

2014 Nunavut Mining Symposium Infrastructure: The Key to Realizing Mineral Wealth

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April 2014



INFRASTRUCTURE AND THE NORTH

<u>"Infrastructure (n):</u> The large-scale public systems, services, and facilities of a country or region that are necessary for economic activity."

-Bing Dictionary

"Nunavut's infrastructure in every area is far behind any other part of Canada. The lack of a road network, ports and harbours, paved runways, geology maps and topographic maps make exploration and mineral development in Nunavut much more expensive and a higher risk than in other Canadian jurisdictions."

-Government of Nunavut, Mineral Strategy, 2007

"We understand the critical importance that infrastructure plays in promoting economic development in Canada's North,"

- Prime Minister Stephen Harper, April 18, 2011

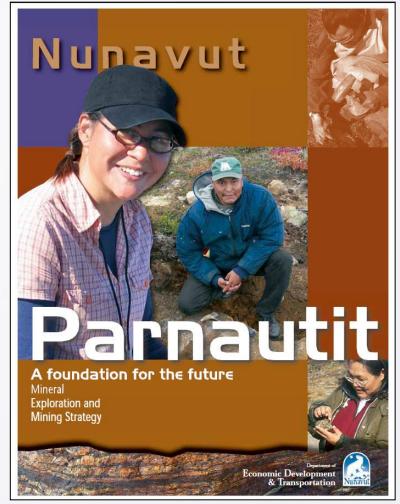




DEVEOPMENT IMPORTANT TO NUNAVUT?

Responsible mineral development is critical for the economic well-being of Nunavut

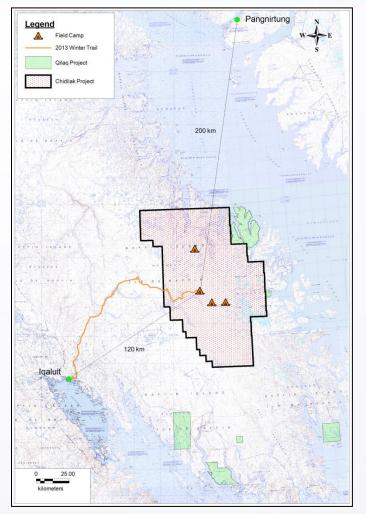
- "To create the conditions for a strong and sustainable minerals industry that contributes to a high and sustainable quality of life for all Nunavummiut" (P. 7)
- "It is argued that Nunavut's future economic viability, and the improvement of the quality of life for Nunavummiut will depend on the development of these known and yet to be discovered (mineral) resources" (P. 44)



March, 2007



CHIDLIAK PROJECT LOCATION





Iqaluit



Pangnirtung

<u>Iqaluit</u>

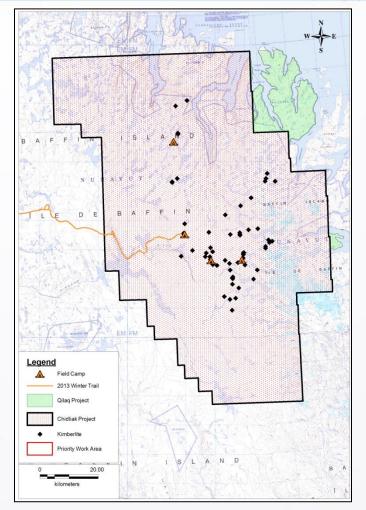
- 120 km to Chidliak
- Goods and services
- 6 year relationship with community

Pangnirtung

- 200 km to Chidliak
- Employee base
- 6 year relationship with community



CHIDLIAK PROJECT

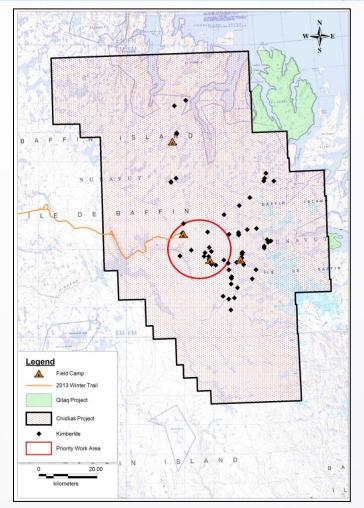


Chidliak Project

- First kimberlite discovery 2008
- 67 kimberlites discovered to date
- 6 high priority kimberlites
- CH-1, CH-6, CH-7, CH-31, CH-44, CH-45
- All work in 2014 will occur in priority area



CHIDLIAK PROJECT

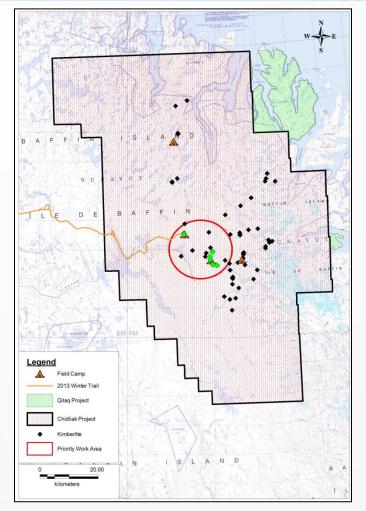


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2013 CH-6 BULK SAMPLE



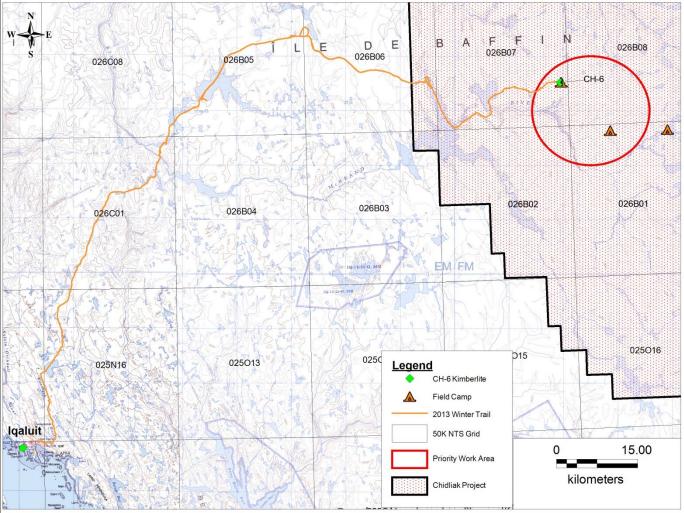


CH-6 Bulk Sample

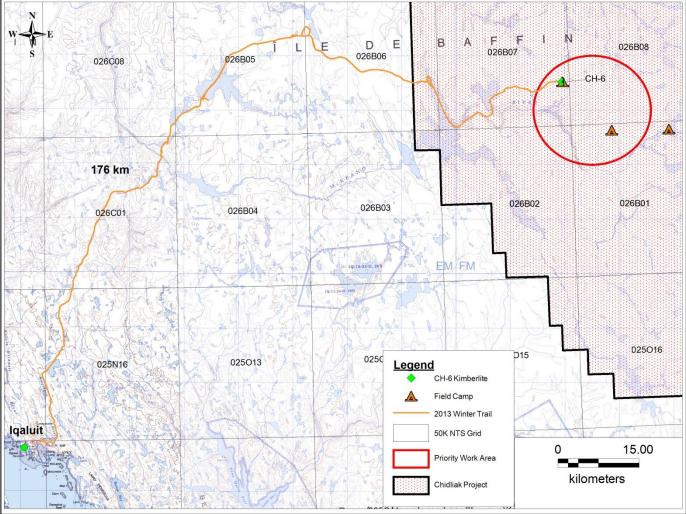
- Collected April 2013
- 508 wet tonnes (404.2 dry) from trench
- Transported overland to Iqaluit
- Transported by sea to Montreal and then

onto Sudbury for processing

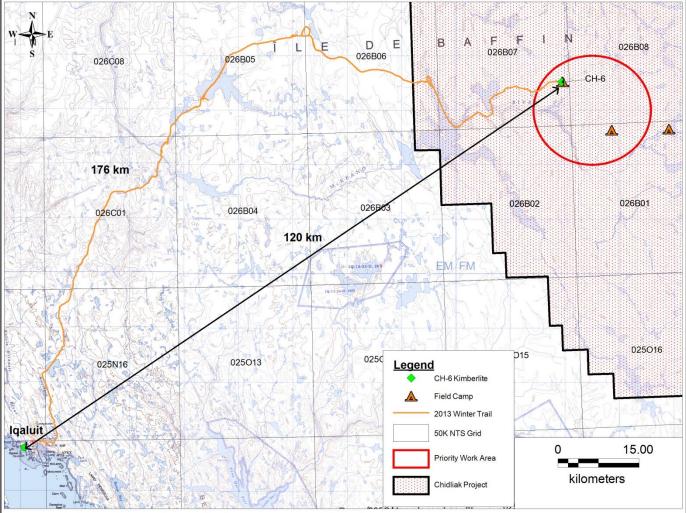














2013 WINTER TRAIL TRADITIONAL KNOWLEDGE











PEREGRINE DIAMONDS LTD.







PEREGRINE DIAMONDS LTD.









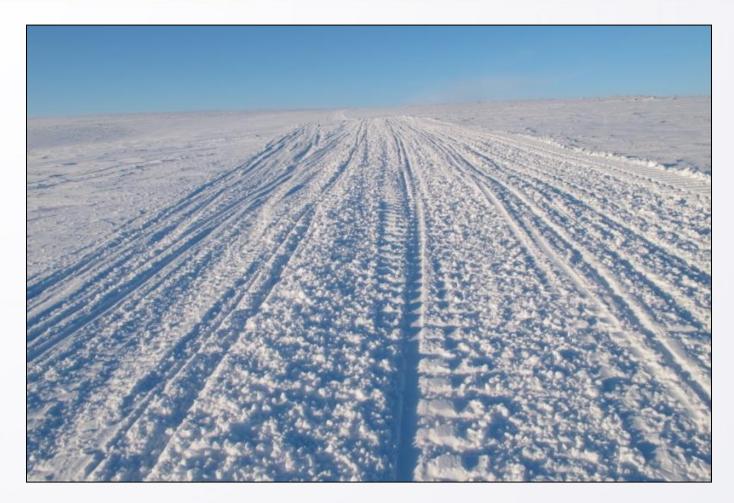














IQALUIT, NUNAVUT TO MONTREAL SEALIFT





Sample stored at Iqaluit airportSealift to Montreal



2013 CH-6 BULK SAMPLE RESULTS

CH-6 Bulk Sample

- 1,013.5 carat parcel of commercial size diamonds
- Estimated 2.58 carats of diamonds per tonne of rock
- Average price of \$213 per carat
- Estimated CH-6 hosts 5.7 million tonnes to a depth of 375 metres below surface







WHERE ARE WE GOING?



2005	2007	2008	2009	2013 - 2015				
Reconnaissance Exploration	Land Acquisition	1 st Kimberlite & Diamonds	Mini-bulk Sampling & Delineation	Advanced Exploration & Bulk Sampling	PEA/Pre- feasibility/ Feasibility	Permitting & Mine Construction	Mine Opening	

Snap Lake



EKATI



Diavik





INFRASTRUCTURE REQUIREMENTS

"I see a new Canada – a Canada of the North."

- Prime Minister John Diefenbaker, Northern Vision, Feb. 12, 1958

Infrastructure (n):

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1) Port

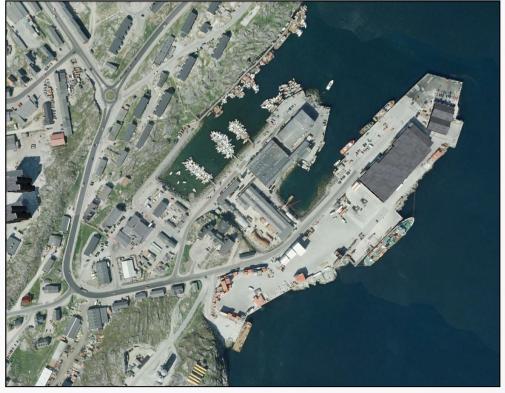
2) Power

3) Road

4) People



INFRASTRUCTURE - PORT

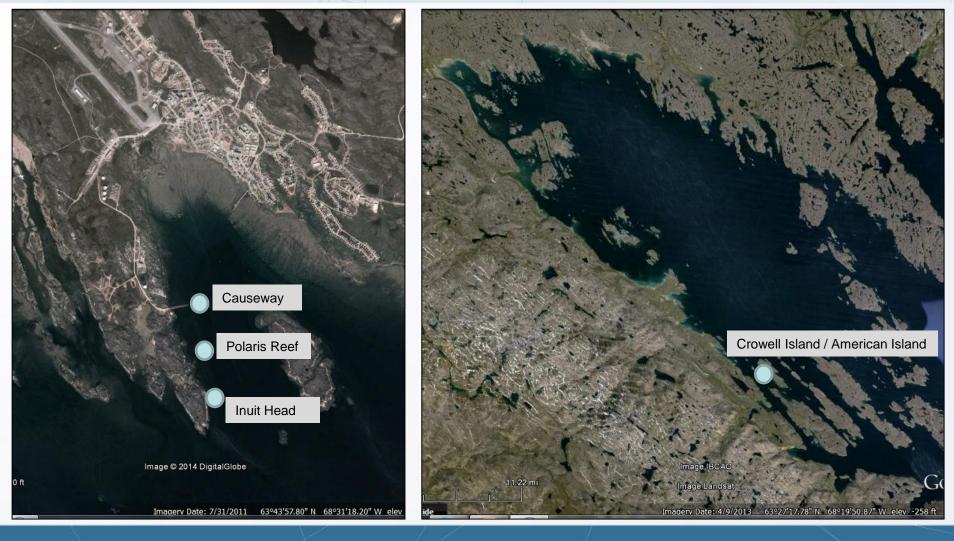


Nuuk Harbour - Greenland

- A port facility in Iqaluit would benefit the community
- At present there is a lack of marine infrastructure
- The economics of any future mine operation would be improved by a port
- 2005 Strategic Plan by the City of Iqaluit found a deepwater port to be "technically feasible and desirable."



INFRASTRUCTURE - PORT



DIAMONDS LTD. INFRASTRUCTURE - DEEP WATER PORT

Strategic Plan for the Iqaluit Deepwater Port Project

Prepared for The City of Iqaluit by Aarluk Consulting Inc., Gartner Lee Limited and Chris Anderson August, 2005 "....the Nunavut legislature drafted a <u>plan</u> in 2010 that included two possible design and location options...."

> -Nunavut Sealift Firm renews call for basic beach infrastructure Nunatsiaq Online, Jan. 30, 2014

"In fact, the 2010 draft government proposal said it was the fifth study of a deep sea port for Iqaluit since 1975."

-Nunavut Sealift Firm renews call for basic beach infrastructure Nunatsiaq Online, Jan. 30, 2014





Buksefjord Hydroelectric Station - Greenland



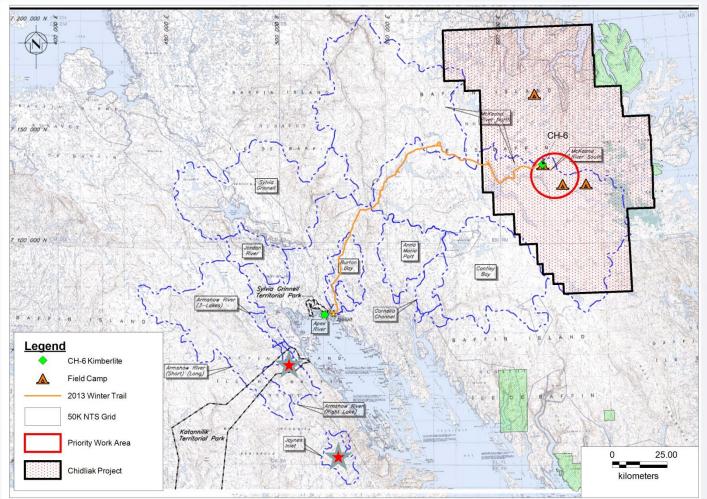
Buksefjord Hydroelectric Station - Greenland

INFRASTRUCTURE - POWER

- · As Iqaluit grows so will demands for power
- Sustainable communities require cleaner and safer energy to maintain growth
- Excess power capacity provides additional options to companies ie: manufacturing
- Hydro-power is successfully used in Greenland
- Any future mine development will require facilities, offices and personnel in Iqaluit



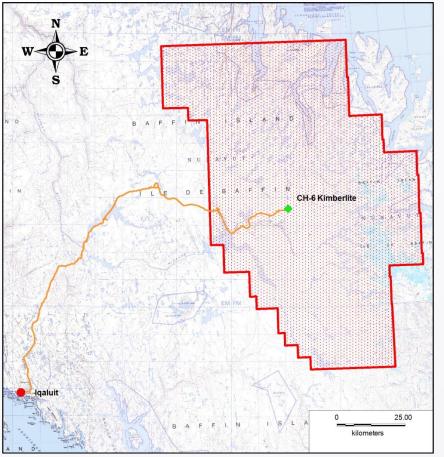
INFRASTRUCTURE - POWER



QEC Iqaluit Hydro-Electric Generation Site Identification and Ranking p.74 (January 17, 2006)



INFRASTRUCTURE - ROADS



^{2013 -} Iqaluit to CH6 Winter Trail

- Current site access options are flight or winter trail, both of which are weather dependant and have short time windows
- A mine site will probably require an all-weather road

Future

- Benefits to community
 - •Greater access to interior
 - Aggregate resources
 - •Possible Development

- Hydro
- •Future exploration access



EDUCATION & TRAINING – SOCIAL INFRASTRUCTURE

News Release

9 Nunavul Together

For Immediate Release

Cabinet Considers Priority Areas

KUGAARUK, Nunavut (February 7, 2014) – Cabinet Ministers met in Kugaaruk over the past three days to establish the foundation for the Government of Nunavut's fourth mandate.

"We are taking a targeted approach that focuses on vital areas to improve the lives of Nunavummiut," said Premier Taptuna. "We are bringing forward to our colleagues a mandate that builds on our successes and strengthens areas of program and service delivery."

Cabinet envisions education and training that better prepares Nunavummiut to benefit from economic and employment opportunities today and in the future; enhanced supports for health and mental wellness; and increased ability to be self-reliant.

"Achieving our priorities requires partnerships and accountable government practices," said Taptuna. "This mandate advances our continued progress to address Nunavut's long-term challenges and opportunities.

The final determination of the government's mandate is set in consultation with full-caucus. A fullcaucus retreat is scheduled for February 2014.

Media Contact: Yasmina Pepa Press Secretary Office of the Premier Government of Nunavut Tel : 867-975-5059 Mobile: 867-222-0961 ypepa@gov.nu.ca

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Communications

2014-02 NR03

- Government of Nunavut Website

"Cabinet envisions education and training that better prepares Nunavummiut to benefit from economic and employment opportunities today and in the future."

 It makes good business sense to hire local workers!



EDUCATION – THE FOUNDATION

- Education is Social Infrastructure that builds local capacity
- The best preparation for future mine work training is a strong K through 12 education system
- Skilled trades and national certifications require literacy and numeracy equivalent to Canadian provincial standards
- Mines can provide mine training but literacy and numeracy are required for successful training

"Schools are perhaps the most important of all services. In our modern society, those without education have no hope of sharing in the opportunities and benefits which Canada offers to its people."

> -John Diefenbaker, Northern Development Speech Notes 1963



 If Peregrine is successful in developing the first diamond mine on Baffin Island, it would bring significant economic opportunity for people in this region including employment, increased opportunities for local businesses and benefits to the government from taxes and royalties.

PEREGRINE

- The economic viability of any project on the Hall Peninsula would be enhanced by improvements to both social and physical infrastructure.
- Peregrine looks forward to fully participating in future discussions on infrastructure development in Nunavut.







