

TUNNEL: 1NB	MACHINE: TBM	DATE: 27/2/18	REF. Nº: 306
CHAINAGE: 5+098	RING: 3708	HOUR: 8:30	

Mapping performed: ☒ Yes ☐ No

Plan view

Face of the Excavationm

Schematic position of the cutter head while mapping

Schematic Rock Mass Structure

1.0 m

Light Gneiss (dotted pattern)

Pegmatite (diagonal lines)

Dark Gneiss (cross-hatched pattern)

Amphibolit (stippled pattern)

Foliation (solid line)

Joint Set (sub. Vertical) (dashed line)

Joint Set (Sub Horizontal) (dotted line)

Joint Set (Strike/dip) (solid line with arrow)

Geological Contact (solid line)

Geological Contact (diffuse) (dashed line)

Weakness zone < 1m (wavy line)

Water (dashed line with arrow)

Weakness zone > 1m (thick wavy line)

DISCONTINUITIES						FACE CHARACTERISTICS			
Fracture set	1	S ₀	SH			Quartz	Veins	<input type="checkbox"/>	Masses <input checked="" type="checkbox"/>
Strike (αs)	E-W	N-S	-			Garnets	Low	<input type="checkbox"/>	High <input checked="" type="checkbox"/>
Dip (αf)	~80-90	~70°W	-			Water	Dry	<input type="checkbox"/>	Moist <input type="checkbox"/>
Spacing (cm)	-	-	-				Dripping	<input type="checkbox"/>	Flowing <input checked="" type="checkbox"/>
Length (m)	1-3	1-3	1-3			Fracturing	RQD:		~5 (low)
Aperture (mm)	<1.0	1-5	<1.0				Depth (cm):		60-70
Roughness	VII	VII	VI			Overbreak	Amount (%):		5-30
Infilling	-	- / HARD SFTSmm	-						20-30
Weathering	W1-Z	W1-Z	W1-Z			Mixed face	Yes	<input checked="" type="checkbox"/>	No <input type="checkbox"/>

NOTES

DG WITH INTRUSIONS OF AMP AND PEG. AMP IS HIGHLY FRACTURED (BLOCKY), WITH WATER FLOWING FROM IT. MINOR WEATHERING ON SOME FRACTURES.

* BAN DOES NOT AGREE TO INCLUDE MIXED FACE ASSESSMENT ON MAPPING.

AMP = Amphibolite, DG = Dark gneiss, LG = Light gneiss, PG = Pegmatite, OB = Overbreak, WZ = Weak zone, LS/RS = Left/Right side

AGJV Geologist			Bane NOR Geologist		
Date	Name	Signature	Date	Name	Signature
27/2/18	XNU	Xavier Noguera	27/2-18	AHF	Agnete H. F.

TUNNEL: INBOUND
CHAINAGE: 05+098
DIRECTION: NORTH

MACHINE: TBM 1
RING: 3708

DATE: 27/02/2018
HOUR: 08:30

REF. N°:
TBM1_20180227_05098_306

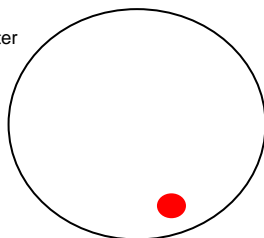
LEFT SIDE



RIGHT SIDE



Schematic position of the cutter head while mapping



UPPER PART



FACE



AGJV Geologist

Date	Name	Signature
27/02/2018	XMV	

Bane NOR Geologist

Date	Name	Signature