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Companies Announcement Office
Via Electronic Lodgement

RESOURCE UPGRADE DRILLING RETURNING EXCEPTIONAL RESULTS AT LANCE

Highlights

- **Significant Intercepts include:**
  - **15.5 ft @ 1,530ppm** eU_3O_8 **(GT 2.37)** including **4 ft @ 5,160ppm** eU_3O_8
  - **31 ft @ 485ppm** eU_3O_8 **(GT 1.50)** including **5.5 ft @ 1,620 ppm** eU_3O_8
  - **4 ft @ 1,965ppm** eU_3O_8 **(GT 0.79)** including **2.5 ft @ 2,990 ppm** eU_3O_8
  - **7.5 ft @ 730ppm** eU_3O_8 **(GT 0.55)** including **3 ft @ 1,140 ppm** eU_3O_8
- **Results include outstanding grades and thick intervals of uranium mineralisation**
- **Drilling in the planned Kendrick production unit upgrades inferred resource and confirms mineralisation in both the Fox Hills and Lance Formations**

Summary

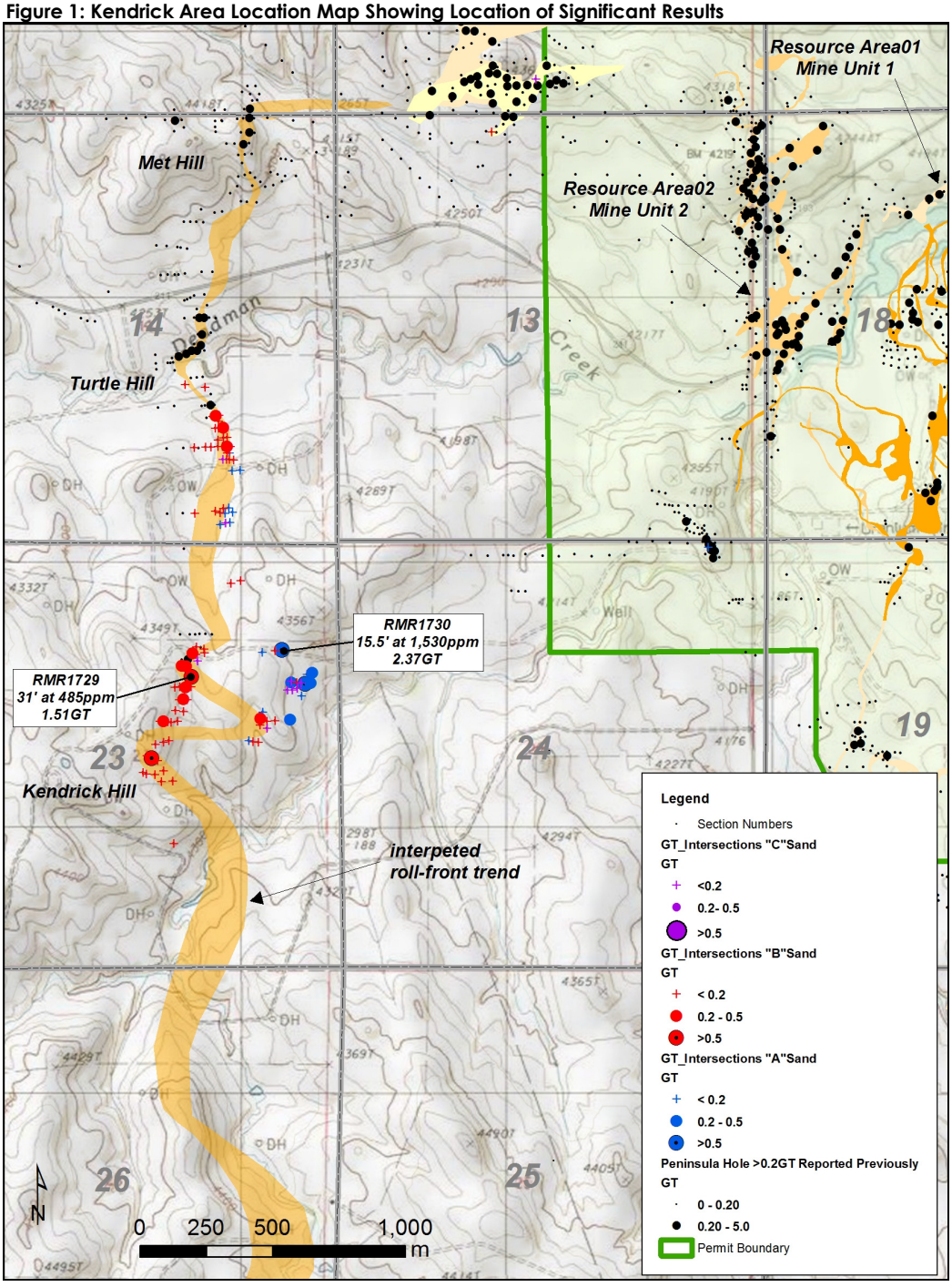
Peninsula Energy Limited (Peninsula) is pleased to announce that it has completed a further 108 exploration drill holes over January for a total of 101,540 feet at the Lance Projects. 61 holes encountered mineralisation, 19 holes encountered significant mineralisation and 12 holes reported multiple intersections of stacked uranium.

The majority of this drilling has been focussed on converting inferred mineralisation to an indicated category in the proposed Kendrick production unit located to the west of the Ross production unit. It has successfully intersected thick intervals of high grade uranium mineralisation due to targeting the nose of the roll front systems.

Drilling Program

In May 2011 a drill program comprising resource conversion and exploration drilling commenced in the Kendrick area. During the period 20 December 2011 to 31 January 2012 a total of 108 holes were completed, of which 61 holes encountered uranium mineralisation (> 100ppm) and 19 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



Drilling in this area has targeted the roll fronts occurring in the A and B Horizon sandstones belonging to the Lower Fox Hills Formation and in the C Horizon sandstone overlying Lance Formation. In the Ross permit area which is located further to the east, the majority of the resources are in the Lower Fox Hills Formation (refer Figure 1). The most recent drilling has produced 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.

This interpreted roll front trend is down-gradient from the main roll front within the permit area and has been tested for over 3,000 metres. The expectation is that much of the inferred material will be classified as indicated.

Further high grade intersections were returned from the mineralised B Horizon sandstone of the Fox Hills Formation including RMR1729 which returned **31ft @ 485ppm** eU3O8 from 830.75 ft including **5.5ft @ 1,620ppm** eU3O8.

To the east of the targeted roll front an adjacent mineralised system was intersected in the A Horizon sandstone of the Lower Fox Hills Formation by drillhole RMR1730. This returned an intersection of **15.5ft @ 1,530ppm** eU3O8 from 830.75 ft including **4ft @ 5,160ppm** eU3O8. This roll front system has not been fully tested; an on-going drill program is planned to pursue extensions along strike north and south.

Uranium intersections of up to 2ft@410ppm eU3O8 were also encountered in the C Horizon sandstones belonging to the Upper Lance Formation. Like the Fox Hills Formation the Lance Formation is developed over most of the project area. These provide additional targets for future follow up.

Two drill rigs will continue to develop the resources along strike and infill the high grade "nose" position of the roll fronts. This success is expected to lift the overall grade of the resources in this area in an upcoming resource recalculation planned for late March.

TABLE 1: Drilling Results Kendrick December 2011- January 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
RMR1631*	4935549	500856	860	699.0	15'@165ppm	4' @ 360 ppm	0.25
RMR1634*	4934653	500770	1000	847.0	17'@124ppm		0.21
RMR1644*	4934605	500746	1000	848.75	17'@153ppm		0.26
RMR1648*	4934606	500728	1000	839.75	6'@350ppm	1.5'@700 ppm	0.21
RMR1657	4935505	500885	860	753.75	4'@620ppm	1.5'@1140ppm	0.25
RMR1660	4934259	500616	1000	848.25	7.5'@730ppm	3'@1140ppm	0.55
RMR1673	4935433	500900	880	733.25	4'@710ppm	1'@1040ppm	0.28
RMR1678	4934526	500744	1020	867.25	21.5'@166ppm	1'@1050ppm	0.36
RMR1681	4935409	500901	860	724.25	22'@90ppm	1'@540ppm	0.20
RMR1692	4934545	501142	960	827.25	23.5'@103ppm	1.5'@800ppm	0.24
RMR1694	4934540	501195	940	800.25	4'@1965ppm	2.5'@2990ppm	0.79
RMR1702	4934397	500660	1040	900.25	11.5'@195ppm	1.5'@560ppm	0.22
RMR1704	4934480	500735	1000	876.25	5'@510ppm	0.5'@770ppm	0.26
RMR1716	4934542	501214	920	795.75	4'@830ppm	2'@1270ppm	0.33
RMR1718	4934408	501026	940	814.75	10'@218ppm	4'@360ppm	0.22
RMR1724	4934404	501137	940	853.25	5.5'@630ppm	4'@760ppm	0.35
RMR1729	4934567	500766	1000	845.25	31'@485ppm	5.5'@1620ppm	1.50
RMR1730	4934667	501106	920	830.75	15.5'@1530ppm	4'@5160ppm	2.37
RMR1732	4934580	501221	900	805.75	3.5'@770ppm	1.5'@1270ppm	0.27

**Denotes measurement by gamma probe*

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 linear 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 inventory[1].

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.

U_3O_8 grades from the 2008-2011 drilling are obtained either from the prompt fission neutron (PFN) down-hole probe and are not subject to disequilibrium effects or a downhole gamma tool which are subject to disequilibrium effects.

[1] Current JORC Compliant Resource Estimate

Resource Classification	Tonnes Ore (M)	U_3O_8 kg (M)	U_3O_8 lbs (M)	Grade (ppm U_3O_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)