**Energy Resources of Australia Ltd**

ABN 71 008 550 865
A member of the Rio Tinto Group

**Head office** Level 3,Energy House,
18-20 Cavenagh Street, Darwin NT 0800
GPO Box 2394, Darwin NT 0801, Australia
**T** +61 8 8924 3500 **F** +61 8 8924 3555

**Ranger mine** Locked Bag 1,
Jabiru NT 0886 Australia
**T** +61 8 8938 1211 **F** +61 8 8938 1203

www.energyres.com.au

# ASX Announcement

**13 August 2014**

## Ranger 3 Deeps Exploration Decline project

## Further underground drilling results released

- Four additional cross sections of underground close-spaced drilling of the Ranger 3 Deeps mineral resource completed
- Significant intercepts include:
  - R3D_10C_015 28m @ 0.610% $U_3O_8$ from 99 metres
  - R3D_ND4_003 46m @ 0.371% $eU_3O_8$ from 140 metres
  - R3D_ND4_004 22m @ 0.719% $U_3O_8$ from 175 metres
  - R3D_10C_018E 17m @ 0.513% $U_3O_8$ from 200 metres
  - R3D_10C_025 17m @ 0.486% $U_3O_8$ from 99 metres
- Results are in line with the current geological model and structural interpretation

Energy Resources of Australia Ltd (ERA) has completed an additional four cross sections of underground close-spaced drilling of the Ranger 3 Deeps resource on the Ranger Project Area. These sections comprise 34 drillholes from sections 12200mN Northern Drill Drive (NDD4), 11775mN (Cuddy 10C North), 11750mN (Cuddy 10C Central) and 11725mN (Cuddy 10C South) totalling 7,139.4 metres.

The downhole collar location and survey of the recent drill holes are outlined in Appendix 1.

These underground drilling results are consistent with the expected geological understanding of the continuity of mineralisation within this zone of the mineral resource.

The results of the sections of the underground drilling programme are outlined below. These results should be read in conjunction with the JORC Code 2012 Edition – Table 1, outlined in Appendix 2 of this announcement. On completion of the Ranger 3 Deeps Prefeasibility Study, ERA will be in a position to review the Ranger 3 Deeps resource model and make appropriate adjustments to the mineral resource statement.

### Ranger 3 Deeps Exploration Decline project

In August 2011, the ERA Board approved the construction of the Ranger 3 Deeps Exploration Decline to conduct underground close-spaced drilling to further define and evaluate the Ranger 3 Deeps resource. Construction of the decline began in May 2012 and underground drilling commenced in May 2013.

In addition, ERA commenced a Prefeasibility Study on the proposed Ranger 3 Deeps underground mine in July 2012. The study is on schedule to be completed in late 2014.

Pursuant to ERA’s section 41 Authority, it is permitted to conduct mining and processing operations on the Ranger Project Area until January 2021, following which rehabilitation activities will continue. Further details of the tenure held over the Ranger Project Area and environmental regulations are outlined in the JORC Code 2012 Edition – Table 1, outlined in Appendix 2 of this announcement.

## Drilling Programme

The main objectives of the Ranger 3 Deeps underground drilling programme are to:

(a) increase confidence in the known mineralisation to allow conversion to a mineral resource;
(b) understand the distribution and abundance of deleterious minerals such as carbonate;
(c) support the development of prefeasibility level mine plans; and
(b) explore those prospective areas with less historical drilling, particularly at the northern end of the deposit.

All drill holes are drilled from positions in dedicated drilling drives, or cuddies, sufficient in size to adequately house the drilling operations with drilling fans to be oriented in a direction of approximately 240 degrees and arranged in vertical and inclined fans (Figure 1). Cuddy depths range from -120 metres to -310 metres from the surface.

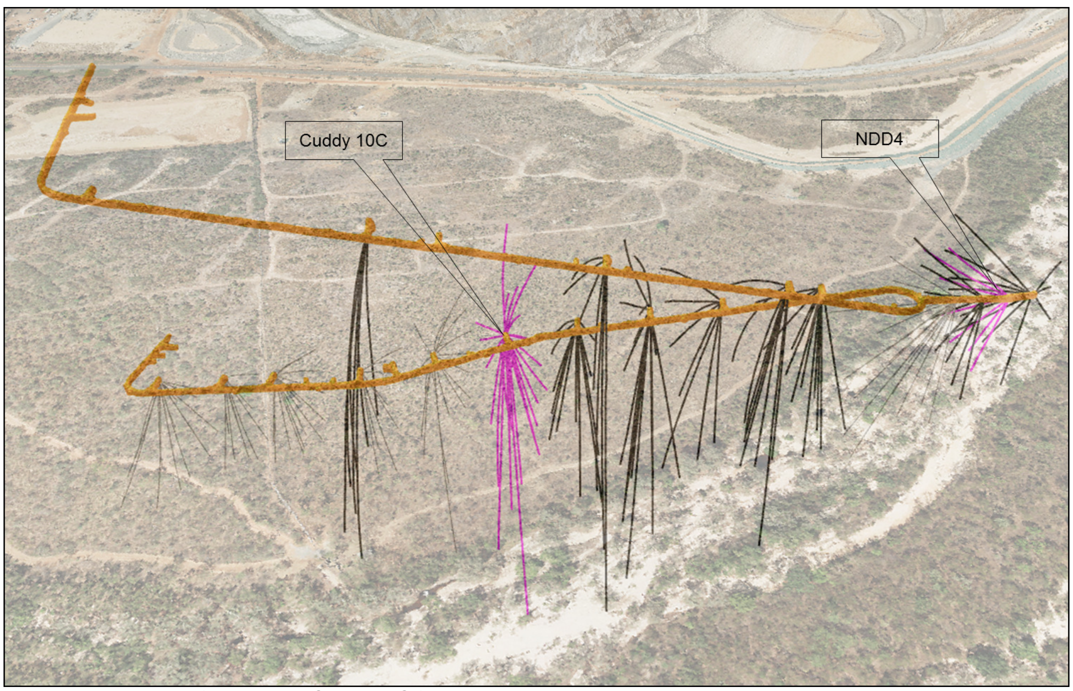


Figure 1 – Location of NDD4 and Cuddy 10C from which drilling has recently been completed. (Pink lines are for drill holes relevant to this announcement; black lines are for drill holes from previous announcements; grey lines are for planned drill holes).

- One drill section was undertaken from NDD4 to test geology along section 12200mN.
- Three drill sections were undertaken from Cuddy 10C (Cuddy 10C North, Cuddy 10C Central and Cuddy 10C South), at dip angles of 70 degrees to the north and 90 degrees and 70 degrees to the south respectively, testing along sections 11775mN, 11750mN and 11725mN.

Drill intersections from all drill drives have been interpreted and are shown in Figures 2 to 5.

Significant mineralised intervals are shown at a cut-off grade of 0.12% $U_3O_8$. Results from all drill drives support and add resolution to the current Ranger 3 Deeps geological model. The width and grade of the reported significant intersections are broadly in line with results from previous surface drilling. Mineralisation from NDD4 is better developed than observed in NDD3 and as such the geological interpretations of this area have been updated accordingly. Additional drilling in the Northern Drill Drive (NDD2) will finalise orebody knowledge in this area and add resolution to the geological interpretation.

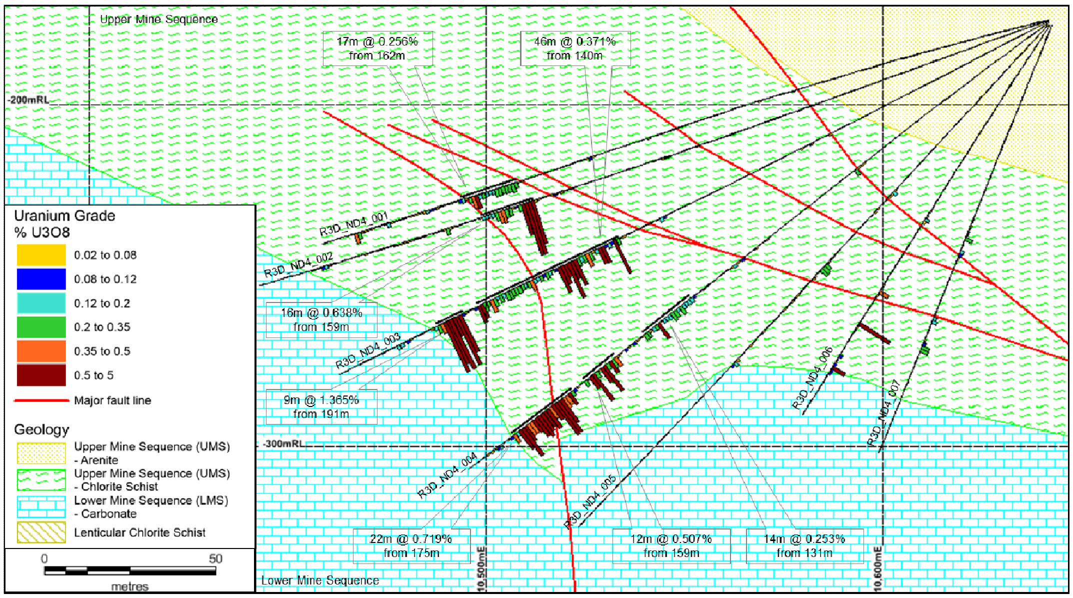

Figure 2 – Interpreted cross section showing the drilling results from NDD4.
*(Includes gamma equivalent and chemical assay results)*

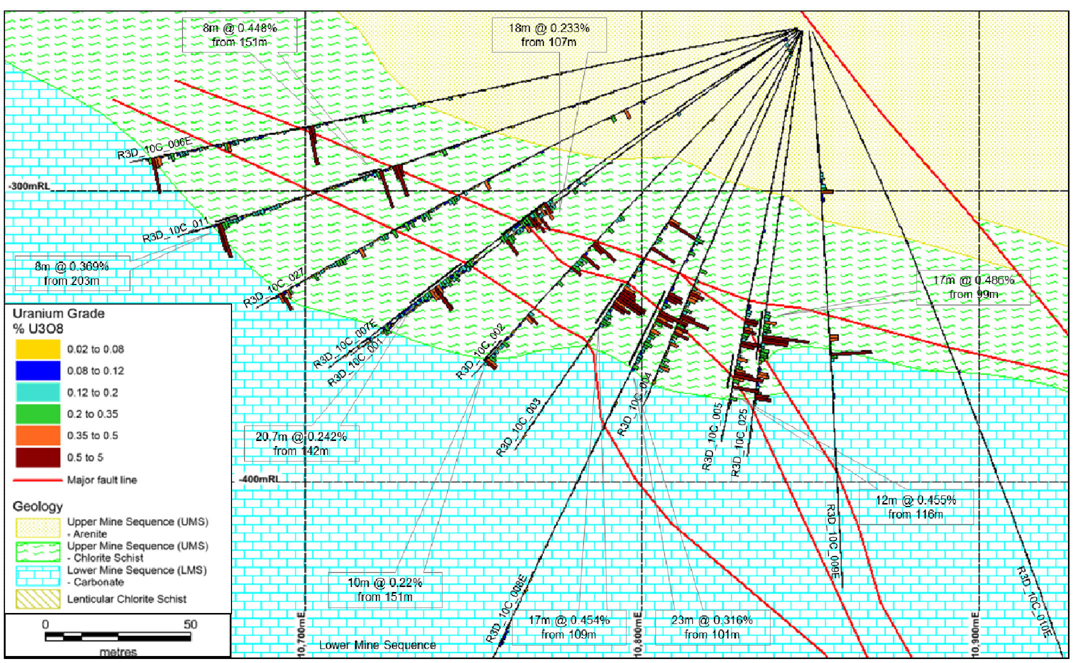

Figure 3 – Interpreted cross section showing the drilling results from Cuddy 10C North.
*(Includes gamma equivalent and chemical assay results)*

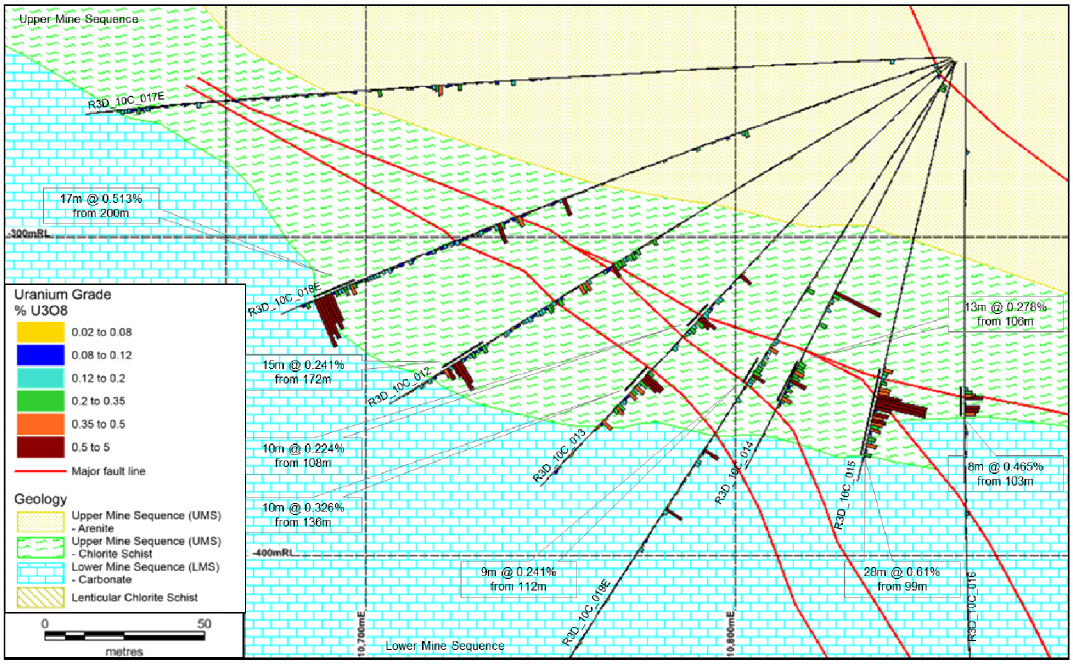


Figure 4 – Interpreted cross section showing the drilling results from Cuddy 10C Central.
*(Includes gamma equivalent and chemical assay results)*

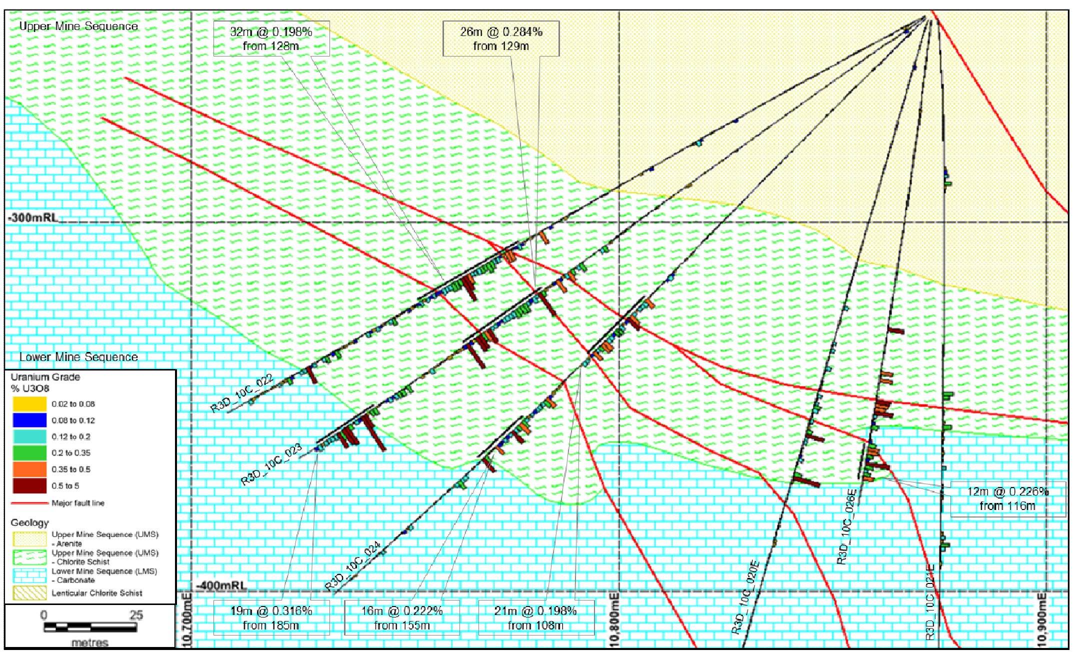


Figure 5 – Interpreted cross section showing the drilling results from Cuddy 10C South.
*(Includes gamma equivalent and chemical assay results)*

In line with current ERA procedures, a downhole geophysical gamma sonde is deployed internally within the drill rod string and subsequently in the open hole (subject to ground conditions). Geophysical measurements (gamma logging) are recorded every 0.05 metres and composited into one metre intervals to provide an equivalent $U_3O_8$ grade (referred to as $eU_3O_8$).

Samples for subsequent geochemical assays are selected on the basis of these downhole geophysical measurements. Intervals that have equivalent grades above 0.02% $eU_3O_8$ are automatically assigned for assaying, plus two samples above and below the triggered interval.

The significant results from the latest drill holes are presented in Table 1. The table includes $eU_3O_8$ results from gamma probing and geochemical analysis (ICPMS - $U_3O_8$_G422M_ppm) of $U_3O_8$. In time all $eU_3O_8$ will be replaced by geochemical assays effectively overriding the gamma probing analysis. The results are in line with the expectations from these drilling sections and will be used to give more confidence in the location of the mineralisation. Significant high grade intersections are in line with the expected continuity of mineralisation. The downhole collar location and survey of the recent drill holes are outlined in Appendix 1.

| HOLE ID | FROM (m) | TO (m) | WIDTH (m) | GRADE % $U_3O_8$ | METHOD |
|---|---|---|---|---|---|
| R3D_10C_001 | 107 | 125 | 18 | 0.233 | Geochemistry |
| R3D_10C_003 | 109 | 126 | 17 | 0.454 | Geochemistry |
| R3D_10C_005 | 100 | 113 | 13 | 0.365 | Gamma |
| R3D_10C_005 | 116 | 128 | 12 | 0.455 | Gamma |
| R3D_10C_007E | 142 | 162.7 | 20.7 | 0.242 | Geochemistry |
| R3D_10C_008E | 101 | 124 | 23 | 0.316 | Geochemistry |
| R3D_10C_015 | 99 | 127 | 28 | 0.610 | Geochemistry |
| R3D_10C_016 | 103 | 111 | 8 | 0.465 | Geochemistry |
| R3D_10C_018E | 200 | 217 | 17 | 0.513 | Geochemistry |
| R3D_10C_022 | 128 | 160 | 32 | 0.198 | Geochemistry |
| R3D_10C_023 | 129 | 155 | 26 | 0.284 | Gamma |
| R3D_10C_023 | 185 | 204 | 19 | 0.316 | Gamma |
| R3D_10C_024 | 108 | 129 | 21 | 0.198 | Geochemistry |
| R3D_10C_025 | 99 | 116 | 17 | 0.486 | Geochemistry |
| R3D_ND4_001 | 162 | 179 | 17 | 0.256 | Gamma |
| R3D_ND4_002 | 159 | 175 | 16 | 0.638 | Gamma |
| R3D_ND4_003 | 140 | 186 | 46 | 0.371 | Gamma |
| R3D_ND4_003 | 191 | 200 | 9 | 1.365 | Gamma |
| R3D_ND4_004 | 159 | 171 | 12 | 0.507 | Geochemistry |
| R3D_ND4_004 | 175 | 197 | 22 | 0.719 | Geochemistry |

Table 1: Significant results from NDD4 and Cuddy 10C.

*Notes:*

A. *All intersections were determined using a 0.12% $U_3O_8$ cut-off at a minimum five metres composite, including a maximum of two metres of non-mineralised internal material. Intersections are downhole lengths and the true width of the intersections has not been calculated.*

B. *Results include $eU_3O_8$ results from gamma probing and geochemical results using ICPMS - U3O8_G422M_ppm.*

**Competent Person**

The information in this report relating to exploration results is based on information compiled by Greg Rogers and Stephen Pevely, Competent Persons who are members of the Australasian Institute of Mining and Metallurgy. Greg Rogers and Stephen Pevely are full-time employees of ERA and have 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'. Greg Rogers and Stephen Pevely consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

**About Energy Resources of Australia Ltd**

Energy Resources of Australia Ltd (ERA) is one of the nation's largest uranium producers and Australia's longest continually operating uranium mine.

ERA has an excellent track record of reliably supplying customers. Uranium has been mined at Ranger for three decades. Ranger mine is one of only three mines in the world to produce in excess of 110,000 tonnes of uranium oxide.

ERA's Ranger mine is located eight kilometres east of Jabiru and 260 kilometres east of Darwin, located in Australia's Northern Territory.

ERA is a major employer in the Northern Territory and the Alligator Rivers Region.

Located on the 79 square kilometre Ranger Project Area, Ranger mine is surrounded by, but separate from, the World Heritage listed Kakadu National Park.

For further information, please contact:

**Media Relations**

Carl Kitchen
Office: +61 (0) 8 8924 3550
Mobile: +61 (0) 401 691 342
Email: carl.kitchen@era.riotinto.com

Daniel Hall
Office: +61 (0) 8 8924 3514
Mobile: +61 (0) 457 532 270
Email: daniel.hall@era.riotinto.com

**Investor Relations**

Chris Maitland
Office: +61 (0) 3 9283 3063
Mobile: +61 (0) 459 800 131
Email: chris.maitland@riotinto.com

Website: www.energyres.com.au
Twitter: Follow @ERARangerMine on Twitter

**Appendix 1**

Drill hole collar summary

| Hole ID | AMG Easting GDA94 | AMG Northing GDA94 | GDA Reduced Level | Depth (metres) | Azimuth | Dip |
|---|---|---|---|---|---|---|
| R3D_ND4_001 | 274414.0 | 8598289.7 | -175.4 | -175.39 | 240 | -13 |
| R3D_ND4_002 | 274414.0 | 8598289.5 | -175.6 | -175.60 | 235.9 | -19 |
| R3D_ND4_003 | 274414.8 | 8598289.7 | -175.9 | -175.93 | 240 | -26.6 |
| R3D_ND4_004 | 274414.9 | 8598289.7 | -176.3 | -176.32 | 240 | -36.3 |
| R3D_ND4_005 | 274415.0 | 8598289.8 | -176.8 | -176.78 | 241 | -46.9 |
| R3D_ND4_006 | 274415.3 | 8598290.0 | -176.8 | -176.79 | 240.9 | -57 |
| R3D_ND4_007 | 274415.8 | 8598290.1 | -176.8 | -176.81 | 240 | -68.1 |
| R3D_10C_001 | 274594.4 | 8597821.6 | -244.7 | -244.67 | 248.7 | -33.5 |
| R3D_10C_002 | 274594.6 | 8597821.8 | -245.0 | -245.01 | 255.8 | -43.9 |
| R3D_10C_003 | 274594.7 | 8597822.2 | -245.3 | -245.25 | 262.3 | -52.3 |
| R3D_10C_004 | 274595.0 | 8597822.5 | -245.2 | -245.24 | 270.6 | -63.7 |
| R3D_10C_005 | 274595.2 | 8597823.1 | -245.2 | -245.24 | 287.4 | -73.5 |
| R3D_10C_006E | 274594.2 | 8597821.4 | -243.9 | -243.91 | 244.4 | -11 |
| R3D_10C_007E | 274594.4 | 8597821.7 | -244.7 | -244.71 | 246.4 | -32 |
| R3D_10C_008E | 274594.9 | 8597822.3 | -245.1 | -245.10 | 249.8 | -62.5 |
| R3D_10C_009E | 274597.5 | 8597824.0 | -245.2 | -245.23 | 17.3 | -83.4 |
| R3D_10C_010E | 274598.7 | 8597823.7 | -245.3 | -245.30 | 51.7 | -63.9 |
| R3D_10C_011 | 274594.4 | 8597821.2 | -244.2 | -244.22 | 239.4 | -18 |
| R3D_10C_012 | 274594.6 | 8597821.1 | -244.6 | -244.61 | 237.4 | -30 |
| R3D_10C_013 | 274594.7 | 8597821.2 | -245.0 | -244.97 | 236.4 | -43.1 |
| R3D_10C_014 | 274595.0 | 8597821.4 | -245.1 | -245.10 | 238.4 | -61.3 |
| R3D_10C_015 | 274595.3 | 8597821.5 | -245.1 | -245.11 | 236.9 | -76.5 |
| R3D_10C_016 | 274598.3 | 8597823.1 | -245.3 | -245.30 | 290.4 | -89 |
| R3D_10C_017E | 274594.3 | 8597821.0 | -243.6 | -243.60 | 236.4 | -2 |
| R3D_10C_018E | 274594.5 | 8597821.1 | -244.1 | -244.08 | 236.4 | -18 |
| R3D_10C_019E | 274596.3 | 8597820.8 | -245.1 | -245.10 | 231.4 | -55 |
| R3D_10C_020E | 274595.4 | 8597821.0 | -245.4 | -245.35 | 221.8 | -73 |
| R3D_10C_021E | 274598.3 | 8597821.4 | -245.2 | -245.23 | 127.7 | -85.3 |
| R3D_10C_022 | 274594.7 | 8597820.8 | -244.4 | -244.40 | 226.4 | -27.1 |
| R3D_10C_023 | 274594.9 | 8597820.7 | -244.6 | -244.61 | 226.1 | -34 |
| R3D_10C_024 | 274595.0 | 8597820.8 | -245.0 | -244.96 | 226.4 | -43.6 |
| R3D_10C_025 | 274595.3 | 8597823.2 | -245.2 | -245.23 | 295.1 | -77.4 |
| R3D_10C_026E | 274596.7 | 8597820.6 | -245.4 | -245.39 | 182.9 | -77.8 |
| R3D_10C_027 | 274594.4 | 8597821.3 | -244.3 | -244.27 | 242.4 | -23 |

Downhole survey summary

| Hole ID | Depth | Azimuth | Dip |
|---|---|---|---|
| R3D_10C_001 | 0 | 248.7 | -33.45 |
| R3D_10C_001 | 12 | 248.9 | -33.89 |
| R3D_10C_001 | 30 | 249.2 | -34.39 |
| R3D_10C_001 | 60 | 249.8 | -35.53 |
| R3D_10C_001 | 90 | 250.1 | -35.96 |
| R3D_10C_001 | 120 | 250.4 | -36.13 |
| R3D_10C_001 | 150 | 250.8 | -36.31 |
| R3D_10C_001 | 180 | 251.8 | -36.56 |
| R3D_10C_002 | 30 | 251.3 | -44.60 |
| R3D_10C_002 | 62 | 252.6 | -45.20 |
| R3D_10C_002 | 90 | 253.8 | -45.50 |
| R3D_10C_002 | 120 | 254.8 | -45.50 |
| R3D_10C_002 | 150 | 255.5 | -46.00 |
| R3D_10C_003 | 12 | 261.2 | -53.00 |
| R3D_10C_003 | 30 | 263 | -53.30 |
| R3D_10C_003 | 60 | 264.1 | -53.60 |
| R3D_10C_003 | 90 | 265.9 | -54.30 |
| R3D_10C_003 | 120 | 267.4 | -53.50 |
| R3D_10C_004 | 12 | 271 | -63.40 |
| R3D_10C_004 | 30 | 272 | -63.60 |
| R3D_10C_004 | 60 | 273.6 | -64.00 |
| R3D_10C_004 | 90 | 275 | -64.20 |
| R3D_10C_004 | 120 | 275.6 | -64.00 |
| R3D_10C_005 | 0 | 287.4 | -73.55 |
| R3D_10C_005 | 12 | 287.6 | -73.49 |
| R3D_10C_005 | 30 | 287.7 | -73.54 |
| R3D_10C_005 | 60 | 288.2 | -73.42 |
| R3D_10C_005 | 90 | 288.8 | -73.31 |
| R3D_10C_005 | 120 | 289.1 | -73.26 |
| R3D_10C_006E | 15 | 244.6 | -10.60 |
| R3D_10C_006E | 30 | 245.4 | -10.50 |
| R3D_10C_006E | 60 | 246.9 | -11.00 |
| R3D_10C_006E | 90 | 248 | -12.10 |
| R3D_10C_006E | 120 | 249.2 | -12.10 |
| R3D_10C_006E | 150 | 250.3 | -11.40 |
| R3D_10C_006E | 180 | 251.2 | -10.90 |
| R3D_10C_006E | 210 | 251.9 | -11.30 |
| R3D_10C_007E | 0 | 246.4 | -32.04 |
| R3D_10C_007E | 12 | 246.6 | -32.22 |
| R3D_10C_007E | 30 | 247.4 | -33.05 |
| R3D_10C_007E | 60 | 249.4 | -34.75 |
| R3D_10C_007E | 90 | 250.7 | -35.68 |
| R3D_10C_007E | 120 | 251.6 | -36.61 |
| R3D_10C_007E | 150 | 252.4 | -36.73 |
| R3D_10C_007E | 180 | 253.3 | -36.18 |
| R3D_10C_008E | 0 | 249.8 | -62.46 |
| R3D_10C_008E | 12 | 250.3 | -62.44 |
| R3D_10C_008E | 30 | 251.6 | -62.67 |
| R3D_10C_008E | 60 | 253.8 | -62.96 |
| R3D_10C_008E | 90 | 254.8 | -63.02 |
| R3D_10C_008E | 120 | 256.1 | -63.00 |
| R3D_10C_008E | 150 | 256.5 | -63.22 |
| R3D_10C_008E | 180 | 255.7 | -63.17 |
| R3D_10C_008E | 210 | 256.4 | -63.95 |
| R3D_10C_008E | 240 | 257.2 | -63.79 |
| R3D_10C_008E | 270 | 258 | -64.04 |
| R3D_10C_009E | 12 | 17.5 | -83.73 |
| R3D_10C_009E | 30 | 14 | -83.90 |
| R3D_10C_009E | 66 | 6 | -84.80 |
| R3D_10C_009E | 90 | 5.3 | -84.70 |
| R3D_10C_009E | 120 | 5.1 | -84.70 |
| R3D_10C_009E | 180 | 6.3 | -85.20 |

| Hole ID | Depth | Azimuth | Dip |
|---|---|---|---|
| R3D_10C_010E | 15 | 50.3 | -65.30 |
| R3D_10C_010E | 30 | 49.7 | -65.40 |
| R3D_10C_010E | 60 | 50 | -66.50 |
| R3D_10C_010E | 90 | 49.3 | -68.40 |
| R3D_10C_010E | 120 | 48.8 | -69.00 |
| R3D_10C_010E | 150 | 48.4 | -69.40 |
| R3D_10C_010E | 180 | 48.9 | -69.80 |
| R3D_10C_010E | 210 | 47.5 | -70.20 |
| R3D_10C_010E | 250 | 46.7 | -72.30 |
| R3D_10C_010E | 280 | 45.2 | -73.10 |
| R3D_10C_011 | 14 | 239.6 | -18.90 |
| R3D_10C_011 | 30 | 240.5 | -18.90 |
| R3D_10C_011 | 60 | 241.7 | -19.20 |
| R3D_10C_011 | 90 | 242.7 | -18.90 |
| R3D_10C_011 | 122 | 243.8 | -19.00 |
| R3D_10C_011 | 150 | 244.7 | -18.60 |
| R3D_10C_011 | 180 | 245.5 | -18.30 |
| R3D_10C_011 | 210 | 246.4 | -17.70 |
| R3D_10C_012 | 12 | 235.4 | -30.90 |
| R3D_10C_012 | 30 | 236.6 | -30.90 |
| R3D_10C_012 | 60 | 238.3 | -30.90 |
| R3D_10C_012 | 90 | 239.5 | -31.10 |
| R3D_10C_012 | 120 | 242.2 | -31.90 |
| R3D_10C_012 | 150 | 242.2 | -32.00 |
| R3D_10C_012 | 180 | 243.9 | -31.90 |
| R3D_10C_013 | 0 | 236.4 | -43.10 |
| R3D_10C_013 | 12 | 237.1 | -43.48 |
| R3D_10C_013 | 30 | 238.7 | -44.66 |
| R3D_10C_013 | 60 | 240.4 | -45.70 |
| R3D_10C_013 | 90 | 242.9 | -46.90 |
| R3D_10C_013 | 120 | 243.5 | -46.73 |
| R3D_10C_013 | 150 | 244.8 | -46.26 |
| R3D_10C_014 | 15 | 238.3 | -62.20 |
| R3D_10C_014 | 30 | 239.2 | -62.60 |
| R3D_10C_014 | 60 | 241.7 | -63.00 |
| R3D_10C_014 | 90 | 243.4 | -63.20 |
| R3D_10C_014 | 120 | 244 | -63.30 |
| R3D_10C_015 | 15 | 238.9 | -76.70 |
| R3D_10C_015 | 30 | 240.1 | -77.00 |
| R3D_10C_015 | 60 | 244.4 | -77.00 |
| R3D_10C_015 | 80 | 247.7 | -77.10 |
| R3D_10C_015 | 120 | 249.7 | -76.90 |
| R3D_10C_016 | 0 | 290.4 | -89.00 |
| R3D_10C_016 | 14 | 97.4 | -89.40 |
| R3D_10C_016 | 30 | 297.5 | -89.41 |
| R3D_10C_016 | 60 | 306.7 | -89.38 |
| R3D_10C_016 | 90 | 320.4 | -88.98 |
| R3D_10C_016 | 120 | 0.4 | -89.07 |
| R3D_10C_016 | 150 | 31.4 | -88.38 |
| R3D_10C_016 | 180 | 39 | -88.32 |
| R3D_10C_016 | 210 | 28.6 | -88.29 |
| R3D_10C_017E | 12 | 236.5 | -2.61 |
| R3D_10C_017E | 30 | 236.8 | -2.80 |
| R3D_10C_017E | 60 | 238.1 | -3.10 |
| R3D_10C_017E | 90 | 239 | -3.40 |
| R3D_10C_017E | 120 | 239.9 | -3.40 |
| R3D_10C_017E | 150 | 240.6 | -3.70 |
| R3D_10C_017E | 180 | 241.4 | -4.30 |
| R3D_10C_017E | 210 | 242.1 | -4.10 |
| R3D_10C_018E | 12 | 236.3 | -18.50 |
| R3D_10C_018E | 30 | 237.3 | -18.80 |
| R3D_10C_018E | 60 | 238.8 | -19.60 |
| R3D_10C_018E | 90 | 239.8 | -20.50 |
| R3D_10C_018E | 120 | 241.1 | -20.90 |

| Hole ID | Depth | Azimuth | Dip |
|---|---|---|---|
| R3D_10C_018E | 150 | 242.6 | -20.80 |
| R3D_10C_018E | 180 | 242.9 | -23.00 |
| R3D_10C_018E | 210 | 242.9 | -22.90 |
| R3D_10C_019E | 12 | 232.2 | -55.50 |
| R3D_10C_019E | 30 | 233.6 | -55.60 |
| R3D_10C_019E | 60 | 238.7 | -57.60 |
| R3D_10C_019E | 90 | 240.4 | -58.00 |
| R3D_10C_019E | 120 | 241.3 | -57.50 |
| R3D_10C_019E | 150 | 243.4 | -56.80 |
| R3D_10C_019E | 180 | 243.1 | -57.00 |
| R3D_10C_019E | 210 | 244.4 | -57.10 |
| R3D_10C_019E | 240 | 246.4 | -57.90 |
| R3D_10C_019E | 270 | 247.5 | -58.20 |
| R3D_10C_019E | 300 | 248.6 | -59.60 |
| R3D_10C_020E | 12 | 220.7 | -72.80 |
| R3D_10C_020E | 30 | 222.6 | -73.40 |
| R3D_10C_020E | 60 | 225.6 | -73.20 |
| R3D_10C_020E | 90 | 226.5 | -73.30 |
| R3D_10C_020E | 120 | 229 | -72.90 |
| R3D_10C_020E | 150 | 230.8 | -73.70 |
| R3D_10C_020E | 180 | 233.5 | -74.20 |
| R3D_10C_020E | 210 | 235.4 | -73.50 |
| R3D_10C_020E | 240 | 237.9 | -73.20 |
| R3D_10C_020E | 270 | 240.8 | -73.50 |
| R3D_10C_021E | 12 | 86 | -85.60 |
| R3D_10C_021E | 30 | 138.7 | -86.60 |
| R3D_10C_021E | 60 | 151.8 | -87.60 |
| R3D_10C_021E | 90 | 167.5 | -87.90 |
| R3D_10C_021E | 120 | 170.2 | -87.40 |
| R3D_10C_021E | 150 | 175.8 | -87.60 |
| R3D_10C_021E | 180 | 168 | -87.50 |
| R3D_10C_021E | 210 | 181.5 | -87.20 |
| R3D_10C_021E | 240 | 179.7 | -87.30 |
| R3D_10C_021E | 280 | 187.5 | -87.90 |
| R3D_10C_022 | 0 | 226.4 | -27.06 |
| R3D_10C_022 | 12 | 228.7 | -27.50 |
| R3D_10C_022 | 30 | 226.6 | -28.11 |
| R3D_10C_022 | 60 | 227.1 | -28.87 |
| R3D_10C_022 | 90 | 227.3 | -29.34 |
| R3D_10C_022 | 120 | 227.8 | -29.79 |
| R3D_10C_022 | 150 | 228.2 | -29.64 |
| R3D_10C_022 | 180 | 229 | -29.49 |
| R3D_10C_022 | 210 | 229.9 | -29.56 |
| R3D_10C_023 | 12 | 226.1 | -34.20 |
| R3D_10C_023 | 30 | 226.7 | -34.46 |
| R3D_10C_023 | 60 | 227.2 | -34.96 |
| R3D_10C_023 | 90 | 227.8 | -35.40 |
| R3D_10C_023 | 120 | 228.1 | -35.52 |
| R3D_10C_023 | 150 | 229.2 | -34.69 |
| R3D_10C_023 | 180 | 230.6 | -34.05 |
| R3D_10C_024 | 15 | 227.3 | -43.70 |
| R3D_10C_024 | 30 | 227.7 | -44.40 |
| R3D_10C_024 | 60 | 228.5 | -44.90 |
| R3D_10C_024 | 90 | 229.7 | -45.40 |
| R3D_10C_024 | 120 | 230.6 | -44.40 |
| R3D_10C_024 | 180 | 233.2 | -41.90 |
| R3D_10C_024 | 210 | 233.7 | -41.90 |
| R3D_10C_025 | 0 | 295.1 | -77.41 |
| R3D_10C_025 | 12 | 293.9 | -76.90 |
| R3D_10C_025 | 30 | 294.7 | -77.32 |
| R3D_10C_025 | 60 | 294.7 | -77.16 |
| R3D_10C_025 | 90 | 294.1 | -77.06 |
| R3D_10C_025 | 120 | 296.2 | -76.96 |
| R3D_10C_025 | 150 | 297.1 | -77.07 |

| Hole ID | Depth | Azimuth | Dip |
|---|---|---|---|
| R3D_10C_026E | 0 | 182.9 | -77.80 |
| R3D_10C_026E | 12 | 185.2 | -77.96 |
| R3D_10C_026E | 30 | 186.9 | -77.96 |
| R3D_10C_026E | 60 | 200.3 | -78.79 |
| R3D_10C_026E | 90 | 204.8 | -78.73 |
| R3D_10C_026E | 120 | 207.2 | -78.66 |
| R3D_10C_027 | 12 | 241.7 | -24.20 |
| R3D_10C_027 | 30 | 243 | -25.10 |
| R3D_10C_027 | 60 | 243.5 | -25.90 |
| R3D_10C_027 | 90 | 243.9 | -26.80 |
| R3D_10C_027 | 120 | 245 | -28.20 |
| R3D_10C_027 | 150 | 244.7 | -28.30 |
| R3D_10C_027 | 180 | 245.8 | -29.40 |
| R3D_10C_027 | 210 | 246 | -29.90 |
| R3D_ND4_001 | 12 | 239.4 | -14.40 |
| R3D_ND4_001 | 30 | 240.7 | -15.30 |
| R3D_ND4_001 | 60 | 241.3 | -16.50 |
| R3D_ND4_001 | 120 | 242.6 | -18.70 |
| R3D_ND4_001 | 140 | 244.6 | -18.60 |
| R3D_ND4_001 | 180 | 245.6 | -17.60 |
| R3D_ND4_002 | 12 | 235 | -19.80 |
| R3D_ND4_002 | 30 | 235.9 | -20.10 |
| R3D_ND4_002 | 60 | 236.8 | -20.00 |
| R3D_ND4_002 | 90 | 236.8 | -19.70 |
| R3D_ND4_002 | 120 | 237.4 | -18.60 |
| R3D_ND4_002 | 150 | 237.2 | -18.50 |
| R3D_ND4_002 | 180 | 237.6 | -18.20 |
| R3D_ND4_002 | 210 | 237.5 | -17.10 |
| R3D_ND4_003 | 16 | 240.2 | -27.30 |
| R3D_ND4_003 | 40 | 240.6 | -27.34 |
| R3D_ND4_003 | 70 | 241.1 | -26.95 |
| R3D_ND4_003 | 100 | 241.6 | -26.56 |
| R3D_ND4_003 | 130 | 242.2 | -25.99 |
| R3D_ND4_003 | 160 | 242.2 | -25.54 |
| R3D_ND4_003 | 190 | 242.4 | -25.99 |
| R3D_ND4_003 | 220 | 242.1 | -26.57 |
| R3D_ND4_004 | 0 | 240 | -36.31 |
| R3D_ND4_004 | 12 | 240 | -36.38 |
| R3D_ND4_004 | 30 | 239.9 | -37.16 |
| R3D_ND4_004 | 60 | 239.8 | -38.10 |
| R3D_ND4_004 | 90 | 240.3 | -38.39 |
| R3D_ND4_004 | 120 | 241.1 | -37.83 |
| R3D_ND4_004 | 150 | 241.4 | -38.04 |
| R3D_ND4_004 | 180 | 241.9 | -37.38 |
| R3D_ND4_004 | 210 | 242.7 | -36.98 |
| R3D_ND4_005 | 0 | 241 | -46.89 |
| R3D_ND4_005 | 12 | 241 | -47.00 |
| R3D_ND4_005 | 30 | 241.5 | -47.38 |
| R3D_ND4_005 | 60 | 242.3 | -47.13 |
| R3D_ND4_005 | 90 | 242.7 | -47.06 |
| R3D_ND4_005 | 120 | 243 | -46.87 |
| R3D_ND4_005 | 150 | 243.9 | -46.57 |
| R3D_ND4_005 | 180 | 244.2 | -46.34 |
| R3D_ND4_006 | 0 | 240.9 | -56.99 |
| R3D_ND4_006 | 12 | 240.8 | -57.04 |
| R3D_ND4_006 | 30 | 241.6 | -57.40 |
| R3D_ND4_006 | 60 | 242.9 | -57.58 |
| R3D_ND4_006 | 90 | 243.2 | -57.69 |
| R3D_ND4_006 | 120 | 243.5 | -58.13 |
| R3D_ND4_007 | 12 | 239.8 | -68.10 |
| R3D_ND4_007 | 30 | 240.4 | -68.00 |
| R3D_ND4_007 | 60 | 241.1 | -68.60 |
| R3D_ND4_007 | 90 | 241.9 | -68.10 |
| R3D_ND4_007 | 120 | 243.3 | -68.40 |

ERA

Appendix 2

# JORC Code, 2012 Edition – Table 1 – NDD4, Cuddy 10C drill results

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • Three primary sampling techniques are utilised, geophysical gamma logging, geochemical assaying and specific gravity by pycnometry testing, all of which are set as 1 metre intervals.<br>• During the drilling phase a down hole geophysics gamma sonde is deployed during both the inrod and openhole drill runs (where possible according to ground conditions). Geophysical sampling is recorded every 0.05 metre and composited into 1 metre intervals and provides an equivalent $U_3O_8$ result (referred to as $eU_3O_8$).<br>• The gamma sonde undertakes a daily calibration test against a standard source, and also undertakes a yearly calibration to verify the dead-time and K-Factor conversion variables used to convert observed and true gamma counts into an $eU_3O_8$ reading.<br>• The selection of samples for geochemical assaying is initially defined by the results from the down hole geophysics 1 metre $eU_3O_8$ composites. Intervals that have gamma results above 0.02% $eU_3O_8$ are automatically assigned for assaying, plus the two samples above and below the triggered interval. In zones where the down hole geophysics were unable to reach and no gamma data was obtained the entire interval is selected for assay.<br>• The current suite of geochemical analyses consists of 48 major and trace elements which is analysed by ICPMS and ICPOES. All elements are reported in parts per million (ppm), except for U, which is reported as the weight percent oxide $U_3O_8$.<br>• Every tenth sample is also assigned for SG testing, and is conducted on the pulverized material by gas pycnometer at the analytical laboratory. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***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).* | • All current drilling has been HQ3 Diamond core, with future drilling to include NQ/NQ3 drilling diameters.<br>• Core orientation is conducted by a reflex digital orientation tool and the low side markup is made at the drilling rig upon core retrieval. The remaining core orientation lines are completed by the field team at the core logging facility. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Sample recovery is logged according to geotechnical intervals, with interval length and total recovered metres logged for the entire drill hole. All exclusion intervals are also recorded (due to core loss) to provide a total sample recovery percentage for every drill hole.<br>• The diamond core is processed in the ERA Jabiru East core yard where each metre is checked, measured and marked before the core is geologically and geotechnically logged. Every discrepancy between the measured length of the core and the driller's length marked on the core blocks is investigated. Discrepancies are resolved by ERA field staff, geologists and drilling personnel prior to cutting and sampling.<br>• Triple tube drilling has been selected to increase core recovery in the mineralised zone. |
| ***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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All diamond core is oriented and geologically logged to a detailed system that is constructed around the specific style of geological model/mineralisation under evaluation. Emphasis is placed upon the association of stratigraphy, lithology, structure and brecciation intensity. Similarly, the same core is geotechnically logged to system that is specifically adopted to derive a Tunneling Quality Index (Q) for geotechnical stope span support criteria. 100% of the core is logged in this manner. All core is photographed under consistent lighting conditions and the digital images stored on an internal shared drive. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Individual metres of diamond core that have been selected for geochemical analysis are cut in half by diamond saw, with each half of each metre representing a single sample.<br>• Core is cut along a line through the centre of the axis of symmetry as defined by the dominant fabric in the rock (or the mineralised structures), i.e. the line which passes through the apex of the foliation ellipsoid.<br>• Upon receipt at the analytical laboratory, samples are dried at 105 degrees Celsius to remove sample moisture.<br>• Samples undergo a primary crushing stage to take the entire sample to <2 millimetres. On occasions, at this stage a sample may be rotary split off for additional metallurgical testing.<br>• The remaining sample undergoes a secondary drying phase at 80 degrees Celcius to remove any additional moisture that may have resulted from the high humidity conditions in the NT.<br>• A rotary split is conducted on up to 3 kilograms of crushed material to a 300 gram result, which then undergoes a final pulverise stage to take the entire sample to 95%<75µm.<br>• The final pulverised sample undergoes a 4-acid near total digestion and submitted to ICPMS and ICPOES analysis. |
| ***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.*<br>• *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.*<br>• *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* | • The down hole gamma sonde is a Geovista 38 millimetres Total Count Gamma Probe and there are currently three in cyclical use, 3348, 3498 and 3540. All three probes were calibrated on the Adelaide Models (AM1, AM2, AM3 and AM7) on 6 June 2013 in order to derive the Deadtime and K Factor for each probe. The derivation of these variables and the drilling diameter correction factors are all documented in a technical report provided by Borehole Wireline Pty Ltd.<br>• To ensure quality control measures are in place for geochemical analysis, a uniform quality control process is assigned for each drillhole to be sampled. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| | *have been established.* | • Field duplicates are taken every 10 metres in the mineralised zone.<br>• The five highest $eU_3O_8$ samples are also assigned as a field duplicate if not already duplicate as per 10 metre intervals.<br>• A certified reference standard is inserted at a frequency of every 25th sample. There are 10 certified reference standards available, ranging from 0.03% to 1.68%, all off which have been created from ERA material and are matrix matched. The first standard is selected at random and subsequent standards are incremented from ERA_CRS_1 to ERA_CRS_10.<br>• A blank sample (quartz sand) is also inserted at a frequency of every 20th sample.<br>• All drill holes are sent as a single dispatch, whereby they are split up into sets of 88 by the analytical laboratory. An additional 12 check samples are included by the laboratory to conduct 100 sample analyses at a time (Qty x4 each of internal laboratory repeats, standards and blanks).<br>• A Quartz flush is also inserted between every sample during the crushing stage to minimise potential contamination of sample preparation equipment. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All samples are conducted by a NATA accredited laboratory (Northern Territory Environmental Laboratory, a division on Intertek). All sample results are reported in electronic format and imported directly into acQuire without modification to the original files. All results are saved in CSV and PDF format for future verification by if required.<br>• A report of the import process and results is also saved on a shared network drive for archive purposes.<br>• Access to the import process is restricted by three layers of security, acQuire software, Active Directory and SQL server protocols are implemented to ensure that only trained and qualified staff are physically capable of importing assay results.<br>• The sample approval process also abides by the same level of security, with specific staff permitted to write permissions, all other staff have read-only |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | access to assay results. |
| ***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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • At present DGPS – Differential Global Positioning System, is used in conjunction with a real time kinematic (RTK) system involving a base/static station radio broadcasting its received satellite telemetry to a moving/rover receiver. Regular QA/QC checks are conducted for the veracity of the GPS system by positioning the GPS rover over known, monumented ground stations with the receivers on a fast static or dynamic mode.<br>• Base Station and Mine Grid System – the survey department of the ERA – Ranger mine maintains a base/static station 24/7 at the mine site office and broadcast the satellite telemetry on the local/adopted mine grid system. The relative positions of various features and earth works requirements are instantly available to the roving receivers for both setting-out and as-built surveys. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • The maximum range of mineralisation continuity as suggested by existing variography studies to achieve a "measured" mineral resource confidence category is a maximum of 25 x 25 metres. The goal of the underground drilling program is to reduce the current data spacing of existing surface exploration drilling from 50 x 50 metres to a maximum of 25 x 25 metres. This confidence classification will be reviewed with further variography studies as new data is gathered. All sampling is conducted on regular 1 metre intervals. |
| ***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.*<br>• *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.* | • All drilling from the underground decline has been oriented to ensure it is 90 degrees to the strike of the known mineralisation and controlling structures. Previous surface drilling was oriented parallel to northing sections which was not 90 degrees the strike of the known mineralisation and controlling structures. The influence of this change of drilling orientation on sampling bias is under assessment. |

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| ***Sample security*** | • *The measures taken to ensure sample security.* | • All post drilling assessments are undertaken within a fully lockable facility located at the Ranger mine.<br>• In preparation for dispatch to the laboratory, all bagged cut core samples are packed into 44 gallon drums with tension strapped lids, closed and stored for transport in a fully enclosed, lockable shipping module. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | • ERA has internal audit and governance processes in place with respect to the classification and reporting of Mineral Resources. |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
| --- | --- | --- |
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • ERA holds an authority issued pursuant to section 41 of the *Atomic Energy Act 1953* (Cth) ('Section 41 Authority') over the Ranger Project Area . This authorises ERA to conduct mining and processing operations on the Ranger Project Area.<br>• The Section 41 Authority permits the conduct of mining and processing operations until 8 January 2021. Following this date, ERA must cease all mining and processing operations and is required to rehabilitate the Ranger Project Area in accordance with the Environmental Requirements annexed to the Section 41 Authority.<br>• The Ranger Project Area is located on Aboriginal land. In January 2013, ERA, the Commonwealth Government, the Gundjeihmi Aboriginal Corporation (representing the Mirarr Traditional Owners) and the Northern Land Council entered into a suite of agreements governing the conduct of operations on the Ranger Project Area.<br>• ERA's operations are closely supervised and monitored by key statutory bodies including the Northern Territory Department of Mines and Energy, Commonwealth Government's Supervising Scientist Division, Northern Land Council, Gundjeihmi Aboriginal Corporation (representing the Mirarr Traditional |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Owners) and the Commonwealth Department of Industry. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | • The Ranger 3 Deeps mineralisation is down dip of the Ranger Pit 3 deposit, which was mined from 1997 to 28 November 2012. The Ranger 3 Deeps mineralisation has been defined by a series of successive surface diamond drilling programs from 2005-2009 undertaken by ERA. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | • The Ranger mine and the Ranger Project Area lie in the north-easternmost part of the Pine Creek Geosyncline. Ranger 3 Deeps is a structurally controlled $U_3O_8$ deposit hosted by Paleo-Proterozoic arenites, shales and carbonate sediments of the Cahill formation which have been regionally metamorphosed to psammites, chlorite schists and magnesitic marble all of which dip at moderate angles to the east. The deposit sits within the "Deeps Fault Zone", a NNW trending complex upward soling reverse fault system controlled by the competency structure of the local stratigraphy. This competency contrast of the Ranger package is hypothesised to directly reflect its depositional character. Mineralisation is associated with brecciation and structural overprint adjacent to reverse faulting and is intimately linked to the geochemistry of the chlorite schist host lithology. |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole*<br>○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | • The initial azimuth and dip setup of the drill hole is conducted via a Downhole Surveys Azimuth Aligner™, which utilises north seeking gyros with precision to 0.2 degrees azimuth and 0.01 degrees inclination. Down hole surveys are conducted via a Reflex EZ-TRAC™ Survey camera (accuracy 0.35 degrees azimuth and 0.25 degrees inclination), with a single shot recorded every 30 metres during drilling, and multi-shot when retrieving rods as a means of quality control. The Reflex tool measures magnetic north, and therefore a correction factor is applied to convert to True North, taking into account yearly magnetic north drift as defined by Geoscience Australia.<br>• Down hole length is recorded both via a daily drill plod and on each core tray blocks to define the start, end and core loss intervals for each drilling run. This is verified by the geologists and field team by cross referencing the drilling contractor measurements with actual core mark-up measurements. Any discrepancies are noted and rectified before any core logging or sampling is |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | conducted.<br>• Initial interception depth (as defined by $eU_3O_8$) is determined by the Geovista Logging unit, which records the wireline depth, speed and cable tension to determine a true down hole depth every five centimetres during the geophysics logging process. A daily wireline calibration check is conducted against known markers on the wireline to ensure the unit is calibrated before each logging run.<br>• Chemical assaying interception depth is determined by the core samples which are created against the core length markups conducted by the logging geologist. |
| ***Data aggregation methods*** | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • All significant intersections are reported at a 0.12% $U_3O_8$ cut-off with a maximum of 2 metres internal dilution below that value. This is considered appropriate for a high grade underground mining project.<br>• All reporting of intersections is based on a regular sample length of 1 metre. |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').* | • Previous surface drilling was completed on an E-W exploration/mine grid orientation towards 270 degrees.<br>• Current and proposed underground drilling is oriented towards 240 degrees which is at right angles to the strike of the structures known to host the mineralisation. |
| ***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* | • Appropriate maps and sections (with scales) are included in the body of the accompanying announcement. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *plan view of drill hole collar locations and appropriate sectional views.* | |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | • The associated report is considered to represent a balanced report. |
| ***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.* | • Other exploration data collected is not material to this announcement. Further data and interpretation will be reviewed and reported when considered material. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • The Ranger 3 Deeps underground work program comprises approximately 200 drillholes are planned from approximately 15 drill positions. Appropriate drill sections will be reported following drilling. |