GEOLOGICAL REPORT ON OSMIRIDIUM
BEARING GROUND ON ADAMSFIELD TOWNSHIP.

During the past few years a small gravel pit has been opened up on the Adamsfield township, the gravel being used for paths &c.

This quarry is situated on the Stock Yard reserves and is distant about half a chain S.E from the corner of Kingston and Charles Streets.

Some months ago K. McPherson and party suspecting that this gravel contained osmiridium, tested it and found that it contained sufficient osmiridium to be worth testing. Accordingly the different parts of the quarry were tested and a shaft sunk to a depth of 11 feet from the original surface.

The quarry had a general southerly bearing along a length of 30 feet. Its depth ranged from 3 to 6 feet and its width from 2 to 7 feet. The shaft was sunk at the entrance (northern end) of the quarry.

The surface of the ground here slopes to the north and east, the eastern fall being the steepest. The gravel was exposed in all faces of the quarry and also, it is stated, to the bottom of the shaft.

The gravel is a white one and consisted of angular pieces of white quartzite in a sandy matrix. Underlying the gravel was a finer layer, up to 18 inches in thickness of clayey sand of a greyish tint due to a very considerable content of fine chromite.

It was stated that this chromite bearing layer rested on or against a hard wall. In the southern and eastern parts of the quarry this wall dipped to the north-east at a low angle, but in the shaft it was represented as being on the western and southern sides, being nearly vertical in each case. Osmiridium was found in the gravel and sand above this wall.

The only other materials exposed were firstly a bump of black puggy material in the centre of the quarry and secondly serpentine in a shallow hole north of this bump.

Statements had been made that the material represented a lode. The whole occurrence was certainly puzzling and a very detailed examination with some excavation and the washing of numerous prospects was necessary to determine the structure. The examination revealed that the alleged wall is really the very irregular outline of a former surface, the sand and gravel forming an uneven layer above it. The steep slopes of this surface in the vicinity of the shaft formed a hole or cliff and explains the large thickness of gravel in the shaft. Curiously enough, the wall on the western side of the shaft is one of quartzite and practically represents the contact of this quartzite on the west with the serpentine on the east. This contact was actually exposed when the southern end of the shaft was dug into.

The junction of the two rocks is easily traced along the surface as at many places the quartzites outcrop boldly. To the north it can be traced as far as McPherson's claim on Main Creek and up the hills to the north.

Thus the deposit consists of surface detritus resting on a former surface in the vicinity of the junction of the serpentine and quartzites. The osmiridium is

restricted to the gravel and sand and as far as the tests went is entirely absent from the quartzites, serpentine and the material at the contact, or in other words, it does not exist below the older surface.

The accidental association of the detritus with the junction of the serpentine and quartzites gave the impression that a lode existed.

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Received
9/4/30
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