



23 December 2015

Companies Announcement Office  
*Via Electronic Lodgement*

## **HIGH GRADE URANIUM INTERCEPTS CONTINUE AT KAROO PROJECTS**

### **Highlights:**

- **Very high grade near surface intercepts from further radiometric re-logging of UCEX drill holes at the Rietkuil project area**
- **Significant intercepts include**
  - **9.4 ft @ 3,725 ppm eU<sub>3</sub>O<sub>8</sub> from 47.6 ft**
  - **4.1 ft @ 4,659 ppm eU<sub>3</sub>O<sub>8</sub> from 46.4 ft**
  - **3.1 ft @ 4,145 ppm eU<sub>3</sub>O<sub>8</sub> from 33.0 ft**
  - **3.9 ft @ 3,032 ppm eU<sub>3</sub>O<sub>8</sub> from 36.9 ft**
  - **4.6 ft @ 2,553 ppm eU<sub>3</sub>O<sub>8</sub> from 141.0 ft**
- **Intercepts will add to the existing JORC Code-compliant resources**

### **Summary**

Peninsula Energy Limited (Peninsula) is pleased to announce results from further radiometric re-logging of existing drill holes completed in November and December 2015 at the Rietkuil project area (Rietkuil), approximately 40 km west of Beaufort West at Peninsula's Karoo Projects in South Africa (Figure 2). Gamma probing was conducted at Blocks D(W) and D(E) (Figure 3) with a series of excellent results that follow on the earlier probing at Blocks F(N), E(N) and E(S) completed earlier in the year.

Results from all blocks investigated to date have demonstrated very high grade mineralisation at shallow depths with a further 44 significant intersections returned from 91 historic holes at Blocks D(W) and D(E) during November and December 2015. Overall 119 significant intersections have been returned from a total of 320 re-logged holes since mid-2014.

Re-logging is occurring in holes originally drilled by Union Carbide Exploration Corporation (UCEX) during the 1970's and continues to successfully validate the location and grade of the mineralisation that was delineated by UCEX at that time.

Probing and re-logging is occurring in areas that are outside the existing JORC Code-compliant resource and information from this work will be included in an update of the JORC Code-compliant resource estimate for the Karoo Projects following any additional evaluation work that may be required.

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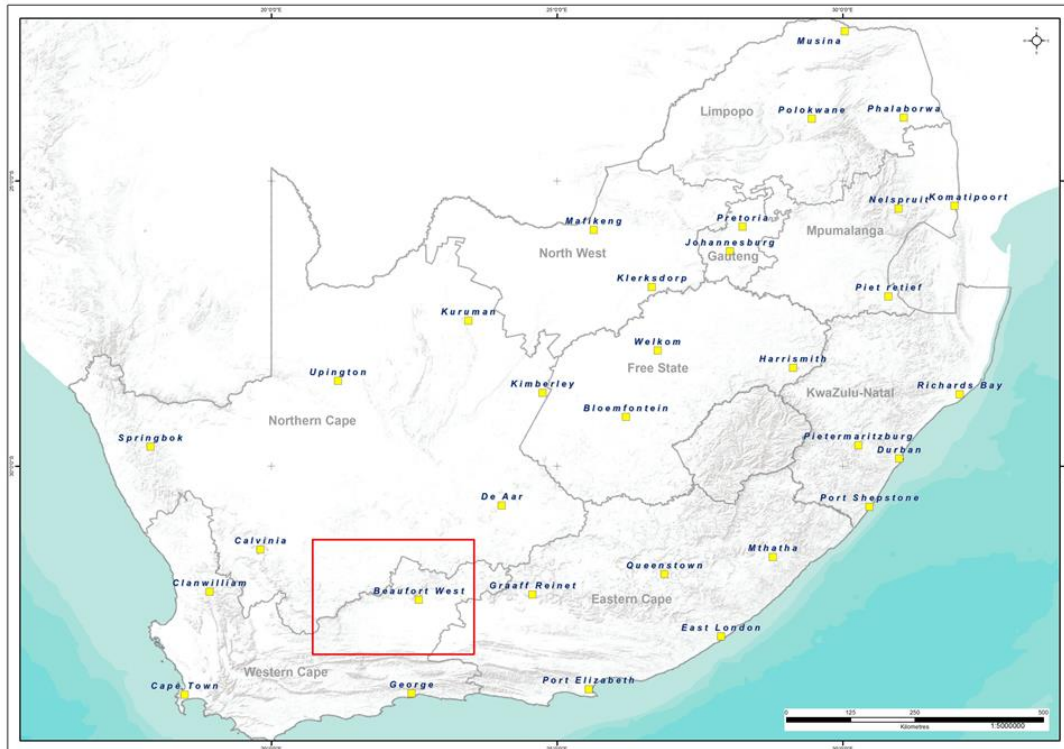


Figure 1: Peninsula Karoo projects location in South Africa (red outline)

## Geology and Mineralisation

The Rietkuil deposit was the first major uranium occurrence to be discovered in the Karoo by UCEX in 1970 and is located in the upper-most sandstones of the Abrahamskraal formation below the escarpment approximately 40 km west of the town of Beaufort West, as shown in Figure 2.

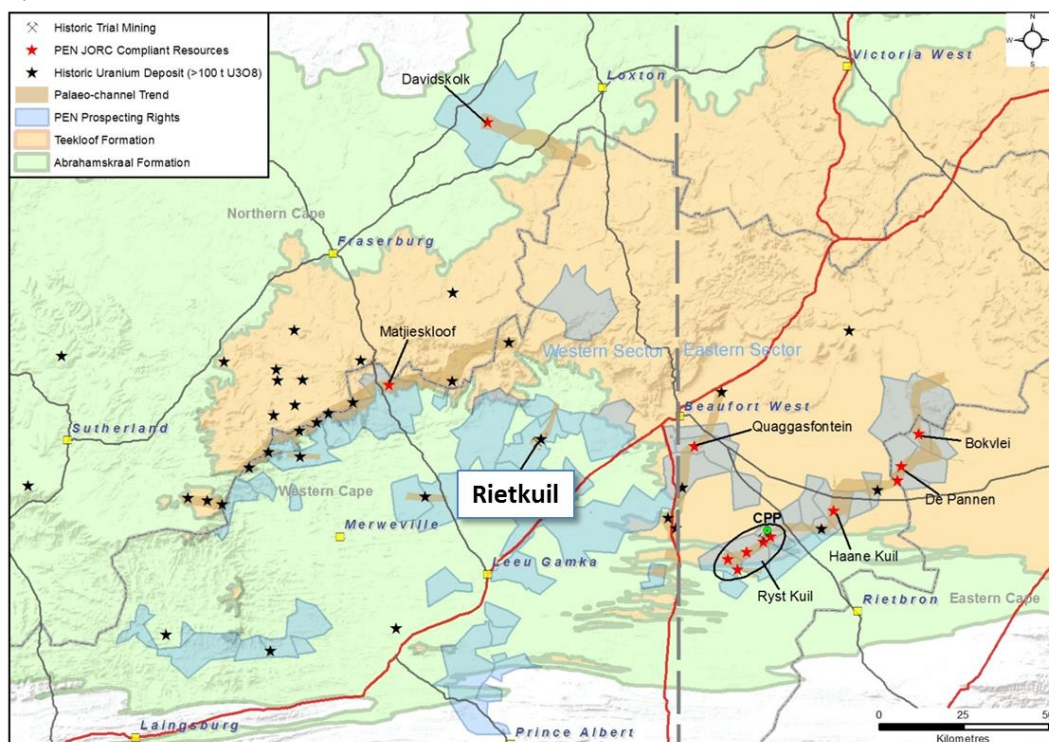


Figure 2: Regional locality map with geology

The tabular, 10 – 20 m thick host sandstones were deposited in a north-north-easterly direction by a meandering river system resulting in multiple stacked sandstone horizons. Uranium mineralisation is located mainly at the base of the two uppermost sandstones (of four) with higher grade mineralisation occurring preferentially in the thicker, more continuous sandstone units. Mineralisation is typically in the order of 1-2m (3-6ft) in thickness and up to several hundred metres in width and length.

Mineralisation was reported by UCEX in 9 anomalous blocks designated A, A-Ext, B, C, D(E), D(W), E(N), E(S), F(N) and G (Figure 3). UCEX also conducted an open pit trial mining exercise at Block A in 1977 during which 44,000 m<sup>3</sup> of overburden were stripped, 14,000 tonnes of ore and 5,000 tonnes of waste were excavated and stockpiled on surface.

### Recent Project Activity

Re-logging activities at Rietkuil commenced in the second half of 2014 to verify the location and depth of open boreholes at blocks F(N), E(N) and E(S) historically drilled by UCEX in the mid to late 1970's. In November 2015 these activities were expanded to include blocks D(W) and D(E). Radiometric re-logging has been undertaken, where possible, in historic holes that are still open to below the expected mineralisation depth. The results of the re-logging are presented below and in Table 1.

To date a total of 320 UCEX holes have now been successfully located and re-logged at Rietkuil. Additional quality assurance and quality control (QAQC) work was also carried out during the month to verify results obtained from the logging work.

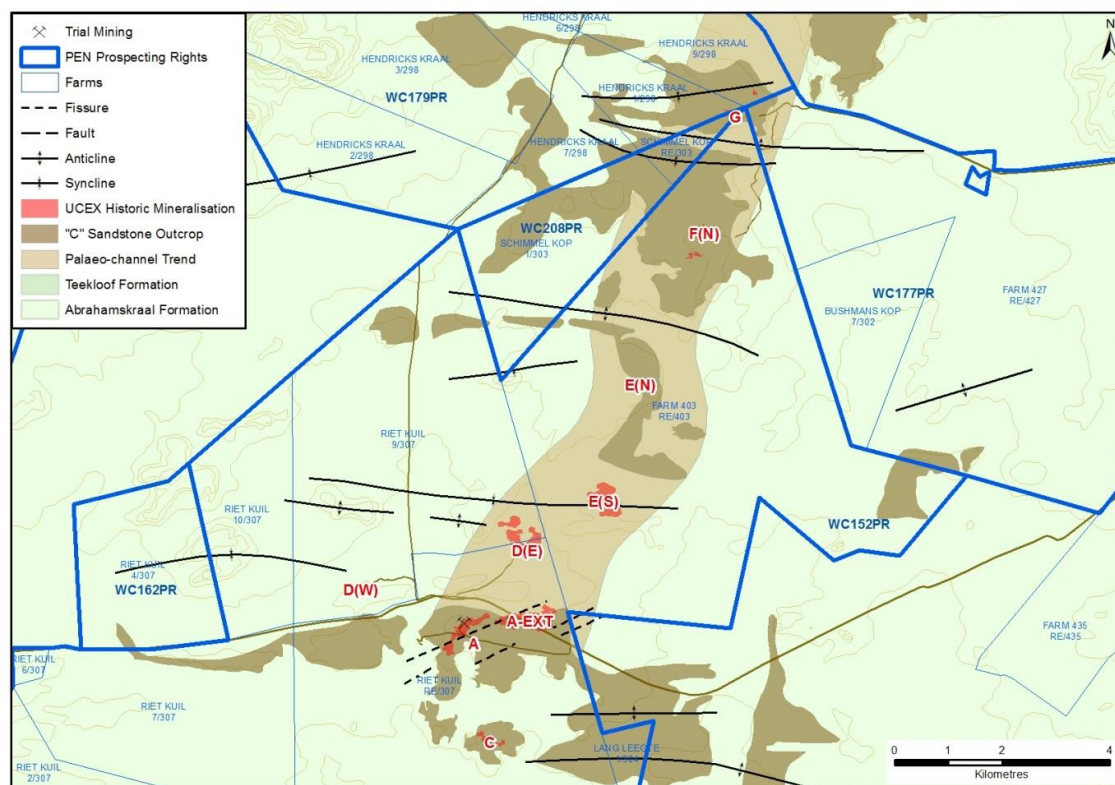


Figure 3: Geology and distribution of mineralisation blocks at Rietkuil

### Block D (W):

60 UCEX holes were successfully radiometrically re-logged during November and December 2015 from which 33 significant mineralised intersections (> 200 ppm eU3O8) were obtained at near-surface depths ranging from 28.1 feet to 56.9 feet below surface (Figure 4).



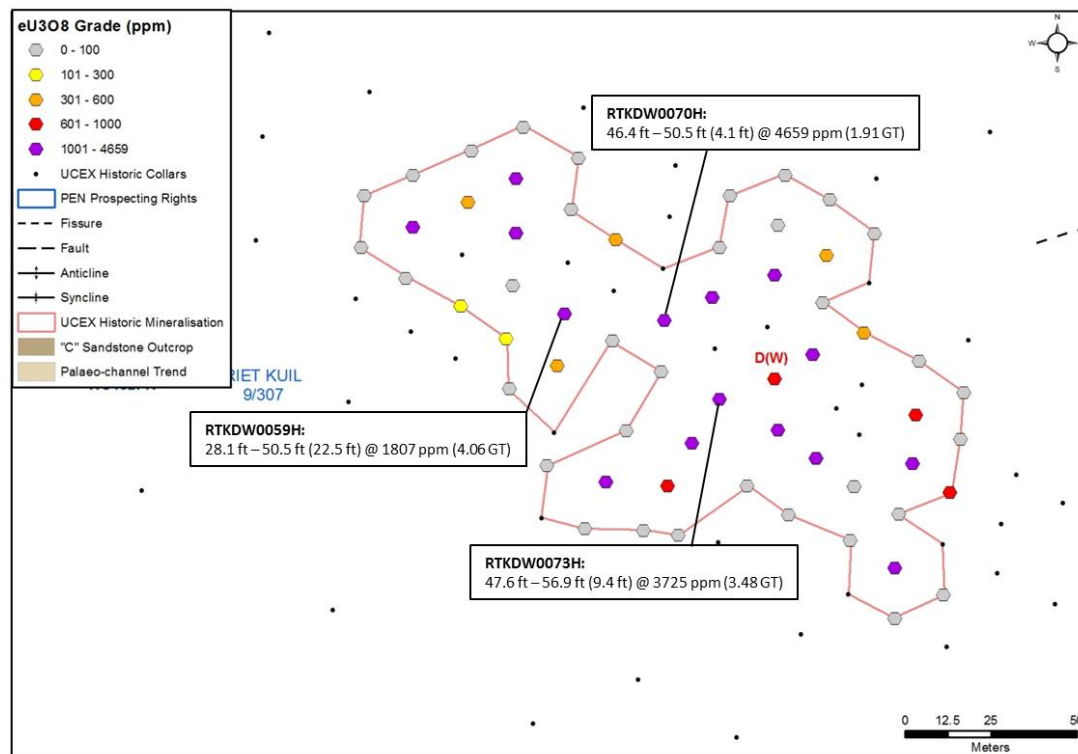


Figure 4: Block D(W) drilling, UCEX mineralisation distribution and radiometric re-logging

### Block D(E):

31 UCEX holes were successfully radiometrically re-logged during November and December 2015 from which 11 significant mineralised intersections were obtained at near-surface depths ranging from 141.1 feet to 160.6 feet below surface (Figure 5).

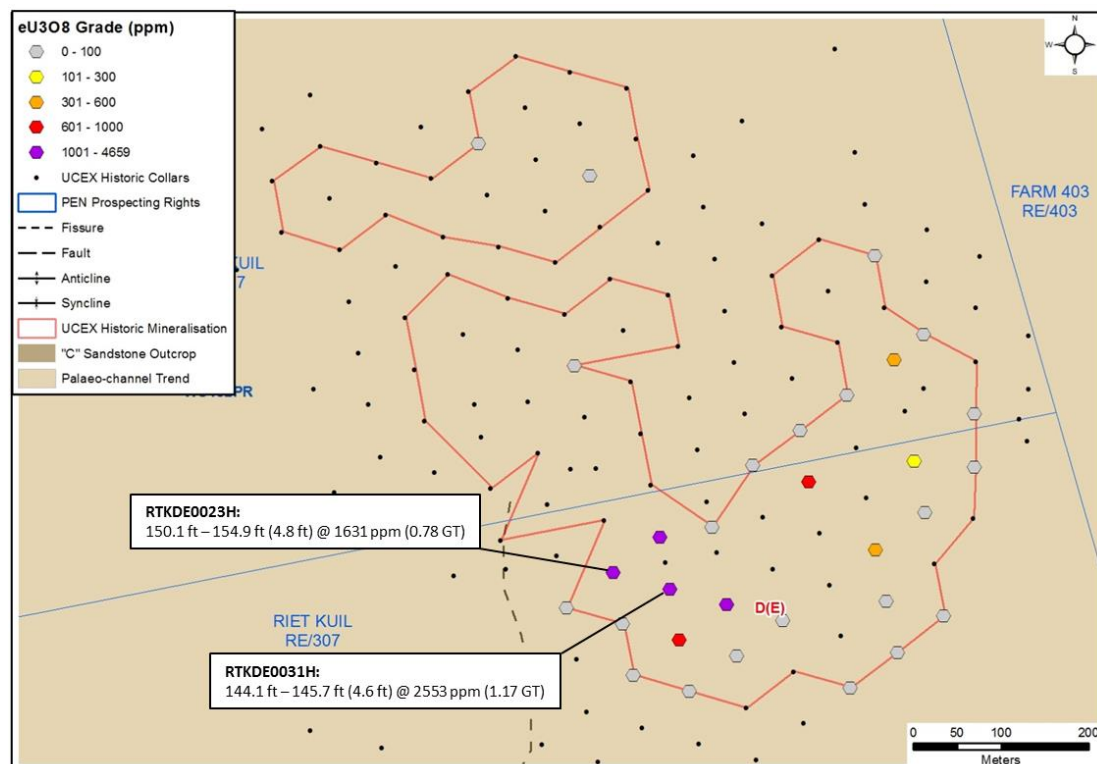


Figure 5: Block D(E) drilling, UCEX mineralisation distribution and radiometric re-logging

Table 1: Karoo Re-logging Significant Results (> 200 ppm eU<sub>3</sub>O<sub>8</sub>)

Hole ID	Block	Easting (X)	Northing (Y)	Depth Logged (ft)	From (ft)	To (ft)	Interval (ft)	Average Grade (ppm eU <sub>3</sub> O <sub>8</sub> )	GT (ft%)
RTKDE0029H	D(E)	-80179	-3587455	165.5	142.9	145.3	2.5	1588	0.39
RTKDE0031H	D(E)	-80168	-3587514	166.0	141.1	145.7	4.6	2553	1.17
RTKDE0038H	D(E)	-80103	-3587531	166.0	144.7	146.2	1.5	299	0.04
RTKDE0038H	D(E)	-80103	-3587531	166.0	149.1	150.9	1.8	388	0.07
RTKDE0038H	D(E)	-80103	-3587531	166.0	156.0	158.5	2.5	1170	0.29
RTKDE0023H	D(E)	-80233	-3587495	166.0	150.1	154.9	4.8	1631	0.78
RTKDE0032H	D(E)	-80157	-3587572	169.6	150.9	155.7	4.8	653	0.31
RTKDE0054H	D(E)	-80009	-3587391	162.1	158.8	160.6	1.8	644	0.12
RTKDE0058H	D(E)	-79933	-3587469	171.9	152.9	154.7	1.8	322	0.06
RTKDE0064H	D(E)	-79889	-3587368	173.6	156.5	157.5	1.0	296	0.03
RTKDE0077H	D(E)	-79912	-3587252	182.1	153.5	154.2	0.7	378	0.02
RTKDW0097H	D(W)	-83103	-3588292	54.2	33.0	36.1	3.1	4145	1.29
RTKDW0097H	D(W)	-83103	-3588292	54.2	38.1	39.7	1.6	368	0.06
RTKDW0005H	D(W)	-83174	-3588298	50.9	38.9	41.2	2.3	972	0.22
RTKDW0085H	D(W)	-83131	-3588290	60.7	38.5	41.3	2.8	3369	0.94
RTKDW0073H	D(W)	-83159	-3588273	57.6	47.6	56.9	9.4	3725	3.48
RTKDW0081H	D(W)	-83143	-3588237	56.3	38.2	41.3	3.1	1587	0.49
RTKDW0081H	D(W)	-83143	-3588237	56.3	44.8	45.6	0.8	532	0.04
RTKDW0083H	D(W)	-83143	-3588267	58.9	44.6	50.0	5.4	940	0.51
RTKDW0087H	D(W)	-83132	-3588260	59.7	36.9	40.8	3.9	3032	1.19
RTKDW0087H	D(W)	-83132	-3588260	59.7	46.6	48.1	1.5	740	0.11
RTKDW0047H	D(W)	-83234	-3588246	51.2	43.5	44.5	1.0	229	0.02
RTKDW0042H	D(W)	-83248	-3588223	59.1	39.2	42.0	2.8	961	0.27
RTKDW0042H	D(W)	-83248	-3588223	59.1	44.3	47.6	3.3	1015	0.33
RTKDW0053H	D(W)	-83218	-3588209	53.8	43.6	47.2	3.6	2592	0.94
RTKDW0070H	D(W)	-83175	-3588250	65.3	46.4	50.5	4.1	4659	1.91
RTKDW0072H	D(W)	-83167	-3588286	52.8	39.4	42.8	3.4	3175	1.09
RTKDW0045H	D(W)	-83232	-3588216	59.1	40.5	48.6	8.0	387	0.31
RTKDW0050H	D(W)	-83221	-3588256	61.4	37.6	37.9	0.3	236	0.01
RTKDW0052H	D(W)	-83218	-3588225	59.5	38.4	41.7	3.3	984	0.32
RTKDW0052H	D(W)	-83218	-3588225	59.5	44.1	46.4	2.3	846	0.19
RTKDW0052H	D(W)	-83218	-3588225	59.5	49.2	51.5	2.3	2061	0.47
RTKDW0059H	D(W)	-83204	-3588248	61.4	28.1	50.5	22.5	1807	4.06
RTKDW0060H	D(W)	-83206	-3588263	56.4	38.4	39.7	1.3	301	0.04
RTKDW0066H	D(W)	-83189	-3588227	53.6	43.1	45.8	2.6	472	0.12
RTKDW0075H	D(W)	-83161	-3588243	58.1	32.3	38.2	5.9	1935	1.14
RTKDW0075H	D(W)	-83161	-3588243	58.1	44.1	48.1	3.9	817	0.32
RTKDW0089H	D(W)	-83128	-3588231	46.9	35.9	37.1	1.1	329	0.04
RTKDW0094H	D(W)	-83117	-3588254	48.9	37.6	38.9	1.3	329	0.04
RTKDW0098H	D(W)	-83102	-3588278	50.7	38.2	39.7	1.5	643	0.09
RTKDW0004H	D(W)	-83192	-3588297	50.9	42.5	45.1	2.6	1978	0.52
RTKDW0016H	D(W)	-83108	-3588322	57.1	37.1	39.2	2.1	2438	0.52
RTKDW0018H	D(W)	-83092	-3588300	54.6	37.6	39.4	1.8	874	0.16
RTKDW0084H	D(W)	-83142	-3588282	51.8	37.4	40.4	3.0	4068	1.20

Yours sincerely



**John (Gus) Simpson**  
**Managing Director/Chief Executive Officer**

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, Exploration Targets, Mineral Resources or Ore Reserves is based on information compiled by Mr George van der Walt *Pr.Sci.Nat., AusIMM*. Mr van der Walt is a Member of the Australian Institute of Mining and Metallurgy (AusIMM) and the South African Council for Natural Scientific Professions (SACNASP). Mr van der Walt is a Geological Consultant and Director of Geo-Consult International (Pty) Ltd, a Johannesburg-based independent consultancy specialising in exploration management. Mr van der Walt is a Competent Person under the definition of the JORC (2012) Code and 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 a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Where eU<sub>3</sub>O<sub>8</sub> results are reported, it relates to values obtained from radiometric logging of boreholes. GeoVista NGRS 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 eU<sub>3</sub>O<sub>8</sub> 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: eU<sub>3</sub>O<sub>8</sub> refers to the equivalent U<sub>3</sub>O<sub>8</sub> grade. This is estimated from gross-gamma down hole measurements un-corrected for water and drilling mud in each hole. Geochemical analysis may show higher or lower amounts of actual U<sub>3</sub>O<sub>8</sub>, the difference being referred to as disequilibrium.

### 1 Classified JORC-Compliant Resource Estimate, Karoo Projects: eU<sub>3</sub>O<sub>8</sub> (February 2014)

Classification	Sector	eU <sub>3</sub> O <sub>8</sub> (ppm) CUT-OFF	Tonnes (millions)	eU <sub>3</sub> O <sub>8</sub> (ppm)	eU <sub>3</sub> O <sub>8</sub> (million lbs)
Indicated	Eastern	600	7.1	1,206	18.7
	Western	600	0.9	1,657	3.2
Inferred	Eastern	600	11.8	1,046	27.2
	Western	600	3.5	1,019	7.8
<b>Total</b>		<b>600</b>	<b>23.3</b>	<b>1,108</b>	<b>56.9</b>

**APPENDIX 1 – Full tabulation of radiometric re-logging results**Average grades are weighted averages calculated above a cut-off of 200ppm eU<sub>3</sub>O<sub>8</sub>.

Hole ID	Block	Easting (X)	Northing (Y)	Depth Logged (ft)	From (ft)	To (ft)	Interval (ft)	Average Grade (ppm eU <sub>3</sub> O <sub>8</sub> )	GT (ft%)
RTKDE0110H	D(E)	-80387	-3587005	150.3	0.0	0.0	0.0	0	0.00
RTKDE0122H	D(E)	-80259	-3587042	157.6	0.0	0.0	0.0	0	0.00
RTKDE0137H	D(E)	-80277	-3587259	170.6	0.0	0.0	0.0	0	0.00
RTKDE0029H	D(E)	-80179	-3587455	165.5	142.9	145.3	2.5	1588	0.39
RTKDE0031H	D(E)	-80168	-3587514	166.0	141.1	145.7	4.6	2553	1.17
RTKDE0038H	D(E)	-80103	-3587531	166.0	144.7	146.2	1.5	299	0.04
RTKDE0038H	D(E)	-80103	-3587531	166.0	149.1	150.9	1.8	388	0.07
RTKDE0038H	D(E)	-80103	-3587531	166.0	156.0	158.5	2.5	1170	0.29
RTKDE0040H	D(E)	-80120	-3587443	163.1	0.0	0.0	0.0	0	0.00
RTKDE0017H	D(E)	-80286	-3587536	163.1	0.0	0.0	0.0	0	0.00
RTKDE0021H	D(E)	-80210	-3587612	154.2	0.0	0.0	0.0	0	0.00
RTKDE0022H	D(E)	-80222	-3587554	160.8	0.0	0.0	0.0	0	0.00
RTKDE0023H	D(E)	-80233	-3587495	166.0	150.1	154.9	4.8	1631	0.78
RTKDE0032H	D(E)	-80157	-3587572	169.6	150.9	155.7	4.8	653	0.31
RTKDE0033H	D(E)	-80146	-3587631	164.4	0.0	0.0	0.0	0	0.00
RTKDE0037H	D(E)	-80092	-3587590	165.7	0.0	0.0	0.0	0	0.00
RTKDE0047H	D(E)	-80039	-3587550	140.2	0.0	0.0	0.0	0	0.00
RTKDE0059H	D(E)	-79921	-3587528	160.4	0.0	0.0	0.0	0	0.00
RTKDE0050H	D(E)	-79962	-3587627	161.9	0.0	0.0	0.0	0	0.00
RTKDE0060H	D(E)	-79908	-3587587	170.6	0.0	0.0	0.0	0	0.00
RTKDE0061H	D(E)	-79855	-3587545	168.6	0.0	0.0	0.0	0	0.00
RTKDE0054H	D(E)	-80009	-3587391	162.1	158.8	160.6	1.8	644	0.12
RTKDE0058H	D(E)	-79933	-3587469	171.9	152.9	154.7	1.8	322	0.06
RTKDE0063H	D(E)	-79877	-3587427	171.6	0.0	0.0	0.0	0	0.00
RTKDE0064H	D(E)	-79889	-3587368	173.6	156.5	157.5	1.0	296	0.03
RTKDE0064H	D(E)	-79889	-3587368	173.6	0.0	0.0	0.0	0	0.00
RTKDE0044H	D(E)	-80073	-3587373	171.9	0.0	0.0	0.0	0	0.00
RTKDE0055H	D(E)	-80019	-3587332	167.0	0.0	0.0	0.0	0	0.00
RTKDE0076H	D(E)	-79966	-3587292	168.6	0.0	0.0	0.0	0	0.00
RTKDE0067H	D(E)	-79820	-3587375	177.2	0.0	0.0	0.0	0	0.00
RTKDE0068H	D(E)	-79820	-3587314	179.8	0.0	0.0	0.0	0	0.00
RTKDE0082H	D(E)	-79878	-3587223	185.0	0.0	0.0	0.0	0	0.00
RTKDE0077H	D(E)	-79912	-3587252	182.1	153.5	154.2	0.7	378	0.02
RTKDE0079H	D(E)	-79934	-3587133	193.7	0.0	0.0	0.0	0	0.00
RTKDW0097H	D(W)	-83103	-3588292	54.2	33.0	36.1	3.1	4145	1.29
RTKDW0097H	D(W)	-83103	-3588292	54.2	38.1	39.7	1.6	368	0.06
RTKDW0099H	D(W)	-83101	-3588262	55.1	0.0	0.0	0.0	0	0.00
RTKDW0101H	D(W)	-83088	-3588271	56.3	0.0	0.0	0.0	0	0.00
RTKDW0102H	D(W)	-83089	-3588285	33.5	0.0	0.0	0.0	0	0.00
RTKDW0013H	D(W)	-83121	-3588314	54.3	0.0	0.0	0.0	0	0.00
RTKDW0015H	D(W)	-83108	-3588337	41.7	0.0	0.0	0.0	0	0.00
RTKDW0017H	D(W)	-83107	-3588306	54.3	0.0	0.0	0.0	0	0.00
RTKDW0020H	D(W)	-83094	-3588330	53.1	0.0	0.0	0.0	0	0.00
RTKDW0003H	D(W)	-83198	-3588311	54.8	0.0	0.0	0.0	0	0.00
RTKDW0005H	D(W)	-83174	-3588298	50.9	38.9	41.2	2.3	972	0.22
RTKDW0007H	D(W)	-83171	-3588313	57.1	0.0	0.0	0.0	0	0.00
RTKDW0008H	D(W)	-83151	-3588298	53.8	0.0	0.0	0.0	0	0.00
RTKDW0011H	D(W)	-83139	-3588307	58.1	0.0	0.0	0.0	0	0.00
RTKDW0062H	D(W)	-83209	-3588292	48.9	0.0	0.0	0.0	0	0.00
RTKDW0063H	D(W)	-83186	-3588282	58.4	0.0	0.0	0.0	0	0.00
RTKDW0085H	D(W)	-83131	-3588290	60.7	38.5	41.3	2.8	3369	0.94
RTKDW0085H	D(W)	-83131	-3588290	60.7	0.0	0.0	0.0	0	0.00
RTKDW0064H	D(W)	-83190	-3588256	61.7	0.0	0.0	0.0	0	0.00

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Hole ID	Block	Easting (X)	Northing (Y)	Depth Logged (ft)	From (ft)	To (ft)	Interval (ft)	Average Grade (ppm eU <sub>3</sub> O <sub>8</sub> )	GT (ft%)
RTKDW0073H	D(W)	-83159	-3588273	57.6	47.6	56.9	9.4	3725	3.48
RTKDW0081H	D(W)	-83143	-3588237	56.3	38.2	41.3	3.1	1587	0.49
RTKDW0081H	D(W)	-83143	-3588237	56.3	44.8	45.6	0.8	532	0.04
RTKDW0083H	D(W)	-83143	-3588267	58.9	44.6	50.0	5.4	940	0.51
RTKDW0087H	D(W)	-83132	-3588260	59.7	36.9	40.8	3.9	3032	1.19
RTKDW0087H	D(W)	-83132	-3588260	59.7	46.6	48.1	1.5	740	0.11
RTKDW0088H	D(W)	-83129	-3588245	52.5	0.0	0.0	0.0	0	0.00
RTKDW0092H	D(W)	-83114	-3588225	55.9	0.0	0.0	0.0	0	0.00
RTKDW0047H	D(W)	-83234	-3588246	51.2	43.5	44.5	1.0	229	0.02
RTKDW0049H	D(W)	-83220	-3588270	53.5	0.0	0.0	0.0	0	0.00
RTKDW0051H	D(W)	-83219	-3588240	39.0	0.0	0.0	0.0	0	0.00
RTKDW0076H	D(W)	-83159	-3588229	55.1	0.0	0.0	0.0	0	0.00
RTKDW0077H	D(W)	-83156	-3588214	58.4	0.0	0.0	0.0	0	0.00
RTKDW0079H	D(W)	-83140	-3588208	60.0	0.0	0.0	0.0	0	0.00
RTKDW0090H	D(W)	-83127	-3588215	58.4	0.0	0.0	0.0	0	0.00
RTKDW0036H	D(W)	-83262	-3588214	58.7	0.0	0.0	0.0	0	0.00
RTKDW0037H	D(W)	-83263	-3588229	52.5	0.0	0.0	0.0	0	0.00
RTKDW0041H	D(W)	-83250	-3588238	57.1	0.0	0.0	0.0	0	0.00
RTKDW0042H	D(W)	-83248	-3588223	59.1	39.2	42.0	2.8	961	0.27
RTKDW0042H	D(W)	-83248	-3588223	59.1	44.3	47.6	3.3	1015	0.33
RTKDW0043H	D(W)	-83248	-3588208	57.9	0.0	0.0	0.0	0	0.00
RTKDW0044H	D(W)	-83231	-3588201	36.9	0.0	0.0	0.0	0	0.00
RTKDW0053H	D(W)	-83218	-3588209	53.8	43.6	47.2	3.6	2592	0.94
RTKDW0054H	D(W)	-83216	-3588194	54.8	0.0	0.0	0.0	0	0.00
RTKDW0056H	D(W)	-83200	-3588203	59.1	0.0	0.0	0.0	0	0.00
RTKDW0057H	D(W)	-83202	-3588218	54.1	0.0	0.0	0.0	0	0.00
RTKDW0006H	D(W)	-83181	-3588311	56.4	0.0	0.0	0.0	0	0.00
RTKDW0012H	D(W)	-83120	-3588298	55.1	0.0	0.0	0.0	0	0.00
RTKDW0012H	D(W)	-83120	-3588298	55.1	0.0	0.0	0.0	0	0.00
RTKDW0070H	D(W)	-83175	-3588250	65.3	46.4	50.5	4.1	4659	1.91
RTKDW0071H	D(W)	-83176	-3588265	59.7	0.0	0.0	0.0	0	0.00
RTKDW0072H	D(W)	-83167	-3588286	52.8	39.4	42.8	3.4	3175	1.09
RTKDW0080H	D(W)	-83142	-3588222	62.7	0.0	0.0	0.0	0	0.00
RTKDW0045H	D(W)	-83232	-3588216	59.1	40.5	48.6	8.0	387	0.31
RTKDW0050H	D(W)	-83221	-3588256	61.4	37.6	37.9	0.3	236	0.01
RTKDW0052H	D(W)	-83218	-3588225	59.5	38.4	41.7	3.3	984	0.32
RTKDW0052H	D(W)	-83218	-3588225	59.5	44.1	46.4	2.3	846	0.19
RTKDW0052H	D(W)	-83218	-3588225	59.5	49.2	51.5	2.3	2061	0.47
RTKDW0059H	D(W)	-83204	-3588248	61.4	28.1	50.5	22.5	1807	4.06
RTKDW0059H	D(W)	-83204	-3588248	61.4	0.0	0.0	0.0	0	0.00
RTKDW0060H	D(W)	-83206	-3588263	56.4	38.4	39.7	1.3	301	0.04
RTKDW0066H	D(W)	-83189	-3588227	53.6	43.1	45.8	2.6	472	0.12
RTKDW0075H	D(W)	-83161	-3588243	58.1	32.3	38.2	5.9	1935	1.14
RTKDW0075H	D(W)	-83161	-3588243	58.1	44.1	48.1	3.9	817	0.32
RTKDW0089H	D(W)	-83128	-3588231	46.9	35.9	37.1	1.1	329	0.04
RTKDW0094H	D(W)	-83117	-3588254	48.9	37.6	38.9	1.3	329	0.04
RTKDW0098H	D(W)	-83102	-3588278	50.7	38.2	39.7	1.5	643	0.09
RTKDW0004H	D(W)	-83192	-3588297	50.9	0.0	0.0	0.0	0	0.00
RTKDW0004H	D(W)	-83192	-3588297	50.9	42.5	45.1	2.6	1978	0.52
RTKDW0016H	D(W)	-83108	-3588322	57.1	37.1	39.2	2.1	2438	0.52
RTKDW0018H	D(W)	-83092	-3588300	54.6	37.6	39.4	1.8	874	0.16
RTKDW0084H	D(W)	-83142	-3588282	51.8	37.4	40.4	3.0	4068	1.20



## APPENDIX 2 – JORC Table 1

### Rietkuil Project

The table below is a description of the assessment and reporting criteria used for reporting of exploration results that reflects those presented in Table 1 of *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves* (The JORC Code, 2012). The reported exploration results were obtained from the Rietkuil project area from radiometric re-logging of historic drill holes and does not include new drilling data.

#### Section 1: Sampling Techniques and Data

Criteria	Explanation
Sampling techniques	<ul style="list-style-type: none"> <li>The primary method of grade determination was through gamma logging for equivalent uranium (<math>eU_{3O_8}</math>) using a GeoVista natural gamma ray sonde (NGRS) with measurements at 0.05 or 0.10 m intervals.</li> <li>No corrections for water/mud, casing or hole diameter were applied.</li> <li>No physical sampling was done for chemical assay.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>No drilling was done, only historic holes were accessed.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>No drilling was done, only historic holes were accessed.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>All open historic holes were logged radiometrically using a natural gamma ray sonde.</li> <li>No other logging techniques were applied.</li> </ul>
Subsampling techniques and sample preparation	<ul style="list-style-type: none"> <li>No physical samples were collected.</li> <li>Gamma values obtained in counts per second were converted to parts per million by applying a standard conversion formula and tool factors.</li> </ul>
Quality of assay or grade data and laboratory tests	<ul style="list-style-type: none"> <li>Calibration and control hole logging was done on a routine basis for gamma probe grades and a representative set of re-logging has also been undertaken.</li> <li>The overall quality of QAQC is considered adequate to ensure the validity of the data used for reporting of exploration results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>No physical samples or assays were obtained for reporting.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>All collar positions were obtained from a historic survey database and plotted in ArcGIS.</li> <li>The collars were then located in the field by hand-held GPS.</li> <li>Downhole deviation surveys were not routinely carried out as all holes are less than 100m deep and drilled vertically.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Drilling spacing at Rietkuil ranges from a 15x15 metre pattern to a 60x65 metre pattern.</li> <li>Distribution of data points obtained radiometric re-logging is uneven and depends on availability of open historic holes.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>The dip of the mineralisation for the entire deposit varies from 0° to -5°. Local grade continuity follows the dip of the mineralisation for the entire deposit. All drilling intersects local grade continuity with 80 to 90 degree angles.</li> <li>No biases are expected from the drilling direction.</li> </ul>
Audits and reviews of sampling and assaying	<ul style="list-style-type: none"> <li>Audits and reviews on sampling and assaying are not relevant as no physical samples or assays were used in reporting grade results.</li> <li>Gamma data and data reduction to <math>eU_{3O_8}</math> was carried out under the supervision of Geotron Systems (Pty) Ltd. Geotron established procedures for collection and processing of raw gamma data.</li> </ul>

#### Section 2: Reporting of Exploration Results

Criteria	Explanation
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Peninsula is the sole shareholder of Tasman Pacific Minerals Limited "Tasman", which through its wholly-owned subsidiary, Tasman RSA Holdings (Pty) Ltd, holds 74% of the issued share capital in Tasman-Lukisa JV Company (Pty) Ltd ("TL JVCo"). Tasman is the holder of the original 74% interest in prospecting rights granted to Peninsula by the DMR while TL JVCo and its subsidiary Beaufort West Minerals (Pty) Ltd holds title to an additional 35 prospecting rights. The remaining 26% interest in the prospecting rights is held by Black Economic Empowerment ("BEE") entities.</li> <li>There are no royalties payable on the prospecting operations pursuant to the prospecting rights held by Tasman, TL JVCo or Beaufort West Minerals (Pty) Ltd, nor are there any encumbrances attaching to these prospecting rights which are apparent.</li> </ul>

Criteria	Explanation
	<ul style="list-style-type: none"> <li>Prospecting rights are granted in accordance with the provisions and guarantees of the Mineral Resources and Petroleum Development Act (MPRDA), Act 28, 2002.</li> <li>All prospecting rights are in good standing and there are no known impediments to obtaining a licence to operate in the area.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Union Carbide (late 1970's): drilled approximately 2968 percussion or wagon drill holes at Rietkuil.</li> <li>Uramin (2005-2007) and Uramin-ARSA (2007- present): re-logged a limited number of holes on an adjacent property, the results of which are still to be fully verified.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>The resources are developed within mostly flat-lying Permian fluvial sandstones of the Karoo Supergroup</li> <li>Uranium distribution is tabular and is associated with organic carbon and/or carbonate.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>Surveyed collar positions were obtained from historic documents and tables or in some instances estimated from maps and verified by hand-held GPS.</li> <li>Detailed drill hole information has been listed in Appendix 1 above.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>All grades were determined by gamma probe and reported as eU3O8.</li> <li>Reported grade intervals were calculated using a 200ppm eU3O8 cut off.</li> <li>Compositing was done to minimum interval of 0.10m and inclusive of maximum 0.60m of low grade between high grade peaks.</li> <li>Grade determinations assume no disequilibrium effects as established from multiple regional measurements and comparisons against physical sample content, however no verification has been done for the Rietkuil area yet.</li> <li>Radon Gas Interference: As a result of routine QAQC measures a number of holes were identified with suspected radon gas accumulations causing interference in the radiometric results. To reduce the effect on the grade calculations the holes were re-logged after placing water into the dry holes to displace the radon gas. All holes that were re-logged for suspected radon interference are indicated in the Tables below.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>Mineralisation true widths vary from 0.10m to &gt;2m. Gamma sampling interval of 0.05m or 0.10m is considered appropriate.</li> <li>Mineralisation is horizontal within a tolerance of +/-2 degrees. All drillholes are vertical thus the intercepts are effectively a measurement of true width</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>See main text above.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>All reporting of exploration results is considered to be comprehensive.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>None.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>Further radiometric re-logging will continue for other blocks.</li> <li>Infill and extensional drilling programs will be planned to enhance data continuity for resource estimation once the data has been fully reviewed.</li> <li>More specific information is considered to be commercially sensitive and thus is not disclosed.</li> </ul>