



Barberton, Nov. 17, 2021

The BASE Newsletter



Drill hole 4A (renamed from 4-1 to align with ICDP lingo) was spudded this morning 11:40 a.m, initiating the BASE drilling campaign. The onsite drilling team Dóra Paprika (Data management), Phumelele Mashele (Education/Outreach/Publicity), Chris Rippon (Wellsite geologist), Rod Tucker (Geology manager) and Christoph Heubeck (Chief Scientist) were all onsite to watch this memorable and long-awaited event.



Drilling company Master Drilling had to overcome a multitude of challenges to get its rig, crew and equipment onsite, ranging from the global (supply chain delays for components and tools) to the local (vehicle breakdowns; subcontractors). The self-propelled, tracked drilling rig MDX315 arrived per flatbed truck at the Oosterbeek forestry compound on Sunday and moved itself ca. 400m into position that same afternoon.



Site BASE 4A is located at -25.831095° 31.078141° along a level plantation road separating young pine from eucalyptus within the mostly forested Lomati valley; forestry company SAPPI cleared a plot of about $15*15$ m. Because strata are steeply dipping and overturned, the borehole will drill stratigraphically upwards at an angle of -45° . Principal targets are crossbedded channel-fill sandstones of an estuarine facies, interbedded with thinbedded, microbial, shaly and tuffaceous tidal-facies strata which are encased in thick strata of unknown composition (they are nowhere exposed). The site forms the distal end of the wedge-shaped Lomati Delta Complex (Stutenbecker et al. 2019) in which we will also drill boreholes 4B and 4C.



The first core trays were delivered down to our “core shed”, the grand BIAS hall in Barberton late this afternoon by Rod Tucker and his grandson Ryan. Its back is ready to receive the cores for slabbing, documentation and storage; its front has evolved into a nice exhibition space on the geology of the Barberton Greenstone Belt, scientific drilling, principal questions and objectives of the drilling campaign, and its relationship to the gradually “awakening” World Heritage Site. Phumi is busy with invitations and reservations by school classes and other interested groups.

On the administrative “front”, Nic Beukes in Johannesburg has succeeded in receiving all remaining permits except for Nkomazi (which we may drill last). All contracts are signed, all staff is on site. We are looking forward to slab and document our first core in the next few days!

So much for now; Frohes Forschen !

Nic Beukes, Christoph Heubeck

For more information: <https://www.icdp-online.org/projects/world/africa/moodies-s-africa/>