



24th April 2013

Companies Announcement Office
Via Electronic Lodgement

POSITIVE URANIUM RESULTS RETURNED FROM DRILLING RYST KUIL CHANNEL EXTENSIONS

Highlights

- **Initial exploration drilling along Ryst Kuil channel trend returns positive results**
- **Drilling confirms shallow nature of existing resources**
- **Additional uranium mineralisation outside existing resource limits identified**
- **Re-logging of historic drill holes validates historic results**

Summary

Peninsula Energy Limited (**Peninsula**) is pleased to announce encouraging results from the initial drilling program along the Ryst Kuil channel in the Eastern Sector of its Karoo Uranium/Molybdenum Projects in South Africa (**Karoo Projects**).

The initial drilling program, conducted at the De Pannen resource area (refer Figure 1), commenced in February 2013 and to date Peninsula has completed 67 reverse circulation drill holes within the main mineralised channel for a total of 2,745 metres.

The drilling program has been successful in its objectives of identifying additional areas of mineralisation outside the current resource limits and also in converting existing inferred mineralisation to indicated status.

In addition to the RC drilling, Peninsula continues to re-log historic holes in order to validate the historic data, as part of the ongoing QAQC program.

Peninsula Executive Chairman Gus Simpson stated "We are very pleased with the first results from the drilling programme at Ryst Kuil, which has demonstrated good uranium mineralisation at shallow depths. Further drilling across Peninsula's landholding will continue with the aim to expand and enhance the existing resource estimates".

2013 Drilling Program – Karoo Projects

In February 2013 Peninsula announced an initial JORC-compliant resource estimate of 50.1Mlbs eU₃O₈ at the Karoo Projects. This resource includes an indicated resource of 15.7Mlbs grading 1,020ppm eU₃O₈ at a lower reporting cut off of 600ppm eU₃O₈ (Table 1).

Table 1: Classified JORC-Compliant Resource Estimate, Karoo Projects: eU₃O₈

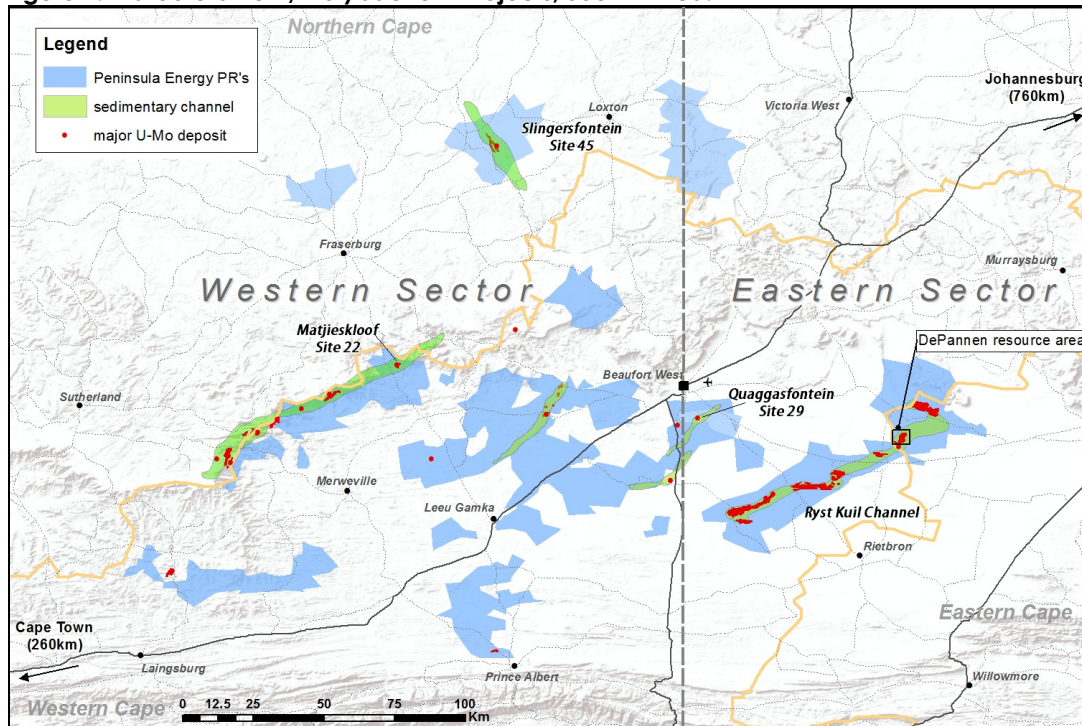
Classification	eU ₃ O ₈ (ppm) CUT-OFF	Tonnes (millions)	eU ₃ O ₈ (ppm)	eU ₃ O ₈ (million lbs)
Indicated	600	6.9	1,020	15.7
Inferred	600	14.8	1,050	34.4
Total	600	21.7	1,040	50.1

The resource estimate was based on a database comprising 7,163 drill holes together with 1,245 additional holes probed or drilled by Peninsula since 2011, including 16 diamond holes and 730 reverse circulation holes.

Previous exploration conducted by Esso Minerals Africa, JCI and Union Carbide at the Karoo Projects in the 1970s included 1.6 million metres of drilling together with trial open-cut and trial decline mining programs. Based on the results of these programs, the previous explorers estimated approximately 99Mlbs U₃O₈ and 61Mlbs molybdenum (Mo).

Peninsula is focussing on bringing approximately half of this total, for which drilling data is available, to a standard suitable for reporting under the JORC guidelines. The remainder, comprising up to 48Mlbs U₃O₈ in historical estimates, for which drilling data is not available, is being targeted in on-going exploration with the objective of converting as much as possible to JORC Code-compliant resources.

Figure 1: Karoo Uranium/Molybdenum Projects, South Africa.



To this end Peninsula commenced drilling in February 2013 at the De Pannen resource area, located within the Eastern Sector of the Karoo Projects (refer Figure 1 above).

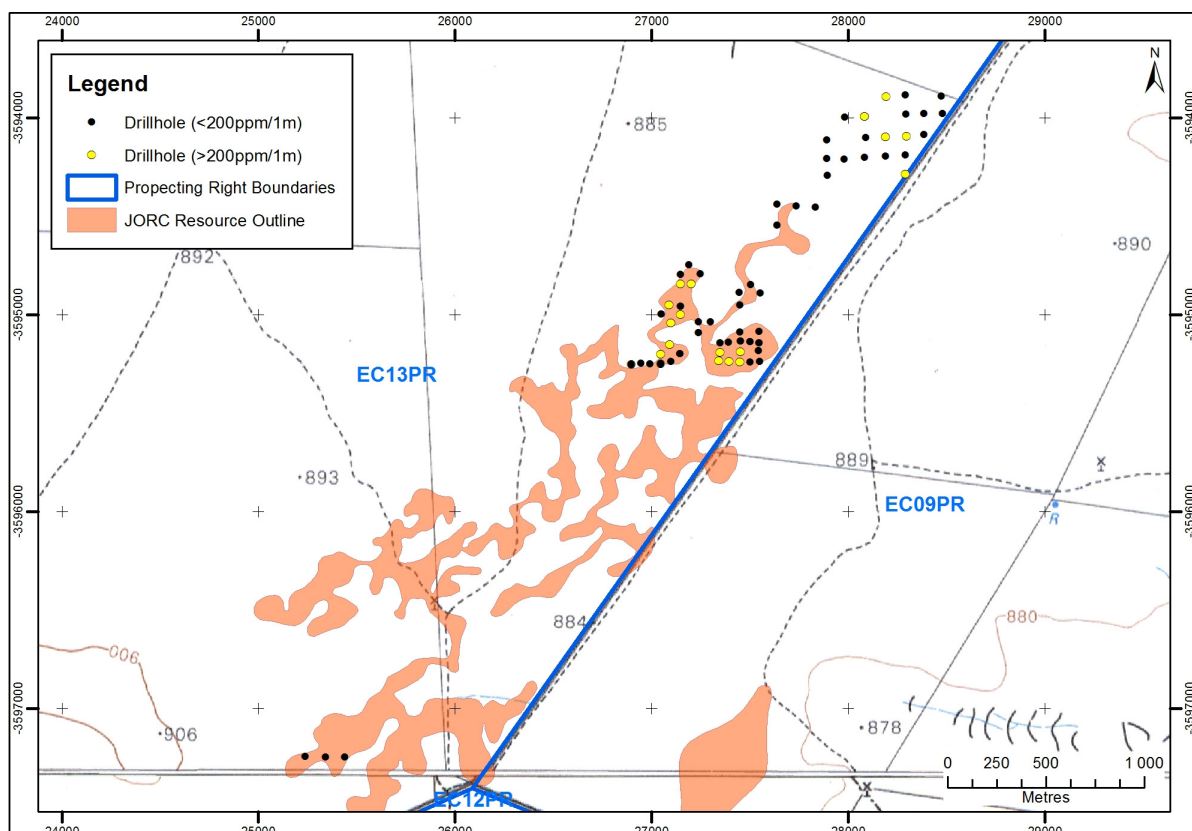
The objectives of this drill program are to convert existing inferred resources to indicated resource classification and identify areas of additional mineralisation outside the current resource boundaries.

To date Peninsula has completed a total of 67 reverse circulation holes for a total of 2,745 metres at the De Pannen project area. A total of 17 holes intersected mineralisation >200ppm and 5 holes reported multiple intersections of stacked uranium with two holes reporting grades in excess of 1,000ppm eU₃O₈. Table 2 lists intersections that exceed the equivalent of 200ppm over 1m. The complete drillhole listing is appended.

The results from the drilling program to date are consistent with the historic drilling results and confirm the presence of shallow uranium mineralisation (at depths mostly under 30m). Within the channel system, uranium and molybdenum mineralisation is localised within smaller-scale sedimentary features in the order of 1-2m in thickness and up to several hundred metres in length. The shallow nature of the mineralisation and resources are potentially amenable to open pit mining which would have highly favourable implications for the economics of the planned operations at Karoo.

As well as facilitating the conversion of existing inferred resources to indicated status, step out drilling beyond the historically mineralised zones has returned high grade intersections which are expanding the limits of the known mineralisation.

Figure 2: De-Pannen Drilling Map showing Location of Significant Results.



In addition to the above, Peninsula is continuing with a down-hole gamma logging program at Ryst Kuil to validate the historic results at the project. As part of the resource delineation process, Peninsula completed a detailed QAQC study comprising the confirmation of drillhole locations and verification of historic down-hole radiometric logging procedures and results. In total Peninsula has now probed 250 holes, including 77 more recently drilled diamond holes and 71 reverse circulation holes, the remainder being historic holes drilled by Esso. The results have been successful in validating the historic data.

Table 2: Drilling Results De Pannen, South Africa (>200ppm over 1m equivalent cut off, gamma logging).

Hole-ID	Easting	Northing	RL	Hole Depth (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Grade (ppm eU ₃ O ₈)
DPN227RC	28193	-	884	35	0	-90	22.70	23.30	0.60	1405
DPN229RC	28081	-	880	40	0	-90	24.85	25.20	0.35	585
DPN229RC	28081	-	880	40	0	-90	25.80	26.30	0.50	824
DPN234RC	28297	-	886	40	0	-90	20.80	21.45	0.65	308
DPN235RC	28189	-	882	40	0	-90	24.60	24.95	0.35	801
DPN235RC	28189	-	882	40	0	-90	26.70	27.70	1.00	420
DPN239RC	28290	-	890	40	0	-90	27.85	28.25	0.40	673
DPN259RC	27392	-	888	30	0	-90	23.10	23.60	0.50	526
DPN260RC	27342	-	884	30	0	-90	17.20	18.60	1.40	483
DPN261RC	27347	-	886	30	0	-90	24.45	25.45	1.00	851
DPN262RC	27451	-	884	35	0	-90	24.10	25.40	1.30	460
DPN271RC	27147	-	888	35	0	-90	22.40	23.10	0.70	484
DPN273RC	27199	-	883	30	0	-90	18.00	18.65	0.65	551
DPN273RC	27199	-	883	30	0	-90	19.50	20.55	1.05	772
DPN277RC	27146	-	887	35	0	-90	17.95	19.65	1.70	749
DPN278RC	27087	-	885	35	0	-90	23.85	25	1.15	400
DPN280RC	27096	-	885	35	0	-90	22.5	22.9	0.40	678
DPN280RC	27096	-	885	35	0	-90	27	28.1	1.10	559
DPN281RC	27090	-	892	35	0	-90	17.7	18.15	0.45	731
DPN281RC	27090	-	892	35	0	-90	25.2	25.85	0.65	1252
DPN285RC	27045	-	888	35	0	-90	19.35	19.85	0.50	401
DPN288RC	26895	-	888	35	0	-90	19.6	20	0.40	579

Karoo Landholding

Peninsula has a 74% interest in a total of 42 prospecting rights (PR's) covering 7,800 km² of the main uranium-molybdenum bearing sandstone channels in the Karoo Basin (Figure 1). Peninsula is nearing completion of the acquisition of these prospecting rights, which are subject to conditions precedent as detailed in the previous Karoo announcement. The residual 26% interest remains with the BEE partners as required by South African law.

In the Eastern Sector, Peninsula has freehold ownership over an area of 322 km² which covers a significant proportion of the reported resource and allows unlimited surface access. Additional surface access rights have also been contracted on a further 153km² until 2021. This area is largely contiguous with the freehold land.

Exploration Target

The Karoo Projects cover a significant proportion of the Karoo Basin Permian sandstones, which are believed to represent an Exploration Target of between 250 and 350Mlbs U₃O₈. This Exploration Target, as shown in Table 3, is based on the total cumulative prospective strike length of about 200km that occurs within the PR's, together with the reported U₃O₈lbs/km along the modelled sections of the Eastern Sector channel sandstones. Further drilling will be required in order to define a resource estimated in accordance with the JORC code and there is no guarantee that a resource will be defined.

Table 3: Karoo Projects Total Exploration Target

Exploration Areas	Tonnes (M)		Grade (ppmU ₃ O ₈)		eU ₃ O ₈ (Mlbs)	
	From	To	From	To	From	To
Range						
Total	126	133	900	1200	250	350

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 the report which relates to Mineral Resources is based upon information compiled by Ian Glacken, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Ian Glacken is an employee of Optiro Pty Ltd 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 to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ian Glacken consents to the inclusion in the report of a summary based upon his information in the form and context in which it appears.

The information in this report which relates to Geology and Mineralized Potential is based on information compiled by Mr George van der Walt. 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 Geo-Consult International (Pty) Ltd. 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr van der Walt consents to the inclusion in the report of a summary based upon his information in the form and context in which it appears.

Please note that in accordance with Clause 17 of the JORC (2012) Code, the potential quantity and grade of the "Exploration Target" 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. eU3O8 grades were determined using a GeoVista gamma sonde measuring at 0.05m (5cm) intervals. Raw gamma counts per second were converted to eU3O8 by applying the formula $eU3O8 \text{ (ppm)} = (\text{Gamma (CPS)} / (1 - \text{Gamma (CPS)} * \text{Deadtime})) * K\text{-Factor}$. The logging protocol, formula and gamma sonde calibrations (calibrated at the IAEA accepted Pelindaba Calibration facility) used by Peninsula were supplied by Geotron (Pty) Ltd, an independent geophysical logging consultancy based in Potchefstroom, South Africa. Daily calibration checks were done in selected Control Holes at the drilling area to check for drift and instrument error.

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.

Appendix 1: Complete Drillhole listing* – 2013 Program, Karoo Projects

Hole-ID	Easting	Northing	RL	Hole Depth (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Grade (ppm eU3O8)
DPN222RC	25236	-3597243	890	85	0	-90	0.00	0.00	0.00	0
DPN223RC	25339	-3597247	890	70	0	-90	0.00	0.00	0.00	0
DPN224RC	25437	-3597248	886	72	0	-90	0.00	0.00	0.00	0
DPN225RC	28473	-3593888	884	50	0	-90	0.00	0.00	0.00	0
DPN226RC	28289	-3593882	884	35	0	-90	0.00	0.00	0.00	0
DPN232RC	28479	-3593976	884	303	0	-90	0.00	0.00	0.00	0
DPN227RC	28193	-3593893	884	35	0	-90	22.70	23.30	0.60	1405
DPN227RC	28193	-3593893	884	35	0	-90	24.70	24.95	0.25	443
DPN228RC	27980	-3593996	883	40	0	-90	0.00	0.00	0.00	0
DPN229RC	28081	-3593993	880	40	0	-90	21.90	22.30	0.40	458
DPN229RC	28081	-3593993	880	40	0	-90	23.70	24.25	0.55	334
DPN229RC	28081	-3593993	880	40	0	-90	24.85	25.20	0.35	585
DPN229RC	28081	-3593993	880	40	0	-90	25.80	26.30	0.50	824
DPN230RC	28292	-3593981	883	35	0	-90	0.00	0.00	0.00	0
DPN231RC	28384	-3593977	880	35	0	-90	0.00	0.00	0.00	0
DPN234RC	28297	-3594093	886	40	0	-90	20.80	21.45	0.65	308
DPN235RC	28189	-3594095	882	40	0	-90	24.60	24.95	0.35	801
DPN235RC	28189	-3594095	882	40	0	-90	26.70	27.70	1.00	420
DPN236RC	28088	-3594100	886	40	0	-90	0.00	0.00	0.00	0
DPN237RC	27891	-3594112	888	40	0	-90	0.00	0.00	0.00	0
DPN233RC	28384	-3594085	886	40	0	-90	0.00	0.00	0.00	0
DPN238RC	28289	-3594189	882	40	0	-90	0.00	0.00	0.00	0
DPN239RC	28290	-3594285	890	40	0	-90	23.80	24.10	0.30	428
DPN239RC	28290	-3594285	890	40	0	-90	27.85	28.25	0.40	673

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Hole-ID	Easting	Northing	RL	Hole Depth (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Grade (ppm eU308)
DPN240RC	28190	-3594195	882	40	0	-90	0.00	0.00	0.00	0
DPN241RC	28083	-3594200	886	40	0	-90	30.65	30.85	0.20	344
DPN242RC	27979	-3594209	885	40	0	-90	0.00	0.00	0.00	0
DPN243RC	27890	-3594205	883	40	0	-90	0.00	0.00	0.00	0
DPN244RC	27893	-3594290	883	40	0	-90	0.00	0.00	0.00	0
DPN245RC	27833	-3594452	884	30	0	-90	0.00	0.00	0.00	0
DPN246RC	27733	-3594446	882	35	0	-90	0.00	0.00	0.00	0
DPN247RC	27638	-3594439	883	35	0	-90	0.00	0.00	0.00	0
DPN248RC	27637	-3594544	886	35	0	-90	29.50	29.60	0.10	237
DPN249RC	27501	-3594848	890	40	0	-90	0.00	0.00	0.00	0
DPN250RC	27551	-3594888	888	30	0	-90	0.00	0.00	0.00	0
DPN251RC	27446	-3594951	893	35	0	-90	0.00	0.00	0.00	0
DPN252RC	27443	-3594887	880	30	0	-90	0.00	0.00	0.00	0
DPN257RC	27546	-3595084	887	35	0	-90	0.00	0.00	0.00	0
DPN253RC	27546	-3595142	884	35	0	-90	14.85	15.10	0.25	368
DPN253RC	27546	-3595142	884	35	0	-90	19.70	19.90	0.20	323
DPN254RC	27543	-3595182	888	35	0	-90	21.65	21.65	0.00	204
DPN255RC	27548	-3595238	886	30	0	-90	0.00	0.00	0.00	0
DPN256RC	27499	-3595240	886	35	0	-90	0.00	0.00	0.00	0
DPN258RC	27446	-3595240	882	30	0	-90	21.00	21.55	0.55	318
DPN259RC	27392	-3595238	888	30	0	-90	23.10	23.60	0.50	526
DPN260RC	27342	-3595234	884	30	0	-90	17.20	18.60	1.40	483
DPN260RC	27342	-3595234	884	30	0	-90	26.60	26.75	0.15	220
DPN261RC	27347	-3595192	886	30	0	-90	24.45	25.45	1.00	851
DPN262RC	27451	-3595187	884	35	0	-90	24.10	25.40	1.30	460
DPN262RC	27451	-3595187	884	35	0	-90	26.35	26.50	0.15	288
DPN263RC	27498	-3595135	879	30	0	-90	0.00	0.00	0.00	0
DPN264RC	27452	-3595134	888	30	0	-90	21.75	22.05	0.30	410
DPN264RC	27452	-3595134	888	30	0	-90	22.95	23.10	0.15	183
DPN265RC	27447	-3595089	882	30	0	-90	0.00	0.00	0.00	0
DPN266RC	27391	-3595140	891	30	0	-90	0.00	0.00	0.00	0
DPN267RC	27348	-3595144	883	30	0	-90	16.10	16.40	0.30	548
DPN268RC	27238	-3595091	891	30	0	-90	24.15	24.40	0.25	415
DPN269RC	27297	-3595036	891	35	0	-90	0.00	0.00	0.00	0
DPN270RC	27238	-3595036	885	30	0	-90	0.00	0.00	0.00	0
DPN271RC	27147	-3594998	888	35	0	-90	22.40	23.10	0.70	484
DPN272RC	27147	-3594955	887	35	0	-90	22.75	23.00	0.25	368
DPN273RC	27199	-3594844	883	30	0	-90	18.00	18.65	0.65	551
DPN273RC	27199	-3594844	883	30	0	-90	19.50	20.55	1.05	772
DPN274RC	27246	-3594791	880	35	0	-90	24.10	24.10	0.00	229
DPN275RC	27187	-3594747	886	35	0	-90	0.00	0.00	0.00	0
DPN276RC	27144	-3594794	889	35	0	-90	0.00	0.00	0.00	0
DPN277RC	27146	-3594844	887	35	0	-90	17.95	19.65	1.70	749
DPN277RC	27146	-3594844	887	35	0	-90	24.85	25.25	0.40	311
DPN278RC	27087	-3594951	885	35	0	-90	18.25	18.4	0.15	244
DPN278RC	27087	-3594951	885	35	0	-90	23.85	25	1.15	400
DPN279RC	27049	-3594997	885	35	0	-90	25.5	25.6	0.10	278
DPN279RC	27049	-3594997	885	35	0	-90	26.3	26.6	0.30	323
DPN280RC	27096	-3595042	885	35	0	-90	21	21.4	0.40	272
DPN280RC	27096	-3595042	885	35	0	-90	22.5	22.9	0.40	678
DPN280RC	27096	-3595042	885	35	0	-90	27	28.1	1.10	559
DPN281RC	27090	-3595152	892	35	0	-90	17.7	18.15	0.45	731
DPN281RC	27090	-3595152	892	35	0	-90	25.2	25.85	0.65	1252
DPN282RC	27044	-3595200	888	35	0	-90	20.65	21.1	0.45	368
DPN283RC	27141	-3595197	889	35	0	-90	25.75	25.75	0.00	202
DPN284RC	27098	-3595237	884	35	0	-90	0	0	0.00	0

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Hole-ID	Easting	Northing	RL	Hole Depth (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Grade (ppm eU ₃ O ₈)
DPN285RC	27045	-3595248	888	35	0	-90	19.35	19.85	0.50	401
DPN285RC	27045	-3595248	888	35	0	-90	20.95	21.3	0.35	424
DPN286RC	26991	-3595248	884	35	0	-90	0	0	0.00	0
DPN287RC	26945	-3595247	884	35	0	-90	0	0	0.00	0
DPN288RC	26895	-3595252	888	35	0	-90	19.6	20	0.40	579
DPN288RC	26895	-3595252	888	35	0	-90	26.1	26.2	0.10	296

*Note: Listed intervals were calculated using a 200ppm eU₃O₈ cut off, so results indicated as zero grade value may contain marginal mineralisation below 200ppm.