

13 October 2020

# TIER-1 SCALE GOLD DEPOSIT TARGETS REVEALED AT NEW PATRICIA

## **Highlights:**

- Tier-1 large-scale structural targets for gold mineralisation defined in detail across Brownfields ground at New Patricia, directly along strike of Barrick's Golden Patricia underground gold mine.
  - ✓ Ardiden's 'Esker' Gold Prospect now clearly defined as an 8km-wide 'Fold-Nose' target analogous in scale and structure to Newmont's nearby 5Moz Musselwhite Gold Mine
  - ✓ A significant 8km-long Dilation Shear Zone identified at New Patricia is analogous to Ardiden's Kasagiminnis Gold Deposit and Barrick's Koval Gold Deposit.
  - ✓ The Geophysical Survey defines multiple other gold targets covering 35km strike length of favourable, under-explored structures, which will greatly assist detailed drill targeting in 2021.

Gold explorer **Ardiden Limited** ('Ardiden' or 'the Company') (ASX: ADV) confirms completion and receipt of initial data from its recent Airborne Geophysical Survey at the **Pickle Lake Gold Project** in northwest Ontario. A preliminary review of raw data from the survey over the Company's **New Patricia Gold Prospect** has revealed multiple Tier-1 large-scale structural targets analogous to significant high-grade gold mine settings in the area.

To provide context of scale, the 'Fold-Nose' structure revealed at the **Esker Gold Prospect** is larger in dimension than the Super Pit in Kalgoorlie, Western Australia (Figure 1).

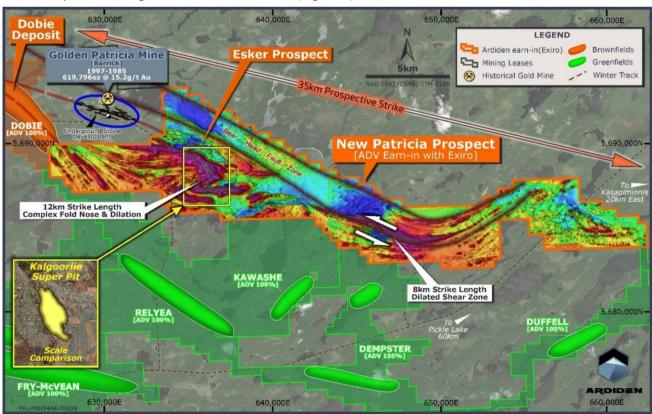


Figure 1-Preliminary Geophysical imagery over Ardiden's 35km-wide 'New Patricia' Gold Property



#### Ardiden's Exploration Manager, Dan Grabiec said:

"The New Patricia Gold Property is a potential company-maker in its own right. Numerous and exciting kilometre-scale geological features have now been delineated for the first time with this modern-day, high-tech Geophysical Survey. The New Patricia brownfields gold property is vastly unexplored with good winter access. We are seeing incredible structural detail over a regional scale thanks to Ardiden's aggregation of adjoining gold Properties. I'm genuinely excited for the time when we commence drilling and see what monsters are potentially hiding below the surface."

The most obvious structure revealed in detail by the survey is at the **Esker Gold Prospect**, located just 3km east along strike of the **Golden Patricia** underground mine workings: A massive 8km-wide '**Fold-Nose' target** is evident at Esker (below, Figure 2- right) which is analogous in size and structure to Newmont's 5Moz operating **Musselwhite Gold Mine** (Figure 2- left).

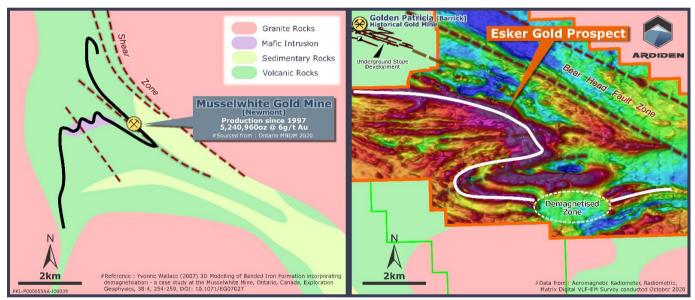


Figure 2-Comparable Size and Structural Setting between Newmont's Musselwhite Mine, and Ardiden's Esker Gold Prospect

Numerous and more-subtle additional structures like the **de-magnetised zone** on the right of Figure 2, have also been identified from raw data, and are known signatures for gold mineralisation elsewhere at Pickle Lake.

Ardiden will now process and interpret the data with specialist Geophysical consultants to generate targets for further investigation and drilling in 2021.

While excited about the **Esker Gold Prospect** and massive discovery-potential across the entire New Patricia Property, Ardiden is adopting a systematic exploration approach to its entire 664km<sup>2</sup> contiguous land holding at Pickle Lake.

This approach involves improving the geological understanding, processing historical data and reports, completing permitting requirements and pursuing ongoing FN consultations, before taking drill rigs into the various Gold Prospect areas.

Ardiden's **New Patricia Gold Property** extends over 35km of highly prospective geological setting within the Meen-Dempster Archean greenstone belt and is situated directly along strike of Barrick's historical Golden Patricia Gold Mine which produced\* 619,796 oz @ 15.2g/t Au to 750m below surface until mine closure in 1997.





Figure 3-Location of the New Patricia Gold Property in relation to Ardiden's greater Pickle Lake Gold Project

Newmont's underground Musselwhite Gold Mine is located 140km north of Pickle Lake in a comparable Archean geological setting (Figure 4).

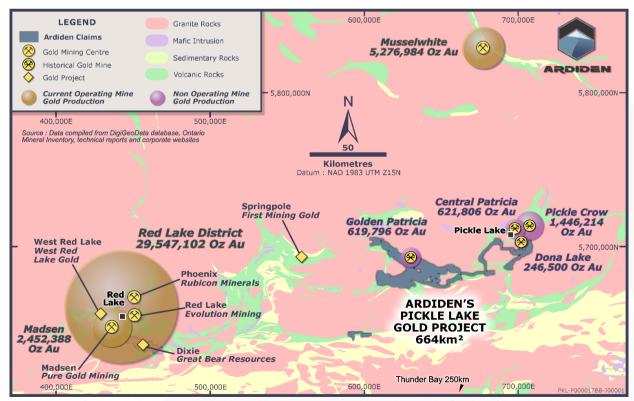


Figure 4-Location of Newmont's 5Moz Musselwhite Gold Mine, approximately 140km north of Ardiden's Pickle Lake Gold Project



With diamond drilling still progressing at Ardiden's 100%-owned **Kasagiminnis Gold Deposit** 20km east of New Patricia (Figure 5), the Company is constantly re-evaluating the controls on gold mineralisation based on current observations and measurements.

Lessons from one Gold Deposit will be transferred to the next as the Company progressively works its way through its **Pipeline of 19 currently-defined Gold Prospects and Deposits** (refer ASX announcement 16 June 2020) to provide the best possible opportunity to make Tier-1 discoveries and deliver shareholder value.



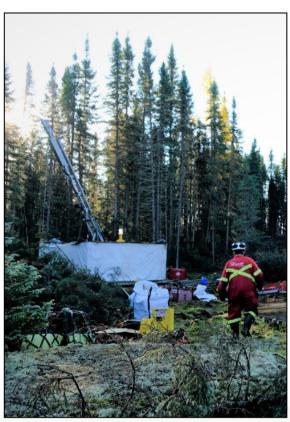


Figure 5-Drilling continuing at the Kasagiminnis Gold Deposit 20km east of New Patricia

Ardiden's **Pickle Lake Gold Project** is a large, District-Scale, highly prospective gold exploration portfolio that is taking shape. With the **Kasagiminnis** and **South Limb Gold Deposits** now fully permitted, and with present-day First Nation Agreements in place, Ardiden is executing its plan and steadily growing a Compelling Gold Project in this Tier-1 North American jurisdiction.

Thanks to this new comprehensive geophysical survey, exciting Tier-1-sized gold targets at the **New Patricia Gold Property** are now visible using a modern geophysical-lens.

Authorised for release to ASX by Rob Longley, Managing Director and CEO.

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#### **Forward Looking Statement**

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This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this presentation are to Australian currency, unless otherwise stated. Investors should make and rely upon their own enquires and assessments before deciding to acquire or deal in the Company's securities.

#### **Competent Person's Statement**

The information in this report that relates to **Exploration Results at the Pickle Lake Prospects** is based on, and fairly represents, information and supporting documentation prepared by Mr Robin Longley, a Member of the Australian Institute of Geoscientists. Mr Longley is a full-time employee of Ardiden Limited. Mr Longley has sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Longley consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to JORC *Mineral Resources* is based on is based on, and fairly represents, information and supporting documentation prepared by Mr Robin Longley, a Member of the Australian Institute of Geoscientists, and Mrs Christine Standing, a Member of the Australian Institute of Geoscientists and a Member of the Australasian Institute of Mining and Metallurgy. Mr Longley is a full-time employee of Ardiden Limited. Mrs Standing is employed by Optiro Pty Ltd and is a consultant to Ardiden. Mr Longley and Mrs Standing have sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Longley and Mrs Standing consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The Company confirms it is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the mineral resource estimates continue to apply and have not materially changed.

The information in this report that relates to **non-JORC Historical Estimates** is based on is based on, and fairly represents, information and supporting documentation prepared by Mr Robin Longley, a Member of the Australian Institute of Geoscientists. The information in this announcement provided under ASX Listing Rules 5.12.2 to 5.12.7 is an accurate representation of the available data and studies for the Pickle Lake Gold Project. Mr Longley is a full-time employee of Ardiden Limited. Mr Longley consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

References and sources of information: Golden Patricia Mine production:

- Harron, 2009 NI43-101 Technical Report on "Three Gold Exploration Properties Pickle Lake Area, Ontario, Canada, for Manicouagan Minerals Inc", G.A. Harron, P.Eng., G.A. Harron & Associates Inc, October 13, 2009.
  - o www.murchisonminerals.com/site/assets/files/5443/pickel-lake-project tehcnical report.pdf
  - o The 2009 Harron report relies upon the following references for the non-JORC historical estimates:
    - Blackburn, C.E., Hailstone, M.R., Parker, J. and Story, C.C., 1988, Kenora Resident Geologist's Report 1988; p. 3-46 in Report of Activities 1988, Resident Geologists edited by K.G. Fenwick, P.E. Giblin and A.E. Pitts, Ont. Geol. Surtv, MP 142, 391 p;
    - Seim, G.W., 1993, Mineral Deposits of the Central Portion of the Uchi Subprovince, Vol. 1, Meen Lake to Kasagiminnis Lake Portion, Ont. Geol. Surv. OFR 5869, 390 p.

#### Relevant ASX Announcements released by Ardiden:

- 6 October 2020: South Limb Gold Prospect Ready to Drill
- 8 September Airborne Geophysics Survey Underway at ethe New Patricia Gold Prospect
- 3 September 2020: Visible Gold in First Kasagiminnis Drillhole
- 1 September 2020: Drilling Underway at Kasagiminnis
- 16 June 2020 Ardiden Lines-Up Extensive Pipeline of Gold Prospects at Pickle Lake
- 21 April 2020: Ardiden signs Gold Exploration MOU with Ontario First Nation
- 6 January 2020 Ardiden Doubles Ontario Gold Footprint

More information is available from the Company's website: www.ardiden.com.au



#### New Patricia Agreement Terms – Refer to ASX Announcement 6 January 2020

New Patricia is the only Property within Ardiden's Pickle Lake Gold Project that has an earn-in arrangement.

To earn 100% of the New Patricia Gold Prospect over a three-year period (commencing January 2020), Ardiden has agreed to the following progressive payments to **Exiro Minerals Corporation**, amounting to a total of C\$226,200 in cash and 57.5m ADV shares:

- Payment of C\$26,200 on signing and issue of 10 million ADV fully paid ordinary shares Completed.
- One years' worth of assessment exploration work on the Property before 30 March 2020 Completed
- On/before 1<sup>st</sup> anniversary, payment of C\$50,000 and issue of 12.5 million ADV fully paid ordinary shares In progress
- Additional one years' worth of assessment exploration work on the Property by 1st anniversary- On course
- On/before 2<sup>nd</sup> anniversary Payment of C\$50,000 and issue of **15 million ADV** fully paid ordinary shares;
- Additional two years' worth of assessment exploration work on the Property by each of the 2<sup>nd</sup> and 3<sup>rd</sup> anniversaries;
- On/before 3<sup>rd</sup> anniversary Payment of C\$100,000 and issue of 20 million ADV fully paid ordinary shares;
- Discovery bonus payments of **CDN \$2 per new/additional ounce** of gold (any category) included in any NI 43-101 or JORC Code-compliant mineral resource during or after earn-in, half of which may be paid in shares at Ardiden's election based on a 20-day volume weighted average price; and
- Exiro retains a 2.5% NSR Royalty, less any existing royalty.

Exiro Minerals Corporation is a privately-owned exploration company focused on global multi-commodity project generation. The company generates high quality targets from a growing collection of proprietary historical paper datasets. Exiro's long-term strategy is to generate high quality mineral projects, divest a majority interest to excellent partners, and retain passive long-term exposure to discovery

**ENDS** 

## JORC Code, 2012 Edition – Table 1 NEW PATRICIA GOLD PROPERTY

JORC Code Table 1 Criteria - The table below summaries the assessment and reporting criteria used for the New Patricia Property Geophysical Survey and reflects the guidelines in Table 1 of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (the JORC Code, 2012).

### **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	Sampling techniques  A high-resolution Aeromagnetic Radiometer, Radiometric, Matrix Digital VLF-EM Survey airborne geophysical survey was conducted by TerraQuest Limited over the entire New Patricia Prospect in September-October 2020.  The survey included High-Resolution Aeromagnetic, Horizontal Gradiometer, Radiometrics and Matrix Digital VLF-EM.  It has extended more than 3000 line-kilometres over the entire New Patricia claim to provide detailed and complete coverage of this property.
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or</li> </ul>	<ul> <li>Drilling techniques</li> <li>Not applicable to a geophysical survey</li> </ul>

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Criteria	JORC Code explanation	Commentary
C. ICCI IG	Total Source Companies of the Companies	Communition y
	other type, whether core is oriented and if so, by	
D.://	what method, etc).	Dell Consulta Dance of
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	Drill Sample Recovery     Not applicable to a geophysical survey
recovery	Measures taken to maximise sample recovery and	1 Wet applicable to a geophysical salivey
	ensure representative nature of the samples.	
	Whether a relationship exists between sample	
	recovery and grade and whether sample bias may	
	have occurred due to preferential loss/gain of	
	fine/coarse material.	
Logging	Whether core and chip samples have been  and principlly and protochaically logged to a loyal of	Not applicable to a geophysical survey
	geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource	Not applicable to a geophysical survey
	estimation, mining studies and metallurgical	
	studies.	
	Whether logging is qualitative or quantitative in	
	nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant	
Cub cam!:	intersections logged.	Consolina
Sub-sampling techniques and	<ul> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul> <li>Sampling</li> <li>Not applicable to a geophysical survey</li> </ul>
sample preparation	For all sample types, the nature, quality and	Not applicable to a geophysical survey
oumpie preparation	appropriateness of the sample preparation	
	technique.	
	<ul> <li>Quality control procedures adopted for all sub-</li> </ul>	
	sampling stages to maximise representivity of	
	samples.	
	Measures taken to ensure that the sampling is  yourseentative of the in situ metarial collected.	
	representative of the in-situ material collected, including for instance results for field	
	duplicate/second-half sampling.	
	Whether sample sizes are appropriate to the grain	
	size of the material being sampled.	
Quality of assay	The nature, quality and appropriateness of the	QAQC
data and laboratory	assaying and laboratory procedures used and	Not applicable to a geophysical survey
tests	<ul> <li>whether the technique is considered partial or total.</li> <li>Nature of quality control procedures adopted (e.g.</li> </ul>	
	standards, blanks, duplicates, external laboratory	
	checks) and whether acceptable levels of accuracy	
	(i.e. lack of bias) and precision have been	
	established.	
Verification of	The verification of significant intersections by either	Sample Verification
sampling and assaying	independent or alternative company personnel.	Not applicable to a geophysical survey
изэиуніц	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry</li> </ul>	
	procedures, data verification, data storage (physical	
	and electronic) protocols.	
	Discuss any adjustment to assay data.	
Location of data	Accuracy and quality of surveys used to locate	Sample Locations
points	drillholes (collar and down-hole surveys), trenches,	Not applicable to a geophysical survey
	mine workings and other locations used in Mineral	
	Resource estimation.  • Specification of the grid system used.	
	<ul> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	
Data spacing and	Data spacing for reporting of Exploration Results.	Sample Locations
distribution	Whether the data spacing and distribution is	Not applicable to a geophysical survey
	sufficient to establish the degree of geological and	
	grade continuity appropriate for the Mineral	

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Criteria	JORC Code explanation	Commentary
	Resource and Ore Reserve estimation procedure(s) and classifications applied.  • Whether sample compositing has been applied.	
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	● Not applicable to a geophysical survey.
Sample security	The measures taken to ensure sample security.	Chain of Custody     Not applicable to a geophysical survey.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not applicable to a geophysical survey.

## **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The New Patricia Gold Project consists of 678 Cell units covering a contiguous area of 140 km2.  Exiro Minerals Corp Limited owns the tenements 100%.  There are no known issues affecting the security of title or impediments to operating in the area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The New Patricia prospect is located within the Pickle Lake area, Kenora (Patricia) Mining Division, Ontario.  Exiro have provided a dataset of 212 historical drillholes spread across the property drilled by various companies during the period 1971 to 1990.  Companies who have conducted historical work at New Patricia include Bond Gold Inc, Noranda Exploration, Power Exploration Inc, Santa Maria Resources, UMEX and Inco.  Some sporadic seasonal drilling was completed across the New Patricia Property by previous owners, confirming the potential for multiple extensive gold mineralised zones  1960-1936 New Jersey Zinc and Cominco Ltd 1970s UMEX and Inco 1984-1986 St Joe Canada
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>1987-1997 Bond Gold, Lac Minerals and Barrick</li> <li>The Pickle Lake Gold Project is located within the Meen-Dempster greenstone belt and the adjoining Pickle Lake greenstone belt, which contain the known gold deposit (Kasagiminnis) and prospects (South Limb, West Pickle, Dorothy-Dobbie, Meen, Dempster, Fry McVean, Kawashe, Duffell, Relyea, Jean, Keating, 250 and New Patricia). Greenstone belts are located on the southern margin of the North Caribou terrane within the Uchi domain.</li> <li>Rocks within the Uchi domain greenstone belts display petrochemical characteristics of arc and back-arc volcanism.</li> <li>Structurally controlled shear-hosted lode style gold deposits are the main style of gold mineralisation in the Pickle Lake District.</li> </ul>
Drillhole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</li> </ul>	Not applicable to a geophysical survey



Criteria	JORC Code explanation	Commentary
		,
	<ul> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	Not applicable to a geophysical survey
Relationship between mineralisation widths and intercept lengths	<ul> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</li> </ul>	Not applicable to a geophysical survey
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.</li> </ul>	Relevant diagrams have been included within the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	See main body of report, - No Drillhole results are being reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<ul> <li>A high-resolution Aeromagnetic Radiometer, Radiometric, Matrix Digital VLF-EM Survey airborne geophysical survey was conducted by TerraQuest Limited over the entire New Patricia Prospect.</li> <li>The Matrix VLF-EM system is a newly developed, light weight, digital, passive system that utilizes continent-wide communication VLF radio signals as a power source to energize ground conductors.</li> <li>The signals are received by 3 orthogonal coils and recorded independently from up to four VLF stations. Being fully digital, a full range of final outputs is possible including total field amplitude, vertical and planar ellipticities, tilt and azimuth to the transmitter separately for each frequency.</li> <li>The survey included High-Resolution Aeromagnetic, Horizontal Gradiometer, Radiometrics and Matrix Digital VLF-EM. It has extended more than 3000 line-kilometres over the entire New Patricia claim to provide detailed and complete coverage of this highly prospective, yet largely under-explored gold property.</li> <li>The previous survey over New Patricia, undertaken by the Ontario Geological Survey (45 years ago) at a wide-spaced 200m line spacing and 120m elevation, is significantly less penetrative than this TerraQuest 50m N-S line spaced helicopter survey at a flight height of only 25-35m.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	The recent work has confirmed numerous exploration targets exist in the New Patricia prospect and the company has high expectations to define significant gold resources through ongoing drilling programs guided by geophysical methods.