

N. Hawkeye shaft,	7.85	per ton.	.38	ounces.
S. Hawkeye shaft	7.44	"	.36	"
Concentrates (Tuttle shaft),	137.48	"	6.65	"
" (Levels deep shaft),	65.00	"	3.14	"
" (Middle vein),	107.48	"	5.20	"
"	129.19	"	6.25	"

Assayed by W. E. Gifford, 54 Pine Street, New York.

Mr. R. H. Stretch, Mining Engineer, sampled the mines by taking one-ton lots of the ore just as it came from the several shafts and levels, without sorting, and the result of his assays was as follows:

Deep shaft, bottom,	\$21.50	per ton.
N. level,	9.00	"
S. level,	7.50	"
A shaft (3 samplings),	17.92	"
Tuttle shaft,	19.00	"
Average after parting; gold,	13.06	"

By far the most exhaustive tests of these ores were made under my own direction. Having secured a working bond upon these properties, I carried on mining and milling operations with a force of eighty or ninety men during nearly four months. During this time, seven shafts were worked upon and attained depths of from forty to one hundred and ten feet; and two levels of forty feet each in length were driven. Three of these shafts, namely, the Tuttle, the A shaft, the deep shaft, and two levels were those upon which the most work was performed, and it is to the ore from these that the following remarks are confined. These openings prove a length along the main vein of about seven hundred feet, as may be seen by reference to the accompanying maps.

The ore extracted, *without any sorting whatever*, was taken to the mill; it was then weighed and crushed for the greater part in five-ton lots, every twentieth shovelful as it came from the Blake crusher being laid aside for a sample. The samples of five-ton lots were crushed fine, quartered down as usual, and assayed; thus, one hundred and eight lots, nearly all representing five tons of ore, were assayed separately, while fifty-one tons from the Tuttle shaft were sampled in the same careful manner in one lot by Mr. Thomas Macfarlane, of the Wyandotte Silver Smelting Company. The assays of these several samples are given in the following table. It will be noted that the richer five-ton lots were obtained by selecting the heavier sulphurets from the remainder of the ore in the ore-house