

TUNNEL: EVB. SOUTH	MACHINE: 1BA1	DATE: 11/10-14	REF. Nº: 229
CHAINAGE: 6+629	RING: 2859	HOUR: 10:15	

Mapping performed:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Plan view

Cutter Head

Face of the Excavation

Schematic position of the cutter head while mapping

Schematic Rock Mass Structure

Light Gneiss

Pegmatite

Dark Gneiss

Amphibolite

Foliation

Joint Set (sub. Vertical)

Joint Set (Sub Horizontal)

Joint Set (Strike/dip)

Geological Contact

Geological Contact (diffuse)

Weakness zone < 1m

Water

Weakness zone > 1m (thickness)

DISCONTINUITIES						FACE CHARACTERISTICS				
Fracture set	1					Quartz	Veins	<input checked="" type="checkbox"/>	Masses	<input type="checkbox"/>
Strike (α_s)	E-W					Garnets	Low	<input type="checkbox"/>	High	<input type="checkbox"/>
Dip (α_f)	90°					Water	Dry	<input type="checkbox"/>	Moist	<input type="checkbox"/>
Spacing (cm)	—						Dripping	<input checked="" type="checkbox"/>	Flowing	<input type="checkbox"/>
Length (m)	1-3						Quantity:			
Aperture (mm)	< 1.0					Fracturing	RQD:		90-100	
Roughness	R. PLAN					Overbreak	Depth (cm):		20-30	
Infilling	NONE						Amount (%):		1-5%	
Weathering	NONE					Mixed face	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>

NOTES

LIGHT AND DARK GNEISS UNWEATHERED AND WITH FRACTURES WIDELY SPACED. SOME DROP FROM THE FACE

AMP = Amphibolite, DG = Dark gneiss, LG = Light gneiss, PG = Pegmatite, OB = Overbreak, WZ = Weak zone

AGJV Geologist			Bane NOR Geologist		
Date	Name	Signature	Date	Name	Signature
11/10-14	JM	José Machado	11/10-14	MAL	M. L.

TUNNEL: INBOUND
CHAINAGE: 06+629
DIRECTION: NORTH

MACHINE: TBM 1
RING: 2854

DATE: 11/10/2017
HOUR: 10:15

REF. N°:
TBM1_20171011_06629_229

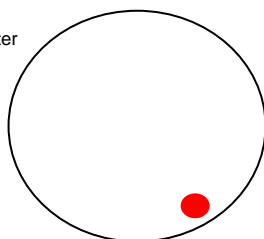
LEFT SIDE



RIGHT SIDE



Schematic position of the cutter
head while mapping



UPPER PART



FACE



AGJV Geologist

Date	Name	Signature
11/10/2017	GC	

Bane NOR Geologist

Date	Name	Signature