

ALTO MAIPO**OWNER'S INSTRUCTION**
Section 2.29
PHAM-PLN12-INS-0003

Contract:	<input type="checkbox"/> AM-CO610/620B <input checked="" type="checkbox"/> AM-CO630/620A	SI 6349 N° 0671
Scope Segment Description:	VL4 Access tunnel to P1Cavern	Scope Segment ID: 3.4
Location:	ch 1+668.5 -VL4	Time for Compliance: immediately

Contractor shall immediately proceed with the Work described below, in accordance with the terms and conditions of the Contract. This instruction is limited to maximum of 1000 UF or USD \$ 50,000., and without impact on the lump sums or schedule (except for Equivalent Times in the BOQ).

Instruction:

- Perform pre-grouting as per attached details
- Adjustments may be made regarding the instructions based on the encountered conditions
 - The packer seating shall be adjusted to prevent water/grout return flows
 - The water/cement ratio shall be selected depending on the water inflow from the grout hole:
 $w/c = 0.45$ if yield $> 2 \text{ l/s}$
 $w/c = 0.65$ if yield $\leq 2 \text{ l/s}$
 - The refusal criteria are as follows:
 - Pressure max = 25 bar
 - take max = 1000 kg cement (if no pressure built-up)
 - take max = 3000 kg cement (if pressure up after take of 1000 kg)
 - G14 = 1990
 - All grout hole shall be fitted with standpipes equipped with a valve; the standpipes shall be sufficiently fixed and/or tied back to the rock mass
- Owner estimate of impact is: Per Units in BOQ ☒ ; or cost ; &/or Time

If Contractor believes that this instruction constitutes a Change, Contractor shall promptly provide Notice according to Section 11 of the Contract.

Contractor comments (if any): The current situation requires to drill hole by hole and grout one by one \Rightarrow no parallel work is possible. After high ingress of water the drilling has to be stopped and the hole will be grouted immediately. Afterwards it has to be re-drilled again till the full depth is reached.

Issued by		Received by Contractor	
Name:	CRISTO BARRIOS	Name:	Matthias Rosenfeld
Sign:		Sign:	
Designation:	Geo	Designation:	Geo-Manager
Date:	13.05.16	Date:	13.05.16
Time:	13:30	Time:	17:30

(original): Contractor