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PRINTED: 05/30/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: BLACK QUEEN MANGANESE

ALTERNATE NAMES:

ARMOUR GROUP
HATTON CLAIMS

MARICOPA COUNTY MILS NUMBER: 159

LOCATION: TOWNSHIP 5 N RANGE 9 W SECTION 19 QUARTER S2
LATITUDE: N 33DEG 45MIN 15SEC LONGITUDE: W 113DEG 14MIN 07SEC
TOPO MAP NAME: AGUILA - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

MANGANESE OXIDE
IRON
SILICON SEE BIBLIO
BARIUM
CALCIUM OXIDE

BIBLIOGRAPHY:

MN ORE CONTAINS 20.4% SILICA
ADMMR BLACK QUEEN MANGANESE FILE
FARNHAM & STEWART USBM IC 7843 P 21
ADMMR "U" FILE
WILSON E & BUTLER G AZBM BULL 127 P 68-69
JONES E & RANSOME F USGS 710-D P 142
ADDITIONAL WORKINGS SEC 29, 30 T5N-R9W
ADMMR PARKER CUSTOM MILL STUDY FILE

BLACK QUEEN MINE

MARICOPA COUNTY

USGS Bull. 710-D p. 142

ABM Bull. 127 p. 68

IC 7843 p. 21

"U" File

MILS Sheet sequence number 0040130178

MAPS - Upstairs in the flat storage area - Fifth Drawer

Parker Custom Mill Study- Manganese Ores - (file)

USGS 15 Aguila Map

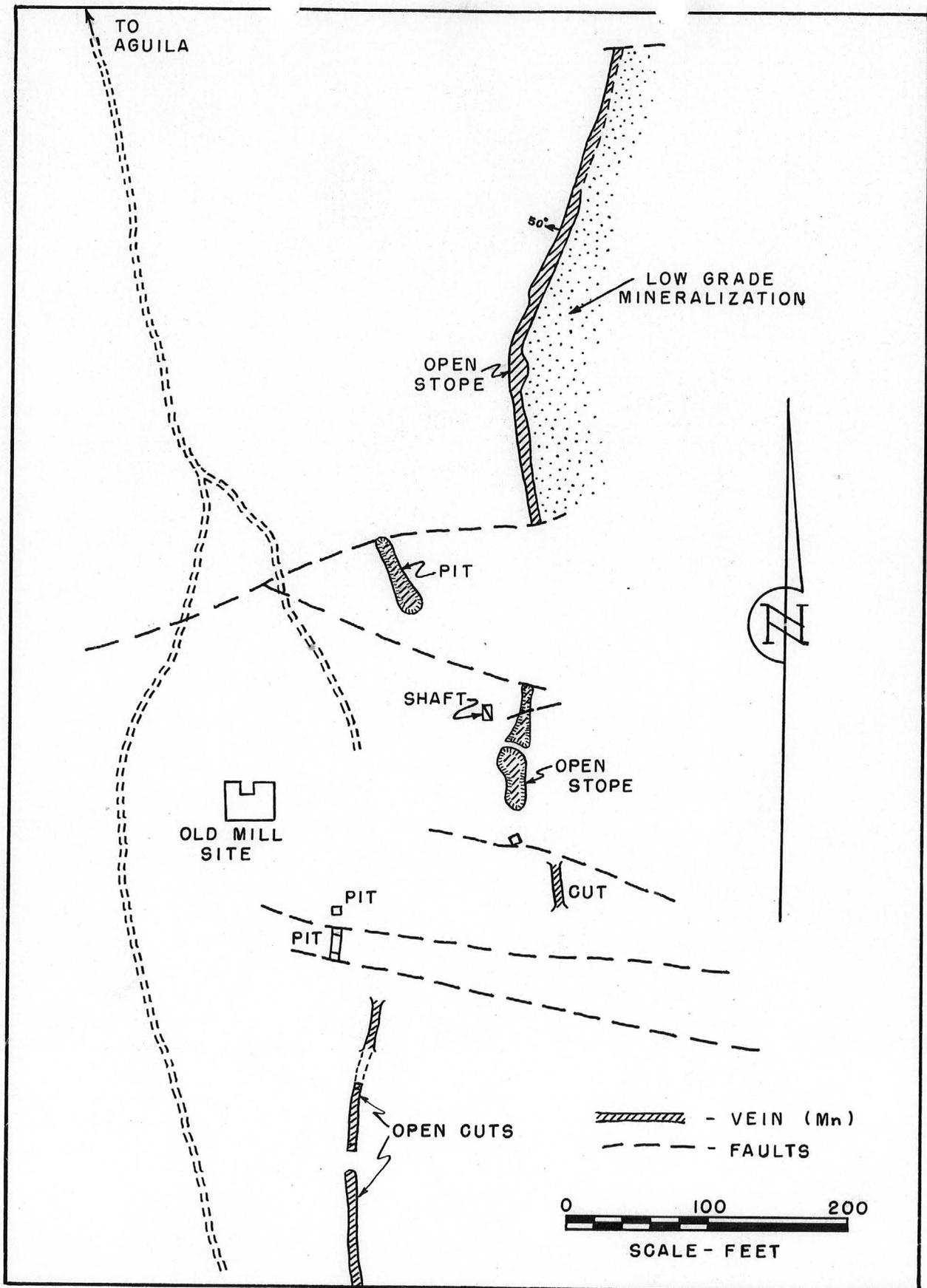


FIGURE 6. - SURFACE PLAN - BLACK QUEEN MINE
 MARICOPA COUNTY, ARIZONA

File

PROJECT 314
AGUILA, ARIZONA

DETAIL OF WORKINGS ON
DEPOSIT No. 1
(Circled figures = slope widths)

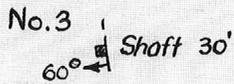
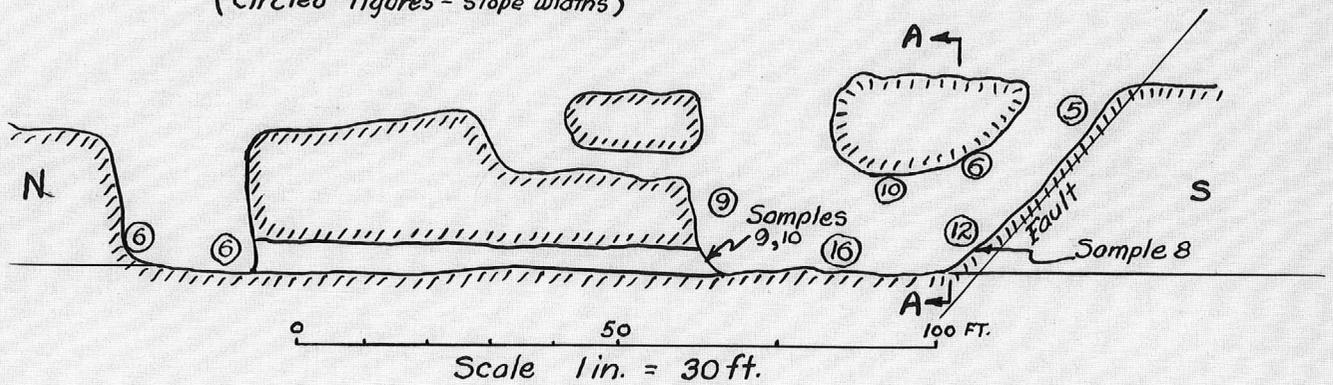
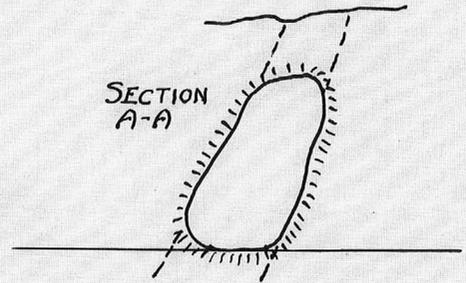
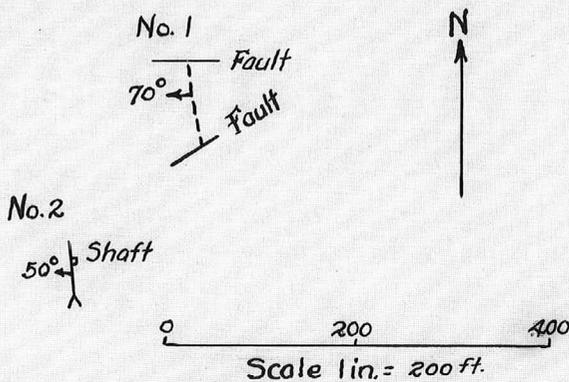


FIGURE 3
BLACK QUEEN
(ARMOUR)



GENERAL PLAN OF BLACK
QUEEN DEPOSITS

PROJECT 314
AGUILA, ARIZONA

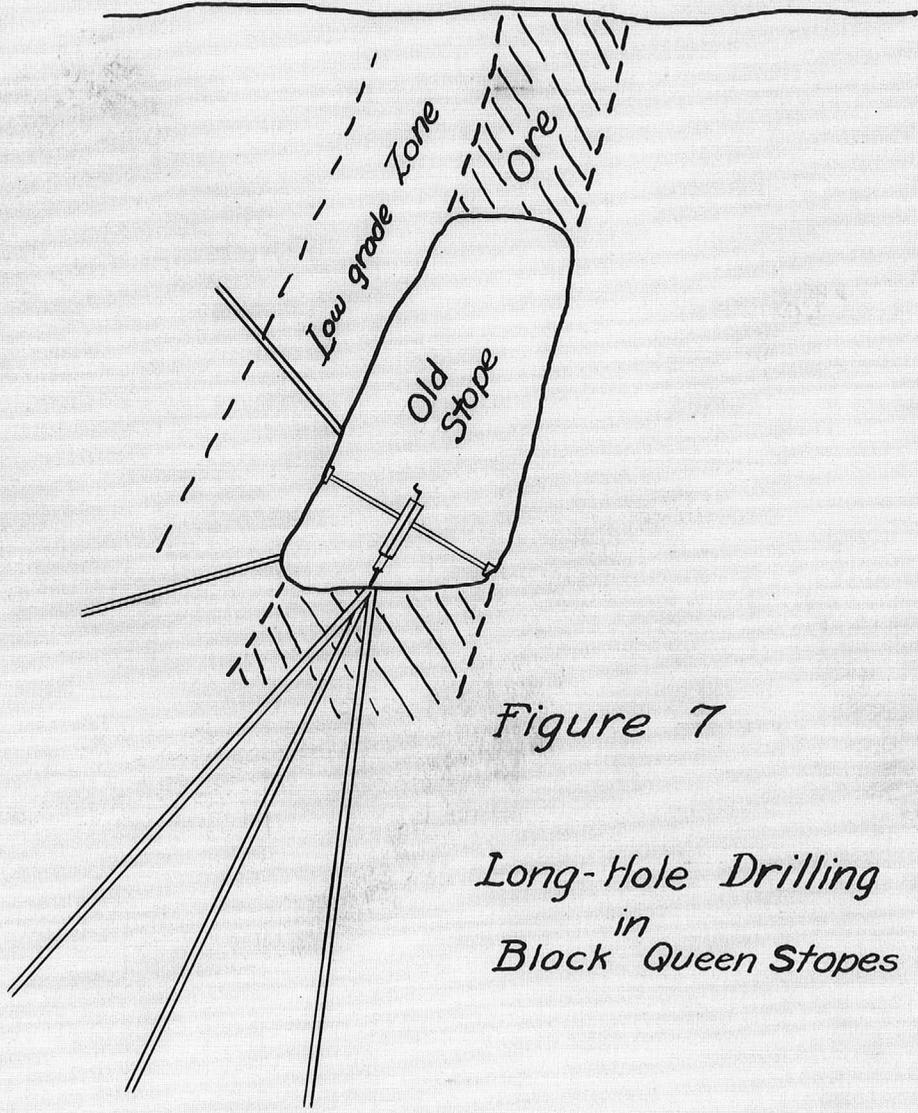


Figure 7

Long-Hole Drilling
in
Block Queen Stopes

5-5-10

Am. Republic 4-11-58

Page 22

Mining Partners File Contract Breach Suit

A breach of contract suit asking \$326,931 in damages has been filed in U.S. District Court by partners of the Black Queen Mining Co. of Phoenix.

Named defendants in the action are Creve C. Maples, Beckley, W.Va., George A. Mellen, Mobile, Ala., Paul E. McDaniel, Houston, Tex., listed as directors of the Herald Mining Co., a subsidiary of Ambrosia Minerals, Inc.; and U. S. Consolidated Mines, Inc.; and Twentieth Century Fuels, Inc.

The partners, Jack P. Stewart, of Phoenix, and L. W. Smith, of Blythe, Calif., allege the three directors named have neglected to pay them percentage payments

There is a Club Hippique du Lasso in Paris whose main aim is to promote the traditions of "Le cowboy americain" in France. Members dress in ten-gallon hats and carry six-shooters.

from gross mill receipts received from sale of finished manganese products from a concentrating mill located south of Aguila.

They state the payments were part of an agreement entered into when they sold the three directors the property in May 1956.

U. S. Consolidated Mines and Twentieth Century Fuels are accused of conspiring with the other companies named to deprive Stewart and Smith of the percentage payments.

The suit shows the manganese mining property and equipment was allegedly sold for \$425,000.

GAZETTE

Mining Firm Files Suit Over Sale

4/12/58

The Black Queen Mining Co., former owners of a manganese mill and mining operation near Aguila, has filed suit asking \$326,931 in damages and \$200,000 it claims is owed on the property sale.

In a U.S. District Court suit, Black Queen claims the properties were purchased in May 1956 for \$425,000 by the Herald Mining Co., a Missouri corporation.

THE SUIT claims that Herald Mining violated regulations in shipment of ore, and was closed down by the federal government.

The return of certain mining claims and an injunction against sale of the property by Herald is also sought by Black Queen.

THREE NEVADA corporations are defendants in the suit along with Herald Mining. They are Ambrosia Mines Inc., Twentieth Century Fuels Inc., and U.S. Consolidated Mines, Inc.

Creve C. Maple of Beckley, W. Va., and Los Angeles, and other individuals also are named defendants.

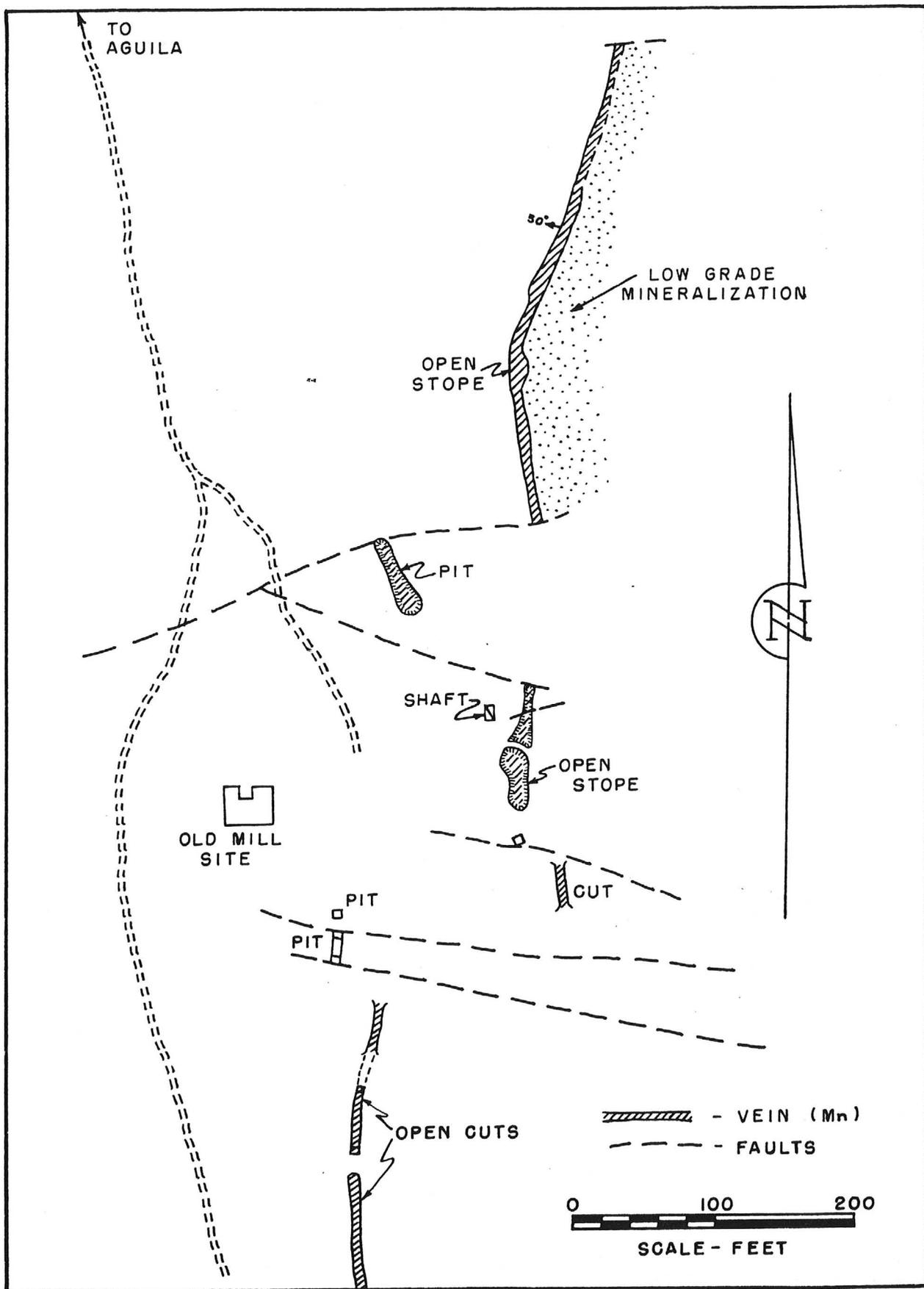


FIGURE 6. - SURFACE PLAN - BLACK QUEEN MINE
 MARICOPA COUNTY, ARIZONA

RIG

PROJECT 314
AGUILA, ARIZONA

DETAIL OF WORKINGS ON
DEPOSIT No. 1
(Circled figures = slope widths)

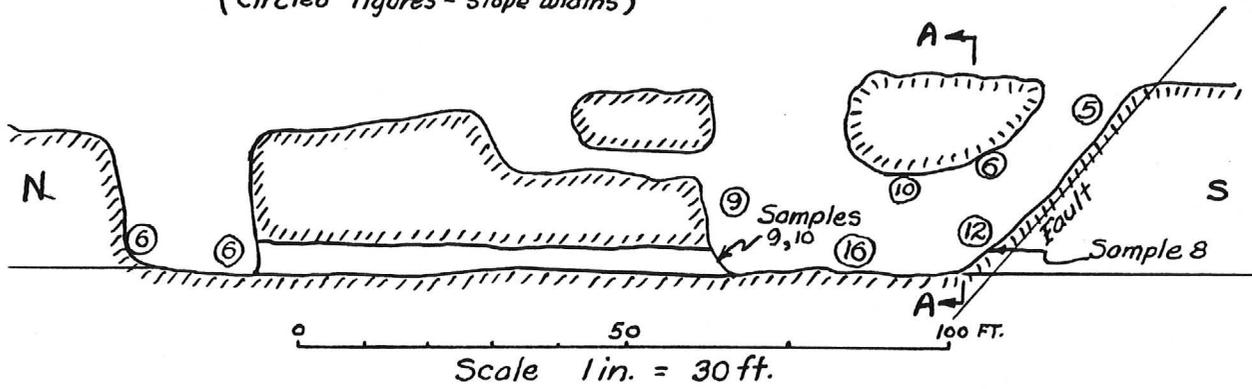
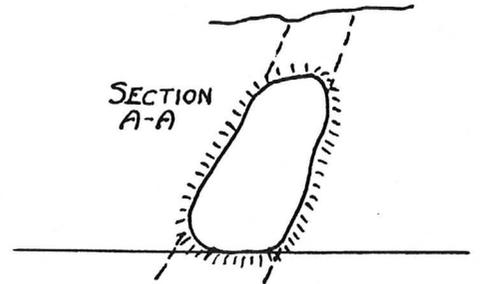
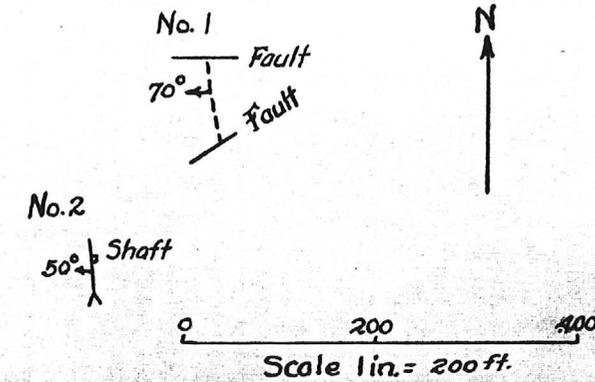


FIGURE 3
BLACK QUEEN
(ARMOUR)



GENERAL PLAN OF BLACK
QUEEN DEPOSITS

PROJECT 314
AGUILA, ARIZONA

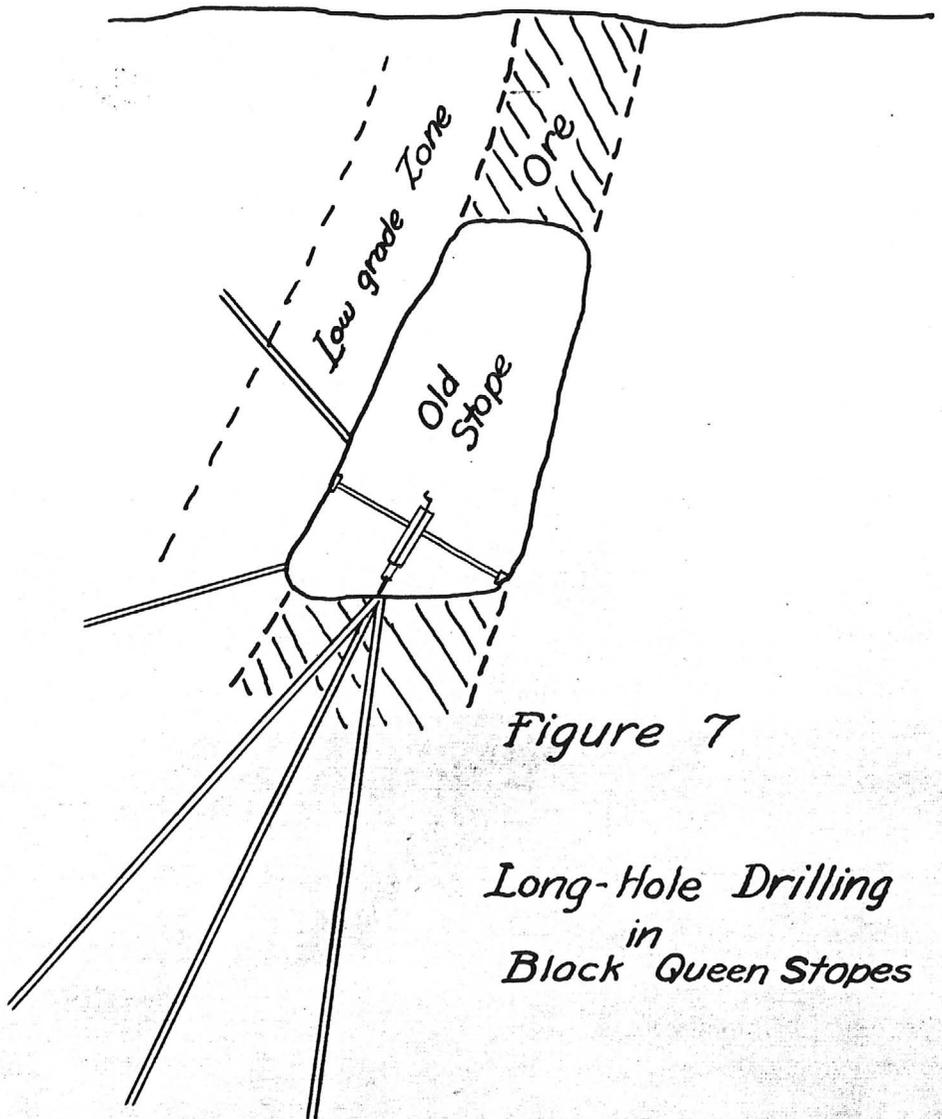


Figure 7

Long-Hole Drilling
in
Block Queen Stopes

5-6-10

.....
OWNERS

FEFFER, Ralph
(Arizona Fertilizers, Inc.)
Box 2828,
Phoenix, Arizona

NO REPORT

BLACK QUEEN MINE and other properties at Aguila

Property has been drilled by U.S. Bureau of
Mines. See letter in file.

.....
MANGANESE

OWNER

' FEFFER, Ralph B.
South 7th St.
Phoenix, Arizona

2-25-43
BLACK QUEEN MINE

An inclined shaft is being sunk by the Black Queen mines at its property 12 miles south of Aguila, Arizona. The operators expect to be in position to ship about 50 tons of manganese ore daily within the next 60 days. Fred Seifert, Aguila, is in charge of the work.

Taken from Mining World 2/1953 p92

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

FIELD ENGINEERS REPORT

MANGANESE SURVEY

Holt copy
Mine BLACK QUEEN

Date June 26, 1942

District Vulture Dist., Maricopa Co.

Engineer Elgin B. Holt

Subject:

B R I E F R E P O R T

OWNER: Ralph B. Feffer, 447 E. Jackson St., Phoenix, Arizona.

METALS: Manganese: psilomelane, manganite & pyrolusite.

LOCATION & HISTORY: This property was formerly known as the Armour group of claims and is located on the northwest end of the Big Horn Mountains, about 15 miles S. 15 degrees W. from Aguila, at an elevation above sea level of 2500 feet. A county maintained road connects property with Aguila. The claims were originally leased to several operators. In April, 1917, Jack Marden shipped five car loads of ore; in August, 1917, the claims were leased to the Noble Electric Steel Company, of San Francisco, which shipped 26 car loads of ore. In May, 1918, the deposit was being worked by T. H. Rosenberger, of Los Angeles.

GEOLOGY: The country rock is mainly red biotite andesite, but a short distance south of the workings hornblende schist, gneiss, and granite are exposed. The ore zone in which manganese ore is found is ~~approximately~~ 844 feet long by ten feet wide; said zone or vein being faulted into six segments with displacements ranging from 112 to 150 feet. Most of the ore occurs in breccia, making it necessary to screen and hand sort the ore in order to obtain a shipping product running from 35 to 40 per cent manganese.

DATA FROM U. S. BUREAU OF MINES: During January, February and March, of 1941, the U. S. Bureau of Mines carried out an extensive sampling of property, during which time the various shallow workings ~~were~~ were cleaned out, mapped and assays plotted thereon. I have a copy of the resulting assay map, dated March 17, 1941, showing that 102 samples were taken over an average vein width of 7.7 feet. An approximate tabulation of these 102 samples gives an average of 17.5 per cent manganese.

ORE RESERVES: Per the U. S. Bureau of Mines assay map mentioned, there are 660 tons of jig reject on dump assaying 18.9 per cent manganese, 49.42 per cent Insol., and 2.25 per cent Iron. There are no ore reserves blocked out in the shallow workings of mine, as said workings only have depths ranging from 20 to 30 feet.

CAPITAL REQUIREMENTS: The ore showing on the surface, however, warrant the investment of around \$60,000 to be spent in sinking one 200-foot working shaft, as well as carrying out around 1800 feet of drifting on the 100 and 200-foot levels in order to block out the ore in the six vein segments mentioned. It is believed that if such work could be carried out that around 100,000 tons of ore would be uncovered averaging around 17 per cent manganese; also that a daily production of 100 tons of ore could be maintained, of above grade, over a considerable period of time. Also, while this ore is low in iron, it carries an abundance of silica and calcite.

MINE PRODUCTION RECORD

772

Name of Mine **PIERSON GROUP**

Operated by **Jas. T. Pierson,**

P. O. Address **Aguila, Arizona.**

Located **15 miles southwest of Aguila.**

Mining District **Ellsworth or Vulture**

County **Maricopa** State **Arizona.**

Average Production tons per

Types of Product Under Contract to Contract Expires

Gold & Manganese

Remarks.

Phoenix, Arizona,
November - 1922.

Examined by:
C. L. Beckwith.

(Called to attention by correspondence
of Mr. Pierson with L. O. Howard and
Reno H. Sales.)

CONCLUSION: Some small lenses of manganese and small veins containing gold and silver. Nothing to indicate the existence of copper ore deposits.

LOCATION: 15 miles southwest of Aguila, a station on the Parker branch of the Santa Fe Railroad, and in the Big Horn mountains.

PROPERTY: 120 unpatented claims; location work has been done on only a few claims.

GEOLOGY: The geological formations found in this part of the Big Horn mountains are granite gneiss and schist overlain by lava and andesitic flows and some metamorphosed sedimentary.

MINERALIZATION: The most important mineralization is the manganese deposits. The shoots of ore generally range from 25 to 50 ft. in length, have a north-south strike and range from 2 to 10 ft. in thickness. Generally occurs in fractures through the andesitic formation.

The most important development was what is called the Old Armor where during the war they operated a Stebbins dry concentrator, and it is said shipped 80 cars of concentrates.

CONDENSED TABLE OF ASSAYS

No.	Ag. Oz.	Au. Oz.	Total Value
1	3.2	3.06	\$64.40
2	13.8	1.43	42.40
3	1.3	1.43	29.90
4	1.3	1.94	40.10
5	6.1	2.80	62.10
6	0.7	0.12	3.10
7	23.8	47.65	986.80
8	1.4	2.82	57.80
9	7.7	6.11	129.90
10	0.1	0.18	3.70
11	Trace	0.03	.60
12	6.7	7.33	153.30

Hand sampling of an ore containing as much free gold as is found in this ore is very uncertain in comparison to actual mill tests.

Record on mill run 619 tons returned an average of \$52.88 per ton. In the above 12 samples, after rejecting No. 7, which was selected for a high-grade, the arithmetical average of the remaining 11 samples was \$53.40 per ton.

Prior to working on the New Vein other portions of the mine have produced considerable ore. The Peerless vein which is the extreme northerly vein and from 6 to 16 inches in thickness has been stoped to surface. It is said the dike stopes between faults "C" and "D" produced 600 tons of \$20.00 to \$25.00 ore.

DEVELOPMENT:

Peerless Vein Tunnel	270 feet
Intermediate Level	710 "
Lower Tunnel	1033 "
50-ft. Level from Winze	60 "
Total Drifts and Crosscuts	2073 "
Winze on 60° incline	72 "

EQUIPMENT:

15 H.P. Electric Hoist on Winze
 Old style Fairbanks-Morse Air Compressor run by belt from electric motor
 2-stamp Hendy Mill - 6 to 10 tons capacity in 24 hours
 70% recovery in battery, balance on plates.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine: Manganese Properties Date: Feb. 20, 1954
To: R.I.C. Manning, Director Engineer: Mark Gemmill
Subject: Present Activities

Black Queen - 15 miles south of Aguila

Production continues at this property but I was told that shipping ore is getting scarce. There appears that there is considerable in the mine which will not quite run the required 15%. The operator, Mr. Smith, has expected to ship to the Aguila mill.

Ambrosia reported to have sold this. FPK 1957

COPY

SRZ/ec
July 28, 1941.

Mr. Louis O. Macloon,
P. O. Box 46,
North Hollywood, California.

VIA AIR MAIL

Dear Mr. Macloon;

This is in reply to your letter of July 17, requesting information concerning concentration of manganese from the Black Queen and other properties at Aguila, Arizona. We know nothing about the new and tested concentrator developed by the Stevens Adamson Manufacturing Company of Aurora, Illinois, or the sample upon which that experimental work was done; the results of ore-dressing work vary quite widely on different samples of ore taken from the same property. Accordingly, our results may differ from those obtained in tests which you mentioned, and the following discussion will apply only to the ore sample on which we worked.

The sample of Black Queen ore was taken by the Mining Division and consisted of two tons that would be roughly representative of milling grade ore that could be obtained in the district. The analysis of the two-ton lot follows:

P e r c e n t									
Mn.	Fe.	SiO ₂	Insol	P	Al ₂ O ₃	Zn	Barium	CaO	MgO
27.6	1.7	20.4	32.0	.050	6.9	No	5.9	6.3	Tr.

This sample of ore was high grade and responded readily to concentration by tabling. The two factors that were found to limit the recovery of the manganese as ferro-grade are as follows: (1) the ore slimes very readily and about 50 percent of the manganese was reduced to slimes on crushing and grinding; (2) barium appears to be a constituent of the manganese mineral itself and cannot be eliminated from the manganese concentrates.

cc/ W. O. Files
Met. Div. - Salt Lake
Met. Div.
Files
Feffer-Wharton Company
Phoenix, Arizona

By tabling sized feed, beginning at 28-mesh, regrinding and retabling the middlings, and combing part of the slimes with the table concentrates, 73 percent of the manganese was recovered as a product that, when sintered, assayed more than 48 percent manganese and otherwise met the chemical specifications for ferro-grade. If the slimes are treated by flotation, an additional 6 percent of the manganese can be recovered, making a total recovery of about 79 percent as a combined product that, when sintered, assayed as follows;

	P e r c e n t							
	Mn	Fe	SiO ₂	P	Al ₂ O ₃	Zn	Barium	CaO
Assay of Sinter	48.3	1.0	6.8	.019	3.1	No	9.91	2.4

It is questionable whether the 6 percent additional recovery would justify the expense of installing flotation equipment.

I doubt if briquetting with a binder and without heating, as you suggest, would be feasible on Aguila concentrates. On heating and sintering or nodulizing, the manganese assay of the concentrate is greatly increased due to the evolution of oxygen and other volatile gases. For example, a table concentrate that assayed 43.3 percent manganese before sintering, produced a sinter that assayed 51.6 percent manganese. Due to the large amount of barium associated with the manganese mineral, it would be impossible to make table concentrates assaying 48 percent manganese from the lot of ore on which our experimental work was done. Hence, it appears that sintering or nodulizing would be an essential part of the process if a plus 48 percent manganese product is required.

Since the Black Queen ore contains an unusually large amount of barium that cannot be separated from the manganese concentrates, I would suggest that you examine your contract with the Metal Reserves Company to be sure that there is no objection to this large amount of barium.

Because of the limited state of development of the Aguila properties when the samples were taken by the Mining Division, it was not possible to make accurate estimates of ore reserves. However, it is my impression that Black Queen has more positive ore than the Black Nugget and Sambo Aguila, and that the reserves of possible plus probable ore are also larger. It is also my impression that there is not enough positive ore in the district to produce 10,000 tons of ferro-grade, but there may be sufficient when the probably and possible ore reserves have been developed.

Since April 29, 23 have completed the ore-dressing work on the Black Nugget. As a result of the final work, we have been able to recover 70.7 percent of the manganese as a ferro-grade product as compared with the 62.4 percent at the time of the previous letter.

The entire matter of producing an acceptable ferro-grade product from manganese ores requires considerable technological experience and knowledge. The services of a competent metallurgical engineer are necessary to successfully correlate the results of test work and the design and construction of a mill or concentrator.

Should you find it convenient to visit the Bureau of Mines station at Salt Lake City, the staff would be glad to discuss the concentration of the Aguila manganese ores with you.

Yours faithfully,

R. R. SAYERS,
Director.

COPY

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July 28, 1941.

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