

## DISCLAIMER AND NOTES

#### JORC AND NI 43-101 MINERAL RESOURCES AND ORE RESERVES

This presentation contains summary information about the Company's activities current as at the date of this presentation. The information in this presentation is of a general background nature and does not purport to be complete or contain all the information investors would require to evaluate their investment in the Company, nor does it contain all the information which would be required in a prospectus or product disclosure statement prepared in accordance with the Corporations Act 2001 (Cth). The Company is not responsible for updating, nor undertakes to update, this presentation. This presentation should be read in conjunction with the Company's other periodic and continuous disclosure announcements, available at <a href="http://www.paladinenergy.com.au">http://www.paladinenergy.com.au</a>.

This presentation includes statements that may be deemed "forward-looking statements". All statements in this presentation, other than statements of historical facts, that address future production, reserve or resource potential, exploration drilling, exploitation activities and events or developments that the Company expects to occur, are forward-looking statements.

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from the expectations expressed in the forward-looking statements. Factors that could cause actual results to differ materially from the expectations expressed those in forward looking statements include market prices, exploitation and exploration successes, continued availability of capital and financing and general economic, market or business conditions and risk factors associated with the uranium industry generally.

Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements. Readers should not place undue reliance on forward-looking information. The Company does not assume any obligation to update or revise its forward-looking statements, whether as a result of new information, future events or otherwise. No representation is made or will be made that any forward-looking statements will be achieved or will prove to be correct.

In this presentation, for those deposits that are reported as conforming to the Joint Ore Reserves Committee (JORC) 2004 or 2012 code, the terms Inferred Mineral Resources, Indicated Mineral Resources, Measured Mineral Resources, Ore Reserves, Proved Ore Reserves, Probable Ore Reserves and Competent Person are equivalent to the terms Inferred Mineral Resources, Indicated Mineral Resources, Measured Mineral Resources, Mineral Reserves, Proven Mineral Reserves, Probable Mineral Reserves and Qualified Person, respectively, used in Canadian National Instrument 43-101 (NI 43-101).

The information in this presentation relating to the Mineral Resources and Ore Reserves for all of the Company's deposits other than Langer Heinrich, Michelin, Jacques Lake and Manyingee was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that this information has not materially changed since it was last reported. Refer to the Resource and Reserve Tables slide in the Appendix of this presentation.

#### **Competent Persons Statement**

The Mineral Resource estimates for the Langer Heinrich deposit were prepared by David Princep of Gill Lane Consulting. Mr. Princep has visited the Project on numerous occasions since 2003, with the most recent being in July 2016. Mr. Princep is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional Geologist. Mr. Princep has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration 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 (JORC 2012). Mr Princep approves of and consents to the inclusion of the information in this announcement in the form and context in which it appears.



## **CORPORATE PROFILE**

#### WHO IS PALADIN?



ASX listed independent uranium company with a focus in Africa, Australia and Canada



14 years of production history across two mines in Africa, Langer Heinrich (Namibia) and Kayelekera (Malawi)



Both mines are on care and maintenance (C&M), preserving our resource and shareholder value in the current low uranium price environment



Non-core assets reviewed to preserve cash leading to the sale of the Kayelekera mine



Large and globally diversified uranium exploration portfolio - ~320Mlb¹

#### **MARKET SNAPSHOT ASX: PDN**

Shares on issue	2.014B
Share price A\$	0.10c
Market capitalisation A\$	201.4M
Market capitalisation US\$ <sup>2</sup>	132.2M
Unrestricted Cash US\$ <sup>3</sup>	40.06M
Debt US\$ <sup>4</sup>	132.1M

#### SUBSTANTIAL SHAREHOLDERS<sup>4</sup>

Tembo Capital Management	13.05%
Paradice Investment Management	9.94%
Value Partners	8.03%
Hopu Clean Energy	7.03%



<sup>&</sup>lt;sup>1</sup> Measured, indicated and inferred resources for the Michelin, Mount Isa and Manyingee Projects (including Carley Bore) on a 100% Project basis

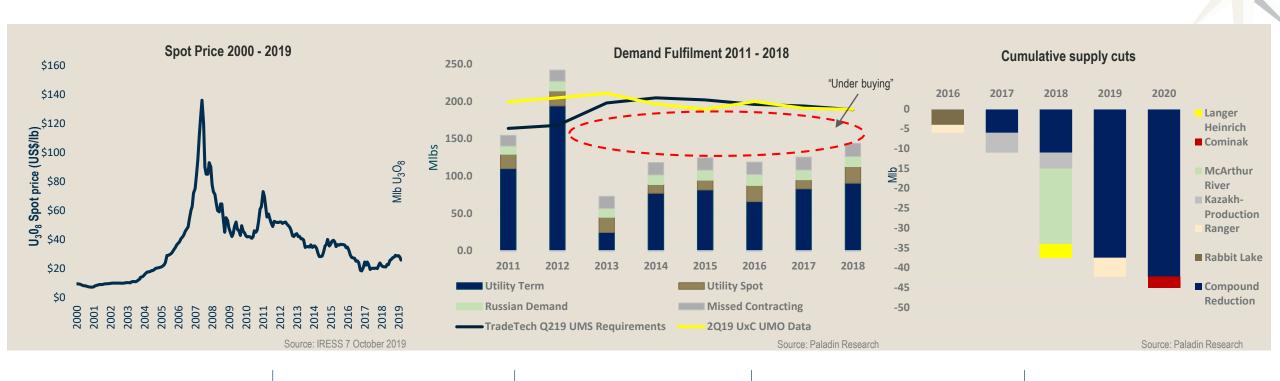
<sup>&</sup>lt;sup>3</sup> As at 30 September 2019 and excluding restricted cash of US\$11M

<sup>&</sup>lt;sup>4</sup> As at 30 September 2019



A solid long-term outlook

## THE URANIUM STORY IS COMPELLING



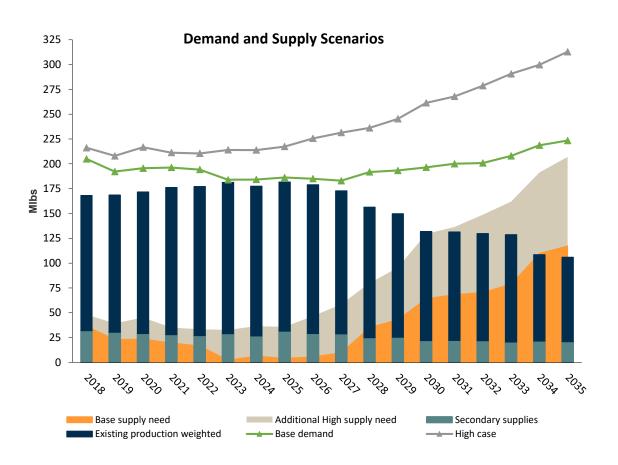
Spot uranium prices are at historic lows

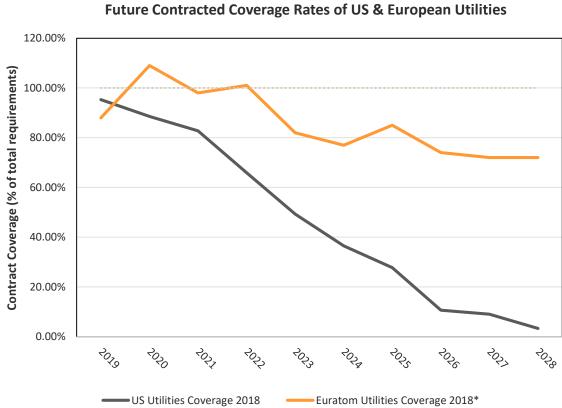
The nuclear power industry is consuming more uranium than pre-Fukushima with growth in China, India and elsewhere

Utilities have been "under buying" at an average rate of 80Mlb per year relative to consumption European and US utilities are running down stockpiles and contract positions put in place pre-Fukushima Mined supply is being rapidly cut back



## DEMAND GROWTH FAR EXCEEDS SUPPLY CAPABILITY





Current supply unable to meet even base case demand

US contract coverage reaching critical lows

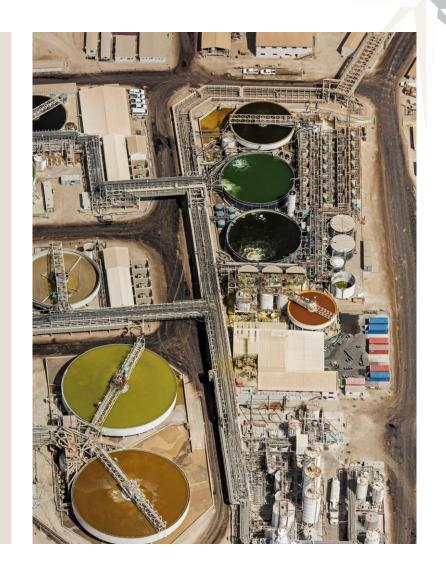


Source: Paladin Research and UxC Uranium Production Cost Study – September 2019 Note\*: Euratom - European Atomic Energy Community



## PREFEASIBILITY STUDY HIGHLIGHTS

- Prefeasibility Study (phase 1 PFS1) confirms 12-month execution lead time to low risk restart Langer Heinrich
- Aspirational average life of mine AISC target US\$30/lb achievable
- 5.2Mlb pa production for restart confirmed for capital of US\$80M
- Opportunity to increase production at restart to 6.5Mlb pa with additional, high return discretionary capital of US\$30M
- Maiden Vanadium Mineral Resource of **38.8Mlb** V<sub>2</sub>O<sub>5</sub> declared
- Potential for further AISC improvements as identified in the Concept Study of approximately US\$4.50/lb through significant process changes to be studied in Phase 2 of the PFS





## PFS1 HAS CONFIRMED RAPID RESTART PLAN

 PFS1 confirms Concept Study results of comparatively low initial restart expenditure requirements of ~US\$80M for ~5.2 Mlb pa production capacity







Plant Repair & De-Preservation Costs US\$38M Operations Restart Costs **US\$42M** 

(includes: first fill of reagents, recommissioning, mobilisation of equipment and tailings dam costs)

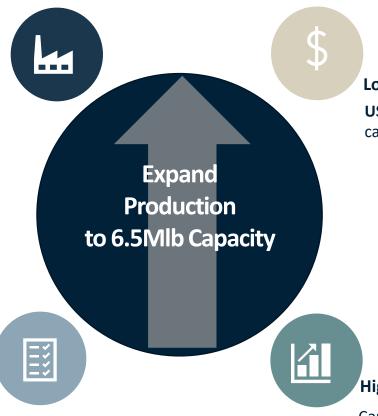




# PALADIN IDENTIFIES LOW COST EXPANSION OPPORTUNITY

#### **2021 Production Potential**

Potential to be **production** ready from mid 2021 (funding and price dependent) if studies are completed in C&M window



Low Cost US\$30M for 1.3Mlb capacity expansion

#### **Low Risk**

No novel technology or processes. Grow by optimising our current approach

#### High return expansion

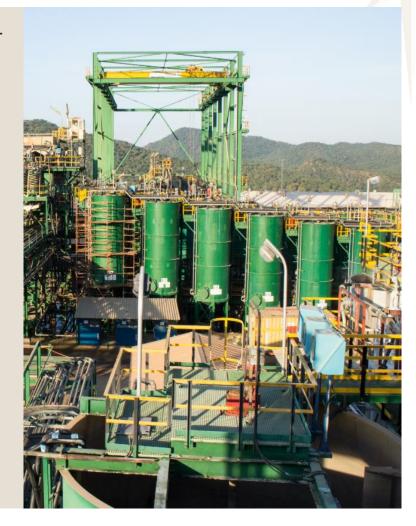
Capital intensity of US\$23/lb (leach debottlenecking, surge capacity, water storage, automation & reliability program)





# PALADIN (AFRICA) LTD (PAL) SALE ANNOUNCED

- PAL to be sold to Lotus Resources Pty Ltd (subsidiary Hylea Resources). PAL holds an 85% interest in Kayelekera Mine and associated leases
- Consideration for the sale:
  - A\$5M
    - A\$200,000 cash
    - A\$4.8M in shares (A\$1.8M on completion subject to 12 month escrow, A\$3M on third anniversary)
  - Deferred royalty of 3.5% from production capped at A\$5M
- US\$10M Environmental performance bond to be refunded:
  - US\$4M on completion; US\$1M first anniversary; US\$2M second anniversary;
     US\$3M third anniversary
- US\$5M pa saving to Paladin on C&M costs
- Key outstanding approval required is the Government of Malawi
- Significantly improves Paladin's forward cash position





# WHY CHOOSE PALADIN AS YOUR URANIUM INVESTMENT?



Diversified portfolio of developed mines and exploration projects with significant leverage to upward movements in the uranium price



Lead time and capital associated with a re-start to bring Langer Heinrich back into production is shorter and lower than new projects



Lower incentive price into production than peers and well positioned on the industry project cost curve



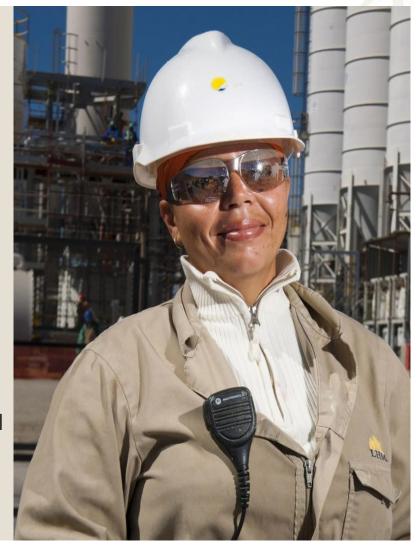
Proven product and market experience



Paladin is focused on minimising expenditure in the current low uranium price environment, while positioning itself for a low risk, well defined path back into production with any sustained price recovery



Langer Heinrich production 7 to 8 times total US production!







CONTACT US

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## MEET OUR BOARD OF DIRECTORS



Rick Crabb - Non-Executive Chairman

Mr Crabb practiced as a solicitor form 1980 to 2004 and was a founder of boutique law firm Blakiston & Crabb in 1992. He left the partnership before it was merged into national player Gilbert + Tobin.

As a lawyer Mr Crabb specialised in mining, corporate and commercial law. He has provided legal counsel in relation to finance, marketing, government agreements and construction contracts for numerous resource development projects throughout Australia and Africa.

Mr Crabb now focuses on his public company directorships and investments. Mr Crabb holds Bachelor of Jurisprudence (Honours), Bachelor of Laws and Master of Business Administration from the University of Western Australia.



David Riekie - Non-Executive Director

Mr Riekie is an experienced ASX Director at both the Executive and Non-executive level.

He has operated in a variety of countries globally and throughout Africa; notably Namibia and Tanzania.

He has throughout his career provided corporate, strategic and compliance services to a variety of organisations operating in the Resource and Industrial sector, usually enterprises seeking expansion capital and listing on ASX.

He has been directly responsible for successful capital raising, stakeholder engagement, acquisition and divestment programmes.



Daniel Harris - Non-Executive Director

Mr Harris is a seasoned and highly experienced mining executive and director. Most recently, Mr Harris was interim CEO and Managing Director of ASX-listed Atlas Iron until January 2017 when he resumed his role as a Non-executive Director and is Chairman of the Audit and Risk Committee.

Mr Harris has been involved in all aspects of the industry for more than 40 years and held both COO and CEO positions in Atlantic Ltd and Strategic Minerals Corporation and was also the former Vice President of EVRAZ Plc in Moscow.

Mr Harris is a consultant and member of the Advisory Board of Black Rock Metals in Montreal and is a consultant and advisor to GSA Environmental in the UK.



John Hodder - Non-Executive Director

Mr Hodder has extensive experience in arranging private equity and debt deals with a focus on mining within developing countries especially Africa. He has also sat on a number of listed and private boards.

Mr Hodder is a geologist with a Bachelor of Science in Geological Sciences and a Bachelor of Commerce in Finance and Commerce from the University of Queensland.

Mr Hodder also worked at Suncorp and Solaris as a Fund Manager focusing on the resources sector, managing an index-linked natural resource portfolio of \$1.25bn.



## MEET OUR SENIOR MANAGEMENT



Scott Sullivan - Chief Executive Officer

Mr Sullivan brings 30 years of diversified mining experience to Paladin, across multiple commodities and projects domestically and internationally.

His experience spans strategic planning in mines and smelters; feasibilities; commissioning; mine expansion and restructuring; mine, port and rail infrastructure; project management; sustainability and government and has a strong emphasis on operational optimisation.

He was most recently General Manager of Newcrest's large and complex Telfer gold-copper mine in the Pilbara region of Western Australia. Prior roles include CEO and Managing Director roles with ASX-listed companies centred in West Africa and the US.

He was Asset President of NSW Energy Coal at BHP, being directly responsible for the operation and rapid expansion of one of Australia's iconic and highest producing coal mines, Mt Arthur, along with the Caroona Coal project and BHP's share in the NCIG port infrastructure in Newcastle.



Anna Sudlow - Chief Financial Officer

Anna is a highly qualified CFO with more than 20-years' experience across the energy and resources sectors specialising in corporate finance, strategy, investor relations and commercial management.

Anna has joined Paladin from Transborders Energy, where she was their CFO. Anna has previously performed senior finance roles as Commercial and Investor Relations Manager at Tap Oil Limited and as Strategic Planning & Portfolio Manager and Treasurer at Woodside Energy Ltd.

Anna has a Bachelor of Commerce and MBA from the University of WA, a Graduate Certificate in Applied Finance from the Securities Institute of Australia, is a CPA and a graduate of the AICD.

Anna currently sits on the Board of the Leeuwin Ocean Adventure Foundation and is Acting Chair of the Board.



Andrea Betti – Company Secretary

Ms Betti is an accounting and corporate governance professional with more than 20 years' experience in accounting, corporate governance, corporate advisory, finance and corporate banking.

Ms Betti has acted as Chief Financial Officer and Company Secretary for companies in the private and publicly listed sectors, as well as senior executive roles in the banking and finance industry.

Ms Betti joined the Paladin Group in August 2015 and was appointed Joint Company Secretary in April 2018.



# RAPID PRODUCTION RESTART ON URANIUM PRICE RECOVERY

DESCRIPTION	STATUS	TIMING	PURPOSE	
Concept Study		Completed February 2019	<ul><li>Found no fatal flaws</li><li>Generated improvement options</li></ul>	
Prefeasibility Study 1 (Rapid Restart)		Prefeasibility Study 1 - completed October 2019	<ul> <li>RAPID RESTART STUDY (PFS1)</li> <li>Detailed restart plan</li> <li>Low risk production expansion by incremental debottlenecking reduces AISC to US\$29/lb (life of asset)</li> <li>Maiden Vanadium Mineral Resource</li> </ul>	
Prefeasibility Study 2 (Process Optimisation)	ess In Progress Complete test work of ontions selection		<ul> <li>PROCESSING UPGRADE STUDY (PFS2)</li> <li>Opportunities to reduce costs by ~US4.50/lb</li> <li>Reasonable prospects of Vanadium production</li> <li>Reduced scope to preserve cash. Will complete engineering later</li> </ul>	
Feasibility Study 1 (Rapid Restart)	Not committed	Undertake closer to restart decision – 9 months required	<ul> <li>+/- 10% accuracy</li> <li>Enable Rapid Restart to be triggered and clear path into production</li> </ul>	

1<sup>st</sup> uranium producer back into production



# **RESOURCE & RESERVE TABLES**

#### 30 June 2019

Ore Reserves		Mt	Grade ppm U <sub>3</sub> O <sub>8</sub>	MIb U <sub>3</sub> O <sub>8</sub>	Paladin Ownership (%)	Paladin Attributable (Mlb)
<u>Namibia</u>	Langer Heinrich					
Proven		42	525	48.5	75	36.4
Probable		13.1	485	14	75	10.5
Stockpiles		30.8	355	24	75	18
Total Namibia		85.9	455	86.5	75	64.9
<u>Malawi</u>	Kayelekera					
Proven	·	0.4	1,170	1	85	0.85
Probable		5.3	880	10.4	85	8.84
Stockpiles		1.6	755	2.6	85	2.21
Total Malawi		7.3	870	14	85	11.9
Total Ore Reserve	s	93.2	490	100.5		76.8

Vanadium Mineral	Resources	Mt	Grade ppm V <sub>2</sub> O <sub>5</sub>	Mlb V <sub>2</sub> O <sub>5</sub> (100% basis)	Paladin Ownership (%)	Paladin Attributable (Mlb)
Namibia	Langer Heinrich					
Measured <sup>1</sup>		66.2	160	23.3	75	17.5
Indicated <sup>1</sup>		18.8	140	5.8	75	4.4
Inferred <sup>1</sup>		6.3	135	1.9	75	1.4
Stockpiles <sup>1</sup>		30.8	115	7.8	75	5.9
Total Namibia		122.1	145	38.8	75	29.1

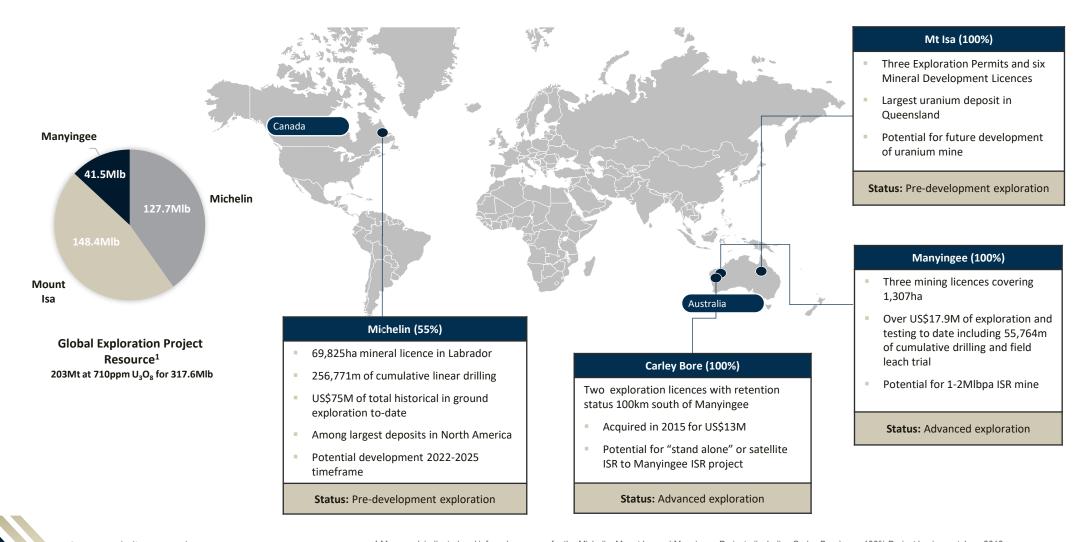
Refer ASX Announcement dated 14.10.2019 "Prefeasibility Study Delivers Improved Financials and Production Capacity For Langer Heinrich" p6: "Refer ASX Announcement dated 21.11.08 "Significant Resource Upgrade for Kaylelkera"; "Refer ASX Announcement dated 31.01.2018 "Correction to 30 June 2017 Annual Report" pf13-15; "Refer SEDAR lodgment (TSX:FRG) dated 3.9.2009 "Frontier Reports Positive Preliminary Economic Assessment for Michelin Urnaium Project," Refer ASX Announcement (ASX:SMM) dated 19.10.2010 "Resource Upgrade for the Valhalial Lannium Deposit;" Refer ASX Announcement dated 16.04.2012 "Quarterly Activities Report for period ending 31 March 2011; "Refer ASX Announcement dated 31.08.2011 "30 June 2011 Annual Report" p29; "Refer ASX Announcement dated 31.08.2011" "20 June 2011 Annual Report" p29; "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 31 December 2011"; "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "Quarterly Activities Report for period ending 30 June 2012", "Refer ASX Announcement dated 31.08.2011" "

The Group is not aware of any new information or data that materially affects the information in the relevant market announcements all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

Mineral Resource	ces	Mt	Grade ppm U <sub>3</sub> O <sub>8</sub>	Mlb U <sub>3</sub> O <sub>8</sub> (100% basis)	Paladin Ownership (%)	Paladin Attributable (Mlb)
<u>Namibia</u>	Langer Heinrich					
Measured <sup>1</sup>		66.2	490	71.9	75	53.9
Indicated <sup>1</sup>		18.8	435	18.0	75	13.5
Inferred <sup>1</sup>		6.3	420	5.8	75	4.4
Stockpiles <sup>1</sup>		30.8	355	24	75	18.0
Total Namibia		122.1	445	119.6	75	89.7
Malawi	Kayelekera					
Measured <sup>2</sup>		0.7	1,010	1.7	85	1.4
Indicated <sup>2</sup>		12.7	700	19.6	85	16.7
Inferred <sup>2</sup>		5.4	620	7.4	85	6.3
Stockpiles <sup>2</sup>		1.6	755	2.6	85	2.2
Total Malawi		20.4	695	31.3	85	26.6
Canada						
Measured	Michelin <sup>3</sup>	17.6	965	37.6	55	18.8
	Rainbow <sup>4</sup>	0.2	920	0.4	55	0.2
Indicated	Gear <sup>4</sup>	0.4	770	0.6	55	0.3
	Inda <sup>4</sup>	1.2	690	1.8	55	0.9
	Jacques Lake <sup>3</sup>	13	630	18	55	9.0
	Michelin <sup>3</sup>	20.6	980	44.6	55	22.3
	Nash <sup>4</sup>	0.7	830	1.2	55	0.6
	Rainbow <sup>4</sup>	0.8	860	1.4	55	0.7
Inferred	Gear <sup>4</sup>	0.3	920	0.6	55	0.3
	Inda <sup>4</sup>	3.3	670	4.8	55	2.4
	Jacques Lake <sup>3</sup>	3.6	550	4.4	55	2.2
	Michelin <sup>3</sup>	4.5	985	9.9	55	5.0
	Nash <sup>4</sup>	0.5	720	0.8	55	0.4
	Rainbow <sup>4</sup>	0.9	810	1.6	55	0.8
Total Canada	Rumbow	67.7	860	127.7	55	63.9
Australia						00.5
Measured	Valhalla <sup>5</sup>	16	820	28.9	100	28.9
Indicated	Andersons <sup>6</sup>	1.4	1,450	4.6	100	4.6
	Bikini <sup>7</sup>	5.8	495	6.3	100	6.3
	Duke Batman <sup>8</sup>	0.5	1,370	1.6	100	1.6
	Odin <sup>9</sup>	8.2	555	10	100	10.0
	Skal <sup>10</sup>	14.3	640	20.2	100	20.2
	Valhalla <sup>5</sup>	18.6	840	34.5	100	34.5
	Carley Bore <sup>11</sup>	5.4	420	5	100	5.0
	Manyingee <sup>12</sup>	8.4	850	15.7	100	15.7
Inferred	Andersons <sup>6</sup>	0.1	1,640	0.4	100	0.4
merred	Bikini <sup>7</sup>	6.7	490	7.3	100	7.3
	Duke Batman <sup>8</sup>	0.3	1,100	0.7	100	0.7
	Honey Pot <sup>13</sup>	2.6	700	4	100	4.0
	Mirrioola <sup>14</sup>	2.0	560	2.5	100	2.5
	Odin <sup>9</sup>	5.8	590	7.6	100	7.6
	Skal <sup>10</sup>	1.4	520	1.6	100	1.6
	Valhalla <sup>5</sup>	9.1	640	12.8	100	12.8
	Watta <sup>15</sup>	5.6	400	5	100	5.0
	Watta Warwai <sup>15</sup>	0.4	360	0.3	100	0.3
	Carley Bore <sup>11</sup>	17.4	280	10.6	100	10.6
	Manyingee <sup>12</sup>					
T-4-1 A	ivianyingee	5.4	850	10.2	100	10.2
Total Australia		135.4	635	189.8	100	189.8



# A QUALITY GLOBAL SUITE OF EXPLORATION ASSETS



Source: Paladin Research

PALADIN

<sup>&</sup>lt;sup>1</sup> Measured, indicated and inferred resources for the Michelin, Mount Isa and Manyingee Projects (including Carley Bore) on a 100% Project basis as at June 2018.