

material was seen only on the dump, but the sequence, described by Mr. Alex. Gullons, in charge of the sinking, is as follows:

	Feet.
Red mud and loose rock.....	11-24
Red rock.....	20-30
Greenish gypsiferous ? rock.....	30-50
Broken clay rocks of dark grey, yellow, and red colours.....	50-70
Dark grey material.....	70-85
Salt and grey material interbanded with pure white salt.....	85-120

The dark grey material at 70 to 85 feet depth, resembles the material interbanded with the salt and suggests a residual accumulation due to the solution of a considerable thickness of the former upward continuation of the salt strata, which dip at angles varying from 25 degrees to the south to 80 degrees to the north.

The sediments overlying the salt are described as flat-lying and somewhat broken, suggesting slumping of gypsiferous rocks overlying or interbedded with the salt strata. The upper surface of the salt strata where uncovered in the shaft is described as a smooth, horizontal plane and the nearly similar depths at which brine was obtained in the borings leaves little doubt that the outcrop as a whole is reduced to a nearly uniform depth. To the north of the brine area the comminuted material raised by the churn drills is described as hard and soft—red and grey rock—probably the sandstone and shale that immediately underlie the boulder clay. South of the shaft boring No. 13 penetrated 170 feet of soft, greenish-white rock, the exact character of which is not known.

A diamond-drill hole placed at the north face of the underground workings in the mine was commenced in February, 1920. The hole is flat—just holding water—and as the strata have a north vertical dip at this point, the thicknesses recorded are nearly approximate to the actual thicknesses of the beds. A partial record of the boring February 27, 1920, is as follows:

From.	To:	Level now exposed	4 feet, 0 inches, average 8.8 per cent K_2O .
Ft. in.	Ft. in.	Ft. in.	Ft. in.
1	—	17 6	—
17 6	—	39	—
39	—	42	—
42	—	46	—
46	—	49	—
49	—	56	—
56	—	58	—
58	—	60	—
			21 Dirty salt, potash zone.
			3 White salt, clean as per sample.
			4 Grey salt.
			4 White salt and gyp- sum.
			3 Red salt.
			7 White salt, clean.
			2 Reddish salt.
			2 White salt.

(Hole to go a farther 75 feet to 100 feet.)

Pure salt occurs on either side of the potash zone and the bed 21 feet 6 inches thick on the north side promises to produce a superior run-of-mine salt. The sample mentioned in the above record is composed of translucent crystals with a faint pinkish shade.