A Method for Preparing Pelleted Clay Samples of Semi-Micro Quantity for Differential Thermal Analysis

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Abstract: A semi-micro quantity (10— 15 mg) sample of clay is pressed into a 3 mm diameter pellet for differential thermal analysis (DTA) in a STONE-TRACOR ring microsample holder. The pellet is transferred to the sample holder dish with a vacuum tweezers. Platinum sample dishes are also handled by vacuum tweezers to avoid denting the dishes or damaging the thermocouple wires. The DTA curves obtained by the pellet method are highly reproducible. The resolution and sensitivity of reaction peaks are equivalent to or better than those produced by a large sample (200 mg) packed into a nickel block holder.

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