

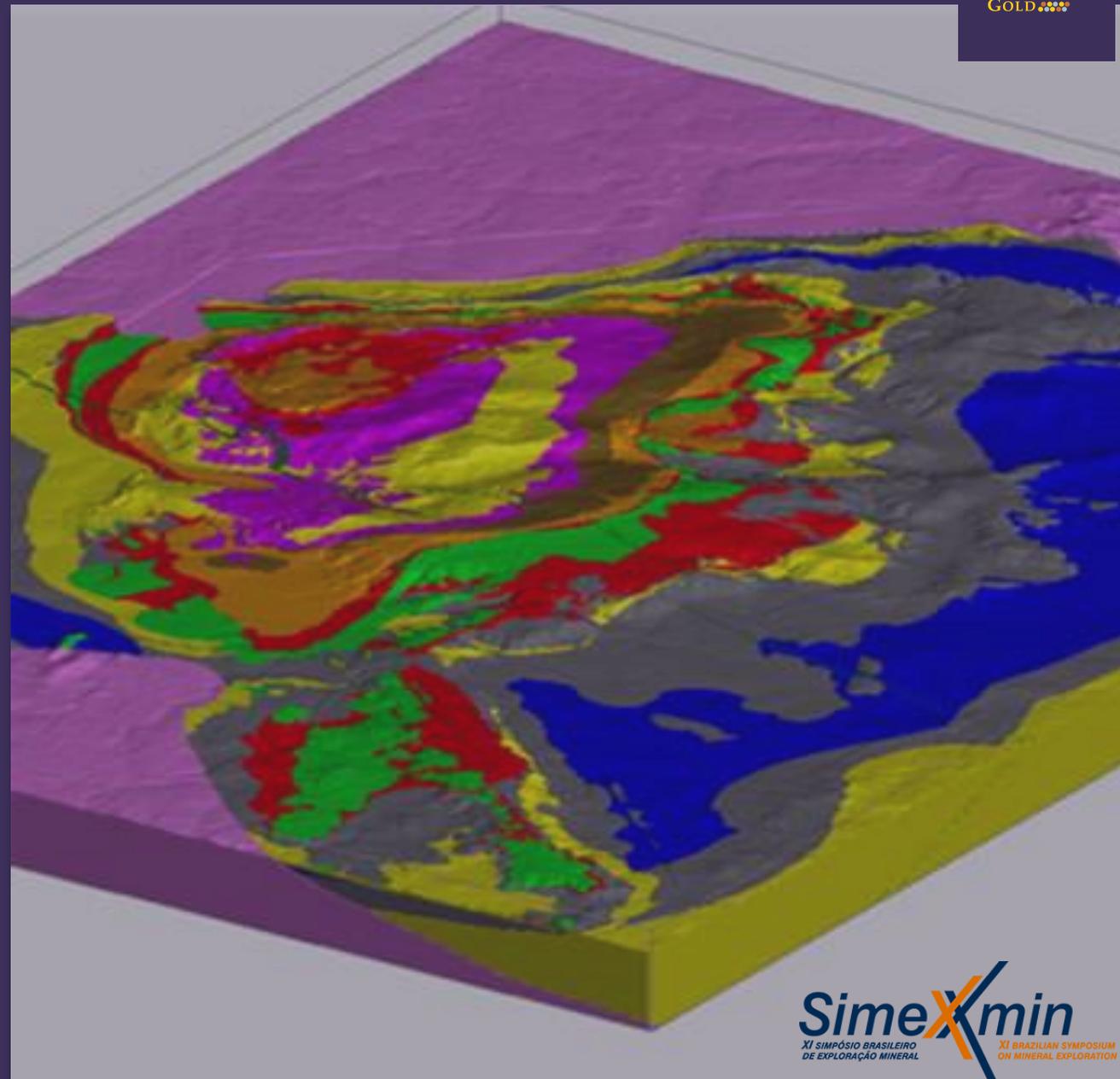


PROJETO

# CASTELO DE SONHOS

Inteligência Artificial aplicada ao desenvolvimento de modelo litogeoquímico do depósito paleoplacer aurífero de Castelo de Sonhos

Ouro Preto  
MAIO 2024



# Localização

Zona rural do distrito de Castelo dos Sonhos, sudoeste do Pará, município de Altamira.



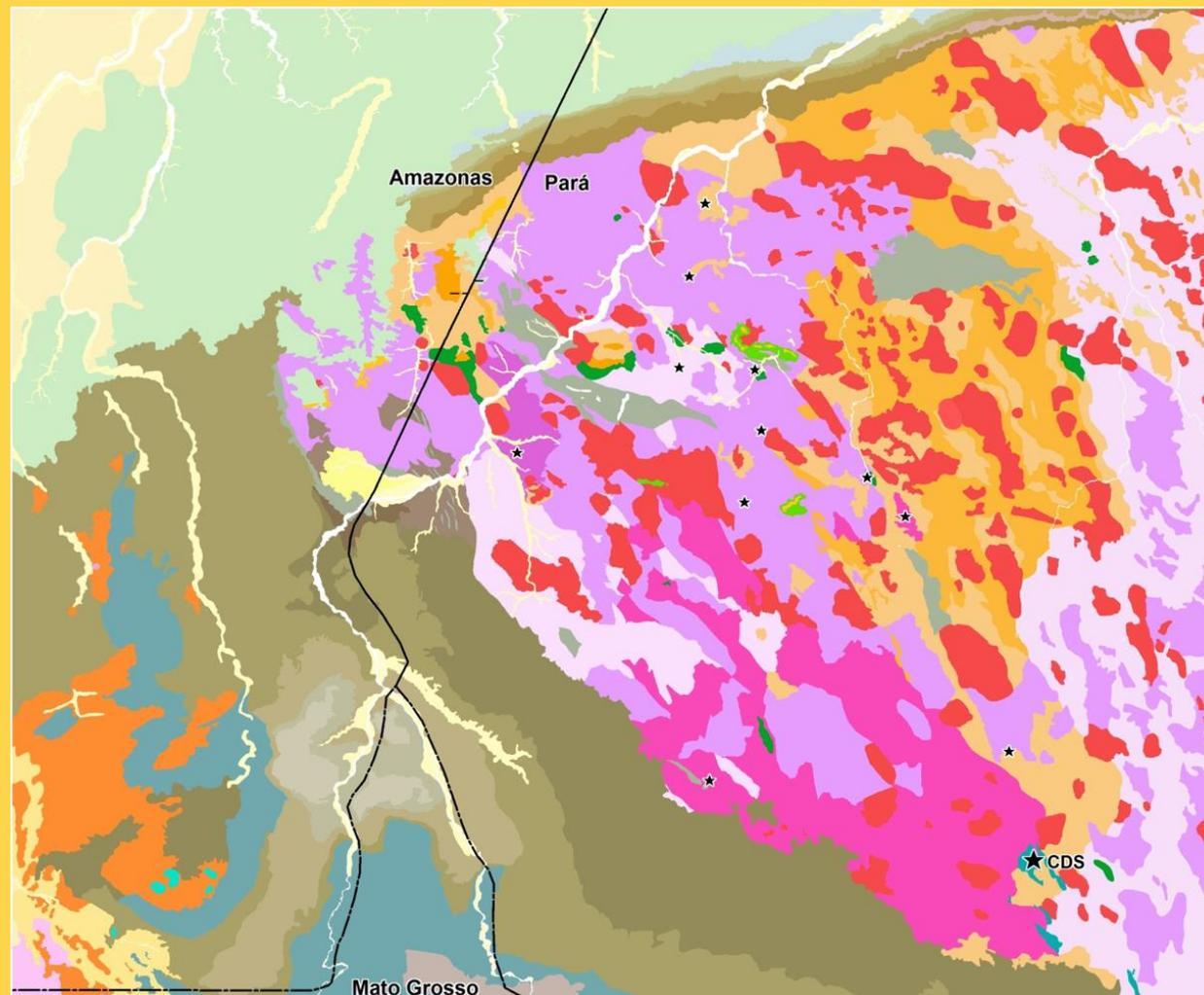
# ●●● Geologia Regional

Província Mineral do  
Tapajós



# ●●● Geologia Regional

Único depósito aurífero  
*paleoplacer* em toda a Província  
do Tapajós



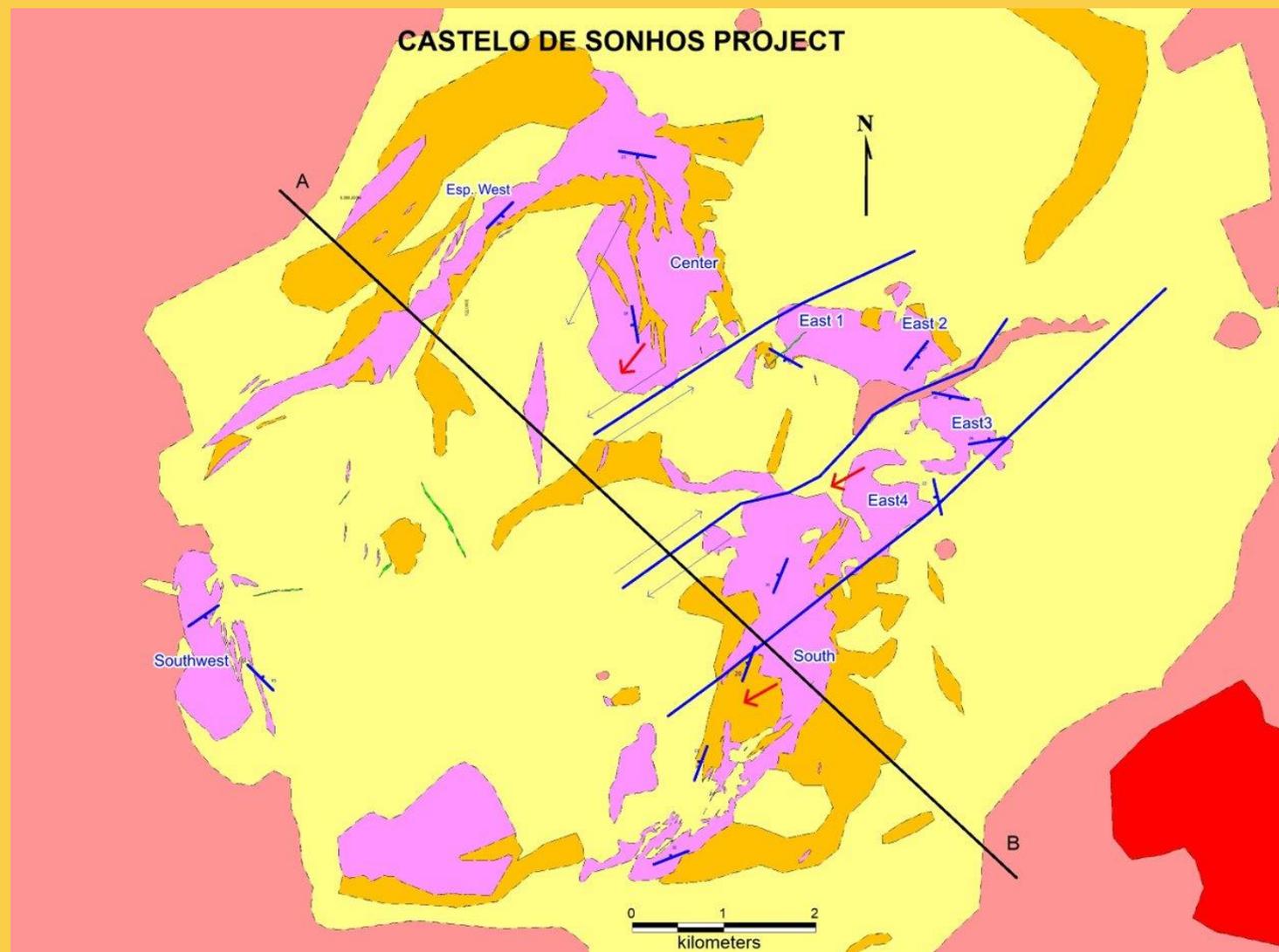
# ●●● Geologia Local

Paleocorrente

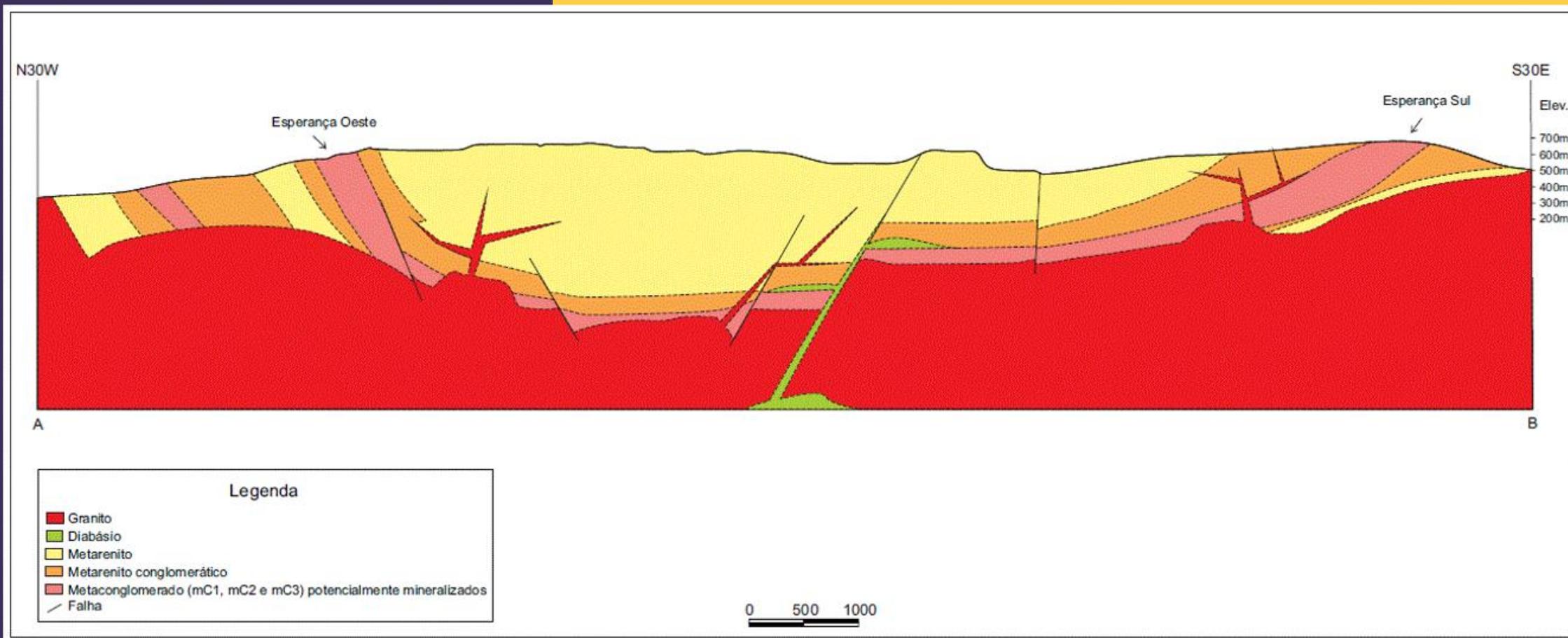
Sondagem:

DD = 25.484,59m

RC = 42.023,50m



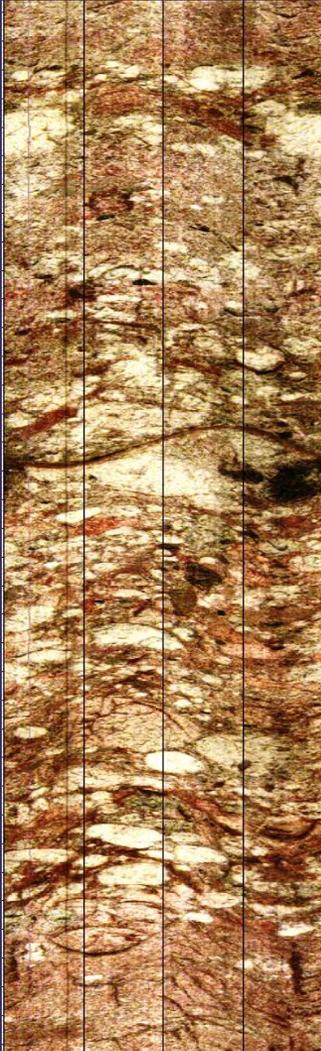
# Geologia Local





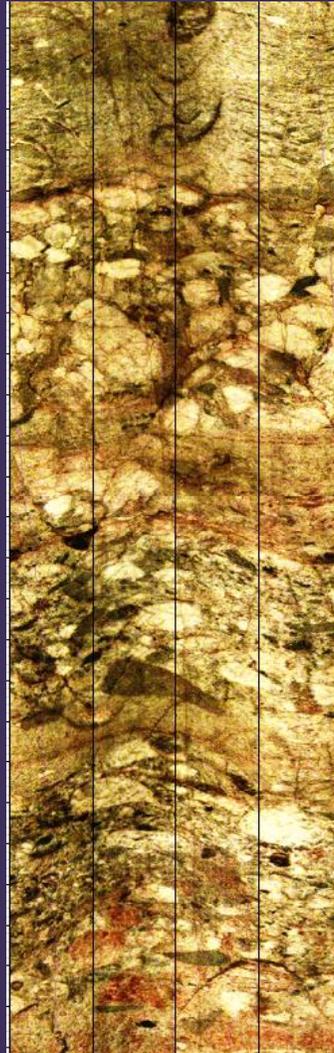
# Televisonamento Óptico (OTV)

RC-157

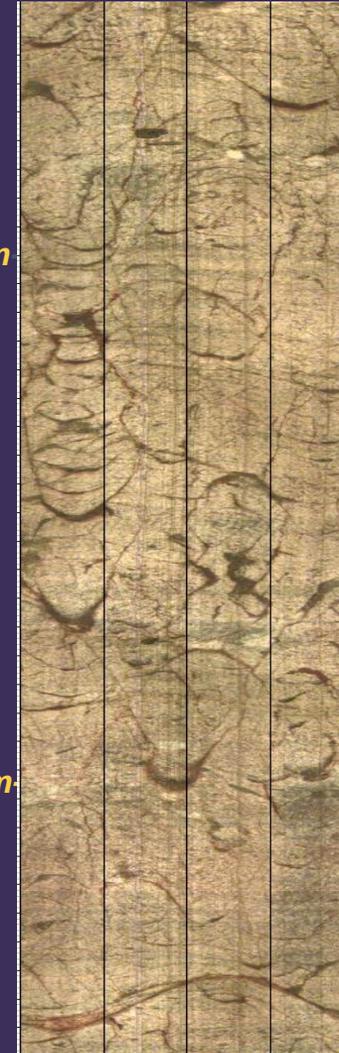


Conglomerate

RC-156



RC-173



Sandstone

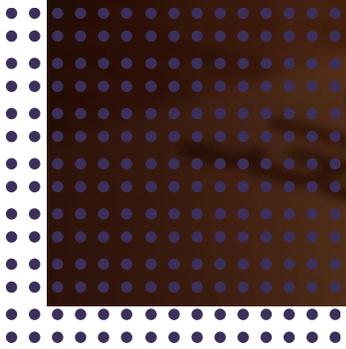
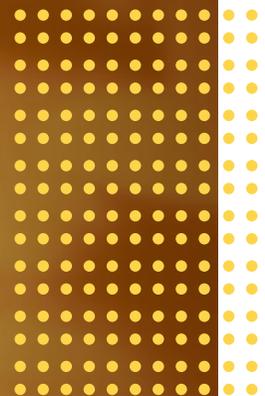
75m

2m @ 8.6g/t

77m



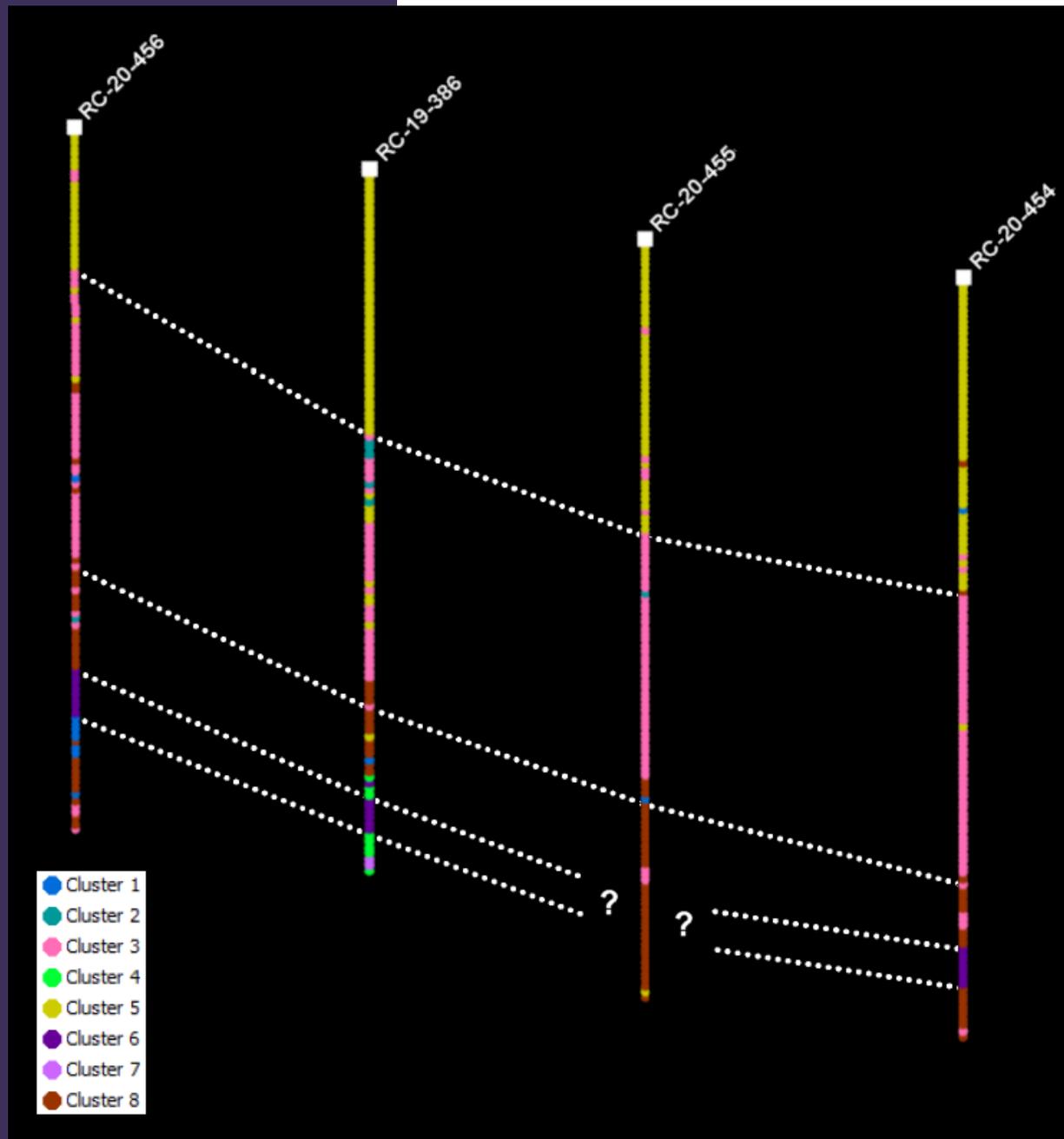
●●●  
**Inteligência  
Artificial**





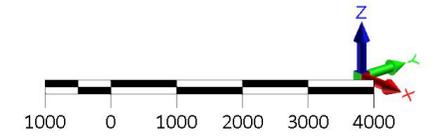
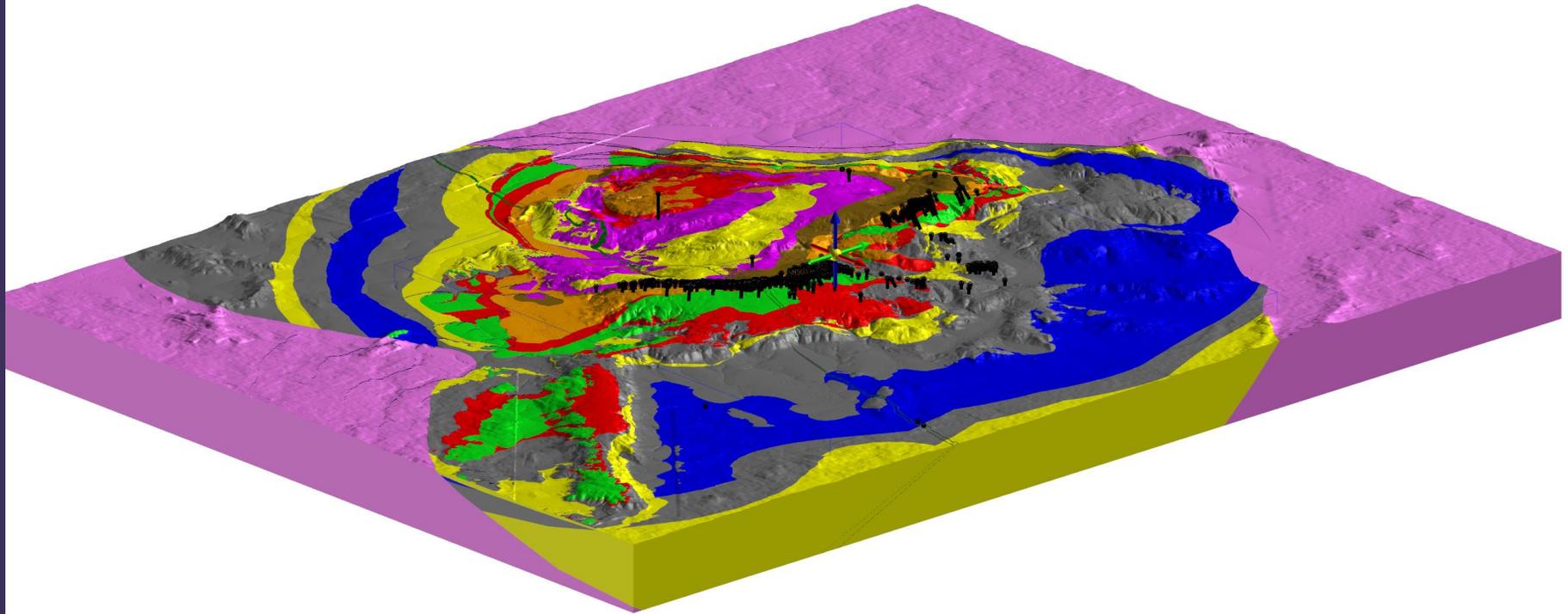
# Clusters

- 4ICP-MS (48 elem)
- Clusterização





# Modelo Litogeoquímico



# Seção



LITHO-GEOCHEMICAL UNITS MODELED FROM MACHINE-LEARNING CLUSTER ANALYSIS

GOLD ASSAYS

Sediments differentiated by Aluminum

Ferrous sediments

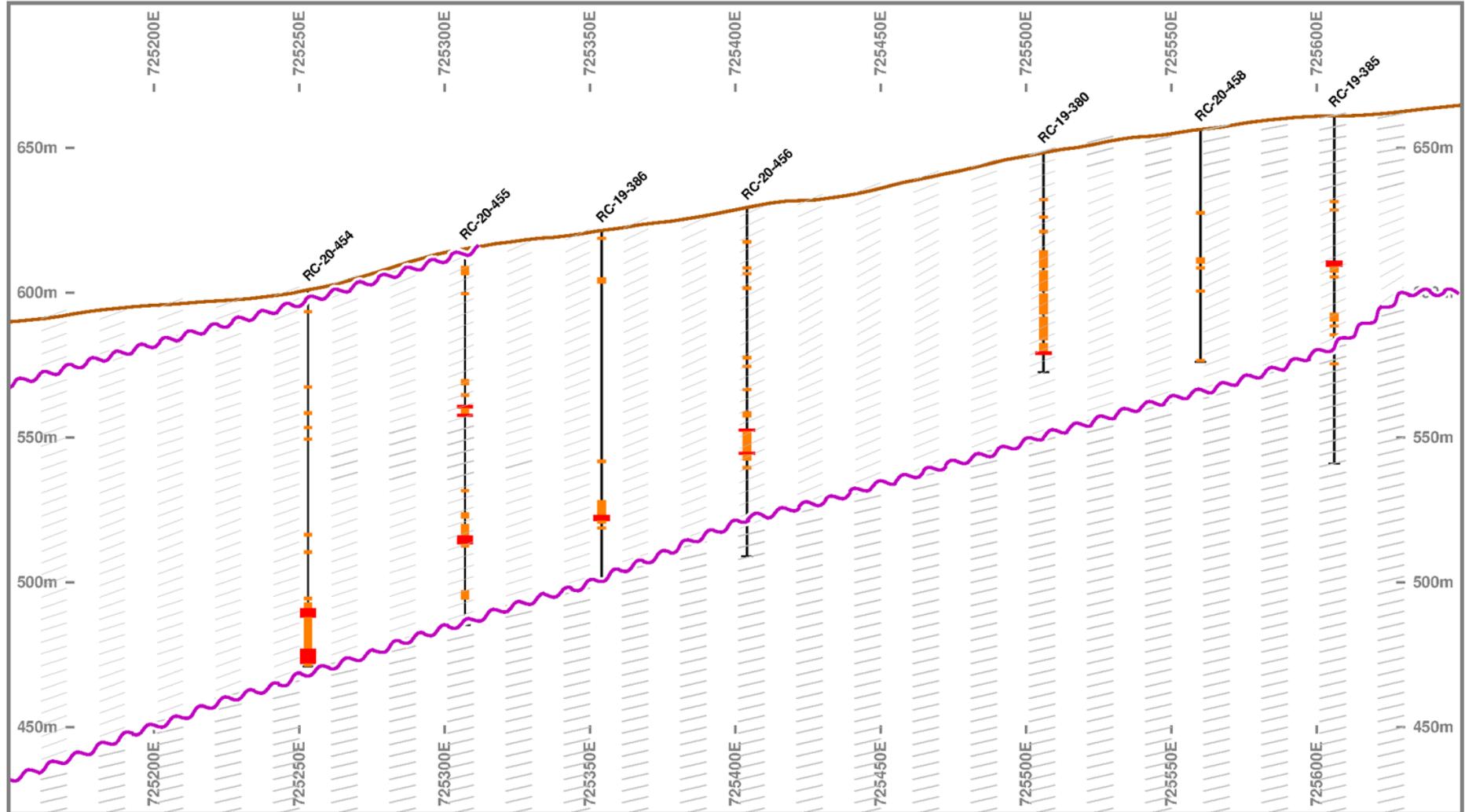
Sediments differentiated by Potassium and Thorium

Non-sediments

0.1 – 1 g/t  
> 1 g/t

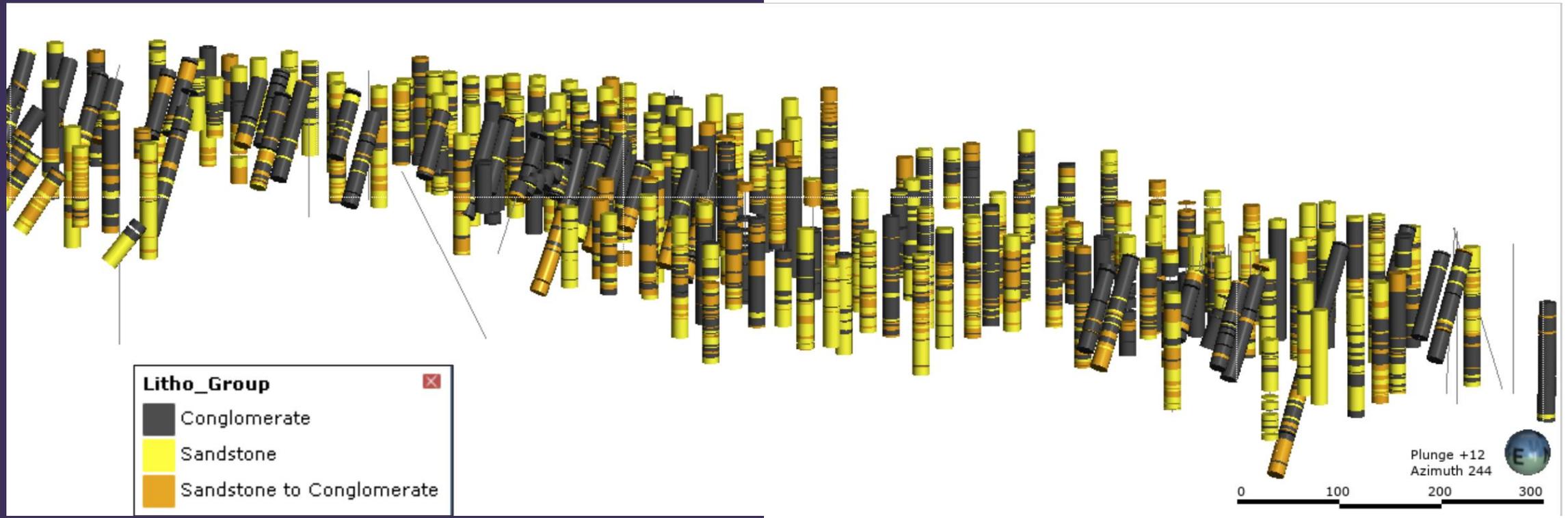


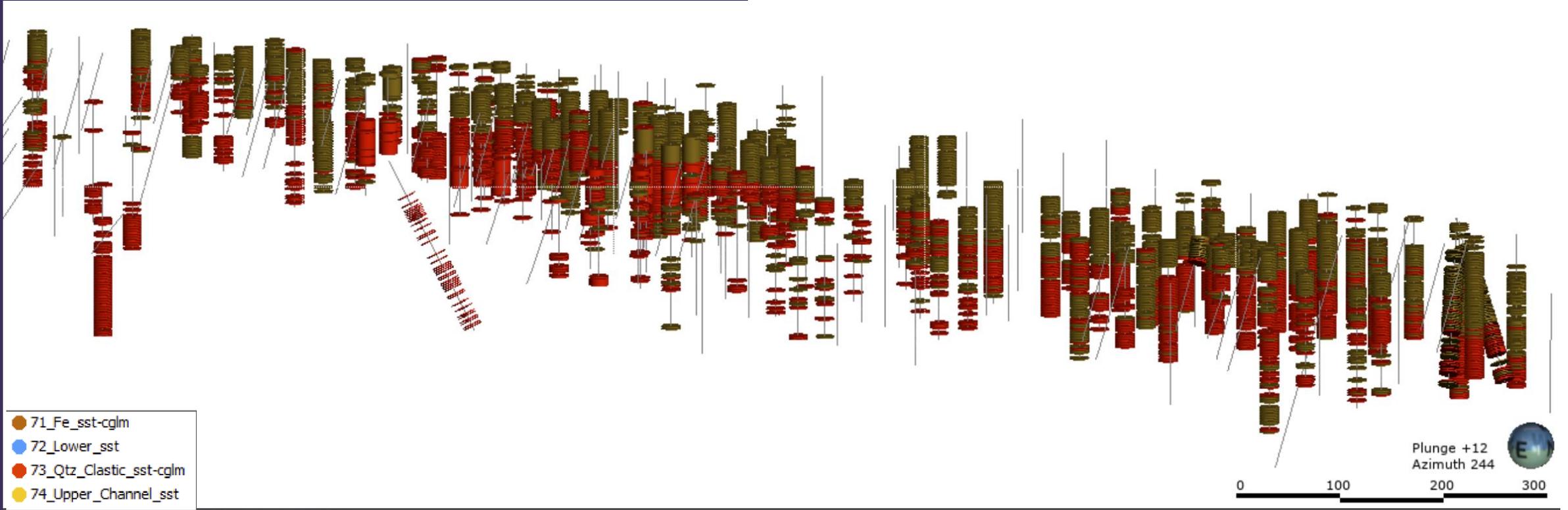
A – A'





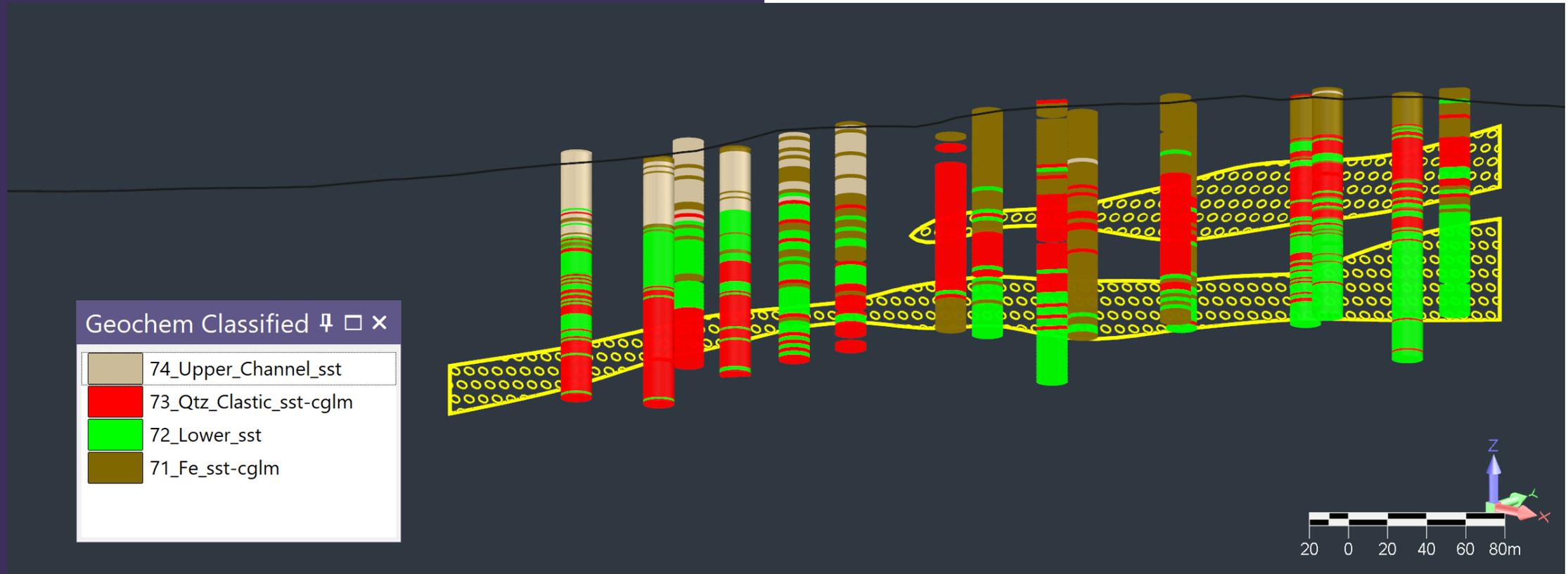
# ●●● Litologia





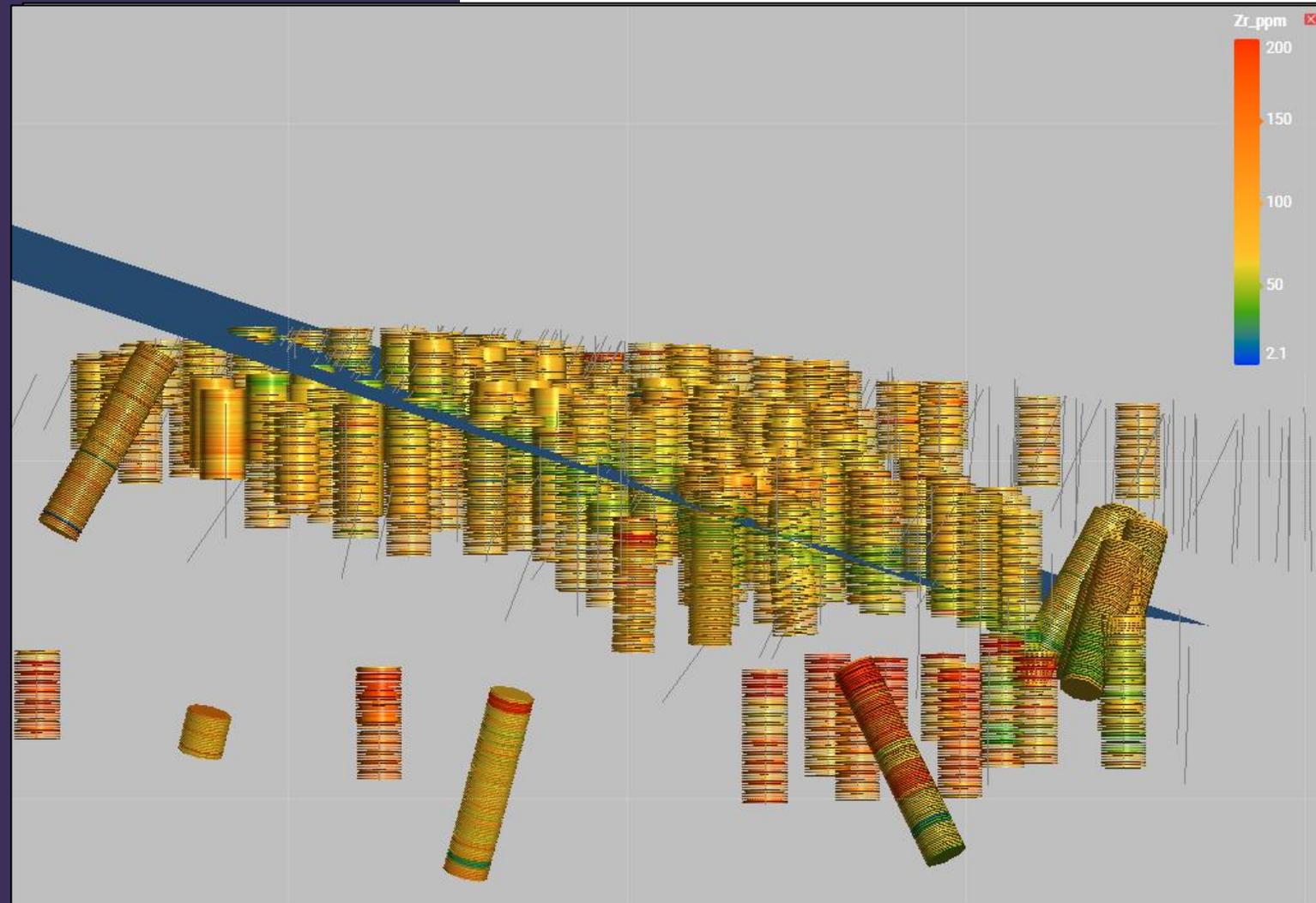


# Modelo Litogeoquímico





# Horizonte Marcador



OBRIGADA!

TRISTAR  
GOLD 

Contato: [fbretas@tristargold.com](mailto:fbretas@tristargold.com)