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07/27/88

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: BIG HORSESHOE

ALTERNATE NAMES:

MOHAVE COUNTY MILS NUMBER: 589A

LOCATION: TOWNSHIP 21 N RANGE 17 W SECTION 32 QUARTER NE
LATITUDE: N 35DEG 09MIN 51SEC LONGITUDE: W 114DEG 06MIN 12SEC
TOPO MAP NAME: KINGMAN - 7.5 MIN

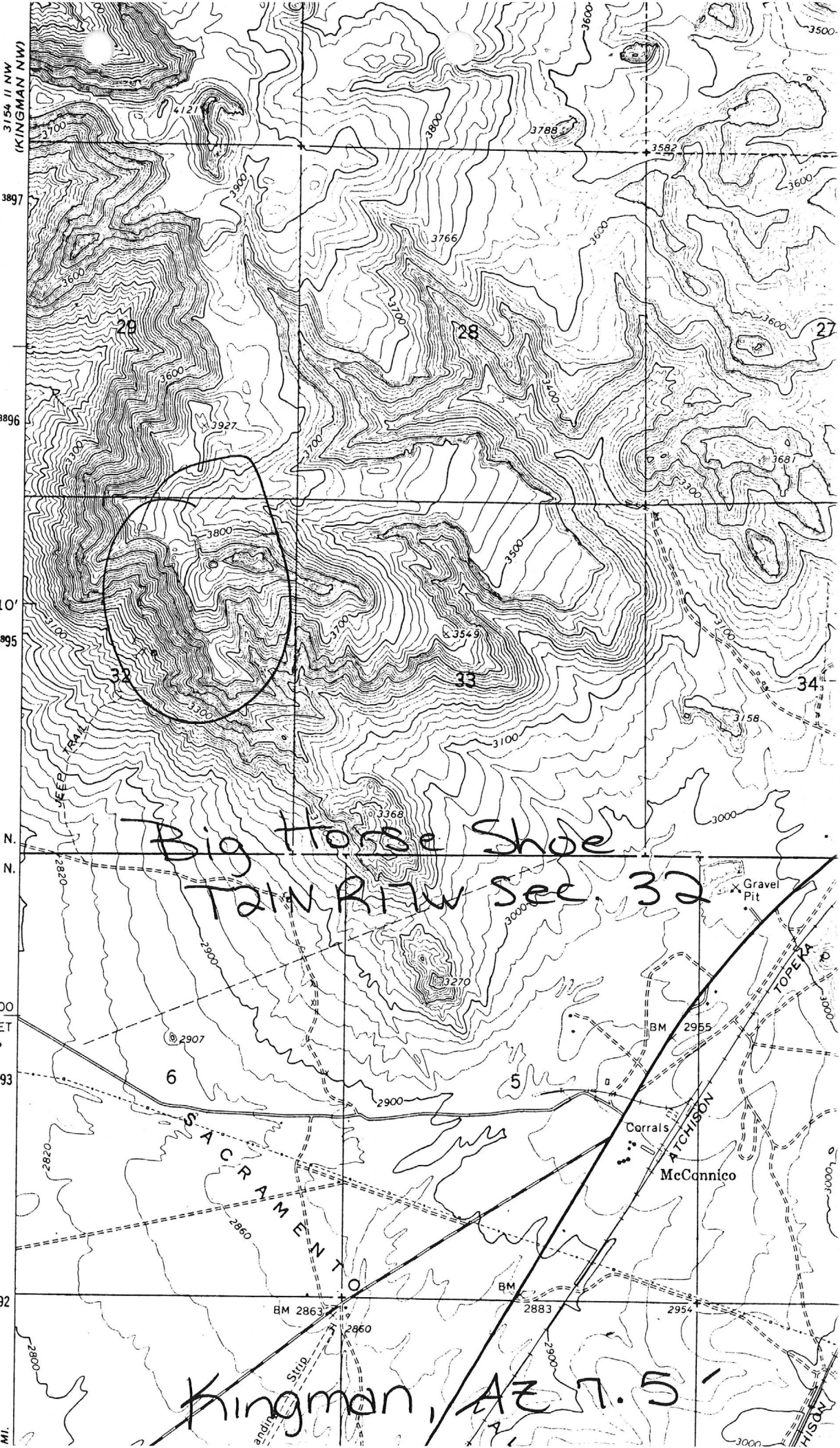
CURRENT STATUS: EXP PROSPECT

COMMODITY:

GOLD LODE

BIBLIOGRAPHY:

ADMMR BIG HORSESHOE MINE FILE



3154 II NW
(KINGMAN NW)

3897

3896

10'

3895

T. 21 N.

T. 20 N.

1 510 000
FEET

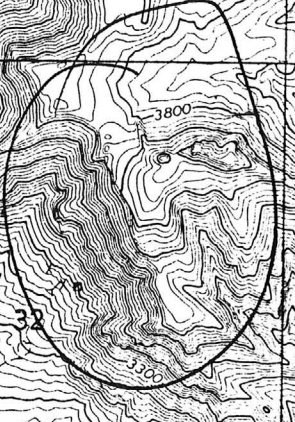
3893

3892

MI.

Big Horse Shoe
TAIN RITW Sec. 32

Kingman, AZ T. 5



SACRAMENTO

Corrals
ATCHISON
McConnico

TOPELA

Kingman
SITUP

ATCHISON

BIG HORSE SHOE

REFERENCES

MOHAVE COUNTY
MAYNARD DIST.
T21N R17w Sec. 32NE

Mohave County MILS Index #589A

Kingman Mining Project, Claim Map 1, 11/5/76

Kingman, AZ 7.5' Topo (included in file)

News Items

E.B.H.

Date 6/9/39

Mine Big Horse Shoe

Location Maynard Mng. Dist.

Owner Rae Johnston (lease)

Address Oatman, Ariz.

7 m. S.W. of Kingman

Operating Co.

Address Large potential medium grade ore.

Pres. Gold content & can

Genl. Mgr. be oxidized - 3 mi.

Mine Supt. from H/W 66 & power

Mill Supt. line.

Principal Metals Johnston will

Men Employed mail special report

Production Rate to Dept. of Min.

Mill, Type & Capacity Resources.

& copy to Holt.

Power, Amt. & Type

Special

Signed Holt.

(Over)

Big Jim Mine, Oatman
✓ Tintic Mine, Chloride
Grey Eagle Lease, Oatman

✓ Ray S Witcher
President
✓ Rae L. Johnston
General Manager

✓ JOHNSTON & WITCHER MINES, INC.
Oatman, Arizona

July 6th., 1939

Mr. Elgin Holt, District Engineer,
Arizona Department of Mineral Resources,
Kingman, Arizona.

Dear Mr. Holt:

Pursuant to your suggestion, I am herewith presenting a brief resumé of the report on the Big Horse Shoe property:

The property is located in the Maynard Mining District, Mohave County, Arizona, and is about five miles south of Kingman in an air line. It is reached from Kingman over U. S. Highway 66 four miles, thence three miles over county road and one mile unimproved road. The shipping point is Kingman on the Santa Fe Ry.

The electric power line of the Citizens Utilities Company parallels the highway and could be run in about four miles at small cost. The power rate is from $1\frac{1}{2}$ cents in the larger brackets to 2 cents per kilowatt hour for nominal consumption.

Several springs with a good flow of water are near the property. It is very probably that ample water for a 500-1000 ton operation can be developed by drilling in the contiguous flat. The Santa Fe Ry., two miles to the northwest have a well to the 200 foot horizon producing 90,000 gallons per day, on the same water table.

There are five claims in the group, held by possessory title. At an elevation of 3000 feet, the climate is mild the year around and working conditions good.

The ore is amenable to cyanidation, or flotation, or a combination of both. Test lots can be sent to the Tom Reed custom mill at Oatman at a cost of \$4.75 to \$5.50, depending on the tonnage, for milling and trucking.

GEOLOGY:

The country rock is a coarsely crystalline granite, medium gray in color and locally is well weathered, leaving many residual boulders of considerable size. Forming a north-south contact with the granite is an area of gneiss and schist. The claims and the deposit under consideration are contained in this gneiss occurrence. The structure of the gneiss and schist strikes north and south and dips about 60° to the west. This structure may prove to be the controlling factor of the trend of the mineralization.

Intruding into the gneiss at varying intervals and over an area some 2000 feet wide by 3000 feet long is an intrusion of syenite-aplite, predominating in a distinctive pink feldspar, and it is in these outcrops and exposures of syenite that the values occur. It is the writer's opinion that this pink syenite is a later phase of the contiguous granite and will be found to be in the form of a fairly extensive, irregular intrusion obtaining to considerable depth, and that the outcrops are the higher, exposed peaks of this intrusion which underlays the area, rather than any dikes or sills confined to the length and width of the outcrops.

Big Horse Shoe - 2
7/6/39

DEVELOPMENT:

This is limited to a half a dozen shallow pits and trenches and two small shafts to 40 and 50 feet of depth, all widely separated. Varying gold values can be obtained from these workings and range from \$0.70 to \$300, but from such scattered limited workings representing potentially a very large tonnage, no average as to what the whole mass may run can be arrived at.

Of significance, however, is the fact that wherever the syenite is exposed it is invariably auriferous and varying values can be obtained. Of pertinent importance is the fact that in all the fresh pink syenite examined the gold was found to be contained thruout the groundmass of the rock, in both the feldspar and the quartz, and is not confined to quartz stringers or seams, but appears to be disseminated thruout. The gold has a fresh, yellow color, is sharp and angular and is undoubtedly of primary origin.

Summation:

Extensive inspection and study of the rock postulate the following: There are three stages of decomposition and alteration of the syenite (1) in the lower horizon, original syenite comprised fresh, pink unaltered feldspar, primary quartz, pyrite and black to brown hematite. This type carries excellent values: \$10-30. (2) nearer to the surface, as a result of surface agencies proceeding downward, we find partially kaolinized feldspar, hematite and limonite, some of it as pseudomorphs after pyrite, carrying commercial gold values: \$7-9; at or near the surface some of the feldspar is well kaolinized and we find vug holes lined with limonite and with practically all values removed. Most of the work done to date was in zone 3 or the transition zone from 3 to 2, and in accordance with this theory, when development is extended entirely in zones 2 and 1 it will be in commercial ore. The line of demarcation between zones 3 and 2 will naturally vary with the contour of the surface, the tightness of the original rock and the extent of the seams and fractures. In places this contact is about at the surface, in other places it may be fifty feet or more below the surface. It is concluded that when development is extended into the main body of the unaltered syenite-aplite, tonnages of magnitude of commercial ore will be developed.

Yours very truly,

(Sgd.)

Rae L. Johnston
Rae L. Johnston E. M.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Special

Date July 7th., 1939

Mine Big Horse Shoe ✓

District Maynard

Location 7 miles SW of Kingman,
Mohave County, Arizona

Former name

Owner Johnston & Witcher ✓

Address Oatman, Arizona

Operator " "

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Gold

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present None

Operations Planned Develop extensively by drilling, trenches and cuts
and shallow prospect shafts.

Number Claims, Title, etc. Five claims - Possessory title

Description: Topog. & Geog. Well eroded, gently sloping hills 200 - 400
feet above surrounding flats and washes.
Elevation 3000-3500 feet. Mild climate
the year around.

Mine Workings: Amt. & Condition About six trenches, open cuts, shallow pits
and one 50 foot shaft with 20 foot drift. Open

Geology & Mineralization

Syenite-aplite intrusions occurring at varying intervals over an area some 2000 feet by 3000 feet in extent. Country rock of gray, well weathered granite. Forming a north-south contact with this and dipping 60° to the west is an area of schist and gneiss, and it is in this latter formation that the syenite intrusions occur. These latter intrusions outcrop from a few feet in area to several hundred feet. Gold values disseminated thruout the syenite.

Ore: Positive & Probable, Ore Dumps, Tailings

Possible tonnage of magnitude of medium grade ore.

Mine, Mill Equipment & Flow Sheet

Ore is amenable to cyanidation or flotation or combination of both. Tom Reed custom mill (cyanide) has paid 95% recovery on test shipments made

Road Conditions, Route

Four miles west from Kingman on U.S. Highway 66; thence three miles south on county road; thence one mile on unimproved road. First class road can be constructed from the Highway to the property at very nominal expense.

Water Supply

Springs for domestic use near the property. It is believed that drilling in the contiguous flat to about 200 feet will develop water for a 500-100 ton operation. Nearby on the same water table the Santa Fe RR has a well producing 90,000 gallons per day.

Brief History

Just recently acquired and prospected.

Special Problems, Reports Filed

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Remarks

All fresh, unaltered syenite encountered carry commercial gold values. It is concluded that when development is extended into the unaltered zones, a tonnage of real magnitude of commercial grade ore will be developed.

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

Desire financing to extensively develop and place on large scale operation if justified.
Communicate with: Rae L. Johnston
Oatman, Arizona.

Signed

Rae L. Johnston

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

MB-3

OWNERS MINE REPORT

Date July 7, 1939

Mine Big Horse Shoe ✓

District Maynard

Location 7 miles SW of Kingman,
Mohave County, Arizona

Former name

Owner Johnston & Witcher ✓

Address Oatman, Arizona

Operator " "

Address

President

Gen. Mgr.

Mine Supt.

Principal Metals Gold ✓

BIG HORSE SHOE

Production Rate

An

Power: Amt. & Type

Mohave 8 - 10 T 20 N, R 17 W

Operations: Present None

Johnston & Witcher, Oatman

(Returned "unknown" 8/2/46)

Operations Planned Develop extensively by drilling, trenches and cuts
and shallow prospect shafts.

Number Claims, Title, etc. Five claims - Possessory title

Description: Topog. & Geog. Well eroded, gently sloping hills 200 - 400
feet above surrounding flats and washes.
Elevation 3000 - 3500 feet. Mild climate
the year around.

Mine Workings: Amt. & Condition About six trenches, open cuts, shallow pits

7/7/39.

MEMORANDUM:

This report should be marked SPECIAL, as it concerns a gold
prospect of unusual promise and one that may develop into a large
low grade milling property.

Geology & Mineralization

Syenite-aplite intrusions occurring at varying intervals over an area some 2000 feet by 3000 feet in extent. Country rock of gray, well weathered granite. Forming a north-south contact with this and dipping 60° to the west is an area of schist and gneiss, and it is in this latter formation that syenite intrusions occur. These latter intrusions outcrop from a few feet in area to several hundred feet. Gold values disseminated throughout the syenite.

Ore: Positive & Probable, Ore Dumps, Tailings Possible tonnage of magnitude of medium grade ore.

Mine, Mill Equipment & Flow Sheet Ore is amenable to cyanidation or flotation or combination of both. Tom Reed custom mill (cyanide) has paid 95% recovery on test shipments made.

Road Conditions, Route Four miles west from Kingman on U. S. Highway 66; thence three miles south on county road; thence one mile on unimproved road. First class road can be constructed from the Highway to the property at very nominal expense.

Water Supply Springs for domestic use near the property. It is believed that drilling in the contiguous flat to about 200 feet will develop water for a 500-1000 ton operation. Nearby on the same water table the Santa Fe RR has a well producing 90,000 gallons per day.

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Rae L. Johnston
Oatman, Arizona

Signed Rae L. Johnston

JOHNSTON & WITCHER MINES, INC.

OATMAN, ARIZONA

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Big Horse Shoe - 2
7/6/39

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Yours very truly,

Rae L. Johnston
Rae L. Johnston E.M.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine BIG HORSE SHOE ✓
District MAYNARD, MOHAVE COUNTY
Subject:

Date April 20, 1955
Engineer MARK GEMMILL

Unable to get any information concerning this property. It is probably abandoned.