

1976/34. Investigation of manganese oxide in sands near Railton.

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Messrs K.B. & B.M. Elliott submitted a sample of black coloured manganese oxide sand to the Department of Mines laboratory to determine its economic uses. The sample (reg. no. 760585) was taken from the Caroline Quarries near Railton [DQ482223].

The sand occurs at the base of a talus deposit of Caroline Creek. Sandstone which flanks The Badgers west of Railton. The manganese oxide has presumably been concentrated in the sand by percolating groundwater but amounts to less than 0.5% of the sand content. The black colouration may be due, in part, to organic matter. The manganese oxide in the sand has no economic value and it can be expected to occur along the length of the deposit.

The sand is currently utilised in the manufacture of cement at Railton. If the sand is rejected due to its colouration, it may be economic to pan the sand through a trommel screen to upgrade it. Some tests on wet screening are suggested to assess this possibility.

The occurrence of 5-10% over size material in the quarry was also noted. This material could possibly be crushed and marketed as sand along with the main quarry product.

Underlying the talus is an *in situ* clay deposit, derived from Lower Palaeozoic sediments. This material has been tested by the brick works at Haines Siding and found to be satisfactory.

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