



Nunavut Exploration Overview 2013



Paul Budkewitsch – District Geologist

17th Nunavut Mining Symposium

April 7-11, 2014

Iqaluit, Nunavut



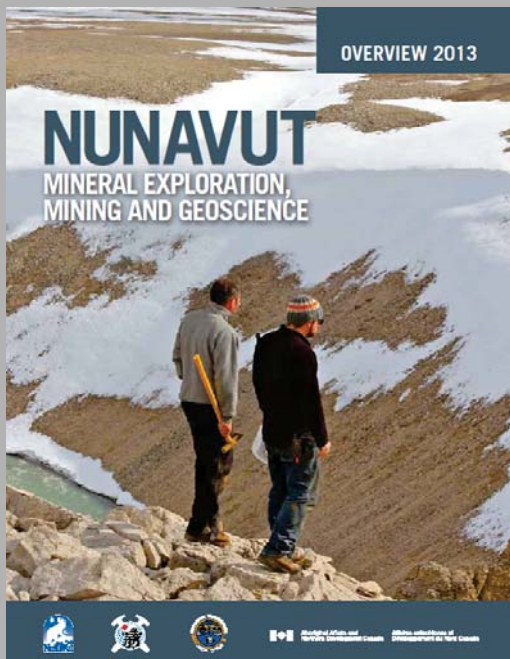
AANDC Activities 2013

- Annual *Exploration Overview* magazine published
- 37 new industry Mineral Assessment Reports released in 2013
- New Mining Regulations and Map Selection in development
- Updated Glossary of Mining and Geoscience Terms



Look for these publications:

Designed for industry and
regulators:



Overview magazine and map

<http://cngo.ca/exploration-overview/>

Designed for Nunavummiut:



Regional Overview Handouts
Kivalliq, Kitikmeot, Qikiqtaaluk

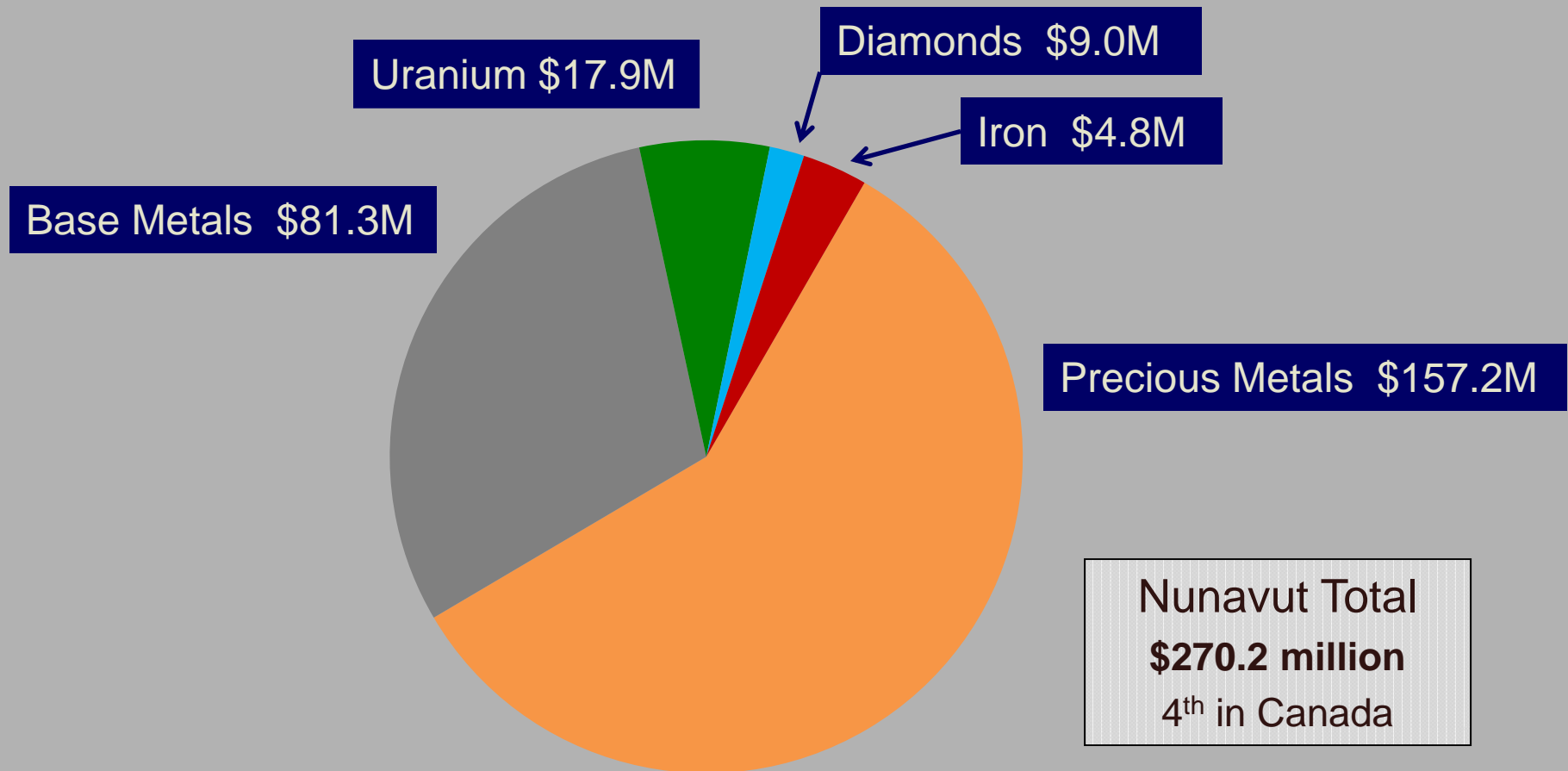


2013 Highlights

- Baffinland signed an Inuit Impact Benefits Agreement with the Qikiqtani Inuit Association
- Baffinland announced a positive construction decision for Mary River iron project and NIRB submitted its report to the Minister for decision on the Early Revenue Phase proposal
- Bulk sample collected from Chidliak CH-6 kimberlite
- Rankin to Meliadine all-weather road completed
- Several projects advancing through Environmental Assessment process
- Positive Prefeasibility Study for Back River gold project
- Hope Bay gold project acquired by TMAC Resources



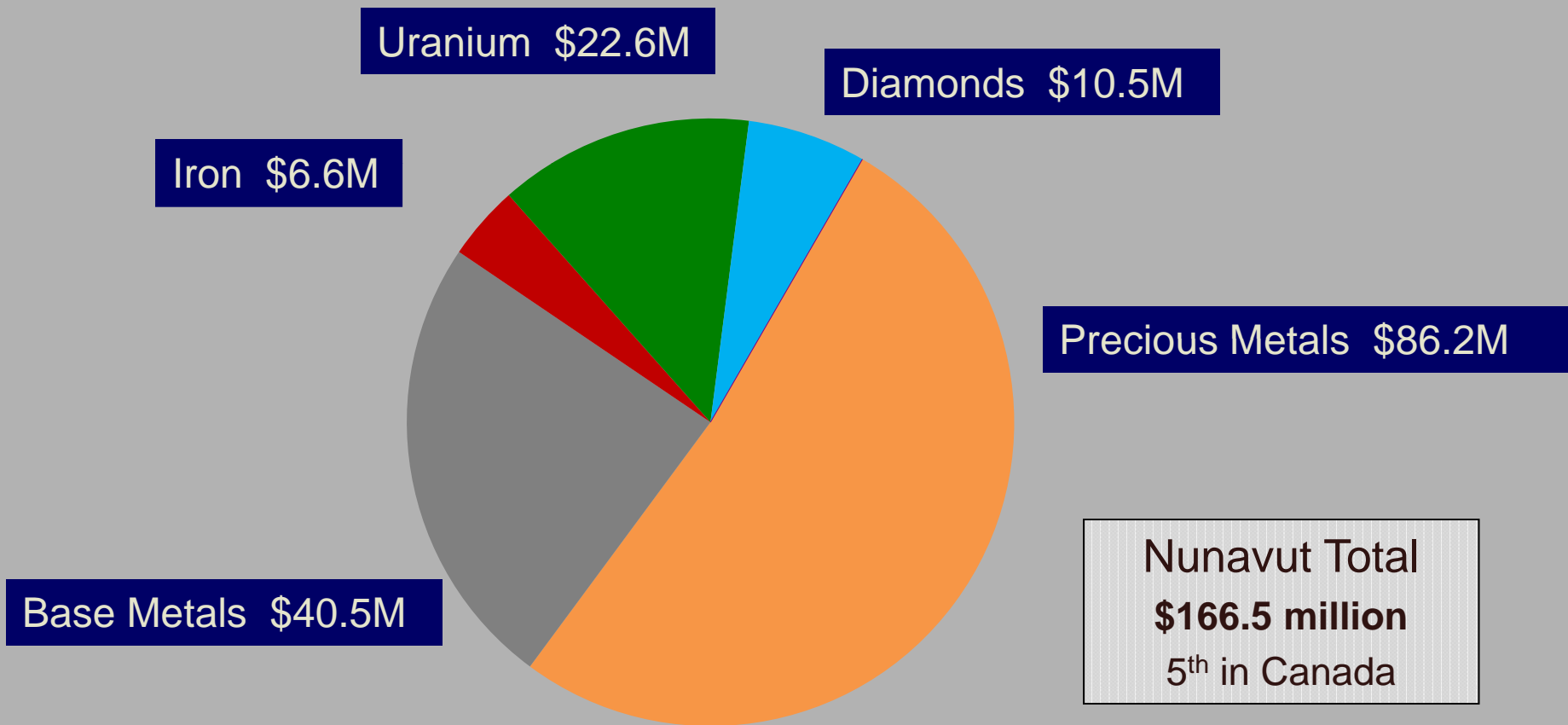
2013 Nunavut Exploration and Deposit Appraisal Expenditure Estimates



Source: NRCan Mineral Statistics



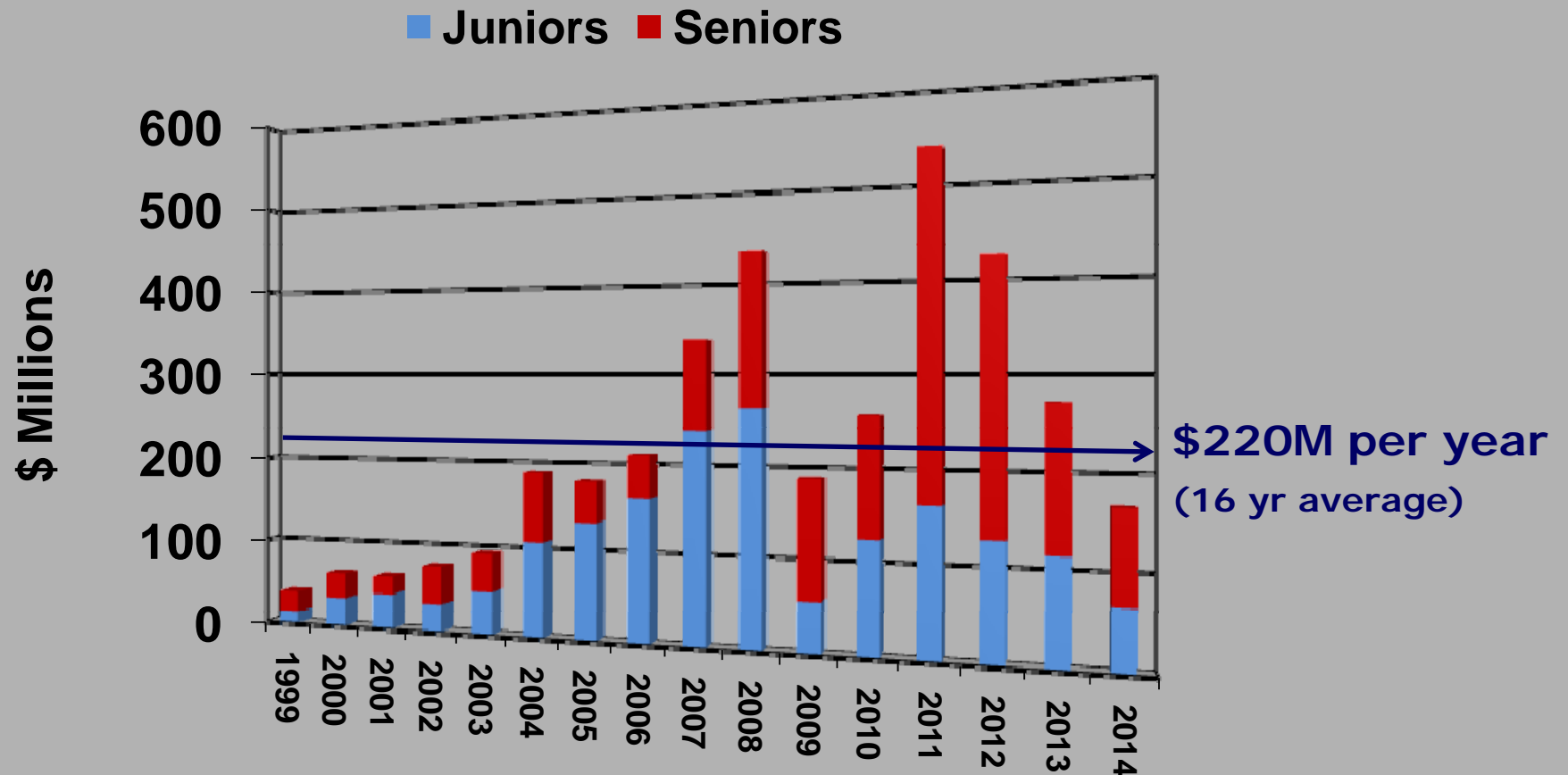
2014 Nunavut Exploration and Deposit Appraisal Expenditure Intentions



Source: NRCan Mineral Statistics



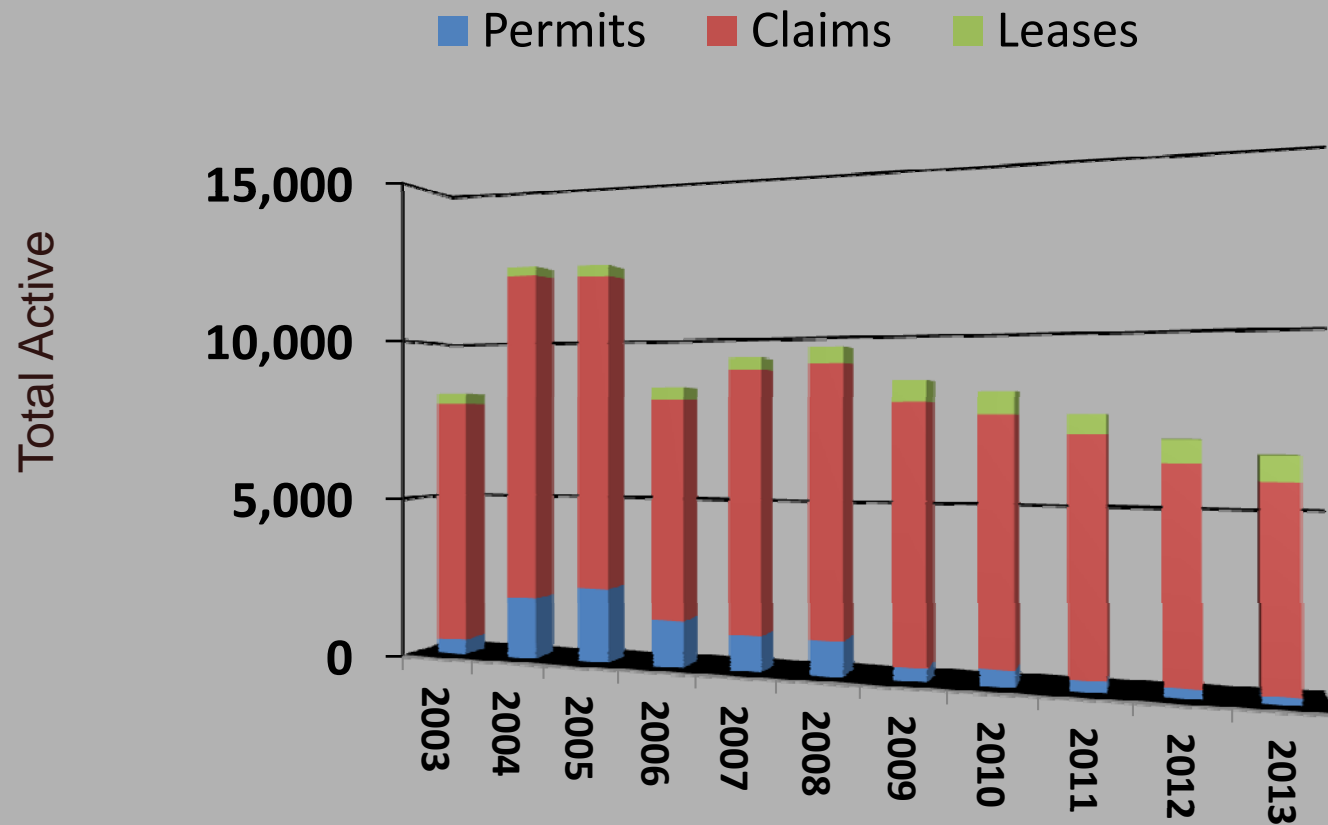
Who is doing the exploration work?



\$3.5 billion since 1999



What is the Mineral Tenure Status?



Source: AANDC-NRO



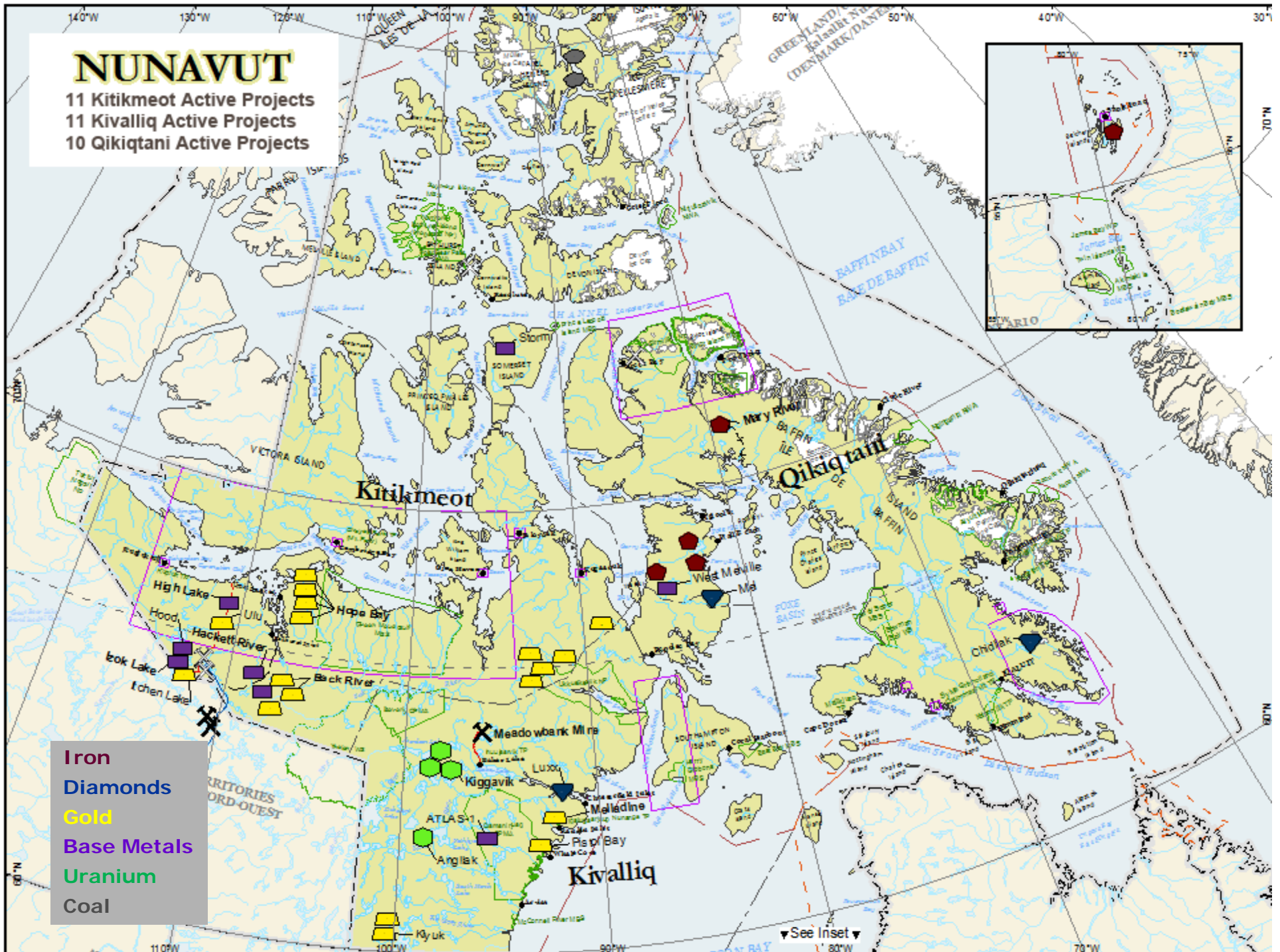
What are the active projects in 2013?

- 12 Gold - Au
- 7 Base Metal – Zn, Cu, Ni, Ag
- 5 Iron – Fe
- 4 Uranium - U
- 3 Diamond – (C)
- 1 Coal – C

32 total projects

NUNAVUT

11 Kitikmeot Active Projects
11 Kivalliq Active Projects
10 Qikiqtani Active Projects





79 196.97

Au

Gold

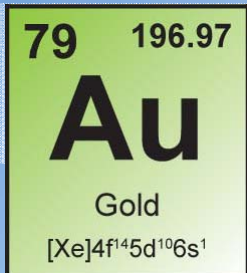
[Xe]4f¹⁴5d¹⁰6s¹

Meadowbank Gold Mine

- Millionth ounce produced April 2013
- 11,000+ tonnes ore per day facility
- Record 2013 production of 430,613 ounces
- 1.8M ounces open pit reserves
- Operating mine life to 2018



Courtesy: Agnico-Eagle Mines Ltd.



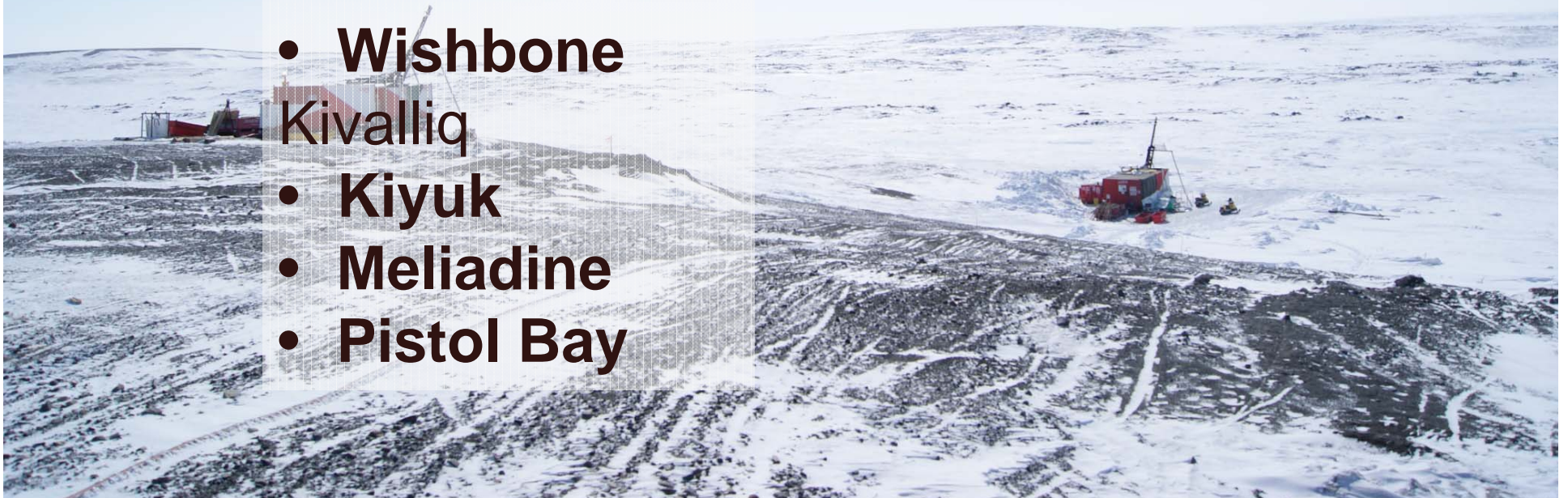
Precious Metal Exploration Projects

Kitikmeot

- **Back River**
- **Hope Bay**
- **Itchen Lake**
- **Wishbone**

Kivalliq

- **Kiyuk**
- **Meliadine**
- **Pistol Bay**





6

12.01

C

Carbon

 $1s^2 2s^2 2p^2$

Diamond Exploration Projects

Kivalliq

- **Luxx**

Qikiqtani

- **Mel**
- **Chidliak**



Coal Permits

Qikiqtani

- **Nunavut Coal**





29 63.55 Cu Copper [Ar]3d ¹⁰ 4s ¹	30 65.39 Zn Zinc [Ar]3d ¹⁰ 4s ²
47 107.87 Ag Silver [Kr]4d ¹⁰ 5s ¹	82 207.20 Pb Lead [Xe]4f ¹⁴ 5d ¹⁰ 6s ² 6p ²

Base Metal Exploration Projects

Kitikmeot

- Hackett River
- Hood
- Izok Corridor

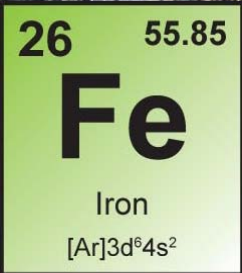
Kivalliq

- ATLAS-1

Qikiqtani

- Storm/Seal

Courtesy: Aston Bay Holdings Ltd.



Iron Exploration Projects

- Qikiqtani
- **Mary River**

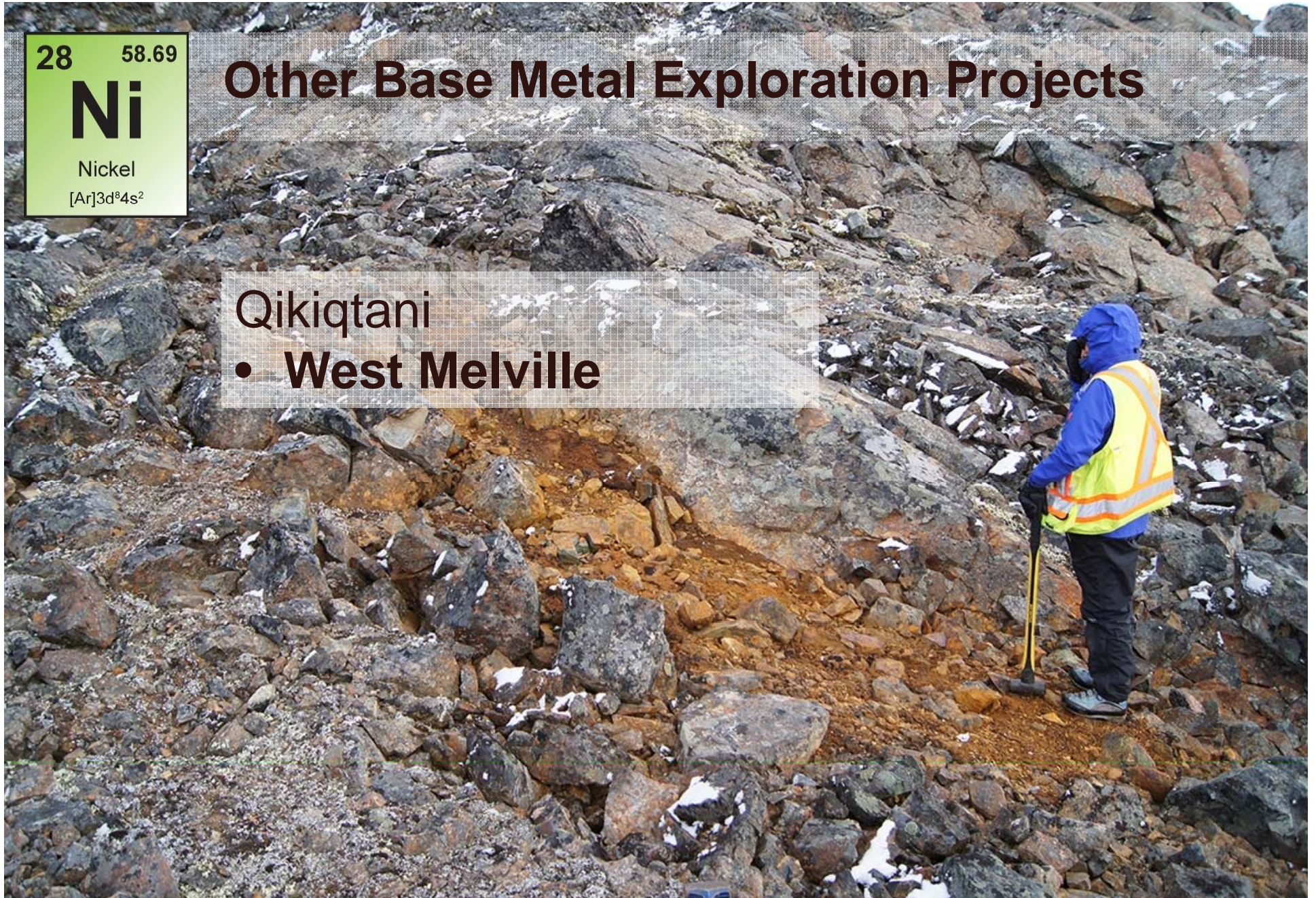


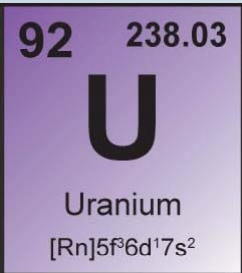


28 58.69
Ni
Nickel
[Ar]3d⁸4s²

Other Base Metal Exploration Projects

- Qikiqtani
- **West Melville**





Uranium Exploration Projects

Kivalliq

- Angilak (Lac 50 Trend)
- Kiggavik





Other Exploration Potential?

Rare Earth Elements

- **HREE, LREE**

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Lanthanum (ᐱᐱᐱᐱᐱᐱ)	Cerium (ᐱᐱᐱᐱᐱᐱ)	Praseodymium (ᐱᐱᐱᐱᐱᐱ)	Neodymium (ᐱᐱᐱᐱᐱᐱ)	Promethium (ᐱᐱᐱᐱᐱᐱ)	Samarium (ᐱᐱᐱᐱᐱᐱ)	Europium (ᐱᐱᐱᐱᐱᐱ)	Gadolinium (ᐱᐱᐱᐱᐱᐱ)	Terbium (ᐱᐱᐱᐱᐱᐱ)	Dysprosium (ᐱᐱᐱᐱᐱᐱ)	Holmium (ᐱᐱᐱᐱᐱᐱ)	Erbium (ᐱᐱᐱᐱᐱᐱ)	Thulium (ᐱᐱᐱᐱᐱᐱ)	Ytterbium (ᐱᐱᐱᐱᐱᐱ)	Lutetium (ᐱᐱᐱᐱᐱᐱ)

Platinum Group Elements

- **Rh, Pd, Re, Os, Ir, Pt**

Other metals

- **In, Ge**
- **Nb, Ta**
- **Li**

3	6.94
Li	
Lithium	(ᐱᐱᐱᐱᐱᐱ)

49	114.82
In	
Indium	(ᐱᐱᐱᐱᐱᐱ)

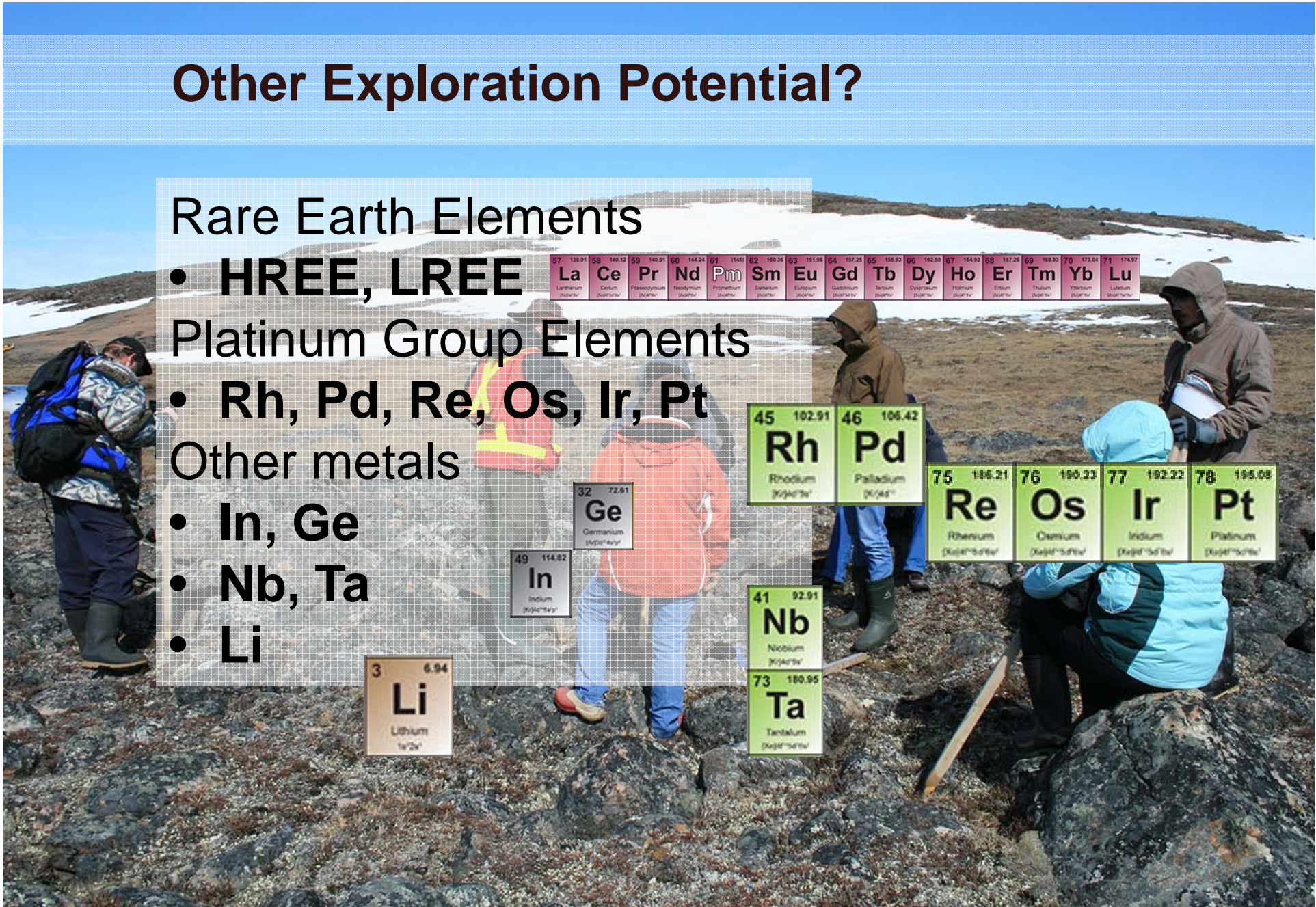
32	72.61
Ge	
Germanium	(ᐱᐱᐱᐱᐱᐱ)

41	92.91
Nb	
Niobium	(ᐱᐱᐱᐱᐱᐱ)

73	180.95
Ta	
Tantalum	(ᐱᐱᐱᐱᐱᐱ)

45	102.91	46	106.42
Rh		Pd	
Rhodium	(ᐱᐱᐱᐱᐱᐱ)	Palladium	(ᐱᐱᐱᐱᐱᐱ)

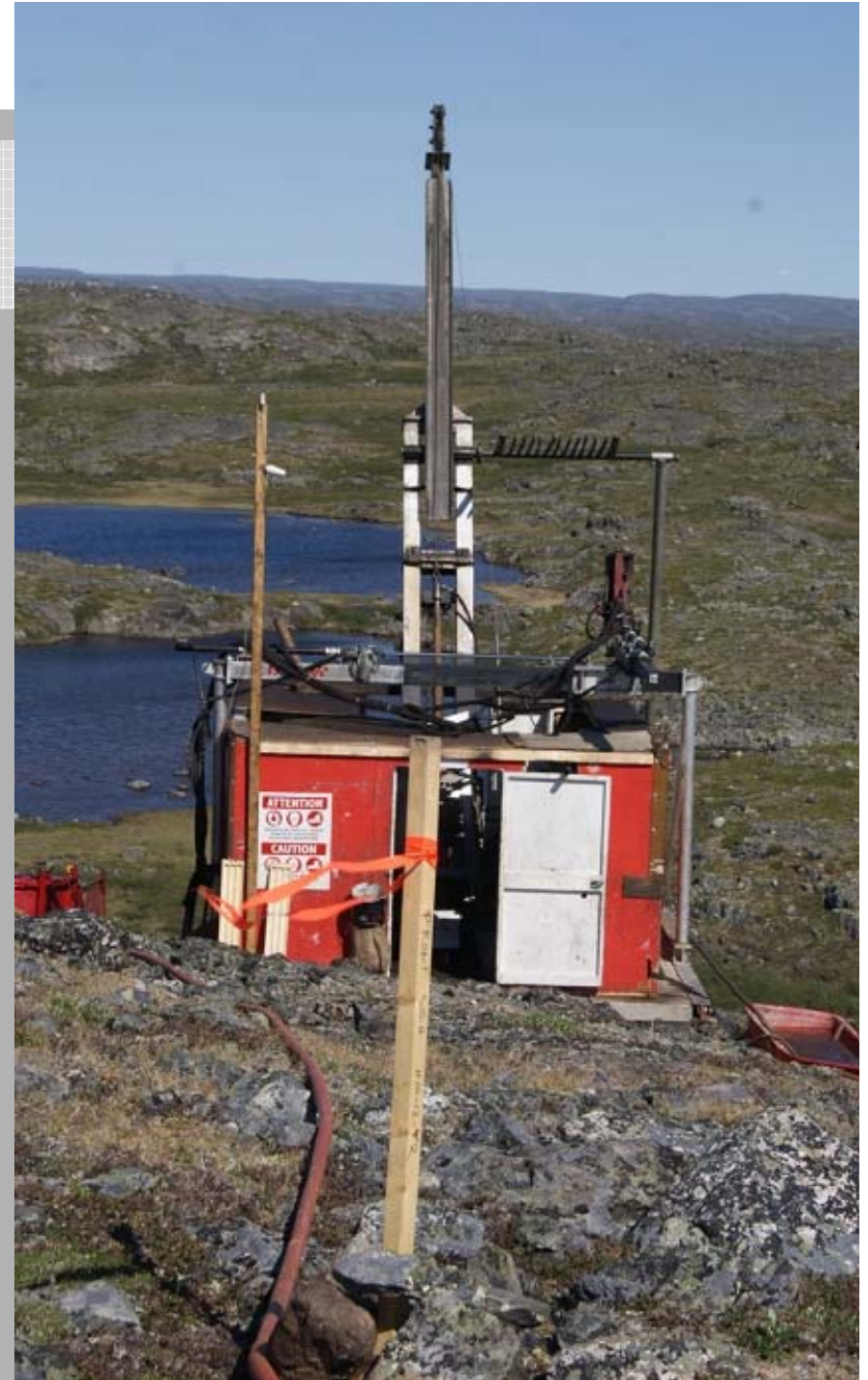
75	186.21	76	190.23	77	192.22	78	195.08
Re		Os		Ir		Pt	
Rhenium	(ᐱᐱᐱᐱᐱᐱ)	Osmium	(ᐱᐱᐱᐱᐱᐱ)	Iridium	(ᐱᐱᐱᐱᐱᐱ)	Platinum	(ᐱᐱᐱᐱᐱᐱ)





Summary

- One operating gold mine
- One gold project and one iron project with project certificates
- Six projects advancing through environmental assessment process
- Continued exploration in all three regions
- New discoveries and new projects





Contact

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