

# **Knight Piésold Ltd.**

CONSULTING ENGINEERS

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MP00165

AUG 11 1998

Mr. Eric Leneve  
Mount Polley Mining Corporation  
P.O. Box 12  
Likely, B.C. V0L 1N0

YOUR REFERENCE  
OUR REFERENCE  
NUMBER  
10162/9.01  
8/2028  
August 7, 1998

Dear Eric,

## **Re: Wood Debris Along Upstream Face of Tailings Embankment**

It is our understanding that the Ministry of Energy and Mines have requested removal of floating wood debris which has accumulated along the upstream face of the dam. Knight Piésold have also provided a similar recommendation in our Annual Report. However, we understand that MPMC attempts at removing the wood have been unsuccessful to date and that a contractor is currently on site to continue these efforts. We also understand that MPMC are concerned about the following:

- the cost of wood removal,
- the time required for wood removal and the interference with tailings spigotting and further delay of beach development, and
- whether the above costs and delays are warranted (i.e. if the wood is left, will it cause a problem?).

The attached Figure 1 illustrates the location and extent of the wood debris that has accumulated along the upstream face of the tailings dam.

In general, it is good practice to keep wood debris away from the dam face and avoid burial in the tailings beach where primary rotting wood debris could result in settlement at a future date, and/or create a higher permeability zone. However, we have evaluated the potential adverse implications in more detail and compared these



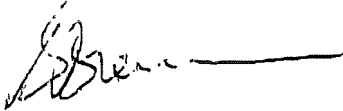
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with the costs for removal of the wood debris. This evaluation suggests that it will be possible to bury the wood debris in the tailings beaches during tailings deposition without incurring additional risk of adverse impacts. The upstream toe drain system has not yet been installed, and therefore, the long term phreatic surface in the impoundment will be maintained above the level of the wood debris. The wood debris would not be susceptible to decay during operations. Also, decomposition of the wood debris (if were to occur) would not result in excessive differential settlement which could adversely affect the integrity of the dam structure.

We believe that MPMC should be concentrating efforts on spigotting and/or cycloning to form a continuous tailings beach along the upstream face of the dam rather than cause further delays with wood removal activities. However, appropriate precautions should be included to ensure that this problem does not re-occur. We recommend that a log boom be constructed using the larger logs that are currently situated along the dam face.

Yours very truly,  
**KNIGHT PIESOLD LTD.**

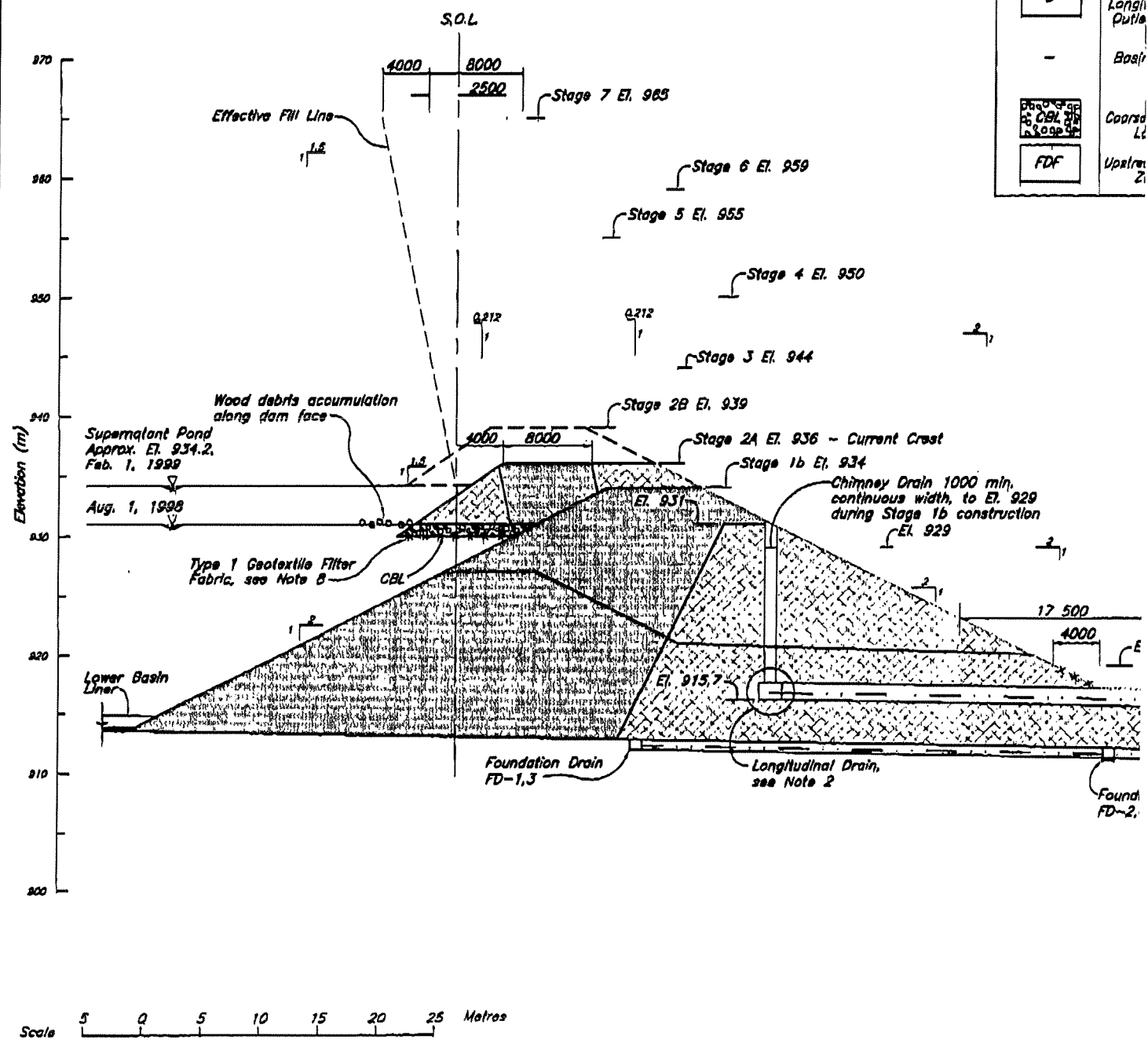


For: Ken J. Brouwer, P.Eng.  
Director

/AGN

Enclosure

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Aug. 6, 1998  
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