Johannesburg, OR Tambo airport, Dec. 16, 2021

The BASE Newsletter

Rig MDX 315 (drillhole A at Site 4, distal Lomati River Delta) continues to struggle with mechanical and electrical difficulties; it is currently at 101 m (ca. 65 m vertical depth) but has cased HQ and is ready to drill smaller NQ. The rocks are unexpectedly deeply weathered but gradually firming up and changing color to pale beige. We are coring beige tuffaceous sandstones interbedded with grey shales, showing a distinct tidal rhythmicity. Because the core is very broken along many clay-coated hairline fractures, it has to be glued and wrapped before marking and slabbing.

Rig MDX 317 continues coring abundantly microbially laminated sandstones of unit MdQ1 exposed on the northern slopes of Hill 4. It reached 66 m (ca. 45 m TVD) by mid-December. Distinct facies pattern, not observable in the grassy and rocky slopes in outcrop, begin to emerge, making the lithological description fun. The “quartzites” are, however, deeply fractured, causing frequent loss of drilling fluid. Percolating rainwater locally oxidizes parts of core sections at this depth.

While we are satisfied with the lithologic and facies encountered to date, actual rate of core production is significantly behind schedule. We have had several in-depth conversations with the operator. As a result, the drilling company will commit by mid-January a third rig, additional crews will work night shifts, and we will have an on-site maintenance crew. Although the expected dramatic increase of core production will probably put strain on us, we will gladly accept this challenge. Consider helping out for a week or two!

Drilling terminated two days ago for the holidays and New Year’s break; they will resume January 5 next year. Crews and the members of our onsite team started heading home for the holidays.

We wish all of you relaxing and joyous holidays. We are looking forward to gain fascinating insights in 2022 with you!

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