

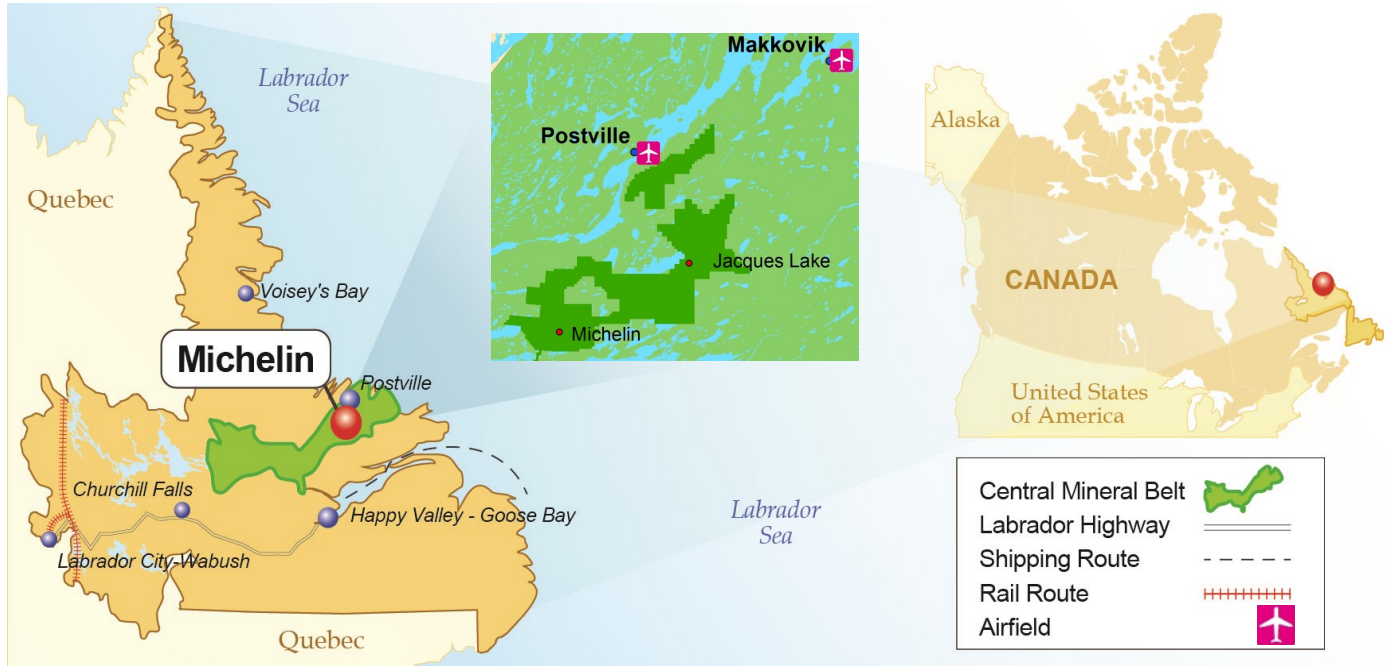
# Michelin Project

Labrador, Canada



PALADIN ENERGY LTD

September 2019



Paladin holds a 55% interest in 69,825 hectares of mineral licences located within the Central Mineral Belt (CMB) of Labrador, Canada. Over the next five years Paladin has the right to increase its interest by 5% each year, by funding the exploration and project commitments, increasing its ownership to 75%. The mineral licences are coincident with 127.7Mlb of uranium resources and Paladin believes that there is significant potential to further grow the existing resources through resource extension drilling and greenfield discovery.

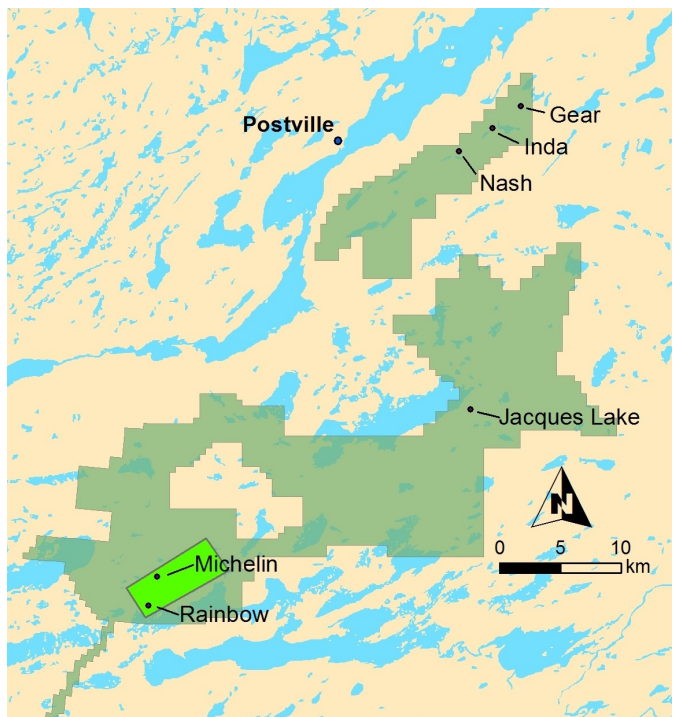
Newfoundland and Labrador have a regulatory framework which is supportive of the responsible development of mineral resources. A large portion of the Michelin Project area lies within an area administered by the Labrador Inuit through the Nunatsiavut Government. The Nunatsiavut Government supports development that contributes to regional growth if it takes into account community concerns provided that it passes Environmental Assessment regulations and an Impacts and Benefits Agreement is in place.

In June 2015 the Federal Canadian Government granted Paladin an exemption to the Non-Resident Ownership Policy under which, by the stage of first production, Canadian resident ownership must be at least 51%. The exemption allows Paladin, at the appropriate time, to proceed to production with no requirement for a majority Canadian partner.

## Location and Access

The mineral licences are approximately 140km north of Happy Valley-Goose Bay and 40km southwest of the

community of Postville. The area can currently only be accessed by small propeller planes, helicopters and snowmobiles. Fieldwork is serviced by an all weather camp established close to the Michelin resource.



*The Michelin Project mineral claim boundary showing the deposit locations and the high priority exploration area around Rainbow and Michelin (lime green)*





*Michelin Camp in Winter*

## Geology

Michelin is associated with a belt of Proterozoic felsic volcanic rocks of the Aillik Group which extends from the coast in the north-east to Michelin in the south-west. Inda, Gear, Nash are hosted in volcanoclastic metasediments and mafic metavolcanics of the Post Hill Group. The mineralisation at Michelin occurs in a strongly deformed package of intercalated finely and coarsely porphyritic metavolcanic rocks of the Aillik group. These host rocks have a rhyolite composition comprising K-feldspar, quartz with minor plagioclase, biotite, magnetite and traces of apatite, titanite and zircon. The Aillik group lithologies in the immediate area also include metamorphosed mafic volcanics, banded siltstones and volcanoclastic sediments. These lithologies have been intruded by granite and granodiorite plutons, sheets and dykes that are generally undeformed and display equigranular to porphyritic textures.

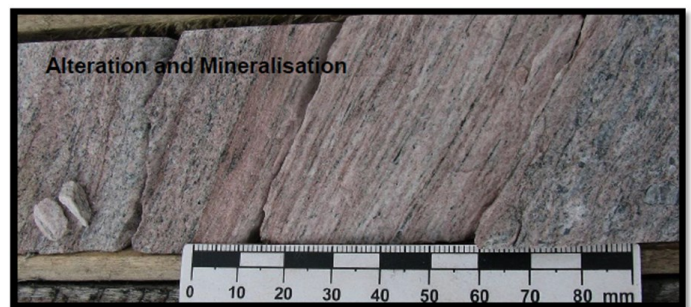
>90% of the area that is proximal to Michelin is covered by till, soil, and vegetation, which potentially obscures additional deposits. The broader area of the mineral licences is covered in, more or less, the same way and to the same extent.



*Helicopter prospecting*

## Uranium Mineralisation and Alteration

The Michelin host rocks were subject to intense sodic metasomatism observed as the replacement of K-feldspar by albite, and biotite by sodic amphibole and sodic pyroxene and quartz phenocrysts show dissolution textures and are partly replaced by albite. The mineralisation is dominated by uraninite, with some uranium in zircon and rarely in brannerite. Uranium minerals tend to occur with titanite, pyroxene, amphibole and hematite. Carbonate minerals are not abundant and sulphide minerals are also uncommon, typically comprising <1% of ore.



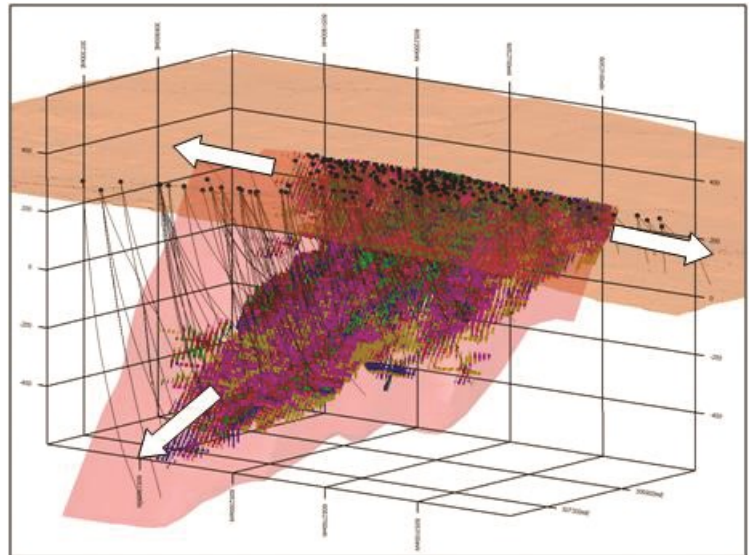
*Mineralised Aillik Felsic Volcanics from Michelin*



*Winter Access*

## Uranium Resources

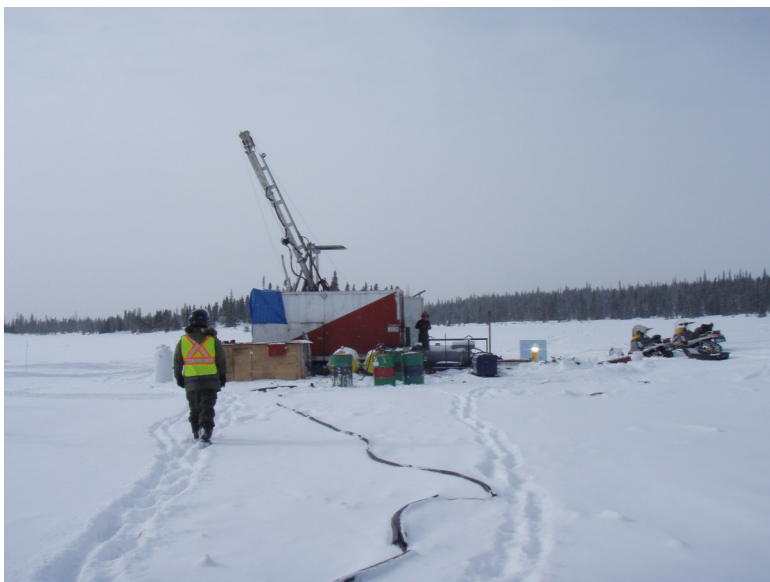
Paladin's estimated uranium mineral resources in the CMB are contained in six deposits: Michelin, Jacques Lake, Rainbow, Nash, Inda, and Gear. Michelin contains the majority of the uranium and as such is the focus of the Project. The Michelin deposit is hosted within a N60°E trending, 55° southeast dipping, mylonite in felsic metamorphic rocks. The ore is confined to two 60°SW west plunging shoots and has been drilled to over 800m depth. Mineralisation is open at depth down plunge and along strike in both directions. Metallurgical testing has achieved 90% uranium recovery with acceptable acid consumption under conventional acid leaching conditions.



Michelin resource model showing drilling and direc-

Deposit	Cut-off ppm U <sub>3</sub> O <sub>8</sub>	Measured Resources			Indicated Resources			Inferred Resources			Total		
		Mt	Grade ppm	MIb	Mt	Grade ppm	MIb	Mt	Grade ppm	MIb	Mt	Grade ppm	MIb
Michelin	200/500	17.6	965	37.6	20.6	980	44.6	4.5	985	9.9	42.7	980	92.1
Jacques Lake	250				13.0	630	18.0	3.6	550	4.4	16.6	610	22.4
Rainbow	200/500	0.2	920	0.4	0.8	860	1.4	0.9	810	1.6	1.9	830	3.4
Inda	200/500				1.2	690	1.8	3.3	670	4.8	4.5	670	6.6
Nash	200/500				0.7	830	1.2	0.5	720	0.8	1.2	780	2.0
Gear	200/500				0.4	770	0.6	0.3	920	0.6	0.7	780	1.2
<b>Total Resources</b>		17.8	965	38.0	36.6	840	67.6	13.1	765	22.1	67.6	860	127.7

*Michelin Project Mineral Resource table. Figures may not add due to rounding. Michelin and Jacques Lake Mineral Resources are JORC (2012) compliant, all others are JORC (2004) compliant. Resources expected to be exploited by open pit mining have cut off grade of 200ppm and resources expected to be exploited by underground mining have a cut off grade of 500ppm.*



Winter drilling

## Exploration

Michelin is situated in a highly prospective north east striking trend that extends for 8 by 3km. There are numerous radiometric anomalies associated with the trend that form several mineralised trends and include known prospects such as Chitra, Running Rabbit, Mikey Lake and Rainbow that have received limited drilling. >90% of this area is covered by till, soil, and vegetation, which potentially obscures additional deposits.

The priority of future exploration will aim at increasing the resources along the north east striking trend within a 5-10km radius of Michelin. A secondary priority of future exploration will target other highly prospective areas further away from the Michelin deposit.



## Project Development

The engineering firm AMEC Americas Limited was commissioned to complete a preliminary assessment report for the Michelin Project in 2009. The report was prepared on the basis of open pit and underground mining at the Michelin and Jacques Lake deposits feeding a mill and conventional acid leach circuit constructed at Michelin.

The timeframe associated with project development will be governed by completing further technical work to further scope the operation, gaining community acceptance and achieving required regulatory permits.

## The Way Forward

Paladin has implemented a mineral licence management strategy to ensure that the licences coincident with the estimated resources and the most prospective ground are maintained at minimum expense until March 2023. The mineral license management strategy will preserve core priorities of the project during the current period of depressed uranium prices for all stakeholders.

Paladin has a core team in Canada that manage the Project with an emphasis on community and government relations during this period of reduced active exploration effort in the field.

Planned exploration programs are periodically updated with the intention that these are ready to execute when the required improvement in uranium market conditions eventuates.



Summer drilling



**PALADIN ENERGY LTD**



### Corporate/Contact Details

#### Paladin Energy Ltd

Karen Oswald

Investor Relations

Email: karen.oswald@paladinenergy.com.au

Level 4 502 Hay St,

Subiaco, Western Australia 6008

PO Box 201, Subiaco, Western Australia 6904

Tel: +618 9381 4366

Fax: +618 9381 4978

Email: paladin@paladinenergy.com.au

www.paladinenergy.com.au

*The mineral resource information in this document is extracted from the report entitled Paladin Energy Ltd 2018 Annual Report created on 28th August 2018 and is available to view on [www.paladinenergy.com.au](http://www.paladinenergy.com.au). The company confirms that it is not aware of any new information or data that materially affect the information included in the original announcement and, in the case of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not materially modified from the original market announcement.*