

# UNLOCKING THE FULL POTENTIAL

20<sup>th</sup> Annual Global Investment Conference | H.C. Wainwright & Co. | September 2018



**PENINSULA**  
ENERGY LIMITED

 **ASX**  
ASX:PEN

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Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

Please note that Production Targets within this presentation are based on a proportion of inferred resources. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resource or that the production target itself will be realised.

## **Competent Person Statement**

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves at Peninsula's Lance Projects is based on information compiled by Mr. Jim Guiling. Mr. Guiling is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (Member of Mining and Metallurgy Society of America and SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr. Guiling is Principal of independent consultants World Industrial Minerals. Mr. Guiling has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking 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. Guiling consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

# Peninsula Energy's Defining Strengths

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## World Class Management

- Experienced technical, financial and commercial team

## U.S. Production Focus

- Producing flagship asset, Lance Uranium Project - Wyoming, USA
- Lance is licensed to produce up to 3M lbs of U3O8 per year

## Innovation

- 'Game Changing' low pH ISR initiative

## Financial Strength

- Robust cash position with long-term revenue generation

## Valuable Contract Book

- Long-Term sales contracts underpin Peninsula's business
- Annual product sales scheduled through 2030

# Corporate Overview

## Capital Structure

Shares on issue*	234m
Share price (1-Aug-18)	A\$0.330
Market capitalisation (1-Aug-18)	A\$77m
Enterprise Value (1-Aug-18)	A\$83m
Available Cash (30-Jun-18)	US\$12.1m

## Shareholding\*

## Holding (%)



22.5%



11.3%



3.0%



2.6%



2.5%

## Top 20 Shareholders

**59.5%**

*\*Undiluted as at 1 August 2018*

## Share Price & Volume History

Ticker: ASX:PEN



## Research Coverage

H.C. Wainwright & Co.

Heiko Ihle

BMO Capital Markets

Alex Pearce

Numis

Justin Chan

VIII Capital

Dave Talbot

Roth Capital Partners

Joe Reagor

# Strategy – Realizing the Inherent Value

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- **Develop and operate long-life, low-cost production assets underpinned by long-term product sales contracts**

## Sales & Marketing

- Valuable long term sales contracts provide financial foundation
  - Source of current/ongoing cash revenues

## Core Assets

- Lance contains resources of 53.5M lbs of U<sub>3</sub>O<sub>8</sub><sup>2</sup>

## Step Change for Lance

- Convert Lance to low pH ISR operations in 2019/2020
- License amendments submitted in early April 2018

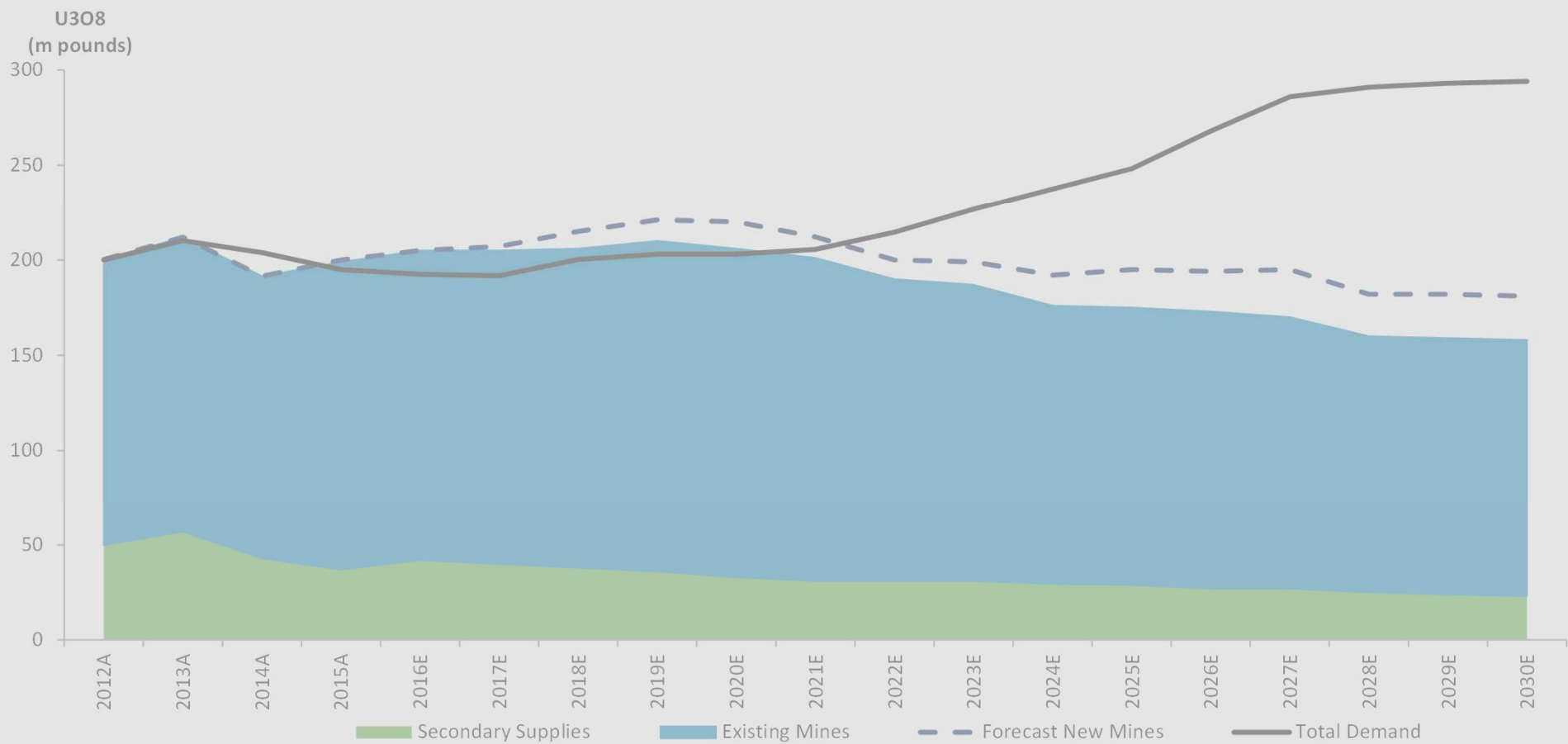
## Growth

- Building production capacity during the bottom of the market cycle

- **2020 Vision: Peninsula capitalizing on uranium market rebound with 1<sup>st</sup> quartile cost base at Lance ISR Project**



# The Uranium Market



Source: Trade Tech

# Uranium Market Overview

- The uranium bear market may have reached its turning point

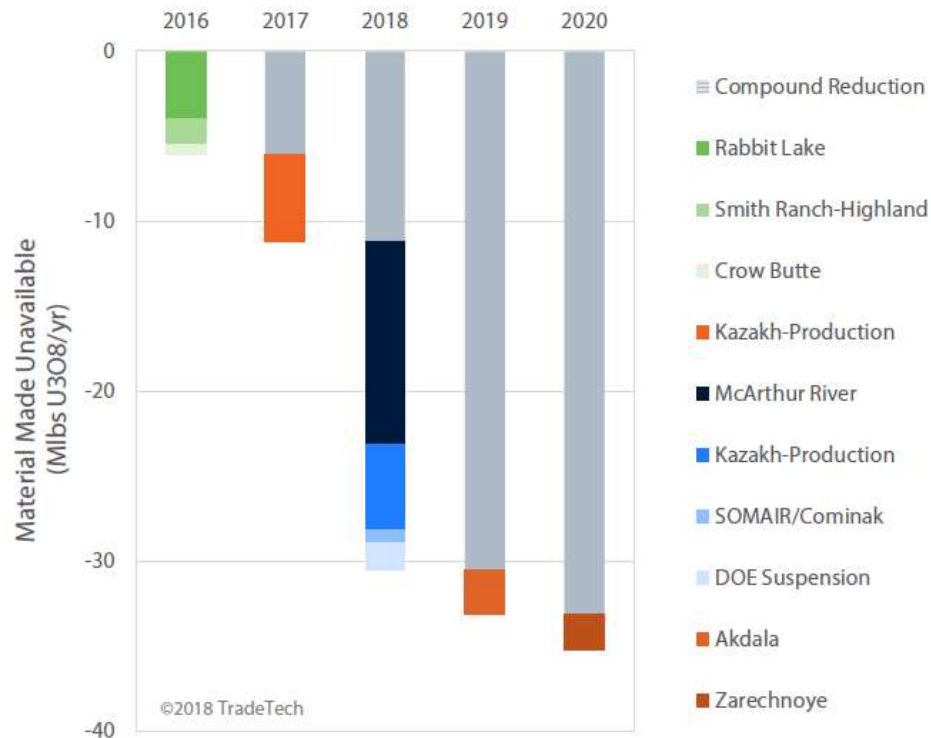


- Uranium is sold in spot & term markets
- Utilities have been buying from spot for several years
- Spot market supply depth is being tested by producer/investor buying
- Term market is opening up
- Both markets are still well below industry's average cost of production

Source: The Ux Consulting Company, LLC

# Market Rebalancing is Occurring Now

- Both supply and demand factors point to rising prices



Source: TradeTech

- Excludes Langer Heinrich C&M announced by  
Paladin on 25 May 2018

## Supply: Global supply restraint

- The miners keep reducing production target levels – now off 30 M lbs U<sub>3</sub>O<sub>8</sub>/yr
- 2018 production estimated at 135M lbs
- Available inventory stockpiles are decreasing

## Demand: New demand is driving the market up

- Primary producers are buying big spot volumes
- New investment funds are buying and holding physical uranium inventories
- Forecasts continue to show demand growth for nuclear power generation well beyond 2030



- **Increasing geopolitical support for domestic production**
  1. Section 232 of the US Trade Expansion Act Petition
    - US Dept. of Commerce (DOC) commenced investigation on 18 July 2018
    - Starts twelve month clock for government action
    - Remedies likely to bolster market for US based production
  2. US Dept of Energy suspension of excess uranium barter/sales
    - For remainder of 2018 Fiscal Year
    - Support for permanent suspension
  3. Review/extension of the Russian Suspension Agreement

# Lance ISR Project | Wyoming, USA



# Lance - Our Flagship Project

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## Exceptional Asset

- Active uranium production center in premier jurisdiction
- The largest defined uranium resource of any currently producing project in the U.S.

## Redefining Success

- Working to transform Lance performance and cost profile using low pH ISR process – watch for our Feasibility Study!

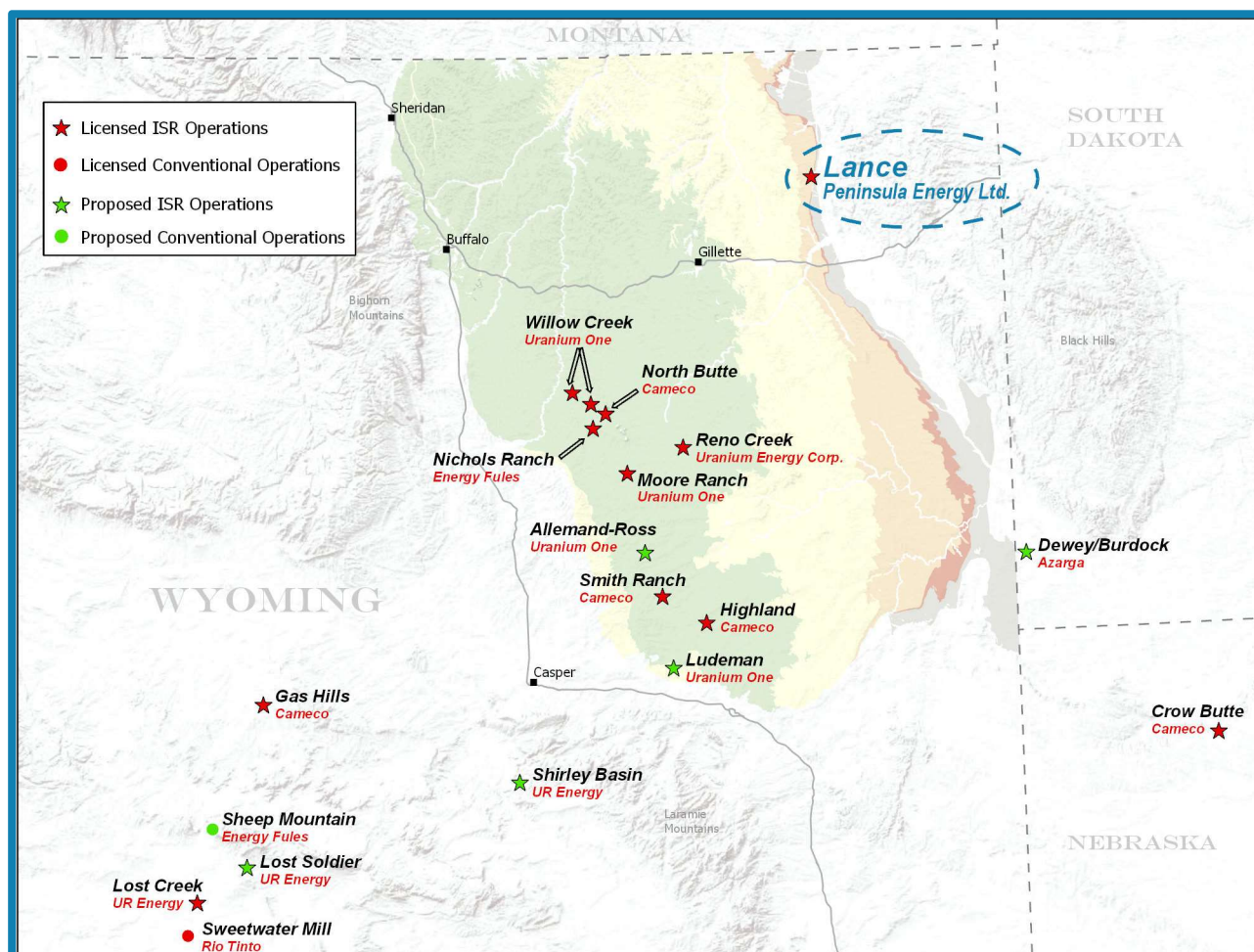
## Scalable Production

- Lance is licensed to produce 3M lbs U3O8 per annum
- 53.5M lbs U3O8 JORC (2012) compliant resource base<sup>2</sup>



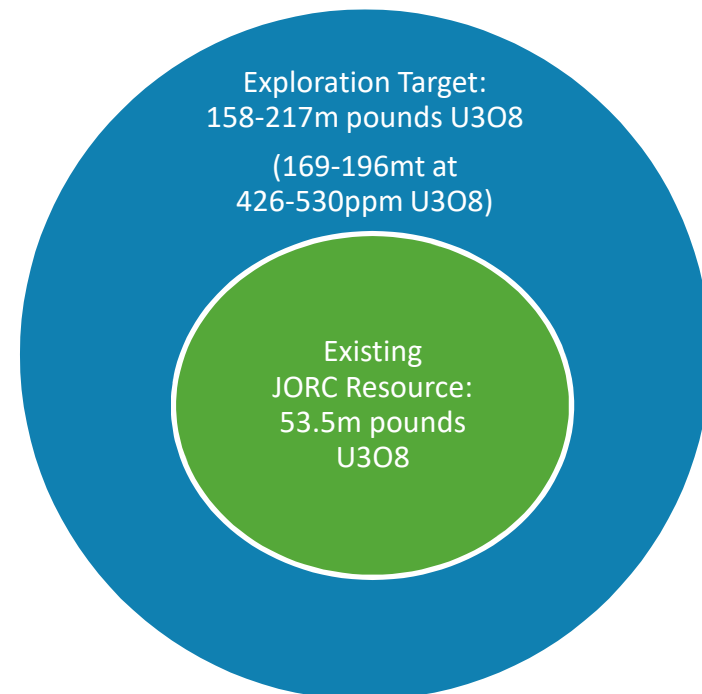
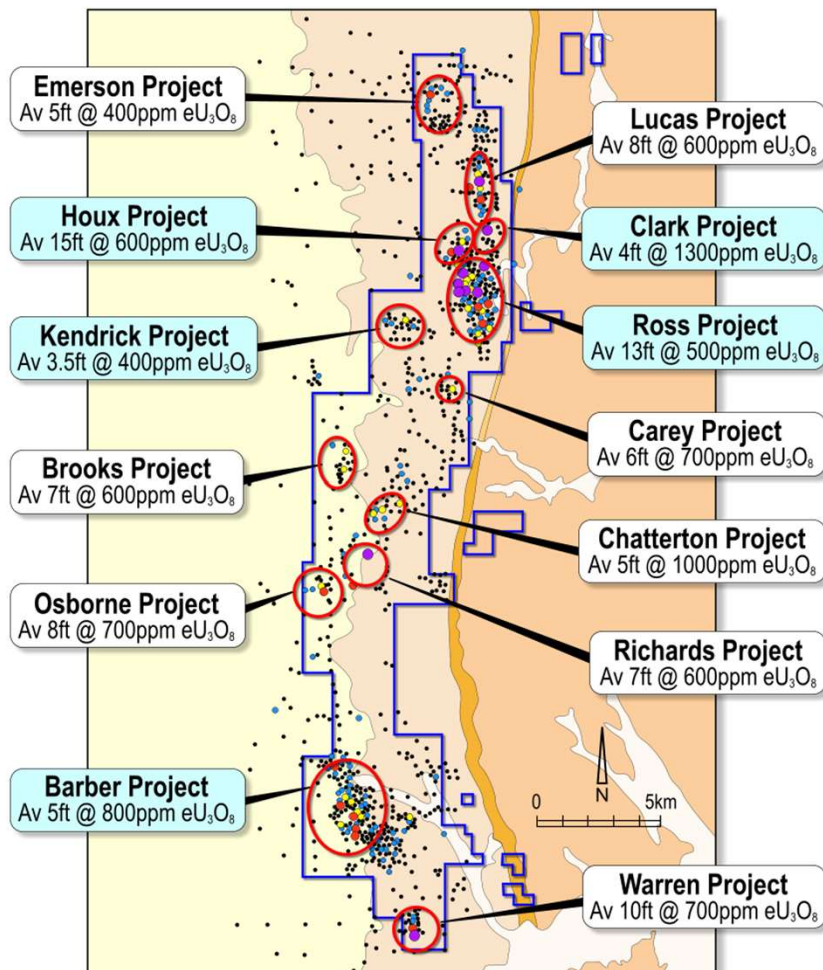
# Premier US Uranium Jurisdiction

- Wyoming is a premier US uranium extraction jurisdiction, hosting multiple licensed facilities



# District Scale Mineral Rights Holdings

- Large JORC defined resource with substantial upside potential
- Rights held for over 24 mile long N-S trend in known uranium district



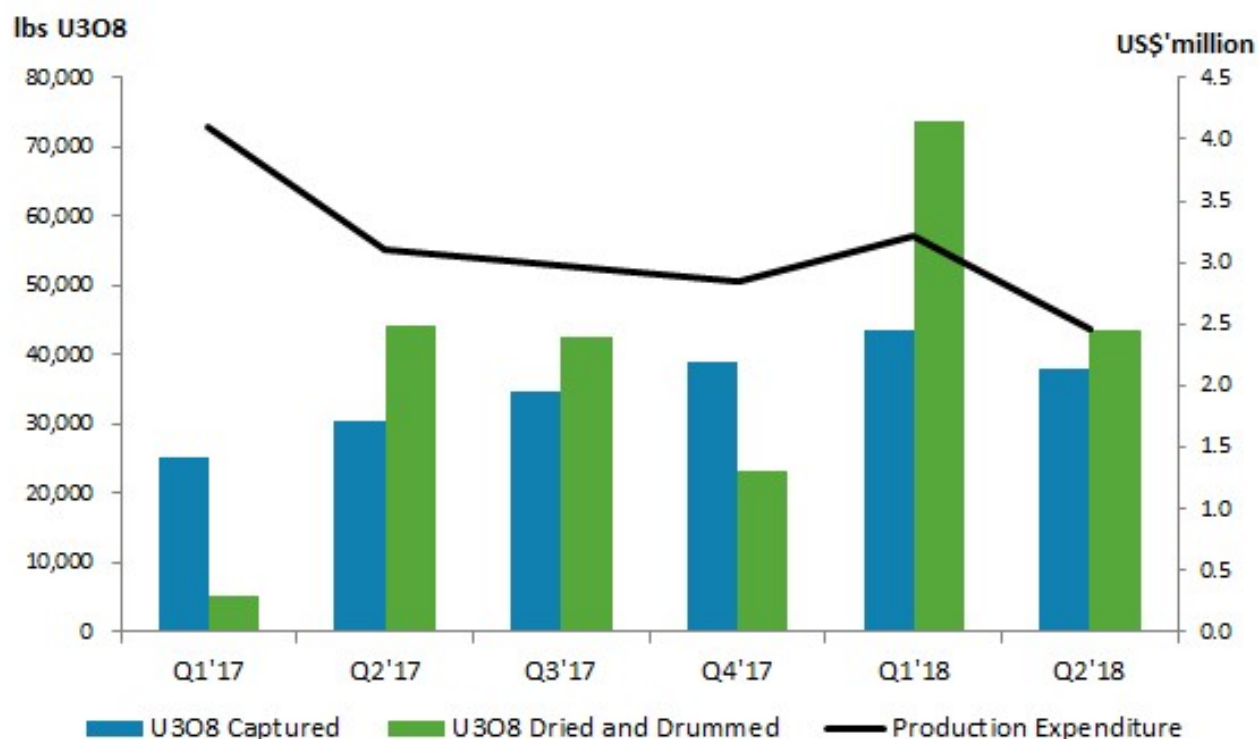
*Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer Appendix 3.*

# Lance - Steady Production Results

- **Demonstrating consistency with quarterly production rates**

- 38,001 lbs produced; 43,553 lbs dried & drummed in 2Q18
- Production in Mine Unit 1 significantly cutback to preserve more “pounds in the ground” for low pH operations
- Tightly controlled production expenditures

## Quarterly Production and Expenditure





# Unlocking the Full Potential of Lance

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- Low pH ISR transformation initiative is being actively advanced

## High Potential

- Potential to transform the performance and cost profile
- Feasibility Study release expected in September 2018

## Short Timeline

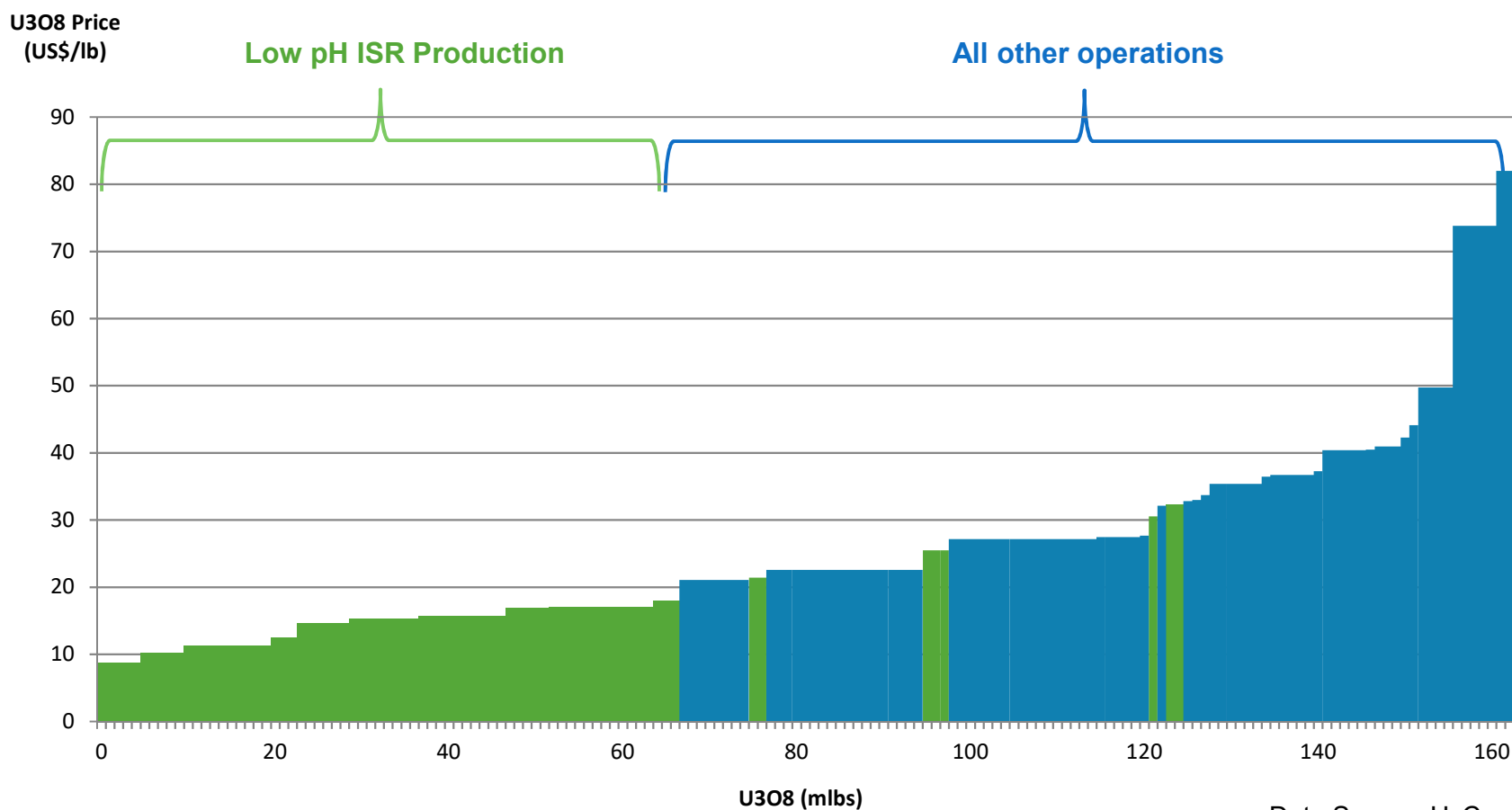
- Permit and licence amendments submitted to regulator and under review, expected approvals in mid-CY2019
- Plant and wellfield modifications can be implemented while production from alkaline ISR operations continues

## Low Capital Cost

- Low CAPEX required for process equipment modifications
- Initial low pH operations will occur in existing wellfields

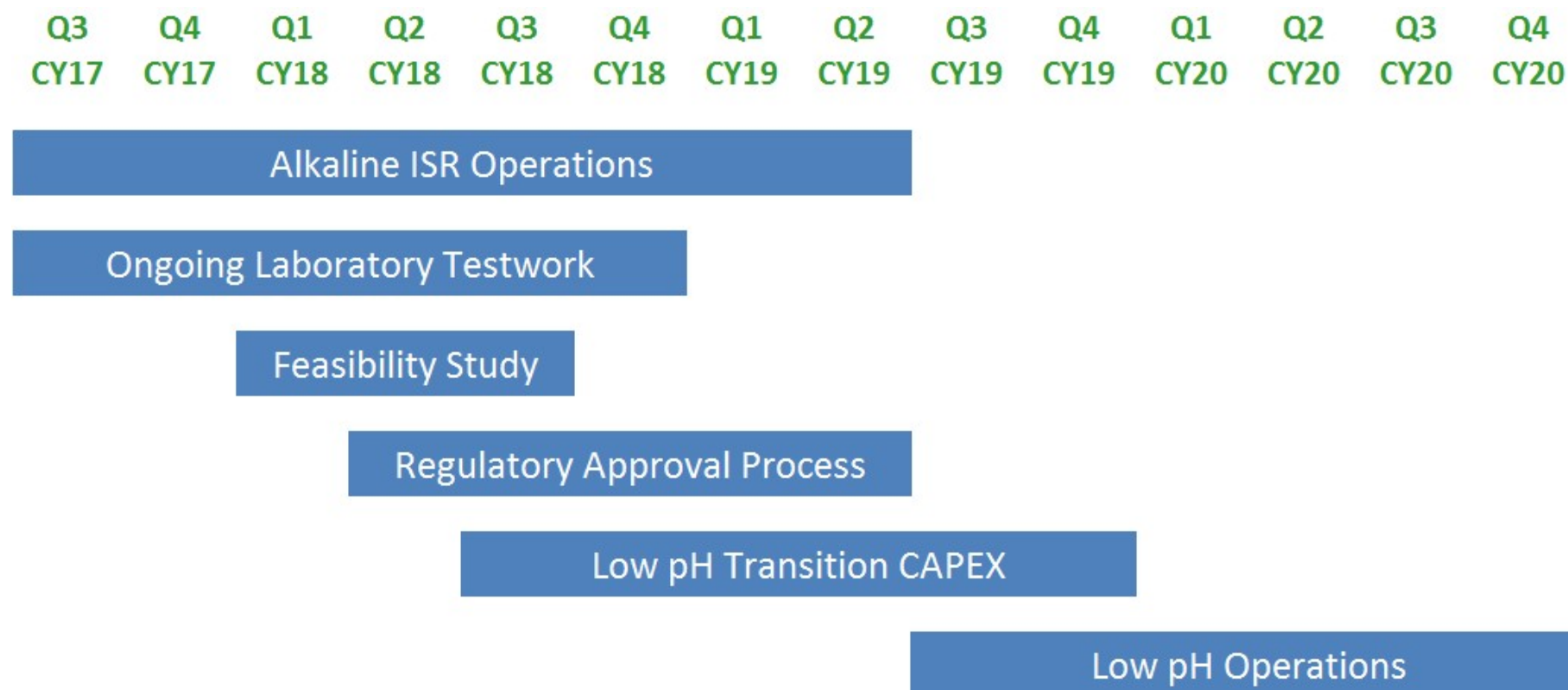
# Why Change Now?

- All 1<sup>st</sup> quartile uranium operations globally are in-situ recovery (ISR) facilities that utilize a low pH lixiviant
- Low pH ISR leads the way



Data Source: UxC

# Timeline for Low pH ISR Transformation



- Low pH transition CAPEX in MU1 and process plant to be carried out parallel to regulatory approval process
- Low pH transition within MU2 can be carried out with ongoing operations in MU1

## 1. CAPEX and OPEX

- Feasibility Study to outline Lance life-of-mine OPEX & NPV
- Minimal CAPEX required
  - Changing process chemistry, not the underlying processes
  - Only minor facility modifications are required up front

## 2. Ongoing production operations and sales revenue

- 10 operational header houses support ongoing production operations
- Product sales agreements generate predictable cash inflow

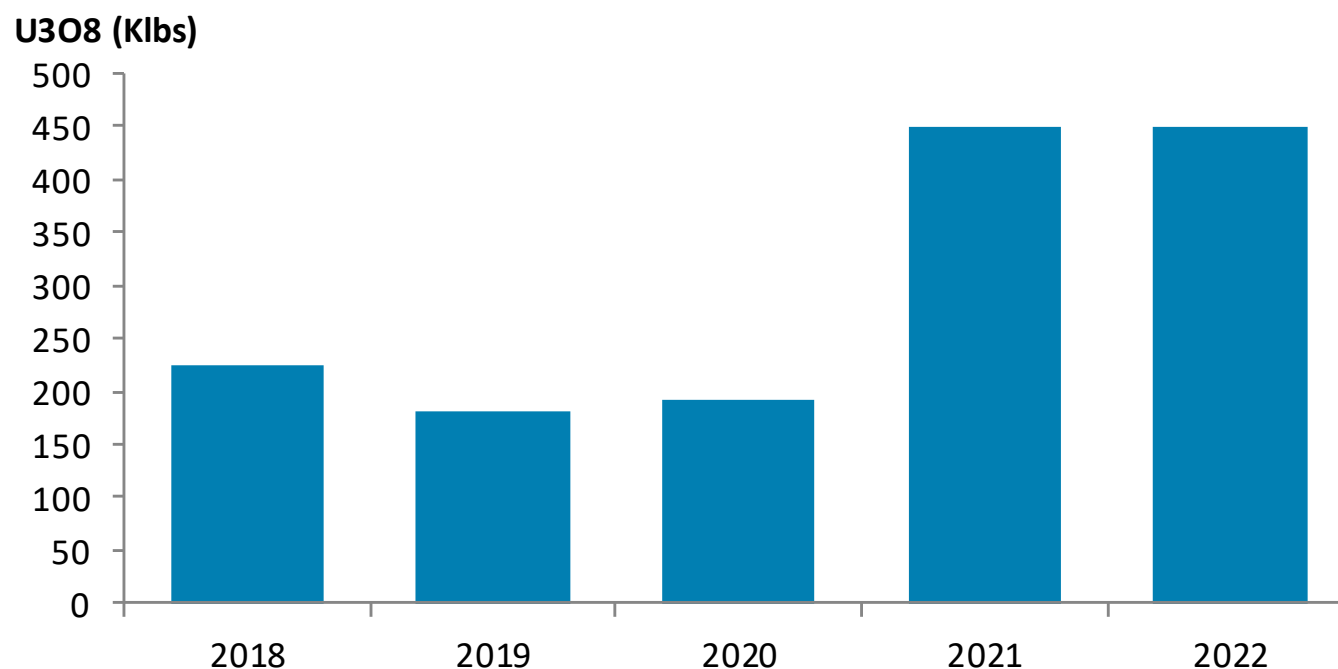
A photograph of an industrial facility, likely a uranium processing plant. Several large, white, cylindrical tanks are arranged in rows, connected by a network of black pipes and metal supports. The tanks have green-rimmed openings at the top, some with black caps. The background shows a corrugated metal wall and other industrial structures.

# Uranium Sales & Marketing

# Substantial Long Term Sales Contracts

- Long term sales contracts underpin Peninsula's business
- CY2018 forecast deliveries of 225,000 lbs of U3O8

## 5-Year Sales Profile (\*)



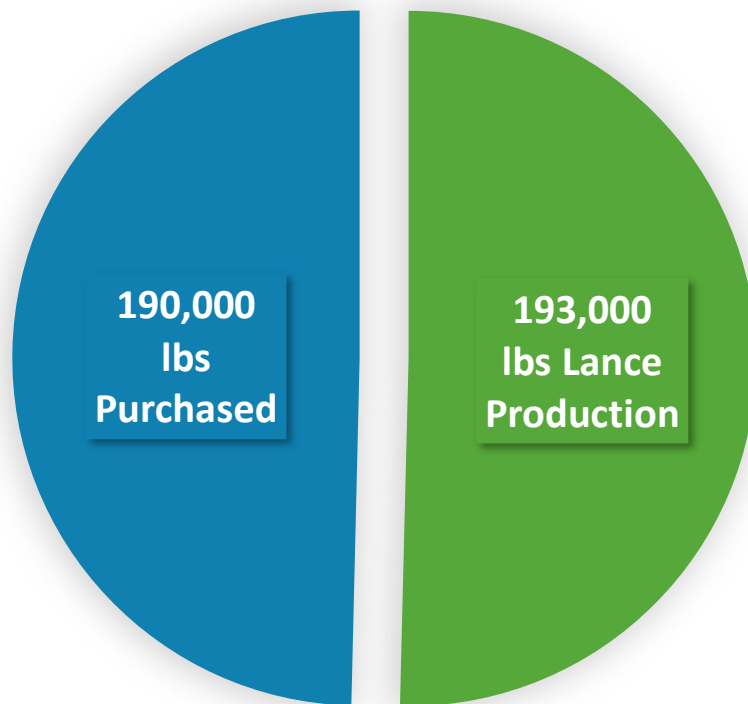
(\*) Committed deliveries only and excludes optional delivery quantities that customers may elect from 2021 onwards.



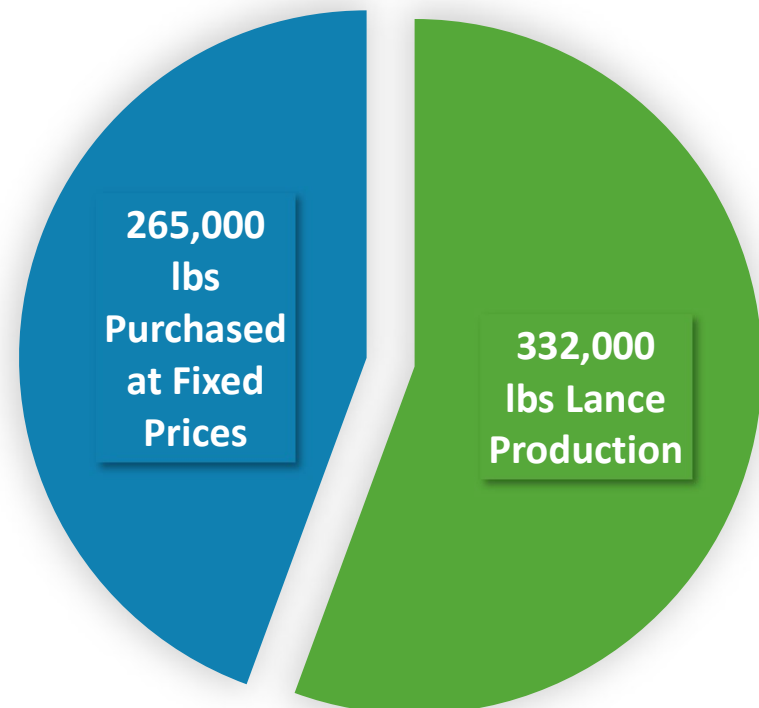
# Flexible Sales Strategy

- **Maximizing returns by blending production with spot purchases**
  - 2017 deliveries were filled by Lance production and purchases
- **Remaining deliveries for 2018 through 2020 have flexible origin clauses allowing seller optionality**

**2017 Sales Composition**



**2018-2020 Planned Sales Composition**



# Unlocking the Value of the Contracts

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- **Significant contract portfolio carries through year 2030**
  - Up to 6.5 million pounds  $U_3O_8$  remaining under contract through 2030
    - 4.6 million pounds  $U_3O_8$  committed deliveries through 2030
    - Up to 1.9 million pounds  $U_3O_8$  optional at customer election between 2021 and 2026
  - Term contracts weighted price between **US\$51-53/lb**  $U_3O_8$
  - Next scheduled sale: First week of October 2018

# Conclusion



# Peninsula Energy Take-Away Points

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## U.S. Domestic Producer

- Peninsula is well positioned to benefit from current market trends

## Long Life Project

- Lance has the largest defined US uranium resource currently in production

## Valuable Contract Book

- Up to 6.5M lbs sales contracted through 2030
- Term contracts weighted price between **US\$51-53/lb**  $U_3O_8$

## Financial Strength

- Robust cash position with reliable income generation

## Unlocking Value

- Clearly defined and focused strategy to enhance shareholder value





## Contact Details

### REGISTERED OFFICE

Unit 32/33, Level 3, 22 Railway Road  
Subiaco, Western Australia 6008  
Australia

[www.pel.net.au](http://www.pel.net.au)  
[info@pel.net.au](mailto:info@pel.net.au)

### FURTHER INFORMATION

**Wayne Heili** Managing Director +61 8 9380 9920

**David Coyne** Finance Director / CFO +61 8 9380 9920

# Appendix 1 - Board and Management

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## Board

<b>John Harrison</b> , Non-Executive Chairman	<i>Capital Markets</i>
<b>Wayne Heili</b> , Managing Director & CEO	<i>Exec. Leadership &amp; Technical</i>
<b>David Coyne</b> , Finance Director & CFO	<i>Finance &amp; Risk Management</i>
<b>Harrison (Hink) Barker</b> , Non-Executive Director	<i>Nuclear Fuel Markets</i>
<b>Mark Wheatley</b> , Non-Executive Director	<i>Mining CEO &amp; ISR Technical</i>
<b>Evgenij Iorich</b> , Non-Executive Director	<i>Buy Side Capital Markets</i>

## World Class Management Team

<b>Ralph Knode</b>	<i>CEO USA</i>
<b>David Hofeling</b>	<i>CFO USA</i>
<b>Mike Brost</b>	<i>VP Geology USA</i>
<b>Jay Douthit</b>	<i>VP Operations USA</i>
<b>Mike Griffin</b>	<i>VP Permitting, Regulatory &amp; Environment USA</i>
<b>Willie Bezuidenhout</b>	<i>CEO South Africa</i>



## Appendix 2 - Lance JORC Resource

Classification	Tonnes (million)	U3O8(kg)	Grade (ppm U3O8)	U3O8(lbs)
Measured	3.7	2.0	489	4.3
Indicated	10.0	5.1	466	12.7
Inferred	37	17.5	463	36.5
<b>Total</b>	<b>50.7</b>	<b>24.6</b>	<b>473</b>	<b>53.5</b>

*<sup>2</sup>JORC Table 1 included in an announcement to the ASX released on 27th March 2014: "Company Presentation – Mines and Money Hong Kong". Peninsula confirms that 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 estimates 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 been materially modified from the original market announcement.*

# Appendix 3 - Lance Exploration Target

## Additional Disclosure

### Exploration Target

The Lance Projects cover a significant proportion of the Powder River Basin Cretaceous sandstones of Wyoming, which are believed to represent an Exploration Target of between 158 and 217mlbs  $U_3O_8$  which includes 54mlbs of existing JORC (2012) Code compliant resource.

### Lance Projects Exploration Target (including the existing JORC (2012) Code Compliant Resource)

Exploration Target	Tonnes (million)		Grade (ppm $eU_3O_8$ )		$eU_3O_8$ (mlbs)	
	From	To	From	To	From	To
Total	169	196	426	530	158	217

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### Basis of Exploration Target

Exploration Target is based on a combination of Exploration Results and on proposed exploration programs.

### Exploration Results

Approximately 7,500 drillholes, of which over 2,500 have been drilled and PFN logged since 2009. The data from these holes has been used to determine a JORC (2012) Code compliant resource and to extrapolate between areas of limited drilling but still within the mineralised trends.

### Proposed Exploration Programs

The Company has minerals rights and surface access rights to 122.2 square kilometres and 107.8 square kilometres respectively. This package covers the most prospective mineralised redox /roll front trends that have a cumulative strike length of over 300km. The Company intends to continue exploration over this ground with drilling in order to validate the exploration target and convert to resources.

# Appendix 3 - Lance Exploration Target

## Additional Disclosure

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### **Basis of Grade and Tonnage Range Determination**

With a database of approximately 7,500 drillholes together with several decades of geological research the level of exploration activity on which the Exploration Target is based, is considered to be high.

The known Lance resources are located in the upper Lance Formation and in the lower Fox Hills horizons in which roll fronts have been identified over a cumulative length of over 300kms. These horizons have only been partially explored and towards the south (Barber area) the lower unit of the Fox Hills has not been systematically tested. Along these channels JORC-compliant resources have been estimated in localised areas in which reliable drilling data is available. The zones between the JORC (2012) Code compliant resource areas form the Exploration Target because of the following:

- Continuity of the prospective sandstone established by geological mapping and regional drilling
- Historic estimates of mineralisation based on drilling which has not yet been validated by Peninsula

The Exploration Target is based on a combination of:

- A tonnage calculation that incorporates the total cumulative prospective strike length of the identified redox fronts multiplied by the average width, thicknesses as determined in the resource estimate,
- The grade range represents the lowest resource area grades and highest resource area grades

### **Summary of the Relevant Exploration Data Available and the Nature of the Results**

For a comprehensive description of drilling information readers are referred to JORC Table 1 at the end of this presentation.

### **Proposed Exploration Activities Designed To Test Validity of the Exploration Target**

Over the life of mine ongoing exploration drilling is proposed to expand the JORC (2012) Code compliant resource within the Exploration Target areas. This initial program will be focussed on the Kendrick area. Exploration activities will mostly comprise geophysical logging of additional drillholes.

### **Lance Projects Competent Person Statement**

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