



ASX and media release 18 February 2010

# NuPower Confirms High Grade Uranium - Gold Discovery in the NT

*High-grade exploration results highlight outstanding exploration potential of the Eva Project and regional tenements*

NuPower Resources is pleased to announce that it has received the second batch of high-grade uranium-gold assay results from Eva Prospect in the Northern Territory, confirming the existence of significant mineralisation and highlighting the Project's outstanding exploration potential.

The latest results, which are the second and final batch of assays from the drilling program completed at Eva in the December quarter, contain exceptionally high uranium grades and significant gold intercepts.

These new assay results include:

<b>EVO22</b>	- 16m at 13,800ppm U <sub>3</sub> O <sub>8</sub> (30.42lb/t), 8.53g/t Au from surface and - 7m at 4,600ppm U <sub>3</sub> O <sub>8</sub> (10.14lb/t), 3.77g/t Au from 19m to 26m
<b>EVO34</b>	- 21m at 6,000ppm U <sub>3</sub> O <sub>8</sub> (13.23lb/t), 5.32g/t Au from 6m to 27m Including 4m at 26,000ppm U <sub>3</sub> O <sub>8</sub> (52.32lb/t), 19.41g/t Au from 12m to 16m
<b>EVO 36</b>	- 12m at 5,900ppm U <sub>3</sub> O <sub>8</sub> (13.01lb/t) , 13.39g/t Au from surface Including 2m at 22,200ppm U <sub>3</sub> O <sub>8</sub> (48.94lb/t), 10.24g/t Au from 1m to 3m - 30m at 2,500ppm U <sub>3</sub> O <sub>8</sub> (5.51lb/t), 2.07g/t Au from 14m to 44m

## ASX Code

NUP

## Capital Details

Shares on issue	236,050,855
Share Price	\$0.072
Market cap	\$17mil

## Executive Chairman

Mick Muir

## Non Executive Directors

Ian Kowalick  
Robert Owen  
John Jackson

## Company Secretary

Anthony Schildkraut

## Projects

**Westmoreland:** Eva/Cobar II and Lagoon Creek - Uranium/Gold  
**Lucy Creek/Arganara** –Phosphate  
**Aileron** - Uranium  
**Warrabri** - Uranium

*NuPower Resources Limited is a Northern Territory based exploration company. Our vision is to become a successful exploration and mining company with superior cashflows.*

NuPower Executive Chairman, Mick Muir said the latest results confirmed the Company's belief that Eva is an exciting deposit with exceptional grades over significant widths at shallow depths.

Mr Muir said Eva offered outstanding exploration upside. "The full strike extent of the structure associated with the old workings is still to be determined. The potential of the parallel structures were only partially tested by this exploration program, therefore the extent of the deposit remains open," he said.

Eva is within the Aboriginal lands of the Waanyi-Garawa Land Trust. Mr Muir stated the Company is very pleased with the relationship formed with the Traditional Owners and he expressed his thanks for their support and assistance in the exploration program. NuPower looks forward to continuing the good relationship with the Traditional Owners in the future.

The latest results stemmed from a 50-hole drilling program, the first assays from which were announced in an ASX statement on December 15, 2009. These results included 23m at 20m at 4,160 ppm U<sub>3</sub>O<sub>8</sub>, 5.07g/t Au from 9m, including 4m at 1.26% U<sub>3</sub>O<sub>8</sub> and 18.32 g/t Au from 27m.

Mineralisation at Eva has now been outlined over a strike length of 100m and intersected to vertical depths of 65m.

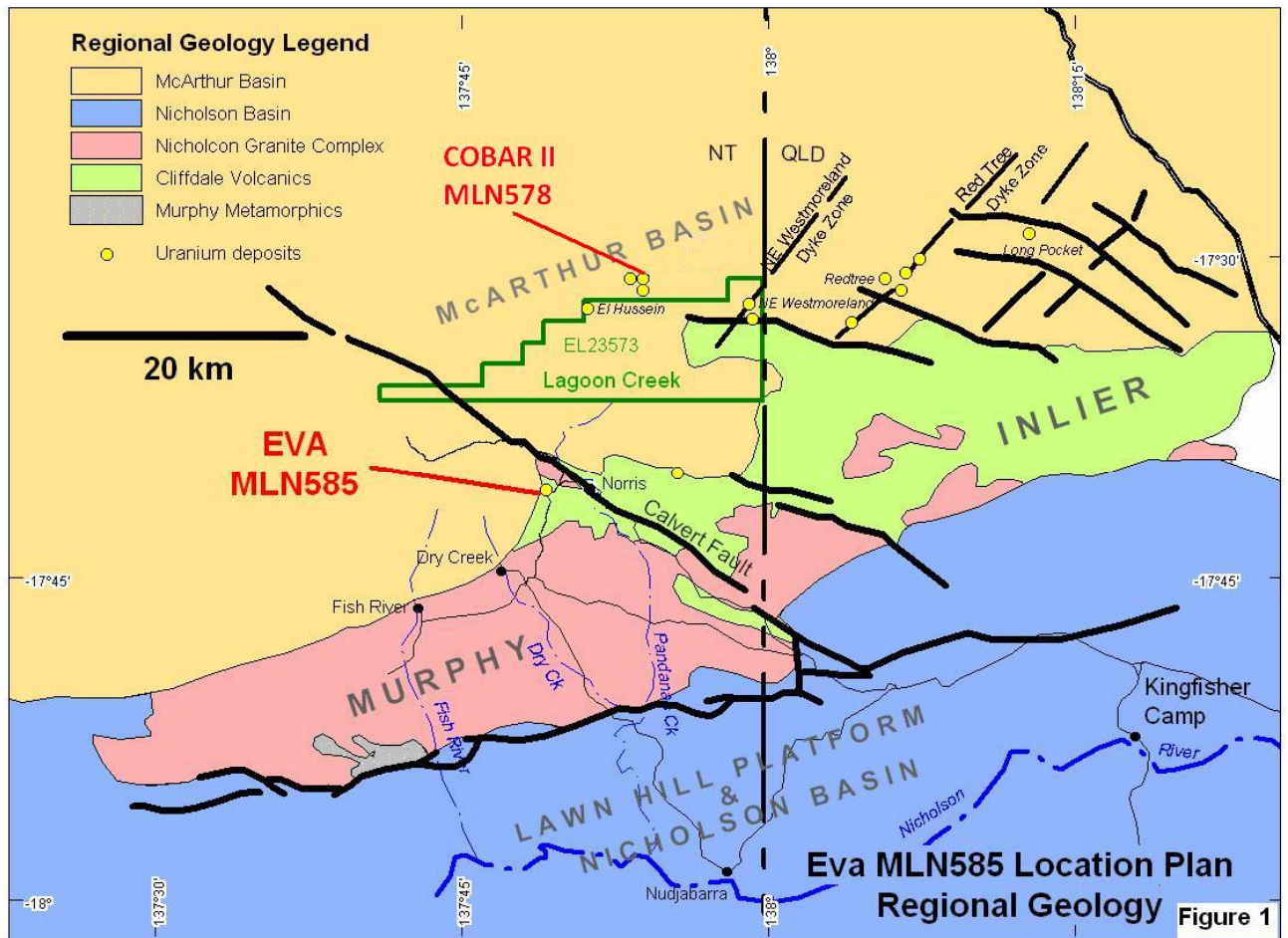
These results have provided significant new regional geological knowledge that positively impacts the potential of the Company's Lagoon Creek and Cobar II tenements. The Company is currently evaluating priority exploration targets on these leases, for the coming field season.



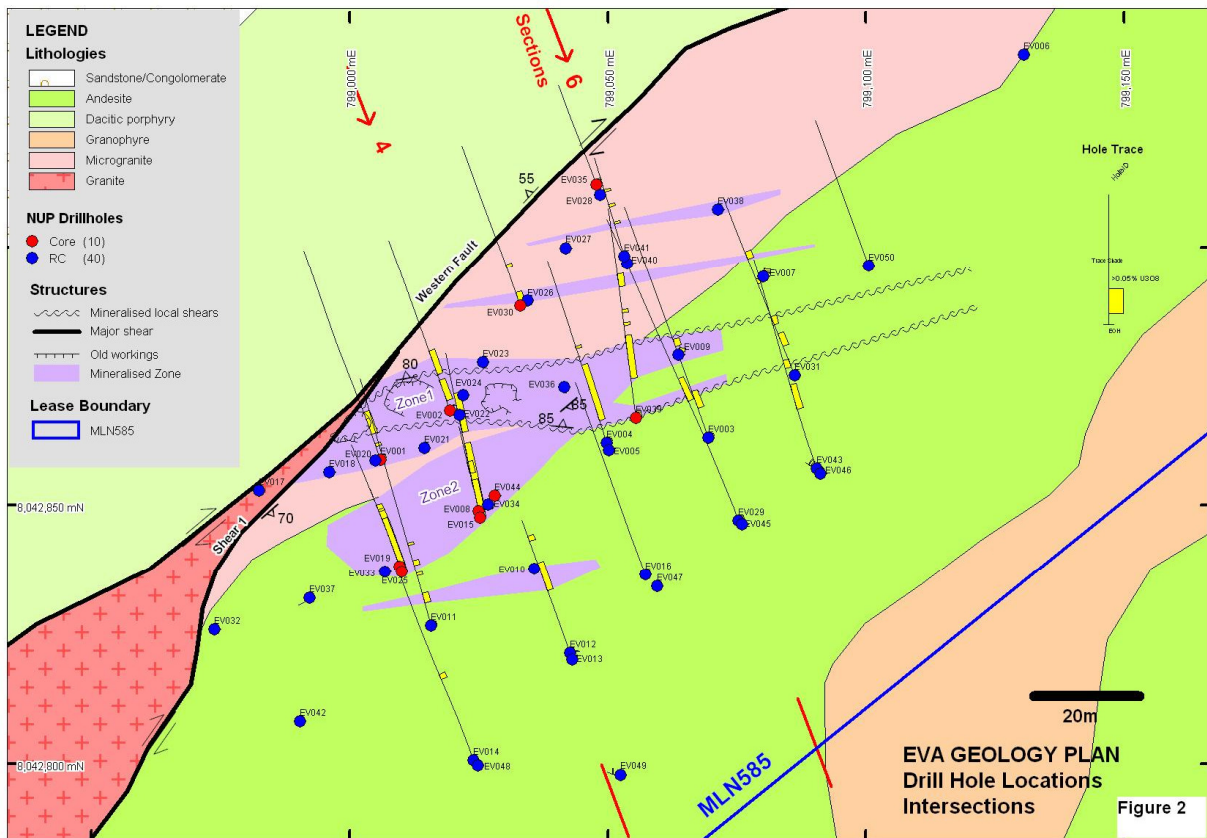
**I G (Mick) Muir**  
**Executive Chairman**

**Detailed Technical Commentary**

NuPower’s Eva project is located in the Westmoreland District, (Figure 1) on the northern margin of the Lower Proterozoic Murphy Inlier where it is hosted by the Cliffdale Volcanics that have been intruded by the Nicholson Granite Complex. The sequence is unconformably overlain immediately north of the prospect by basal rocks of the McArthur Basin represented here by the Westmoreland Conglomerate that is also host to uranium mineralisation elsewhere including NuPower’s Lagoon Creek property.



At Eva, the Cliffdale volcanics consist of flow banded dacitic porphyry that equates with the ignimbritic lower member of the volcanics overlain by massive andesite that although is a significant lithology in the prospect area, is not recognized regionally (Figure 2). The Nicholson Granite Complex is represented here by medium-coarse grained granite, a granophyric porphyry dyke and microgranite.

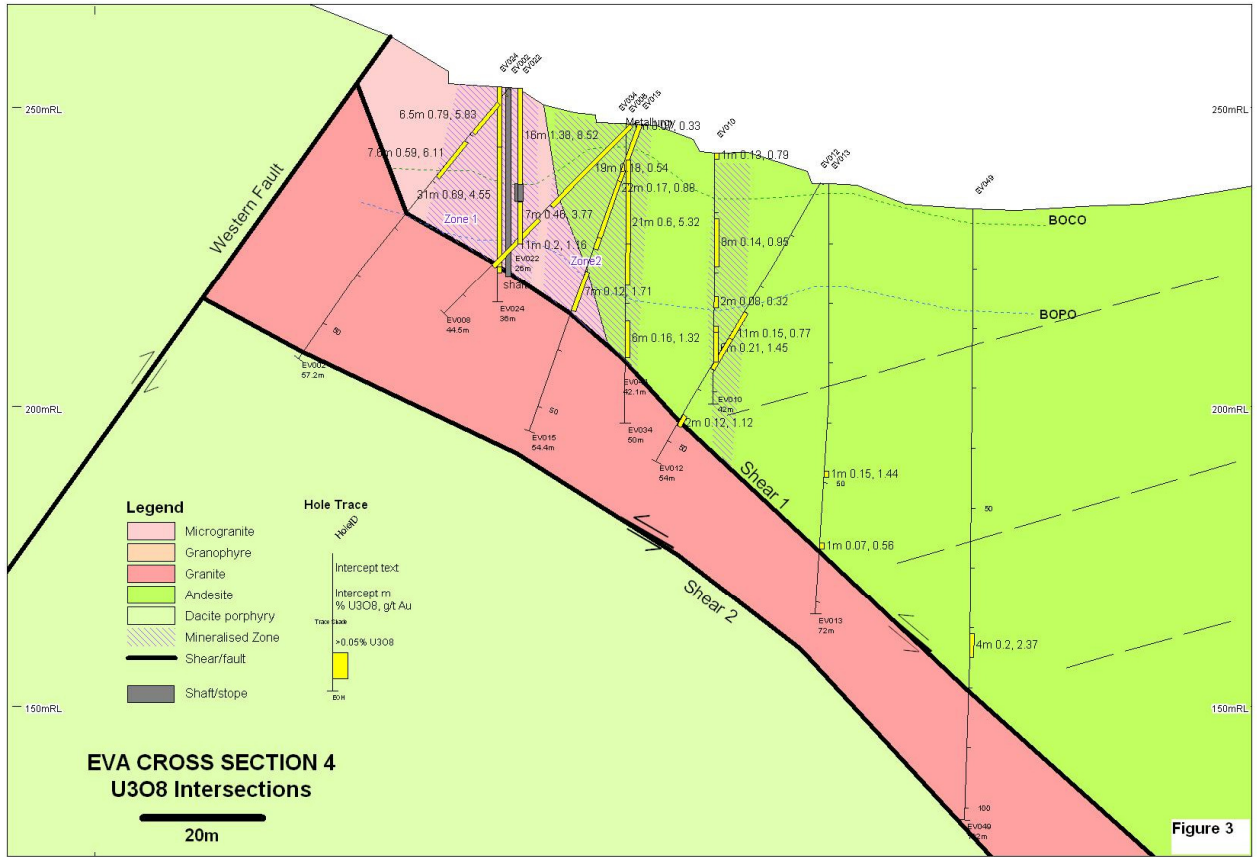


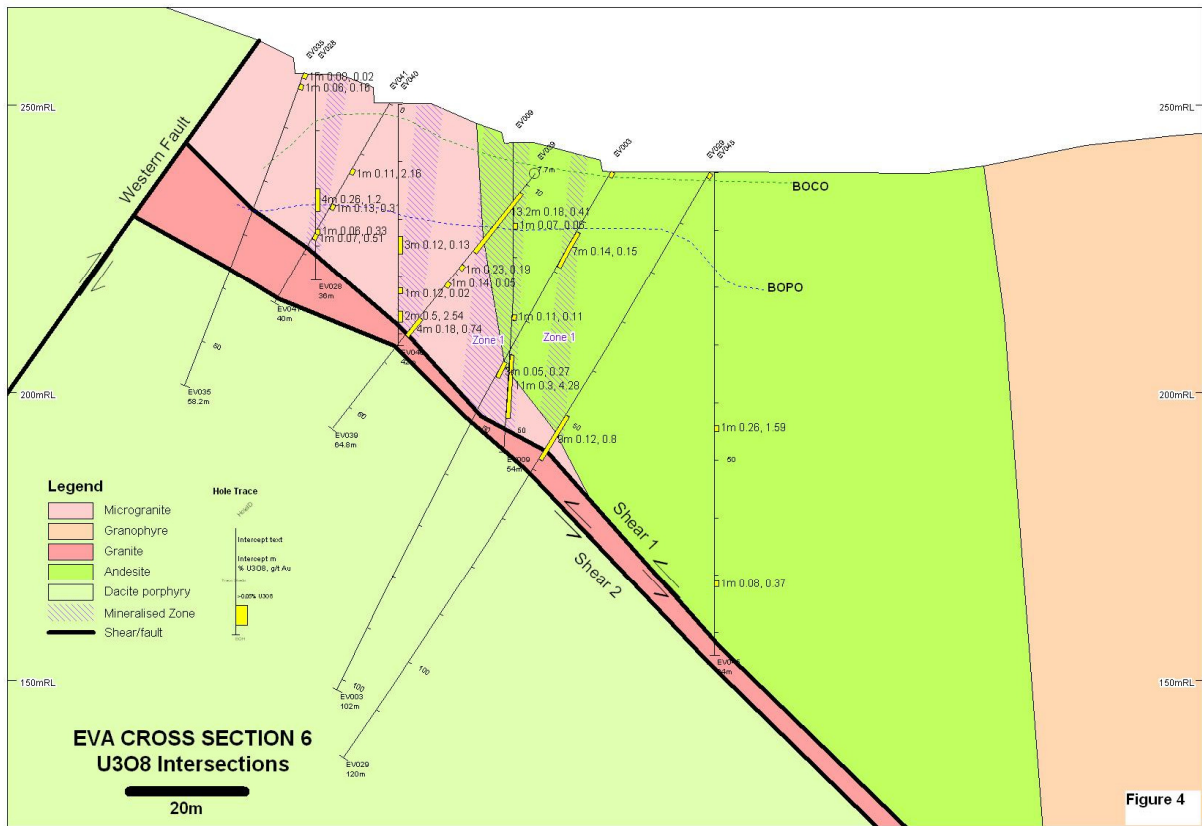
The two units of the Cliffdale Volcanics are separated by major shears but their relative ages are unknown. The granite, outcropping in the southwest and in the vicinity of the Eva workings, is bounded by the Western Fault and Shears 1 & 2 and wedged between the two volcanic units. It thins from a thickness of more than 50m in the south towards the north and down dip between Shear 1 and 2 and is thought to represent a sliver of granite from depth that has been emplaced by a duplex thrust system formed by these shears. The granophyric porphyry dyke outcrops in the east of the prospect trending northeast-southwest and dipping steeply to the southeast. Although locally altered it is not known to host uranium mineralisation.

The microgranite, which is probably a dyke and hosts much of the mineralisation, is bounded by the Western Fault and Shear 1 and has an intrusive hanging wall contact with the andesite. From the workings, where it is terminated against the granite, it extends in a northeasterly direction for several hundred meters. It is generally intensely altered and has previously been mapped as an arenite.

The interpretation of the structural controls on the mineralisation is still in progress but the following observations can be made. Previous mining at Eva followed high grade primary and secondary uranium mineralisation within a steeply inclined, east-west trending structure (Zone 1) that crosses the microgranite into the andesite with a strike length to date of about 100m (Figure 2). Although it pinches and swells, it is interpreted to have a true width of 10-15m from the previous work and recent drilling

by NuPower (Figures 3, 4). There is no significant mineralisation directly associated with Shears 1 or 2 and instead Shear 1 represents the base of mineralisation while Shear 2 forms the base of the granite, between which drilling to date has shown that there is no mineralisation.





It appears that the preferred location for high grade mineralisation is on this structure within the microgranite and includes intersections such as (Figures 3,4):

<u>Drill Hole</u>	<u>Intercepts</u>
<b>EV020</b>	19m @ 2,900 ppm U <sub>3</sub> O <sub>8</sub> , 3.42 g/t Au from surface <i>including</i> 1m @ 11,700 ppm U <sub>3</sub> O <sub>8</sub> , 10.2 g/t Au from 2m
<b>EV024</b>	31m @ 6,900 ppm U <sub>3</sub> O <sub>8</sub> , 4.55 g/t Au from surface <i>including</i> 4m @ 11,800 ppm U <sub>3</sub> O <sub>8</sub> , 4.27 g/t Au from 8m <i>and</i> 2m @ 44,800 ppm U <sub>3</sub> O <sub>8</sub> , 28.69 g/t Au from 22m
<b>EV036</b>	12m @ 5,900 ppm U <sub>3</sub> O <sub>8</sub> , 13.39 g/t Au from surface <i>including</i> 2m @ 22,200 ppm U <sub>3</sub> O <sub>8</sub> , 10.24 g/t Au from 1m <i>and</i> 1m @ 10,200 ppm U <sub>3</sub> O <sub>8</sub> , 24.1 g/t Au from 8m 30m @ 2,500 ppm U <sub>3</sub> O <sub>8</sub> , 2.07 g/t Au from 14m <i>including</i> 1m @ 10,200 ppm U <sub>3</sub> O <sub>8</sub> , 2.56 g/t Au from 24m
<b>EV039</b>	13.2m @ 1,800 ppm U <sub>3</sub> O <sub>8</sub> , 0.41 g/t Au from 11.8m

(Note: results from EV020, EV024 were previously reported in ASX release dated 15/12/2009)

The mineralisation, in the form of secondary yellow-green uranium oxides with pitchblende or uraninite, is associated with sericite-epidote-talc-silica alteration of the microgranite. Topaz is reported locally and traces of cassiterite are present suggesting an earlier stage of greisenisation may be present.

A second high grade zone, Zone 2, lies adjacent and to the south of Zone 1 and the two appear to merge. Zone 2 is steeply dipping over a distance of 50m with true widths to 14m. The mineralisation style is similar that of Zone 1. (Figures 2, 3):

<u>Drill Hole</u>	<u>Intercepts</u>
<b>EV019</b>	18m @ 1,800 ppm U <sub>3</sub> O <sub>8</sub> , 0.31 g/t Au from surface
<b>EV034</b>	21m @ 6,000 ppm U <sub>3</sub> O <sub>8</sub> , 5.32 g/t Au from 6m <i>including</i> 4m @ 26,000 ppm U <sub>3</sub> O <sub>8</sub> , 19.41 g/t Au from 12m

The drilling also suggests a number of mineralised zones to the north and south of Zones 1 & 2, that are steeply dipping with probable true widths of 2-5m (Figures 2-4). These mineralized lenses occur both within the microgranite and andesite, and include intersections such as:

<u>Drill Hole</u>	<u>Intercepts</u>
<b>EV010</b>	6m @ 2,100 ppm U <sub>3</sub> O <sub>8</sub> , 1.45 g/t Au from 29m
<b>EV026</b>	9m @ 7,200 ppm U <sub>3</sub> O <sub>8</sub> , 5.43 g/t Au from 24m <i>including</i> 1m @ 14,200 ppm U <sub>3</sub> O <sub>8</sub> , 18.55 g/t Au from 30m
<b>EV038</b>	5m @ 6,300 ppm U <sub>3</sub> O <sub>8</sub> , 3.39 g/t Au from 37m <i>including</i> 1m @ 28,800 ppm U <sub>3</sub> O <sub>8</sub> , 15.75 g/t Au from 40m
<b>EV043</b>	9m @ 1,300 ppm U <sub>3</sub> O <sub>8</sub> , 0.12 g/t Au from 23m
<b>EV047</b>	6m @ 2,200 ppm U <sub>3</sub> O <sub>8</sub> , 1.91 g/t Au from 54m
<b>EV049</b>	4m @ 2,000 ppm U <sub>3</sub> O <sub>8</sub> , 2.37 g/t Au from 71m

(Note: Intersection in EV010 was previously reported as 5m @ 2,400ppm U<sub>3</sub>O<sub>8</sub>, 1.69 g/t Au)

Mineral associations are similar to that of Zones 1 & 2 but also include secondary uranium oxides on joint planes, fractures and shears.

As reported in the Interim Eva Results ASX release of 15/12/2009, drill hole EV013 intersected a high gold with low uranium zone of 2m @ 6.17 g/t Au and 200ppm U<sub>3</sub>O<sub>8</sub>. Similar zones have also been noted, albeit not with the same grades, in several other holes on the margins of the uranium mineralisation, generally below the base of oxidation and include anomalous intercepts such as:

<b><u>Drill Hole</u></b>	<b><u>Intercepts</u></b>
<b>EV023</b>	1m @ 0.7 g/t Au, 200ppm U <sub>3</sub> O <sub>8</sub> from 8m
<b>EV030</b>	1m @ 0.61 g/t Au, 200ppm U <sub>3</sub> O <sub>8</sub> from 18m
<b>EV034</b>	1m @ 1.89 g/t Au, 500ppm U <sub>3</sub> O <sub>8</sub> from 29m
<b>EV041</b>	1m @ 1.64 g/t Au, 200ppm U <sub>3</sub> O <sub>8</sub> from 8m

A summary of mineralised uranium and gold intercepts above 500ppm U<sub>3</sub>O<sub>8</sub> from all drill holes of the 2009 Eva drilling campaign are given below in Table 1.

The microgranite/andesite contact to the northeast has been tested only by holes EV050 and EV006 that did not intersect anomalous uranium. The interpreted strike and down plunge extent of the mineralisation has not been tested to date and therefore remains open.



**2009 Eva Drilling- Significant Uranium/Gold Intercepts**

Hole ID	From	To	Width	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/tonne)	Au (g/t)
<b>EV001</b>	0	1	1	700	0.07	1.54	0.89
	4	5	1	7,100	0.71	15.65	6.74
	8	15	7	16,000	1.60	35.27	4.79
	<i>including</i> 8	<i>11</i>	<i>3</i>	<i>36,200</i>	<i>3.62</i>	<i>79.81</i>	<i>10.58</i>
<b>EV002</b> historical mine void	1	1.2	0.2	1,400	0.14	3.09	2.12
	1.2	3					
	3	9.5	6.5	7,900	0.79	17.42	5.83
	<i>including</i> 3	<i>4</i>	<i>1</i>	<i>18,600</i>	<i>1.86</i>	<i>41.01</i>	<i>14.00</i>
	<i>including</i> 8	<i>9</i>	<i>1</i>	<i>13,000</i>	<i>1.30</i>	<i>28.66</i>	<i>9.90</i>
	historical mine void 9.5	11.4					
	11.4	19	7.6	5,900	0.59	13.01	6.11
<i>including</i> 12	<i>14</i>	<i>2</i>	<i>10,600</i>	<i>1.06</i>	<i>23.37</i>	<i>5.14</i>	
<b>EV003</b>	0	1	1	700	0.07	1.54	0.05
	12	19	7	1,400	0.14	3.09	0.15
	38	41	3	500	0.05	1.10	0.27
<b>EV004</b>	0	1	1	1,200	0.12	2.65	0.17
	9	32	23	1,900	0.19	4.19	0.33
	39	40	1	2,100	0.21	4.63	2.37
<b>EV005</b>	12	15	3	1,000	0.10	2.20	1.13
	26	32	6	1,100	0.11	2.43	0.09
<b>EV006</b>	no significant uranium assays						
<b>EV007</b>	28	29	1	8,200	0.82	18.08	0.56
	39	40	1	2,100	0.21	4.63	0.54
	44	50	6	2,300	0.23	5.07	0.15
<b>EV008</b>	0	19	19	1,800	0.18	3.97	0.54
	22	33	11	2,000	0.20	4.41	1.16

Hole ID	From	To	Width	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/tonne)	Au (g/t)
<b>EV009</b>	14	15	1	700	0.07	1.54	0.06
	30	31	1	1,100	0.11	2.43	0.11
	37	48	11	3,000	0.30	6.61	4.28
	<i>including</i> 41	42	1	12,200	1.22	26.90	28.70
<b>EV010</b>	0	1	1	1,300	0.13	2.87	0.79
	11	19	8	1,400	0.14	3.09	0.95
	24	26	2	800	0.08	1.76	0.32
	29	35	6	2,100	0.21	4.63	1.45
<b>EV011</b>	0	1	1	800	0.08	1.76	0.46
	9	13	4	600	0.06	1.32	0.07
	20	21	1	500	0.05	1.10	1.89
	24	26	2	700	0.07	1.54	0.01
	32	33	1	800	0.08	1.76	1.18
<b>EV012</b>	25	36	11	1,500	0.15	3.31	0.77
	45	47	2	1,200	0.12	2.65	1.12
<b>EV013</b>	48	49	1	1,500	0.15	3.31	1.44
	60	61	1	700	0.07	1.54	0.56
<b>EV014</b>	33	35	2	700	0.07	1.54	0.80
<b>EV015</b>	0	22	22	1,700	0.17	3.75	0.88
	26	33	7	1,200	0.12	2.65	1.71
<b>EV016</b>	not assayed						
<b>EV017</b>	no significant uranium assays						
<b>EV018</b>	0	5	5	2,300	0.23	5.07	1.39
	12	14	2	600	0.06	1.32	4.93
<b>EV019</b>	0	18	18	1,800	0.18	3.97	0.31

Hole ID	From	To	Width	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/tonne)	Au (g/t)
<b>EV020</b>	0	19	19	2,900	0.29	6.39	3.42
<i>including</i>	2	3	1	11,700	1.17	25.79	10.20
<b>EV021</b>	0	28	28	1,600	0.16	3.53	2.70
<i>including</i>	10	11	1	10,700	1.07	23.59	1.92
<b>EV022</b>	0	16	16	13,800	1.38	30.42	8.52
<i>including</i>	1	7	6	18,900	1.89	41.67	9.53
<i>including</i>	8	9	1	11,400	1.14	25.13	2.92
<i>including</i>	10	11	1	15,600	1.56	34.39	3.22
<i>including</i>	12	14	2	14,600	1.46	32.19	7.31
<i>including</i>	15	16	1	18,300	1.83	40.34	21.30
historical mine void	16	19					
	19	26	7	4,600	0.46	10.14	3.77
<i>including</i>	23	24	1	12,100	1.21	26.68	2.31
<b>EV023</b>	0	1	1	600	0.06	1.32	0.28
	5	6	1	800	0.08	1.76	0.27
	9	32	23	4,100	0.41	9.04	5.17
<i>including</i>	15	16	1	10,000	1.00	22.05	6.81
<i>including</i>	27	31	4	12,300	1.23	27.12	18.32
<b>EV024</b>	0	31	31	6,900	0.69	15.21	4.55
<i>including</i>	8	12	4	11,800	1.18	26.01	4.27
<i>including</i>	22	24	2	44,800	4.48	98.77	28.69
<b>EV025</b>	0	22	22	1,200	0.12	2.65	0.25
	25	26	1	700	0.07	1.54	1.95
<b>EV026</b>	0	9	9	800	0.08	1.76	0.05
	24	33	9	7,200	0.72	15.87	5.43
<i>including</i>	30	31	1	14,200	1.42	31.31	18.55
<b>EV027</b>	10	13	3	800	0.08	1.76	0.09
	17	20	3	2,100	0.21	4.63	1.35
	29	31	2	700	0.07	1.54	0.66

Hole ID	From	To	Width	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/tonne)	Au (g/t)
<b>EV028</b>	20	24	4	2,600	0.26	5.73	1.20
	27	28	1	600	0.06	1.32	0.33
<b>EV029</b>	0	1	1	500	0.05	1.10	0.02
	49	58	9	1,200	0.12	2.65	0.80
<b>EV030</b>	1	4	3	1,300	0.13	2.87	0.65
	12	13	1	500	0.05	1.10	0.02
<b>EV031</b>	12	17	5	1,000	0.10	2.20	0.10
	37	39	2	1,400	0.14	3.09	2.78
	47	50	3	4,500	0.45	9.92	1.75
	<i>including</i> 47	48	1	11,100	1.11	24.47	4.22
<b>EV032</b>	no significant uranium assays						
<b>EV033</b>	0	11	11	900	0.09	1.98	0.10
<b>EV034</b>	0	1	1	700	0.07	1.54	0.33
	6	27	21	6,000	0.60	13.23	5.32
	<i>including</i> 12	16	4	26,000	2.60	57.32	19.41
	33	39	6	1,600	0.16	3.53	1.32
<b>EV035</b>	0	1	1	800	0.08	1.76	0.02
	2	3	1	600	0.06	1.32	0.16
<b>EV036</b>	0	12	12	5,900	0.59	13.01	13.39
	<i>including</i> 1	3	2	22,200	2.22	48.94	10.24
	<i>including</i> 8	9	1	10,200	1.02	22.49	24.10
	14	44	30	2,500	0.25	5.51	2.07
	<i>including</i> 24	25	1	10,200	1.02	22.49	2.56
<b>EV037</b>	no significant uranium assays						
<b>EV038</b>	37	42	5	6,300	0.63	13.89	3.39
	<i>including</i> 40	41	1	28,800	2.88	63.49	15.75

Hole ID	From	To	Width	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/tonne)	Au (g/t)
<b>EV039</b>	0	2	2	700	0.07	1.54	0.28
	11.8	25	13.2	1,800	0.18	3.97	0.41
	28	29	1	2,300	0.23	5.07	0.19
	32	33	1	1,400	0.14	3.09	0.05
	40	44	4	1,800	0.18	3.97	0.74
<b>EV040</b>	23	26	3	1,200	0.12	2.65	0.13
	32	33	1	1,200	0.12	2.65	0.02
	36	38	2	5,000	0.50	11.02	2.54
<b>EV041</b>	13	14	1	1,100	0.11	2.43	2.16
	20	21	1	1,300	0.13	2.87	0.31
	26	27	1	700	0.07	1.54	0.51
<b>EV042</b>	no significant uranium assays						
<b>EV043</b>	23	32	9	1,300	0.13	2.87	0.12
	38	41	3	1,400	0.14	3.09	0.15
	54	57	3	1,600	0.16	3.53	0.72
<b>EV044</b>	Metallurgical PQ cored hole. Not sampled.						
<b>EV045</b>	44	45	1	2,600	0.26	5.73	1.59
	71	72	1	800	0.08	1.76	0.37
<b>EV046</b>	16	17	1	600	0.06	1.32	0.22
	20	21	1	1,200	0.12	2.65	0.40
	24	27	3	900	0.09	1.98	0.37
	31	32	1	1,000	0.10	2.20	0.01
	59	60	1	500	0.05	1.10	0.01
	62	64	2	700	0.07	1.54	BLD
	69	71	2	1,200	0.12	2.65	BLD
<b>EV047</b>	43	44	1	600	0.06	1.32	0.05
	54	60	6	2,200	0.22	4.85	1.91
	68	69	1	2,100	0.21	4.63	1.48
<b>EV048</b>	33	36	3	3,100	0.31	6.83	0.30

Hole ID	From	To	Width	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (%)	U <sub>3</sub> O <sub>8</sub> (lb/tonne)	Au (g/t)
EV049	71	75	4	2,000	0.20	4.41	2.37

**EV050** no significant Uranium assays

Notes:

\* Intersections have been calculated using a 500ppm U<sub>3</sub>O<sub>8</sub> lower cut off, with up to 2m of internal waste

\* 1 lb/per tonne U<sub>3</sub>O<sub>8</sub> = 454ppm U<sub>3</sub>O<sub>8</sub> = 0.0454% U<sub>3</sub>O<sub>8</sub>

*The information in this release relates to exploration results and geological interpretation by Mr Warrick Rafferty (MSc). Mr Rafferty is a Member of the Australasian Institute of Mining and Metallurgy and a Fellow of the Society of Economic Geology and has sufficient experience to qualify as a Competent Person as defined in the Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC CODE) for reporting exploration results. Mr Rafferty consents to the inclusion of the data in the form and context in which it appears.*

*This release contains forward-looking statements. The actual results could differ materially from a conclusion, forecast or projection in the forward-looking information. Certain material factors or assumptions were applied in drawing a conclusion or making a forecast or projection as reflected in the forward-looking information.*