



Barberton, Dec. 1, 2021

### The BASE Newsletter



Rig MDX 315 (drill hole A at Site 4) is currently at 58 m depth (ca. 30 m TVD), still drilling in weathered pink and red tuffaceous sandstones which are only gradually improving in firmness. Apparently, oxidic weathering in this forested wide valley with subvertical strata reaches deep. Because the rig is based on forest soil, a week of daily rains had softened the ground sufficiently that it temporarily lost the tug-of-war between Earth and machine: The rig started pulling itself into the ground when it battled stuck pipe, and had to be supported. PQ casing was finally set at 34.3 m; drilling continued in HQ.



Rig MDX 317 arrived outside Barberton by flatbed truck Monday, Nov. 22. It was transferred to a stronger truck at the base of the Geotrail the next morning, transported up the mountain, offloaded at the Station 6 Pass, then tracked itself ca. 4 km to Site 3, a flat spot at the end of a forest road halfway up the steep north slope of Hill 4 on Farm Oosterbeek (-25.830107°, 31.090799°), and set up. This is a scenic site, ca. 20m next to spectacular outcrops in silicified Moodies sandstones in shallow-water-facies with abundant microbial mats (“crinklies”). The objective here is to core a continuous sections >150 m thick through unweathered rocks of this facies in order to constrain the “lifestyle” of these potential oxygenic photosynthesizers. PQ casing was installed after one day of drilling at 12 m depth. Much to our delight, we received ca. 4 m of excellent cores of HQ diameter the following day, Nov. 30.



Visitors start trickling in, while our outreach activities increase. We may add some exhibition equipment on drilling and logging. In the past two weeks, we hosted a group of French colleagues, a UJ 2<sup>nd</sup>-year field trip, a short visit by an SABC TV crew, and several smaller parties. Radio interviews are coming up, home-made movies in beta versions. Our EOP (education outreach publicity) activities, headed by Phumelele, may be disproportionately large in comparison to other ICDP projects, but not every ICDP project is privileged to drill in and contribute critical data to a nascent World Heritage Site. Christoph occasionally participates in WHS management meetings; Nic keeps us straight on finances and permits.



Christoph Heubeck, Nic Beukes