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WALLENDREEN TALC DEPOSITS.

by

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WALLENDREEN TALC DEPOSITS.

Situation: The Wallendreen talc workings are situated just east of the Wallendreen township and railway station in the parish of Wallendreen, County of Harden, New South Wales. The workings, which consist of innumerable pits and shafts, are distributed along a narrow belt of country, usually not more than 200 feet wide and extending from approximately 2 miles north to $\frac{1}{2}$ mile south of the railway. The main workings at present are at the southern end of the field and the two producing pits were inspected. An examination was also made of a shaft at the northern end of the field.

The talc is a second-grade material, occurring both massive and schistose and should be referred to as steatite or soapstone.

Geology: The talc-bearing belt strikes approximately north and closely follows the contact of an intrusive granite mass. In places, as in the main southern workings, the granite forms the eastern wall of the talc deposits. The country rock is slate and talc schist, probably of Silurian age, and bodies of serpentine are common. The soapstone occurs as lenses dipping steeply usually to the east. Rock types immediately associated with the soapstone bodies are chlorite schist, actinolite schist, a grey clay schist and serpentine, and quartz and granite on the east wall.

The old workings that were seen are erratically distributed and are usually small, seldom greater than 15 feet by 10 feet in surface area, indicating that the lenses worked have been small bodies. A prominent feature is the association of a strong white quartz reef with the soapstone belt both at the northern and southern end of the field. In the main southern workings, quartz appears to outcrop along the western as well as the eastern side of the talc. Although solutions from the intrusive granite probably help the alteration of the original rocks to talc, the impression was gained that subsequent movement has been largely responsible for its formation. The granite mass acted as a buttress against which shearing was induced in the schist.

Workings:

A. Southern Pits: These are held by a Mr. Dacey. One man is being employed. Two main pits, approximately 60 feet apart, are being worked. The more northerly one is the larger. It is irregular in shape with a maximum depth of 10 feet and exposes talc for a length of about 30 feet and a width of 15 feet without defining the western wall. Granite forms the east wall and a tongue of decomposed granite is seen in the talc in the southern face of the pit. A shaft immediately to the south of the pit has proved the talc for about 20 feet depth. Overburden is limited to 2 or 3 feet of soil and decomposed rock with some stained talc immediately below it, but the main mass of the talc is fairly free from iron discolouration. Fibrous actinolite is prominent in the impure talcose and chloritic schist into which the talc grades laterally, especially at the northern end of the workings.

The southern pit is shallow and smaller and is producing soapstone and an undetermined grey clay schist.

The limit of the orebodies being developed by these two pits cannot be defined from the present exposures, but they are

obviously much more extensive than the small lenses which have been previously worked.

Mining is cheap and simple. There is very little overburden and the portion of reject material in the pits is low. The talc is easily selected by eye and by its greasy "feel". Prospecting for new soapstone bodies should be a fairly simple matter in this locality as the overburden is quite uniformly light. The presence of quartz seems to be a good guide.


The quartz associated with these workings forms a strong "blow" or very pure granular white quartz, some of which has been shipped to Sydney. Mr. Dacey stated that the price offered was £2/10/- per ton presumably on rails Wallendbeen, but that it was not a good proposition at this price on account of the difficulty of breaking.

B. Northern Pits. These are very numerous, erratically placed and mainly shallow. A few of those inspected showed little talc and it is possible that many of them were exploratory. A Mr. Greenham has been sporadically working the northernmost area about $1\frac{1}{2}$ miles north of the railway, under a tribute arrangement with Mr. Dacey. He has mined soapstone from several shafts, selecting it from a serpentine rock, and is at present developing a new shaft. An inspection of this showed it to be about 25 feet deep. At the bottom, 5 feet of massive soapstone was exposed on the western side with a steep dip to the east. The remainder of the shaft consisted of clays and a little grit. Overburden is the main deterrent to further development in the northern area, but neither the northern or the southern limits of the field have yet been defined.

Previous Reports: Dr. H. G. Raggatt, New South Wales Geological Survey, Bulletin No. 14, pp. 25 to 31.


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Specimens of the typical talc collected from both the northern and southern workings grind to an off-white colour with a faint greenish tinge.