



17th February 2012

Companies Announcement Office
Via Electronic Lodgement

OUTSTANDING DRILL RESULTS CONTINUE AT LANCE

Highlights

- **Significant Intercepts include:**
 - **12.5 ft @ 1,220ppm eU₃O₈ (GT 1.53)** including **5 ft @ 2,330ppm eU₃O₈**
 - **7.5 ft @ 1,400ppm eU₃O₈ (GT 1.05)** including **4 ft @ 2,140 ppm eU₃O₈**
 - **11 ft @ 864ppm eU₃O₈ (GT 0.95)** including **2.5 ft @ 2,120 ppm eU₃O₈**
 - **10.5 ft @ 840ppm eU₃O₈ (GT 0.88)** including **3 ft @ 1,780ppm eU₃O₈**
 - **8 ft @ 1,080ppm eU₃O₈ (GT 0.86)** including **4 ft @ 1,710ppm eU₃O₈**
- **Results include outstanding grades, thick intervals and continuity of uranium mineralisation**
- **Drilling in the planned Kendrick production unit continues to upgrade inferred resource and demonstrates extensive and robust mineralisation in the Fox Hills Formation**

Summary

Peninsula Energy Limited (Peninsula) is pleased to announce that it has completed a further 40 exploration drill holes during February for a total of 36,500 feet at the Lance Projects. A total of 32 holes encountered mineralisation, 16 holes encountered significant mineralisation and 9 holes reported multiple intersections of stacked uranium.

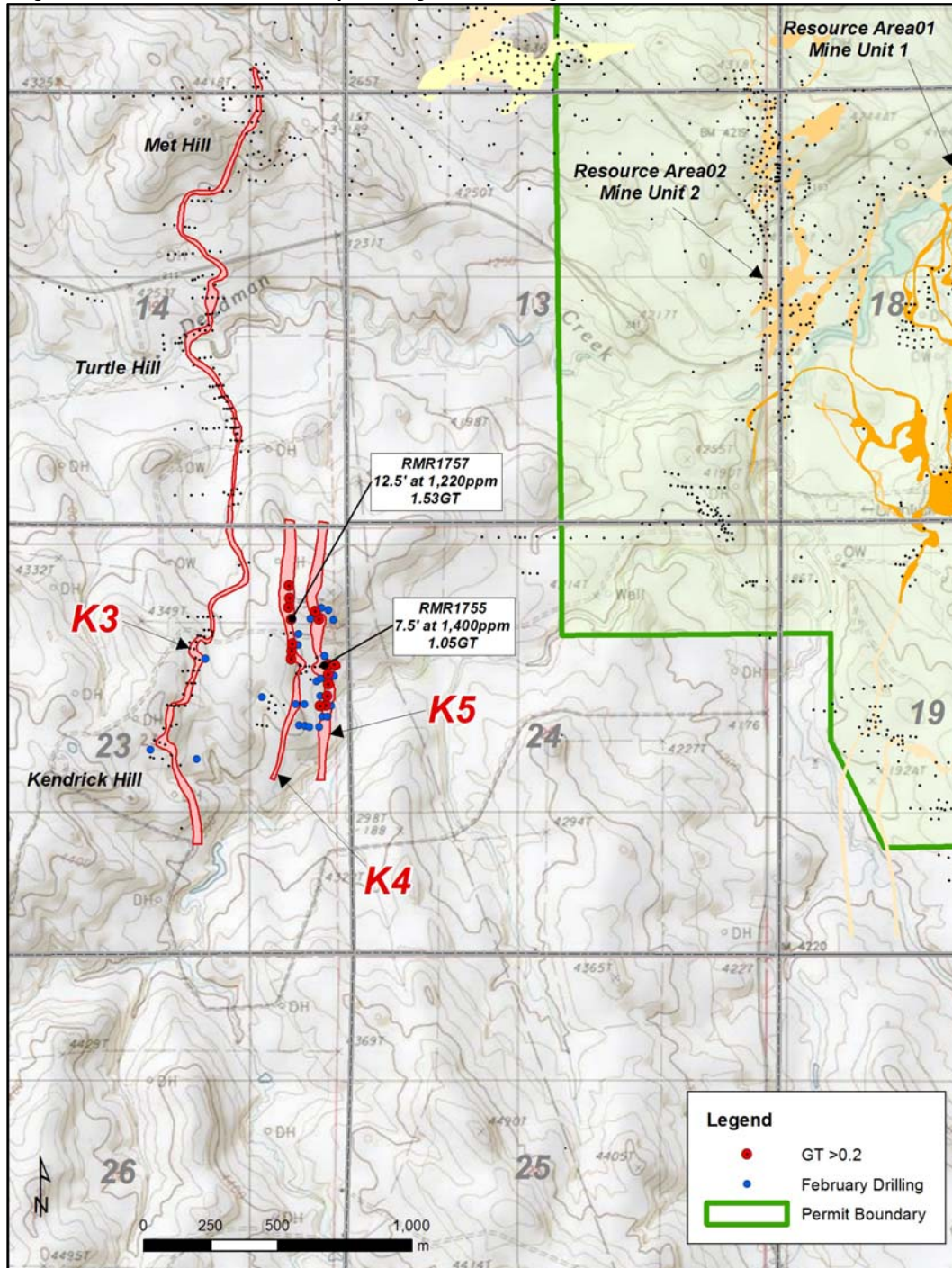
This drilling has focussed on converting inferred resources to an indicated category in the proposed Kendrick production unit located to the west of the Ross production unit. The drilling continues to successfully intersect thick intervals of high grade uranium mineralisation due to targeting the nose of the roll front systems.

As a result of the successful targeting of the roll front nose position, the average GT of the >0.2GT intersections (as shown in Table 1), is 0.64 with a weighted average grade of 826ppm eU₃O₈. These improved GT's and grades are considered by Peninsula to be indicative of the GT's and average grades of the overall Lance resource which currently comprises a total of 41.5Mlbs¹. Future drilling in other key areas will target the nose of the roll front and is expected to increase the average GT and grade of the overall resource.

Drilling Program

In May 2011 a drill program comprising resource conversion and exploration drilling commenced in the Kendrick area. During the period 1 February 2012 to 15 February 2012 a total of 40 holes were completed, of which 32 holes encountered uranium mineralisation (> 100ppm) and 16 holes reported GT values exceeding 0.2. The location of the drilling is shown in Figure 1 below.

Figure 1: Kendrick Area Location Map Showing Location of Significant Results



The most recent drilling in this area has targeted the K4 and K5 roll fronts with significant mineralisation intersected in the Fox Hills sandstones. This drilling continues to produce thick high grade intercepts along an extensive roll front trend, and the area is now categorised as a key area for resource expansion given its close proximity to the proposed Central Processing Plant site.

Recent drilling on the K4 and K5 roll fronts has confirmed along-strike continuity of over 500 metres together with horizontal widths of up to 60 metres.

The K4 and K5 roll fronts are located to the east of and adjacent to the K3 roll front trend which is down-gradient from the main roll front within the permit area. The expectation is that much of the inferred material within these areas will be re-classified as indicated. The K3, K4 and K5 roll fronts are currently open-ended and continuing exploration is targeting both the northern and southern strike extensions as well as defining the nose position.

High grade intersections were returned from the K4 roll front trend including RMR1757 which returned **12.5ft @ 1,220ppm** eU3O8 from 813.75 ft including **5ft @ 2,330ppm** eU3O8 and RMR1755 which returned **7.5ft @ 1,400ppm** eU3O8 from 813.75 ft including **4ft @ 2,140ppm** eU3O8.

As a result of the successful targeting of the roll front nose position, the average GT of the >0.2GT intersections (as shown in Table 1), is 0.64 with a weighted average grade of 826ppm eU3O8. These improved GT's and grades are considered by Peninsula to be indicative of the GT's and average grades of the overall Lance resource which currently comprises a total of 41.5Mlbs¹. Future exploration in other key areas of the Lance project, that will target the roll front nose, is expected to confirm an uplift in average GT and grade of the overall resource.

Two drilling rigs are currently in operation with one dedicated to the along strike exploration and one to intersecting the high grade nose of the roll front. Peninsula also has a full time PFN logging contractor on site to ensure the rapid turn-around of drilling results.

TABLE 1: Drilling Results Kendrick 1 February 2012- 15 February 2012 (PFN Measurement)

Hole ID	Local Northing	Local Easting	Depth (ft)	From (ft)	Intercept ft / eU3O8 grade ppm	Peak Concentration Intercept ft / eU3O8 grade ppm	Grade Thickness ft% eU3O8
RMR1743	4934626	501110	920	842.25	17'@195ppm	1.5'@670ppm	0.33
RMR1746	4934599	501109	920	846.75	14'@317ppm	1.5'@1150ppm	0.44
RMR1749	4934547	501243	900	786.75	7.5'@1400ppm	4'@2140ppm	1.05
RMR1755	4934716	501211	920	828	11'@864ppm	2.5' @ 2120 ppm	0.95
RMR1756	4934514	501244	880	779.25	3.5'@1290ppm	2' @ 1940 ppm	0.45
RMR1757	4934717	501107	920	813.75	12.5'@1220ppm	5' 2330 ppm	1.53
RMR1758	4934551	501268	880	781.75	2.5'@1130ppm	1.5' 1660 ppm	0.28
RMR1760	4934477	501245	880	777.75	3'@980ppm	1.5' 1390 ppm	0.29
RMR1763	4934761	501097	920	813	10'@722ppm	3' @ 1850 ppm	0.72
RMR1764	4934433	501240	880	777.75	2.5'@1180ppm	1' @ 2070 ppm	0.30
RMR1767	4934796	501101	920	824.25	6.5'@1060ppm	4.5' @ 1320 ppm	0.69
RMR1768	4934398	501237	880	777.25	5.5'@860ppm	1.5' @ 1390 ppm	0.47
RMR1769	4934748	501195	920	840.25	8'@1080ppm	4'@1710ppm	0.86
RMR1771	4934843	501099	920	823.75	6'@1350ppm	2'@2490ppm	0.81
RMR1771	4934843	501099	920	846.75	8.5'@640ppm	1.5'@1290ppm	0.54
RMR1780	4934570	501106	920	860.25	10.5'@840ppm	3'@1780ppm	0.88
RMR1784	4934396	501215	880	792.75	3'@860ppm	1.5'@1440ppm	0.26

Unit 17, Level 2, 100 Railway Road, Subiaco WA 6008, PO Box 8129, Subiaco East WA 6008

Phone: +61 (0)8 9380 9920 Fax: +61 (0)8 9381 5064

Peninsula Energy Limited - ABN: 67 062 409 303

Conclusion

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 312 lineal kilometres (194 linear miles) of mapped redox boundaries. To date regional exploration is proving very successful in identifying mineralisation in these roll front systems and drilling will continue to explore areas that have the potential to increase the existing resource inventory¹.

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 Guiling. 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 Guiling 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 Guiling is Principal of independent consultants World Industrial Minerals. Both Mr Gillman and Mr Guiling 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 Guiling consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

U₃O₈ grades quoted in this document are obtained from the prompt fission neutron (PFN) down-hole probe and are not subject to disequilibrium effects.

¹ Current JORC Compliant Resource Estimate

Resource Classification	Tonnes Ore (M)	U ₃ O ₈ kg (M)	U ₃ O ₈ lbs (M)	Grade (ppm U ₃ O ₈)
Measured	3.6	1.7	3.8	479
Indicated	7.9	3.4	7.5	433
Inferred	33.1	13.7	30.2	414
Total	44.6	18.8	41.5	422

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