

TAHAROA IRONSANDS LTD

The Geological model of Taharoa ironsands mine

30th of Sept 2026



Summary

1. The Geological model for Taharoa ironsands mine was created based of multiple campaigns of exploration drillings through the mine life; the last campaign was completed in 2023.
2. The geological model is updated regularly by external consultants.
3. On-site mining engineers utilize the geological model to produce the mine plans.
4. The different geological units of Taharoa are showed in the next slide,
5. The main two layers are the top Mitiwai formation (which had been mined during the last 40 Years)
6. And, the lower Te Ake Ake sand (Waiau Formation), started in 2024 at the south of Mitiwai pit.
7. The economics of the proposed mine plan of the Te Ake Ake sand was based on targeting the lower high grade ADH and ABH sands.
8. The removal of the non processable clay layers (AP and AZ) using truck and shovel operation, (no financial return)
9. Mining the AD low grade layers (<20% yield) down to RL 10 using the Dry mining units, (DMU 1, 2 &3).
10. Dredging the lower high-grade layers (>30 % yield), ADH and ABH down to the basement below RL-20. (high return)



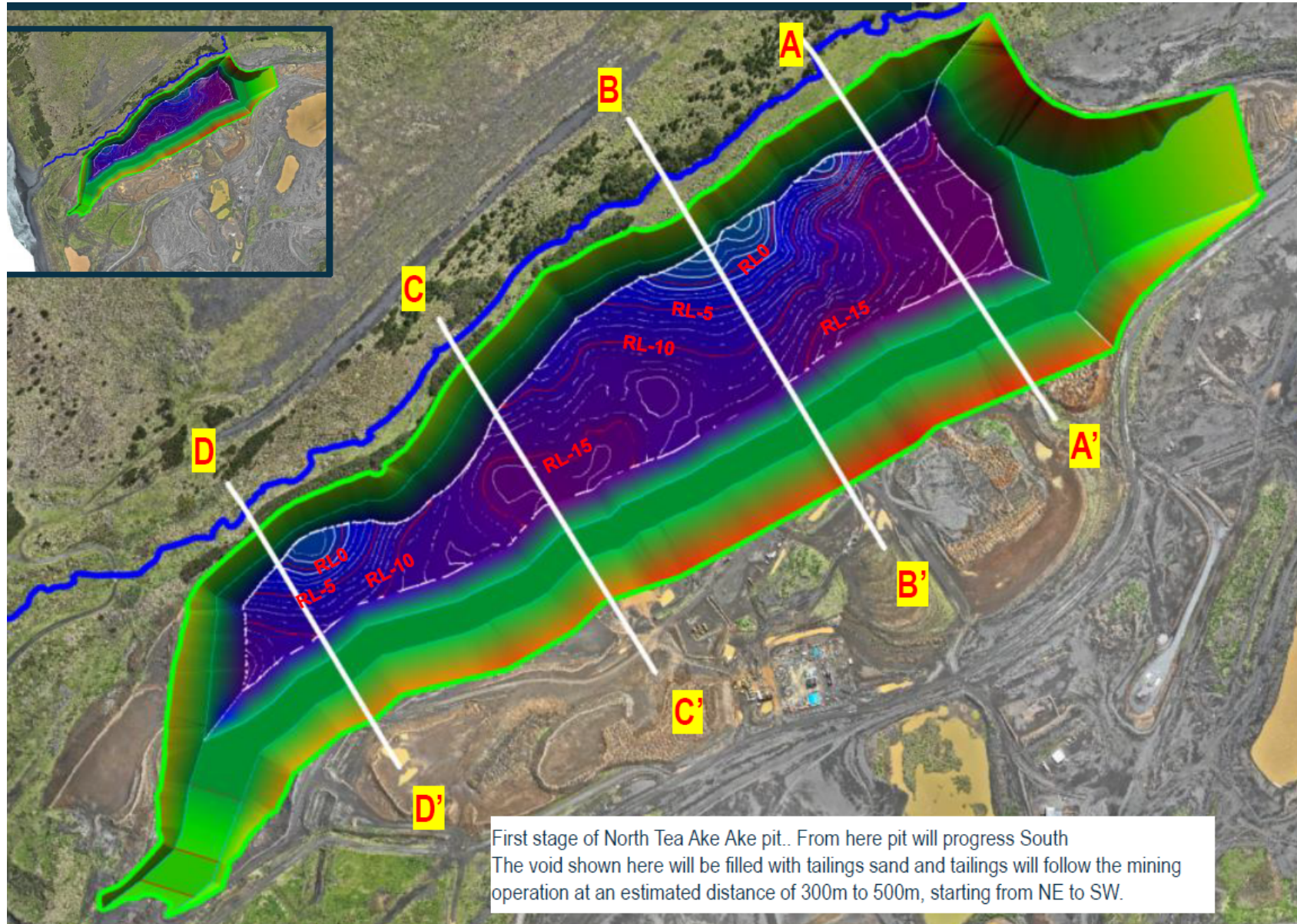
Geology of Taharoa



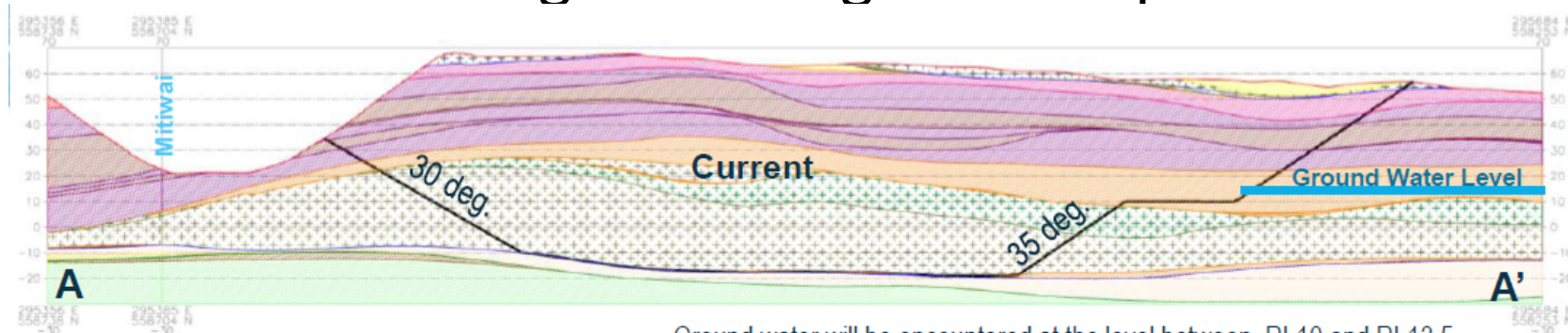
Revised Taharoa Ironsands Stratigraphic Column after 2014 drilling program

Geological Unit			Lithology		Description	PLYS		Ply Description				
Age (Ma)	Tauranga Group Subaqueous deposits	Kaihu Group Subaerial deposits	Units	Unit colour		Updated convention	Redundant convention					
Pliocene to Holocene	↑ (Upper) Tauranga Group ↓	↑ Titano-magnetite dominated facies sands ↓	Mitiwai Formation	Paparoa and Nukimiti Sand	F		Tailings and fill	F	Tailings	Tailings		
			Md		Free flowing grey to black sand	MDH MDL MOC MOB	VGCA VGCA LVGC VGCB	>30% mags <30% mags Dark grey to brown, <30% mags, <50% FeMags >30% mags				
			Mz		Localised thin layers of silt and sandy silt	MZ		Localised silt layers				
			Mt		Peat	Mt		Mud and peat, generally within MOC/MOB				
			Ma1		Clay and alluvium	Ma1						
			MI		Sloppy brown lacustrine mud	MI		Uneconomical Mitiwai Base				
			Ma		Greenish to bluish clays and silts (alluvium)	Ma	MLF					
			Me		Bluish mud and sandy mud with shell, at base of Md in paleochannel	Me						
			↑ (Lower) Tauranga Group ↓	↓	Waiau Formation	Te Ake Ake Sand	Ap		Ash and paleosol (brown to orange silt and clay)	Ap	BV CLAY	Semi continuous ash/paleosol
							Az		Silt, sandy silt and clay, brown to orange to reddish brown, as layers and lenses within Ad; forms homogeneous deposits in southern area (Clay ridge, Az1)	Az	BVGCA HBVGC BVGCB HBVGL	Low mags, high slimes
	Ad						Silty fine sand, brown, and grey, may be consolidated.	Ad	Low grade sand <30% mags			
	At						Peat,as localised lenses within Ad	At	High grade black sand >30% mags			
	Adh						fine to medium sand, some silt, black, high mags, below Ad	Adh				
	Abh						Medium to fine sand, clean, black, may contain gravel. High mags	Abh	Low grade sand <30% mags			
	Abi						Medium to fine sand, clean, brown to orange to grey-black, low mags, may contain gravel. May interfinger with Ac	Abi				
	Ac						Silty sand, silt and sand, local peat; dark brown, grey, black, low mags	Ac		Subeconomical to uneconomical Te Ake Ake Base		
	Ae						Bluish grey to grey incompetent mud, muddy sand; some shell	Ae	Silica Clay Base	Uneconomical Te Ake Ake Base		
	Au						Pumiceous and siliceous sand and silt, light brown to white to pink	Au				
	Aa		Alluvial silt and clay,competent, bluish grey, green, brown; some peat	Aa	Uneconomical Material							
	Qs		Silty quartzofeldspathic sand, yeallow to orange to green	Qs								
	Rc		Residual soils: clay and silty clay, orange to red to yellow; (weathered greywacke)	Rc								
Mesozoic	Greywacke basement		GW		Greywacke basement	GW						

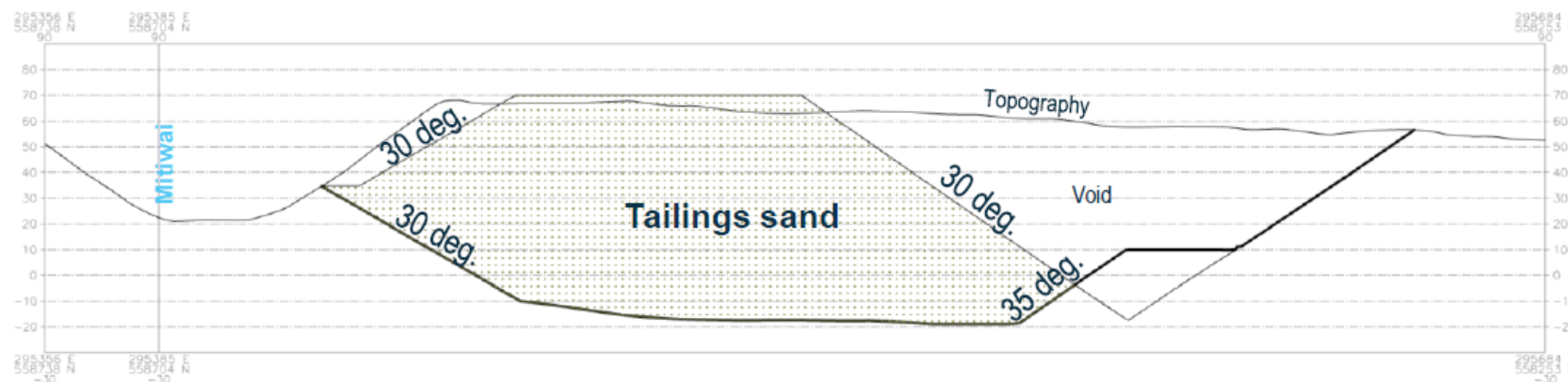
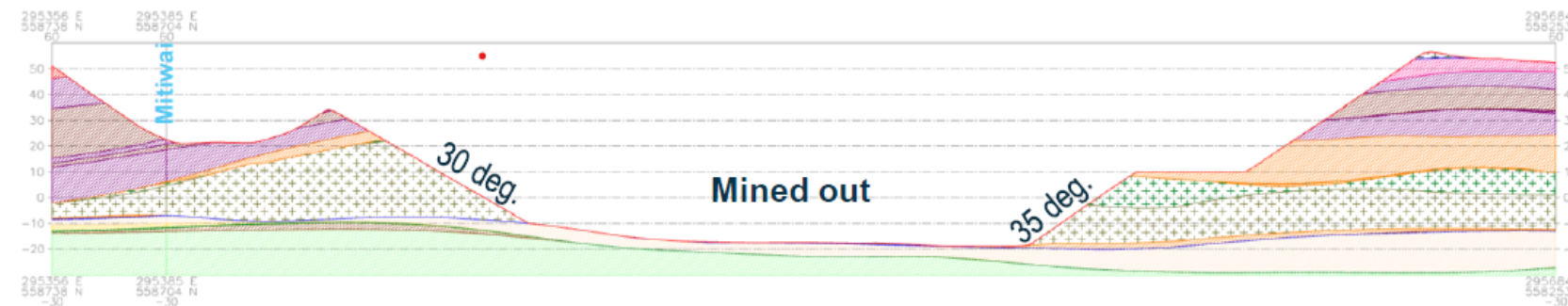
NTAA pit shell cross sections



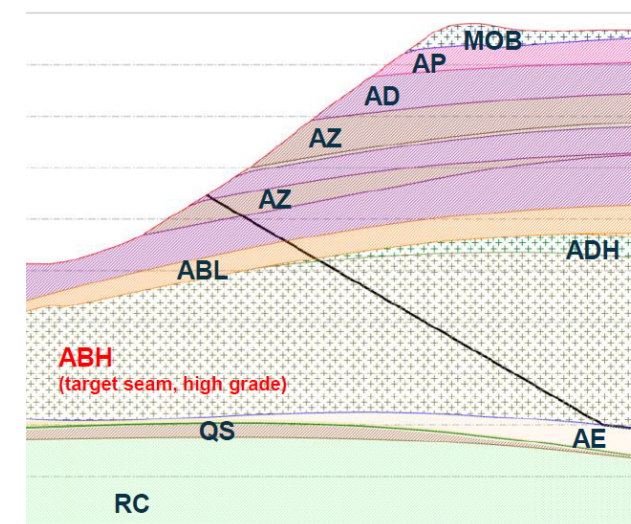
Section A-A' Mining and tailings current plan



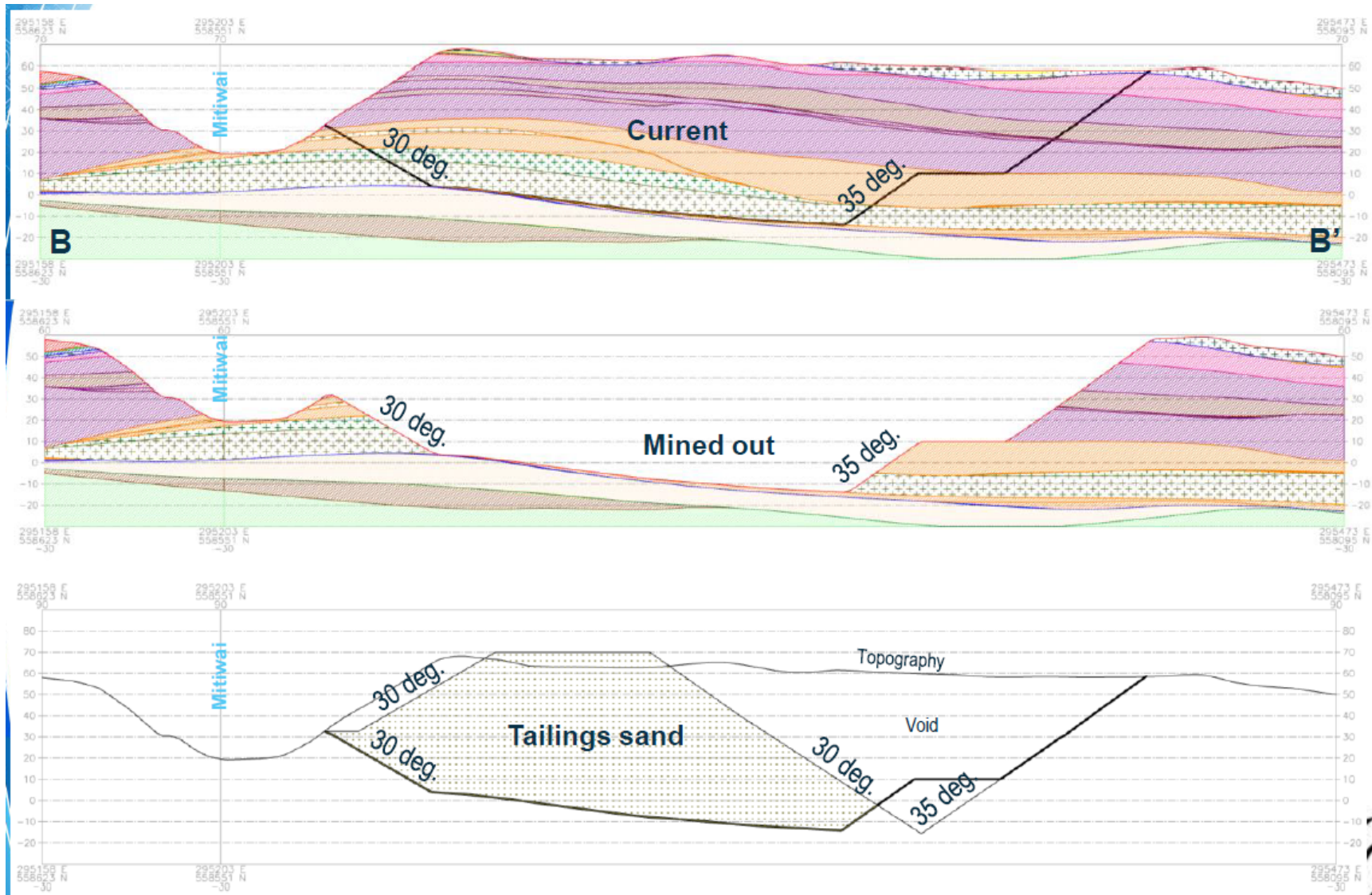
Ground water will be encountered at the level between RL10 and RL13.5



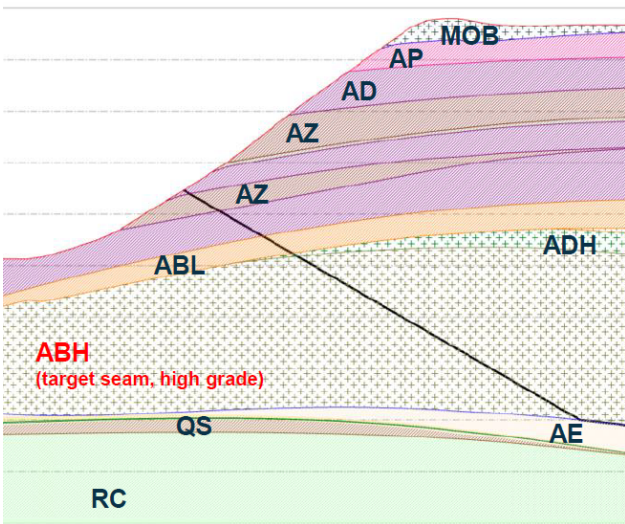
Geological Interval –As Modelled



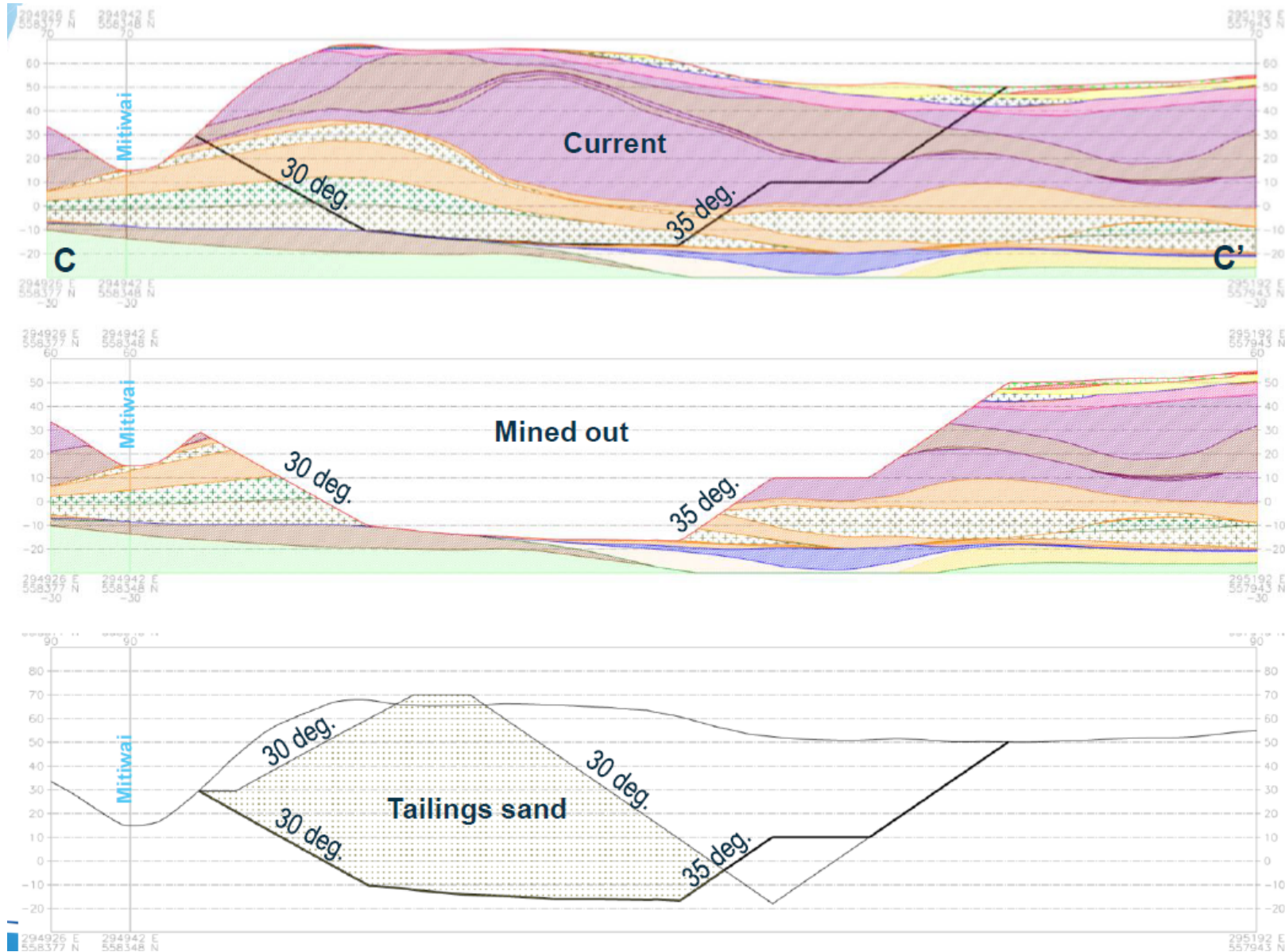
Section B-B' Mining and tailings current plan



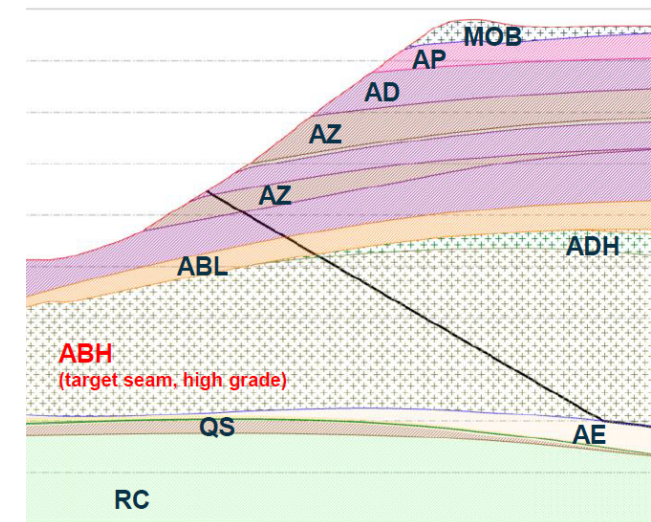
Geological Interval –As Modelled



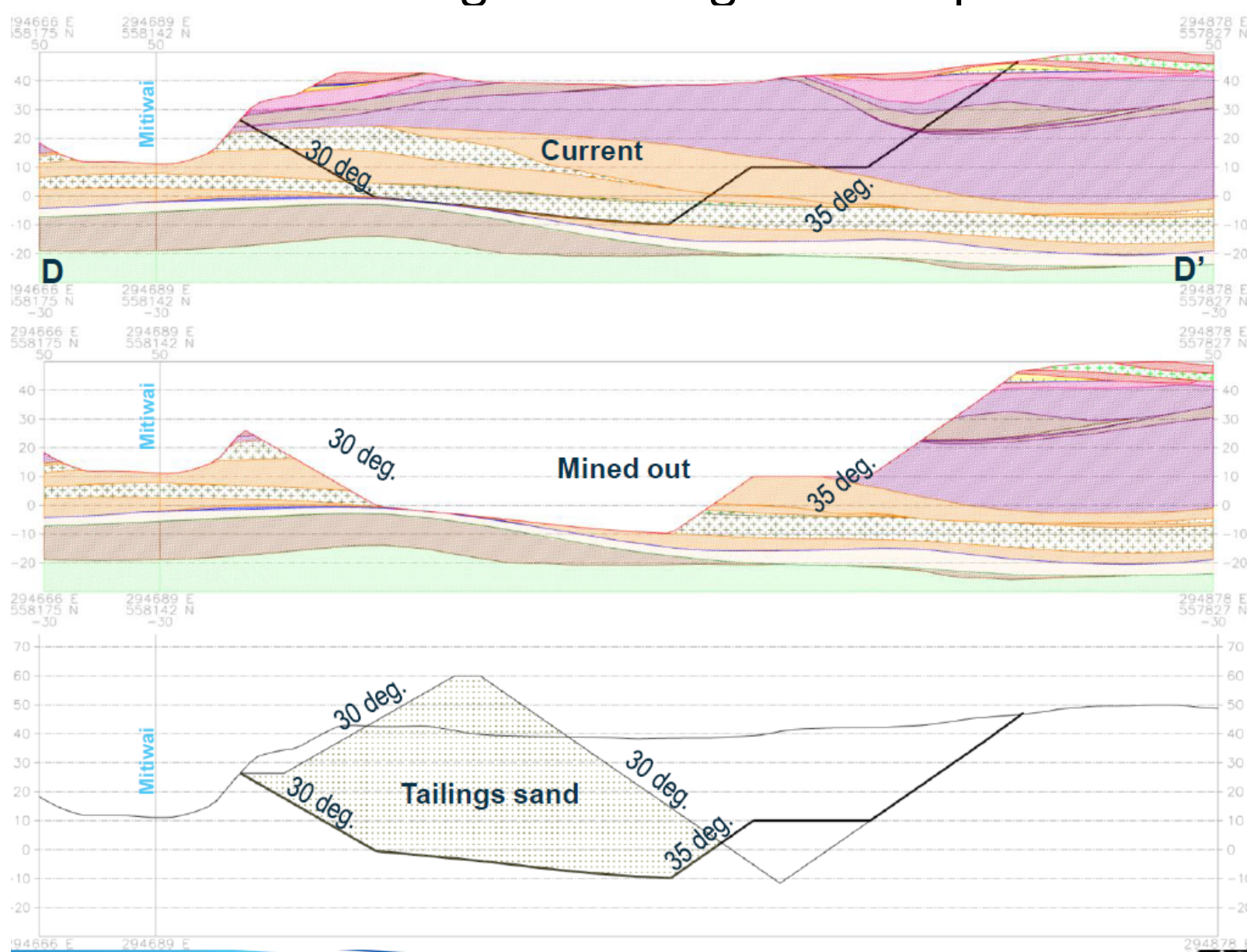
Section C-C' Mining and tailings current plan



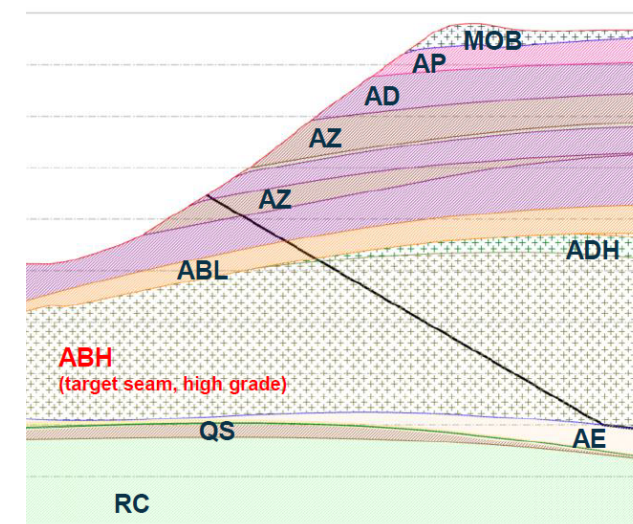
Geological Interval –As Modelled



Section D-D' Mining and tailings current plan



Geological Interval –As Modelled



Sections demonstrating the expected losses due to the proposed set back

