

TUNNEL: INEONDMACHINE: TBM 1DATE: 06/12/17

REF. N°:

CHAINAGE: 5+888RING: 3270HOUR: 9:15

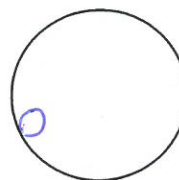
Mapping performed:

☐ Yes☐ No

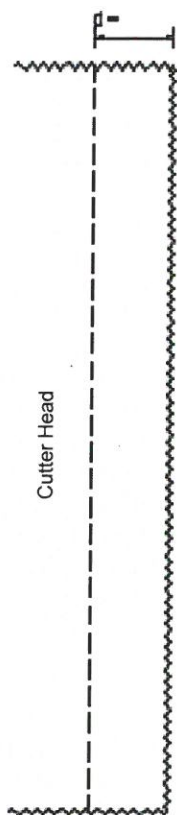
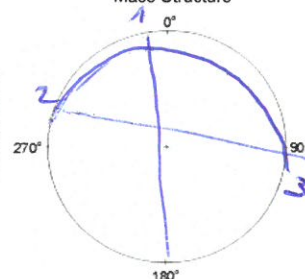
Plan view

Face of the Excavation

Schematic position of the cutter head while mapping



Schematic Rock Mass Structure



1.0 m

Light Gneiss

Dark Gneiss

Foliation

Joint Set (sub. Vertical)

Joint Set (Sub Horizontal)

Joint Set (Strike/dip)

Geological Contact

Geological Contact (diffuse)

Weakness zone &lt; 1m

Water

Weakness zone &gt; 1m (thickness)

Pegmatite

Amphibolite

## DISCONTINUITIES

Fracture set	1	2	3			
Strike ( $\alpha_s$ )	N-S	NE-SW	NE-SW			
Dip ( $\alpha_f$ )	80°-80°	80°-90°	30°-40° NE			
Spacing (cm)	0.50-1m	0.50-1m	>1m			
Length (m)	1-3m	1-3m	1-3m			
Aperture (mm)	-	-	-			
Roughness	subpl.	subpl.	subpl.			
Infilling	-	-	-			
Weathering	W <sub>1</sub>	W <sub>1</sub>	W <sub>1</sub>			

## FACE CHARACTERISTICS

Quartz	Veins	<input type="checkbox"/>	Masses	<input type="checkbox"/>
Garnets	Low	<input type="checkbox"/>	High	<input type="checkbox"/>
Water	Dry	<input type="checkbox"/>	Moist	<input type="checkbox"/>
	Dripping	<input type="checkbox"/>	Flowing	<input checked="" type="checkbox"/>
	Quantity:	10-11m		
Fracturing	RQD:	90-100%		
Overbreak	Depth (cm):	5-20cm		
	Amount (%):	1-5%		
Mixed face	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

## NOTES

PEGMATITE BODY INTERSECTING SMALL AMP. DYKES.  
DARK GNEISS ON THE RIGHT SIDE. WATER FLOWING FROM THE  
RIGHT SIDE. OVERBREAKS CLOSE TO THE AMP.

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

## AGJV Geologist

Date	Name	Signature
06/12/17	GC	

## Bane NOR Geologist

Date	Name	Signature
06/12/17		

TUNNEL: INBOUND  
CHAINAGE: 05+888  
DIRECTION: NORTH

MACHINE: TBM 1  
RING: 3270

DATE: 06/12/2017  
HOUR: 09:15

REF. N°:  
TBM1\_20171206\_05888\_266

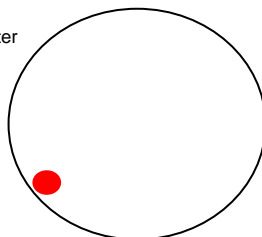
LEFT SIDE



RIGHT SIDE



Schematic position of the cutter  
head while mapping



UPPER PART



FACE



AGJV Geologist

Date	Name	Signature
06/12/2017	GC	

Bane NOR Geologist

Date	Name	Signature