

31 MARCH 2016 QUARTERLY ACTIVITIES REPORT

29 April 2016

ASX: PEN, PENOD

Peninsula Energy Limited
ABN 67 062 409 303

Directors

John Harrison - Non Exec Chairman
Gus Simpson - Managing Director/CEO
Warwick Grigor - Non Exec Director
Richard Lockwood - Non Exec Director
Evgenij Iorich - Non Exec Director
Harrison Barker - Non-Exec Director
Mark Wheatley - Non-Exec Director

Management

Gus Simpson - CEO
Ralph Knode - CEO, Strata Energy Inc
David Coyne - CFO

Jonathan Whyte - Co Secretary

Head Office

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100 Railway Road
Subiaco WA 6008

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Website

www.pel.net.au

Capital Structure

176.4 million shares
44.3 million \$2.00 2018 options

Cash at 31 March 2016

\$3.8 million

Market cap at 31 March 2016

\$165.8 million

For further information please
contact:

info@pel.net.au



HIGHLIGHTS

WYOMING, USA – LANCE URANIUM PROJECTS

- Production ramp up continues at Lance Projects including:
 - 2nd header house brought online during the quarter
 - 3rd header house brought online in April
 - 3.3% daily average head grade increase over last 6 weeks
 - Head grade already increased to 72% of forecast Life of Mine average
- Target minimum sodium bicarbonate levels achieved on 10 March increasing the rate of uranium extraction
- Recovery rates set to increase during 2nd quarter with 3 header houses now on line
- Production well flow rates continue to be above expectations, confirming ore body permeability
- CPP and well field systems continue to operate as expected

URANIUM SALES AND MARKETING

- 4,000,000 pound U3O8 agreement signed with major European utility
- 2 new requests for product (RFP's) received in April
- Peninsula currently has 7,900,000 pounds under five contracts with major utilities located in the US and Europe
- Projected revenue under existing long term contracts is US\$440 million
- Weighted average delivery price next 10 years is US\$56/lb U3O8

SOUTH AFRICA – KAROO URANIUM PROJECTS

- Further high grade intercepts at Rietkuil
- New RSA CEO appointed for 1 June start

CORPORATE

- US\$15m project funding secured
- US\$25m Revenue Streaming term sheet for Stage 2 expansion signed and due diligence at an advanced stage
- Additional corporate and uranium expertise added to the Board
- Cash as at 31 March 2016 of A\$3.8m (Cash at 29 April – A\$17.8m)



WYOMING, USA – LANCE PROJECTS

(Peninsula Energy 100%)

PENINSULA AUSTRALIA & WYOMING'S LATEST URANIUM PRODUCER

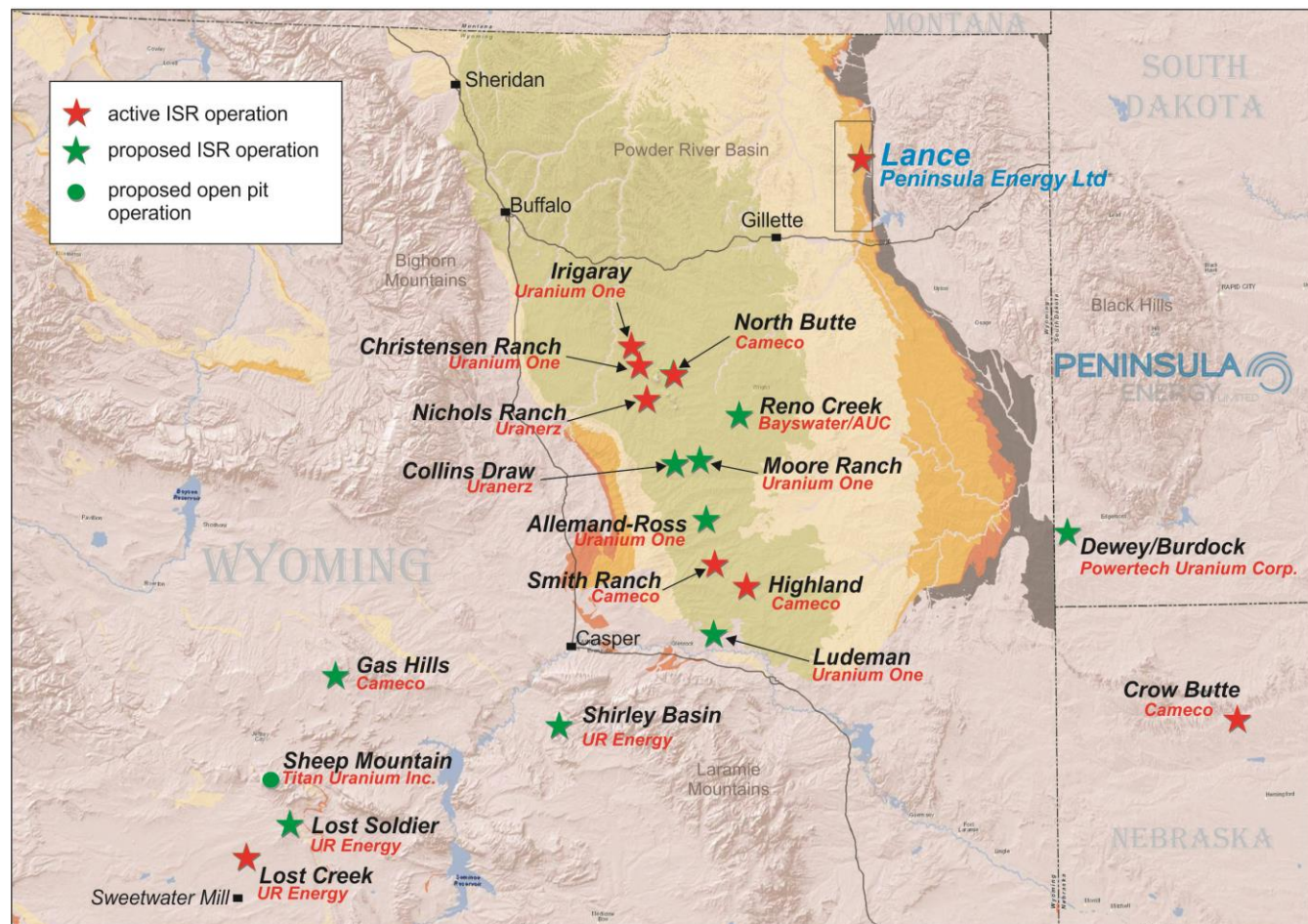


Figure 1: Lance Projects location, Wyoming USA

Production ramp up at Lance Projects

Peninsula's wholly-owned subsidiary Strata Energy Inc. (Strata) began in-situ uranium recovery operations from the Ross Permit Area at the Lance Projects in Wyoming, USA in December 2015. To date the Central Processing Plant (CPP) and well field systems are operating as expected as production continues to ramp up.

Since the initial injection of O₂ and CO₂ at the first header house unit on 2 December 2015, production well flow-rates are meeting expectations and substantially confirming the permeability of the ore body, a key risk factor in ISR operations. Production is still early in the ramp-up phase; the second header house came online on 27 January 2016 and the third header house came online on 15 April 2016. Stage One full production will see up to seven header houses in simultaneous operation.

The minimum target level of NaHCO₃ (sodium bicarbonate) rates in the operating header houses was first reached on 10 March 2016. Since that date the uranium head grade has consistently increased by an average of 3.3% per day (170% over the past 6 weeks) across both header houses, substantially confirming the solubility of the uranium and consistent with expectations drawn from the results of pre-operation leach testing performed between 2009 and 2012.

Head grades are already at 72% of forecast life of mine average head grades (38mg/L per production unit) and are at 61% of the equivalent peak head grade (45mg/L per production unit) which is expected to be reached at all seven header houses during the first 12 months of operations. The 4th header house is expected to come online during June and the remaining header houses are forecast to progressively come online during the second half of the 2016 calendar year.

During the quarter 9,134 pounds U_3O_8 were recovered from Lance, the bulk of which has been recovered since 10 March 2016. Regular transportation of uranium rich resin to the Irigaray processing facility for final stripping, drying and packaging commenced during the quarter. With the minimum level of $NaHCO_3$ in the operating wells having been reached and the corresponding increase in the rate of uranium recovery, Peninsula expects to report significantly more recovered uranium in the June quarter and expects to be in a better position to provide production guidance at that time.

As the Lance Projects is still in the early stage of ramp-up, approximately A\$1.76m of operating costs incurred during the quarter have been capitalised as part of the commissioning activities.



Figure 2: Well fields, Lance Projects, Wyoming USA – April 2016

In parallel with the Stage 1 ramp up above, Peninsula is targeting commencement of initial development activities for Stage 2 at the Lance Projects followed by, (subject to completion of the revenue streaming or alternative funding), the commencement of construction of the Stage 2 CPP and the expansion to fourteen well field units. Bringing Stage 2 online is being planned to coincide with the conclusion of the current toll milling agreement, bringing this function in house, when combined with the cost



benefits of increased production and greater economies of scale, is forecast to reduce all-in sustaining cash costs by US\$9-10/lb from US\$41/lb to US\$31-32/lb at steady state Stage 2 production rates.



Figure 3: Header House, Lance Projects – April 2016

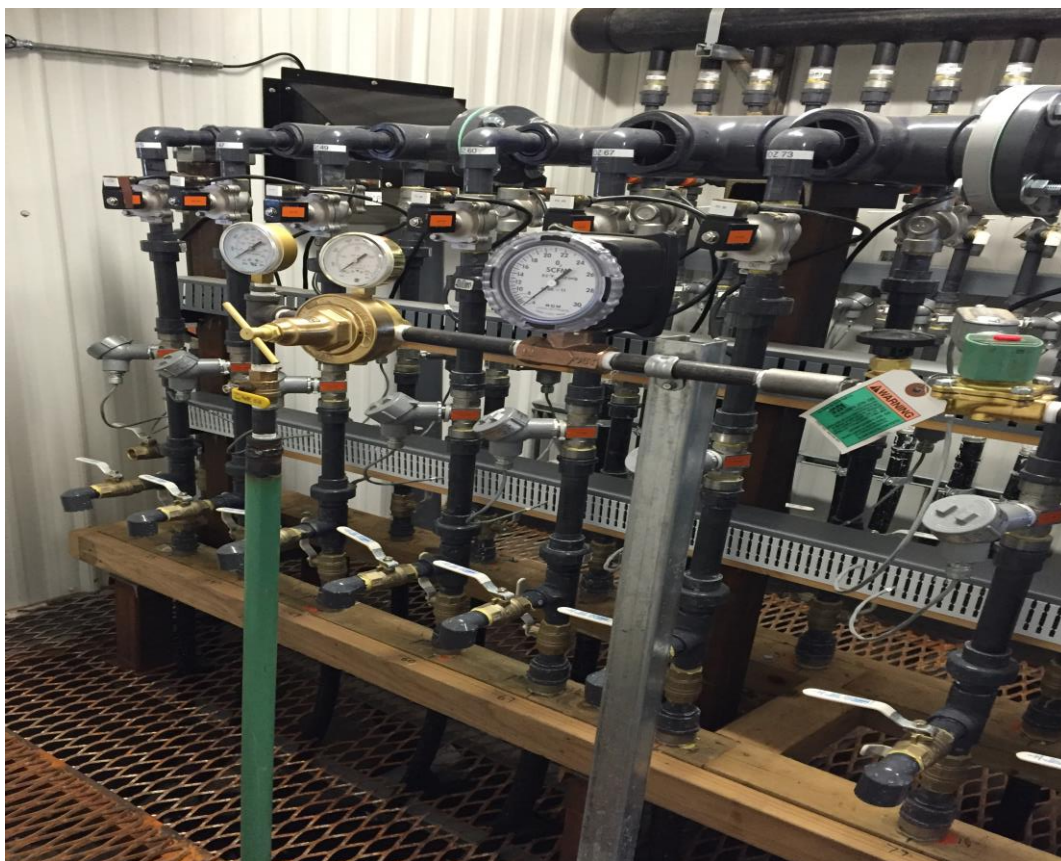


Figure 4: Header House Manifold, Lance Projects – April 2016

Lance Projects Expansion Application Accepted by Nuclear Regulatory Commission

During 2015, Strata submitted a request to the United States Nuclear Regulatory Commission (NRC) to amend its existing license to include Kendrick at the Ross Permit Area (Ross) within the Lance Projects. The NRC staff initiated their acceptance review of the expansion request on 30 September 2015 and during the quarter notified Strata that the application to amend Source Materials License SUA-1601 is complete and has been accepted for detailed technical and environmental review.

Kendrick is adjacent to Ross and under the current life of mine plan is scheduled to come online during the 2019 calendar year to supply uranium to the CPP.

The target timetable published by the NRC indicates that the amendment would be issued during the 2017 calendar year, well in advance of the date required to meet operational requirements.

Project Staffing

As at 31 March 2016, a total of 37 employees are now directly employed on the project (excluding construction and drilling contractor personnel). The majority of personnel hired during the calendar year are residents of Crook County or counties close to the Lance Projects.



Figure 5: Ion Exchange Columns inside CPP, Lance Projects – April 2016



SALES AND MARKETING

Peninsula Completes Sale Agreement with a Major European utility

During the quarter the Company entered into a long term uranium concentrate sale and purchase agreement with a major European utility and nuclear industry leader.

The agreement is for the sale and purchase of 4.0 million pounds of U_3O_8 from the Lance Projects over a 10 year period beginning at the end of 2020 and contemplates increasing this to 50% of annual mine production from 2026 onwards.

The securing of such a significant contract is a substantial achievement for the Company and comes after several years of negotiation and extensive due diligence on Peninsula and its projects.

While price and annual quantities are subject to commercial confidentiality, the terms of the agreement provide certainty of sale and a committed revenue stream.

This agreement and the establishment of a long term relationship with this large customer will underpin Stage 2 production levels and the Company's long term plan to become a significant and profitable global supplier of uranium.

Peninsula currently has 7.9 million pounds of U_3O_8 under contract for delivery to major utilities located in the United States and Europe. Projected revenue under these existing long term contracts is US\$440 million. These contracts provide a substantial earnings stream to the Company whilst allowing it to retain significant quantities of planned U_3O_8 production for future contracting during periods of anticipated improved uranium prices.

The weighted average delivery price for these five contracts over the next 10 years is US\$56/lb U_3O_8 . The progressive expansion to Stage 2 will generate increased operating margins, (both in aggregate and on a per pound basis), and is projected to move the Company to significant profitability.

On 4 January 2016 Peninsula completed its first U_3O_8 sale under Strata's 2011 sale and purchase agreement with a United States utility. This follows Strata's execution of a variation to that agreement allowing Peninsula to complete the delivery on 4 January 2016. Proceeds from the first delivery were received in early February 2016. The uranium was borrowed material to ensure compliance with the delivery schedule under an existing agreement.

SOUTH AFRICA – KAROO PROJECTS

(Peninsula Energy 74% / BEE Groups 26%)

Peninsula has a 74% interest in a total of 40 prospecting rights (PRs) covering 7,774 km² of the main uranium-molybdenum bearing sandstone channels in the Karoo Basin (Karoo Projects) (see Figure 6). The residual 26% interest remains with BEE partners as required by South African law. The Karoo Projects are categorised into the Eastern and Western Sectors as shown in the diagram below. In the Eastern Sector, Peninsula has freehold ownership over an area of 322 km² which covers a significant proportion of the reported resource and allows unlimited surface access.

Gamma probing was conducted at Block A-Ext (Figure 7) during the quarter with significant interceptions returned from over half the holes probed. This work follows on the earlier probing at Blocks F(N), E(N) and E(S), D(W) and D(E) completed in 2015.

Results from all blocks investigated to date have demonstrated very high grade mineralisation at shallow depths with a further 124 significant intersections returned from 170 historic holes at Block A-Ext during December 2015 to February 2016. Overall 227 significant intersections have now been returned from a total of 481 re-logged holes since mid-2014.



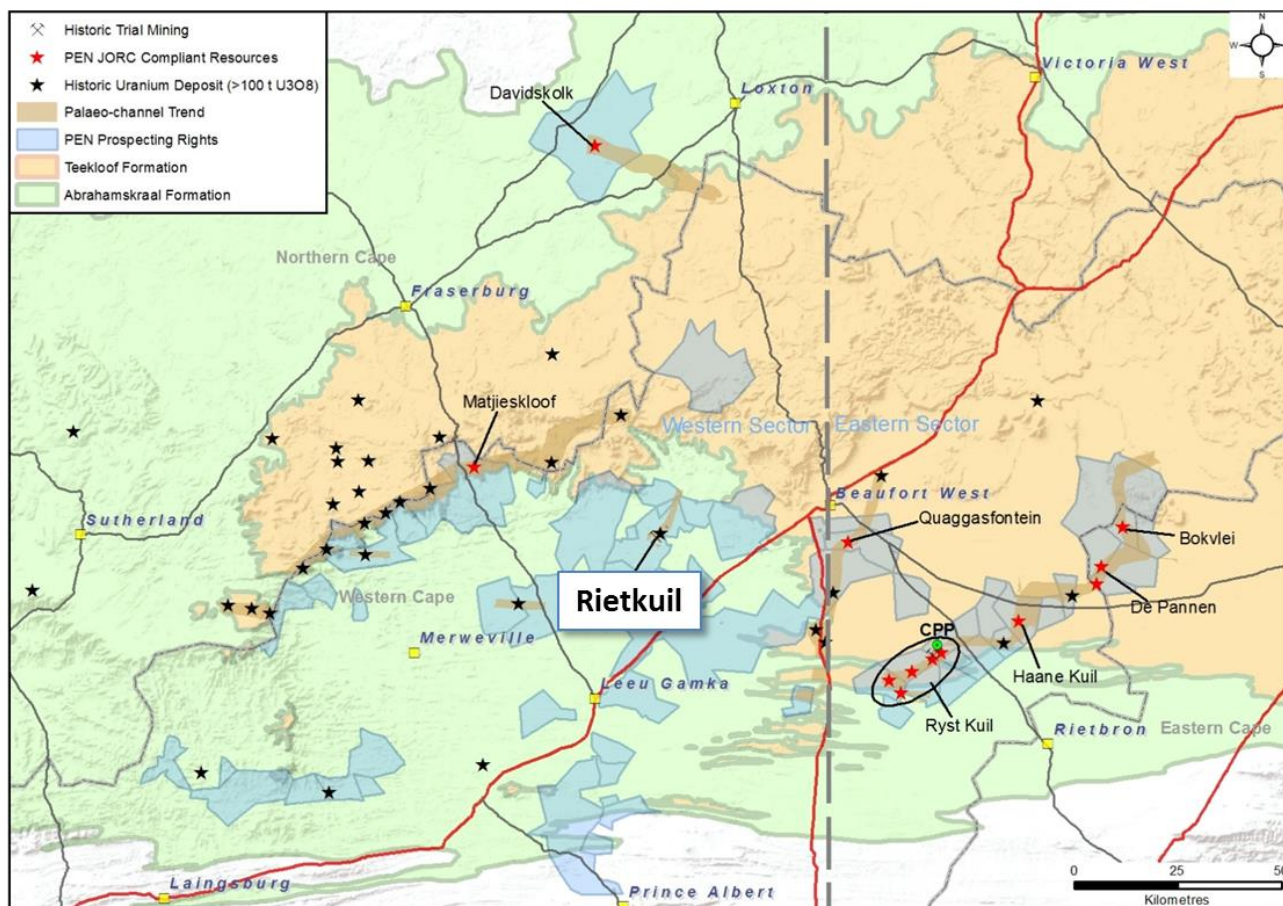


Figure 6: South Africa – Karoo Uranium Project Area Locations

Re-logging is occurring in holes originally drilled by Union Carbide Exploration Corporation (UCEX) during the 1970's and continues to successfully validate the location and grade of the mineralisation that was delineated by UCEX at that time.

Probing and re-logging is occurring in areas that are outside the existing JORC Code-compliant resource and information from this work will be included in an update of the JORC Code-compliant resource estimate for the Karoo Projects following any additional evaluation work that may be required.

New Chief Executive Officer (South Africa) Appointed

Effective 1 June 2016, the Company has appointed Mr. Willie Bezuidenhout to the role of Chief Executive Officer (South Africa). Mr. Bezuidenhout will oversee the progression of the Karoo Projects through feasibility, financing, development and into operations. Mr. Bezuidenhout is a highly credentialed senior mining executive with extensive uranium operational and financial management expertise. Mr. Bezuidenhout has most recently held senior executive and management positions at Uranium One and its subsidiaries for close to a decade.

Mining License Applications

The public consultation process for the Mining Rights applications at the Karoo Projects is ongoing. The Environmental Impact Assessment and Environmental Management Plan (EIA and EMP) reports for the mining applications were submitted to the Department of Mineral Resources (DMR) in the Western Cape on 25 January 2016. This was followed by public participation and consultation process for which the Company's response report is being prepared for submission to the DMR for review.

A Radiological Risk (Impact) Assessment is being compiled for submission to the National Nuclear Regulator (NNR) prior to applications for nuclear authorisation for mining and processing operations. It is anticipated that this report will be completed by the end of April/early May.

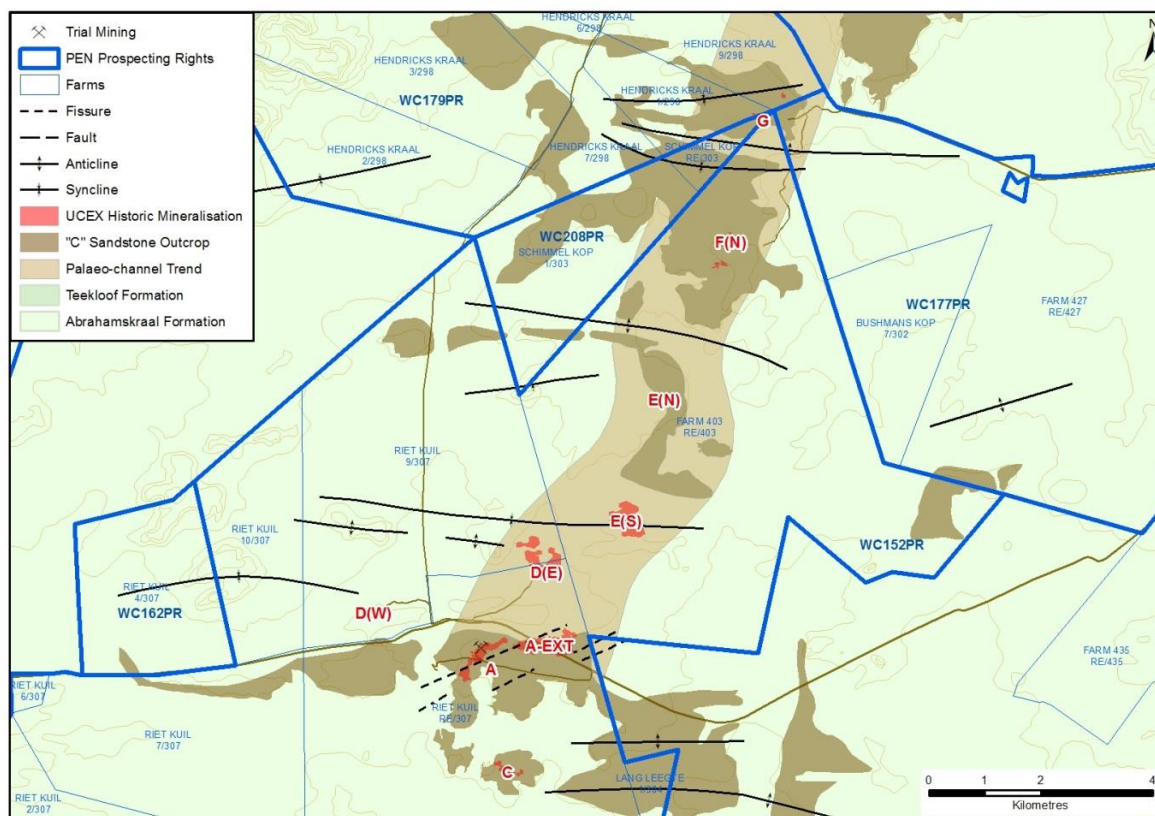


Figure 7: Geology and distribution of mineralisation blocks at Rietkuil

CORPORATE

US\$15 million Project Funding Secured

In April 2016 Peninsula entered into convertible loan agreements with major shareholders Resource Capital Fund VI L.P. (RCF VI) and Pala Investments Ltd (Pala) for a total of US\$15 million (Convertible Loans) and was drawn in full on the date that it was signed.

This funding is the first component of a broader funding package including a potential Revenue Streaming Facility, for which a Term Sheet has been signed and due diligence is well advanced. Proceeds from the convertible loan agreements will be used for general well field development activities at the Lance Projects, resource development drilling and feasibility studies at the Karoo Projects and for general working capital purposes.

The Revenue Streaming Facility allows for the commencement of initial Stage 2 development at the Lance Projects. This follows the detailed engineering of the Stage 2 CPP, which will increase the ion exchange capacity and bring the elution, precipitation, drying and packaging processes in-house. Bringing all processing in-house is forecast to reduce cash operating costs by US\$4-5/lb U3O8.

It is expected that construction for Stage 2, which includes construction of up to seven additional (7) well production units, will be primarily funded through the Revenue Streaming Facility that is currently being negotiated. Ramp-up to Stage 2 production rates are forecast to further reduce cash operating costs by US\$5-6 per pound U₃O₈.

Convertible Loan Agreements

Under the Convertible Loans, RCF VI and Pala (Lenders) have each provided Peninsula with a convertible loan facility, with participation in proportion to their existing shareholdings in the Company. The US\$15 million total loan amount is comprised of a US\$9.63 million convertible loan provided by RCF VI and a US\$5.37 million convertible loan provided by Pala.

Under the terms of the Convertible Loans, the Lenders may elect to convert all or part of the principal amount of the Convertible Loans (including any capitalised interest) into fully paid ordinary shares at any time at a conversion price that is the lower of \$0.80 per share or the price of any equity raised prior to repayment. The Convertible Loans will bear interest at the rate of 8% per annum, payable quarterly in arrears in cash or shares at the Lenders election. The Maturity Date of the Convertible Loans is 22 April 2017.

Additionally, an arrangement fee of 2% of the amount available under the Convertible Loans is also payable in cash or in fully paid ordinary shares (at the Lenders election) using a conversion price of \$0.80 per share.

The Convertible Loans will be secured by a charge over certain assets of the Company, but will be subordinated to the existing Investec working capital facility.

Other Funding – Revenue Streaming

In addition to the Convertible Loans, Peninsula is currently at Term Sheet stage on a Revenue Streaming Facility and is evaluating other non-equity funding alternatives for Stage 2 of the Lance Projects.

As previously advised, the Company has received several proposals and has executed one non-binding Term Sheet for a revenue streaming facility with technical and commercial due diligence activities now well advanced.

Revenue streaming is a non-dilutive mechanism that sees a proportion of future sales revenue, over a finite time period and finite quantity of annual production, being exchanged for a one-off upfront cash payment that is to be used for development or expansion capital expenditure.

Board Changes

Mr Mark Wheatley joined the Board of the Company as a Non-Executive Director and nominee of RCF VI, effective 26 April 2016. Mr Wheatley is an experienced resources company CEO, Non-Executive Director and Chairman with a career spanning more than 30 years in mining and related industries. He has 10 years' experience in the uranium industry and been involved in ISR project feasibility studies, start up, production, rehabilitation and closure. His uranium experience includes the roles of Chairman and CEO of Southern Cross Resources Inc., the operator of the Honeymoon ISR uranium project and Non-Executive Director of Uranium One Inc. and Uranium Resources Inc. He is currently Executive Chairman of Xanadu Mines Ltd.

With the appointment of Mr Wheatley, Mr Neil Warburton retired from his role as Non-Executive Director. In addition to the above changes, Mr. Richard Lockwood has stepped down from the role of Non-Executive Chairman, but will remain on the Board as Non-Executive Director. Existing Non-Executive Director Mr. John Harrison has accepted the position of Non-Executive Chairman.



NYSE MKT Listing Progressing

During the quarter Peninsula submitted an updated Form 20-F and an amended registration statement with the SEC for review. Peninsula continues to work through the remaining outstanding items with the SEC in parallel with the NYSE MKT listing process.

As previously announced, Peninsula is seeking a secondary listing of American Depositary Shares on the NYSE MKT.

Cash Position

The Company's cash position at the end of the quarter, including commercial bills, bonds and security deposits was A\$3.8 million. As at 29 April 2016, the Company's cash position was A\$17.8 million. Drawn debt at 29 April 2016 was US\$18.5 million, with US\$11.5 million available in undrawn facility limits (subject to the Company maintaining minimum liquidity levels in the form of cash or undrawn debt).

For further information please contact:

John Simpson (Gus)
Managing Director/Chief Executive Officer
Telephone: +61 9380 9920

Competent Persons Statement

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves at the Lance Projects is based on information compiled by Mr Jim Guilinger. Mr Guilinger 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 Guilinger is Principal of independent consultants World Industrial Minerals. Mr Guilinger have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is 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'.

The information in this report that relates to Exploration Results and Exploration Potential at Peninsula's Karoo projects is based on information compiled by Mr George van der Walt. Mr van der Walt is a member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (The South African Council of Natural Scientific Professions, Geological Society of South Africa). Mr van der Walt is a Director of Geoconsult International. Mr van der Walt has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Guilinger and Mr van der Walt consent to the inclusion in the report of the matters based on their information in the form and context in which it appears

Disequilibrium Explanatory Statement: eU_3O_8 refers to the equivalent U_3O_8 grade. This is estimated from gross-gamma down hole measurements corrected for water and drilling mud in each hole. Geochemical analysis may show higher or lower amounts of actual U_3O_8 , the difference being referred to as disequilibrium. Disequilibrium factors were calculated using the Peninsula PFN database and categorized by area and lithological horizon. Specific disequilibrium factors have been applied to the relevant parts of the resource based on comparative studies between PFN and gamma data. There is an average positive 11% factor applied. All eU_3O_8 results above are affected by issues pertaining to possible disequilibrium and uranium mobility.

1 Detailed Classified JORC-Compliant Resource Estimate, Lance Projects: U_3O_8

Resource Classification	Tonnes Ore (M)	U_3O_8 kg (M)	U_3O_8 lbs (M)	Grade (ppm U_3O_8)
Measured	4.1	2.1	4.5	495
Indicated	11.6	5.7	12.7	497
Inferred	35.5	16.6	36.5	467
Total	51.2	24.4	53.7	476

(The JORC Resource is reported above a lower grade cut-off of 200ppm and a GT of 0.2)

2 Detailed Classified JORC-Compliant Resource Estimate, Karoo Projects: eU3O8

Classification	Sector	eU ₃ O ₈ (ppm) CUT-OFF	Tonnes (millions)	eU ₃ O ₈ Grade(ppm)	eU ₃ O ₈ (million lbs)
Indicated	Eastern	600	7.1	1,206	18.7
	Western	600	0.9	1,657	3.2
Inferred	Eastern	600	11.8	1,046	27.2
	Western	600	3.5	1,019	7.8
Total	Total	600	23.3	1,108	56.9

Schedule of Interests in Mining Tenements at 31 March 2016

Location/Project Name	Tenement	Percentage Held
<u>Karoo Region, South Africa (Karoo Projects)</u>		
Karoo Uranium, South Africa	PR (WC) 25	74%
Karoo Uranium, South Africa	PR (WC) 33	74%
Karoo Uranium, South Africa	PR (WC) 34	74%
Karoo Uranium, South Africa	PR (WC) 35	74%
Karoo Uranium, South Africa	PR (WC) 47	74%
Karoo Uranium, South Africa	PR (WC) 59	74%
Karoo Uranium, South Africa	PR (WC) 60	74%
Karoo Uranium, South Africa	PR (WC) 61	74%
Karoo Uranium, South Africa	PR (WC) 80	74%
Karoo Uranium, South Africa	PR (WC) 81	74%
Karoo Uranium, South Africa	PR (WC) 127	74%
Karoo Uranium, South Africa	PR (WC) 137	74%
Karoo Uranium, South Africa	PR (WC) 151	74%
Karoo Uranium, South Africa	PR (WC) 152	74%
Karoo Uranium, South Africa	PR (WC) 153	74%
Karoo Uranium, South Africa	PR (WC) 154	74%
Karoo Uranium, South Africa	PR (WC) 156	74%
Karoo Uranium, South Africa	PR (WC) 158	74%
Karoo Uranium, South Africa	PR (WC) 162	74%
Karoo Uranium, South Africa	PR (WC) 167	74%
Karoo Uranium, South Africa	PR (WC) 177	74%
Karoo Uranium, South Africa	PR (WC) 178	74%
Karoo Uranium, South Africa	PR (WC) 179	74%
Karoo Uranium, South Africa	PR (WC) 180	74%
Karoo Uranium, South Africa	PR (WC) 187	74%
Karoo Uranium, South Africa	PR (WC) 188	74%
Karoo Uranium, South Africa	PR (WC) 207	74%
Karoo Uranium, South Africa	PR (WC) 208	74%
Karoo Uranium, South Africa	PR (WC) 228	74%
Karoo Uranium, South Africa	PR (WC) 257	74%
Karoo Uranium, South Africa	PR (EC) 07	74%
Karoo Uranium, South Africa	PR (EC) 08	74%
Karoo Uranium, South Africa	PR (NC) 331	74%
Karoo Uranium, South Africa	PR (NC) 347	74%
Karoo Uranium, South Africa	PR (EC) 09	74%
Karoo Uranium, South Africa	PR (EC) 12	74%
Karoo Uranium, South Africa	PR (EC) 13	74%
Karoo Uranium, South Africa	PR (WC) 168	74%
Karoo Uranium, South Africa	PR (WC) 170	74%
Karoo Uranium, South Africa	PR (NC) 330	74%

Location/Project Name	Tenement	Percentage held
<u>Wyoming, USA (Lance Projects)</u> Lance Projects are located within the area contained within Township and A Township and Range System in Crook County, Wyoming USA. USA, including various surface and mineral right holdings, hence tenement tenement references are not applicable. Private Land (FEE) – Surface Access Agreements (approx. 24,581 acres) Private Land (FEE) – Mineral Rights (approx. 10,078 acres) Federal Mining Claims – Mineral Rights (approx. 12,717 acres) Federal Mining Claims – Surface Access – Grazing Lease (approx. 40 acres) State Leases – Mineral Rights (approx. 10,690 acres) State Leases – Surface Access (approx. 1,229 acres) Strata Owned – Surface Access (approx. 320 acres)	N/A	100%

Location/Project Name	Tenement	Percentage held
<u>VitiLevu, Fiji (RakiRaki Project)</u> Raki Raki (Geopacific JV) Raki Raki (Geopacific JV) Raki Raki (Geopacific JV)	SPL 1231 SPL 1373 SPL 1436	50% 50% 50%

