



6 September 2018

Companies Announcement Office
Via Electronic Lodgement

PRESENTATION AT H.C. WAINWRIGHT CONFERENCE

Please find attached a copy of the presentation made overnight by Peninsula Energy Limited's Managing Director/CEO Mr Wayne Heili at the H.C. Wainwright 20th Annual Global Investment Conference in New York.

A video recording of the presentation may be viewed at the following link:

<http://wsw.com/webcast/rrshq28/pen.ax/>

A copy of the presentation will also be available on our website at www.pel.net.au.

Yours sincerely

A handwritten signature in black ink, appearing to be "DC", written in a cursive style.

David Coyne
Finance Director & CFO

UNLOCKING THE FULL POTENTIAL

20th Annual Global Investment Conference | H.C. Wainwright & Co. | September 2018



PENINSULA
ENERGY LIMITED

 **ASX**
ASX:PEN

Disclaimer & Competent Person



This presentation is provided on the basis that the Company nor its representatives make any warranty (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in the Presentation and nothing contained in the Presentation is, or may be relied upon as, a promise, representation or warranty, whether as to the past or the future. The Company hereby excludes all warranties that can be excluded by law. The Presentation contains material which is predictive in nature and may be affected by inaccurate assumptions or by known and unknown risks and uncertainties, and may differ materially from results ultimately achieved.

The Presentation contains “forward-looking statements”. All statements other than those of historical facts included in the Presentation are forward-looking statements including estimates of resources, timing of permit and license amendments, and rates of uranium extraction and recovery. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, uranium price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any “forward-looking statement” to reflect events or circumstances after the date of the Presentation, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws. All persons should consider seeking appropriate professional advice in reviewing the Presentation and all other information with respect to the Company and evaluating the business, financial performance and operations of the Company. Neither the provision of the Presentation nor any information contained in the Presentation or subsequently communicated to any person in connection with the Presentation is, or should be taken as, constituting the giving of investment advice to any person.

This presentation shall not constitute an offer to sell or solicitation of an offer to buy securities of the Company, and the securities of the Company may not be offered or sold in any jurisdiction in which their offer or sale would be unlawful.

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



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

- **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 U3O8²

Step Change for Lance

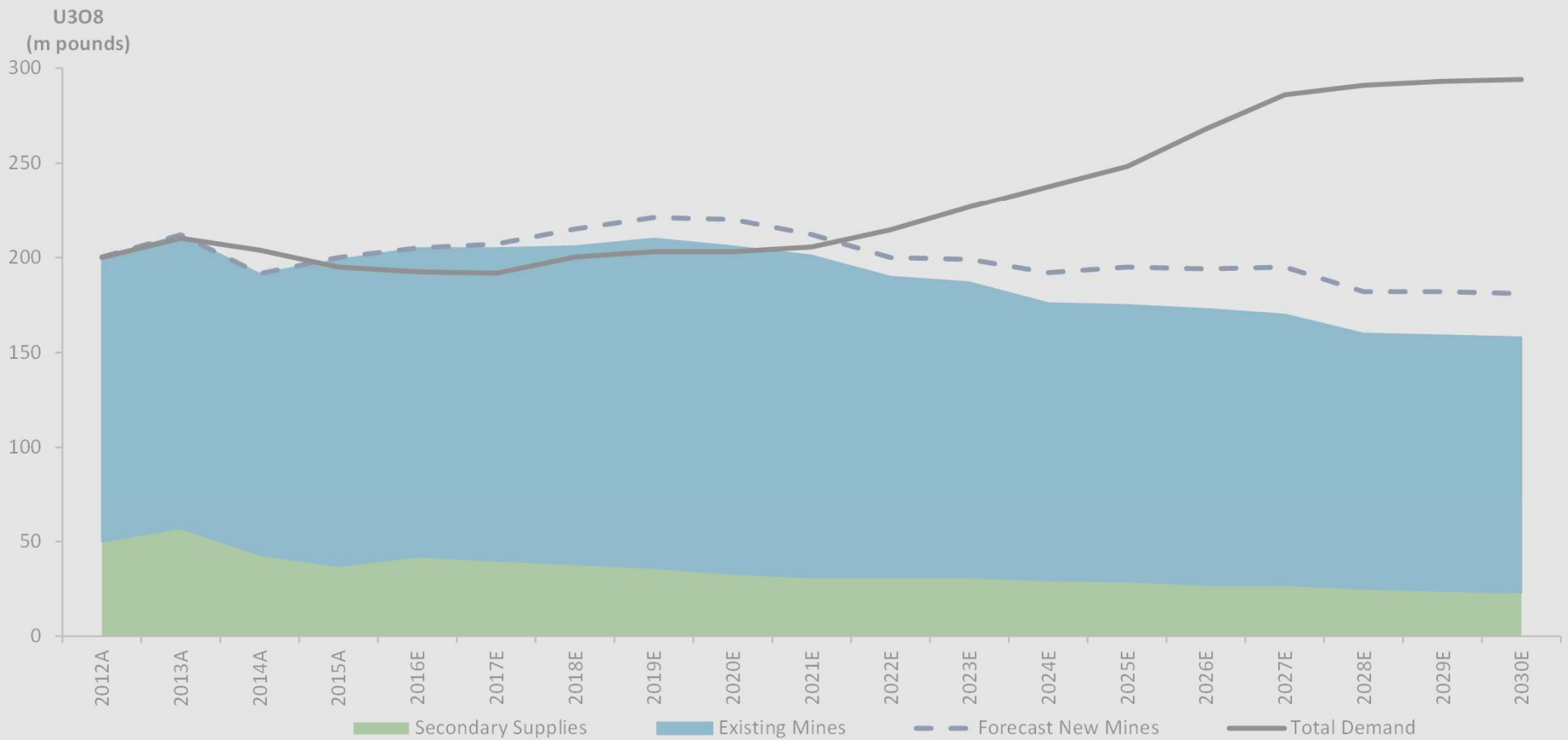
- Convert Lance to low pH ISR operations in 2019/2020
- License amendments submitted in early April 2018

Growth

- Building production capacity during the bottom of the market cycle

- **2020 Vision: Peninsula capitalizing on uranium market rebound with 1st 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

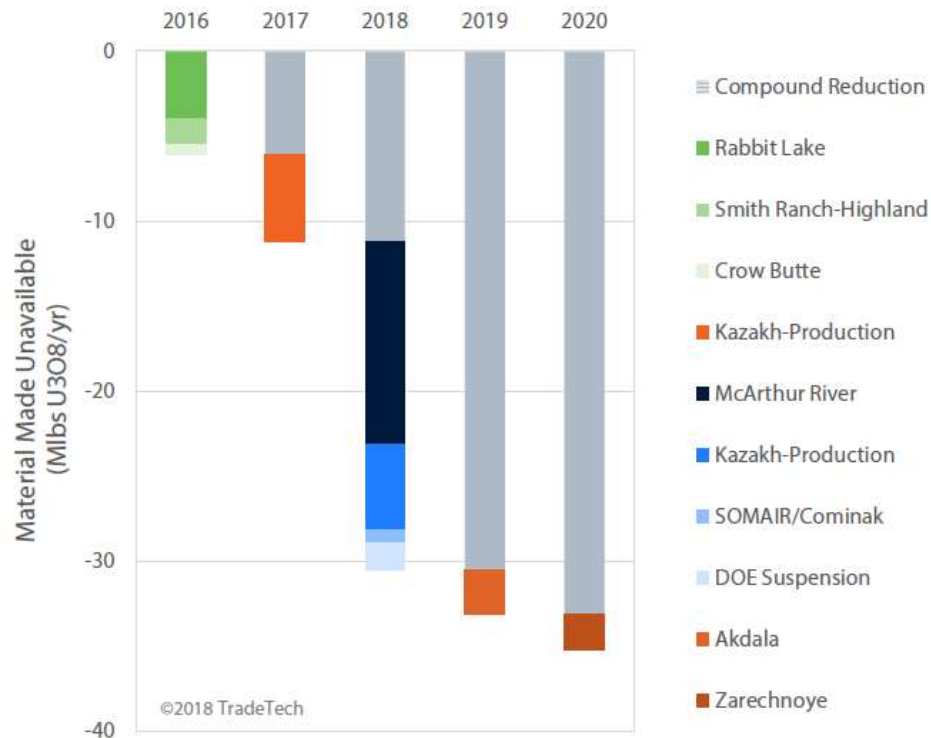


- Uranium is sold in spot & term markets
- Utilities have been buying from spot for several years
- Spot market supply depth is being tested by producer/investor buying
- Term market is opening up
- Both markets are still well below industry's average cost of production

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 U₃O₈/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

A photograph of an industrial facility, likely a water treatment plant, featuring a complex network of large pipes and machinery. A prominent white pipe runs horizontally across the upper middle of the frame. Below it, a grey pipe is supported by a metal structure. In the foreground, there are several red-handled valves and a blue motor. The background shows more industrial equipment and a yellow wall.

Lance ISR Project | Wyoming, USA

Lance - Our Flagship Project

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

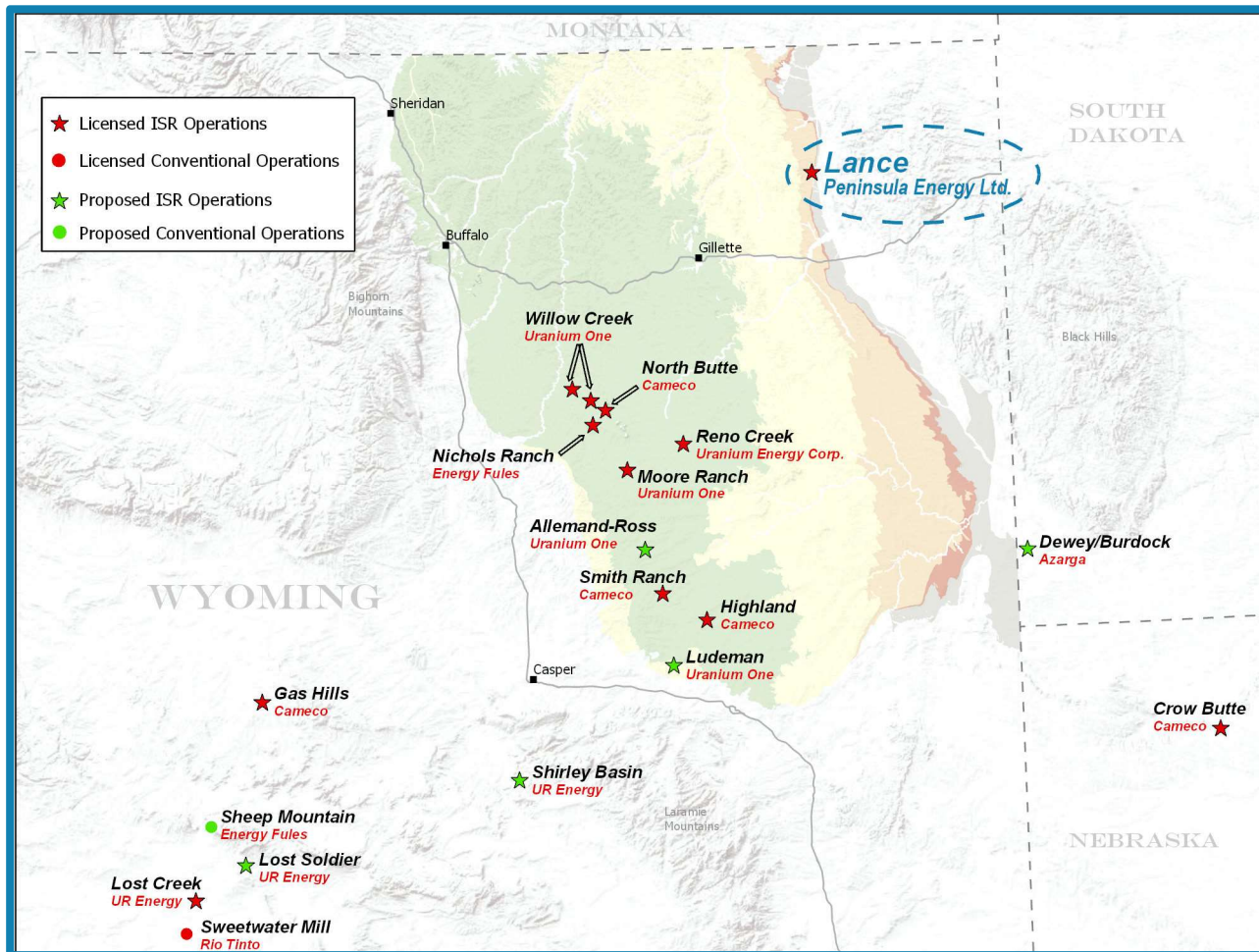
- Working to transform Lance performance and cost profile using low pH ISR process – watch for our Feasibility Study!

Scalable Production

- Lance is licensed to produce 3M lbs U3O8 per annum
- 53.5M lbs U3O8 JORC (2012) compliant resource base²

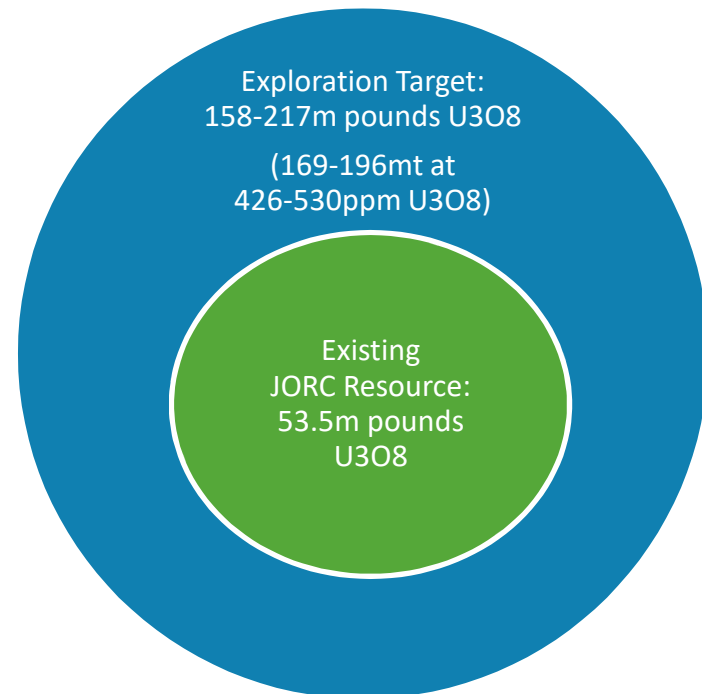
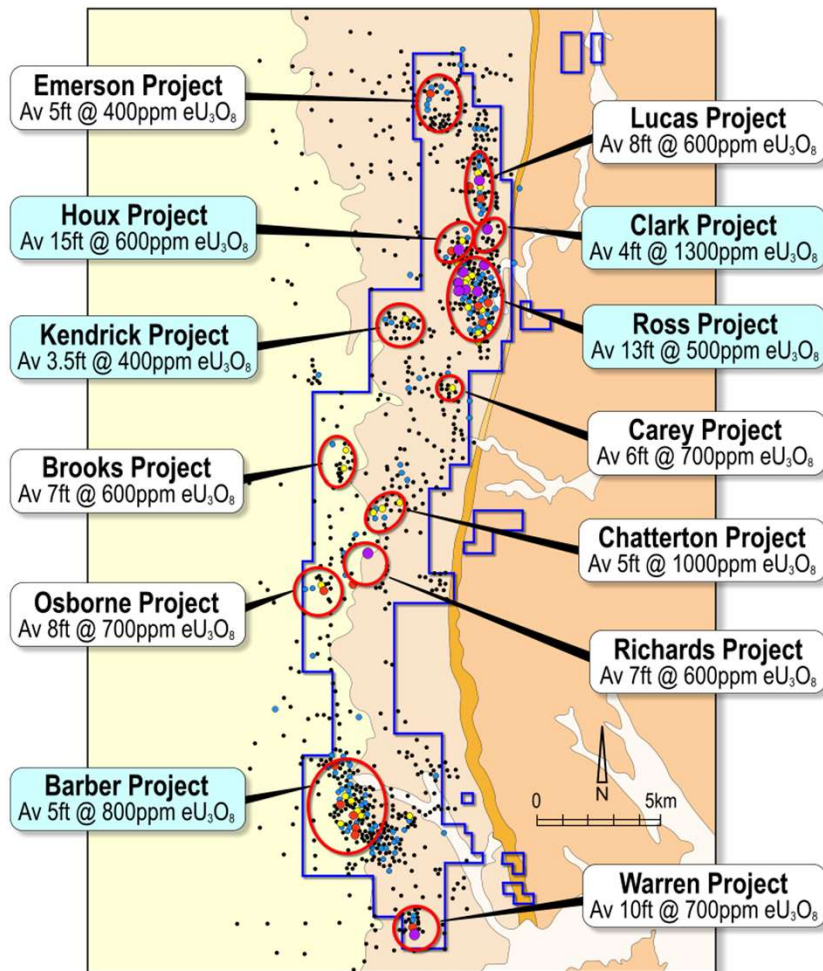
Premier US Uranium Jurisdiction

- 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



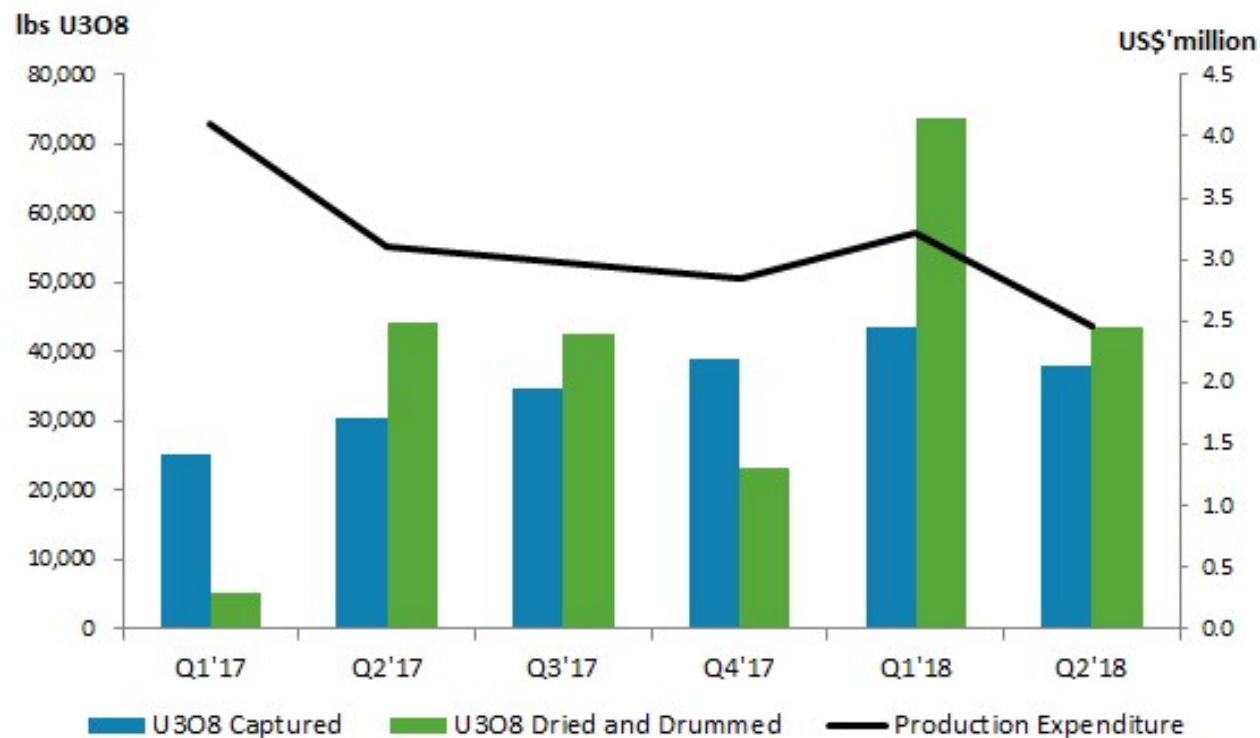
Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" in this presentation must be considered conceptual in nature as there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration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

- **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

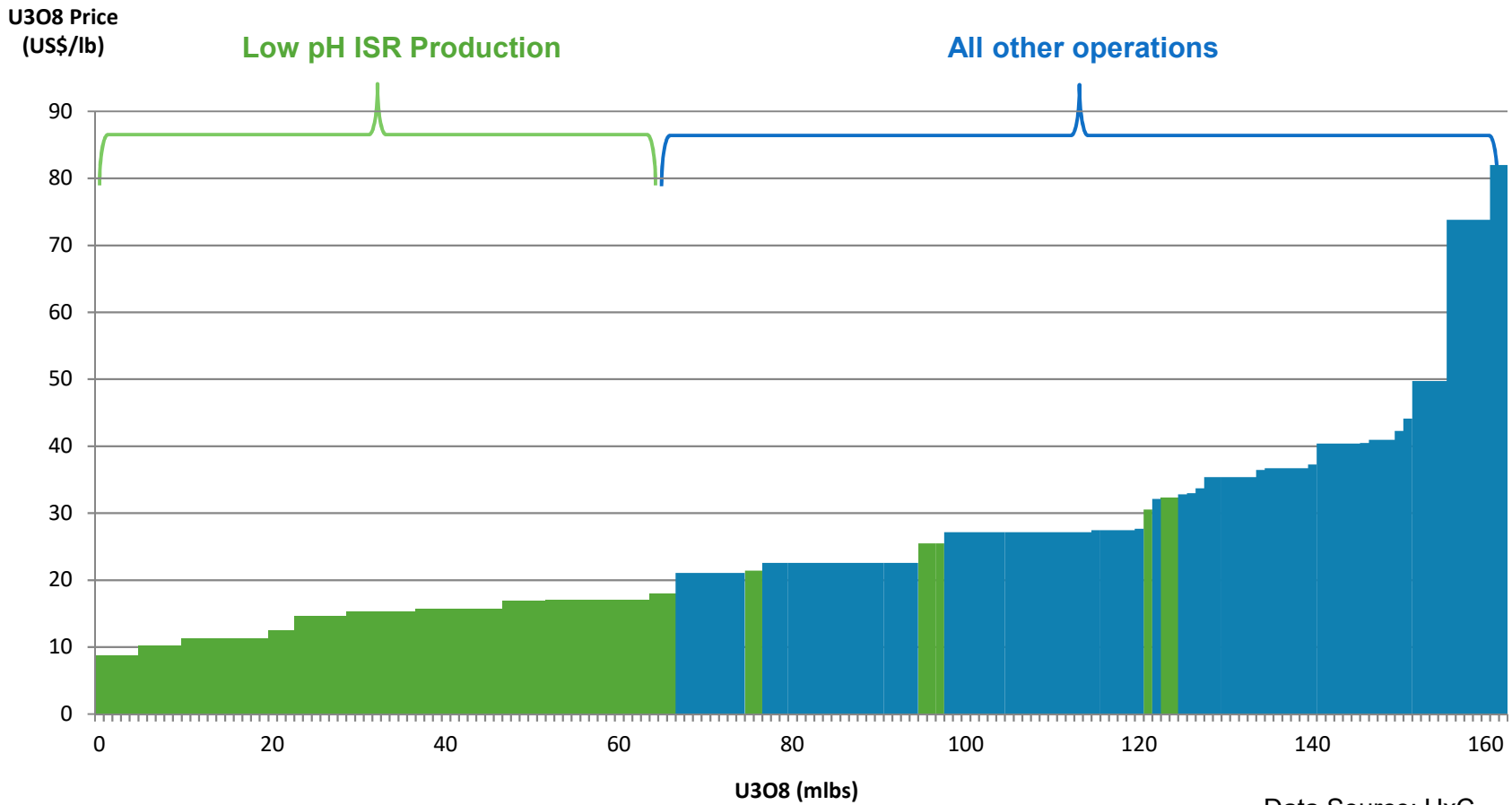
- Permit and licence amendments submitted to regulator and under review, expected approvals in mid-CY2019
- Plant and wellfield modifications can be implemented while production from alkaline ISR operations continues

Low Capital Cost

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

Why Change Now?

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

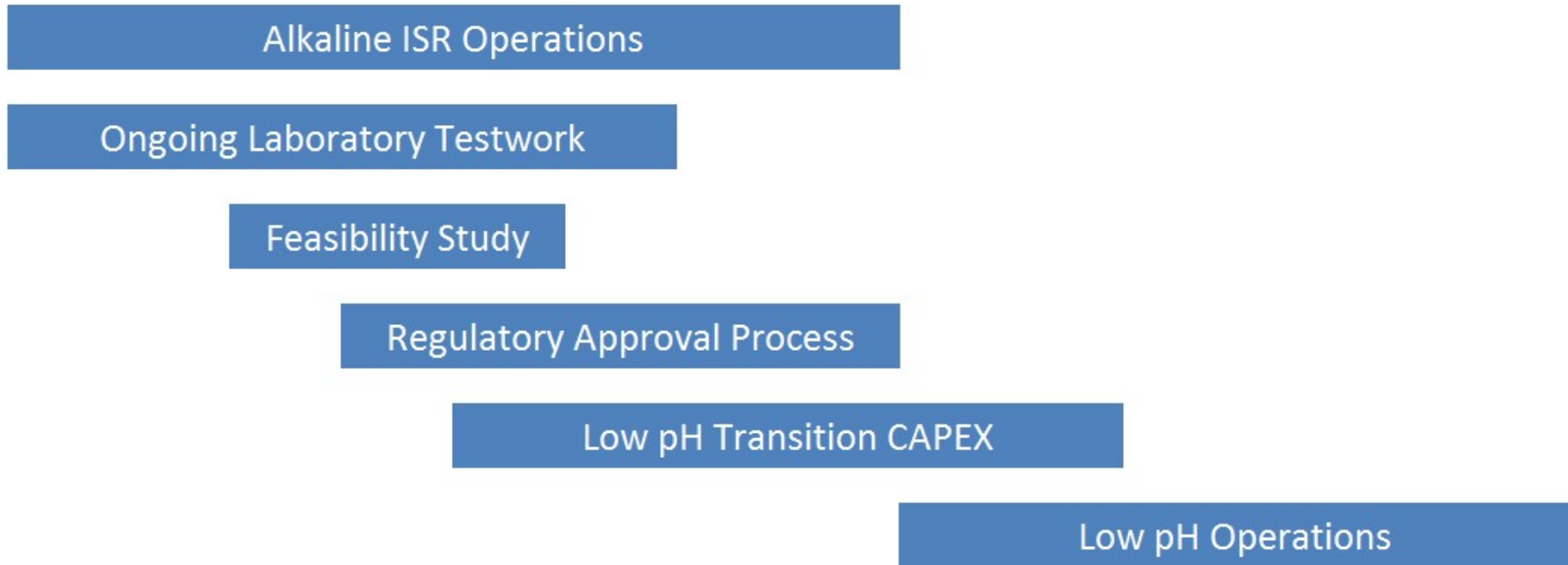


Data Source: UxC

Timeline for Low pH ISR Transformation



Q3 CY17 Q4 CY17 Q1 CY18 Q2 CY18 Q3 CY18 Q4 CY18 Q1 CY19 Q2 CY19 Q3 CY19 Q4 CY19 Q1 CY20 Q2 CY20 Q3 CY20 Q4 CY20



- 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



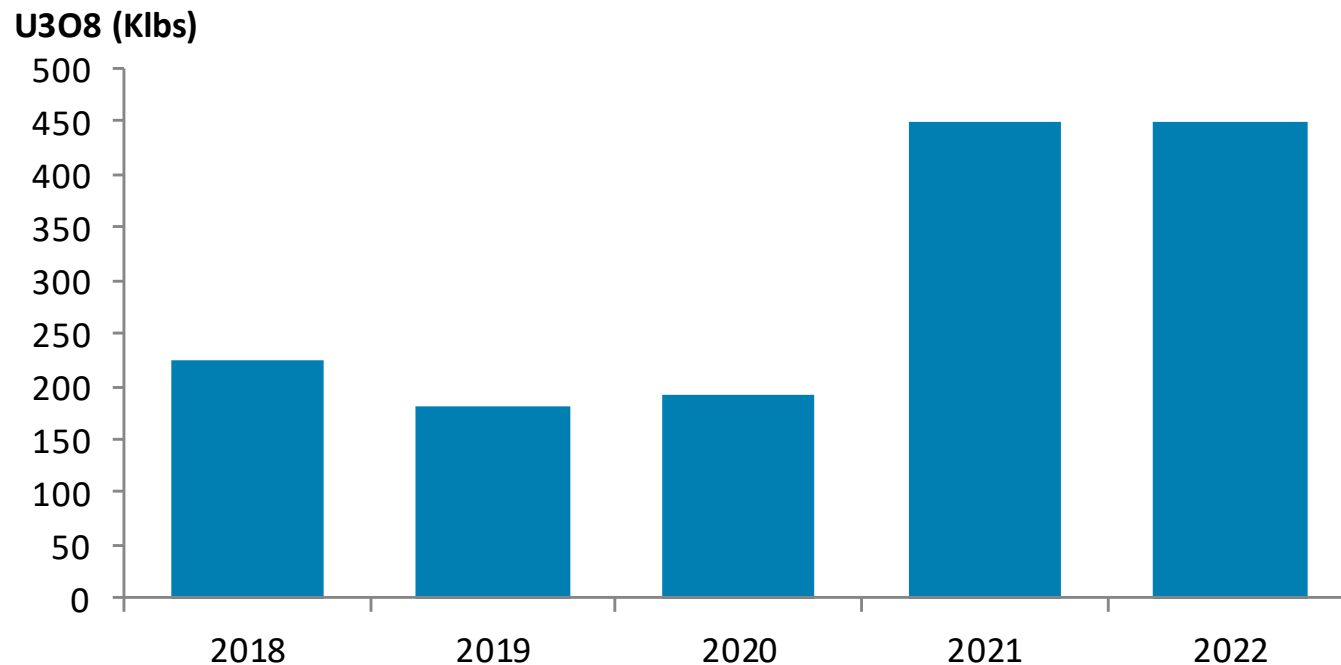
Uranium Sales & Marketing

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 (*)

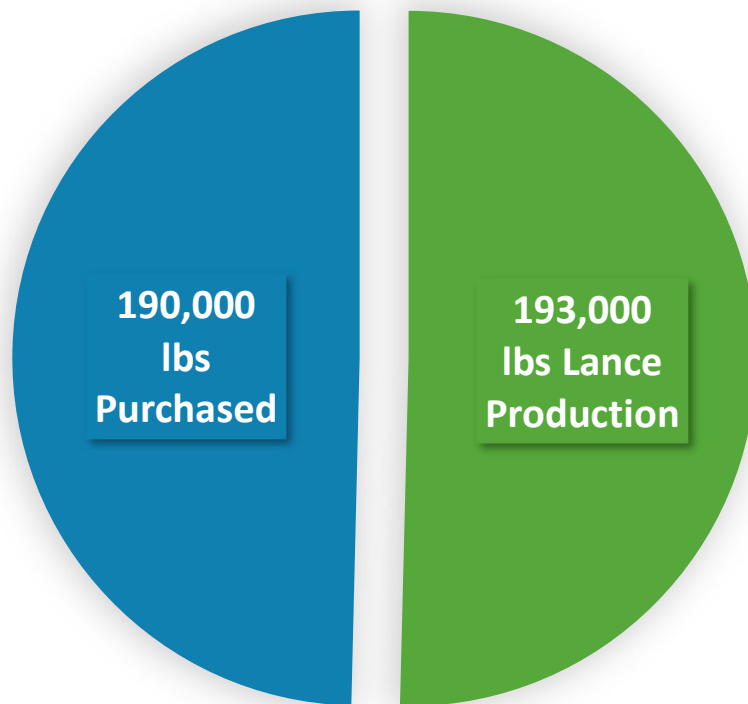


(*) Committed deliveries only and excludes optional delivery quantities that customers may elect from 2021 onwards.

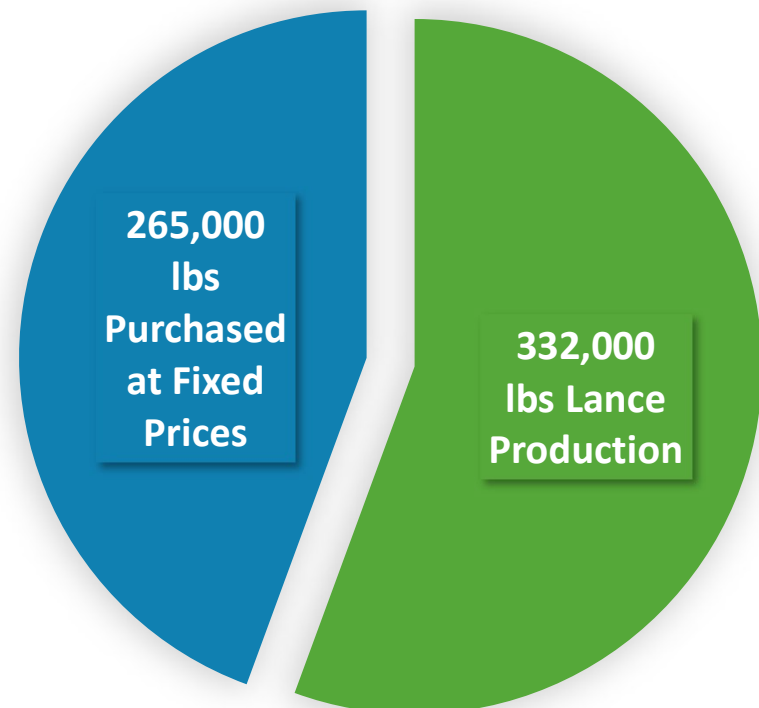
Flexible Sales Strategy

- **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

- **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



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** U₃O₈

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
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



Board

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

World Class Management Team

Ralph Knode	<i>CEO USA</i>
David Hofeling	<i>CFO USA</i>
Mike Brost	<i>VP Geology USA</i>
Jay Douthit	<i>VP Operations USA</i>
Mike Griffin	<i>VP Permitting, Regulatory & Environment USA</i>
Willie Bezuidenhout	<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
Total	50.7	24.6	473	53.5

²JORC 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 Basin Cretaceous sandstones of Wyoming, which are believed to represent an Exploration Target of between 158 and 217mlbs U₃O₈ 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 ₃ O ₈)		eU ₃ O ₈ (mlbs)	
	From	To	From	To	From	To
Range						
Total	169	196	426	530	158	217

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.

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

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

The information in this presentation that relates to Exploration Targets, Exploration Results and Exploration Potential at the Lance Projects is based on information compiled by Mr. Jim Guilinger. Mr. Guilinger is a Member of a Recognized Overseas Professional Organization 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. Guilinger is Principal of independent consultants World Industrial Minerals. Mr. Guilinger has sufficient experience which is relevant to the style of mineralization 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. Guilinger consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.