

GARDNER MINE

There was no work done at the Gardner Mine during the month of December 1914.

WORK FOR YEAR

The work of installing brackets and steel sets in the concrete shaft was started in January and completed early in March.

Grouting the weep holes near the bottom of the shaft was then started. These holes having been left open at the time the New York Foundation Company finished their work, as the concrete was green. The first hole grouted was near the bottom of the shaft, very little water was being made in this hole and after a few minutes grouting the flow was entirely stopped. When attempting to grout the second hole, located on the North wall and below the original seal, it was found that the water and grout came out along the North wall at the contact of the top of the steel shoe and concrete. The second hole was then plugged and a water tight form constructed along the North wall at the contact of top of steel shoe and concrete, this form was braced by stulls from the South wall. Grouting was then forced back of this form under pressure. After the pressure had been on a short time a fresh crack was discovered in the concrete a few feet below the form. The pressure was then removed and holes drilled in the concrete at different elevations to ascertain at what depth the water was circulating in the concrete wall. From these holes it was demonstrated that the source of the water was near the original seal and that the water was flowing between the original concrete wall and the 6" wall that was constructed after the original seal was made, showing that there was an open seam between the two walls. The concrete along the North wall was then removed, forms built and fresh concrete poured. A 2" pipe was then placed in the weep hole that was drilled just below the cutting edge and practically all the water that was being made in the shaft came through this hole.

The work of cleaning up the shaft was then started and completed on

April 20th.

The work of sinking the shaft was started on April 21st and continued throughout the year on two eight hour shifts up to September 30th, at which time the work was stopped for an indefinite period.

The elevation of the bottom of the shaft September 30th was 776.83 feet or 334.64 feet below the collar of the shaft.

Total depth sunk below concrete 220.05 feet.

UNDERGROUND IN GENERAL

The work of cutting out 1st Level plat was started on the North and West sides of the shaft at an elevation 300 feet below the surface of the ground. Rock was also excavated for pocket on West side of the shaft. It was planned to utilize this pocket for a temporary sump for electric sinking pump.

Practically no water was encountered after sinking was started. The greater part of the water was made through the weep hole on the North wall of the concrete just below the cutting edge.

GARDNER SURFACE

The following work was done during the year 1914:

Land was cleared on East and West sides of the shaft on site for stockpile grounds, and then seeded down for fire protection.

Electric hoist, built by Lake Shore Engine Works for Francis Mine, was installed in Gardner engine house and iron railing constructed for safety device.

Sheaves were placed on pulley stands and ladders and railings placed on stands for safety device.

Plank laid on landing floor of head frame and railing constructed for safety device.

A powder house was erected at a point 360 feet Southwest of Mackinaw Shaft and 875 feet Northwest of Gardner Shaft. This house was used to store powder for both the Gardner and Mackinaw Mines.

A 4" plank floor was laid on bottom of pockets in head frame.

A temporary landing floor for bucket, chute and two sets of doors for safety device were installed at shaft.

The 6" discharge pipe from Gardner Shaft was extended 230 feet West thence Northeast 95 feet. From this point a ditch was dug for 650 feet to the West and connected with main ditch from Mackinaw Mine.

Three car loads of Fir timber were shipped from the Francis Mine and unloaded at the Gardner Mine.