



November 28, 2012

ALEXCO

Bellekeno Mine Dry Stack Tailings



Alexco History

- ◆ Established in 2005
- ◆ Now Canada's only primary silver producer: 2 million oz silver production in 2011
- ◆ Sole owner of Keno Hill Silver District
- ◆ Developing 2 new mines, near-term
- ◆ Environmental subsidiary, Alexco Environmental Group



Acknowledgements

- ✦ First Nation of Nacho Nyak Dun: Traditional territory
- ✦ eba: Dry Stack design and performance monitoring
- ✦ Access Consulting Group, Dry Stack environmental performance monitoring
- ✦ Katherine Penny, Mill Manager
- ✦ Vanessa Benwood, Environmental Coordinator
- ✦ Alexco Management team: Clynt Nauman, Brad Thrall



Perspectives on Bellekeno Dry Stack Tailings



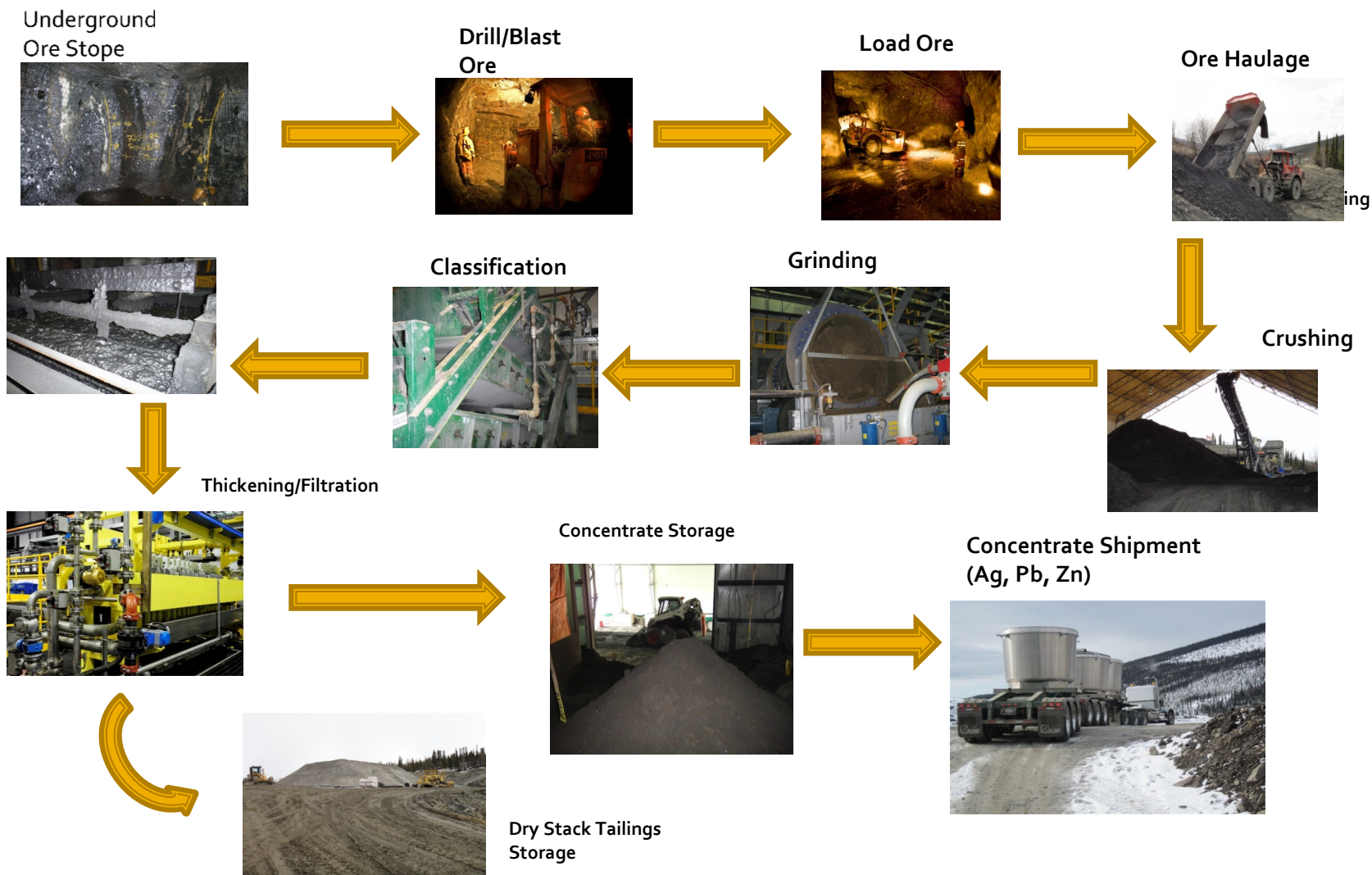
- Environmental Assessment and Permitting
- Bellekeno Dry Stack Design
- Bellekeno Dry Stack Performance 2011-present
- Regulatory Perspective
- First Nations/Community Perspective
- DSTF Risk Assessment

Environmental Assessment and Permitting



- Testwork: humidity cells, metallurgical testing, historical tailings
- Dry Stack location (discontinuous permafrost)
- Environment Canada: MMER applies (seepage volume)
- FNNND DSTF Risk Assessment

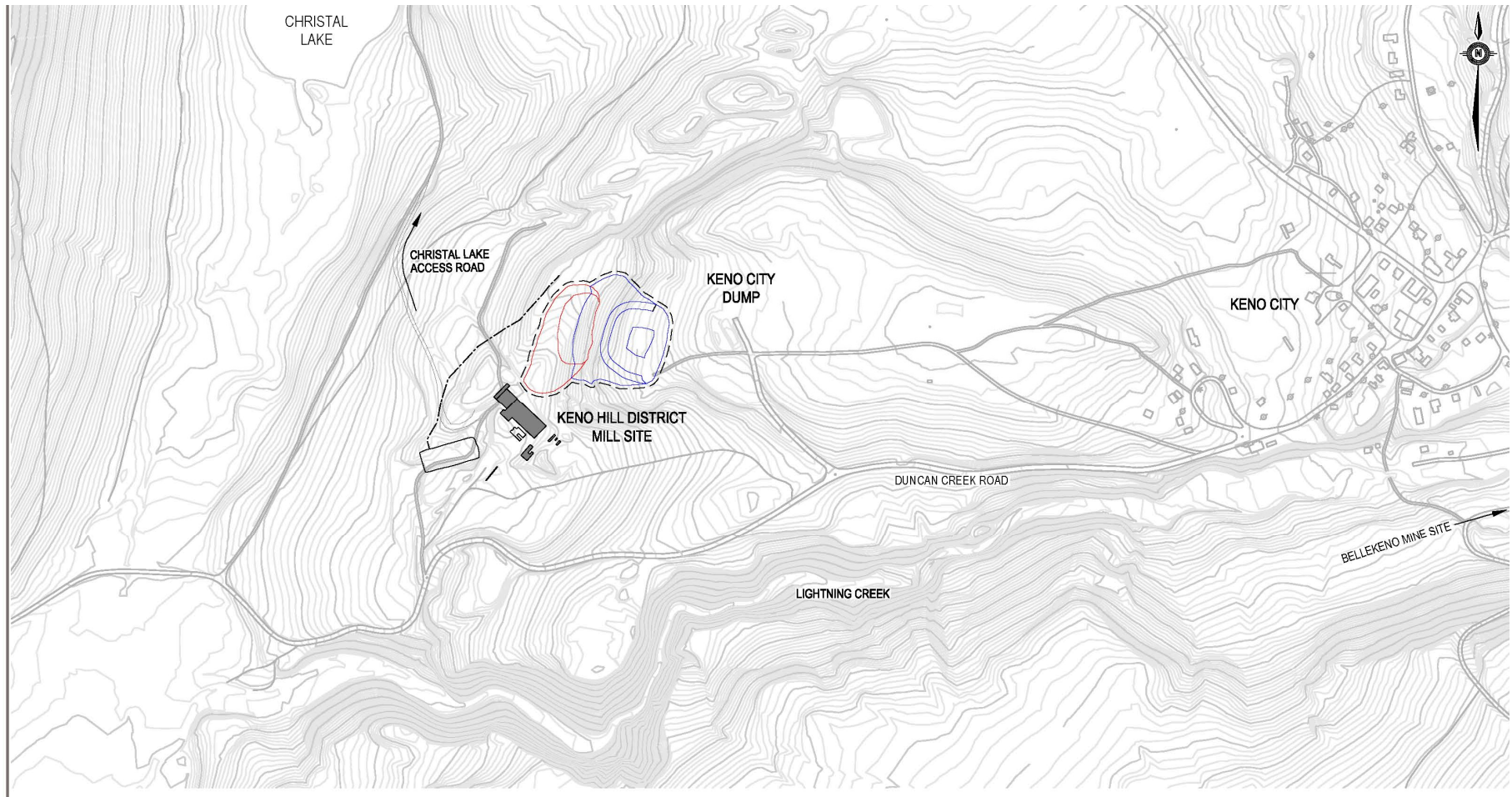
Mill Process Flowsheet



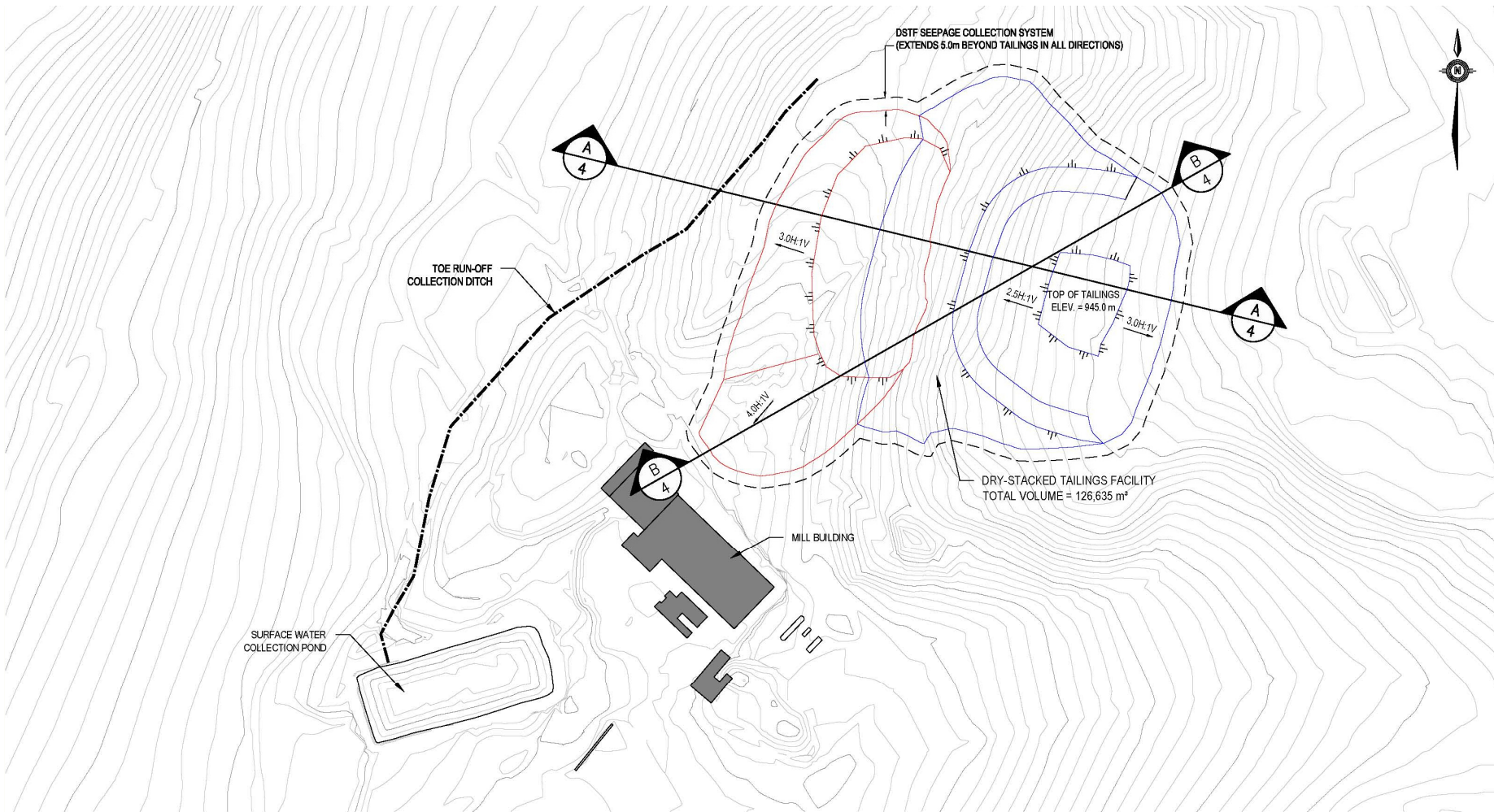
Mill Area Layout



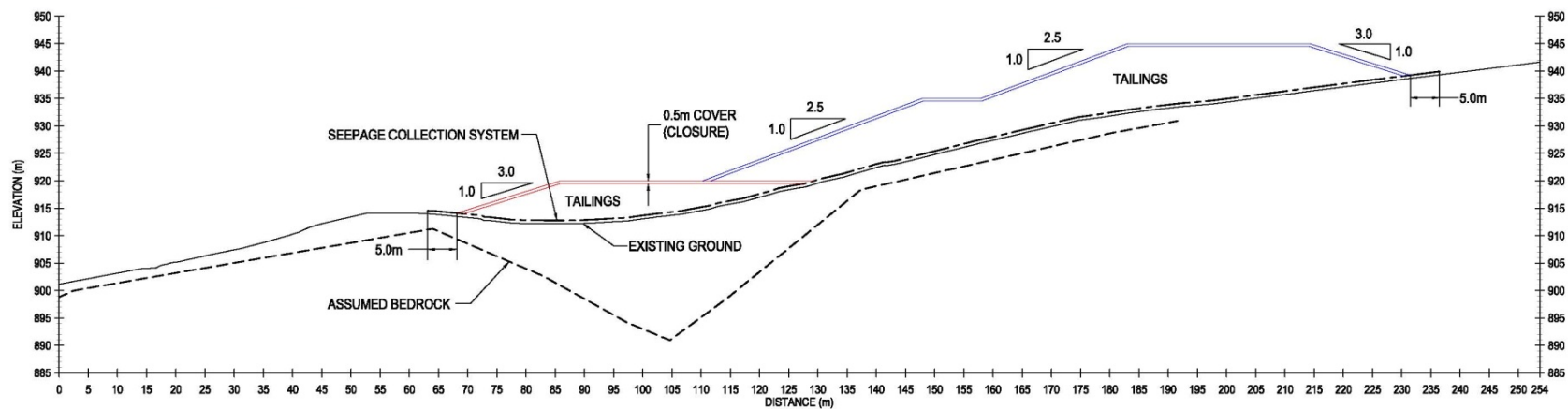
DSTF Location



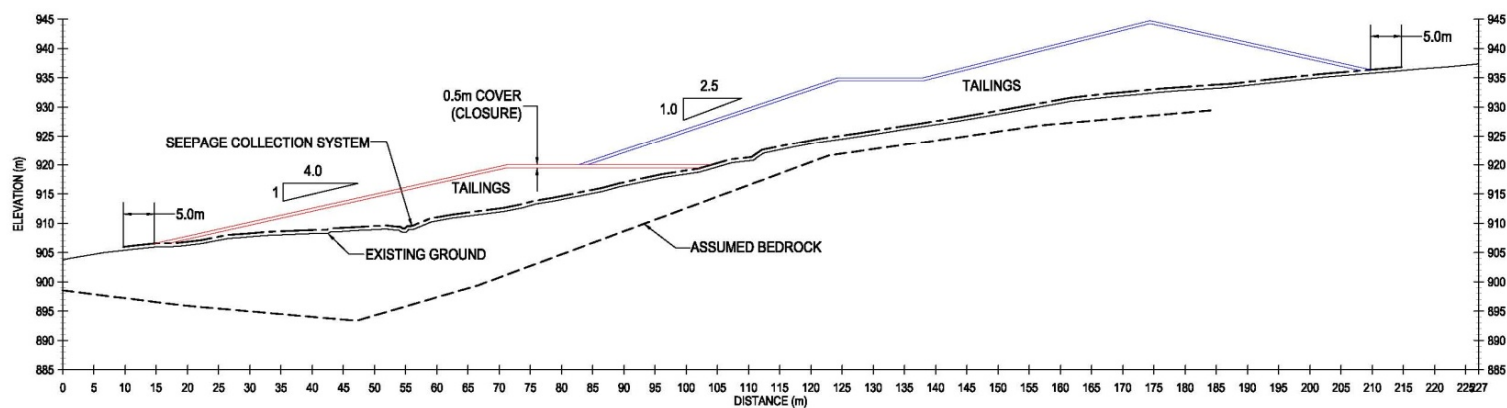
DSTF Footprint and Water Management



DSTF X-Section

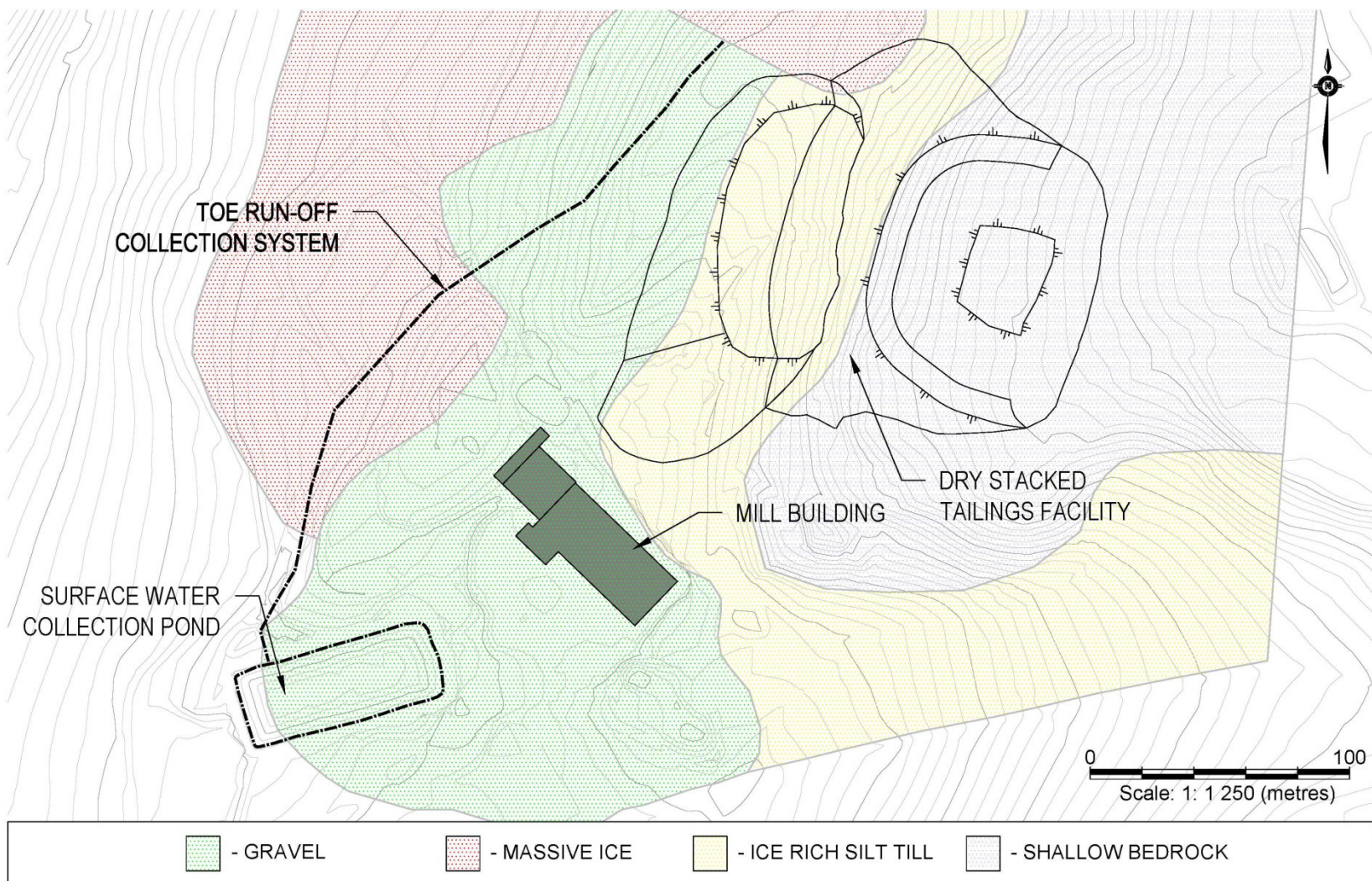


A
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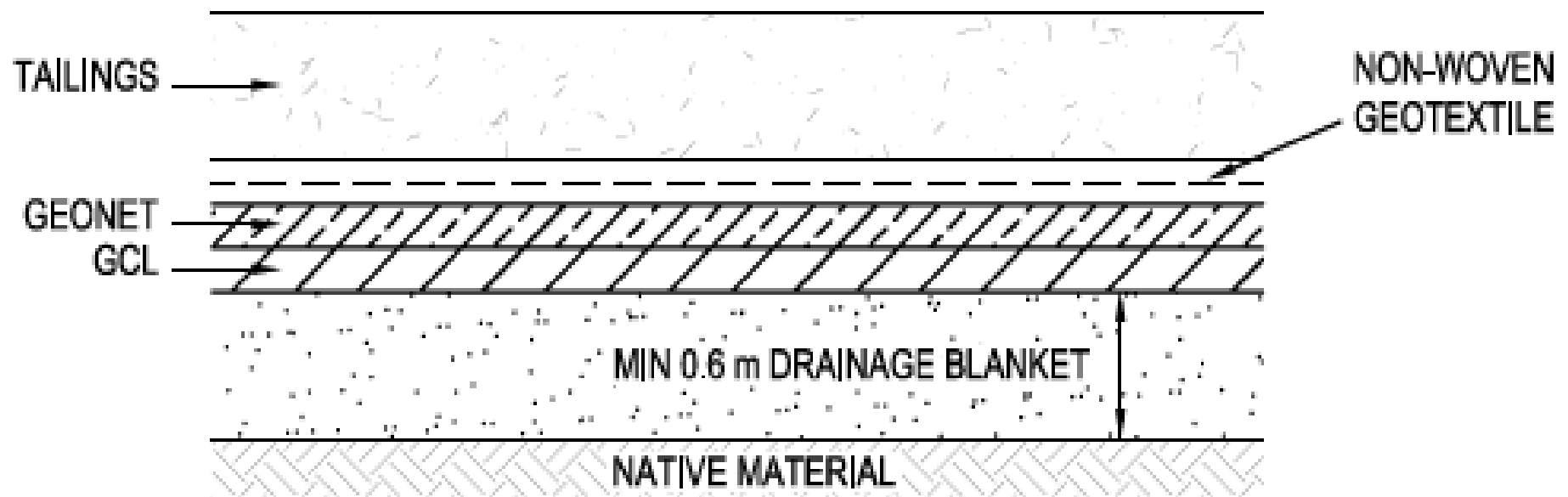


B
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DSTF Subsurface Conditions



DSTF Drainage Design



SEEPAGE COLLECTION SYSTEM DETAIL

Construction



DSTF Drainage Design



Performance Monitoring

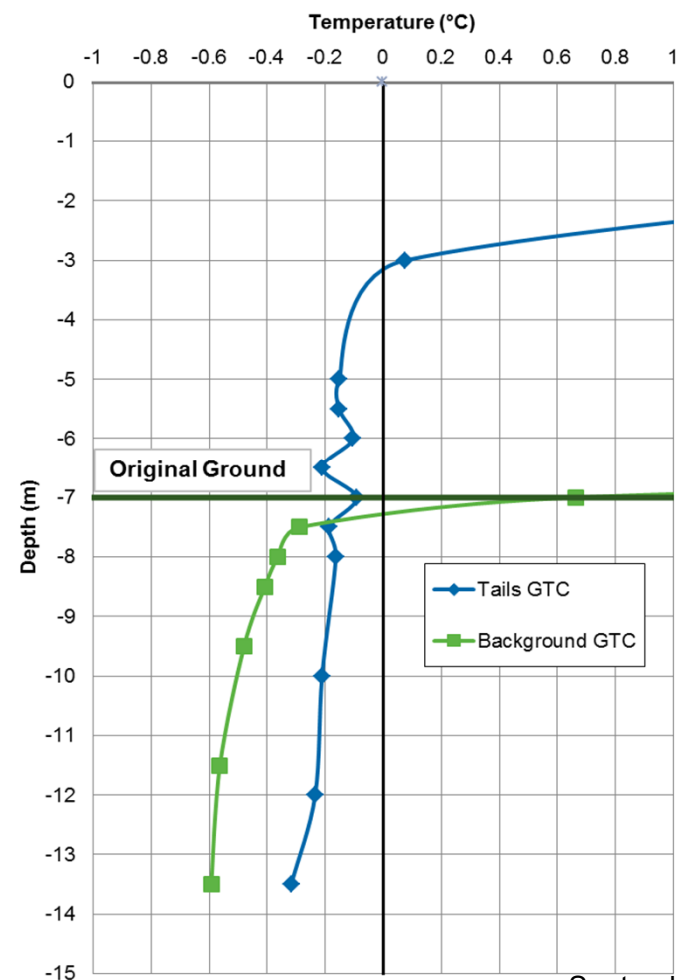
- Visual inspections
- Compaction testing
- Ground temperatures
- Slope indicators



Dry Stack Update



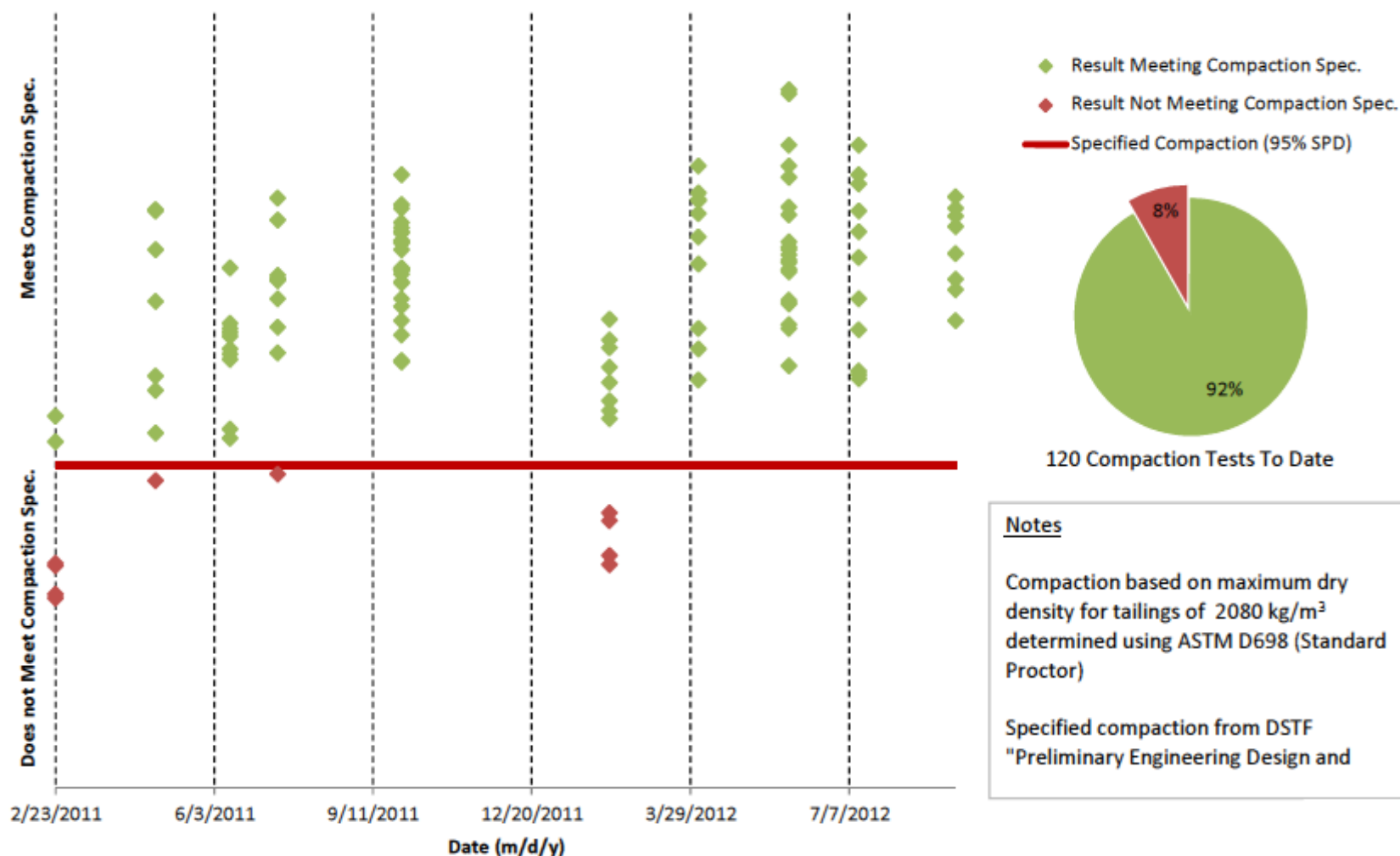
Ground Temperature Profile



September 2012

DSTF Performance - Compaction

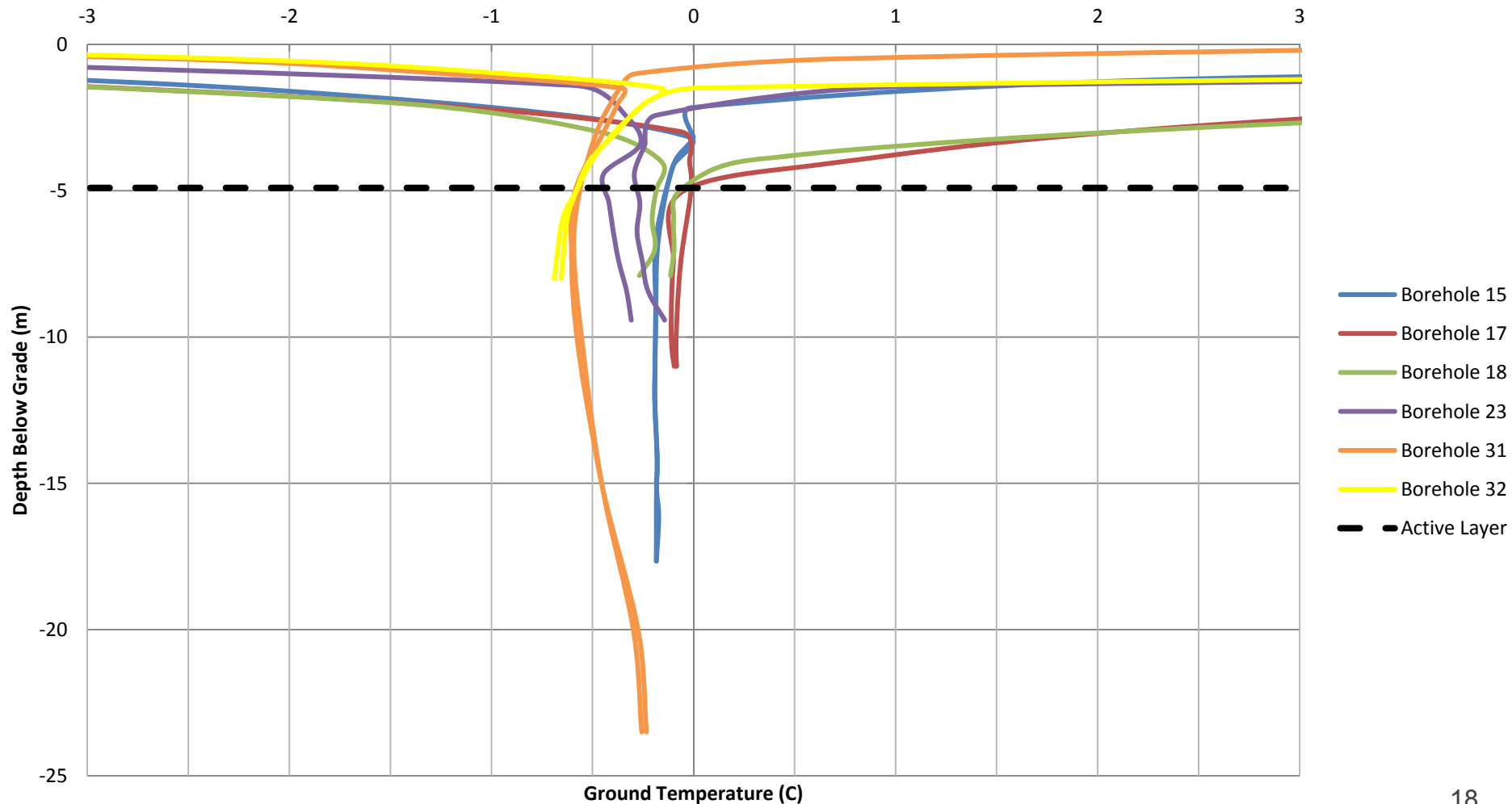
Summary of DSTF Compaction Results



DSTF Performance - Temperature



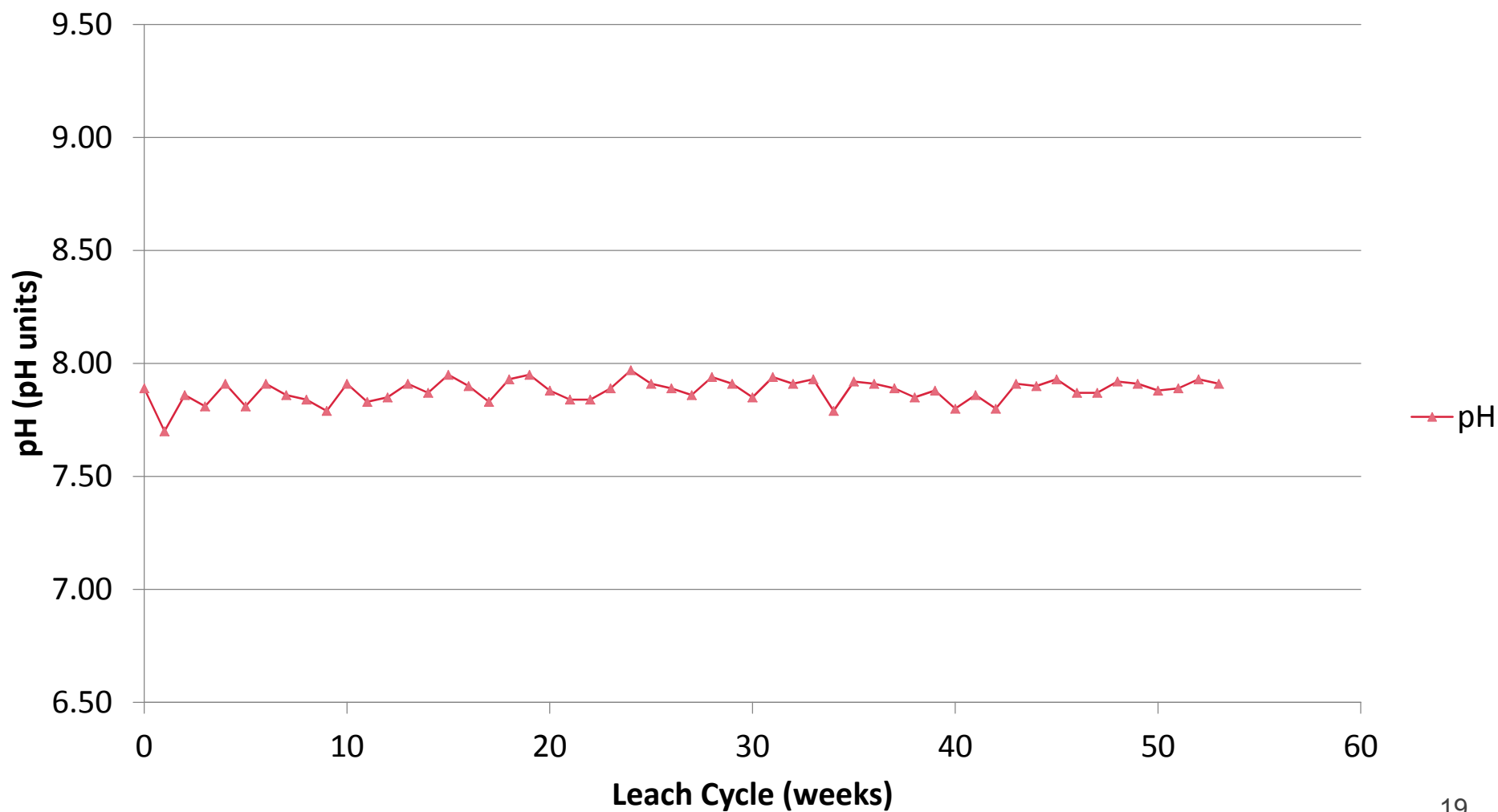
Ground Temperature Summary



DSTF Humidity Cell



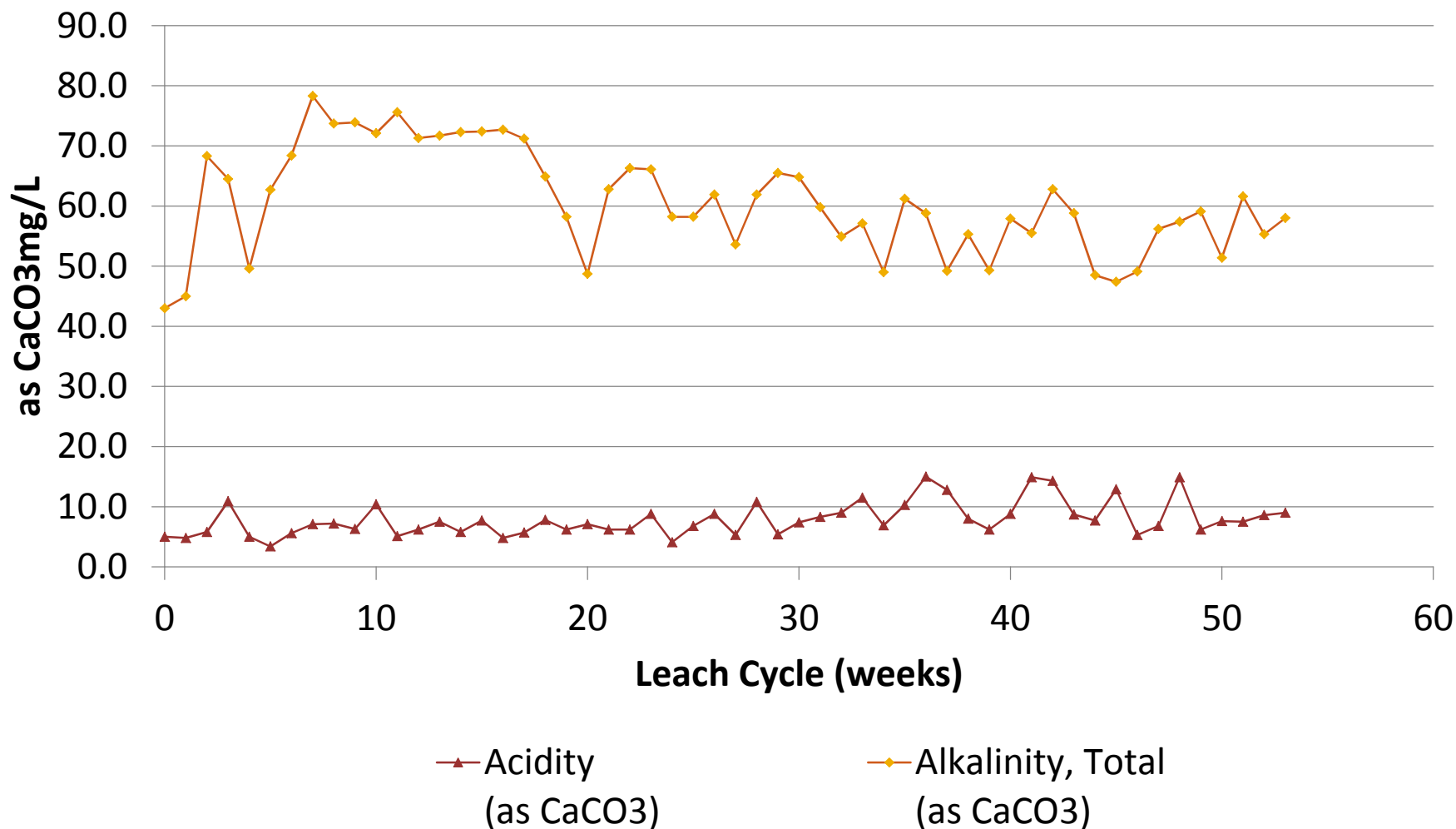
Humidity Cell Testing, pH



DSTF Humidity Cell

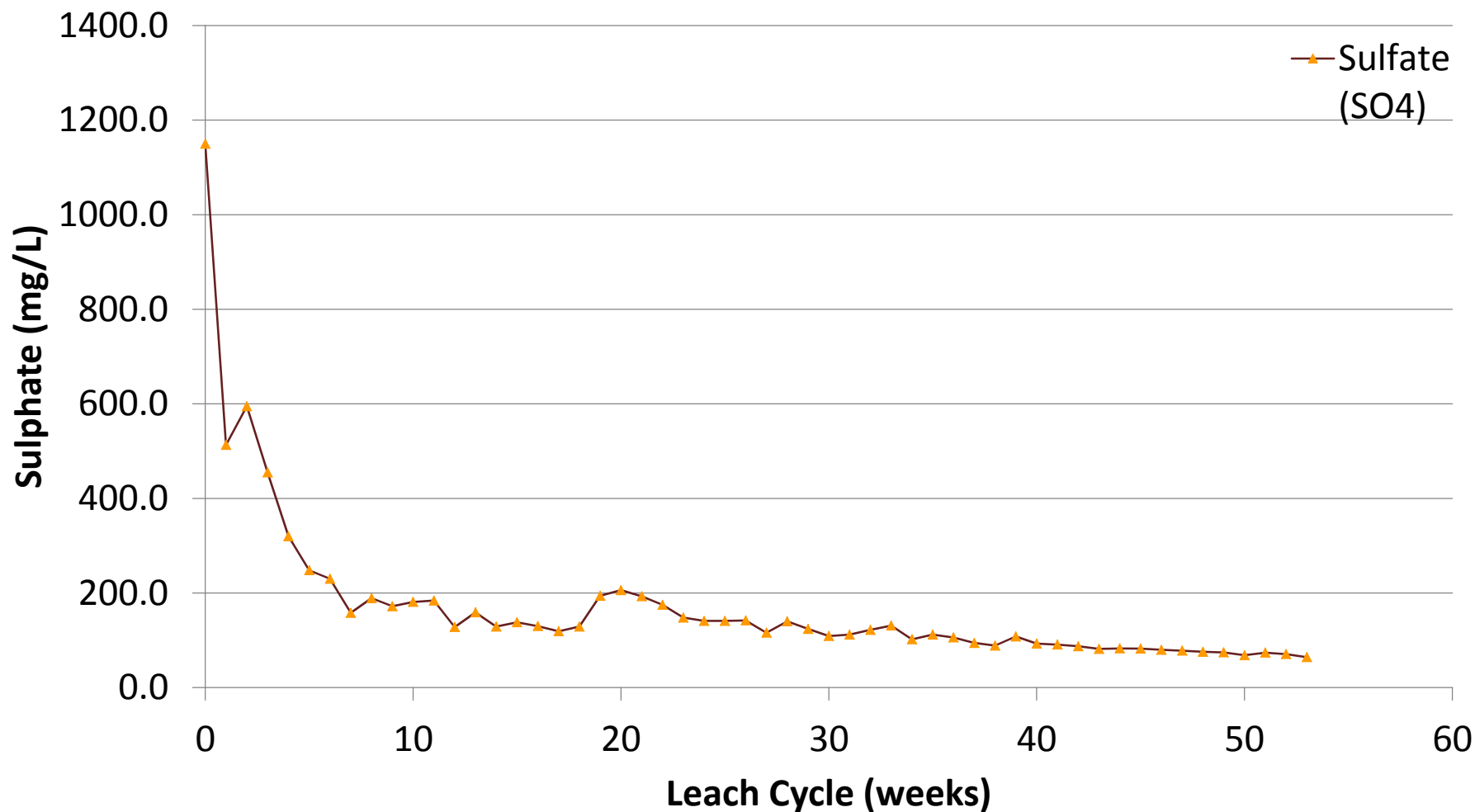


Humidity Cell Testing, Acidity and Alkalinity



DSTF Humidity Cell

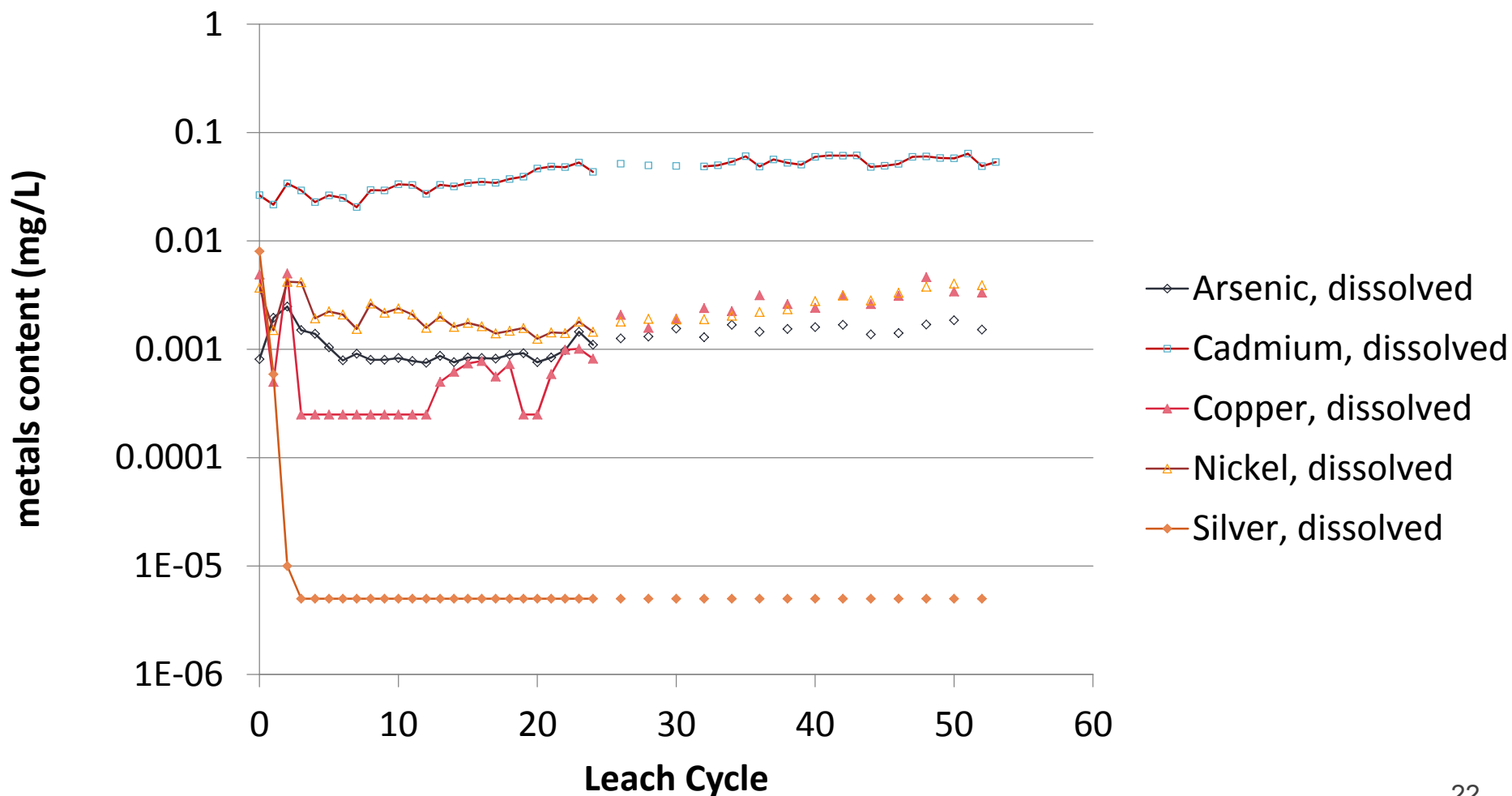
Humidity Cell Testing, Sulphate



DSTF Humidity Cell



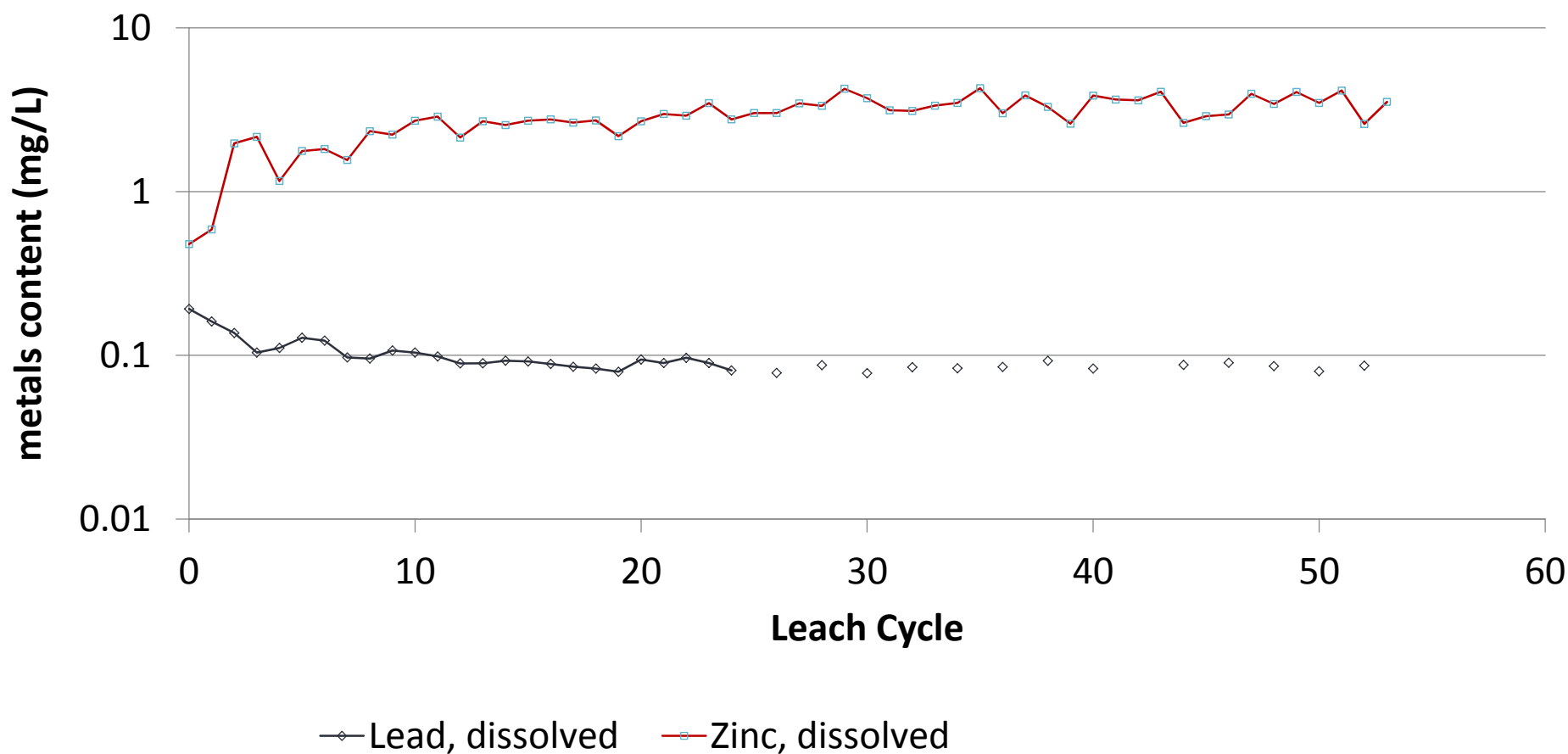
Humidity Cell Testing, Dissolved Metals



DSTF Humidity Cell



Humidity Cell Testing, Dissolved Metals Lead and Zinc



DSTF Progressive Reclamation



DSTF Progressive Reclamation



Questions?

