



CONTACT INFORMATION

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: CRESCENT

ALTERNATE NAMES:

ARIZONA RARE METALS PROP.
SAN PEDRO GROUP
BEAM AND ISHIMOTO LEASE
SANTA MARIA CLAIMS
TARR AND HARPER PROPERTY
BRANCH MANGANESE
ORSEN BRANCH PROPERTY
PUTNAM WASH DEPOSIT
CACTUS BOWL PROPERTY
RIVERSIDE MINIG CLAIMS

PINAL COUNTY MILS NUMBER: 523C

LOCATION: TOWNSHIP 7 S RANGE 16 E SECTION 8 QUARTER S2
LATITUDE: N 32DEG 50MIN 24SEC LONGITUDE: W 110DEG 43MIN 49SEC
TOPO MAP NAME: LOOKOUT MTN - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

MANGANESE
GOLD
SILVER
COPPER

BIBLIOGRAPHY:

HILLEBRAND, JAMES, GEOLOGY AND ORE DEPTS. IN
THE VICINITY OF PUTNAM WASH, PINAL CO., AZ.
U OF A THESIS 1953, P. 85-87
ADMMR CRESCENT MILL AND MINE FILE
FARNHAM, L.L. & OTHERS MANGANESE DEPTS. OF
EASTERN AZ. USBM IC 7990, 1966, P. 144-147
ADMMR U FILE PINAL MN28
ADMMR FILE
STEWART, L.A., CHRYSOLITE-ASBESTOS DEPOSITS
OF AZ. IC 7706, 1955, P. 118

CRESCENT MILL & MINES

PINAL COUNTY

Mining World Dec. 1958 p. 58

ABM Bull. 127 p. 86, 87

IC 7990 p. 144, 149

ABM Bull. 180, p. 218

Sept

September 9, 1942

Mr. Rush T. Sill,
Ruscardon Engineers
108 West 6th Street,
Los Angeles, California.

Dear Rush:

I have your letter of September 4 relative to the loan application which was presented by you and Mr. Jamison.

Bill Gohring is now back in Phoenix and it would be a good idea to take up the matter of an examination of the San Pedro mine in the near future with him personally. They have been getting these applications in faster than they can take care of them. They have been trying to get extra help but have not been too successful. You should write to W. B. Gohring, R.F.C. Mine Loan Division, 325 Heard Building, Phoenix.

Another thing which causes some delay is the effort to route the engineers to make several examinations on one trip which gives some of the applicants quicker service, while delaying others. Of course, it has to be remembered that everyone is anxious to get going and everyone is putting on pressure.

We will see if there is anything we can do to speed up your examination.

With kindest personal regards, I am

Yours very truly,

CHARLES F. WILLIS, Chairman
Board of Governors

CFW:MH

debt

RUSCARDON ENGINEERS

ENGINEERS CONSTRUCTORS

108 WEST 6TH STREET
LOS ANGELES

TUCKER 4033

RUSH T. SILL
CARL B. WIRSCHING
DONALD M. BAKER

September 4, 1942

Chas F. Willis,
Title & Trust Bldg.,
Phoenix, Arizona.

My dear Willis:

R. C. Jamison and I have made an application for a \$20,000 R. F. C. Development Loan for the San Pedro Manganese Mine, owned by Burns Giffin of Superior and Orson Branch of Winkelman. The property is located 12 miles south of Winkelman one mile off the Tucson highway.

You will remember Jamison and Peacock who opened up and operated the 79 Mine for some years. Jamison mined manganese at the Crescent Mine at Port Angeles, Washington and he and I have examined about all of the known manganese mines in Arizona and California and some in New Mexico.

This San Pedro Mine is the best that we have seen. The R. F. C. has ordered the examination and have instructed C. A. Rockwood to make the examination. A letter from him today states that he is very busy but will make the examination as soon as possible and let us know several days ahead of time so that we can come down to go over the property with him.

If Gorøing was still there we could put the pressure on him and get this examination put on the preferred list. Neither of us know Rockwood and we thought you might help us with a suggestion that this property is one that should be looked at right now. We are anxious to get going.

Jamison worked with Andy Leitu's father, the old professor, for years on the iron ranges of

Chas. F. Willis

page 2

Sept. 4, 1942

Minnesota. We are enclosing for your information copies of letters which may interest you.

A copy of Rockwood's letter is enclosed. How can we build a fire under him to get some immediate action. This is not just another mine but a manganese mine that can be put into operation quickly and should produce thousands of tons of concentrates.

Yours very truly

Rush T. Sill

Rush T. Sill

RECONSTRUCTION FINANCE CORPORATION

WASHINGTON
325 Heard Building
Phoenix, Arizona
September 3, 1942

AIR MAIL

Mr. R. C. Jamison
1232 San Vicente Blvd.,
Santa Monica, California.

Dear Mr. Jamison:

This will acknowledge receipt of your letter of September 2 regarding a date for the examination of your mining property.

Due to the rush of business going through this office, it is impossible to give you a definite date for this examination work. However, you may be assured that we will get to it as soon as possible, and will notify you several days in advance.

Very truly yours,

C. A. ROCKWOOD
Supervising Engineer

September 4, 1942

Mr. C. A. Rockwood,
Supervising Engineer R. F. C.,
325 Heard Building,
Phoenix, Arizona.

Dear Mr. Rockwood:

I have your letter of September 3rd stating that your office is loaded with work and that it is impossible to give us a definite date for this examination but that you will notify us several days in advance.

We are very anxious to get this property under way and hope that you can arrange to meet Mr. Sill and me at an early date.

I mined in Arizona for several years and am sending copies of letters from people I have dealt with.

When you are ready send a collect wire and we will be right over.

Yours very truly,

R. C. Jamison

RCJ/MD

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UNITED STATES SENATE

August 25, 1942

Mr. R. C. Jamison
1232 San Vicente Blvd.
Santa Monica, California

Dear Mr. Jamison:

Referring to our recent correspondence, relative to your application for a mine loan with the R. F. C. on the Winkelman property, your application was received on the 10th of this month and is now under consideration. From what I learned in talking with Mr. Rait's office, a field examination will be ordered in this case. You understand, of course, that there are a great number of these applications pending and that it takes between three weeks and a month to get action.

I have been assured that the processing of your application will be expedited in every way possible and I am hopeful that a field examination will be ordered by Mr. Rait's office at the earliest possible date.

Assuring you of my interest in this matter, I remain,

Yours truly,

Ernest W. McFarland.

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WAR PRODUCTION BOARD

Washington, D. C.

August 28th 1942

In Reply refer to:
Manganese-Chrome Branch
Room 2404
Temporary R Building

Mr. R. C. Jamison
1232 San Vicente Boulevard
Santa Monica, California

Dear Mr. Jamison:

Mr. Andrew Leith has referred your letter of August 18, 1942, to me for my reply.

I have called the Mining Section of Reconstruction Finance Corporation regarding the \$20,000 Development Loan which you mention in your letter of August 18. I was advised that your application had been sent out today to the District Engineer in Phoenix, and that it will receive prompt attention.

Consequently, I think you can anticipate an inquiry from the District Engineer sometime within the next week in order to make an appointment to visit your property.

Very truly yours

Olaf N. Rove
Manganese and Chrome Branch

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Y

COPY

Congress of the United States
House of Representatives
Washington, D.C.

LELAND M. FORD
16th District
California

August 28, 1942

Mr. Charles B. Henderson
Chairman, Board of Directors
Reconstruction Finance Corporation
811 Vermont Avenue
Washington, D.C.

My dear Mr. Henderson:

My attention has been directed to the fact that Mr. R. C. Jamison, an experienced mining man, is opening a manganese mine in Arizona. His associate is Mr. Rush T. Sill. I believe that this manganese mine has been inspected by agents of the Reconstruction Finance Corporation and application has been filed, and that you have received a letter from Mr. Jamison, of 1232 San Vicente Boulevard, Santa Monica, California, dated August 8, 1942. This letter was addressed to Mr. D. M. Rait, Chief of the Mining Section, Reconstruction Finance Corporation, and with it were enclosed papers pertaining to an application for a development loan on the San Pedro manganese mine, situated in the Feldman Mining District, 12 miles South of Winkelman, Arizona, a station on the Arizona Eastern Railroad.

I shall greatly appreciate your advising me if any action has been taken on the application described above, and as to the possibilities of the Reconstruction Finance Corporation taking action thereon. I sincerely hope that you may find it possible to keep me advised as to progress being made on the above described application.

Sincerely yours,

L. M. Ford

(The above copy is self-explanatory)

C
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RECONSTRUCTION FINANCE CORPORATION

Washington

August 28, 1942

Mr. R. C. Jamison
1232 San Vicente Boulevard
Santa Monica, California

Re: R.C. Jamison and Rush T. Sill
Docket No. B-ND-4402

Dear Mr. Jamison:

We have authorized our Supervising Engineer, Mr. Carl A. Rockwood, whose address is 325 Heard Building, Phoenix, Arizona, to make a field examination of your mining property in Pinal County, Arizona.

It is suggested that you communicate with Mr. Rockwood at his Phoenix, Arizona, office to arrange a mutually convenient time when you can conduct him over your mining property and explain to him at firsthand the development expenditures you propose.

In the event that any of your mine workings, where ore is claimed, are inaccessible, it will, of course, be necessary for you to repair and render safe such places for Mr. Rockwood's detailed inspection and systematic sampling. It is also suggested that you furnish any labor or other assistance our engineer may require in order to expedite his examination of the property.

This authorization for a field examination is being made to determine whether or not this corporation can consider a loan on your property and is not to be construed as meaning that a loan is being recommended.

In the event that Mr. Rockwood is not immediately available to make the examination, please be assured that he will do so at his first opportunity.

Very truly yours,

CHAS. W. TULLY
Assistant Chief, Mining Section

29 January 1942

Mr. Orsen Branch,
Winkelman, Arizona

My dear Mr. Branch:

I thank you for your card of January 8, and I am glad to hear that you have made a deal on the SAN PEDRO GROUP.

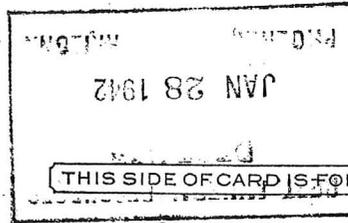
I shall appreciate your advising me with whom the deal was made and any particulars you would care to give.

With best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf



Mr. Charles J. Willis
Chairman, Board of Governors.
518 Title & Trust Building
Phoenix,
Ariz.

Jan 8 - 1942

Dear Sir:

Rec. your letter this a.m. We have
our manganese property tied up:
and they will start working at once
Thank you very much, I appreciate
your kindness. I'll drop you a line
later on. Sincerely yours, Orsen Branch

MS-18 SAN PEDRO, O. Branch & P. Griffin, Winkelman, Arizona.

Copy of Mine Owners report covering property listed with the
Department of Mineral Resources has been furnished to -

Mr. J.R. Finkelstein, Congress Hote, Chicago, Illinois.

DEPARTMENT OF MINERAL RESOURCES

J. S. Coupal, Director

MS-18 SAN PEDRO, O.Branch & P B.Griffin, Winkelman, Arizona

Your name and address has been furnished to -

Edward Smith, Box 1923, Phoenix, Arizona

who has made inquiry for the same with reference to mining
property listed with the Department of Mineral Resources.

DEPARTMENT OF MINERAL RESOURCES

J. S. Coupal, Director

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Crescent Mine & Mill

Date Jan. 14, 1959

District San Pedro (Feldman) District, Pinal Co.

Engineer Axel L. Johnson

Subject: Present Status - Information from Bayard Squire, Engineer and Borden Burleson, Mill Foreman and Personal Visit.

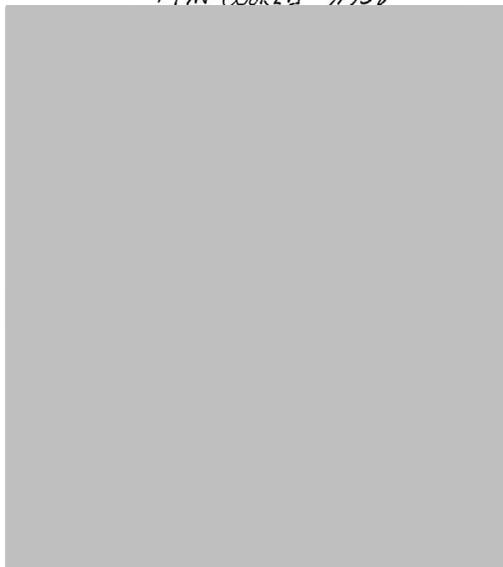
References: See report of Sept. 10, 1958 and previous reports.

Present Status: Mining and milling operations closed down about Jan. 1, except for the milling of the ore stockpile which had already been crushed and screened. Milling of this stockpile is expected to be finished in 3 or 4 days. At present only 3 men are working at the mill, Robert S. O'Brien, Supt. from Los Angeles, Bayard Squire, Engineer, and Borden Burleson, Mill Foreman.

Milling difficulties and low recovery were given as the reasons for closing down the operations.

Mill tests are now being made to substantiate their reasons for closing down operations.

120
MIN World 12/1958



References: Mining World 12/58,
p. 58
ABM Bull. 127,
p. 86, 87
IC 7990, p. 144,
149
ABM Bull. 180,
p. 218

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Crescent Mine & Mill Date Sept. 10, 1958
District San Pedro (Feldman) Dist., Pinal Co. Engineer Axel L. Johnson
Subject: Field Engineers Report. Information from Joe McDaniel & Personal visit.

References: Report of June 25, 1958 and previous.

Location: About 7 miles N of Mammoth. (note change of road from previous report.)
Drive 1.3 miles N of Mammoth or 0.3 miles N of New Mammoth (1/4 mile S. of Bridge over San Pedro) turn left and drive 6 miles north to the mill.

Sub-Lessees: (Note changes from previous report)

- ✓ Crescent Mining Co., owned directly by H. E. Roberts, local address -- Box 567 Mammoth.
- ✓ Joe McDaniel, Engineer and Superintendent, 2117 E. Juanita St., Tucson, Ariz.
- ✓ Borden Burleson, Mill Superintendent.

Present Mining Activity:

- (1) By Nelson -- Belding Corporation, Los Angeles -- on contract
 - (a) Mining ore at the Crescent Mine (open pit) operated 1 shift. 10 men working
 - (b) Hauling ore to the mill site. 4 men working.
 - (c) Crushing and screening the ore in portable plant, operated 2 shifts, 6 men working. Ore production reported to be from 300 to 500 tons per day.
- (2) by Crescent Mining Co. -- Milling ore at the mill, operating 3 shifts, 5 days per week, 10 men working. Milling about 350 tons of ore per day, obtaining 60 to 65 tons of concentrate.

Total of 30 men working, including all operations.
Crescent Mine now the only property being operated.

Geology and Mineralization: According to Joe McDaniel, Engr. & Supt. -- The country rock at the Crescent Mine is fine grained Quartzite, intensely crushed and brecciated. The ore is mainly psilomelane, with some pyrolusite and manganite. The ore body is about 400 ft. long, with an average width of 60 ft. (max. width 75 ft.). The thickness of the ore body varies from 10 ft. to 20 ft., with an average of 15 ft.

This mine is also described in Bulletin No. 127 "Manganese Deposits in Arizona" by Eldred Wilson and G. M. Butler, pages 87 to 89 under "Tarr & Harper Mine."

Ore Values: According to Mr. McDaniel, the ore averages from 12 to 13% manganese.

Exploration Work: Mr. McDaniel reports that rotary drilling was done on the property by the Scott Drilling Co. of Albuquerque, N. Mex., using a Mayhew 1000 truck mounted drill. 35 holes, 4 1/2" to 4 3/4" diam. and from 45 ft. to 100 ft. deep were drilled. He reports that 90% of these drill holes showed 10 ft. or more of ore.

Milling & Marketing Facilities: See reports of June 25 & May 14, 1958.

Present Mining Operations: The contractors, Nelson-Belding Corporation, Los Angeles, Calif., are now mining ore from the Crescent Mine, trucking it to the mill site a distance of 5 to 6 miles, and crushing and screening the ore by means of a Universal Portable Crushing and Screening Plant. 1 - 1 1/2 yd. diesel Shovel & 1 - D8 Caterpillar bulldozer is in use at the mine. Production reported as 300 to 500 tons per day.

Present Milling Operations: Milling operations are conducted approximately as described in the June 25, 1958 report.

Mr. McDaniel reports milling about 350 tons per day, obtaining from 60 to 65 tons of concentrates daily, with a mill recovery (initial & rerun) of about 50%.

He states that, of this concentrate, 1 part is of metallurgical grade, average above 40% Mn; 3 parts of sintering grade, average 35% Mn; and 3 parts middling, average 20 to 25% Mn.

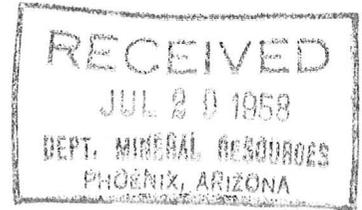
The metallurgical grade is being shipped direct on the Manganese Car Lot Program.

The sintering grade and the middlings are being shipped to the Mohave Mining & Milling Co. at Wickenburg and to the Holken Mining Co. at Winterhaven, Calif. for further treatment.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT



Mine Crescent Mill and Mines

Date June 25, 1958

District Mammoth Mining District, Pinal County.

Engineer Axel L. Johnson

Subject: Field Engineers Report ---- Information from Frank Parker and Personal Visit.

Location About 7 miles north of Mammoth. Drive 6.7 miles north of Mammoth or 5.7 miles north of New Mammoth on Highway 77. Turn left at sign and drive 1 additional mile to mill.

Owners State of Arizona. A State lease.

Lessees Austin Buzan and Ralph Beard

Sub-Lessees Crescent Mining Co., Roberts and Associates, Box 567, Mammoth, Ariz.

Joe McDaniels, Engineer and Superintendent. Frank Parker, Mill Supt.

This company has a lease with option to purchase the interests of Austin Buzan and Ralph Beard in the following mining properties:

- (1) Crescent Mine, located 5 to 6 miles N. of the mill site (open pit)
- (2) North Star or Buzan Mine 4 to 5 miles W. of the mill site (underground)
- (3) Cactus Bowl Mine (a new development), near the North Star (open pit)

Contractors Belding and Nelson, Los Angeles, Calif. ^{have} a contract from Crescent Mining Co. for stripping of the overburden at the Crescent and Cactus Bowl mines, and for the mining, hauling and crushing of the ore.

Principal Minerals Manganese ores both pyrolusite and psilomelane. Mines not visited as yet by field engineer. For report of the Geology and Ore Values reported by Frank Parker see my report of May 14, 1958.

Present Mining Activity The contractors are now stripping the Cactus Bowl property, near the North Star, using a D-8 bulldozer. A 1 1/2 ton electric shovel will be moved in shortly to assist in the stripping operations. 1 man working for Belding and Nelson running the bulldozer. 2 men sampling in the mines for the Crescent Mining Co.

Present Milling Activity A Universal Portable Crushing and Screening Plant was shipped in from California, arriving on June 18. This is now being installed at the mill, with installation expected to be completed about July 7. Milling of ore will be started on the completion of the portable crushing plant installation.

The Crescent Mining Co. has completed their part of the mill construction, and are now building an assay office and a change house.

5 men are working for Belding and Nelson on the crushing plant installation.

5 men working for Crescent Mining Co. on building construction, and miscell. work.

Type of Mill Bravity concentration with Jigs.

Mill Capacity Portable Crushing and Screening Plant ---- capacity 75 tons per hour.
Concentrating Plant ---- capacity reported at from 600 to 800 tons / 24 hrs.

Milling Equipment

- (1) Universal Portable Crushing and Screening Plant, consisting of a 25 ton hopper and an apron feeder, a 24" x 36" jaw crusher, and 2 -- 20" x 30" rolls, with a closed circuit screen, grinding and screening the ore to minus 1/4 inch mesh. Now being installed.
- (2) 2 ore hoppers below the crushing unit, equipped with belt feeders below same.
- (3) One 24" conveyor belt -- 83 ft/ long-- from the ore hoppers to the jigs.
- (4) 2 --- 24" x 36" Denver Duplex Jigs, with 4 hatches and 4 center draws.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine **Crescent Mill and Mines (continued)** Date **June 25, 1958**
 District **Mammoth Mining District, Pinal County** Engineer **Axel L. Johnson**
 Subject: **Field Engineers Report ---- Information from Frank Parker and Personal Visit.**

Milling Equipment (continued)

- (5) 1 Screen for screening out the minus 20 mesh material.
- (6) 2 Dewatering Mills (one for the minus 20 mesh material and one for the poor concentrates.
- (7) 3 Storage Bins (one for the plus 40 % concentrates, one for the minus 20 mesh product, and one for the poor concentrates.)
- (8) 1 --85KW Generator, driven by a D-17000 Caterpillar Motor of 167 HP.
- (9) 1 -- 120 ft. deep well, producing 700 gal. per min.

Past History & Production Mines were leased in 1954 and 1955 to Raymond Godfrey, Grant Godfrey, et. al. 75 to 80 cars of manganese ore is reported to have been shipped by above producers to the Deming and Wenden government buying depots.

Proposed Milling Operations Ore from the mine will be run through the portable crushing and screening plant, crushing the ore to minus 1/4 inch mesh. The crushed product will drop into the 2 ore hoppers below the crushing unit, and will be fed by means of the 2 belt feeders to the 24" x 83' conveyor belt. Conveyor belt will drop the ore into the 2 -- 24" x 36" Denver Duplex Jigs, with 4 hatches and 4 center draw outs. These jigs will yield 3 products--- (1) Tailings which will be run out into the tailings pond.
 (2) Good concentrates, which will go to a screen for screening out fines
 (3) Poor concentrates, which will go to a Dewatering Mill.

The screens, which screens the good concentrates, will yield 2 products -----
 (a) A plus 20 mesh product, which will run about 44 % manganese, which will then go to a storage bin, from which it will be shipped on the Car Lot Program.
 (b) A minus 20 mesh product, which will go to a Dewatering Mill for dewatering, and from there, to a second storage bin. This product will run about 35 % manganese, and will be shipped to the Holken Mining Co. mill at Winterhaven, Calif. or to the Mohave Mining and Milling Co. mill at Wickenburg for further treatment.
 The poor concentrates, after going through the dewatering mill, will go to a third storage bin. This product will run about 25% manganese, with a certain amount of fines. This will be rerun through the mill a second time.

Recovery Mr. Parker estimates the recovery on the Crescent Mine ore at about 65 %, from mill heads running about 13 %. However, only about 50 % of this will be in the form of plus 40 % concentrates which can be shipped direct to the Government Car Lot Program. Mr. Parker estimates the recovery on the North Star (Buzan) Mine at better than 70 % from mill heads running from 8 to 10 %, with about 90 % of the recovered ore running better than 40 %. Recovery on the Cactus Bowl ore has not been announced.

Proposed Plans

- (1) Company will rerun the poor concentrates, instead of shipping same to Winterhaven, Calif. for further treatment as announced previously (see report of May 14, 1958)
- (2) Fines will be shipped either to Winterhaven or Wickenburg for sintering.
- (3) Construction of a sintering plant to treat the fines is being considered.

Additional It was reported by Edson H. Burnett, who works on the crusher at the mill, on July 9, 1958, that the mill has now started operating, and that about 40 tons of ore had been milled to date (July 9). Mine operated day shift only --- Mill operated 2 shifts

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Crescent Mill

Date May 14, 1958

District

Engineer Axel Johnson

Subject: Information from Frank Parker and Personal Visit

Location About 7 miles north of Mammoth. Drive 6.7 miles north of Mammoth or 5.7 miles north of New Mammoth on Highway 77. Turn left and drive 1 mile to the mill.

Owners ✓ Crescent Mining Co.
✓ Roberts and Associates,
Box 567, Mammoth, Ariz.
✓ Joe McDaniels, Engineer and Superintendent
✓ Frank Parker, Mill Supt.

The company has lease with option to buy the Crescent Mine, 5 to 6 miles north of the mill site, and the North Star Mine (also called Buzan Mine) 4 to 5 miles west of the mill site, from the owners Austin Buzan and Ralph Beard. (The greater part is reported owned by Austin Buzan, and also the part they are going to operate first is owned by Mr. Buzan.)

Principal Minerals ✓ Manganese ores, both pyrolusite and psilomelane. Ore in the Crescent mine is reported by Mr. Parker to run about 13%, and the ore in the North Star (Buzan) Mine to run from 8 to 10%. The Crescent deposit is reported by Mr. Parker to be a 200 ft. vein, with definite footwall and hanging wall of diorite, with a lime capping, while the North Star (Buzan) deposit is reported to be veinlets in decomposed granite rock. The mines are not working at present, and were not visited by the field engineer.

Present Milling Activity

The mill is still under construction but is practically completed, except for the crushing unit. This unit is scheduled to be shipped from California in about 10 days, and to be completely installed in about 3 weeks.

A number of mill tests have been run to date, with a few tons of concentrates obtained from same.

Type of Mill Gravity concentration with jigs.

Mill Capacity Reported to be from 600 to 800 tons of ore per 24 hrs.

Milling Equipment (1) Portable crushing plant, consisting of a 25 ton hopper and an apron feeder, a 24" x 36" jaw crusher, and 2 -- 20" x 30" rolls, with a closed circuit screen, grinding and screening ore to minus 1/4 inch mesh. (This has been ordered and scheduled to arrive in about 2 weeks, and will be installed in about 3 weeks).

- (2) 2 ore hoppers below the crushing unit, with 2 belt feeders below same.
- (3) 24" conveyor belt -- 83 ft. long, from the ore hoppers to the jigs.
- (4) 2 -- 24" x 36" Denver Duplex Jigs, with 4 hatches and 4 center draws.
- (5) 1 Screen for screening out minus 20 mesh material.
- (6) 2 Dewatering mills (one for the minus 20 mesh product, and one for the poor concentrates).

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Crescent Mill (continued)

Date May 14, 1958

District

Engineer

Subject:

- (7) 3 storage bins (one for the 40% product, one for the minus 40 mesh product, and one for the poor concentrates.
- (8) An 85 KW Generator, driven by a D 17000 Caterpillar Motor of 167 HP.
- (9) A 120 ft. deep well, producing 700 gal. per min.

Past History & Production Mines were leased in 1954 to 1955 to Raymond Godfrey, Grant Godfrey, et. al. 75 to 80 cars of manganese ore is reported to have been shipped to government buying depots (Deming & Wenden).

Proposed Milling Operations Ore from the mine will be dumped in the 25 ton hopper of the portable crushing plant, where it will be crushed to minus 1/4 in. mesh, by means of the 24" x 36" jaw crusher and the 2 - 20" x 30" rolls with a closed circuit 1/4 in. screen.

The crushed product will drop into 2 ore hoppers below the crushing unit, and will be fed by means of 2 belt feeders to the 24" x 83' conveyor belt.

Conveyor belt will drop the ore into the 2 - 24" x 36" Denver Duplex Jigs. These have 4 hatches and 4 center draw outs.

The jigs will yield 3 products: (1) Tailings, which will be run out in the tailings pond.
 (2) Good concentrates, which will go to a screen for screening out fines.
 (3) Poor concentrates, which will go to a Dewatering Mill.

The screen, which screens the good concentrates, will yield two products: (1) a plus 20 mesh product running about 44% mang. which will go to a storage bin, from which it will be shipped on the Car Lot Program.

(2) a minus 20 mesh product, which will go to a Dewatering Mill for dewatering and from there to a second storage bin. This product will run about 35% manganese and will be shipped to Holken Mining Co. mill at Winterhaven, Calif. (Box 308) for further treatment.

The poor concentrates, after going through the dewatering mill will go to a third storage bin. This product will run about 25% Mang., and contain a certain amount of fines, as it has not been screened. This will also be shipped to the Holken Mining Co. of Winterhaven, Calif. for further treatment. Mr. Parker states that Holken Mining Co. will treat this ore at so much per ton basis.

Recovery Mr. Parker estimates the recovery on the Crescent Mine ore at about 65%, from mill heads running about 13%. However, only about 50% of this will be in the form of plus 40% concentrate, which can be shipped to the Car Lot Program; the remaining 50% being in form of fines and poor concentrates, which will be shipped to Winterhaven, Calif. for further treatment.

Mr. Parker estimates the recovery on the North Star (Buzan Mine) at better than 70%.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine Crescent Mill (continued)

Date May 14, 1958

District

Engineer

Subject:

from mill heads running from 8 to 10%. About 90% of the milled product will be in the form of plus 40% concentrates to be shipped on the Car Lot Program.

Proposed Mining Plans The company expects to contract for the mining of the ore and hauling it to the mill, and bids have already been received for this operation. No contract has been let, as yet.

Mr. Parker estimates that present bids would indicate that the mining and hauling cost will be about \$2.00 per ton for each ton delivered at the mill, and that the stripping costs will be about \$0.75 per ton.

Mining operations at both mines are expected to start in about 10 days to 2 weeks.

CRESCENT MINE

(Probably the old SAN PEDRO GROUP ~~(Mile)~~)
- also in ARIZ. BUREAU MINES BULLETIN 127
as TARR & HARPER MINE.

NW Of Mammoth, up Putnam Wash, 2 veins,
one not mined, Strike NW-SE dip 45° E. 100
ft. shaft on one vein.

ROBERTS & ASSOCIATES,
639 So. Spring St.
Los Angeles, Calif.

B. J. SQUIRE, 5702 N. 13th Place, Phoenix
Local Manager

ADRIAN C. DORENFELD, in charge expl. div.
and oper. projects.

MS-18

Dec. 19, 1939

MANGANESE - 5 claims unpatented; fair road, 1½ miles
to Highway, 12 miles S. of Winkelman; 1 vertical
shaft 50', 1 incline shaft 60'; drifts 150'; veins
2' to 8' wide; water accessible; all workings in ore;
for sale, terms reasonable; Gila County

MS-18

OR

*1-8-42
Card says has
profits but
will attend
at trial*

Pinal

11 - 4

T 5 S, R 16 E

Jim Ferguson, ~~Fubac~~ unclaimed 8-30-46

'42

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Date November 23, 1939.

Engineer Newton Wolcott

Mine San Pedro Group

Location 13 Miles South of Winkelman

District Feldman Mining District

Former name Probably the Tarr & Harper Mine

Address Winkelman, Arizona.

Owners Burns Given
O. Branch

Address

Operator

Gen. Mgr.

President

Mill Supt.

Mine Supt.

Men Employed

Principal Metals Manganese

Mill: Type & Cap.

Production Rate Not Producing

Power: Amt. & Type

Operations: Present

Inactive at present

Operations Planned

Not known.

Number Claims, Title, etc.

Five unpatented claims.

Description: Topog. & Geog.

The property is situated at the mouth of a branch of Camp Grant Wash about one mile west of the San Pedro River. The surrounding hills are fairly high and barren of vegetation.

Mine Workings: Amt. & Condition

One vertical shaft at least 50 feet deep, but inaccessible without a rope.
One inclined shaft 60 feet in depth, accessible to bottom.
Approximately 150 feet of drifts and several open stopes.

Geology & Mineralization

This deposit has been formed by the filling of a fissure zone which traverses diorite, limestone & quartzite. The fissures strike N-W and dip in varying degrees to the NE. (Dip between 45 and 60 degrees). Vein minerals are pyrolusite and psilomelane with secondary calcite and iron as the chief impurities. Veins vary in width from 2 to 8 feet, but in the wider places, there is included between the walls varying amounts of brecciated material as well as ore. Owner states that grade varies between 35% and 50%, but the quantity of higher grade material is not large.

Ore: Positive & Probable, Ore Dumps, Tailings

Lack of development makes it impossible to render any estimate of tonnage, although it is certain that there is a considerable quantity of ore remaining in the present workings. A long horizontal portion of the vein has never been developed.

Mine, Mill Equipment & Flow Sheet

No equipment of any sort on the property.

Road Conditions, Route

Good graded State Highway 77 south from Winkelman to Feldman (11 miles), then road follows a sand wash to property. Best to inquire at Winkelman as to route.

Water Supply

No water developed on property. It appears probable that a reasonable amount could be developed without any great expense.

Brief History

Considerable ore was shipped from this property during the World War, but there are no records available as to the actual tonnage or grade. The property has not been worked since that time.

Special Problems, Reports Filed

This property appears to be the one described in University of Arizona Bulletin No. 127, pp 87-89. (Manganese Ore Deposits in Arizona, by Eldred D. Wilson and G. M. Butler)

Remarks

Owner states that there is a deal now pending on this property, but it is still open at this date.

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

For sale or lease. See owner for terms.

Signed

[Handwritten signature]

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

Date Nov. 9, 1939

1. Mine SAN PEDRO GROUP
2. Location APPROXIMATELY 12 MILES SOUTH OF WINKELMAN
3. Mining District & County FELDMAN MINING DIST.
PINAL COUNTY
4. Former name
5. Owner O. BRANCH AND R. B. GIFFEN
6. Address (Owner) WINKELMAN, ARIZONA
7. Operator
8. Address (Operator)
9. President, Owning Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals MANGANESE
11. Mine Supt.
15. Production Rate
12. Mill Supt.
16. Mill: Type & Cap.
13. Men Employed
17. Power: Amt. & Type
18. Operations: Present INACTIVE AT PRESENT.
19. Operations: Planned EXPECT TO RESUME PRODUCTION WHEN PRICE JUSTIFIES.
20. Number Claims, Title, etc. FIVE UNPATENTED CLAIMS.
21. Description: Topography & Geography ROLLING HILLS ON WEST BANK OF SAN PEDRO RIVER.
22. Mine Workings: Amt. & Condition
1 - 50' VERTICAL SHAFT SEVERAL STOPES
1 - 60' INCLINE SHAFT ALL WORKINGS ARE OPEN
APPROXIMATELY 150' of DRIFTS.

23. Geology & Mineralization

VEINS ALONG DIORITE LIMESTONE CONTACT. VEIN MINERALS ORE MANGANESE, CALCITE, LIMONITE AND HEMATITE. VEINS ARE FROM TWO TO EIGHT FT. WIDE.

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

ORE IN SIGHT IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT TONNAGE.

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet

NO EQUIPMENT.

26. Road Conditions, Route

PROPERTY IS SITUATED ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. FAIR ROAD LEADS TO PROPERTY.

27. Water Supply

28. Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

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

PROPERTY IS FOR SALE---COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

32. Signature.....(SIGNED) ORSEN BRANCH.....

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

NOV 20

✓ Pinal County ✓
Mine ✓ San Pedro Group ✓
District ✓ Feldman Mining District ✓
Former name
Owner ✓ O Branch + R. B. Giffen ✓
Operator
President
Mine Supt.
Principal Metals ✓ Manganese ✓
Production Rate
Power: Amt. & Type
Operations: Present

Date Nov 9 - 1939.
Location Approximately 12 miles
South of Winkelmann
Address Winkelmann Ariz.
Address
Gen. Mgr.
Mill Supt.
Men Employed
Mill: Type & Cap.

Inactive at Present

Operations Planned

Expect to resume production when price justifies

Number Claims, Title, etc.

5 Unpatented claims

Description: Topog. & Geog.

Rolling hills on west bank of San Pedro River.

Mine Workings: Amt. & Condition

1-50' Vertical Shaft
1-60' Incline
Approximately 150' of drifts
(over)

Several stopes
all working and open

Veins along diorite limestone contact

Geology & Mineralization

Vein minerals are manganese calcite, limonite and hematite. Veins are from 2 to 8 feet wide

Ore: Positive & Probable, Ore Dumps, Tailings

Ore in sight in many places: but not possible to give estimate at tonnage.

Mine, Mill Equipment & Flow Sheet

No equipment

Road Conditions, Route

Property is situated about 1 1/2 miles west of State Highway 77. Fair road leads to property.

Water Supply

Have not developed any water on property but there is abundant water within one mile each way from workings. Water could be easily developed on the property.

Brief History

Property was opened up and lots of ore shipped during the World War. No production since then.

Special Problems, Reports Filed

Remarks

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

Property is for sale. Communicate with owners for terms & price

Signed.....

Orsen Branch

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date Nov. 9, 1939

Mine ~~Pinal County~~ ✓
San Pedro Group

District Feldman Mining District Location Approximately 12 miles south of Winkelman
Pinal County

Former name

Owner O. Branch and R.B.Giffen ✓ Address Winkelman, Arizona

Operator Address

President Gen. Mgr.

Mine Supt. Mill Supt.

Principal Metals Manganese ✓ Men Employed

Production Rate Mill: Type & Cap.

Power: Amt. & Type

Operations: Present Inactive at present

Operations Planned Expect to resume production when price justifies

Number Claims, Title, etc. 5 unpatented claims

Description: Topog. & Geog. Rolling hills on west bank of San Pedro River

Mine Workings: Amt. & Condition

1 - 50' vertical shaft Several stopes
1 - 60' incline shaft All working ore open
Approximately 150' of drifts

Geology & Mineralization Veins along diorite limestone contact. Vein minerals ore manganese, calcite, limonite and hematite. Veins are from 2 to 8 feet wide.

Ore: Positive & Probable, Ore Dumps, Tailings Ore in sight in many places, but not possible to give estimate at tonnage.

Mine, Mill Equipment & Flow Sheet No equipment

Road Conditions, Route Property is situated about 1 1/2 miles west of State Highway 77. Fair road leads to property

Water Supply Have not developed any water on property but there is abundant water within one mile each way from workings. Water could be easily developed on the property.

Brief History Property was opened up and lots of ore shipped during the World War. No production since then

Special Problems, Reports Filed

Remarks

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

Property is for sale - communicate with owners for terms and price

Signed..... Orsen Branch <

Use additional sheets if necessary.

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

Geology & Mineralization

Date Nov. 9, 1939

1. Mine **SAN PEDRO GROUP**
2. Location **APPROXIMATELY 12 MILES SOUTH OF WINKELMAN**
3. Mining District & County **FELDMAN MINING DIST. PINAL COUNTY**
4. Former name
5. Owner **O. BRANCH AND R. B. GIFFEN**
6. Address (Owner) **WINKELMAN, ARIZONA**
7. Operator
8. Address (Operator)
9. President, Owing Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals **MANGANESE**
11. Mine Supt.
15. Production Rate
12. Mill Supt.
16. Mill: Type & Cap.
13. Men Employed
17. Power: Amt. & Type
18. Operations: Present **INACTIVE AT PRESENT.**
19. Operations: Planned **EXPECT TO RESUME PRODUCTION WHEN PRICE JUSTIFIES.**
20. Number Claims, Title, etc. **FIVE UNPATENTED CLAIMS.**
21. Description: Topography & Geography **ROLLING HILLS ON WEST BANK OF SAN PEDRO RIVER.**
22. Mine Workings: Amt. & Condition
1 - 50' VERTICAL SHAFT SEVERAL STOPES
1 - 60' INCLINE SHAFT ALL WORKINGS ARE OPEN
APPROXIMATELY 150' of DRIFTS.

Ore: Positive & Probable Ore Dumps, Tailings

ORE IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT THIS TIME. WINKELMAN

A. Dimensions and Value of Ore body

Mine Mill Equipment & Flow-Sheet

NO EQUIPMENT

Road Conditions, Route

PROPERTY LIES ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. TAIR ROAD LEADS TO PROPERTY.

Water supply

Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

Special Problems, Reports Filed

Remarks

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

PROPERTY IS NOT BUILT. COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

Signature (SIGNED)

Use additional sheets if necessary.

23. Geology & Mineralization

VEINS ALONG DIORITE LIMESTONE CONTACT. VEIN MINERALS ORE MANGANESE, CALCITE, LIMONITE AND HEMATITE. VEINS ARE FROM TWO TO EIGHT FT. WIDE.

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

ORE IN SIGHT IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT THIS TIME.

24A. Dimensions and Value of Ore body

NO DATA PROVIDED FOR THIS SECTION.

25. Mine, Mill Equipment & Flow-Sheet

NO EQUIPMENT.

26. Road Conditions, Route

PROPERTY IS SITUATED ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. FAIR ROAD LEADS TO PROPERTY.

27. Water Supply

28. Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

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

PROPERTY IS FOR SALE---COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

32. Signature (SIGNED) ORSEN BRANCH

33. Use additional sheets if necessary.

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

Date November 9, 1939

Mine San Pedro Group

Location - Approximately 12 miles south of Winkelman

Mining District & County - Feldman District
Pinal County

Former Name

Owners - C. Branch and R. B. Giffen

Address - Winkelman, Arizona

Operator

Address

President, Owing Co.

President, Operating Co.

Gen. Mgr.

Principal Minerals - Manganese

Mine Supt.

Production Rate

Mill Supt.

Mill: Type & Cap.

Men Employed

Power: Amt. & Type

Operations: Present - Inactive at present

Operations: Planned - Expect to resume production when price justifies

Number Claims, Title, etc. - 5 unpatented claims

Description: Topography & Geography - Rolling hills on west bank of San Pedro river

Mine Workings: Amt. & Condition - One 50 ft. vertical shaft
One 60 ft. incline shaft
Approximately 150 ft. of drifts
Several stopes
All working ore open

Geology & Mineralization - Veins along diorite limestone contact. Vein minerals
ore manganese, calcite, limonite and hematite. Veins
are from 2 to 8 ft. wide.

Date November 9, 1939

Ore: Positive & Probable, Ore Dumps, Tailings - Ore in sight in many places,
but not possible to give estimate at tonnage.

Mining District & County - Toliman District
Pinal County

Dimensions and Value of Ore body -

Owners - C. Branch and R. B. Giffen
Address - Winkelman, Arizona

Mine, Mill Equipment & Flow-Sheet - No equipment

Operator
President, Owning Co.
Gen. Mgr.
Principal Minerals - Manganese

Road Conditions, Route - Property is situated about 1 1/2 miles west of state
highway 77. Fair road leads to property.

Mill: Type & Cap.
Man Employed
Power: Amt. & Type

Water Supply

Operations: Present - Inactive at present

Brief History - Property was opened up and lots of ore shipped during the World
War. No production since then.

Operations: Planned - Expect to resume production when price justifies

Special Problems, Reports Filed

Number Claims, Title, etc. - 3 unpatented claims

Remarks

If property for sale: Price, terms and address to negotiate - Property is for sale.
Communicate with owners for terms and price.

Mine workings: Amt. & Condition - One 80 ft. vertical shaft
One 60 ft. incline shaft
Approximately 150 ft. of drifts

(SIGNED) Orsen Branch

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

Date November 9, 1939

Mine San Pedro Group Location - Approximately 12 miles south of Winkelman

Mining District & County - Feldman District
Pinal County

Former Name -

Owners - C. Branch and R. B. Giffen Address - Winkelman, Arizona

Operator Address

President, Owing Co. President, Operating Co.

Gen. Mgr. Principal Minerals - Manganese

Mine Supt. Production Rate

Mill Supt. Mill: Type & Cap.

Men Employed Power: Amt. & Type

Operations: Present - Inactive at present

Operations: Planned - Expect to resume production when price justifies

Number Claims, Title, etc. - 5 unpatented claims

Description: Topography & Geography - Rolling hills on west bank of San Pedro river

Mine Workings: Amt. & Condition - One 50 ft. vertical shaft
One 60 ft. incline shaft
Approximately 150 ft. of drifts
Several stopes
All working ore open

Geology & Mineralization - Veins along diorite limestone contact. Vein minerals
ore manganese, calcite, limonite and hematite. Veins
are from 2 to 8 ft. wide.

November 9, 1939 Date

Ore: Positive & Probable, Ore Dumps, Tailings - Ore in sight in many places,
but not possible to give estimate at tonnage.

Mining District & County - Pinal County
Pinal County

Dimensions and Value of Ore body -

Address - Winkelman, Arizona

Owners - C. Branch and R. B. Giffen

Mine, Mill Equipment & Flow-Sheet - No equipment

Address

Operator

President, Operating Co.

President, Owning Co.

Principal Minerals - Manganese

Gen. Mgr.

Road Conditions, Route - Property is situated about 1 1/2 miles west of state
highway 77. Fair road leads to property.

Mill: Type & Cap.

Mill Supt.

Power: Amt. & Type

Men Employed

Water Supply

Operations: Present - Inactive at present

Brief History - Property was opened up and lots of ore shipped during the World
War. No production since then.

Operations: Planned - Expect to resume production when price justifies

Special Problems, Reports Filed

Number Claims, Title, etc. - 5 unpatented claims

Remarks

Description: Topography & Geography - Rolling hills on west bank of San Pedro river
If property for sale: Price, terms and address to negotiate - Property is for sale.
Communicate with owners for terms and price.

Mine workings: Amt. & Condition - One 50 ft. vertical shaft
One 50 ft. incline shaft
Approximately 150 ft. of drift
Several stops

(SIGNED) Orsen Branch

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

Geology & Mineralization

Date **Nov. 9, 1939**

- 1. Mine **SAN PEDRO GROUP**
- 2. Location **APPROXIMATELY 12 MILES SOUTH OF WINKELMAN**
- 3. Mining District & County **FELDMAN MINING DIST. PINAL COUNTY**
- 4. Former name
- 5. Owner **O. BRANCH AND R. B. OLFFEN**
- 6. Address (Owner) **WINKELMAN, ARIZONA**
- 7. Operator
- 8. Address (Operator)
- 9. President, Owing Co.
- 9A. President, Operating Co.
- 10. Gen. Mgr.
- 14. Principal Minerals **MANGANESE**
- 15. Production Rate
- 16. Mill: Type & Cap.
- 17. Power: Amt. & Type
- 18. Operations: Present **INACTIVE AT PRESENT.**

19. Operations: Planned **EXPECT TO RESUME PRODUCTION WHEN PRICE JUSTIFIES.**

20. Number Claims, Title, etc. **FIVE UNPATENTED CLAIMS.**

21. Description: Topography & Geography **ROLLING HILLS ON WEST BANK OF SAN PEDRO RIVER.**

22. Mine Workings: Amt. & Condition
**1 - 50' VERTICAL SHAFT SEVERAL STOPS
1 - 60' INCLINE SHAFT ALL WORKINGS ARE OPEN
APPROXIMATELY 150' of DRIFTS.**

23. Geology & Mineralization

VEINS ALONG DIORITE LIMESTONE CONTACT. VEIN MINERALS ARE MANGANESE, CALCITE, LIMONITE AND HEMATITE. VEINS ARE FROM TWO TO EIGHT FT. WIDE.

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

ORE IN SIGHT IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT THIS TIME.

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet

NO EQUIPMENT.

26. Road Conditions, Route

PROPERTY IS SITUATED ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. FAIR ROAD LEADS TO PROPERTY.

27. Water Supply

28. Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

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

PROPERTY IS FOR SALE---COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

32. Signature (SIGNED) ORSEN BRANCH

33. Use additional sheets if necessary.

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

Geology & Mineralization

Date **Nov. 9, 1939**

1. Mine **SAN PEDRO GROUP**
2. Location **APPROXIMATELY 12 MILES SOUTH OF WINKELMAN**
3. Mining District & County **FELDMAN MINING DIST. PINAL COUNTY**
4. Former name
5. Owner **O. BRANCH AND R. B. GIFFEN**
6. Address (Owner) **WINKELMAN, ARIZONA**
7. Operator
8. Address (Operator)
9. President, Owning Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals **MANGANESE**
15. Production Rate
16. Mill: Type & Cap.
17. Power: Amt. & Type
18. Operations: Present **INACTIVE AT PRESENT.**

One: Positive & Probable Ore Deposits, Tailings

A. Dimensions and Value of Ore Body

Mine, Mill Equipment & Flow-Sheet

Road Conditions, Route

Water Supply

19. Operations: Planned **EXPECT TO RESUME PRODUCTION WHEN PRICE JUSTIFIES.**

Brief History

20. Number Claims, Title, etc. **FIVE UNPATENTED CLAIMS.**

Special Problems, Reports Filed

21. Description: Topography & Geography **ROLLING HILLS ON WEST BANK OF SAN PEDRO RIVER.**

Remarks

22. Mine Workings: Amt. & Condition
- 1 - 50* VERTICAL SHAFT SEVERAL STOPS**
- 1 - 60* INCLINE SHAFT ALL WORKINGS ARE OPEN**
- APPROXIMATELY 150* of DRIFTS.**

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

Signature

Use additional sheets if necessary.

23. Geology & Mineralization

VEINS ALONG DIORITE LIMESTONE CONTACT. VEIN MINERALS ARE MANGANESE, CALCIUM, LIMONITE AND HEMATITE. VEINS ARE FROM TWO TO EIGHT FT. WIDE.

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

ORE IN SIGHT IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT THIS TIME.

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet

NO EQUIPMENT.

26. Road Conditions, Route

PROPERTY IS SITUATED ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. FAIR ROAD LEADS TO PROPERTY.

27. Water Supply

28. Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

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

PROPERTY IS FOR SALE---COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

32. Signature... (SIGNED) ORSEN BRANCH

33. Use additional sheets if necessary.

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

Geology & Mineralization

Date **Nov. 9, 1939**

1. Mine **SAN PEDRO GROUP**
2. Location **APPROXIMATELY 12 MILES SOUTH OF WINKELMAN**
3. Mining District & County **FELDMAN MINING DIST. PINAL COUNTY**
4. Former name
5. Owner **O. BRANCH AND R. B. GIFFEN**
6. Address (Owner) **WINKELMAN, ARIZONA**
7. Operator
8. Address (Operator)
9. President, Owing Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals **MANGANESE**
11. Mine Supt.
15. Production Rate
12. Mill Supt.
16. Mill: Type & Cap.
13. Men Employed
17. Power: Amt. & Type
18. Operations: Present **INACTIVE AT PRESENT.**

19. Operations: Planned **EXPECT TO RESUME PRODUCTION WHEN PRICE JUSTIFIES.**

20. Number Claims, Title, etc. **FIVE UNPATENTED CLAIMS.**

21. Description: Topography & Geography **ROLLING HILLS ON WEST BANK OF SAN PEDRO RIVER.**

22. Mine Workings: Amt. & Condition

1 - 50' VERTICAL SHAFT SEVERAL STOPES
1 - 60' INCLINE SHAFT ALL WORKINGS ARE OPEN
APPROXIMATELY 150' of DRIFTS.

Use additional sheets if necessary.

23. Geology & Mineralization

VEINS ALONG DIORITE LIMESTONE CONTACT. VEIN MINERALS ARE MANGANESE, CALCITE, LIMONITE AND HEMATITE. VEINS ARE FROM TWO TO EIGHT FT. WIDE.

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

ORE IN SIGHT IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT THIS TIME.

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet

NO EQUIPMENT.

26. Road Conditions, Route

PROPERTY IS SITUATED ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. FAIR ROAD LEADS TO PROPERTY.

27. Water Supply

28. Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

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

PROPERTY IS FOR SALE---COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

32. Signature... (SIGNED) ORSIN BRANCH

33. Use additional sheets if necessary.

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

Geology & Mineralization

Date **Nov. 9, 1939**

1. Mine **SAN PEDRO GROUP**
2. Location **APPROXIMATELY 12 MILES SOUTH OF WINKELMAN**
3. Mining District & County **FELDMAN MINING DIST. PINAL COUNTY**
4. Former name
5. Owner **O. BRANCH AND R. B. GIFFEN**
6. Address (Owner) **WINKELMAN, ARIZONA**
7. Operator
8. Address (Operator)
9. President, Owning Co.
- 9A. President, Operating Co.
10. Gen. Mgr.
14. Principal Minerals **MANGANESE**
11. Mine Supt.
15. Production Rate
12. Mill Supt.
16. Mill: Type & Cap.
13. Men Employed
17. Power: Amt. & Type
18. Operations: Present **INACTIVE AT PRESENT.**

19. Operations: Planned **EXPECT TO RESUME PRODUCTION WHEN PRICE JUSTIFIES.**

20. Number Claims, Title, etc. **FIVE UNPATENTED CLAIMS.**

21. Description: Topography & Geography **ROLLING HILLS ON WEST BANK OF SAN PEDRO RIVER.**

22. Mine Workings: Amt. & Condition

1 - 50° VERTICAL SHAFT SEVERAL STOPES
1 - 60° INCLINE SHAFT ALL WORKINGS ARE OPEN
APPROXIMATELY 150° of DRIFTS.

23. Geology & Mineralization

VEINS ALONG DIORITE LIMESTONE CONTACT. VEIN MINERALS ARE MANGANESE, CALCITE, LIMONITE AND HEMATITE. VEINS ARE FROM TWO TO EIGHT FT. WIDE.

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

ORE IN SIGHT IN MANY PLACES, BUT NOT POSSIBLE TO GIVE ESTIMATE AT THIS TIME.

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet

NO EQUIPMENT.

26. Road Conditions, Route

PROPERTY IS SITUATED ABOUT ONE AND A HALF MILES WEST OF STATE HIGHWAY 77. FAIR ROAD LEADS TO PROPERTY.

27. Water Supply

28. Brief History

PROPERTY WAS OPENED UP AND LOTS OF ORE SHIPPED DURING THE WORLD WAR. NO PRODUCTION SINCE THEN.

29. Special Problems, Reports Filed

30. Remarks

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

PROPERTY IS FOR SALE---COMMUNICATE WITH OWNERS FOR TERMS AND PRICE.

32. Signature... (SIGNED) ORSEN BRANCH

33. Use additional sheets if necessary.

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

Date **Nov. 9, 1939**

- | | | | |
|-----------------------------|---------------------------------------|--------------------|--|
| 1. Mine | San Pedro Group | 2. Location | Approximately 12 miles south of Winkelman |
| 3. Mining District & County | Feldman Mining Dist. Pinal Co. | | |
| 4. Former name | | | |
| 5. Owner | O. Branch and R. B. Giffen | 6. Address (Owner) | Winkelman, Arizona |
| 7. Operator | | | |
| 9. President, Owning Co. | | | |
| 10. Gen. Mgr. | | | |
| 11. Mine Supt. | | | |
| 12. Mill Supt. | | | |
| 13. Men Employed | | | |
| 14. Principal Minerals | Manganese | | |
| 15. Production Rate | | | |
| 16. Mill: Type & Cap. | | | |
| 17. Power: Amt. & Type | | | |
| 18. Operations: Present | In-active at present | | |

19. Operations: Planned **Expect to resume production when price justifies.**

20. Number Claims, Title, etc. **5 unpatented claims**

21. Description: Topography & Geography **Rolling hills on west bank of San Pedro River.**

22. Mine Workings: Amt. & Condition

1-50' vertical shaft	Several stopes
1-60' incline shaft	All working ore open
Approximately 150' of drifts	

23. Geology & Mineralization

Veins along diorite limestone contact. Vein minerals ore manganese, calcite, limonite and hematite. Veins are from 2 to 8 feet wide.

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

Ore in sight in many places, but not possible to give estimate at tonnage.

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet

No equipment

26. Road Conditions, Route

Property is situated about 1 1/2 miles west of State Highway 77. Fair road leads to property.

27. Water Supply

Have not developed any water on property but there is abundant water within one mile each way from workings. Water could be easily developed on the property.

28. Brief History

Property was opened up and lots of ore shipped during the World War. No production since then.

29. Special Problems, Reports Filed

30. Remarks

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

Property is for sale---communicate with owners for terms and price.

32. Signature... (Signed) Orsen Branch

33. Use additional sheets if necessary.