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ASX Announcement

2 October 2014

Ranger 3 Deeps Exploration Decline project

Further underground drilling results released

- Three additional cross sections of underground close-spaced drilling of the Ranger 3 Deeps mineral resource completed
- Significant intercepts include:
 - R3D 11C 007 44m @ $0.382\% U_3O_8$ from 175 metres R3D 11C 015 72.4m @ 0.227% U₃O₈ from 155 metres 0 R3D 11C 004 38m @ 0.427% U₃O₈ from 171 metres R3D 11C 014 55m @ 0.292% U₃O₈ from 124 metres R3D 11C 016 13m @ 0.956% U₃O₈ from 103 metres
- Results are in line with the current geological model and structural interpretation

Energy Resources of Australia Ltd (ERA) has completed an additional three cross sections of underground close-spaced drilling of the Ranger 3 Deeps resource on the Ranger Project Area. These sections comprise 19 drill holes from sections 11725mN (Cuddy 11C North), 11700mN (Cuddy 11C Central) and 11675mN (Cuddy 11C South) totalling 4,549.2 metres.

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 finalise 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. ERA will release further cross sections as they become available.

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 guarter of 2014 and considered by the ERA Board in the first guarter 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.

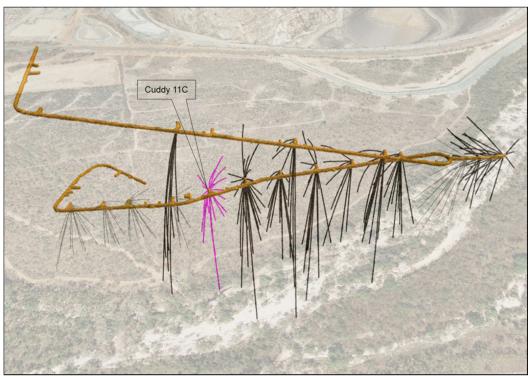


Figure 1 – Location of Cuddy 11C from which drilling has recently been completed. (Pink lines are for drill holes relevant to this announcement; black lines are for drill holes from previous announcements; grey lines are for drill holes for upcoming announcements).



 Three drill sections were undertaken from Cuddy 11C (Cuddy 11C North, Cuddy 11C Central and Cuddy 11C South, at dip angles of 70 degrees to the north and 90 degrees and 70 degrees to the south respectively).

Drill intersections from all drill drives have been interpreted and are shown in Figures 2 to 4.

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.

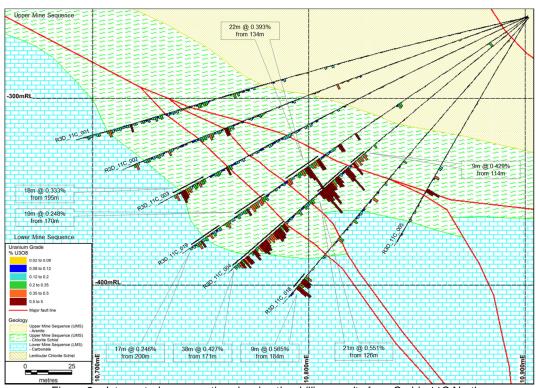


Figure 2 – Interpreted cross section showing the drilling results from Cuddy 11C North.

(Includes gamma equivalent and chemical assay results)



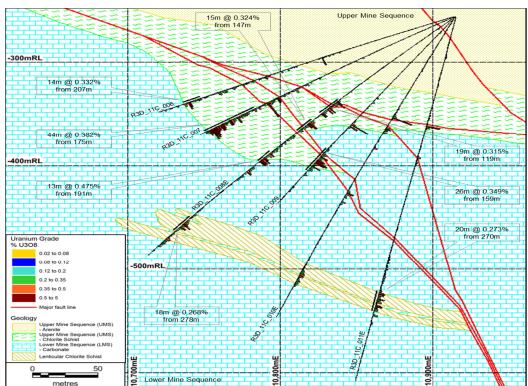


Figure 3 – Interpreted cross section showing the drilling results from Cuddy 11C Central.

(Includes gamma equivalent and chemical assay results)

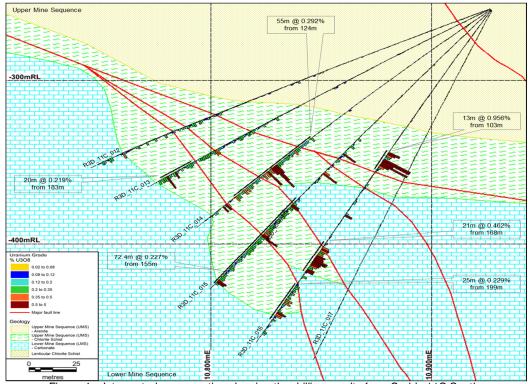


Figure 4 – Interpreted cross section showing the drilling results from Cuddy 11C South.

(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% eU₃O₈ 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_11C_003	195	213	18	0.333	Geochemistry
R3D_11C_004	126	147	21	0.551	Geochemistry
R3D_11C_004	171	209	38	0.427	Geochemistry
R3D_11C_006	207	221	14	0.332	Geochemistry
R3D_11C_007	175	219	44	0.382	Geochemistry
R3D_11C_008E	119	138	19	0.315	Geochemistry
R3D_11C_008E	147	162	15	0.324	Geochemistry
R3D_11C_008E	191	204	13	0.475	Geochemistry
R3D_11C_008E	278	296	18	0.268	Geochemistry
R3D_11C_009	159	185	26	0.349	Geochemistry
R3D_11C_011E	270	290	20	0.273	Geochemistry
R3D_11C_013	183	203	20	0.219	Geochemistry
R3D_11C_014	124	179	55	0.292	Geochemistry
R3D_11C_015	155	227.4	72.4	0.227	Geochemistry
R3D_11C_016	103	116	13	0.956	Geochemistry
R3D_11C_016	168	189	21	0.462	Geochemistry and Gamma
R3D_11C_016	199	224	25	0.229	Gamma
R3D_11C_018	184	193	9	0.565	Geochemistry
R3D_11C_019	134	156	22	0.393	Geochemistry
R3D_11C_019	170	189	19	0.248	Geochemistry

Table 1: Significant results from Cuddy 11C.

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 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.

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Appendix 1

Drill hole collar summary

Hole ID	AMG Easting GDA94	AMG Northing GDA94	GDA Reduced Level	Depth (metres)	Azimuth	Dip
R3D_11C_001	274644.597	8597762.497	-256.885	251.8	241.6	-11.9
R3D_11C_002	274644.6463	8597762.597	-256.163	233.7	243.3	-19
R3D_11C_003	274644.6275	8597762.7	-256.364	224.7	244.4	-25
R3D_11C_004	274644.7111	8597762.779	-256.924	212.7	246	-39
R3D_11C_005	274644.8242	8597762.837	-256.833	143.8	256.4	-57.5
R3D_11C_006	274644.7857	8597762.236	-256.235	242.8	235.9	-20.5
R3D_11C_007	274644.8218	8597762.372	-256.48	224.7	235.9	-28.3
R3D_11C_008E	274645.1677	8597762.281	-256.899	326.9	231.4	-41.1
R3D_11C_009	274645.2139	8597762.68	-257.166	224.8	238	-52.3
R3D_11C_010E	274645.5681	8597762.766	-256.17	320	232.4	-63.8
R3D_11C_011E	274645.9353	8597762.84	-257.194	360	236.2	-78.5
R3D_11C_012	274645.0059	8597761.794	-256.332	233.8	226.4	-22.4
R3D_11C_013	274645.0406	8597761.987	-256.449	211.4	228.3	-29.2
R3D_11C_014	274645.3391	8597762.005	-256.685	207	224.9	-37.6
R3D_11C_015	274645.4946	8597762.067	-256.913	227.4	223.5	-46.6
R3D_11C_016	274645.603	8597762.092	-257.175	239.7	221.1	-55.8
R3D_11C_017	274645.8725	8597762.187	-257.217	235.4	217.2	-63.9
R3D_11C_018	274645.101	8597762.922	-257.027	203.7	246.9	-47.8
R3D_11C_019	274644.5332	8597762.726	-256.848	224.9	247.3	-48



Downhole survey summary

Hole ID	Depth	Azimuth	Dip
R3D 11C 001	12	242	-12.8
R3D_11C_001	30	242.4	-13.1
R3D_11C_001	60	243.2	-13.8
R3D_11C_001	90	244.2	-14.9
R3D_11C_001	120	245	-15.5
R3D_11C_001	150	245.7	-16.1
R3D_11C_001	180	246.3	-16.7
R3D_11C_001	210	246.8	-16.3
R3D_11C_001	240	248	-16.4
R3D_11C_002 R3D_11C_002	12 30	243.7 244.2	-19.1 -19.3
R3D_11C_002	60	244.2	-19.6
R3D 11C 002	90	246.3	-20.0
R3D 11C 002	120	247.4	-20.6
R3D_11C_002	150	248.6	-21.4
R3D_11C_002	180	249.6	-21.6
R3D_11C_002	210	250.5	-21.8
R3D_11C_003	12	244.6	-25.5
R3D_11C_003	30	245.2	-25.5
R3D_11C_003	60	246.2	-25.7
R3D_11C_003 R3D_11C_003	90 120	247.8 248.8	-26.5 -26.9
R3D_11C_003	150	248.8	-26.9 -27.3
R3D 11C 003	180	250.6	-27.6
R3D 11C 003	210	251.4	-27.9
R3D 11C 004	12	246	-39.0
R3D_11C_004	30	246.4	-39.0
R3D_11C_004	60	247.4	-39.4
R3D_11C_004	90	249.4	-40.0
R3D_11C_004	120	250.1	-40.4
R3D_11C_004	150	251.4	-40.6
R3D_11C_004 R3D_11C_005	180 15	251.7 256.6	-40.8 -57.2
R3D_11C_005	30	258.2	-57.2 -57.8
R3D 11C 005	60	260.4	-58.0
R3D 11C 005	90	261.7	-58.3
R3D_11C_005	120	261.7	-58.1
R3D_11C_006	12	236.5	-20.7
R3D_11C_006	30	237.1	-21.3
R3D_11C_006	60	238.4	-21.7
R3D_11C_006	90	239.6	-22.2
R3D_11C_006	120	241.3	-22.9
R3D_11C_006 R3D_11C_006	150 180	242.2 242.9	-23.2 -23.0
R3D_11C_006	210	243.4	-23.0
R3D 11C 006	240	244.4	-22.7
R3D_11C_007	12	236.9	-28.9
R3D_11C_007	30	236.3	-29.3
R3D_11C_007	60	237.7	-30.0
R3D_11C_007	90	239.3	-30.6
R3D_11C_007	120	241	-31.0
R3D_11C_007	150	242.1	-31.1
R3D_11C_007 R3D_11C_007	180 210	243.2 243.9	-31.3 -31.3
R3D_11C_007	12	231.3	-31.3 -41.2
R3D 11C 008E	30	232.9	-41.2
R3D 11C 008E	60	233.4	-41.7
R3D_11C_008E	90	234.5	-42.4
R3D_11C_008E	120	236	-43.8
R3D_11C_008E	150	236.5	-44.4
R3D_11C_008E	180	236.4	-44.5
R3D_11C_008E	210	236.8	-44.8
R3D_11C_008E	240	238.3	-45.2
R3D_11C_008E	270	238.2	-47.0 -47.9
R3D_11C_008E	300	239	-47.9



Hole ID	Depth	Azimuth	Dip
R3D 11C 009	14	240.4	-53.3
R3D_11C_009	30	241.1	-52.6
R3D_11C_009	60	242.2	-52.9
R3D_11C_009	90	242.6	-52.9
R3D_11C_009	120	243.1	-53.1
R3D_11C_009	150	243.8	-53.3
R3D_11C_009	180	244.5	-53.7
R3D_11C_009 R3D_11C_010E	210 12	244.6 233.4	-54.2 -63.5
R3D_11C_010E	30	234.2	-63.6
R3D 11C 010E	60	236.2	-63.9
R3D 11C 010E	90	237.4	-64.0
R3D_11C_010E	120	238.1	-63.9
R3D_11C_010E	150	238.9	-64.3
R3D_11C_010E	210	241	-65.1
R3D_11C_010E	240 270	242.5 243.2	-66.0
R3D_11C_010E R3D_11C_011E	15	236.3	-66.3 -78.5
R3D_11C_011E	30	236.1	-78.4
R3D_11C_011E	60	238	-78.1
R3D_11C_011E	90	240.4	-77.7
R3D_11C_011E	120	243	-77.3
R3D_11C_011E	150	243.8	-77.3
R3D_11C_011E R3D_11C_011E	180 210	244.3 247.2	-77.2 -77.3
R3D_11C_011E	240	247.2	-77.6
R3D 11C 011E	270	249.3	-77.7
R3D_11C_011E	300	251.6	-77.7
R3D_11C_011E	330	251.6	-77.7
R3D_11C_011E	360	253.2	-77.8
R3D_11C_012	12	226.7	-22.8
R3D_11C_012	30	226.9	-23.1
R3D_11C_012 R3D_11C_012	60 90	227.7 228.5	-23.3 -23.8
R3D_11C_012	120	229.6	-24.5
R3D 11C 012	150	230.2	-24.9
R3D_11C_012	180	230.7	-25.4
R3D_11C_012	210	231.1	-27.1
R3D_11C_013	15	228.7	-29.2
R3D_11C_013 R3D_11C_013	30	229.2 229.2	-29.5
R3D_11C_013	60 90	230.6	-30.0 -30.8
R3D 11C 013	120	231.4	-31.0
R3D_11C_013	180	233.9	-32.4
R3D_11C_014	12	225.2	-37.7
R3D_11C_014	30	226	-38.1
R3D_11C_014	60	227.5	-39.2
R3D_11C_014 R3D_11C_014	90 120	227.9 228.4	-39.8 -40.8
R3D_11C_014	150	220.4	-40.6 -41.6
R3D_11C_014	190	228.3	-42.1
R3D_11C_015	12	224.1	-46.9
R3D_11C_015	30	225.1	-47.3
R3D_11C_015	60	227.6	-48.2
R3D_11C_015 R3D_11C_015	90 120	229.8 231	-48.7
R3D_11C_015 R3D_11C_015	150	231.9	-48.9 -49.3
R3D_11C_015	180	231.9	-49.3 -50.0
R3D_11C_015	210	233.3	-50.4
R3D_11C_016	12	221.9	-55.8
R3D_11C_016	30	222.9	-56.7
R3D_11C_016	60	225.4	-58.0
R3D_11C_016	90	226	-58.2
R3D_11C_016 R3D_11C_016	120 150	226.5 227.2	-58.4 -58.7
R3D_11C_016	180	227.4	-58.8
R3D_11C_016	210	229.2	-58.6
		•	



Hole ID	Depth	Azimuth	Dip
R3D_11C_017	12	218.6	-63.7
R3D_11C_017	30	220.2	-64.2
R3D_11C_017	60	222.5	-64.4
R3D_11C_017	90	224.9	-65.5
R3D_11C_017	152	227	-66.3
R3D_11C_017	210	229.8	-67.0
R3D_11C_018	12	247.6	-48.0
R3D_11C_018	30	248.6	-48.2
R3D_11C_018	60	250.7	-48.3
R3D_11C_018	90	252.4	-49.0
R3D_11C_018	120	253.6	-48.9
R3D_11C_018	150	254.3	-48.9
R3D_11C_018	180	254.7	-48.9
R3D_11C_019	12	246	-34.2
R3D_11C_019	30	246.6	-34.6
R3D_11C_019	60	247.5	-34.3
R3D_11C_019	90	249	-34.5
R3D_11C_019	150	251.9	-33.9
R3D_11C_019	190	249.6	-34.4
R3D_11C_019	220	251.1	-34.0



Criteria

Appendix 2

JORC Code, 2012 Edition – Table 1 – Cuddy 11C drill results

Section 1 Sampling Techniques and Data

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

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.

Commentary

- 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 eU_3O_8).
- 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 in parts per million (ppm), except for U, which is reported as the weight percent oxide U₃O₈.
- 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 (e.g. 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 in NQ, NQ3 and HQ3 size diamond core. 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. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 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. 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 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. 	 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. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 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. 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. Upon receipt at the analytical laboratory, samples are dried at 105 degrees celsius to remove sample moisture. 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. 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 NT. 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% 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. For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 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. To ensure quality control measures are in place for geochemical analysis, a uniform quality control process is assigned for each drill hole to be sampled. Field duplicates are taken every 10 metres in the mineralised zone. The five highest eU₃O₈ samples are also assigned as a field duplicate if not already duplicate as per 10 metre intervals. A certified reference standard is inserted at a frequency of every 25th sample.



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. 	 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. A blank sample (quartz sand) is also inserted at a frequency of every 20th sample. 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). A Quartz flush is also inserted between every sample during the crushing stage to minimise potential contamination of sample preparation equipment. 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 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 –



Criteria	JORC Code explanation	Commentary
		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. 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. 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 <i>Atomic Energy Act</i> 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 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 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. 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. 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.



Criteria	JORC Code explanation	Commentary
Data aggregation	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg	 Chemical assaying interception depth is determined by the core samples which are created against the core length markups conducted by the logging geologist. 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
methods	 cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 appropriate for a high grade underground mining project. 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. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Previous surface drilling was completed on an E-W exploration/mine grid orientation towards 270 degrees. 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 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.



Criteria	JORC Code explanation	Commentary
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. 	 To date, approximately 150 holes have been reported on, with approximately 70 holes remaining to be reported.