March 14 2023

Cleo Uranium Deposit Mineral Resource Estimate

Highlights

- **Inferred Mineral Resource exceeds 5 million pounds of U_3O_8**
- **Cleo Deposit remains open at depth and along strike with potential for further expansion**

Kingsland Minerals Ltd (ASX:KNG) (Kingsland or the Company) is pleased to announce the Cleo Uranium Deposit Inferred Mineral Resource Estimate. Cleo is located within Kingsland's Allamber Project area near Pine Creek in the Northern Territory of Australia.

Kingsland Minerals Managing Director, Richard Maddocks, commented, '*We are very pleased to deliver this Mineral Resource Estimate for Cleo less than nine months after first listing on the ASX in June 2022. Everyone involved, including field geologists, assay labs, resource consultants, the local pastoralist and all other consultants and contractors are to be thanked and congratulated on this outcome. There is still unfinished work at Cleo with mineralisation open along strike and at depth. This first MRE sets a firm platform upon which to build the resource base for Cleo. We look forward to further success growing the Cleo Mineral Resource*"

Table 1: Cleo Inferred Mineral Resource Estimate, JORC (2012)

Classification	Cut off grade U_3O_8 ppm	Tonnes	Grade U_3O_8 ppm	U_3O_8 pounds	U_3O_8 kilograms
Inferred	150	6,800,000	345	5,200,000	2,360,000

After drilling a total of 30 holes with 3,228m of Reverse Circulation (RC) drilling and 450 meters of diamond core during the second half of 2022, an independent MRE has been estimated for the Cleo Uranium Deposit. The estimation used the recent Kingsland Minerals drilling as well as historic drilling by previous explorers.

Mineral Tenement and Land Tenure Status

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.

Geology and Geological Interpretation

Diamond drilling completed by Kingsland shows that the higher grade uranium intersections are generally controlled by the position and possibly orientation of granitic intrusions. The contact between the sedimentary Masson Formation and the Cullen Granite batholith provides an eastern contact constraining uranium mineralisation. At Cleo, the Masson Formation generally consists of a series of graphitic, schistose sediments. These graphitic sediments have been intruded by a series of later felsic/granitic dykes varying in downhole width from centimetres to several meters. There appears to be several intrusion events with variation in grain size, mineralogy and orientation distinguishing them.

Higher grade mineralisation is also found in some intrusives. Figure 2 shows a cross section with geology and mineralisation. The mineralisation can be seen to generally mimic the intrusive/sediment contact but is also contained within the intrusive in places. There may be different phases of intrusions into the sediments and one or more of these phases may be associated with uranium mineralisation. Fault zones were intersected in the diamond drilling with a south-west dip interpreted. These faults may have dislocated geological contacts and/or mineralisation as shown in Figures 2 and 3. Mineralisation may also extend along these fault zones.

Figure 3 is a plan view showing geology and Kingsland Minerals significant drill results. All the results are based on 1m assays. Also shown in brown are the position of the modelled mineralised domains. Figure 1 shows the location of the 18 modelled mineralised domains.

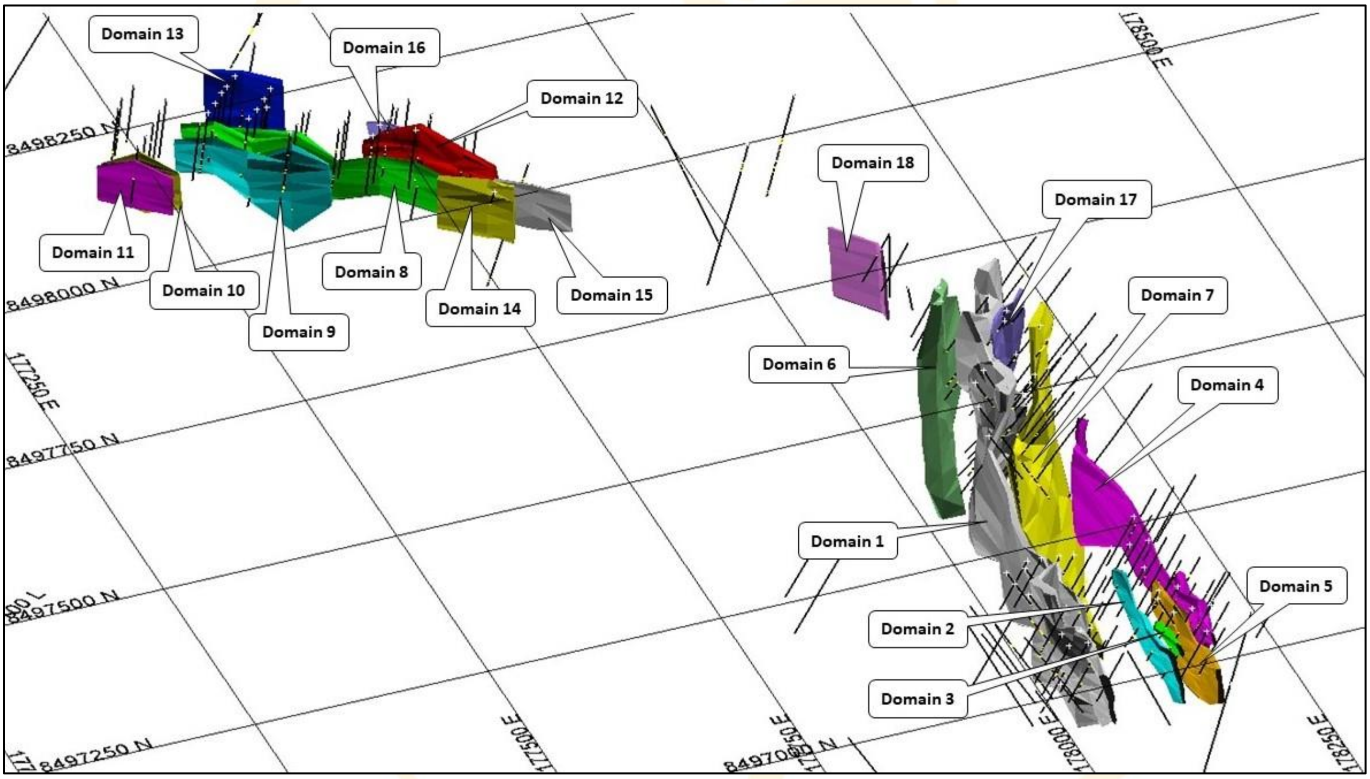

Figure 1: View looking North-east showing 18 modelled mineralised domains and drilling

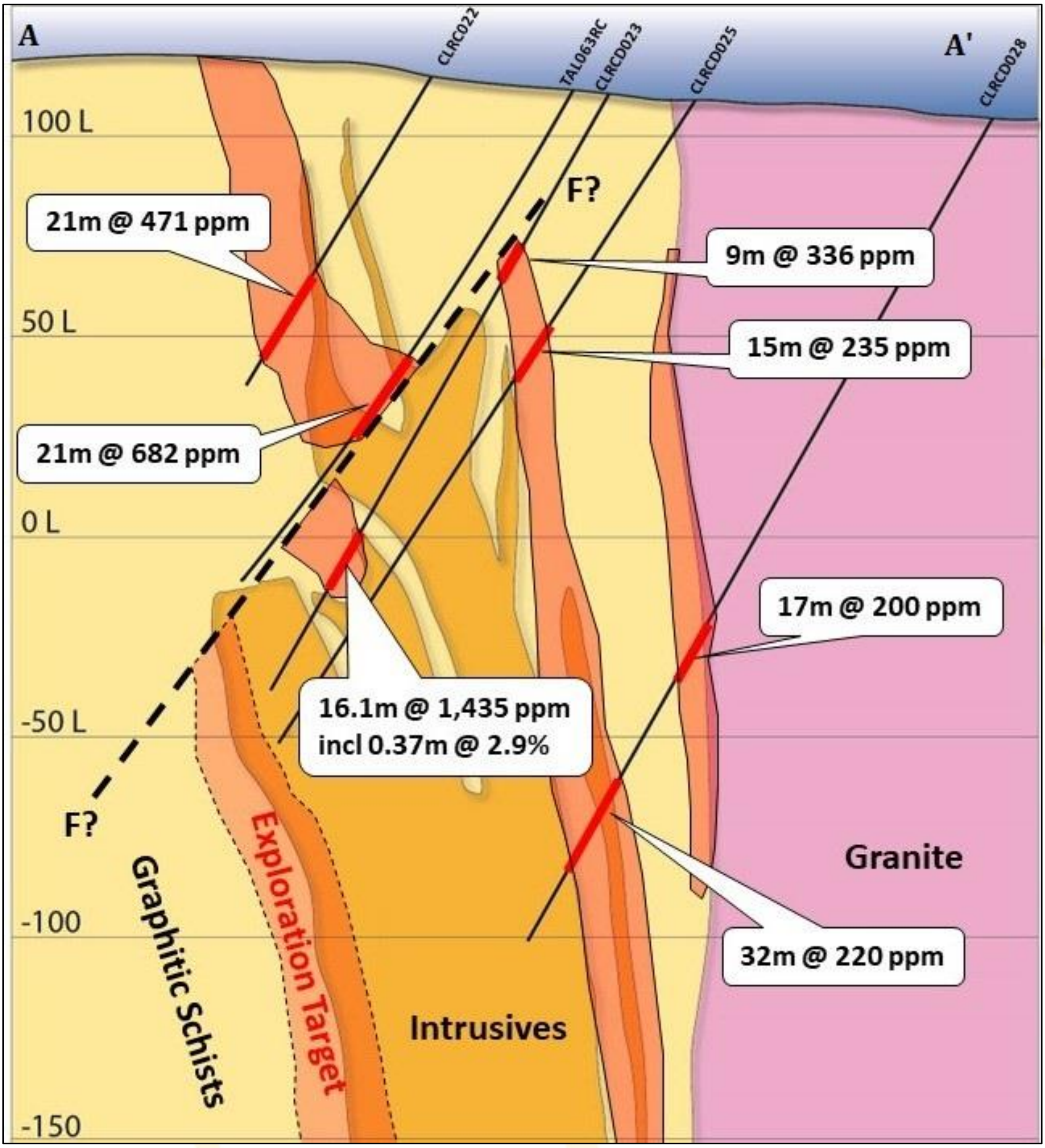

Figure 2: Cross section A-A' showing mineralisation and geology[1]

[1] Refer to Kingsland Minerals Ltd ASX announcement Dec 7 2022

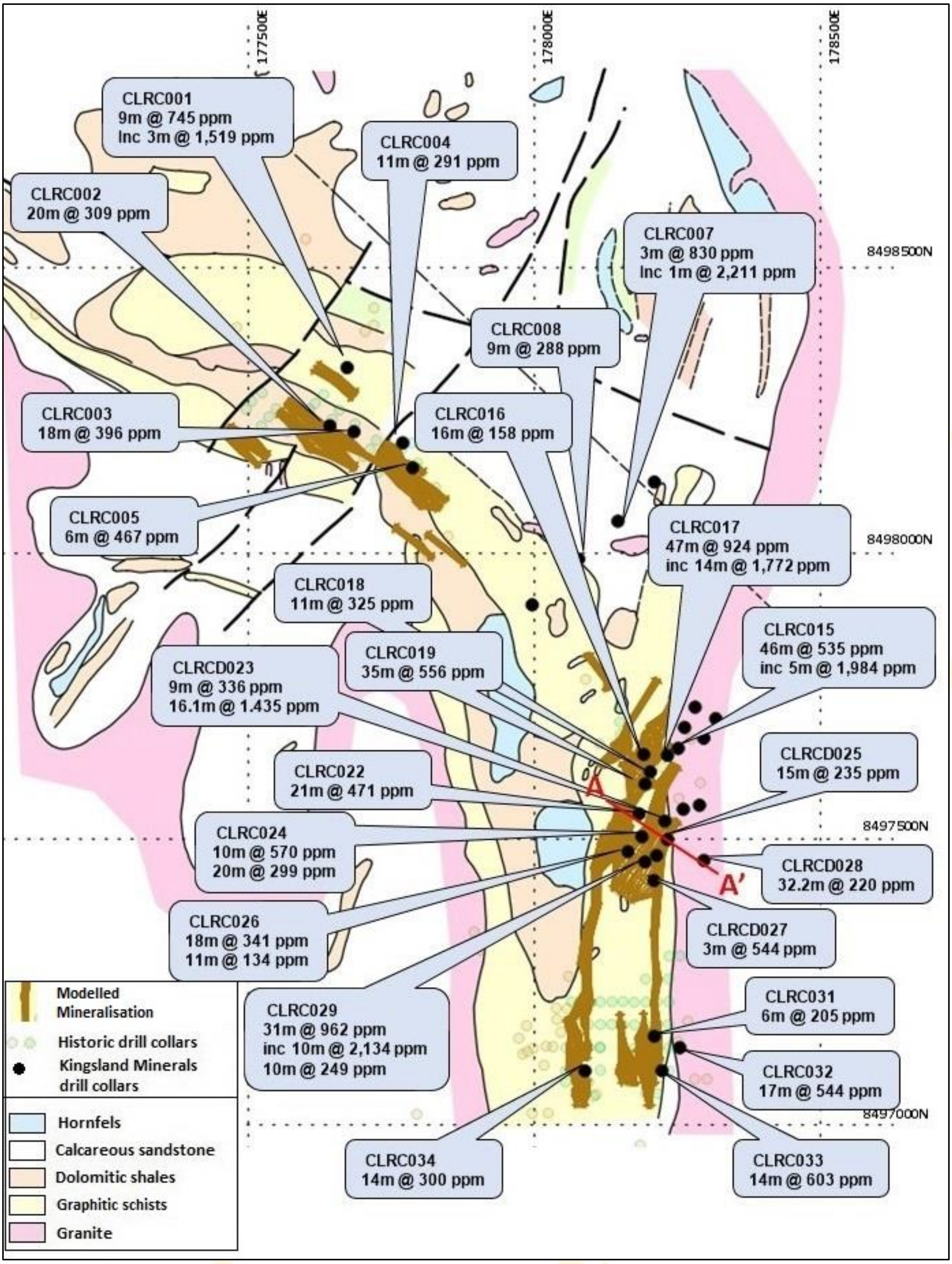

Figure 3: Plan of Cleo Uranium Project showing KNG drilling and U_3O_8 grades, modelled mineralised domains and location of cross section AA'

Drilling Techniques and Hole Spacing

Drilling used within the mineral resource estimate has predominantly been Reverse Circulation (RC) with some minor Diamond Core (DD). Some of the historical Total Energy Australia drilling was used to guide the construction of the mineralisation envelopes however the grade values from this drilling were not used in the final estimation.

The drill hole spacing is currently approximately 20m across strike by 40m along strike in the southern and northern sections of the deposit and approximately 30m across strike and 20m along strike in the more intensively drilled central portion. The longest drill spacing when mineralisation has been defined is approximately 150m in the area between the southern and central domains.

The majority of the more recent drilling has been across the strike of the mineralisation and at an initial dip of 60 degrees.

Table 2: Summary of Drilling Campaigns at Cleo

Company	Year Drilled	Holes	RC	DD	RC meters	DD meters
Total Energy Australia	1985-1988	182	165	17	10,250	1,119
Atom Energy Ltd	2007	89	88	1	5,511	236
Thundelarra Exploration Ltd	2010-2014	54	54	0	6,060	0
Kingsland Minerals Ltd	2022	30	26	4	3,643	449
TOTAL		**173**	**168**	**5**	**25,465**	**1,804**

Sampling and Sample Analysis

For the historical Atom Energy and Thundelarra drilling the sampling was based on one metre composites split on the drill rig with the samples analysed by Northern Territory Environmental Laboratories (NTEL) using a 4-acid digest with an ICP-MS finish. The samples were initially selected for analysis by checking each metre interval with a scintillometer however this was later found to be problematic and may have resulted in some areas of the drilling not being selected for assay. QAQC for this round of sampling is not available.

Samples for the most recent drilling campaign were split on the drill rig as one metre samples with a sub-sample of these being composited into four metre intervals for initial assay at the Northern Assay Laboratory in Pine Creek using a four acid digest with ICP-MS finish. On receipt of the screening assay results the one metre original samples for four metre composites returning values over 100ppm were sent for further assay. QAQC samples (CRM standards and blanks) were submitted during both rounds of assays and no QAQC issues were identified.

During the company drilling a number of 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. Analysis of the log data indicates a reasonable correlation with the returned sample assays.

Estimation Methodology

Mineralisation wireframes representing the main zones within the deposit were constructed by Kingsland and were validated by the Competent Person once imported into the estimation software. Some minor inconsistencies were addressed and, due to differing de-surveying methods, the wireframes were re-snapped to the drill hole intervals. In general the wireframes as provided were consistent with the underlying mineralisation and geology. The 18 individual mineralised zones are shown in **Figure** 5.

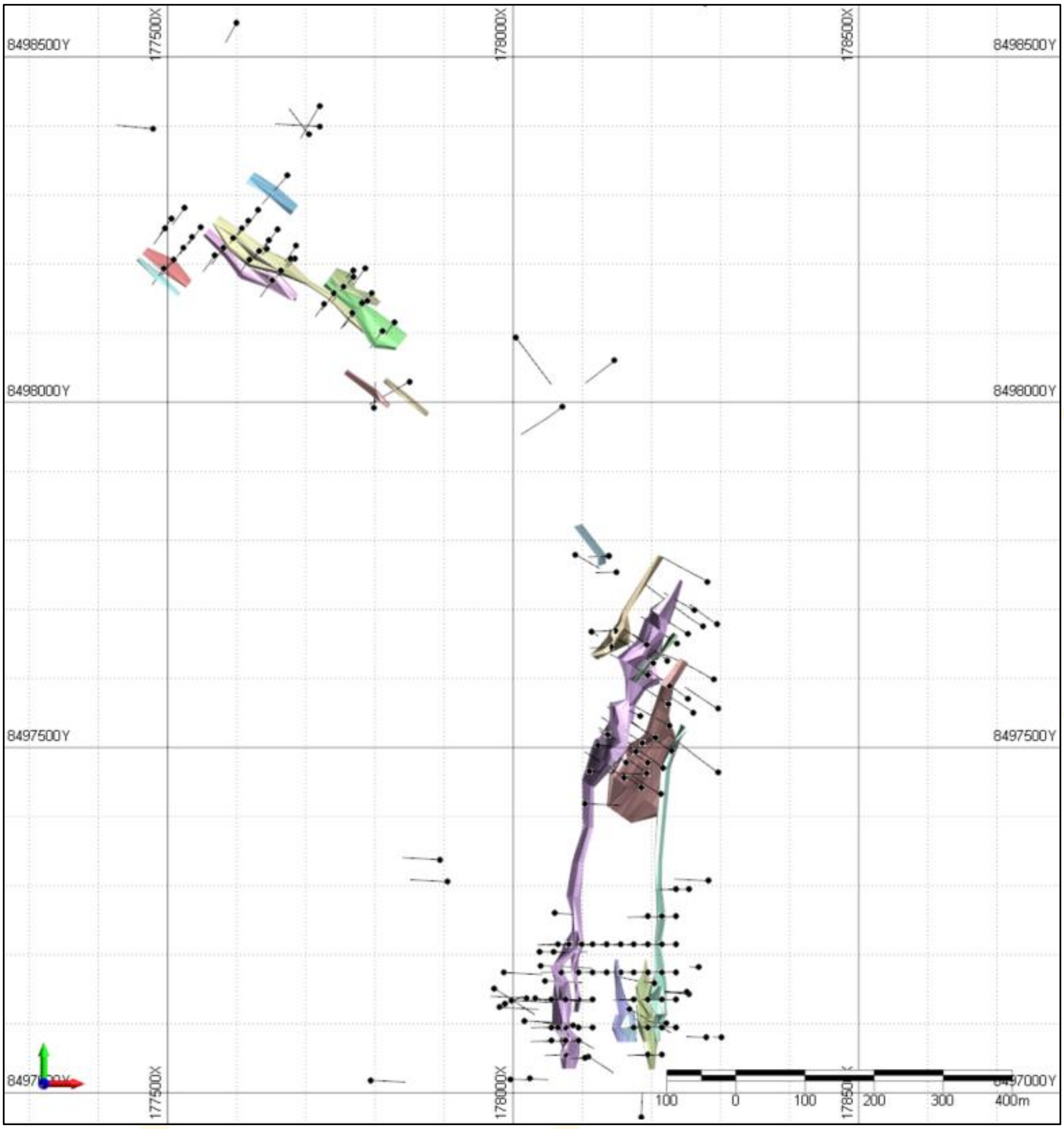

Figure 5 Mineralisation wireframes

The drill dataset was coded with the individual wireframes in order to derive an estimation dataset. Due to the presence of some extreme values within the resultant dataset individual domain cut values were defined and these are detailed with the accompanying population statistics in **Error! Reference source not found.**3.

Table 3: Data statistics by Domain

Domain	Number samples	Mean ppm U_3O_8	Mean of cut samples ppm U_3O_8	Median ppm U_3O_8	Coefficient of variation	Coefficient of variation of cut values	Maximum value ppm U_3O_8	Cut value ppm U_3O_8	Number of samples cut
1	1,417	341	323	140	2.06	1.67	11,245	3,500	12
2	46	358		208	1.09		1,701		
3	21	181		140	0.72		535		
4	119	513	481	195	1.69	1.51	5,467	3,000	4
5	132	249		162	1.09		1,761		
6	53	201		155	0.76		791		
7	164	317	278	138	1.91	1.28	5,708	2,000	3
8	166	345	325	193	1.39	1.09	4,182	2,000	2
9	144	170		108	1.32		1,667		
10	25	199	173	110	1.61	1.20	1,621	1,000	1
11	13	326		130	1.07		1,060		
12	123	364	322	155	2.00	1.48	5,943	2,500	3
13	18	432	426	140	1.41	1.39	2,092	2,000	1
14	20	114		106	0.69		472		
15	5	239		219	0.72		513		
16	20	150		136	0.81		535		
17	21	236		153	0.80		782		
18	7	419		440	0.60		810		

The top-cuts changed the overall statistics for the mineralised samples from a mean of 312ppm to a mean of 308ppm.

Variogram analysis was completed on the estimation dataset in order to determine the spatial relationships between the samples. Due to the changes in orientation within the modelled mineralisation the samples were adjusted to a north south plane for this analysis with the local change in orientation being subsequently coded into the block model. The basic variography parameters for the deposit are shown in Table 4.

Table 4: Variography Parameters

	Azimuth	Plunge	Nugget	Range 1	Sill 1	Type	Range 2	Sill 2	Type
1	0	0	100000	22.3	126304	Exp	301	172230	Sph
2	90	0	100000	72.8	126304	Exp	213	172230	Sph
3	0	-90	100000	1.64	126304	Exp	12	172230	Sph

A block model was constructed using the mineralisation wireframes to cover the entire area of the deposit and was coded with the proportion of the block within the wireframe, wireframe domain, weathering surface, density and topography proportion constructed from the LIDAR data. **Error! Reference source not found.**5 details the extents of the model.

Table 5: Block Model Dimensions

Direction	Minimum Centroid	Maximum	Size	Number of blocks
East	177200	178300	5	221
North	8497000	8498400	5	281
Rl	-200	170	5	75

Due to the change in local orientation within the mineralisation the block model individual wireframe domains were coded with individual search orientations which were subsequently used to modify the primary search and variography orientations during the estimation process.

The estimation was performed using an expanding search methodology with the initial search distance being 50m and the final search distance being 400m. **Error! Reference source not found.**6 details the actual search and sample selection criteria.

Table 6: Search distances and parameters

Search pass	Radius	Octants	Minimum points	North/RL factor	East Factor
1	50	2	8	1	0.1
2	100	2	8	1	0.1
3	200	2	8	1	0.1
4	200	1	4	1	0.1
5	400	1	4	1	0.1

Wireframes of the weathering surfaces for the deposit were provided by the company and were validated against the logging data. As no additional bulk density determinations had been completed the mineral resource estimate was coded with the values used in the previous 2008 estimate. These are shown in Table 7.

Table 7: Bulk Densities

Weathering domain	Density t/m^3
Oxidised	2.30
Transitional	2.45
Fresh	2.60

The finalised block model is shown in Figure 6.

Check Estimates

A number of check estimates were completed using either different search processes, primarily dropping the initial short-range search, or different methodologies – inverse distance squared (id2) and nearest neighbour (nn). The results of the comparisons are detailed in Table 8 using a 100ppm U_3O_8 cut-off. There is minimal difference between the estimates in terms of grade with only the nearest neighbour estimate being significantly higher in grade and lower in tonnes (as expected) than the final mineral resource estimate.

Table 8: Check Estimate Comparisons

Estimate	M tonnes	Grade ppm U_3O_8	M pounds
Domain cut nn	6.34	387	5.41
Uncut id2	7.77	335	5.74
Global cut id2	7.77	323	5.53
Domain cut id2	7.77	318	5.45
Uncut ok	7.71	342	5.81
Global cut ok	7.71	330	5.61
Domain cut ok	7.71	325	5.24
Final search domain cut ok	7.59	324	5.42

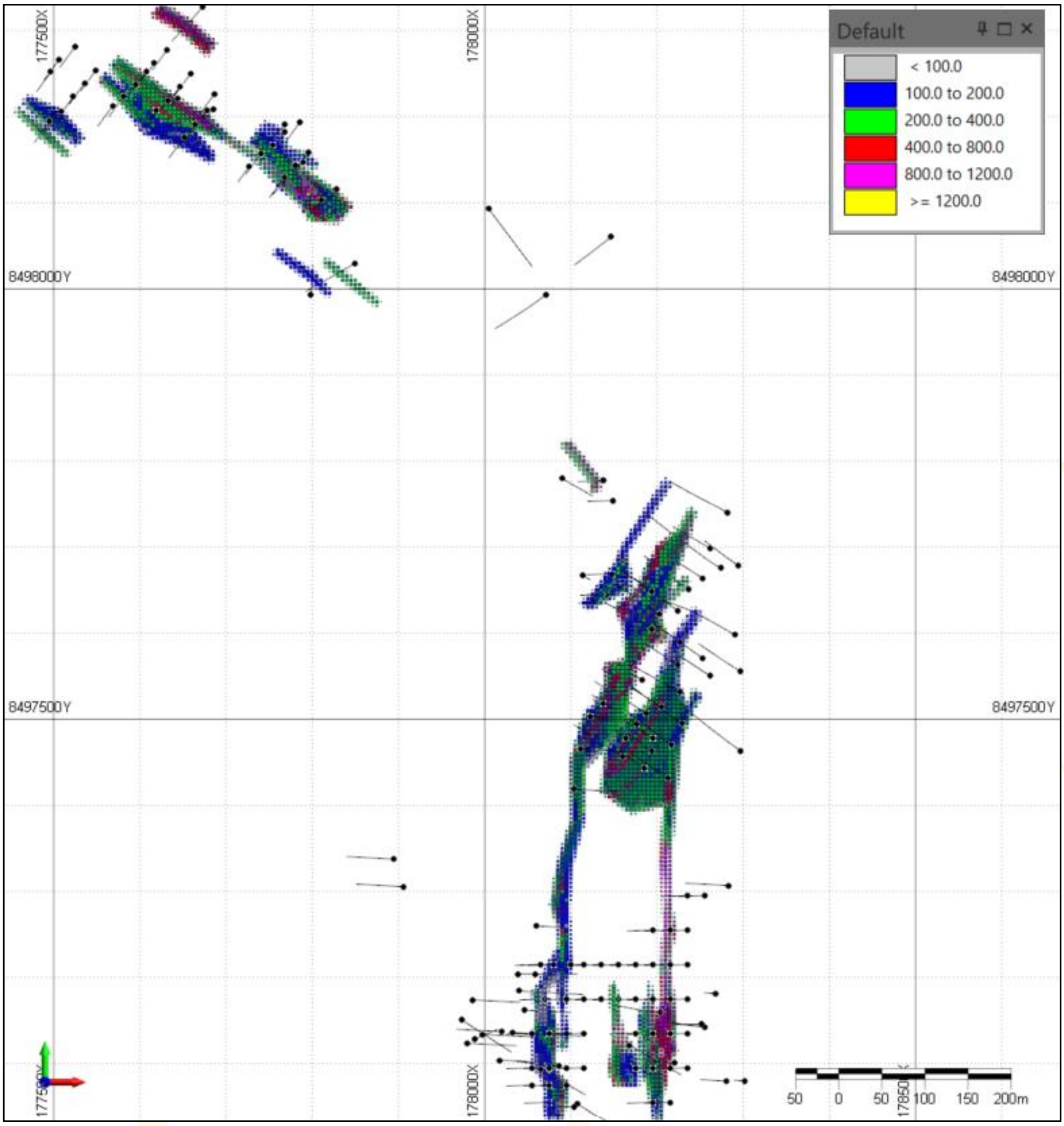

Figure 6: Block model plan view

In order to validate the mineral resource estimate a comparison between the sample mean grades and global mineral resource grades was undertaken with the mineral resource estimate returning a slightly higher (3%) mean grade than the underlying sample grades. The reasoning for this is likely to be the extension of the higher grade mineralisation in the southeastern limb of the main wireframe and the amount of high grade mineralisation present in the most northerly wireframe area – see Figure 6.

A sequence of swath plots was also completed in order to compare the local average sample grades against the mineral resource estimate grades. The swath plots are presented in Figure 7 to Figure 10. It can be seen that, in most cases, there is a good correlation between the block and sample average grades particularly where there are large numbers of samples and that localised high sample grades do not have disproportionate influence within the mineral resource model.

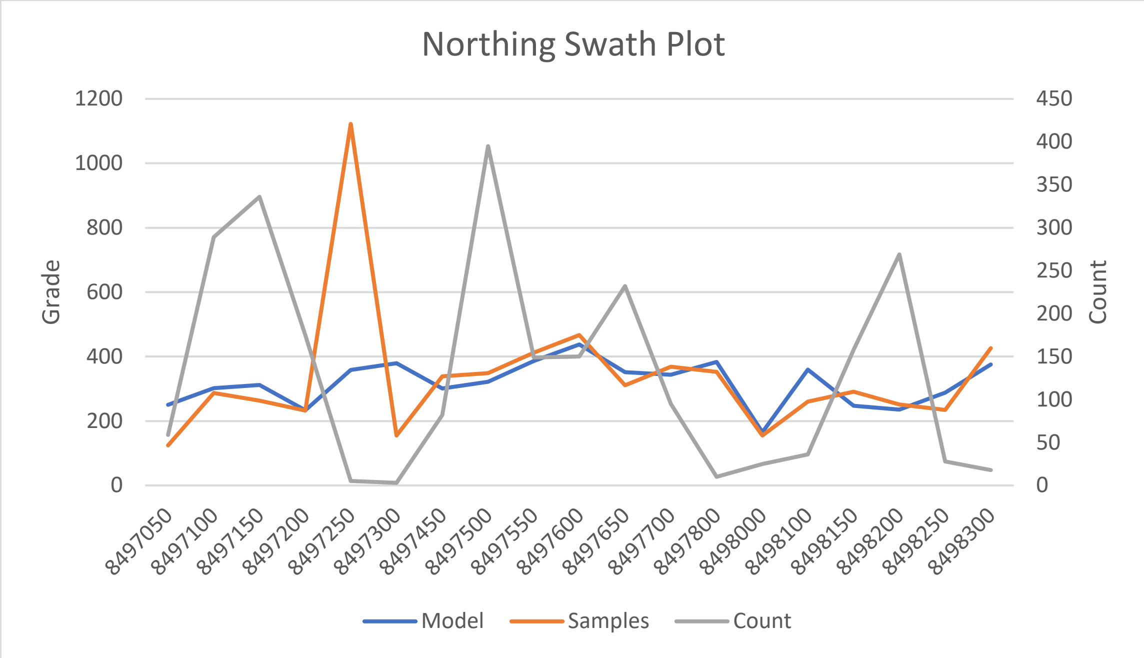

Figure 7: Northing Swath Plot

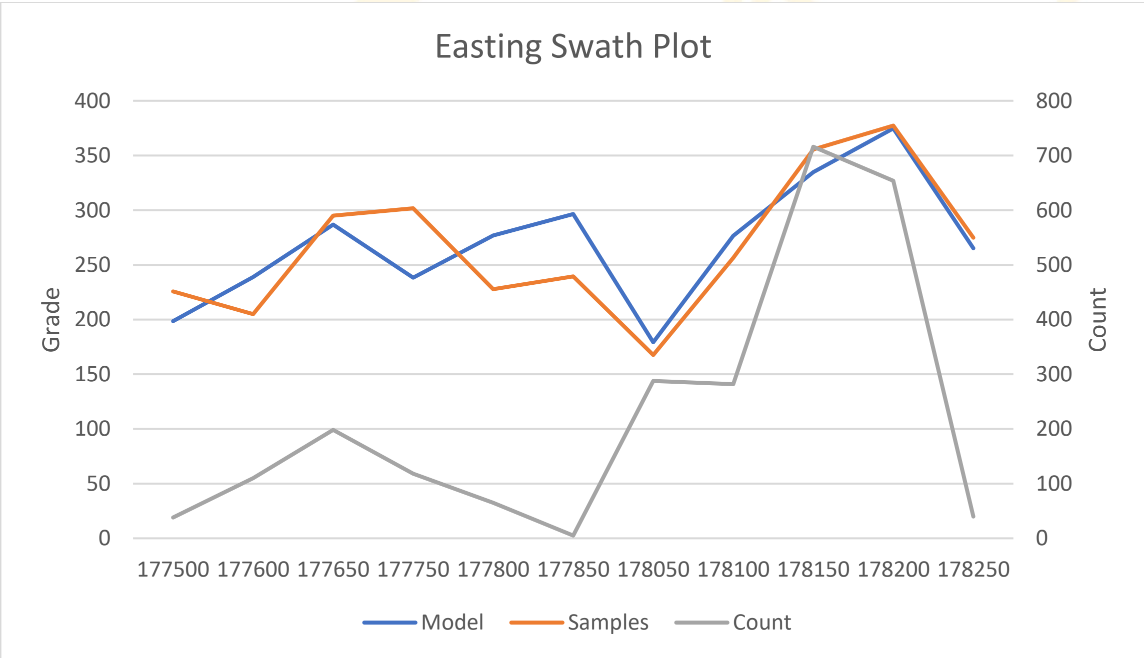

Figure 8: Easting Swath Plot

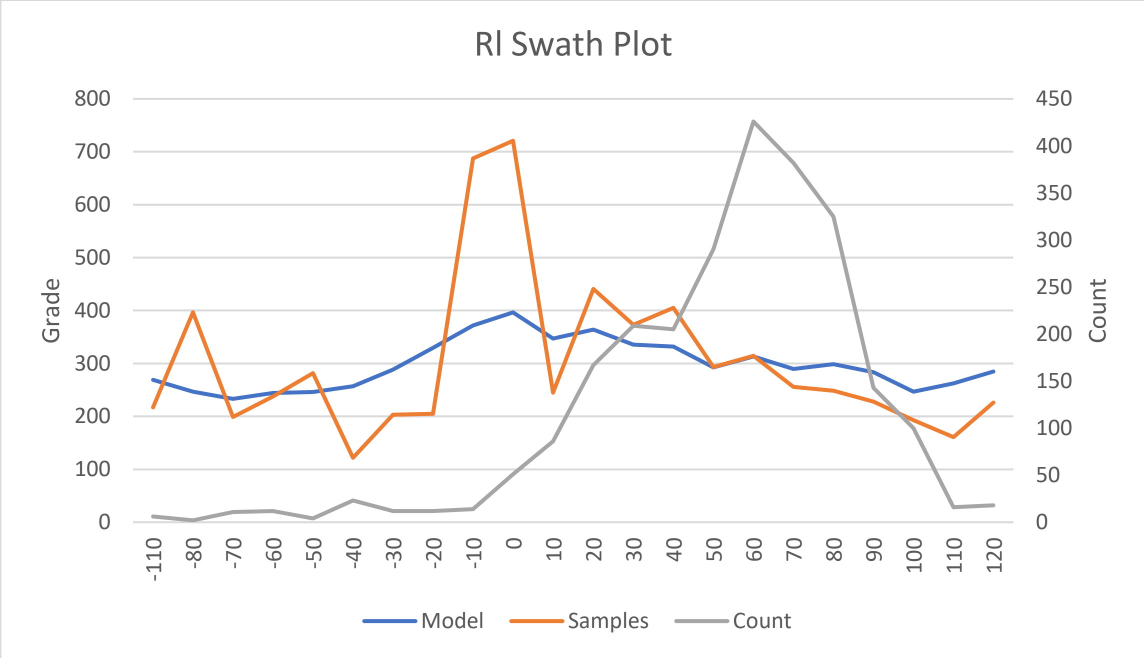

Figure 9: RL Swath Plot

Resource Classification

Due to the incorporation of drilling completed prior to 2010 into the estimation dataset with no assay QAQC, the limited availability of downhole direction surveys and the lack of bulk density determinations the mineral resource estimate is currently classified as Inferred.

Comparison to Previous Estimate

The previous mineral resource estimate was completed by Atom Energy in 2008 and announced to the ASX on the 26th March 2008 titled 'Cleo's Uranium Project Resource Statement' under JORC (2004) and was reported at a 100ppm U_3O_8 cut-off grade. Table 9 compares the previous estimate with the current one with the major differences being the extension of the mineral resource wireframes following the drilling and inclusion of what was previously considered the Cliff and Cleo's prospects.

Table 9: Comparison with previous estimate

Estimate	Cut -off Grade ppm U_3O_8	M tonnes	Grade ppm U_3O_8	M pounds
2008	100	1.41	304	0.94
Current	100	7.59	324	5.42
% increase		440%	7%	480%

Cut-off Grade

The Cleo MRE has been reported at a cut-off grade of 150 ppm U_3O_8. The cut-off grade reflects the generally shallow nature of the mineralisation and its amenability to potential open pit mining methods. Table 10 and Figure 10 show the Mineral Resource Estimate at different U_3O_8 cut-off grades.

Table 10: Block model by grade

Cut-off	M tonnes	Grade ppm U_3O_8	M pounds	M Kilograms
100	7.59	324	5.42	2.46
150	6.79	347	5.20	2.36
175	6.13	367	4.96	2.25
200	5.39	392	4.66	2.11
300	2.99	508	3.35	1.52
500	1.03	755	1.72	0.78
1,000	0.15	1,253	0.41	0.18

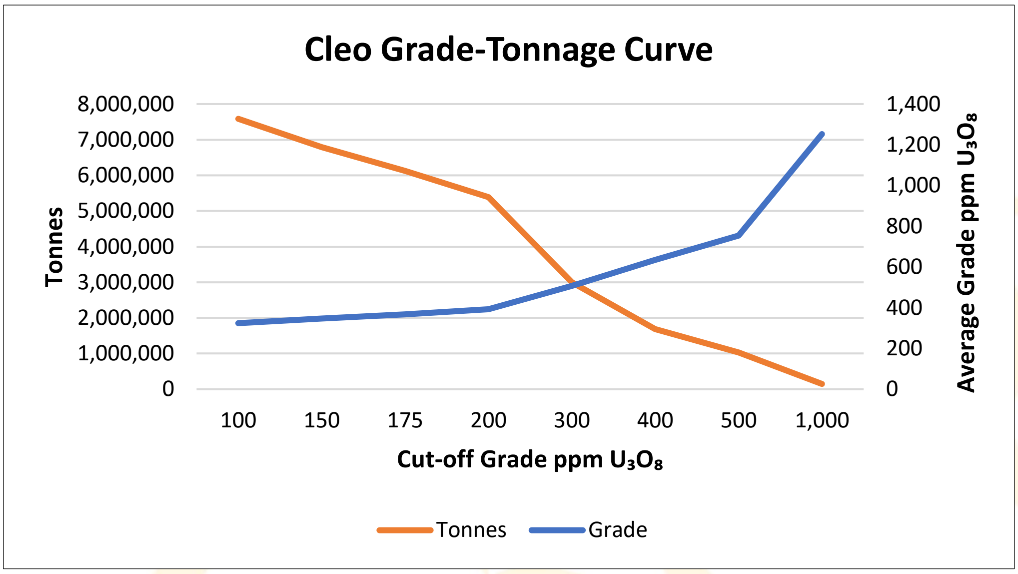

Figure 10: Cleo Grade Tonnage Curve

Mineral Resources Statement

The mineral resource estimate is classified as Inferred and is reported at a 150ppm U3O8 cut-off grade and conforming to the JORC (2012) guidelines.

Table 11: JORC (2012) Inferred Mineral Resource Estimate[2]

Estimate	M tonnes	Grade ppm U_3O_8	M pounds
Inferred	6.8	345	5.2

Mining and Metallurgical Considerations

No explicit mining or metallurgical inputs have been incorporated into the Cleo MRE.

[2] Numbers have been rounded to reflect Inferred classification

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. There are four project areas in the NT: Allamber, Woolgni, Shoobridge and Mt Davis. In additional Kingsland Minerals owns a nickel project at Lake Johnston in Western Australia. Kingsland's focus is on exploration and development of prospective uranium prospects at Allamber and Shoobridge in the Northern Territory. Following a successful listing on the ASX in June 2022 company details are as follows:

FOLLOW US ON TWITTER:
https://twitter.com/KingslandLtd

CAPITAL STRUCTURE
Shares on issue: 37,389,840.
Options on issue (KNGO) : 18,694,920.

MEDIA
Stewart Walters
Email: stewart@marketopen.com.au

SHAREHOLDER CONTACT
Bruno Seneque
Email: info@kingslandminerals.com.au
Tel: +61 8 9381 3820

BOARD OF DIRECTORS
Mal Randall: Non-Executive Chairman
Richard Maddocks: Managing Director
Bruno Seneque: Director/Company Secretary
Nicholas Revell: Non-Executive Director

Competent Persons Statement

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr David Princep, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Princep is an independent consultant employed by Gill Lane Consulting. Mr Princep 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'. Mr Princep consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Reference to Exploration Results is from the report entitled ' All Assay Results Received at Cleo – Grades up to 2.9% U_3O_8' released on 7 December 2022 and available to view on the Kingsland Minerals website, www.kingslandminerals.com.au or the ASX website www.asx.com.au under the ticker code KNG. 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.'

Table 12 Drill hole collar locations

Hole	East	North	Rl	Azimuth	Dip	Depth
CLRC001	177,673.30	8,498,328.12	111.22	221.00	-60.00	102.00
CLRC002	177,643.91	8,498,221.38	108.49	222.00	-60.00	102.00
CLRC003	177,684.75	8,498,208.50	103.85	221.00	-60.00	102.00
CLRC004	177,768.17	8,498,191.05	101.54	223.00	-60.00	72.00
CLRC005	177,789.00	8,498,147.00	105.54	222.00	-60.00	102.00
CLRC007	178,146.89	8,498,060.05	101.64	233.00	-60.00	108.00
CLRC008	178,071.47	8,497,993.51	104.43	233.00	-60.00	150.00
CLRC011	178,281.42	8,497,740.50	104.60	298.00	-60.00	168.00
CLRC013	178,261.49	8,497,698.52	106.37	303.00	-60.00	102.00
CLRC014	178,294.53	8,497,678.56	104.15	306.00	-60.00	102.00
CLRC015	178,252.58	8,497,664.04	106.96	303.00	-60.00	114.00
CLRC016	178,193.94	8,497,648.97	114.29	304.00	-60.00	102.00
CLRC017	178,236.41	8,497,650.58	108.32	303.00	-60.00	126.00
CLRC018	178,202.33	8,497,622.23	112.09	305.00	-60.00	120.00
CLRC019	178,194.34	8,497,605.07	112.97	303.00	-60.00	120.00
CLRC020	178,296.26	8,497,555.81	103.39	303.00	-60.00	102.00
CLRC021	178,261.32	8,497,550.52	105.90	303.00	-60.00	102.00
CLRC022	178,183.08	8,497,545.82	114.17	298.00	-60.00	90.00
CLRC024	178,187.68	8,497,506.93	113.86	303.00	-60.00	126.00
CLRC026	178,163.48	8,497,478.15	116.25	303.00	-60.00	60.00
CLRC029	178,193.76	8,497,463.07	113.09	303.00	-60.00	162.00
CLRC030	178,213.22	8,497,432.02	110.00	303.00	-60.00	102.00
CLRC031	178,204.14	8,497,159.17	99.91	273.00	-60.00	102.00
CLRC032	178,254.81	8,497,142.58	97.15	273.00	-60.00	114.00
CLRC033	178,220.84	8,497,100.44	98.23	273.00	-60.00	102.00
CLRC034	178,086.88	8,497,097.01	102.00	273.00	-60.00	108.00
CLRCD023	178,226.12	8,497,531.36	109.23	298.00	-60.00	149.00
CLRCD025	178,229.00	8,497,495.00	109.37	303.00	-60.00	176.00
CLRCD027	178,216.78	8,497,470.59	110.63	303.00	-60.00	182.78
CLRCD028	178,297.27	8,497,463.42	103.96	303.00	-60.00	229.00
DRC701	177,810.45	8,498,102.80	110.42	216.00	-60.00	60.00
DRC702	177,827.64	8,498,115.19	108.77	216.00	-60.00	60.00
DRC703	177,767.87	8,498,129.97	109.77	216.00	-60.00	60.00
DRC704	177,780.71	8,498,143.42	106.80	216.00	-60.00	60.00
DRC705	177,795.70	8,498,157.99	105.00	216.00	-60.00	53.00
DRC706	177,726.56	8,498,141.65	105.71	216.00	-60.00	44.00
DRC707	177,740.45	8,498,157.32	104.65	216.00	-60.00	60.00
DRC708	177,754.41	8,498,167.46	103.60	216.00	-60.00	60.00
DRC709	177,701.29	8,498,170.13	102.00	216.00	-60.00	0.00
DRC710	177,713.06	8,498,182.46	102.00	216.00	-60.00	0.00
DRC711	177,723.70	8,498,198.09	101.57	216.00	-60.00	0.00
DRC712	177,651.39	8,498,176.17	106.00	216.00	-60.00	60.00
DRC713	177,664.21	8,498,190.72	105.34	216.00	-60.00	60.00

Hole	East	North	Rl	Azimuth	Dip	Depth
DRC714	177,678.09	8,498,207.50	104.66	216.00	-60.00	60.00
DRC715	177,686.52	8,498,226.43	104.38	216.00	-60.00	60.00
DRC716	177,618.51	8,498,206.77	111.78	216.00	-60.00	60.00
DRC717	177,632.44	8,498,219.13	110.44	216.00	-60.00	42.00
DRC718	177,646.34	8,498,234.80	109.27	216.00	-60.00	60.00
DRC719	177,659.15	8,498,250.46	108.28	216.00	-60.00	60.00
DRC720	177,568.60	8,498,212.81	116.68	216.00	-60.00	60.00
DRC721	177,581.47	8,498,224.04	116.45	216.00	-60.00	60.00
DRC722	177,595.38	8,498,237.50	116.11	216.00	-60.00	60.00
DRC723	177,607.12	8,498,252.04	115.57	216.00	-60.00	60.00
DRC724	177,616.75	8,498,262.12	114.56	216.00	-60.00	60.00
DRC725	177,631.73	8,498,277.81	113.20	216.00	-60.00	60.00
DRC726	177,495.16	8,498,194.19	119.72	216.00	-60.00	60.00
DRC727	177,508.01	8,498,206.53	120.54	216.00	-60.00	60.00
DRC728	177,522.97	8,498,223.33	121.78	216.00	-60.00	60.00
DRC729	177,535.78	8,498,238.99	122.65	216.00	-60.00	60.00
DRC730	177,548.60	8,498,253.54	123.62	216.00	-60.00	60.00
DRC731	177,496.62	8,498,251.80	126.72	216.00	-60.00	57.00
DRC732	177,506.20	8,498,266.31	128.23	216.00	-60.00	60.00
DRC733	177,524.44	8,498,280.93	128.76	216.00	-60.00	60.00
DRC734	177,768.32	8,498,182.02	102.21	216.00	-60.00	60.00
DRC735	177,785.51	8,498,193.31	102.00	216.00	-60.00	60.00
TAL001RC	177,719.90	8,498,429.60	108.41	210.00	-60.00	110.00
TAL002RC	177,479.59	8,498,395.66	148.30	276.00	-60.00	108.00
TAL003RC	177,719.62	8,498,399.59	108.57	273.00	-60.00	132.00
TAL004RC	177,599.92	8,498,549.73	114.36	209.00	-60.00	67.00
TAL005RC	177,849.69	8,498,029.75	115.23	240.00	-60.00	133.00
TAL006RC	178,090.00	8,497,779.53	123.35	120.00	-60.00	82.00
TAL007RC	178,113.69	8,497,667.08	135.34	120.00	-60.00	61.00
TAL008RC	178,251.57	8,497,145.40	97.38	270.00	-60.00	121.00
TAL009RC	178,058.13	8,497,203.61	111.00	90.00	-60.00	79.00
TAL010RC	178,038.08	8,497,204.15	110.96	90.00	-60.00	139.00
TAL011RC	178,064.78	8,497,093.73	102.99	120.00	-60.00	121.00
TAL012RC	178,168.12	8,497,121.35	99.53	120.00	-60.00	139.00
TAL013RC	178,137.38	8,497,518.64	124.09	120.00	-60.00	61.00
TAL014RC	177,798.69	8,497,992.47	117.21	3.00	-60.00	73.00
TAL015RC	177,703.83	8,498,388.21	110.10	323.00	-60.00	93.00
TAL018RC	178,004.49	8,498,092.99	104.61	140.00	-60.00	169.00
TAL019RC	178,282.75	8,497,306.80	100.63	270.00	-60.00	100.00
TAL020RC	178,268.03	8,497,181.48	97.33	270.00	-60.00	27.00
TAL021RC	178,280.10	8,497,079.74	95.00	270.00	-60.00	60.00
TAL022RC	178,301.76	8,497,080.01	94.31	270.00	-60.00	26.00
TAL023RC	178,185.09	8,496,964.52	94.75	360.00	-60.00	70.00
TAL024RC	177,997.78	8,497,133.89	106.55	90.00	-60.00	123.00
TAL025RC	178,046.18	8,497,162.16	109.49	90.00	-60.00	108.00
TAL026RC	178,060.16	8,497,259.79	112.32	90.00	-60.00	73.00
TAL027RC	177,905.76	8,497,305.52	109.67	270.00	-60.00	110.00

Hole	East	North	Rl	Azimuth	Dip	Depth
TAL028RC	177,894.54	8,497,337.50	109.27	270.00	-60.00	110.00
TAL029RC	177,979.48	8,497,123.70	105.50	90.00	-60.00	115.00
TAL030RC	178,024.08	8,497,020.14	100.48	90.00	-60.00	54.00
TAL031RC	177,995.92	8,497,019.80	101.05	90.00	-60.00	60.00
TAL032RC	178,122.19	8,497,503.07	123.30	90.00	-60.00	60.00
TAL033RC	178,110.73	8,497,465.27	121.95	90.00	-60.00	150.00
TAL034RC	178,103.72	8,497,418.68	119.56	90.00	-60.00	102.00
TAL035RC	178,039.41	8,497,184.23	110.36	90.00	-60.00	150.00
TAL037RC	178,020.05	8,497,137.04	107.61	270.00	-60.00	108.00
TAL047RC	177,972.98	8,497,150.97	104.72	120.00	-60.00	139.00
TAL048RC	177,986.02	8,497,174.05	105.49	90.00	-61.00	115.00
TAL049RC	178,031.98	8,497,135.97	107.79	90.00	-58.00	151.00
TAL050RC	177,794.01	8,497,018.00	97.62	90.00	-59.00	97.00
TAL051RC	178,016.99	8,497,104.00	105.05	90.00	-58.00	127.00
TAL052RC	178,108.07	8,497,052.95	98.61	120.00	-63.00	97.00
TAL053RC	178,177.01	8,497,493.99	115.00	300.00	-63.00	139.00
TAL054RC	178,277.99	8,498,578.05	104.39	270.00	-57.00	133.00
TAL055RC	177,128.07	8,498,418.94	129.48	220.00	-60.00	73.00
TAL062RC	178,195.08	8,497,478.04	113.10	300.00	-60.00	160.00
TAL063RC	178,205.04	8,497,514.04	111.91	300.00	-60.00	148.00
TAL064RC	178,160.02	8,497,457.02	116.04	300.00	-60.00	136.00
TAL078RC	178,252.44	8,497,571.10	105.88	306.00	-60.00	174.00
TAL079RC	178,226.22	8,497,589.60	108.95	306.00	-60.00	109.00
TAL080RC	178,224.38	8,497,563.00	109.07	303.00	-60.00	144.00
TAL107RC	178,223.61	8,497,626.12	109.26	307.00	-60.00	126.00
TAL108RC	178,184.67	8,497,442.92	113.26	307.00	-60.00	138.00
TAL109RC	177,988.09	8,497,128.23	106.00	67.00	-60.00	60.00
TAL138RC	178,290.03	8,497,598.13	103.74	300.00	-60.00	300.00
TAL139RC	178,273.92	8,497,675.46	105.48	300.00	-60.00	200.00
TRC701	178,075.00	8,497,055.00	100.31	268.00	-60.00	59.00
TRC702	178,104.00	8,497,050.00	98.74	268.00	-60.00	60.00
TRC703	178,055.00	8,497,075.00	102.19	268.00	-60.00	60.00
TRC704	178,075.00	8,497,075.00	101.40	268.00	-60.00	60.00
TRC705	178,095.00	8,497,075.00	100.33	268.00	-60.00	60.00
TRC706	178,055.00	8,497,095.00	103.45	268.00	-60.00	60.00
TRC707	178,075.00	8,497,095.00	102.52	268.00	-60.00	60.00
TRC708	178,095.00	8,497,095.00	101.32	268.00	-60.00	60.00
TRC709	178,115.00	8,497,095.00	99.98	268.00	-60.00	60.00
TRC710	178,055.00	8,497,135.00	107.00	268.00	-60.00	60.00
TRC711	178,075.00	8,497,135.00	105.36	268.00	-60.00	60.00
TRC712	178,095.00	8,497,135.00	103.10	268.00	-60.00	60.00
TRC713	178,115.00	8,497,135.00	101.80	268.00	-60.00	60.00
TRC714	178,070.00	8,497,175.00	110.00	268.00	-60.00	60.00
TRC715	178,095.00	8,497,175.00	106.36	268.00	-60.00	60.00
TRC716	178,115.00	8,497,175.00	104.21	268.00	-60.00	60.00
TRC717	178,135.00	8,497,175.00	102.75	268.00	-60.00	60.00
TRC718	178,155.00	8,497,175.00	101.72	268.00	-60.00	60.00

Hole	East	North	Rl	Azimuth	Dip	Depth
TRC719	178,065.00	8,497,215.00	111.45	268.00	-60.00	60.00
TRC720	178,080.00	8,497,215.00	110.24	268.00	-60.00	60.00
TRC721	178,100.00	8,497,215.00	107.59	268.00	-60.00	60.00
TRC722	178,115.00	8,497,215.00	105.77	268.00	-60.00	60.00
TRC723	178,135.00	8,497,215.00	103.96	268.00	-60.00	60.00
TRC724	178,155.00	8,497,215.00	103.36	268.00	-60.00	60.00
TRC725	178,175.00	8,497,215.00	103.19	268.00	-60.00	60.00
TRC726	178,195.00	8,497,215.00	102.84	268.00	-60.00	60.00
TRC727	178,215.00	8,497,215.00	101.96	268.00	-60.00	60.00
TRC728	178,195.00	8,497,255.00	104.82	268.00	-60.00	60.00
TRC729	178,215.00	8,497,255.00	103.02	268.00	-60.00	60.00
TRC730	178,235.00	8,497,255.00	101.65	268.00	-60.00	60.00
TRC731	178,175.00	8,497,175.00	101.24	268.00	-60.00	60.00
TRC732	178,195.00	8,497,175.00	101.00	268.00	-60.00	60.00
TRC733	178,215.00	8,497,175.00	100.28	268.00	-60.00	60.00
TRC734	178,235.00	8,497,175.00	98.99	268.00	-60.00	60.00
TRC735	178,175.00	8,497,135.00	99.92	268.00	-60.00	60.00
TRC736	178,195.00	8,497,135.00	99.56	268.00	-60.00	60.00
TRC737	178,215.00	8,497,135.00	99.00	268.00	-60.00	60.00
TRC738	178,235.00	8,497,135.00	98.26	268.00	-60.00	60.00
TRC739	178,175.00	8,497,095.00	98.63	268.00	-60.00	60.00
TRC740	178,195.00	8,497,095.00	98.55	268.00	-60.00	60.00
TRC741	178,215.00	8,497,095.00	98.21	268.00	-60.00	60.00
TRC742	178,235.00	8,497,095.00	98.00	268.00	-60.00	60.00
TRC743	178,195.00	8,497,055.00	97.45	268.00	-60.00	60.00
TRC744	178,215.00	8,497,055.00	97.87	268.00	-60.00	60.00
TRC745	178,235.00	8,497,215.00	100.21	268.00	-60.00	60.00
TRC746	178,235.00	8,497,295.00	103.29	268.00	-60.00	60.00
TRC747	178,255.00	8,497,295.00	101.64	268.00	-60.00	60.00
TRC748	178,141.00	8,497,645.00	124.43	268.00	-60.00	60.00
TRC749	178,148.00	8,497,669.00	122.92	268.00	-60.00	60.00
TRC753	178,149.00	8,497,754.00	121.98	268.00	-60.00	60.00
TRC754	178,138.00	8,497,777.00	121.17	268.00	-60.00	60.00
TRC755	178,138.00	8,497,777.00	121.17	260.00	-60.00	80.00
TRC756	178,138.00	8,497,777.00	121.17	270.00	-60.00	80.00
TWDDH001	178,248.81	8,497,069.40	98.21	270.00	-75.00	236.00

Table 13: Significant Kingsland Minerals Drilling Intersections

Hole	From		To	Width	U_3O_8 ppm
CLRC001		34	35	1	218
		46	47	1	319
		53	**62**	**9**	**745**
	incl	**53**	**56**	**3**	**1,519**
		65	66	1	126
		69	71	2	355
		75	76	1	100
		86	89	3	331
CLRC002		**22**	**42**	**20**	**309**
	incl	**40**	**41**	**1**	**1,340**
		45	47	2	130
		54	65	11	102
		68	74	6	136
		81	82	1	192
		85	87	2	201
		91	92	1	107
CLRC003		24	25	1	336
		28	30	2	219
		33	37	4	334
		41	**59**	**18**	**396**
	incl	**51**	**52**	**1**	**1,345**
		68	72	4	160
		75	87	12	152
		91	102	11	415
	incl	92	93	1	1,667
	and	100	101	1	1,153
CLRC004		30	35	5	127
		38	39	1	617
		44	55	11	291
		60	72	12	247
CLRC005		21	27	6	467
		61	62	1	180
		66	69	3	177
CLRC007		47	53	6	250
		59	60	1	223
		69	**72**	**3**	**830**
	incl	**70**	**71**	**1**	**2,211**
		76	78	2	186
		82	83	1	145
		101	104	3	145
CLRC008		20	29	9	288
	incl	24	25	1	1,321

Hole		From	To	Width	U_3O_8 ppm
CLRC011		162	164	2	271
CLRC013		14	20	6	185
		64	72	8	307
		79	83	4	238
CLRC014					NSI
CLRC015		48	52	4	127
		62	**108**	**46**	**535**
	incl	**69**	**70**	**1**	**1,076**
	and	**77**	**79**	**2**	**1,958**
	and	**90**	**95**	**5**	**1,984**
	and	**91**	**92**	**1**	**4,394**
CLRC016		44	45	1	145
		48	52	4	456
		85	101	16	158
CLRC017		8	16	8	351
		19	20	1	117
		24	25	1	174
		31	32	1	242
		36	45	9	462
	incl	**41**	**42**	**1**	**1,160**
		53	**100**	**47**	**924**
	incl	**53**	**54**	**1**	**1,777**
	and	**62**	**76**	**14**	**1,772**
	incl	**64**	**65**	**1**	**3,800**
	and	**91**	**94**	**3**	**1,575**
		103	114	9	138
		118	126	8	243
CLRC018		7	12	5	163
		28	31	3	170
		38	39	1	175
		45	46	1	150
		51	57	6	149
		60	**71**	**11**	**325**
	incl	**61**	**62**	**1**	**1,521**
		103	105	2	142
		110	113	3	177
		119	120	1	122
CLRC019		15	21	6	157
		30	31	1	119
		38	50	12	158
		60	**95**	**35**	**556**
	incl	**62**	**69**	**7**	**2,059**
	and	**62**	**63**	**1**	**10,172**
	and	**68**	**69**	**1**	**2,002**
CLRC020					NSI
CLRC021					NSI

Hole		From	To	Width	U_3O_8 ppm
CLRC022		34	35	1	215
		38	40	2	139
		54	57	3	670
		61	**82**	**21**	**471**
	incl	**67**	**68**	**1**	**1,622**
	incl	**74**	**75**	**1**	**1,971**
	incl	**79**	**80**	**1**	**1,234**
CLRCD023		36	38	2	376
		46	**55**	**9**	**336**
		58	60	2	195
		115.86	**132**	**16.14**	**1,435**
	incl	**120.63**	**121**	**0.37**	**29,197**
	incl	**127**	**130.68**	**3.68**	**2,160**
		135	136	1	113
		137	138	1	122
		142.4	143.57	1.17	113
CLRC024		44	45	1	155
		47	48	1	394
		51	**65**	**14**	**380**
	incl	**54**	**55**	**1**	**2,411**
	incl	**57**	**58**	**1**	**1,377**
		61	65	4	138
		68	**78**	**10**	**570**
	incl	**68**	**69**	**1**	**3,472**
		84	**104**	**20**	**299**
	incl	**88**	**89**	**1**	**1,877**
CLRCD025		64	79	15	235
		83	84	1	171
		139	139.64	0.64	131
		158.3	159	0.7	219
		175	176	1	112
CLRC026		22	40	18	341
		43	54	11	134
CLRCD027		88	89	1	110
		97	100	3	544
	incl	**99**	**100**	**1**	**1,140**
		105	106	1	642
		108.58	112.3	3.72	476
	incl	**110.9**	**111.17**	**0.27**	**2,874**
		120	122	2	392
		147	150	3	624
	incl	**147**	**147.87**	**0.87**	**1,778**
		165.8	**167**	**1.2**	**1,065**
		181	181.64	0.64	137
CLRCD028		149	166	17	200
		170	171	1	117

Hole		From	To	Width	U_3O_8 ppm
		174	175	1	107
		177.43	177.64	0.21	1,887
		181	**213.2**	**32.2**	**220**
	incl	**184**	**184.22**	**0.22**	**2,057**
		185.23	**185.35**	**0.12**	**3,902**
CLRC029		70	71	1	198
		74	77	3	534
	incl	75	76	1	1,216
		82	83	1	102
		90	**110**	**20**	**252**
	incl	**96**	**97**	**1**	**1,434**
		118	**149**	**31**	**962**
	incl	**131**	**141**	**10**	**2,134**
	incl	**132**	**134**	**2**	**4,280**
		152	**162**	**10**	**249**
CLRC030					**NSI**
CLRC031		1	7	7	189
		28	31	3	198
		34	40	6	205
		44	45	1	150
		51	52	1	258
		60	62	2	207
CLRC032		72	73	1	250
		76	**93**	**17**	**544**
	incl	**80**	**81**	**1**	**2,700**
	and	**91**	**92**	**1**	**3,643**
		96	97	1	159
		111	113	2	350
CLRC033		11	12	1	174
		22	**36**	**14**	**603**
	incl	**24**	**25**	**1**	**5,467**
		41	42	1	162
		52	**54**	**2**	**983**
	incl	**52**	**53**	**1**	**1,491**
		60	69	9	236
		91	95	4	327
CLRC034		18	28	10	222
		32	**46**	**14**	**300**
		49	51	2	282
		54	57	3	159
		63	65	2	302
		98	100	2	121
DRC701		28	32	4	700
	inc	29	31	2	1,085
	and	35	36	1	500
DRC702		40	48	8	184

Hole		From	To	Width	U_3O_8 ppm
DRC704		10	15	5	210
	and	18	20	2	125
	and	23	37	14	1,132
	inc	23	29	6	2,433
	and	42	44	2	163
	and	50	59	9	220
DRC705		23	29	6	189
DRC706		21	23	2	151
DRC708		7	9	2	168
	and	15	34	19	179
	and	49	52	3	543
DRC709		20	24	4	133
DRC712		37	41	4	240
	inc	39	40	1	522
	and	54	60	6	141
DRC713		39	45	6	171
		57	60	3	329
	inc	59	60	1	602
DRC714		25	41	16	680
	inc	25	32	7	1,317
DRC714		49	53	4	649
DRC715		49	52	3	384
		57	59	2	409
DRC716		41	48	17	128
DRC717		29	42	13	303
	inc	30	34	4	687
DRC718		36	59	23	299
DRC722		19	28	9	149
	and	40	56	16	291
DRC723		38	43	5	298
DRC724		47	60	13	202
DRC726		26	35	9	318
	inc	30	33	3	673
DRC727		26	28	2	746
DRC732		31	34	3	177
DRC734		25	29	4	136
	and	40	42	2	539
	and	46	55	9	237
	inc	46	47	1	1,111
TRC701		1	7	6	134
TRC705		31	39	8	107
		49	55	6	160
TRC707		8	19	11	133
	and	32	35	3	156

Hole	From		To	Width	U_3O_8 ppm
	and	52	55	3	213
TRC708		2	5	3	109
	and	32	60	28	601
	inc	32	42	10	1,263
TRC712		4	11	7	156
TRC713		32	36	4	242
		47	50	5	413
TRC716		0	10	10	201
		28	32	4	367
		52	56	4	290
TRC718		0	19	19	228
TRC721		22	26	4	196
TRC722		26	36	10	134
		40	60	20	532
	inc	51	57	6	1,133
TRC730		42	47	5	1,035
	inc	45	47	2	2,201
TRC734		47	54	7	673
	inc	47	50	3	1,214
TRC735		44	47	3	728
		54	57	3	314
TRC736		16	31	15	205
TRC737		23	31	8	577
	inc	23	25	2	859
		45	48	3	722
TRC738		30	53	23	635
	inc	37	43	6	1,372
TRC739		19	22	3	150
		33	38	5	656
		43	48	5	414
TRC740		17	29	12	171
		39	48	9	206
		54	59	5	167
TRC741		39	47	8	350
		51	58	7	255
TRC744		30	33	3	239
		50	51	1	933
TRC746		44	46	2	148
TRC748		0	14	14	272
TRC749		9	16	7	130
TRC754		21	28	7	355
TAL013RC		30	39	**9**	**498**
TAL032RC		43	51	**8**	**474**
TAL033RC		77	89	**12**	**727**

Hole	From		To	Width	U_3O_8 ppm
	inc	88	89	**1**	**3,927**
		108	113	**5**	**614**
TAL053RC		61	99	**38**	**527**
	inc	78	87	**9**	**1,457**
TAL062RC		97	139	**42**	**611**
	inc	99	107	**8**	**1,579**
	and	124	127	**3**	**1,347**
TAL063RC		77	98	**21**	**682**
	inc	88	97	**9**	**1,055**
TAL064RC		50	86	**36**	**234**
	inc	76	79	**3**	**912**
TAL078RC		98	117	**19**	**829**
	inc	98	102	**4**	**2,857**
TAL079RC		86	109	**23**	**1,318**
	inc	102	107	**5**	**3,169**
TAL080RC		96	119	**23**	**300**
	inc	96	102	**6**	**616**
TAL0107RC		58	107	**49**	**787**
	inc	78	95	**17**	**1,286**
TAL0108RC		70	88	**18**	**932**
	inc	82	86	**4**	**2,600**
		123	136	**13**	**251**

JORC Tables

Section 1: Sampling Techniques and Data Cleo

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.*	• 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

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	that additional processing be completed in order to derive a more reasonable radiometric grade.
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.*	• A QAQC program of standards and duplicates was submitted with the drill samples.

Criteria	JORC Code explanation	Commentary
	• *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No twinned sample locations have been completed. • No QAQC issues have been identified to 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*	• The Cleo Project is located on tenement EL 31960, which was granted in March 2019 and is valid until March 2025. This

Criteria	JORC Code explanation	Commentary
	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 security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.*	tenement is 100% owned by Kingsland Minerals Ltd. There are no known encumbrances to conducting exploration on this tenement.
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

Criteria	JORC Code explanation	Commentary
		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 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.*
		• Drilling information is included in the 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*	• All received results to date have been reported. • Drill holes completed by Atom and Thundelarra were surveyed by GHD

Criteria	JORC Code explanation	Commentary
	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 reporting of Exploration Results.*	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.
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'
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 and this is expected to be completed as funds allow. • 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.*	