

**Exploring Diamond Opportunities in Canada** 

**June 2014** 

**TSX-V: NAR** 



This presentation contains projections and forward looking information that involve various risks and uncertainties, including, without limitation, statements regarding the potential extent of mineralization, resources, reserves, exploration results and plans and objectives of North Arrow Minerals Inc. These risks and uncertainties include, but are not restricted to, the amount of geological data available, the uncertain reliability of drilling results and geophysical and geological data and the interpretation thereof and the need for adequate financing for future exploration and development efforts. There can be no assurance that such statements will prove to be accurate. Actual results and future events could differ materially from those anticipated in such statements. These and all subsequent written and oral forward-looking statements are based on the estimates and opinions of management on the dates they are made and are expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward looking statements should circumstances or management's estimates or opinions change.



- An exploration company focused on some of Canada's premier diamond projects developed over years of exploration by past companies at costs in excess of \$40 million dollars.
- Experienced team, responsible for the discovery of numerous important kimberlites in Canada and Africa, including the Diavik diamond mine.
- Very little competition for diamond exploration in Canada or globally.
- Diamond market fundamentals are robust and are predicted to remain so for the foreseeable future.
- Canada remains underexplored as well as being a jurisdiction with low political risk.



### Corporate Overview – as of Feb. 25, 2014

Corporate Highlights:

| Capitalization             |                       |  |  |  |  |  |
|----------------------------|-----------------------|--|--|--|--|--|
| Listing:                   | TSX Venture - NAR     |  |  |  |  |  |
| Issued:                    | 49.8 M*               |  |  |  |  |  |
| Options:                   | 3.6 M                 |  |  |  |  |  |
| Warrants:                  | 1.0 M \$0.25 & \$0.65 |  |  |  |  |  |
| Fully diluted:             | 54.4 M*               |  |  |  |  |  |
| Estimated Working Capital: | ~\$10 M*              |  |  |  |  |  |

\*Includes Feb 25 private placement of 7,700,000 common shares issued at a price per share of \$0.65 for aggregate gross proceeds of \$5,005,000.

#### Main Shareholders

Management/Directors~17.5%Zebra Holdings & Investments~19.5%controlled by a trust settled by the late Adolf H. Lundin



# **Corporate Overview**

#### Management Highlights:

**D. Grenville Thomas (Chairman)** History of success in exploration with multiple junior mining companies. Founder of Aber Resources (now Dominion Diamond Corporation), discoverer of the Diavik Diamond Mine. 2009 Canadian Mining Hall of Fame inductee.

Ken Armstrong (President, CEO and Qualified Person under NI 43-101) Past diamond exploration experience with Diavik Diamond Mines Inc., Aber Resources, De Beers, Navigator Exploration, and Stornoway Diamond Corporation; President and CEO of Strongbow Exploration Inc.

**Christopher Jennings (Director)** Extensive diamond, gold and base metal exploration and development experience. Founder of SouthernEra Diamonds Inc., consultant to Aber Resources and has held positions with numerous companies including International Corona Corp., BP Minerals (Canada) and Falconbridge Ltd.

**William Lamb (Director)** President and CEO of Lucara Diamond Corp., 20 years project development experience with Lucara, De Beers, Kvaerner and Rand Mines.

**Blair Murdoch (Director)** More than thirty years experience in senior management of private and public companies.

**Eira M. Thomas (Advisor)** Extensive diamond exploration and development experience in Canada and Africa. Has served as an officer and/or director of Aber Resources and Stornoway Diamond Corporation. Currently CEO of Kaminak Gold Corporation and a director of Suncor and Lucara Diamond Corp.



## **Principal Diamond Projects**

#### **Redemption (NT)**

- 34,800 acres
- Near Diavik & Ekati mines
- Unexplained KIM trains
- >\$12M dataset
- Earning a 55% interest from Arctic Star

#### Lac de Gras (NT)

- >300,000 acres
- Near Diavik & Ekati mines
- 1<sup>st</sup> \$5M funded by Dominion Diamonds
- ~\$3M 2013 program

#### Pikoo (SK)

- Diamondiferous kimberlite field discovered in 2013
- 80/20 JV with Stornoway

#### Qilalugaq (NU)

- Large tonnage resource
- Potential for high value stones
- Bulk sample in 2014
- Under option from Stornoway

#### Mel (NU)

- KIM targets
- 100% NAR

#### Luxx (NU)

- KIM targets
- 100% NAR

#### Timiskaming (ON/QC)

- Six kimberlites
- Additional targets
- 80/20 JV with Stornoway

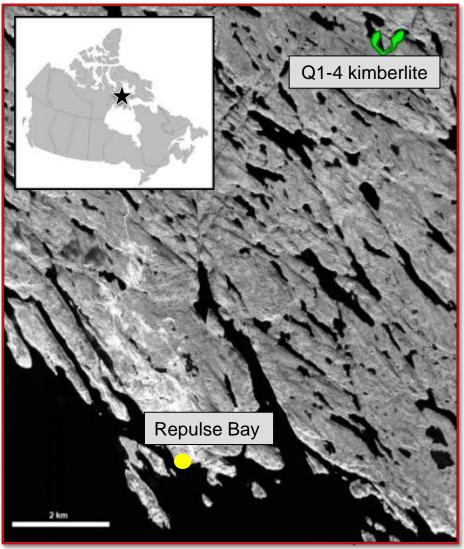


### Qilalugaq Project - NU

- Can earn 80% from Stornoway by completing mini-bulk sample.
- SWY retains one time back-in right to 40% by paying 3X exploration costs.

### Primary target is the Q1-4 kimberlite (Repulse Bay, NU)

- 7 km from tidewater; 9 km from town.
- Largest diamondiferous kimberlite in eastern Arctic (12.5 ha).
- May 2013 inferred resource estimate of 26.4 million carats, modeled to 205m.
- Yellow diamonds could significantly impact value.
- Needs large tonnage mini-bulk sample for preliminary evaluation (estimate \$3.7 million to collect/value 500 carats).





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#### View looking south-southwest from Q1-4 kimberlite towards Repulse Bay





### Qilalugaq Project - Resource

#### May 2013 resource estimate<sup>1</sup>

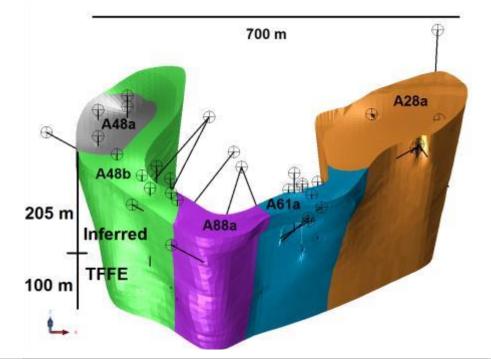
- Inferred Resource = 48.8 Mt, 26.1 Mcts, total diamond content<sup>2</sup> 53.6 cpht.
- TFFE<sup>3</sup> = 14.1 to 16.6 Mt, 7.9 to 9.3 Mcts, total diamond content<sup>2</sup> 56.1 cpht.

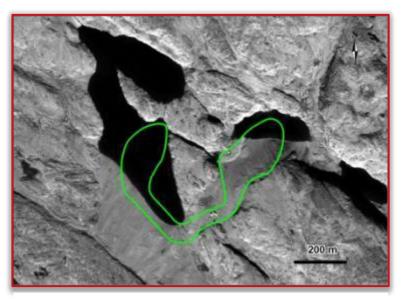
#### • Size/grade compares favourably to other current advanced/development projects.

<sup>1</sup>Mineral resources are not mineral reserves and do not have demonstrated economic viability

<sup>2</sup>Defined as 100% recovery of +1 to +23 DTC diamonds

<sup>3</sup>Target for further exploration - The potential quantity and grade of the TFFE referred to above is conceptual in nature and it is uncertain whether further exploration will result in the target being delineated as a mineral resource



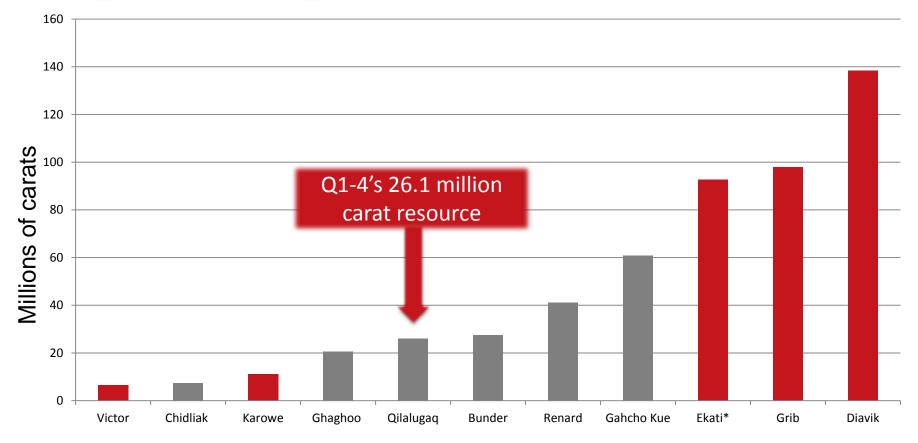


12.5 ha surface area kimberlite



#### **Resource Comparison of Mines at Startup and Current Projects with Resources**\*\*



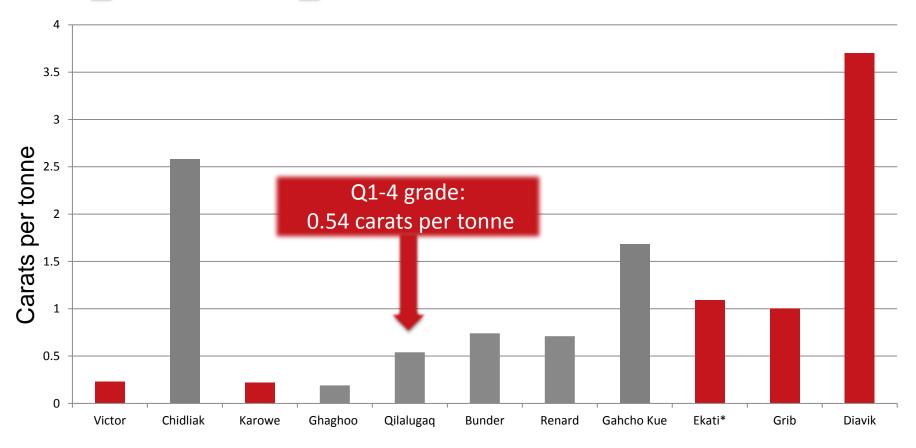


\*Ekati millions of carats numbers are based on the initial reserve. Information on the initial resource was not available. \*\*Compares the Q1-4 Inferred resource to more advanced projects to show its potential relative size/diamond content Q



#### Grade Comparison of Producing Mines at Startup and Current Advanced Projects\*

Producing Mine 🛛 🔳 Projects with Resources



\*this chart compares the Q1-4 Inferred resource grade to more advanced projects to show its relative potential diamond grade



# Qilalugaq Project - Diamonds

- Size and grade on par with other operating mines; diamond value still unknown.
- 64 carat parcel recovered to date suggests a value on par with 'typical Canadian smalls'.
- Need a larger diamond parcel (+500 cts) for a more robust valuation.
- Qilalugaq's northern locale will require a higher than average diamond value to demonstrate potential economic viability - a 'sweetener'.





## Qilalugaq Project – Yellow Diamonds

- Q1-4 diamond parcel includes a population of yellow diamonds described as 'fully saturated'.
- Presence of yellow diamonds could have a significant positive impact on diamond valuations for Q1-4.
- Potential to bring up a modeled average value into the upper end of Canadian and World diamond values.



\*Note: Additional possible upside due to breakage in early sampling - 10-30% of +3DTC showed >50% breakage in RC samples (A48, A88 and A61). Almost 50% breakage for + 3DTC in the drill-core samples processed by DMS (A28). Could have an additional positive impact on grade, value and size distribution.



### Yellow Diamonds - Supply

#### The Ellendale Mine – Australia

- Kimberley Diamonds (the producer) has an off-take agreement with Laurelton Diamonds (Tiffany's) to sell the yellow stones so information is public.
- Produces ~50% of the world's yellow fancies.
- Yellows comprise ~9-16% of total run of mine production (Q1 2013 13%) and made up 75% of Ellendale's revenue in FY2014.
- Q1 2013 US\$/carat for yellows sold to Tiffany: \$5,486 ; Q1 2013 US\$/carat for all diamonds sold: \$880.
- Recovered grades achieved at Ellendale are ~3.7 carats per hundred tonnes (June 2013). 116,000 carats were produced total, 11,000 carats of which were Tiffany's fancy yellows (FY2014).
- As of June 2013, 350,000 carats remained in the indicated and inferred resource, including stockpiled material for the E9 pipe. Therefore ~234,000 carats remain total as of June 2014.

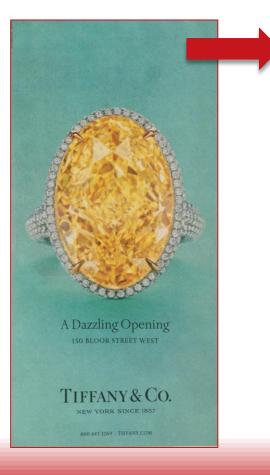
#### A look at the biggest single producer of yellow diamonds in the world





### Tiffany's: Driving the Market for Yellows

*"We have seen a phenomenal upsurge in the interest since we launched the [yellow diamond] collection in 2010...There is also the allure of limited supply – we have no idea how long the mine will last, so prices keep rising." Melvyn Kirtley, Tiffany's Chief Gemologist from June 2013 Financial Times* 



Page 2, Sept 7, 2013 Globe and Mail: Toronto store opening ad
In this example the Tiffany's brand is solely associated with the yellow diamond along with their classic robin's egg blue. This is common since the yellow collection's launch in 2010.



\$242 M

\$234 M

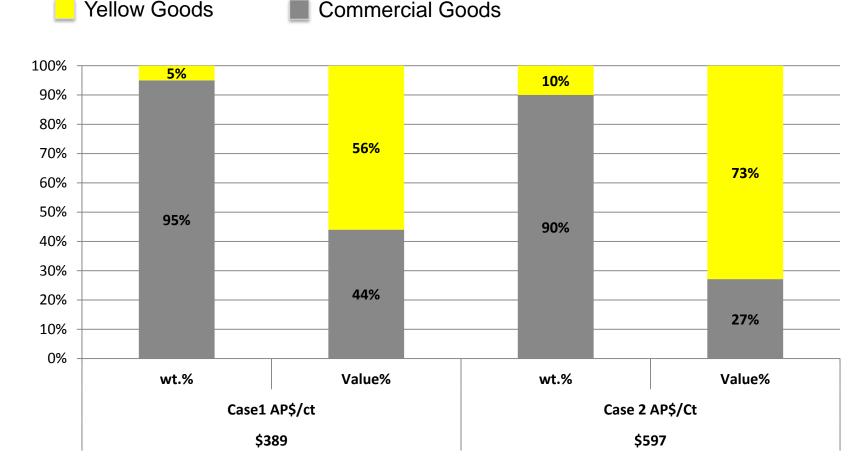
Advertising, Marketing, PR, Media Relations (represents 6.4% of worldwide net sales)

*"Our success reflects an extraordinary assortment of diamond jewelry. In particular Tiffany's yellow diamond collection continued to sparkle with great success in 2013" – Mark Aarons – VP of IR, March 21, 2014* 

\$197M



#### **Case Study: Potential Impact of Fancy Yellows on Average Diamond Price**

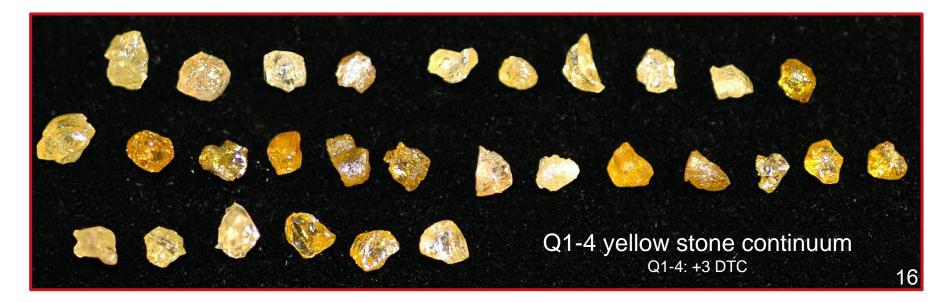


Each case assumes a world average price of commercial goods (~US\$139/carat based on rough import average price into Antwerp in 2012) and an average price for yellow diamonds of \$4350/ct (price achieved for yellows from Ellendale in Q1 2012)

15



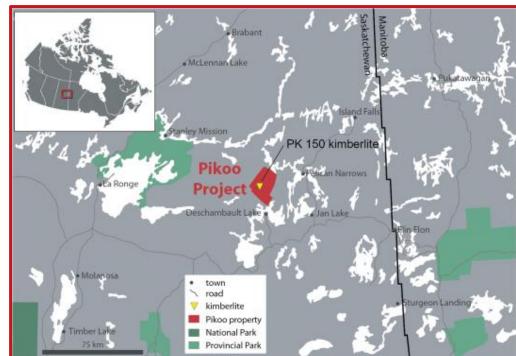
- WAY FORWARD: collect ~1,500 tonnes of kimberlite from surface pits planned for summer 2014 in a 6-8 week program commencing late June
- **COST**: \$3.7 million.
- GOAL: to recover a +500 carat diamond parcel to determine grade, size distribution and the potential for fancy yellows in commercial sizes. Also, to get a preliminary sense of yellow's impact on the overall diamond value.





### Pikoo Project – East Central SK

- North Arrow (80%)/Stornoway (20%) Joint Venture.
- Identified through regional targeting and sampling of the Sask Craton.
- Located between La Ronge, SK & Flin Flon, MB, with good local infrastructure; within 10 km of SK Hwy 911– more than 200 km from nearest kimberlite field (FALC).
- Kimberlite was discovered in nine of ten drill holes completed in 2013 (including PK 150).
- In-fill till sampling for June 2014 almost completed.
- Follow up drilling fall 2014 and/or spring 2015 planned.





### Pikoo Project – PK 150 Diamond Results

#### A 209.7 kg sample from drill core yielded:

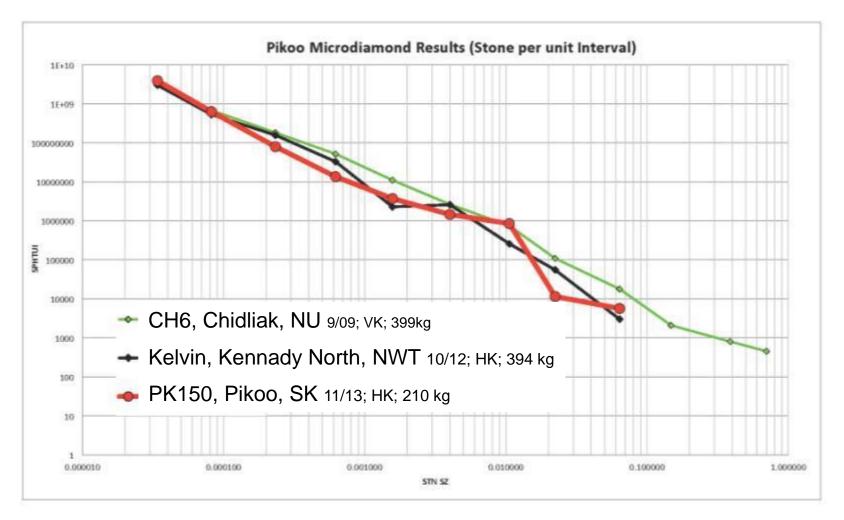
- ➢ 745 diamonds > 0.106 mm
- 23 diamonds > 0.85 mm
- Total carats > 0.85 mm = 0.2815
- Total recovery sample grade (+0.85mm)
   = 1.34 cpt
- > 95% of diamonds are intact, white octahedrons or aggregates.

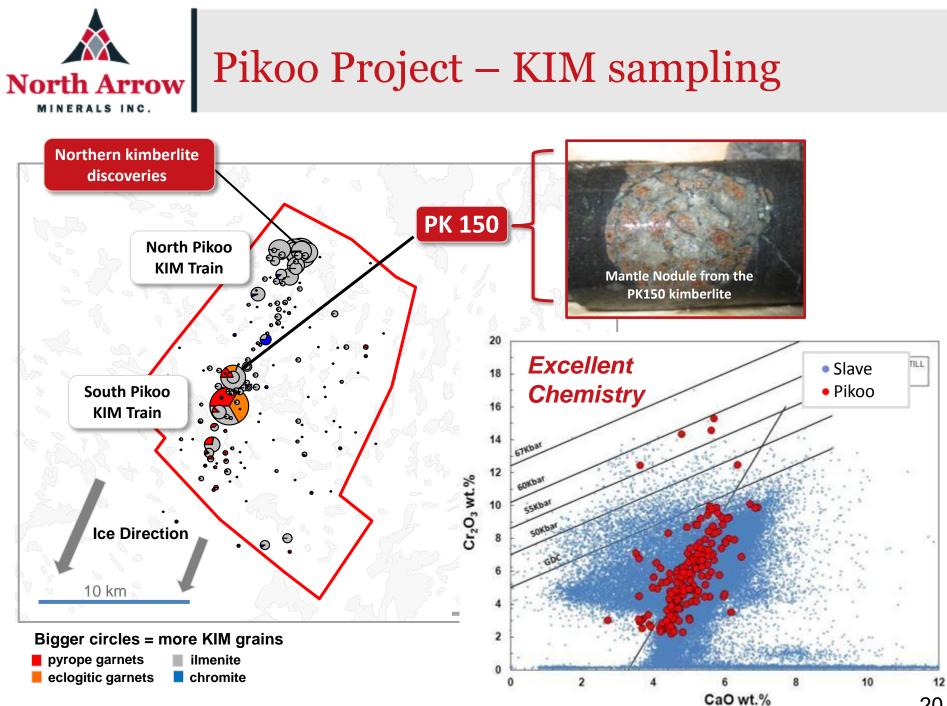


|                  | Number of Diamonds per Sieve Size (mm Square Mesh Sieve) |        |        |        |        |        |        |       |       |        |                   |
|------------------|--|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------------------|
| Sample           | +0.106   | +0.150 | +0.212 | +0.300 | +0.425 | +0.600 | +0.850 | +1.18 | +1.70 | Total  | Total             |
| Weight<br>Dry Kg | -0.150   | -0.212 | -0.300 | -0.425 | -0.600 | -0.850 | -1.18  | -1.70 | -2.36 | Stones | Carats<br>+0.85mm |
| 209.7            | 392  | 199    | 65     | 27     | 19     | 20     | 21     | 1     | 1     | 745    | 0.2815            |



## PK150 Microdiamond Comparison

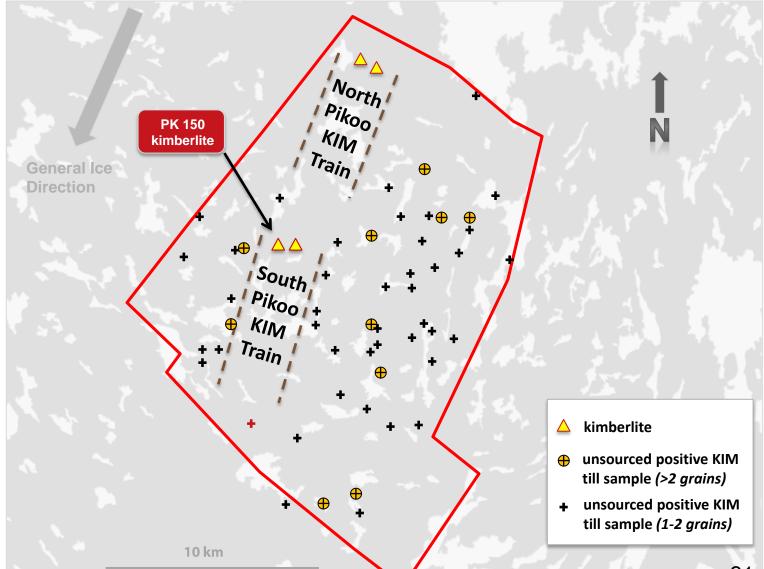




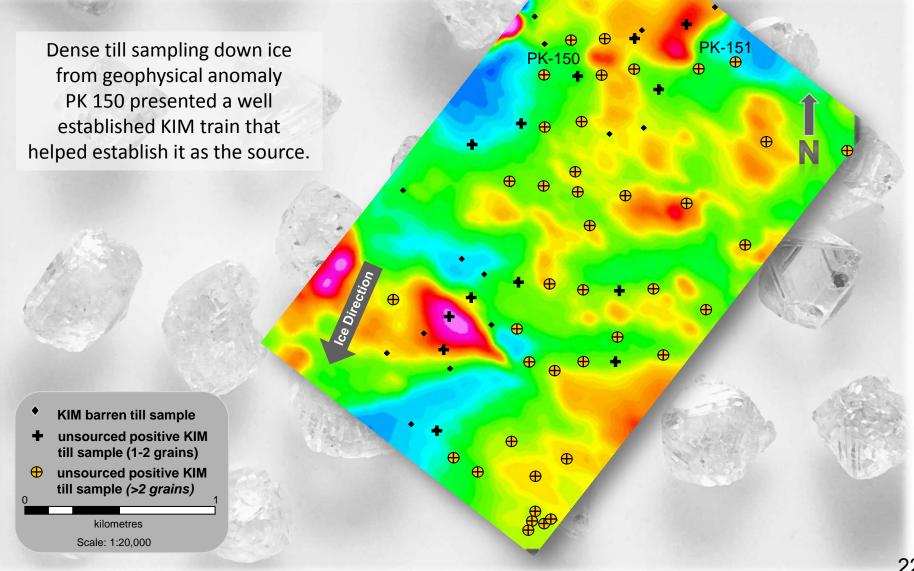


### Pikoo Project 2014 Exploration

- The Pikoo Project area originally became a focus because of a single till sample in the south that contained 2 pyrope garnets.
- Focus for June program will be infill existing KIM anomalous till samples to better define unsourced trains.
- There are more kimberlites to discovered



# North ArrowTill Sampling and Geophysics atNorth ArrowPK 150 and PK 151



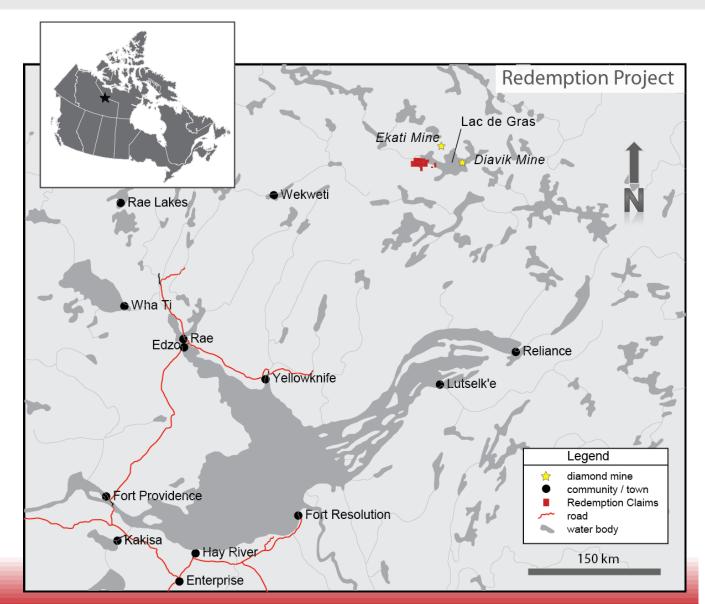
# **North Arrow** PK 177 and PK 170/171 Geophysical Targets

PK-177 **PK 170** KIM barren till sample unsourced positive KIM till sample (1-2 grains) Increasing till sample density down ice from unsourced positive KIM  $\oplus$ till sample (>2 grains) other geophysical anomalies (PK 170, 171 and 177 are examples) will help define them as kilometres possible targets for a Sept. 2014 drill program. Scale: 1:20,000



# Redemption Project, NT

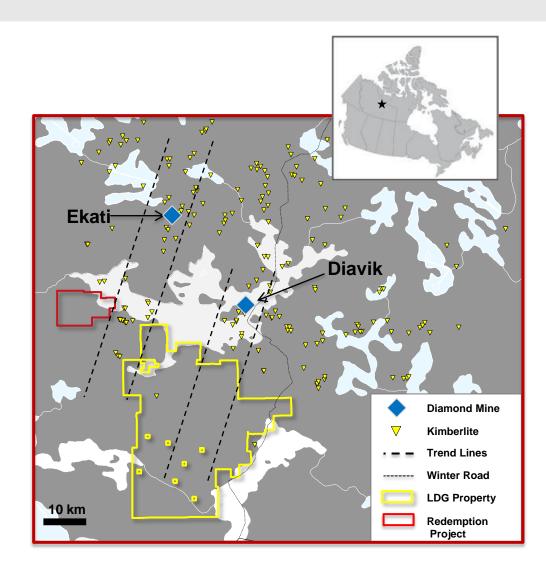
- 34,300 acres located within the Lac de Gras diamond district.
- 32 km southwest of Ekati diamond mine.
- 47 km west of Diavik diamond mine.
- Under Option from Arctic Star Exploration.
- NAR to spend \$5 million by 2017 to earn a 55% interest.
- Drilling permits in place.





### Redemption Project, NT

- At the western end of the Lac de Gras kimberlite field, northwest of North Arrow's LDG JV with Dominion Diamond Corporation.
- 2013 work included and airborne gravity survey; bathymetry surveys; 350 till samples.
- Also a major data compilation of historic exploration work.
- April 2014 ground geophysical surveys have identified at least 9 priority targets for drilling.
- Planning is underway for July/August drilling program.

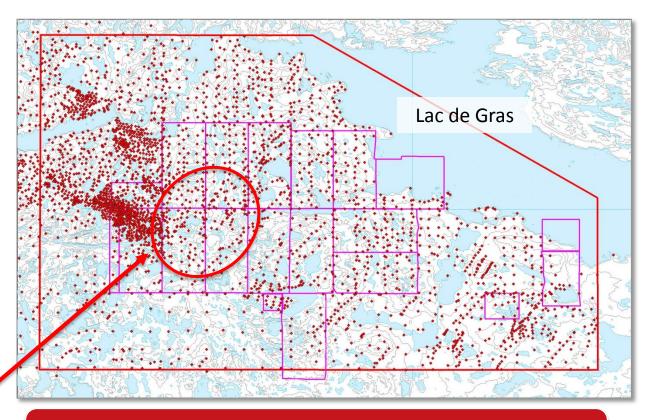




**Redemption – Past Work** 



- Significant past exploration by earlier workers since the early 1990's.
- Over \$12 million spent chasing the South Coppermine indicator train.
- ➤ ~3,100 till samples.
- <30,000 KIM analyses.</p>
- 10 airborne geophysical surveys.
- ~70 detailed helicopter and ground geophysical surveys.
- < 20 drill holes.</p>
- Only 4 drill holes in the priority target area.



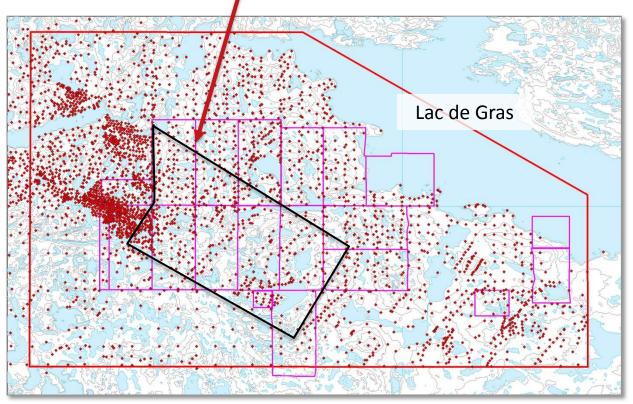
Lots of work but not much drilling...



Redemption – 2013 Work

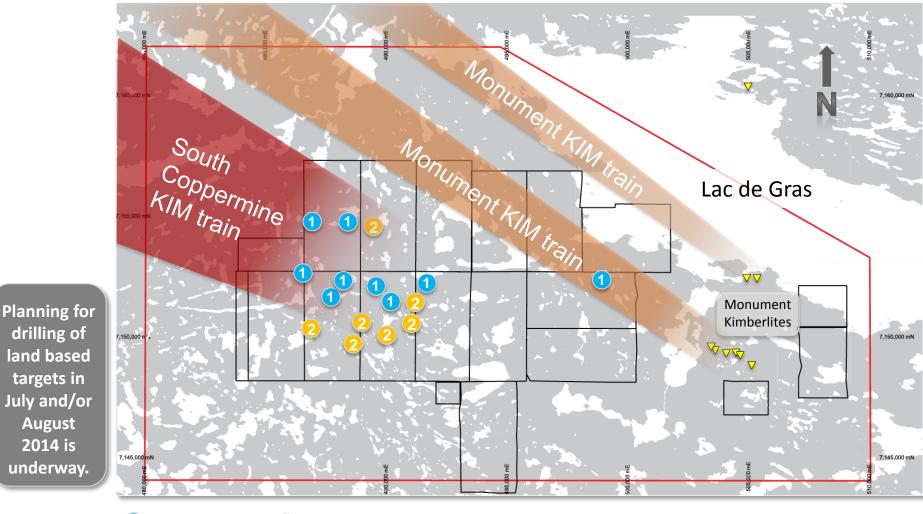


- Arctic Star and North Arrow signed option agreement.
- Flew Airborne Gravity Survey covering main target area.
- > 350 till samples collected.
- Water depth surveys of 13 lakes.
- Detailed modelling of gravity targets.
- Ground geophysical surveys of 21 grids.
- Final geophysical modelling and drill program planning are underway.



### Next stage is drilling...





1<sup>st</sup> priority targets

drilling of

land based targets in

> August 2014 is

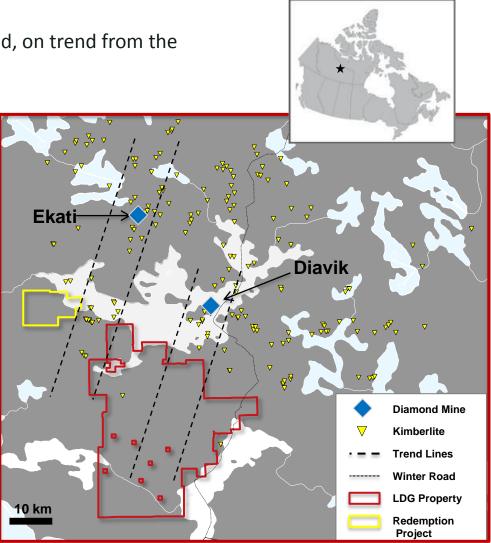
underway.

2nd priority targets



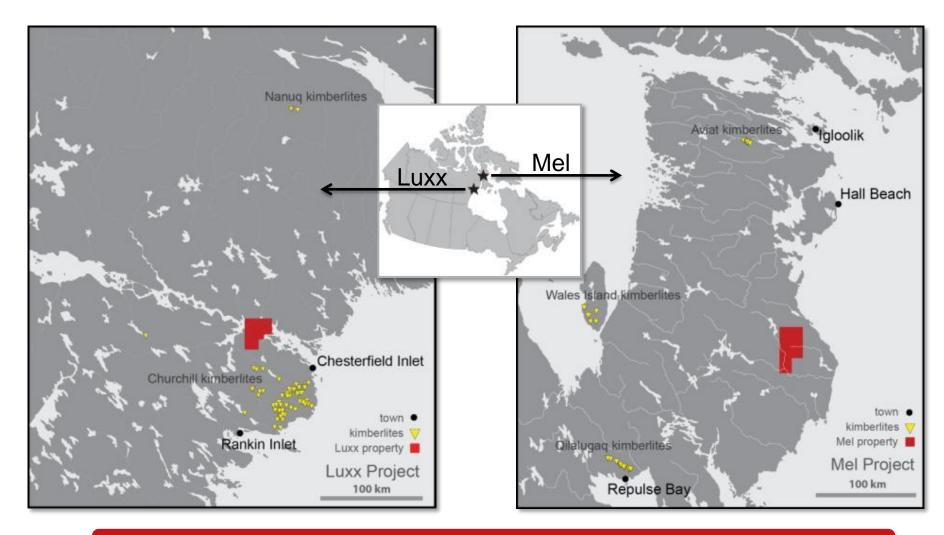
# Lac de Gras Diamond Project, NT

- Located within the Lac de Gras kimberlite field, on trend from the Ekati and Diavik diamond mines.
- Option Agreement with Dominion
   Diamond Corp (formerly Harry Winston; owns 40% of Diavik; 80% of Ekati):
  - Creation of a JV property covering ~307,000 acres (>1,200 km<sup>2</sup>).
  - Dominion to spend \$5M over 5 years to explore the JV property.
  - Vesting will create a JV with DDC (55%) and North Arrow (45%).
- Numerous untested airborne geophysical targets with kimberlite type signatures.
- ~\$3M overburden drilling program completed in 2013.





### Luxx & Mel Projects - NU



Two early stage projects with un-sourced kimberlite indicator mineral trains



# Way Forward – 2014

| <b>Project</b> | Location         | Commodity | Interest  | Comment                             |
|----------------|------------------|-----------|-----------|-------------------------------------|
| Qilalugaq      | Nunavut          | Diamonds  | 80% (60%) | Mob underway for 2014 program       |
|                |                  |           |           | Bulk Sample collection July/Aug     |
| Pikoo          | Saskatchewan     | Diamonds  | 80%       | Follow up till sampling June 2014   |
| Lac de Gras    | NWT              | Diamonds  | 45%       | Results for ~\$3M 2013 program      |
| Redemption     | NWT              | Diamonds  | 55%       | Ground geophysics complete          |
|                |                  |           |           | Planning underway for 2014 drilling |
| Luxx           | Nunavut Diamonds |           | 100%      | 2014 exploration follow-up in July  |
| Mel            | Nunavut          | Diamonds  | 100%      | 2014 exploration follow-up in July  |
| Timiskaming    | Ontario          | Diamonds  | 80%       | Diamond and KIM evaluation of 4     |
|                |                  |           |           | kimberlites                         |

- Priority for 2014 will be Q1-4 sampling program for diamond value.
- Sample collected July/Aug; shipped Sept; processed Oct-Jan; valuation Q1/15
- May-June 2014 till sampling program almost complete at Pikoo; fall 2014 follow up.
- Planning underway for summer drilling at Redemption.
- > Follow up till sampling, permitting and prospecting at Mel and Luxx.



#### **TSXV: NAR**

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