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Companies Announcement Office
Via Electronic Lodgement

DRILLING TO COMMENCE AT KAROO PROJECT SITES 45 and 49

HIGHLIGHTS

- **Drilling program to commence at the highly prospective Site 45 following approvals from the DMR**
- **Drilling to confirm historic mineralisation of 4.8mlb eU3O8 and test significant exploration potential at Site 45**
- **Maiden JORC-Compliant Estimate planned post drilling at Site 45**

Summary

Peninsula Energy Limited (Peninsula) is pleased to announce that it 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 at the Karoo Uranium Projects in South Africa (Karoo Projects).

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.

JCI drilled 431 exploration holes at Site 45 which resulted in a mineralisation estimate of 4.8mlbs eU3O8. The historic work returned a grade in excess of 700ppm eU3O8 in two sandstone units contained within the Davidskolk Member, 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 southwest trend.

Peninsula Executive Chairman stated that "*Site 45 has significant historic mineralisation and following on from the success of the drill programmes at Site 22 and 29, successful confirmation drilling at Site 45 will expedite the calculation of the maiden JORC-compliant estimate for the Karoo*".

Site 45 RC Drilling Program

Site 45 is located 120km northwest of Beaufort West and comprises a contiguous area of 489km² (see Figure 1). During the late 1970's JCI completed a total of 431 exploration holes in a central portion of the project area. Based on this data JCI calculated the presence of approximately 4.8Mlbs eU₃O₈ in the Davidskolk sandstones.

Post the JCI drilling, rock chip sampling by the South African Geological Survey returned maximum values of 4,210ppm eU₃O₈ and 1,372ppm Mo within the project area indicating an associated high grade molybdenum occurrence.

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 historic drillholes that were open to the mineralised depth were probed with a gamma tool. This initial program returned results for 13 with intersections exceeding 200ppm with highlights including:

- DH SFN0336 **9.2ft at 1,095ppm eU₃O₈** from 45.4ft
- DH SFN0443 **7.7ft at 592ppm eU₃O₈** 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.

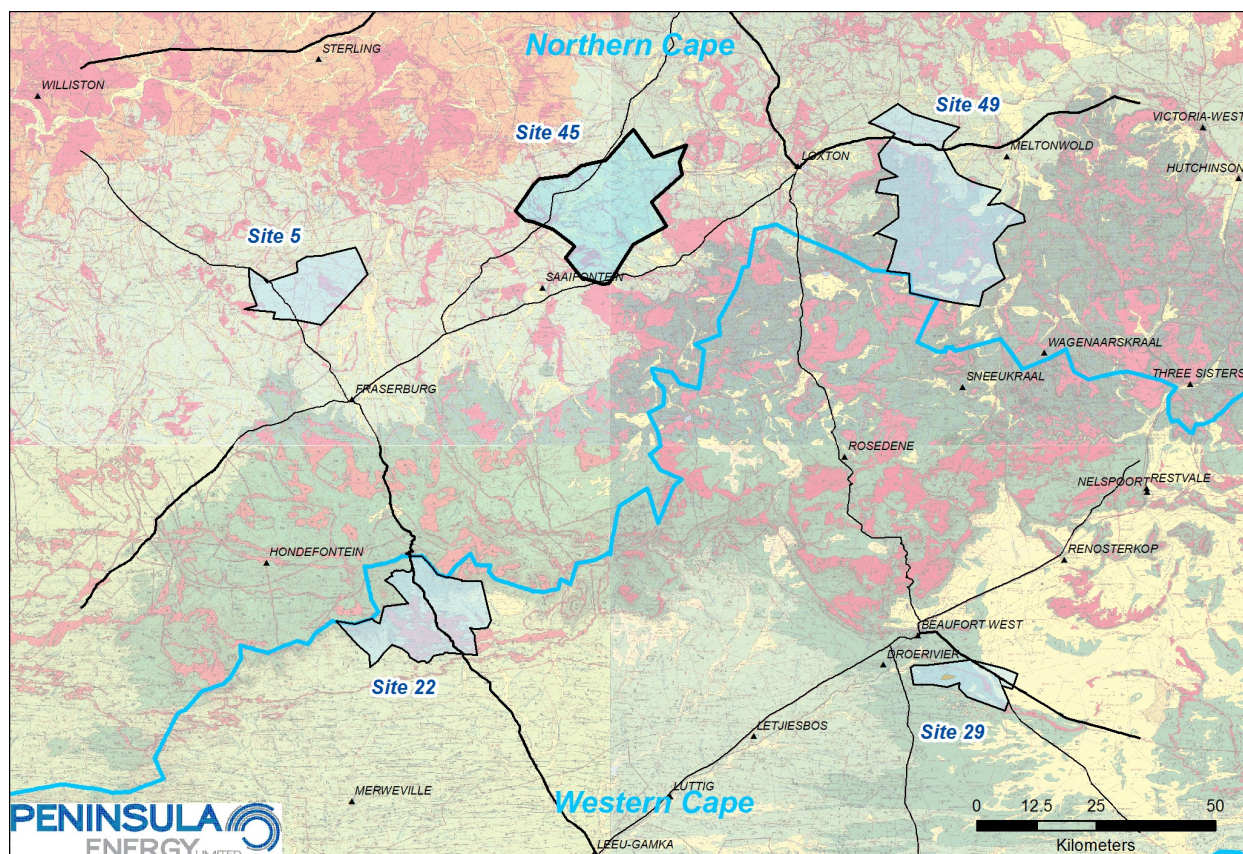


Figure 1: Karoo Projects Location, South Africa

Karoo Projects – Exploration Potential

In addition to the existing resource drilling, 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 4 years.

Further targets have been identified following recent acquisition and review of exploration reports compiled by Union Carbide during the 1970s and early 1980s. Peninsula obtained these reports from the South African Nuclear Energy Corporation during the September 2010 quarter.

Preliminary geological studies have estimated a combined exploration potential in the Karoo of 30-60m tonnes @ 700 – 1,400ppm eU₃O₈ for 90 – 150m lbs eU₃O₈.

The Company's target over the next 12 months is to delineate 30mlbs of eU₃O₈ (15-25m tonnes @ 700–1,400ppm eU₃O₈). The source of this material may include the historic mineral occurrences, their extensions and new exploration targets.

Yours sincerely



John (Gus) Simpson
Executive Chairman

For further information, please contact our office on +61(0)89380 9920 during normal business hours.

Competent Person

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Alfred 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.

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

Where eU₃O₈ results are reported, it relates to values obtained from radiometric logging of drillholes. GeoVista and Geotron equipment was used and all the probes were calibrated at the IAEA accepted Pelindaba Calibration facility in South Africa with calibration certificates supplied by Geotron Systems (Pty) Ltd, a geophysical consultancy based in South Africa.

All eU₃O₈ values reported may be affected by issues such as possible disequilibrium and uranium mobility which should be taken into account when interpreting the results, pending confirmatory chemical analyses. Disequilibrium Explanatory Statement: eU₃O₈ refers to the equivalent U₃O₈ 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 U₃O₈, the difference being referred to as disequilibrium.