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NORTH AMERICAN PALLADIUM LTD.

LAC DES ILES MINES LTD.

2015 GPS-Integrated Ground Magnetic Survey

ASSESSMENT REPORT

on the

Lac des Iles Mine Property

THUNDER BAY MINING DIVISION

NORTHWESTERN ONTARIO

NTS: 052H04

LAC DES ILES CLAIM AREA

Stephen Miller

Thunder Bay, Ontario

November 6, 2015

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APPENDICES

Introduction

Early 2015, North American Palladium contracted Abitibi Geophysics to conduct a GPS-Integrated Ground Magnetic Survey located south of Lac Des Iles Mine (LDI). The survey was conducted between February 16th and March 4th on a virtual grid covering 260.35km. The purpose of the survey was to add higher magnetic resolution to the South Lac des Iles Intrusion (SLDI) for future lithological mapping and targeting.

Location and Access

LDI is located approximately 95 kilometers north of Thunder Bay. The LDI mine site can be accessed by traveling 87 kilometers north on Provincial Highway 527 then traveling 15 kilometers west on the Mine Road (Figure 1). Survey location was accessed off roads maintained by LDI (see Appendix A: Figure 2 of Abitibi Report).

Land Status

The GPS-Integrated Ground Magnetic Survey was performed on 4 leases and 2 claims totaling 2667.89 hectares (see Appendix A: Figure 2 of Abitibi Report). Claims worked are recorded under Lac Des Iles Mines (a wholly owned subsidiary of North American Palladium) and were staked in 1991 and 1992 respectively (see Table 1). Leases that were surveyed have a 21 year tenure, active starting September 1st, 2006 (see Table 1).

Claim Number	Status	Type	Expiry Date	Lease/Lic#	Township/Area	Short Description
CLM251	Active	Lease	2027-Aug-31	107910	LAC DES ILES AREA	CLM251
CLM252	Active	Lease	2027-Aug-31	107911	LAC DES ILES AREA	CLM252
CLM253	Active	Lease	2027-Aug-31	107909	LAC DES ILES AREA	CLM253
CLM431	Active	Lease	2027-Sep-30	108138	LAC DES ILES AREA	CLM431

Claim Number	Township/Area	Recorded Holder	Due Date
1165558	LAC DES ILES AREA (G-0739)	LAC DES ILES MINES LTD. (100.00 %)	2019-MAR-06
1194309	LAC DES ILES AREA (G-0739)	LAC DES ILES MINES LTD. (100.00 %)	2019-SEP-09

Table 1: Lac des Iles Mine Claim List

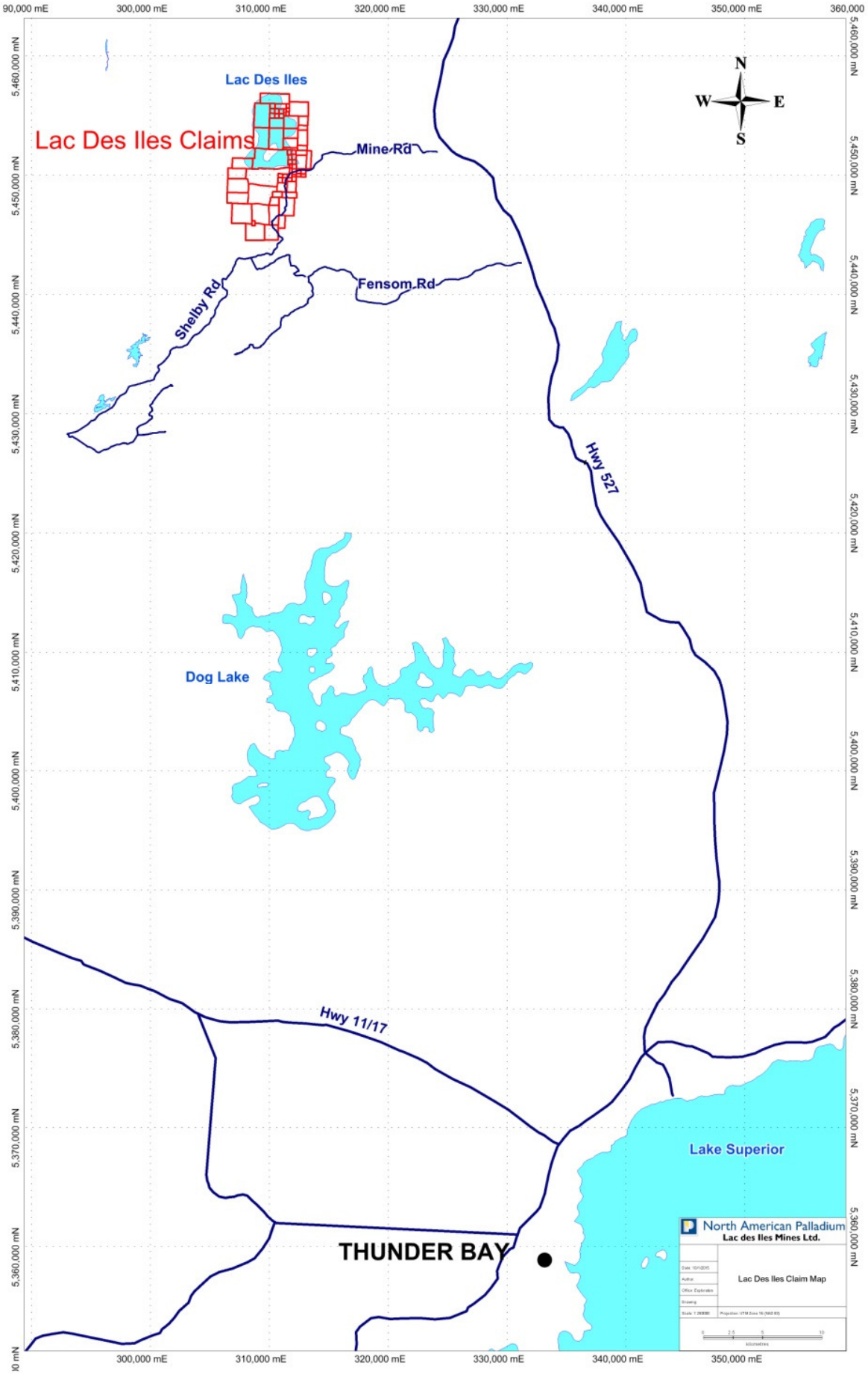

Figure 1: Lac des Iles Location and Access

Exploration History

Exploration history taken from: Mumin, A. (2015). 2013-2014 Diamond Drilling Assessment Report. Submitted for Assessment to the Ministry of Northern Development, Mines and Forestry.

> *"Previous work on the Lac des Iles property has concentrated on the main Roby Zone (production 1993-2013 from open pit and underground) and the more recently discovered fault displaced Offset Zone with sporadic and limited exploration on the rest of the claim group (Nelson et al, 2010).*
>
> *Historic work on LDI dates back to the discovery of palladium mineralization in 1963 at the 'A' Zone (Lavigne et al, 2005), later renamed the Baker Zone. Early surface and diamond drilling exploration included work performed by Gunnex Limited and Anaconda American Brass (1963-1973), Boston Bay Mines and Texasgulf (1974-75), American Platinum (1987-1989) and Madeleine Mines (1986-1993). Madeleine Mines changed its name to North American Palladium in 1993 which is the 100% owner of Lac des Iles Mines Ltd.*
>
> *Geological mapping and studies in the area include but are not limited to those conducted by Pye (1968), Watkinson and Dunning (1979), Sutcliffe (1986), Sutcliffe and Sweeny (1986), Lavigne and Michaud (2002) and Lavigne et al (2005).*
>
> *Open pit mining commenced in Dec 1993 with a major expansion of mining (~50,000tpd) and milling operations (~16,000tpd) in 2001 (Tait, 2012). Underground development commenced in 2004 and achieved commercial production in 2006 of ~2,000tpd via ramp access. Operations were put on care-and-maintenance in October 2008 due to depressed commodity prices but were successfully restarted in May 2010 with continued underground mining of the Roby Zone.*
>
> *Between 1986 and 2014, approximately 2100 diamond drill holes totalling 747,426m have been drilled on the Lac Des Iles property by North American Palladium Ltd. and its predecessors. Drilling has been mainly concentrated on zones mined in the open pit (e.g. Roby Zone, Footwall Breccia Zone, Twilight Zone, North Roby Zone) as well as the portion of the Roby Zone mined underground."*

In 2010 and 2011, mechanical stripping and channel sampling programs was performed on approximately 695 linear meters over SLDI and the Camp Lake Intrusion (Tait, 2010 and 2011).

A VTEM and airborne magnetic survey was flown over the LDI suite properties in 2012, including the Mine Block intrusion.

Regional Geology

LDI is part of the Lac Des Iles Intrusive Complex (LDI-IC) and is situated in the greenstone belt in the southern Wabigoon Subprovince of the Superior Province (Figure 2). The Complex is part of a suite of late mafic-ultramafic plutons north of contact with the Quetico Subprovince (Hinchey & Hattori, 2005). The LDI-IC is subdivided into three separate magma chambers, the North Lac Des Iles Intrusive Complex (NLDI-IC), the Mine Block Intrusion (MBI) and the Camp Lake Intrusion (Lavigne et al, 2005). Historic magnetic surveys and recent structural mapping indicate a fourth intrusion, similar to MBI, known as the South Lac Des Iles Intrusion (SLDI). The MBI and SLDI are oval shaped intrusions composed of veritextured gabbros and gabbronorites (Djon and Barnes, 2012). The NLDI-IC is an ultramafic intrusion composed of clinopyroxenites, websterites and gabbronorites (Djon and Barnes, 2012). The Camp Lake Intrusion is considered a homogenous hornblende gabbro southwest of the Camp Lake Fault (Nelson et al, 2010).

Property Geology

LDI is situated within the MBI, which is composed of anorthosite and leucocratic to melanocractic gabbronorite, including magnetite-rich gabbronorite (Djon and Barnes, 2012). The MBI is located along the Shelby Lake fault, which is a splay off the Quetico Fault (Figure 2). Mineable concentrations of Pd mineralization at surface are/were found in the Roby, Twilight and High Grade Zone along with underground mineralization in the Offset Zone (Djon and Barnes, 2012).

The Roby Zone was mainly mined as an open pit operation before significant underground mining of the zone commenced in 2006 (Figure 3). The Offset Zone is a faulted displacement of the Roby Zone along the Offset Fault. The displacement is down dip of the Offset Fault at approximately 250 m west of the Roby Zone (Djon and Barnes, 2012). The Twilight Zone is a heterolithic gabbro breccia, east of the Roby Zone separated by an approximately 50m barren equigranular gabbronorite (Hinchey and Hattori, 2005). The hanging wall of the intrusion is composed of norites and gabbronorite, including layers of Magnetite-rich gabbronorite. The footwall is primarily composed of veritextured gabbro which can contain economic amounts of Pd mineralization (Lavigne and Michaud, 2002). The hanginwall/Footwall contact is a High Grade Zone consisting of a chlorite-actinolite-schist, historically called a pyroxenite zone (Djon and Barnes, 2012).

The SLDI consists of veritextured gabbro and gabbronorite similar to the MBI. Both, SLDI and MBI are a northern extension of the Shelby Lake Fault, forming a ring-shaped, dike-like intrusive complex (Figure 3). The Contact between SLDI and MBI is not well defined because of limited outcropping due to tailing facilities and infrastructure. Contact is based on sharp gradients highlighted in recent magnetic survey imagery (NAP, 2015)

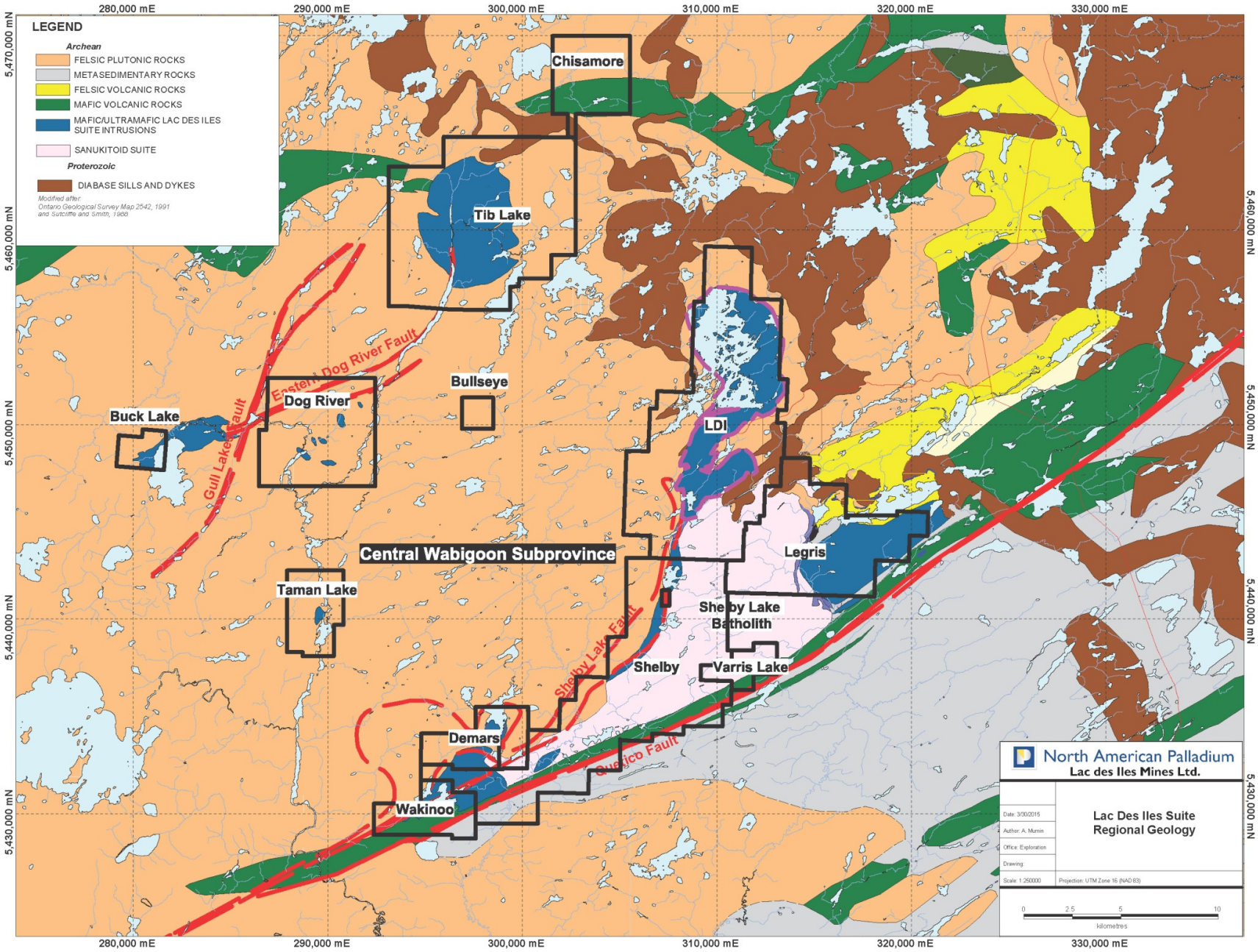

Figure 2: Regional Geology

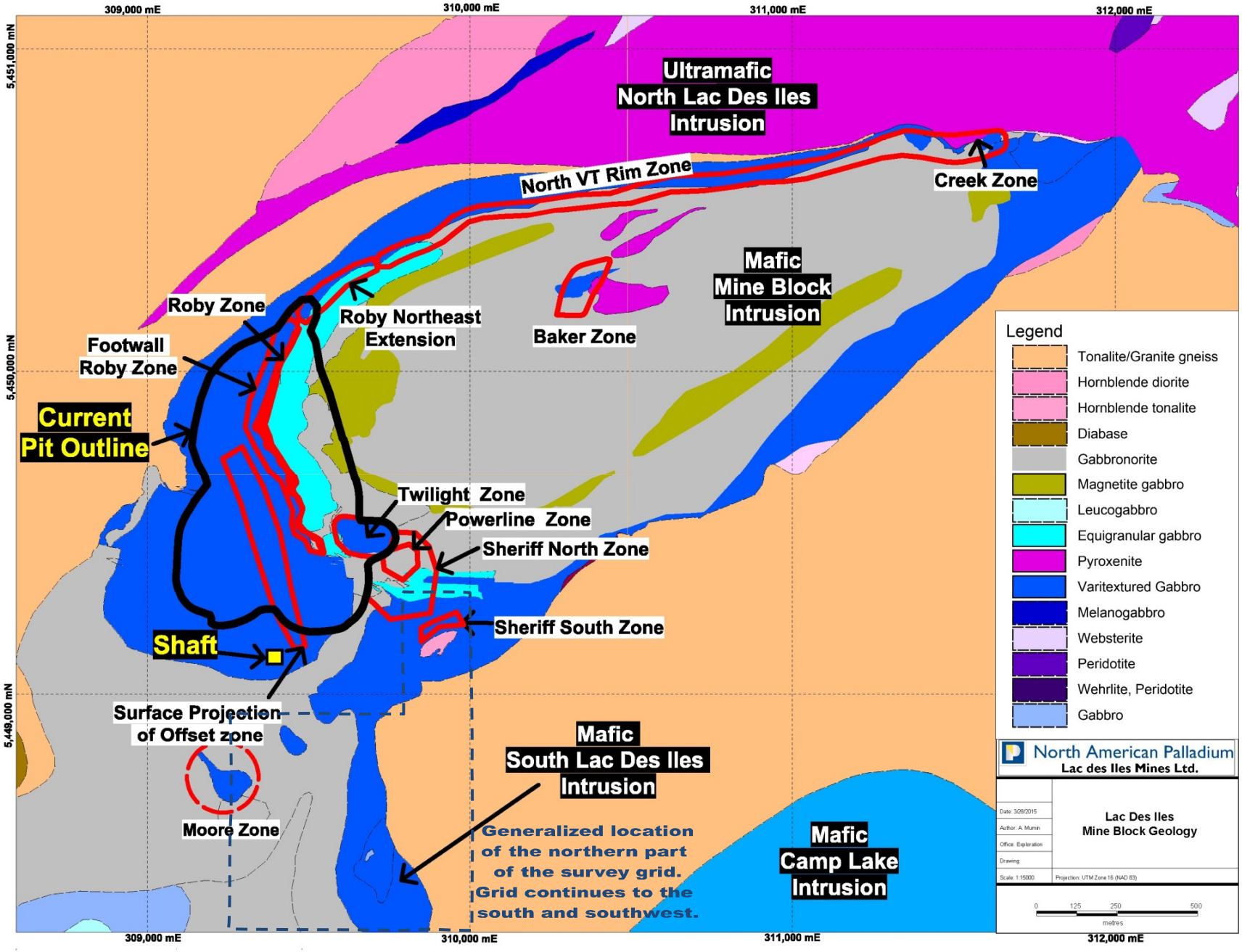

Figure 3: Property Geology

Survey Results

Between February 16th and March 4th a GPS-Integrated Ground Magnetic Survey was conducted on the LDI property (figure 4). On a virtual grid covering 260.35km, magnetic data was collected on the MBI and the SLDI. Results of the magnetic survey produced higher data resolution in the target area and highlighted possible faults, shear zones and lithological boundaries that will help in future exploration on the property (See Appendix B). Details of the equipment used and the data processing can be found in the Abitibi Geophysics Final Report in Appendix A.

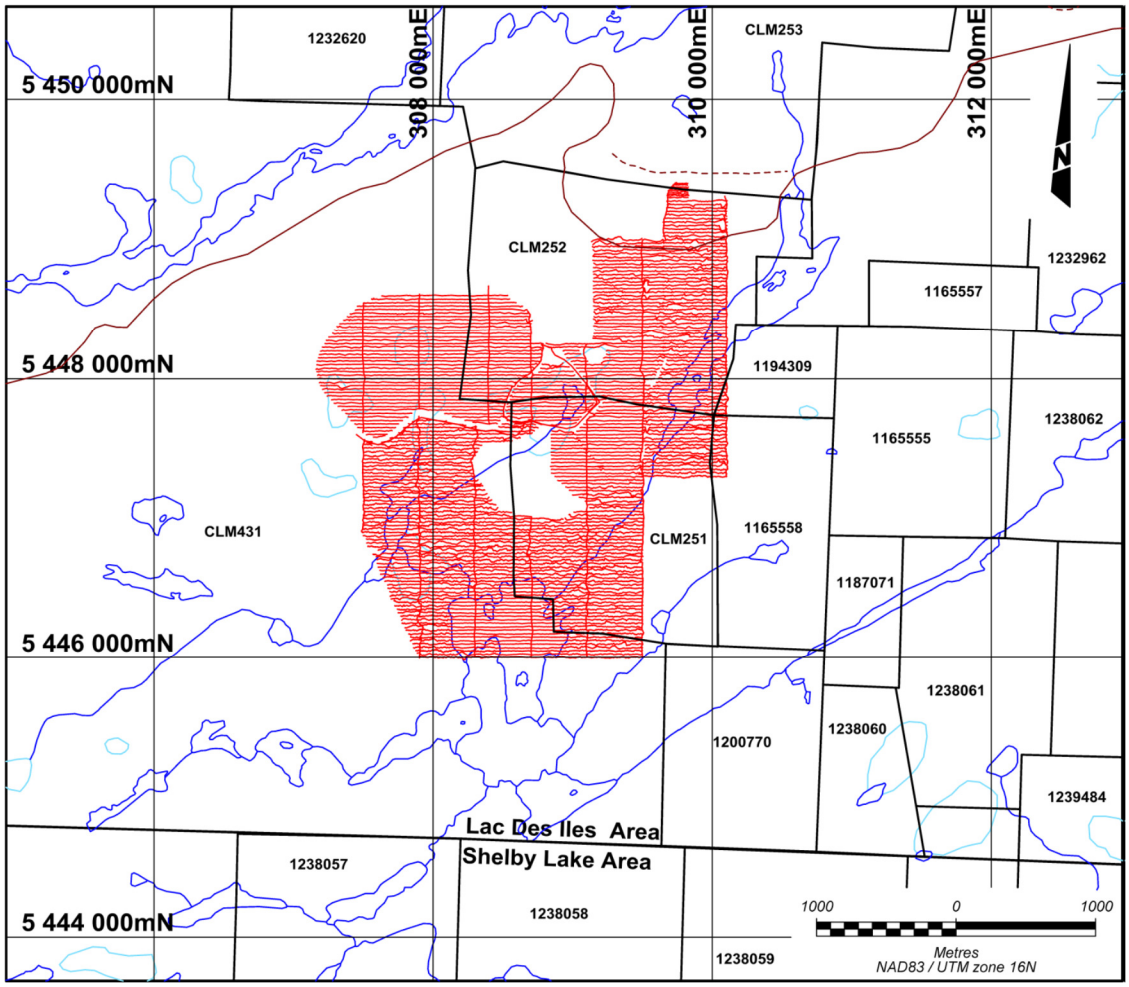

Figure 4: location of the Ground Magnetic survey grid on the Lac des Iles Mine area claims (Figure 2 from Abitibi Geophysics (2015)).

Conclusion and Recommendations

The ground magnetic survey was successful in collecting detailed magnetic data on the property. Magnetic features will provide a source of data for lithological mapping and interpretation of geological structures that may control the distribution of Pd mineralization. MBI magnetic signatures of structural lithological importance should be followed up with diamond drilling. SLDI anomalies should be followed up with prospecting, stripping and trenching over areas of interest (infrastructure permitting).

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Appendix A

Abitibi Geophysics

GPS-Integrated Ground Magnetic Survey

Final Report

NORTH AMERICAN PALLADIUM LTD.

GPS-INTEGRATED GROUND MAGNETIC SURVEY

LAC DES ILES MINE PROJECT

THUNDER BAY DISTRICT, ONTARIO, CANADA

LOGISTICS & INTERPRETATION REPORT

15N015 APRIL 2015

PGE | C | Fe | Ag | Cu | Au | Zn | REE | Li | Mo | U | Ni | Cr | Pb

Abitibi Geophysics Inc 1740 chemin Sullivan, Suite 1400, Val-d'Or, Québec J9P 7H1 T.: 819.874.8800 F : 819.874.8801 www.ageophysics.com

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ABSTRACT

On behalf of ***North American Palladium Ltd.****, a* ***GPS-Integrated Ground Magnetic*** *survey was carried out over the Lac des Iles Mine property, located approximately 90 km north of Thunder Bay, Ontario. The goal of this geophysical campaign was to acquire high-resolution magnetic field data over the property in order to delineate magnetite-enriched mafic/ultramafic rock bodies that may carry significant amounts of PGE mineralization*

From ***February 16th to March 4th, 2015****, a total of* ***260.35 km*** *of ground magnetic surveying was conducted on a virtual grid located on the Lac des Iles Mine property. Line spacing was a nominal 25.0 m and navigation was accomplished using GPS. Survey specifications, instrumentation control, data acquisition and processing were all successfully performed within the Abitibi Geophysics Quality System framework.*

Interpretation of the high-resolution ground magnetic survey has successfully identified a number of high magnitude magnetic anomalies reaching over 3000nT above and below the background value of 57000 nT. These values are typical response of mafic, or ultramafic units, which in this region can carry a strong reversed remanent magnetization. Apparent breaks and offsets of these strongly magnetized zones are interpreted as faults or narrow shear zones.

A follow up program including limited prospecting/trenching and additional geophysics is recommended.

1. THE MANDATE

❑ *PROJECT ID*	**Lac des Iles Mine** (Our reference: **15N015**)
❑ *GENERAL LOCATION*	90 km north of Thunder Bay, Ontario, Canada
❑ *CUSTOMER*	**North American Palladium Ltd.** 556 Tenth Ave. Thunder Bay, ON P7B 2R2 **Telephone**: (807) 623-8005, ext. 4005
❑ *REPRESENTATIVE*	**Mr. Robert D. Stewart, P.Geo.** Chief Geoscientist **Email**: bstewart@nap.com
❑ *SURVEY TYPE*	**GPS-Integrated Ground Magnetic**
❑ *GEOPHYSICAL OBJECTIVE*	Acquire high-resolution magnetic field data over the area to the south of the pit in order to identify magnetite enriched mafic / ultramafic structures that may carry significant amounts of PGE mineralization.

Figure 1. General location of the Lac des Iles Mine Project

2. THE LAC DES ILES MINE PROJECT

- ❑ *LOCATION*

Thunder Bay District, Ontario

NW Roby Extension virtual grid:
Latitude: 49° 9'2.12"N, Longitude: 89°37'9.76"W
UTM : 308 900 mE, 5 447 500 mN (NAD83, zone 16N)
NTS sheets: **52H/04**

- ❑ *NEAREST SETTLEMENTS*

Thunder Bay: approximately 90 km to the South.
Upsala: approximately 63 km to the West.

- ❑ *ACCESS*

The crew was accommodated at the mine site for the duration of the project. The grid was accessible directly from the mine site.

- ❑ *GEOMORPHOLOGY*

The Property is located in northwestern Ontario within the Superior Province of the Canadian Shield. The Property is situated in a boreal forest region typified by uplands forested mostly by black spruce, birch, poplar, and jack pine, as well as low-lying areas comprising lakes, streams, and bogs. Drainage is poorly integrated and generally runs to the south toward Lake Superior. The topography of the site is of low relief with elevations on the Property ranging from 465 to 527m above sea level, excluding mining operations.

- ❑ *CULTURAL FEATURES*

This survey was conducted to the south and east of the LDI mine. The survey covered a number of tailings ponds, waste piles and passed close to mine infrastructure and equipment. There are also reports of possible buried equipment on the property. A large number of single line, short wavelength anomalies that are consistent with a localized, anthropogenic source were observed, particularly on the northeast corner of the survey area. Upward continuation to 5m has been applied to the TMI in order to reduce the influence of very short wavelength features.

Features with a suspected cultural source are marked with "♦" on the interpretation map (10.0) The presence of a cultural feature does not preclude a geological source at the same location.

- ❑ *MINING LAND TENURE*

The location of the Lac des Iles mine is illustrated on the following page. The survey was conducted on mine leases registered to Lac Des Iles Mines Ltd. (a subsidiary of North American Palladium)

- ❑ *SECURITY AND ENVIRONMENT*

As part of the Abitibi Geophysics EHS program, crew members received first aid training and are provided with the safety equipment and specialized training for the geophysical techniques utilized on this project. In addition, the crew was provided with a satellite telephone for emergency communication.

- *SURVEY GRIDS* — The survey was conducted on a virtual grid with navigation by GPS. The planned magnetic survey consisted of 136 east-west lines, varying in length from 100m to 2.950 km and regularly spaced at intervals of 25 m and 12.5m over the power line zone. Seven tie lines were also surveyed. In areas of thick vegetation or where there were obstructions on the line, the survey line path deviated from the planned path by a few meters. Some areas were excluded from the survey due to unsafe ice conditions or other obstructions. The line paths are shown on the colour gridded data maps provided.

- *COORDINATE SYSTEM* — Projection: Universal Transverse Mercator (UTM), zone 16N
  Datum: NAD 83

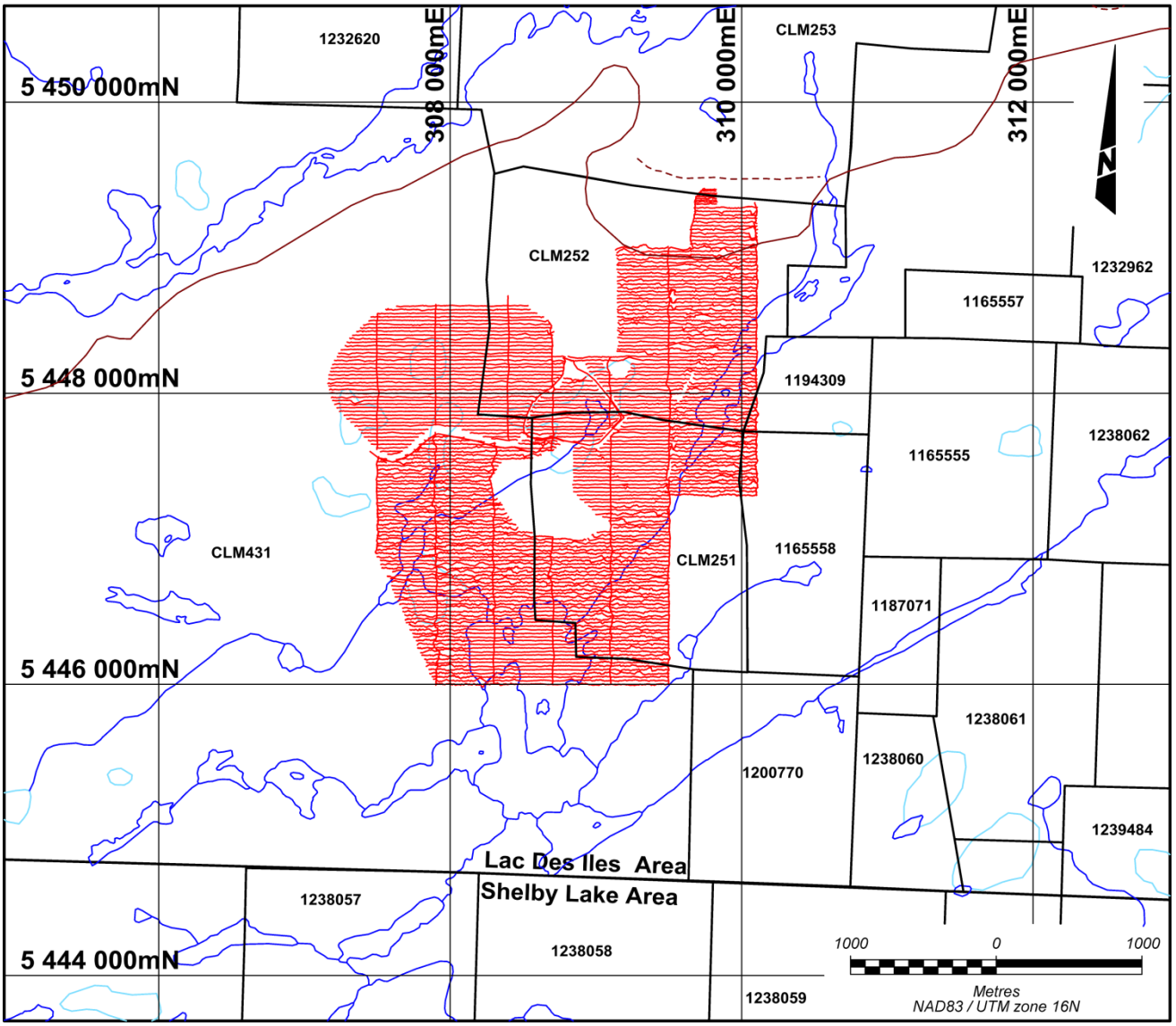

Figure 2. Index of claims and GPS-Integrated Ground Magnetic survey coverage over the Lac des Illes Mine area.

3. GPS-INTEGRATED GROUND MAGNETIC SURVEY

- ❑ *TYPE OF SURVEY*

  Measurement of the Total Magnetic Field (TMF) with GPS readings recorded every 2.0 seconds. The plotted values were corrected for diurnal variations using readings from a synchronized MAG base station.

- ❑ *PERSONNEL*

Marcel Naud	Crew Chief & Geophysical operator
Philippe Larouche	Crew Chief & Geophysical operator
Carole Picard, Tech.,	QC and Plotting
Martin Dubois, P.Geo.,	Logistics
Tom Loader, P.Geo.,	Data processing & interpretation
Pierre Bérubé, P.Eng.,	Project Supervisor
Chris Brown, P.Geo.,	Final validation of product conformity

- ❑ *DATA ACQUISITION*

  From February 18th to March 4th, 2015

- ❑ *SURVEY COVERAGE*

  260.35 km

- ❑ *FIELD MAGNETOMETERS*

  GEM Systems GSM-19W, s/n 2085540 & 7052356
  Proton precession magnetometers with Overhauser effect and built-in GPS.

Resolution:	0.01 nT/1m
Absolute accuracy:	0.2 nT / 2-5 m
Gradient tolerance:	>10 000 nT/m
TMI sensor elevation:	1.8 m above ground
Sensors:	s/n 85450 & 970721

- ❑ *BASE STATION*

  GEM Systems GSM-19, s/n 56465
  Proton precession magnetometer with Overhauser effect

Resolution:	0.01 nT
Absolute accuracy:	0.2 nT
Cycle time:	**10 seconds**
Sensors:	s/n 21777
Location (UTM NAD83):	Zone 16N, 309073 mE, 5450291 mN
Reference field:	56 780 nT

- ❑ *QUALITY CONTROLS (RECORDS AVAILABLE UPON REQUEST)*

  Before the survey:
  - ✓ All magnetometers were successfully field-tested on Abitibi Geophysics' private control line.

  Every day during data acquisition:
  - ✓ Every morning, the operator had to successfully test for any magnetic contamination.
  - ✓ In the evening, the geophysical operator reviewed the base station and the mobile unit recordings using MAGneto® processing and QC, in-house software.
  - ✓ The geophysical operator ensures no active geomagnetic activity would be encountered during the survey.

  At the Base of Operations:
  - ✓ Field QCs were inspected & validated.
  - ✓ All profiles were inspected and several spikes were removed from the database.

4. DELIVERABLES

- ❑ *TOTAL MAGNETIC INTENSITY*

The total magnetic field was gridded using a minimum curvature gridding algorithm with grid cell size of 6.25 m. The resulting grid was upward continued to an elevation of 5m in order to reduce some of the high frequency (short wavelength) signals. The Geosoft colour table (Clrb64.tbl) was used with linear intervals of 100 nT, from 55 000 nT to 58 800 nT on the total Magnetic field map 1.2

- ❑ *NORMALIZED DERIVATIVES*

Conventional filtering:
Using a convolution filter method, the *first vertical derivative* (vertical gradient) of the total magnetic field was calculated from the final TMI. The resulting *Calculated Vertical Derivative Contours map*s (1.6) are displayed using the Geosoft colour table (Clrb64.tbl) with linear intervals of 2.5 nT/m, from -80 to 80 nT/m.

- ❑ *ANALYTIC SIGNAL*

The analytic signal displays the magnitude of the magnetic field, independent of polarity. This can be useful when interpreting data that contains negative anomalies.
The analytic signal was calculated from the final, TMI grid. The resulting *Analytic Signal Contours map*s (1.6) are displayed using the Geosoft colour table (Clrb64.tbl) with linear intervals of 2, from 0 to 100

- ❑ *MAPS PRODUCED*

The following colour maps are bound or inserted in pouches at the end of this report.

Our Quality System requires every final map to be inspected by at least two qualified persons before being approved and included within a final report.

Table 1. Maps produced

Map #	Description	Scale
GPS-Integrated Ground Magnetic Survey		
1.2	GPS-Integrated Ground Magnetic Survey – Total Magnetic Intensity Contours (nT) (upward continued to 5 m)	1:5000
1.4	GPS-Integrated Ground Magnetic Survey – Calculated Vertical Gradient Contours (nT/m) (from upward continued TMI grid)	1:5000
1.6	GPS-Integrated Ground Magnetic Survey – Analytic Signal Contours (from upward continued TMI grid)	1:5000
10.0	Geophysical Interpretation	1:5000

- ❑ *DIGITAL DATA*

The above-described maps are delivered in the Oasis Montaj map and JPG file formats on DVD-Rom.

A copy of all survey acquisition data (ASCII text format) and processed data (Geosoft Montaj databases) are also delivered on DVD-Rom.

5. GEOPHYSICAL INTERPRETATION

- *GROUND MAGNETIC SURVEY*

During February 18th to March 4th, of 2015 a GPS-Integrated Ground Magnetic survey was conducted over the Lac des Iles Mine property, located 90 km north of Thunder Bay, Ontario.

The Lac des Iles mine produces palladium from mineralized zones, including the Roby zone. The Roby zone comprises two parts, a varitextured gabbro, with low magnetic susceptibility on the west and a magnetite gabbro with high magnetic susceptibility on the east.

This geophysical program was designed to map and characterize the area to the south of the LDI pit in order to locate new targets and to help map tectonic features (faults and shear zones) that may have offset mineralized zones

Study of the resulting magnetic maps (1.2, 1.4, and 1.6), has revealed 14 significant magnetic zones (see map 10.0). These zones are simply strongly magnetic (positive or negative polarity); the observed magnetic intensity does not necessarily correlate with the economic potential, however, it is considered a useful tool for mapping geological units and their structural relationships which may affect the distribution of economic mineralization on the property.

The interpretation (map 10.0) includes a large number of possible fault/shear zones; these are based primarily on the magnetic data collected as part of this project, but also include more regional scale faults interpreted from the regional magnetic data. Geologists familiar with this property are in a better position to evaluate the relevance of the interpreted faults.

The following table (Table 2) describes the anomalies observed on the Lac des Iles Mine grid.

Table 2. Interpreted Magnetic anomalies

Magnetic Anomaly	Maxima centred on		Polarity	Comments
	Easting	Northing		
LM-01	308315 mE	5447700 mN	positive	Large, highly magnetic zone. Appears to terminate in the north against a west trending regional fault/shear zone and in the west by a north trending fault or shear zone. The zone also appears to be bisected by a northeast trending fault.
LM-02	308350 mE	5447100 mN	positive	A highly magnetic, north east trending linear anomaly. Appears to be flanked on the north west and south east by negative magnetic anomalies
LM-03	307915 mE	544710 mN	positive	A highly magnetic, north east trending linear anomaly, likely a south westerly extension of LM-01
LM-04	308135 mE	544665 mN	reversed	A strongly negative magnetic anomaly. The anomaly appears to contain a narrow positive component running northeast across it's centre. This lies on an interpreted fault and may represent a zone of re-magnetization associated with alteration along the fault plane.
LM-05	308990 mE	5447495 mN	positive	This narrow, strongly magnetic east south east trending zone is located in an area of known mineralization. This zone is flanked on the north and south by two broad negative magnetic anomalies. The trend appears to extend to the eastern edge of the grid (most visible on the TMI map (1.2)
LM-06	308525 mE	5448280 mN	reversed	The northern end of a broad magnetic low

Magnetic Anomaly	Maxima centred on		Polarity	Comments
	Easting	Northing		
LM-07	309100 mE	5447965 mN	bipolar	This anomaly is a northwest trending string of single line magnetic highs that lie along a road. A non-metallic pipeline also parallels this road. A metallic trace on this pipe may be responsible for this anomaly.
LM-08	309880 mE	5447620 mN	bipolar	A group of positive and negative anomalies located on the eastern side of the grid.
LM-09	309330 mE	5448060 mN	reversed	This anomaly lies at the intersection of a north east trending and a south east trending magnetic low. **The north east trending arm lies approximately along strike of the Roby zone, exploited in the LDI mine. This feature may represent a southerly extension of the Roby zone.**
LM-10	309225 mE	5448540 mN	reversed	This broad negative anomaly likely has some cultural components as it lies to the east of some mine infrastructure and there is miscellaneous equipment within the bounds of this anomaly. However the southern extension of this magnetic low cannot be explained by the presence of mine equipment, suggesting that there is a significant geological component.
LM-11	309740 mE	5448390 mN	reversed	A NNW trending magnetic low, appears to be two closely parallel negative anomalies. South of 5448200 mN this trend appears to be deflected to the west and is bounded to the east by a north east trending fault. **This zone lies along strike of the LDI mine and may represent a southerly continuation of this mineralization.**
LM-11b	309865 mE	5448535 mN	positive	A NNW trending linear magnetic high that closely parallel LM-11. This feature lies along strike of the "powerline zone" that is located in the extreme north of this grid. **This zone may represent an extension of this known mineralization.**
LM-11c	309600 mE	5448140 mN	positive	This relatively small magnetic high lies to the west of the southern part of LM-11 and appears to comprise two parallel linear magnetic highs and may represent two parallel dykes.
LM-12	309750 mE	5449340 mN	positive	This magnetic high lies close to the LDI pit and is in an area with numerous potential cultural sources including mine infrastructure and equipment. However, these cultural features appear to only partly explain the anomaly observed at this location. **The "Power line" zone of mineralization has been described at this location (outlined in grey on the interpretation map (10)) and may be the source of this anomaly.**
LM-13	308880 mE	5446740 mN	positive	A large magnetic high, with an abrupt linear boundary to the north, possible a north east trending fault.
LM-14	309400 mE	5446160 mN	positive	A northeast trending linear magnetic high may extend eastward out of the survey area.

6. CONCLUSIONS

The high resolution ground magnetic survey conducted on the LDI property appears to have successfully identified a number of strongly magnetic zones with both positive and negative polarities. These are consistent with the signature expected from mafic and ultramafic intrusions of the Lac des Iles igneous complex. Furthermore, this detailed magnetic survey has allowed for the interpretation of a large number of possible fault / shear zones within the property that may play an important role in the distribution of mineralized zones on the property.

Based on the magnetic signature alone it is difficult to prioritize the observed anomalies for follow up work. **LM-05** and **LM-12** are both located within zones of known mineralization, but do not possess any distinctive character that set them apart from other anomalies within the survey area. Additional geological or geophysical knowledge is required to prioritize the observed anomalies.

7. RECOMMENDATIONS

Prospecting:

Although it is difficult to select targets based on the magnetic field data alone, there are some areas that appear interesting because of a combination of the magnetic signature and the location/ orientation of the anomaly with respect to known mineralization on the property.

LM-11

If the cover is sufficiently thin, prospecting or trenching should be considered across the **LM-11** series of anomalies. In the absence of any additional information trenches could be excavated perpendicular to the trends crossing the maxima at the locations described below:

Table 3. proposed targets on anomaly LM-11

Anomaly	Easting	Northing
LM-11	309740 mE	5448390 mN
LM-11b	309865 mE	5448535 mN
LM-11c	309600 mE	5448140 mN

LM-09

If the cover is sufficiently thin prospecting or trenching should be considered across **LM-09**. In the absence of any additional information a trench could be excavated perpendicular to the trend crossing the maxima at the location described below:

Table 4. proposed targets on anomaly LM-09

Anomaly	Easting	Northing
LM-09	309330 mE	5448060 mN

Additional Geophysics:

Although the high resolution ground magnetic survey has clearly mapped the complex magnetic character of this property, the information provided by this survey alone is not sufficient to prioritize the anomalies observed. A ground gravity survey should be considered in order to map the density contrasts across the property and help distinguish cultural from geological anomalies. In addition, a 3D inversion of both ground magnetic and gravity data should be considered in order to establish a possible 3D model of the magnetic susceptibility and density contrasts to assist in target selection.

When additional information is available from either prospecting / trenching or a follow up gravity survey it should be possible to select targets for detailed follow up with either 2D or 3D IP in order to clearly define drill targets.

The interpretation of the geophysical data embodied in this report is essentially a geophysical appraisal of the Lac des Iles Mine Project. As such, it incorporates only as much geoscientific information as the author had on hand at the time. Geologists thoroughly familiar with the area may be in a better position to evaluate the geological significance of the various geophysical signatures. Moreover, as time passes and data provided by follow-up programs are compiled, the priority and significance of exploration targets reported in this study may be downgraded or upgraded.

Respectfully submitted,
Abitibi Geophysics Inc.

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TL/jg

APPENDIX A

CERTIFICATE OF QUALIFICATIONS

I, *Thomas W. G. Loader*, P.Geo of the town of Torbay, Province of Newfoundland & Labrador do hereby certify:

1) That I am a professional geoscientist, and reside at *63 Crowes Lane, Torbay, NL, A1K 1H5*;

2) That I graduated from *Memorial University of Newfoundland* in 2001 with the degree Bachelor of Science (Honours) in Earth Science;

3) That I am a registered professional geoscientist in the province of Newfoundland and Labrador;

4) That I have been practicing in my profession for a period of 14 years;

5) That I have no direct or indirect interest, nor do I expect to receive any interest in the property or securities of *North American Palladium Ltd.*

Thomas W. G. Loader, B.Sc., P.Geo.
April, 2015

Appendix B

Abitibi Geophysics

GPS-Integrated Ground Magnetic Survey

Field Maps

Appendix C
Personnel

Data Acquisition and Processing
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Andrea Perego, P. Geo	Sr. Geologist	Supervision
Stephen Miller	G.I.T.	Report Preparation
Ahmad Mumin	G.I.T.	Figure Preparation

Signatures of People who prepared the Report

Stephen Miller

X _____ **Date:** Nov 26, 2015

Statement of Qualifications

I R. Cameron McLean P. Geo., of Thunder Bay, Ontario, do hereby certify:

- I am the exploration manager with North American Palladium with business address at 556 Tenth Avenue, Thunder Bay Ontario, P7B 2R2.
- I am a graduate of the University of Alberta, (B.Sc. Hons. Geol.). I am a member in good standing of the Association of Professional Geoscientists of Ontario, License #2064. My relevant experience is 20 years of mineral exploration and management experience. I am a "Qualified Person" for purposes of National Instrument 43-101.
- I managed company personnel and the contractor for the 2015 ground geophysics program.
- I am responsible for all sections of this Technical Report.
- As of the date of this report, to the best of my knowledge, information and belief, the report is scientifically and technically accurate.

Signed and dated November 27th, 2015 at Thunder Bay, Ontario.

R. Cameron McLean, P. Geo.
Exploration Manager
North American Palladium