30 April 2012

Australian Stock Exchange Limited (ASX)
Company Announcements Platform

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31 MARCH 2012
QUARTERLY ACTIVITIES REPORT
HIGHLIGHTS

WYOMING, USA - LANCE URANIUM PROJECTS

- Major Uranium Resource Upgrade Completed at Lance
- Decision to Mine at Lance Announced
- Feasibility Study Update
- NRC Approves Early Deep Disposal Well Testing
- Kendrick Drilling Returning Exceptional Results

SOUTH AFRICA – URANIUM / MOLYBDENUM EXPLORATION

- Drilling to Commence at Sites 45 and 49
- Exploration Program Successfully Completed at Sites 22 and 29
- Maiden JORC Compliant Estimate planned post drilling at Site 45.

CORPORATE

- Appointment of Chief Executive Officer – Strata Energy (Wyoming)
- Cash at 31 March 2012 $13.8m

WYOMING, USA – LANCE PROJECTS
(Peninsula Energy 100%)

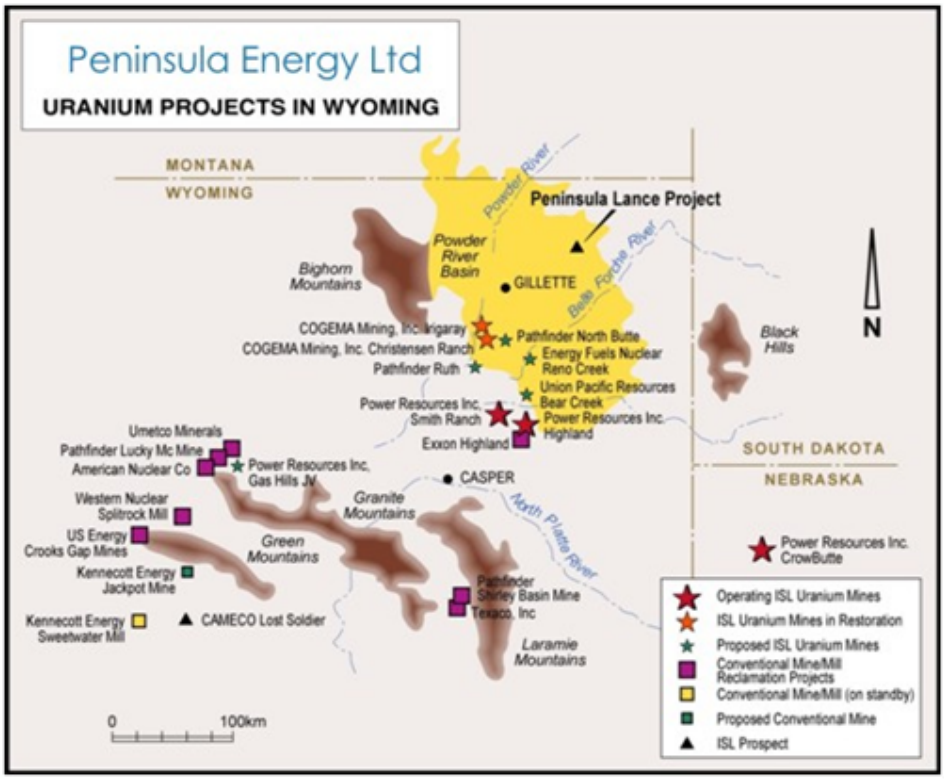

Figure 1: Lance Projects location, Wyoming USA

Major Uranium Resource Upgrade at Lance

On 2 April 2012 Peninsula announced a further upgrade to the JORC-compliant Resource Estimate for the Lance Uranium Projects in Wyoming, USA (Lance Projects). This upgrade was achieved by the completion of an additional 806 drill holes subsequent to the June 2011 resource estimate.

The revised JORC compliant resource estimate of 51.5Mlbs U_3O_8 represents a 24.3% increase to the total resource estimate including a 30.7% increase in Measured and Indicated Resource since the previous estimate in June 2011.

The revised JORC compliant vanadium resource estimate of 4.9Mlbs V2O5 represents a 111% increase to the previous resource estimate.

Since the release of the JORC resource estimate on June 17, 2011, Peninsula has continued resource conversion and exploration drilling with the completion of a further 806 drill holes, mostly within the Kendrick area.

Recent drilling focused on converting resources from inferred to indicated in the proposed Kendrick Production Unit, which is located to the west of the Ross Production Unit. The drilling along the Kendrick roll front system is producing consistent thick high-grade intercepts, which has resulted in its prioritisation due to its resource expansion potential and its proximity to the proposed site of the Lance Central Processing Plant. The drill density and demonstrated continuity of mineralisation at Kendrick has resulted in a high proportion of inferred resources being upgraded to indicated category.

The revised resource estimate (Table 1) is reported by Resource Areas that correspond with the Ross, Kendrick and Barber Production Units as defined in the Expanded Economic Study (EES). These production areas differ slightly from the historic reporting areas that were known as Ross Permit Area, Ross and Barber. The EES anticipates the

expanded project including Ross, Kendrick and Barber production units feeding a Central Processing Plant with an expandable capacity of up to 3.0Mlbs per annum.

Table 1: Lance Project Classified Resource Summary (U_3O_8) March 2012

Resource Classification	Tonnes Ore (M)	U_3O_8 kg (M)	U_3O_8 lbs (M)	Grade (ppm U_3O_8)
Measured	3.6	1.8	4.0	505
Indicated	9.4	4.9	10.7	517
Inferred	35.1	16.7	36.8	475
Total	48.1	23.4	51.5	485

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

The refinement of the exploration model has resulted in the successful targeting and intersection of new roll front high-grade nose positions, and hence a 15% increase in the overall grade from 422ppm to 485ppm U_3O_8 has been achieved.

Within the three production units have a combined measured, indicated and inferred resources and respective grades and GT's, as follows (Table 2);

- Ross Production Unit - 9.0Mlbs U_3O_8 with an average grade of 525ppm and an average GT of 0.55.
- Kendrick Production Unit - 26.1Mlbs U_3O_8 at an average grade of 480ppm and an average GT of 0.49.
- Barber Production Unit - 13.4Mlbs U_3O_8 at an average grade of 446ppm and an average GT of 0.43

It is anticipated that with further drilling that the Kendrick and Barber Production Units will exceed the grade and GT's recorded at the Ross Production Unit.

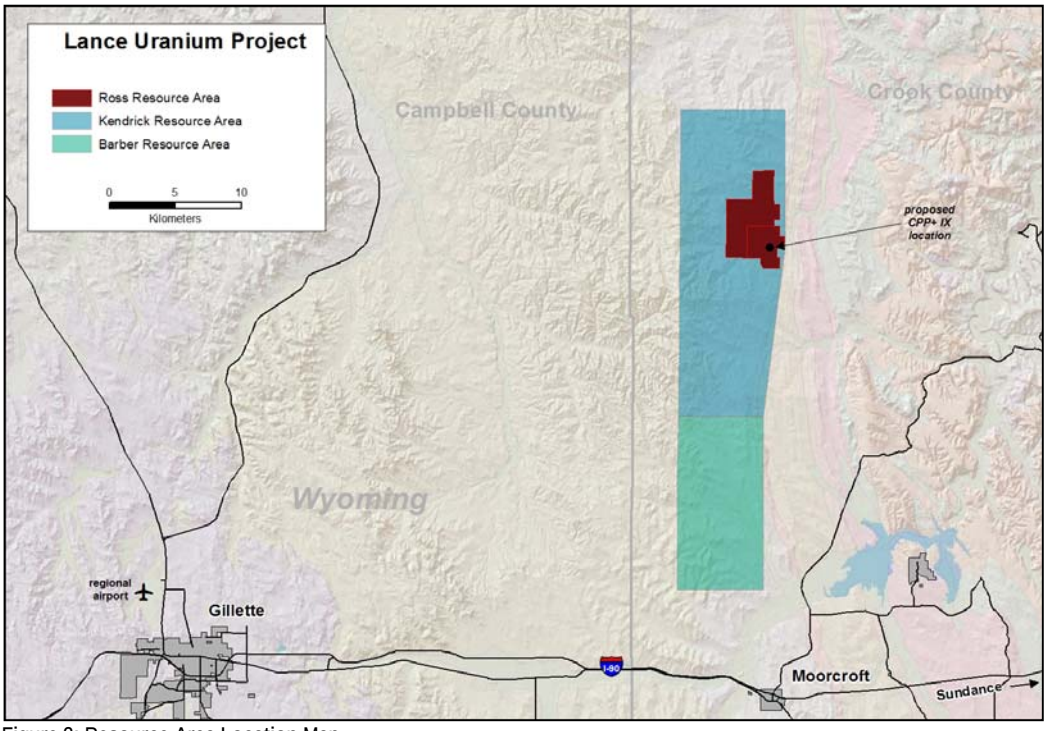

Figure 2: Resource Area Location Map

Table 2: Lance Project Classified Resource by Resource Area (U_3O_8) March 2012

Ross	Tonnes	Grade (ppm U_3O_8)	U_3O_8 lbs	Average Thickness (ft)	Average GT
Measured	2,784,509	510	3,129,569	11.5	0.59
Indicated	4,923,289	534	5,799,077	9.9	0.53
Inferred	109,000	499	120,000	9.8	0.49
Total	7,816,798	525	9,048,646	10.5	0.55

Kendrick	Tonnes	Grade (ppm U_3O_8)	U_3O_8 lbs	Average Thickness (ft)	Average GT
Measured	182,236	592	237,861	8.4	0.50
Indicated	2,454,100	579	3,133,199	7.9	0.46
Inferred	24,077,350	484	25,705,724	9.6	0.47
Total	26,713,686	494	29,076,784	9.5	0.47

Barber	Tonnes	Grade (ppm U_3O_8)	U_3O_8 lbs	Average Thickness (ft)	Average GT
Measured	636,302	461	647,045	9.0	0.41
Indicated	2,002,184	400	1,765,263	8.4	0.34
Inferred	10,953,788	454	10,957,678	10.	0.45
Total	13,592,274	446	13,369,986	9.7	0.43

Total	Tonnes	Grade (ppm U_3O_8)	U_3O_8 lbs	Average Thickness (ft)	Average GT
Measured	3,603,047	505	4,014,475	10.9	0.55
Indicated	9,379,574	517	10,697,540	9.1	0.47
Inferred	35,140,138	475	36,783,402	9.7	0.46
Total	48,122,759	485	51,495,417	9.7	0.47

Vanadium (V2O5) Resource

As a result of a comprehensive core sampling and assay program in the Ross Resource Area and adjacent Kendrick Resource Area an average U_3O_8/V2O5 ratio of 2.5:1 was used to define the V2O5 resource of 4.92M lbs V2O5.

The updated vanadium resource for the Ross Permit Area as at March 2012 is summarised in Table 3 below.

Table 3: Classified V2O5 Resource – March 2012

Ross	Tonnes	Grade (ppm V_2O_5)	V_2O_5 lbs
Measured	2,784,509	202	1,240,232
Indicated	4,923,289	212	2,298,144
Inferred	109,000	198	47,555
Total	7,816,798	208	3,585,931

Kendrick	Tonnes	Grade (ppm V_2O_5)	V_2O_5 lbs
Inferred	2,636,337	230	1,335,934
Total	2,636,337	230	1,335,934

Total	Tonnes	Grade (ppm V_2O_5)	V_2O_5 lbs
Measured	2,784,509	202	1,240,232
Indicated	4,923,289	212	2,298,144
Inferred	2,745,337	229	1,383,489
Total	10,453,135	214	4,921,865

Decision to Mine

On 3 April 2012 the Company advised that it had formally resolved to commence commercial mining operations at the the Lance Projects.

In late 2011, Peninsula announced the results of the Definitive Feasibility Study (DFS) on the Ross Project and Expanded Economic Study (EES) on the greater Lance Projects which confirmed the technical and economic viability of an ISR mining operation at the Lance Projects. These studies were based on planned steady state production of 2.19mlbs U_3O_8 per annum from three production units (Ross, Kendrick and Barber) within three years of start-up, with the mine plan based on 17.2mlbs recovered U_3O_8.

Since the completion of these studies, Peninsula has commissioned Trec, an independent specialist ISL engineering firm based in Wyoming, to complete an owners review and optimisation study of the DFS and EES. Peninsula has received the final draft from Trec and the financial model is being independently verified by Rockbury Capital who is also ensuring that its findings are correct and are presented in a format that fully meets the expectations of the various project financing groups who are currently reviewing the Lance Projects.

This study has been combined with the new resource estimate to produce a revised Feasibility Study, which will form the basis of the debt-funding proposal that has been put to several financial institutions who are currently reviewing the Lance Projects database.

Peninsula is in advanced discussions with these groups and anticipates being in position to finalise the structuring and implementation of such funding within the next quarter.

Construction at the Lance Projects is estimated at six-nine months commencing in the second half 2012, with first production targeted for 2013.

Permitting

Nuclear Regulatory Commission Approves Earlier Deep Disposal Well Testing

On 16 January 2012 the United States Nuclear Regulatory Commission (NRC) advised Peninsula's wholly owned subsidiary Strata Energy, Inc. that the development of a deep disposal well to test subsurface conditions would be considered exploration activity (as opposed to construction) and therefore Strata can begin drilling without any further approval.

This decision allows the Company to proceed with DDW testing significantly ahead of original schedule and could see flow rates at the upper limits of expectation that would lead to significant capital expenditure reductions at the Lance Projects.

Construction and operation of up to five Underground Injection Control (UIC) Class 1 wells at the Lance Central Processing Plant site was approved by the Wyoming Department of Environmental Quality (WDEQ) in April 2011. At the time of WDEQ permit issuance, the NRC regulations classified the drilling of any deep disposal well as part of the operation of an ISR project and subsequently a NRC Source Material License (SML) or an Exception was required to develop and test a deep disposal well (DDW).

Late in 2011 amendments to the NRC regulations relating to construction, including necessary borings to determine foundation conditions or other preconstruction monitoring to establish background information related to the suitability

of the site, the environmental impacts of construction or operation, or the protection of environmental value, are excluded from the definition of construction and therefore do not require an Exception from the NRC.
The DDW'S will be used to inject non-hazardous wastes at depths in excess of 8,000 feet below the surface in order to meet the water management requirements of the proposed operations at the Lance Projects.

The NRC has confirmed that Strata can, upon the issue of the SML, apply to have the test deep disposal well converted for operations.

NRC Requests for Additional Information Issued Ahead of Schedule

During the quarter the NRC issued Requests for Additional Information (RAIs) to support their environmental and technical review of the Strata Energy Inc application for a Source and 11(e).2 Byproduct Material License.

The RAIs were issued ahead of NRC's schedule and were significantly less in number than have typically been expected. This was due to the quality of the application submitted by Strata. The Strata permitting team anticipated the content of most RAIs and has formally lodged responses.

Early issuance of the RAIs marks another significant milestone in the overall process and Strata Energy's prompt response is expected to have a positive impact on the permitting schedule.

The Company has submitted technical and environmental applications to the WDEQ for the Permit to Mine and the NRC for the Source Materials License. These submissions have been accepted as technical/environmental complete for review by both agencies. The quality of the submissions has provided the Company with the basis to submit amendments to bring on the further production units in a timely and efficient manner.

The WDEQ has finalised its technical and environmental reviews and the Company has completed the submission on the request for further information. The Company acquired the site of the proposed Central Processing Plant during the quarter and the WDEQ has advised that subject to the Company lodging the appropriate restoration and reclamation bonds the Permit to Mine will be issued for public comment.

The NRC is continuing its technical and environmental review and has advised that request for further information will be issued to the Company in December 2011. The Company is well advanced in collating additional information that may be required (based on precedent). The NRC has also advised that it will complete the draft supplemental environmental impact statement (DSEIS) by no later than December 2012.

Based on the quality of the applications submitted by the Company it is anticipated that the DSEIS will be released prior to the timeline indicated by the NRC.

Drilling Programme

January to March 2012

During the March quarter Peninsula completed a further 264 development drillholes for a total of 247,410 feet at the Lance Project. Two rotary mud rigs were engaged during the quarter.

Of the 264 drill holes completed during the quarter, a total of 62 holes encountered mineralisation greater than 0.2GT. A total of 39 holes recorded multiple stacked intersections of uranium mineralisation.

Drilling during the quarter focused on converting inferred resources to indicated category in the proposed Kendrick production unit located to the west of the Ross production unit. Drilling in this area targeted the K3, K4 and K5 roll front with testing of the northern extensions of the K4 and K5 roll fronts confirming that the trends merge in places to produce wide areas of continuous mineralisation.

The demonstrated continuity of the K3 roll front is now over 4.2 kilometres and the K5 roll front over 2 kilometres.
Resource confirmation and upgrade drilling of the K6 roll front, which runs parallel to the K4 and K5 roll fronts has also commenced.

The drilling along the Kendrick roll front system is consistently producing thick high grade intercepts which has resulted in its prioritisation due to its resource expansion potential and its proximity to the proposed site of the Lance Central Processing Plant. The drill density and continuity of mineralisation is expected to result in a high proportion of inferred resources being upgraded to indicated category.

The highlights of the drilling during the quarter were (by drillhole):

- RMR1779 which intersected 13.5ft @ 2,340ppm eU_3O_8 (GT 3.16) including a peak intersection of 8.5ft @ 3,420ppm eU_3O_8,
- RMRD1730 which intersected 15.5ft @1,530ppm eU_3O_8 (GT 2.37) including a peak intersection of 4ft @ 5,160ppm eU_3O_8; and
- RMR1904 which intersected 15.0ft @ 1,475ppm eU_3O_8 (GT 2.21) including a peak intersection of 4ft @ 4,420ppm eU_3O_8.

As a result of the successful targeting of the roll front nose position, the average GT and grade of the resource roll fronts is increasing. The improved GT's and grades at K4 and K5 are considered by Peninsula to be indicative of the GT's and average grades of the overall Lance resource which comprises a total of 51.5Mlbs[1]. Future exploration in other key areas of the Lance project, that will target the roll front nose, is expected to confirm uplift in average GT and grade of the overall resource.

While this drilling is exploring the potential for additional roll front systems not previously identified, results such as these also contribute directly to the indicated resource inventory. To date, the regional exploration program has been very successful in identifying new mineralised roll front systems and drilling will continue to step out into these targeted areas that have the potential to significantly increase the existing resource inventory[1]

Table 4: Best Drilling Results (based on grade thickness > 0.2 ft%), Drill Period January to March 2012 LANCE DRILLING

Hole ID	Northing	Easting	Total Depth (ft)	From (ft)	Intercept ft over PFN U3O8 grade ppm	Peak Concentration Grade	GT
RMR1779	4934877	501093	920	822.25	13.5'@2340ppm	8.5'@3420ppm	3.16
RMR1730	4934662	501101	920	830.75	15.5'@1530ppm	4'@5160ppm	2.37
RMR1904	4932116	500758	1100	991.25	15'@1475ppm	4'@4420ppm	2.21
RMR1757	4934714	501095	920	813.75	12.5'@1220ppm	5' 2330 ppm	1.53
RMR1729	4934567	500759	1000	845.25	31'@485ppm	5.5'@1620ppm	1.50
RMR1781	4934779	501182	920	831.75	11'@1100ppm	3.5'@2760ppm	1.21
RMR1874	4932357	500781	1100	1023.25	8.5'@1260ppm	6.5' @ 1560 ppm	1.07
RMR1749	4934544	501234	900	786.75	7.5'@1400ppm	4'@2140ppm	1.05
RMR1755	4934710	501216	920	828	11'@864ppm	2.5' @ 2120 ppm	0.95
RMR1780	4934562	501101	920	849.75	10.5'@840ppm	3'@1780ppm	0.88
RMRD0028	4934566	500759	890	861.75	9.5'@920ppm		0.87
RMR1898	4932206	500764	1080	1004.25	12'@725ppm	2'@1910ppm	0.87
RMR1769	4934748	501195	920	832.25	8'@1080ppm	4'@1710ppm	0.86
RMR1797	4934811	501164	920	827.75	9'@920ppm	2.5'@2300ppm	0.83
RMR1771	4934834	501093	920	817.75	6'@1350ppm	2'@2490ppm	0.81
RMR1694	4934540	501195	940	800.25	4'@1965ppm	2.5'@2990ppm	0.79
RMR1795	4934917	501104	920	840.75	11'@680ppm	0.5'@1030ppm	0.75
RMR1763	4934754	501092	920	813	10'@722ppm	3' @ 1850 ppm	0.72
RMR1767	4934794	501094	920	824.25	6.5'@1060ppm	4.5' @ 1320 ppm	0.69
RMR1806	4934473	501214	880	783.75	4'@1710ppm	3' @ 2120 ppm	0.68
RMR1854	4933239	500776	1000	825.75	14.5'@460ppm	1'@1050ppm	0.67
RMR1850	4933169	500782	1060	855.5	28'@203ppm	4' @ 400 ppm	0.57
RMR1660	4934259	500616	1000	848.25	7.5'@730ppm	3'@1140ppm	0.55
RMR1771	4934834	501093	920	838.25	8.5'@640ppm	1.5'@1290ppm	0.54
RMR1768	4934394	501231	880	777.25	5.5'@860ppm	1.5' @ 1390 ppm	0.47
RMR1817	4934997	501159	940	859	19'@246ppm	8' @ 320 ppm	0.47

RMR1809	4934960	501131	920	855.75	8'@570ppm	4.5' @ 760 ppm	0.46
RMR1756	4934509	501238	880	779.25	3.5'@1290ppm	2' @ 1940 ppm	0.45
RMR1746	4934593	501102	920	846.75	14'@317ppm	1.5'@1150ppm	0.44
RMR1794	4934559	501176	900	809.75	3.5'@1180ppm	1.5'@2200ppm	0.41
RMR1884	4932277	500792	1100	972.25	7.5'@525ppm	1.5' @ 1350 ppm	0.39
RMR1889	4933122	501146	960	875.25	4'@960ppm	2' @ 1440 ppm	0.38
RMR1678	4934526	500744	1020	867.25	21.5'@166ppm	1'@1050ppm	0.36
RMR1724	4934398	501132	940	853.25	5.5'@630ppm	4'@760ppm	0.35
RMR1716	4934539	501207	920	795.75	4'@830ppm	2'@1270ppm	0.33
RMR1743	4934622	501101	920	842.25	17'@195ppm	1.5'@670ppm	0.33
RMR1825	4935039	501160	920	801.75	5.5'@600ppm	1'@1080ppm	0.33
RMR1866	4933322	500740	980	808.25	4'@740ppm	1.5'@1370ppm	0.30
RMR1764	4934432	501233	880	777.75	2.5'@1180ppm	1' @ 2070 ppm	0.30
RMRD0028	4934566	500759	890	855.25	5'@590ppm		0.30
RMR1760	4934470	501238	880	777.75	3'@980ppm	1.5' 1390 ppm	0.29
RMR1673	4935433	500900	880	733.25	4'@710ppm	1'@1040ppm	0.28
RMR1758	4934547	501262	880	781.75	2.5'@1130ppm	1.5' 1660 ppm	0.28
RMR1732	4934576	501213	900	805.75	3.5'@770ppm	1.5'@1270ppm	0.27
RMRD0025	501101	4934660	860	843.75	4'@670ppm	1.5' @ 1190ppm	0.27
RMR1784	4934393	501211	880	789.75	3'@860ppm	1.5'@1440ppm	0.26
RMR1704	4934475	500729	1000	876.25	5'@510ppm	0.5'@770ppm	0.26
RMRD0028	4934566	500759	890	871.75	3.5'@720ppm		0.25
RMR1657	4935505	500885	860	753.75	4'@620ppm	1.5'@1140ppm	0.25
RMR1847	4934241	502612	700	548.25	8'@306ppm	2'@680ppm	0.24
RMR1692	4934545	501142	960	827.25	23.5'@103ppm	1.5'@800ppm	0.24
RMR1810	4934435	501128	920	829.75	2.5'@940ppm	1.5' @ 1370 ppm	0.24
RMR1795	4934917	501104	920	827.25	3.5'@650ppm	1'@1160ppm	0.23
RMR1827	4935084	501165	920	786.25	7'@323ppm	1'@870ppm	0.23
RMR1702	4934392	500656	1040	900.25	11.5'@195ppm	1.5'@560ppm	0.22
RMR1783	4934711	501139	920	809.75	32'@70ppm	2'@720ppm	0.22
RMR1718	4934398	501018	940	814.75	10'@218ppm	4'@360ppm	0.22
RMR1816	4933878	501180	880	801.5	9'@240ppm	2.5' @ 470 ppm	0.22
RMR1902	4932019	500755	1120	982.75	6'@350ppm	1'@540ppm	0.21
RMR1800	4934669	501215	900	814.75	18'@113ppm	1.5'@690ppm	0.20
RMR1681	4935409	500901	860	724.25	22'@90ppm	1'@540ppm	0.20
RMR1809	4934960	501131	920	840.25	5.5'@360ppm	2' @540 ppm	0.20

Lance Projects – Mineralised Potential

The Lance Project covers an area of over 120km² within which there is a combined total of at least 305 line kilometres (190 miles) of known stacked roll fronts. Of this total, only a small percentage has been explored, with over 90% of the drilling concentrated within the more advanced Ross and Barber resource areas. Based on the historic conversion rate from roll front length to a drill-defined resource, the mineralised potential of the Lance Project, which is in addition to the JORC-compliant resource, is assessed at between 104 and 163 Mlbs U_3O_8. The upgrade in mineralised potential from previous estimates is based on an anticipated grade range of 400ppm to 550ppm U_3O_8. This grade range approximates the minimum and maximum modelled grades respectively.

Table 5: Lance Project Mineralised Potential

Exploration Areas	Tonnes (M)		Grade (ppm U3O8)		U3O8 (Mlbs)	
Range	From	To	From	To	From	To
Total	117.7	134.7	400	550	104	163

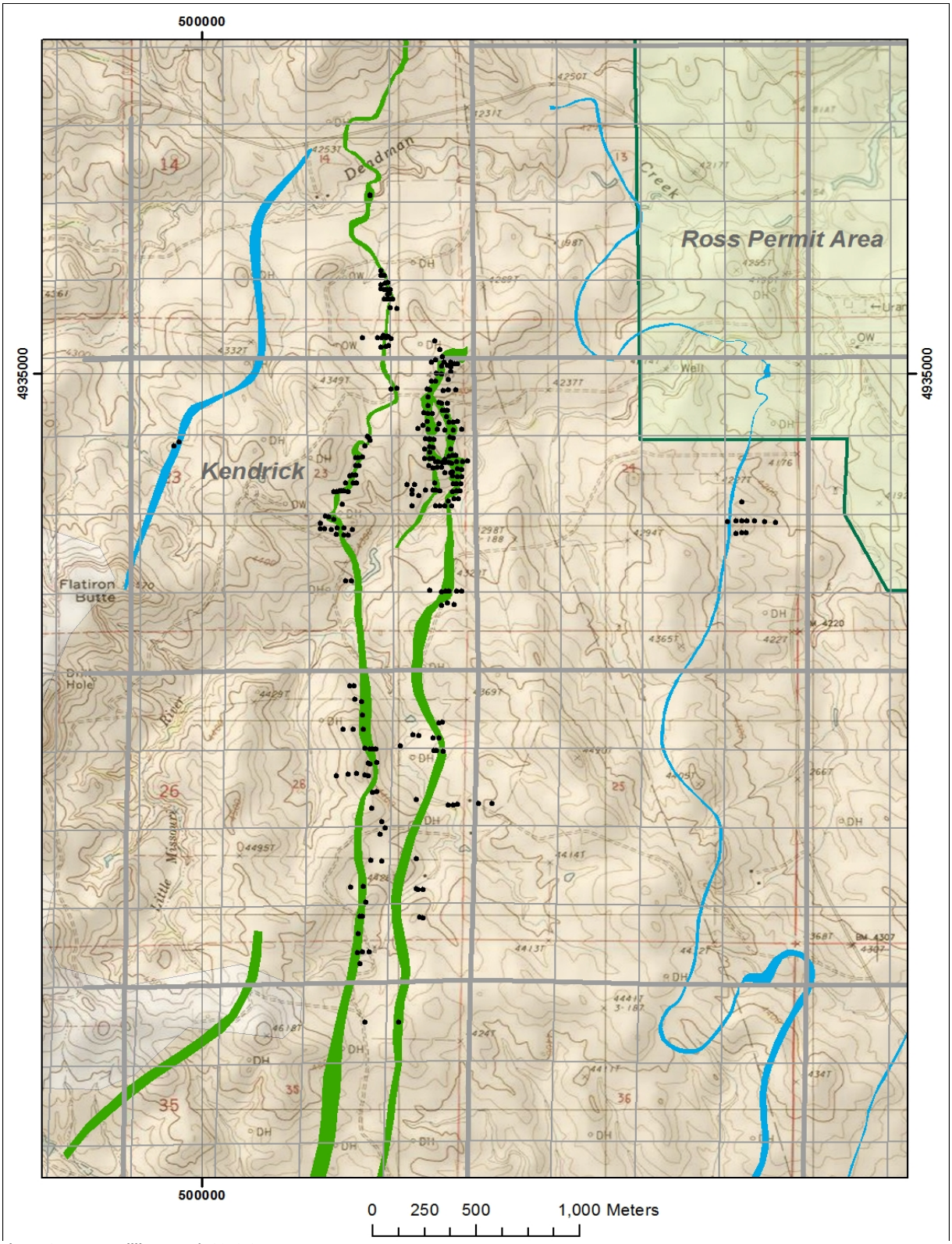

Figure 3: Lance Drilling March 2012 Quarter

SOUTH AFRICA – URANIUM / MOLYBDENUM EXPLORATION
(Peninsula Energy 74% / BEE Group 26%)

Karoo Projects, South Africa

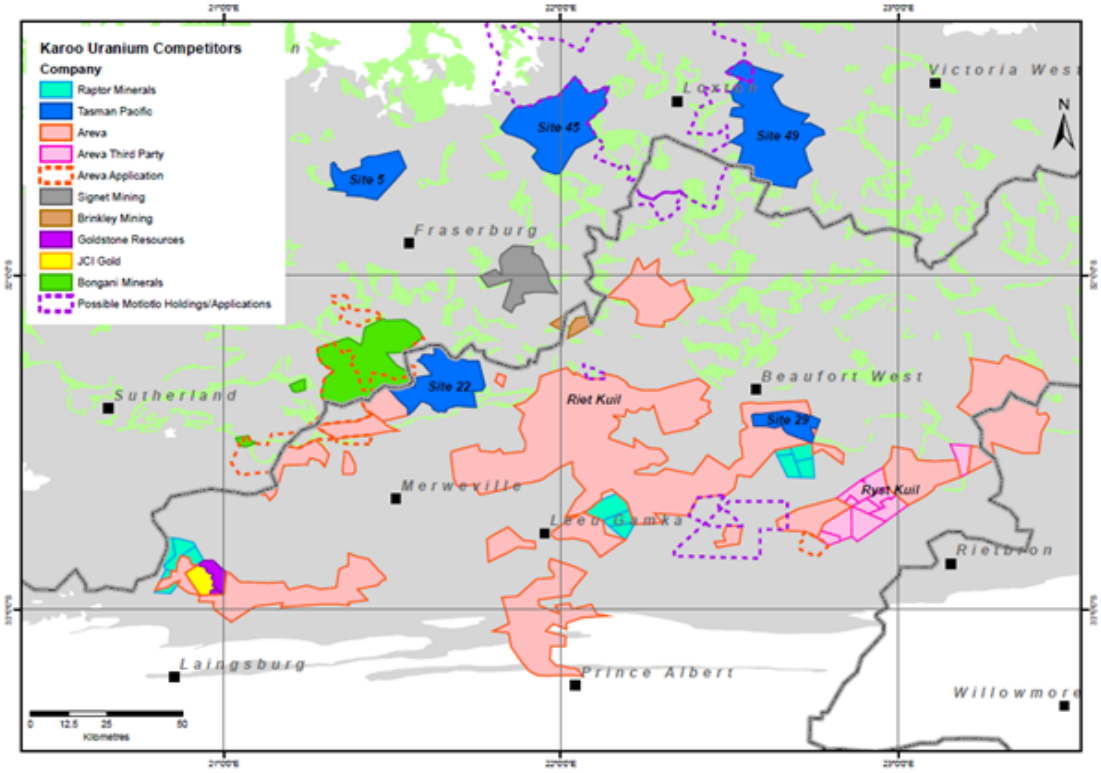

Figure 4: South Africa - Uranium /Molybdenum Project Area Locations

Peninsula's wholly owned subsidiary Tasman Pacific Minerals Limited holds prospecting rights to six project areas in the Karoo region of South Africa. They are designated Site 5 (Fraserburg District), Site 22 (Fraserburg District), Site 29 (Beaufort West District), Site 37 (Cradock District), Site 45 (Loxton District) and Site 49 (Loxton District). Two of the sites (22 and 45) contain resource estimates by JCI in the early 1980's and one site (29) contains a resource estimate by Union Carbide in the early 1980's.

Introduction

Approximately 1500 boreholes were drilled by JCI (Site 22 and 45) and Union Carbide (Site 29) during the late 1970's from which historic mineral estimates were derived. The first phase of the Tasman Pacific drilling programme in the Karoo commenced on 25 January 2011 at Site 29 and is focused on a selection of the JCI and Union Carbide drill holes to be re-drilled and logged to determine uranium correlations in order to confirm the historical resources. Further exploration work has identified numerous other untested uranium occurrences at these sites and other sites (Site 5, 49 and 37). In many cases old boreholes were re-opened and gamma probed for eU_3O_8 values to be determined. Where reverse circulation (RC) or diamond drilling (DD) work was undertaken, the samples were submitted for analysis at an accredited laboratory to verify the gamma probe grades and obtain a value for molybdenum, which is considered to be an important by-product.

Site 45

The Company has now received the necessary approvals from the Department of Mineral Resources (DMR) which enable it to commence development drilling of Sites 45 and 49. As at Sites 22 and 29 the drilling program at Site 45 will be targeted to confirm the historic mineralisation defined by the Johannesburg Consolidated Investment Company (JCI) during the late 1970's.

Site 45 is located 120km northwest of Beaufort West and comprises a contiguous area of 489km². JCI drilled 431 exploration holes at Site 45 which resulted in a mineralisation estimate of 4.8mlbs eU_3O_8. The historic work returned a grade in excess of 700ppm eU3O8 in two sandstone units contained within the Davidskolk Member of the Abrahamskraal Formation, including maximum values of 4,210ppm eU3O8 and 1,372ppm Mo. This near surface mineralisation occurs in broad, stacked paleochannels with an apparent northwest to southeast trend.

During December 2011 Peninsula field crew were able to undertake non-invasive exploration work in preparation for an extensive drilling campaign. A total of 15 drillholes that were open to the mineralised depth were probed with a gamma tool. This initial program returned results for 13 intersections exceeding 200ppm with highlights including:

- DH SFN0336 9.2ft at 1,095ppm eU_3O_8 from 45.4ft
- DH SFN0443 7.7ft at 592ppm eU_3O_8 from 47.4ft

The RC drilling programme at Site 45 is expected to twin a representative sample of the historic holes and, if the correlations are positive, will then allow the generation of an initial JORC -compliant estimate for the Karoo Projects.

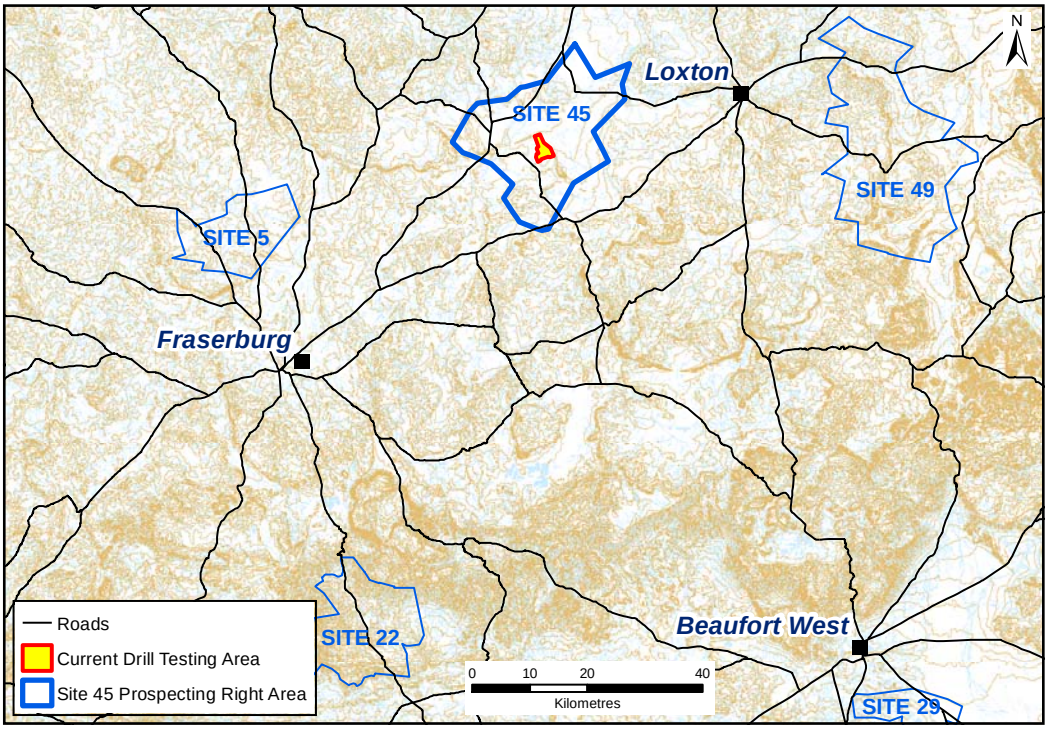

Figure 5: Site 45 Location Plan, Karoo RSA.

Site 29

RC drilling continued at Site 29 during the quarter to further delineate the historic mineralised area of Union Carbide. During the quarter Peninsula completed a further 128 RC drillholes for 3,601m (11,814ft). Of these completed holes, a total of 13 holes encountered mineralisation greater than 0.2GT. The full list of significant intersections (>0.2GT) is detailed below in Table 6.

Drilling was focused on delineating a new previously undefined area of mineralisation that was found through the wide-spaced grid drilling. Initial test drilling was also undertaken at the other planned target area that was identified from the airborne survey and subsequent field work

The drill results continue to confirm strong high-grade mineralisation in paleochannels averaging a thickness of 3.05ft (at 200ppm eU_3O_8 cut off). This mean thickness is consistent with the historic results for the project site and is typical of the thickness of mineralised zones in the Karoo.

During the 1970's Union Carbide estimated the presence of approximately 600,000lbs eU_3O_8 in a small part of Site 29 which in total covers 106km². Union Carbide reported an average grade exceeding 1,000ppm eU_3O_8 and the mineralisation being hosted by the Poortjie Formation. This sedimentary sandstone formation is the main target for uranium mineralisation in the Karoo.

Site 22

RC drilling continued at Site 22 during the quarter to further delineate the historic mineralised area of JCI. During the quarter Peninsula completed a further 63 RC drillholes for 1,885m (6,184ft). Of these completed holes, a total of 12 holes encountered mineralisation greater than 0.2GT.

This drilling is providing further assay data to progress the associated molybdenum evaluation. In addition to validating the historic uranium mineralisation, results to date indicate the potential to delineate significant levels of Molybdenum at Site 22.

The drill results continue to confirm strong high grade mineralisation in paleochannels averaging a thickness of 4.55ft (at 200ppm eU_3O_8 cut off), which is consistent with the historic results for the project and mineralised zones in the rest of the Karoo.

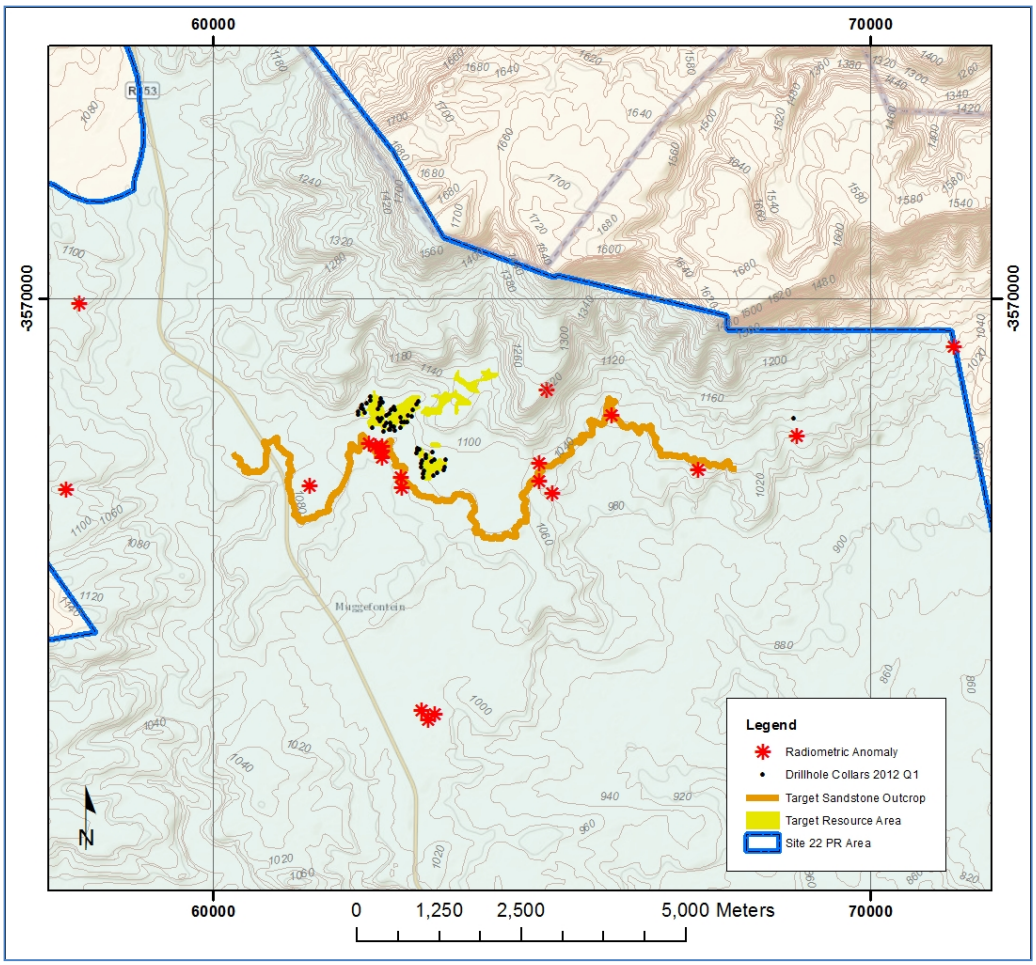

Figure 6: Karoo Project Site 22 – Drillhole Location Plan January - March 2012

During the 1970's JCI estimated the presence of approximately 2.8mlbs eU_3O_8 in a small part of Site 22 which in total covers 329km². JCI reported an average grade exceeding 1,400ppm eU_3O_8 with the mineralisation being hosted in the Poortijie Formation.

The full list of significant intersections (>0.2GT) is detailed below in Table 6.

Table 6: Site 22 and 29 - Karoo RC Results for January to March 2012 (based on grade thickness > 0.2 ft%))

Site	Hole ID	Northing	Easting	Total Depth (ft)	From (ft)	Intercept ft over Gamma Probe U3O8 grade	GT
29	QFN0288RC	-3590355	-35295	82.0	53.8	2.3ft @ 932ppm	0.21
29	QFN0230RC	-3590295	-35040	82.0	59.4	10.0ft @ 258ppm	0.26
29	QFN0395RC	-3590012	-35027	82.0	53.1	2.5ft @ 1,097ppm	0.27
29	QFN0388RC	-3590137	-34476	65.6	21.3	7.7ft @ 1,393ppm	1.07
29	QFN0397RC	-3590050	-35081	98.4	53.5	3.3ft @ 1,709ppm	0.56
29	QFN0389RC	-3590120	-34447	65.6	17.9	6.1ft @ 566ppm	0.34
29	QFN0436RC	-3590649	-35396	82.0	18.2	3.3ft @ 1,345ppm	0.44
29	QFN0450RC	-3590681	-35394	82.0	20.0	3.4ft @ 2,331ppm	0.80
29	QFN0453RC	-3590669	-35371	82.0	17.9	2.8ft @ 786ppm	0.22
29	QFN0455RC	-3590700	-35362	82.0	13.1	14.1ft @ 291ppm	0.41
29	QFN0458RC	-3590677	-35339	82.0	19.0	6.1ft @ 414ppm	0.25
29	QFN0460RC	-3590729	-35363	82.0	5.4	6.9ft @ 289ppm	0.20
29	QFN0469RC	-3590766	-35205	82.0	4.6	6.1ft @ 442ppm	0.27
22	06F0213RC	-3571624	-62276	98.4	76.6	3ft @ 769ppm	0.23
22	06F0035RC	-3571497	-62400	164.0	96.3	3ft @ 3,104ppm	0.92
22	06F0035RC	-3571497	-62400	164.0	101.5	4.3ft @ 1,654ppm	0.71
22	06F0079RC	-3571816	62525	82.0	55.1	8.2ft @ 1,075ppm	0.88
22	06F0086RC	-3571869	62546	82.0	39.0	7.5ft @ 643ppm	0.49
22	06F0895RC	-3571694	62775	98.4	55.4	2.1ft @ 917ppm	0.20
22	06F0124RC	-3571942	62714	82.0	17.9	2.3ft @ 3,320ppm	0.76
22	06F0137RC	-3571947	62760	82.0	46.9	4.6ft @ 800ppm	0.37
22	06F0482RC	-3572341	63346	82.0	51.8	5.2ft @ 911ppm	0.48
22	06F0452RC	-3572373	63253	82.0	54.6	1.6ft @ 1,267ppm	0.21
22	06F0890RC	-3572446	63373	98.4	69.2	3.1ft @ 2,714ppm	0.85
22	06F0209RC	-3571606	63112	164.0	138.0	2.3ft @ 1,139ppm	0.26
22	06F0198RC	-3571692	63045	164.0	136.0	4.6ft @ 1,311ppm	0.60

Karoo Projects – Exploration Potential

Results achieved to date are generally very positive and indications are that the current strategy has successfully confirmed the presence of high-grade uranium and molybdenum mineralisation located at depths that can easily be reached by conventional open pit mining.

In addition to the existing resource drilling areas, a total of ten high ranking drill targets distributed across all six of the Company's Project Areas have been prioritised from the 392 uranium occurrences generated by the 2008 helicopter-borne radiometric and magnetic surveys. This process has included site mapping, ground sampling and aerial extent studies of the project areas conducted by Peninsula over the last 3 years.

Preliminary geological studies have estimated a combined exploration potential in the Karoo of 30-60m tonnes @ 700 – 1,400ppm eU_3O_8 for 90 – 150m lbs eU_3O_8.

The Company's target over the next 12 months is to delineate 30Mlbs of eU_3O_8 (15-25m tonnes @ 700–1,400ppm eU_3O_8). The source of this material may include the historic mineral occurrences, their extensions and new exploration targets. If this target is achieved a conceptual study has suggested that this quantity of uranium would support the development of a central processing facility near Site 29.

FIJI – RAKIRAKI GOLD PROJECT

(Peninsula Energy 50% / Geopacific Resources NL operator 50%)

During mid to late 2010 Geopacific Resources NL (GPR), through Geotech Ltd (Geotech), carried out a helicopter-borne geophysical survey over several areas of Fiji including the RakiRaki project area. The ZTEM method employed utilized an AFMAG Z-axis Tipper electromagnetic sensor.

Preliminary and final data processing, including generation of final digital data and map products were undertaken at the offices of Geotech in Aurora, Ontario. Further processing and interpretation of the data was undertaken by Southern Geoscience Consultants Pty Ltd of Perth (SGC).

The RakiRaki survey area is located in north east Viti Levu and consists of 42 survey lines oriented in a northwest direction and covering an area of 173 km^2 with 400m line spacing. Six conductive trends have been interpreted by Geotech, with potential correlation of these conductive trends with known structural features.

Historic exploration is being compiled and is being used in conjunction with the recent ZTEM data to define and prioritise drilling targets.

CORPORATE

Appointment of Chief Executive Officer – Strata Energy

During the quarter the Company announced the appointment of Mr. Ralph Knode as Chief Executive Officer of Strata Energy. Mr Knode's appointment commenced on 1 April 2012 and is overseeing all aspects of the Lance Projects.

Mr. Knode has over 20 years of experience in uranium mine construction, mine operations and property evaluation, throughout North America, Kazakhstan and Australia.

Mr. Knode joins Strata from Uranium One Inc, one of the largest publicly traded uranium producers in the world, where he was Senior Vice President of Projects for the past four years. During that time Mr. Knode worked across all Uranium One operations and joint ventures, including overseeing four operating uranium mines in Kazakhstan, as well as the start up of the Honeymoon Uranium mine, Australia's fourth uranium mine.

Prior to joining Uranium One Mr. Knode was with Cameco Corporation and served as Director of Operations and Construction at the Inkai Joint Venture, an In-Situ Recovery project in Kazakhstan between Cameco and Kazatomprom, Kazakhstan's State owned Uranium entity.

Mr. Knode also served as General Manager of Uranium Operations at Power Resources Inc (Cameco subsidiary) from 1999-2005, where he directed mining, well field construction and ground water restoration activities at the Smith Ranch-Highland uranium mine in Wyoming. He also directed the construction of the Inkai test mine in 2001 for parent company Cameco.

He was also Vice President, Development at Crowe Butte Resources Inc. (Cameco subsidiary), he was responsible for all development activities including design, procurement and installation of well fields. This included directing test mine and commercial mine construction and subsequent operational activities.

Cash Position

The Company's cash position at the end of the quarter, including commercial bills, bonds and security deposits, was $13.8 million.

For further information please contact:

John Simpson
Executive Chairman
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 Alf Gillman and Mr Jim Guilinger. Mr Gillman is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Gillman is General Manager Project Development and is a Competent Person under the definition of the 2004 JORC Code. 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. Both Mr Gillman and 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 2004 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 Alf Gillman and Mr George van der Walt. Mr Gillman is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Gillman is General Manager Project Development and is a Competent Person under the definition of the 2004 JORC Code. 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. Both Mr Gillman and Mr van der Walt 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 Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Both Mr Gillman 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.

The information in this report that relates to Exploration Results and Exploration Potential at the Raki Raki Project in Fiji is based on information compiled by Dr Ian Pringle, Member of the Australasian Institute of Mining and Metallurgy. Dr Pringle is Managing Director of Geopacific Resources NL. Dr Pringle 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 a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Gillman, Mr Guilinger, Mr van der Walt and Dr Pringle consent to the inclusion in the report of the matters based on their information in the form and context in which it appears

Please note that in accordance with Clause 18 of the JORC (2004) Code, the potential quantity and grade of the "Mineralised Potential" in this report 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.

Cautionary and Inferred Resources Notices

The DFS completed on the Ross production unit includes measured and indicated resources within the Ross project area, excluding vanadium. The EES includes measured and indicated resources within the remainder of the Lance projects including an assumed resource conversion of 40% (inferred to indicated or greater) and vanadium in accordance with the ratio of 2.6:1 U_3O_8 to V_2O_5 mineralisation identified within the permit area.

The EES is based on various assumptions, including homogeneity of the delineated ore body contained within the Lance projects. This is considered reasonable by Company's technical consultants, competent persons and independent external consultants.

The purpose of the EES was to demonstrate the Lance projects continued economic viability and robustness over an extended life beyond the Ross production unit - which is limited to measured and indicated resources of 6.2mlbs recovered U_3O_8.

In accordance with the relevant regulations governing the disclosure of mineral projects, readers are cautioned that mineable resources based on inferred resource material are considered too speculative geologically to enable them to be classified as reserves.

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] Current JORC Compliant Resource Estimate

Resource Classification	Tonnes Ore (M)	U3O8 kg (M)	U3O8 lbs (M)	Grade (ppm U3O8)
Measured	3.6	1.8	4.0	505
Indicated	9.4	4.9	10.7	517
Inferred	35.1	16.7	36.8	475
Total	48.1	23.4	51.5	485

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