

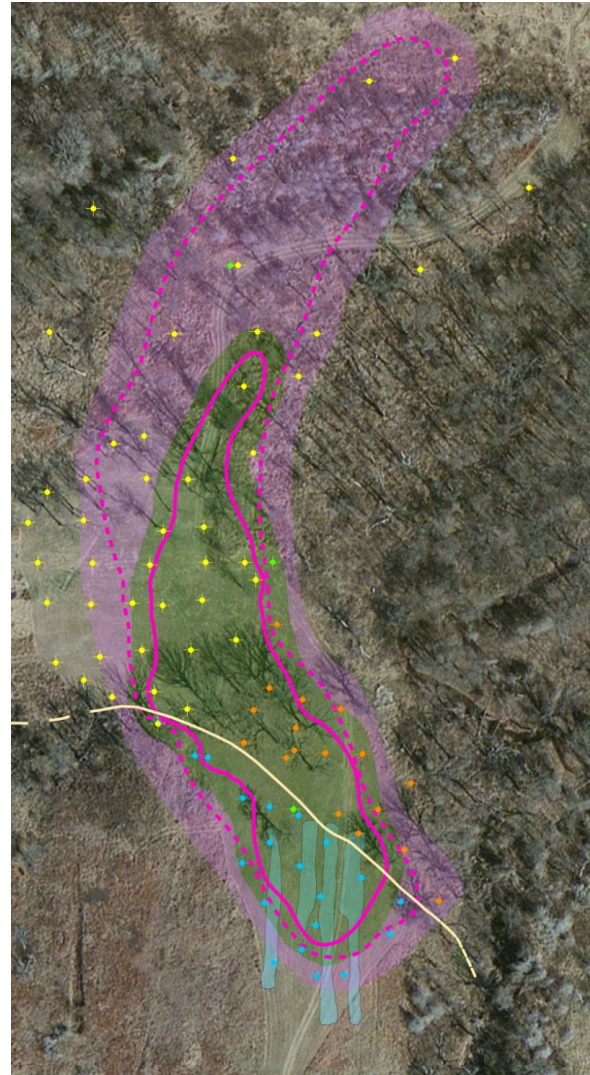
# Optimizing a Uranium Sediment and Groundwater Remedy through Cost-Effective Investigation, 3D Modeling and Geologic Interpretation

Session: E3. High-Resolution Site Characterization

April 16, 2019

# **BURIAL AREA 1**

# Nature & Extent



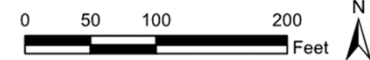
## Legend

- ★ MONITORING WELL IN TRANSITION ZONE
- ★ MONITORING WELL IN ALLUVIUM
- ★ MONITORING WELL IN SANDSTONE B
- ★ MONITORING WELL IN SANDSTONE C
- TRANSITION ZONE
- URANIUM > 180 PICOCURIES PER LITER (pCi/L)
- URANIUM > 30 MICROGRAMS PER LITER (ug/L)
- BA1 U > DCGL REMEDIATION AREA
- BA1 U < DCGL REMEDIATION AREA
- FORMER BA1 WASTE TRENCH

11 / 12 URANIUM CONCENTRATION DATA IN ug/L /  
URANIUM ACTIVITY DATA IN pCi/L

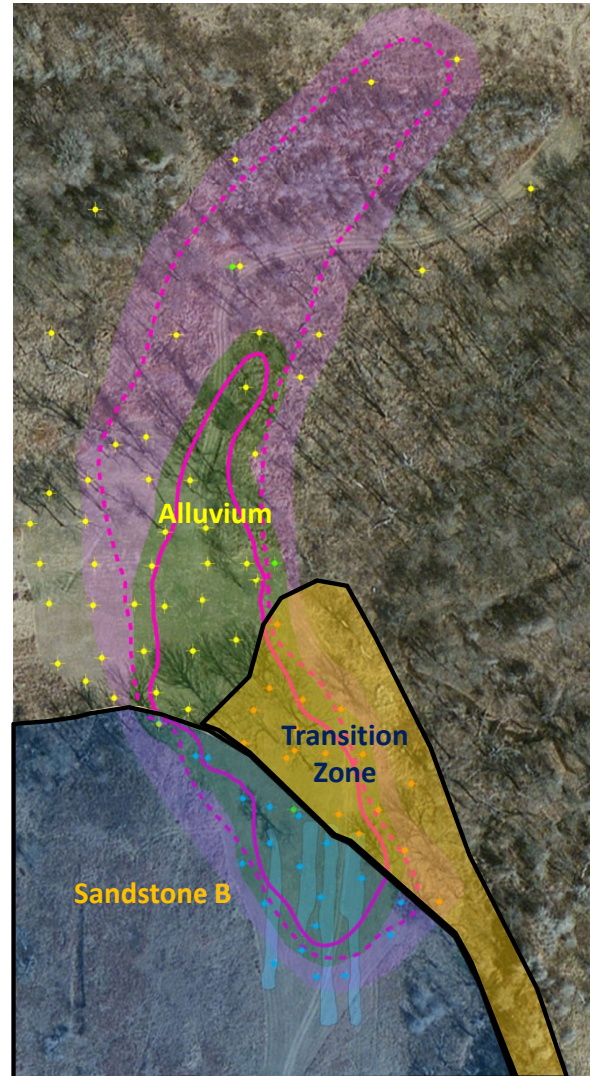
The most recent data are posted. The highest value of the original sample and its duplicate is posted.

J = Estimated Value      NS = Not Sampled  
MCL = Maximum Contaminant Level      U = Not Detected





# Nature & Extent



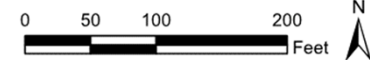
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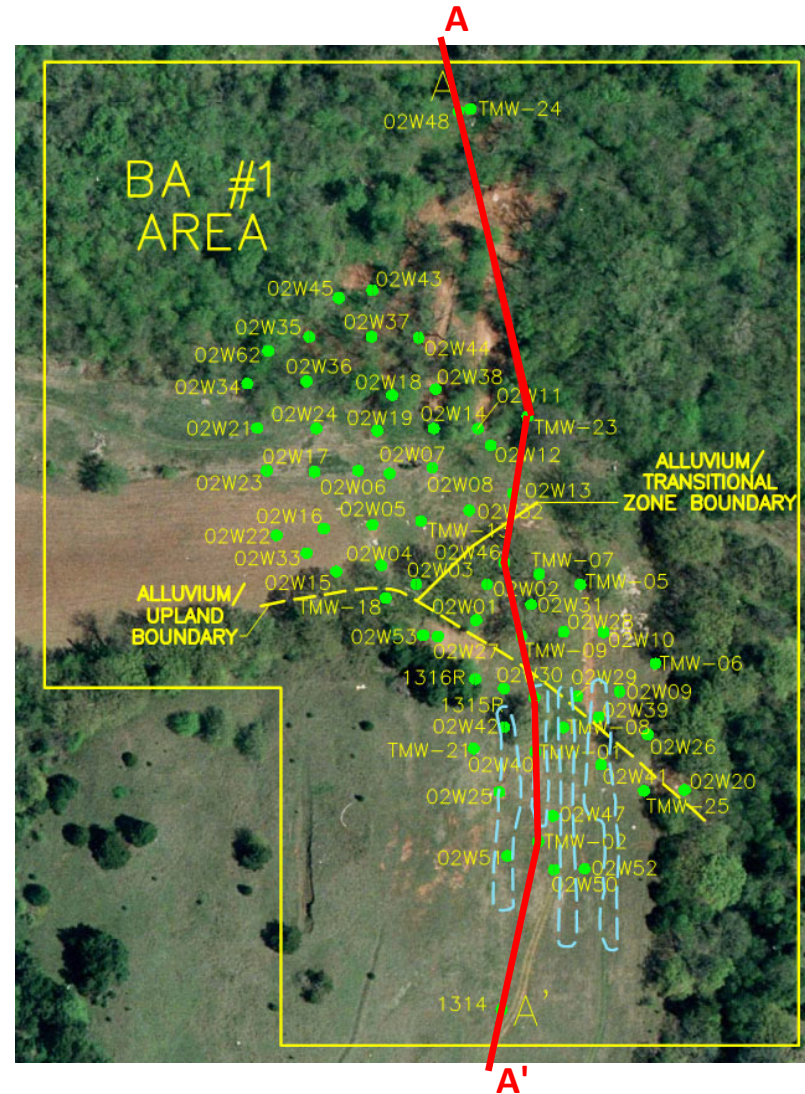
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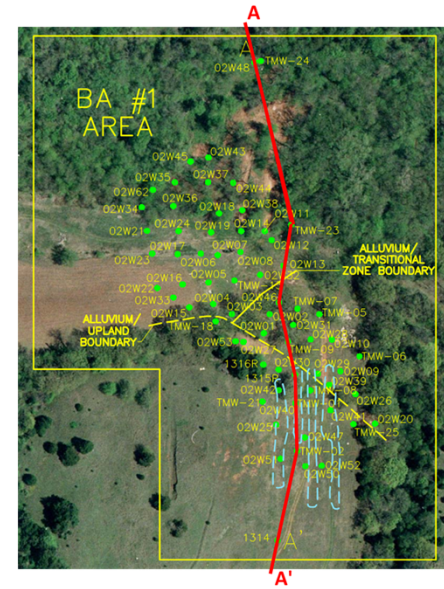
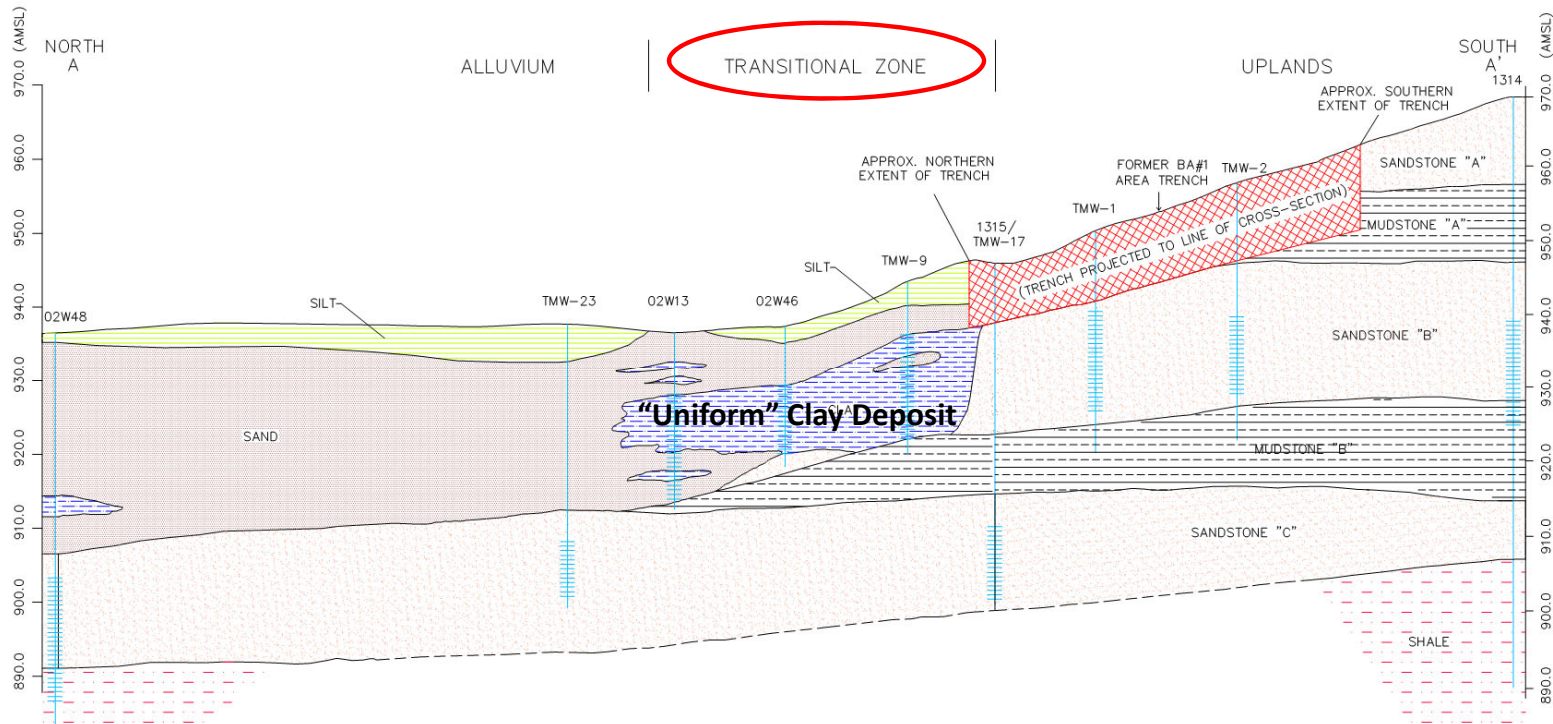




# Original Conceptual Site Model

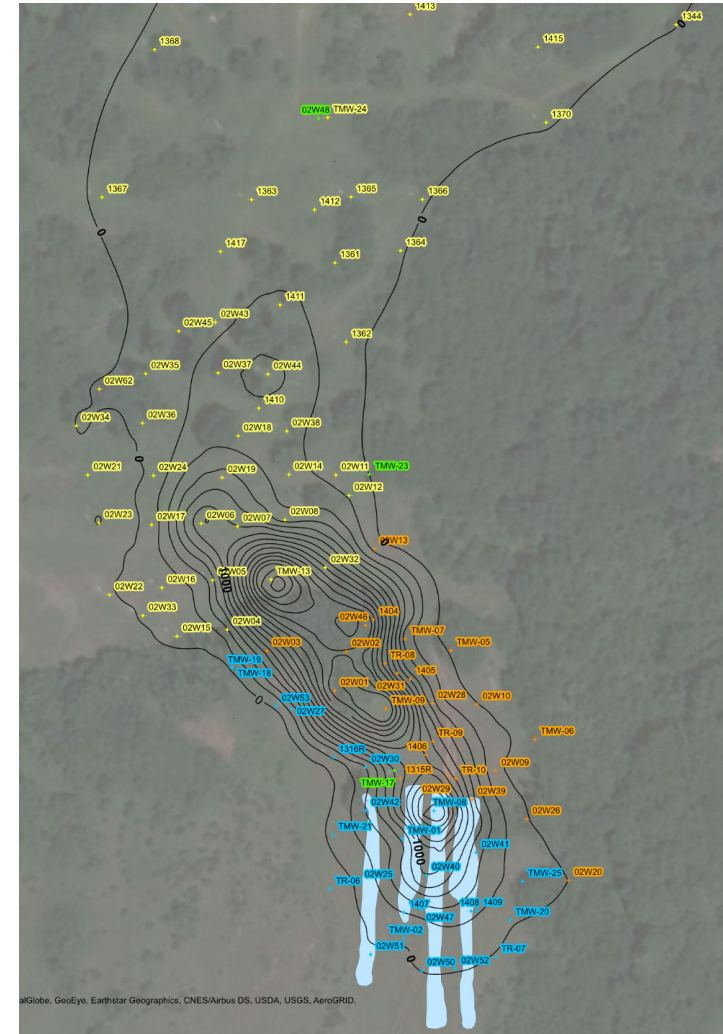
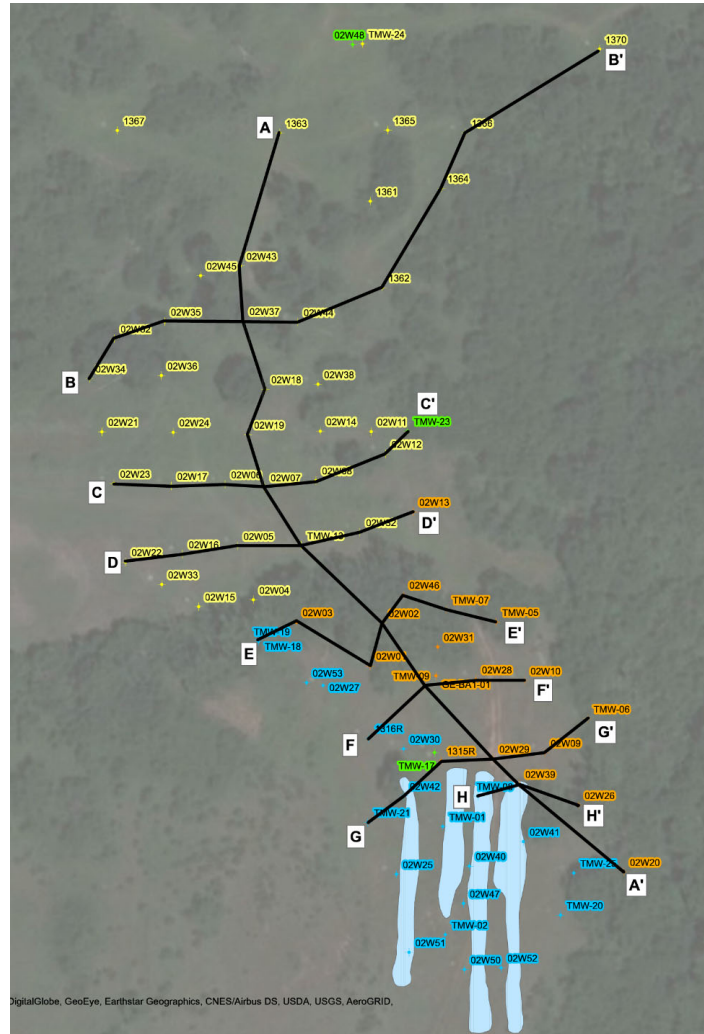


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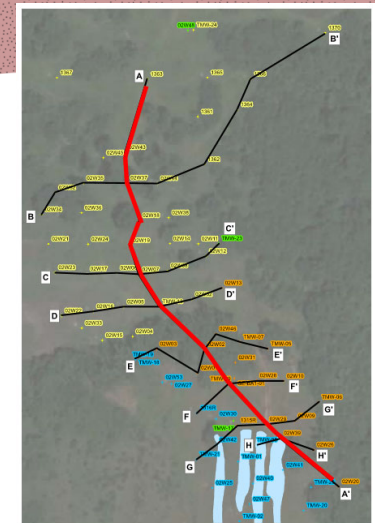
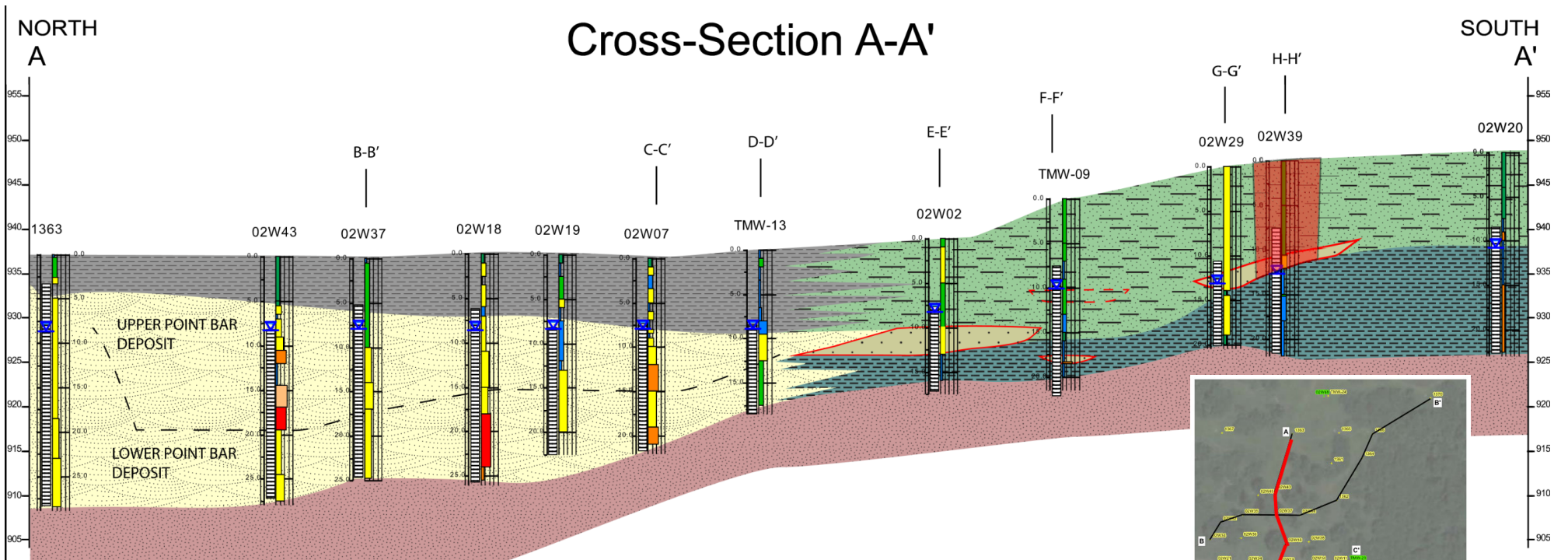


# Revised Conceptual Site Model

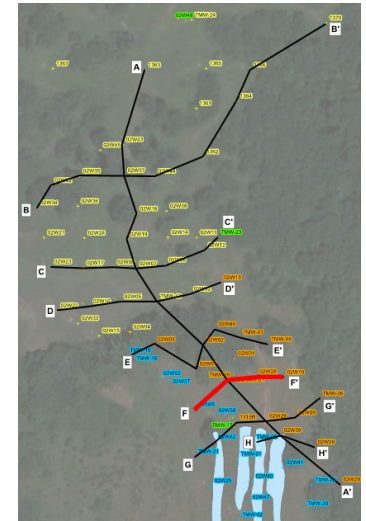
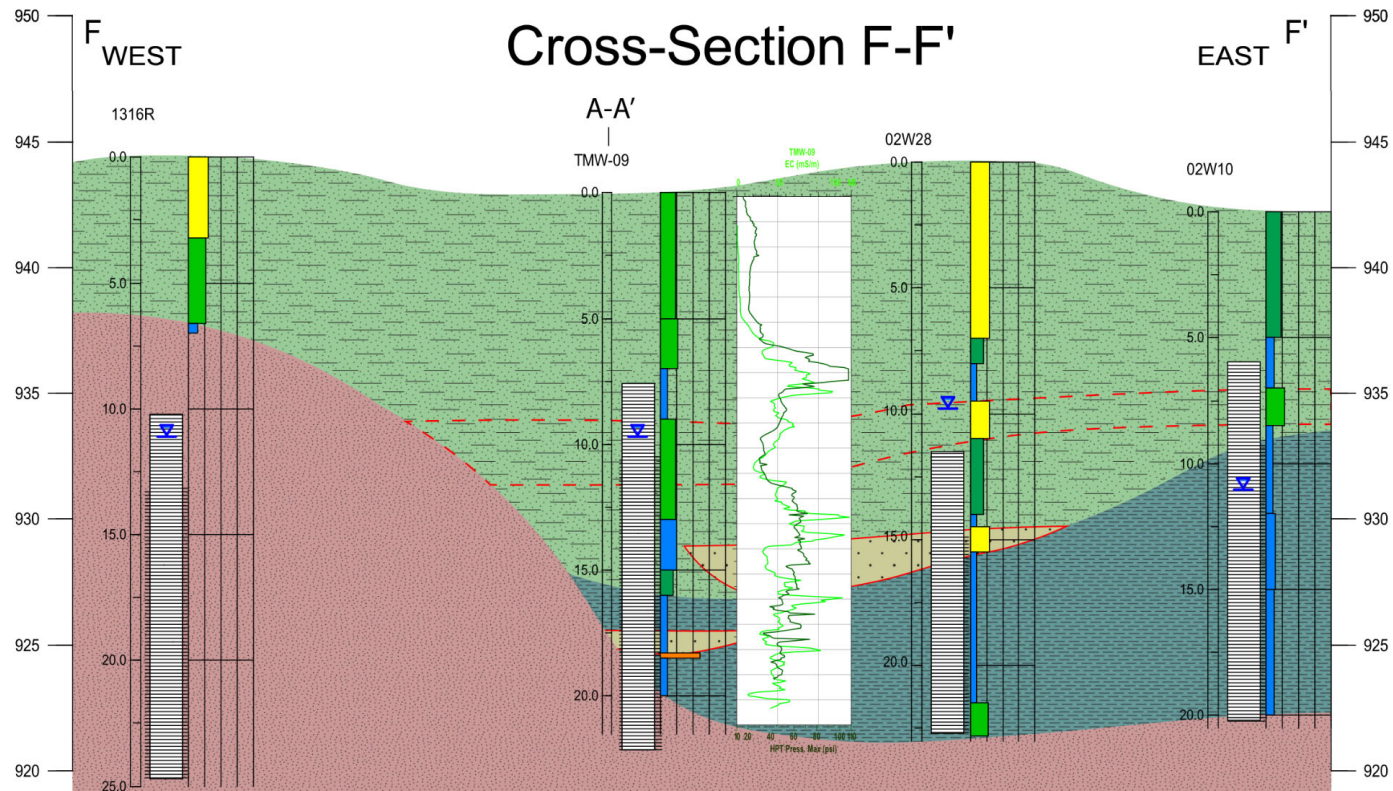




# Revised Conceptual Site Model

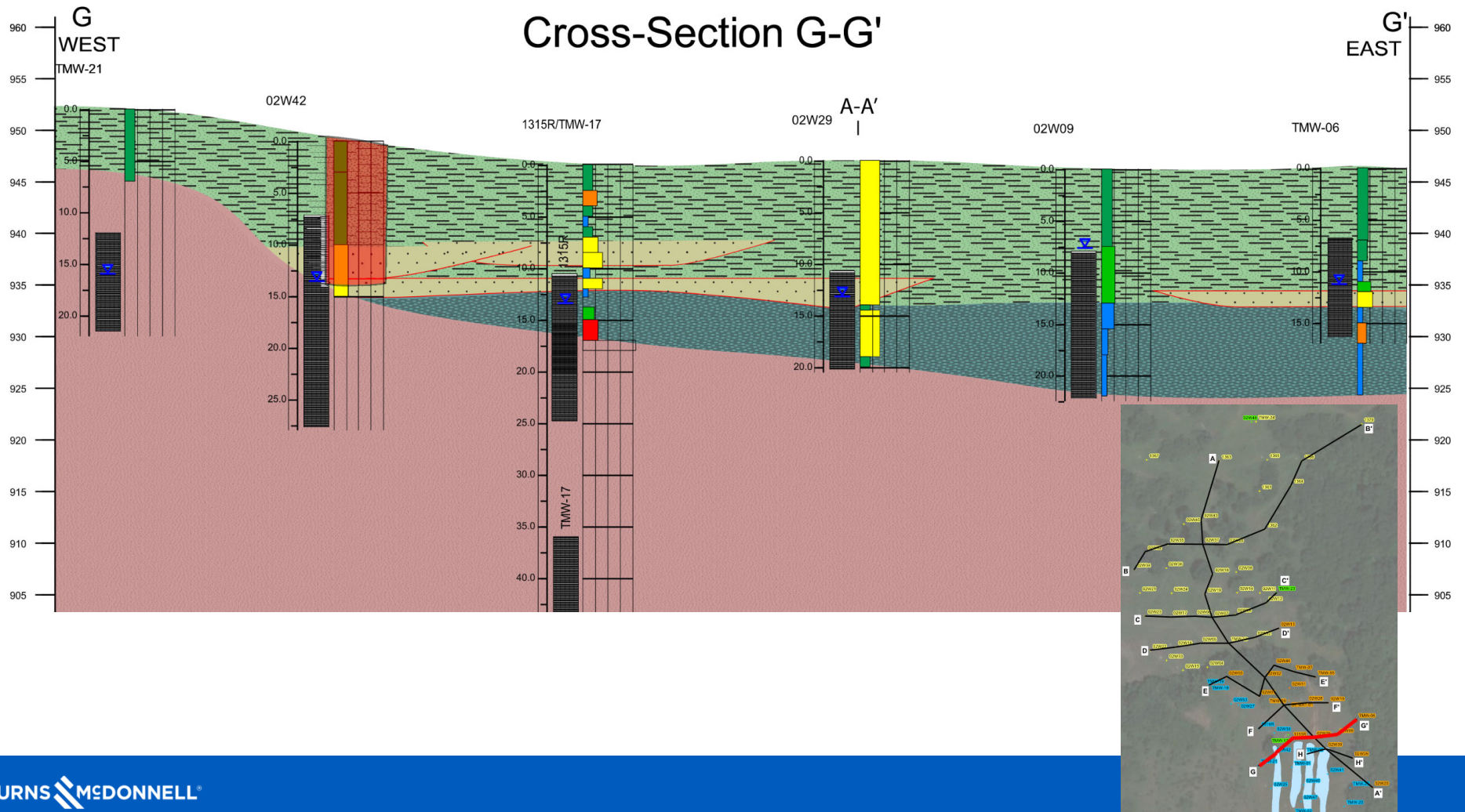


# Revised Conceptual Site Model



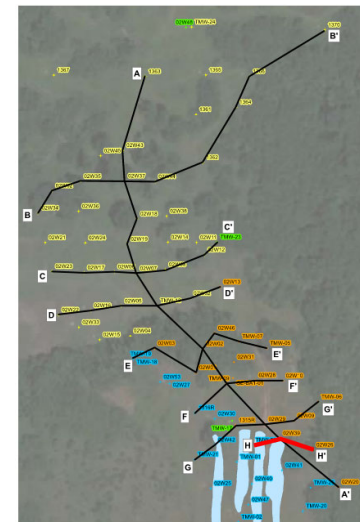
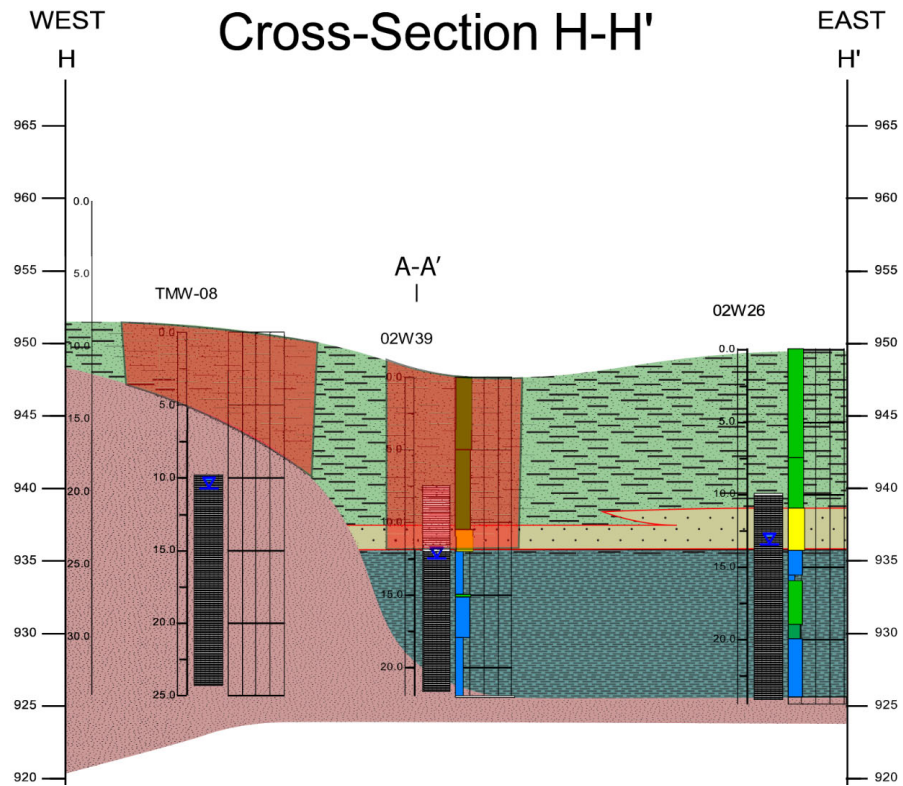


# Revised Conceptual Site Model

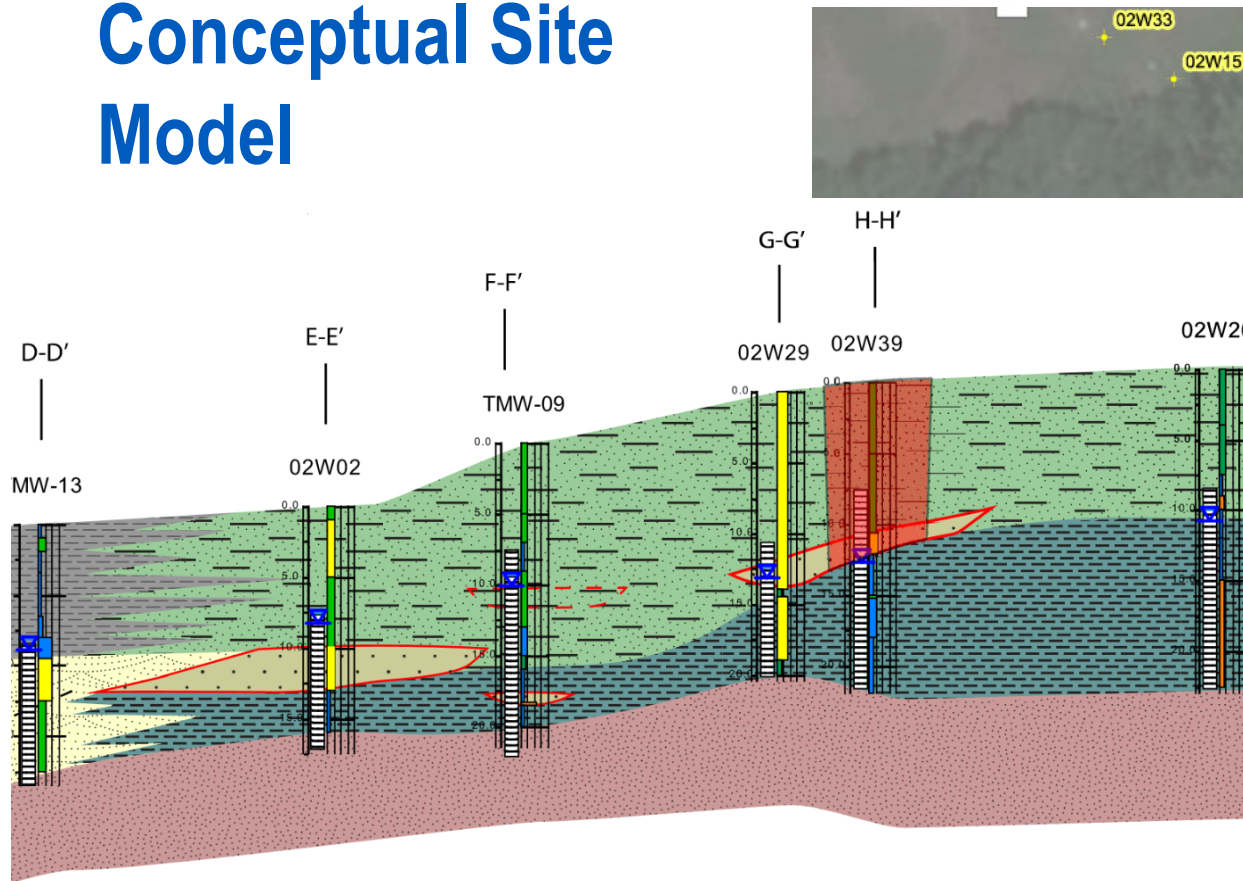




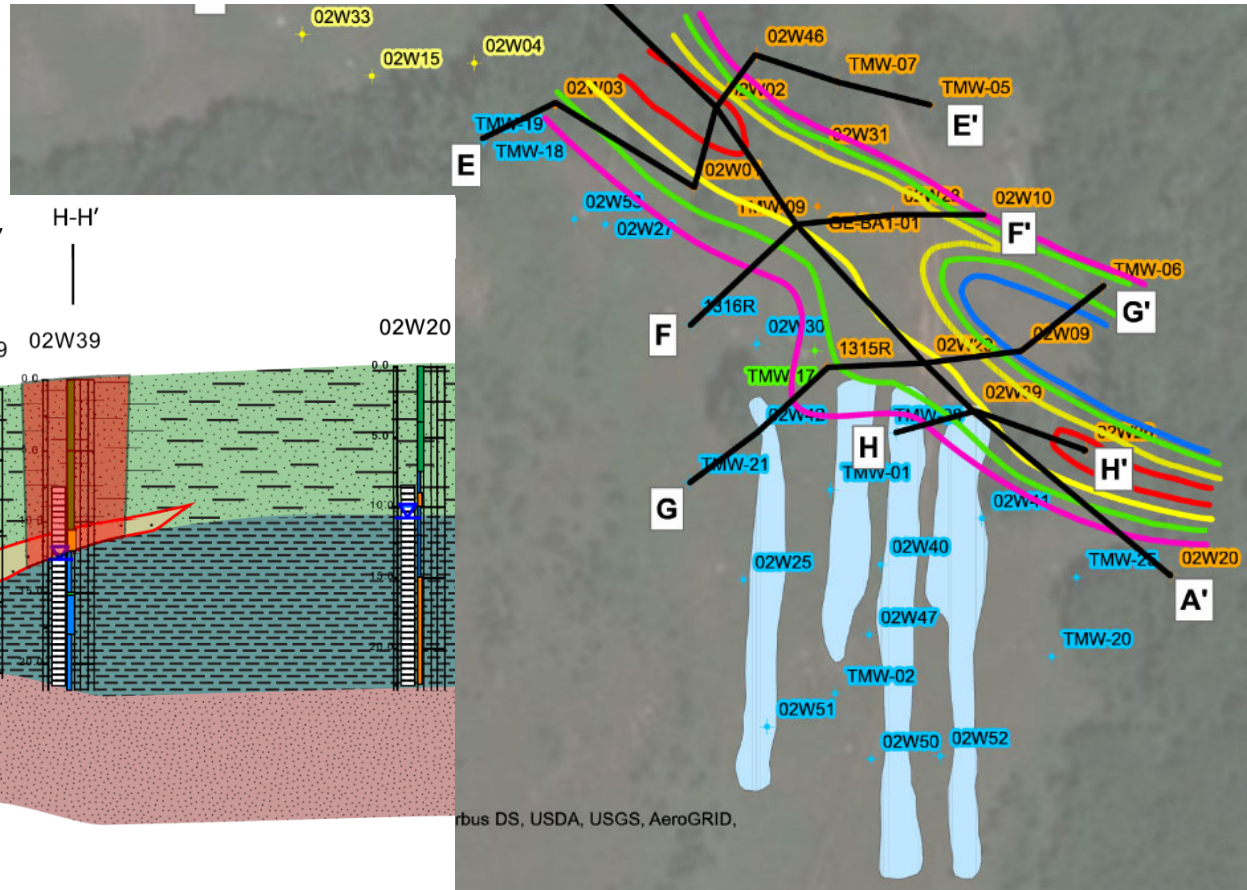
# Revised Conceptual Site Model



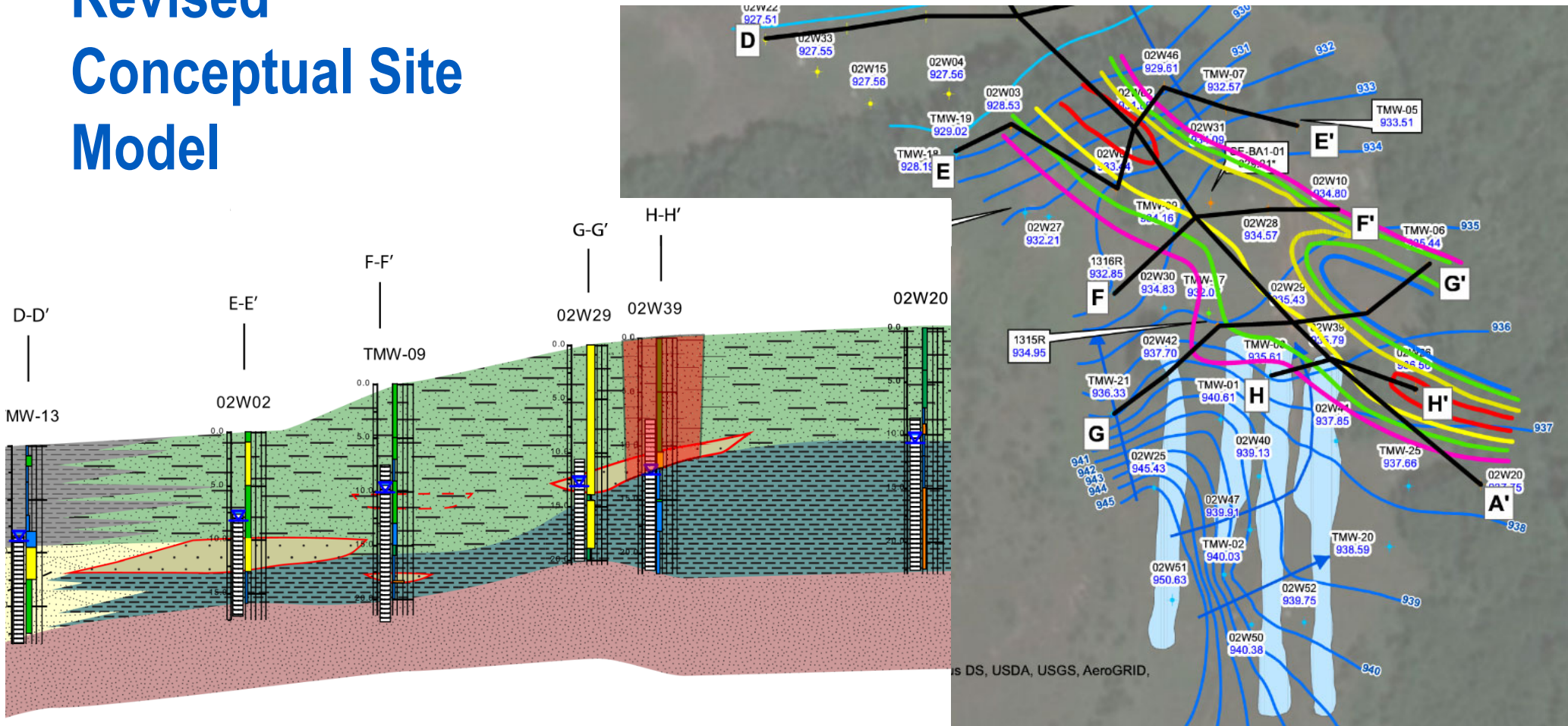
# Revised Conceptual Site Model



Sand Channel Isopach (0 – 3 ft thickness)

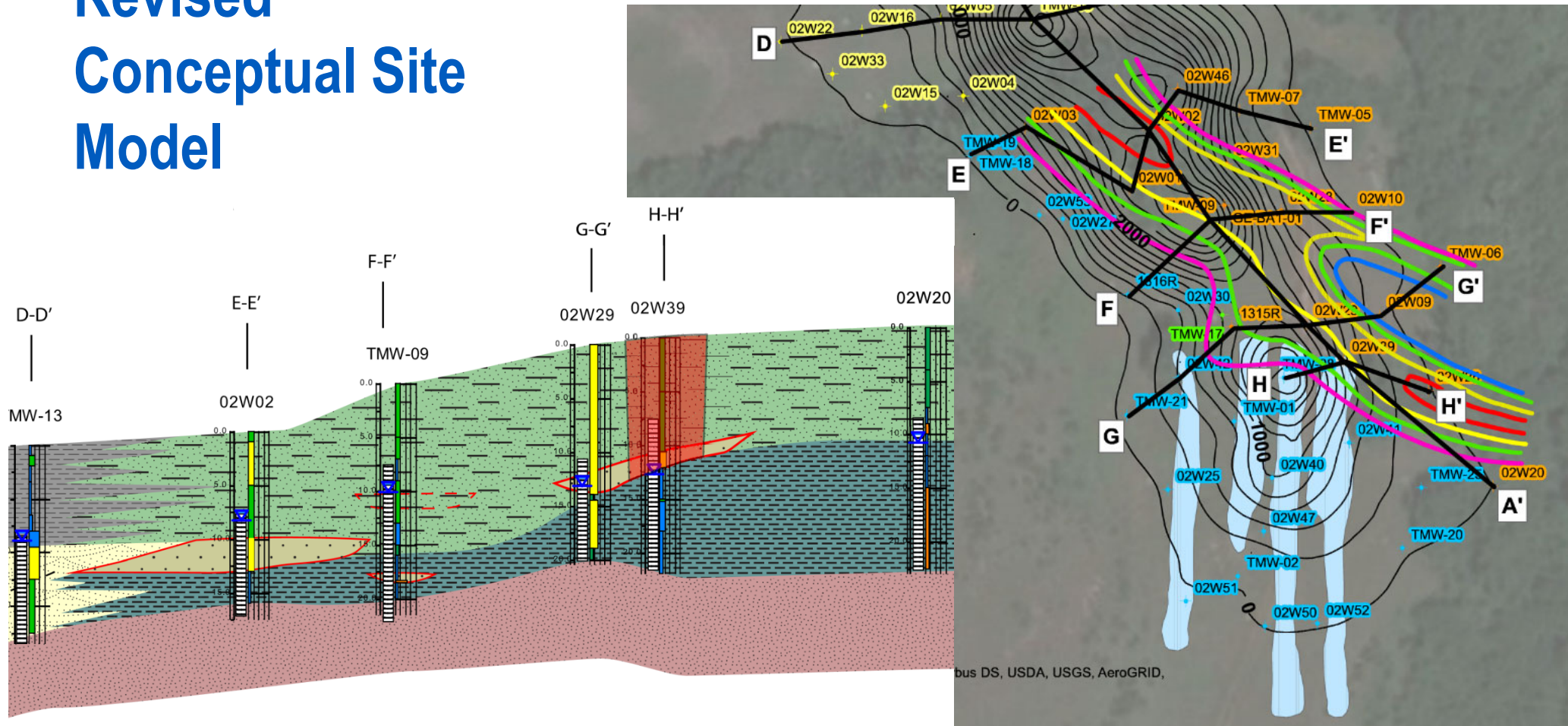


# Revised Conceptual Site Model

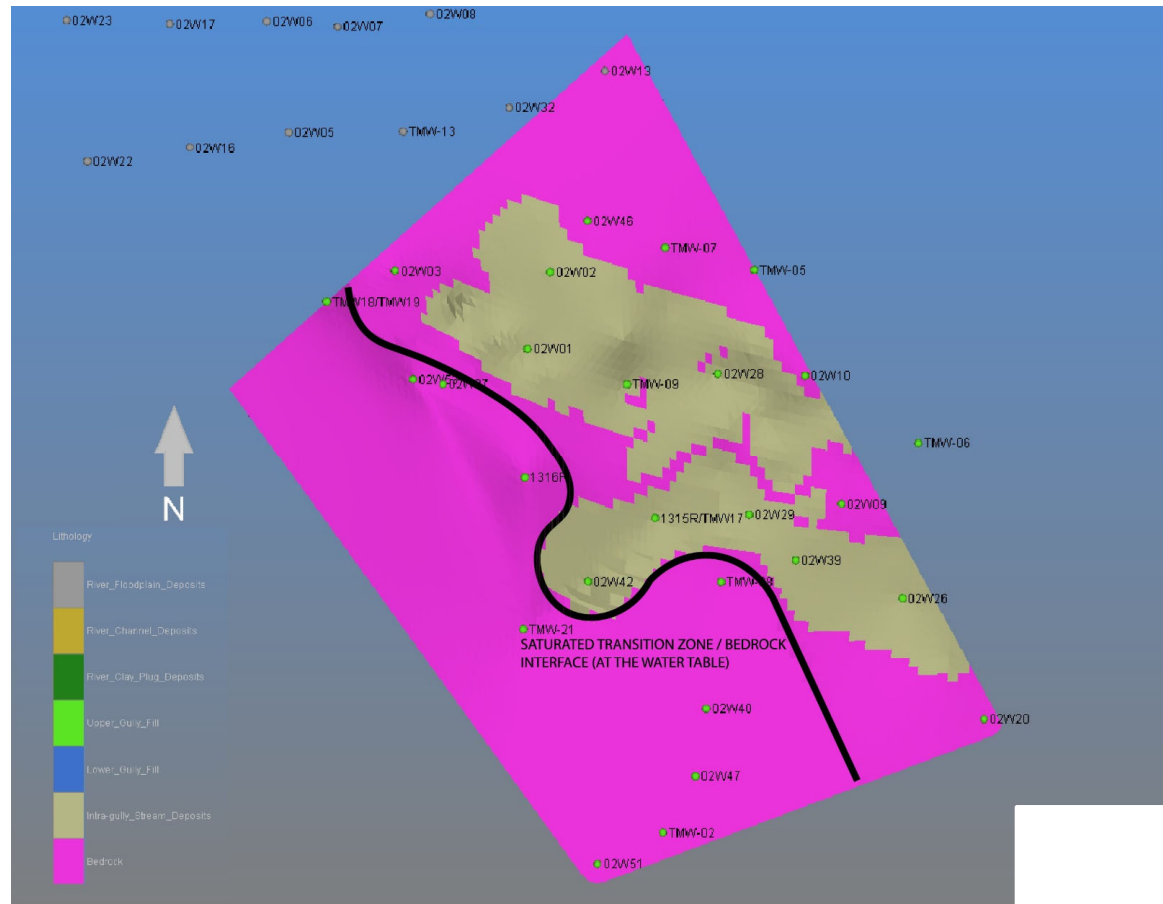




# Revised Conceptual Site Model



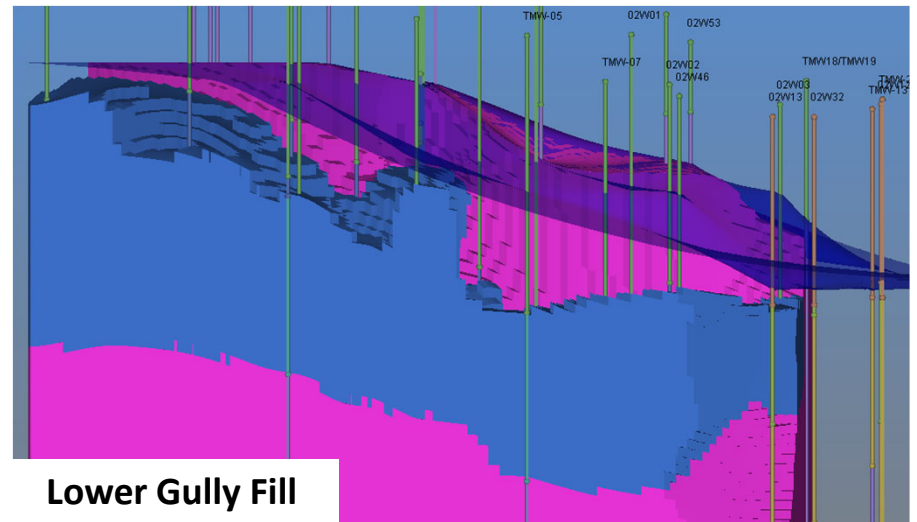
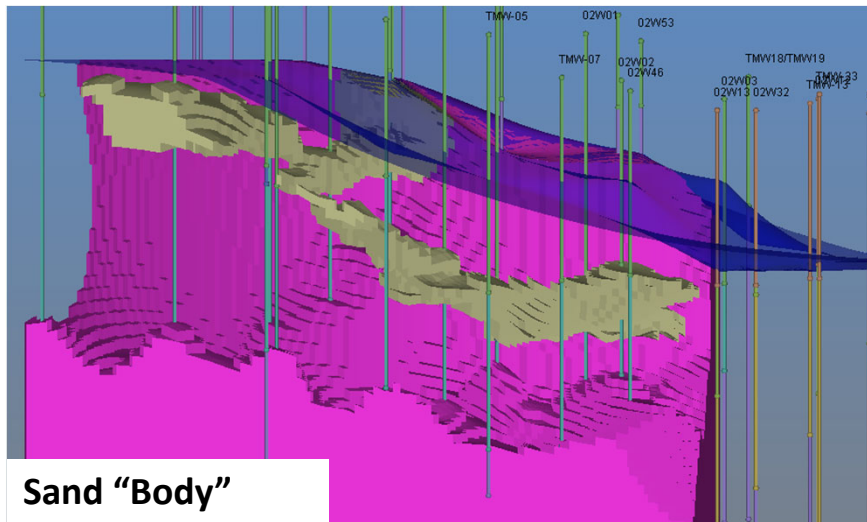
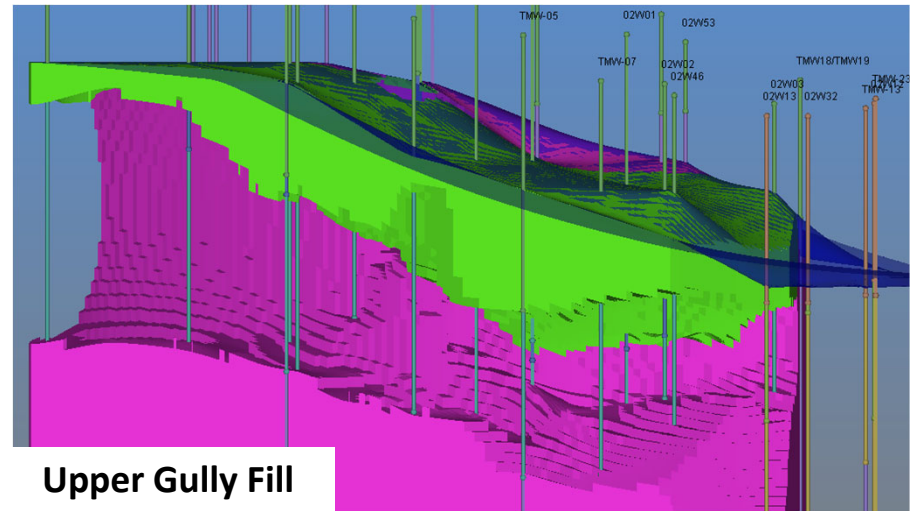
# Revised Conceptual Site Model



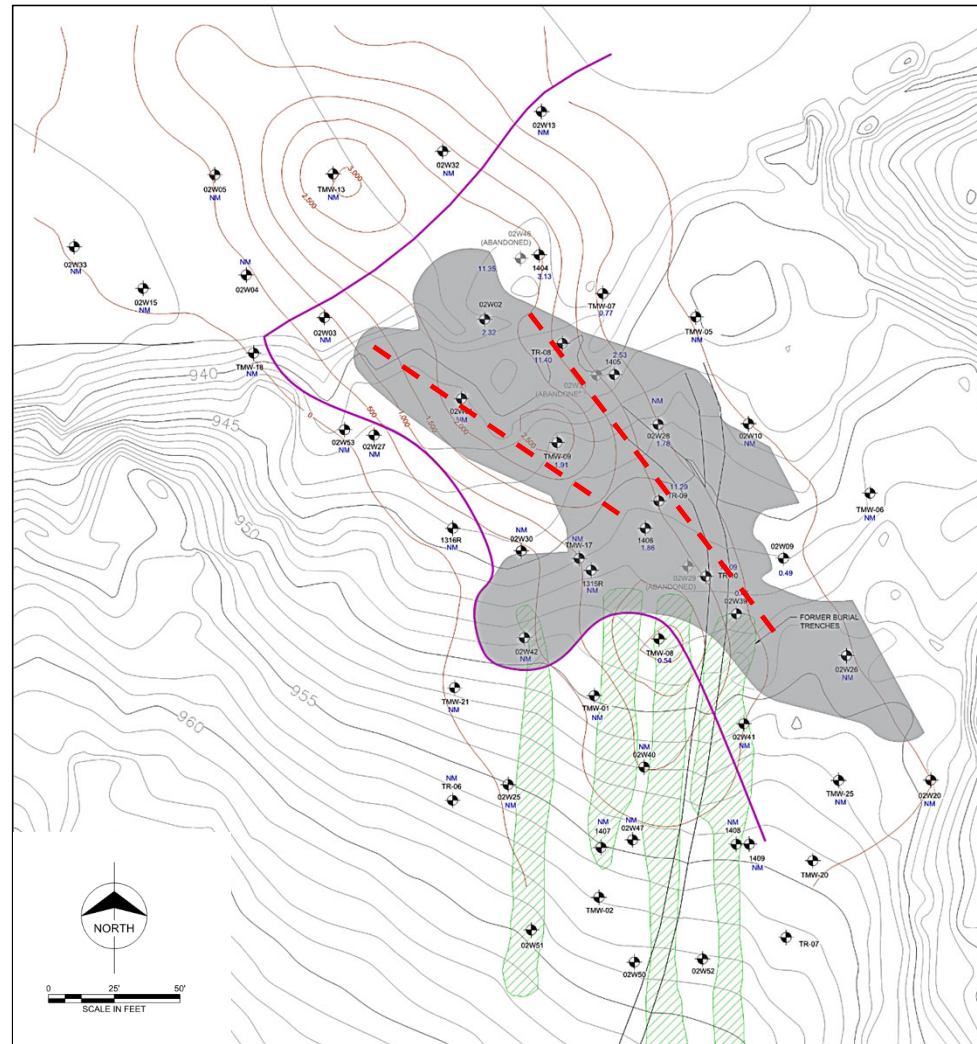




# Revised Conceptual Site Model



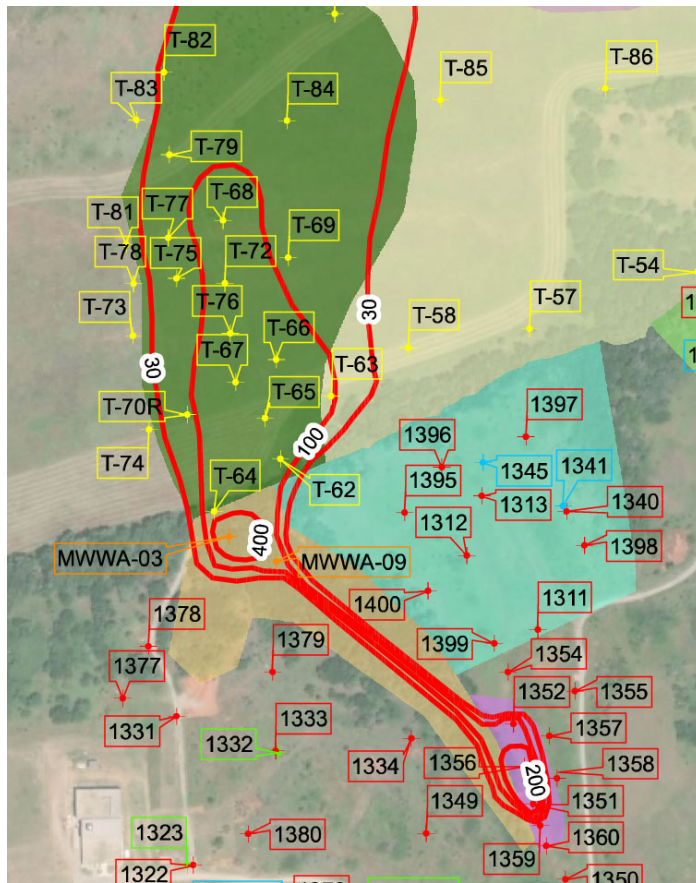
# Remediation Design



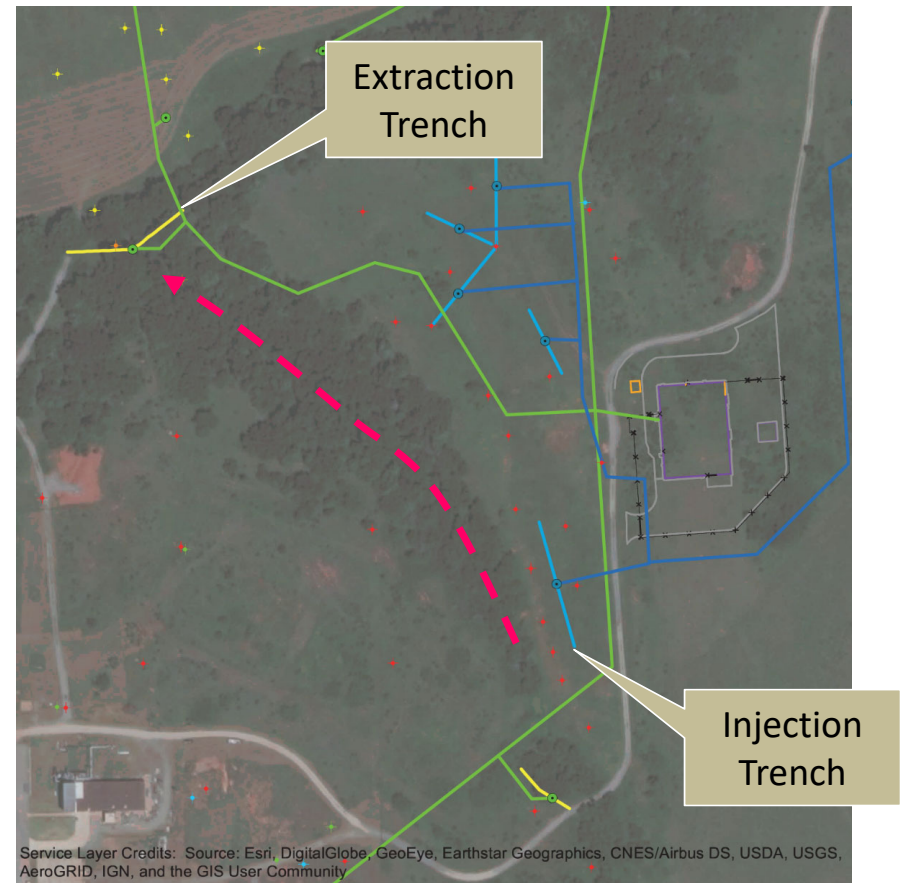
# **1206 DRAINAGE**



# Nature & Extent



Uranium Concentrations in Groundwater ( $\mu\text{g/L}$ )



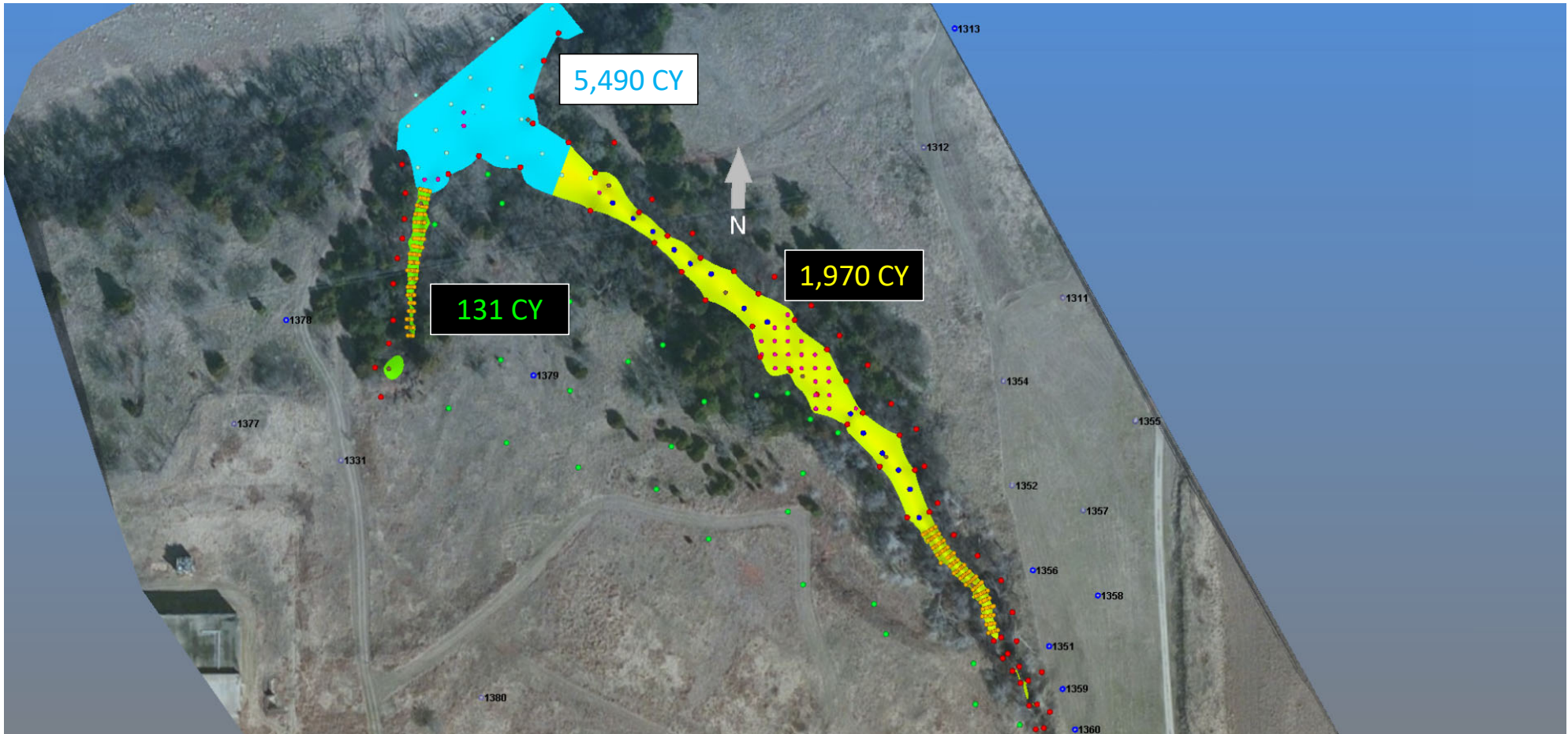
Conceptual Remediation Design

# Impacted Sediment



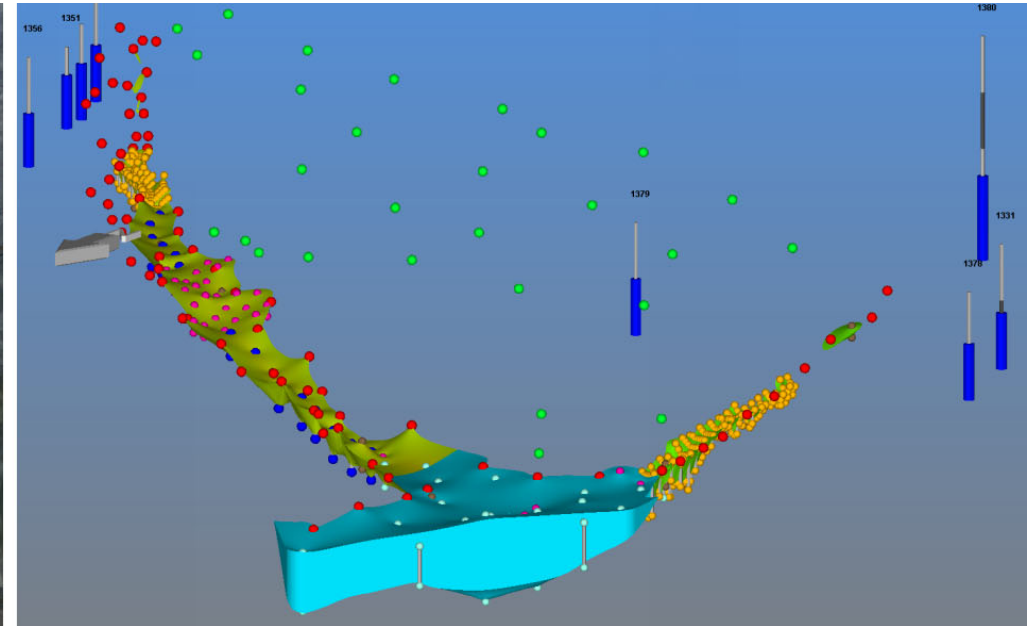
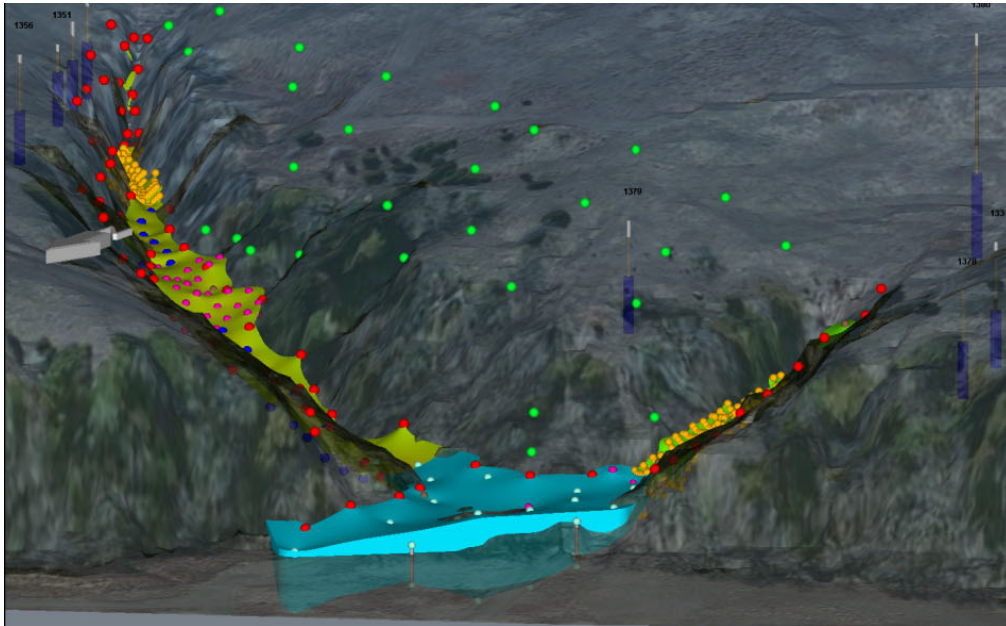


# Sediment Extent and Volume

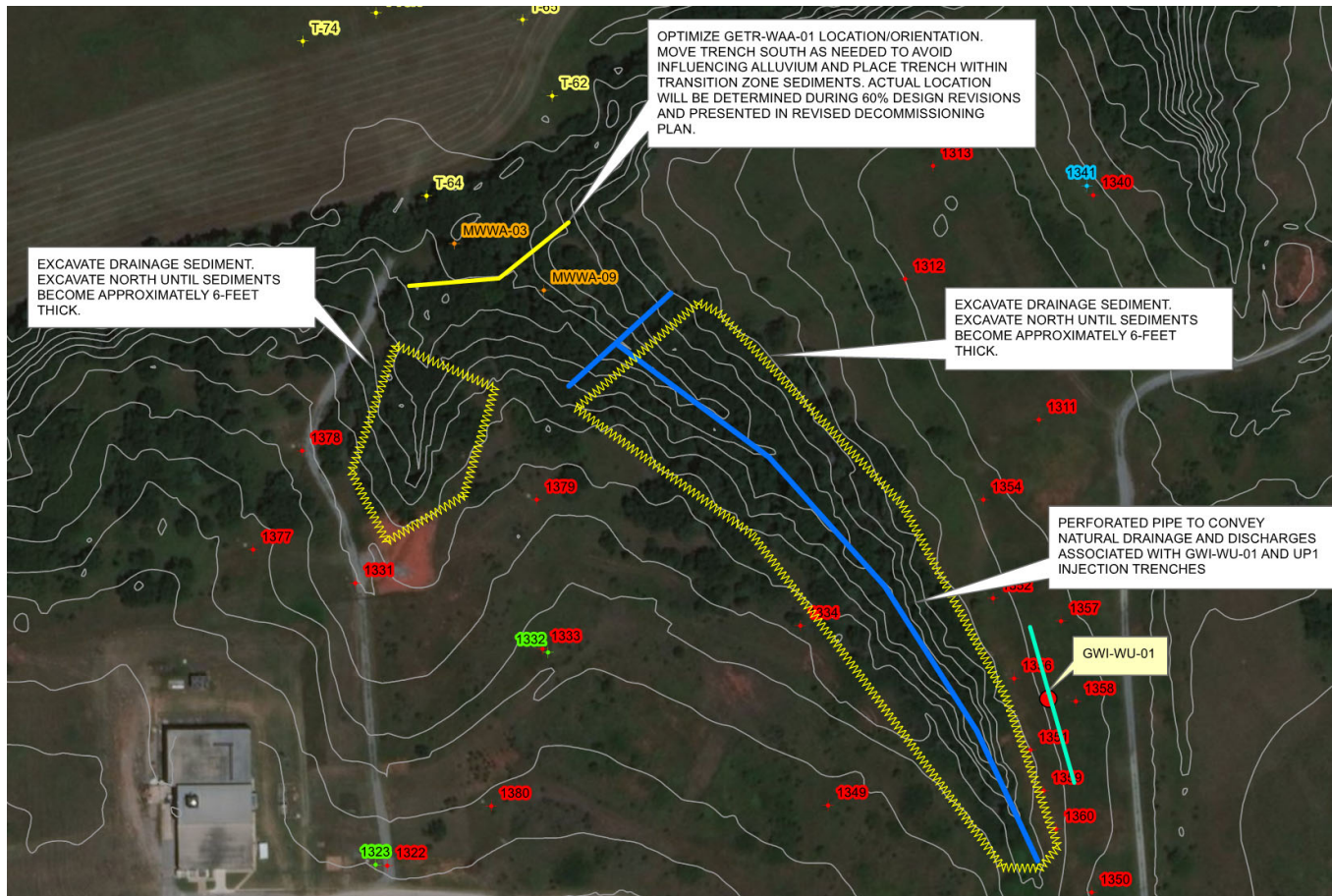


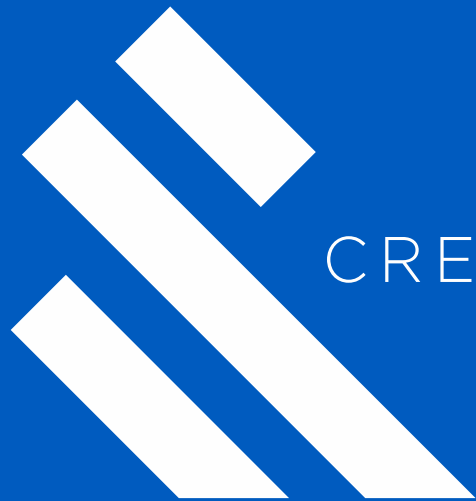


# Sediment Extent and Volume



# Remediation Design





CREATE AMAZING.