CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the John E. Kinnison mining collection

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Total to PD shutdown
U.V. 2 3/4 Billion # Cu 1/2 B #
to 1938
U.V.X. 3/4 Bill # Cu 125 M #

Knight — Army Bureau
Mineral Resources

J. E. K.
DEC 15 1969

Elsing U.V to 1933
1.98 Bil # Cu Total Value 360 M

U.V.X. 730 M # Cu
$125 M Value

The 2 deposit mines of Jerome – UV UVX, are truly outstanding, and are by far the largest of the pre Cam b deposits in the Ariz schist belt. Wilmington, states"

Jerome – 2 principal mines the United Verde and the United Verde extension (U.V.X.) Massive pyritic sulphide replacement in a the general shape of a vertical pipe about 300 feet in dia was mined to 4000 feet. The U.V. bottomed at (as known by drilling) at 4500 feet. The UV.X was the faulted upper segment of the U.V., and was mined to 2000 feet. Thus the original extent of this great deposit was ~~in excess of~~ at a minimum 7000 feet, and since the top of the deposit (the U.V.X.) is an erored surface, the original extent was greater still. Much of the massive sulphide at U.V. carried 2½ % Cu and some was eventually mined by open pit. The bulk of production was from pyritic ores lenses which varied from just under 5% up to 5½ % Cu. A few levels yielded 6% ore. The U.V.X was a fabulous homogeneous, much of it running ~~above~~ about 25% Cu in the upper levels. This deposit, however, owed its exceptional grade to extensive secondary enrichment by chalcocite.

Under no circumstances should you take even the remotest idea from the foregoing dese that I imply that your long shorty group will prove to be another Jerome. I here include the foregoing factual summary of that great deposit to illust. 2 points. 1) The pre-Cambrian deposits of the Ariz no sch belt were formed in a mw which permitted

Find deposit mines levels. Total product # Cu U.V. & U.V.X.

uniform ore deposition over a great vertical range, and 2) 5% copper was there present.

To further illustrate the expl potential, I will summarize other notable properties, which offer a more reasonable corollary to the Keystone.

Blue Bell

slightly ~~something~~ over 67 Mill # Cu
900,000 tons ore.

grade in the early years appears to have been about ~~4.3~~ 4 plus % Cu, while in later years during the 1920s peak annual production ranged from from 2.7 to 3.2 %.

Mined to 1500 feet. Overlapping ore lenses developed 1600 in along the strike.

Binghampton

8 Mill pounds Cu from concentrates, principal shaft, mined to 600 feet.

There was, in 1926, a 1000 foot shaft and Lindgren writes: "The mine is said to contain a considerable amount of developed ore".

Chloritized schist, with more or less pyrite and much chalcopyrite. The grade is listed as 3% Cu, with 2 oz/ton in Ag.

Stockland – nearly all oxidized, and some of the upper levels were rich, so that considerable production was made, despite only a few develop hundred feet in depth. The ore was direct smelter at a small reduction works at the property. 5M # Cu

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Lindgren General statement – the general lack of sericite on the persistence of an iron rich chlorite point to a high temperature of deposition.

Des Soto Mine – The ore occurs in overlapping lenses, there being 7 such in the upper levels.
to 1922, when Lindgren wrote on the deposit

it had been developed to 600 feet below the outcrop, where it was cut off by a flat fault. A single shoot, pinching out downward, was found below this ~~post~~ pos level. The mine was considered exhausted by the management. Lindgren lists product to yield 180,000 tons averaging 3.75% Cu 1 oz/ton Ag, and .02 once/ton Au. These figures calculate to a production of about 12 ~~13.5~~ Mill lbs Cu, ~~without~~ allowing 90% mill recovery. Elsing, at a later date, lists total production 18 mill #Cu to 1930. Evidently the mine was reopened and additional ore found, but I have no information on this later work.

Iron King

12/15/69 – R. Welch

1942 – 1967

Concentrates
1000 Tons – 1500 Tons
50% Conc

Heads
6–8% Zn
.2% Cu

27th level – 500 feet long Some Au & Ag – The base metals alone were marginal, and the Au/Ag content was the necessary to boost return up to a profit.
~~2200~~ 3000 feet

30 ft total in each lense

deeper went into one vein
and narrowed in depth
and to NE narrowed to 4 feet
Country rock pressures increased
mining costs.

Say 1200 tons/mo
@ 1000# ton (50%)

1,200,000 #Zn/mo

1.2 Mill
x 12
14.4 Mill/year
25 years
350 Mill pounds zinc

1967
1942
25

26 level – 1500 feet long
The last level split into a hanging wall and footwall seam, with ~~heavy~~ schist lense between, and the rock pressures prevented mining at the existing grades.