



CONTACT INFORMATION

Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 03/14/2003

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SAMBO AGUILA

ALTERNATE NAMES:
BLACK CASTLE MINES

MARICOPA COUNTY MILS NUMBER: 141

LOCATION: TOWNSHIP 5 N RANGE 8 W SECTION 1 QUARTER NW
LATITUDE: N 33DEG 48MIN 20SEC LONGITUDE: W 113DEG 03MIN 13SEC
TOPO MAP NAME: AGUILA - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
MANGANESE OXIDE
MANGANESE NODULES

BIBLIOGRAPHY:
USGS AGUILA QUAD
ADMMR SAMBO AGUILA MINE FILE
FARNHAM & STEWART USBM IC 7843 P 16-17
ADMMR "U" FILE
ADDITIONAL WORKING SEC 35 SE 1/4, SEC 36
SW 1/4 -T6N-R8W

Sambo Aguila Mine

Maricopa County

reference: Arizona Dept. of Mineral Resources
Sambo Aguila Mine (file)

present owner:

minerals: manganese - pyrolusite,
psilomelane, and manganoite

history of the area:

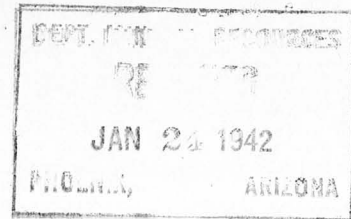
In 1941 the property was owned by
D.B. Powell of Aguila, Az. and G.W. Fiske.
Assessment work was done. At some time
prior to 1942 the property was leased
to Ray E. Black and William E. Castle
(Black Castle Mines). They shipped a
car load of ore assaying 42.6% Mn.
This was closely hand-sorted material.
In 1942 it was estimated that there
were at least 95,000 tons of 15% Mn ore.
By 1943 the property was idle.

geology of the area:

country rock is volcanic tuff; there are
a number of mineralized veins which
strike NW-SE and dip 45° SW

Assay: 1941

Fe	Mn	SiO ₂	Insol.	Al ₂ O ₃	Zn	Ba	CaO	MgO
37.4 1.6	37.4	4.0	5.9	1.9	None	5.7	11.8	0.3



Aguila, Ariz., Jan. 22, 1942

Department of Mineral Resources,

Phoenix, Arizona

Gentlemen:-

Will you please inform us as to what is a reasonable royalty to expect when a manganese property is leased. The percent of the net smelter returns is what we refer to. While this might vary somewhat there must be some fair average. You can undoubtedly tell us ^{WHAT} some of the royalties are that are being paid.

Perhaps some are based on a given price per ton of the ore as mined. If such is the case about what would ^{be} the high and low limits.

We understand that the particular conditions in each case will vary this price.

As you know we have the Sambo Aguila Claims and the information you can give us will help us very much and we will thank you for it.

Yours very truly,

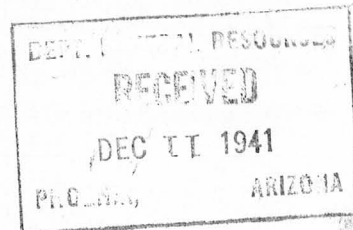
Powell & Fiske,

By

G. W. Fiske

10%
P.S. We enclose self addressed envelope for reply.

Aguila, Ariz., Dec. 6, 1941



Department of Mineral Resources,
518 Title & Trust Building,
Phoenix, Arizona

Gentlemen:-

We have on file with you a report of the SAMBO AGUILA manganese claims located 13 miles South of Aguila.

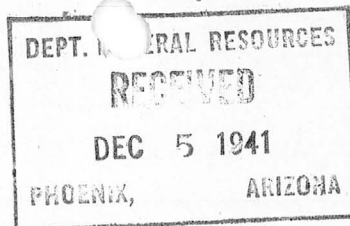
Attached to this report is a letter (copy) from the U. S. Bureau of Mines signed by C. W. Davis of the Metallurgical Division, Salt Lake City, showing the analysis of the manganese ore. This assay shows silica (SiO_2) as 24.0%. This should read 4.0% and undoubtedly was a typographical error. We received a report today with a correction of this. Will you please change this figure on your file report.

Yours very truly,

Powell & Fiske,

By

G. W. Fiske



Aguila, Ariz., Dec. 3, 1941

Box Man-2,
Dept. of Mineral Resources,
518 Title & Trust Building,
Phoenix, Arizona

Dear Sir:-

Replying to your advertisement in Pay Dirt relative to a manganese property.

We are the owners of 8 claims of manganese known as the SAMBO AGUILA which are located 13 miles South of Aguila on highway 93. A complete description of these claims is on file with the Department of Mineral Resources, or should you wish we will send you a complete copy by return mail. The copy on file gives the name of F. Herbert as Agent but he has no exclusive selling right.

The grade of ore runs from 36.0 % to 44.2%. There is a very large tonnage and the road to Aguila, the nearest shipping point is good with no hills.

We will sell the ore on a royalty basis to parties who are equipped to begin soon taking out the ore and mining it on a scale that the property warrants, or we will sell the property for cash.

We are now working a small gold claim South of town but will meet you and show you the property at any time you wish, if you are interested. Wire us Western Union or enquire of the Postmaster as to our location.

Please advise us if you wish a complete report sent direct to you.

Yours very truly,

Powell & Fiske

By

A. W. Fiske

Aguila, Ariz., Dec. 1, 1941

Department of Mineral Resources,
Capitol Building, Phoenix, Arizona

Gentlemen:-

We thank you for copies of reports in your files of the Sambo Aguila Manganese claims which are located 13 miles South of Aguila, also of the Copper Chief Mine which is located 10 miles North of Aguila.

We note that both of these reports carry the name of Mr. Edres Herbert as agent. We have given him no exclusive right to handle these properties but we have arrangements with him to pay him a commission if he does sell them.

We filed with you nearly a year ago a very brief report of these properties, but since we have done more work on them, we assisted Mr. Herbert in making out the reports which you have and he brought them to you in person.

Many, and perhaps most buyers, prefer to deal with the owners of property, and we as such believe you should eliminate from your reports Mr. Herberts name as agent. The inference of one looking over the reports would be that he had the exclusive sales right.

You enclosed with the reports copies of letter to Mr. Herbert and we infer from them that any inquiries would be referred to him.

We are lending him any assistance we can, but we believe the above suggested change should be made.

Yours very truly

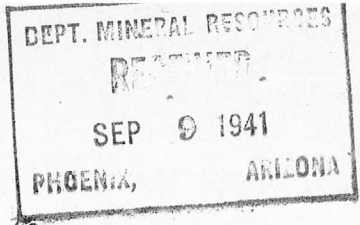
Powell & Fiske

By

B. W. Fiske

Box 14

Bny 14



Aguila, Arizona, Sept. 6, 1941

Department of Mineral Resources,
518 Title & Trust Building,
Phoenix, Arizona

Gentlemen:-

I thank you for your letter of the 3d advising me that the J. C. Meyers^{Co} of El Paso are looking for manganese properties, and that you have given Mr. M. R. Zaret copy of report on my SAMBO AGUILA MANGANESE claims.

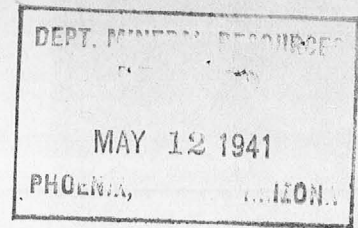
Since that report was filed a considerable work has been done in the way of opening up the deposit. I had power machinery there and three shafts were put down as well as various cuts made. There is now approximately four carloads of ore mined. The assays ran from 36% to 44.2% Mn.

I will be glad to show the property to Mr. Zaret at any time it is convenient for him to come.

Yours very truly,

D. B. Powell

G. W. FISKE
MECHANICAL ENGINEER
3911 SOUTH NORMANDIE
LOS ANGELES
PHONE PARKWAY 6883



Box 50
Aguila, Ariz. 5-10-1941

Dept. of Mineral Resources,
Phoenix, Arizona.

Gentlemen:-

Can you supply us with
the names of dependable manganese buyers
who want all from 38 to 45% Mn?

We are now mining this ore from our
"Sanito Aguila" claims and are pre-
pared to supply a large tonnage. We
are members of the G. S. M. C. A.

Any information you can give
us will be greatly appreciated.

Yours truly,

Powell & Fiske
by G. W. Fiske

Description of the
SAMBO AGUILA MANGANESE CLAIMS



The Sambo Aguila manganese claims are located in the Vulture Mining District, Maricopa County, 13 miles South of Aguila, Arizona. Highway 93 crosses the property at one end. This highway is kept well conditioned and there are no hills. An electric power line also crosses the property.

Good water with an ample supply is available at 240 foot depth from wells one mile away and could be had on the property at no greater depth.

The elevation is 2200 feet. The nearest shipping point is Aguila on the Santa Fe Railroad.

There are 8 claims which are unpatented. No conflicting claims, no litigation.

The deposit lies in the low lying hills. It consists of beds of manganese overlying each other covered by an extrusive of basalt and volcanic tuff. The probable ore must be large as the beds indicate they originated in a basin nearby.

Three shafts ranging from 10 to 25 feet deep have been put down on the different veins which range from 2 ft. to 7 ft. in width. Numerous cuts have also been made. All shafts and cuts have revealed a good grade of ore. There are many parts of the deposit that have not yet been opened up.

The principal mineral is manganese; pyrolusite, psilomelane and some manganite. One carload of sorted ore was shipped to the stockpile at Phoenix. This ore assayed 42.6 per cent manganese.

This ore assayed 42.6 per cent manganese

There are no special problems to this ore body as reported by the U. S. Bureau of Mines, Salt Lake City, where tests were made; also by University of Arizona at Tucson.

Attached is a tabulation of the assays which have been made. In many cases only manganese content was requested because it has been found that the barium and silica content have always been low.

The owner wishes to lease the property on a royalty basis.

G. W. Fiske, owner

Aguila, Arizona

C O P Y

United States Department
of the Interior
Bureau of Mines

Salt Lake City, Utah, Sept. 11, 1941

Mr. C. W. Fiske,
3911 S. Normandie,
Los Angeles, California

Dear Mr. Fiske:-

Replying to your letter of August 27th regarding the status of the work on manganese ore from the Sambo Aguila claims:

The ore sample from these claims has been under investigation and a preliminary report covering the test work will be issued soon. The representative sample submitted by the Mining Division proved to be fairly high grade as the following analysis will show:

Assay Per cent

Mn	Fe	SiO ₂	Insol	Al ₂ O ₃	Zn	Ba	CaO	MgO
37.4	1.6	4.0	5.9	1.9	No	5.7	11.8	0.3

As may be seen from the above analysis, calcite is the chief gangue constituent which must be rejected in making a product to meet ferro-grade specifications.

The Sambo Aguila ore was found to be readily amenable to ore dressing concentration by either tabling or a combination of flotation and tabling. By tabling, a recovery of approximately 75 per cent of the manganese was obtained in a product that, when sintered, met ferro-grade specifications. An additional recovery of 15 per cent of the manganese was obtained by floating the calcite from the material too fine to treat by gravity methods.

None of the product obtained would meet chemical specifications or physical specifications for ferro-grade manganese without sintering because ferro-grade specifications for Grade B manganese demands that the manganese content of the sinter shall be 48 per cent manganese and the physical character of the sinter shall be such that 87.5 per cent of the manganese product is coarser than 20 mesh. In the ore dressing procedure outlined above it was necessary to grind all of the ore finer than this limit and the manganese product assayed less than 48 per cent manganese. After sintering this product met all physical and chemical specifications for ferro-grade manganese.

Very truly yours,
C. W. Davis
Asst. Chief Engineer,
Metallurgical Division.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

FIELD ENGINEERS REPORT

MANGANESE SURVEY

Holt copy
Mine SAMBO AGUILA

Date June 26, 1942

District Vulture, Maricopa Co.

Engineer Elgin B. Holt

Subject:

check
BRIEF REPORT

OWNERS: D. B. Powell & G. W. Fiske, Aguila, Arizona.

METALS: Manganese: psilomelane, pyrolusite, barite, calcite, etc.

AREA, LOCATION & WATER: There are eight claims in group; property being located 13 miles southeast of Aguila on Highway 93, which crosses the same. The Parker-Phoenix power line also crosses property. Within one mile of property there is located a ranch at which excellent water wells are obtained at a depth of 240 feet. Here the main well is said to produce around 75 gallons of water per minute. The nearest shipping point is Aguila on the Santa Fe R. R.

GEOLOGY & VEINS: The country rock is volcanic tuff, forming a hill around 300 feet high above the surrounding plain. This formation is traversed by a number of parallel veins forming a mineralized zone around 1,000 feet wide by 4,500 feet long. Veins range from two to seven feet in width; strike NW-SE and dip 45 degrees SW. Ore occurs in lenses of unknown length and depth.

MINE WORKINGS: A compressor was installed, during the present year, and a number of prospect shafts were put down on veins which are from two to seven feet wide, as stated, to shallow depths, not exceeding 15 feet.

LESSEES: At the time the above work was done, property was under lease to: Ray E. Black & Wm. E. Castle, who operated under the firm name: "BLACK CASTLE MINES". Said lessees shipped and sold to the Phoenix stockpile one car load of ore assaying 42.6 percent manganese. This was closely hand-sorted material, however.

METALLURGICAL TESTS: During 1941, a large sample of ore was shipped to the U. S. Bureau of Mines, Salt Lake City, Utah, for testing purposes. The results of these tests are briefly set forth in the attached letter from C. W. Davis, Assistant Chief Engineer, Metallurgical Division, Bureau of Mines, as well as in the attached table copied from U. S. B. M., preliminary report No. 25.

ORE RESERVES: There are no ore reserves blocked out in the mine. The splendid ore showings on the surface, however, warrant the expenditure of around \$85,000, to be used in sinking two working shafts to 200 feet in depth each, at points to be selected by engineers, as well as carrying out around 3,000 feet of drifts on veins. This work should result in blocking out at least 95,000 tons of ore estimated to run 15 percent manganese. Hence, property should produce approximately 100 tons daily of this grade of ore for the proposed Parker plant.

Elgin B. Holt.

Pinkerton
File
Sambo Aguilera

13 MAY 1941

Mr. G. W. Fiske,
Powell & Fiske,
Box 50,
Aguila, Arizona.

My dear Mr. Fiske:

I thank you for your letter of May 10.

I am giving you herewith the names and addresses
of parties making inquiries for manganese:

Harry L. Coombs, 1765 West 25th Street, Los Angeles,
California.

L. J. Cuneo, 910 Russ Building, San Francisco, California.

J. R. Denison, Cushman, Arkansas.

J. R. Finkelstein, Box 2052, Phoenix, Arizona

J. E. Leland, 228 West 4th St., Room 202, Los Angeles,
California.

Rufus C. Little, Deming, New Mexico.

Frank O. Long, 3300 Glendale Blvd., Los Angeles,
California.

S. R. Ramsay, 607 Sabine Street, Houston, Texas.

A. M. Riedesel, 523 Mining Exchange Bldg., Denver,
Colorado.

Stephen A. Thorniley, 320 West Santa Barbara Avenue,
Los Angeles, California.

Th. von Rolf, 806 Central Bldg., Hollywood, California.

Western Minerals Associates, 1256 Fulton Street,
Fresno, California.

F. C. Worth, Monadnock Building, Chicago, Illinois.

I should suggest that you write to the above parties
regarding your property.

I am enclosing herewith a copy of mine owners report
filed with this department on the SAMBO AGUILA. If there is
any additional information that you would like to add to this
report, please do so and return it to me so that I may submit
it to inquirers for manganese ore.

13 November 1941

Mr. E. Herbert,
Aguila,
Arizona.

My dear Mr. Herbert:

I am enclosing herewith a copy of mine owner's report covering the SAMBO AGUILA MINE in the Vulture Mining District, Maricopa County, Arizona, owned by Mr. D. B. Powell and G. W. Fiske, on which property you are acting as agent.

I shall be glad to submit a copy of this report to anyone making inquiry for a property such as this, and I hope that we may be able to be helpful to you.

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

jrf
encls.

CC-D. B. Powell
G.W. Fiske

5 December 1941

Mr. G. W. Fiske,
Powell & Fiske,
Aguila, Arizona.

My dear Mr. Fiske:

Replying to your letter of December 3 addressed to MAN-2, I beg to advise that the party who was looking for a manganese property has taken over a mine near Casa Grande and is no longer interested.

However, I have your Mine Owners Report covering the SAMBO AGUILA MINE on file, and I shall be glad to submit it to anyone making inquiry for manganese properties.

With best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf

11 December 1941

Mr. G.W. Fiske,
Powell & Fiske,
Aguila, Arizona.

My dear Mr. Fiske:

Complying with request contained in your letter of December 6, we have today corrected the copy of the letter from the U. S. Bureau of Mines, Metallurgical Division, Salt Lake City, attached to Mine Owner's Report covering the SAMBO AGUILA to show silica (SiO_2) as 4.0%.

With best wishes, I am

Yours very truly,

Charles F. Willis
Chairman, Board of Governors

CFW-jrf

26 January 1942

Mr. G. W. Fiske,
Powell & Fiske,
Aguila, Arizona.

My dear Mr. Fiske:

In reply to your letter of January 22, I will state that the customary royalty on manganese ores would vary from 5 per cent to 10 per cent of the net smelter returns. The lower percentage will apply to the marginal or low-grade ores, and the higher percentage to the higher grade ores.

We should appreciate your advising us when and if you enter into contracts for shipping this ore.

With best wishes, I am

Yours very truly,

J. S. Coupal

JSC-jrf

SAMBO AGUILA GROUP

MARICOPA COUNTY
AGUILA DIST.

See: "MANGANESE DEPOSITS OF WESTERN ARIZ."
USEM - I. C. 7843 - (1958)

Parker Custom Mill Study - Manganese
Ores (file)

23. Geology & Mineralization Ore occurs in volcanic tuff.
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

24. Ore: Positive & Probable, Ore Dumps, Tailings 75 tons ore on dumps. Probable ore body large as it lies in a basin.

24A. Dimensions and Value of Ore body Veins from one foot to seven feet wide.
Ore assays from 28% to 42%.

25. Mine, Mill Equipment & Flow-Sheet -----

26. Road Conditions, Route Road is excellent- no hills- highway-93 crosses one end of the property.

27. Water Supply Unlimited water supply can be had from wells 240 feet deep.

28. Brief History Claims have never been worked to any extent.

29. Special Problems, Reports Filed -----

30. Remarks

31. If property for sale: Price, terms and address to negotiate. Prefer to lease on straight royalty of 10% on ore below 35%, 15% above 35%. Will sell.

32. Signature.....

G. W. Fiske

33. Use additional sheets if necessary.

(1000)

- DEPARTMENT OF MINERAL RESOURCES
BUREAU OF MINES
WASHINGTON, D. C.
23. Geology & Mineralization: The manganese veins range from 2 feet to 7 feet wide where exposed. Many outcrops have not been worked on.
24. Ore - Positive & Probable, Ore Dumps, Tailings: Estimated 2 or 3 carloads of ore on dumps.
- 24A. Dimensions and Value of Ore body: The veins are parallel and extend practically 4500' or the length of three claims where they are end to end.
25. Mine, Mill Equipment & Flow Sheet:
26. Road conditions, Route: Property is on highway 93 which crosses the property, and 13 miles south of Aguila. Electric power line also crosses the property.
27. Water Supply: Within one mile of the claims. Good wells are obtained at a depth of 240 ft.
28. Brief History:
29. Special Problems, Reports Filed:
30. Remarks: The nearest shipping point is Aguila on the Santa Fe Railroad.
Attached is a tabulation of the assays which have been made. In many cases only manganese content was requested because previous tests had revealed that silica and barium were always low. The manganese content ranges from 36.67% to 44.2%.
31. If property for sale - Price, terms and address to negotiate: Property is for sale. Address - ~~Mr. E. Herbert, Agent,~~
~~Aguila, Arizona,~~
32. Signature: (Signed) D. B. POWELL
G. W. FISKE

Assays - SAMBO AGUILA MANGANESE CLAIMS

Iron	Mn.	Insol.	Phos.	Lead	Zinc	BaCO ₃	CaCO ₃
2.6	41.8	3.7	.010	Nil.	Nil.	Nil.	13.0
2.3	38.6	2.6	.030	Nil.	Nil.	3.0	15.4
	36.67	2.75				3.0	
	38.11	4.83					
	39.19						
	42.35						
2.9	44.2	4.8	.014			1.7	13.0
	43.5						

23. Geology & Mineralization

The manganese veins range from 2 feet to 7 feet wide when exposed. Many outcrops have not been washed on.

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

24-A Vein Width, Length, Value, etc.

The veins are parallel and extend practically 4500' or the length of B claims where they are end to end.

25. Mine, Mill Equipment & Flow Sheet

26. Road Conditions, Route

Property is on highway 93 which crosses the property and 13 miles south of Aguila. Electric power line also crosses the property.

27. Water Supply

Within one mile of the claims, good wells are obtained at a depth of 240 ft.

28. Brief History

29. Special Problems, Reports Filed

30. Remarks

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

Property is for sale.

32. Signed

D. B. Powell

33. Use additional sheets if necessary.

Geology & Mineralization - The manganese veins range from 2 ft. to 7 ft. wide, where exposed. Many outcrops have not been worked on.

Ore: Positive & Probable, Ore Dumps, Tailings

Dimensions and Value of Ore body - The veins are parallel and extend practically 4500 ft. or the length of three claims where they are end to end.

Mine, Mill Equipment & Flow-Sheet

Road Conditions, Route - Property is on highway 93 which crosses the property, and 13 miles south of Aguila. Electric power line crosses the property.

Water Supply - Within one mile of the claims. Good wells are obtained at a depth of 240 ft.

Brief History

Special Problems, Reports Filed

Remarks

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

(SIGNED) D. B. Powell

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

Date January 23, 1941

Mine Sambo Aguila

Location - Aguila, Arizona

Mining District & County - Vulture District
Maricopa County

Former Name

Owner - D. B. Powell

Address - Aguila, Arizona

Operator

Address

President, Owning 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

Operations: Planned

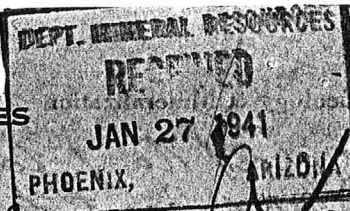
Number Claims, Title, etc. - 8 claims. Assessment work done and additional cuts made to expose veins.

Description: Topography & Geography - Claims on hillside which grades out into level rolling country.

Mine Workings: Amt. & Condition

MS-75

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT



Date

Jan. 23 1941

1. Mine

Sancho Aguila

2. Mining District & County

Vulture, Maricopa

4. Location

Aguila, Arizona

3. Former name

5. Owner

D. B. Powell

6. Address (Owner)

Aguila, Arizona

7. Operator

8. Address (Operator)

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals

Manganese

14. Men Employed

15. Production Rate

16. Mill: Type & Cap.

17. Power: Amt. & Type

18. Operations: Present

19. Operations Planned

20. Number Claims, Title, etc.

8 claims. Assessment work done and additional cuts made to expose veins

21. Description: Topography & Geography

Claims on hillside which grades out into level rolling country

22. Mine Workings: Amt. & Condition

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines

Salt Lake City, Utah, Sept. 11, 1941.

Mr. G. W. Fiske,
3911 S. Normandie,
Los Angeles, California.

Dear Mr. Fiske:-

Replying to your letter of Aug. 27 regarding the status of the work on manganese ore from the Sambo Aguila claims:

The ore sample from these claims has been under investigation and a preliminary report covering the test work will be issued soon. The representative sample submitted by the Mining Division proved to be fairly high grade as the following analysis will show:

Assay, per cent								
Mn.	Fe.	SiO ₂	Insol.	Al ₂ O ₃	Zn.	Ba.	CaO	MgO
37.4	1.6	4 4.0	5.9	1.9	No.	5.7	11.8	0.3

As may be seen from the above analysis, calcite is the chief gangue constituent, which must be rejected in making a product to meet ferro-grade specifications.

The Sambo Aguila ore was found to be readily amenable to ore dressing concentration by either tabling or a combination of flotation and tabling. By tabling, a recovery of approximately 75 per cent of the manganese was obtained in a product that, when sintered, met ferro-grade specifications. An additional recovery of 15 per cent of the manganese was obtained by floating the calcite from the material too fine to treat by gravity methods.

None of the product so obtained would meet chemical specifications or physical specifications for ferro-grade manganese without sintering because ferro-grade specifications for Grade B manganese demands that the manganese content of the sinter shall be 48 per cent manganese and the physical character of the sinter shall be such that 87.5 per cent of the manganese product is coarser than 20-mesh. In the ore dressing procedure outlined above it was necessary to grind all of the ore finer than this limit and the manganese product assayed less than 48 per cent manganese. After sintering this product met all chemical and physical specifications for ferro-grade manganese.

Very truly yours,

(Signed) C. W. DAVIS
Assistant Chief Engineer
Metallurgical Division

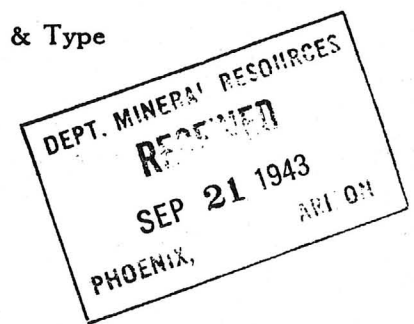
Date: **October 28, 1941.**

1. Mine: **SAMBO AGUILA MINE**
2. Location: **13 miles south of Aguila, Arizona, on Highway 93.**
3. Mining District & County: **Vulture Mining District, Maricopa County.**
4. Former Name:
5. Owner: **D. B. Powell and G. W. Fiske**
6. Address (Owner) **Aguila, Arizona.**
7. ~~Agent: E. Herbert~~
8. ~~Address (Agent): Aguila, Arizona.~~
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:
19. Operations - Planned:
20. Number Claims, Title, etc: **8 claims. Assessment work done and additional cuts made to expose veins.**
21. Description - Topography & Geography: **Claims on hillside which grades out into level rolling country. The elevation is 2200 ft.**
22. Mine Workings - Amt. & Condition: **A compressor was installed and 3 shafts put down on different veins which were from 2 ft. to 7 ft. in thickness. Numerous cuts were also made. All openings showed a good quality of ore.**

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

Date September 20, 1943

1. Mine Sambo Aguila
2. Location Aguila, Arizona
3. Mining District & County Vulture, Maricopa Co.
4. Former name No other
5. Owner G. W. Fiske
6. Address (Owner) Aguila, Ariz.
7. Operator -----
8. Address (Operator)
9. President, Owning Co. -----
9A. President, Operating Co.
10. Gen. Mgr. -----
14. Principal Minerals
11. Mine Supt. -----
15. Production Rate
12. Mill Supt. -----
16. Mill: Type & Cap.
13. Men Employed None
17. Power: Amt. & Type
18. Operations: Present None



19. Operations: Planned None

20. Number Claims, Title, etc. 8 claims, held by doing annual assessment work

21. Description: Topography & Geography Situated 14 miles South of Aguila on highway 93. Is in the low lying hills.

22. Mine Workings: Amt. & Condition " shallow shafts 8' and 12' deep and a number of open cuts. About 75 tons of ore on dumps.

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

December 4, 1958

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

Sambo Aguila Mine (Maricopa County)	Manganese
(Property)	(ore)



y which we would like to have

report form with as complete detail
as possible, assay returns, shipment returns
before and which might interest a
y.

Frank P Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

Assays SAMBO, AGUILA Manganese Claims

Iron	Mn	Insol	Phos	Lead	Zinc	BaCO ₃	CaCO ₃
2.6	41.8	3.7	.010	Nil	Nil	Nil	13.0
2.3	38.6	2.6	.030	Nil	Nil	3.0	15.4
	36.67	2.75				3.0	
	38.11	4.83					
	39.19						
	42.35						
2.9	44.2	4.8	.014			1.7	13.0
	43.5						

Sambo Aguila

2 shafts 200' ea.

40050\$
20,000

3000' drifts

15
15000
3000
\$45,000

2 shafts = \$20,000
3000' dr. 15' = 45,000

65000

Inc.

20,000
\$85,000

Tons

1500'

200

300,000
4
1200000

a very Rough estimate

1500' x 200' x 4' = 120,000 Tons = 95,000 Tons
of 15% Mn