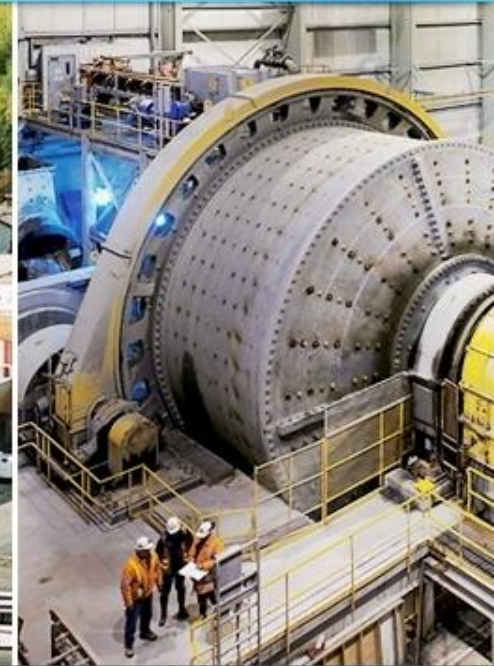




North American Palladium Ltd.



a growth-oriented precious metals producer

INVESTOR PRESENTATION

William J. Biggar
President & CEO

December 2010

Forward Looking Statements

Certain information included in this presentation, including any information as to our future exploration, development, 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, factors, and assumptions that, while considered reasonable by management, are inherently subject to significant business, economic and competitive uncertainties, risks and contingencies, including the possibility that metal prices, foreign exchange assumptions and operating costs may differ from management's expectations. These factors 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. The forward-looking statements are not guarantees of future performance. For more details on these estimates, risks, factors, and assumptions, 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. The Company cautions the reader that the Offset Zone preliminary economic assessment ("PEA") has been prepared by third parties and is based on a number of assumptions, any one of which, if incorrect, could materially change the projected outcome discussed in this presentation. In addition, there can be no assurance that the Company's Lac des Iles or Sleeping Giant mines will operate as anticipated, that management expectations for the development of the Offset Zone will be met, 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. Additionally, the forward-looking statements contained herein are presented solely for the purpose of conveying management's expectations or estimates of future performance and may not be appropriate for other purposes.

All dollar amounts are in Canadian currency unless otherwise stated.

Investment Case for NAP



 Growth-oriented precious metals producer in mining-friendly jurisdictions:



Lac des Iles, one of only two primary palladium mines in the world, transitioning into a long life, low cost operation



Sleeping Giant gold mine provides foundation for growth

 Robust pipeline of projects to increase palladium and gold production

 Significant commitment to palladium and gold exploration

 Experienced senior management and operating teams

 Strong balance sheet, \$114 million in cash and no long-term debt*

 Attractive stock price relative to analyst targets and peer group multiples

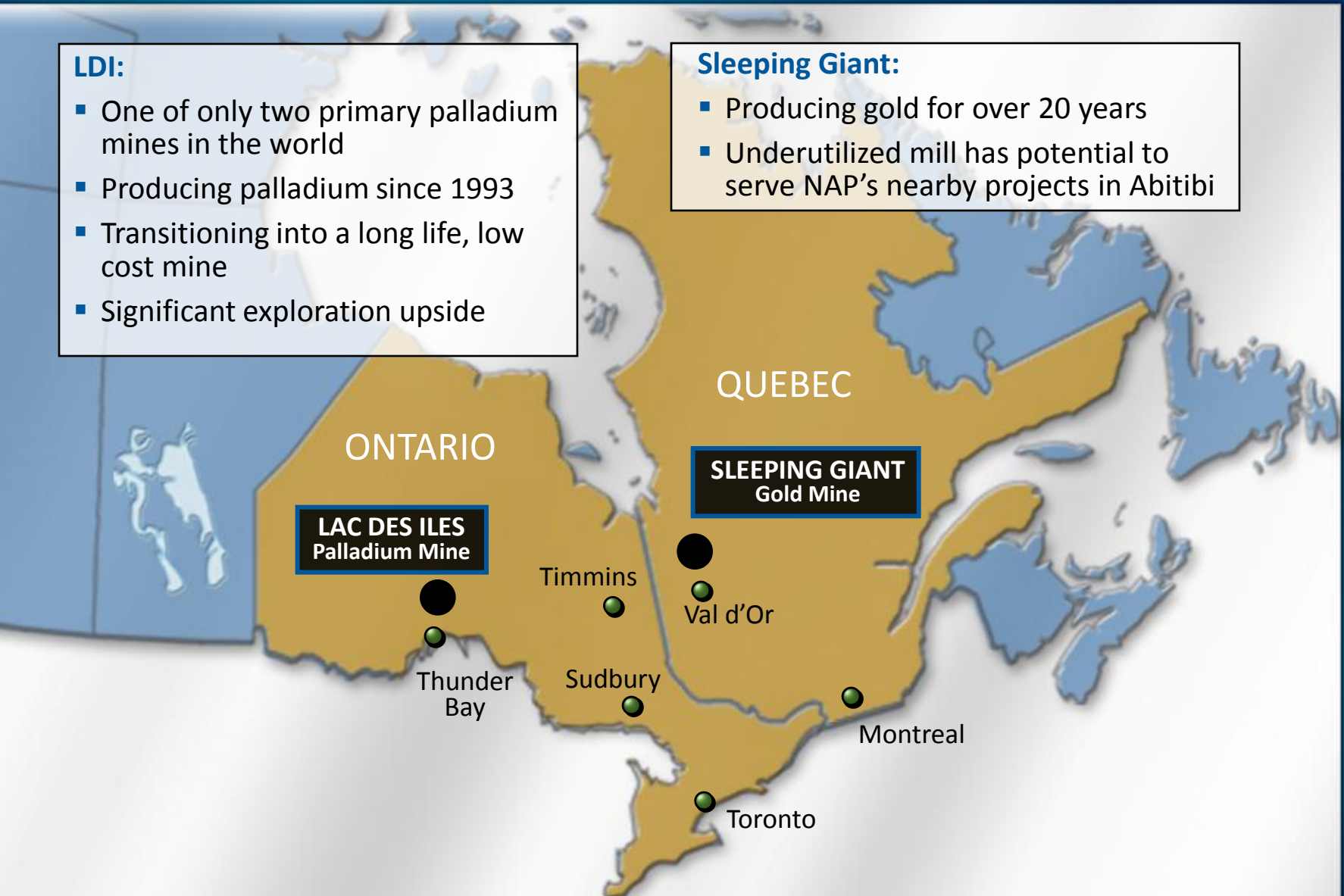
Diversified Precious Metals Producer

LDI:

- One of only two primary palladium mines in the world
- Producing palladium since 1993
- Transitioning into a long life, low cost mine
- Significant exploration upside

Sleeping Giant:

- Producing gold for over 20 years
- Underutilized mill has potential to serve NAP's nearby projects in Abitibi



Market Statistics: A Very Liquid Stock

STOCK SYMBOLS:

NYSE Amex: PAL

TSX: PDL

MARKET CAPITALIZATION:

US \$922 M

SHARE PRICE:

US \$6.19

SHARES/WARRANTS OUTSTANDING:

Shares: 149 M

Warrants: 19 M*

3-MONTH AVERAGE DAILY TRADING VOLUME:

NYSE Amex: 2,881,502

TSX: 472,735

* Warrant Information:

1. PDL.WT.A: 9.2 M, expire Sept.30, 2011, \$4.25 strike price (accelerated to expire on January 14, 2011)
2. PDL.WT.B: 10.0 M, expire Oct. 18, 2011, \$6.50 strike price

Analyst Coverage:

Leon Esterhuizen
RBC Capital Markets

Matthew O'Keefe
Cormark Securities

George Topping
Stifel Nicolaus

Chris Thompson
Haywood Securities

Andrew Mikitchook
GMP Securities

Daniel Greenspan
Macquarie

Michael Parkin
Bank of America Merrill Lynch

Rik Visagie
Octagon Capital

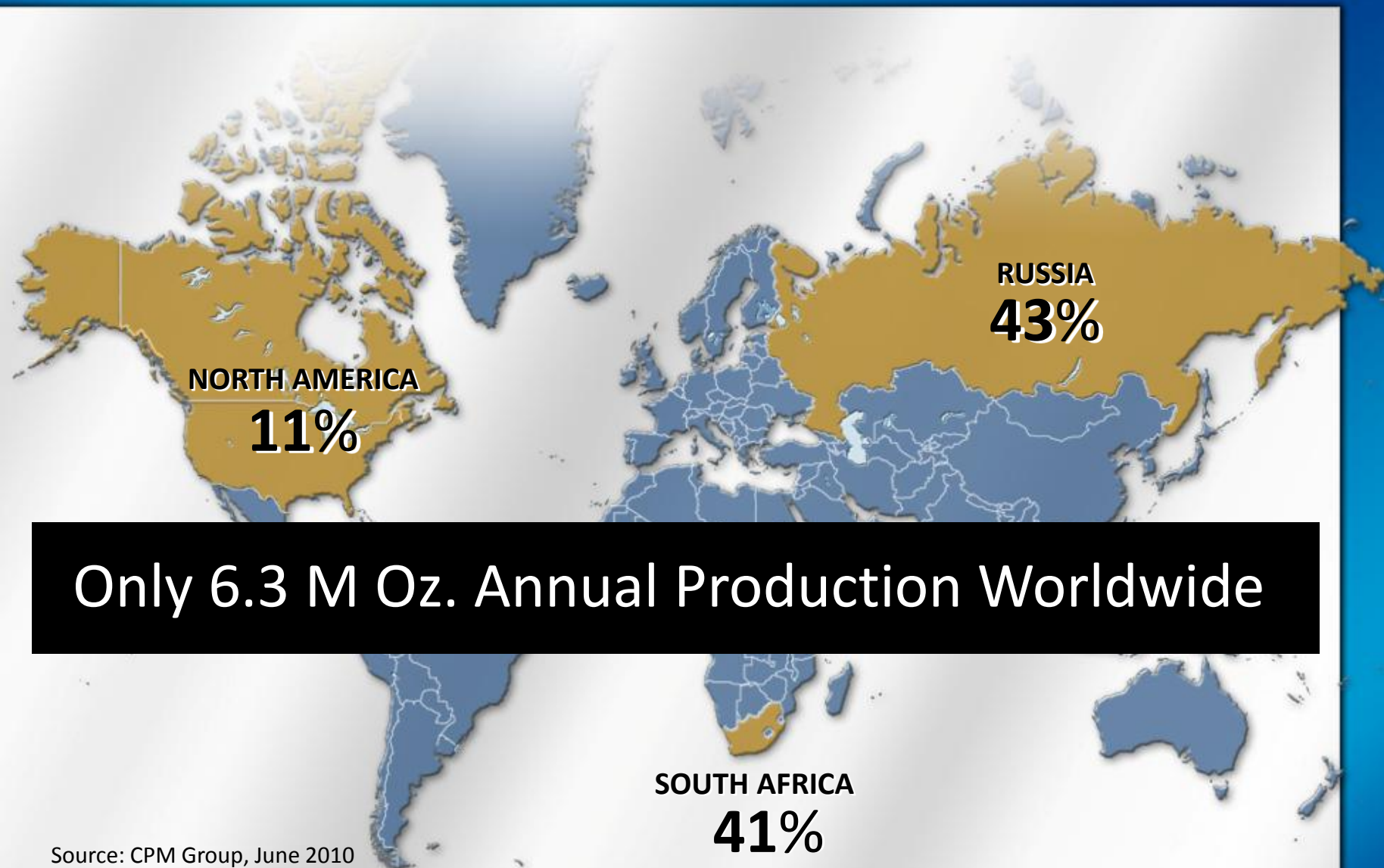


North American Palladium Ltd.

Investment Case for **Palladium**



Palladium Market: Mine Supply



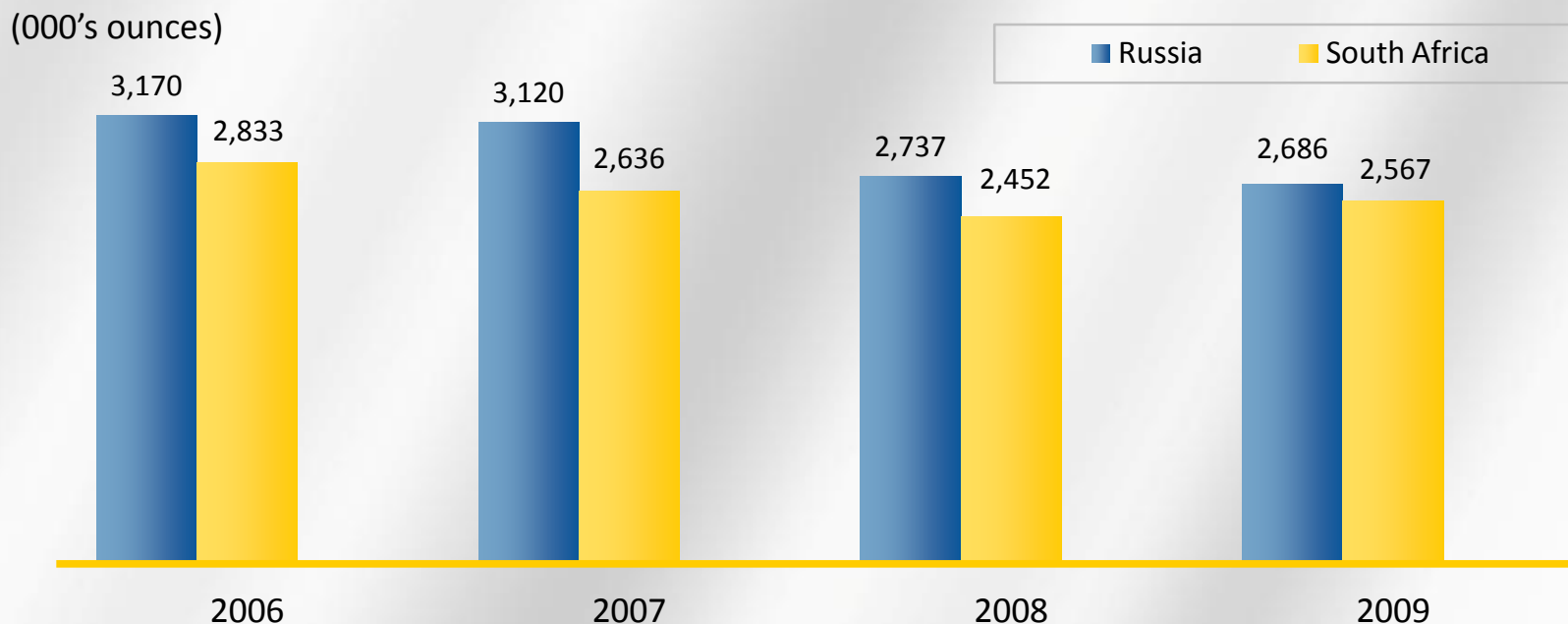
Source: CPM Group, June 2010

Note: Excludes secondary supply of 1.34 M oz.

Palladium Market: Supply



CONSTRAINED MINE SUPPLY



Source : CPM Group, June 2010

RUSSIAN STOCKPILE NEARING EXHAUSTION

- "The Russian state palladium stock is "practically nil," and the State Precious Metals and Gemstones Repository, known as Gokhran, is unlikely to sell palladium on the world market."¹
- "The company and other main market players conclude on the basis of indirect indicators that the state palladium stocks will not be a decisive factor on this market."²

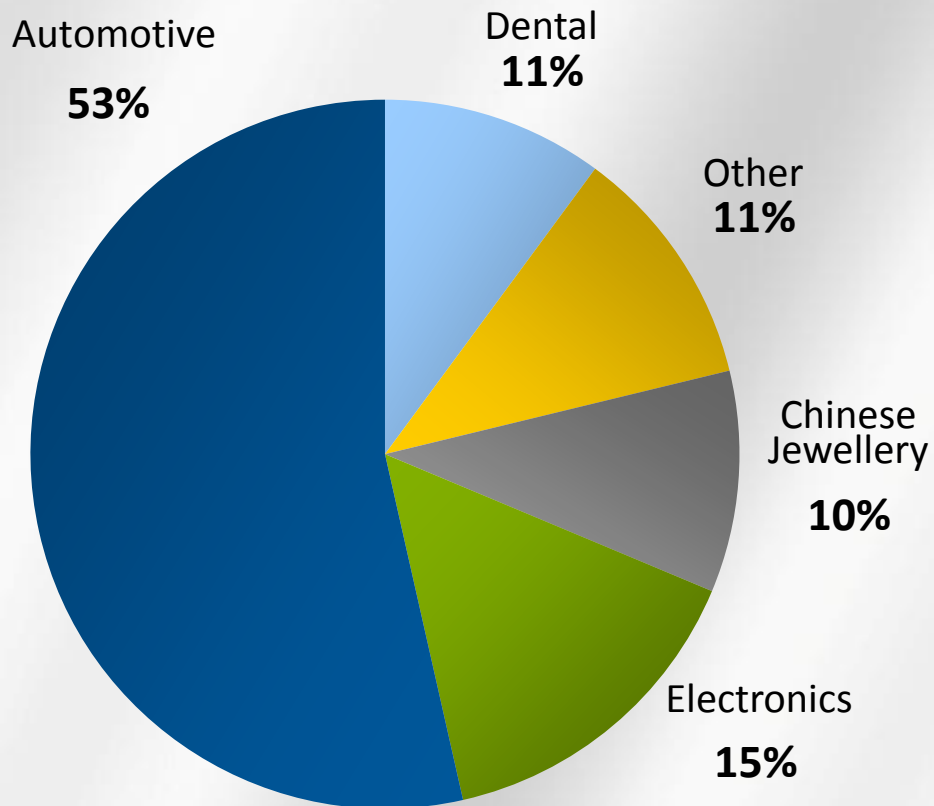
1. Statement made by a Russian Finance Ministry official; as reported by Dow Jones, November 17, 2010.

2. Viktor Sprogis, Deputy CEO, Norilsk Nickel; as reported by Reuters, May 21, 2010 .

Palladium Market: Demand



2009 FABRICATION DEMAND



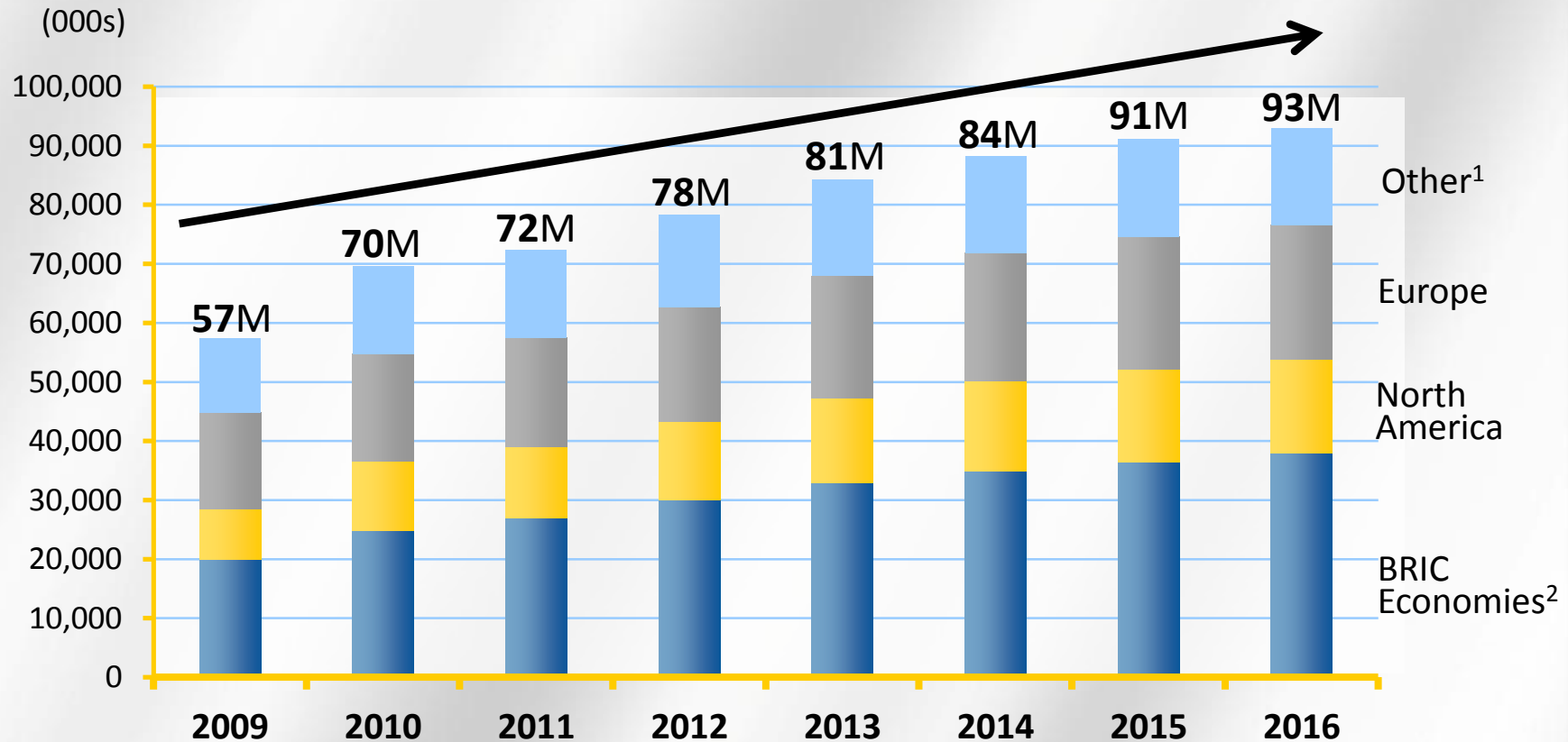
Source: CPM Group, June 2010

Notes: Other includes chemical and petroleum catalysts, jewellery (excluding China), and other minor uses of palladium

Palladium Market: Demand



Global Light Vehicle Production



Source: CSM Worldwide Inc., Oct. 2010

1. Other includes: Japan, Korea, Middle East and Africa

2. BRIC Economies include: Greater China, South America and South Asia

Palladium Market: Demand



Adoption of Stricter Emission Control Standards

		2005	2006	2007	2008	2009	2010	2011	2012
Europe		Euro IV				Euro V			
China	Beijing	Euro III		Euro IV					
	Nationwide	Euro II		Euro III			Euro IV		
India	Select Cities	Euro III					Euro IV		
	Nationwide	Euro II					Euro III		
Russia		Euro I	Euro II		Euro III		Euro IV		
USA		Tier 2 and LEV II							
Brazil		Prconve 3		Prconve 4		Prconve 5			

- Emerging economies have adopted emission control standards that mandate the use of catalytic converters
- Advancing to a higher level of emission controls results in higher PGM loadings in the catalytic converter

Use of Palladium in Catalytic Converters



Gasoline Engines

- Use +90% palladium

Diesel Engines

- Historically used platinum due to technical requirements
- Now 25% palladium, with scope to increase to 50% due to advent of low sulphur diesel fuel



Hybrids & Other New Power Forms

- Neutral impact on PGM use
- Gasoline hybrids tend to use as much palladium as normal gasoline engines
- Currently account for only 1% of global cars sales¹
- Forecasted to be 14% of overall market by 2020²

Electric

- No requirement for catalytic converters
- Challenged by lack of infrastructure to recharge, high costs, long charging periods and short driving range
- Forecasted to account for only 2% of global car sales by 2020²

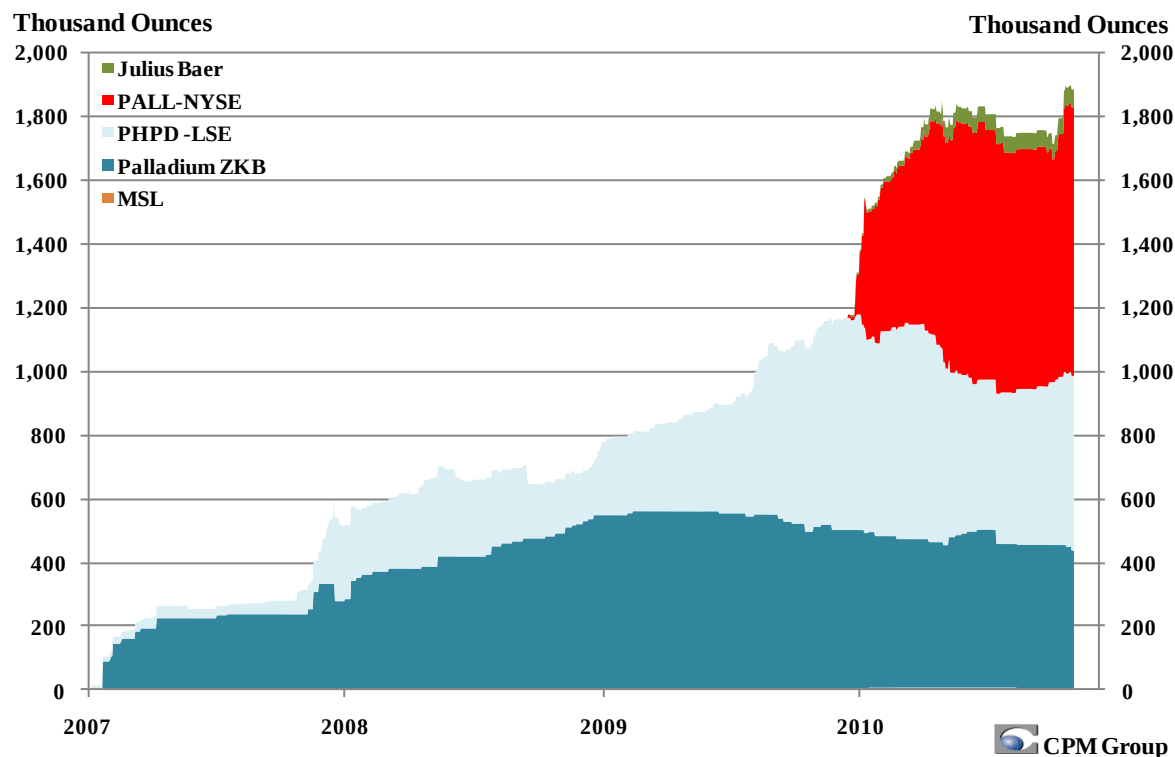
1. CPM Group, June 2010

2. Stefan Bratzel, director of the Centre of Automotive Management in Germany; as reported in Mitsui Global Precious Metals "Pole Position" Report, June 2010

Palladium Market: Demand

ETFs: Approaching 2 M ounces

Exchange Traded Funds' Physical Palladium Holdings



FIX GROUP



London
STOCK EXCHANGE



TOKYO
STOCK EXCHANGE



NYSE

Palladium Market: Increasing Value



RECENT PERFORMANCE OF PALLADIUM



NEAR-TERM AVERAGE ANNUAL PRICE FORECASTS

	2011	2012
Bank of America Merrill Lynch	\$775	\$850
Credit Suisse	\$760	\$800
CPM Group	\$700	\$752
JP Morgan	\$675	\$742
UBS	\$625	\$700
Barclays	\$554	\$600

Historic High: US \$1,090 (2001)

Current Price: US \$660 (Nov. 17, 2010)

Best performing precious metal of 2010



North American Palladium Ltd.

Lac des Iles Palladium Mine

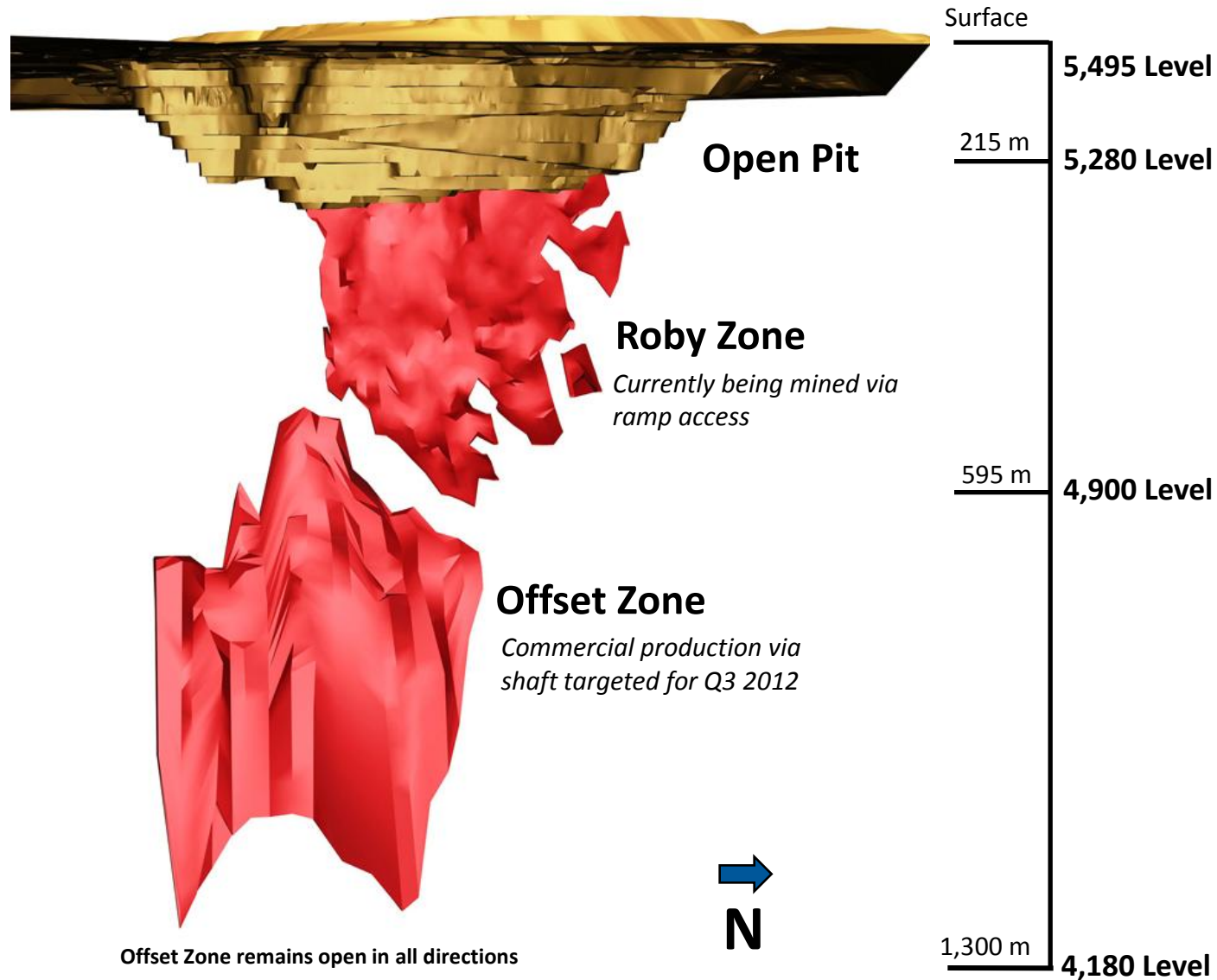


LDI: A World Class Mine



- Open pit commenced operations in 1993
- Underground mining from the Roby Zone (via ramp) began in 2006
- Mine expansion underway with production from the Offset Zone (via shaft) targeted for Q3 2012
- 190 employees
- 15,000 tpd mill
- +\$500 M invested in infrastructure and mineral rights to date

LDI: Ore Body

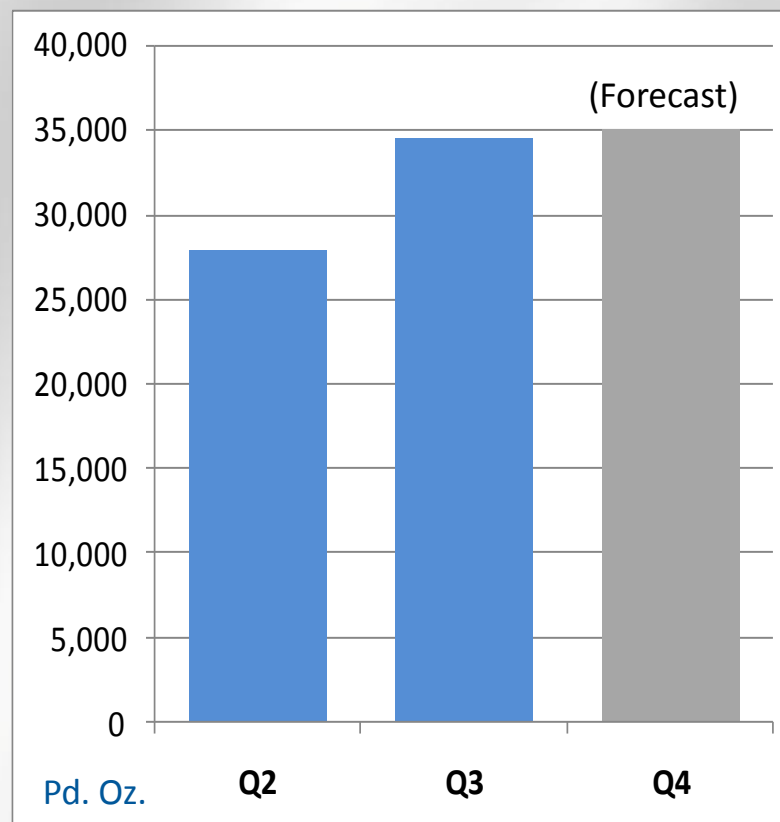


LDI: Operating Metrics



- Currently mining Roby Zone via ramp access at rate of 2,600 tpd
- Q3 2010 Production:
 - 34,420 oz of Pd
 - US\$218/oz cash costs
 - 7.05 g/t avg. Pd grade
 - 82.1% Pd recovery
- YTD* (*commencing May 1, 2010*):
 - 62,258 oz of Pd
 - US\$253/oz Pd cash costs
- Q4 2010 Guidance:
 - 35,000 oz

2010 Production

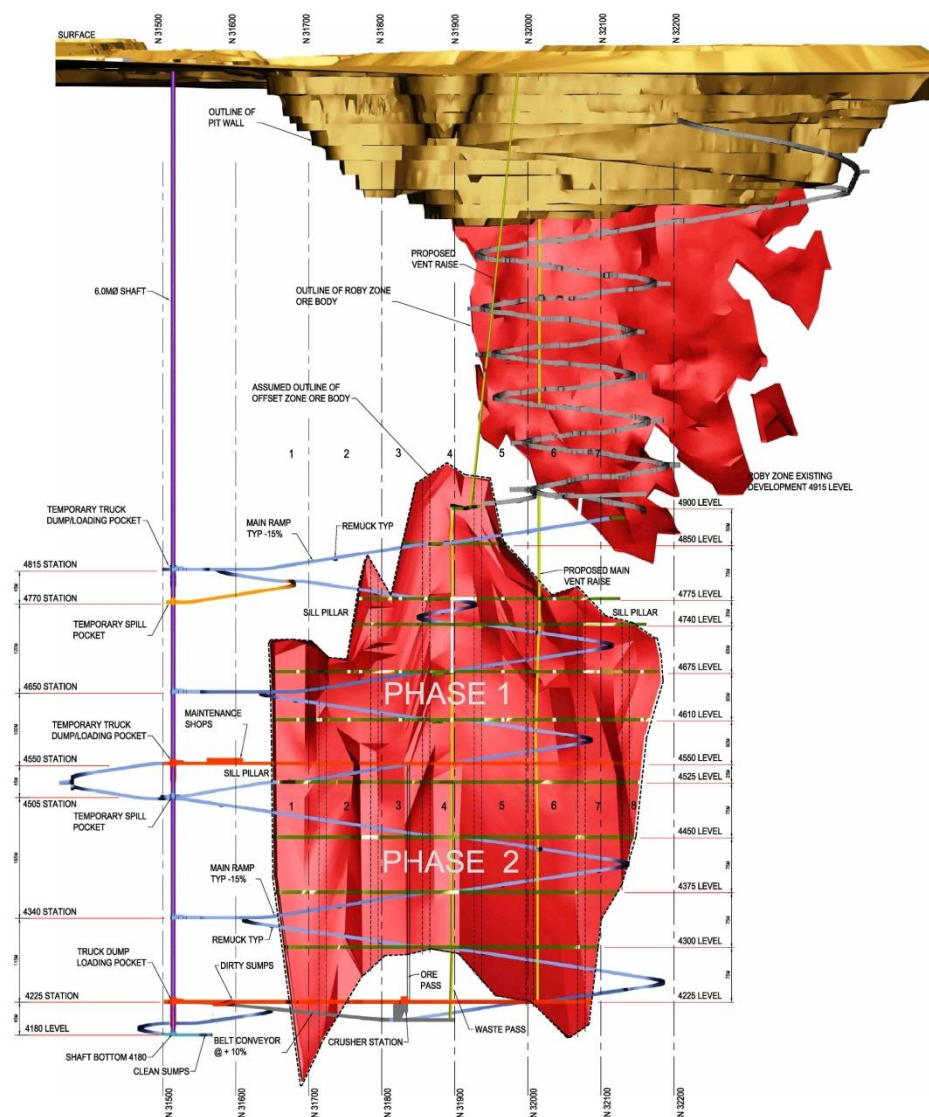


* Mine was placed on temporary care & maintenance in Oct. 2008 due to low metal prices.

LDI: Mine Expansion Plan*

NAP to become a very low cost palladium producer

- Plan to raisebore a shaft to surface from the 4,815 level to commence commercial production
- Subsequently sink the shaft to bottom (4,180 level)
- Shaft is being sized for 7,000 tpd
- Super Shrinkage mining method:
 - Similar to Agnico-Eagle's Goldex mine
 - Blast large mining blocks 60m x 75m with 10m rib pillars
 - Due to the rock conditions, no backfilling is anticipated
 - Highly mechanized operation



*Based on third-party Scoping Study report, August 2010

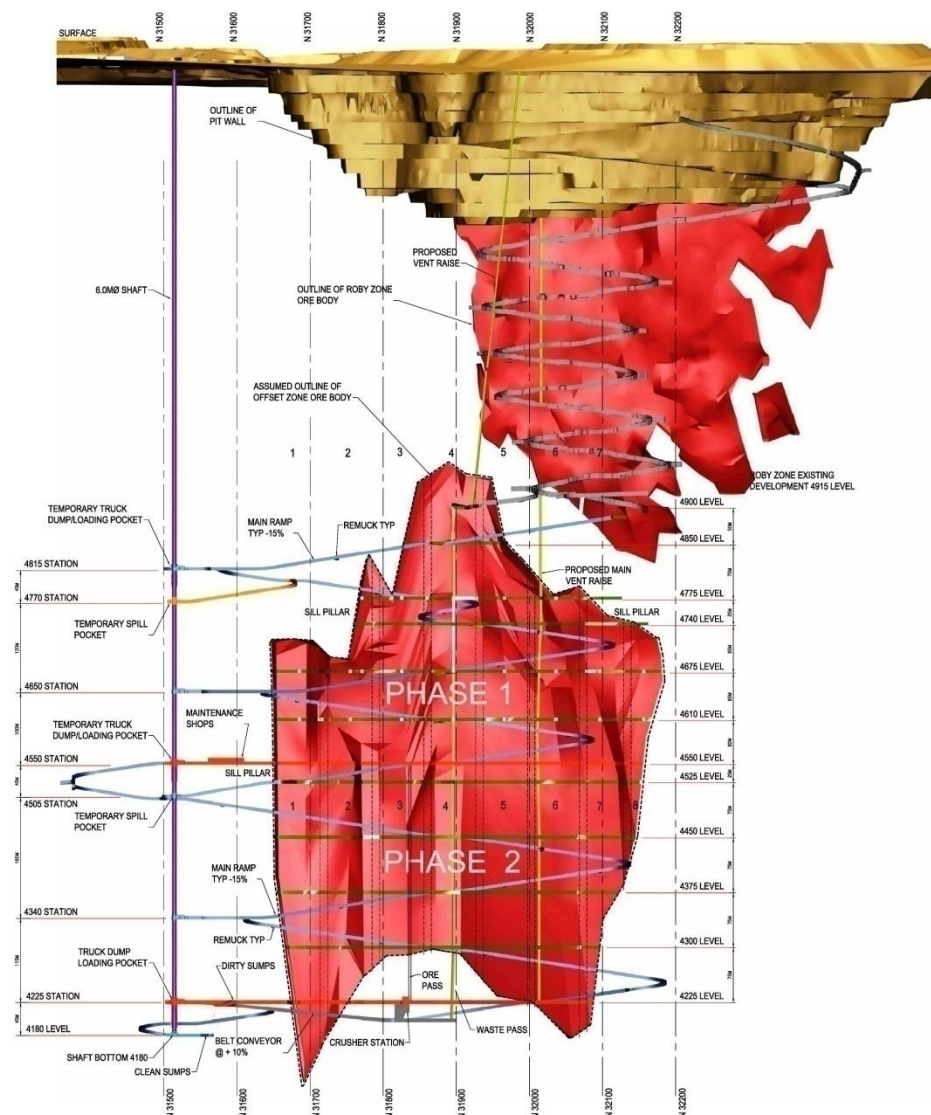
LDI: Mine Expansion Plan*



- Target mining rate:
 - 3,500 tpd (Q3 2012)
 - 5,500 tpd (Q4 2014)
- Anticipating 10% mining dilution (at 3.0 g/t Pd) and 90% mining recovery
- Assumes 82% Pd mill recovery

Mine Operating Costs	C\$/t
Mining	\$25.53
Processing	\$12.41
General & Administration	\$3.33
Contingencies	\$2.00
Total	\$43.27

- LOM cash costs US\$132/oz Pd



*Based on third-party Scoping Study report, August 2010

Offset Zone Production Forecast*

Production Rate	Year	Tonnes Milled Per Year (000's)	Avg. Diluted ¹ Grade (g/t Pd)	Pd Oz Production (000's)	Cash Cost (US\$/oz)
Pre-Commercial	2010	68	6.2	10	403
	2011	485	6.6	78	250
3,500 tpd²	2012	1,264	6.1	189	254
	2013	1,728	6.0	256	143
5,500 tpd³	2014	2,000	5.9	288	149
	2015	2,000	5.7	278	104
	2016	2,000	5.7	281	59
	2017	1,771	5.3	232	68
	LOM	11,300	5.8	1,613	132

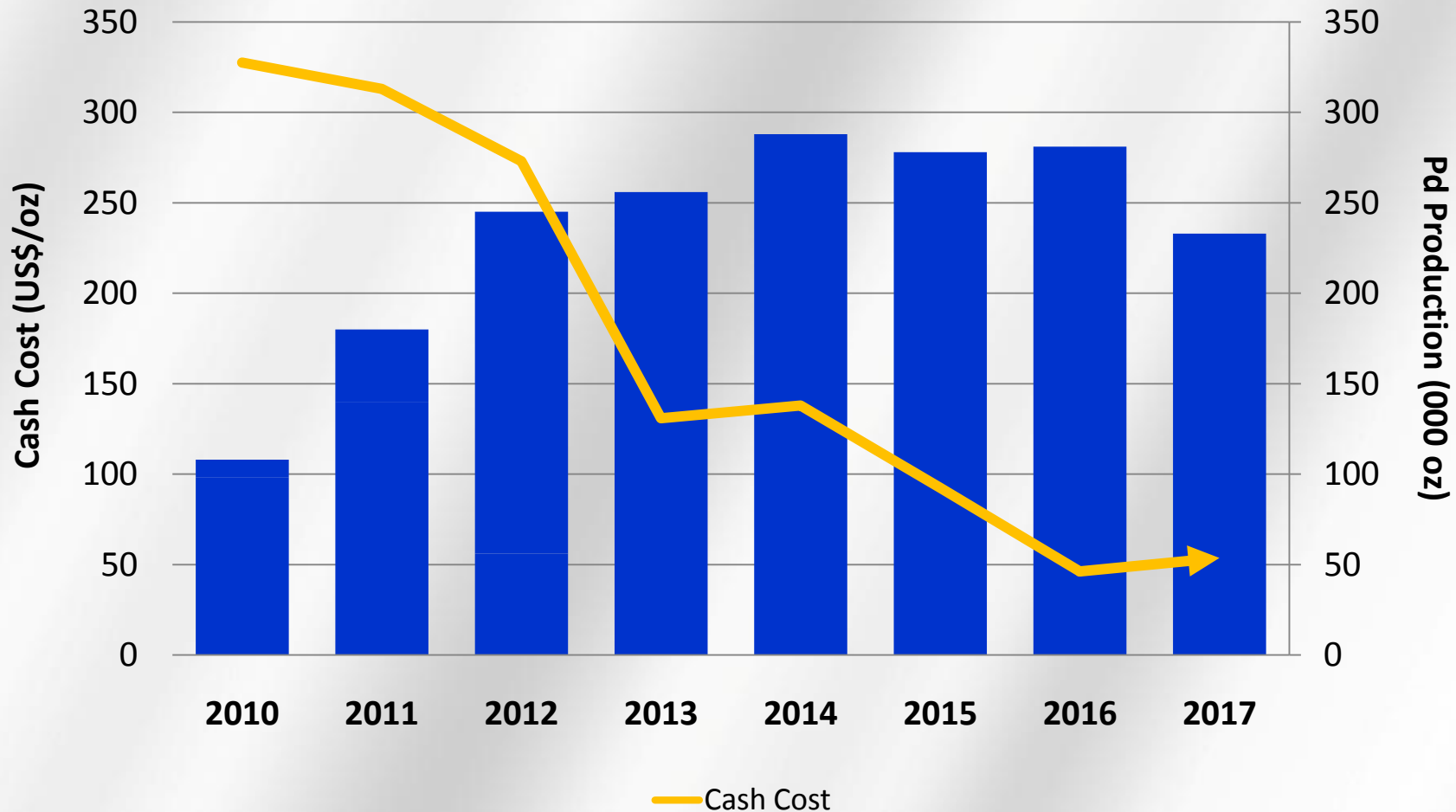
1. 10% mining dilution; grades based on current drill density

2. Commercial production from the shaft at 3,500 tpd is expected in Q3 2012.

3. Production from the shaft at 5,500 tpd is expected in Q4 2014.

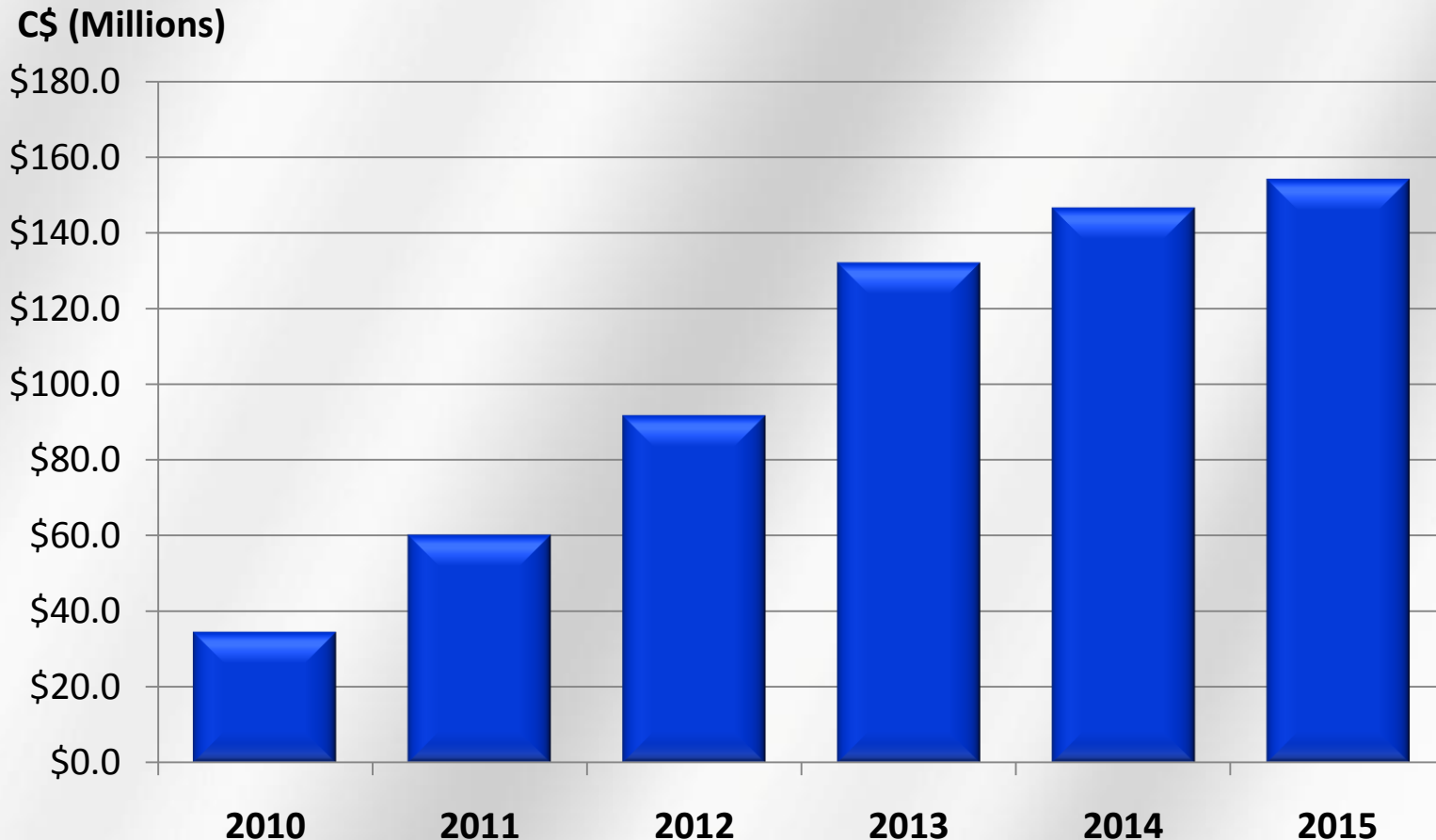
* Based on third-party Scoping Study report, August 2010

LDI Transition to Low Cost Production*



*Potential production profile and cash costs based on third-party Scoping Study report, August 2010.

LDI: Potential Operating Cash Flow*



*Operating cash flow is before changes in working capital. Based on third-party Scoping Study report production forecast, August 2010, adjusted to assume a palladium price of US\$650 and FX of 1.03.

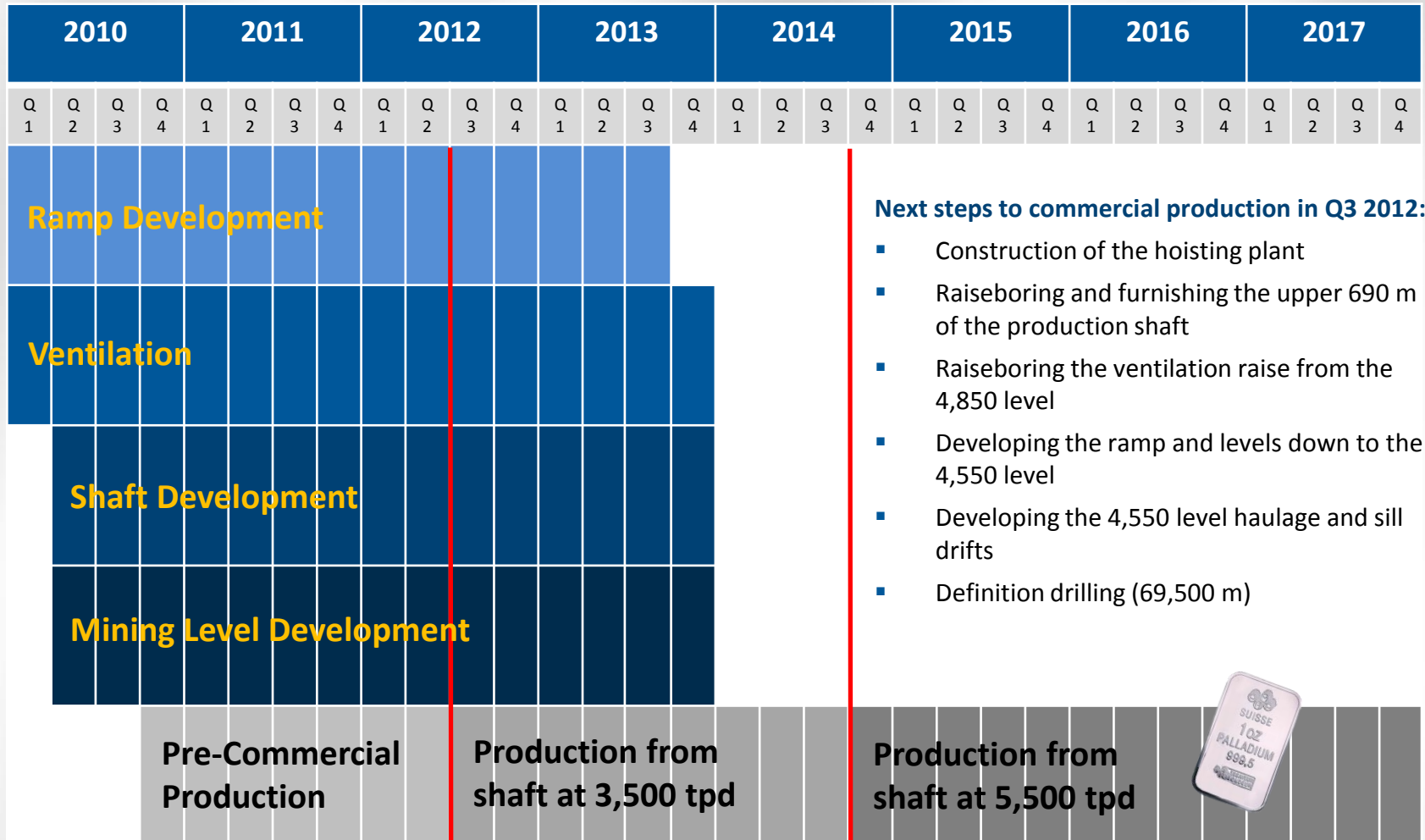
(Price assumptions for byproduct metals: Pt: US\$1,627/oz, Au: US\$1,300/oz, Cu: US\$3.55/lb, and US\$10.50/lb)

Offset Zone Capital Expenditures*

- Pre-commercial production capital expenditures estimated at \$204.1 M (*including \$24.6 M contingency*):
 - 2010: \$35.4 M
 - 2011: \$116.7 M
 - 2012 (Q1-Q3): \$52 M
- Capital expenditures for development post commercial production are estimated at \$71.9 M (*including \$7.2 M contingency*):
 - 2012 (Q4): \$11.6 M
 - 2013: \$30.1 M
 - 2014: \$30.2 M

Capital Expenditures	Pre-Commercial Production (2010 – Q3 2012)
Definition Drilling	\$7.0 M
Waste Development	\$42.7 M
Surface, Shaft, and Service Facilities	\$99.2 M
U/G Infrastructure Development & Construction	\$3.4 M
Mining Equipment	\$14.2 M
Surface Equipment	\$0.2 M
Engineering	\$2.5 M
Project Management	\$10.3 M
Subtotal	\$179.5 M
<i>Contingency (13.7%)</i>	<i>\$24.6 M</i>
Total	\$204.1 M

Offset Zone Development Schedule*



*Based on third-party Scoping Study report, August 2010

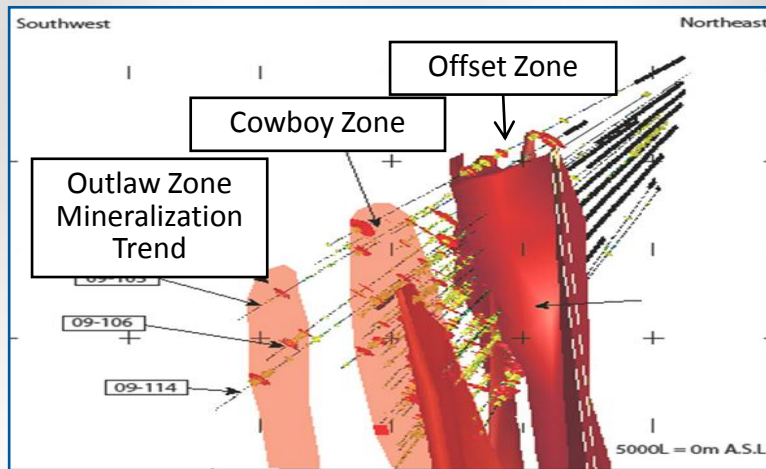
Low Execution Risk



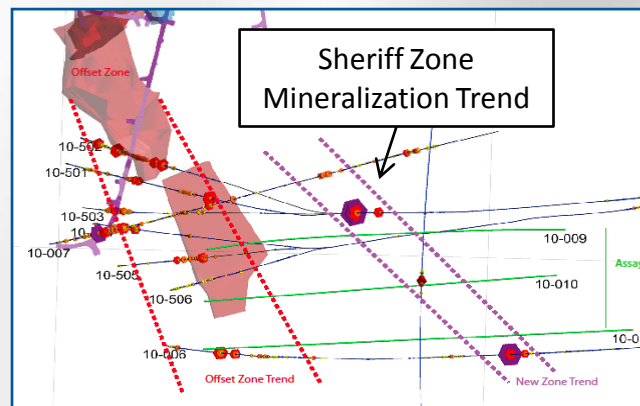
- Over 17 years of mining & milling experience at LDI
- Established fully permitted and under utilized facilities
- Strong management & operating team in place with a solid track record in underground development
- Initial development already in progress:
 - Ramp extension to 4,700 level
 - Service cage & production hoist purchased
 - Detailed engineering of the surface hoisting plant and production shaft
 - Raiseboring construction activities
- Brownfield expansion vs. greenfield project
 - No long lead items (*e.g. hoist already purchased*)
 - No capex currency risk as all expenditures are in C\$



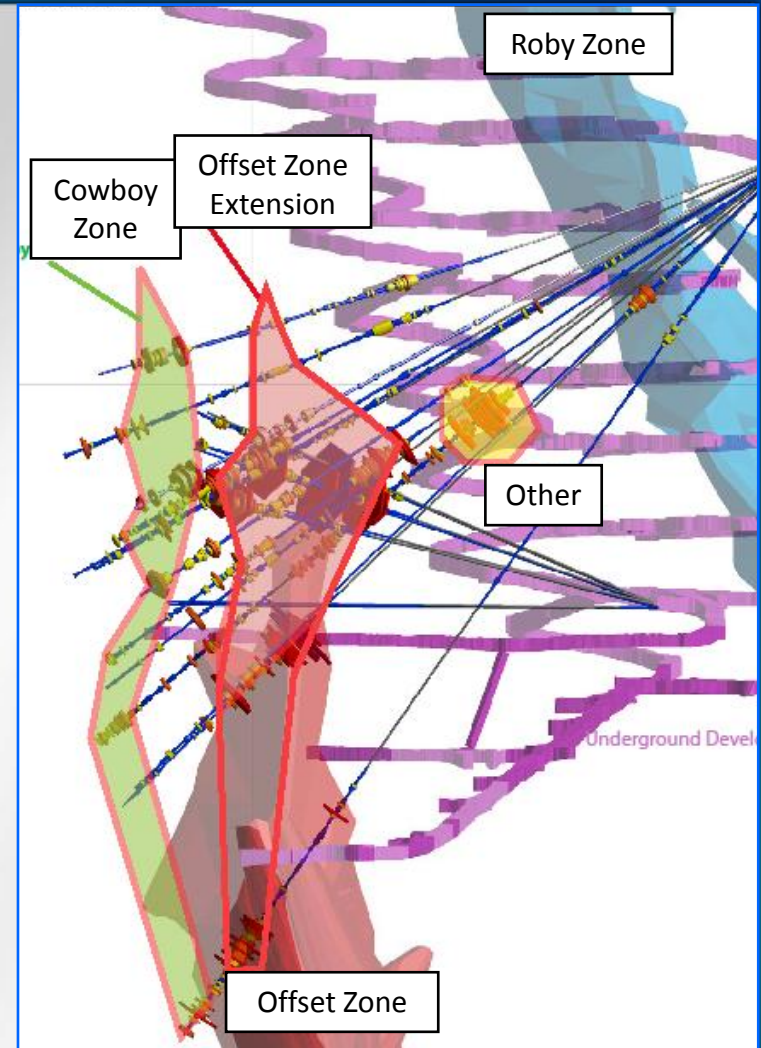
LDI: New Underground Zones*



Cowboy & Outlaw Zones discovered in 2009



Sheriff Zone discovered in 2010



Continued exploration has potential to increase resources & extend mine life

*New zones not included in May 2010 Resource Estimate and Scoping Study estimates

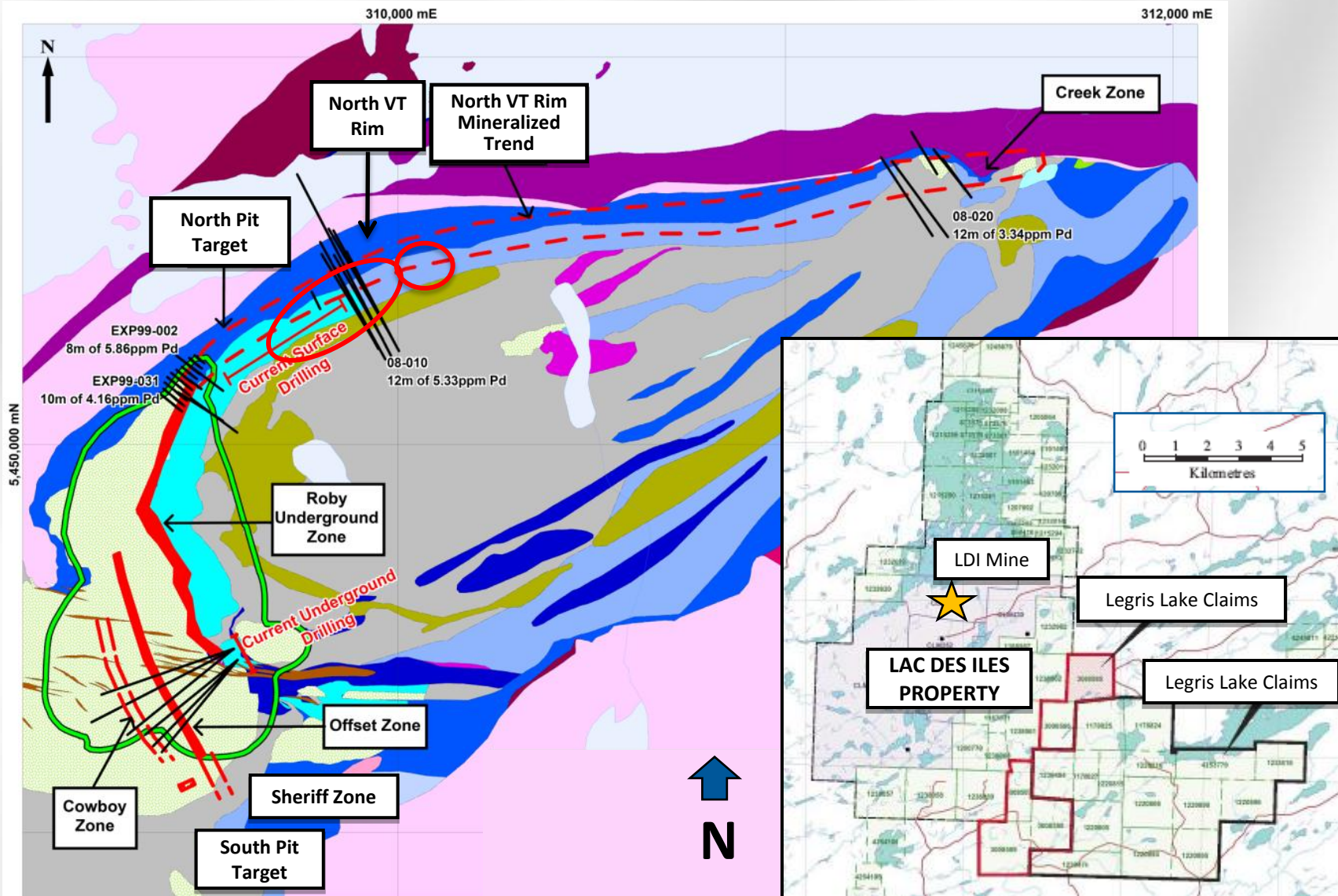
LDI: Continuing Focus on Exploration



- 20 geologists and technicians at the Thunder Bay exploration office
- +30,000-acre land package has historically been underexplored
- Significant \$15 M 2010 exploration program:
 - \$12 M for 53,000 metres of drilling for Offset Zone
 - \$3 M for 15,000 metres of drilling West Pit & other surface areas
- Exploration objectives:
 - Identify additional resources
 - Update resource estimate
 - Facilitate mine development planning



LDI: Exploration Upside Near Mine



Boundary of LDI landholdings +30,000 acres



North American Palladium Ltd.

Sleeping Giant Gold Mine



Sleeping Giant: A Foundation for Growth

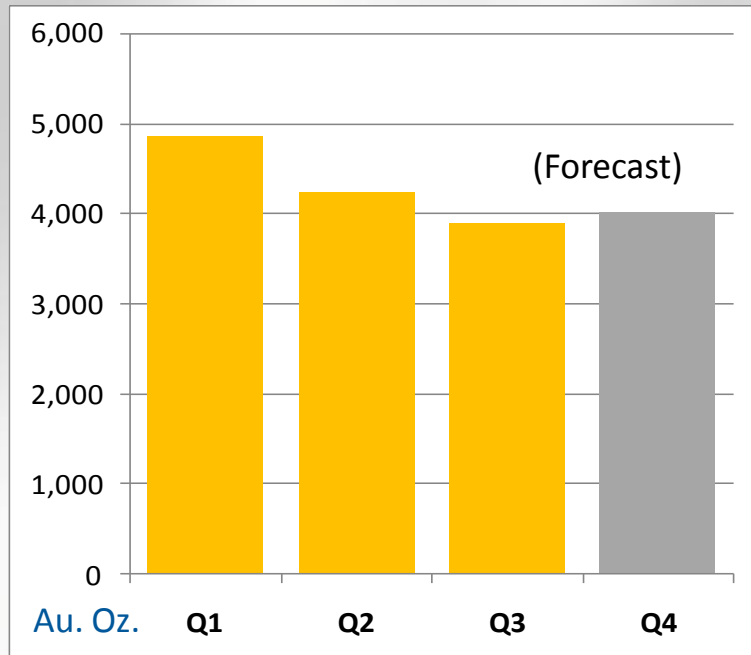


- Acquired in May 2009 for \$32 M
- Previously operated by IAMGOLD (Avg. production of 58,000 oz Au/yr.)
- Cumulative production of 1 M oz Au over 20 yrs.
- First step in NAP's evolution into a diversified precious metals producer
- Reduces risk associated with a single mine operation

Sleeping Giant: Operating Metrics

- Commercial production declared Q1, 2010
- Q3 Production:
 - 3,879 oz of Au
 - US\$1,660*/oz cash costs
 - 5.8 g/t avg. gold grade
 - 95.5% Au recovery
- YTD Production:
 - 12,979 oz Au
- Ramp-up targets for tonnage and grade have not been met
- Ongoing measures to mitigate ramp-up issues:
 - Tighter infill drilling
 - Focus on shrinkage and long-hole stopes vs. room and pillar stopes
 - New higher grade zones to be developed at depth

2010 Sleeping Giant Gold Production

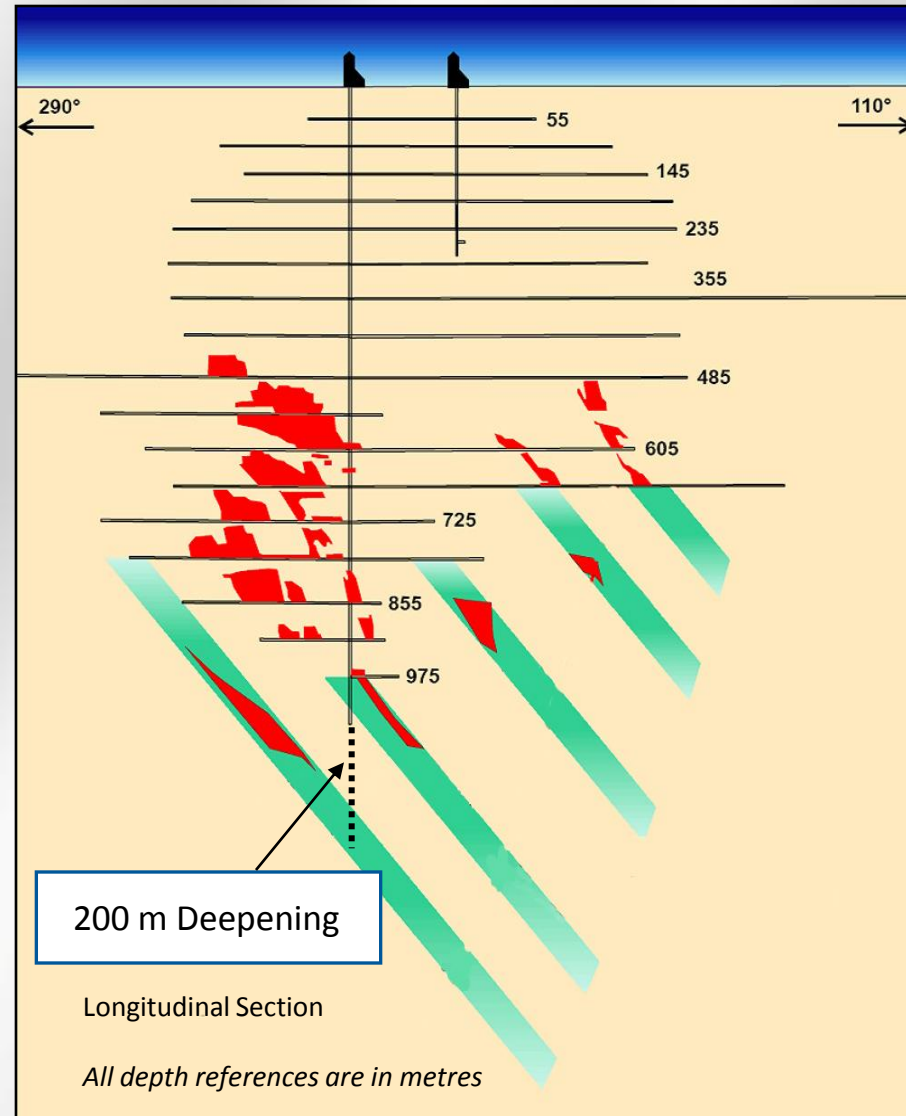


* See cautionary note to Investors in MD&A

Sleeping Giant: A Foundation for Growth



- Currently deepening the Sleeping Giant mine shaft by 200 metres to gain access to 3 new mining levels – *target completion by Q2 2011*
- 2010 exploration program:
 - 30,000 metres of underground extensional drilling
 - Cost: \$2.1 M
 - Goal to define and extend the zones within the current mine and at depth



Sleeping Giant: Underutilized Mill

Strategic Asset

- 900 tpd mill has excess capacity
- Potential to serve NAP's other gold projects in Abitibi region
- Mill expansion study underway – *target completion Dec. 2010*
- Preliminary cost estimate \$10 million to double capacity



Gold Assets: Organic Growth

Project	Resources*	2010 Exploration Program <i>Metres</i> <i>Cost</i>		Trucking Distance to Mill	Au Production Potential
Veza	<u>Measured & Indicated:</u> 288,000 oz Au (5.9 g/t) <u>Inferred:</u> 121,000 oz Au (5.0 g/t)	AEM historic drilling: ~82,000 m	\$3 M (in Q4)	70 Km	40-50,000 oz/yr (over 7-9 yrs)
Flordin	<u>Measured & Indicated:</u> 92,000 oz Au (4.25 g/t) <u>Inferred:</u> 169,000 oz Au (3.6 g/t)	10,000 m (infill drilling)	\$2 M	70 km	TBD (potential open pit)
Discovery	<u>Measured & Indicated:</u> 237,000 oz Au (5.74 g/t) <u>Inferred:</u> 294,000 oz Au (5.93 g/t)	4,200 m (surface)	\$1 M	80 Km	44,000 oz /yr (over 4 yrs)
Dormex	TBD	7,000 m (surface)	\$1 M	Adjacent	TBD (potential fold of Sleeping Giant)

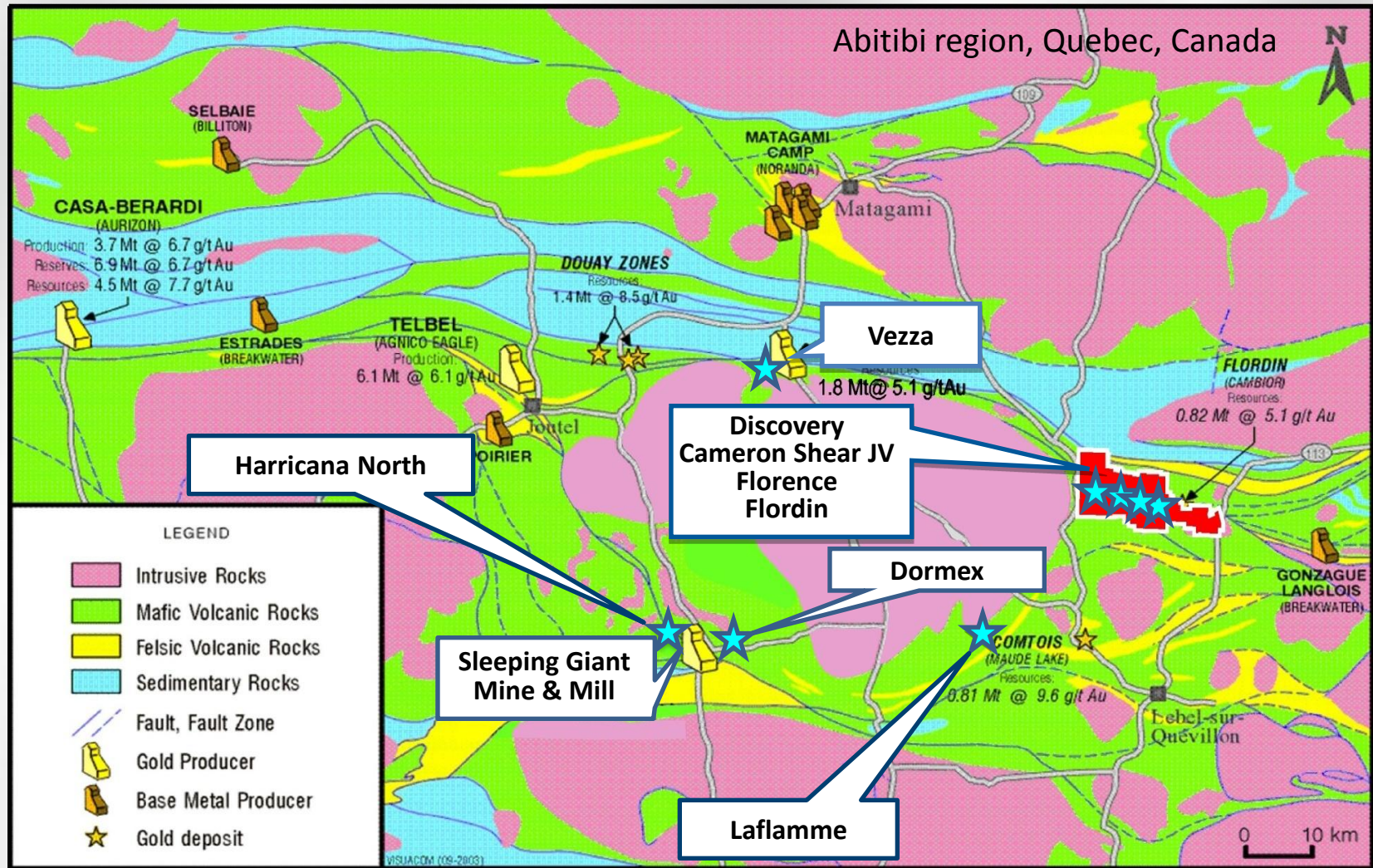
Potential to produce in the range of 125,000 oz per year from expanded Sleeping Giant mill

*See Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated and Inferred Resources. Report sources can be found in the appendix.



Gold Division: Significant Land Holdings

70 Km Land Package Surrounding Sleeping Giant Mill



Gold Division: Focus on Exploration

- 20 geologists and technicians at Val d'Or exploration office
- \$6 million, 53,000-metre drill program for 2010
- Exploring Sleeping Giant and adjacent landholdings in the Abitibi region



Goal to build gold division to production of 250,000 oz per year

Near Term Initiatives



 Grow palladium production at LDI while continuing to optimize costs

 Continue to advance the LDI mine expansion

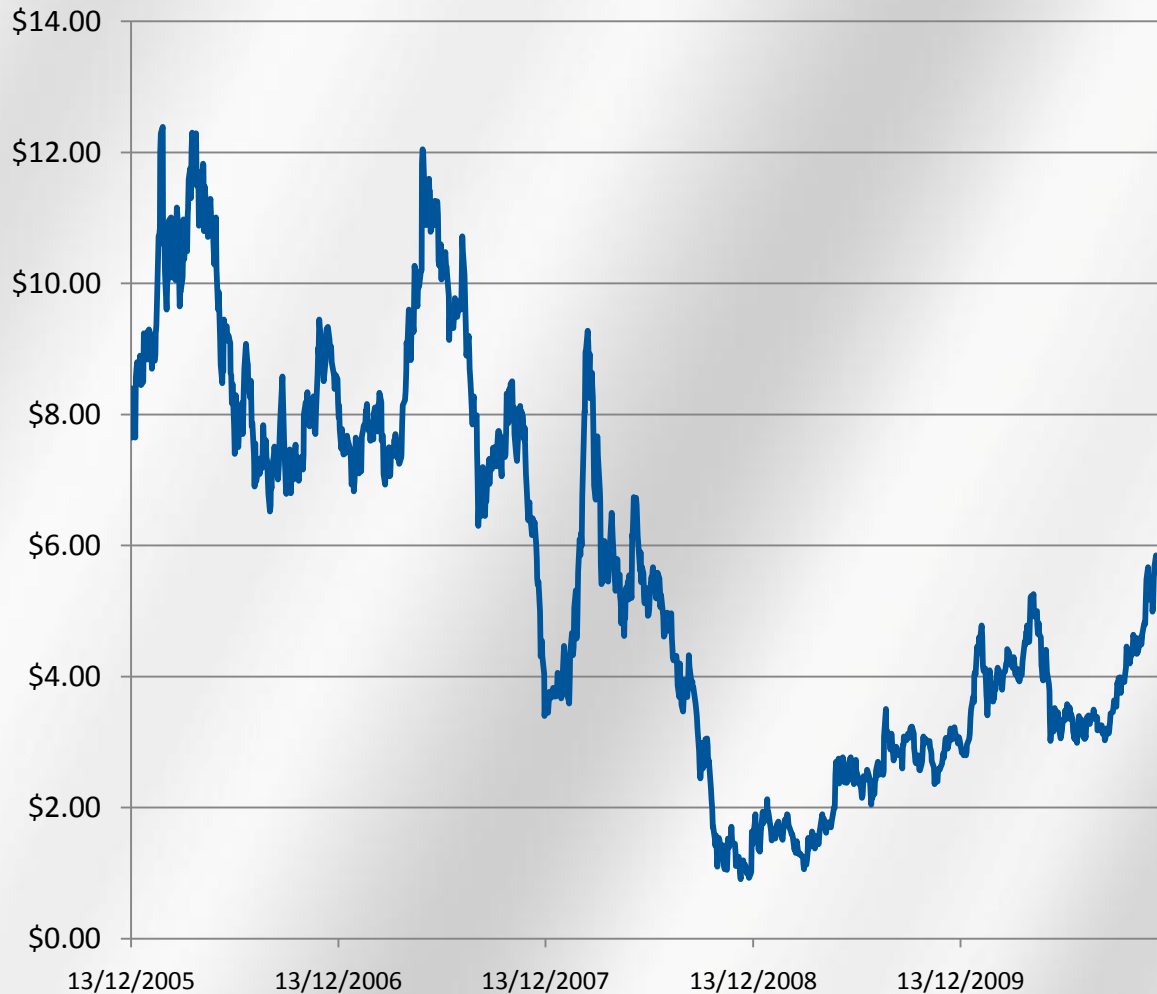
 Continue exploration programs aimed at increasing reserves and resources at LDI and in the gold division

 Improve operating results at Sleeping Giant and continue the deepening of the mine shaft to facilitate development of new zones at depth

 Determine expansion plans for NAP's gold assets

Attractive Stock Price

NYSE Amex: PAL



Analyst Coverage:

Leon Esterhuizen
RBC Capital Markets

Matthew O'Keefe
Cormark Securities

George Topping
Stifel Nicolaus

Chris Thompson
Haywood Securities

Andrew Mikitchook
GMP Securities

Daniel Greenspan
Macquarie

Michael Parkin
Bank of America Merrill
Lynch

Rik Visagie
Octagon Capital



North American Palladium Ltd.

INVESTING
IN FUTURE
GROWTH

STRONG
MANAGEMENT
TEAM

PIPELINE OF
PROJECTS TO
INCREASE
PRODUCTION

FINANCIAL
STRENGTH



Shareholder Information

North American Palladium's vision is to build a mid-tier diversified precious metals company operating in mining friendly jurisdictions. Highly leveraged to palladium, the Company is also building its exposure to gold, and is focused on investing in its current operations to grow its production of palladium and gold. NAP's experienced management and technical teams have a significant commitment to exploration and are dedicated to building shareholder value.

Corporate Office:

Royal Bank Plaza, South Tower, 200 Bay St., Suite 2350
Toronto, ON M5J 2J2

Stock Symbols:

NYSE Amex – PAL
TSX – PDL, PDL.WT.A, PDL.WT.B

Website:

www.nap.com

Investor Relations:

Camilla Bartosiewicz
Manager, Investor Relations & Corporate Communications
camilla@nap.com
416-360-7590 ext. 7226



North American Palladium Ltd.

Appendices & Further Information



Senior Management

Bill Biggar – President and CEO

An accomplished businessman with extensive experience in mining and in a broad range of industries. Mr. Biggar has held senior positions with Barrick Gold Corporation, Horsham Corporation and Magna International. He also has over 12 years of experience as an investment banker and private equity investor. A Chartered Accountant, he holds Master of Business Administration and Bachelor of Commerce (with distinction) degrees from the University of Toronto.

Greg Struble – Vice President and COO

A mine engineer with over 30 years of experience in underground mining. Most recently, he served as Executive Vice President and COO of Stillwater Mining Company, where he was responsible for two underground palladium mines as well as smelter and refinery operations. Prior to this, he worked as underground project manager for Barrick Gold's Cortez Hills Joint Venture. Mr. Struble has also worked internationally at a number of large gold mines.

Jeff Swinoga – Vice President, Finance and CFO

Eighteen years of experience in the resource, mining and finance industries. Mr. Swinoga has held CFO positions with HudBay Minerals and MagIndustries, and was Director, Treasury Finance of Barrick Gold Corporation for seven years. A Chartered Accountant, he also has an MBA from University of Toronto and an honours economics degree from University of Western Ontario.

Dave Passfield – Vice President, Operations

A professional engineer by training, Mr. Passfield has 30 years experience in open pit and underground operations. Mr. Passfield has held key management positions with several major Canadian and international mining companies and has operating experience in Canada and overseas.

Michel Bouchard – Vice President, Exploration and Development

Mr. Bouchard has been involved in exploration, development, and operations in the mining industry for the past 25 years. He is credited with contributing to the discovery of the Bouchard Hebert Mine in northwest Quebec. Previously Mr. Bouchard held senior positions with Audrey Resources, Lyon Lake Mines and SOQUEM. Mr. Bouchard was formerly President and CEO of Cadiscor Resources Inc.

Trent Mell – Vice President, Corporate Development and General Counsel

Mr. Mell has previously worked at the corporate head offices of Barrick Gold Corporation and Sherritt International. Prior to joining the mining industry, Mr. Mell worked with Stikeman Elliott LLP, where he practiced securities law. Mr. Mell has published papers on NI 43-101, and holds a B.A., a B.C.L. (with distinction) and a LL.B. (with distinction), all from McGill University, as well as a Masters degree in Securities Law from Osgoode Hall Law School.

John Caldbick – General Manager, Lac des Iles Mine

Mr. Caldbick is a professional engineer with over 29 years of experience in the mining industry. Prior to joining NAP, he was the General Superintendent Operations for PT Redpath Indonesia where he was responsible for managing operations for excavation and construction of Grasberg, the world's largest underground mining complex.

Dan Rousseau – General Manager, Sleeping Giant Mine

Mr. Rousseau has over 24 years of mining industry experience in open pit and underground operations. He has held senior positions with a number of mining companies, including Barrick Gold Corporation where he was a Senior Mine Engineer at the Bulyanhulu mine in Tanzania.

Resources and Reserves



1. **Cautionary Note to U.S. Investors Concerning Mineral Reserves and Mineral Resources**
2. **Lac des Iles Mine**
Roby Zone Underground Reserves – November 2010
3. **Lac des Iles Mine**
Mineral Resource Summary – November 2010
4. **Sleeping Giant Mine**
Mineral Reserves and Resources – March 31, 2010
5. **Discovery Project**
Mineral Resources – August 1, 2008
6. **Flordin Property**
Mineral Resources – March 31, 2010
7. **Veza Project**
Mineral Resources – February 23, 2010

Michel Bouchard, P. Geo, Vice President, Exploration & Development, 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, 2009 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 Securities Exchange Commission (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 SEC, 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 SEC.

Lac des Iles Mine – Roby Zone Reserves

Location	Tonnes (000's)	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Ni (%)
Reserve						
Proven	480	5.80	0.33	0.20	0.041	0.052
Probable	1,209	6.43	0.38	0.30	0.065	0.074
Proven & Probable	1,689	6.25	0.37	0.27	0.058	0.068

Notes:

1. Prepared by Richard Routledge, M.Sc., P.Geo., Principal Geologist for URS/Scott Wilson, an independent Qualified Person within the meaning of NI 43-101.
2. CIM definitions were followed for the estimation of Mineral Reserves.
3. Mineral Reserves for the underground Roby Zone were estimated at a cut-off grade of 4.5 g/t Pd.
4. Metal price assumptions of US\$375/oz palladium, US\$1,500/oz platinum, US\$900/oz gold, US\$7.00/lb nickel, and US\$2.50/lb copper were used in the estimation of cut-off grade. A US\$/C\$ exchange rate of 1.11 was used.
5. Variable dilution has been applied according to anticipated over-break on footwall or hanging wall, and to the location of stopes with respect to hanging wall structures that affect over-break.
6. Mining extraction for the crown pillar is 100%. For Roby Zone stopes, extraction is 95%.

Please refer to North American Palladium's Annual Information Form for the year ended December 31, 2008 and applicable technical reports filed on www.sedar.com, www.sec.gov and www.nap.com for further information.

Lac des Iles – Mineral Resource Summary



Location	Tonnes (000's)	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu (%)	Ni (%)
MEASURED RESOURCES						
Open Pit	3,722	1.99	0.23	0.17	0.08	0.07
Stockpiles	747	1.89	0.19	0.16	0.06	0.08
Total Measured	4,469	1.97	0.22	0.17	0.07	.07
INDICATED RESOURCES						
Open Pit	2,565	2.20	0.24	0.18	0.08	0.07
RGO Stockpiles	13,365	0.97	0.12	0.08	0.03	0.06
Roby Zone Underground	3,144	7.62	0.44	0.33	0.06	0.08
Offset Zone Underground	8,628	6.29	0.42	0.40	0.11	0.14
Total Indicated	27,702	3.50	0.26	0.22	0.06	0.09
Total M&I Resources	32,171	3.28	0.26	0.21	0.06	0.08
INFERRED RESOURCES						
Offset Zone Underground	3,322	5.70	0.35	0.23	0.07	0.10

Notes:

1. Prepared by Jason Cox, P.Eng., Supervisor of Mine Engineering for URS/Scot Wilson, an independent Qualified Person within the meaning of NI 43-101.
2. CIM definitions were followed for the estimation of Mineral Resources.
3. Mineral Resources are inclusive of Mineral Reserves, which are contained in the Roby Zone underground mine.
4. Mineral Resource cut-off grades were estimated for a 14,000 tpd production scenario. Open pit and RGO stockpile resources are not economic at the current production rate.
5. Open Pit Mineral Resources were estimated at a pit discard cut-off grade of 1.8 g/t palladium equivalent (PdEq), within an optimized pit shell. Additional mineralization is present outside of the pit shell.
6. Mineral Resources in stockpiles were estimated at a cut-off grade of 1.9 g/t PdEq.
7. Mineral Resources for the Roby Zone underground mine were estimated at a cut-off grade of 5.8 g/t PdEq. Resources include sill, rib, and crown pillars.
8. Mineral Resources for the underground Offset Zone were estimated at a cut-off grade of 4.0 g/t Pd (6.0 g/t PdEq).
9. PdEq factors were calculated separately for each area, based on operating cost and metallurgical performance estimates appropriate for those areas.
10. Metal price assumptions of US\$350/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 PdEq and cut-off grade. A US\$/C\$ exchange rate of 1.11 was used. For the Offset Zone, metal price basis is: US\$400/oz Pd; US\$1,400/oz Pt; US\$1,000/oz Au; US\$3.00/lb Cu; US\$8.50/lb Ni; US\$20/lb Co. Exchange rate is 1.11 US\$/C\$.
11. Effective dates are variable for the various areas of Mineral Resources.

Sleeping Giant Mine



Mineral Reserves & Resources – March 31, 2010

Type	Tonnes	Au (g/t)	Au Contained ounces
Reserves			
Proven	91,000	8.91	26,000
Probable	96,000	9.79	30,000
Resources			
Measured	213,000	8.32	57,000
Indicated	243,000	12.9	101,000

Notes:

1. Source: NI 43-101 Technical Report, March 31, 2010
2. The mineral reserve and mineral resource estimate for the Sleeping Giant mine was prepared by Mr. Vincent Jourdain, P.Eng., Ph.D, a qualified person under NI 43-101, assuming a long-term gold price of Cdn.\$850. The effective date of the estimate is December 31st, 2009.
3. Grade capping was carried out on a vein-by-vein basis using the historical values of 60 g/t in zones 2, 7 and 9; 90 g/t in Zone 8; and 100 g/t in Zone 50. Reserves were evaluated from drill hole results using the polygonal method on inclined longitudinal sections. A specific gravity of 2.85 t/m³ was used. Shrinkage Stopes the intersections are internally diluted (at zero grade) to minimum true thickness of 1.8 metres; for Long Hole or Room and Pillar stopes the intersections are internally diluted (at zero grade) to minimum true thickness of 1.8 metres. An external dilution of 15% (at zero grade) and a mining recovery of 95% are applied to the Shrinkage stopes; an external dilution of 25% (at zero grade) and a mining recovery of 95% are applied to the Long Hole stopes; and an external dilution of 15% (at zero grade) and a mining recovery of 85% are applied to the Room and Pillar stopes.
4. This estimate conforms with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). U.S. investors should refer to the company's most recent 40F/Annual Information Form for an overview on how Canadian standards differ significantly from U.S. requirements. Mineral Resources, having demonstrated economic viability, are not Mineral Reserves.

Discovery Project



Mineral Resources – August 1, 2008

Type	Tonnes	Au (g/t)	Au (Contained Oz)
Mineral Resources			
Measured	3,000	8.95	900
Indicated	1,279,000	5.74	236,000
Inferred	1,546,000	5.93	294,000

Notes:

1. Source: NI 43-101 Technical Report, August 1, 2008
2. The mineral resource estimate for the Discovery Project was prepared by Mr, Carl Pelletier, B.Sc., P.Geo. of InnovExplo, an independent qualified person under NI 43-101, assuming a gold price of U.S.\$850 in the first 5 years, and U.S.\$750 thereafter. Applied varying cut-off grades depending on the type of mining method contemplated.
3. The effective date of the estimate is June 17, 2008.
4. This estimate conforms with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). U.S. investors should refer to the company's most recent 40F/Annual Information Form for an overview on how Canadian standards differ significantly from U.S. requirements. Mineral Resources, having demonstrated economic viability, are not Mineral Reserves.

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 under Cadiscor Resources Inc.

Flordin Property



Mineral Resources – March 31, 2010

Type	Tonnes	Au (g/t)	Au (Contained Oz)
Mineral Resources			
Measured	30,000	4.60	4,000
Indicated	649,000	4.24	88,000
Inferred	1,451,000	3.63	169,000

Notes:

1. Source: NI 43-101 Technical Report, March 31, 2010
2. The mineral resource estimate for the Flordin property was prepared by Mr. Carl Pelletier, B.Sc., P.Geo. and Mr. Bruno Turcotte, M.Sc., P.Geo. of InnovExplo, both of whom are independent qualified persons under NI 43-101, using a cut-off grade of 2 g/t.
3. The effective date of the estimate is February 23, 2010.
4. This estimate conforms with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). U.S. investors should refer to the company's most recent 40F/Annual Information Form for an overview on how Canadian standards differ significantly from U.S. requirements. Mineral Resources, having demonstrated economic viability, are not Mineral Reserves

Mineral Resources – February 23, 2010

Resources	Tonnes	Au (g/t)	Au (Contained Ounces)
Measured	193,000	6.0	37,600
Indicated	1,324,000	5.9	251,000
Total M&I	1,517,000	5.9	288,600
Inferred	754,000	5.0	121,500

Notes:

1. Source: NI 43-101 Technical Report, February 23, 2010.
2. This mineral resource estimate was prepared by RPA as of February 23, 2010.
3. M. Bernard Salmon, B.Sc., Eng. and M. Peter Peltz are each independent Qualified Persons within the meaning of NI 43-101 and authors for the RPA report.
4. See Cautionary Note to U.S. Investors Concerning Estimates of Measured, Indicated and Inferred Resources.