

24th February 2011

Companies Announcement Office Via Electronic Lodgement

HIGH GRADE DRILL RESULTS CONTINUE AT LANCE

Highlights

- Hole RMR0859 intersected 21ft @ 378ppm U_3O_8 for GT 0.79 and 22.5ft @ 252ppm U_3O_8 for GT 0.57
- Hole RMR0827 intersected 8ft @ 820ppm U₃O₈ for GT 0.66
- Hole RMR0831 intersected 6ft @ 730ppm U₃O₈ for GT 0.44
- Hole RMR0824 intersected 11.5ft @ 360ppm U₃O₈ for GT 0.41
- Drilling continues to convert inferred resource to indicated status
- Results will also add to inferred resources at next resource upgrade
- Drilling program expanded with second rig deployed at Ross and a third planned for Barber

Summary

Peninsula Energy Limited (Peninsula) is pleased to announce that it has completed a further 55 development drill holes for a total of 38,960 feet at the Ross Project (Ross).

Current drilling at Ross is designed to convert the existing inferred resource¹ to indicated JORC compliant resource status. One drilling rig is currently engaged within the Ross Permit area while a second drilling rig is dedicated to the areas immediately adjacent to the north-west. Within the next quarter a third drilling rig will also commence drilling at Barber.

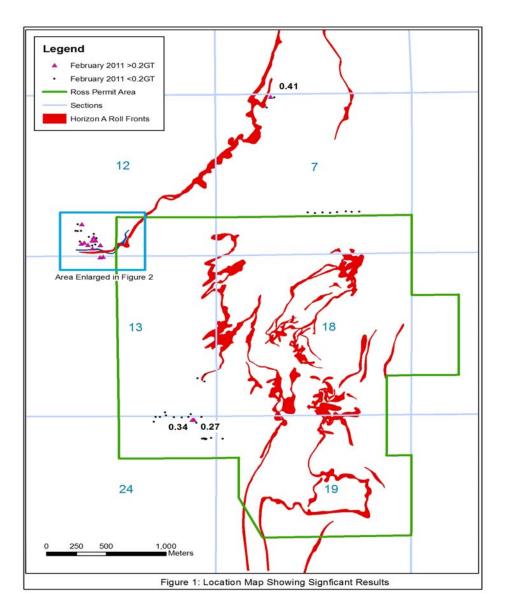
Executive Chairman Gus Simpson said "the drilling at Lance is producing very pleasing results that continue to upgrade the quality and quantity of the resource and augur well for the next re-calculation. It has been a difficult winter in Wyoming and the team is doing an exceptional job".

2011 Lance Drilling Program

During the period 18 January to 18 February 2011 Peninsula has completed 55 drill holes at Ross of which 33 holes encountered significant mineralisation and 15 holes reported multiple stacked intersections of uranium.

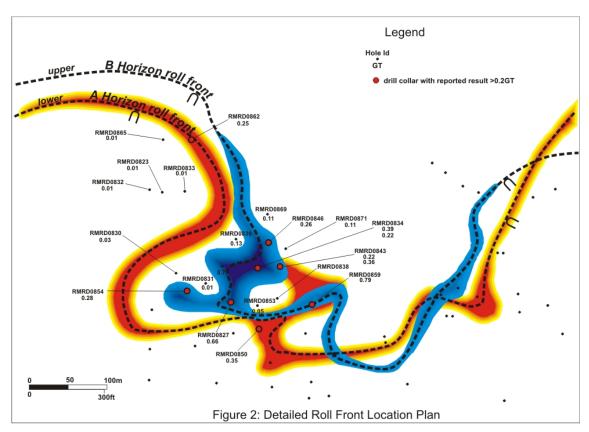
The focus of the drilling was within and adjacent to the resource zones in the Ross Permit area, (predominantly in Sections 12, 13 and 24 as shown in Figure 1), with further exploration drilling in the more sparsely drilled zones of Section 7.

Drilling during the period continued to test extensions of a strong, stacked roll front system in the southern parts of Section 12 (north-west of the Ross permit area).



The latest drilling results include 17 separate intersections with GT greater than 0.2ft/% (Refer Table 1). All of these intersections are located outside the existing measured/indicated resource boundaries and will add further to the recently announced resource base.

Figure 2 below illustrates the detail of the stacked characteristics of the mineralised system that trends towards the west and north-west.



The results (as shown in Table 1), demonstrate the broad intervals of uranium mineralisation within this roll front system. Further testing of the north-westerly extension of this trend will continue.

TABLE 1: Drilling Results Ross January 2011-February 2011 (based on grade thickness > 0.2GT)

Hole ID	Local Northing	Local Easting	Depth (ft)	From (ft)	Intercept ft / PFN U3O8 grade ppm	Peak Concentration Intercept ft /PFN U3O8 grade ppm	Grade Thickness ft% U3O8
RMR0824	4938286	503386	580	425.75	11.5'@360ppm	2.5'@580ppm	0.41
RMR0827	4936801	501858	820	714.25	8'@820ppm	6' @ 1000ppm	0.66
RMR0831	4936825	501826	820	694.75	6'@730ppm	4.5' @ 930ppm	0.44
RMR0834	4936845	501892	800	729.75	23.5'@167ppm	5' @ 240ppm	0.39
RMR0834	4936845	501892	800	783.25	4.5'@480ppm	2' @ 750ppm	0.22
RMR0843	4936847	501920	840	744.25	12.5'@175ppm	4.5'@300ppm	0.22
RMR0843	4936847	501920	840	771.25	19.5'@184ppm	9'@240ppm	0.36
RMR0846	4936877	501906	840	765.25	8.5'@300ppm	1.5'@650ppm	0.26
RMR0850	4936767	501894	840	759.25	20.5'@170ppm	3'@390ppm	0.35
RMR0854	4936815	501802	820	686.25	10.5'@263ppm	1'@560ppm	0.28
RMR0859	4936798	501961	840	715.75	21'@378ppm	3.5'@810ppm	0.79
RMR0859	4936798	501961	840	759.75	22.5'@252ppm	16'@310ppm	0.57
RMR0862	4937009	501807	860	796.25	18'@140ppm	2'@350ppm	0.25
RMR0866	4935047	502731	680	573.75	9.5'@286ppm	0.5'@510ppm	0.27
RMR0872	4935048	502743	660	554.75	10'@340ppm	1.5'@530ppm	0.34
RMR0876	4936681	501983	840	747.75	6.5'@560ppm	4'@710ppm	0.36
RMR0878	4936678	501958	780	709.25	20.5'@147ppm	2'@710ppm	0.30

(Cutoff > 2 feet and 100ppm)

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These results are reporting a significantly increased percentage of ore grade holes. This is due to an improving geological model which forms the basis of on-going drill planning.

Peninsula is pursuing a strategy of converting inferred resource to indicated resource as well as undertaking regional exploration that aims to locate the mineralised portions of over 320 lineal kilometres of mapped redox boundaries.

Two rotary mud rigs are currently engaged full-time in the northern Ross area and a third rig is planned for the Barber area to identify additional uranium mineralisation and increase the status of the existing resource.

Yours sincerely

John (Gus) Simpson Executive Chairman

For further information, please contact our office on (08) 9380 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 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'. Both Mr Gillman and Mr Guilinger consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

All U_3O_8 grades from the 2008-2010 drilling are obtained from the prompt fission neutron (PFN) down-hole probe and are not subject to disequilibrium effects.

Current JORC Compliant Resource Estimate

Resource Classification	Tonnes Ore (M)	U3O8 kg (M)	U3O8 lbs (M)	Grade (ppm U3O8)
Measured	3.7	1.7	3.8	472
Indicated	7.0	3.0	6.7	434
Inferred	22.6	10.2	22.5	450
Total	33.3	14.9	32.9	449