



North American Palladium Ltd.



re-engineering the future

Site Visit: Lac des Iles

October 27, 2009

Presenters:

Bill Biggar, Bill Stone, John Caldbick
and Dave Passfield





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: Lac des Iles

Introduction

Bill Biggar

President & Chief Executive Officer





North American Palladium Ltd.



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Site Visit: Lac des Iles

Exploration Update

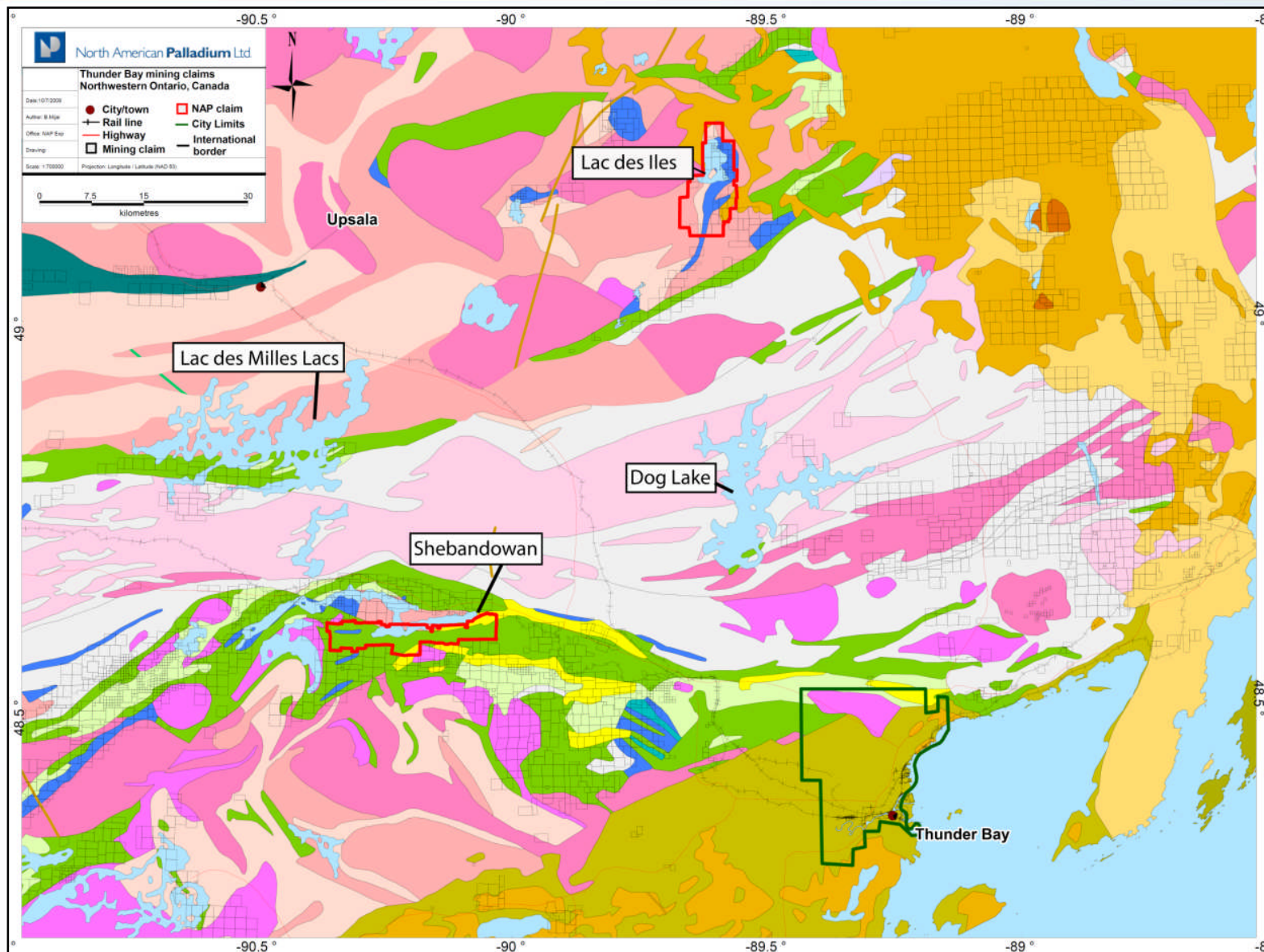
Bill Stone

Vice President, Exploration



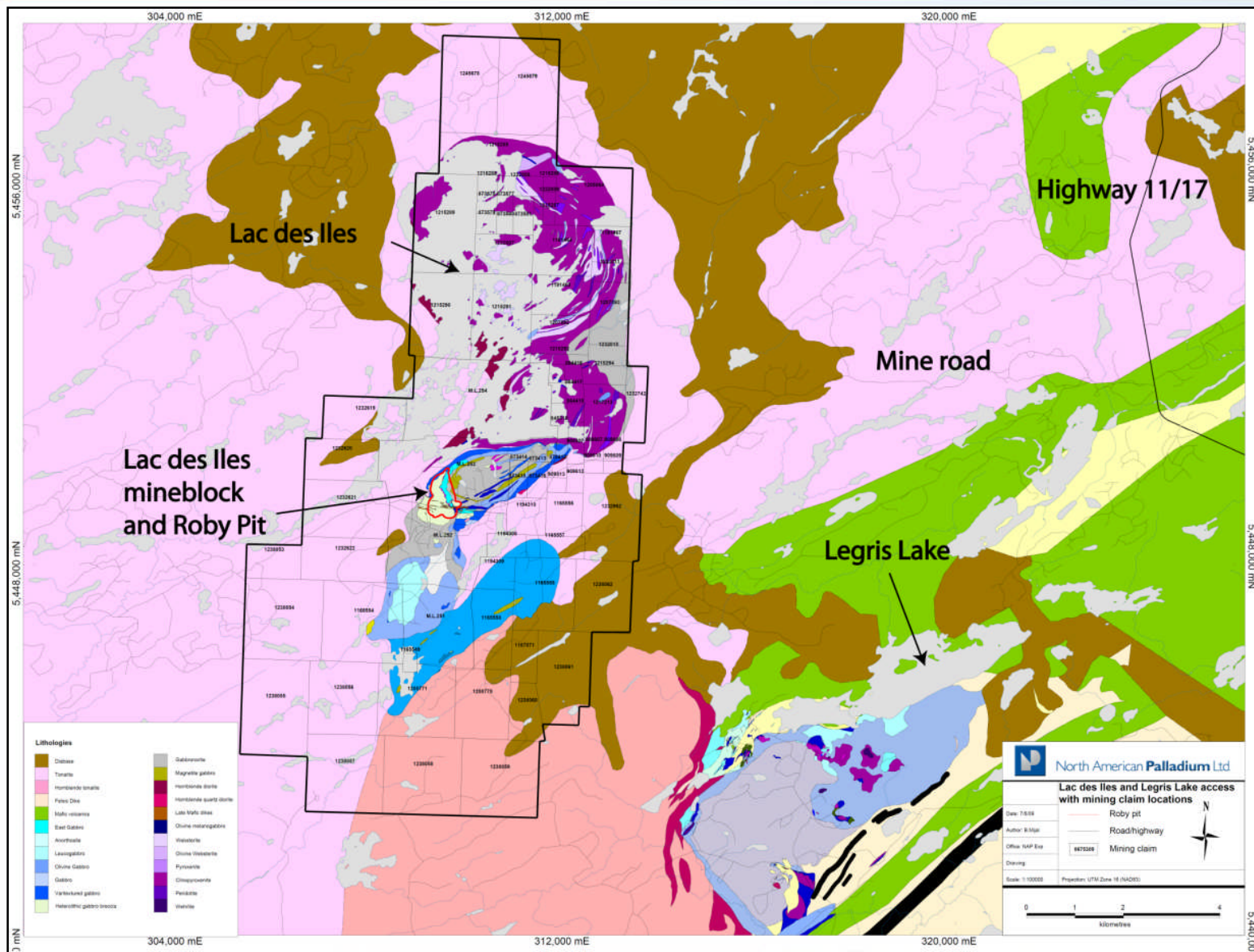


Geological setting of Lac des Iles mine



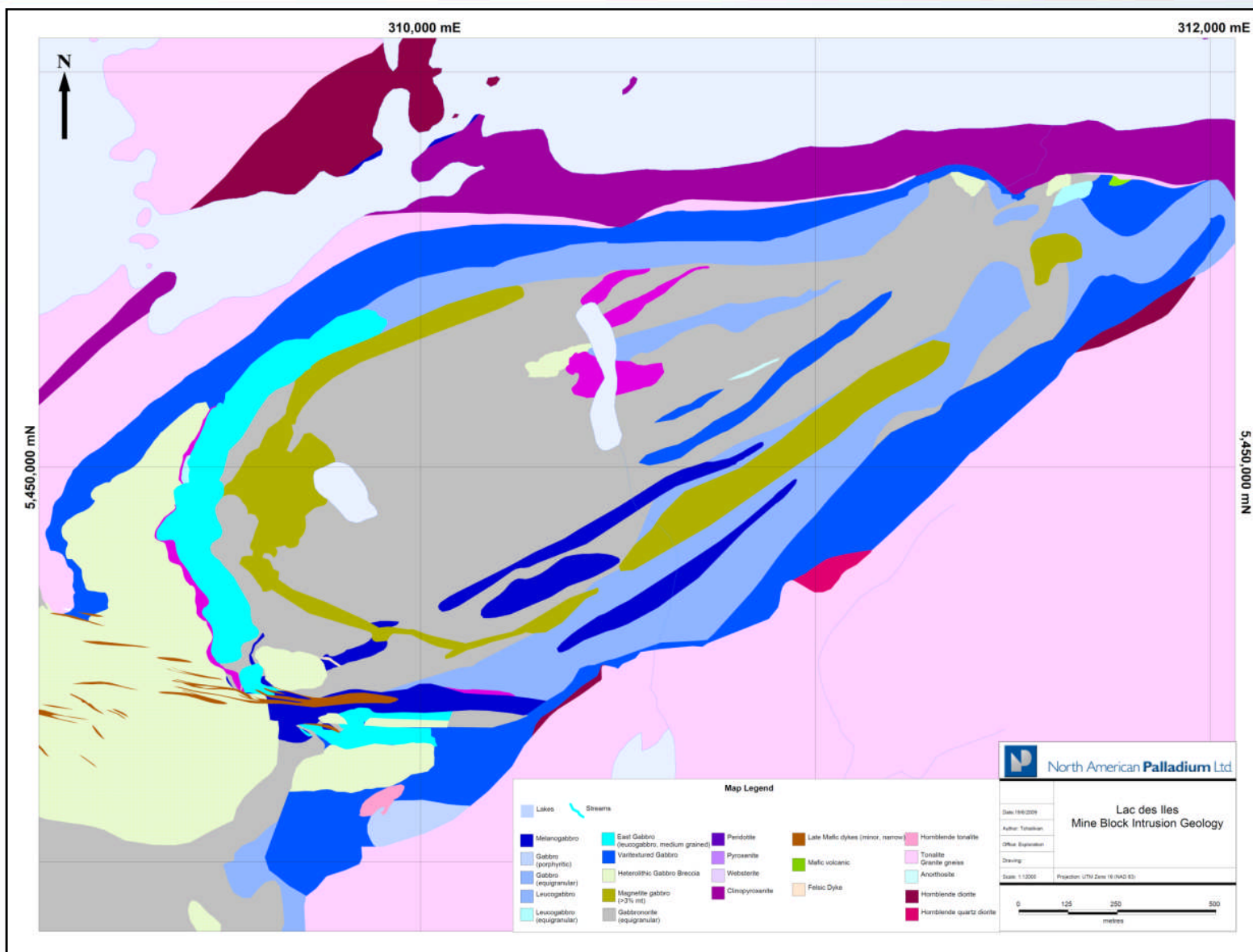


Lac des Iles mine property



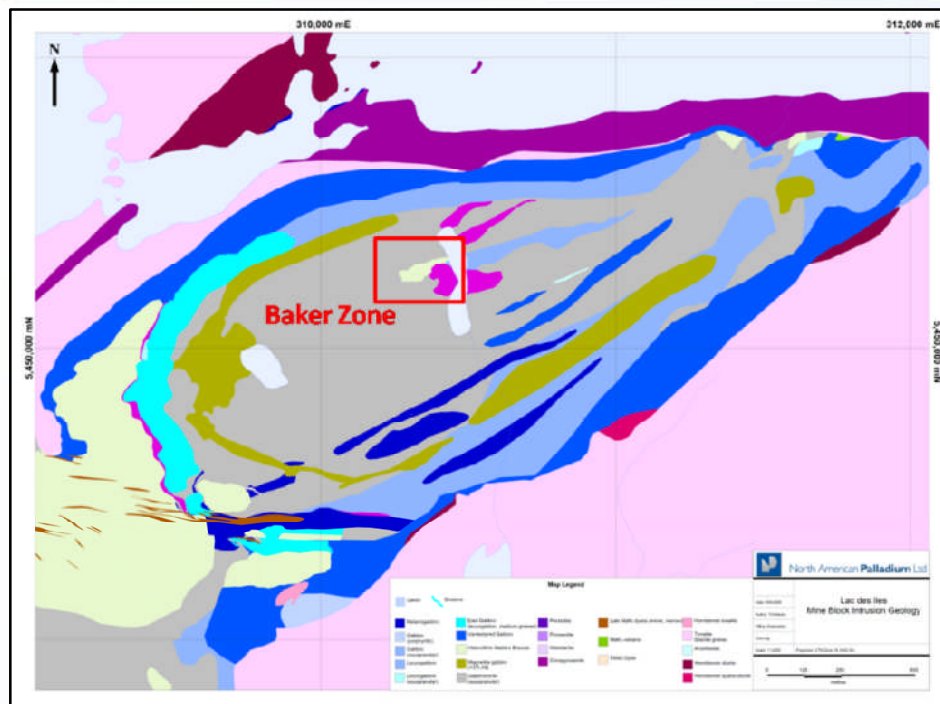


Geology of the mine block intrusion





Discovery



1963 Walter Baker and George Moore (Matawin Mines Ltd.)

- Investigated magnetic anomaly on south shore of Lac des Iles
- Discovered Cu-Ni sulphides at the Baker Zone
- And a second zone to the west of Baker Zone
- After discovery, group optioned a 60% interest to Gunnex Ltd.



History

1992 to present

- Continuous drilling and exploration
- Discovered large, low grade, open pit resource
- Discovered large underground extension

1991: Kaiser Francis Oil

- Assumes control of Madeleine Mines
- Changed name to North American Palladium Ltd. in 1993

1989: Madeleine Mines

- Continues drilling and exploration
- Brief production in 1990

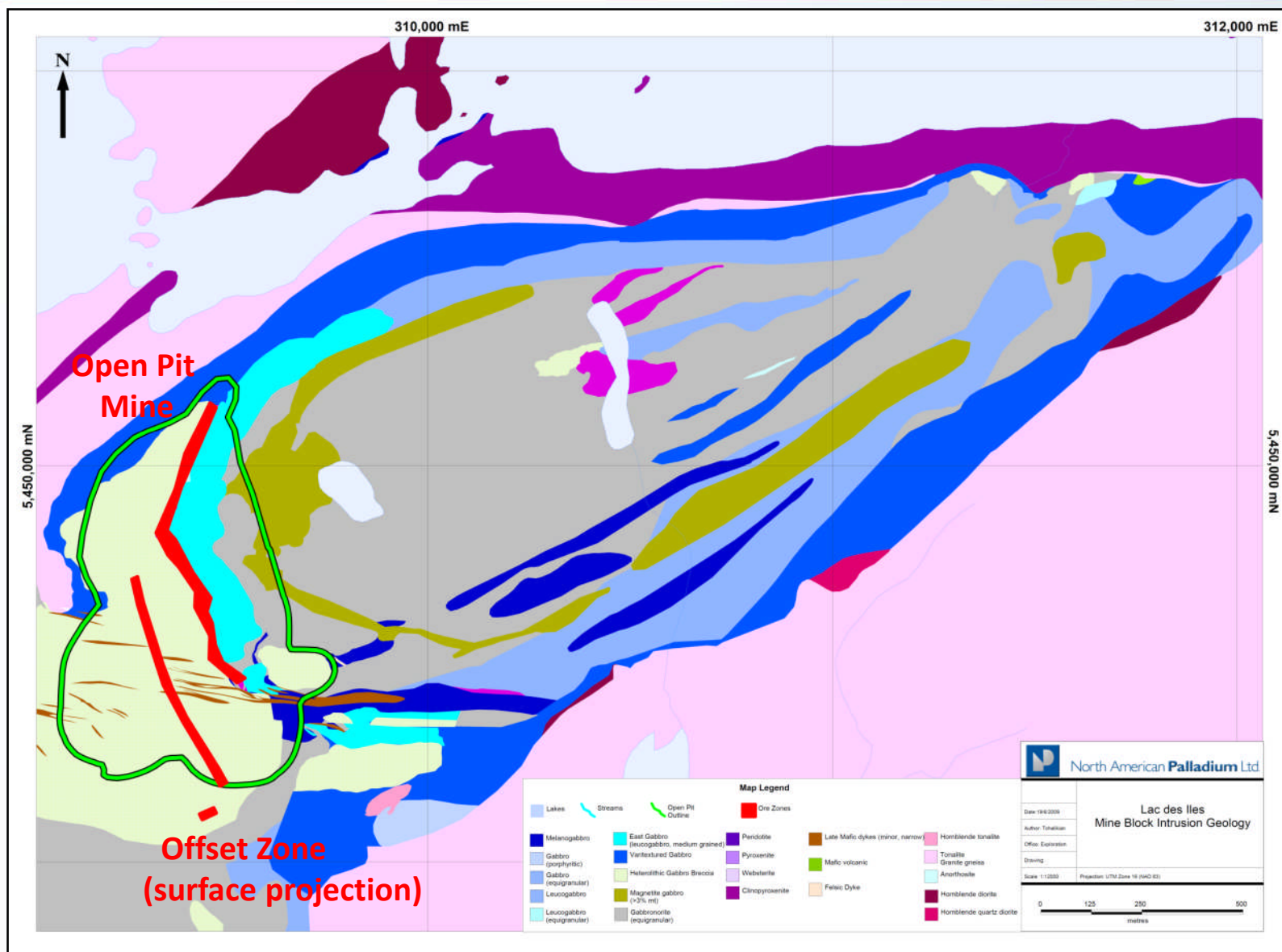
1964-89:

- Exploration by various companies





LDI mine and zones





Exploration targets: LDI mine underground

- Offset Zone
- Mineralized footwall
- Phased drill programs





Building on existing resources

Lac des Iles mine Mineral Resource Summary – December 31, 2008

Location	Tonnes (000's)	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Ni (%)	PdEq (g/t)	Pd (000 oz)
Measured Resources								
Roby Open Pit	3,722	1.99	0.23	0.17	0.075	0.065	3.77	238
Roby Stockpiles	763	2.09	0.19	0.18	0.060	0.079	3.79	51
Indicated Resources								
Roby Open Pit	2,565	2.20	0.24	0.18	0.078	0.068	4.07	181
Roby RGO Stockpile	13,365	0.97	0.12	0.08	0.034	0.056	2.00	417
Roby Underground	3,292	7.61	0.44	0.33	0.062	0.077	10.46	805
Offset Underground	12,331	5.02	0.38	0.37	0.114	0.133	8.28	1,990
Total M&I Resources	36,038	3.18	0.26	0.22	0.072	0.086	5.29	3,682
Inferred Resources								
Offset Underground	4,637	4.9	0.4	0.3	0.12	0.13	8.0	730

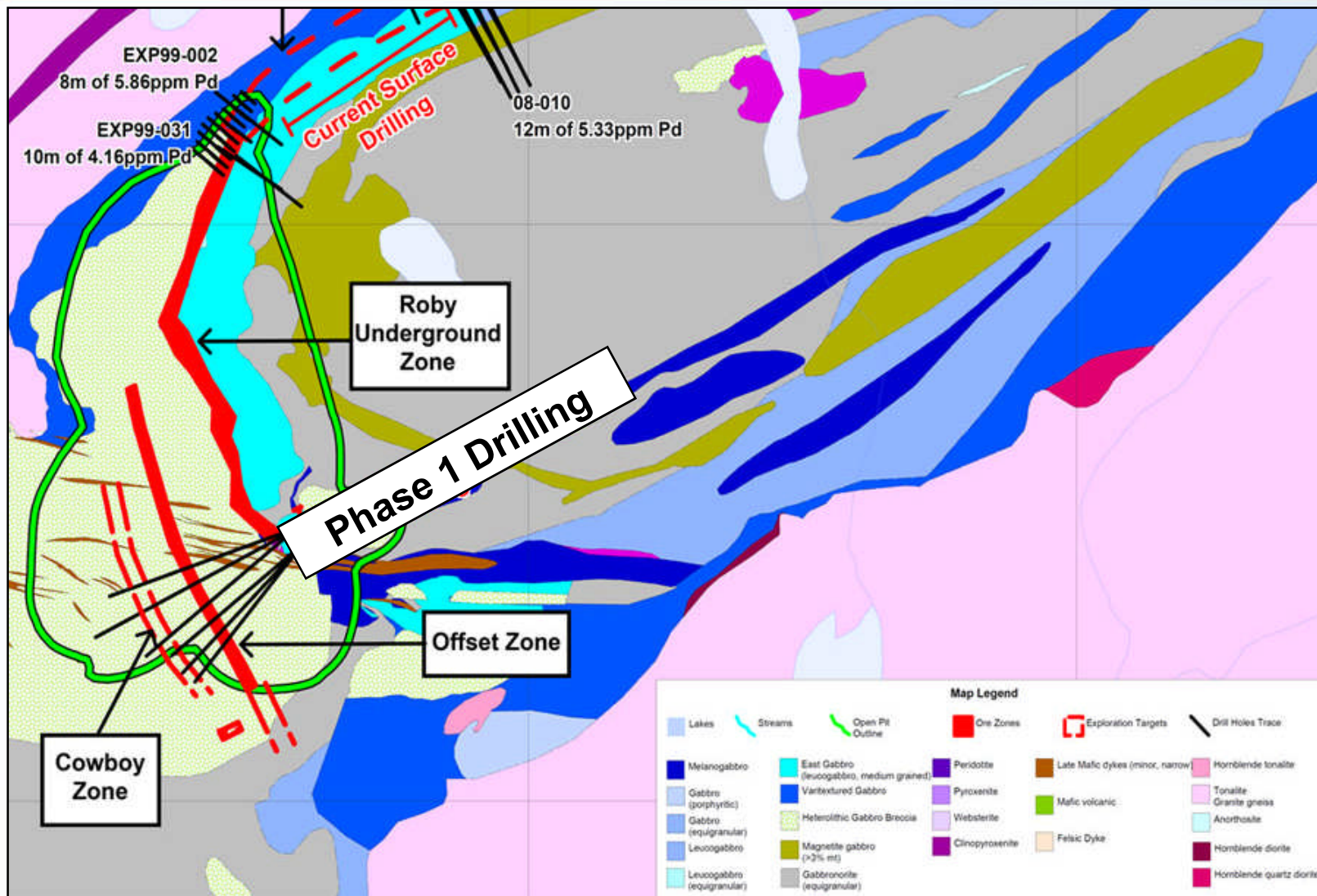
Lac des Iles mine – Offset Zone Estimated Mineral Resource – March 31, 2008

Category	Tonnes (millions)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ni (%)	Cu (%)	PdEq (g/t)	Pd (000 oz)
Indicated	12.3	5.02	0.38	0.37	0.13	0.11	8.28	1,985
Inferred	4.6	4.85	0.37	0.33	0.13	0.12	8.0	717

Please see detailed Resource information in Appendix.

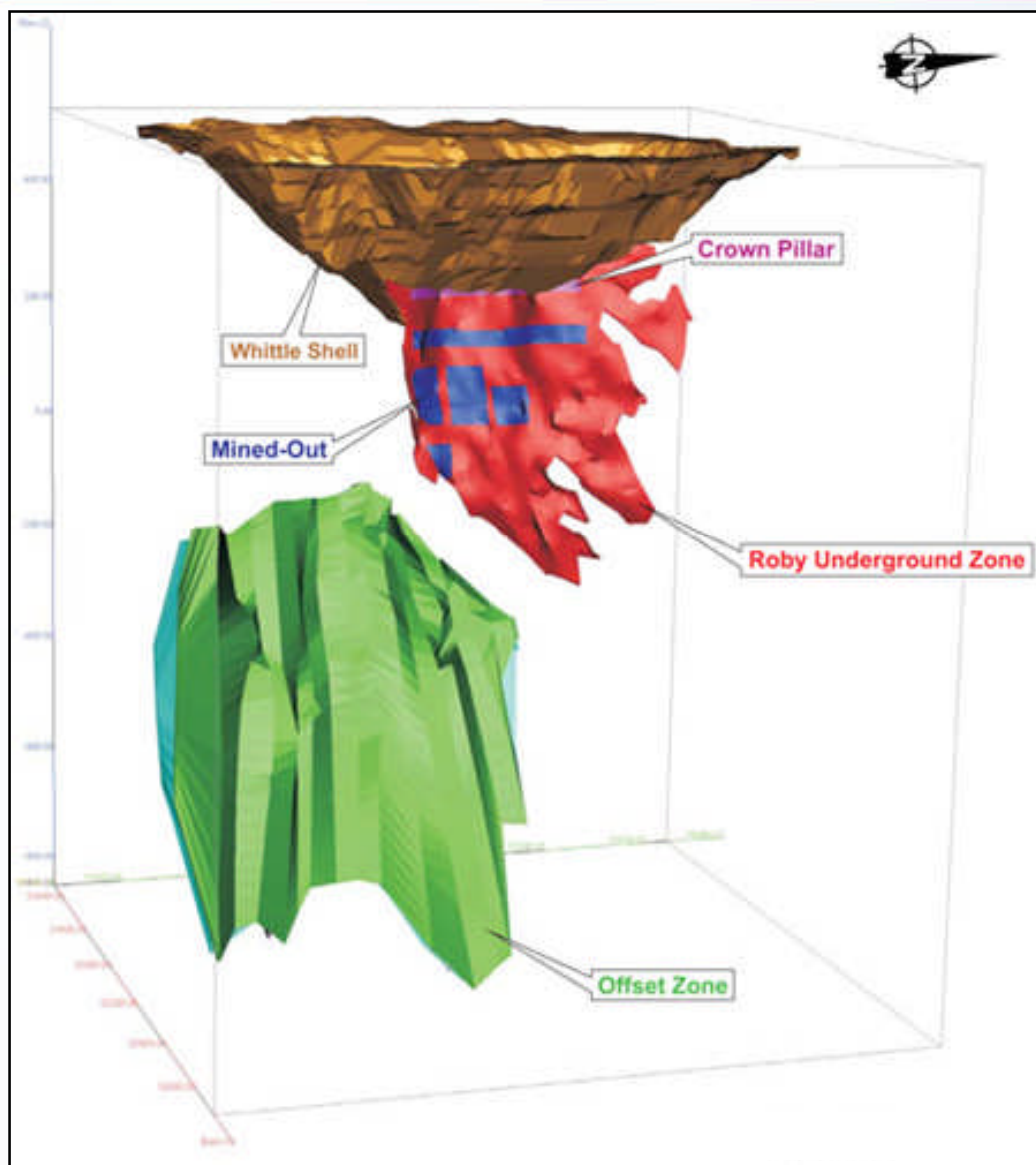


Offset zone drilling: Phase 1





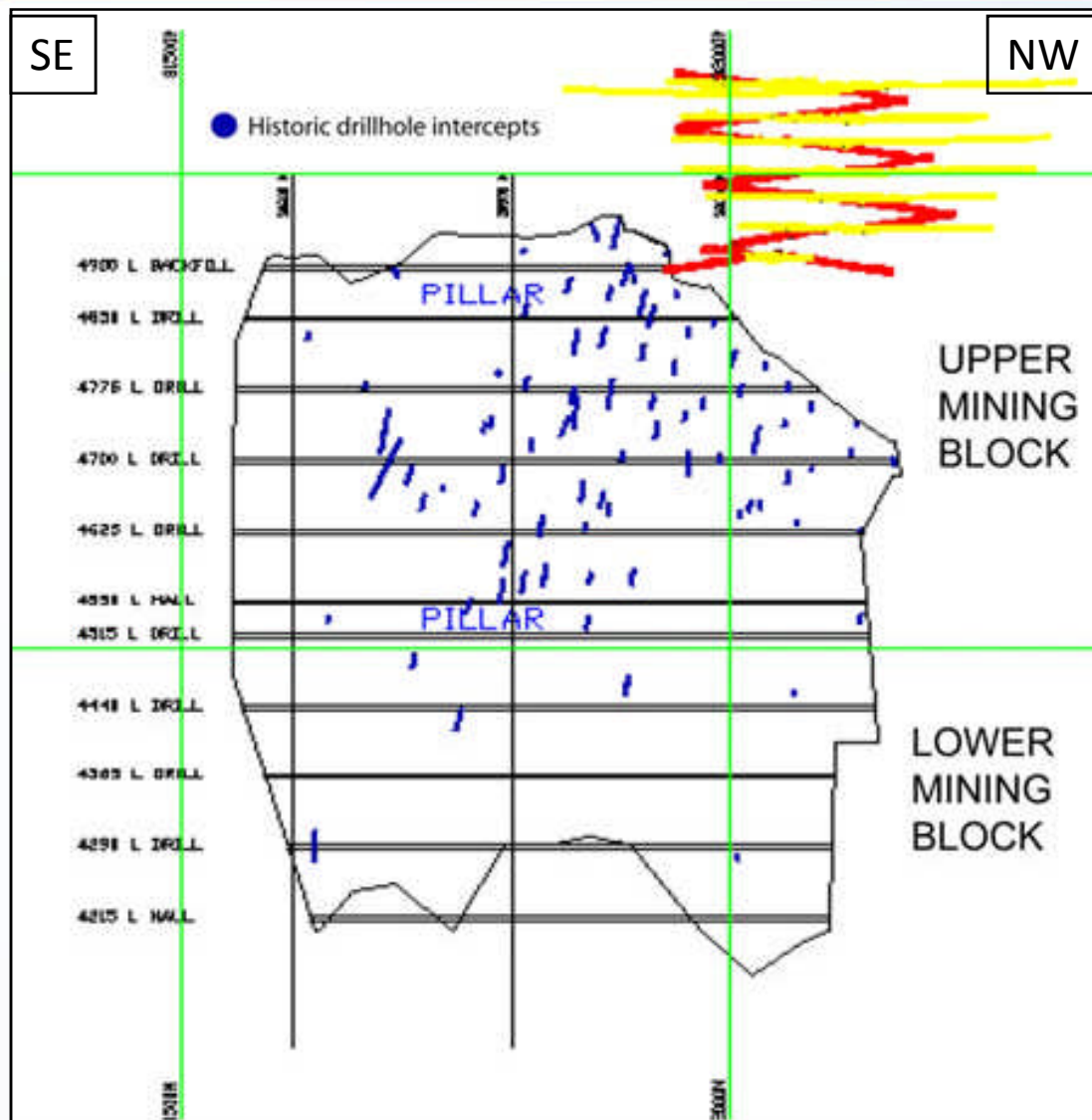
Location of Offset Zone with respect to Roby UG zone



Please see Resource information in Appendix.

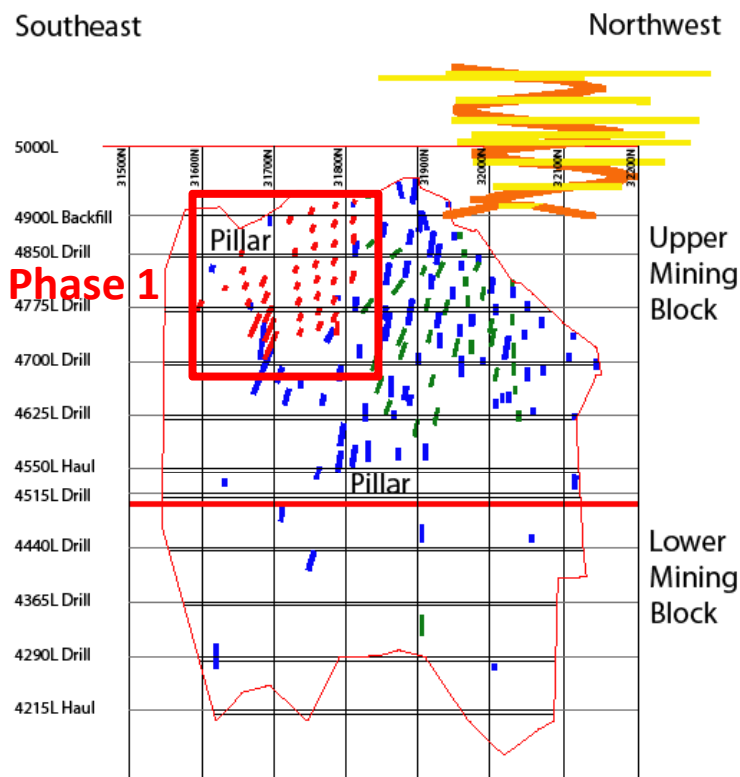


Infill drilling to 2008



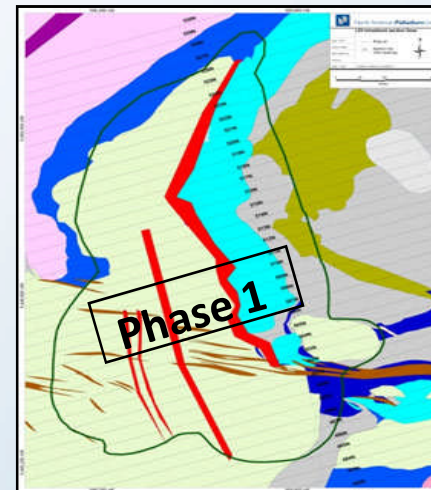


Offset Zone long section



Long-section view of Lac des Iles Offset Zone with drillhole intercepts

- Historic drillhole intercepts (pre-2009 drilling)
- 2009 Phase 1 drill intercepts
- 2009 Phase 2 drill intercepts

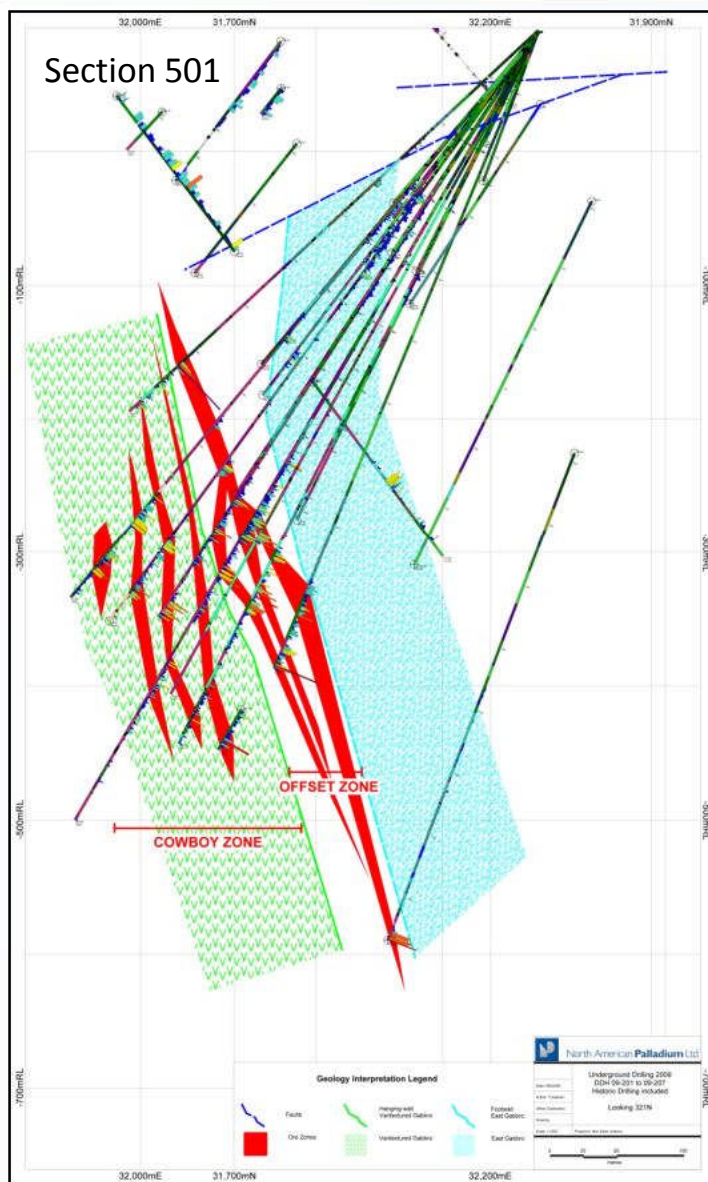
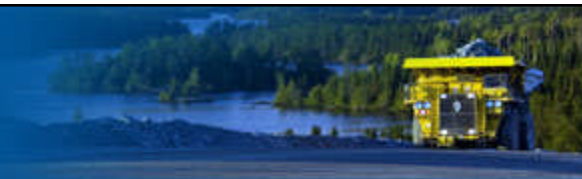


Phase 1 Drill Program

- February to June 2009
- 38 holes completed
- Drilled from the 5095 mL
- 20,150 metres in total (total Offset zone drilling 102,000 m)
- 26-33 metre hole spacing



Phase 1 highlights: Offset Zone

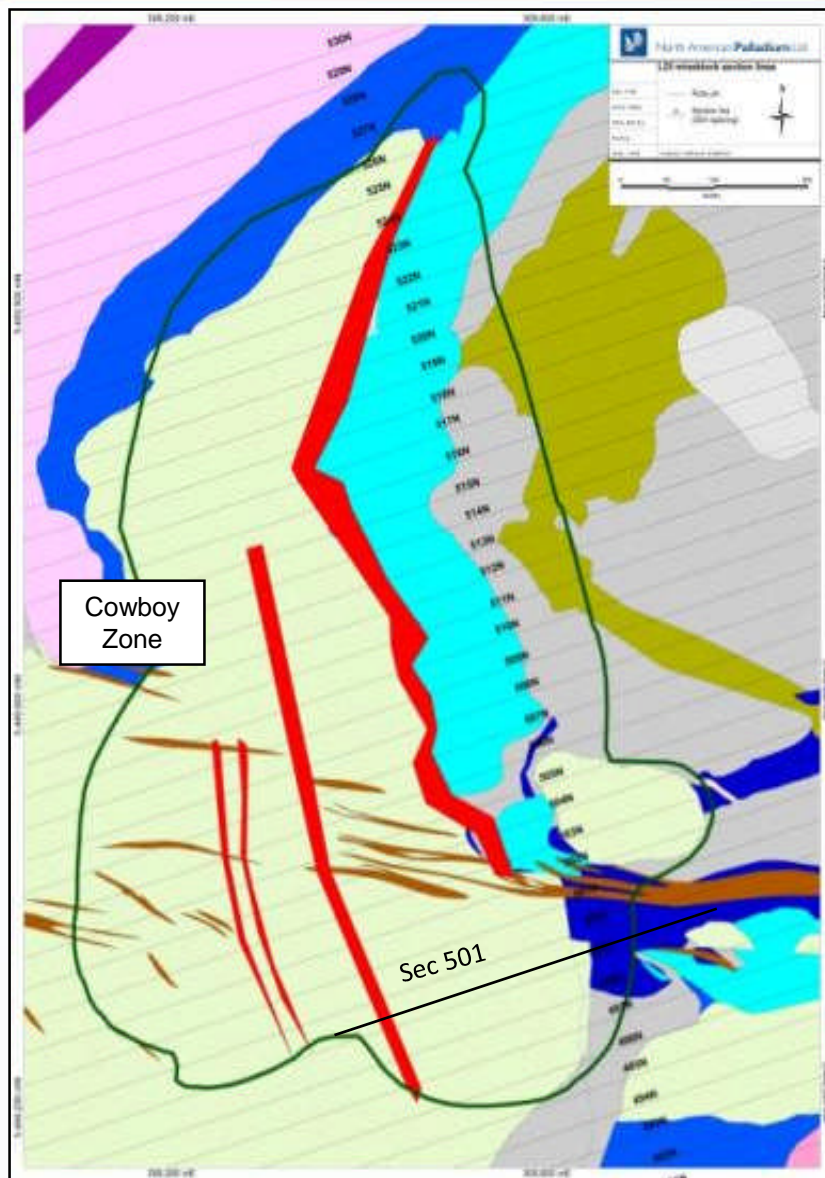


Drill Intercepts

- 09-120: 5 m @ 16.9 g/t Pd
- 09-117: 17 m @ 6.1 g/t Pd
- 09-201: 7 m @ 7.1 g/tPd



Phase 1 highlights: Cowboy Zone discovery

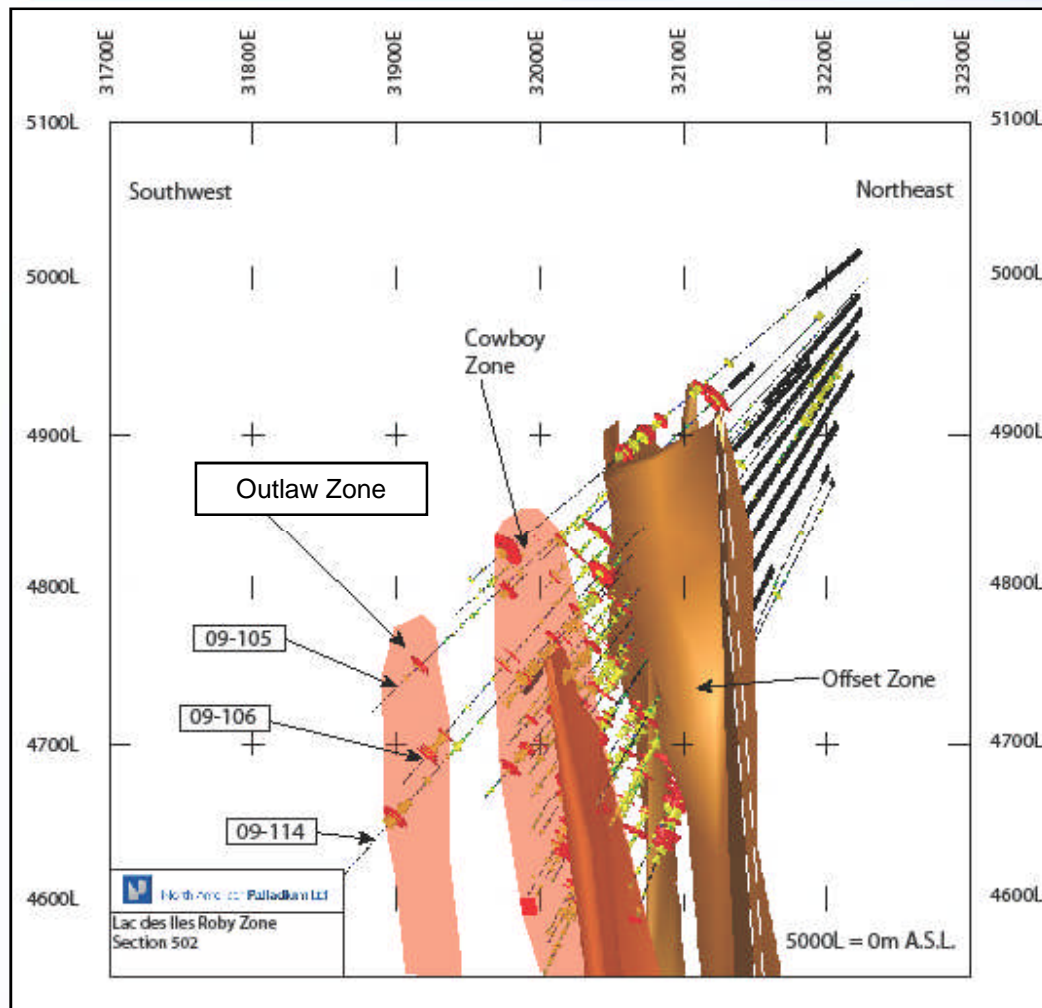


Drill intercepts

- 09-106: 8 m @ 4.7 g/t Pd
- 09-204: 11 m @ 4.2 g/t Pd



Phase 1 highlights: Outlaw Zone discovery

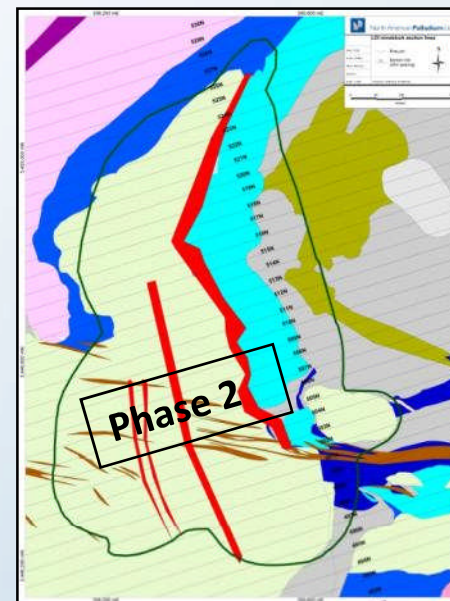
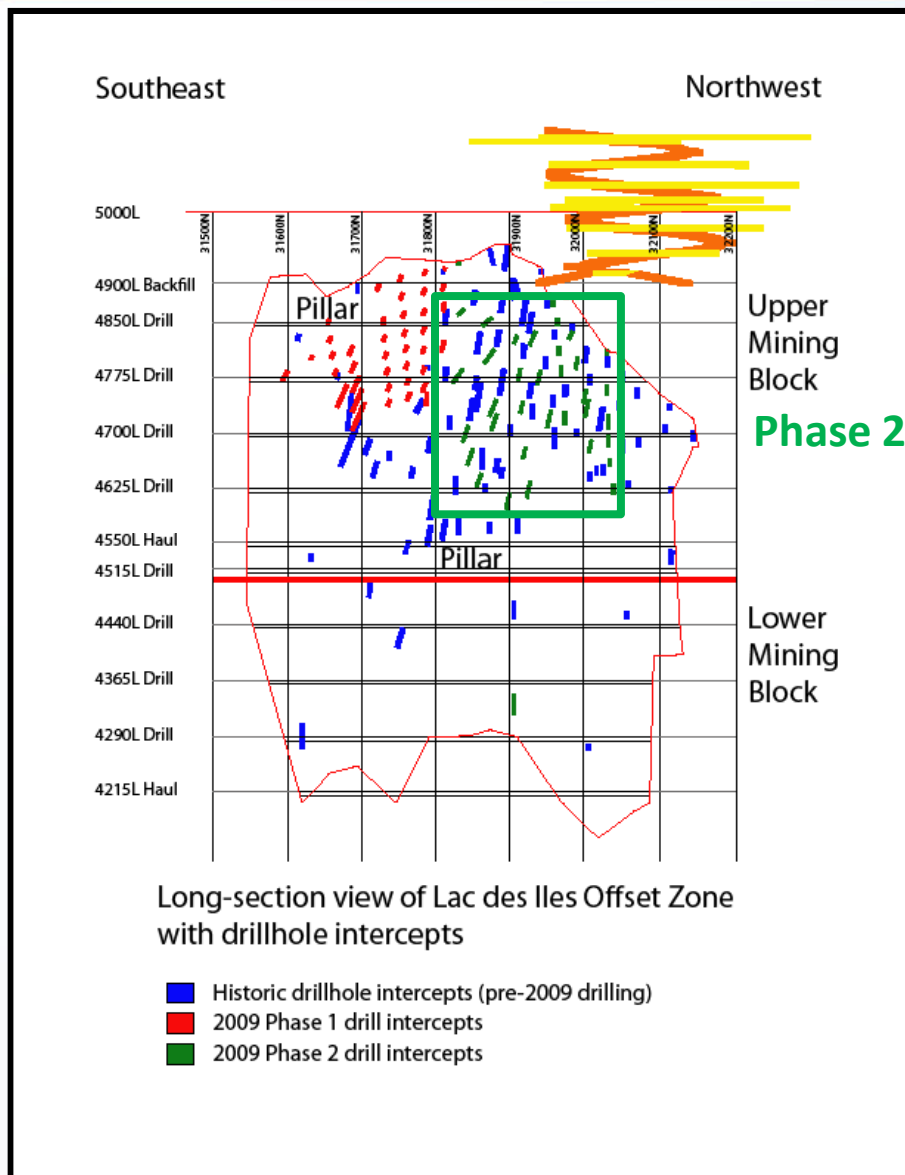


Drill Intercepts

- 09-114: 22 m @ 3.3 g/t Pd
Incl. 5 m @ 5.9 g/t Pd
- 09-105: 4 m @ 5.1 g/t Pd
- 09-106: 20 m @ 3.4 g/t Pd



Offset Zone Phase 2 drill plan

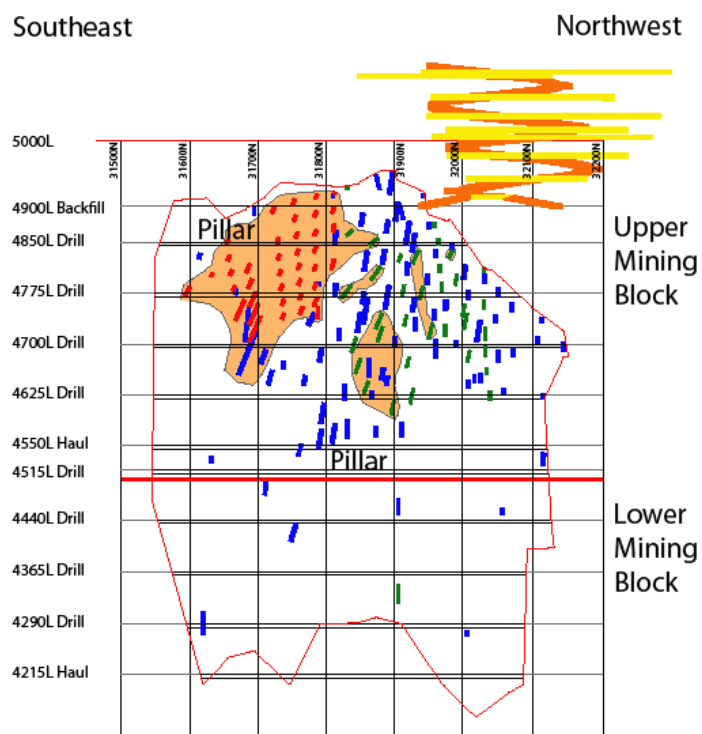


Phase 2 Drill Program

- July to December 2009
- 40 holes planned
- Drilled from bottom of ramp
- 19,000 metres in total
- 30 metre hole spacing
- Total amount of Offset Zone drilling will be 121,000 metres



Phase 2 Results: Offset Zone highlights



Long-section view of Lac des Iles Offset Zone
with drillhole intercepts

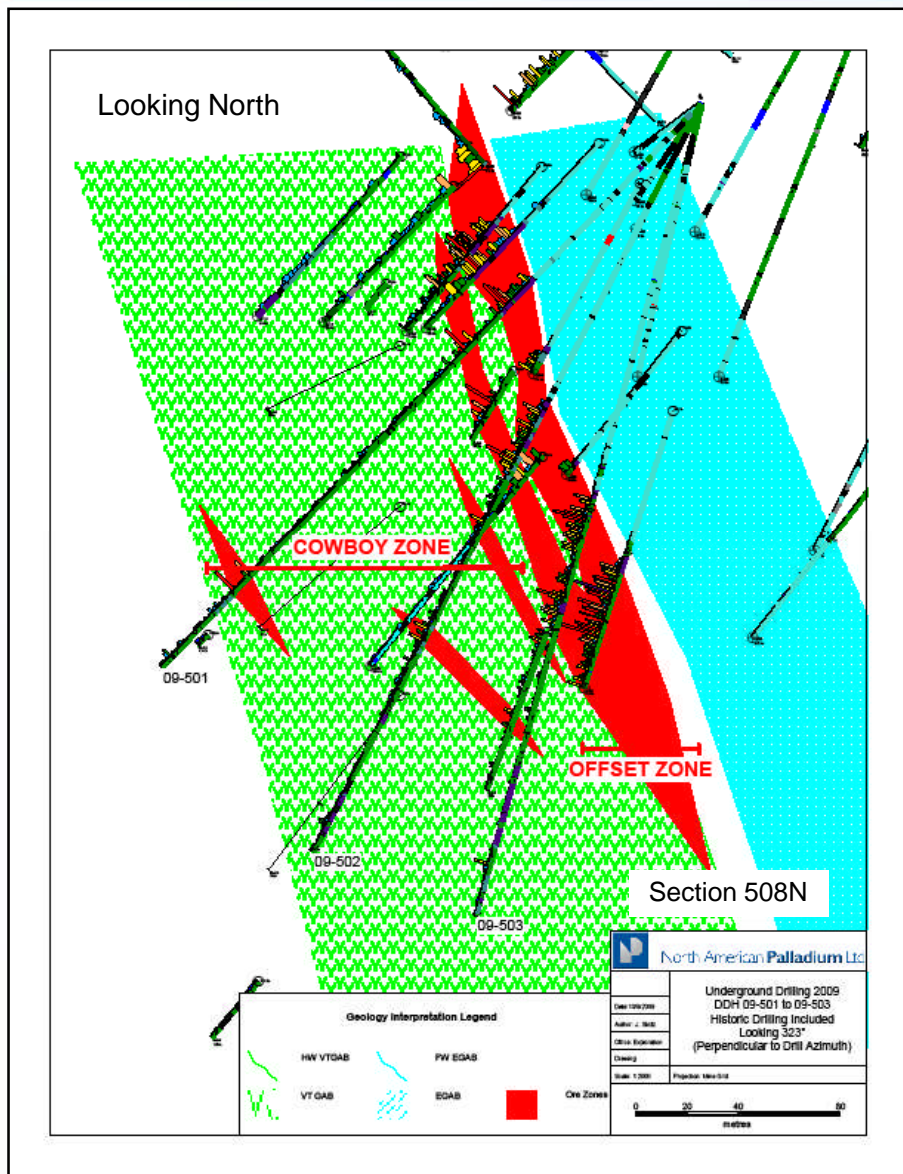
- Historic drillhole intercepts (pre-2009 drilling)
- 2009 Phase 1 drill intercepts
- 2009 Phase 2 drill intercepts
- Region outlining drillholes which intercept the Cowboy Zone

*Most historic drillholes terminate short of Cowboy Zone mineralization

- Hole 09-405: 28m @ 9.2 g/t Pd
- Hole 09-405: 16m @ 9.7 g/t Pd
- Hole 09-503: 6m @ 9.2 g/t Pd



Phase 2 Results: Cowboy Zone highlights



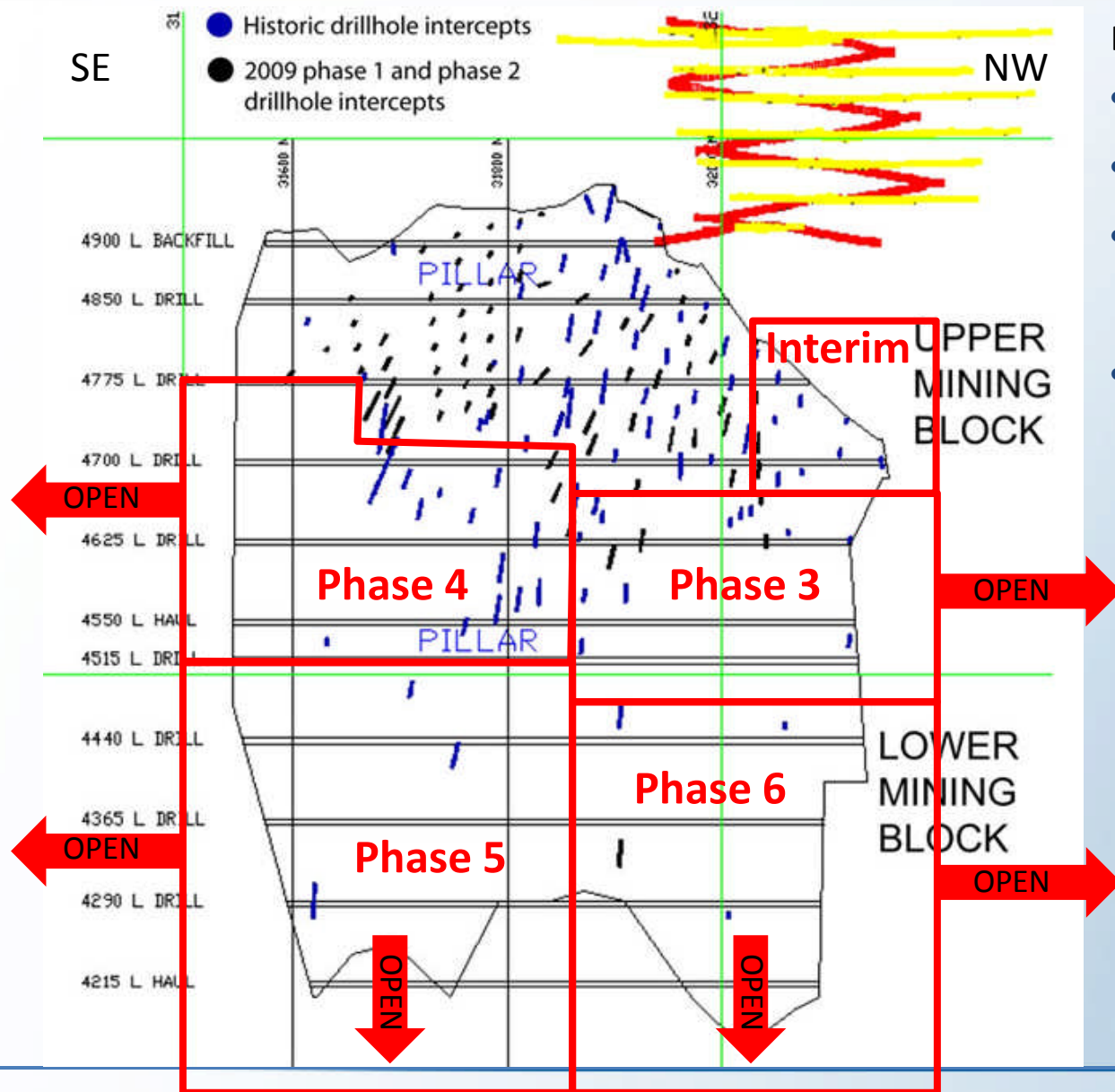
- Hole 09-402: 5m @ 7.1 g/t Pd
- Hole 09-403: 5m @ 6.7 g/t Pd
- Hole 09-503: 8m @ 5.3 g/t Pd



Plans for 2010 to 2012

Interim Drill Program

- Infill high grade area
- 17 holes for 6100 metres
- Commence mid-November 2009
- Completion Q1 2010





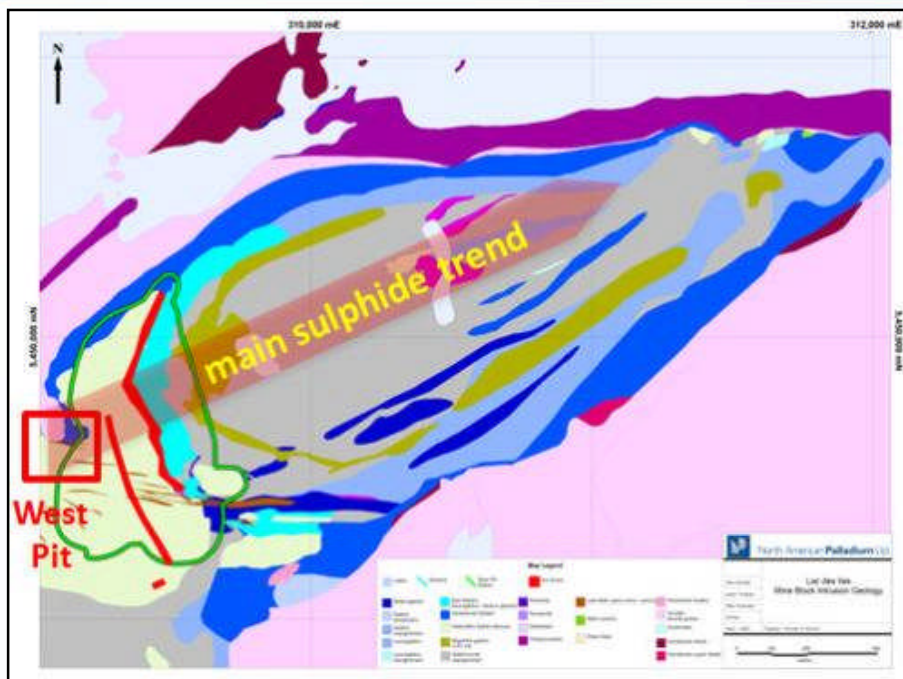
Exploration targets: LDI mine site surface

- West Pit
- North Pit-North VT Rim





West Pit area



Previous Intercepts: 507 Pod

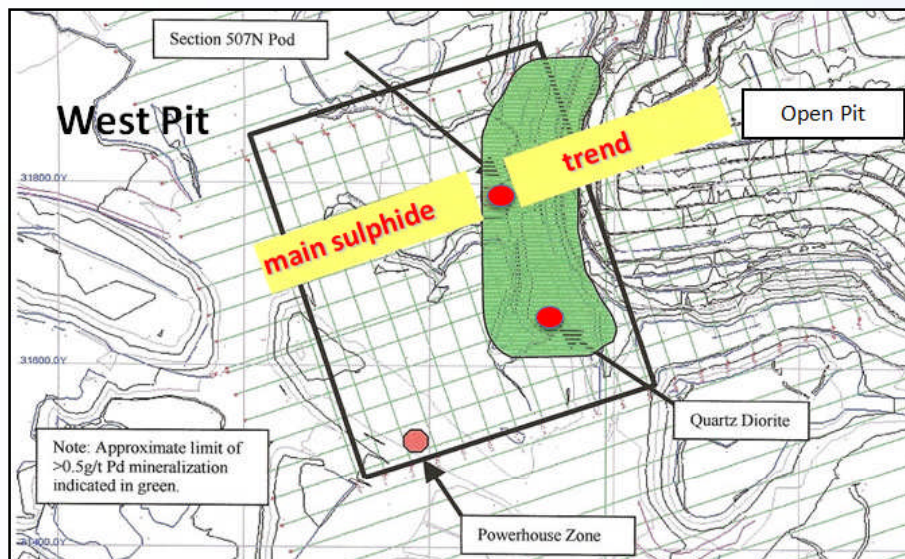
- 00-258: 15m @ 1.33 g/t Pd (from 240m)
- 00-129: 39m @ 3.30 g/t Pd (from 186m)
 - Incl. 3m @ 28.4 g/t Pd (from 221m)
- 00-130: 74m @ 2.6 g/t Pd (from 101m)
- 00-131: 54m @ 2.0 g/t Pd (from 96m)

Previous Intercepts: Qz Diorite

- 00-083: 15m @ 4.9 g/t Pd (from 18m)
- 00-085: 8m @ 2.5 g/t Pd (from 62m)



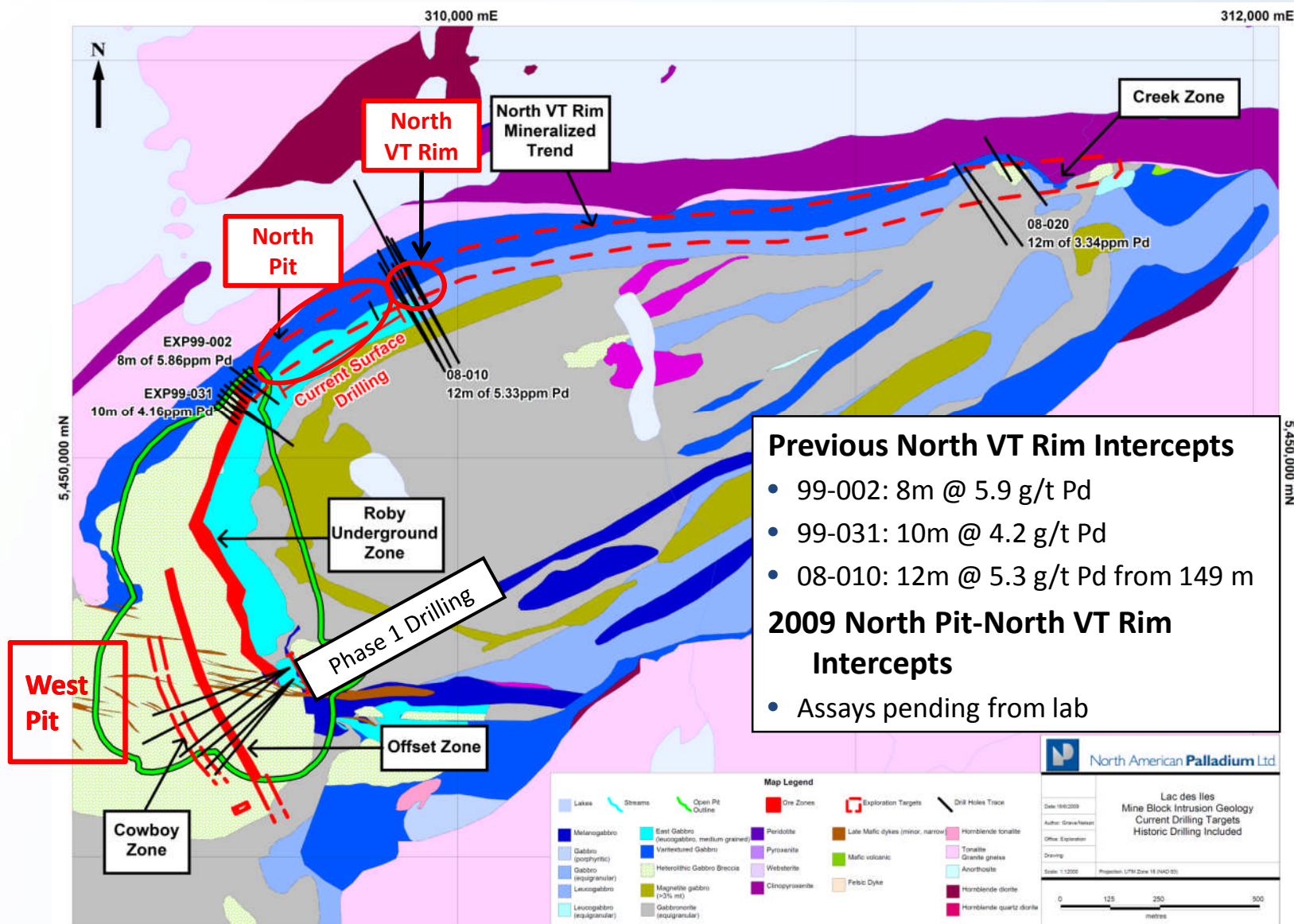
West Pit area



- Two km long sulphide trend
- Three main targets:
 - Main sulphide target (507 Pod)
 - Quartz Diorite target (high grade Pd)
 - Mineralized footwall to Offset Zone
- Potential to expand pit west
- 15 holes drilled (Sept 17 Press Release)
 - 09-071: 24m @ 3.5 g/t Pd (from 175m)
 - Incl. (1) 5m @ 5.7 g/t Pd
 - Incl. (2) 7m @ 4.8 g/t Pd
 - Phase 3 program underway
 - 11 drill holes
 - 3000 metres



North Pit-North VT Rim



Previous North VT Rim Intercepts

- 99-002: 8m @ 5.9 g/t Pd
- 99-031: 10m @ 4.2 g/t Pd
- 08-010: 12m @ 5.3 g/t Pd from 149 m

2009 North Pit-North VT Rim Intercepts

- Assays pending from lab



Future exploration



**Mineralized NQ drill
core from the Cowboy
Zone**

- Increase resources
- Discover new zones
- Geologic modelling
- Underground Offset, Cowboy Zone, Outlaw Zone and footwall drilling
- Surface drilling: West Pit, North Pit-North VT Rim
- Trenching
- Mapping



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Site Visit: Lac des Iles

Operational Review

John Caldbick

General Manager, Lac des Iles mine





History



Late 2008

- LDI placed on care and maintenance due to low metal prices

2006

- Roby Underground reaches commercial production

2004: Development

- Development begins on Roby Underground mine

2000 to 2001: Lac des Iles

- Mine expansion to 15,000 tpd open pit

1993

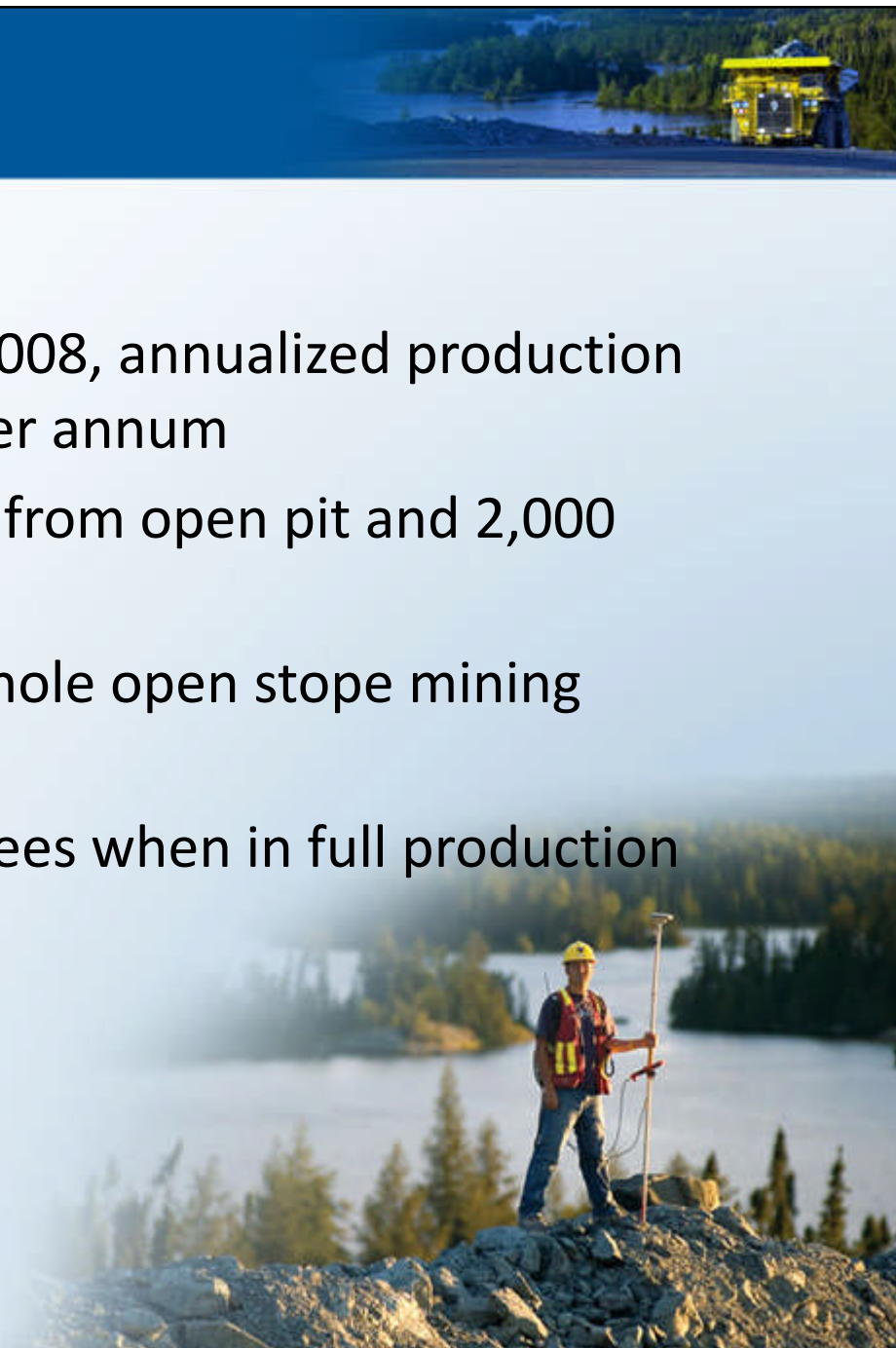
- Started as Madeleine Mines
- 2500 tpd open pit





Operation

- When mine shut down in 2008, annualized production rate was 270,000 ounces per annum
- Production was 13,000 tpd from open pit and 2,000 tpd from underground
- Underground utilized long hole open stope mining method
- Approximately 400 employees when in full production





Milling and metallurgy

- Mill has nameplate capacity of approximately 15,000 tpd
- Ore goes through two stages of crushing then reports to SAG pebble crusher – two ball mill setup
- Flotation circuit consists of multi-stage rougher – cleaner-scavenger set up
- Produced palladium rich bulk concentrate that was shipped to Sudbury smelter for treatment and refining



Way forward

- Open pit was months away from completion when mine was shut down in late 2008
- Any high grade ore remaining in the pit could be accessed from underground
- LDI will essentially become a higher grade underground only operation
- Known Roby underground resources allow for approximately two years of mining
- Workforce would number about 200 people
- Depending on metal prices, there are additional lower grade ore stockpiles available above ground that could be milled
- Mill would operate on a batch system





Offset Zone

- LDI currently undertaking a scoping study of the Offset Zone
- Work to date shows it would require an extension to the existing ramp and a shaft
- Shaft is envisaged to be raise bored in order to keep operating costs lower and speed development
- Ore body is currently envisaged to be mined in two halves: “Upper Mining Area” & “Lower Mining Area”
- Mining method could be described as “large scale shrinkage”; similar to Agnico Eagle’s Goldex mine
- Emphasis placed on reducing manpower requirements and overall operating costs
- Mill would be reconfigured particularly in grinding section to handle lower tonnages
- Test work has been completed on high pressure grinding rolls and ore appears amenable to this process



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Site Visit: Lac des Iles

Site Tour Agenda

Dave Passfield

Vice President, Operations





Visiting LDI

- Mill
- New tailings management facility
- Open Pit look out
- Roby underground mine





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[Appendices and further information](#)





Appendix – Resources and Reserves

- 1. Cautionary Note to U.S. Investors Concerning Mineral Reserves and Mineral Resources**
- 2. Lac des Iles mine**
Mineral Resource Summary – December 31, 2008
- 3. Lac des Iles mine – Offset Zone**
Estimated Mineral Resource – January 20, 2009

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, www.sec.gov and 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.



Lac des Iles mine

Mineral Resource Summary – December 31, 2008



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Inferred Resources								
Offset Underground	4,637	4.9	0.4	0.3	0.12	0.13	8.0	730

Notes:

1. CIM definitions were followed for the estimation of Mineral Resources.
2. Mineral Resources for the Roby Open Pit were estimated at a cut-off grade of 1.8 g/t PdEq, within an optimized pit shell run below the current pit survey (October 2008).
3. Mineral Resources in stockpiles were estimated at a cut-off grade of 1.9 g/t PdEq.
4. Mineral Resources for the Roby and Offset Zones underground were estimated at a cut-off grade of 5.8 g/t PdEq.
5. Cut-off grades were determined under the assumption that a production rate of 14,000 tpd would be resumed in the event of restarting operations.
6. PdEq factors were calculated separately for each area, based on operating cost and metallurgical performance estimates appropriate for those areas.
7. Metal price assumptions of US \$250/oz palladium, US\$1,400/oz platinum, US\$850/oz gold, US\$6.50/lb nickel and US\$2.00/lb copper were used in the estimation of Pd/Eq and cut-off grade. A US\$/C\$ exchange rate of 1.11 was used.

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Lac des Iles mine – Offset Zone

Estimated Mineral Resource – March 31, 2008



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Inferred	4.6	4.85	0.37	0.33	0.13	0.12	8.0	717

Notes:

1. Prepared by Mr. Ian T. Blakley, P. Geo and Senior Consulting Geologies for Scott Wilson Roscoe Postle Associates, an independent Qualified Person within the meaning of NI 43-101.
2. Palladium equivalency (PdEq) cut-off of 5.575 g/t, assuming long-term US\$ metal prices of \$300/oz Pd, \$1,000/oz Pt, \$850/oz Au, \$7.00/lb Ni, \$2.50/lb Cu and a US\$/C\$ exchange rate of 1.10.
3. Resources were estimated to a maximum depth of 1,200 m.
4. Metal recovery assumptions of 80% Pd, 70% Pt, 75% Au, 40% Ni and 85% Cu were used in estimation of PdEq.

The Offset Zone resource estimate is available on www.sedar.com, www.sec.gov and www.nap.com.