

Phyllis Beaulieu

From: David Hohnstein [dts@nunavutwaterboard.org]
Sent: Wednesday, November 28, 2007 3:48 PM
To: Paul J. Brugger
Cc: Phyllis Beaulieu; Dionne Filiatrault
Subject: Re: Cullaton Lake - Low pH run-off observed at Shear Lake

Thanks for the information Paul,

the NWB looks forward to your update within the 2007 Annual Report.

Regards,

David Hohnstein
A/Director Technical Services
Nunavut Water Board

From: Paul J Brugger [mailto:p.brugger@sympatico.ca]
Sent: Friday, November 16, 2007 7:06 AM
To: Dionne Filiatrault
Cc: Bill Ferdinand; David Abernethy
Subject: Cullaton Lake - Low pH run-off observed at Shear Lake

Hi Dionne,

This email is to make the NWB aware of a recently discovered pH issue at the Shear Lake site of Cullaton Lake. There is an area south of the Encapsulated Waste Rock (EWR) that appears to be producing low pH run-off in the order of 2.5. It is important to note that this area is not related to the EWR and, because of local relief, the run-off seems to collect and evaporate in the small pool seen above the main access road in the center of the attached Photo 1. There is however minor erosion evidence on the access road that suggests some run-off reports to the grasslands east of the site during periods of heavy rainfall. There is no evidence of vegetation stress where the run-off would have entered the grasslands. Shear Lake upstream and Shear Creek downstream field pH measurements also indicate there is no influence from this area.

The pool was first brought to our attention by INAC and confirmed during our July site visit. To follow up, I returned to the site in mid September with an ARD specialist to conduct a detailed investigation. The suspected source appears to be the mounded area seen above the pool in Photo 1 and right of center in Photo 2. This area consists of raised outcrop covered by a thin veneer of rock fill. Both fill and outcrop samples were taken for ARD testing during the September visit. While I was hoping to have results and report the issue by mid October, it appears now that results will not be forthcoming before December due to lab overload. As soon as I do receive them, I will include full details on the source and will include any proposed remediation plans in this year's annual report.

Please don't hesitate to contact me if you have further questions.

Rgds,
Paul