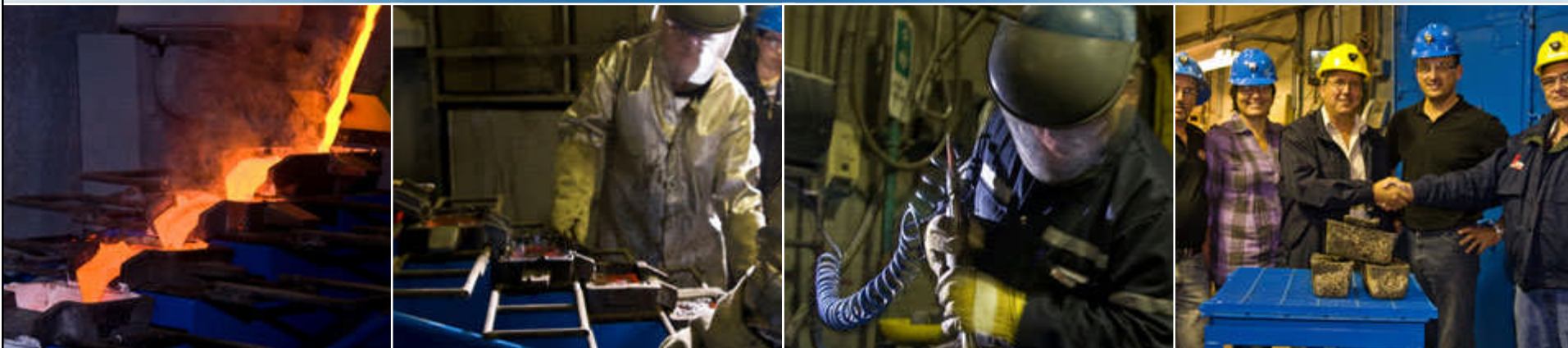




North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

October 26, 2009

---

### Presenters:

Bill Biggar, Michel Bouchard, Dan Rousseau,  
Dave Passfield, and William Stone





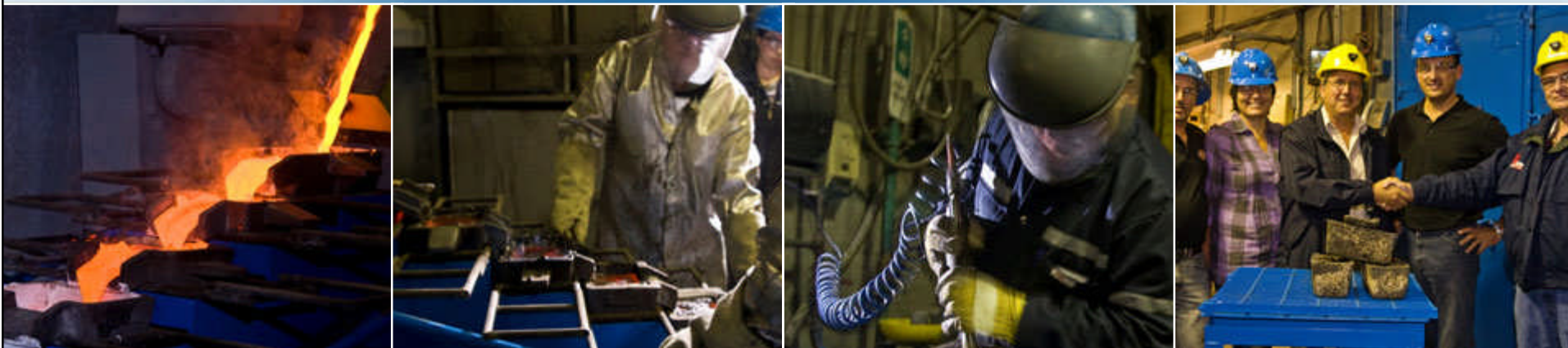
## Forward-Looking Statements

Certain information included in this presentation, including any information as to our future financial or operating performance and other statements that express management's expectations or estimates of future performance, constitute 'forward-looking statements' within the meaning of the 'safe harbor' provisions of the *United States Private Securities Litigation Reform Act of 1995* and Canadian securities laws. The words 'expect', 'believe', 'will', 'intend', 'estimate' and similar expressions identify forward-looking statements. Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by management, are inherently subject to significant business, economic and competitive uncertainties, risks and contingencies. The Company cautions the reader that such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual financial results, performance or achievements of North American Palladium to be materially different from the Company's estimated future results, performance or achievements expressed or implied by those forward-looking statements and that the forward-looking statements are not guarantees of future performance. These statements are also based on certain factors and assumptions. For more details on these estimates, risks, assumptions and factors, see the Company's most recent Form 40-F/Annual Information Form on file with the U.S. Securities and Exchange Commission and Canadian provincial securities regulatory authorities. In addition, there can be no assurance that the Company's Lac des Iles or Sleeping Giant mines will be successfully restarted or that other properties can be successfully developed. The Company disclaims any obligation to update or revise any forward-looking statements, whether as a result of new information, events or otherwise, except as expressly required by law. Readers are cautioned not to put undue reliance on these forward-looking statements.

All dollar amounts in Canadian currency unless otherwise stated.



North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

Introduction

---

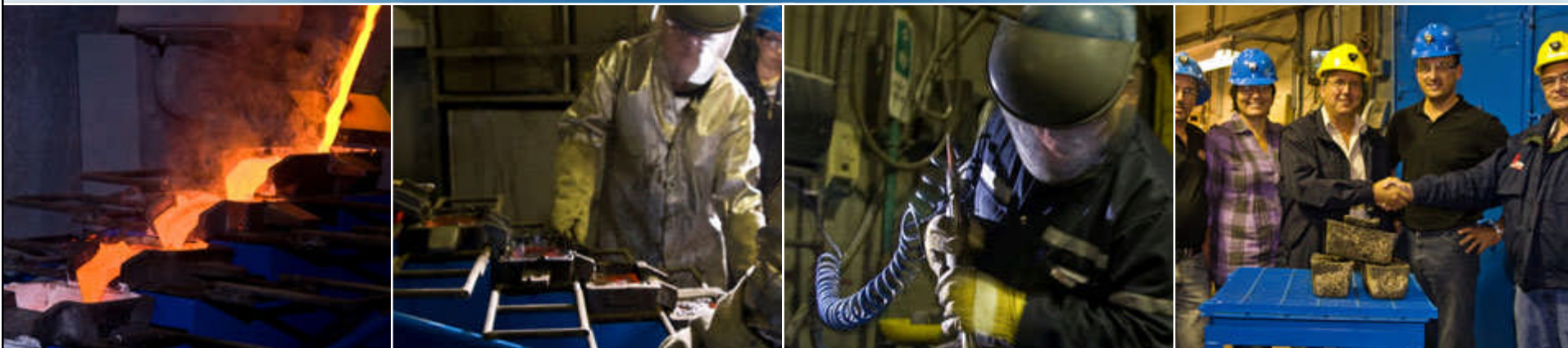
**Bill Biggar**

President & Chief Executive Officer





North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

Mine Geology

---

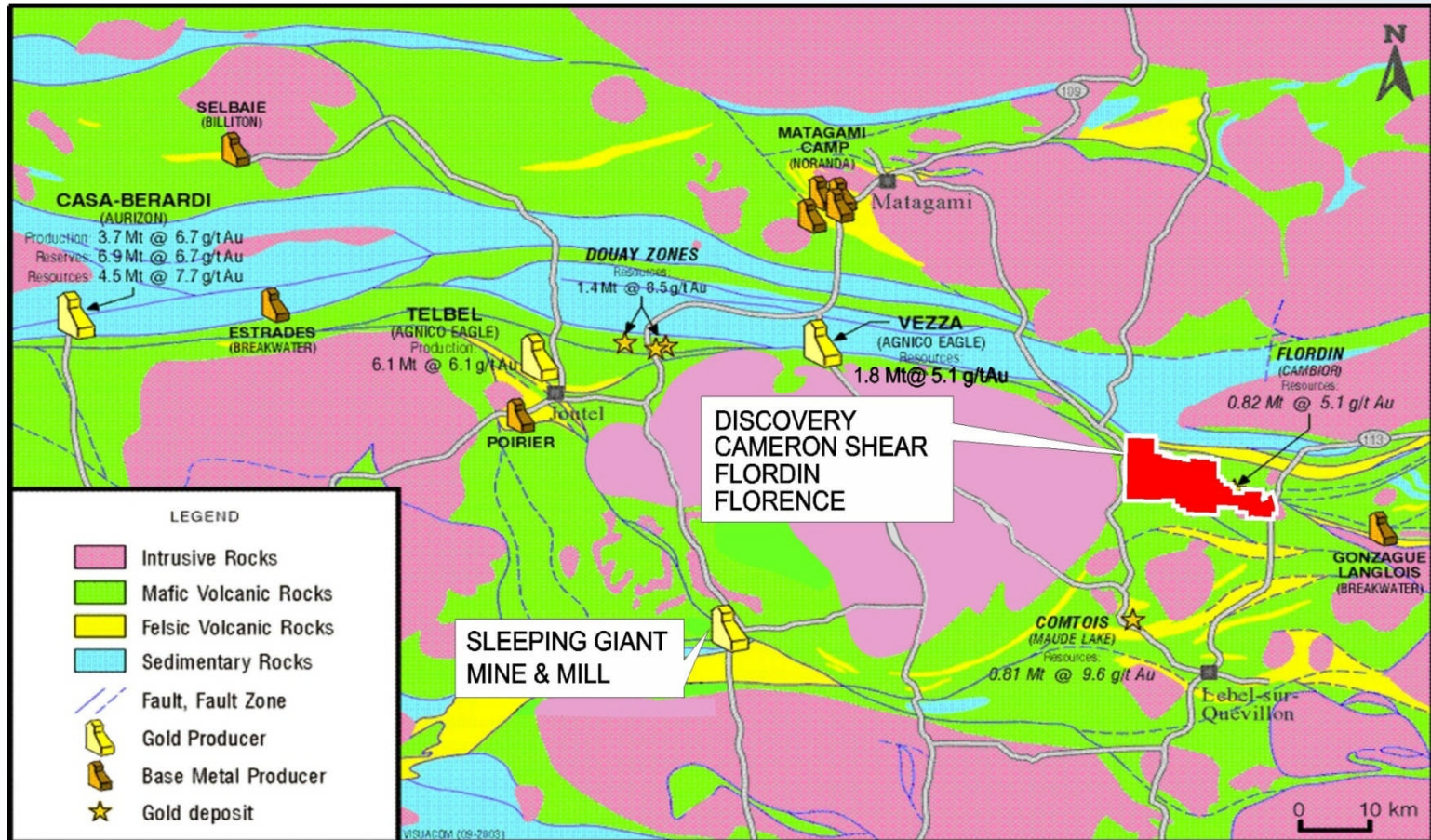
**Michel Bouchard**

Vice President, Gold Division



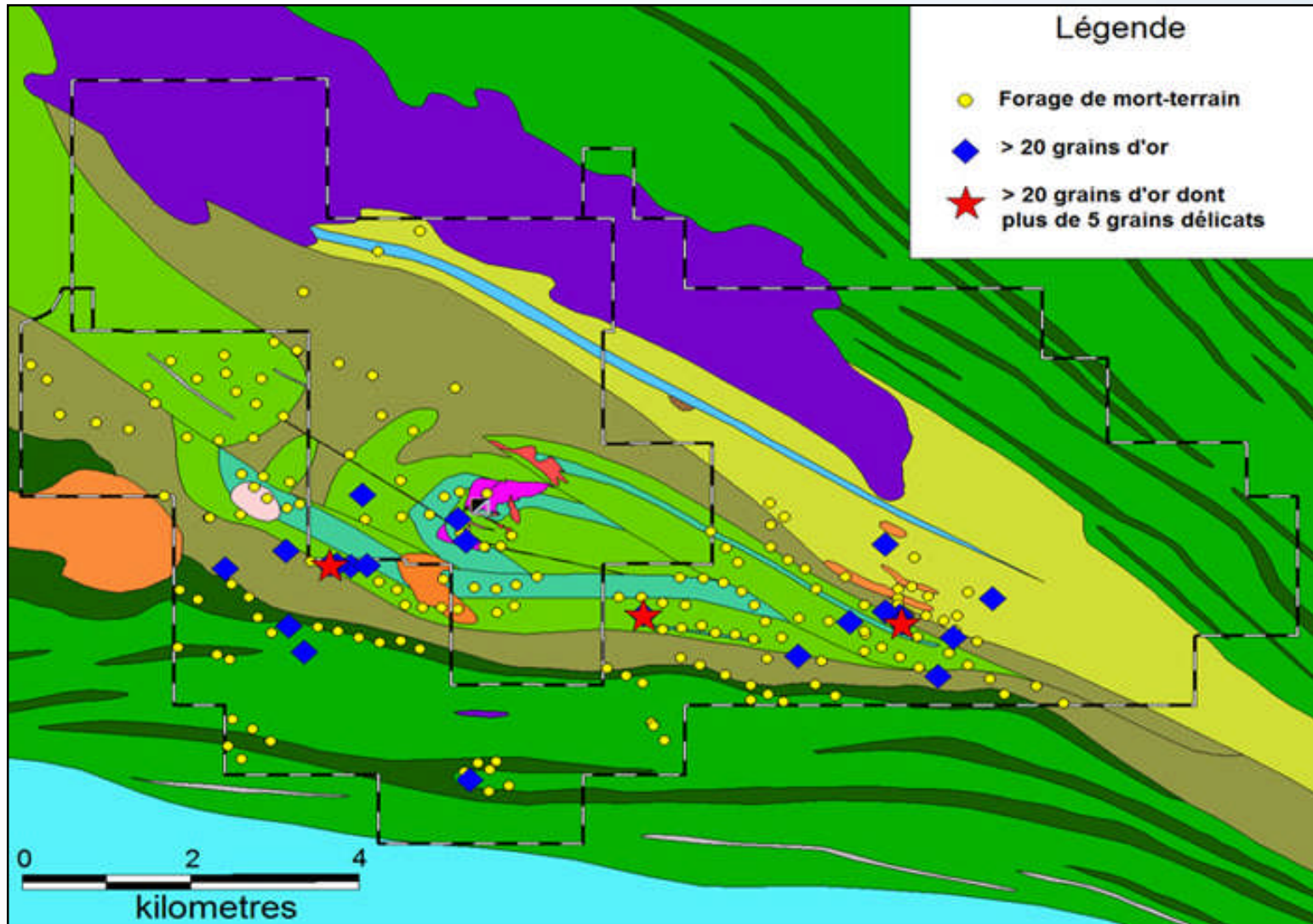


# Regional geology



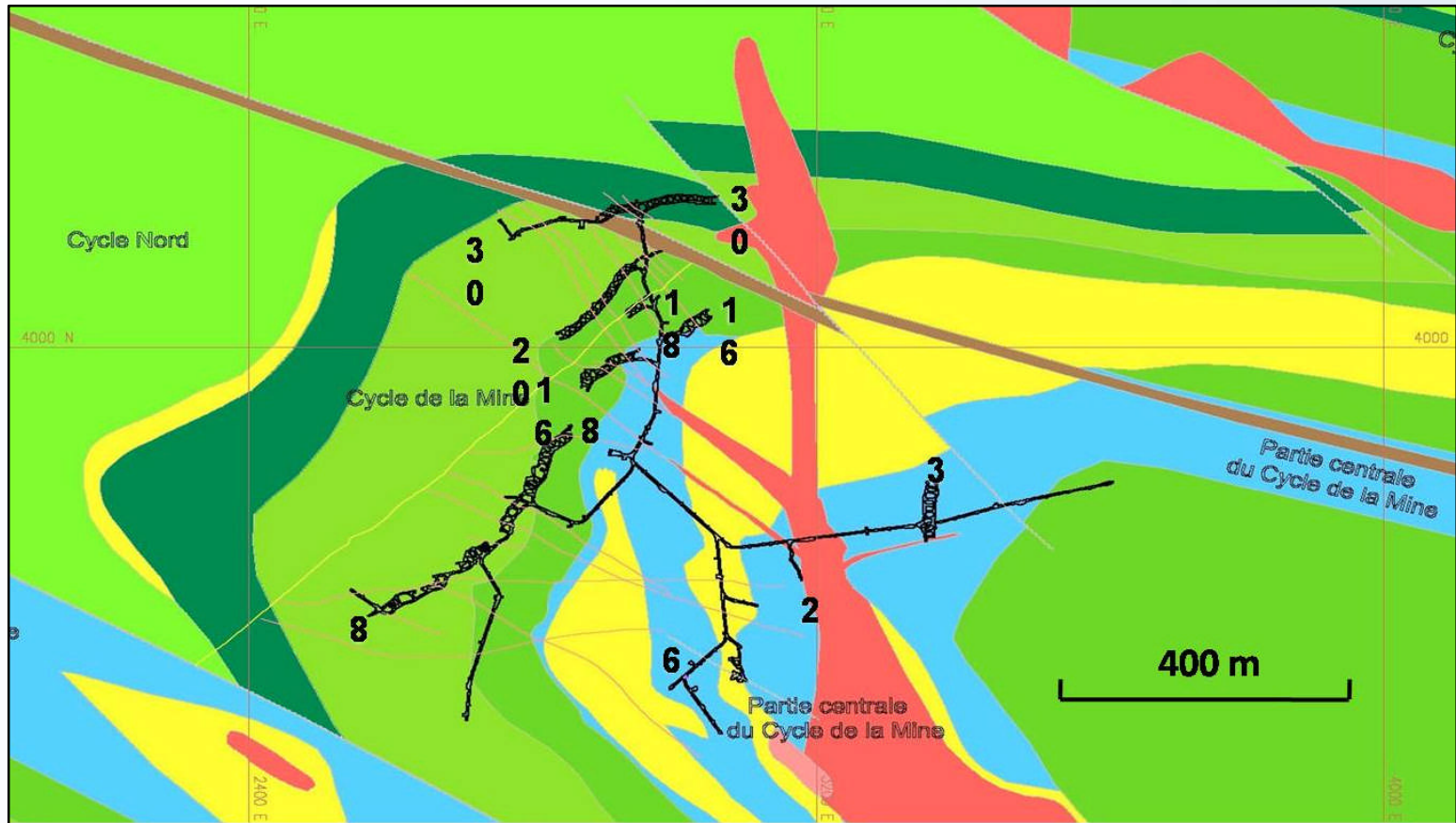


# Mine geology



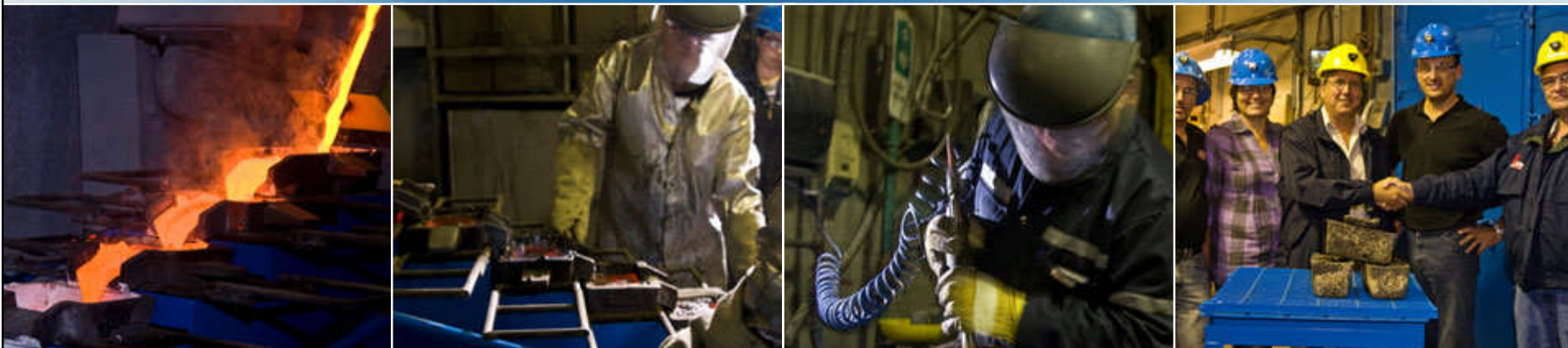


# Mine geology: level 625





North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

Operational Review

---

**Dave Passfield**

Vice President, Operations

**Dan Rousseau**

General Manager





# Sleeping Giant: History



## 1984 to 1987:

Peron Gold Mines (now Aurizon) sinks two shafts

## 1991:

Cambior acquires 50% by investing in drilling and underground work

## April 2005:

Cambior acquires second 50% from Aurizon, becomes sole owner

## Oct. 2007:

Cadiscor signs option to acquire SG and begins underground drill campaign to identify new reserves

## Oct. 2008:

Ownership transferred to Cadiscor

## May 2009:

NAP acquires Cadiscor and continues operational restart

## 2006:

IAMGOLD becomes owner, after acquiring Cambior

## 1993:

Production resumes

## 1988 to 1990:

Commercial production until reserves thought depleted

## Sept. 2008:

Cadiscor releases NI 43-101 report indicating new reserves and resources for 3 years of production

## April 2009:

Cadiscor commences restart

## Oct. 6, 2009:

First gold pour



## Mining



- Typical narrow vein high-grade gold mine in the Abitibi region: tracked haulage, jacklegs, long toms, slushers, etc. More labour intensive, no diesel equipment underground
- Three mining methods to be utilized
  - Shrinkage
  - Room and pillar
  - Long hole
- Room and pillar current mining method
- Long hole stopes under development and scheduled to come on line in late 2009, early 2010
- Mine operates 12 shifts per week
- Shaft is approximately 1000 metres deep, has been deepened twice in its life, and can be deepened further
- Last production level is currently 975



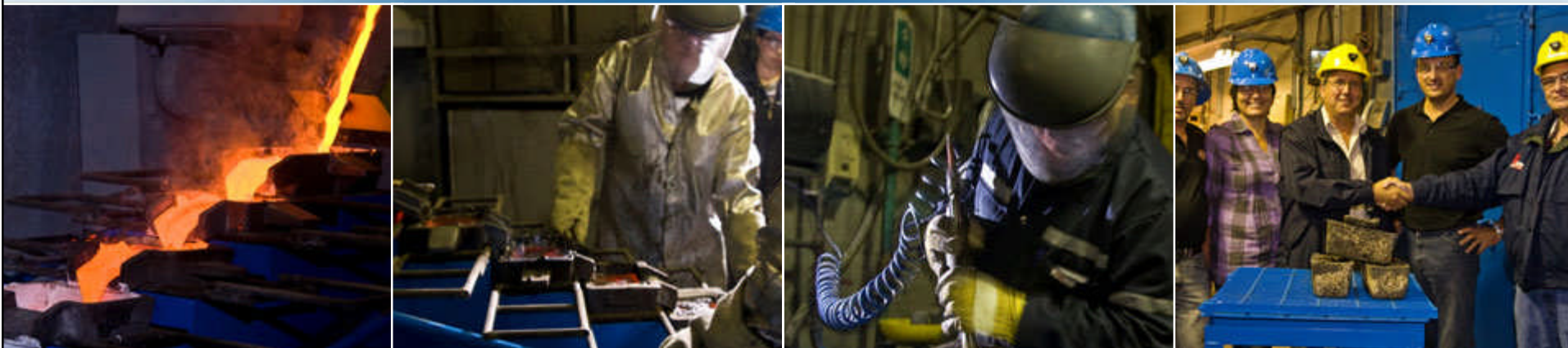
## Milling



- Mill operates five days a week at a scheduled rate of 15,000 tonnes per month
- Mill: rod and two ball mills feeding CIL circuit
- Historical recoveries: 97%
- Tailings pond has capacity for additional 1 million tonnes in current footprint



North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

Tour Agenda

---

**Dave Passfield**

Vice President, Operations





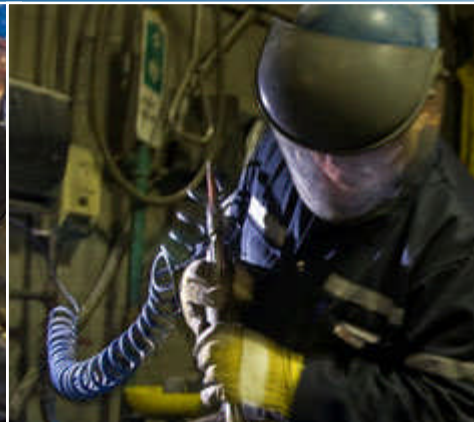
## Visiting Sleeping Giant



- Mill
- Underground mine
- Tailings management facility



North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

The Potential for Growth

---

**Bill Stone**

Vice President, Exploration





## NAP – Exploration Quebec



### Staff

- Director of Exploration (started July 2009)
- Senior Project Geologist (started June 2009)
- Junior Geologist (started September 2009)
- Geotechnicians
- Vincent Jourdain (Senior Geologist with Evaluation & Project Development Group)

---

### Office

- New office space under construction in Val d'Or
- Exploration to share office space with Projects and with Accounting

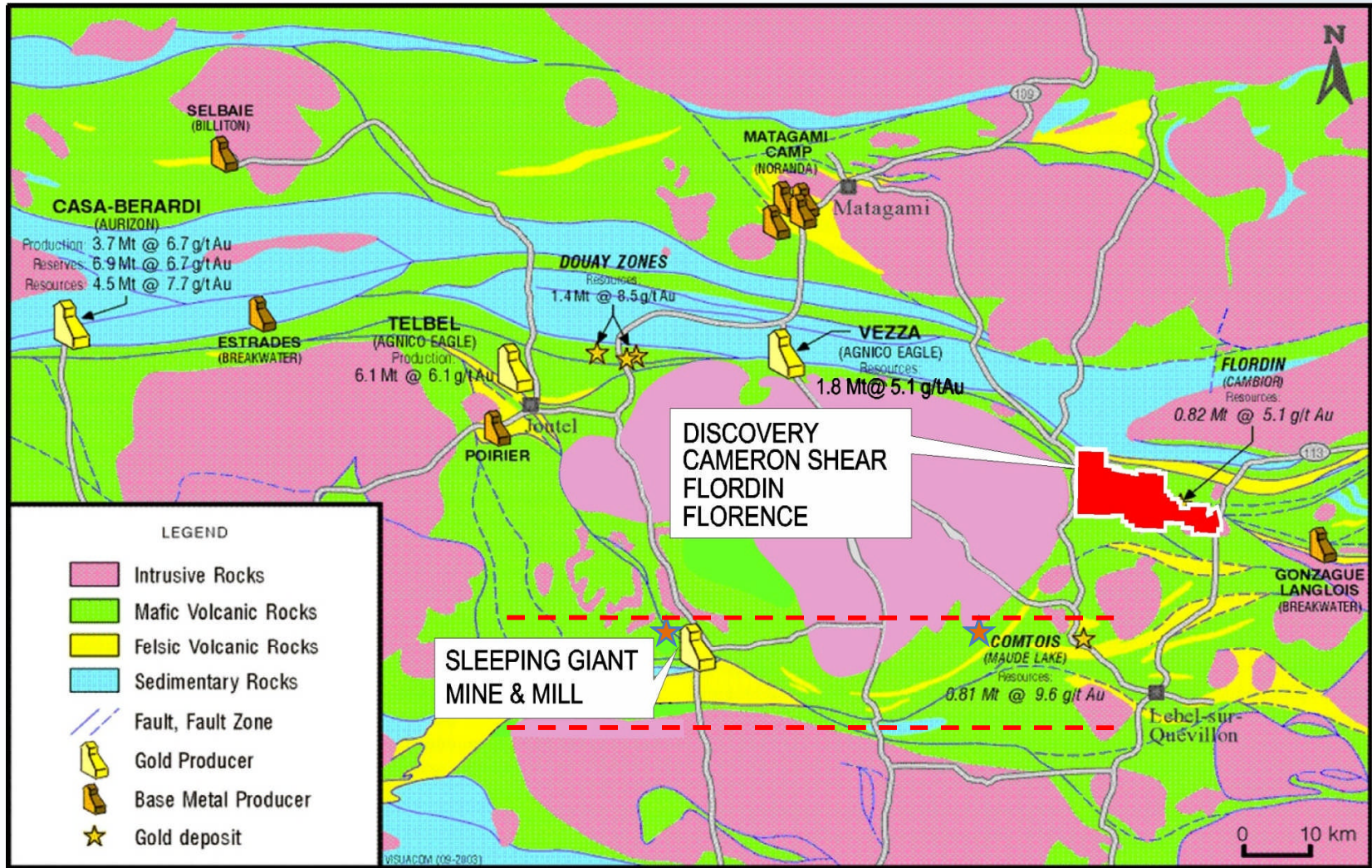
---

### Priorities

- Sleeping Giant Mine: exploration adjacent, below current mine
- SGM property-Dormex: surface exploration
- Grassroots opportunities like Laflamme property
- Other

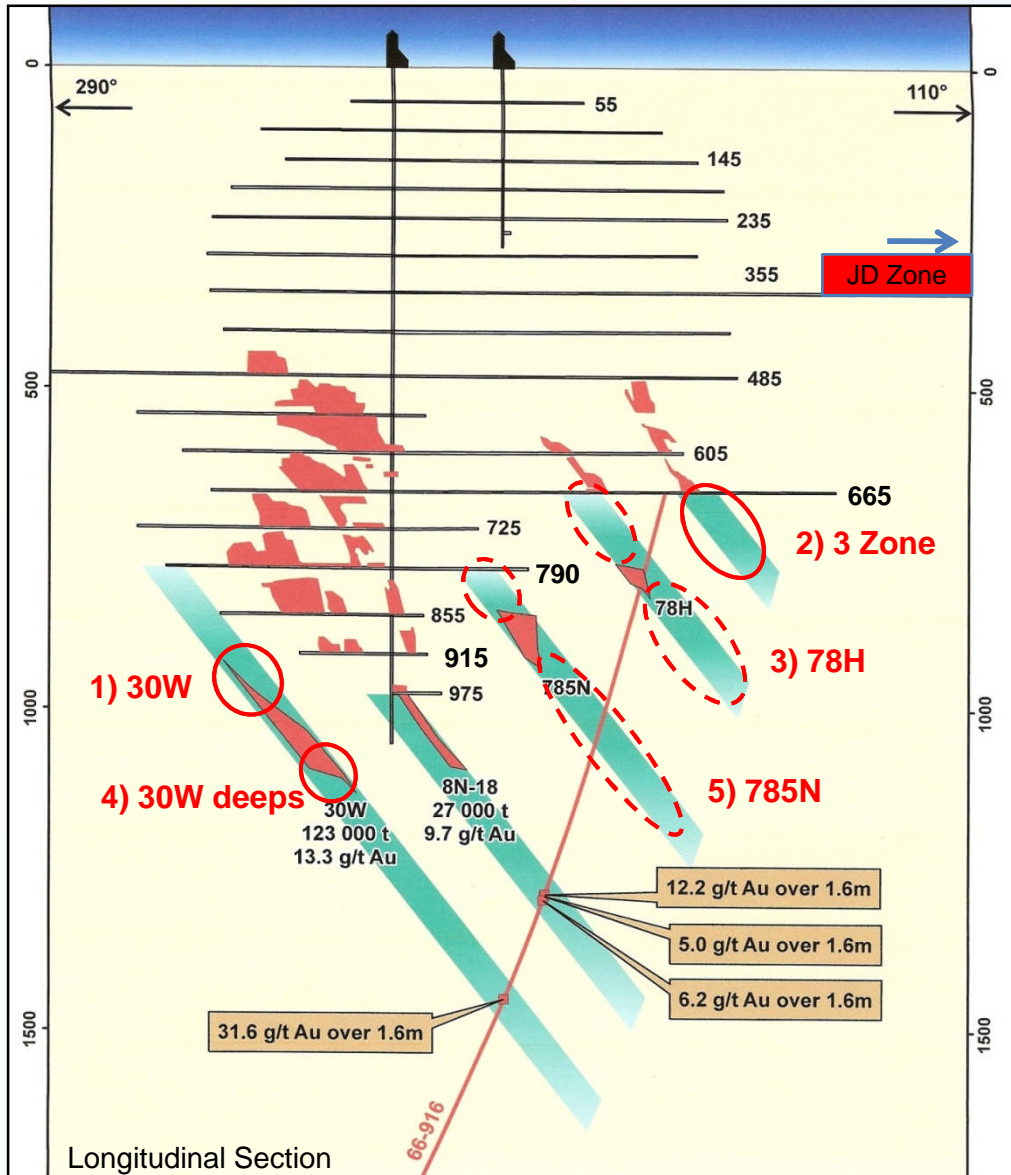


# Sleeping Giant in context





# Sleeping Giant Mine



## SGM Resources and Reserves - 2008

Class	Tonnes	Gold Grade g/t	Oz in situ
Reserves	235,000	9.3	70,350
Resources	255,000	10.1	82,760

## Exploration Plan

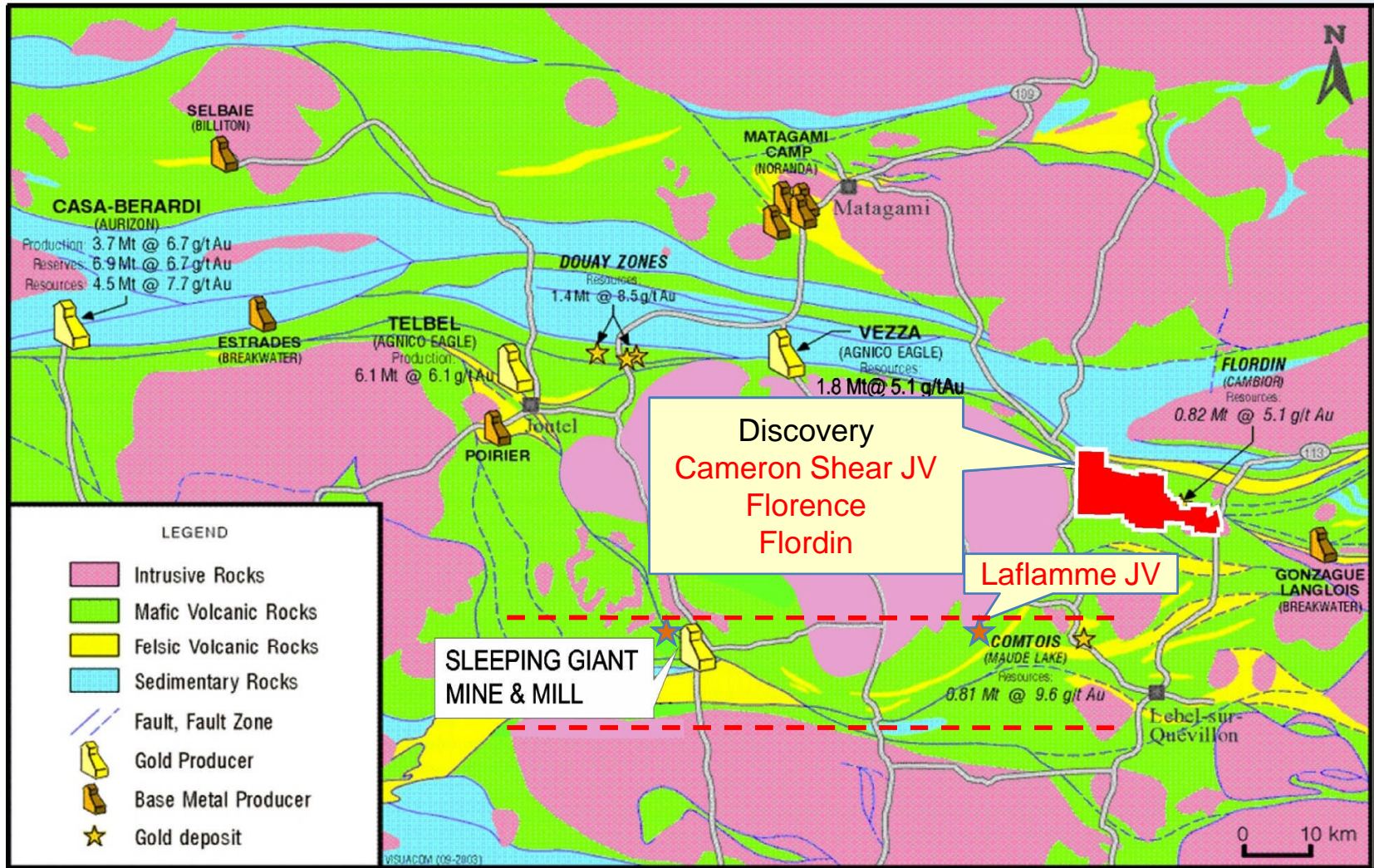
- Infill drilling (mine geology)
- Extensional drilling
  - Underground drilling to test up dip, down dip and lateral continuity
  - Surface drilling (JD Zone)
  - Commenced August 2009
- Target priorities
  1. 30W Zone – 8000 m drilling  
– from 855 and 915 mL
  2. 3 Zone – 2000 m drilling  
– from 665 mL
  3. 78H – extend holes from 3 Zone
  4. 30W Deeps
  5. 785N
- Two UG rigs currently drilling

*Please see Appendix for details on reserves and resources.*





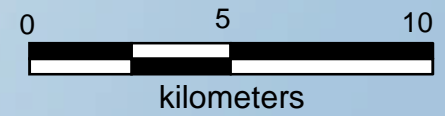
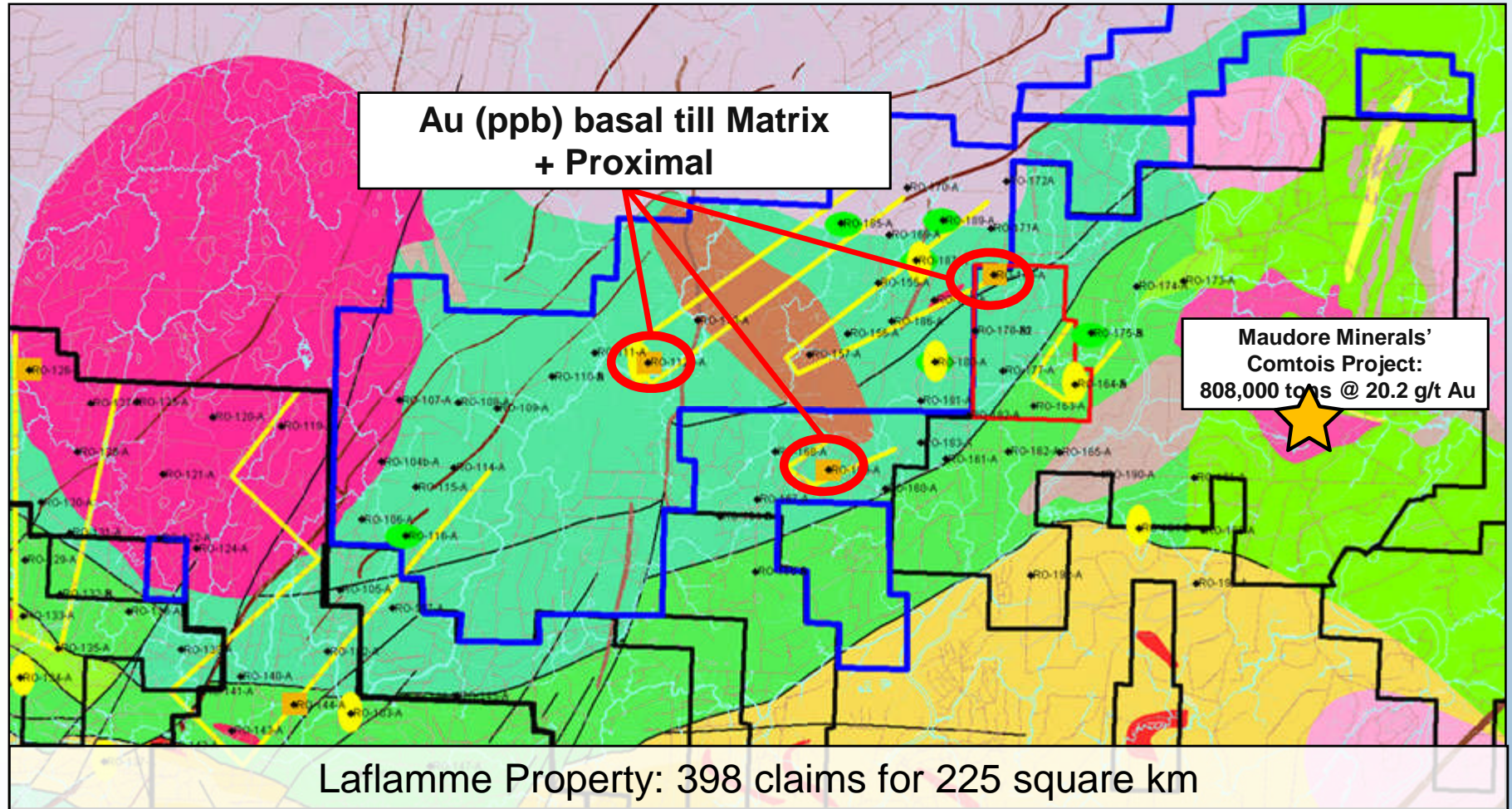
# Regional Exploration Projects



NAP anticipates that exploration projects in red will be active in 2009.

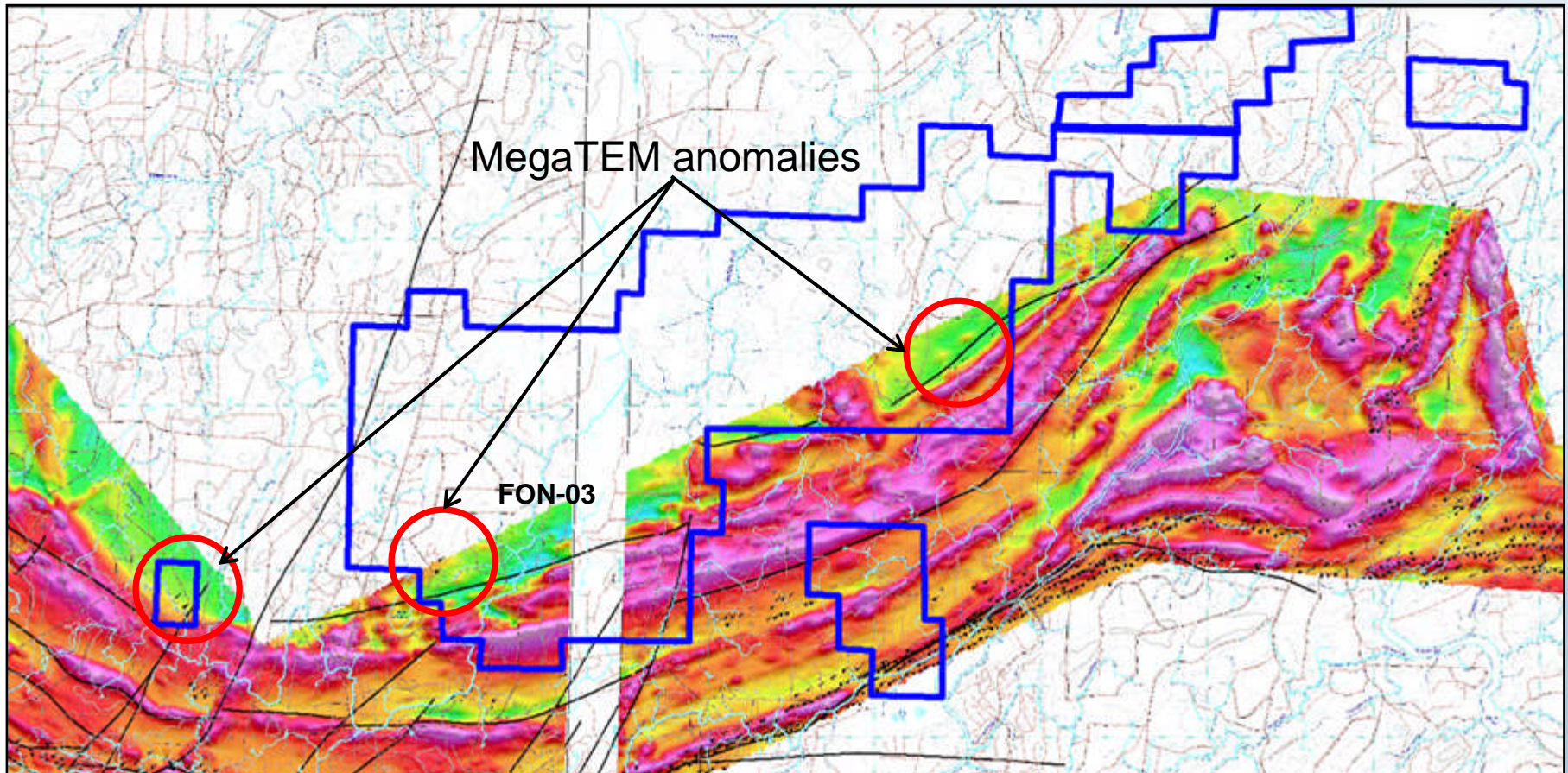


# Laflamme Property JV Proximal Au (Till Matrix ppb)

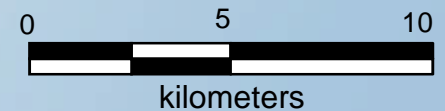




# Laflamme Property JV Noranda-Virginia MegaTEM



VTEM airborne geophysical survey planned to complete coverage of the Laflamme Property.





North American Palladium Ltd.



re-engineering the future

## Site Visit: Sleeping Giant

October 26, 2009

[Appendices and further information](#)





## Appendix – Resources and Reserves

- 1. Cautionary Note to U.S. Investors Concerning Mineral Reserves and Mineral Resources**
- 2. Sleeping Giant mine**  
Statement of Reserves and Resources – October 2008
- 3. Discovery Project**  
Mineral Resources – August 1, 2008

---

Dr. William E. Stone, P. Geo, Vice President, Exploration for North American Palladium Ltd., is the Qualified Person who supervised the preparation of the technical data in this presentation.

Please refer to North American Palladium's Annual Information Form for the year ended December 31, 2008 and applicable technical reports available on [www.sedar.com](http://www.sedar.com), [www.sec.gov](http://www.sec.gov) and [www.nap.com](http://www.nap.com) for further information.



## Cautionary Note to U.S. Investors Concerning Mineral Reserves and Mineral Resources



Mineral reserves and mineral resources have been calculated in accordance with National Instrument 43-101 as required by Canadian securities regulatory authorities. For United States reporting purposes, Industry Guide 7, (under the Securities and Exchange Act of 1934), as interpreted by Staff of the SEC, applies different standards in order to classify mineralization as a reserve. In addition, while the terms “measured”, “indicated” and “inferred” mineral resources are required pursuant to National Instrument 43-101, the U.S. Securities and Exchange Commission does not recognize such terms. Canadian standards differ significantly from the requirements of the U.S. Securities and Exchange Commission, and mineral resource information contained herein is not comparable to similar information regarding mineral reserves disclosed in accordance with the requirements of the U.S. Securities and Exchange Commission. U.S. investors should understand that “inferred” mineral resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. In addition, U.S. investors are cautioned not to assume that any part or all of NAP's mineral resources constitute or will be converted into reserves. For a more detailed description of the key assumptions, parameters and methods used in calculating NAP's mineral reserves and mineral resources, see NAP's most recent Annual Information Form/Form 40-F on file with Canadian provincial securities regulatory authorities and the U.S. Securities and Exchange Commission.



# Sleeping Giant mine

Statement of Reserves & Resources – October, 2008



Type	Tonnes (000's)	Au (g/t)	Au Contained Ounces
<b>Reserves</b>			
Proven	135,300	9.3	40,396
Probable	100,000	9.4	30,177
<b>Resources</b>			
Measured	42,000	8.7	11,731
Indicated	211,900	10.3	70,068

Notes:

1. CIM definitions were followed for the estimation of Mineral Resources and Reserves.
2. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
3. Mineral Reserves as stated can be produced at or below the production cost of CDN\$850 per troy ounce.  
With an exchange rate of \$1US=1.07 \$CDN, this corresponds to a gold price of US \$794 per troy ounce.
4. Reserve estimates are based on historical mine operating costs and gold recoveries at the mine.  
The estimated cost of each stope has included development costs based on current mine costs and per shift production.
5. A series of gold prices have been used to estimate reserves in a number of economic scenarios.  
The gold price has been modified in US\$50 increments from US\$750 to US\$900 per troy ounce.

Please refer to the Technical Report titled "The Sleeping Giant Mine, Northwestern Quebec", dated October 8, 2008 and prepared by Genivar LP for further information. It is filed on [www.sedar.com](http://www.sedar.com) under Cadiscor Resources Inc.

Dr. Tyson C. Birkett, Eng. Ph.D., Josee Couture, Eng., and Christian Bezy, Geo, are the Qualified People who supervised the preparation of the above technical data.



# Discovery Project

## Mineral Resources – August 1, 2008



Type	Tonnes	Au (g/t)	Au Contained Ounces
<b>Mineral Resources</b>			
Measured	3,109	8.95	893
Indicated	1,278,973	5.74	235,682
Inferred	1,545,500	5.93	294,223

#### Notes:

1. CIM definitions were followed for the estimation of Mineral Resources and Reserves.
2. The Independent and Qualified Persons for the Mineral Resource estimates as defined by Regulation 43-101 is Carl Pelletier, B.Sc., P.Geo., of InnovExplo Inc. The effective date of the estimate is June 17, 2008.
3. Mineral Resources, having demonstrated economic viability, are not Mineral Reserves.
4. Results are presented undiluted and in situ. The estimate included six (6) gold-bearing zones ("A", "B", "C", "E", "20" and "30") and covers the Discovery Project area between sections 1+00E to 9+00W and 4+50E to 15+00E.
5. The resources were compiled using a cut-off grade of 3.0 g/t Au. This cut-off must be re-evaluated in light of present market conditions (gold price, exchange rate and mining cost). A fixed density of 2.82 g/cm<sup>3</sup> was used. A minimum of 1.6 m horizontal width was applied, using the grade of the adjacent material when assayed, or a value of zero when not assayed. High grade capping was done on the raw data and established at 35.0 g/t Au. Drill hole compositing was not done. Resources were evaluated from drill hole results using a polygonal on longitudinal approach.  
Calculations used metric units (metre, tonnes and g/t Au).  
The company is not aware of any known environmental, permitting, legal, title, taxation, socio-political, marketing or other relevant issue that could materially affect the Mineral Resource estimates.

For further information, please refer to the report titled "Technical Report on the Scoping Study and Mineral Resource Estimate for the Discovery Project (according to Regulation 43-101 and Form 43-101F1) dated August 1, 2008 and prepared by InnovExplo Inc. It is filed on [www.sedar.com](http://www.sedar.com) under Cadiscor Resources Inc.