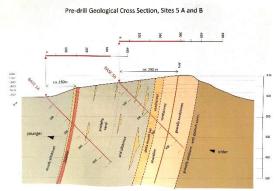


The BASE Newsletter, vol. 3, issue 6









On March 24, rig NF90 relocated from Site 2 to Site 5, located in the grasslands of Farm Belvue in the eastern Stolzburg Syncline. The 40 km move took place largely on forest roads and was done in part by flatbed truck (an impressive sight), in part by the rig driving itself on its tracks. Borehole 5A (left) will examine thick, finely laminated ferruginous siltstones and the jaspilite unit MdI2; the correlatable borehole 5B (right) a transgressive coastal plain-shoreline-deltaic section. We hope for insights in Archaean cyclostratigraphy, ocean geochemistry, shale composition as weathering proxy, and shoreline processes, among others.

Christoph Heubeck (4th from left), principal writer of this Newsletter, returned March 25 to Germany to resume teaching at Jena University. I lived and worked since Oktober 2021 in Barberton (with a New Year's interruption), tending to the BIAS Hall exhibition and coordinating the drilling. The onsite team (from left: Thiko, Musa, co-PI Nic, Dora, Astrid, Rod (symbolically present), Derek, Tony, Victor, Phumi, Chris, and Ryan) will process the remaining cores from Sites 1, 5A and 5B, and see 4C to the end. Thanks to all of you! You are the best!

Borehole 4B in the middle Lomati Delta of the Saddleback Syncline terminated at 355.4 m on March 23 and is currently being logged. The borehole, located on a forest road junction in the midst of mature SAPPI pine and eucalyptus plantations, drilled though a thick, highly tuffaceous and chert-granuly sequence of sandstones with some tuffs and microbial mats, but had its final 170 m largely in crumbly, fractured and minor-faulted sandstones which were partially or fully oxidized. This largely obscured original features. Much to our surprise, the final meter penetrated a 70 cm thick, cross-cutting porphyritic dike!

Thanks to persistent, years-long lobbying and an outstanding Barberton community effort, we succeeded in wading the 2870 m long tunnel which connects the Lomati Reservoir to Barberton's water treatment plant in upper Rimer's Creek. The tunnel, constructed in 1989, crosscuts Moodies strata in both limbs of the Saddleback Syncline below Saddleback Hill, each section ca. 900 m thick. We were given four hours. Three teams of three members each collected a total of 92 samples for petrography, geochemistry, and age dating, using a canoe for sample transport. The sludge buildup of the past four years, mobilized by us, required Barberton water supply to be interrupted for up to 24 hours.

Frohes Forschen!

Christoph Heubeck and Nic Beukes