

Geological Survey Department.

had contracted to deliver it at Athabasca Landing. I then proceeded to Athabasca Landing, arriving there on June 8th.

Report on
boring opera-
tions—Cont

“There it was found that the men had just finished loading the plant, and part of the casing. With three rafts and a large flat-boat loaded with all they could carry, we left on the morning of the 10th to descend the river to the mouth of the Pelican River.

“We experienced great difficulty with the rafts when nearing the mouth of the Pelican, and were forced to leave two of them some four miles above and to proceed down with the boat and one raft. We landed these in a low, horse-shoe like flat where the Waupaska trail strikes the Athabasca, about two miles above Pelican River. There we unloaded the machinery and then brought the other rafts down. No horses or oxen could be procured, and the work had to be done entirely by hand, under great difficulties. We proceeded, however, to build the rig, and began the hole by digging.

“The river began to rise on the night of the 19th, and on the next day (Sunday) it was up about the derrick and had submerged all the machinery and tools. It was the highest flood that had occurred on the Athabasca for many years, and our work was brought to a standstill for several days.

“After the water fell back into its proper bed, I discovered that it had cut away the bank upon which the tools had been lying, and these had dropped off into about eight feet of water. Then for many days we were fishing the tools out of water. Some of the most important ones we could not find at all, as they were buried under about two feet of mud below eight feet of water. But by using some ingenuity and doing much blacksmithing we managed to get tools enough together to proceed with the work, but we did not get started until the 1st of July.

“In the first part of the bore an unexpected difficulty was encountered. All along the river it seemed as though the shale rose to the very surface, and where we had located I did not expect to encounter more than six or eight feet of sand and gravel at the most. I put in first a large square cribbing, six feet in diameter, down to about eight feet, then a wooden conductor, 15 inches in diameter, down 16 feet, and still the sand and gravel continued. I then put down the 8½ inch iron casing to 41 feet 4 inches, but the sand and gravel still continued. This was on the 12th of July—or two weeks that we had been getting down 41 feet.

“As we were driving on the 8½-inch casing all I thought it would stand, and as the next size—7½-inch—had not yet arrived, I put down