

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

www.energyres.com.au

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

ASX Announcement

20 November 2014

Ranger 3 Deeps Exploration Decline project

Final underground drilling results for the Ranger 3 Deeps Prefeasibility Study released

- 10 additional cross sections of underground close-spaced drilling of the Ranger 3
 Deeps mineral resource completed
- Significant intercepts include:

0	R3D_14C_001E 45m	@	$0.702\% \ U_3O_8$	from	112 metres
0	R3D_14C_007E 38m	@	$0.396\% U_3O_8$	from	114 metres
0	R3D_15C_011 21m	@	0.745% eU ₃ O ₈	from	120 metres
0	R3D_ND2_007 19m	@	0.980% U ₃ O ₈	from	123 metres
0	R3D_ND2_012 26m	@	0.519% eU ₃ O ₈	from	113 metres

Results are in line with the current geological model and structural interpretation

Energy Resources of Australia Ltd (ERA) has completed an additional 10 cross sections of underground close-spaced drilling of the Ranger 3 Deeps resource on the Ranger Project Area. These cross sections comprise 47 drill holes from the following cross sections for a combined total of 7,788.2 metres:

- Northern Drill Drive 12150mN (NDD2 North), 12125mN (NDD2 Central), 12100mN (NDD2 South);
- Cuddy 14C 11550mN (Cuddy 14C North), 11525mN (Cuddy 14C Central), 11500mN (Cuddy 14C South); and
- Cuddy 15C 11475mN (Cuddy 15C North), 11450mN (Cuddy 15C Central), 11425mN (Cuddy 15C South) and 11400mN (Cuddy 15C South Two).

The downhole collar location and survey results 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 the mineral resource within this zone.

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 update the Ranger 3 Deeps resource model and make appropriate adjustments to the mineral resource statement.

On 17 September 2014, ERA released an updated resource model estimate for Ranger 3 Deeps. The cross sections in this announcement provide additional detail on the geological



interpretation used in the ore body modelling process for Ranger 3 Deeps. The cross sections are the final sections to be released from the Ranger 3 Deeps Prefeasibility Study underground close-spaced drilling program.

Ranger 3 Deeps 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 by the end of the fourth quarter of 2014 and is scheduled to be considered by the ERA Board in the first quarter of 2015.

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:

- 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
- (d) 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. Drilling fans are oriented in a direction of approximately 240 degrees and arranged in vertical and inclined fans (Figure 1). Cuddy depths for the drilling program range from -120 metres to -310 metres from the surface.



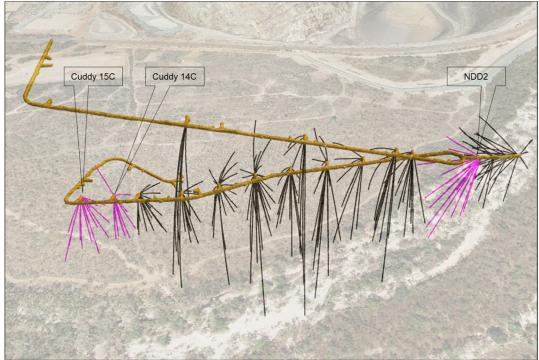


Figure 1 – Location of NDD2, Cuddy 14C and Cuddy 15C from which drilling has recently been completed. (Pink lines are for drill holes relevant to this announcement; black lines are for drill holes from previous announcements).

- Three drill sections were undertaken from Northern Drill Drive 2 (NDD2 North, NDD2 Central and NDD2 South, at dip angles of 90 degrees and 70 degrees to the south and 55 degrees to the south respectively).
- Three drill sections were undertaken from Cuddy 14C (Cuddy 14C North, Cuddy 14C Central and Cuddy 14C South, at dip angles of 70 degrees to the north and 90 degrees and 70 degrees to the south respectively).
- Four drill sections were undertaken from Cuddy 15C (Cuddy 15C North, Cuddy 15C Central, Cuddy 15C South and Cuddy 15C South Two, at dip angles of 70 degrees to the north and 90 degrees and 70 degrees to the south and 55 degrees to the south respectively).

Drill intersections from all drill drives have been interpreted and are shown in Figures 2 to 11.

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.



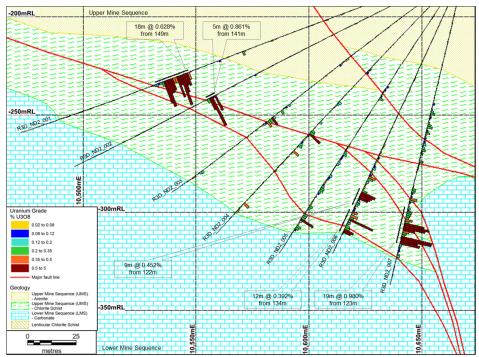


Figure 2 – Interpreted cross section showing the drilling results from NDD2 North.

(Includes gamma equivalent and chemical assay results)

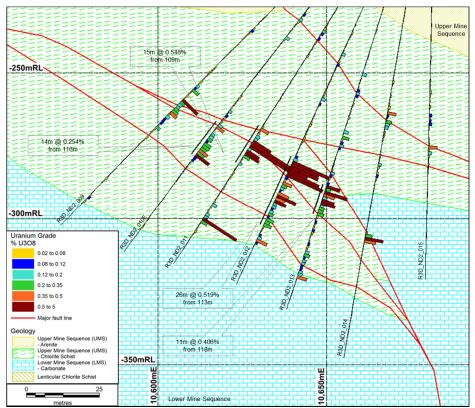


Figure 3 – Interpreted cross section showing the drilling results from NDD2 Central. (Includes gamma equivalent and chemical assay results)



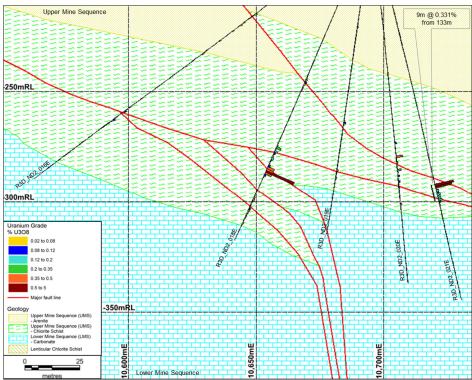


Figure 4 – Interpreted cross section showing the drilling results from NDD2 South. (Includes gamma equivalent and chemical assay results)

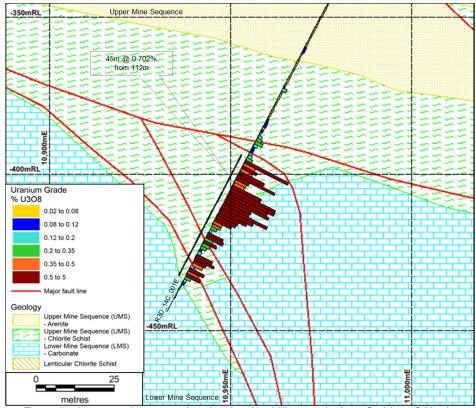


Figure 5 – Interpreted cross section showing the drilling results from Cuddy 14C North.

(Includes gamma equivalent and chemical assay results)



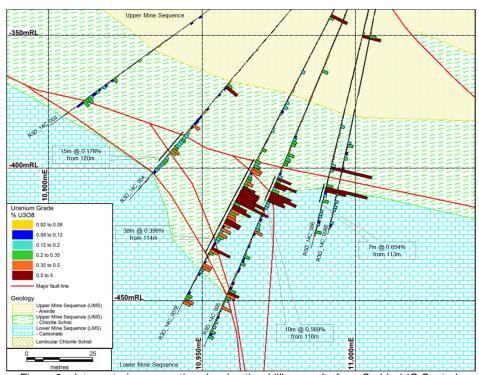


Figure 6 – Interpreted cross section showing the drilling results from Cuddy 14C Central.

(Includes gamma equivalent and chemical assay results)

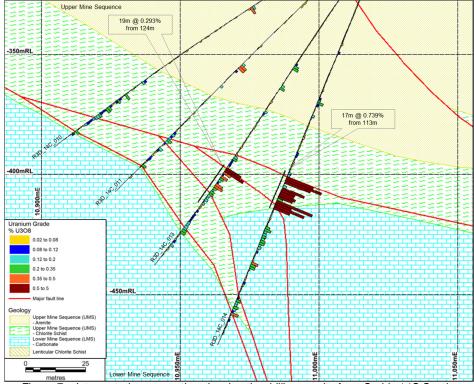


Figure 7 – Interpreted cross section showing the drilling results from Cuddy 14C South.

(Includes gamma equivalent and chemical assay results)



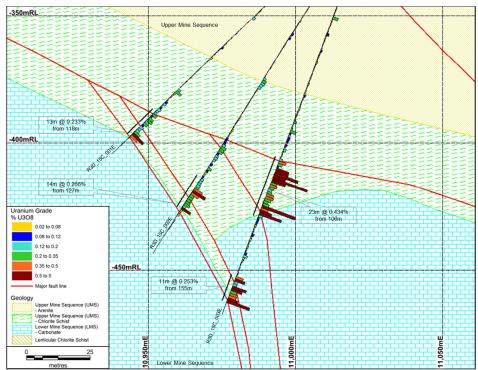


Figure 8 – Interpreted cross section showing the drilling results from Cuddy 15C North.

(Includes gamma equivalent and chemical assay results)

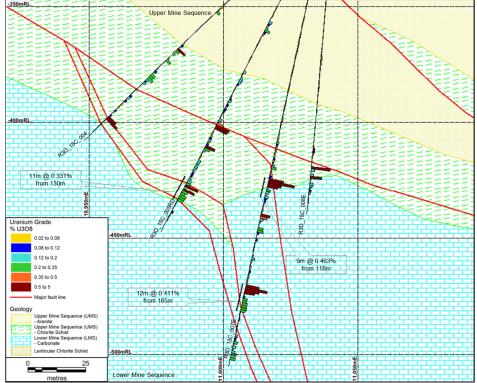
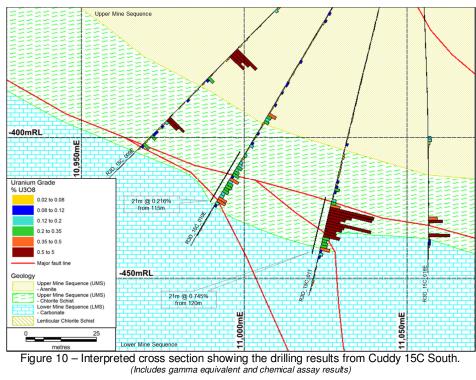


Figure 9 – Interpreted cross section showing the drilling results from Cuddy 15C Central. (Includes gamma equivalent and chemical assay results)







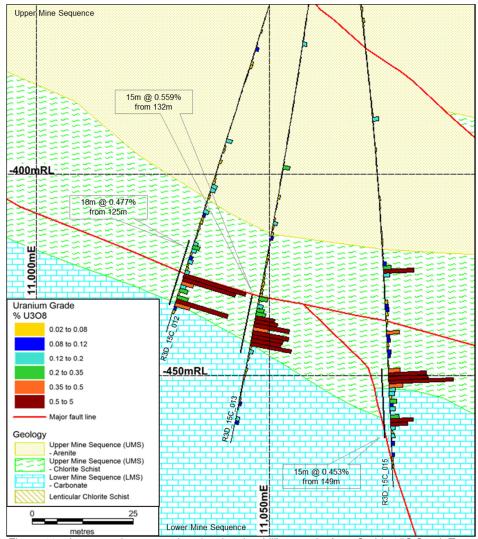


Figure 11 – Interpreted cross section showing the drilling results from Cuddy 15C South Two.

(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.



HOLE ID	FROM (m)	TO (m)	WIDTH (m)	GRADE % U ₃ O ₈	METHOD
R3D_ND2_001	149	167	18	0.628	Geochemistry
R3D_ND2_002	141	146	5	0.861	Geochemistry
R3D_ND2_006	134	146	12	0.392	Geochemistry
R3D_ND2_007	123	142	19	0.98	Geochemistry
R3D_ND2_011	109	124	15	0.548	Gamma
R3D_ND2_012	113	139	26	0.519	Gamma
R3D_ND2_013	118	129	11	0.406	Gamma
R3D_14C_001E	112	157	45	0.702	Geochemistry
R3D_14C_005	116	126	10	0.569	Geochemistry
R3D_14C_006	113	120	7	0.654	Geochemistry
R3D_14C_007E	114	152	38	0.396	Geochemistry
R3D_14C_013	124	143	19	0.293	Geochemistry
R3D_14C_014	113	130	17	0.739	Geochemistry
R3D_15C_003E	106	129	23	0.434	Geochemistry
R3D_15C_007E	165	177	12	0.411	Gamma
R3D_15C_010E	115	136	21	0.216	Gamma
R3D_15C_011	120	141	21	0.745	Gamma
R3D_15C_012	125	143	18	0.477	Gamma
R3D_15C_013	132	147	15	0.559	Gamma
R3D_15C_015	149	167	18	0.453	Gamma

Table 1: Significant results from NDD2 and Cuddy 14C and Cuddy 15C.

Notes:

A. All intersections were determined using a 0.12% U₃O₈ 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 eU₃O₈ 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

Investor 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

Website: www.energyres.com.au

Twitter: Follow @ERARangerMine on Twitter

Rachel Storrs

Office: +61 (0) 3 9283 3628 Mobile: +61 (0) 417 401 018 Email: rachel.storrs@riotinto.com



Appendix 1Drill hole collar summary

Hole ID	AMG Easting GDA94	AMG Northing GDA94	GDA Reduced Level	Depth (metres)	Azimuth	Dip
R3D_14C_001E	274726.8801	8597552.099	-296.121	167.9	245.9	-61.6
R3D_14C_003	274726.5262	8597551.408	-295.587	155.8	236	-29.4
R3D_14C_004	274726.7253	8597551.537	-296.07	152.8	235.6	-48.3
R3D_14C_005	274727.2919	8597551.794	-296.137	185.9	236	-67.9
R3D_14C_006	274727.6762	8597552.067	-296.197	138	236	-77.2
R3D_14C_007E	274727.5557	8597551.655	-296.195	179.7	223.1	-61
R3D_14C_008E	274728.305	8597551.502	-296.149	132	208	-78
R3D_14C_010	274726.82	8597550.809	-295.56	170.9	222.9	-29.1
R3D_14C_011	274727.0204	8597550.954	-296.067	161.7	222	-40.7
R3D_14C_013	274727.6098	8597551.033	-296.175	175.3	216.3	-54
R3D_14C_014	274728.0738	8597551.124	-296.166	191.7	240	-65.6
R3D_14C_015E	274726.7435	8597550.259	-295.001	23.2	217	-13
R3D_14C_015RD	274726.815	8597550.2	-294.962	242.2	215.5	-12.1
R3D_15C_001E	274746.8355	8597478.212	-308.088	141	248.2	-40.6
R3D_15C_002E	274746.9716	8597478.417	-308.446	161.7	251.4	-55.9
R3D_15C_003E	274747.04	8597478.742	-308.565	171	260	-68.8
R3D_15C_004	274747.0794	8597477.715	-308.216	144	236.8	-41.9
R3D_15C_005	274747.2623	8597477.805	-308.481	106.9	236.8	-58.3
R3D_15C_005RD	274747.4662	8597477.957	-308.429	156.2	236.8	-62
R3D_15C_007E	274747.3003	8597477.779	-308.599	201.2	236.8	-78.4
R3D_15C_008E	274750.2251	8597477.899	-308.474	131.7	244.7	-86.5
R3D_15C_009E	274747.1868	8597477.218	-308.312	153	224.7	-43.1
R3D_15C_010E	274747.5456	8597477.387	-308.387	153.3	220.9	-57
R3D_15C_011	274747.9545	8597477.095	-308.519	155.8	192.4	-69
R3D_15C_012	274747.8242	8597477.271	-308.526	150.3	182.8	-58
R3D_15C_013	274748.5281	8597477.202	-308.473	170.9	166.6	-66.9
R3D_15C_015	274748.8043	8597476.757	-308.449	179.8	130.1	-68.4
R3D_15C_016E	274750.2954	8597477.601	-308.55	140.9	125.8	-80.9
R3D_ND2_001	274438.3537	8598243.697	-176.445	240.3	238.8	-18.8
R3D_ND2_002	274438.3709	8598243.699	-176.71	222.1	238.6	-25.8
R3D_ND2_003	274438.3352	8598243.68	-177.111	186.4	238.6	-36.1



Hole ID	AMG Easting GDA94	AMG Northing GDA94	GDA Reduced Level	Depth (metres)	Azimuth	Dip
R3D_ND2_004	274438.3029	8598243.64	-177.322	183.2	238.4	-45.8
R3D_ND2_005	274438.2249	8598243.593	-177.697	170.7	238.4	-55.9
R3D_ND2_006	274438.3935	8598243.718	-177.694	158	236.4	-65
R3D_ND2_007	274438.5136	8598243.789	-177.736	163.5	236.9	-78.5
R3D_ND2_009	274438.5326	8598243.105	-177.213	180.3	226.6	-41.7
R3D_ND2_010E	274438.4733	8598243.066	-177.597	171.2	225.5	-48.9
R3D_ND2_011	274438.8484	8598242.877	-177.655	164.9	223.1	-56.4
R3D_ND2_012	274438.9368	8598242.978	-177.674	161.4	217.9	-63
R3D_ND2_013	274439.1493	8598242.241	-177.517	163.2	209.5	-69.7
R3D_ND2_014	274439.2492	8598242.249	-177.544	174.2	190.6	-76.8
R3D_ND2_015	274440.1021	8598242.993	-177.674	144	145.8	-82.3
R3D_ND2_016E	274439.1493	8598242.241	-177.517	204.1	210.8	-32.7
R3D_ND2_018E	274440.0444	8598242.366	-177.686	171	185	-54.3
R3D_ND2_019E	274441.0503	8598242.595	-177.673	159	162.8	-58.6
R3D_ND2_020E	274441.7808	8598242.694	-177.666	183	137.9	-59.1
R3D_ND2_021E	274442.3007	8598243.278	-177.669	192.9	125.9	-58.2



Downhole survey summary

Hole ID	Depth	Azimuth	Dip
R3D_ND2_001	12	238.8	-19.2
R3D_ND2_001	30	239	-19.7
R3D_ND2_001	60	239.3	-20.2
R3D_ND2_001	90	239.4	-20.6
R3D_ND2_001	120	239.8	-21.0
R3D_ND2_001	150	240.3	-20.7
R3D_ND2_001	180	240.4	-20.6
R3D_ND2_001	210	240.8	-19.0
R3D_ND2_002	12	238.6	-25.7
R3D_ND2_002	30	239.2	-25.8
R3D_ND2_002	60	239.5	-26.5
R3D_ND2_002	90	239.9	-26.9
R3D_ND2_002	120	240	-27.5
R3D_ND2_002	150	240.5	-27.4
R3D_ND2_002	180	240.6	-26.8
R3D_ND2_002	210	240.6	-26.6
R3D_ND2_003	12	238.8	-36.4
R3D_ND2_003	30	239	-36.8
R3D_ND2_003	60	239.5	-37.6
R3D_ND2_003	90	239.6	-37.8
R3D_ND2_003	120	240.2	-37.6
R3D_ND2_003	150	240.7	-37.0
R3D_ND2_003	180	241	-36.3
R3D_ND2_004	12	238.5	-45.9
R3D_ND2_004	30	238.8	-46.1
R3D_ND2_004	60	239.5	-46.5
R3D_ND2_004	90	239.7	-46.6
R3D_ND2_004	120	240	-47.0
R3D_ND2_004	150	240.7	-47.1
R3D_ND2_005	12	238.5	-56.0
R3D_ND2_005	30	238.9	-56.2
R3D_ND2_005	60	239.6	-56.7
R3D_ND2_005	90	239.7	-57.0
R3D_ND2_005	120	240	-57.0



Hole ID	Depth	Azimuth	Dip
R3D_ND2_005	150	240.4	-57.5
R3D_ND2_006	12	238.6	-65.7
R3D_ND2_006	30	239.9	-65.5
R3D_ND2_006	60	241	-65.1
R3D_ND2_006	120	241.1	-64.7
R3D_ND2_007	12	238.3	-78.0
R3D_ND2_007	30	242	-76.6
R3D_ND2_007	60	243.3	-76.4
R3D_ND2_007	90	243.3	-76.4
R3D_ND2_007	120	244	-76.9
R3D_ND2_007	150	246.1	-77.0
R3D_ND2_009	12	225.7	-41.6
R3D_ND2_009	30	226.3	-42.7
R3D_ND2_009	60	226.2	-43.5
R3D_ND2_009	90	226.3	-44.3
R3D_ND2_009	120	226.4	-44.5
R3D_ND2_009	150	226.4	-45.0
R3D_ND2_009	180	226.2	-45.3
R3D_ND2_010E	12	225.5	-48.9
R3D_ND2_010E	30	227.3	-49.5
R3D_ND2_010E	60	229	-51.4
R3D_ND2_010E	90	228.7	-51.6
R3D_ND2_010E	120	228.6	-52.1
R3D_ND2_010E	150	227.9	-53.1
R3D_ND2_011	12	223	-56.4
R3D_ND2_011	30	224.1	-56.8
R3D_ND2_011	60	224.5	-56.9
R3D_ND2_011	90	224.9	-56.6
R3D_ND2_011	120	225.4	-56.5
R3D_ND2_011	150	225.8	-56.2
R3D_ND2_012	15	217.2	-63.6
R3D_ND2_012	30	218.5	-63.7
R3D_ND2_012	60	220	-63.9
R3D_ND2_012	90	220.4	-63.8
R3D_ND2_012	120	221.6	-64.2
R3D_ND2_012	150	221.3	-64.2



Hole ID	Depth	Azimuth	Dip
R3D_ND2_013	12	211.4	-70.2
R3D_ND2_013	30	212.4	-70.0
R3D_ND2_013	70	212	-70.2
R3D_ND2_013	100	212.4	-70.1
R3D_ND2_013	130	212.6	-70.0
R3D_ND2_013	160	213.4	-69.8
R3D_ND2_014	15	193.5	-76.9
R3D_ND2_014	30	197.6	-77.1
R3D_ND2_014	60	200.1	-77.4
R3D_ND2_014	90	201.8	-77.2
R3D_ND2_014	120	205.8	-77.7
R3D_ND2_014	150	206.1	-78.0
R3D_ND2_015	15	152.2	-82.9
R3D_ND2_015	30	157.6	-83.3
R3D_ND2_015	60	160.4	-83.7
R3D_ND2_015	90	162.9	-83.9
R3D_ND2_015	120	163.9	-84.0
R3D_ND2_016E	12	210.8	-32.6
R3D_ND2_016E	30	211.8	-32.9
R3D_ND2_016E	60	212.4	-33.2
R3D_ND2_016E	90	212.8	-32.9
R3D_ND2_016E	120	213.2	-32.8
R3D_ND2_016E	150	213.9	-32.8
R3D_ND2_016E	180	213.9	-33.4
R3D_ND2_018E	12	188.5	-54.8
R3D_ND2_018E	30	186.6	-54.8
R3D_ND2_018E	60	187.8	-55.1
R3D_ND2_018E	90	188.1	-55.1
R3D_ND2_018E	120	188.9	-54.9
R3D_ND2_018E	150	189.4	-54.9
R3D_ND2_019E	12	163.3	-58.8
R3D_ND2_019E	30	163.6	-59.1
R3D_ND2_019E	60	164.1	-59.6
R3D_ND2_019E	90	164.1	-59.8
R3D_ND2_019E	120	165	-60.1
R3D_ND2_019E	150	165.6	-59.7



Hole ID	Depth	Azimuth	Dip
R3D_ND2_020E	12	141.4	-59.6
R3D_ND2_020E	30	142.7	-59.5
R3D_ND2_020E	60	143.8	-60.0
R3D_ND2_020E	90	142	-59.9
R3D_ND2_020E	120	143.3	-60.4
R3D_ND2_020E	150	143.5	-60.8
R3D_ND2_021E	15	126.2	-58.4
R3D_ND2_021E	30	125.9	-58.5
R3D_ND2_021E	60	125.9	-58.9
R3D_ND2_021E	90	125.8	-59.6
R3D_ND2_021E	120	126.2	-60.4
R3D_ND2_021E	150	125.7	-61.2
R3D_ND2_021E	180	124.6	-61.3
R3D_14C_001E	12	246.8	-61.7
R3D_14C_001E	30	247.7	-61.8
R3D_14C_001E	60	249.8	-61.7
R3D_14C_001E	90	250.9	-62.0
R3D_14C_003	14	237.3	-31.2
R3D_14C_003	30	238.3	-32.3
R3D_14C_003	60	240.2	-34.7
R3D_14C_003	90	241.5	-35.8
R3D_14C_003	120	241.6	-36.2
R3D_14C_003	150	243.4	-36.8
R3D_14C_004	15	236.1	-48.7
R3D_14C_004	30	236.7	-49.0
R3D_14C_004	60	237.3	-49.6
R3D_14C_004	90	237.8	-49.6
R3D_14C_004	120	238.4	-49.8
R3D_14C_005	14	237.1	-68.0
R3D_14C_005	30	237.9	-67.7
R3D_14C_005	60	239	-67.5
R3D_14C_005	90	240.2	-67.4
R3D_14C_005	120	241.5	-67.0
R3D_14C_006	12	238.9	-77.5
R3D_14C_006	30	240.2	-76.2
R3D_14C_006	60	241.9	-76.6



Hole ID	Depth	Azimuth	Dip
R3D_14C_006	90	243.9	-76.6
R3D_14C_007E	12	223.6	-61.3
R3D_14C_007E	30	224.8	-61.6
R3D_14C_007E	60	228.7	-62.3
R3D_14C_007E	90	229.9	-62.5
R3D_14C_007E	120	230.7	-62.7
R3D_14C_007E	150	231.4	-62.5
R3D_14C_008E	12	212.3	-78.4
R3D_14C_008E	24	214.2	-78.2
R3D_14C_008E	60	219.1	-77.9
R3D_14C_008E	90	224.3	-77.4
R3D_14C_010	15	223.3	-29.9
R3D_14C_010	30	223.5	-30.4
R3D_14C_010	60	224.3	-31.7
R3D_14C_010	90	225.3	-32.9
R3D_14C_010	120	225.9	-34.9
R3D_14C_010	150	226.2	-35.6
R3D_14C_011	12	222.7	-41.6
R3D_14C_011	30	224.8	-42.3
R3D_14C_011	60	225.6	-43.1
R3D_14C_011	90	225.9	-44.1
R3D_14C_011	120	226.5	-44.3
R3D_14C_013	12	214.8	-53.8
R3D_14C_013	30	217.5	-54.1
R3D_14C_013	60	218.3	-54.1
R3D_14C_013	90	219.9	-54.7
R3D_14C_013	150	224.8	-51.8
R3D_14C_014	12	211.4	-65.3
R3D_14C_014	30	211.8	-65.3
R3D_14C_014	60	214.7	-65.7
R3D_14C_014	90	216.3	-66.0
R3D_14C_014	128	218	-66.2
R3D_14C_014	150	217.2	-66.3
R3D_14C_014	180	218.9	-66.5
R3D_14C_015E	12	217.1	-15.5
R3D_14C_015E	21	217.1	-15.8



Hole ID	Depth	Azimuth	Dip
R3D_14C_015RD	15	215.5	-12.7
R3D_14C_015RD	30	215.6	-12.8
R3D_14C_015RD	60	215.4	-13.6
R3D_14C_015RD	90	215.5	-14.3
R3D_14C_015RD	120	215.2	-14.7
R3D_14C_015RD	150	215.3	-15.1
R3D_14C_015RD	180	215.1	-15.3
R3D_14C_015RD	210	215.2	-15.6
R3D_14C_015RD	240	215.4	-16.4
R3D_15C_001E	15	247.9	-41.7
R3D_15C_001E	30	249.1	-42.2
R3D_15C_001E	60	248.9	-42.9
R3D_15C_001E	90	250	-43.4
R3D_15C_002E	12	253.1	-56.4
R3D_15C_002E	30	253.8	-56.4
R3D_15C_002E	60	254.8	-56.4
R3D_15C_002E	91	255.5	-57.1
R3D_15C_002E	121	256.1	-56.5
R3D_15C_002E	151	256.2	-56.2
R3D_15C_003E	12	261.8	-68.4
R3D_15C_003E	30	262.2	-68.4
R3D_15C_003E	60	262.7	-68.0
R3D_15C_003E	90	263.2	-68.0
R3D_15C_003E	120	264	-67.8
R3D_15C_004	12	237	-42.9
R3D_15C_004	30	237.5	-43.0
R3D_15C_004	60	237.5	-43.4
R3D_15C_004	90	238.5	-43.8
R3D_15C_004	120	239.6	-44.3
R3D_15C_005	12	236.4	-57.9
R3D_15C_005	30	237.3	-57.9
R3D_15C_005	60	238.2	-57.8
R3D_15C_005	90	238.8	-57.8
R3D_15C_005RD	12	237.8	-62.4
R3D_15C_005RD	30	238.2	-62.3
R3D_15C_005RD	60	238.9	-62.5



Hole ID	Depth	Azimuth	Dip
R3D_15C_005RD	90	239.2	-62.5
R3D_15C_005RD	121	239.4	-62.8
R3D_15C_005RD	151	238.5	-62.6
R3D_15C_007E	12	237.6	-78.1
R3D_15C_007E	30	240.1	-78.2
R3D_15C_007E	60	241.7	-77.8
R3D_15C_007E	90	242.4	-77.8
R3D_15C_007E	129	240.9	-77.6
R3D_15C_007E	150	240.7	-77.9
R3D_15C_008E	12	245.6	-85.8
R3D_15C_008E	30	247.4	-85.3
R3D_15C_008E	60	248	-85.2
R3D_15C_008E	90	250	-84.8
R3D_15C_008E	120	253.1	-84.6
R3D_15C_009E	12	224.2	-43.4
R3D_15C_009E	30	225.9	-43.7
R3D_15C_009E	60	226.6	-44.0
R3D_15C_009E	90	230.3	-45.0
R3D_15C_009E	120	232.1	-45.2
R3D_15C_010E	12	222.9	-57.6
R3D_15C_010E	30	223.7	-58.3
R3D_15C_010E	60	224.7	-58.4
R3D_15C_010E	90	225.6	-58.6
R3D_15C_011	12	193	-70.1
R3D_15C_011	36	194.3	-70.6
R3D_15C_011	70	197.5	-70.9
R3D_15C_011	90	199	-71.5
R3D_15C_011	120	199.7	-71.8
R3D_15C_012	12	182.8	-58.3
R3D_15C_012	50	183.2	-59.0
R3D_15C_012	80	184.4	-59.8
R3D_15C_012	111	187	-61.5
R3D_15C_013	12	168.8	-66.8
R3D_15C_013	30	169	-66.9
R3D_15C_013	60	170.5	-67.2
R3D_15C_013	90	174.4	-67.4



Hole ID	Depth	Azimuth	Dip
R3D_15C_013	120	179	-68.4
R3D_15C_013	150	179.7	-68.6
R3D_15C_015	12	131.1	-68.7
R3D_15C_015	30	131.7	-69.0
R3D_15C_015	60	132.5	-69.3
R3D_15C_015	90	136.6	-70.4
R3D_15C_015	120	140.3	-71.1
R3D_15C_015	150	142.3	-71.4
R3D_15C_016E	12	127.9	-81.0
R3D_15C_016E	30	133.2	-81.6
R3D_15C_016E	60	135.6	-82.1
R3D_15C_016E	90	145	-82.6
R3D_15C_016E	120	152	-83.6



Appendix 2

JORC Code, 2012 Edition – Table 1 – NDD2, Cuddy 14C and Cuddy 15C 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 (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. 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. During the drilling phase a down hole geophysics gamma sonde is deployed during both the in rod and open hole 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 U₃O₈ result (referred to as eU₃O₈). 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 eU₃O₈ reading. The selection of samples for geochemical assaying is initially defined by the results from the down hole geophysics 1 metre eU₃O₈ composites. Intervals that have gamma results above 0.02% eU₃O₈ 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. The current suite of geochemical analyses consists of 48 major and trace elements which is analysed by ICPMS and ICPOES. All elements are reported



Criteria	JORC Code explanation	Commentary
		in parts per million (ppm), except for U, which is reported as the weight percent oxide $\rm U_3O_8$.
		 Every 10th sample is also assigned for SG testing, and is conducted on the pulverized material by gas pycnometer at the analytical laboratory.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (eg	All current drilling has been in NQ, NQ3 and HQ3 size diamond core.
	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.).	 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.	Sample recovery is logged according to geotechnical intervals, with interval length and total recovered metres logged for the entire drill hole. All exclusion
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 	intervals are also recorded (due to core loss) to provide a total sample recovery percentage for every drill hole.
	 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. 	 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.
		 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	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,



Criteria	JORC Code explanation	Commentary
	 metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	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.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and 	 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.
	 whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. 	 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.
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 	 Upon receipt at the analytical laboratory, samples are dried at 105 degrees Celsius to remove sample moisture.
	 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. 	 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.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	 The remaining sample undergoes a secondary drying phase at 80 degrees Celsius to remove any additional moisture that may have resulted from the high humidity conditions in the Northern Territory.
		 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.
		The final pulverised sample undergoes a 4-acid near total digestion and submitted to ICPMS and ICPOES analysis.



laboratory tests * 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. * Neture of quality control precedures adopted (or standards) * Neture of quality control precedures adopted (or standards)	hole gamma sonde is a Geovista 38 millimetres Total Count Gamma d there are currently three in cyclical use, 3348, 3498 and 3540. All pes were calibrated on the Adelaide Models (AM1, AM2, AM3 and 5 June 2013 in order to derive the Deadtime and K Factor for each e derivation of these variables and the drilling diameter correction e all documented in a technical report provided by Borehole Wireline
blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. • Field dupl • The five halready dimeters are 1.68%, all matched. are incren • A blank sa sample. • All drill ho of 88 by th	e quality control measures are in place for geochemical analysis, a quality control process is assigned for each drill hole to be sampled. Icates are taken every 10 metres in the mineralised zone. Icates are taken every 10 metres in the mineralised zone. Icates are taken every 10 metres in the mineralised zone. Icates as per 10 metre intervals. It reference standard is inserted at a frequency of every 25th sample. If 10 certified reference standards available, ranging from 0.03% to 10 off which have been created from ERA material and are matrix. The first standard is selected at random and subsequent standards mented from ERA_CRS_1 to ERA_CRS_10. It reference standard is inserted at a frequency of every 20th and it is also inserted at a frequency of every 20th a
internal la • A Quartz	boratory repeats, standards and blanks). flush is also inserted between every sample during the crushing minimise potential contamination of sample preparation equipment.



Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All samples are conducted by a NATA accredited laboratory (Northern Territory Environmental Laboratory, a division of 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 if required. A report of the import process and results is also saved on a shared network drive for archive purposes. 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. 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 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. Specification of the grid system used. 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. 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



Criteria	JC	PRC Code explanation	Co	ommentary
				surveys.
Data spacing and distribution	•	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.	•	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. 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.
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. 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. 	 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.
	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.	 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.
		 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.
		 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 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.



Criteria	JORC Code explanation	Commentary
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 ₃ O 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: O easting and northing of the drill hole collar O elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar O dip and azimuth of the hole O down hole length and interception depth O hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 The initial azimuth and dip setup of the drill hole is conducted via a Down hole 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. 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 conducted.



Criteria	JORC Code explanation	Commentary
		 Initial interception depth (as defined by eU₃O₈) 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.
		 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. 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. 	 All significant intersections are reported at a 0.12% U₃O₈ cut-off with a maximum of 2 metres internal dilution below that value. This is considered appropriate for a high grade underground mining project.
		All reporting of intersections is based on a regular sample length of 1 metre.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	These relationships are particularly important in the reporting of Exploration Results.	Previous surface drilling was completed on an E-W exploration/mine grid orientation towards 270 degrees.
mineralisation widths and intercept	 If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 	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
lengths	• 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	mineralisation.



Criteria	JORC Code explanation	Commentary
	length, true width not known').	
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	Appropriate maps and sections (with scales) are included in the body of the accompanying announcement.
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 (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	All drill holes and cross sections from the deeps exploration program have been reported.