

REPORT

ON THE SMUGGLER CONCENTRATOR.

ASPEN, COLORADO

For the Year 1900.

MINE MANAGER'S REPORT PAGE 524, 1900.

STATE BUREAU OF MINES

STATE OF COLORADO

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GOLDEN, COLORADO

THE SMUGGLER CONCENTRATOR.

Located At Aspen, Colorado.. Vested in the Smuggler Mining Co. S. I. Hallett, Manager, Aspen, Colorado.; David Cole., Supt.; Box 347, Aspen, Colorado.

Jig and table process.

The ore is run in small cars from the Railroad cars and dumped in a 9 x 15 Dodge Crusher. From the crusher by elevator to the top of the mill to the feeders; thence to three revolving screens, the oversized ore going to two set of rolls, the medium material going to two coarse jigs, two compartment each. These jigs make coarse concentrates. The overflow from these jigs goes to two sets of rolls, thence to a bin and elevated to top of mill; the fine material goes to four other revolving screens, which furnishes feed to six other jigs of four compartment each. The fine material then goes to a classifier which furnished feed to four five-compartment jigs called the sand jigs. The overflow from the classifier is divided equally and goes to two large settling tanks known as "Spitz Kasten," which furnish feed to four Hallett tables. The overflow from the spitz kastens is sufficiently clear to pass off as tailings. The midlings from the midling jigs are taken by elevator to another set of rolls and reground and again go through the above mentioned process. The concentrates are dried by steam and shipped to Sampler.

This mill has a capacity of 160 tons in 11 hours. The savings are lead, 94 per cent.; silver, 87 per cent. One 110 H.P. motor runs the grinding machinery and a 20 H.P. motor runs the tables, five-foot Chillian mill, and five-foot Huntington mill.

16 men employed. Wages paid are:

Jig men - - - - -	\$3.50 per day.
Table men - - - - -	3.50 " "
Trammers - - - - -	3.25 " "
Shovelers - - - - -	3.50 " "

Respectfully Submitted,

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Inspector.

October 10th, 1900.

REPORT

SMUGGLER ZINC CONCENTRATOR.

The ore is dumped from the railroad cars into ore bins; then to a 9 x 15 Dodge Crusher; thence to one set of rolls, 36 x 15, and elevated to storage bins behind two 6-foot Bradley Chillian Mills. These mills are fitted with 60 mesh screens and have a capacity of 50 tons each in 24 hours. The ore goes from the mills to two Menicke classifiers, which furnish feed to three Hallett tables each. The overflow from the tables passes to two large settling tanks or spitz cassons, which furnish feed to three additional Hallett tables each. The overflow from the settling boxes is clear water and passes into the tailings launder. The tables make a clean lead product or concentrate and a middling product which later passes to five additional tables (Hallett) for retreatment. These last five tables take out the balance of the lead and also a zinc concentrate which is carried to storage ponds outside the building. The lead concentrates are dried by steam heat and shipped to the Sampling Works.

One 110 Horse Power electric motor runs the crushing machinery, and one 75 Horse Power motor runs the concentrating machinery, which only requires 15 H.P. The power is transmitted from the Roaring Fork Electric Light & Power Co. Plant about 1 mile distant. 500 volts.

Two men on a shift run the mill. \$2.75 and \$3.00 per day, 8 hour shift.

Respectfully submitted,

P. H. Clifford

Inspector.

October 9th, 1900.

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