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Companies Announcement Office
Via Electronic Lodgement

SHALLOW HIGH GRADE DRILL RESULTS AT KAROO SITE 29 & POSITIVE INITIAL RESULTS AT SITE 45

HIGHLIGHTS

- **High grade results returned from Site 29 drilling program include:**

DH QFN0162RC - **10.7 ft @ 1,755ppm eU₃O₈** from 29.2ft

DH QFN0167RC - **3.6 ft @ 2,560 ppm eU₃O₈** from 31.2ft

DH QFN0382RC - **20.5 ft @ 300 ppm eU₃O₈** from 23.8ft

- **13 of 15 re-logged holes at Site 45 returned intersections greater than 200ppm eU₃O₈ including:**

DH SFN0336 - **9.2 ft @ 1,095 ppm eU₃O₈** from 45.4ft

DH SFN0443 - **7.7 ft @ 592 ppm eU₃O₈** from 47.4ft

Peninsula Energy Limited (Peninsula) is pleased to announce the results from the continuation of the reverse circulation (RC) drilling program at Site 29, which is located 10km south of the regional capital, Beaufort West in the Karoo, South Africa.

The results further demonstrate the widespread distribution of near surface high grade uranium in broad paleochannels.

Initial exploration also commenced at the highly prospective Site 45 with the re-logging of 15 open historic drillholes, with 13 of these recording intersections greater than 200ppm.

Site 29 RC Drilling Program

Since commencement of exploration at Site 29 in January 2011 Peninsula has completed 210 RC drillholes for 5,381m (17,654ft). This drilling has returned a total of 95 intersections in excess of 200ppm eU₃O₈.

A further 167 historic holes have also been probed returning 82 intersections in excess of 200ppm eU₃O₈.

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Since July 2011 a total of 113 RC and diamond exploration and historic-hole-confirmation drillholes have been completed returning a total of 47 intersections in excess of 200ppm eU₃O₈. The full list of significant intersections (> 200ppm) is detailed below in Table 1.

These drill results continue to confirm strong high-grade mineralization in paleochannels averaging a thickness of 3.05ft (at 200ppm eU₃O₈ cut off). This mean thickness is consistent with the historic results for the project site and is typical of the thickness of mineralized zones in the Karoo.

The depth of mineralization is shallow, averaging 13.1m (43ft) within a range of 7.2m (23.5ft) to 20.2m (66.4ft), which is very encouraging from a potential development perspective.

Highlights include:

- QFN0162RC **10.7ft at 1,755ppm eU₃O₈** from 29.2ft
- QFN0382RC **20.5ft at 300ppm eU₃O₈** from 23.8ft
- QFN0167RC **3.61ft at 2,560ppm eU₃O₈** from 31.2ft

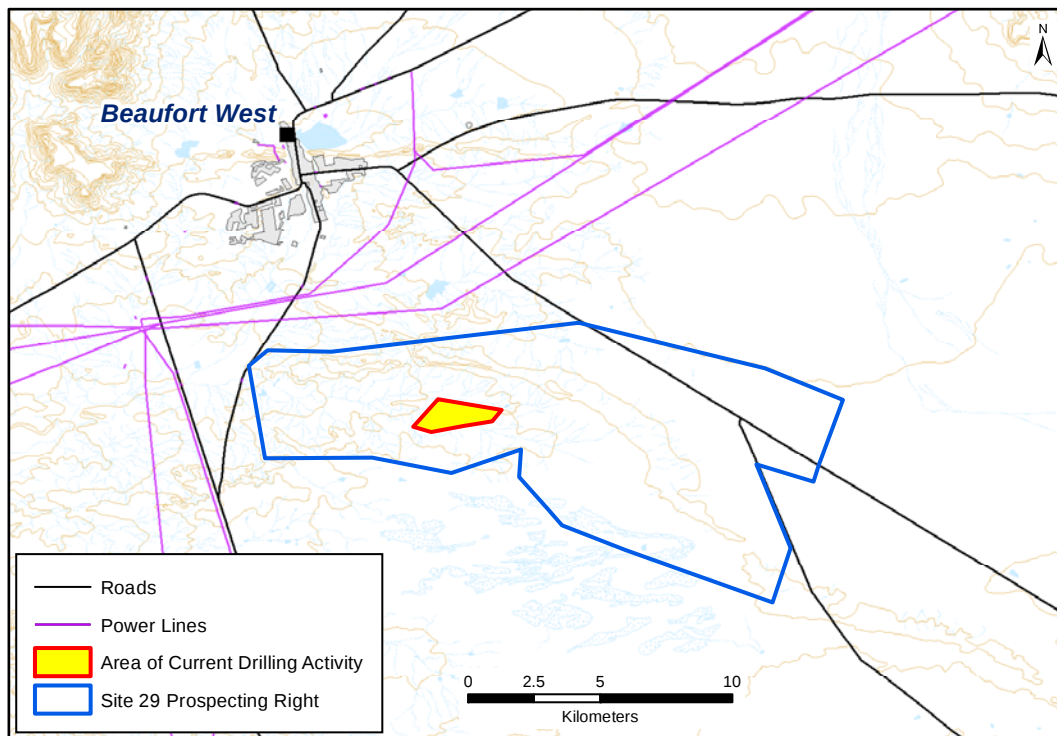


Figure 1: Site 29 Location Plan

During the 1970's Union Carbide calculated the presence of approximately 600,000lbs eU₃O₈ in a small part of Site 29 which in total covers 128km² (refer Figure 1).

Union Carbide reported an average grade exceeding 1,000ppm eU₃O₈ and the mineralisation being hosted by the Poortjie formation. This sedimentary sandstone formation is the main target for uranium mineralisation in the Karoo.

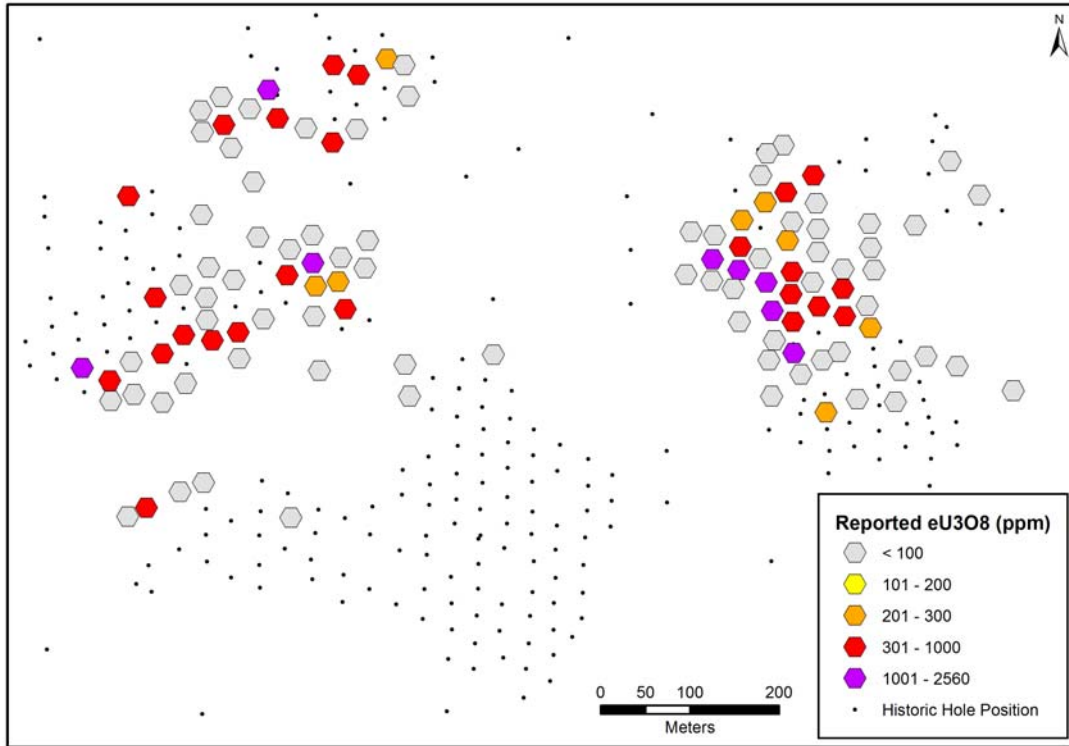


Figure 2: Site 29 July to December 2011 Reported Drillhole Location Plan (>200ppm eU3O8)

Hole-ID	Easting	Northing	Drill Depth (ft)	From (ft)	To (ft)	Interval (ft)	Grade (ppm eU3O8)
QFN0106RC	-34433	-3590416	68.90	14.93	15.58	0.66	281
QFN0139RC	-34447	-3590151	65.62	32.64	35.10	2.46	470
QFN0155RC	-34471	-3590259	65.62	37.40	41.67	4.27	589
QFN0156RC	-34472	-3590284	65.62	27.23	29.69	2.46	972
QFN0159RC	-34469	-3590350	75.46	23.46	25.59	2.13	2137
QFN0162RC	-34500	-3590271	65.62	29.20	39.86	10.66	1755
QFN0163RC	-34493	-3590303	65.62	28.71	31.00	2.30	2012
QFN0167RC	-34531	-3590257	65.62	31.17	34.78	3.61	2560
QFN0169RC	-34529	-3590231	65.62	31.66	33.96	2.30	541
QFN0173RC	-34560	-3590245	65.62	31.33	34.28	2.95	1558
QFN0202RC	-34957	-3590038	75.46	57.41	60.04	2.62	485
QFN0206RC	-34985	-3590027	75.46	57.91	59.06	1.15	333
QFN0209RC	-35058	-3590055	78.74	53.48	55.77	2.30	1063
QFN0221RC	-34972	-3590301	98.43	56.10	57.74	1.64	869
QFN0222RC	-34980	-3590270	98.43	62.17	65.62	3.44	250
QFN0226RC	-35008	-3590249	82.02	63.65	66.44	2.79	1529
QFN0227RC	-35005	-3590275	82.02	58.40	59.22	0.82	266

QFN0232RC	-35037	-3590263	82.02	59.06	62.34	3.28	795
QFN0232RC	-35037	-3590263	82.02	68.73	69.23	0.49	239
QFN0241RC	-35092	-3590327	98.43	54.13	62.17	8.04	407
QFN0245RC	-35108	-3590094	82.02	62.01	62.66	0.66	303
QFN0255RC	-35153	-3590330	75.46	54.79	56.10	1.31	420
QFN0255RC	-35153	-3590330	75.46	61.68	64.30	2.62	754
QFN0263RC	-35185	-3590288	78.74	60.70	63.16	2.46	397
QFN0270RC	-35215	-3590174	82.02	56.43	60.04	3.61	463
QFN0280DD	-35267	-3590367	131.23	47.74	49.70	1.97	1142
QFN0280DD	-35267	-3590367	131.23	52.99	58.89	5.91	729
QFN0353RC	-35236	-3590381	78.74	46.26	51.67	5.41	938
QFN0359RC	-35048	-3590087	75.46	57.91	59.22	1.31	502
QFN0362RC	-35195	-3590523	98.43	74.80	76.44	1.64	541
QFN0364RC	-34470	-3590315	75.46	22.97	25.26	2.30	532
QFN0364RC	-34470	-3590315	75.46	27.40	28.87	1.48	412
QFN0365RC	-34441	-3590298	52.49	25.43	25.59	0.16	209
QFN0365RC	-34441	-3590298	52.49	28.87	30.68	1.80	734
QFN0366RC	-34412	-3590309	59.06	25.10	31.17	6.07	711
QFN0367RC	-34383	-3590322	55.77	26.57	29.86	3.28	270
QFN0368RC	-34925	-3590020	78.74	53.15	54.63	1.48	239
QFN0372RC	-34986	-3590114	75.46	59.22	60.20	0.98	335
QFN0374RC	-34414	-3590278	65.62	27.72	28.87	1.15	426
QFN0377RC	-34476	-3590224	65.62	27.89	28.05	0.16	205
QFN0382RC	-34527	-3590201	65.62	23.79	44.29	20.51	300
QFN0383RC	-34501	-3590181	65.62	25.26	25.59	0.33	207
QFN0383RC	-34501	-3590181	65.62	34.12	39.21	5.09	199
QFN0384RC	-34478	-3590170	65.62	29.53	30.84	1.31	421
QFN0384RC	-34478	-3590170	65.62	37.89	38.55	0.66	221
QFN0401RC	-35177	-3590351	82.02	50.85	56.10	5.25	654
QFN0402RC	-35121	-3590336	98.43	52.17	59.38	7.22	490

Table 1: Karoo Site 29 RC Results for July to December 2011– Uranium (> 200ppm eU308)

It is important to note that exploration activity to date has been concentrated on a very limited part of Site 29. Further exploration drilling is planned for 2012 to determine the sub-surface extent of the host sandstone unit and to target further mineralization. This will be accomplished by drilling 200m spaced stratigraphic holes in both east-west and north-south fences across the property.

Site 45 RC Drilling Program

Site 45 is located 120km northwest of Beaufort West and comprises a contiguous area of 489km². During the late-1970's JCI completed a total of 431 exploration holes in a central portion of the project area. Based on this data JCI calculated the presence of approximately 4.8Mlbs eU₃O₈ in the Davidskolk formation.

Post the JCI drilling, rock chip sampling by the South African Geological Survey returned maximum values of 4,210ppm U₃O₈ and 1,372ppm Mo within the project area indicating an associated high grade molybdenum occurrence.

During December 2011 Peninsula field crew were able to undertake non-invasive exploration work in preparation for an extensive drilling campaign planned for 2012 at Site 45. A total of 15 drillholes that were open to the expected mineralised depth were probed with a gamma tool. This initial program returned results for 13 with intersections exceeding 200ppm with highlights including:

- DH SFN0336 **9.2ft at 1,095ppm eU₃O₈** from 45.4ft
- DH SFN0443 **7.7ft at 592ppm eU₃O₈** from 47.4ft

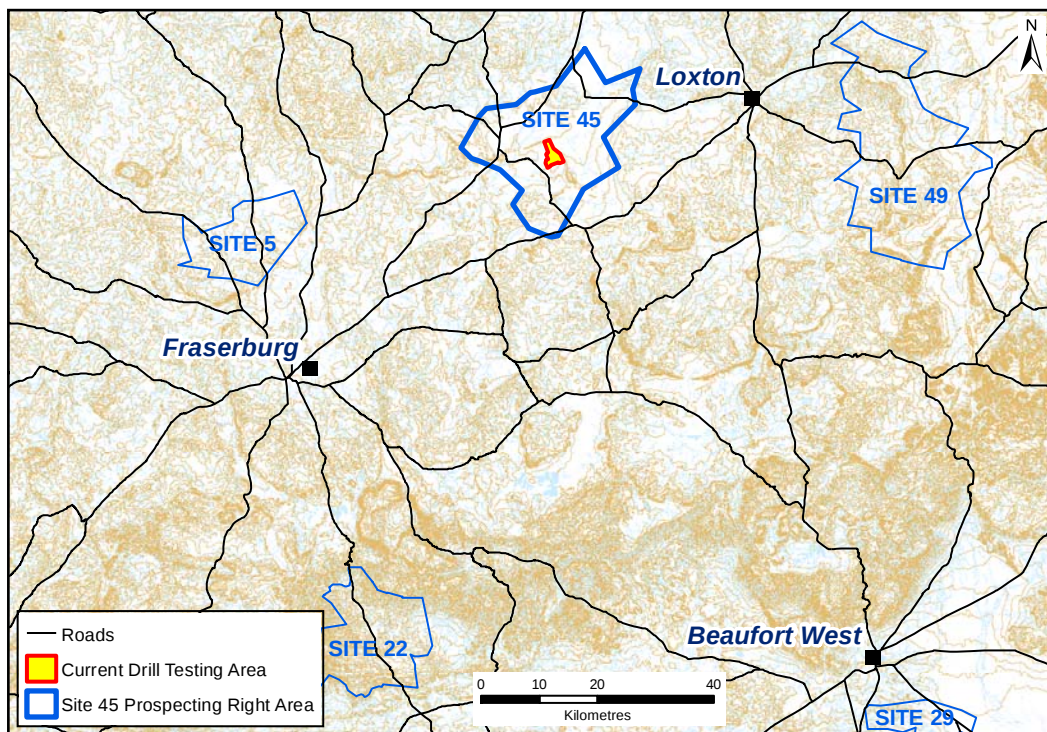


Figure 3: Site 45 Location Plan

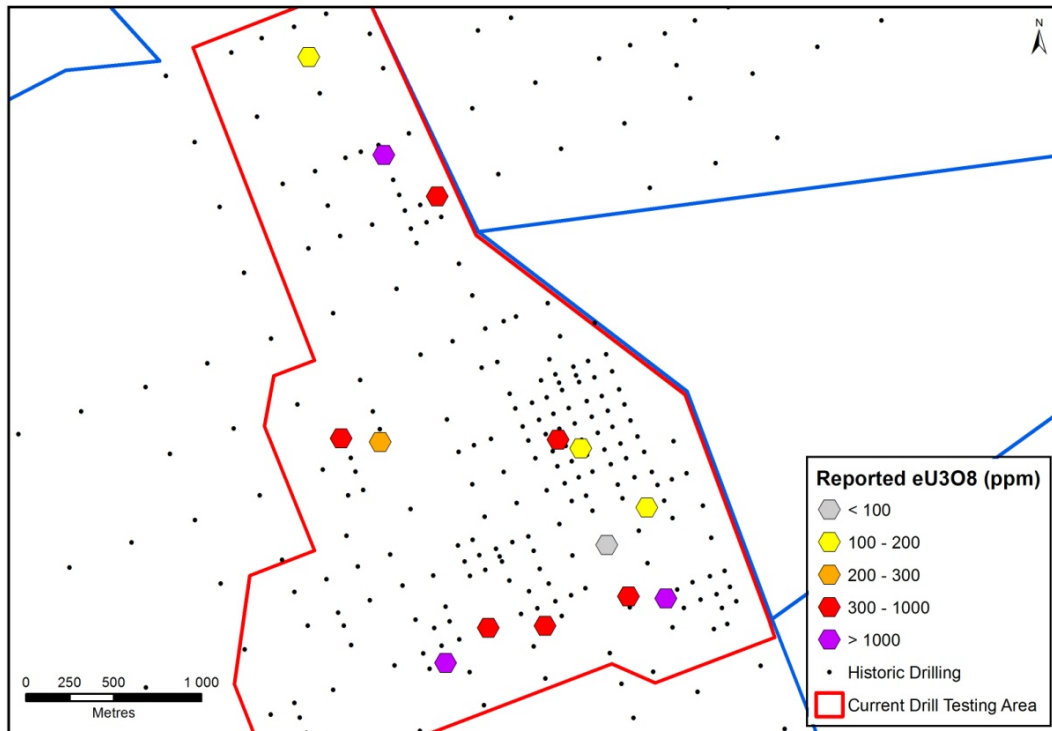


Figure 4: Site 45 Drillhole Location Plan

Hole-ID	Easting	Northing	Total Depth Logged (ft)	From (ft)	To (ft)	Interval (ft)	Grade (ppm eU3O8)
SFN0021	93862	-3495579	55.0	36.7	38.4	1.64	688
SFN0058	93244	-3494521	213.9	85.5	86.0	0.49	372
SFN0099	93570	-3493121	309.4	158.5	166.2	7.71	488
SFN0315	93617	-3495779	157.2	129.8	132.1	2.30	1,689
SFN0320	94185	-3495569	193.2	163.1	164.4	1.31	654
SFN0326	94875	-3495413	212.9	201.1	202.9	1.80	1,179
SFN0332	94661	-3495400	251.5	231.8	232.8	0.98	632
SFN0336	94875	-3495413	184.4	45.4	54.6	9.19	1,095
SFN0413	93022	-3494501	107.6	70.4	72.0	1.64	389
SFN0425	93266	-3492886	145.3	89.2	90.4	1.15	1,012
SFN0425	93266	-3492886	145.3	97.1	98.8	1.64	1,337
SFN0433	94260	-3494508	206.4	47.4	55.1	7.71	592
SFN0434	94389	-3494558	203.2	55.9	56.1	0.16	214

Table 2: Karoo Site 45 Re-logging Results – Uranium (> 200ppm eU3O8)

An RC drilling programme is planned at Site 45 for 2012 and the Company is awaiting the final approval of drill permits. The completion of this programme should allow the generation of an initial JORC compliant resource for the Karoo Project Sites 22, 29 and 45.

Karoo Projects – Exploration Potential

In addition to the existing resource drilling, ten high ranking drill targets distributed across all six of the Company's Project Areas have been prioritised from the 392 Uranium occurrences generated by the 2008 helicopter-borne radiometric and magnetic surveys. This process has included site mapping, ground sampling and aerial extent studies of the project areas conducted by Peninsula over the last 4 years.

Further targets have been identified following recent acquisition and review of exploration reports compiled by Union Carbide during the 1970s and early 1980s. Peninsula obtained these reports from the South African Nuclear Energy Corporation during the September 2010 quarter.

Preliminary geological studies have estimated a combined exploration potential in the Karoo of 30-60m tonnes @ 700 – 1,400ppm eU_3O_8 for 90 – 150m lbs eU_3O_8 .

The Company's target over the next 12 months is to delineate 30mlbs of eU_3O_8 (15-25m tonnes @ 700–1,400ppm eU_3O_8). The source of this material may include the historic mineral occurrences, their extensions and new exploration targets. If this target is achieved a conceptual study has suggested that this quantity of uranium would support the development of a central processing facility near Site 29.

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 this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Alfred Gillman and Mr George van der Walt. 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 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 Geoconsult International. Both Mr Gillman and 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Both Mr Gillman and Mr van der Walt consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Please note that in accordance with Clause 18 of the JORC (2004) Code, the potential quantity and grade of the "Mineralised Potential" 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 eU_3O_8 results are reported, it relates to values obtained from radiometric logging of drillholes. GeoVista and Geotron 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_3O_8 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_3O_8 refers to the equivalent U_3O_8 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 U_3O_8 , the difference being referred to as disequilibrium.