URI/NSC3/34

3

(34)

C O P Y.

Geological Survey Laboratory,
Department of Mines,
MELBOURNE.

November 19th, 1924.

Report No. 578

Sample ---------- Gem Sand
Locality --------- Tasmania.

Monazite is a complex rare earth mineral consisting mainly of Cerium, Lanthanum, and yttrium ortho-phosphates and thorium silicate. All monazites vary in composition. Since they all contain thorium which is employed in the manufacture of incandescent gas mantles, the commercial value of a sample of Monazite depends upon its Throium content.

The sample consisted of a medium grained sand, black and coloured.

By chemical analysis the samples received yielded the following percentages of Thorium Oxide (ThO_2)

No. 578 ---------- 10·22% ThO_2

The high thorium oxide content suggests the presence of thorium minerals other than Monazite.

Based on the latest American prices offering for Monazite this sample should be valued at 3/7 per lb.

(Signed) J. C. WATSON

19-11-'24