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ARIZONA BUTTE MINES CO.

District: Stockton Hill

Location: Stockton Hill; about 15 miles by wagon road northwest of Kingman, Arizona. Elevation of 4800 feet.

Owners: Arizona Butte Mines Co., incorporated under laws of Arizona, Capital stock 2,000,000 shares, one dollar par. Of this 1,375,000 shares are issued and outstanding, balance in treasury. Officers: H. M. Crowther, President and General Manager, Kingman, Arizona.

Date visited: September 1 and 2, 1919.

NOTES:

35 Claims located along what is known as the Prince George vein, striking N. 40° W. and dipping to the N. E. 80°.

G E O L O G Y

Veins are fissures of movement, occurring in a Pre-Cambrian complex consisting of Gneiss, Gneissoid Granite and Schist cut by numerous acid and basic dikes of per-mineral age. The main vein at one point may be in a fine grained Gneiss, and at other points in the Gneiss but with parallel bands of pegmatite on either wall. The walls are badly sheared and crushed, necessitating heavy timbering or filling. The usual method is to mine out the ore and fill with barren vein filling or wall rock.

H I S T O R Y

In the early eighties the various claims shown on the attached maps as the Banner, Prince George and De La Fontaine are credited with a production of a million ounces of silver, taken largely from the rich surface ores.

During 1917 the properties were consolidated under present management, \$100,000.00 raised from sale of stock, the greater portion of which was expended in the construction of a mill and in opening some of the old workings - entirely by hand methods of mining. A leasing system was adopted and approximately 90 cars of ore and concentrates were shipped during 1918.

The following is an average of the above shipments, though there was no means at hand of identifying concentrate from crude ore shipments:

<u>Tons</u>	<u>Au</u>	<u>Ag</u>	<u>Pb</u>
2624	.35 oz.	15.1 oz.	27.5 %

At the present time the Company has two sets of leasers working in the upper levels and contemplates the reconstruction of the mill, which has been idle for nearly a year. They are also preparing to drive a tunnel, already in 600 feet, a distance of 11,000 feet to tap their main workings at a maximum depth of one thousand feet. The tunnel will be on the vein. They are also equipping with air in order to increase number of leasers, and under the splitcheck system will supply everything, charging for air, steel, sharpening, hauling and milling.

D E V E L O P M E N T

Development consists of several thousand feet of tunnels as well as some drifting from the intersection shaft as shown on the accompanying blue print. The infallable tunnel is open for the greater portion of its length, and it is from this tunnel and the winze shown that the present production is being made.

Blue print of elevation shows various blocks of ground and tonnage and grade of ore contained. There is no reason to doubt this estimate, and in fact deep development should produce much larger tonnage. Widths of ore vary from a few inches up to 3 feet. The owners have no exact knowledge of these orebodies except from previous shipments around their borders, and there are no assay maps at hand.

Concentrator, using jigs and tables, has a capacity of 180 tons per day, although it will be several months before this tonnage is attained. It is their intention to use this mill as custom mill for leasers on split-check system; also, to buy some outside ore and a sampler will be installed for this purpose.

A 75 H. P. Fairbanks Morse type engine has been installed at mouth of deep tunnel; also, a 10 x 12 single stage Ingersoll-Rand Compressor, belt driven from the gas engine. This equipment appears inadequate for a long tunnel. The power line of the Desert Light and Power Company crosses the portal of the tunnel, but for some reason the operators think they can operate more cheaply on their own power.

A similar plant is being installed at the upper workings of the mine with a view of supplying air for the leasers. Jackhammers

will be used both at the tunnel and by leasers, and are entirely adequate for the character of ground encountered along the vein; and in fact, in stoping operations due to heavy ground and soft ore, I doubt the wisdom of using machines, since handwork is quite efficient and would save a great admixture of waste.

C O N C L U S I O N

Estimate of 25,000 tons of grade of ore as follows:

Au \$4.00, Ag 5 oz., Pb 15%, and Zn 10% is probably reasonable.

In the event that the Company continues operations as planned and reconstructs the mill, the property can produce approximately four to five cars monthly of crude ore and concentrates of approximately the following composition: Au .8 oz., Ag 12.3 oz., Pb 50%, Zn 7%.

The veins are narrow, or at least the ore is narrow, varying as mined by leasers from six inches to two feet - costs will be high.

Mining Cost	\$7.00	Per ton
Milling "	2.50	" "
Haul ratio Stol	1.00	" "
Freight 5 to 1	.90	" "
Total	11.40	

Crude ore, where mined, will cost \$15.00 to Humboldt, due to haul.

Total cost, including treatment on mill concentrates will be for

Milling ore	\$12.60	Per ton
Shipping "	25.40	" "

Margin of profit for leasers and Company will be small, although Company will get some benefit from shipments of zinc, which they do not propose to pay for at the mill.

As a producer of lead the Company should be able within five months to produce five cars monthly of 15 to 50 per cent lead ore, either as concentrates or coarse ore, but can hardly be depended on for any great amount of coarse ore, and their maximum shipments of such ore will probably not exceed two cars per month varying from 22 to 40% lead.

MILLING RESULTS - 849 TON LOT

	Weight Pounds	Tons	Oz. Gold	Oz. Ag.	% Cu.	% Lead	% Zinc	% Sil.	% Iron	% Lime	% Sulph.
Crude Ore	1,698,195	849	.324	4.97	.29	15.67	10.4	55.5	5.2	1.	9.7
Lead Concentrates	311,440	155	.277	10.51	.20	66.07	6.2	8.1	3.05	0.9	15.1
Lead Concentrates	108,026	54	2.58	17.91	.49	51.1	12.2	3.3	8.5	0.9	20.4
Zinc Concentrates	260,000	130	.356	6.53	.95	4.22	42.3	15.	6.9		
Tailings			.055	1.35	.13	.42	3.6	90.9	1.15		
Percent Recovery			83.	81.8	--	98.0	80.8	--	41.5		

4.04 Tons Crude Ore - - - - 1 Ton Lead Concentrates
6.53 " " " - - - - 1 " Zinc "

AVERAGE ASSAYS FROM SAMPLES MAPS

	Feet	Oz. Gold	Oz. Silver	% Lead	% Zinc	Total Value
Banner Shaft, 36 Assays	1.59	.235	5.4	20.8	14.6	\$36.92 per ton
Banner Shaft, 165 Ft. Level, 37 Assays	1.5	.21	9.0	27.2	13.0	43.25 " "
Banner Shaft, 330 Ft. Level, N., 21 Assays	1.3	.35	4.3	15.0	13.2	34.00 " "
Banner Shaft, 330 Ft. Level, S., 35 Assays	1.29	.21	5.4	15.0	13.1	31.79 " "
Banner Shaft, 430 Ft. Level, N., 3 Assays	.8	.31	3.0	7.9	7.6	21.31 " "
Banner Shaft, 430 Ft. Level, S., 13 Assays	1.7	.30	5.0	11.1	12.7	30.71 " "

Based on { (Gold, \$19., Silver 50¢ Oz.)
(Lead 4¢ Zinc 5¢ Lb.) } Net from Smelters

Kingman Ariz, June 8th 1919

Messrs. Consolidated Arizona Smelting Co,
Humboldt, Arizona

Gentlemen:

The Arizona Butte Group requires a special automobile to reach it, for which reason I did not visit the property, but have made a number of enquiries. I find from Mr. McGinley, an engineer who has been in the district some 4 years, that possibly two cars a week are now being shipped from the property by leasees. Mr. Crowthers the manager is now in the East, to finance the driving of a 2000 ft. tunnel to strike the ore bodies at depth. The property has been a shipper of some note in the past, and the belief is that it will again be a shipper.

I might remark that throughout the Chloride district as a whole, an impoverished zone seems to obtain near or immediately below the oxidized zone. This zone of impoverishment may persist for a hundred feet or thereabouts, when the unaltered sulphides are again encountered, often of a grade high enough to ship, at other places being but a milling ore. The conditions seem to prevent the shipping of an ore below \$25.00 per ton, the smelter and freight rates being such as but a small margin is left even with such grade.

Referring again to the Arizona Butte, a mill of 50 to 75 tons capacity is now erected on the ground, but little if any concentrate has been produced. I understand the mill was built without an immediate supply of ore being available.

Respectfully submitted,

A. Burnett.

Sept. 28-30, 1921

Notes Will J. Halloran, Supt. Ariz. Butte, (Kingman Consolidated Mining Co.) stated that the Ariz. Butte would have no interest for us because of its high lead content 50% to 60% but that he has several other interests and would be able to produce ore of interest to us if we get started. The Ariz. Butte is not operating at present.

DISTRICT:

Stockton Hill, Mojave County.

PROPERTY:

Arizona Butte

LOCATION:

Some 15 miles northerly from Kingman

OPERATORS:

Now being operated by a number of lessees.

Several properties have been consolidated and a tunnel to open up deeper ones is being planned for. Mr. H. Crowther, Genl. Mgr. now in New York in connection with financing of this tunnel.

Did not visit the property, but it is reputed as being most promising, and there is a likelihood of it' becoming a lead silver producer of some prominence.

A. Burnett.
June 14, 1919

EARLE
Pat. 1943

EARL

FRACTION

FOUNTAIN HEAD
Pat. 1942

STAR SPANGLED BANNER
Pat. 1991

INFALIBILE M.S.
INFALIBILE
Pat. 1991

Banner Vein
Pat. 1991

HELEN

Clearing House Vein

CLEARING HOUSE

DE LA FOUNTAIN
Pat. 1956

Alta Vein

ALTA

SIRIUS

SIRIUS Vein

RICHARD

ROBIN HOOD

Robin Hood Vein

CUPEL

CUPEL Vein

EASTERN

DEXTER

CO-OP

Prince George Vein

STOCKTON

NEW ERA

STOCKTON HILL

JUBILEE

PRINCE GEORGE

STOCKTON

Jubilee Vein

Prince George Vein

WINCHESTER

LITTLE CHIEF

Little Chief Vein

TEDDY

CUPEL EX. 2.

CUPEL EX. 1.

TUNNEL SITE

Portal Deep Tunnel

CLEMENTA

TUNNEL

Probable East Body
End Large Ore Body

Veins

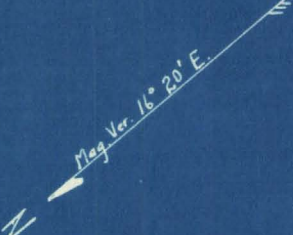
Known Ore Shoots

MAP OF CLAIMS

SHOWING PRINCIPAL VEIN SYSTEM

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Kingman, Ariz.



Copied

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Arizona Butte #3.

Notes (Cont'd)

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W.V.DeCamp

Tabulation on next page.

Arizona Butte Mines - #4.

MILLING RESULTS - 849 TON LOT

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