form a basis for a reasonable belief that the mineral in the ground can be mined, removed, and marketed at a profit. The mill runs (smelter returns) may establish that large quantities of valuable material had been removed in the past, but by themselves, they do not tell us whether more minerals remain. Evidence of past production is not sufficient to establish the discovery of a valuable mineral deposit; if the mine is worked out, a discovery is lost. U.S. v. Houston, 66 I.D. 161 (1959). For these reasons, assay reports and records of past production, by themselves, can be given little weight in determining the validity of a mining claim. See United States v. Maley, 29 IBLA 201 (1977);[g] United States v. Avgeris, 8 IBLA 316 (1972).[h] We find that Judge Rampton properly gave these exhibits little weight in his evaluation of the evidence, and correctly found the claims null and void for lack of discovery.

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision appealed from is affirmed.

Joan B. Thompson
Administrative Judge

I concur:

Douglas E. Henriques
Administrative Judge

Joseph W. Goss
Administrative Judge

f) GFS(MIN) 13(1975)
g) GFS(MIN) 13(1977)
h) GFS(MIN) 2(1973)

COPY

REPORT ON THE PROPERTY OF THE DIXIE MINING GROUP (which consists of ten unpatented claims) LOCATED MARICOPA COUNTY, FORT MCDOWELL, ARIZONA.

By C. E. Meyers, Mining Engineer.

DIXIE MINING GROUP

Gentlemen: Phoenix, Arizona

Pursuant to your request of April 5, 1917, I submit for your consideration the following report, based upon a personal examination of your property:

LOCATION: This group of ten unpatented and surveyed mining claims, consisting of approximately 200 acres, is situated in the central portion of the Dixie Mining District, in Maricopa County, Arizona. The locations claimed, cover the mineralized outcroppings ore bodies in an advantageous manner, and is large enough to prevent all chance of conflict from extra lateral rights of any adjoining properties.

The property in consideration is situated on the east slope of the McDowell range of Mountains, in air line about 16 miles northerly from Mesa, about 35 miles northwesterly from Weever's Needle, about 30 miles northeasterly from Phoenix and about 6 miles westerly from Fort McDowell, Arizona.

ACCESSIBILITY: From Tempe, a station on the Southern Pacific Railroad, the property is reached by a road of good grade in a distance of about 30 miles. However, from Mesa, a station on the Southern Pacific, the distance to the property would be about five miles less and a good road.

ALTITUDE, WATER AND CLIMATE: An elevation of about 2500 ft. above sea level makes an admirable and mild climate. With little development, nearby springs of fairly good water will furnish ample water for domestic purposes. For concentration and every connection with the treatment of ores, water in quantity is available at the mine.

TITIE: The claims have been held by the original locaters for years and the title established by annual assessment work, is good and perfect.

TOPOGRAPHY: The locality in which this property lies is generally mountainous, cut by ravines and gulches flowing easterly into the Verde river, and rising abruptly a short distance westerly to the high mountains of the McDowell range, where a few ragged quartzite or siliceous knobs protrude their heads conspicuously above the eroded schists, forming prominent land marks on the horizon and then gradually descend to the Paradise Valley.

GENERAL GEOLOGY: BRIEFLY AND GENERALLY DISCUSSING THIS SUBJECT - The Dixie Mining property lies in a belt of mineralized schist and prophyry, traversed and paralleled by quartzite dykes which have a northeasterly and soutwesterly strike. There is also some limestone bordering the mineralized dyke on the southeast, and the true granite lies to the north about a mile.

Leaching of the dykes and formation has occurred on a large and extensive scale. The most prominent rock of the mineral bearing part of the property is silicified schist carrying calcite. These rocks are evidently of sedimentary origin. With the silicified schists there is an intrusion of highly acidic granular rock resembling quartz-porphyry of igneous origin. This intrusion has resulted in a great shearing and alteration of the nearby schist causing them, in places to take on a darkened aspect in their weathered and silicified outcrops. The formation near the igneous rock in the dyke and ore zone is more or less stained and bears the appearance of gossan, carrying much iron oxide on the surface, having a highly cellular and pitted structure caused by the leaching out of former sulphides and leaving a condition very similar to the ore forming rocks of large copper mines of Arizona and other places. The property is notable for its bold outcrop and continuous mineral bearing dyke over a distance of fully 5,000 ft. in places, over 100 ft. in width. The strike is northeasterly to southwesterly with a dip southeasterly from 40° to 50°. A number of pits, cuts, tunnels and shafts are sunk into the underlying water levels large sulphide bodies of commercial ore can be reasonable anticipated.

This conclusion is substantiated by a winze sunk 50 ft. in one of the tunnels on the property, and has proved that there exists valuable sulphide ore beneath the water levels.

DEVELOPMENT: The development on the property of the Dixie Mining Group comprises some 500 ft. It is work of a prospecting character, such as tunnels, cuts, and shafts of which the deepest is 240 ft. This work provides a means of proving the great area of mineralized possibilities is of very considerable importance. Tunnel No.1 is some 200 ft. in length with a 28 ft. crosscut inthe dyke matter and as yet, neither wall has been encountered. It also has a 50 ft. winze which shows good values. The material which came from the winze shows a high percentage of sulphides. The bottom of the tunnel is very heavily copper stained.

VALUES: The following list of assays were taken at various times and by different people and will give an idea of the values of the leached material in and about the tunnel and shafts.

SILVER	GOLD	COPPER
21.4	.04	3.01%
3.0	.02	Trace
.2	.22	Trace
Trace	.60	Trace
12.5	.36	.15
.3	Trace	17.30
33.2	.16	4.20
5.0	.06	1.96
6.9	.15	9.50
48.3	.00	.00
5.0	Trace	10.00
31.3	.70	5.64
17.7	.10	
10.4	.03	1.66
8.8	.08	1.95
2.4	.04	.50
105.4	.60	16.81
31.3	.70	5.64

The samples were not taken as an average of any proven ore body but as an illustration of the actual metal contents in the leached and semi-leached vein and dyke matter in and about the property which serves to warrant development on an extensive scale. The copper contents in the water is a very good indication for sulphide ore bodies at depth.

CONCLUSIONS: In valuing such a property as the Dixie Mining Group it is necessary in a way, to use comparison. With few exceptions, the surface conditions of this property are as good as many of the producing mines of the state. There can be no reason, then, that by developing to depth, mines of equal importance may not be opened. On this copper belt, as well as most all other copper belts, it is necessary to get below the leached surface, down into the standing water, original conditions prevail, in order to find bodies of payable ore.

Summarizing the different advantages in favor of the Dixie Mining Group's property attention is drawn to:- (1) The mineralized belt in which it is located, compares favorably with the geological conditions of the producing mines of Arizona. (2) The formation is favorable for economical mining. (3) The satisfactory grade of sulphide ore contained in the mineralized dykes and which is easily treated by any of the several processes now operating on this character of ore in Arizona. (4) with ample funds and proper management, the property has excellent prospects of making a large producing mine. I have no hesitation whatever in recommending extensive development. Such development, I feel assured will give promising results, and the property will develop into one of the large concentrating propositions in the State.

Respectfully submitted,

C. E. MEYERS, E. M.

REFERENCES

USBM "U" File

MILS Sheet sequence number 0040130256

Geology File - Ayer, Maynard R. 1963, Mineral Resources at Mexwell Reservoir Site, Maricopa County

See: Dixie Mine file (Colvocoresses files)

McDowell -
Dixie Mine.
40 from Park.
240' shaft.
tunnel + drifts.
Skelton

Min Jour. 6/1941

January 5, 1944

Office of Price Administration
War Price and Rationing Board 81.7.1
137 North Second Avenue
Phoenix, Arizona

Gentlemen:

C. A. Gillespie is operating the Dixie Mine, a copper property, in the Ft. McDowell Mountains. This mine is being developed on RFC funds. Operator desires such additional gasoline supplies as are necessary to the prosecution of this work.

Yours very truly,

G. A. Ballam
Assistant to the Director

GAB:JES

August 31, 1942

Mr. Clarence A. Gillespie
1703 South First Street
Phoenix, Arizona

Dear Mr. Gillespie:

We are enclosing a mine owner's report form. Will you fill it in with as complete information as you have on the aluminum showing close to your Dixie property. In the event that you do not make the deal on which you were working yesterday it may be that we can interest other parties in the development of this property. It is possible that the U. S. Bureau of Mines would consider developing the property or at least drilling it, as an aluminum ore occurrence in the district would be quite important in its relation to the new plant which is to be constructed in Phoenix.

I will complete the review on your Dixie property today and suggest that if you can contact the miner who cut these samples on the lower levels, that you get from him a signed statement containing all the information he has on the property. I will not hold up the review for this letter but we can send it on later to be added to the docket.

Very truly yours,

Earl F. Hastings, Assistant Director
and Projects Engineer

EFH:LP
enc.

August 28, 1942

Mr. Clarence A. Gillespie
1708 South First Street
Phoenix, Arizona

Dear Mr. Gillespie:

The information on your application for a development "C" loan still seems insufficient. I have suggested and Mr. Earl Hastings, Assistant Director and Projects Engineer for the Department, has agreed to make the trip out to your property Sunday before noon, if agreeable to you, to see if he can be of further assistance in gathering additional information so that we might review favorably your application. As it stands at present there is not enough evidence to give the property a sound favorable comment.

Will you please phone Mr. Hastings or me some time early Saturday so as to make arrangements for Sunday.

With best wishes, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP

18 July 1940

Mr. Dan Finlayson,
Hillsboro,
New Mexico.

Dear Dan:

Some time ago, at the request of Mr. Gillespie, I sent you a blank Mine Owners report with the request that you fill it out with detailed information on the DIXIE MINE.

Thinking perhaps this blank was misplaced, I am enclosing herewith another blank form, which I should appreciate having at your earliest convenience.

With best wishes, I am

Yours very truly,

J. S. Coupal
Director

JSC-jrf
encl.

REPORT on the PERTY of the DIXIE MINING GROUP which consists of ten unpatented claims), LOCATED MARICOPA COUNTY, FORT MCDOWELL, ARIZONA.

By C. E. MEYERS, MINING ENGINEER.

DIXIE MINING GROUP

Gentlemen: Phoenix, Arizona.

Pursuant to your request of April 5, 1917, I submit for your consideration the following report, based upon a personal examination of your property:

LOCATION: This group of ten unpatented and surveyed mining claims, consisting of approximately two hundred acres, is situated in the central portion of the Dixie Mining District, in Maricopa County, Arizona.

The locations claimed, covers the mineralized outcroppings ore bodies in an advantageous manner, and is large enough to prevent all chance of conflict from extra lateral rights of any adjoining properties.

The property in consideration is situated on the east slope of the McDowell range of Mountains, in air line about sixteen miles northerly from Mesa, about thirty-five miles northwesterly from Weever's Needle, about thirty miles northeasterly from Phoenix and about six miles westerly from Fort McDowell, Arizona.

ACCESSIBILITY: From Tempe, a station on the Southern Pacific Railroad, the property is reached by a road of good grade in a distance of about thirty miles. However, from Mesa, a station on the Southern Pacific, the distance to the property, would be about five miles less and a good road.

ALTITUDE, WATER AND CLIMATE: An elevation of about two thousand five hundred feet above sea level makes an admirable and mild climate. With little development, nearby springs of fairly good water will furnish ample water for domestic purposes. For concentration and every connection with the treatment of ores, water in quantity is available at the mine.

TITLE: The claims have been held by the original locaters for years and the title established by annual assessment work, is good and perfect.

TOPOGRAPHY: The locality in which this property lies is generally mountainous, cut by ravines and gulches flowing easterly into the Verde River, and rising abruptly a short distance westerly to the high mountains of the McDowell range, where a gew ragged quartzsite, or sillicious knobs protude their heads conspicuously above the eroded schists, forming prominent land marks on the horizon and then gradually descend to the Paradise valley.

GENERAL GEOLOGY: BRIEFLY AND GENERALLY DISCUSSING THIS SUBJECT: The Dixie Mining propety lies in a belt of mineralized schist and porphyry, traversed and paralleled by quartzsite dykes which have a northeasterly and southwesterly strike. There is also some limestone bordering the mineralized dyke on the southeast, and the true granite lies to the north about a mile.

Leaching of the dykes and formation has occured on a large and extensive scale. The most prominent rock of the mineral bearing part of the property is silicified schist carrying calcite. These rocks are evidently of sedimentary origin. With the silicified schists there is an intrusion of highly acidic granular rock resembling quartz-porphyry of igneous origin. This intrusion has resulted in a great shearing and alteration of the nearby schist causing them, in places to take on a darkened aspect in their weathered and silicified outcrops. The formation near the igneous rock in the dyke and ore zone is more or less stained and bears the appearance of gossan, carrying much iron oxide on the surface, having a highly cellular and pittedstructure caused by the leaching out of former sulphides and leaving a condition very similar to the ore forming rocks of large copper mines of Arizona and other places. The property is notable for its bold out-crop and continuous

mineral bearing dyke over a distance of fully five thousand feet in places, over a hundred feet in width. The strike is northeasterly to southwesterly with a dip southeasterly from forty to fifty degrees. A number of pits, cuts, tunnels and shafts are sunk into the underlying water levels large sulphide bodies of commercial ore can be reasonable antitipated.

This conclusion is substantiated by a winze sunk fifty feet in one of the tunnels on the property, and has proved that there exists valuable sulphide ore beneath the water levels.

DEVELOPMENT: The development on the property of the Dixie Mining Group comprises some five hundred feet. It is work of a prospecting character, such as tunnels, cuts and shafts of which the deepest is two hundred and forty feet. This work provides a means of proving the great area of mineralized possibilities is of very considerable importance. Tunnel Number 1 is some two hundred feet in length with a twenty eight foot cross cut in the dyke matter and as yet, neither wall has been encountered. It also has a fifty foot winze which shows good values. The material which came from the winse shows a high percentage of sulphides. The bottom of the tunnel is very heavily copper stained.

VALUES: The following list of assays were taken at various times and by different people and will give an idea of the values of the leached material in and about the tunnel and shafts

SILVER	GOLD	COPPER
21.4	.04	3.01%
3.0	.02	Trace
.2	.22	"
Trace	.60	"
12.5	.36	.15
.3	Trace	17.30
33.2	.16	4.20
5.0	.06	1.96
6.9	.15	9.50
48.3	.00	.00
5.0	Trace	10.00
31.3	.70	5.64
17.7	.10	
10.4	.03	1.66
8.8	.08	1.95
2.4	.04	.50
105.4	.60	16.81
31.3	.70	5.64

The samples were not taken as an average of any proven ore body but as an illustration of the actual metal contents in the leached and Semi-leached vein and dyke matter in and about the property which serves to warrant development on an extensive scale. The copper contents in the water is a very good indication for sulphide ore bodies at depth.

CONCLUSIONS:

In valuing such a property as the Dixie Mining Group it is necessary in a way, to use comparison. With few exceptions, the surface conditions of this property are as good as many of the producing mines of this state. There can be no reason, then, that by developing to depth, mines of equal importance may not be opened. On this copper belt, as well as most all otjer copper belts, it is necessary to get below the leached surface, down into the standing water, original conditions prevail, in order to find bodies of payable ore.

Summarizing the different adyantages in favor of the Dixie Mining Group's property, attention is drawn to:

(1) The mineralized belt in which it is located, compares favorably with the geological conditions of the producing mines of Arizona.

(2) The formation is favorable for economical mining.
(3) The satisfactory grade of sulphide ore contained in the mineralized dykes and which is easily treated by any of the several processes now operating on this character of ore in Arizona.
(4) With ample funds and proper management, the property has excellent prospects of making a large producing mine. I have no hesitation whatever in recommending extensive development. Such development, I feel assured will give promising results, and the property will develop into one of the large concentrating propositions in the state.

Respectfully submitted,

C.E. MYERS, E.M.

REPORT ON THE PROPERTY

of the

DIXIE MINING GROUP

(which consists of ten unpattented claims)

LOCATED

MARICOPACOUNTY; FORT McDOWELL, ARIZONA

By C. E. MEYERS;

[illegible]

MINING ENGINEER

DIXIE MINING GROUP

Phoenix Arizona.

Gentlemen:

Pursuant to your request of April 5th,1917, I submit for your consideration the following report, based upon a personal examination of your property:

LOCATION:

This group of ten unpatented and surveyed mining claims, consisting of approximately two hundred acres, is situated in the central portion of the Dixie Mining District, in Maricopa County, Arizona.

The locations claimed, covers the mineralized outcropping ore bodies inan advantageous manner, and is large enough to preventaall chance of conflict from extra lateral rights of any adjoining properties.

The property in consideration is situated on the east slope of the McDowell range of Mountains, in air line about Sixteen miles northerly from Mesa, about Thirty-five miles northwesterly from Weever's Needle, about thirty miles northeasterly from Phoenix and about six miles westerly from Fort McDowell, Arizona.

ACCESSIBILITY:

From Tempe, a station on the Southern Pacific Railroad, the property is reached by a road of good grade in a distance of about thirty miles. However, from Mesa, a station on the Southern Pacific, the distance to the property, would be about five miles less and a good road.

ALTITUDE? WATER AND CLIMATE:

An elevation of about two thousand five hundred feet above sea level makes an admirable and mild climate. With little development, nere-by springs of fairly good water will furnish ample water for domestic purposes. For concentration and every connection with the treatment of ores, water in quantity is available at the mine.

TITLE

The claims have been held by the original locaters for years and the title established by annual assessment work,is good and perfect.

TOPOGRAPHY:

The locality in which this property lies is generally mountainous, cut by ravines and gulches flowing easterly into theVerde River, and

tunnels, cuts and shafts of which the deepest is two hundred and forty feet. This work provides ameans of proving the great area of mineralized possibilities is of very considerable importance. Tunnel Number 1 is some two hundred feet in length with a twenty eight foot cross cut in the dyke matter and as yet, neither wall has been encountered. It also has a fifty foot winze which shows good values. The material which came from the winze shows a high per centage of sulphides. The bottom of the tunnel is very heavily copper stained.

VALUES:

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.2	.22	"
Trace	.60	"
12.5	.36	.15%
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33.2	.16	4.20%
5.0	.06	1.96%
6.9	.15	9.50 %
48.3	.00	.00
5.0	Trace	10.00 %
31.3	.70	5.64%
17.7	.10	
10.4	.03	1.66%
8.8	.08	1.95%
2.4	.04	.50%
105.4	660	16.81%
31.3	.70	5.64%

The samples were not taken as an average of any proven ore body but as an illustration of the actual metal contents in the leached and Semi-leached vein and dyke matter in and about the property which serves to warrant development on an extengive scale. The copper contents in the water is a very good indication for sulphide ore bodies at depth.

CONCLUSIONS:

In valuing such a property as the Dixie Mining Group it is necessary in a way, to use comparison. With few exceptions, the surface conditions of this property are as good as many of the producing mines of this state. there canbe no reason, then, that by developing to depth, mines of equal importance may not be opened. On this copper belt, as well as most all other copper belts, it is necessary to get below the leached surface, down into the standing water, original conditions prevail, in order to find bodies of payable ore.

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GENERAL GEOLOGY:

BRIEFLY AND GENERALLY DISCUSSING THIS SUBJECT: The Dixie Mining property lies in a belt of mineralized schist and porphry, traversed and paralleled by quartzite dykes which have a northeasterly and southwesterly strike. There is also some limestone bordering the mineralized dyke on the southeast, and the true granite lies to the north about a mile.

Leaching of the dykes and formation has occurred on a large and extensive scale. The most prominent rock of the mineral bearing part of the property is a silicified schist carring calcite. These rocks are evidently of sedimentry origin. With the silicified schists there is an intrusion of highly acidic gramular rock resembling quartz-porphyry of igneous origin. This intrusion has resulted in a great shearing and alteration of the nereby schistcausing them, in places to take on a darkened aspect in their weathered and silicified outcrops. The formation near the ignious rock in the dyke and ore zone is more or less stained and bears the appearance of gossan, carying much iron oxide on the surface, having a highly cellular and pitted structure caused by the leaching out of former sulphides and leaving a condition very similarto the ore forming rocks of large copper mines of Arizona and other places. The property is notable for its bold out-crop and continuous mineral bearingdyke over a distance of fully five thousand feet in places, over a hundred feet in width. The strike is northeasterly to southwesterly with a dip southeasterly from forty to fifty degrees. A number of pits, cuts, tunnels and shafts are sunk into the underlying water levels large sulphide bodies of commercial ore can be reasonably anticipated.

This conclusion is substantiated by a winze sunk fifty feet in one of the tunnels on the property, and has proved that there exists valuable sulphide ore beneath the water levels.

DEVELOPMENT:

The Development on the property of the Dixie Mining Group comprises some five hundred feet. It is work of a prospecting character, such as

Summarizing the diferent advantages in favor of the Dixie Mining Group's property. attention is drawn to;

(1) The mineralized belt in which it is located, compares favorably with the geological conditions of the producing mines of Arizona.

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(4) With ample funds and proper management ,the property has exelent prospects of making a large producing mine. I have no hesitation whatever in recommending extensive development. Such development, I feel assured will give promising results, andthe property will develope into one of the large concentrating propositions in the state

Respectfully submitted,

C. E. MYers. E.M.

June 24, 1942

Mr. C. A. Gillespie
1708 South 1st Street
Phoenix, Arizona

Dear Mr. Gillespie:

As the Mine Owner's Report you gave us on your Tufa Rock property does not give the name of the mine, we are calling it the DIXIE TUFA MINE.

Yours very truly,

J. S. Coupal, Director

JSC:LP

June 26, 1942

Mr. C. A. Gillespie
1708 So. 1st Street
Phoenix, Arizona

Dear Mr. Gillespie:

I am enclosing a copy of Mine Owner's Report filed with this department covering the DIXIE TUFA MINE in Maricopa County.

I shall be glad to submit this report to anyone making inquiry for a property such as yours.

Assuring you of my desire to be helpful, and with best wishes, I am

Yours very truly,

J. S. Coupal, Director

JSC:LP
Enc.

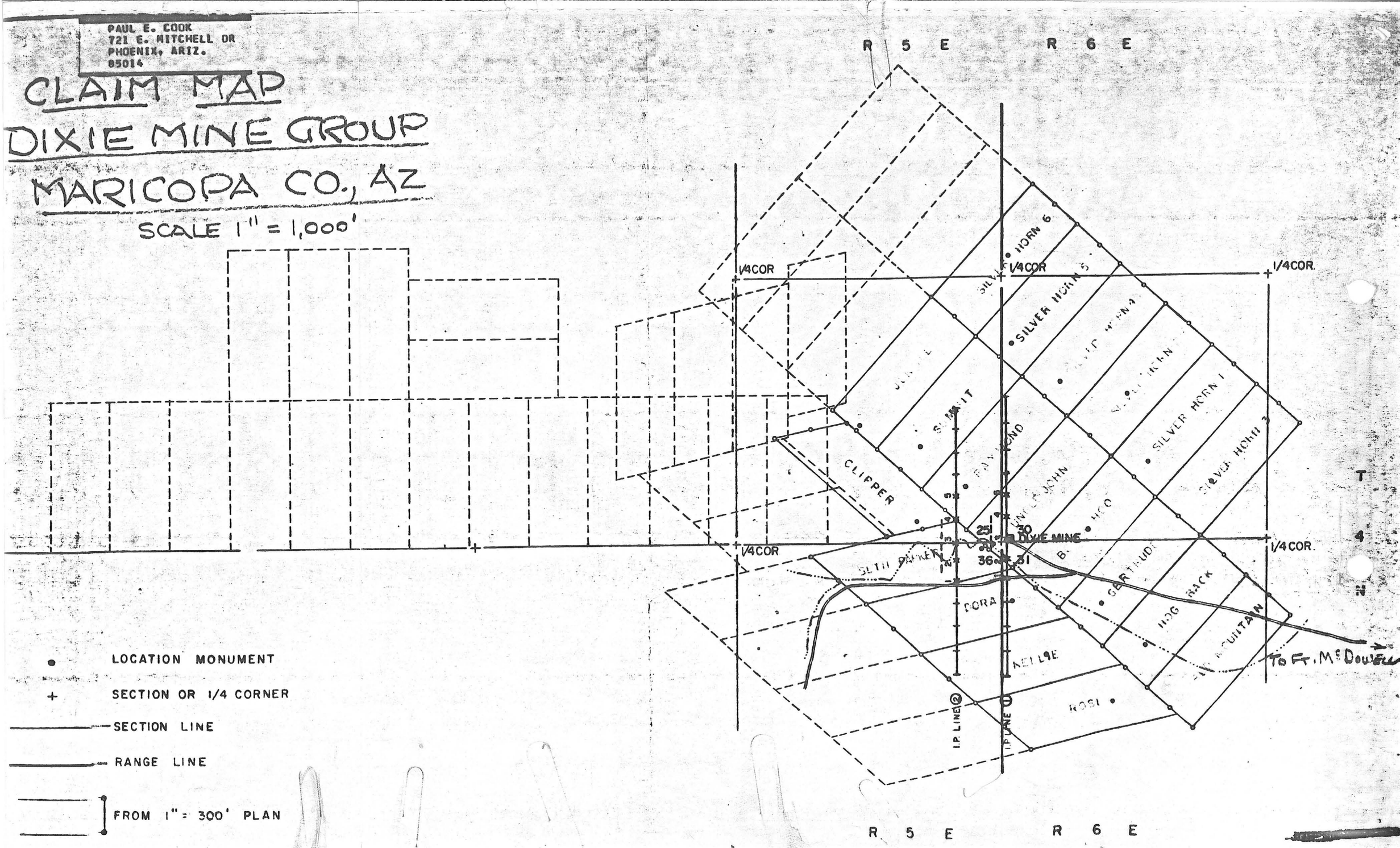
PAUL E. COOK
721 E. MITCHELL DR
PHOENIX, ARIZ.
85014

CLAIM MAP

DIXIE MINE GROUP

MARICOPA CO., AZ

SCALE 1" = 1,000'



- LOCATION MONUMENT
- \+ SECTION OR 1/4 CORNER
- SECTION LINE
- RANGE LINE
- FROM 1" = 300' PLAN

DIXIE LODE MINING CLAIM - FIELD SHEET

MAIN WORKINGS - ADIT LEVEL

1" = 20' Waist Level Method

0 10 20

By Al Burch, Jeff Garreth, Matt Shumaker

Begin 11-09-90 / Survey
End 2-17-94 / Geology
4/94

N 12°

Decl. 1994 12°16.5'E

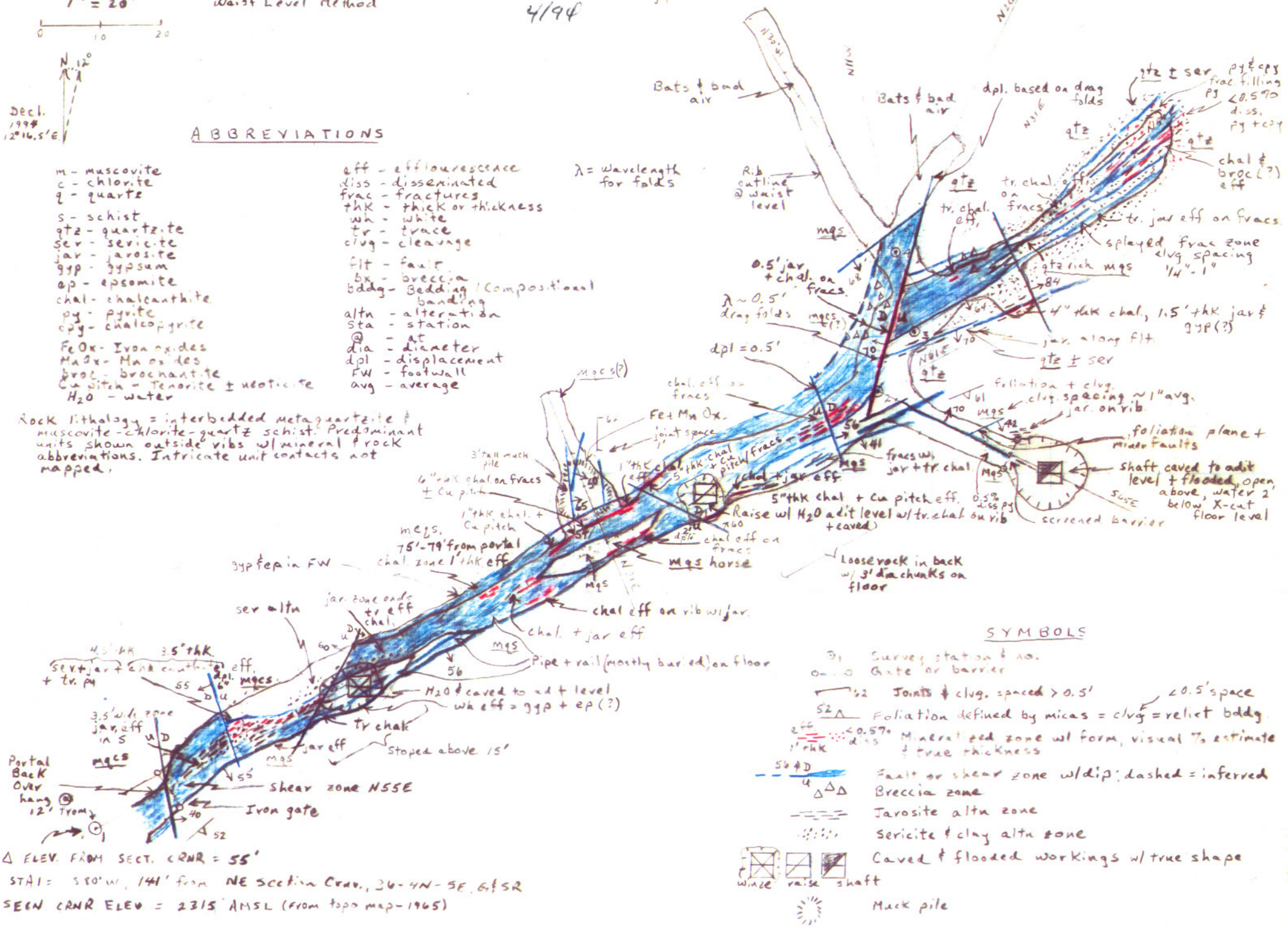
ABBREVIATIONS

m - muscovite
c - chlorite
q - quartz
s - schist
qtz - quartzite
ser - sericite
jar - jarosite
gyp - gypsum
ep - epsomite
chal - chalcanthite
py - pyrite
cpy - chalcopyrite
FeOx - Iron oxides
MnOx - Mn oxides
broc - brochantite
Cu pitch - Tenorite ± neotocite
H_2O - water

eff - efflourescence
diss - disseminated
frac - fractures
thk - thick or thickness
wh - white
tr - trace
clvg - cleavage
flt - fault
bx - breccia
bddg - Bedding / Compositional banding
altn - alteration
sta - station
@ - at
dia - diameter
dpl - displacement
FW - footwall
avg - average

λ = wavelength for folds

Rock lithology = interbedded metaquartzite & muscovite-chlorite-quartz schist. Predominant units shown outside ribs w/ mineral & rock abbreviations. Intricate unit contacts not mapped.



Δ ELEV. FROM SECT. CRNR = 55'

STA 1 = S 80° W, 141' from NE Section Corn., 26-4N-5E, G&SR

SECN CRNR ELEV = 2315' AMSL (From topo map - 1965)

SYMBOLS

- Survey station & no.
- Gate or barrier
- Joints & clvg. spaced > 0.5' ∠0.5' space
- Foliation defined by micas = clvg = relict bddg.
- Mineralized zone w/ form, visual % estimate & true thickness
- Fault or shear zone w/ dip; dashed = inferred
- Breccia zone
- Jarosite altn zone
- Sericite & clay altn zone
- Caved & flooded workings w/ true shape
- winze, raise, shaft
- Muck pile