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A member of the Rio Tinto Group

## ASX Announcement

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**28 January 2016**

### ANNUAL STATEMENT OF RESERVES AND RESOURCES

Energy Resources of Australia Ltd (**ERA**) has completed its annual assessment and reconciliation of reserves and resources for both Ranger and Jabiluka. The results are set out on page 3 of this release.

#### Ranger Reserves and Resources

The Ranger Ore Reserves and Mineral Resource are reported under the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (**JORC Code 2012**).

During 2015, the Proved and Probable Ore Reserves for Ranger increased from 6,206 tonnes of uranium oxide to 10,383 tonnes of uranium oxide primarily as a result of the lowering of the cut-off grade from 0.08% U<sub>3</sub>O<sub>8</sub> to 0.06% U<sub>3</sub>O<sub>8</sub>, optimisation of mining stages for this lower cut-off and from positive reconciliation of the stockpile model. The assessment of the 2015 Proved and Probable Ore Reserves for Ranger included the ore depletion by processing of 2,518 tonnes. During the reporting period, all processed ore was sourced from either run of mine stocks or low grade stockpiles.

For the same period, Ranger Mineral Resources increased from 52,711 tonnes to 56,149 tonnes of uranium oxide. This increase (3,438 tonnes) was mainly due to the lowering of the Ranger 3 Deeps cut-off grade in line with the assumptions from the 2014 prefeasibility study relating to the Ranger 3 Deeps underground project.

The table below sets out the reconciliation of Ranger Ore Reserves:

<b>Ranger Reconciliation</b>	<b>Contained U<sub>3</sub>O<sub>8</sub> tonnes*</b>
Ore Reserves as at 1 January 2015	6,206
Ore Reserves depleted by processing	(2,518)
Other adjustments See Explanatory Notes	6,695
<b>Ore Reserves as at 31 December 2015</b>	<b>10,383</b>
<b>Explanatory Notes</b>	
Effect of lowered cut-off grade from 0.08% to 0.06%	6,003
Favourable Stockpile Model Performance	692

\*Rounding differences may occur



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### **Jabiluka Reserves and Resources**

The Jabiluka Ore Reserves have been written back to Mineral Resources in accordance with the JORC Code 2012 for the 31 December 2015 Statement of Reserves and Resources.

The 2015 Mineral Resources statement for Jabiluka is 137,107 tonnes of uranium oxide.

Since entering into the Long Term Care and Maintenance Agreement, the reporting of Jabiluka Ore Reserves and Mineral Resources has been grandfathered under the reporting requirements of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2004 Edition.

In 2015 ERA determined that the 2015 Jabiluka Ore Reserves and Mineral Resources statement should be updated in line with the JORC Code 2012. The Company was of the view that it was appropriate to bring Jabiluka Ore Reserves and Mineral Resources into line with the JORC Code 2012, to reflect updated assumptions in relation to the economic, technical, environment, approvals and communities aspects of the resource.



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ERA 2015 Ore Reserves & Mineral Resources	CUT-OFF GRADE – STOCKPILE ORE 0.06% U <sub>3</sub> O <sub>8</sub>			CUT-OFF GRADE – STOCKPILE ORE 0.08% U <sub>3</sub> O <sub>8</sub>		
	As at 31 December 2015			As at 31 December 2014		
	Ore (MT)	% U <sub>3</sub> O <sub>8</sub>	t U <sub>3</sub> O <sub>8</sub>	Ore (MT)	% U <sub>3</sub> O <sub>8</sub>	t U <sub>3</sub> O <sub>8</sub>
Ranger ore reserves						
Current Stockpiles	12.08	0.086	10,383	5.05	0.123	6,206
In situ						
Proved	-	-	-	-	-	-
Probable	-	-	-	-	-	-
Sub-total Proved and Probable Reserves	12.08	0.086	10,383	5.05	0.123	6,206
Total Ranger No. 3 Stockpiles, Proved and Probable Reserves	12.08	0.086	10,383	5.05	0.123	6,206
	CUT-OFF GRADE – STOCKPILE RESOURCE 0.02% U <sub>3</sub> O <sub>8</sub> UNDERGROUND INSITU RESOURCE 0.11% U <sub>3</sub> O <sub>8</sub>			CUT-OFF GRADE – STOCKPILE RESOURCE 0.02% U <sub>3</sub> O <sub>8</sub> UNDERGROUND INSITU RESOURCE 0.15% U <sub>3</sub> O <sub>8</sub>		
<i>Ranger mineral resources IN ADDITION TO THE ABOVE RESERVE</i>						
Current Mineralised Stockpiles	31.17	0.04	12,291	38.29	0.05	17,844
In situ resource (R3 Deeps)						
Measured	3.72	0.27	10,134	2.78	0.32	8,922
Indicated	10.41	0.22	22,636	6.30	0.28	17,366
Sub-total Measured and Indicated Resources	45.31	0.10	45,062	47.37	0.09	44,128
Inferred Resources	5.44	0.20	11,087	3.50	0.25	8,579
Total Resources	50.75	0.11	56,149	50.87	0.10	52,711
	As At 31 December 2015 CUT-OFF GRADE 0.20% U <sub>3</sub> O <sub>8</sub>			As At 31 December 2014 CUT-OFF GRADE 0.20% U <sub>3</sub> O <sub>8</sub>		
	Ore (MT)	% U <sub>3</sub> O <sub>8</sub>	t U <sub>3</sub> O <sub>8</sub>	Ore (MT)	% U <sub>3</sub> O <sub>8</sub>	t U <sub>3</sub> O <sub>8</sub>
Jabiluka ore reserves (all written back to resource)						
Proved	-	-	-	-	-	-
Probable	-	-	-	13.80	0.49	67,700
Total Proved and Probable Reserves	-	-	-	13.80	0.49	67,700
Jabiluka mineral resources						
Measured	1.21	0.89	10,769	0.24	0.48	1,140
Indicated	13.88	0.52	72,176	4.30	0.36	15,330
Sub-total Measured and Indicated	15.09	0.55	82,945	4.54	0.36	16,440
Inferred Resources	10.03	0.54	54,162	10.90	0.53	57,500
Total Resources	25.12	0.55	137,107	15.44	0.48	73,940

Rounding differences may occur.



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### **Competent persons**

As required by the Australian Securities Exchange, the above tables also contain details of other mineralisation that has a reasonable prospect of being economically extracted in the future but which is not yet classified as Proven or Probable Reserves. This material is defined as Mineral Resources under the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (**JORC Code 2012**). Estimates of such material are based largely on geological information with only preliminary consideration of mining, economic and other factors. While in the judgment of the Competent Person there are realistic expectations that all or part of the Mineral Resources will eventually become Proven or Probable Reserves, there is no guarantee that this will occur as the result depends on further technical and economic studies and prevailing economic conditions in the future.

The information in this announcement that relates to Ranger and Jabiluka Mineral Resources and Ore Reserves is based on information compiled by geologist Stephen Pevely (a full time employee of ERA). Stephen Pevely is a member of the Australasian Institute of Mining & Metallurgy and has sufficient experience which is relevant to the style of mineralisation and the type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the JORC Code 2012. Stephen Pevely consents to the inclusion in this announcement of the matters based on his 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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## JORC Code, 2012 Edition – Table 1 – Mineral Reserves update for Ranger low grade stockpiles

### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li><i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i></li> <li><i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i></li> </ul>	<ul style="list-style-type: none"> <li>The reserve model is a subset of the resource model as described above. The stockpiles have been drilled out on a 50 metres by 50 metres to 25 metres by 25 metres basis. The holes were chemical assayed on 1 metre composites. The holes were also gamma logged. An ordinary kriged model was produced with a block size of 12.5 metres by 12.5 metres by 3.33 metres.</li> <li>The mineral resources are reported additional to the ore reserves.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li><i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li><i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>Regular site visits are undertaken by the Competent Person to review mining practice, ensure that the trucks are being discriminated and that re-handling and stockpile depletion and growth are being tracked properly.</li> <li>Site visits have been undertaken.</li> </ul>
<b>Study status</b>	<ul style="list-style-type: none"> <li><i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li> <li><i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li> </ul>	<ul style="list-style-type: none"> <li>A Life of Mine Plan and A Reserves Only Plan have been used to convert resources to reserves. These plans are updated each year.</li> <li>The 3 dimensional stockpile resource model (depleted for end of year production) is coded with specific mining stage designs and is loaded into XPAC which is then used to schedule a stockpile mine plan. This XPAC mine plan and final run of mine stock balance is fed into the ERA Processing Scheduler to forecast plant performance and consumable usage based on historical plant data and plant budget forecasts. The resulting production schedule is then tested in the ERA Life of Mine cash flow model for viable economics.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The cut-off grade for primary ore is 0.06 per cent U<sub>3</sub>O<sub>8</sub> and laterite ore 0.08 per cent U<sub>3</sub>O<sub>8</sub>. The grade is based on processing costs and mill recoveries.</li> </ul>



Criteria	JORC Code explanation	Commentary
<p><b>Mining factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>• <i>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</i></li> <li>• <i>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</i></li> <li>• <i>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</i></li> <li>• <i>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</i></li> <li>• <i>The mining dilution factors used.</i></li> <li>• <i>The mining recovery factors used.</i></li> <li>• <i>Any minimum mining widths used.</i></li> <li>• <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li>• <i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mining of stockpiles is achieved by free-dig mining of 10 metre benches with a 2500 Komatsu excavator and CAT785 haul trucks with each truck load passing through the discriminator for dump location.</li> <li>• The equipment had previously been used to complete mining of Pit 3. On completion of the pit in November 2012 the mining fleet commenced stockpile mining. The trucks and excavators are well matched to the stockpile mining.</li> <li>• The stockpiles are mined in 10 metre benches, with 37 degree batters and a 5 metre bench at each bench level.</li> <li>• No dilution is included in the mining schedule.</li> <li>• Recovery is set at 100 per cent. All trucks exiting the stockpile area pass through the truck discriminator which assigns the grade to the trucks load.</li> <li>• Minimum mining width is 25 metres.</li> <li>• The stockpiles are all indicated with no inferred ore.</li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>• <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li>• <i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li>• <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li>• <i>Any assumptions or allowances made for deleterious elements.</i></li> <li>• <i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li>• <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>• The stockpile reserve is being processed in the existing Ranger processing plant with no change to the process.</li> <li>• The process is well tested with over 30 years of operation.</li> <li>• Significant metallurgical testwork has been undertaken over the years. A Feasibility Study was undertaken for processing of the laterite ore. Processing of the laterite has been undertaken for more than 5 years.</li> <li>• The only significant deleterious element is carbonate, which impacts acid consumption in the leach circuit. Ca is modelled in the block model. Mill feed is blended to maintain a Ca level of less than 1 per cent.</li> <li>• No bulk sample required. Processing of the low grade stockpiles has been undertaken since the end of open cut mining in November 2012.</li> <li>• N/A</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Environmental</b>	<ul style="list-style-type: none"> <li>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	<ul style="list-style-type: none"> <li>All tailings and mineralised material needs to be buried in a pit or final landform. Processing of the low grade stockpiles reduces that liability. All tailings in the existing tailings storage facility and from future processing will be discharged into Pit 3.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</li> </ul>	<ul style="list-style-type: none"> <li>No new infrastructure is required to treat the stockpiles. Processing continues at the same rate.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul style="list-style-type: none"> <li>No capital required to reclaim the stockpiles.</li> <li>Operating costs are based on actual mining and processing costs and 2 year plan budget forecasts for the relevant departments.</li> <li>High Carbonate ore is blended with low carbonate ore to keep calcium to less than 1 per cent. Leach acid consumption and extraction impact is forecast in production schedules which uses calcium-driven algorithms.</li> <li>Rio Tinto Economics supplied exchange rates.</li> <li>Price, exchange rate and oil price assumptions supplied by Rio Tinto Economics. Product transportation costs are based on historical actual costs.</li> <li>Existing royalty agreements in place.</li> </ul>
<b>Revenue factors</b>	<ul style="list-style-type: none"> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	<ul style="list-style-type: none"> <li>Price, exchange rate and oil price assumptions supplied by Rio Tinto Economics. Product transportation costs are based on historical actual costs.</li> <li>U<sub>3</sub>O<sub>8</sub> is sold to Rio Tinto Uranium for on sale to third party purchasers. Rio Tinto Uranium's sales pricing strategy focuses on long term contracting using a variety of pricing mechanisms.</li> </ul>





Criteria	JORC Code explanation	Commentary
<b>Market assessment</b>	<ul style="list-style-type: none"> <li>• <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li> <li>• <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li> <li>• <i>Price and volume forecasts and the basis for these forecasts.</i></li> <li>• <i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Uranium sales schedules arranged by Rio Tinto Uranium. There are no problems in selling the scheduled production from the Ranger stockpiles.</li> </ul>
<b>Economic</b>	<ul style="list-style-type: none"> <li>• <i>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</i></li> <li>• <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rio Tinto Economics is the source of assumptions on inflation and discount rate and also supplies sensitivity upside/downside ranges for price, foreign exchange, oil and cost flex parameters.</li> </ul>
<b>Social</b>	<ul style="list-style-type: none"> <li>• <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A new mining agreement was signed with the traditional owners in January 2013. The current mining lease requires ERA to cease mining and processing operations by 8 January 2021. ERA maintains a good working relationship with all stakeholders.</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li>• <i>Any identified material naturally occurring risks.</i></li> <li>• <i>The status of material legal agreements and marketing arrangements.</i></li> <li>• <i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></li> </ul>	<ul style="list-style-type: none"> <li>• There are no significant naturally occurring risks to the stockpile reserves.</li> <li>• A new mining agreement was signed with the Traditional Owners in January 2013. The Ranger mining lease is valid to 8<sup>th</sup> January, 2021, and the reserves will be depleted before then. Product is sold through the Rio Tinto Uranium.</li> <li>• The mining lease expires on 8<sup>th</sup> January, 2021. There are no unresolved matters pertaining to the stockpile reserves.</li> </ul>





Criteria	JORC Code explanation	Commentary
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li>• <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Stockpile resources are classified as 100 per cent indicated with no measured; this is due to relatively wide spaced drilling and heterogeneity. This then converts into probable reserves.</li> <li>• The Competent Person regards the reserves as probable.</li> <li>• There are no proven reserves.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The stockpile resource model was audited by Coffey Mining Ltd. in September 2010. There were no adverse findings.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li> <li>• <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The reserve model is a subset of the resource model as described above. The stockpiles have been drilled out on a 50 metre x 50 metre to 25 metre x 25 metre basis. The holes were chemical assayed on 1 metre composites. The holes were also gamma logged. An ordinary kriged model was produced with a block size of 12.5 metre x 12.5 metre x 3.33 metres. The reserve model is deemed to be appropriate.</li> <li>• Stockpile estimate uses local estimates based on the drilling.</li> <li>• Annual production using reclaim from the stockpiles is reconciled to the stockpile resource model. So far there has been a positive reconciliation. All trucks exiting the stockpiles pass through a truck discriminator which assigns a U<sub>3</sub>O<sub>8</sub> grade to the load. This process has found considerable ore grade material on sub grade stockpiles.</li> <li>• Production from the stockpiles is compared to the resource block model on a monthly basis, and generally the results are in relative agreement.</li> </ul>



## JORC Code, 2012 Edition – Table 1 – Jabiluka II Mineral Resource update

### Section 1- Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>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.</i></li> </ul>	<p>There have been two main periods of fundamental data collection relating to Jabiluka II mineral resource evaluation; by the discoverers, Pancontinental Mining (1973-1980) and by Energy Resources Australia (ERA) (1993-2000), who purchased the deposit in 1991.</p> <p>For both periods, two primary sampling techniques were utilised; geochemical assaying of split and sawn core and geophysical gamma logging using down-hole gamma sondes.</p> <p>No additional fundamental resource data has been collected from the deposit since the last phase of underground drilling in late 1999.</p> <p><b>Pancontinental core sampling methodology</b></p> <p>After the geological logging for each hole was completed, the intervals to be chemically assayed were chosen by selecting the intervals that had a radiometric grade of 0.02 per cent U<sub>3</sub>O<sub>8</sub> or greater. Narrow waste zones between mineralisation were included in the sample interval. Core cutting was done with a large diamond saw, ensuring the cut was normal to the strike of the schistosity. Half core was bagged with a sample number ticket. The drill hole name, depth, assays requested and the date of sampling were recorded on the butt of the sample number ticket. 45 field duplicates (whereby both halves of the core were submitted for analysis) were collected.</p> <p><b>ERA core sampling methodology</b></p> <p>SAL (stratigraphic assay level) 3 and SAL 4 samples, and any intersections below SAL 4 with a radiometric assay of 0.02 per cent U<sub>3</sub>O<sub>8</sub> or greater, were sampled. After logging and core photography, half core was sampled in 1 metre composite intervals, bagged and dispatched to the laboratory for gold assay by the fire assay method.</p>



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Criteria	JORC Code explanation	Commentary
		<p>Except for the first 400 metres which was hand split, all core samples were cut using the diamond saw.</p> <p>For the 1999 underground program, core cutting was done on site using an automatic core saw.</p> <p>All samples were placed in numbered calico bags.</p> <p>There is no evidence that field duplicate samples were collected in the ERA programs.</p> <p><b>Pancontinental Gamma Logging Methodology</b></p> <p>For the period 1971-1976 all drill holes were radiometrically logged by external contractors. From 1977-1980 all logging was done internally by Pancontinental. Both analogue and digital output was produced. From 1977, all radiometrically intervals in the database have a calculated <math>U_3O_8</math> grade.</p> <p><b>ERA Gamma Logging Methodology</b></p> <p>Radiometric 'assays' are a derived assay equivalent using a number of correction factors applied to the raw data and the correlation between the corrected gamma data and another assay method.</p> <p>As a consequence of the different approaches by Pancontinental and ERA the database contains gamma assays derived by different methods using different corrections over time.</p> <p>The Jabiluka II radiometric assays represent an approximation of the true uranium grade and most gamma assays greater than or equal to 0.02 per cent <math>U_3O_8</math> were submitted for chemical assay. The chemical assays are considered the most reliable.</p>



Criteria	JORC Code explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.).</i></li> </ul>	<p><b>Pancontinental</b></p> <ul style="list-style-type: none"> <li>• All surface diamond drilling was NQ size core.</li> <li>• Most holes were pre-collared (rock roller) through the overlying barren Kombolgie sandstone.</li> <li>• No use of oriented core.</li> </ul> <p><b>ERA</b></p> <ul style="list-style-type: none"> <li>• NQ coring was completed from surface, with no pre-collaring</li> <li>• Underground drilling was completed using LTK 60 (45 millimetre diameter) core size.</li> <li>• Limited use of oriented core other than in later geotechnical holes.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Single tube coring only for both surface and underground programs.</li> <li>• All core recoveries documented from all programs. Average recovery for all non-Kombolgie samples is greater than 98 per cent.</li> <li>• Analysis of grade vs recovery shows no obvious trend, suggesting no grade bias due to core recovery.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All core was geologically (and to a lesser extent geotechnically) logged according to established logging procedures and legends used by Pancontinental and adopted by ERA. The level of detail is considered appropriate for the current level of study.</li> <li>• Logging is considered quantitative and is based on an established geological and stratigraphic model.</li> <li>• All relevant intersections have been logged at the appropriate level of detail.</li> </ul>



Criteria	JORC Code explanation	Commentary
<p><b>Sub-sampling techniques and sample preparation</b></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Sampling was mostly by sawn half core, though open-hole percussion pre-collars were also sampled and assayed.</li> <li>• Core was 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.</li> </ul> <p><b>Pancontinental Sample Preparation</b></p> <ul style="list-style-type: none"> <li>• Drying the received sample to a core temperature of approximately 100°C</li> <li>• Jaw crushing the total sample followed by milling in a pulveriser to 90 per cent passing 106 micrometres.</li> <li>• Taking an analytical pulp of 250 grams from the bulk and retaining the residue, where practical, in the original bag.</li> </ul> <p><b>ERA Sample Preparation – surface program</b></p> <ul style="list-style-type: none"> <li>• Each sample was jaw crushed and then pulverised.</li> <li>• A 500 gram split was then taken and further pulverised.</li> <li>• From this a 50 gram split was then taken for gold analysis</li> <li>• An additional 50 gram sample was returned to the Ranger Mine Laboratory for U<sub>3</sub>O<sub>8</sub> analysis.</li> </ul> <p><b>ERA Sample Preparation – underground program</b></p> <ul style="list-style-type: none"> <li>• Drying, crushing and pulverising the entire sample to a minimum of 85 per cent passing minus 75 micrometres in an LM5 mill.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"><li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li><li>• <i>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.</i></li><li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li></ul>	<p><b>Pancontinental Laboratory Procedures</b></p> <ul style="list-style-type: none"><li>• X-ray fluorescence (XRF) Pressed Powder method was used for the bulk of the Pancontinental samples with some XRF Fusion and Neutron Activation checks.</li></ul> <p><b>ERA Laboratory Procedures – Surface Program</b></p> <ul style="list-style-type: none"><li>• XRF Fusion at the Ranger Mine Laboratories</li><li>• Neutron Activation assay checks were done externally by Becquerel Laboratories and gold analysis was performed by Classic and Amdel Laboratories.</li></ul> <p><b>ERA Laboratory Procedures – Underground Program</b></p> <ul style="list-style-type: none"><li>• Uranium analysis was done using XRF Powder (Australian Laboratory Services) and values exceeding one per cent <math>U_3O_8</math> were re-assayed</li><li>• Gold was assayed using a 50 gram fire assay, with lead cupellation and AAS determination.</li></ul> <p><b>Independent QAQC</b></p> <ul style="list-style-type: none"><li>• There is limited information available to verify assay values other than the fact that the majority of assay values were generated in commercial laboratories with their own internal quality assurance/quality control (QAQC) procedures in place and that some 'round robin' laboratory checks were conducted. Independent assay quality control procedures such as the submission of standard reference materials were not employed prior to 1999. During the underground drilling program conducted by ERA in 1999, assay QAQC protocol consisted of internal laboratory standards, blanks and check assays. The precision and bias statistics for the <math>U_3O_8</math> check assays of the 1999 assays show reasonable precision and insignificant bias.</li></ul> <p><b>Pancontinental Gamma Logging Methodology</b></p> <ul style="list-style-type: none"><li>• For the period 1971-1976 all drill holes were radiometrically logged by external contractors. From 1977-1980 all logging was done internally by Pancontinental. Both analogue and digital output was produced. From 1977,</li></ul>



Criteria	JORC Code explanation	Commentary
		<p>all radiometrically intervals in the database have a calculated U<sub>3</sub>O<sub>8</sub> grade.</p> <p><b>ERA Gamma Logging Methodology</b></p> <ul style="list-style-type: none"> <li>• Radiometric ‘assays’ are a derived assay equivalent using a number of correction factors applied to the raw data and the correlation between the corrected gamma data and another assay method.</li> <li>• As a consequence of the different approaches by Pancontinental and ERA the database contains gamma assays derived by different methods using different corrections over time.</li> <li>• The Jabiluka II radiometric assays represent an approximation of the true uranium grade and most gamma assays greater than or equal to 0.02 per cent U<sub>3</sub>O<sub>8</sub> were submitted for chemical assay. The chemical assays are considered the most reliable.</li> </ul>
<p><b>Verification of sampling and assaying</b></p>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• High grade gamma logged intersections are generally supported/verified by chemical assays.</li> <li>• Though no holes were deliberately twinned at Jabiluka II, the location of mineralised intervals defined by surface drill holes is supported by the later underground drilling.</li> <li>• All data is stored electronically on the ERA main server with daily, weekly and monthly backups.</li> <li>• Both Pancontinental and later ERA data sets have been subject to three detailed validation including precision/bias analysis (1992, 1997, 2007). The conclusions of these validations state that the impact of the remaining small number of errors not yet detected would be unlikely to have significant impact on future uranium resource estimates.</li> <li>• Small adjustments in assay data were done as part of the first major data validation/clean-up exercise on the Jabiluka II dataset in 1997. This resulted in a small decrease of the preferred uranium value and is mostly attributable to differences in the derivation of the preferred uranium value from gamma data.</li> </ul>
<p><b>Location of data points</b></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All collar locations were subsequently resurveyed and validated after Jabiluka was acquired from Pancontinental by ERA in 1991.</li> <li>• Down-hole single and multi-shot survey data (taken at 25-30 metre intervals down-hole) was the primary survey source.</li> </ul>





Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• No down-hole survey data has been verified using gyroscopic survey tools.</li> <li>• Location of the mineralised intervals would be most effectively verified with further infill drilling however it has been demonstrated that underground drilling supports the location of mineralised intervals intersected by surface drill holes.</li> <li>• The down-hole survey database was validated in 2007.</li> <li>• Topographical control from previous surveys is considered adequate for the current study level.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• From surface, it is mostly 60 metre by 60 metre drillhole spacing with some areas at 30 metre grids used for the main target horizon.</li> <li>• Underground drilling from the exploration decline was on 15 metre centres.</li> <li>• The deposit is open to the east and at depth.</li> <li>• The current drill holes spacing is considered appropriate for the current estimation procedure and confidence classification used in the block model.</li> <li>• Nominal 1m sampling widths. No further compositing has been applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Previous surface drilling was completed on a surveyed exploration/mine grid. Holes were collared either vertically or steeply inclined towards the north. Because hole deviation is predictable and always to the north, this enables a reasonable intersection with the steeply south/east dipping stratigraphy.</li> <li>• Underground holes were drilled in fans directly south from an E-W hangingwall drill drive and were inclined from +2 to +85 degrees. This orientation was optimal for intersecting the mineralisation geometry.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All remaining Jabiluka diamond core is stored in a locked shed at the Ranger Exploration offices.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Jabiluka II has been subject to three significant database validation reviews and a similar number of reviews associated with resource model updates. The most comprehensive review of all data was the 2007 Resource Model Update by Rio Tinto.</li> </ul>



**ERA**

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• ERA holds a mineral lease for the Jabiluka Project Area (MLN1) granted under the Northern Territory Mining Act. MLN1 was issued in 1982 for an initial term of 42 years (1982-2024) and can be automatically renewed upon application by ERA to the responsible Northern Territory Minister for a maximum of 10 years, provided ERA has complied with the Mining Act and the conditions of MLN1. The Mining Act contemplates further renewal of a mineral lease beyond this additional 10 year period.</li> <li>• In February 2005 ERA entered into a Long Term Care and Maintenance Agreement with the Northern Land Council and the Mirarr Traditional Owners in respect of the Jabiluka Project Area. The Long Term Care and Maintenance Agreement provides that no mining development shall occur on the Jabiluka Project Area without the approval of the Mirarr Traditional Owners.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Jabiluka II deposit was discovered in the dry season of 1973 by Pancontinental Mining who continued surface drilling until 1980. The first ore reserve was announced in January 1976. Energy Resources Australia (ERA) purchased the deposit in 1991 and conducted drilling campaigns in 1992, 1993, 1998 and 1999. The latest ore resource and reserve statements originate from 2007.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Jabiluka II is one of the major uranium deposits of the Pine Creek Geosyncline, a 66,000 square kilometre area south and east of Darwin. The Pine Creek Geosyncline is a Lower Proterozoic basinal feature, draped on mixed Archaean and Archaean-Lower Proterozoic granitoid and gneissic basement. It is surrounded and partly covered by younger sedimentary basins, from Middle Proterozoic to Mesozoic in age, and is largely covered by Cenozoic sediments.</li> <li>• The Jabiluka II uranium deposit is hosted by an east-west trending, south-dipping alternating sequence of muscovite and sericite ± graphite quartz-chlorite schists which form part of the Early Proterozoic Cahill Formation. The Cahill Formation is unconformably overlain by 40 to 180 metres of predominantly flat-dipping Middle Proterozoic Kombolgie orthoquartzite and conglomerate which forms the prominent escarpment and plateau features in the area.</li> <li>• The historical interpretation of the Jabiluka II sequence consists of nine units, referred to as Stratigraphic Assay Level (SAL) units with SAL 1 forming the uppermost unit in the sequence.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All previous drilling information is included in this release.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>All significant intersections are reported at a 0.2 per cent U<sub>3</sub>O<sub>8</sub> cut-off.</li> <li>All reporting of intersections is based on a regular sample length of 1 metre.</li> <li>No metal equivalents have been used in resource modelling.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>Previous surface drilling was completed on a surveyed exploration/mine grid. Holes were collared either vertically or steeply inclined towards the north. Because hole deviation is predictable and always to the north, this enables a reasonable intersection with the steeply south/east dipping stratigraphy.</li> <li>Underground holes were drilled in fans directly south from an E-W hangingwall drill drive and were inclined from +2 to +85 degrees. This orientation was optimal for intersecting the mineralisation geometry.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All Appropriate maps and sections (with scales) have been included in previous releases to the market. Representative surface and underground plans and section are included in this Table 1. There are no new material additions to report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The associated report is considered to represent a balanced report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Other exploration data collected is not material to this announcement. Further data and interpretation will be reviewed and reported when considered material.</li> </ul>



## ERA

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<ul style="list-style-type: none"><li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li><li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li></ul>	<ul style="list-style-type: none"><li>As Jabiluka is still under the 2005 Long Term Care and Maintenance Agreement, no further work is planned.</li></ul>



### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<p><b>Database integrity</b></p>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<p>The Jabiluka II project has been subject to numerous drilling campaigns over its 40 year history.</p> <ul style="list-style-type: none"> <li>Fundamental data has been stored as hardcopy and in various digital databases commensurate with the computing technology of the time. The latest (2007) resource estimate was completed using Datamine and all current data files are available as text (CSV), Datamine and VULCAN binary format.</li> </ul> <p>There is however limited information available to verify assay values other than the fact that the majority of assay values were generated in commercial laboratories with their own internal quality assurance/quality control (QAQC) procedures in place and that some 'round robin' laboratory checks were conducted. Independent assay quality control procedures such as the submission of standard reference materials were not employed prior to 1999. During the underground drilling program conducted by ERA in 1999, assay QAQC protocol consisted of internal laboratory standards, blanks and check assays.</p> <ul style="list-style-type: none"> <li>As a result of the historical lack of assay quality control, the associated resource risk has been managed primarily via an appropriate resource classification strategy.</li> <li>Improved assay QAQC practices adopted during the 1999 underground drilling program together with other supporting data (e.g. underground mapping and sampling) effect a higher confidence in this area.</li> </ul>
<p><b>Site visits</b></p>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person (CP) and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Existing detailed reports of work undertaken at Jabiluka indicate that an experienced Competent Person was always on site when drilling and sampling activities were taking place.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>An exhaustive review of the geological interpretation took place in 2007, which included the following:</p> <ul style="list-style-type: none"> <li>• Re-logging included 35 underground drill holes and ten vertical surface holes.</li> <li>• Development of a Resource classification scheme reflecting confidence in the geological data, geological interpretation and overall data quality, replacing the previously used scheme that relied entirely upon drill hole spacing.</li> <li>• The 2007 re-evaluation resulted in a 28 per cent reduction in tonnes, a 9 per cent increase in grade for an overall 21 per cent decrease in metal compared to the 2006 resource statement.</li> <li>• This reduction is due to the revised geological interpretation and changes made to grade estimation and resource classification parameters. The resource classification scheme was re-evaluated and the classification scheme used refers to the level of geological certainty and the impact of data quality as well as the distribution sample data.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Jabiluka II has a projected east-west strike length of 1000 metres, a width of 400 metres and down-dip extension exceeding 500 metres and is considered to be open at depth and to the east. The top of the mineralisation occurs at a depth of 40 to 180 metres below surface.</li> </ul>





Criteria	JORC Code explanation	Commentary
<p><b>Estimation and modelling techniques</b></p>	<ul style="list-style-type: none"> <li>• <i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Grade Estimation:</b> Multiple indicator kriging (MIK) was chosen as the appropriate estimation method for Jabiluka because it deals with skewed grade distributions and associated extreme high grades more effectively than traditional methods such as ordinary kriging and inverse distance. The MIK was performed in Hellman and Schofield GS3 software.</li> </ul> <p>The mean, rather than median, grade was used for all indicator bins (including the top indicator) in the calculation of the e-type estimate. No top cut was applied to the data for estimation.</p> <p>A three pass multiple search strategy was used, based on drill hole spacing and a number of other factors including including data reliability, confidence in the geological interpretation and the changes to the resource as a result of the underground drilling.</p> <p>A total of 54 DOMZONS (9 SAL units x 6 structural domains) were estimated separately using 15 indicator thresholds each.</p>
<p><b>Moisture</b></p>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All tonnages are estimated on a dry basis.</li> </ul>
<p><b>Cut-off parameters</b></p>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For a comparison with previous model iterations, tabulations have been provided using a cut off of 0.2 per cent U<sub>3</sub>O<sub>8</sub>. This is equivalent to the cut off used for existing 'Order of Magnitude' base case studies.</li> </ul>



Criteria	JORC Code explanation	Commentary
<p><b>Mining factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Previous mining studies date from 2000.</li> <li>Previous mining studies used Long Hole Stopping with Cemented Paste Backfill to extract the Jabiluka II resource. Stope configuration will vary depending on the ore geometry and geotechnical conditions. Typically, stopes would be 15 metres to 50 metres high, 10 metres to 25 metres wide by 10 metres to 25 metres deep.</li> <li>Cut-off, loss and dilution factors as applied to the designed stope shapes as part of the mine scheduling model were:               <ul style="list-style-type: none"> <li>Cut-off - 0.2 per cent U<sub>3</sub>O<sub>8</sub></li> <li>Recovery - 98 per cent</li> <li>Dilution - 5 per cent</li> <li>Fill Density - 1.9 tonner per cubic metre</li> </ul> </li> </ul>
<p><b>Metallurgical factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Previous mining studies indicated that processing Jabiluka ore through the existing Ranger mill is considered to minimise processing risk for the purposes of existing 'Order of Magnitude' base case studies.</li> <li>Mill recovery for Jabiluka ore is currently assumed at 94 per cent, which is based on prior process test-work by ERA.</li> </ul>
<p><b>Environmental factors or assumptions</b></p>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Previous mining studies used underground mining voids for the long-term storage and disposal of tailings through cemented paste backfill.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Pancontinental used an average dry bulk density of 2.68 tonnes per cubic metre for tonnage calculations based on a 77-sample program. The details of the determination method are unknown.</li> <li>• ERA used an average bulk density of 2.64 tonnes per cubic metre in the 1992 and 1997 resource estimates. This figure was based on 324 determinations made at the Ranger laboratory in August 1992 using a water displacement technique. Based on the raw data, it appears that sample volume was determined by placing unsealed samples in a graduated container of water and recording the increase in volume recorded. Bulk density was then determined by dividing the dry weight by the sample volume.</li> <li>• Density was applied to the new block model using an empirical formula based on uranium grade. This formula gives an average density of 2.644 tonnes per cubic metre at a 0.2 per cent U<sub>3</sub>O<sub>8</sub> cut-off grade and a maximum density of 3.001 tonnes per cubic metre for the highest grade block, with a grade of 4.841 per cent U<sub>3</sub>O<sub>8</sub>.</li> <li>• This average density (at 0.2 per cent U<sub>3</sub>O<sub>8</sub> cut-off grade) is almost identical to the assumed constant density of 2.64 tonnes per cubic metre applied to the 2000 model.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The estimation search pass, effectively based on drill hole spacing, served as a starting point for the classification of the 2007 Jabiluka resource estimate.</li> <li>• A number of other factors were also considered in the resource classification, including data reliability, confidence in the geological interpretation and the changes to the resource as a result of the underground drilling.</li> <li>• The area of underground drilling has the highest data density (approximately 15 metre by 15 metre centres), the highest level of QAQC of all programs and minimal uncertainty in the geological interpretation.</li> <li>• This drilling resulted in a substantial change in the resource locally (20 per cent loss in contained oxide), suggesting that close spaced drilling is required to adequately define the mineralisation. Therefore, this area is considered to be of highest confidence and is consequently classified as Measured resource.</li> <li>• Previously, all material estimated in the first pass was classified as Measured, but in light of the substantial local change in the resource (approximately .20</li> </ul>



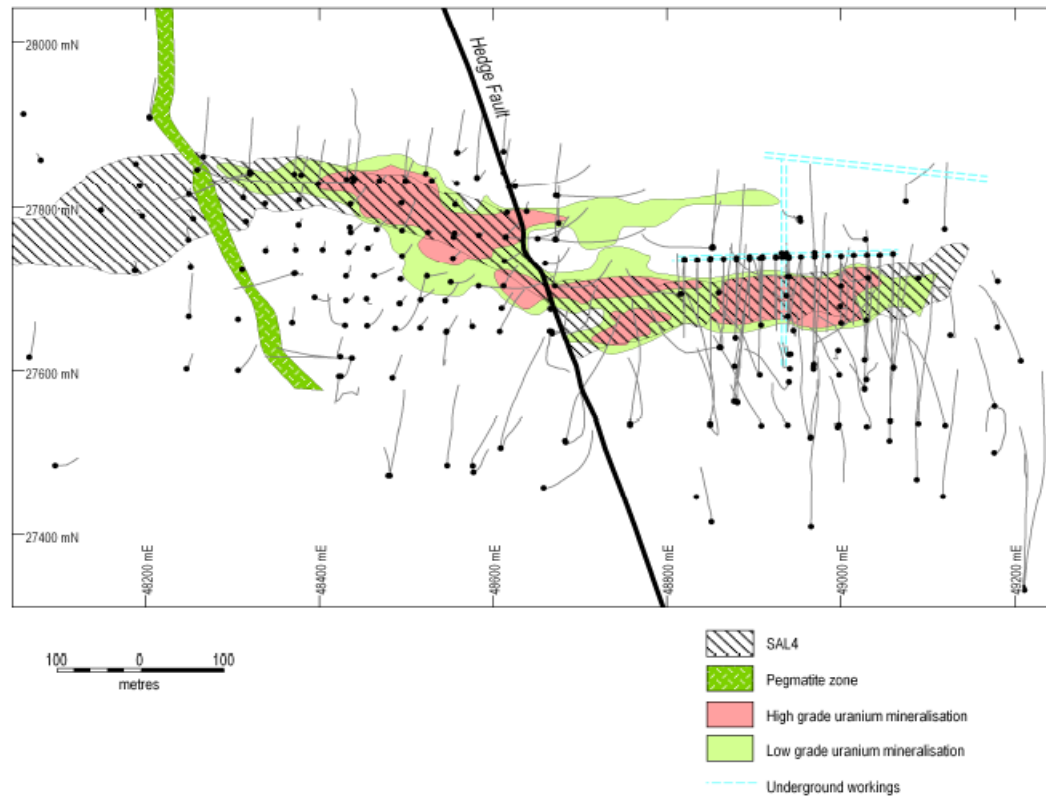
Criteria	JORC Code explanation	Commentary
		<p>per cent loss in contained oxide) as a result of the underground drilling, this position was no longer considered tenable in areas outside the underground drilling.</p> <ul style="list-style-type: none"> <li>• Therefore, all material estimated in the first two search passes was considered as potential Indicated resource.</li> </ul>
<p><b>Audits or reviews</b></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Jabiluka II has been subject to three significant database validation reviews/audits associated with resource model updates in 1992, 1997, 2000 and 2007. Each successive review has further validated the samples database and refined the geological model prior to re-estimation of the resource. The latest and most comprehensive review of all data was the 2007 Resource Model Update by Rio Tinto.</li> </ul>
<p><b>Discussion of relative accuracy/confidence</b></p>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All aspects of the Mineral Resource estimate, including the estimation search pass classification methodology, are considered appropriate for the level of study by the Competent Person.</li> <li>• This estimate relates to both global and local estimates.</li> <li>• There is no underground production data with which to compare with.</li> </ul>



Criteria	JORC Code explanation	Commentary
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APPENDICES – REPRESENTATIVE PLANS AND SECTIONS

Fig. 1 Jabiluka II resource area and drilling plan (all holes). Geology and uranium mineralisation boundaries projected from 885 RL.





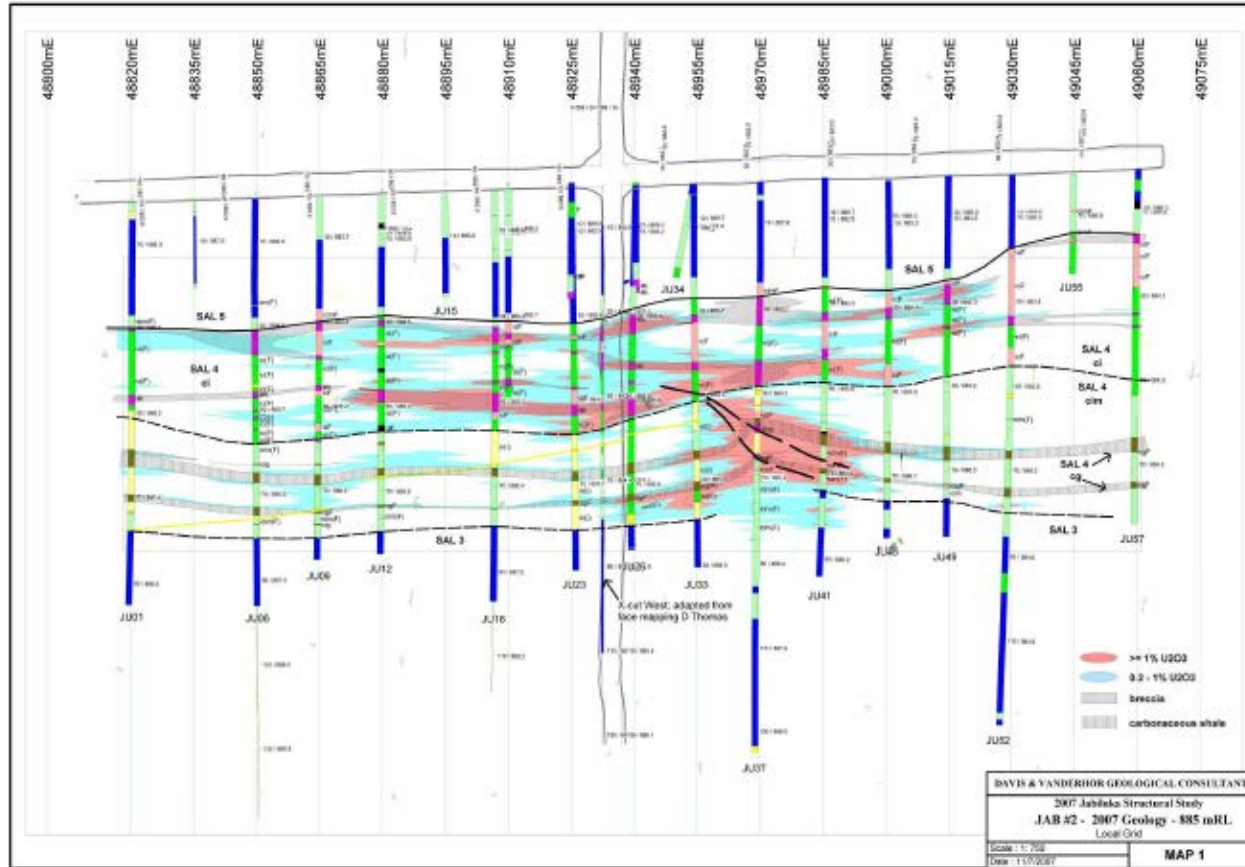
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JORC Code explanation

Commentary

Fig.2 Jabiluka II Level Plan at 885RL showing U<sub>3</sub>O<sub>8</sub> grade distribution and underground drilling







ERA

Criteria

JORC Code explanation

Commentary

Fig.3 Jabiluka II Interpreted Geology Section 48940 E (looking west) showing  $U_3O_8$  grade distribution with underground and surface drilling.

