

# 30 JUNE 2013 QUARTERLY ACTIVITIES REPORT

31 July 2013

ASX: PEN, PENOC

**Peninsula Energy Limited**  
ABN 67 062 409 303

## Directors

Gus Simpson - Executive Chairman  
Alf Gillman - Technical Director  
Michael Barton - Non Exec 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

Telephone: +61 8 9380 9920  
Facsimile: +61 8 9381 5064

## Website

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

## Capital Structure

2,955million shares  
802million options

## Cash at 30 June 2013

\$11.73 million

## Market cap at 31 July 2013

\$82.8million

For further information please  
contact:  
[info@pel.net.au](mailto:info@pel.net.au)

## HIGHLIGHTS

### WYOMING, USA – LANCE URANIUM PROJECTS

- Pre-SML construction program progress
- US EPA approves aquifer exemption for Ross Permit Area at Lance
- Draft SEIS public comment period closes without extension
- Final Production License expected in December 2013
- EPC Contract executed for central processing facility executed

### SOUTH AFRICA – KAROO URANIUM/MOLYBDENUM PROJECTS

- Positive uranium results returned from drilling Ryst Kuil Channel extensions

## CORPORATE

- Appointment of new Chief Financial Officer
- Appointment of project finance debt advisors
- Cash as at 30 June 2013 of \$11.73m



## WYOMING, USA – LANCE PROJECTS

(Peninsula Energy 100%)

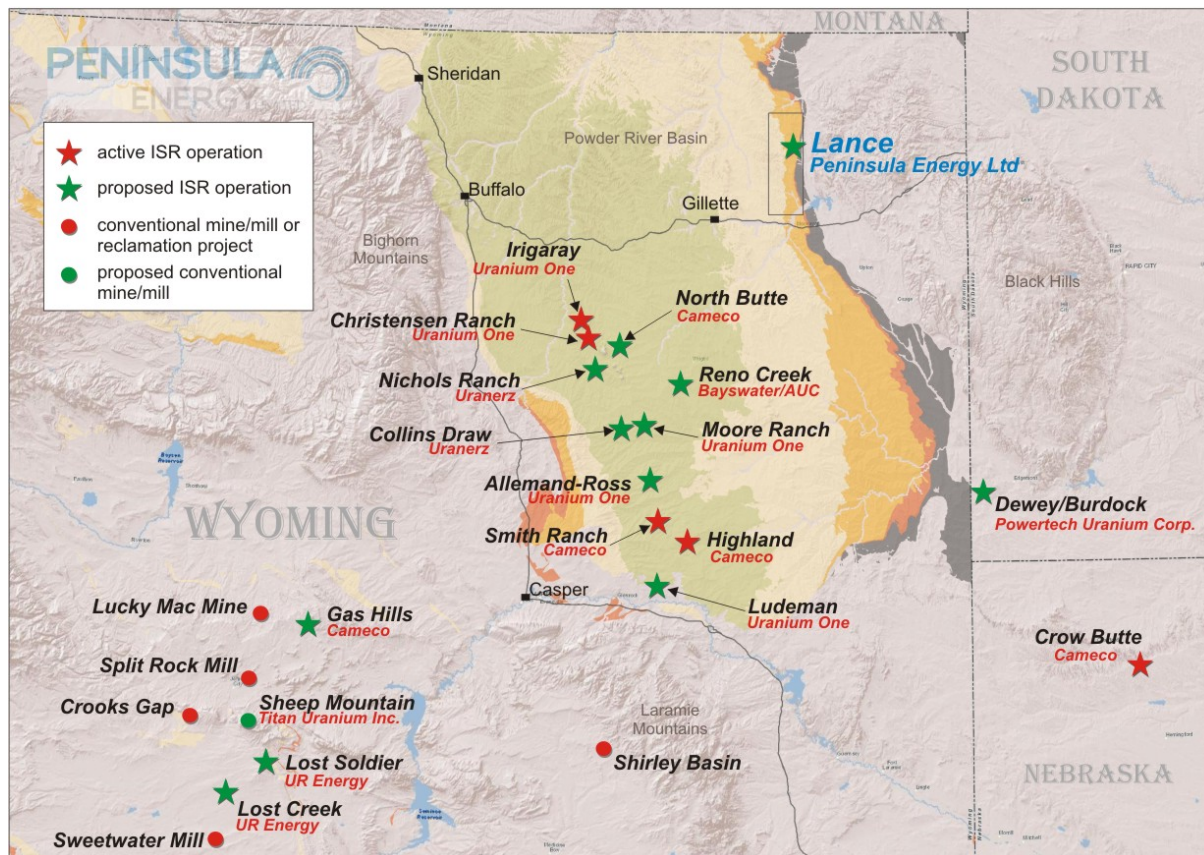


Figure 1: Lance Projects location, Wyoming USA

### Pre-SML construction programme

During the period April 2013 to June 2013 Peninsula's wholly owned subsidiary Strata Energy Inc (Strata) completed 20 monitoring wells and 23 delineation holes for a total of 20,635 feet at the Lance Projects, the majority of the holes being within and around the planned first production unit at the Ross Permit area.

A total of 20 monitoring wells in 13 clusters have been completed in Mine Unit 1 of the Ross Permit area and will be used for correlations and base line studies of the Mine Unit 1 water quality. These monitoring wells are helping further refine site specific geological and hydrological parameters which is enhancing Strata's overall understanding of the ore body and extraction rates. Delineation drilling is also being conducted to optimise the well field patterns and design within this first production unit.

In addition several of the drillholes provided the additional benefit of intersecting significant mineralisation, some of which is outside of the existing resource boundaries. The highlights of these included wells MU1-OZ6 which intersected 7.5ft @ 950ppm U<sub>3</sub>O<sub>8</sub> Grade Thickness (GT) 0.71 and MU1-OZ9 which intersected 6.0ft @ 1000ppm U<sub>3</sub>O<sub>8</sub> GT 0.60.

The Company has also conducted a 3 core hole drilling program within planned Mine Unit 1 to provide information on recoveries and to refine the most efficient leach agent chemistry for the Ross ore body. Review of this core is currently in progress and will provide material for porosity/permeability samples as well as "Leach Test" samples that are being selected and prepared for laboratory analysis. The core drilling is also providing more definitive information on expected uranium concentrations during mining.

In addition to providing the information above, the core drilling has intersected strong uranium mineralisation, some of which is outside the existing resource boundaries. A total of 15 holes reported Grade Thickness ("GT") intersections exceeding 0.2, as shown in Table 1.

The results from the delineation well drilling generally reconcile well against the previous exploration drilling results. In conjunction with the above program Strata is fulfilling regulatory commitments to re-plug historic exploration holes in the vicinity of the first mine units and are also systematically re-probing the historic NuBeth holes. To date, the new Prompt Fission Neutron (PFN) data correlates within 1% of the original hand-calculated gamma data, providing confirmation of the veracity of the original gamma measurements.

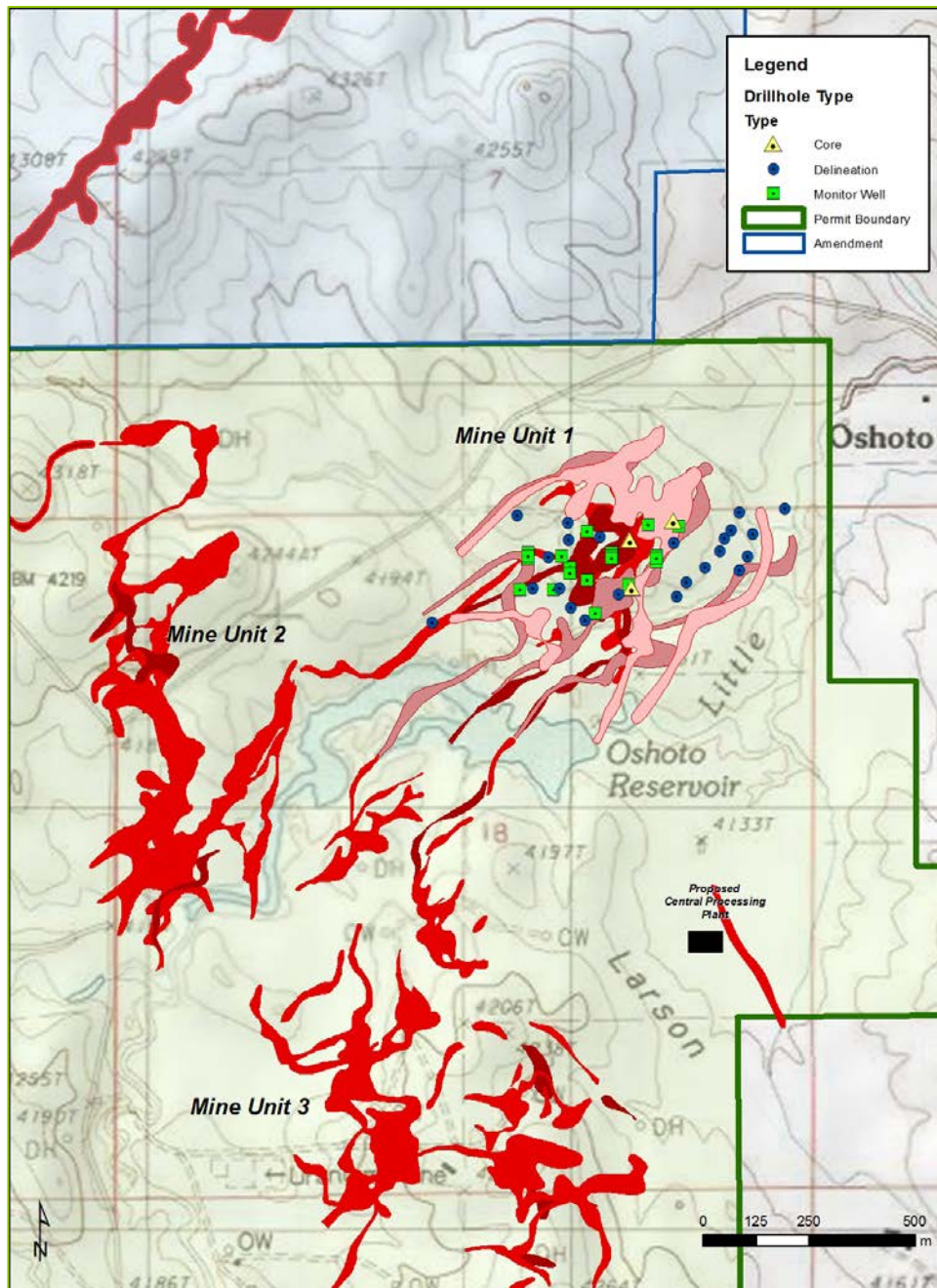


Figure 2: Lance Projects Pre-Production Drilling Location Map (roll front trends shown in red)

**Table 1: Pre-Production Drilling Results – Lance Projects, Wyoming USA**

| Drilling     | Hole_ID  | Easting | Northing | Depth | From Ft | Interval Ft | Grade ppm | GT   |
|--------------|----------|---------|----------|-------|---------|-------------|-----------|------|
| Monitor Well | MU1-OZ6  | 503995  | 4936535  | 490   | 443.5   | 7.5         | 950       | 0.71 |
| Delineation  | RMR2721  | 504025  | 4936636  | 520   | 417.5   | 8.0         | 760       | 0.61 |
| Monitor Well | MU1-OZ9  | 504094  | 4936524  | 470   | 379.0   | 6.0         | 1000      | 0.60 |
| Core         | RMRD0038 | 504197  | 4936675  | 500   | 361.0   | 10.0        | 580       | 0.58 |
| Monitor Well | MU1-DM2  | 503955  | 4936565  | 560   | 436.5   | 7.0         | 650       | 0.46 |
| Core         | RMRD0037 | 504094  | 4936630  | 500   | 450.0   | 10.5        | 400       | 0.42 |
| Monitor Well | MU1-DM1  | 503856  | 4936599  | 570   | 418.0   | 7.5         | 550       | 0.41 |
| Monitor Well | MU1-DM3  | 504054  | 4936600  | 570   | 434.5   | 3.5         | 1010      | 0.35 |
| Monitor Well | MU1-OZ13 | 504015  | 4936455  | 470   | 369.0   | 5.0         | 690       | 0.35 |
| Core         | RMRD0039 | 504098  | 4936517  | 480   | 373.5   | 7.0         | 500       | 0.35 |
| Delineation  | RMR2720  | 504069  | 4936502  | 480   | 371.5   | 9.5         | 350       | 0.33 |
| Monitor Well | MU1-OZ7  | 504140  | 4936665  | 490   | 432.0   | 9.5         | 290       | 0.28 |
| Delineation  | RMR2740  | 504201  | 4936623  | 520   | 380     | 9.5         | 270       | 0.26 |
| Monitor Well | MU1-OZ4  | 504160  | 4936585  | 460   | 388.5   | 5.5         | 400       | 0.22 |
| Monitor Well | MU1-OZ1  | 503856  | 4936592  | 510   | 421.0   | 4.5         | 480       | 0.22 |

## Permitting

### *US Environmental Protection Authority approves Aquifer exemption for Lance Projects Ross Permit Area*

On 28 May 2013 Peninsula announced that the US Environmental Protection Agency (EPA) had approved the request of Strata for an aquifer exemption at the Lance Projects Ross Permit Area. The Ross Permit Area includes the first three uranium production units at the Lance Projects.

The approval represents EPA's concurrence with the previous conclusion by the Wyoming Department of Environmental Quality (WDEQ) concerning exemption of the Ross ore zone aquifer to facilitate In-Situ Recovery(ISR) mining of uranium:

- The aquifer does not currently and cannot in the future serve as a source of drinking water, and
- The aquifer is mineral producing and can be demonstrated to contain minerals that, considering their quantity and location, are expected to be commercially producible.

Under US law (40 CFR part 146.4), an aquifer may be exempted if it is not currently being used and will not be used in the future as a drinking water source, or it is not reasonably expected to supply a public water system. Without an aquifer exemption, certain types of energy production, mining, or waste disposal into the aquifer would be prohibited. EPA makes the final determination on granting all exemptions.

With approval of the aquifer exemption, only one licensing action remains, being the issuance by the US Nuclear Regulatory Commission of the Combined Source and 11e.(2) Byproduct Material License (SML), which is anticipated in December 2013. Prior to the issuance of the SML Peninsula can conduct certain construction, including deep disposal wells, monitoring wells, central processing plant (CPP) site works, civil works, ancillary roads, plant long lead items.

Post issuance of the SML, subject to the securing of the main debt financing, Peninsula will complete construction of the CPP, CPP expansion, satellite ion exchange plant and well-field development.



*Draft SEIS public comment period closes without extension*

In March 2013 the NRC issued to Strata both the Safety Evaluation Report and Draft Supplemental Environmental Impact Statement (SEIS). During the quarter the public comment period for the Draft SEIS closed, with no extension requested by any of the relevant stakeholders. This augurs well for the timely issue of the final SEIS in November 2013 and the SML in December 2013.

*Consultation with Native American Tribes*

During the quarter Strata completed two rounds of site visits by Native American tribes to assess cultural issues (if any), as required under Section 106 of the National Historic Preservation Act.

**Engineering and Construction**

During the quarter Strata executed an EPC Contract with Wyoming based ISL engineering group TREC DB, LLC for design and construction of the CPP. TREC had previously been engaged to perform the engineering and design work for the CPP and well fields and the new agreement encompasses the remaining design work as well as performance of procurement and construction going forward.

Design has now been finalized on all phase one construction activities, including site civil works, building foundations and administration/shop building completion. Construction readiness documents are also prepared for these activities. Pre-qualification of contractors for civil and other works has also commenced.

**SOUTH AFRICA – URANIUM / MOLYBDENUM EXPLORATION**

(Peninsula Energy 74% / BEE Group 26%)

Peninsula has a 74% interest in a total of 42 prospecting rights (PR's) covering 7,800 km<sup>2</sup> of the main uranium-molybdenum bearing sandstone channels in the Karoo Basin (Karoo Projects) (Figure 3). Completion of the acquisition of some of these prospecting rights is subject to conditions precedent as detailed in the previous Karoo announcement. The residual 26% interest remains with the BEE partners as required by South African law.

In the Eastern Sector, Peninsula has freehold ownership over an area of 322 km<sup>2</sup> which covers a significant proportion of the reported resource and allows unlimited surface access. Additional surface access rights have also been contracted on a further 153km<sup>2</sup> until 2021. This area is largely contiguous with the freehold land.

In February 2013 Peninsula commenced drilling along the Ryst Kuil channel in the Eastern Sector of its Karoo Projects which has returned encouraging initial results.

To date Peninsula has completed a total of 67 reverse circulation holes for a total of 2,745 metres at the De Pannen project area (refer Figure 3). This drilling has been successful in its objectives of identifying additional areas of mineralisation outside the current resource limits and also in converting existing inferred mineralisation to indicated status.

No drilling was undertaken by Peninsula during the quarter to allow for completion of the Section 11 transfer of mineral rights from ARSA by the Department of Mineral Resources (DMR). However, an extensive review of the geological data is underway in order to improve the geological model, which will add confidence to the resource estimation. The process involves interpretation of the geological units and stratigraphic coding, which will allow for better correlation of the mineralised zones within them. This may be of particular importance in areas of lower density drilling that have been allocated to the Inferred Resource category on the basis of geological confidence.



The results from the drilling program to date are consistent with the historic drilling results and confirm the presence of shallow uranium mineralisation (at depths mostly under 30m from surface). Within the channel system, uranium and molybdenum mineralisation is localised within smaller-scale sedimentary features in the order of 1-2m in thickness and up to several hundred metres in length. The shallow nature of the mineralisation and resources are potentially amenable to open pit mining which would have highly favourable implications for the economics of the planned operations at Karoo.

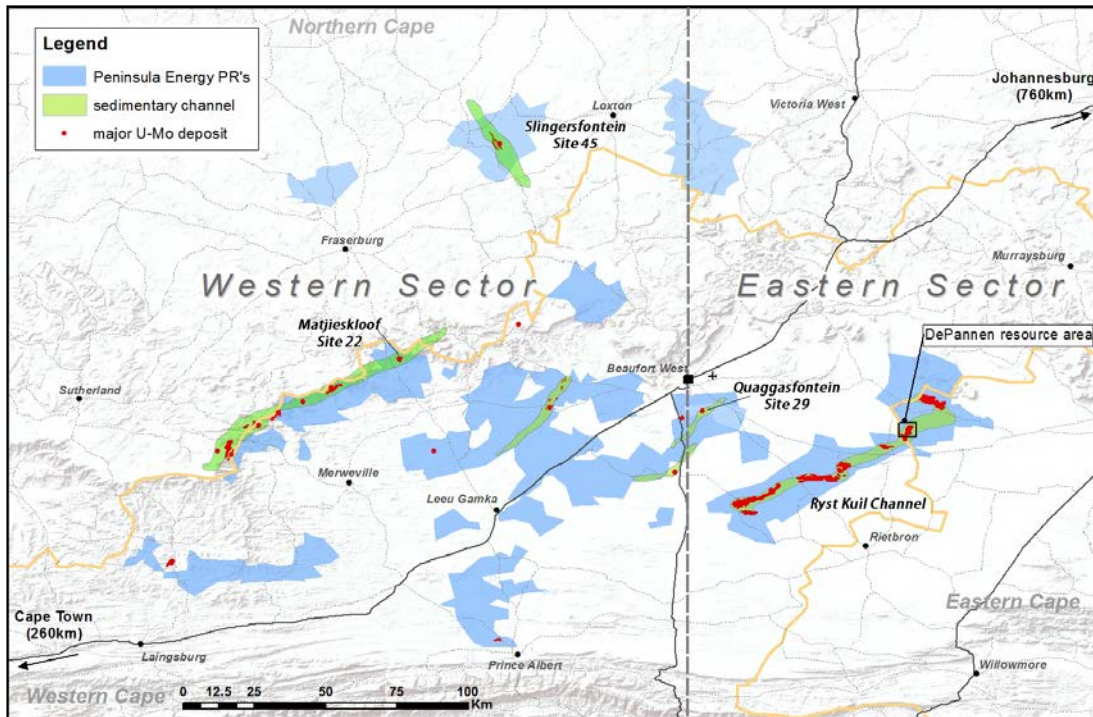


Figure 3: South Africa – Karoo Uranium /Molybdenum Project Area Locations

As well as facilitating the conversion of existing inferred resources to indicated status, step out drilling beyond the historically mineralised zones has returned high grade intersections which are expanding the limits of the known mineralisation.

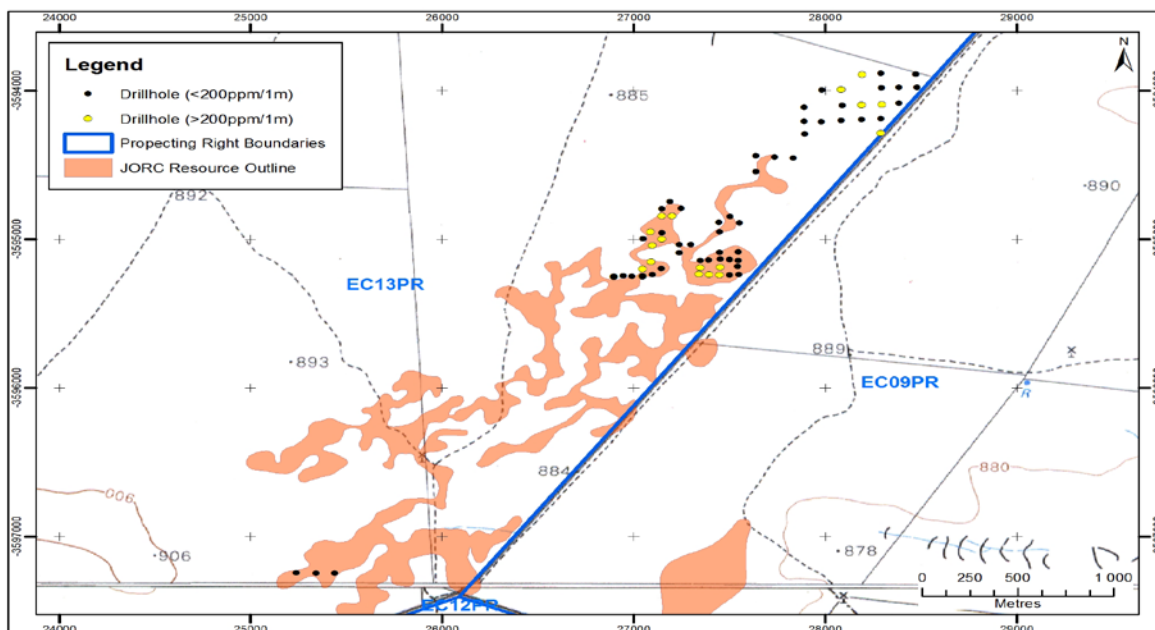


Figure 4: Karoo Projects –De-Pannen Drilling Map showing Location of Significant Results.

In addition to the above, Peninsula is continuing with a down-hole gamma logging program at Ryst Kuil to validate the historic results at the project. As part of the resource delineation process, Peninsula completed a detailed QA/QC study comprising the confirmation of drillhole locations and verification of historic down-hole radiometric logging procedures and results. In total Peninsula has now probed 336 holes in the Ryst Kuil trend area totalling 30,386 metres. The results have been successful in validating the historic data.

**Table 2: Drilling Results De Pannen, South Africa (>200ppm over 1m equivalent cut off, gamma logging).**

| Hole-ID  | Easting | Northing | RL  | Hole Depth (m) | Azimuth | Dip | From (m) | To (m) | Interval (m) | Grade (ppm eU <sub>3</sub> O <sub>8</sub> ) |
|----------|---------|----------|-----|----------------|---------|-----|----------|--------|--------------|---------------------------------------------|
| DPN227RC | 28193   | -3593893 | 884 | 35             | 0       | -90 | 22.70    | 23.30  | 0.60         | 1405                                        |
| DPN229RC | 28081   | -3593993 | 880 | 40             | 0       | -90 | 24.85    | 25.20  | 0.35         | 585                                         |
| DPN229RC | 28081   | -3593993 | 880 | 40             | 0       | -90 | 25.80    | 26.30  | 0.50         | 824                                         |
| DPN234RC | 28297   | -3594093 | 886 | 40             | 0       | -90 | 20.80    | 21.45  | 0.65         | 308                                         |
| DPN235RC | 28189   | -3594095 | 882 | 40             | 0       | -90 | 24.60    | 24.95  | 0.35         | 801                                         |
| DPN235RC | 28189   | -3594095 | 882 | 40             | 0       | -90 | 26.70    | 27.70  | 1.00         | 420                                         |
| DPN239RC | 28290   | -3594285 | 890 | 40             | 0       | -90 | 27.85    | 28.25  | 0.40         | 673                                         |
| DPN259RC | 27392   | -3595238 | 888 | 30             | 0       | -90 | 23.10    | 23.60  | 0.50         | 526                                         |
| DPN260RC | 27342   | -3595234 | 884 | 30             | 0       | -90 | 17.20    | 18.60  | 1.40         | 483                                         |
| DPN261RC | 27347   | -3595192 | 886 | 30             | 0       | -90 | 24.45    | 25.45  | 1.00         | 851                                         |
| DPN262RC | 27451   | -3595187 | 884 | 35             | 0       | -90 | 24.10    | 25.40  | 1.30         | 460                                         |
| DPN271RC | 27147   | -3594998 | 888 | 35             | 0       | -90 | 22.40    | 23.10  | 0.70         | 484                                         |
| DPN273RC | 27199   | -3594844 | 883 | 30             | 0       | -90 | 18.00    | 18.65  | 0.65         | 551                                         |
| DPN273RC | 27199   | -3594844 | 883 | 30             | 0       | -90 | 19.50    | 20.55  | 1.05         | 772                                         |
| DPN277RC | 27146   | -3594844 | 887 | 35             | 0       | -90 | 17.95    | 19.65  | 1.70         | 749                                         |
| DPN278RC | 27087   | -3594951 | 885 | 35             | 0       | -90 | 23.85    | 25     | 1.15         | 400                                         |
| DPN280RC | 27096   | -3595042 | 885 | 35             | 0       | -90 | 22.5     | 22.9   | 0.40         | 678                                         |
| DPN280RC | 27096   | -3595042 | 885 | 35             | 0       | -90 | 27       | 28.1   | 1.10         | 559                                         |
| DPN281RC | 27090   | -3595152 | 892 | 35             | 0       | -90 | 17.7     | 18.15  | 0.45         | 731                                         |
| DPN281RC | 27090   | -3595152 | 892 | 35             | 0       | -90 | 25.2     | 25.85  | 0.65         | 1252                                        |
| DPN285RC | 27045   | -3595248 | 888 | 35             | 0       | -90 | 19.35    | 19.85  | 0.50         | 401                                         |
| DPN288RC | 26895   | -3595252 | 888 | 35             | 0       | -90 | 19.6     | 20     | 0.40         | 579                                         |

## CORPORATE

### Appointment of Chief Financial Officer

On 19 June 2013 Peninsula announced the appointment of Mr David Coyne as its new Chief Financial Officer.

Mr Coyne joins Peninsula after having held similar senior executive roles including Chief Financial Officer–Australia for manganese miner Consolidated Minerals and, most recently, Chief Financial Officer for engineering and construction company VDM Group Limited.



## Appointment of Project Finance Debt Advisors

During the quarter Peninsula appointed Cutfield Freeman & Co (Cutfield Freeman) as advisors for the Lance Projects debt finance raising. The Company is currently working with Cutfield Freeman to finalise the necessary documentation to solicit proposals in the third quarter of 2013 from major financial institutions for the debt finance component of the overall project financing.

Cutfield Freeman are a London based corporate advisory firm, with regional offices in Toronto and Hong Kong. Cutfield Freeman have a long and successful track record in assisting companies such as Peninsula to implement appropriate project finance facilities for new and existing mine developments.

## Cash Position

The Company's cash position at the end of the quarter, including commercial bills, bonds and security deposits was \$11.73 million. In addition the Company has \$US22 million in undrawn funds under the BlackRock Notes Purchase Agreements, as announced in December 2012.

### 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 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 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 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 2004 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

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.

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.

Karoo Projects: Where eU3O8 results are reported, it relates to values obtained from radiometric logging of drillholes. eU3O8 grades were determined using a GeoVista gamma sonde measuring at 0.05m (5cm) intervals. Raw gamma counts per second were converted to eU3O8 by applying the formula  $eU3O8 (ppm) = ( \text{Gamma (CPS)} / (1 - \text{Gamma (CPS)} * \text{Deadtime}) ) * K\text{-Factor}$ . The logging protocol, formula and gamma sonde calibrations (calibrated at the IAEA accepted Pelindaba Calibration facility) used by Peninsula were supplied by Geotron (Pty) Ltd, an independent geophysical logging consultancy



based in Potchefstroom, South Africa. Daily calibration checks were done in selected Control Holes at the drilling area to check for drift and instrument error.

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.

