

4th August 2023



Reference [REDACTED]

Summary of analysis

Sample	Analysis	Evaluation	Comment
HC1166	TSA, TSB (Thin section), TSC (SEM-EDS), FT	Low/Medium	Core apparently sound and containing 2.29 mass % water. Free mica rare, determined at 0.59% with SEM-EDS. No evidence of degradation. Sample in good condition after 60 freeze-thaw cycles when saturated. Microporosity normal. Pyrrhotite identified during TSB, but the risk presented by degradation via sulfide oxidation is considered Low for the sample on the basis of: 1) well indurated host aggregate, 2) normal microporosity of cement matrix, and 3) aggregate total sulfur, as extrapolated from a bulk TS chemical result of 0.30% is within limit stipulated by S.R. 16 and EN 12620
HC1167	TSA	Low/Medium	Core apparently sound, but containing 2.51 mass % water
HC1169	TSA	Low/Medium	Core apparently sound and containing 1.86 mass % water. Without evidence of degradation. Microporosity not determined

Conclusion

HC1166 from the outer leaf was sound, wet and showing without evidence of degradation. A compressive strength of 11.0 N/mm² was measured on core HC1166 and chemical analysis gave a cement content of 6.8%, total sulfur of 0.30% and an acid soluble sulfate of 0.25% SO₄. Core HC1168 from the outer leaf gave a compressive strength of 16.8 N/mm².

HC1169 from the outer leaf of the extension was sound, wet and without evidence of degradation.

HC1167 from below the DPC was sound, wet and without evidence of degradation. Chemical analysis of HC1167 gave a total sulfur of 0.26% and an acid soluble sulfate of 0.31% SO₄.

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