

MONTHLY DIKE PERFORMANCE REPORT

Dike: D-CP5	
Date: January 2019	Temps: Min = -42.7°C Max = -16.8°C Mean = -33.5°C
Season: Ice	Signature: <i>Janet D. Blum</i>

MONITORING/INSPECTION SUMMARY

	Daily	Weekly	Monthly
Ground Temperature Readings			✓
Survey Monuments			Attempted
Water/Ice Elevations			
Visual Inspection			

GROUND TEMPERATURES

- The average temperature across all horizontal beads within the key trench is **-5.41°C** (January 7). Temperatures have decreased since January 7 by **-2.04°C** at an average rate of change of **-0.07°C/day**. Compared to last year (February 9, 2018), average key trench temperatures are cooler (**-1.14°C**).
- Vertical GTC's show frozen temperatures throughout the dike at all cable locations, with cooling temperatures observed throughout the dike structure. Seasonal warming continues below elevations 5 – 9 m below the maximum key trench depth.

SURVEY MONUMENTS

- A survey of the monuments was attempted February 7, 2019. However, it was discovered that M1 (Station 1+170) had apparently been run over and is bent. At the current time, only one of three monuments is functioning as intended.

WATER/ICE ELEVATIONS

- Ice elevations were not taken in January.

VISUAL INSPECTIONS

- No visual inspections were undertaken in January.

RECOMMENDATIONS

- New “baseline” readings were attempted from the damaged monument at D-CP5 and survey is in the process of re-calibrating the results. Several attempts will be made over the next couple of weeks and survey readings will be provided for the February report.
- Additional flagging and/or protective measures will be implemented for the monuments as soon as possible.
- Discussions with E&I regarding restricting access to the dike to authorized personnel only are on-going.