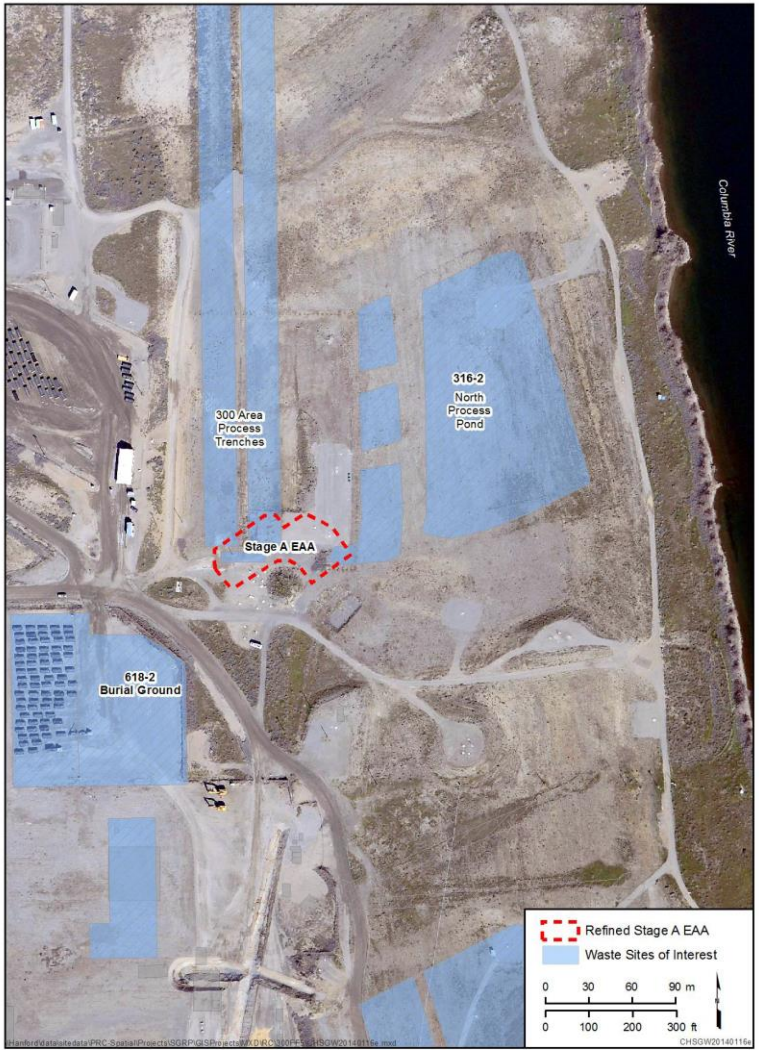
300-FF-5 Tour

presented by Patrick Baynes

June 14, 2016

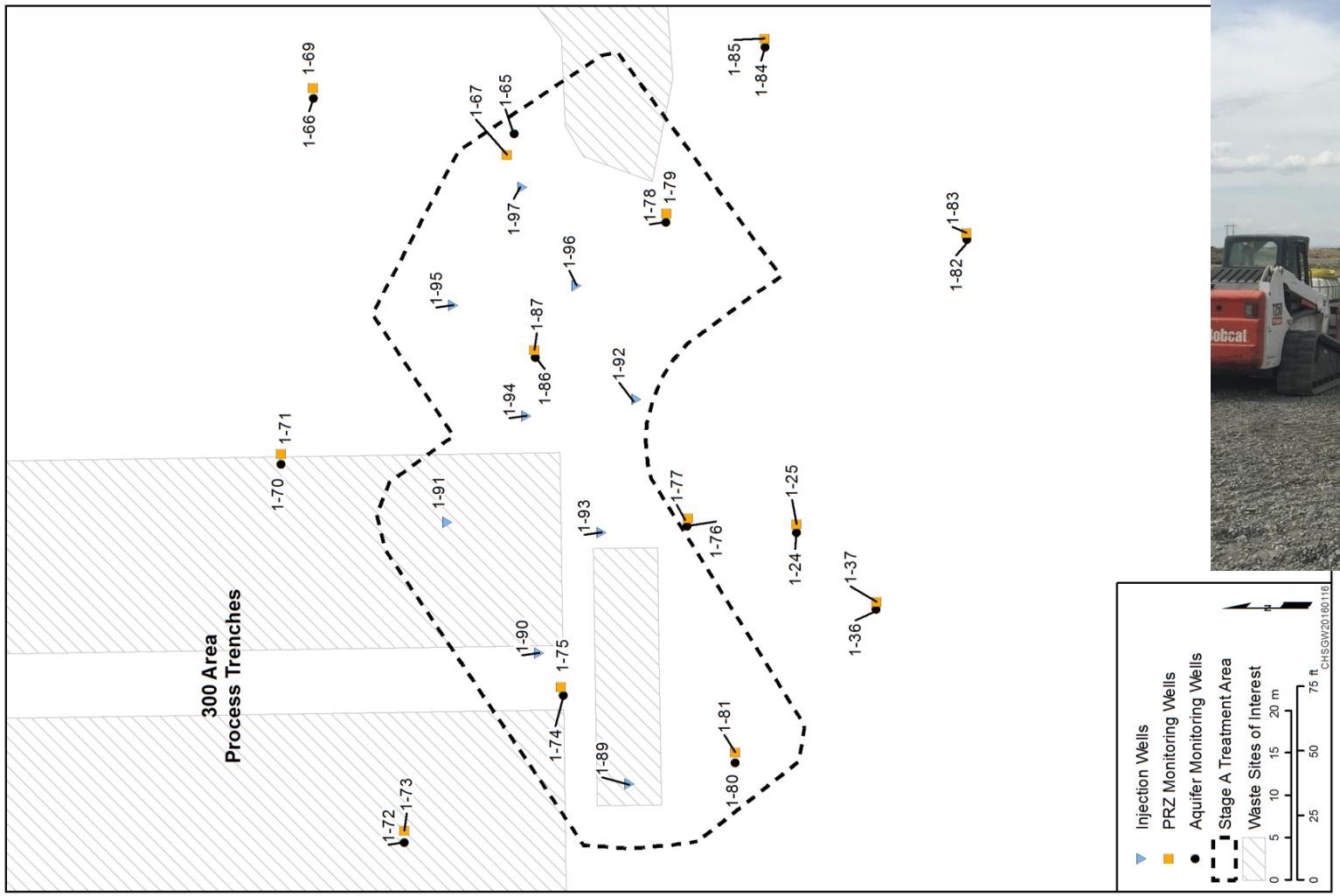
300-FF-5 Stage A General Location



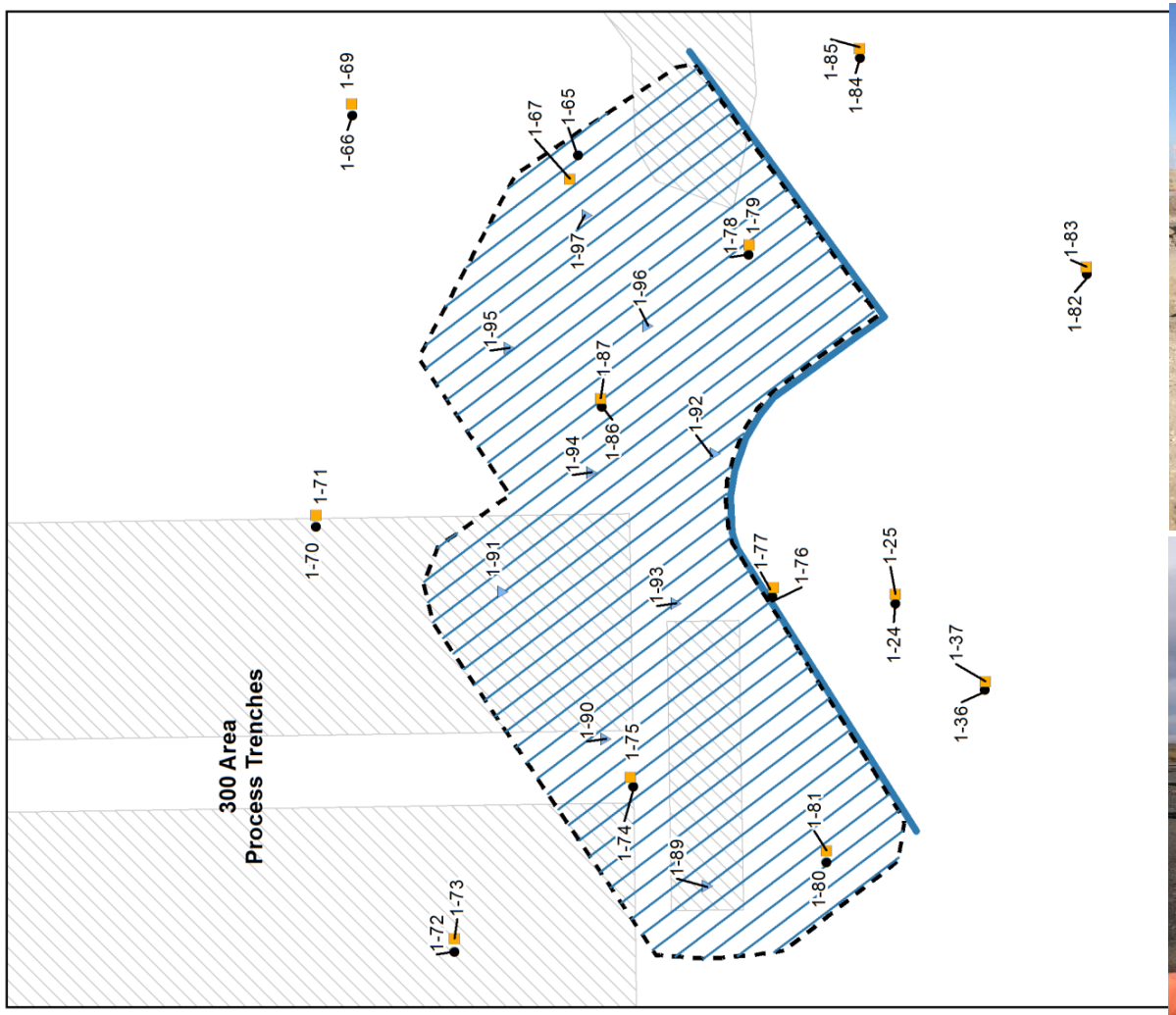
- Uranium sequestration will occur in two sequential stages, Stage A and Stage B.
- Infiltration and injection of phosphate solutions into the soil, PRZ, and groundwater will form insoluble minerals that bind mobile uranium.
- Stage A was implemented in a 0.75 acre area of high residual uranium contamination.
- Stage B will address the remaining 2.25 acres and is still in the planning phase.

300-FF-5 Aerial Photograph

300-FF-5 – Injection and Monitoring Wells



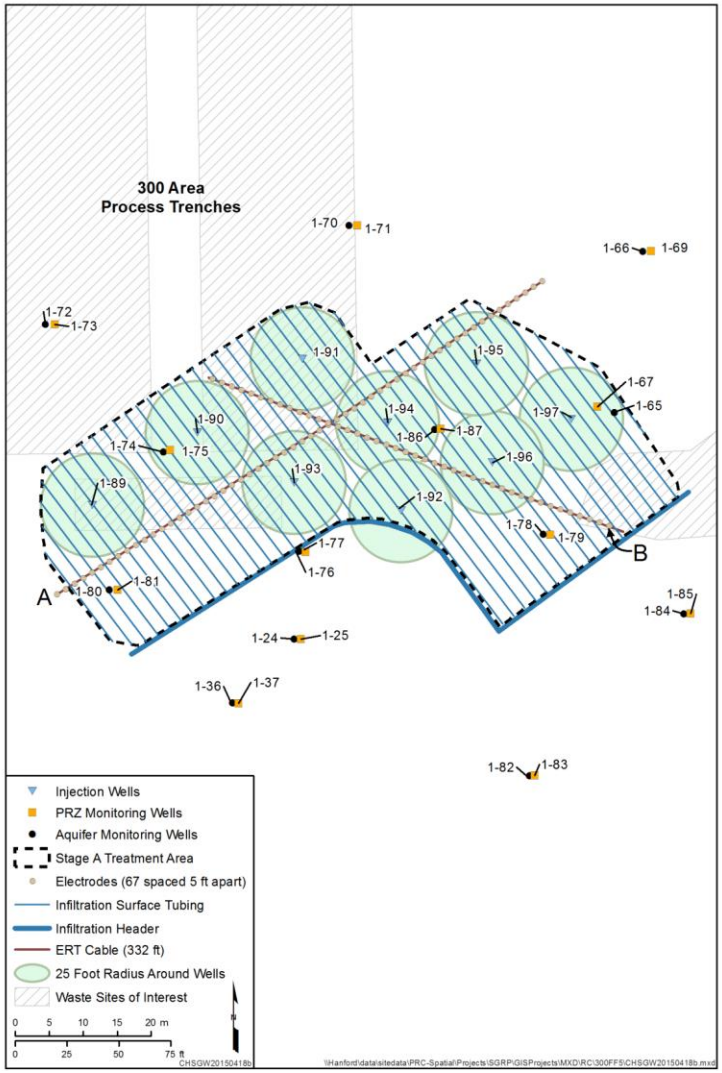
300-FF-5 – Infiltration System

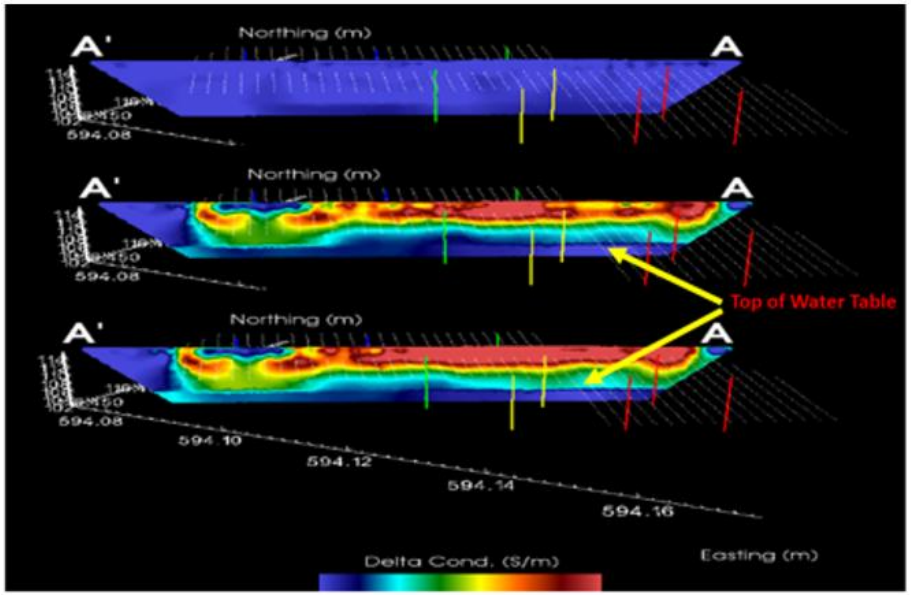


300-FF-5 – Mixing Skids and River Pumps

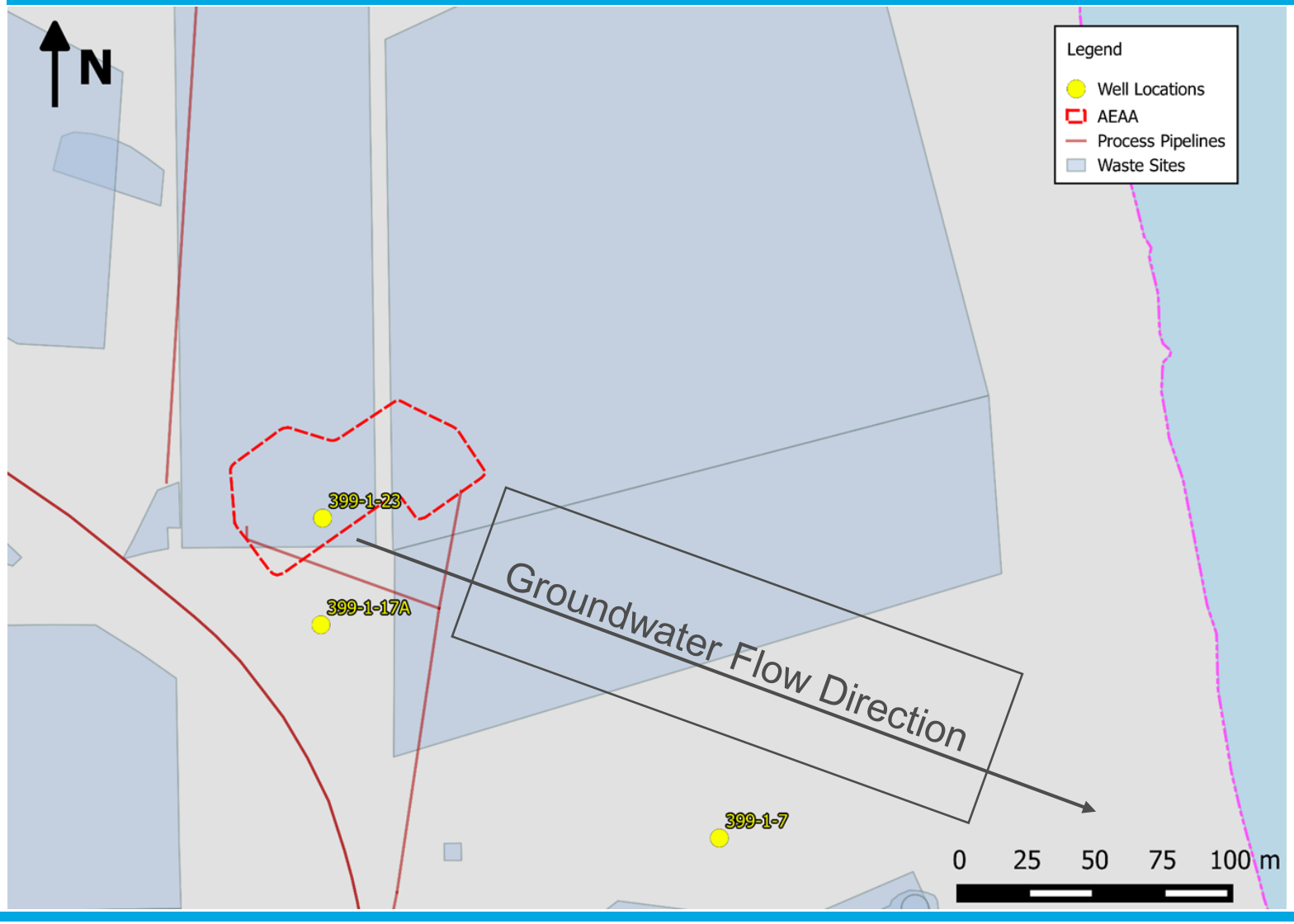
300-FF-5 – Chemical Tanks

300-FF-5 – Electrical Resistivity Tomography

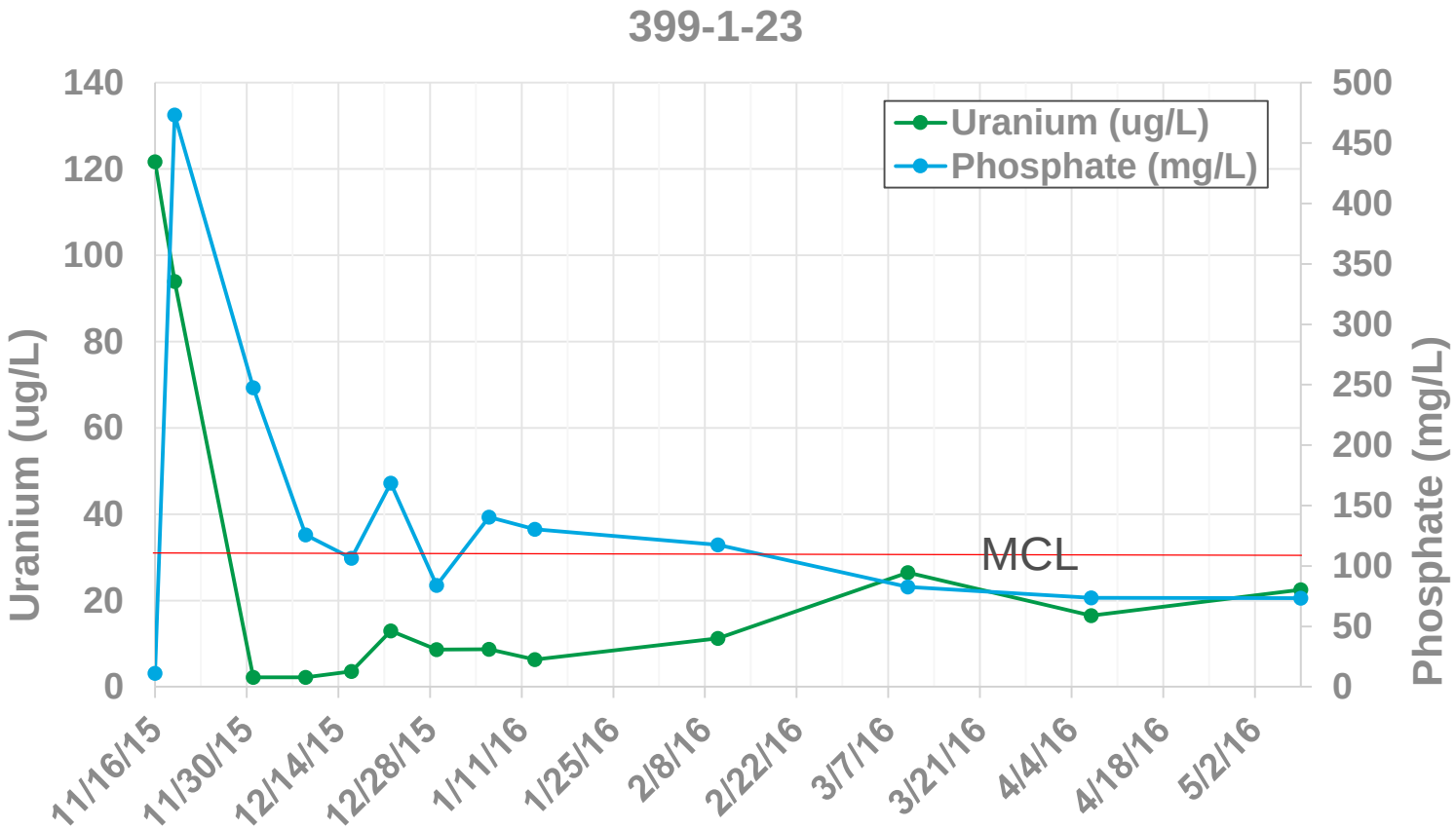




300-FF-5 Uranium Sequestration Stage A Performance

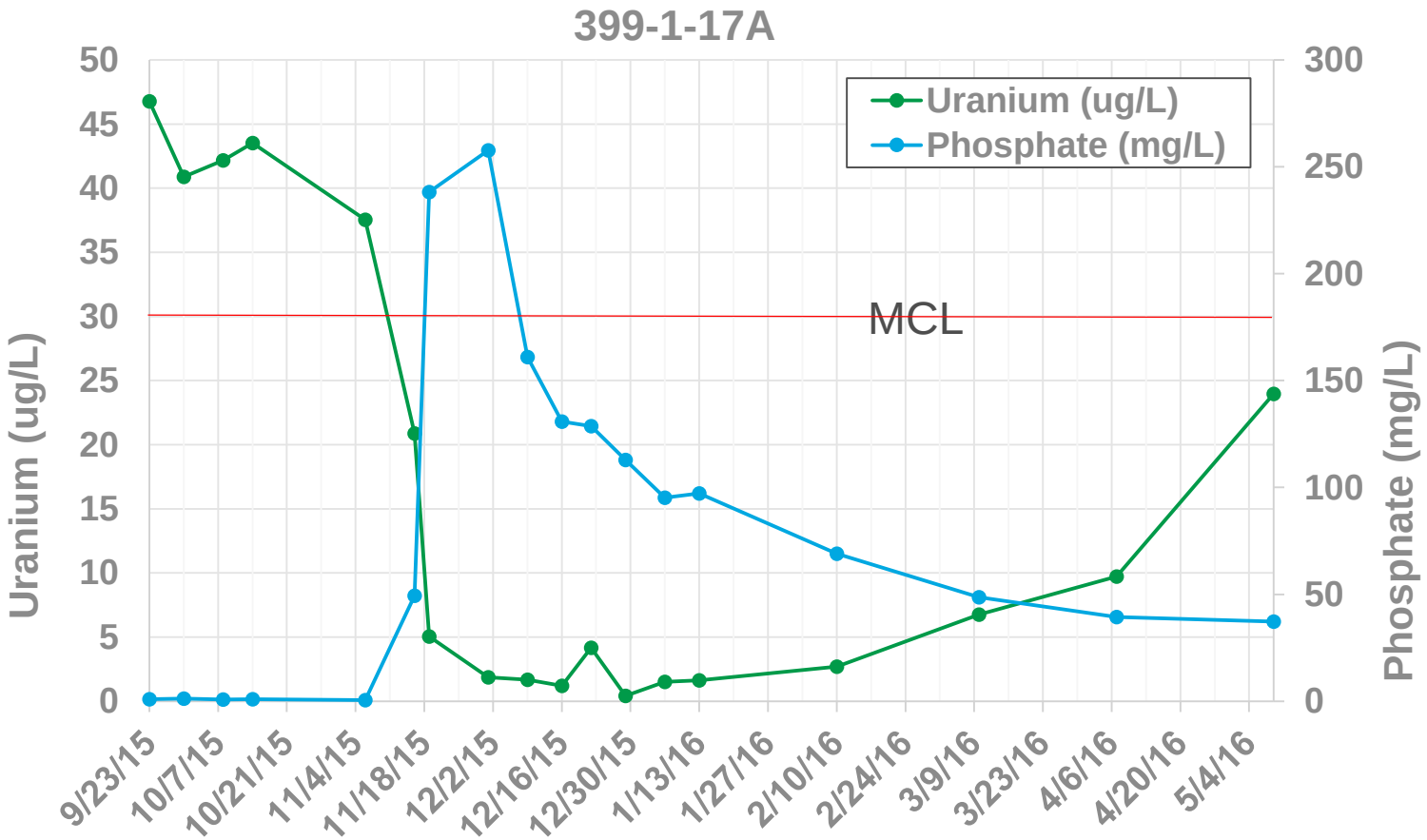


300-FF-5 Uranium Sequestration Stage A Performance
(Preliminary Results)



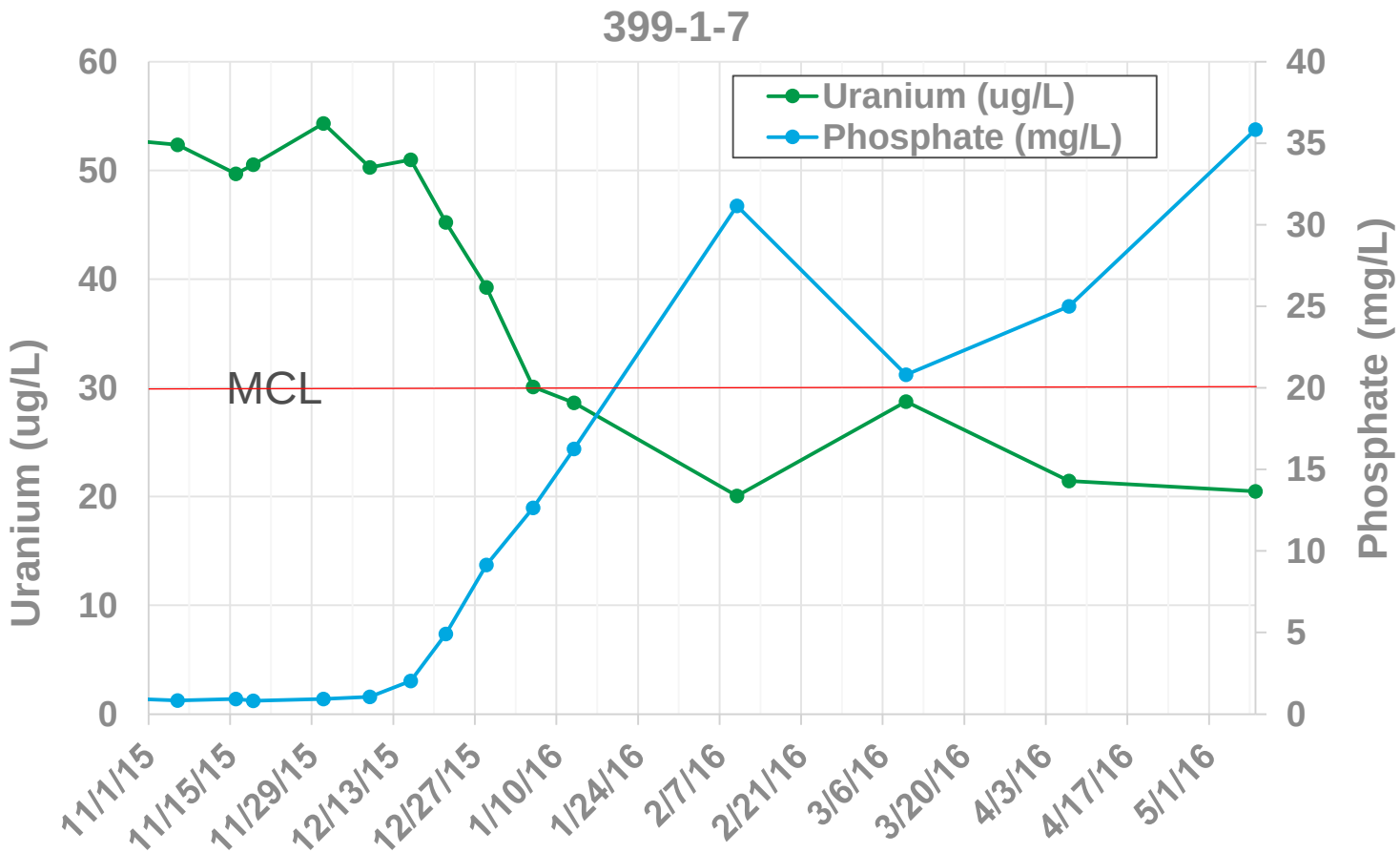
- Groundwater Wells Outside Stage A EAA with long-term monitoring records show decline in Uranium concentrations. The uranium concentrations remain lower following the Stage A remedy.

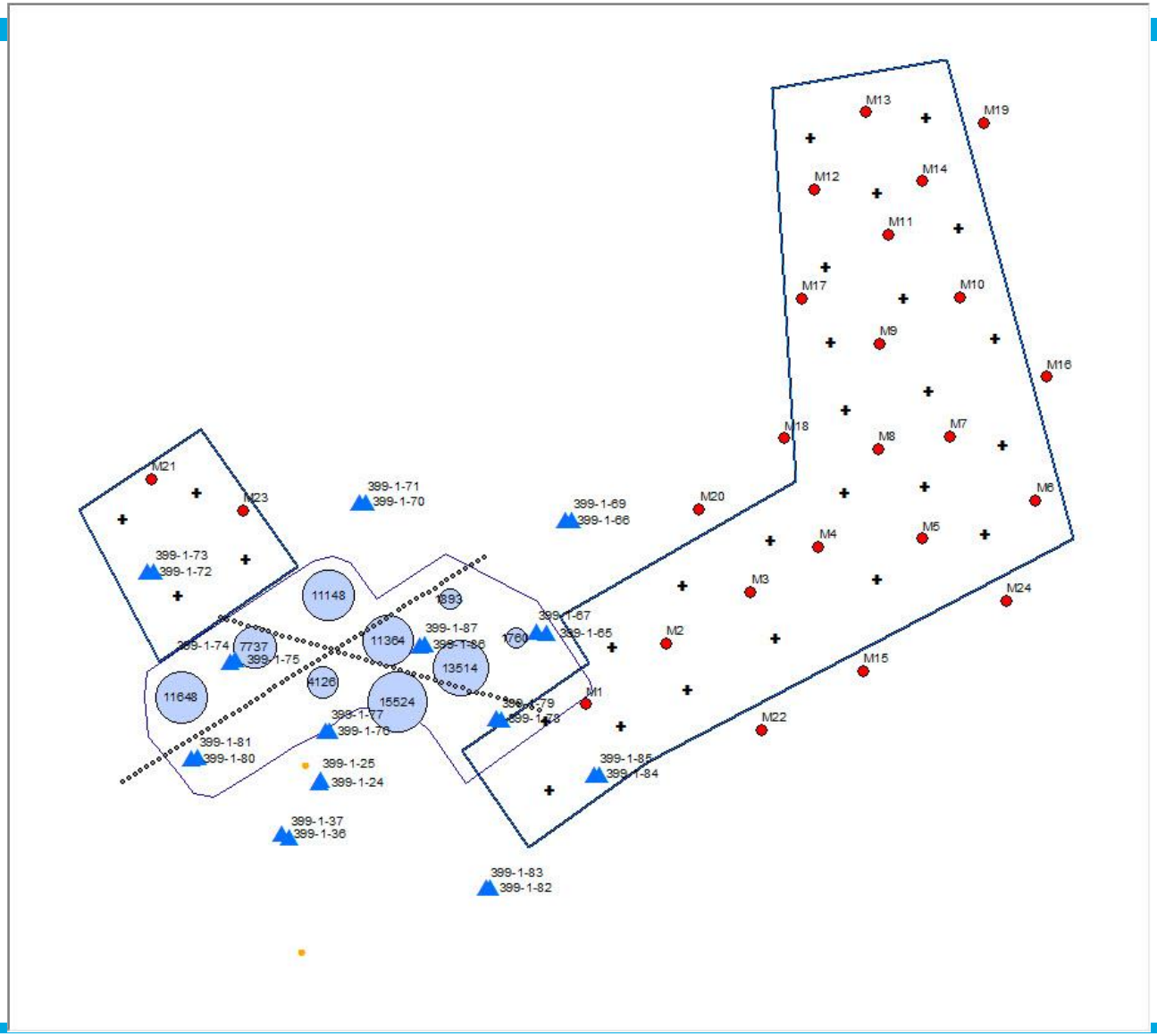
300-FF-5 Uranium Sequestration Stage A Performance (Preliminary Results)



- Note the decline in uranium concentrations with corresponding increase in phosphate concentrations.

300-FF-5 Uranium Sequestration Stage A Performance (Preliminary Results)



- Uranium concentrations remained below MCL during the observation time period following the Stage A infiltration/injection.

300-FF-5 – Stage B (NOTIONAL)