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# The Determination of Feldspars in Mudrocks Using an X-Ray Powder Diffraction Method

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**Abstract:** Low albite and maximum microcline were the two feldspars identified in Coal Measures mudrocks. Standard feldspars were then used to spike a mudrock base to construct standard working curves based on X-ray powder diffraction peak areas. Boehmite was added as an internal standard and also to correct for orientation effects. The samples were ignited at 950° C before the addition of the internal standard. This is advantageous for several reasons, but a disadvantage is that albite was found to undergo partial conversion to K-feldspar. The conversion was not total and the original albite content could be determined. This method is an extension of an existing method for quartz and therefore feldspars and quartz can be determined simultaneously.

**Key Words:** Albite • Feldspar • Microcline • Mudrock • Orthoclase • Plagioclase

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