

*copy Headley → please replace pages 4 and 5.*

MP00104

***Knight Piesold Ltd.****1-250-952-0481**14745-40/**NTPD/01**annual TP Report 1998***Plane C**

- All piezometers showed significant pore pressure increases during fill placement. C2-PE2-03 and C2-PE2-05 are both located upstream of the chimney drain. C2-PE2-03 increased dramatically after installation and was almost fully dissipated when it increased due to the placement of Stage 2A fill (an increase of 6.87 m was recorded, but this is likely an error). The pore pressure currently is 0.53 m. C2-PE2-05 had slowly increased to 2.00m when a 1.66 m response from the placement of Stage 2A fill was recorded. There was no reading for May 27.

**Plane D**

- D2-PE2-01 is fully dissipated, with zero excess pore pressure.

As described above, embankment fill piezometers responded quickly to the placement of fill materials. Most of the high pore pressures were slowly dissipating, illustrating the low permeability of the surrounding fill materials. Some high pressures were observed because of the piezometer installation method, where the saturated tips were immersed in a loose slurry in a small hole and were then quickly loaded by subsequent fill placement in the overlying lifts. These pore pressures are not considered to be indicative of general pore pressure conditions in the embankment fill, but provide an indication of the confined slurry pressure at the piezometer tip.

**Tailings Piezometers**

Six tailings piezometers were installed in the sandy tailings beaches during Stage 2A construction. Pore pressures increased during placement of 1.0 to 1.5 m of Coarse Bearing Layer, but dissipated within about 8 hours following fill placement, as expected. The current readings reflect the level of the tailings pond, but are slightly lower (by approx. 0.5 to 0.8m).

**2.0 Drain Flows**

The Main Embankment seepage recycle pipeline is being reconnected and the pond is being pumped down. The water level in the Seepage Collection Pond is still above the foundation drain outlets. Foundation drain flow data will be reported as soon as the pond level has been lowered.

Seepage flows from the chimney drain will be monitored from the outlet drains as soon as possible. They will be extended to the drain monitoring sumps during Stage 2B construction.

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MPMC has graded the area around groundwater well GW96-9 and will resume water level monitoring at this location.

**3.0 Survey Monuments**

New survey monuments will be installed at the crest of the Stage 2A embankment. Regular monitoring of the monuments will be carried out quarterly to record any settlements or displacements, and will be evaluated as the surveys are completed. Additional surveys will be carried out if necessary.

MPMC has installed five survey points along the upstream edge of the Main Embankment CBL to monitor settlement of the tailings following till placement. This information will be provided when it becomes available.

**4.0 Inclinometers**

Inclinometers are to be installed just past the final toe of the Main Embankment at Planes A, B, C during Stage 2B construction.

Submitted by,



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