GEOLOGICAL SURVEY OF CANADA

The last is in places mixed with shale owing, apparently, to local crushing.

It would appear therefore that the two seams seen in the tunnel when traced westward to Shaft No. 1 approach each other, and the shale parting becomes much less. This feature is seen in a small shaft and tunnel No. 3, nearly midway. Here the dip of the coal at the entrance of the slope is $N.15^{\circ}E. < 37^{\circ}$, agreeing with that of the top of the lower seam at the tunnel, with a bunch of eoal next the foot-wall, but this part of the seam was not proved at a lower depth. Then come black and brown shales to the back of the tunnel, a distance of about 15 feet, when the tunnel turns to the right and continues for 15 feet more. This is in coal, the thickness of which could not be ascertaincd, but 30 inches could be seen. The dip appears to incline to the east, and decreases in angle, so that it appears the principal excavation here in $N \circ$. 3 is above the lower seam seen in the tunnel, and penetrates the upper seam without passing through it. It thus tends to confirm the identity of the two seams at this camp.

In view of the fact that a considerable sum of money has been spent at this place, it is to be regretted that its expenditure has not been carried out on a more scientific basis, since far more intelligible results as regards the structure of this part of the field should have been obtained. The difficulty of bringing in supplies and machinery from the coast with the appliances available was, however, great, and the actual location of the outcrops at a time when the whole place was densely forested was almost an impossibility. A couple of boreholes well placed would have been more economical in the circumstances, and would have given more actual information as to the extension and condition of the coal seams that have already been located.

It will be seen from the above remarks that a large area of coal exists both at the Robertson and Wilson camps. The extension of the seams at either place can only be ascertained by borings, but it seems probable that the Robertson seams form a basin separate from the Wilson area and bounded on the cast by the high ridge between the two camps. This would indicate a strong probability of finding seams in the valley of the East branch of the Yakoun. East of the outcrop of the Wilson seam, the regularity of the measures, in so far as they could be seen, indicates conditions favourable to the occurrence of coal, but in the absence of exposures such probability can only be assumed.

The extension of the Robertson seams in the valley of the Honna is also quite probable. The sandstone and shale, where seen in that area, between the mouth of the Honna and the creeks which flow west into the Yakoun, are comparatively undisturbed though the lack of

42 B