

23 January 2008

Eleckra Mines Limited ABN 13 109 289 527  
6 Altona Street West Perth WA 6005  
PO Box 1157 West Perth Western Australia 6872  
Phone: (61 8) 9486 4144  
Fax: (61 8) 9481 6405  
Email: perth@eleckramines.com.au  
[www.eleckramines.com.au](http://www.eleckramines.com.au)

Company Announcements Office  
Australian Securities Exchange  
Level 4  
20 Bridge Street  
SYDNEY NSW 2000

Dear Sir / Madam

## **EXTENSIVE URANIUM MINERALISATION INTERSECTED AT ELECKRA'S THATCHER SOAK URANIUM PROJECT**

Down hole gamma probe logging from the first systematic round of drilling at Eleckra Mines Limited ("Eleckra") 100% owned Thatcher Soak uranium project returned elevated  $eU_3O_8^*$  values over an extensive area. Eleckra drilled 450 aircore holes for 4,792m, testing approximately  $18km^2$  of the Thatcher Soak channel. Confirmatory geochemical assays for samples from the mineralised intervals are expected in March – April 2008.

- **Down hole gamma logging results indicate widespread uranium mineralisation. Over 40% of all drill holes have  $eU_3O_8$  values above 100ppm at minimum thickness of 0.2m.**
- **The mineralised envelope as defined by the 100ppm  $eU_3O_8$  cut-off and a minimum thickness of 0.2m is interpreted to have the following approximate dimensions:**
  - **Total Area** **7km<sup>2</sup>**
  - **Thickness** **0.2m – 2.8m with average of 0.8m**
  - **Maximum length and width at Thatcher Soak** **7km NS by 1.5km EW**
  - **Maximum length and width at Thatcher Soak North** **3km NS by 0.5km EW**
- The majority of the mineralisation is within 6m of surface, and is interpreted to occur as sub-horizontal sheets.
- New, deeper zones discovered at depths from 6m to 14m.
- Eleckra is planning to carry out infill drilling in April – May 2008 to provide sufficient information to prepare an Inferred Mineral Resource estimate for Thatcher Soak in late 2008.
- **Best intercepts from drilling include:**
  - **7EYAC319: 2.00m at 808ppm  $eU_3O_8$**
  - **7EYAC316: 2.16m at 758ppm  $eU_3O_8$**
  - **7EYAC314: 1.74m at 649ppm  $eU_3O_8$**
  - **7EYAC258: 2.16m at 596ppm  $eU_3O_8$**
  - **7EYAC318: 2.50m at 349ppm  $eU_3O_8$  (new deeper zone).**
- **An 8km long radiometric anomaly to the south-west within the Thatcher Soak channel remains untested.**

*\*Uranium mineralisation grades through this report annotated with a sub-prefix 'e' have been reported as uranium equivalent grades derived from down hole gamma ray logging results and should be regarded as approximations only.*

## DRILLING PROGRAMME

During October and November 2007, Eleckra Mines Limited (ASX Code EKM) completed 450 vertical aircore holes for 4,792m at its Thatcher Soak Uranium Project. The aim of this first round of drilling was to systematically test the paleochannel for calcrete-hosted uranium mineralisation at Thatcher Soak and Thatcher Soak North (adjacent to Khan North gold prospect).

Holes were drilled at a nominal 100m spacing along lines 400m apart over the most prospective area as indicated by the aerial radiometric surveys. Hole depths were nominally 9m with approximately one in every five of the holes drilled to maximum depth of 28m to test for possible deeper zones of uranium mineralisation and for gold in the Archaean basement.

Most of the holes in the mineralised zone were cased with PVC to protect them from collapsing before gamma logging was completed. Radiometric logging using a calibrated Auslog A075 Total Count Gamma Probe with serial number S939 and processing of the raw data were completed by independent contractors.

The locations of the drill holes are shown on Figure 1.

## RESULTS

Calibrated down hole gamma probe ( $eU_3O_8$ ) results have been received with 44% of the holes intersecting anomalous values  $>100\text{ppm } eU_3O_8$  and minimum thickness of 0.2m. The most significant intercepts as indicated by the gamma probe data are summarised in Tables 1 and 2.

**It is emphasised that these gamma probe results provide uranium equivalent grades ( $eU_3O_8$ ) and are to be considered preliminary and subject to confirmation by geochemical assays that are expected to be available during March – April 2008.**

Approximately 3,500, 1m drill samples from the drilling at Thatcher Soak have been dispatched to Genalysis for geochemical assay. The assay results will be released as they become available.

The maximum down hole gamma probe results for Eleckra's drilling were contoured and plotted on Figure 1 using the same  $eU_3O_8$  contour intervals as reported by Uranex NL in the release to the ASX dated 14 December 2007. Uranex NL has recently conducted aircore drilling programs on the section of the Thatcher Soak uranium deposit within their tenements and the contours as shown by Uranex NL in their ASX release dated 14 December are reproduced for comparison.

**Table 1: Hole intersections greater than 300ppm eU<sub>3</sub>O<sub>8</sub> using 100ppm eU<sub>3</sub>O<sub>8</sub> cut-off and minimum thickness of 0.2m. Maximum values quoted are maximum response as recorded over 0.02m down hole interval.**

Hole Number	From (m)	To (m)	Interval (m)	Average Grade ppm eU <sub>3</sub> O <sub>8</sub>	Maximum Grade ppm eU <sub>3</sub> O <sub>8</sub>	East GDA94_51	North GDA94_51
7EYAC061	4.57	5.09	0.52	408	958	558,196	6,897,809
7EYAC061	5.71	6.13	0.42	450	961	558,196	6,897,809
7EYAC062	1.87	3.35	1.48	365	590	558,090	6,897,787
7EYAC064	4.38	4.90	0.52	882	1933	557,907	6,897,804
7EYAC072	1.91	2.27	0.36	556	1032	557,904	6,898,201
7EYAC115	2.74	3.80	1.06	351	492	558,195	6,899,004
7EYAC134	0.51	2.15	1.64	321	521	557,906	6,899,394
7EYAC136	0.77	2.21	1.44	342	507	557,701	6,899,402
7EYAC143	4.07	4.29	0.22	353	518	557,508	6,899,801
7EYAC145	0.55	1.71	1.16	333	628	557,694	6,899,799
7EYAC151	2.80	4.66	1.86	309	500	558,302	6,899,791
7EYAC163	2.36	3.56	1.20	301	628	559,101	6,900,205
7EYAC165	2.42	3.52	1.10	377	569	558,890	6,900,200
7EYAC173	0.70	2.56	1.86	327	703	558,092	6,900,197
7EYAC176	1.20	3.40	2.20	320	558	557,803	6,900,207
7EYAC177	4.42	4.80	0.38	538	831	557,702	6,900,196
7EYAC179	3.28	4.40	1.12	473	960	557,507	6,900,199
7EYAC180	0.92	3.22	2.30	328	520	557,586	6,900,301
7EYAC181	0.98	3.08	2.10	310	547	557,504	6,900,398
7EYAC182	0.02	2.68	2.66	327	896	557,510	6,900,493
7EYAC183	0.20	2.90	2.70	329	638	557,500	6,900,595
7EYAC184	0.16	2.60	2.44	306	516	557,498	6,900,706
7EYAC185	0.50	2.18	1.68	325	629	557,499	6,900,784
7EYAC189	2.20	3.66	1.46	312	587	557,700	6,900,598
7EYAC190	1.12	3.44	2.32	304	1044	557,799	6,900,602
7EYAC191	1.00	3.76	2.76	318	673	557,899	6,900,611
7EYAC212	1.32	3.00	1.68	303	428	558,204	6,900,996
7EYAC223	2.32	4.24	1.92	342	595	557,499	6,901,402
7EYAC225	1.34	3.16	1.82	341	591	557,703	6,901,399
7EYAC226	1.58	3.38	1.80	337	805	557,791	6,901,391
7EYAC252	6.80	7.22	0.42	441	797	557,801	6,901,806
7EYAC256	5.34	6.38	1.04	303	470	557,609	6,901,910
7EYAC258	4.70	6.86	2.16	596	1702	557,607	6,902,103
7EYAC309	3.82	4.10	0.28	331	626	556,496	6,903,402
7EYAC311	6.54	7.00	0.46	601	1270	556,295	6,903,404
7EYAC313	4.64	6.06	1.42	543	1961	556,113	6,903,508
7EYAC314	3.38	5.12	1.74	649	1423	556,001	6,903,479
7EYAC315	3.50	4.74	1.24	428	1275	555,897	6,903,427
7EYAC316	0.10	2.26	2.16	758	2020	556,005	6,903,584
7EYAC318	2.20	4.06	1.86	356	981	555,904	6,903,599
7EYAC319	0.06	2.06	2.00	808	3068	555,898	6,903,702
7EYAC320	3.82	4.20	0.38	1129	2486	555,906	6,903,792
7EYAC321	0.76	1.68	0.92	443	913	556,006	6,903,786
7EYAC323	0.94	1.98	1.04	337	608	556,205	6,903,802
7EYAC355	2.30	2.82	0.52	317	563	554,697	6,906,898
7EYAC416	0.86	2.14	1.28	373	666	556,003	6,908,899
7EYAC439	1.64	2.14	0.50	302	446	557,598	6,901,587
7EYAC442	2.24	3.48	1.24	321	532	557,610	6,900,496
7EYAC444	1.26	3.04	1.78	315	617	557,614	6,900,104
7EYAC446	0.16	1.04	0.88	352	657	557,591	6,899,898
7EYAC447	2.94	3.22	0.28	347	550	557,610	6,899,700

The gamma probe results indicate that a number of holes intersected deeper levels of uranium mineralisation at several localities at depths between 6m and 14m. The best intercepts are summarised in Table 2. This mineralisation appears to be associated with calcareous sand and clays.

**Table 2: Hole intersections of lower mineralised zone using 100ppm eU<sub>3</sub>O<sub>8</sub> cut-off and minimum thickness of 0.2m.**

Hole Number	From (m)	To (m)	Interval (m)	Average Grade ppm eU <sub>3</sub> O <sub>8</sub>	Maximum Grade ppm eU <sub>3</sub> O <sub>8</sub>	East GDA94_51	North GDA94_51
7EYAC062	6.51	7.09	0.58	700	1923	558,090	6,897,787
7EYAC264	10.28	10.54	0.26	111	129	558,007	6,902,218
7EYAC264	10.60	11.34	0.74	125	198	558,007	6,902,218
7EYAC265	9.86	10.30	0.44	140	208	558,098	6,902,206
7EYAC265	10.78	11.04	0.26	127	160	558,098	6,902,206
7EYAC267	10.46	12.16	1.70	159	203	558,318	6,902,212
7EYAC268	11.16	11.64	0.48	186	250	558,399	6,902,211
7EYAC268	11.70	13.52	1.82	267	474	558,399	6,902,211
7EYAC269	12.00	12.92	0.92	139	198	558,508	6,902,202
7EYAC269	13.12	13.98	0.86	141	215	558,508	6,902,202
7EYAC318	7.48	9.98	2.50	349	880	555,904	6,903,599
7EYAC319	7.86	8.90	1.04	252	410	555,898	6,903,702
7EYAC319	9.62	9.84	0.22	120	148	555,898	6,903,702
7EYAC320	7.36	9.56	2.20	326	671	555,906	6,903,792
7EYAC320	9.82	10.38	0.56	144	227	555,906	6,903,792
7EYAC321	8.72	9.80	1.08	172	311	556,006	6,903,786
7EYAC343	9.32	9.82	0.50	154	200	555,902	6,904,200

## SIGNIFICANCE OF RESULTS

The down hole gamma probe results are considered encouraging, indicating that mineralisation extends over total area of approximately 7km<sup>2</sup> using a 100ppm eU<sub>3</sub>O<sub>8</sub> cut-off and minimum thickness of 0.2m.

The maximum dimensions of the mineralised zones are 7km long by 1.5km wide at Thatcher Soak and 3km long by 0.5km wide at Thatcher Soak North. The probe results indicate the vertical thickness varies from 0.2m to 2.8m with an average of 0.8m. Most of the mineralisation is within 6m of the surface and is interpreted to form sub-horizontal sheets of calcrete / gypsum, calcareous sand and clay.

There is potential for the mineralisation to extend further to the south / south west as indicated by an airborne radiometric anomaly which is approximately 8km long within Eleckra's tenements E38/1798 and E38/1315.

A number of holes that were drilled deeper have identified mineralisation at depths between 6m and 14m. This deeper mineralisation has been identified in a few localities and requires further deeper and systematic drilling to estimate its full extent, however, the initial results are encouraging.

## FOLLOW UP

Interpretation of the results from this initial drilling programme will be completed upon receipt of the geochemical analyses. The down hole probe results are however considered sufficiently encouraging to commence planning a follow up drilling programme on a 100m by 100m grid to determine continuity of mineralisation at Thatcher Soak. It anticipated that this follow up programme, planned for April – May 2008, would provide sufficient data to prepare an Inferred Mineral Resource estimate for Thatcher Soak by late 2008.

## BACKGROUND

### Thatcher Soak

Eleckra's Thatcher Soak uranium project is located approximately 150km north-east of Laverton in Western Australia within granted exploration licences E38/1083 and E38/1388 to which Eleckra Mines Limited holds 100% of the uranium rights. The mineralisation extends to the west into Uranex's tenements.

The Thatcher Soak deposit was first drilled in 1971 and up to 1974 mineralisation had been delineated within a zone approximately 7.5km long and between 1km and 200m wide and generally confined within an area with anomalous airborne radiometrics. The mineralisation is principally carnotite with the mineralised zones elongated parallel to the drainage and largely coincident with a playa lake system. The mineralisation is usually shallow and 1m to 2m thick. The evaluation of that drilling and airborne uranium radiometric data indicated that Eleckra's tenements cover the eastern section of the Thatcher Soak calcrete-hosted uranium prospect and northern extension of the anomalous drainage channel. In 2007, Uranex NL, which holds tenements overlying the western section of the Thatcher Soak deposit, announced to the ASX that extensive uranium mineralisation had been intersected in the drilling at its project. Encouraged by these results, Eleckra initiated its first drilling programme in October – November 2007.

Yours sincerely



**RICHARD HARRIS**  
Executive Chairman

Telephone (08) 9486 4144  
www.eleckramines.com.au

*The information in this report which relates to Exploration Results is based on information compiled by Russell Davis, a Non-Executive Director of Eleckra Mines Limited, who is a Member of the Australasian Institute of Mining and Metallurgy. Russell Davis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Russell Davis consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

*\* Uranium mineralisation grades through this report annotated with a sub-prefix 'e' have been reported as uranium equivalent grades derived from down hole gamma ray logging results and should be regarded as approximations only.*

*Gamma logging or total count gamma logging is a common method used to estimate uranium grade where radiation contribution from thorium and potassium is very small. Sandstone and calcrete hosted deposits are usually of this type. Gamma logging does not account for energy derived from thorium and potassium and thus the result is expressed as an equivalent value or eU<sub>3</sub>O<sub>8</sub>.*

*The contractor used by Eleckra Mines Limited to conduct the down hole gamma log advised Eleckra that it used gamma probe Auslog A075 Total Count Gamma Probe with serial number S939 that was calibrated within the last 12 months at the Department of Water, Land and Biodiversity Conservation (Adelaide, South Australia) test pits that have been constructed under supervision of the CSIRO, to provide for the calibration of radiometric tools. Most probe calibrations in Australia are carried out at this facility.*

### ABOUT ELECKRA

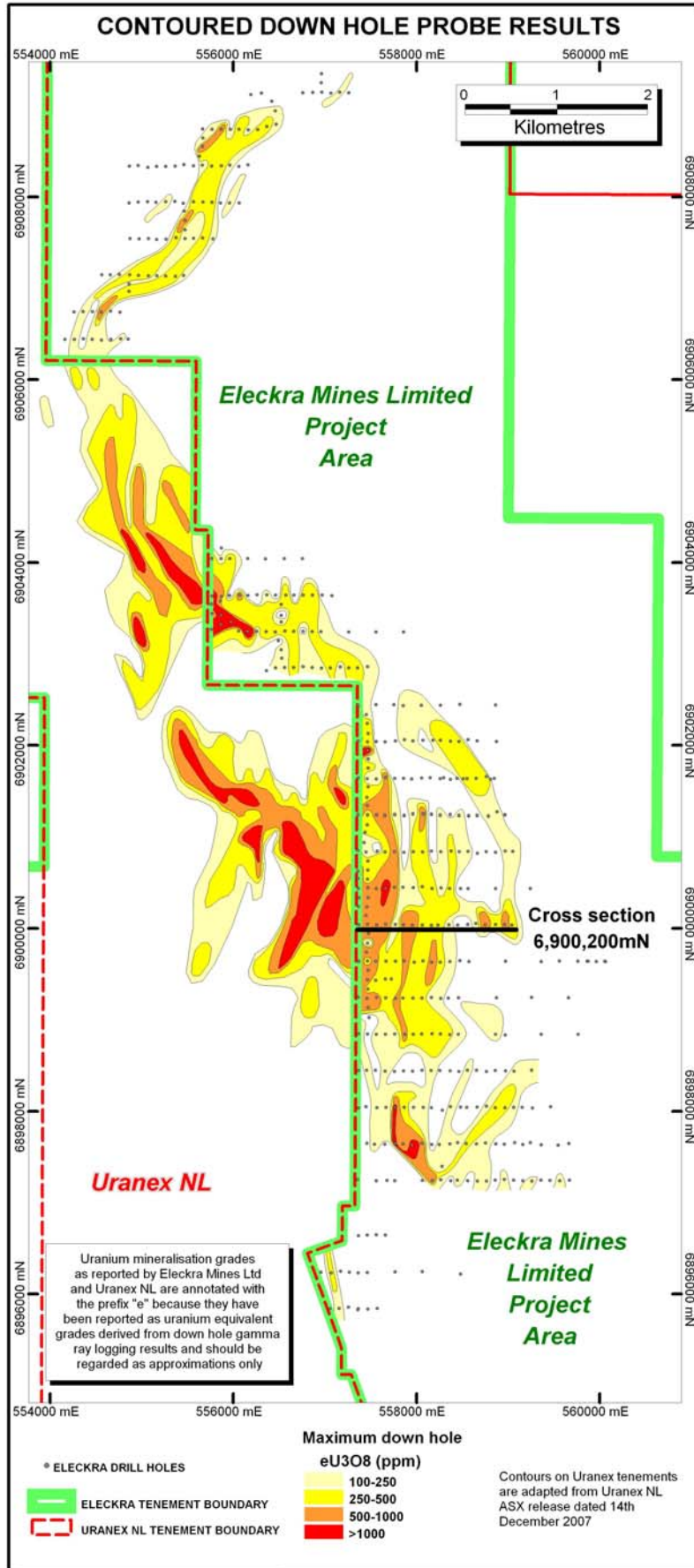
Eleckra is an exploration company focused on gold and uranium. The company has two exploration projects in Western Australia, the Yamarna Project in the Eastern Goldfields and the South West Project, south of Perth and one project in northern Queensland termed the Kitty O'Shea Project. At the Golden Sands Project in between Yamarna and the Tropicana gold deposit the company has applied for exploration licenses covering about 1,500km<sup>2</sup>.

Situated on the eastern margin of the Archaean Yilgarn Craton in Western Australia, some 140km east of Laverton and 900km north east of Perth, the Yamarna Project has Measured, Indicated and Inferred Mineral Resources totalling 740,000 oz of gold (12.6mt at 1.8 g/t Au). The Yamarna project is also considered prospective for uranium, copper, nickel, chrome and platinum group elements.

Eleckra holds some 2,000km<sup>2</sup> of granted tenements and tenement applications prospective for uranium at Yamarna including sections of the Thatcher Soak calcrete hosted uranium deposit and extensions of the anomalous paleochannel. The Company's total tenement position at Yamarna covers approximately 5,000km<sup>2</sup> in area.

FIGURE 1

Hole location with maximum down hole probe  $eU_3O_8$  (ppm).



**FIGURE 2**

Drill hole section 6,900,200mN. Histograms of intercepts averaged using a 100ppm eU308 cut-off and minimum thickness of 0.2m on right hand side and graphs of down hole gamma probe response on left hand side. Refer to Figure 1 for the location of this section.

