P0D Water Sensor Replacement and Fill

Alex Clifton
Paul Rojas

December 16, 2013
Run 5

- Assume that Run5 starts on Tuesday April 1st, 2014
- Working back 4 weeks = March 4th
- From Paul's schedule, tentative P0D fill on February 3rd
- A two week test fill would end on February 16th
- The time between the end of the two week test fill (2/16) and the beginning of the 4 week physics fill (3/4) is two weeks
- We do not believe the P0D should be drained between the 2/3 test fill and the 3/4 physics fill
- No changes need to happen to Paul's schedule aside from keeping the P0D filled past 2/16
Overview of Schedule

- Jan. 13 – 18: P0D Fill. Begin new sensor calibration
- Jan. 20 – 25: Collaboration meeting, continue new sensor calibration
- Jan. 24: P0D drain
- Jan. 27: Begin sensor replacement effort
- Feb. 3: Fill P0D and keep filled
- April 1: Begin Run 5

- Alex will be on-site water expert for the first half of Run5 with water in
- Paul will take over for the second half of Run5 with water in
Detailed Schedule: Week of Jan. 13

• Fill P0D on Jan. 13 in order to test current condition of depth sensors
• Begin new sensor calibration and stability tests
  • Estimate 4 sensors/day → 8 days for sensors to be used in replacement effort (20)
    • 6 days for testing 20 sensors
    • 2 days for extra sensors (5 new + 1 replacement)

• No extra Man Power needed
Detailed Schedule: Week of Jan. 20

- Jan. 19: ND280 upgrade meeting
- Jan. 20 – 25: Collaboration meeting
- Jan. 24: Drain the P0D
  - Give Tianlu, Ko, Jay, and Jeremy experience performing the drain
  - Continue new depth sensor calibration and stability tests

- Man Power:
  - Tianlu
  - Ko
  - Jay Jo
  - Jeremy
Detailed Schedule: Week of Jan. 27

- Jan. 27: Sensor replacement begins
  - Requires 5 people:
    - Paul
    - Alex
    - Tianlu (1/20 - ?)
    - Jay (1/14 – 2/5)
    - Ko (1/13 – 1/31)
      - \textit{Will not be around for the entire sensor replacement period}
    - Jeremy (1/20 - ?)
- Feb. 2: Complete sensor replacement (\textit{Estimated})
- Suggested departure date for volunteers: Feb. 5

- Man Power needed: 5 people
Detailed Schedule: Week of Feb. 3

- Feb. 3: Fill P0D
- Alex will remain on-site water expert

Man Power:
- One additional person to aid in an emergency drain (looking for volunteers)
- If available, please email Alex, Paul, and Walter
- Keep P0D filled until drain time for water out running
- Alex to be on site water expert for first half of water-in running
- Paul takes over for last half of water-in running
- Need another person until P0D expert takes over for Run5 (4/1)
Man Power Needed

- Jan. 13 – 18: P0D Fill, begin new sensor calibrations
  - Alex and Paul

- Jan. 20 – 25: Collaboration meeting week, continue new sensor calibrations
  - Alex and Paul

- Jan. 24: P0D Drain
  - Alex, Paul, JayJ, Tianlu, Ko, Jeremy

- Jan. 27: Begin sensor replacement
  - Alex, Paul, Jay(1/14 – 2/5), Tianlu(1/20 - ?), Ko(1/13 – 1/31), Jeremy(1/20 - ?)

- Feb. 3: P0D fill
  - Alex, Paul

- Past Feb. 3 and into Run5: P0D filled
  - Alex, one other person