

31 MARCH 2014 QUARTERLY ACTIVITIES REPORT

30 April 2014

ASX: PEN, PENOC

Peninsula Energy Limited
ABN 67 062 409 303

Directors

Gus Simpson - Executive Chairman
Alf Gillman - Technical Director
Warwick Grigor - Non Exec Director
Neil Warburton - Non Exec Director

Management

Gus Simpson - Executive Chairman
Alf Gillman - Technical Director
Glenn Black - COO
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

3,420 million shares
862 million options

Cash at 31 March 2014

\$10.74million

Market cap at 31 March 2014

\$119.7 million

For further information please
contact:

info@pel.net.au

HIGHLIGHTS

WYOMING, USA – LANCE URANIUM PROJECTS

- Source Materials License Received – Licensing Process Concluded
- Supplemental Environmental Impact Statement Received
- Fabrication of Ion Exchange Columns Completed
- Containment Barrier Wall Completed and testing underway

SOUTH AFRICA – KAROO URANIUM PROJECTS

- Resource Expansion and Upgrade
- PFS progressing

CORPORATE

- \$5m Placement completed with J.P Morgan Asset Management (UK)
- Cash as at 31 March 2014 of \$10.74m



WYOMING, USA – LANCE PROJECTS

(Peninsula Energy 100%)

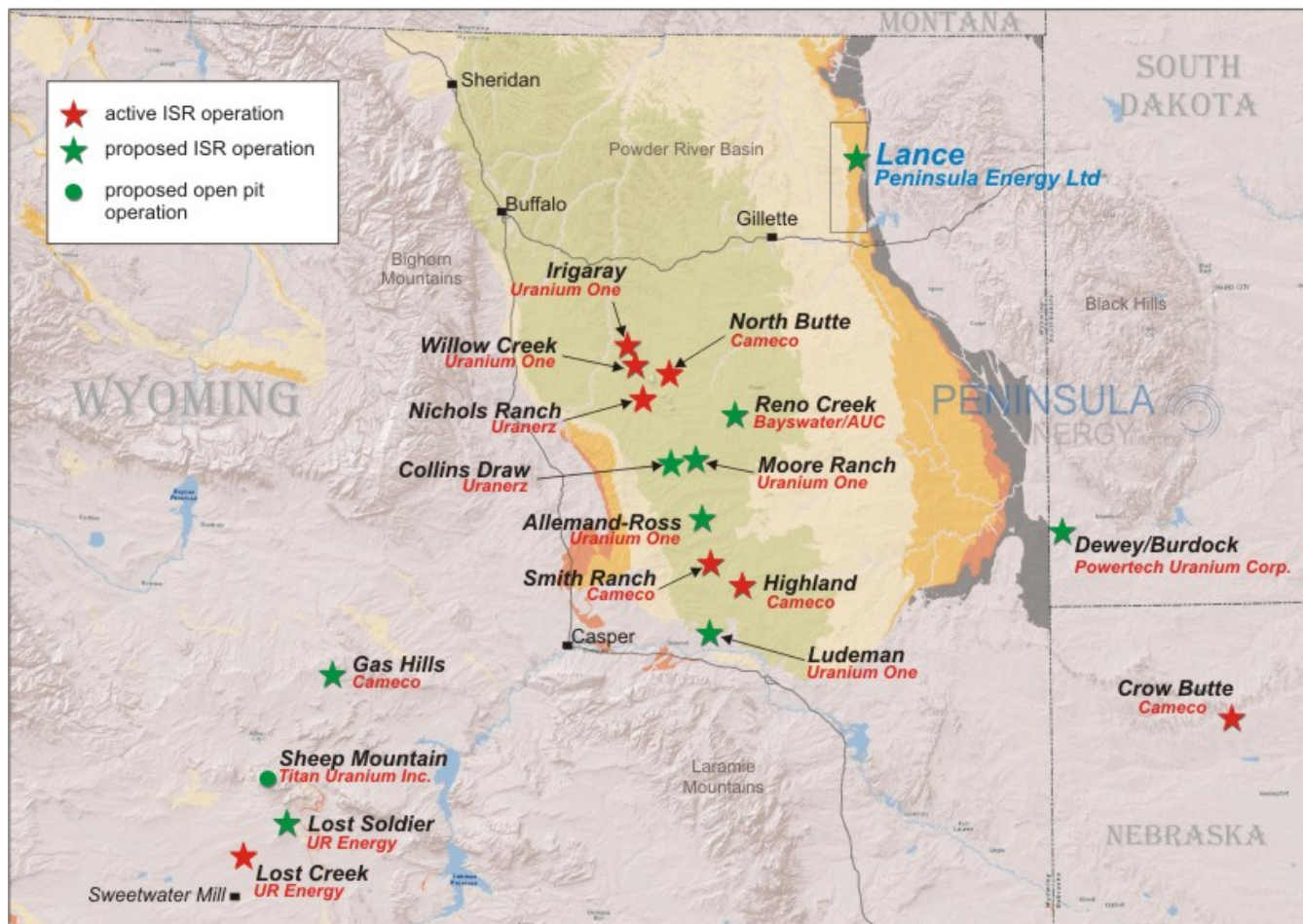


Figure 1: Lance Projects location, Wyoming USA

Permitting

Source Material License Received – Licensing Process Concluded

On 24 April 2014 the United States Nuclear Regulatory Commission (NRC) issued the Combined Source and 11e.(2) Byproduct Materials License (SML) to Peninsula's wholly-owned subsidiary Strata Energy Inc. for the Central Processing Plant (CPP) and Ross Permit Area (RPA) in Wyoming, USA (the Project).

Issuance of the SML concluded the licensing process for the three million pound per annum capacity CPP and the Ross Project. Peninsula now has the capacity to produce uranium from the largest 2012 JORC-Compliant in-situ recovery resource in the USA (54 million pounds U₃O₈)¹. The SML is the culmination of a four-year permitting process involving multiple local, state and federal regulatory agencies.

In October 2013 Peninsula began site preparation for the CPP, fabrication of long lead time plant & equipment and the construction of access roads and other infrastructure. With the SML now in hand Peninsula can move to finalise construction of the CPP and commence the installation of production well-fields at the Ross Project which will allow for the production of uranium.

¹ JORC Table 1 included in announcement to the ASX presentation 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.

Supplemental Environmental Impact Statement Received

During the quarter the NRC also issued the final Supplemental Environmental Impact Statement (SEIS) for the Lance CPP and RPA.

The SEIS is a comprehensive review of the project-specific environmental aspects and mitigation measures of the CPP and RPA as required under the National Environmental Policy Act (NEPA). It analyses the environmental effects of the proposed action at the RPA, the environmental impacts of alternatives to the proposed action, and mitigation measures to either reduce or avoid adverse effects of the proposed action. Impacts assessed include land use; historical and cultural resources; visual and scenic resources; climatology, meteorology and air quality; geology, minerals and soils; water resources; ecological resources; socioeconomics; environmental justice; noise; traffic and transportation; public and occupational health and safety; and waste management. Issuance of the final SEIS formalises NRC's determination that no major environmental impacts preclude the completion of licensing.

Programmatic Agreement Approved

On 24 April 2014 the Programmatic Agreement (PA) for Section 106 consultations was signed by the NRC, the United States Bureau of Land Management, Advisory Council on Historic Preservation, Wyoming State Historic Preservation Officer and Strata.

Section 106 consultations is a process that is designed to ensure that vested historical and cultural stakeholders are engaged in the development of protocols that are designed to protect sites of historical and cultural significance that may reside within a project area.

Work on the PA was initiated in October 2013 and its development involved the United States Nuclear Regulatory Commission, United States Bureau of Land Management, Advisory Council on Historic Preservation, Wyoming State Historic Preservation Officer, Consulting Native American Tribes and Strata Energy Inc.

Construction Update

Construction activity is continuing at the CPP building and administration facility sites located in the RPA. Following the completion of earthworks and building pad construction for the CPP and administration facilities in November 2013 excavation commenced for the installation of the Containment Barrier Wall (CBW), located along the south side of the building and pond locations .

The CBW is a key part of site construction and on-site groundwater management. It will cause ground water to be directed via a drainage system into a vertical sump for subsequent pumping into an above ground diversion ditch.

Construction of the CBW was completed during the quarter which included installation of purchased pumping equipment.

Long Lead Items

Off-site fabrication of Ion Exchange Vessels and other pressure vessels is now complete, as shown below in Figures 2 and 3.



A down payment was made for vacuum dryers during the quarter. The Company was able to secure two suitable used dryers in lieu of purchasing new dryers, resulting in cost savings of approximately \$0.5 million against the capital budget.



Figure 2: Completed Ion-Exchange Columns for RPA



Figure 3: Completed Ion-Exchange Column for RPA



SOUTH AFRICA – URANIUM EXPLORATION

(Peninsula Energy 74% / BEE Group 26%)

Peninsula has a 74% interest in a total of 41 prospecting rights (PR's) covering 6,710 km² of the main uranium-molybdenum bearing sandstone channels in the Karoo Basin (Karoo Projects) (Figure 4). The residual 26% interest remains with BEE partners as required by South African law.

The Karoo Projects are categorized into the Eastern and Western Sectors as show 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.

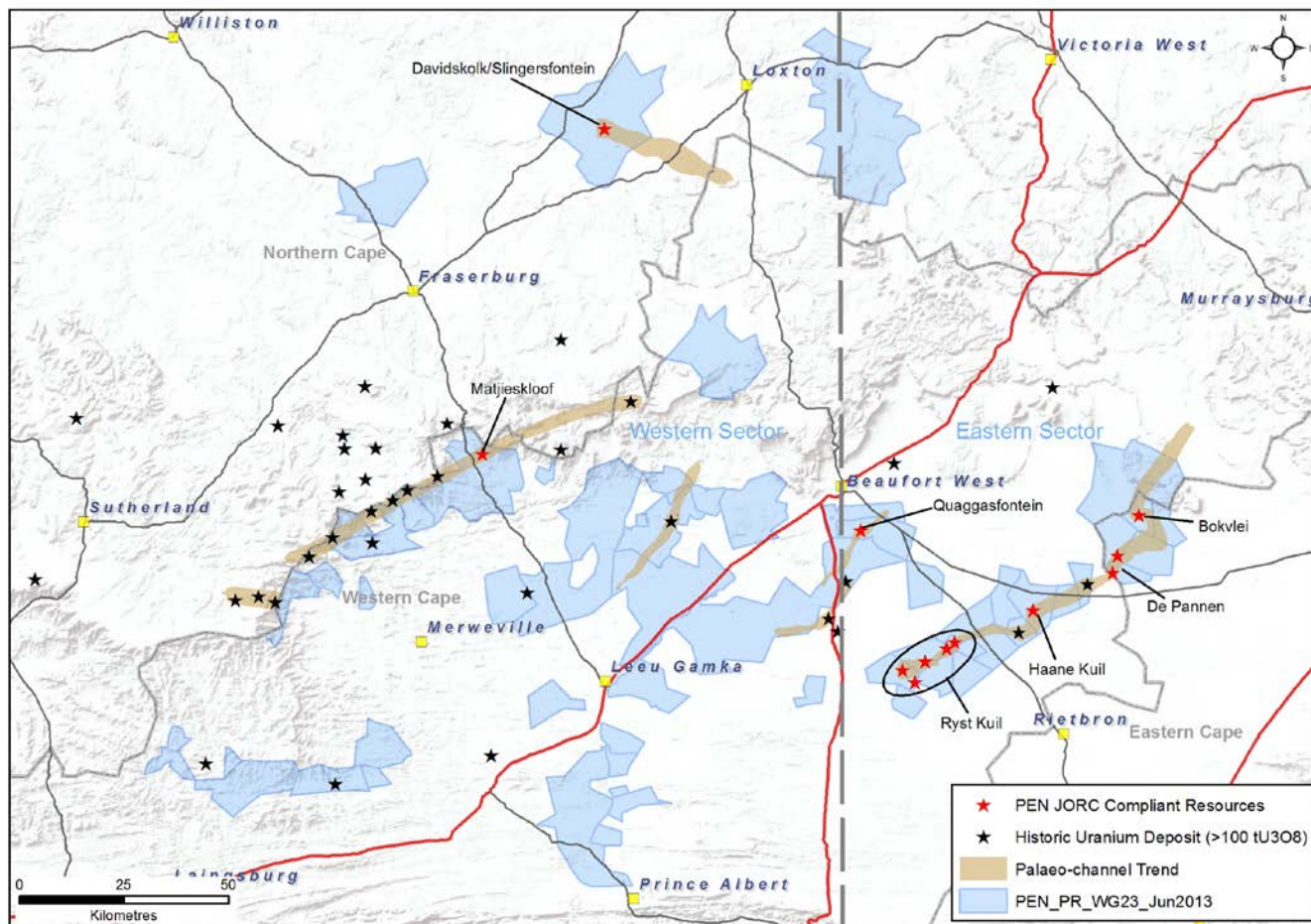


Figure 4: South Africa – Karoo Uranium Project Area Locations

Resource Expansion and Upgrade

On 11 March 2014 Peninsula announced an updated JORC Code-compliant Mineral Resource estimate of 56.9Mlbs eU₃O₈ at the Karoo Projects.

This includes an increased indicated resource of 21.9Mlbs with an increased grade of 1,242ppm eU₃O₈ (cut off of 600ppm eU₃O₈), which is a 30% increase.

The increase in the Karoo resource is the result of the inclusion of data from the 2013 drill program and the adoption of a revised block model reporting methodology in line with the Local Uniform Conditioning formalism.

The updated resource estimate, as shown in Table 1, is based on 7,230 drill holes from a database comprising 9,343 drill holes, which includes 1,245 holes drilled or re-logged by Peninsula since 2011 (including 16 diamond holes and 801 reverse circulation holes). During 2013 Peninsula completed 67 holes at the De Pannen prospect and re-logged 291 holes in the Ryst Kuil area.

Table 1: Classified JORC-Compliant Resource Estimate, Karoo Projects: eU3O8¹

Classification	eU3O8 (ppm) CUT-OFF	Tonnes (millions)	eU3O8 (ppm)	eU3O8 (million lbs)
Indicated	600	8.0	1,242	21.9
Inferred	600	15.3	1,038	35.0
Total	600	23.3	1,108	56.9

¹ JORC Table 1 is included in announcement to the ASX released on 11th March 2014 – “13% Resource Expansion and Upgrade at Karoo Projects”. Peninsula confirms that it is not aware of any new information or data that materially affects the information included in this report 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

The resource estimate was carried out by Optiro Pty Ltd. Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (kriging efficiency).

The incorporation of new drilling data and the adoption of a revised block model reporting methodology in line with the Local Uniform Conditioning formalism has resulted in an overall increase in project contained metal, with the most significant increase related to the Ryst Kuil deposit (as depicted in Figure 1 above).

The historic and current drilling is distributed over two main areas – the Western and Eastern Sectors (Figure 4) and includes results for more than 4,000 mineralised intervals. Drill-spacing varies from 100m x 100m to 25m x 25m with the majority of indicated resources drilled at an average spacing of 50m x 50m. Inferred Mineral Resources have been defined in areas of 100m x 100m up to 400m by 400m drill spacing. A bulk density of 2.67 t/m³ was applied to derive the resource tonnage (based on 1,425 representative sample determinations).

The Eastern Sector covers the majority of the reported resources including the Ryst Kuil Channel and Quaggasfontein (Site 29). The Western Sector encompasses the Matjieskloof (Site 22) and Davidskolk/Slingersfontein (Site 45) resources together with the majority of the Exploration Targets. Total resources by Sector are detailed in Table 2.

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

Classification	Sector	eU ₃ O ₈ (ppm) CUT-OFF	Tonnes (millions)	eU ₃ O ₈ (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

Note: Totals may not sum exactly due to rounding.



Development Progress

Peninsula commenced with a Pre-Feasibility Study (PFS) for the Karoo Project in November 2013 based on an alkaline processing route. In support of the PFS the Company appointed Mintek, a South African based global leader in mineral and metallurgical test work, to undertake validation metallurgical test work on five discrete mineral samples from five mining areas within the Eastern Sector.

The initial phase of this test work was successfully completed at the end of February, and Mintek has issued this draft report for review.

Further test work has been undertaken at Mintek during March and April on the introduction of radiometric sorting technology and carbonate flotation processing prior to both acid and alkaline process circuits.

The initial radiometric tests indicated that sorting can reject between 30-40% mass, at a discard rate of 200ppm at process recoveries of up to 90%. The carbonate flotation test work has also been very successful, and indicates the possible removal of 50% of the carbonates through the flotation process which allows for a significant reduction in reagents and associated operating costs.

Following from the very good initial radiometric test work results, further test work is now planned at Mintek on a thirty (30) ton representative sample with the full range of material size distribution. This test work is scheduled to start in July, and is expected to take approximately twelve weeks to complete.

It is the belief of the Company that with consolidation the various Karoo deposits offer several potential large-scale development options, including simultaneous open pit, adit-access and decline-access mining operations feeding through to a single central processing plant.

CORPORATE

Placement to JP Morgan Asset Management (UK)

On 14 March 2014 Peninsula placed 161.29 million new shares at 3.1 cents per share to raise \$5,000,000 (pre-costs) to funds managed by J.P. Morgan Asset Management (JPMAM). JPMAM is a leading global asset management with assets under management of \$1.5 trillion. RFC Ambrian is the Lead Manager to the Placement.

Funds received from the Placement will be used for the ongoing construction activities at the Lance Projects in Wyoming, to progress feasibility studies at the Karoo Projects in South Africa, and for general working capital purposes.

The allotment of the Placement shares was not subject to shareholder approval and fell within the Company's 10% placement capacity under ASX LR 7.1A.

Cash Position

The Company's cash position at the end of the quarter, including commercial bills, bonds, initial funds draw-down on the BlackRock Notes and security deposits was \$10.74 million. USD \$12.6 million was undrawn on the BlackRock Notes at the end of the quarter.

Debt Collateral

The Company's existing sales contract used as collateral for the drawn amount of the BlackRock Notes has an inherent value of US\$ 21.9 million as at 31 March 2014 (using a discount factor of 8%). This value exceeds the drawn debt amount by US\$ 12.5 million.



For further information please contact:

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Executive Chairman
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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 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'.

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 van der Walt consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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.



Schedule of Interests in Mining Tenements at 31 March 2014

Location/Project Name	Tenement	Percentage Held
Karoo Region, South Africa (Karoo Projects)		
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 (EC) 28	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
Wyoming, USA (Lance Projects) 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 hence tenement references are not applicable. Private Land (FEE) – Surface Access Agreements (approx. 26,856 acres) Private Lane (FEE) – Mineral Rights (approx. 9,375 acres) Federal Mining Claims – Mineral Rights (approx. 12,006 acres) State Leases – Mineral Rights (approx. 10,590 acres)	N/A	100%

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