

**WISSARD FIELD REPORT: 8 January 2015. Compiled by John Priscu**

**ACT SLW camp population: 36 total (16-ASC; 4-C525; 9-C524; 4-C523; 2-C522; 1-C521)**

**Weather @ 0930h NZDT:** Visibility >6mi; ceiling: >10,000 ft AGL-scattered cirrus; Wind ~6 kts; Temp ~24 F; there is a low fog bank to the northeast of ACT

**Drilling Ops:** The 0.2 um filter plugged early this morning and stopped flow. The drill was shut down and we pulled the filters. They were loaded up with dark particulate matter—possibly volcanic ash. The filters were replaced and back-flushed, which removed some of the material. Once back on line, they rapidly clogged again, stopping flow. We decided to remove the 0.2 um filters from the 0.2 um filter cannister and drill without them. The filters are bagged in flat-wrap and frozen for return to CONUS so that we can determine the nature of the particulate matter and to provide us with another “blank”. We discussed examining the particulate matter of the filters with light microscopy, SEM and extracting DNA for sequencing. We will increase our collection of “clean-access” samples from the filtration system (sampling ports before the 2 um filter and after the UV systems) until we breakthrough. We also plan to collect 2-10 liter Niskin samples from within the borehole (~400 m and ~600 m—to be determined after we see the CTD data) for use as a subglacial blank.

The borehole is now at 680 m and we expect breakthrough later today. There will be a ~12 h ream following breakthrough, which would open the hole for science tomorrow morning.

The roving drill tower is up over borehole #2 and drilling at this site progressed through the night, reaching the bottom of the firn.

**Camp Ops:** SPOT2 did not arrive last night but is expected to arrive at ACT sometime today, or possibly tomorrow, with ~8 tractors. They will spend the night and haul retro to MCM. The SPOT2 team will be “self support” during their time at ACT.

**Borehole Science Ops:**

We will proceed with the plan included in the 7 January Sitrep if flights do not arrive today. If the flight does come in, we should have an all-hands meeting as soon as possible to discuss borehole plans and crew changes.

Hope to see you all later today!!