

7 December 2022

# All Assay Results Received - Cleo Uranium Project, NT Grades up to 2.9% U<sub>3</sub>O<sub>8</sub>

# <u>Highlights</u>

- All assay results from maiden drilling campaign received.
- Significant results from program include:
  - o 16m @ 1,435 ppm U<sub>3</sub>O<sub>8</sub> (CLRCD023 from 116m)
    - including 0.4m @ 29,197 ppm (2.9%) U<sub>3</sub>O<sub>8</sub>
  - o 47m @ 924 ppm U<sub>3</sub>O<sub>8</sub> (CLRC017 from 53m)
    - including 14m @ 1,772 ppm (0.18%) U<sub>3</sub>O<sub>8</sub>
  - o 31m @ 962 ppm U<sub>3</sub>O<sub>8</sub> (CLRC029 from 118m)
    - including 10m @ 2,134 ppm (0.21%) U<sub>3</sub>O<sub>8</sub>
  - **46m @ 535 ppm** U<sub>3</sub>O<sub>8</sub> (CLRC015 from 62m)
    - including 5m @ 1,984 ppm (0.20%) U<sub>3</sub>O<sub>8</sub>
  - $\circ$  **35m** @ **556 ppm** U<sub>3</sub>O<sub>8</sub> (CLRC019 from 60m)
    - Including 7m @ 2,059 ppm (0.21%) including 1m @ 10,172 ppm (1.02%) U<sub>3</sub>O<sub>8</sub>
- Mineralisation remains open along strike and at depth.
- Plannin<mark>g f</mark>or future drilling programs commenced.

Kingsland Minerals Ltd (ASX:KNG) (Kingsland or Company) is pleased to announce that all assay results from the maiden drilling program at the Cleo Uranium Project have been received.

A total of 30 holes with 3,228m of Reverse Circulation (RC) drilling and 450 meters of diamond core drilling has been completed. The rigs have demobilised from site and site rehabilitation works are well advanced. The drilling campaign achieved its objectives of confirming historical drilling

intersections, providing additional information and data for a more detailed geological interpretation and extending known mineralisation along strike and at depth.

The completion of Kingsland Minerals' maiden drilling program and the receipt of all assays from the recent drilling has enabled a re-interpretation of geology and geological controls of uranium mineralisation to commence. This is a pre-cursor to planning additional drilling next year leading to a Mineral Resource Estimate later in 2023. Table 1 presents a summary of significant drilling intersections from the recent KNG drilling and historic drilling. A feature of these intersections are the broad zones of mineralisation with higher grade zones within them.

| Hole                    | from   | to                | width | U3O8 ppm             |
|-------------------------|--------|-------------------|-------|----------------------|
| CLRC017                 | 53     | 100               | 47    | 924                  |
| incl                    | 62     | 76                | 14    | 1,772                |
| TAL0107RC               | 58     | 107               | 49    | 787                  |
| incl                    | 78     | 95                | 17    | 1,286                |
| CLRC029                 | 118    | 161               | 43    | 751                  |
| incl                    | 131    | 141               | 10 🦯  | 2,134                |
| TAL079RC                | 86     | 109               | 23    | 1,318                |
| incl                    | 102    | 107               | 5     | 3,169                |
| TAL <mark>062R</mark> C | 97     | 139               | 42    | 611                  |
| inc                     | 99     | 107               | 8     | 1,579                |
| CLRC015                 | 62     | 108               | 46    | 535                  |
| incl                    | 69     | 70                | 1     | 1,076                |
| incl                    | 77     | 79                | 2     | 1,958                |
| incl                    | 90     | 9 <mark>5</mark>  | 5     | 1,984                |
| incl                    | 91     | 9 <mark>2</mark>  | 1     | <mark>4,</mark> 394  |
| CLRCD023                | 115.86 | 13 <mark>2</mark> | 16.14 | 1 <mark>,</mark> 435 |
| incl                    | 120.63 | 121               | 0.37  | 29,197               |
| incl                    | 127    | 130.68            | 3.68  | 2,160                |
| TAL053RC                | 61     | 99                | 38    | 527                  |
| incl                    | 78     | 87                | 9     | 1,457                |
| CLRC019                 | 60     | 95                | 35    | 556                  |
| incl                    | 62     | 69                | 7     | 2,059                |
| incl                    | 62     | 63                | 1     | 10,172               |
| incl                    | 68     | 69                | 1     | 2,002                |
| TAL0108RC               | 70     | 88                | 18    | 932                  |
| incl                    | 82     | 86                | 4     | 2,600                |
| TAL078RC                | 98     | 117               | 19    | 829                  |
| incl                    | 98     | 102               | 4     | 2,857                |
| TAL063RC                | 77     | 98                | 21    | 682                  |
| incl                    | 88     | 97                | 9     | 1,055                |
| CLRC022                 | 61     | 82                | 21    | 471                  |
| incl                    | 67     | 68                | 1     | 1,622                |
| incl                    | 74     | 75                | 1     | 1,971                |
| incl                    | 79     | 80                | 1     | 1,234                |

 Table 1: Significant Drill Intersections from current and historic drilling

Results reported at a cut-off grade of 100ppm  $U_3O_8$  with a maximum of 2m contiguous internal dilution

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.

Table 2 shows the mineralised interval in diamond drill hole CLRCD023 and Figures 1 and 2 illustrate the mineralisation in hole CLRCD023. The samples were assayed for uranium and this has been converted to  $U_3O_8$  by applying a factor of 1.179.

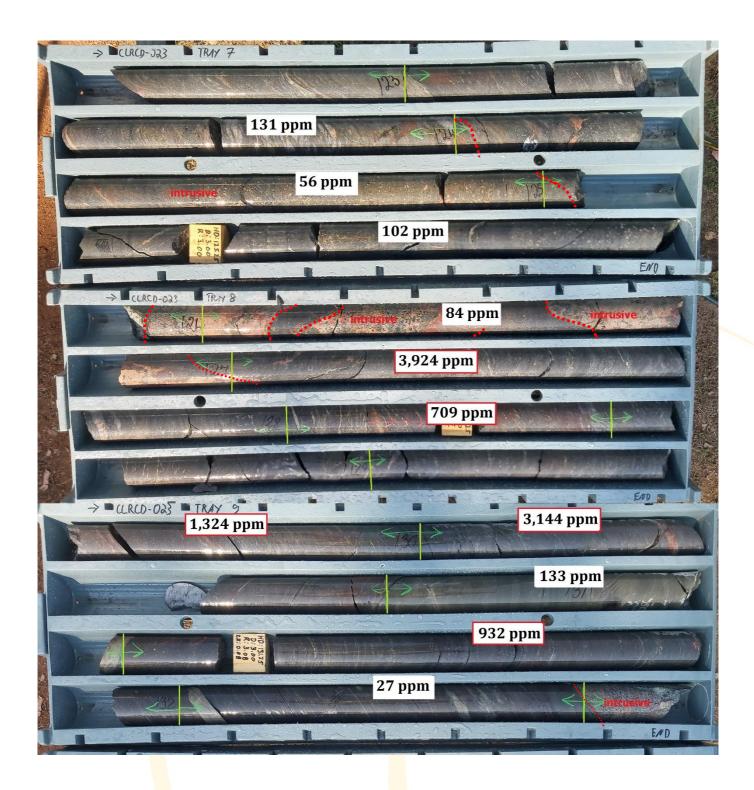
|              |                      |                      |                      |        | U₃O <sub>8</sub> |
|--------------|----------------------|----------------------|----------------------|--------|------------------|
| Hole         | From                 | То                   | Width                | U ppm  | ppm              |
| CLRCD023     | 114                  | 115.05               | 1.05                 | 76     | 90               |
| CLRCD023     | <mark>115</mark> .05 | 115.48               | 0.43                 | 39     | 46               |
| CLRCD023     | 115.48               | 115. <mark>86</mark> | 0.38                 | 29     | 34               |
| CLRCD023     | 115.86               | 116.6                | 0.74                 | 184    | 217              |
| CLRCD023     | 116.6                | 117                  | 0.40                 | 4,409  | 5,198            |
| CLRCD023     | 117                  | 117.62               | 0.62                 | 64     | 75               |
| CLRCD023     | 117.62               | 118.55               | 0.93                 | 40     | 47               |
| CLRCD023     | 118.55               | 119                  | 0.45                 | 191    | 225              |
| CLRCD023     | 119                  | 120                  | 1.00                 | 78     | 92               |
| CLRCD023     | 120                  | 120.63               | 0.63                 | 595    | 702              |
| CLRCD023     | 120.63               | 121                  | 0.37                 | 24,764 | 29,197           |
| CLRCD023     | 121                  | 122                  | 1.00                 | 94     | 111              |
| CLRCD023     | 122                  | 123                  | 1.00                 | 119    | 141              |
| CLRCD023     | 123                  | 124                  | 1.00                 | 111    | 131              |
| CLRCD023     | 124                  | 125                  | 1.00                 | 47     | 56               |
| CLRCD023     | 125                  | 126                  | 1.00                 | 87     | 102              |
| CLRCD023     | 126                  | 127                  | 1.00                 | 71     | 84               |
| CLRCD023     | 127                  | 128                  | 1.00                 | 3,329  | 3,924            |
| CLRCD023     | 128                  | 128.45               | 0.45                 | 602    | 709              |
| CLRCD023     | 128.45               | 129                  | 0.55                 | 298    | 351              |
| CLRCD023     | 129                  | 130                  | 1.00                 | 1,165  | 1,374            |
| CLRCD023     | 130                  | 130.68               | 0.68                 | 2,666  | 3,144            |
| CLRCD023     | 130.68               | 131.2                | 0.52                 | 113    | 133              |
| CLRCD023     | 131.2                | 132                  | 0.80                 | 791    | 932              |
| CLRCD023     | 132                  | 132.63               | <mark>0.</mark> 63   | 23     | 27               |
| Intersection | 115.86               | 132                  | 1 <mark>6.1</mark> 4 | 1,217  | 1,435            |

Table 2: Assay Results CLRCD023

The core photos in Figures 1 and 2 show the assay results and the location of intrusives (denoted by red dashed lines). There are a series of intrusives around 113m to 115m and then from 124m to 127m. Meter marks are written on the core. There is also an intrusive in tray 9 starting at 132.6m. Significant mineralisation is generally bordered by these intrusives with higher grade mineralisation contained in the graphitic schists.



Figure 1: Hole CRRCD023 Trays 4 to 6 (112.8m to 122.4m)



*Figure 2: Hole CLRCD023 Trays 7 to 9 (122.4m to 132.7m)* 

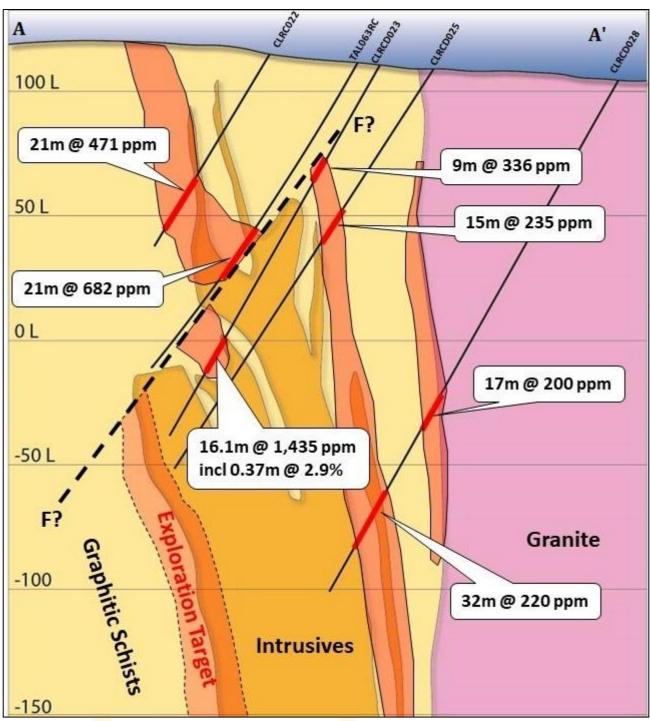


*Figure 3: Hole CLRCD023* 120.63*m* – 121.0*m* 2.92% *U*<sub>3</sub>0<sub>8</sub>

Figure 3 shows a close up of hole CLRCD023 120.63m – 121.0m. This interval assayed 29,197 ppm  $U_3O_8$  or 2.92%. Within the red coloured interval are several areas of very dark mineralisation. This has been identified in this hand specimen as likely being Uraninite (UO<sub>2</sub>). Uraninite, also known as pitchblende, is a significant ore of uranium. The red-orange material is likely various weathering products of uraninite containing other uranium oxides.

Higher grade mineralisation is also found in some intrusives. Figure 4 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 Figure 4. A target also exists for future exploration on the south-eastern or hanging-wall contact as shown in Figure 4.

Figure 5 is a plan view showing geology and Kingsland Minerals significant drill results. All the results are based on 1m assays. The focus for future exploration drilling is highlighted by the red dashed lines. These are areas with little or no previous drilling that represent excellent potential for extensions of the uranium mineralisation.



**Figure 4: Cross section A-A' showing mineralisation and geology** 

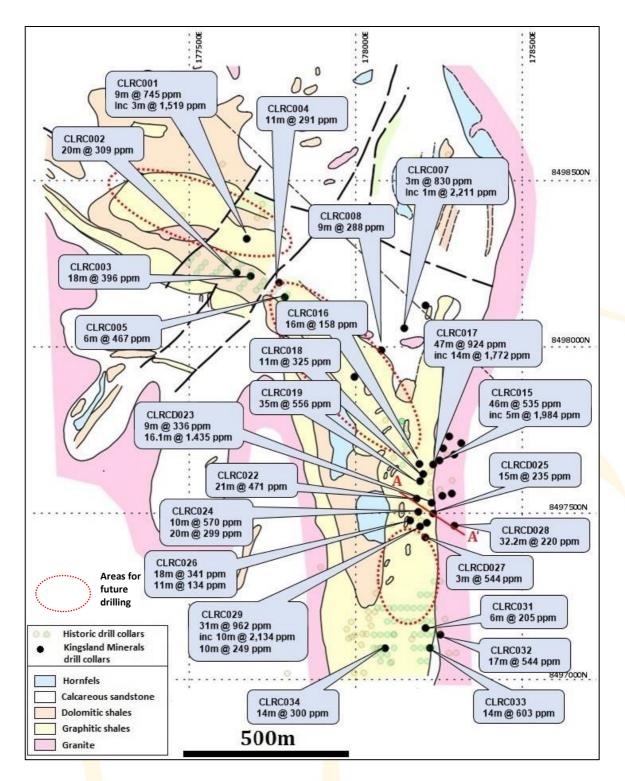


Figure 5: Plan o<mark>f C</mark>leo Uranium Project Drilling s<mark>ho</mark>wing U₃O₃ grades, intervals and location of cross se<mark>cti</mark>on

Table 3 shows all assay intersections at a cut-off grade of 100 ppm  $U_3O_8$ . A maximum of two meters of contiguous internal dilution is included in the reported intervals. Widths are reported as downhole widths. The true thickness is expected to be approximately 70%-80% of the downhole width although the exact orientation of the mineralisation is yet to be determined. Table 4 presents full collar details of the current RC drilling program.

Hole Width From То U₃O<sub>8</sub> ppm **CLRC001** incl 1,519 **CLRC002** incl 1,340 **CLRC003** <mark>30</mark> 1,345 incl incl 1,667 and 1,153 CLRC004 CLRC005 CLRC007 incl 2,211 CLRC008 incl 1,321

Table 3: Cleo Uranium Project RC Drillhole Intervals >100 ppm U<sub>3</sub>O<sub>8</sub>

| Hole    | F    | rom       | То        | Width | U₃O <sub>8</sub> 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  | <b>91</b> | 94        | 3     | 1,575                |
|         |      | 103       | 114       | 9     | 138                  |
| CLRC018 |      | 118<br>7  | 126<br>12 | 8     | 243<br>163           |
| CLRCUIO |      | 28        | 31        | 3     | 103                  |
|         |      | 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       | F    | rom    | То              | Width               | U₃O₅ 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      |
| 01.102 010 |      | 46     | 55              | 9                   | 336      |
|            |      | 58     | 60              | 2                   | 195      |
|            |      | 115.86 | 132             | 16.14               | 1,435    |
|            | incl | 120.63 | 121             | 0.37                | 29,197   |
|            | incl | 120:05 | 130.68          | 3.68                | 2,160    |
|            | inci | 135    | 136             | 1                   | 113      |
|            |      | 135    | 130             | 1                   | 113      |
|            |      | 142.4  | 143.57          | 1.17                | 113      |
| CLRC024    |      | 44     | 45              | 1.17                | 115      |
| CLNCU24    |      | 44     | 45              | 1                   | 394      |
|            |      | 51     | 40<br><b>65</b> | 14                  | 394      |
|            | incl | 54     | 55              | 14                  | 2,411    |
|            |      |        |                 |                     |          |
|            | incl | 57     | 58              | 1                   | 1,377    |
|            |      | 61     | 65              | 4                   | 138      |
|            |      | 68     | 78              | 10                  | 570      |
|            | incl | 68     | 69<br>101       | 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 <mark>.6</mark> 4 | 137      |
| CLRCD028   |      | 149    | 166             | 17                  | 200      |
|            |      | 170    | 171             | 1                   | 117      |
|            |      |        |                 |                     |          |

| Hole     | F    | rom    | То               | Width | U₃O₃ ppm |
|----------|------|--------|------------------|-------|----------|
| CLRCD028 |      | 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     | 7 <mark>3</mark> | 1     | 250      |
|          | 0    | 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      |

incl - including

EOH – end of hole

NSI – No significant intercept Results reported at a cut-off grade of 100ppm U₃O₅ with a maximum of 2m contiguous internal dilution

|          | East                  | North                 |                    | RC                |                     |                   | Bearing           |
|----------|-----------------------|-----------------------|--------------------|-------------------|---------------------|-------------------|-------------------|
| Hole     | MGA53L                | MGAS53L               | RL                 | Depth             | Core Tail           | Dip               | (mag)             |
| CLRC001  | 177673                | 8498325               | 111                | 102               |                     | -60               | 218               |
| CLRC002  | 177643                | 8498223               | 109                | 102               |                     | -60               | 218               |
| CLRC003  | 177685                | 8498213               | 104                | 102               |                     | -60               | 218               |
| CLRC004  | 177770                | 8498193               | 101                | 102               |                     | -60               | 218               |
| CLRC005  | 177787                | 8498150               | 105                | 72                |                     | -60               | 218               |
| CLRC007  | 178146                | 8498056               | 109                | 108               |                     | -60               | 225               |
| CLRC008  | 178077                | 8497990               | 106                | 150               |                     | -60               | 225               |
| CLRC011  | 178281                | 8497731               | 107                | 168               |                     | -60               | 300               |
| CLRC013  | 178262                | 8497695               | 107                | 102               |                     | -60               | 300               |
| CLRC014  | 178296                | 8497677               | 107                | 102               |                     | -60               | 300               |
| CLRC015  | 178251                | 8497659               | 108                | 114               |                     | - <mark>60</mark> | <mark>3</mark> 00 |
| CLRC016  | 178191                | 849764 <mark>8</mark> | 117                | 102               |                     | -60               | <mark>30</mark> 0 |
| CLRC017  | 178233                | 849 <mark>7647</mark> | 110                | 126               |                     | -60               | <mark>30</mark> 0 |
| CLRC018  | 178203                | <mark>8497</mark> 618 | 115                | 120               |                     | -60               | <mark>3</mark> 00 |
| CLRC019  | 178193                | <mark>849</mark> 7596 | 116                | 120               |                     | -60               | <mark>30</mark> 0 |
| CLRC020  | 178289 🦯              | 8497559               | 1 <mark>08</mark>  | 102               |                     | -60               | 300               |
| CLRC021  | 17826 <mark>0</mark>  | 8497552               | 108                | 102               |                     | -60               | 300               |
| CLRC022  | 178 <mark>183</mark>  | 8497544               | 1 <mark>15</mark>  | 90                |                     | -60               | 300               |
| CLRCD023 | 17 <mark>822</mark> 8 | 8497531               | 1 <mark>0</mark> 9 | 102               | <u>68.25</u>        | -60               | 300               |
| CLRC024  | <mark>1781</mark> 88  | 8497504               | 113                | 126               |                     | -60               | 300               |
| CLRCD025 | <mark>178</mark> 233  | 8497499               | 108                | 102               | <mark>88.5</mark>   | -60               | 300               |
| CLRC026  | <mark>1</mark> 78164  | 8497478               | 115                | 60                |                     | -60               | 300               |
| CLRCD027 | <mark>1</mark> 78214  | 8497471               | 110                | 102               | <mark>83.3</mark> 5 | -60               | 300               |
| CLRCD028 | 178296                | 8497463               | 106                | 60                | 209.82              | -60               | 300               |
| CLRC029  | 178193                | 8497460               | 111                | 162               |                     | -60               | 300               |
| CLRC030  | 178209                | 8497427               | 109                | 1 <mark>02</mark> |                     | -60               | 300               |
| CLRC031  | 178210                | 8497155               | 100                | <mark>1</mark> 02 |                     | -60               | 270               |
| CLRC032  | 178254                | 8497135               | 98                 | 114               |                     | -60               | 270               |
| CLRC033  | 178223                | 8497095               | 99                 | 102               |                     | -60               | 270               |
| CLRC034  | 178088                | 8497094               | 102                | 108               |                     | -60               | 270               |

### Table 4: Cleo Uranium Project Hole Details

Holes CLRC006, CL<mark>RC</mark>009, CLRC010, CLRC012 were not drilled.

### About Cleo Uranium Project

The Cleo Uranium Project is located within Kingsland's Allamber Project (Figure 6). The Allamber Project has been historically explored for uranium, copper and graphite. The project is located in the historic Pine Creek mining region where mining, predominantly for gold, has taken place since the 1870's. The project area is well serviced with sealed roads and other infrastructure and services that enable exploration programs to progress in a timely manner. There are no native title claims or determinations covering the project area.

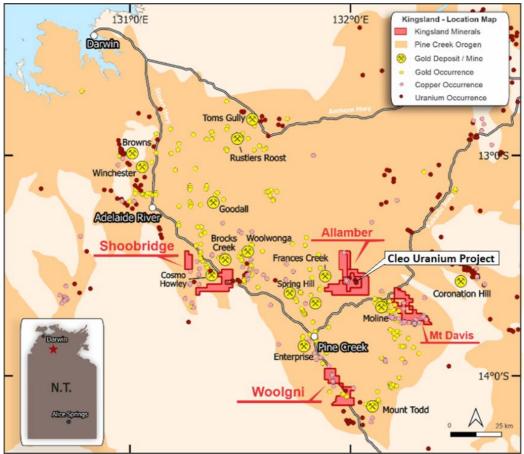


Figure 6: Kingsland Minerals Northern Territory Exploration Projects

# 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:** <u>https://twitter.com/KingslandLtd</u>

#### **CAPITAL STRUCTURE**

Shares on issue: 37,389,840 Options (KNGO): 14,582,250

**MEDIA** 

Stewart Walters Email: <u>stewart@marketopen.com.au</u>



#### SHAREHOLDER CONTACT

Bruno Seneque Email: <u>info@kingslandminerals.com.au</u> 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 Kingsland Minerals Exploration Results is based on information compiled by Mr David Princep, a Competent Person who is a Member 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 historical Exploration Results is from the report entitled 'Kingsland Prospectus' released on 9 June 2022 and available to view on the Kingsland Minerals website, <u>www.kingslandminerals.com.au</u> or the ASX website <u>www.asx.com.au</u> 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.'

## **JORC** Tables

Section 1: Sampling Techniques and Data Cleo Uranium Project

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
| Criteria         Sampling techniques         Drilling techniques | <ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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.</li> <li>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).</li> </ul> | <ul> <li>Commentary</li> <li>RC drilling samples were collected as 1m intervals via a riffle splitter off the drill rig.</li> <li>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.</li> <li>Based on the results returned, sampling of the original 1m bagged intervals will be undertaken to confirm the actual distribution of mineralisation throughout the drill hole.</li> <li>Diamond core was sampled either as 1m intervals or on geological boundaries.</li> <li>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.</li> <li>The Cleo Uranium deposit was drilled with RC and Diamond Core drilling techniques.</li> <li>Diamond drilling has been completed in order to derive samples for assay and mineralogical analysis. Diamond drill holes will also enable a more detailed view on the actual orientation of mineralisation.</li> </ul> |
| Drill sample recovery  | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>  | Drilling recoveries were generally very<br>good. Some zones of low recovery were<br>encountered associated with voids or<br>cavities but these were not common and<br>are not considered to influence the overall<br>sample quality.  |
| Logging  | <ul> <li>Whether core and chip samples have<br/>been geologically and geotechnically<br/>logged to a level of detail to support<br/>appropriate Mineral Resource<br/>estimation, mining studies and<br/>metallurgical studies.</li> <li>Whether logging is qualitative or<br/>quantitative in nature. Core (or<br/>costean, channel, etc) photography.</li> <li>The total length and percentage of</li> </ul>   | <ul> <li>All drilling was qualitatively geologically logged recording lithology, mineralisation colour, weathering and grain size.</li> <li>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.</li> </ul>   |

| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   | the relevant intersections logged.   |  |
| Sub-sampling techniques<br>and sample preparation | <ul> <li>the relevant intersections logged.</li> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul> <li>A rig-based riffle splitter was used to extract a sub-sample of approximately 3-4kg. This sample will be submitted for assay based on mineralised intervals determined by four metre composite sampling.</li> <li>Some results reported in this announcement are based on four metre composites of the original one metre samples in order to improve assay laboratory turnaround and undertake preliminary identification of mineralised intervals.</li> <li>One metre samples have been submitted based on initial results from the four meter composite samples. Results from these one metre re-splits have been reported in this announcement.</li> <li>Diamond core was sampled using cut half core with intervals either 1m or based on geological contacts.</li> <li>A suite of elements were assayed at the North Australian Laboratories (NAL) 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].</li> <li>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.</li> <li>Assay procedure is a four acids digest [MA4 acid HNO3/HCI/HCIO4/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 HCI and diluted to volume with demineralised</li> </ul> |
| Verification of sampling and assaying             | intersections by either independent or   | <ul> <li>water and mixed. The dilution factor is 50.<br/>U is read by ICP-MS. Each batch of 50<br/>assays contains 40 samples, four CRM's,<br/>one reagent blank and five replicate<br/>control assays. CRM's used include<br/>Geostats and OREAS. All U assays above<br/>400 ppm are checked and confirmed by a<br/>sodium peroxide fusion digest with an<br/>ICP-MS reading.</li> <li>A QAQC program of standards and<br/>duplicates was submitted with the drill</li> </ul>   |
|   | <ul> <li>alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data<br/>entry procedures, data verification,<br/>data storage (physical and electronic)<br/>protocols.</li> <li>Discuss any adjustment to assay<br/>data.</li> </ul>   | <ul> <li>samples.</li> <li>No twinned sample locations have been completed.</li> <li>Minor QAQC issues have been identified to date, once the drilling and assay program is completed all QAQC information will be compiled and reviewed. It is not expected that any of the issues identified will affect the results contained</li> </ul>  |

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| Location of data points                                    | <ul> <li>Accuracy and quality of surveys used<br/>to locate drill holes (collar and down-<br/>hole surveys), trenches, mine<br/>workings and other locations used in<br/>Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic<br/>control.</li> </ul>   | <ul> <li>in this announcement.</li> <li>No adjustments have been made to any of the assay data other than converting uranium to uranium oxide values using a standard factor of 1.17924.</li> <li>Hole collars were surveyed by Cross Solutions of Darwin using a differential GPS in MGA94 zone 53S datum. MGA is the Map Grid of Australia as applied to the Geocentric Datum of Australia (GDA). Accuracy is +/01m</li> <li>RC drillholes were downhole surveyed every 30m with a Reflex single shot</li> <li>Diamond holes are surveyed every 30m with a Boart Longyear TruShot.</li> <li>A limited number of drill holes were logged with a combination downhole deviation and total count gamma tool.</li> </ul> |
| Data spacing and distribution                              | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>                                 | <ul> <li>Data spacing is variable. Areas of historic drilling are approximately 40m along strike where other areas are spaced at several hundred meters.</li> <li>Drilling spacing and distribution in some areas is expected to be sufficient for estimation of Mineral Resources when combined with existing drill hole information.</li> <li>The data presented in this announcement are based on one metre original samples or diamond core intervals.</li> <li>The original one metre samples have been submitted to the laboratory upon receipt of results for all of the four metre composites for RC samples.</li> </ul>   |
| Orientation of data in relation<br>to geological structure | <ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul> | <ul> <li>Drilling is generally perpendicular to the strike direction of mineralisation.</li> <li>No bias is considered to have been introduced through the drill hole direction or orientation.</li> <li>Diamond drilling has been completed and is expected to provide additional information regarding mineralisation orientation.</li> </ul>  |
| Sample security  | The measures taken to ensure sample security.  | Due to the proximity of the laboratory<br>samples are collected and delivered to the<br>assay laboratory by Kingsland Minerals<br>personnel.   |
| Audits or reviews  | <ul> <li>The results of any audits or reviews<br/>of sampling techniques and data.</li> </ul>  | No audits or reviews of sampling techniques have been undertaken.  |

Section 2: Reporting of Cleo Uranium Project Exploration Results

| Criteria                                   | JORC Code explanation   | Commentary  |
|--|---|---|
| Mineral tenement and land<br>tenure status | <ul> <li>Type, reference name/number,<br/>location and ownership including<br/>agreements or material issues with<br/>third parties such as joint ventures,<br/>partnerships, overriding royalties,<br/>native title interests, historical sites,<br/>wilderness or national park and<br/>environmental settings.</li> <li>The security of the tenure held at the<br/>time of reporting along with any known<br/>impediments to obtaining a license to<br/>operate in the area.</li> </ul>  | The Cleo Project is located on tenement<br>EL 31960, which was granted in March<br>2019 and is valid until March 2025. This<br>tenement is 100% owned by Kingsland<br>Minerals Ltd. There are no known<br>encumbrances to conducting exploration<br>on this tenement.   |
| Exploration done by other parties          | <ul> <li>Acknowledgment and appraisal of<br/>exploration by other parties.</li> </ul>   | <ul> <li>The Cleo Uranium Project was discovered<br/>in 1985 by Total Mining Australia Pty Ltd.<br/>Total Mining carried out an extensive<br/>exploration program including RC and<br/>diamond core drilling. Atom Energy drilled<br/>a program of RC holes in 2004-05<br/>followed by Thundelarra Exploration with<br/>additional RC holes in 2011-14.</li> </ul>  |
| Geology                                    | Deposit type, geological setting and<br>style of mineralisation.  | <ul> <li>The Cleo deposit to the north is located in<br/>a strongly folded syncline of Lower<br/>Proterozoic metasediments enclosed and<br/>intruded by the Cullen granite. The<br/>lithologies forming the syncline include a<br/>basal psammite, quartzites and sericite-<br/>chlorite schists. The unit is overlain by a<br/>thick sequence of carbonaceous shales<br/>which, when affected by faulting, become<br/>graphite and chlorite schists. The<br/>carbonaceous shale sequence contains<br/>interbedded dolomite lenses. The<br/>uppermost unit exposed at the Twin<br/>deposit is a coarse-grained quartzite<br/>which occupies the core of the syncline.<br/>The Twin deposit has been strongly<br/>faulted, with faults trending parallel to the<br/>axial plane of the syncline. These faults<br/>have become the loci of subsequent<br/>intrusion by the late phases of the Cullen<br/>granite. The uranium mineralisation is<br/>also concentrated within the faults.</li> <li>Mineralisation towards the south occurs<br/>higher in the stratigraphic sequence. A<br/>large proportion of the lower units of the<br/>syncline have been adsorbed into the<br/>Cullen granite, particularly in the west.<br/>Mineralisation is more widely spread<br/>through the stratigraphy.</li> </ul> |
| Drill hole information                     | <ul> <li>A summary of all information material to<br/>the under-standing of the exploration<br/>results including a tabulation of the<br/>following information for all Material drill<br/>holes:         <ul> <li>easting and northing of the drill hole<br/>collar</li> <li>elevation or RL (Reduced Level –<br/>elevation above sea level in metres)<br/>of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception<br/>depth</li> <li>hole length</li> <li>If the exclusion of this information is</li> </ul> </li> </ul> | Drilling information is included in the announcement in Table 4.  |

| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
|  | justified on the basis that the<br>information is not Material and this<br>exclusion does not detract from the<br>understanding of the report, the<br>Competent Person should clearly<br>explain why this is the case.  |   |
| Data aggregation methods   | <ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul> | <ul> <li>Drilling results are reported on a length weighted average format. Holes have been reported at a cut-off of 100ppm U<sub>3</sub>O<sub>8</sub> with a maximum of 3m of internal dilution.</li> <li>Metal equivalent values have not been used.</li> </ul>   |
| Relationship between<br>mineralisation widths and<br>intercept lengths | <ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>   | <ul> <li>Drilling has 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.</li> <li>Mineralisation orientation, and therefore true width, will be investigated during the upcoming diamond drilling program.</li> </ul> |
| Diagrams   | <ul> <li>Appropriate maps and sections (with<br/>scales) and tabulations of intercepts<br/>should be included for any significant<br/>discovery being reported. These should<br/>include, but not be limited to a plan view<br/>of drill hole collar locations and<br/>appropriate sectional views.</li> </ul>  | Relevant diagrams have been included within the main body of text.  |
| Balanced Reporting   | <ul> <li>Accuracy and quality of surveys used<br/>to locate drill holes (collar and down-<br/>hole surveys), trenches, mine<br/>workings and other locations used in<br/>Mineral Resource estimation.</li> <li>Where comprehensive reporting of all<br/>Exploration Results is not practicable,<br/>representative reporting of both low<br/>and high grades and/or widths should<br/>be practiced avoiding misleading<br/>reporting of Exploration Results.</li> </ul>   | <ul> <li>All received results to date have been reported.</li> <li>Hole locations have been surveyed to a high degree of accuracy by a surveyor using DGPS equipment</li> <li>The competent person deems the reporting of these drill results to be balanced.</li> </ul>  |
| Other substantive<br>exploration data                                  | <ul> <li>Other exploration data, if meaningful<br/>and material, should be reported<br/>including (but not limited to): geological<br/>observations; geophysical survey<br/>results; geochemical survey results;<br/>bulk samples - size and method of<br/>treatment; metallurgical test results;<br/>bulk density, groundwater,<br/>geotechnical and rock characteristics;<br/>potential deleterious or contaminating<br/>substances.</li> </ul>   | • The company has not completed any<br>other exploration within the area to date.<br>Previous companies have explored the<br>area between 1985 and 2014 and this<br>information was used in designing the<br>drilling program. Historic information is<br>publicly available through the STRIKE<br>website.                                 |
| Further work   | • The nature and scale of planned   | <ul> <li>Kingsland Minerals is currently planning</li> </ul>  |

| Criteria | JORC Code explanation   | Commentary                                   |
|----------|---|--|
|          | <ul> <li>extensions or depth extensions or large- scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul> | and along strike as illustrated in Figures 4 |