



CONTACT INFORMATION

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Arizona Department of Mines and Mineral Resources Mining Collection

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01/15/98

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: BOSQUE GROUP

ALTERNATE NAMES:

BIG FOUR MANGANESE
LYNCH MANGANESE

MARICOPA COUNTY MILS NUMBER: 806

LOCATION: TOWNSHIP 5 S RANGE 2 W SECTION 18 QUARTER SW
LATITUDE: N 32DEG 59MIN 08SEC LONGITUDE: W 112DEG 30MIN 38SEC
TOPO MAP NAME: BOSQUE - 7.5 MIN

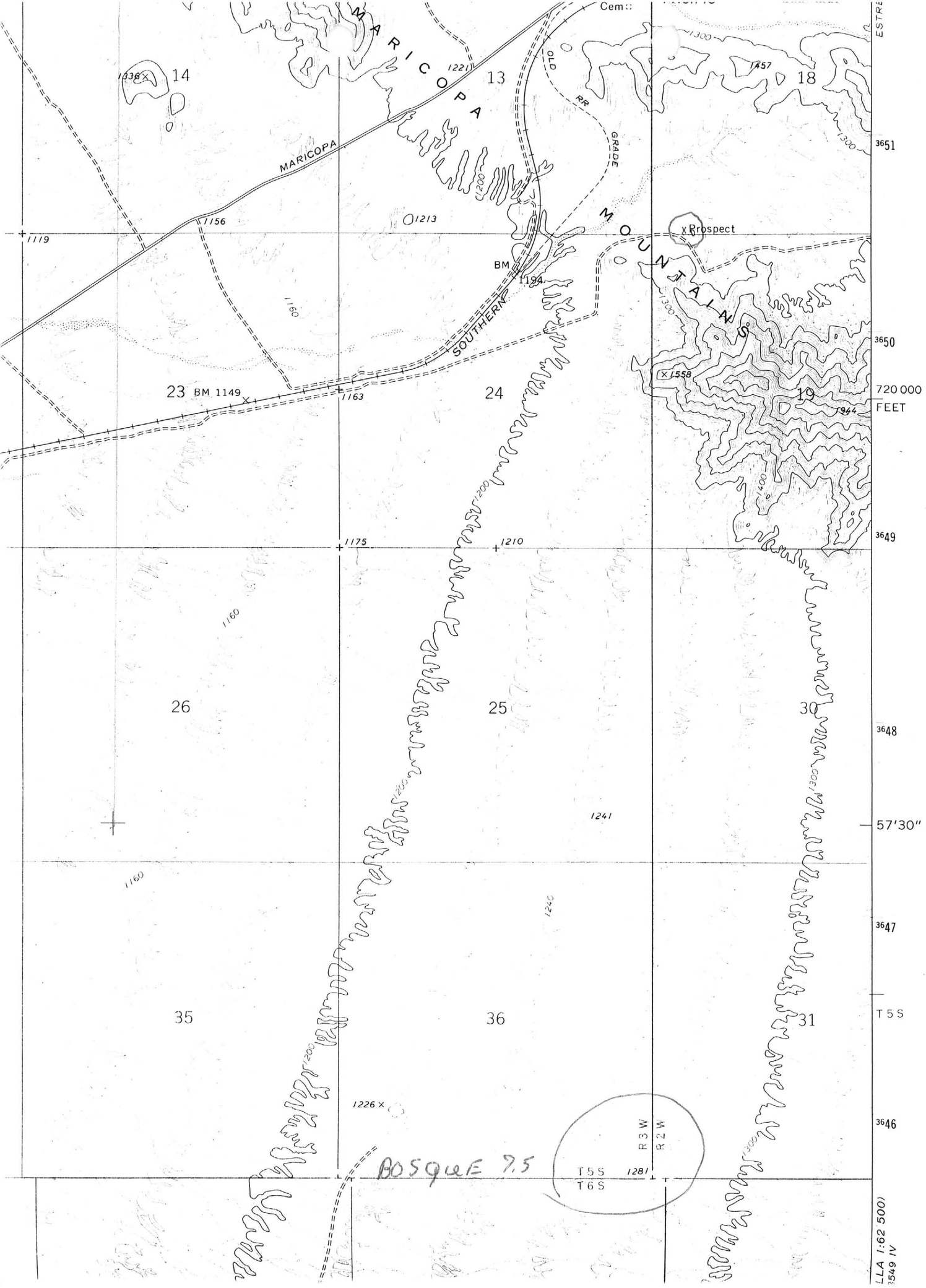
CURRENT STATUS: EXP PROSPECT

COMMODITY:

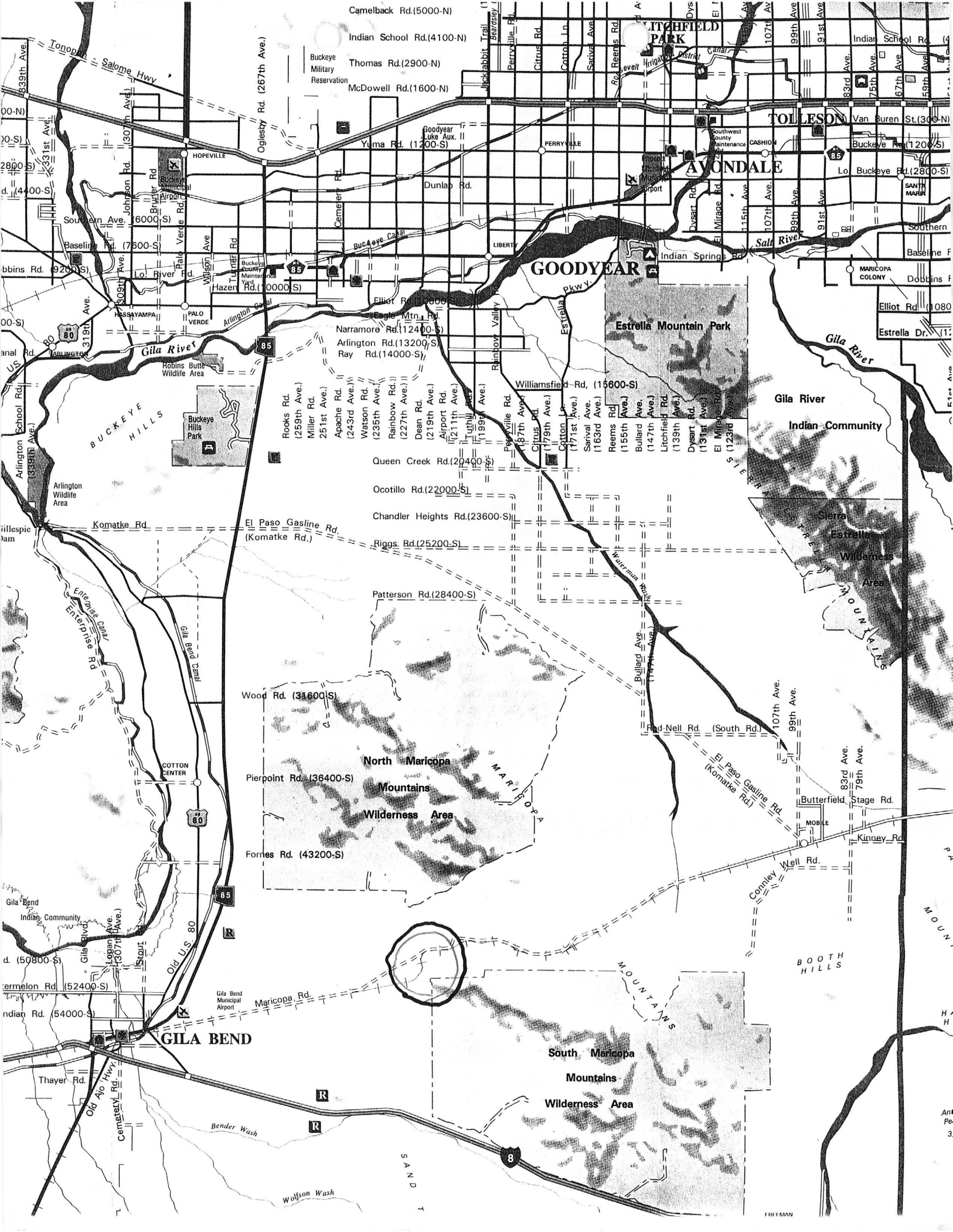
MANGANESE OXIDE

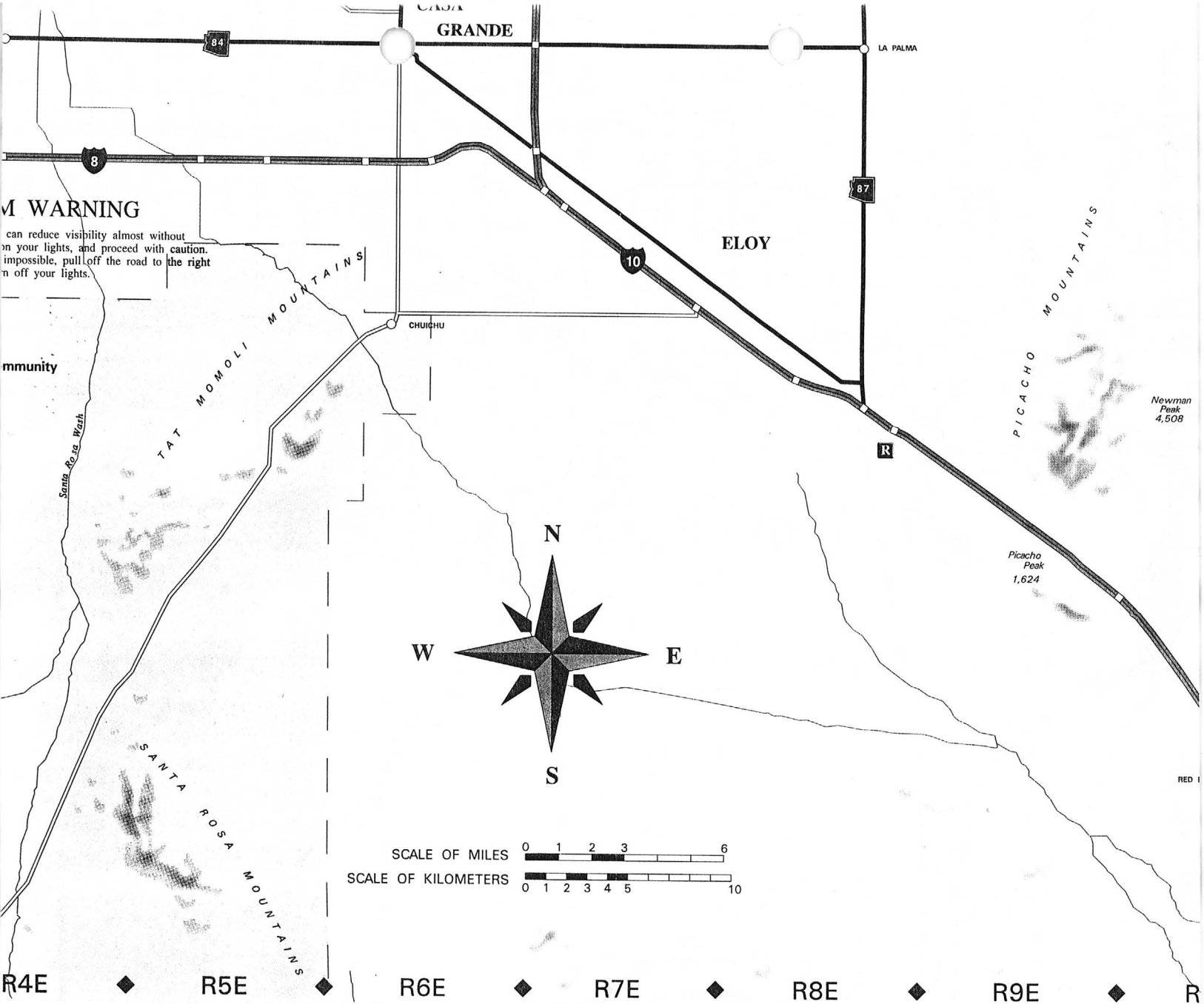
BIBLIOGRAPHY:

ADMMR BOSQUE GROUP FILE
U FILE, MN 13, LYNCH MANGANESE
USGS BULL 710-D, P. 133



LLA 1:62 500
3549 IV





M WARNING

can reduce visibility almost without
on your lights, and proceed with caution.
impossible, pull off the road to the right
n off your lights.

BIG FOUR MANGANESE MINE (file) 3-1-43 MARICOPA COUNTY
GILA BEND DIST.

MANGANESE

GANNAWAY, H. B. 4-21-40 MARICOPA COUNTY
GILA BEND DIST.

BIG FOUR MANGANESE MINE (file)

LYNCH, J. D. 3-1-43 MARICOPA COUNTY
Glendale, Arizona - P.O. Box 806 GILA BEND DIST.

BIG FOUR MANGANESE MINE (file)

BIG FOUR MANGANESE MINE (file) 3-1-43

MARICOPA COUNTY
GILA BEND DIST.

MANGANESE

LYNCH, J. D. 3-1-43
Glendale, Arizona - P.O. Box 806

MARICOPA COUNTY
GILA BEND DIST.

BIG FOUR MANGANESE MINE (file)

GANNAWAY, H. B.

4-21-40

MARICOPA COUNTY
GILA BEND DIST.

BIG FOUR MANGANESE MINE (file)

MARICOPA ARIZONA
County State

Chief Mineral Manganese No. Mn 13
Accessory Minerals _____

Property Name: Lynch Manganese prospect

Location: About 10 mi. E. of Gila Bend,
Date Ariz. T5S, R3W unsur.

Owner: Name Address
J. D. Lynch Phoenix 4/1941

SS - SW - SE 24
NO DEF. INFO.

Operator: _____

Production: 40 T of 18% Mn ore.

Total _____ From _____ To _____
Present Rate _____ per _____ Date _____

Source of Information: _____

Status	Date
<u>Active (%)</u>	<u>Early 1941</u>

USBM Report: File No. 464.2/300
Engineer: J. E. Bell

Classification: Prospect

(See other side for general information)

General Information: On the 2 unpat. claims are serveral breccia zones occurring in a remnant of rhyolite overlying granite. The Mn oxides occur as breccia filling, but the mineralization is erratic & spotty. By close hand sorting the deposit could produce _____ low-grade ferromanganese.

Character of Ore:

Equipment (Date _____):

MARICOPA ARIZONA
County Sta

Chief Mineral Manganese No. Mn 13
Accessory Minerals

Property Name: Lynch Manganese prospect

Location: About 10 mi. E. of Gila Bend,

Owner: Name Address

Date Ariz. T5S, R3W unsur.

J. D. Lynch Phoenix 4/1941

SS - 3W - SE 24

NO DEF. INFO.

Operator:

Production: 40 T of 18% Mn ore.

Total From To

Present Rate per Date

Source of Information:

Status

Date

Active (%)

Early 1941

USBM Report: File No. 464.2/300

Engineer: J. E. Bell

Classification: Prospect

(See other side for general information)

dumps, where the material is screened, and the larger chunks of ore and waste material are removed. The finer material is then hauled to a well a quarter of a mile distant, where three hand jigs have been set up and a further separation is made. Each jig consists merely of a 16-mesh screen about 2 by 4 feet, operated by hand power. The ore is thrown on the screen and on being worked or jigged in water the clayey substance is washed off, leaving the manganese concentrates. About 1,000 pounds of manganese concentrates per man per day can be produced in these jigs. The concentrates contain about 45 per cent of manganese, 2 per cent of iron, and 4 per cent of silica.

MARICOPA COUNTY.

4. *Manganese Nos. 1 and 2 claims.*—Two claims owned by J. C. Reed and Simon Rodriguez are on the northeast slope of Black Butte, about 20 miles in an air line S. 70° W. from Wickenburg. The deposit is best reached by the road that goes to the Vulture mine, southwest of Wickenburg. Westward from the Vulture mine a poorly defined road can be traversed within 2 miles of the deposit. The ore body is small and does not warrant any expenditure in road making. The claims were located in March, 1918. On May 27, when they were visited, no development work had been done on them except for a shallow discovery hole.

Black Butte is an isolated hill in a detrital plain. The deposit is at an altitude of 2,950 feet, about 600 feet below the summit of the butte and 700 feet above the surrounding plain. Several arroyos drain from the butte to the plain, but none of them contain water. The rainfall is very scanty, and the vegetation consists of desert shrubs and cactus.

Black Butte is composed entirely of volcanic rocks. Near its base and extending within a few hundred feet of the summit are thick-bedded white rhyolite tuffs and pink flow-banded rhyolite, some of which are glassy or felsitic. The rocks that overlie the rhyolite and extend to the summit are black basalt and probably some andesite.

The deposit consists of small seams of manganese oxides in a shear zone in rhyolite which strikes apparently N. 30° E. The seams are widely distributed through a distance of 20 feet, and they range from a fraction of an inch to 3 inches in width. They are not abundant enough to be profitably mined, and the mineralized zone has been traced only a few feet north and south from the discovery hole. The manganese oxides are soft black fine-grained crystals that are probably pyrolusite. They occur for the most part as fissure fillings, but they also replace the wall rocks and included fragments of tuff in the veins. No iron oxides were observed with the manganese oxides, but calcite is commonly found in the seams.

5. *Bosque group.*—The Bosque group of manganese claims, owned by T. H. Farley, is about a quarter of a mile south of the Southern Pacific Railroad, 12 miles east of Gila, the junction of a branch line running south to Ajo. The group comprises three claims, but manganese minerals have been found on one of them only. The developments consist of a few shallow holes, and no ore had been shipped to the time of visit, September 18, 1917. The deposits exposed at that time were small and discontinuous, and only a few tons of ore was in sight.

The climate is extremely arid, but the area supports a sparse growth of desert shrubs and cactus.

The deposit is on a small circular knoll about 50 feet high, at an altitude of 1,100 feet above sea level. The knoll is an outlier of the Maricopa Mountains, some of whose summits rise 1,000 feet or more above the detrital plains that flank them. Gila River, which flows around the south end of the Gila Bend Mountains, about 10 miles west of the deposit, is the only stream of the region. There are no wells in the vicinity of the deposit, and the depth to water level is not known.

A coarse-grained biotite granite composes the hill on which the manganese deposit lies, and it is apparently the dominant rock of the Maricopa Mountains. No sedimentary rocks were noted in the vicinity of the claims.

The deposit has been formed by the replacement of the granite along a poorly defined zone of fissuring. As exposed by open cuts the deposit is small. The replacement or impregnation of the granite by manganese oxides was irregular and incomplete, and the deposit is generally but a few inches wide. In one place, however, it is 20 inches wide in the center of a lens which tapers within a distance of 5 feet to a mere seam at each end. The granite is clearly replaced by the manganese solutions, for all gradations were observed from ore in which, though it is granular in texture, none of the original component minerals of the granite are apparent to ore which shows numerous crystals of feldspar, quartz, and biotite in a groundmass of manganese oxides. The replacement of the granite minerals apparently proceeded selectively, feldspars being attacked first, followed by biotite and quartz. In the process of replacement abundant secondary calcite was formed and it occurs in veinlets and bunches in the ore.

The manganese oxides are psilomelane, pyrolusite, and manganite, all intimately mixed. Psilomelane is the most abundant and occurs in small nodules in the ore. Manganite occurs as microscopic crystals in the interstices of psilomelane, associated with the soft amorphous pyrolusite. The material is hard, granular, and very siliceous for

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

-December-10,-1957

January 30, 1958

To the Owner or Operator of the Arizona Mining Property named below:

BIG FOUR MANGANESE
(Property)

MANGANESE
(ore)

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

FRANK P. KNIGHT,



REASON CHECKED

Unclaimed Refused
Unknown
Insufficient address
Moved. Left no address
No such office in state
Do not remain in this envelope

Mr. H. B. Gannaway

Not at → ~~P.O. Box 806~~
~~Glendale, Arizona~~



REASON CHECKED

Refused
.....
.....
.....
.....

Mr. J. D. Lynch
~~P.O. Box 806~~
Glendale, Ariz.



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

Date April 21, 1940

Mine Big Four Manganese

Location PHONE: 621 (Home after 5:00 P.M.)
PHONE: 231 (Work)

Mining District & County - Gila Bend Dist.
Maricopa County.

Former Name

Owners - J. D. Lynch, E. W. Andrews,
H. B. Gannaway, G. R. Andrews.

Address - J. D. Lynch
P.O. Box 806, Glendale, Arizona
Address

Operator

President, Owning Co.

President, Operating Co.

Gen. Mgr. - J. D. Lynch, Power of Attorney
for handling.

Principal Minerals - Manganese

Mine Supt.

Production Rate

Mill Supt.

Mill: Type & Cap.

Men Employed

Power: Amt. & Type

Operations: Present - None

Operations: Planned

Number Claims, Title, etc. - Eight

Description: Topography & Geography

Mine Workings: Amt. & Condition - Location and assessment holes only.

(ORIGINAL) J. D. LYNCH

Geology & Mineralization - Granite and lime with manganese ore coming to the surface and spreading on depth. It is a very large proposition from surface indications, but from the way these are spreading it looks like that depth would bring it to a blanket formation.

Ore: Positive & Probable, Ore Dumps, Tailings

Dimensions and Value of Ore body - Unknown at this time but looks good for an immense body of good ore.

Mine, Mill Equipment & Flow-Sheet

Road Conditions, Route - Fair and not more than a $2\frac{1}{2}$ mile haul to the Southern Pacific railroad,

Water Supply - Has not been investigated to date,

Brief History - The main lode is domed shape hill with pure manganese nuggets to be found scattered about over the hill,

Special Problems, Reports Filed

Remarks - 4 assays,
2 run 37 per cent and 2 run 36 per cent. MnO_2

If property for sale: Price, terms and address to negotiate, - Property will be for sale or lease to right party, Address: J. D. Lynch
P.O. Box 806
Glendale, Arizona

(SIGNED) J. D. Lynch

Man-12

August 20, 1940

Mr. J. E. Leland,
228 W. 4th St.,
Los Angeles, Cal.

Dear Sir:

With further reference to your inquiry for information on a mining property with manganese deposits or good prospects with large tonnage indicated, I am enclosing herewith a copy of mine owners report on the Big Four Mine owned by Mr. J. D. Lynch, Box 806, Glendale, Arizona.

Mr. Lynch has asked that I send this report to you, and I should suggest that you communicate with him directly regarding the property.

Assuring you of my desire to be helpful, I am

Yours very truly,

J. S. Coupal,
Director.

JSC-aam

Enclosure

August 20, 1940

Mr. J. D. Lynch,
P. O. Box 806,
Glendale, Arizona.

Dear Mr. Lynch:

Referring to your request that a copy of your mine owners report be forwarded to Mis-21 and Man-12, I beg to advise that this communication has been forwarded to the parties making the inquiries, with the request that they communicate with you directly regarding this property.

Assuring you of my desire to be helpful, I am

Yours very truly,

J. S. Coupal,
Director.

JSC-aam

February 20, 1943

MEMORANDUM

SUBJECT: Mine Examination March 1
Big Four Manganese

TO: George Ballam

FROM: J. S. Coupal

You are due to attend the meeting in Ajo on Monday, March 1. A Mr. Bill Thorp, whom I have known for many years, is operating at the Big Four Manganese located about sixteen miles east of Gila Bend on the old Gila Bend-Casa Grande road.

Mr. Thorp wishes to apply for a mining loan and has asked that you look over the property, make a brief report, and advise him as to the detailed procedure for setting it up.

Please drop a card to W. V. Thorp, Route 5, Box 120, Phoenix advising him that the following arrangements are or are not possible. My suggestion is that Mr. Thorp meet you at Stouts Hotel, Gila Bend, at 11:30 A.M. Monday, March 1. This will give you ample time to make the property, put in two or three hours, and then make the meeting at Ajo.

I will be in the field all next week so please confirm this arrangement by mail to Mr. Thorp. He is operating on the property and he will not get his mail until Friday, February 26 when he returns to Phoenix.

August 31, 1943

Mr. L. W. Dalby, Regional Loan Agent
Smaller War Plants Corporation
Room 1250, 1031 South Broadway
Los Angeles, 15, California

Dear Mr. Dalby:

Re: Wm. V. Thorpe
Route 5, Box 120
Phoenix, Arizona

Mr. D. L. Bouse, District Manager in Phoenix, called and Mr. George A. Ballam, Field Engineer in the Southern District, and I discussed with Mr. Bouse this property. Both Ballam and myself have examined the manganese property called the Big Four manganese, which is the subject of this letter and of Mr. Thorpe's application.

These two examinations were made over one and one-half year's apart and independently we both arrived at the same conclusion, namely that the development work on the property was too meager to indicate a sufficient tonnage to justify either an R.F.C. development loan or a Smaller War Plants Corporation working capital loan.

Mr. Thorpe's present plans call for erecting a small concentrating mill. The water problem is a difficult one in this section and the operation of a mill would call for hauling the ore anywhere from 5 to 15 miles to the proper location of a mill near a permanent water supply or the hauling of water to the mine. It might call for funds to sink a well to develop water.

I am sorry to say that the project cannot be recommended by either George Ballam, the field engineer, or myself.

Very truly yours,

J. S. Coupal, Director

JSC:LP

CC: Mr. D. L. Bouse

Regional Office (14)
Room 1250, 1031 South Broadway
Los Angeles, 15, California

22/23

File


Mr. D. L. Bouse,
District Manager,
Smaller War Plants Corporation,
426 Security Building,
Phoenix, Arizona.

Dear Mr. Bouse:

Re: Wm. V. Thorpe
Route 5, Box 120
Phoenix, Arizona

We received your letter of August 19, 1943, in connection with the above-captioned application for a loan of \$4,000.00. It will be appreciated if you can obtain from Mr. A. C. Nebeker whatever information he has in connection with this property. It would also be helpful if you would get the Department of Mineral Resources to write us a letter giving their opinion as to the value of this property and the likelihood of its becoming a profitable producer under the management of Mr. Thorpe and Mr. Ferrin.

Very truly yours,


L. W. Dalby,
Regional Loan Agent.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine **HIG FOUR, Manganese**

Date **March 6, 1943**

District **Gila Bend**

Engineer **Earl F. Hastings**

Subject: **Reconstruction Finance Corporation
Mine Loan**

Docket No.
Date Application Received
Date of Field Examination
Date of Report

Phoenix C - 150
March 3, 1943
March 1, 1943
March 6, 1943

1. Name and address of applicant (correspondent): **W. V. Thorpe and R. W. Ferrin
Route 5, Box 120, Phoenix, Arizona.**
2. Character of project and estimated cost thereof:
Equip mine to produce manganese ore. \$5,000.00.
3. Location of property:
Gila Bend Mining District, Maricopa County, Arizona.
4. Applicant's interest in or ownership of property:
Applicants hold lease with option to purchase. Royalty 10%, option price \$2,500.00.
5. Loan requested:
\$5,000.00.
6. Loan recommended:
None.
7. Comments:
(A) Added to the docket is the brief report by George A. Ballam, Field Engineer for the Department of Mineral Resources dated March 1, 1943.

(B) The property is insufficiently developed to show any commercial ore. The deepest pit is but 6 ft., and this has shown the limit of ore at that point.

(C) The manganese occurs in stringers and careful sorting would be required to obtain a marketable grade.

(D) The property has little prospects of developing into a regular producer and the granting of loan funds is not warranted.

ARIZONA DEPARTMENT OF MINERAL RESOURCES

**Earl F. Hastings
Projects Engineer**

21
JMS
August 20, 1940

Mr. J. A. Gruwell,
Pomerene, Arizona.

Dear Mr. Gruwell:

With further reference to your inquiry for information on a mining property that could be handled and put into operation for around \$50,000.00, I am enclosing herewith a copy of mine owners report on the Big Four Mine owned by Mr. J. D. Lynch, Box 806, Glendale, Arizona.

Mr. Lynch has asked that I send this report to you, and I should suggest that you communicate with him directly regarding the property.

Assuring you of my desire to be helpful,

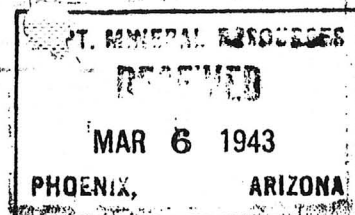
I am

Yours very truly,

J. S. Coupal,
Director.

JSC-aam

Enclosure



Sam-

Tried to see the optimistic side of this thing. I don't see how those two boys can make any ~~money~~ ^{money} here, unless this manganese opens up with depth and is a little cleaner. Since that isn't the nature of the beast I can't be too enthusiastic. There isn't enough work done to show commercial ore in any quantity, and the one hole over six feet deep shows nothing below.

However, by dint of a whole lot of work, they have about five tons of ore which should average better than 30%, and some will run 35% maybe. They are going ahead with their application for about \$5000 for operating capital, some equipment, and a little development work. I helped them with this and can only hope that it looks better when the RFC examines.

Geo