



Former Polaris Mine Application for Renewal of Water Licence 1AR-POL0311 For Supplemental Long Term Monitoring



December 4/5, 2014 – NWB Public Hearing, Resolute Bay
Bruce Donald, Manager Legacy Properties

Polaris Mine Location

Mine History

Polaris Decommissioning & Reclamation

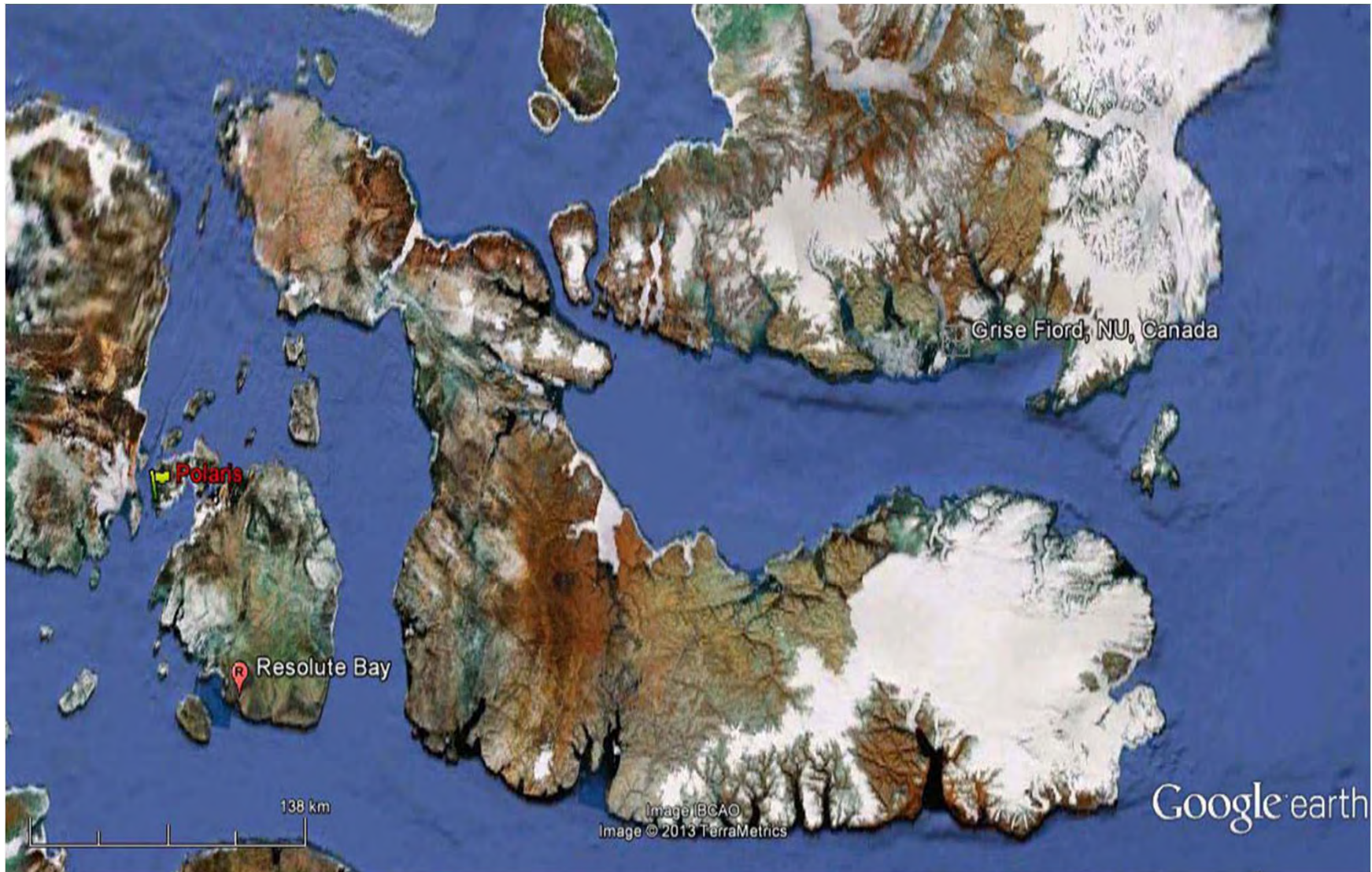
Mine Reclamation & Monitoring

Supplemental Long Term Monitoring

Summary of Key Points

Polaris Location – Little Cornwallis Island

Teck



Polaris Mine History

Teck



- Lead & Zinc Underground Mine
- Operated from 1981 to Sept. 2002
- Produced 25 million tonnes of ore during its life
- Decommissioned & reclaimed Sept 2002 to Sept 2004
- Approved Post-Reclamation Monitoring – 2004 to 2011

Polaris Decommissioning & Reclamation

Teck



Polaris Decommissioning & Reclamation

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Polaris Decommissioning & Reclamation

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Polaris Post-Reclamation

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Polaris Reclamation & Monitoring 2002-2011



- **Teck successfully completed all of the required works included in the NWB Approved 2001 “Decommissioning and Reclamation Plan” (DRP)**
- **Teck was released from MMER EEM monitoring requirements in 2006 and has Recognized Closed Mine status.**
- **There are no facilities, personnel or equipment remaining at site.**
 - One remaining small wood cabin was given to an Inuit resident in Resolute.
- **Post-Reclamation Geotechnical and Water Quality Monitoring demonstrate success of the DRP, confirm site stability, and there are no significant residual physical or chemical issues.**
- **Positive example of mine reclamation for Nunavut.**

- **Supplemental Long Term Monitoring (SLTM) is proposed to occur on a decreasing frequency (2014, 2019, and 2029) providing the results of the monitoring continue to demonstrate the site is stable.**
- **If any significant concerns are identified by the monitoring, Teck has committed to review and increase its monitoring program (increase monitoring frequency) and take other necessary actions.**
- **Scope of the Supplemental Long Term Monitoring Program includes:**
 - Site inspections by a geotechnical engineer and water quality monitoring of Garrow Creek in 2014, 2019, and 2029; and
 - Garrow Lake Limnology and Chemistry Monitoring in 2019 & 2029

- **The 2014 monitoring program was completed as proposed.**
 - The geotechnical engineer identified no subsidence issues and water quality results continue to be consistent and compliant.
 - Results continue to confirm the site is stable.
 - Results have been submitted to the NWB.
- **Future SLTM reports will be provided to the NWB in 2019 and 2029**
- **Teck modified its originally proposed monitoring program in response to Pre-Hearing discussions and submissions by Environment Canada & AANDC, so there is full agreement with both the monitoring schedule and the scope of monitoring.**

- **Teck originally proposed reclamation security be set at \$1.324M. Through Pre-Hearing discussions with AANDC, Teck is now in agreement with AANDC's final submission that reclamation security be set at \$1.565M.**
- **The conditions of the Licence should recognize:**
 - That the next scheduled SLTM event is in 2019; and
 - The water quality monitoring program has been simplified.

- **Licence term is proposed to expire in January 2031 with the last monitoring event proposed for 2029.**
- **The timing of the end of the Licence allows for Final review of data from the supplemental monitoring program and subsequent discussions with Regulators and the Water Board towards cancellation of the Water Licence.**

Thank you

Teck

