

2.1 Cont'd

provide material:

- (i) for a powder diffraction photograph, and
- (ii) for the preparation of two oriented samples on ceramic plates, one treated with  $Mg^{++}$  ions and the other with  $Mg^{++}$  and glycerol. These two oriented samples when air-dry were examined in the X-ray diffractometer, and the first sample was re-examined at  $130^{\circ}C$ .

2.2 Results

The  $-4 \mu m$  fraction, which made up approximately 6% of the crushed material, consisted dominantly of crystalline kaolinite, with moderate and approximately equal amounts of chlorite and mica. Quartz was present at roughly the 10% level. No swelling clays were found.