

**The BASE Newsletter, vol. 3, issue 11**



Borehole 1 A in the Eureka Syncline spudded on May 17. The rig is drilling stratigraphically upsection into a condensed Moodies section on the overturned eastern limb of the syncline, intermittently exposed along the Elephant's Kloof Road of Fairview Mine. The borehole is planned to reach ca. 450 m depth. 1A is our only borehole outside the World Heritage Site and will document a mixed section of jaspilites, (pro-)deltaic and tidal sandstones/siltstones/shales, and the Moodies Lava.

Due to space constraints in the tight valley, we had to set up the drill site topographically higher and stratigraphically lower than originally planned, right next to the mapped trace of the Sheba Fault. Unexpectedly, the rig drilled into Onverwacht strata. As of June 3, borehole 1 was still drilling at 78 m in hard black chert, after having penetrated a variety of tightly folded and faulted, highly sheared, serpentized, carbonatized and steatized ultramafic rocks, part of the collapsed Zwartkoppie Anticline between the Eureka and Ulundi synclines. The borehole also encountered some fault-bounded Fig Tree greywacke.

Heavy rains at the end of May had prevented access to Site 5 for several days because the vehicles had started digging ruts into the soft soil of the grassland. The long pay weekend also contributed to an extended pause in drilling. The rig assisted in logging 5A, pulled the casing, and moved to 5B. The site was established, equipment moved, and the rig oriented (compasses are unreliable there due to thick jaspilite nearby). Borehole 5B (our final hole!) spudded June 3.

The Barberton area experienced some unrest again in early June. Striking groups blocked several local roads, setting brush and tires on fire. In the townships, there was violence against shops and foreigners. Fortunately, our work crew was not much affected; to our knowledge, access to Fairview Mine, where drillsite 1A is located, was largely kept open.

Dora and Phumi were invited by Martin Clark to present on BASE at the Department of Geology, University of the Orange Free State, Bloemfontein. Phumi and Dora were wined and dined; they thoroughly enjoyed their break of several days from the drilling campaign routine, now in its 8<sup>th</sup> and (hopefully?) final month. Their presentation was well attended.

Frohes Forschen!

Christoph Heubeck and Nic Beukes