17 January 2024

Strategic Review of Cleo Uranium Project, 5.2Mlbs @ 345ppm U_3O_8

Kingsland is committed to advancing its potential world-class Leliyn Graphite Project and is considering its strategic options for the Cleo Uranium Project

HIGHLIGHTS

- **Kingsland is undertaking a strategic review of its 100% owned Cleo Uranium Project ("Cleo") located in Pine Creek, Northern Territory**
- **Cleo contains a JORC 2012 Inferred Mineral Resource of 6.8Mt @ 345ppm U_3O_8 (150ppm U_3O_8 cut-off grade) for 5.2Mlbs U_3O_8 and mineralisation remains open at depth and along strike**
- **Significant exploration upside to the existing 5.2Mlbs U_3O_8 resource through testing depth extensions of high-grade zones, highlights include:**
  - **16m @ 1,435ppm U_3O_8 from 116m, incl. 0.4m @ 29,197ppm U_3O_8 from 120m**
  - **23m @ 1,318ppm U_3O_8 from 86m, incl. 5m @ 3,169ppm U_3O_8 from 102m**
  - **47m @ 924ppm U_3O_8 from 118m, incl. 14m @ 1,772ppm U_3O_8 from 76m**
- **High-priority untested drill-ready regional target identified to the north of Cleo**
- **Kingsland's activities are focused on advancing the potentially world-class Leliyn Graphite Project in the Northern Territory with metallurgical test work ongoing and the Maiden Mineral Resource on track for Q1-CY24**

Kingsland Minerals Ltd (ASX:KNG) ("**Kingsland**" or the "**Company**") is pleased to advise that it has commenced a strategic review of its 100% owned Cleo Uranium Project ("**Cleo**" or the "**Project**"), located in Pine Creek in the Northern Territory, Australia. Kingsland remains committed to the exploration and development of its 100% owned Leliyn Graphite Project ("**Leliyn**"), that is scheduled to announce a maiden Mineral Resource Estimate in Q1 CY2024.

Kingsland Minerals Managing Director, Richard Maddocks said:

"Kingsland listed in June 2022 with the Cleo Uranium Project as our flagship asset. Up to the announcement of the maiden JORC 2012 Inferred Resource of 5.2Mlbs U_3O_8 in March 2023, we had exceptional exploration results including zones up to 29,197ppm (2.9%) U_3O_8.

Cleo remains underexplored and has enormous exploration upside both from extensions at depth and along strike, and untested drill-ready targets in proximity to the existing resource.

Cleo, whilst incredibly prospective, has become second priority to Kingsland as we are committed to the exploration and development of our Leliyn Graphite Project, which has potential to be a world-class graphite deposit, uniquely in a tier-1 mining jurisdiction."

Cleo Uranium Project Overview

The Cleo Uranium Project is located near Pine Creek in the Northern Territory. Access to the Project is along the sealed Kakadu Highway from Pine Creek and is accessible via sealed roads, approximately 200km from Darwin.

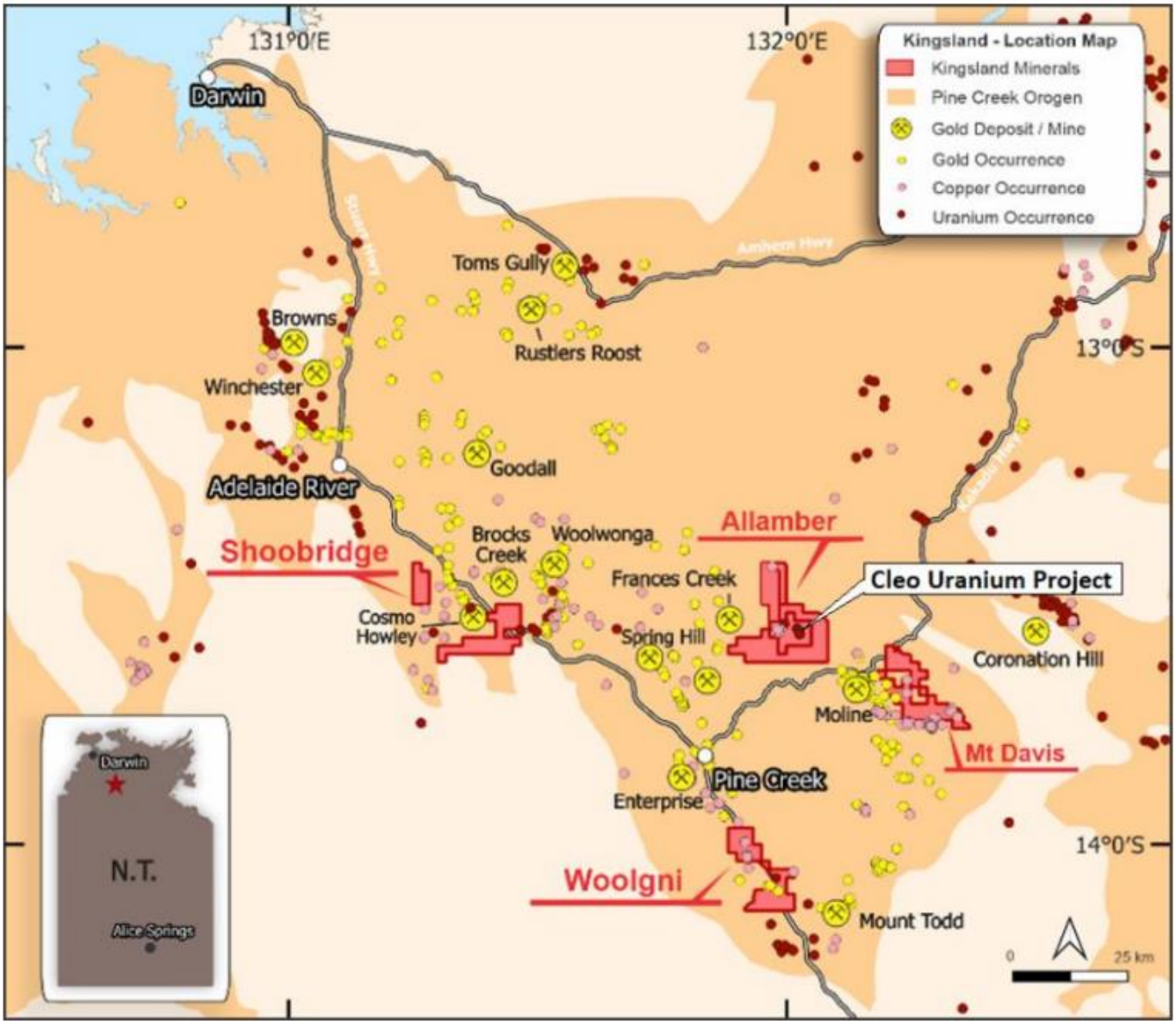

Figure 1: Regional map showing Kingsland's Northern Territory exploration projects

Kingsland released a maiden JORC 2012 Inferred Mineral Resource (MRE) at Cleo of 6.8Mt @ 345ppm U_3O_8 for 5.2Mlbs U_3O_8 at a cut-off grade of 150ppm[1]. The low cut-off grade of 150ppm U_3O_8 reflects the shallow nature of mineralisation and its potential amenability to open-pit mining.

[1] ASX Announcement titled "Cleo Uranium Resource" dated 14 March 2023

Table 1: Cleo Uranium Block Model by Grade[2]

Cut-off Grade U_3O_8 (ppm)	Tonnage (Mt)	Grade U_3O_8 (ppm)	U_3O_8 pounds (Mlbs)
100	7.59	324	5.42
150	**6.79**	**347**	**5.20**
175	6.13	367	4.96
200	5.39	392	4.66
300	2.99	508	3.35
500	1.03	755	1.72
1000	0.15	1253	0.41

Mineralisation at Cleo remains open at depth and along strike, with significant high-grade mineralisation in Kingland's last drilling program completed in December 2022. Highlights from the last drill program include[3]:

- **16m @ 1,435ppm U_3O_8** from 116m, incl. **0.4m @ 29,197ppm (2.9%) U_3O_8** from 120m (CLRCD023)
- **23m @ 1,318ppm U_3O_8** from 86m, incl. **5m @ 3,169ppm U_3O_8** from 102m (TAL079RC)
- **47m @ 924ppm U_3O_8** from 53m, incl. **14m @ 1,772ppm U_3O_8** from 76m (CLRC017)
- **31m @ 962ppm U_3O_8** from 118m, incl. **10m @ 2,134ppm U_3O_8** from 131m (CLRC029)
- **49m @ 787ppm U_3O_8** from 58m, incl. **17m @ 1,286ppm U_3O_8** from 78m (TAL0107RC)
- **23m @ 1,318ppm U_3O_8** from 96m, incl**. 5m @ 3,169ppm U_3O_8** from 102m (TAL080RC)
- **42m @ 611ppm U_3O_8** from 97m, incl. **8m @ 1,579ppm U_3O_8** from 99m (TAL062RC)

High-grade uranium intersections are generally controlled by the position and orientation of late stage intrusives. Mineralisation is commonly found on the contact between these intrusives and the hosting sediment. Interpreted faulting also appears to control distribution and geometry of uranium mineralisation. Figure 2 illustrates the drilling completed by Kingsland in 2022 with geology and significant drilling intersections. The modelled uranium mineralisation in the MRE is also shown.

Kingsland has identified a number of targets at Cleo including a high-priority drill-ready target to the north of the existing resource that remains untested (refer Figure 5). Radiometric anomalies correspond to the currently drilled out MRE so there is excellent potential to expand the resource by drilling the untested anomalies circled in red in Figure 5.

[2] ASX announcement 'Cleo Uranium Resource' released 14 March 2023

[3] ASX Announcement titled "All assay results received – Cleo Uranium Project, NT Grades up to 2.9% U_3O_8" dated 7 December 2022.

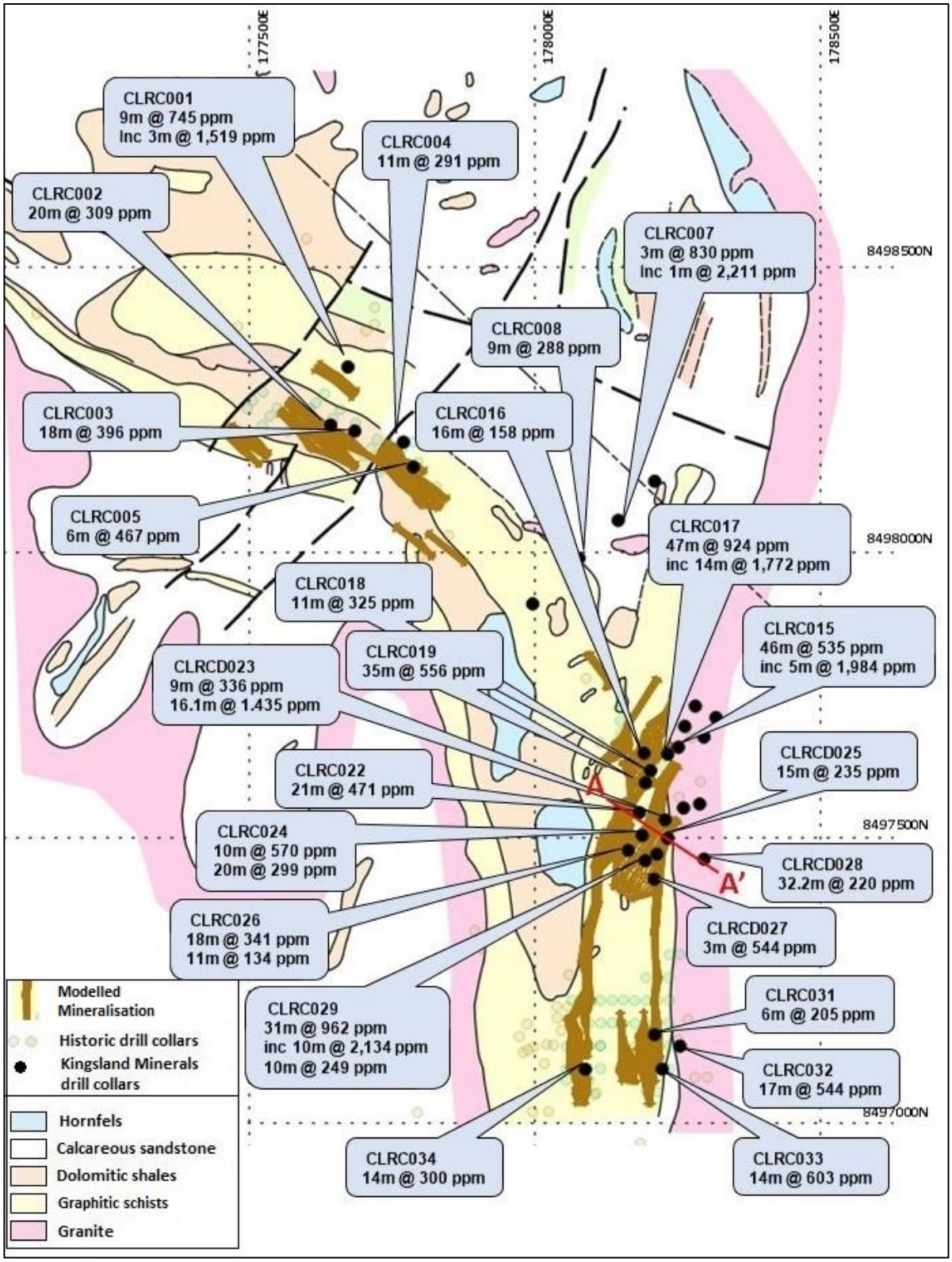

Figure 2: Plan View of Cleo Uranium Project showing U_3O_8 grades, intervals and location of cross-section[4]

[4] ASX announcement 'Cleo Uranium Resource' released 14 March 2023

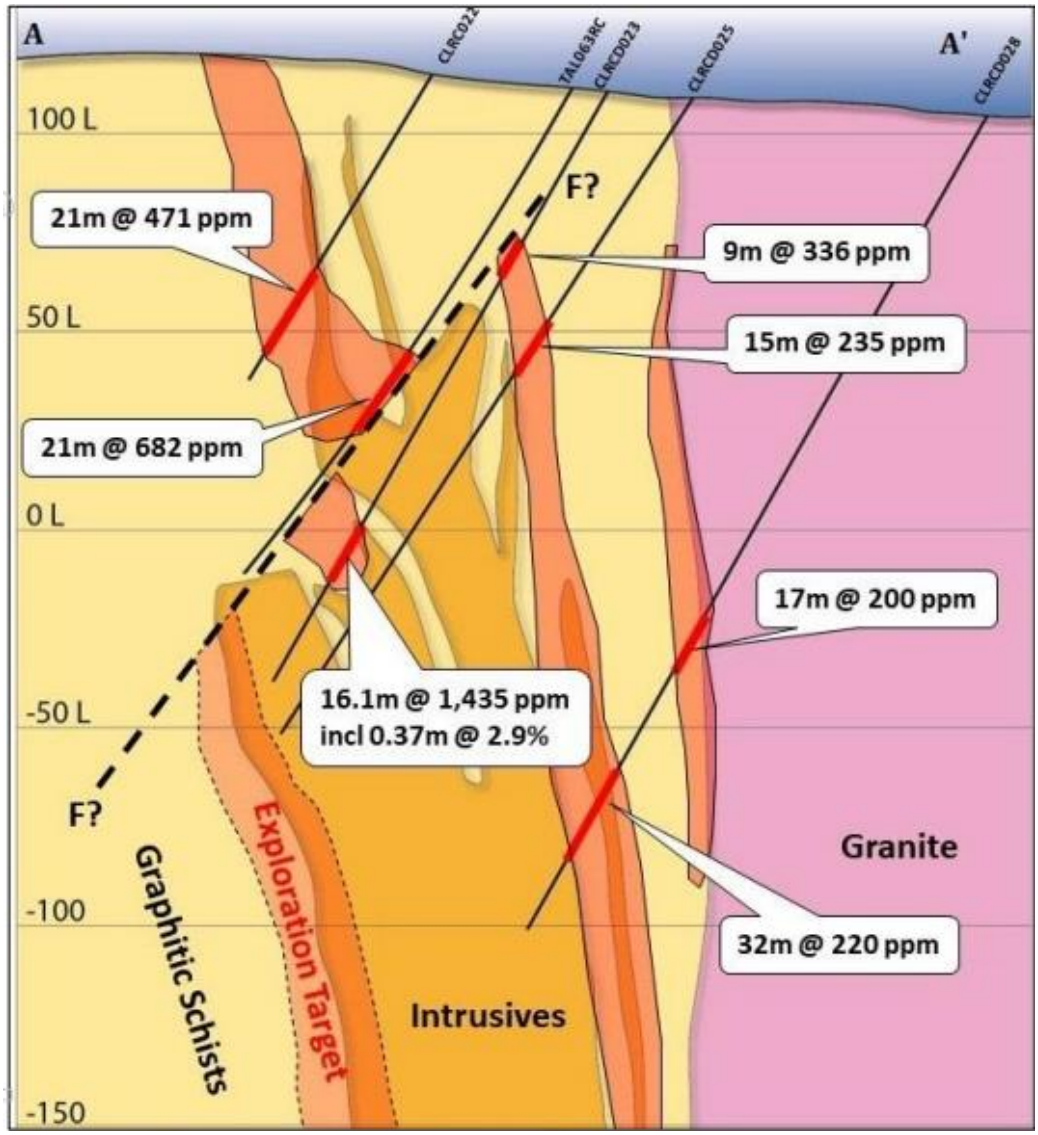

Figure 3: Cross Section A-A' showing geology showing mineralisation and geology[5]

Figure 4: Drill Hole CLRCD023 120.63m – 121.0m at 29,197ppm (2.91) U_3O_8[6]

[5] ASX announcement 'Cleo Uranium Resource' released 14 March 2023

[6] ASX Announcement titled "All assay results received – Cleo Uranium Project, NT Grades up to 2.9% U_3O_8" dated 7 December 2022

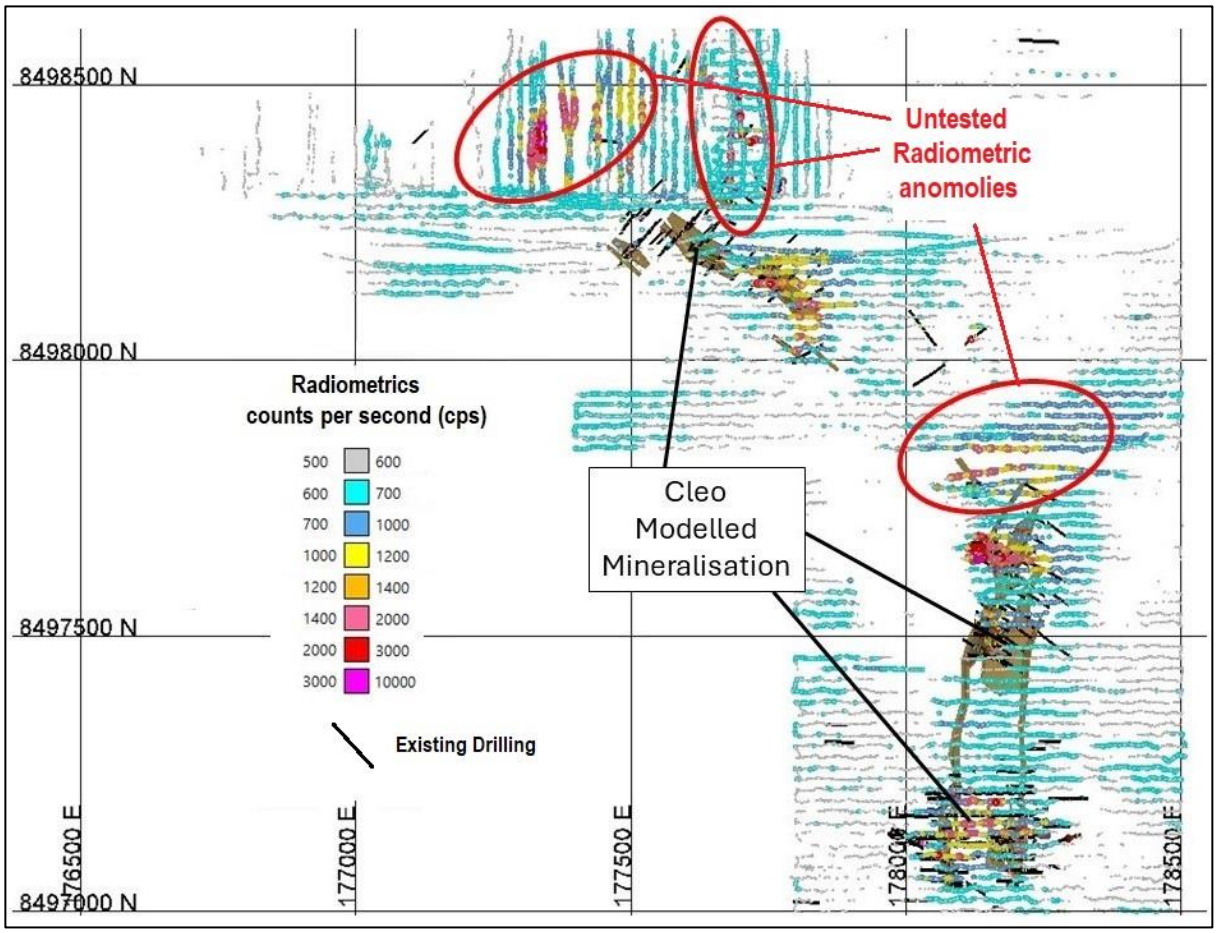

Figure 5: Radiometric survey showing untested uranium anomalies

THIS ANNOUNCEMENT HAS BEEN AUTHORISED FOR RELEASE ON THE ASX BY THE COMPANY'S BOARD OF DIRECTORS

About Kingsland Minerals Ltd

Kingsland Minerals Ltd is an exploration company with assets in the Northern Territory and Western Australia. Kingsland's focus is exploring the Leliyn Graphite Project in the Northern Territory. The Company is confident that Leliyn has significant potential, as shown by the substantial Exploration Target of 200-250 million tonnes grading 8-11 per cent Total Graphitic Carbon (TGC) for contained graphite of 16-27Mt. **The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised.** The Exploration Target is based on a graphitic schist measuring 5km long, 200m deep and 100m wide. The 5km strike length of the schist sits within a longer 20km-long graphitic schist. The initial exploration program will focus on the 5km stretch which hosts the Exploration Target. This will underpin a maiden JORC Resource. Kingsland believes there is also significant exploration potential within the remaining 15km of graphitic schist.

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Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Richard Maddocks, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Richard Maddocks has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Richard Maddocks consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Richard Maddocks is a full time employee of Kingsland Minerals Ltd and holds securities in the company.

The information referring to the Cleo Mineral Resource is extracted from the report entitled 'Cleo Uranium Resource' created on 14 March 2023 and is available to view on www.kingslandminerals.com.au The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.'

JORC Tables

Section 1: Sampling Techniques and Data – Cleo Uranium Project

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• RC drilling samples were collected as 1m intervals via a riffle splitter off the drill rig. • In order to speed up the analysis process initial sampling of holes was undertaken on 4m composites. A composite sample was taken with a scoop from each 1m bagged interval and combined for analysis. • Based on the results returned, sampling of the original 1m bagged intervals was undertaken to confirm the actual distribution of mineralisation throughout the drill hole. • A number of drill holes were downhole logged using a total count gamma tool in order to identify uranium mineralisation. The drill holes were logged open and a few days after drilling, as a result of radon build-up within the drill hole additional processing would be required in order to validate the quality of the downhole logging. Preliminary analysis of the log data indicates a reasonable correlation with the returned sample assays.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The Cleo Uranium deposit was predominantly drilled with RC drilling techniques. • Diamond drilling has been completed in order to derive additional samples for assay and mineralogical analysis. Diamond drill holes also enabled a more detailed view on the actual orientation of mineralisation.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Drilling recoveries were generally very good. Some zones of low recovery were encountered associated with voids or cavities but these were not common and are not considered to influence the overall sample quality.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• All drilling was qualitatively geologically logged recording lithology, mineralisation colour, weathering and grain size. • Some drill holes were logged using a downhole gamma and deviation tool. Radon build-up in the drill holes requires that additional processing be completed in order to derive a more reasonable radiometric grade.

Criteria	JORC Code explanation	Commentary
	• *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• A rig-based riffle splitter was used to extract a sub-sample of approximately 3-4kg. This sample was submitted for assay based on mineralised intervals determined by four metre composite sampling. • One metre intervals were submitted for any four metre composite averaging over the cut-off grade. • The mineral resource estimate outlined in this announcement utilised one metre composites.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Historical samples were analysed by Northern Territory Environmental Laboratories (NTEL) using a 4 acid digest with ICPMS finish with a lower level of detection of 5ppm U_3O_8. • A suite of elements were assayed at the Northern Assay Laboratory in Pine Creek, NT. Jobs are sorted as per client sample submission, if any discrepancies client notified by email and job is set up as received. Samples are dried at 120 C for a minimum of four hours [or over-night if samples are excessively wet]. • Sample prep is jaw crushing whole sample through a Boyd double toggle jaw crusher to a nominal 2mm particle size, splitting 400 gram through a jones riffle splitter and fine pulverising to 75 micron through an LM2 pulveriser. A barren washed creek sand as a barren flush is pulverised after every sample. • Assay procedure is a four acids digest [MA4 acid HNO3/HCl/HClO4/HF] leach of a 0.3 gram sample aliquot in a Teflon vessel to strong fumes of Perchloric acid. The leach residue is digested in conc HCl and diluted to volume with demineralised water and mixed. The dilution factor is 50. U is read by ICP-MS. Each batch of 50 assays contains 40 samples, four CRM's, one reagent blank and five replicate control assays. CRM's used include Geostats and OREAS. All U assays above 400 ppm are checked and confirmed by a sodium peroxide fusion digest with an ICP-MS reading.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification,*	• A QAQC program of standards and duplicates was submitted with the drill samples. • No twinned sample locations have been completed. • No QAQC issues have been identified to

Criteria	JORC Code explanation	Commentary
	data storage (physical and electronic) protocols. • *Discuss any adjustment to assay data.*	date. • No adjustments have been made to any of the assay data. • No QAQC is available for the historical samples.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill holes completed by Atom and Thundelarra were surveyed by GHD Surveys using Topcon GPS equipment. • All recent drill holes were located with differential GPS. Recent RC drillholes were downhole surveyed every 30m with a Reflex single shot • Recent Diamond holes were surveyed every 30m with a Boart Longyear TruShot. • A limited number of drill holes were logged with a combination downhole deviation and total count gamma tool. • Holes drilled by Atom were not downhole surveyed. • Topographic survey is based on an airborne LIDAR survey downsampled to produce 0.5m contours.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Data spacing is variable. Areas of historic drilling and infill are approximately 20m along strike where other areas are spaced up to one hundred and fifty meters. • Drilling spacing and distribution in some areas is sufficient for estimation of Mineral Resources when combined with existing drill hole information. • The data presented in this announcement is one metre composite samples.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drilling is generally perpendicular to the strike direction of mineralisation. • No bias is considered to have been introduced through the drill hole direction or orientation. • Diamond drilling has been completed which provided additional information regarding mineralisation orientation.
Sample security	• *The measures taken to ensure sample security.*	• Due to the proximity of the laboratory samples are collected and delivered to the assay laboratory by Kingsland Minerals personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques have been undertaken.

Section 2: Reporting of Cleo Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The Cleo Project is located on tenement EL 31960, which was granted in March 2019 and is valid until March 2025. This tenement is 100% owned by Kingsland Minerals Ltd. There are no known encumbrances to conducting exploration on this tenement.

Criteria	JORC Code explanation	Commentary
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Cleo Uranium Project was discovered in 1985 by Total Mining Australia Pty Ltd. Total Mining carried out an extensive exploration program including RC and diamond core drilling. Atom Energy drilled a program of RC holes in 2007-08 followed by Thundelarra Exploration with additional RC holes in 2011-14. • Results for the TAL series of drill holes were released to the ASX by the previous owner of the project, Thundelarra Limited, on the 6th December 2010 titled 'Significant uranium & copper intercepts at Allamber NT', 7th December 2011 titled 'Extensive uranium intersected at Allamber, NT', 22nd December 2011 titled 'Widespread Copper Mineralisation at Allamber Project', 22nd December 2012 titled 'Further high grade uranium at Cliff South, NT' and 25th October 2013 titled 'More Copper, Uranium Mineralisation at Allamber' • Results from the DRC and TRC series of drill holes were released to the ASX by the previous owner of the project, Atom on the 22nd November 2007 titled 'Shareholder update – Cleo's resource drilling', 30th November 2007 titled 'Atom Energy Shareholder update – Cleo's resource drilling', 19 December 2007 titled 'Cleo's Uranium Project Resource Drilling', 26th March 2008 titled 'Cleo's uranium project resource statement'
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Cleo deposit to the north is located in a strongly folded syncline of Lower Proterozoic metasediments enclosed and intruded by the Cullen granite. The lithologies forming the syncline include a basal psammite, quartzites and sericite-chlorite schists. The unit is overlain by a thick sequence of carbonaceous shales which, when affected by faulting, become graphite and chlorite schists. The carbonaceous shale sequence contains interbedded dolomite lenses. The uppermost unit exposed at the Twin deposit is a coarse-grained quartzite which occupies the core of the syncline. The Twin deposit has been strongly faulted, with faults trending parallel to the axial plane of the syncline. These faults have become the loci of subsequent intrusion by the late phases of the Cullen granite. The uranium mineralisation is also concentrated within the faults. • Mineralisation towards the south occurs higher in the stratigraphic sequence. A large proportion of the lower units of the syncline have been adsorbed into the Cullen granite, particularly in the west. Mineralisation is more widely spread through the stratigraphy.
Drill hole information	• *A summary of all information material to*	• Drilling information is included in the

Criteria	JORC Code explanation	Commentary
	the under-standing of the exploration results including a tabulation of the following information for all Material drill holes: • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	announcement.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Drill hole samples are composited to 1m for use in the mineral resource estimate. • Metal equivalent values have not been used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• Drilling has predominantly been perpendicular to the strike direction. The true width of mineralisation will vary but is generally expected to be from 70% to 80% of the reported down-hole widths. • Mineralisation orientation, and therefore true width, will be investigated during any upcoming drilling program.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Relevant diagrams have been included within the main body of text.
Balanced Reporting	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading*	• All received results to date have been reported. • Drill holes completed by Atom and Thundelarra were surveyed by GHD Surveys using Topcon GPS equipment. • All recent drill holes were located with differential GPS. • The competent person deems the reporting of these drill results to be balanced.

Criteria	JORC Code explanation	Commentary
	reporting of Exploration Results.	
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• The company has not completed any other exploration within the area to date. Previous companies have explored the area between 1985 and 2014 and this information was used in designing the drilling program. Historic information is publicly available through the STRIKE website. • A mineral resource estimate for the deposit was announced by Atom Energy on the 26th March 2008 titled 'Cleo's Uranium Project Resource Statement' • The radiometric survey was conducted by previous explorers, Thundelarra Exploration, in 2008. Lines were run across the Cleo project on approximate 20m NS spacing. The survey was conducted by Terra Search Pty Ltd, geophysical consultants from Townsville.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large- scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Kingsland Minerals is currently planning follow-up drilling. • The deposit is considered open at depth and along strike.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	*Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* *Data validation procedures used.*	• Data was provided as a .csv data dump from Kingsland's database and was digitally imported into Micromine Mining software. Micromine validation routines were run to confirm validity of all data. • Individual drill logs from site have been previously checked with the electronic database on a random basis to check for validity. • Analytical results have all been electronically merged to avoid any transcription errors.
Site visits	*Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *If no site visits have been undertaken indicate why this is the case.*	• The Competent Person for the updated and re-estimated Mineral Resources has not yet visited the project area as there was insufficient time to carry out a site visit. It is expected that a site visit will be undertaken in due course.
Geological interpretation	*Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* *Nature of the data used and of any assumptions made.* *The effect, if any, of alternative interpretations on Mineral Resource estimation.* *The use of geology in guiding and controlling Mineral Resource estimation.* *The factors affecting continuity both of grade and geology.*	• Confidence in the geological interpretation is considered to be reasonable. • Detailed geological logging and surface mapping allows extrapolation of drill intersections between adjacent sections. • Alternative interpretations would result in similar tonnage and grade estimation techniques. • Geological boundaries are determined by the spatial locations of the various mineralised structures. • Mineral resource wireframes were provided by Kingsland and were validated by the Competent Person

Dimensions	*The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• In general the mineralisation is near vertical with a north/south strike. To the northern end of the deposit the orientation changes to a more Northwest/Southeast direction.
		• Search and variogram orientation were coded into the mineral resource block model in order to appropriately deal with the subtle changes in orientation within the model at depth as well as the more significant change in strike.
		• The mineral resource extents are;
		  • 177,200m to 178,300m East
		  • 8,497,000m to 8,498,400m North
		  • -200m to 170m Rl

Estimation and modelling techniques	*The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* *The availability of check estimates, previous estimates and/or mine production records and whether the*	• The mineral resource estimates were completed using Ordinary Kriging (OK) techniques following wireframing and domaining of the estimation dataset. • Appropriate top-cuts were applied to the data based on an assessment of the sample population for each domain. In all, top-cuts were applied to 7 out of the 18 domains and all resulted in the coefficient of variation within the sample dataset being reduced to an acceptable level for an OK estimate. • Drill hole spacing is variable, and the block sizes were chosen to reflect the best compromise between spacing and the necessity to define the geological detail of

Criteria	JORC Code explanation	Commentary

	Mineral Resource estimate takes appropriate account of such data.
	The assumptions made regarding recovery of by-products.
	Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.
	Any assumptions behind modelling of selective mining units.
	Any assumptions about correlation between variables.
	Description of how the geological interpretation was used to control the resource estimates.
	Discussion of basis for using or not using grade cutting or capping.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.
		each deposit. In general, block sizes are 5 m along strike, 5m across strike and 5m vertically.
		• A number of different modelling scenarios were estimated (global top-cut, no top-cut, Inverse Distance Squared and Nearest Neighbour) and all produced similar results.
		• Block model validation has been carried out by several methods, including:
		  • Drill Hole Plan and Section Review
		  • Model versus Data Statistics by Domain
		  • Easting, Northing and RL swathe plots
		  • Comparison to previous Mineral Resources
		• All validation methods have produced acceptable results.

Moisture	*Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	*The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A nominal downhole cut-off of 100ppm U_3O_8 has been used to define mineralised intersections, the final reporting cut-off grade of 150 ppm U_3O_8 is based on a combination of the previously reported cut-off grade and the likely mining, processing cost and uranium price assumptions.
Mining factors or assumptions	*Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining is assumed to be by conventional open pit mining methods • It is expected that conventional ore loss and dilution would be applied to the Mineral Resource estimate as a modifying factor during pit optimisation and mine planning work.
Metallurgical factors or assumptions	*The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with*	• Due to the current status of the deposit no metallurgical test work has been completed on the project.

Criteria	JORC Code explanation	Commentary
	an explanation of the basis of the metallurgical assumptions made.	
Environmental factors or assumptions	*Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• Due to the early-stage nature of the mineral resources only limited environmental investigations have been carried out.
Bulk density	*Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density values used in this mineral resource estimate are based on those outlined in the initial 2008 estimate – 2.60t/m3 for fresh rock, 2.45t/m3 for transitional material and 2.30t/m3 for oxidised material. No additional bulk density values have been reported. • It is suggested that, following the drilling of diamond core, additional bulk density determinations be carried out to confirm the values used in this mineral resource estimate.
Classification	*The basis for the classification of the Mineral Resources into varying confidence categories.* *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified in the Inferred category, in accordance with the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). A range of criteria has been considered in determining this classification including: • Geological and grade continuity • Data quality. • Drill hole spacing. • Modelling technique and kriging output parameters. • The Competent Person is in agreement with this classification of the resource.
Audits or reviews	*The results of any audits or reviews of Mineral Resource estimates.*	• No audits or reviews of the current Inferred Mineral Resources have been undertaken. • The previous mineral resource estimate for the deposit was announced by Atom Energy on the 26th March 2008 titled 'Cleo's Uranium Project Resource Statement'
Discussion of relative accuracy/ confidence	*Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such*	• The relative accuracy of the resource estimate is reflected in the JORC resource categories. • Inferred Resources are considered global in nature.

Criteria	JORC Code explanation	Commentary
	an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	