

TR5-248

Reg. No. 765-767

EFFLORESCING SALTS IN BRICKMAKING SHALE. LUCK BROS. PTY. LTD.

by F. C. Gillespie.

SUMMARY

Samples obtained by Mr. F. Gillespie, Ceramic Technologist, from the shale quarry of Luck Brothers Pty. Ltd., Dulverton, on the 2nd August, 1960, have been analysed for salts of calcium and magnesium, in order to determine whether subsequent efflorescence on bricks made from the shale can be prevented economically.

Both calcium and magnesium were present in appreciable quantities in two samples; in one case as sulphates, and in the other as carbonates.

DESCRIPTION

Reg. No. 765. White powdery coating from the shale face.

Reg. No. 766. White glassy coating from the shale face.

Reg. No. 767. Weathered grey and white pebbles from within the shale.

RESULTS

Number 765 consisted mainly of calcium sulphate, with some magnesium sulphate. Number 766 was highly siliceous, and did not contain significant quantities of calcium and magnesium. Number 767 contained a considerable proportion of magnesium carbonate, with some calcium carbonate.

REMARKS

Handpicking of material similar to No. 767 may be practicable, but would not prevent efflorescence, as No. 765 type material is fairly widely distributed, and this could not be removed by handpicking. Cleaning and sealing the affected bricks should prevent further efflorescence.