

**ASX RELEASE** | 7 OCTOBER 2015 | ASX:BKY

## **Increase in Zona 7 grade**

### **Expected to boost Salamanca Project economics**

The updated JORC Compliant Mineral Resource Estimate for the Zona 7 deposit has reported grades comparable to the world's highest grade open pit mines in operation, with the bulk of the resource lying within fifty metres of the surface.

Following the recently completed infill drill programme, the Mineral Resource Estimate for Zona 7 has been updated, reporting a significant increase in resource grade, an increase in resource pounds and with almost ninety percent of the resource upgraded to the Indicated category.

The inclusion of the important Zona 7 deposit is expected to fundamentally improve the economics of the Salamanca project, even at current Uranium prices, by significantly increasing the mine life, the production rates and by reducing the operating costs from the levels previously reported.

Managing Director Paul Atherley commented "*With high grades, good recoveries and the potential for some of the lowest costs in the industry the Salamanca project is rapidly emerging as one of the best new projects around.*"

A Pre-Feasibility Study which will include the Zona 7 deposit will allow the overall economics of the project to be reported for the first time and is expected to be published this quarter.

Early indications from the study are that the project will have lower capital costs than previously reported, benefitting from favourable movements in exchange rates and due to the high grade, low strip ratio and impressive metallurgy it is expected that operating costs will reduce significantly.

The total resource for Zona 7 now stands at 31.4 million pounds of U<sub>3</sub>O<sub>8</sub> (at a cut-off grade of 200 ppm) including an Indicated resource of 17.1 million tonnes at 735 ppm containing 27.8 million pounds of U<sub>3</sub>O<sub>8</sub>.

The overall Mineral Resource Estimate for the Salamanca Project now stands at 89.5 million pounds of U<sub>3</sub>O<sub>8</sub>.

Following the Board's decision to push ahead with the overall development of the project and the recent positive announcements on approvals, drill results and metallurgical testwork, the company has received a number of approaches from potential financiers which are now being advanced.

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## Appendix A: Summary of Mineral Resource Estimate and Reporting Criteria

### Prospect Location, Geology and Geological Interpretation

Zona 7 is the largest deposit within the Salamanca Project located in central-western Spain (Figure 1).



**Figure 1: Location of the Salamanca Project, Spain**

Significantly, the Zona 7 deposit is located within 10km of the approved location of the proposed processing plant at Retortillo (Figure 2).

Zona 7 is a vein type uranium deposit hosted in a sequence of fine grained metasediments which are overlain by a conglomerate unit and adjacent to a granite intrusive. The mineralised envelope is interpreted to be sub-horizontal to shallowly dipping and occurs from surface and to maximum depth of approximately 100m.

The style of the uranium mineralisation includes veins, stockwork and disseminated mineralisation in joint/fracture filling associated with brittle deformation. The uranium mineralisation occurs both within the partially weathered zone and fresh rock. Uraninite and coffinite are the primary uranium minerals. Secondary uranium mineralisation is developed in 'supergene-like' tabular zones corresponding to the depth of weathering (Figure 3).

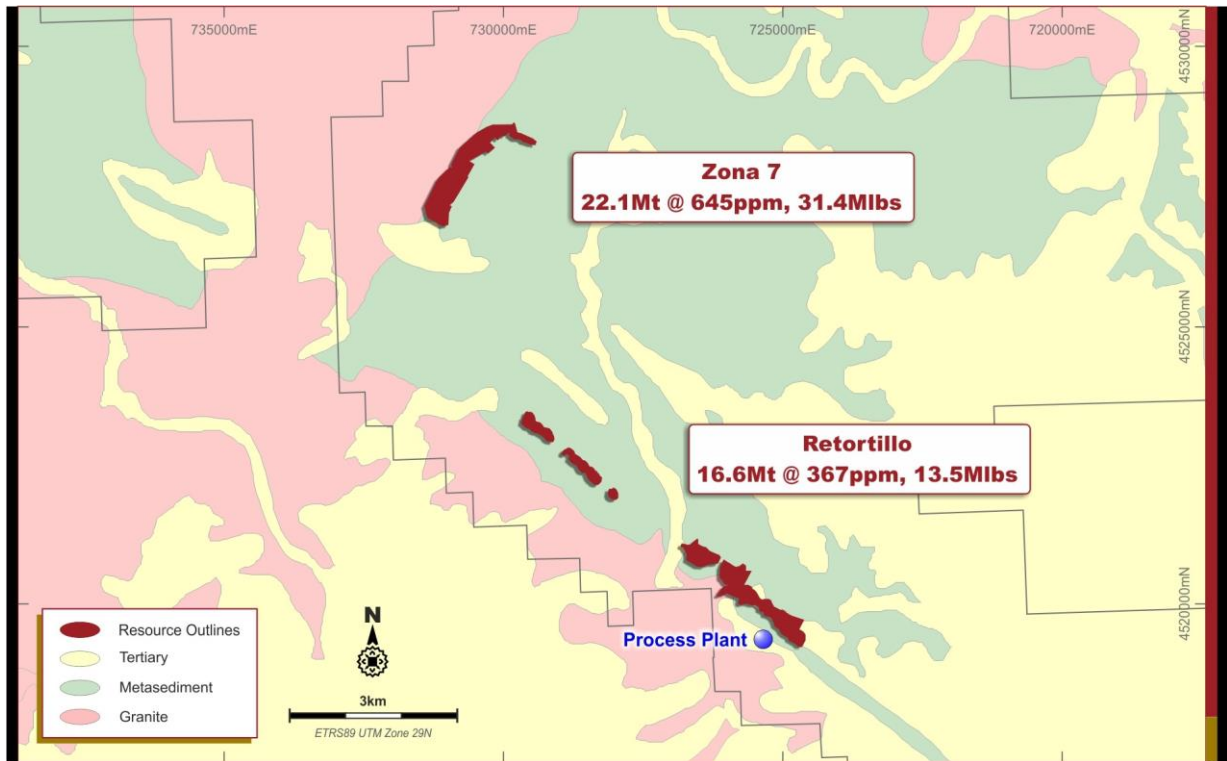


Figure 2: Location of Zona 7 within Retortillo Region

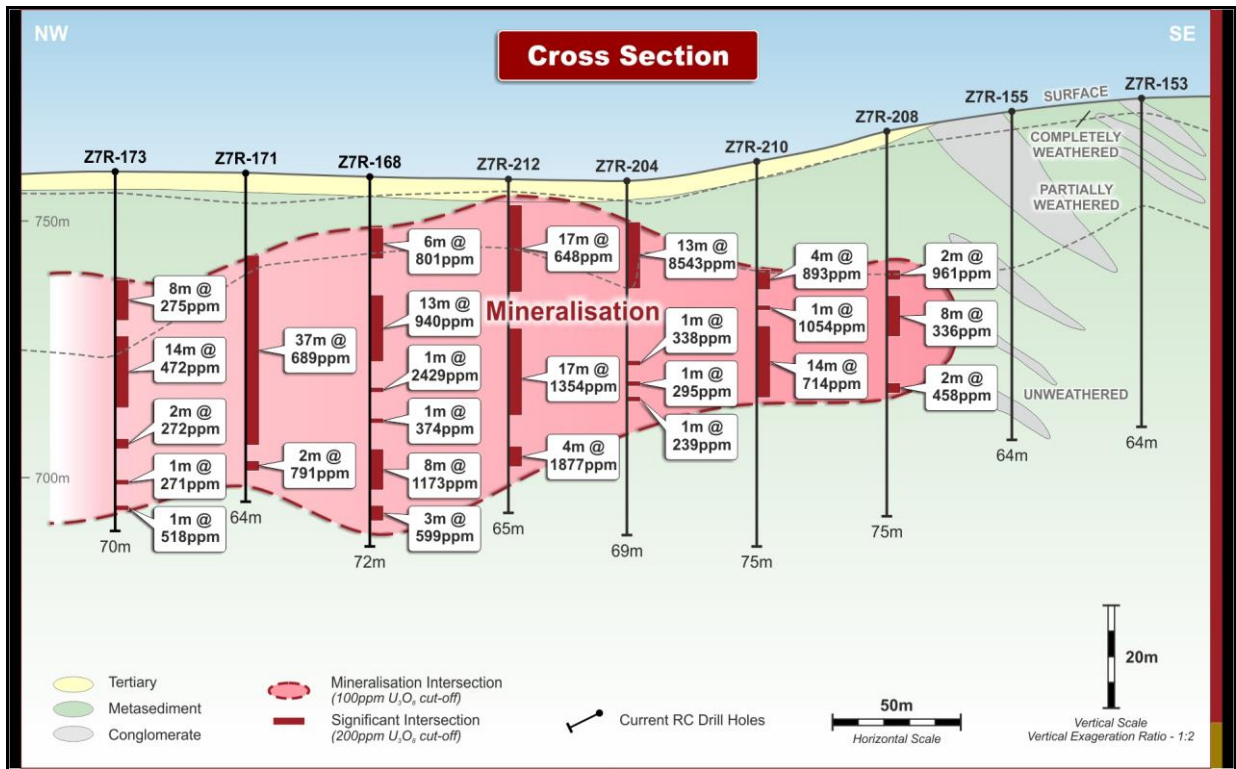


Figure 3: Zona 7 Cross Section



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### Drilling and Sampling Techniques

The Mineral Resource Estimate ('MRE') is based on data obtained from three phases of drilling (historical 1960's to 1980's, 2007-2008, 2013-2015) totalling 312 holes for 19,393m. The drilling comprised 93 diamond holes ('DD') and 219 reverse circulation ('RC') holes (Table 1).

The majority of drilling conducted by Berkeley prior to 2015 was undertaken on a 100m by 100m grid, with section lines orientated approximately northwest-southeast across the interpreted strike of the mineralisation. The 2015 infill drilling campaign closed the spacing in Domain 6 to a 50m x 50m grid, in order to improve confidence in this part of the MRE (Figure 4). Some of the historical drilling was completed on a closer spaced 35m x 35m grid. The majority of the drill holes are vertical.

The drill hole collar locations were surveyed by qualified surveyors using standard DGPS equipment achieving sub decimetre accuracy in horizontal and vertical position. Down-hole surveys were undertaken using a Geovista down-hole deviation probe. Measurements were taken every 1cm down hole and averaged every 10m. All DD and RC drill samples were geologically logged, with all relevant data being recorded. Diamond core was also geotechnically logged. Core boxes and samples and RC samples and chip trays were photographed for future reference.

Diamond core was quarter or half cut and sampled on 0.25-1.85m intervals. RC samples were collected over 1m intervals and split in the field using two riffle splitters in cascade or a cone and quarter method to provide an approximately 3-5kg sample. Samples were further split in the core shed using a scoop to generate 0.7-1kg samples which were sent to external laboratories for preparation and analysis. Quality assurance procedures were employed, including the use of standards, blanks and duplicates.

Down-hole gamma logging was undertaken for all probe accessible holes drilled by Berkeley to provide a gamma equivalent  $U_3O_8$  ('e $U_3O_8$ ') grade. The down-hole gamma response was converted to e $U_3O_8$  after correcting for radon, hole diameter, air/water and application of a deconvolution filter. e $U_3O_8$  data was only used in the MRE when chemical assay data was not available.

Bulk density values were derived from 462 solid-fluid pycnometer measurements. In situ dry bulk densities were applied to all blocks in the resource model based on the degree of weathering.

**Table 1: Summary of drill holes used in the MRE update**

Drill Type	Pre-2007		2007-2008		2013-2014		2015		Total		
	Holes	Metres	Holes	Metres	Holes	Metres	Holes	Metres	Holes	Metres	%
Reverse Circulation	-	-	66	3,579	63	4,051	90	6,226	219	13,856	71
Diamond Core	72	4,024	9	661	5	391	7	461	93	5,537	29
<b>Total</b>	<b>72</b>	<b>4,024</b>	<b>75</b>	<b>4,240</b>	<b>68</b>	<b>4,442</b>	<b>97</b>	<b>6,687</b>	<b>312</b>	<b>19,393</b>	<b>100</b>

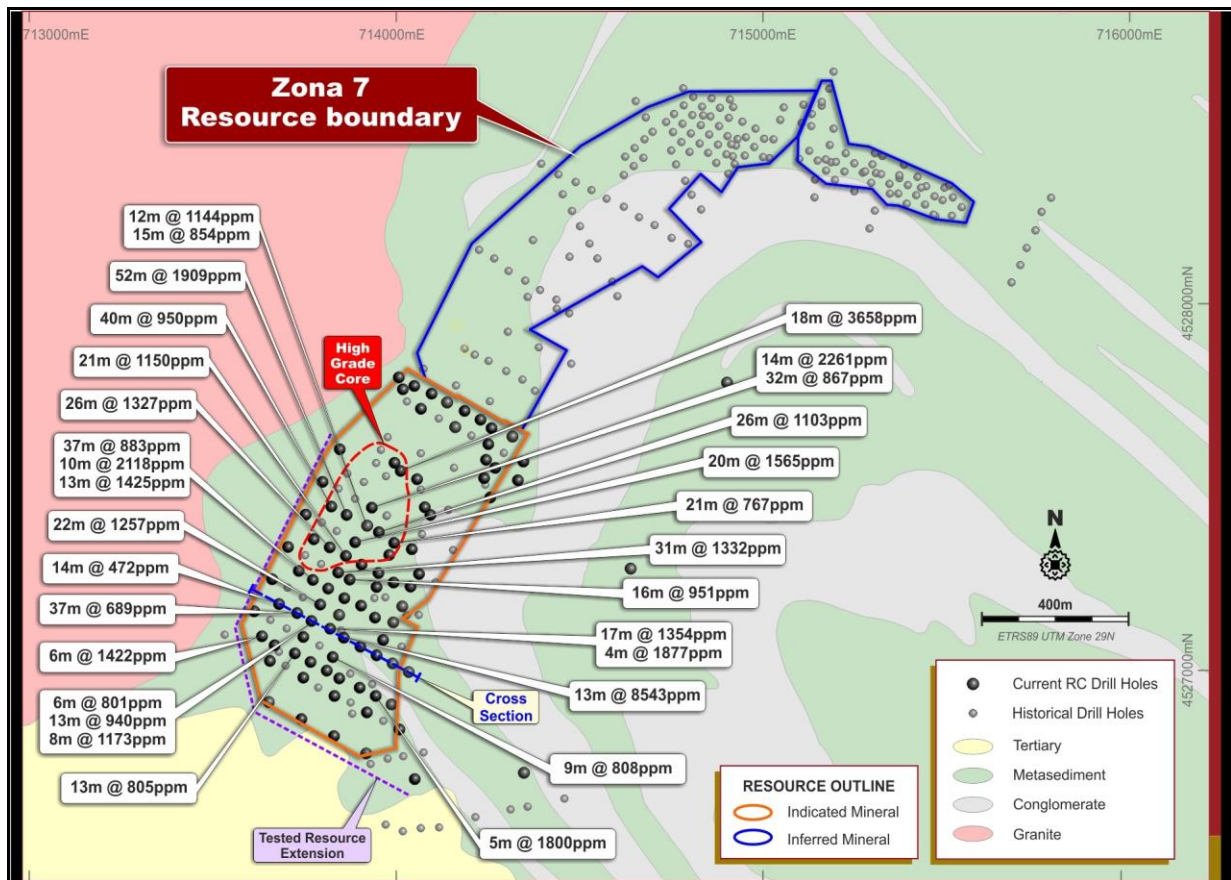


Figure 4: Drilling Plan highlighting selected 2015 drilling results

## Sample Analysis Methods

Sample preparation of all drill samples involved oven drying, crushing and pulverising to achieve a grind size of 85% passing 75µm. Sample pulps from the drilling program were analysed for uranium using either of the Delayed Neutron Counting ('DNC') or pressed powder X-ray fluorescence ('XRF') methods. Historical drilling samples were analysed for uranium using the XRF, atomic absorption spectroscopy ('AAS') or fluorometric methods.

## Resource Model

Surpac and Isatis software was used for geological modelling, block modelling, grade estimation, MRE classification and reporting. Sectional geological interpretations were joined to create a series of 3D mineralised wireframe domains (Figure 5) that showed continuity above a grade of 100 ppm U<sub>3</sub>O<sub>8</sub>. Statistical and geostatistical variogram modelling was used to determine appropriate parameters for estimation of uranium grade using Ordinary Kriging ('OK') and Uniform Conditioning ('UC').

The resource model for Domains 5 and 6 (>88% of the Zona 7 MRE) has been updated with the 2015 infill drilling, and the upgrades to these Domains are the subject of this release. As a result of the closer spaced infill drilling, improvements in sample support, geological continuity and variography, Domain 6 was determined to be suitable for the application of UC and Local Uniform Conditioning ('LUC'). LUC provides a simulation of the expected grade and tonnage selectivity at the Pre-Feasibility Study Selective Mining Unit ('SMU') dimensions.



## Grade Estimate

The uranium grade was estimated into a 25m by 25m x 6m panel using OK for all domains followed by the application of UC and LUC to simulate the grade tonnage distribution based on SMU dimensions of 5m x 5m x 6m for Domain 6 only. Domain 5 was updated using OK. All other domains (2, 3 & 4) were unchanged from the November 2014 OK estimate (Figure 6 and 7).

Variography was used to derive appropriate orientation and weighting factors employed by the OK, UC and LUC algorithms. Suitable sample search distances, minimum and maximum sample numbers required to make a grade estimate and search ellipse anisotropy to honour the mineralisation trends were derived. These parameters were selected to ensure that the resource model honours both the global and local grade distribution of the uranium mineralisation.

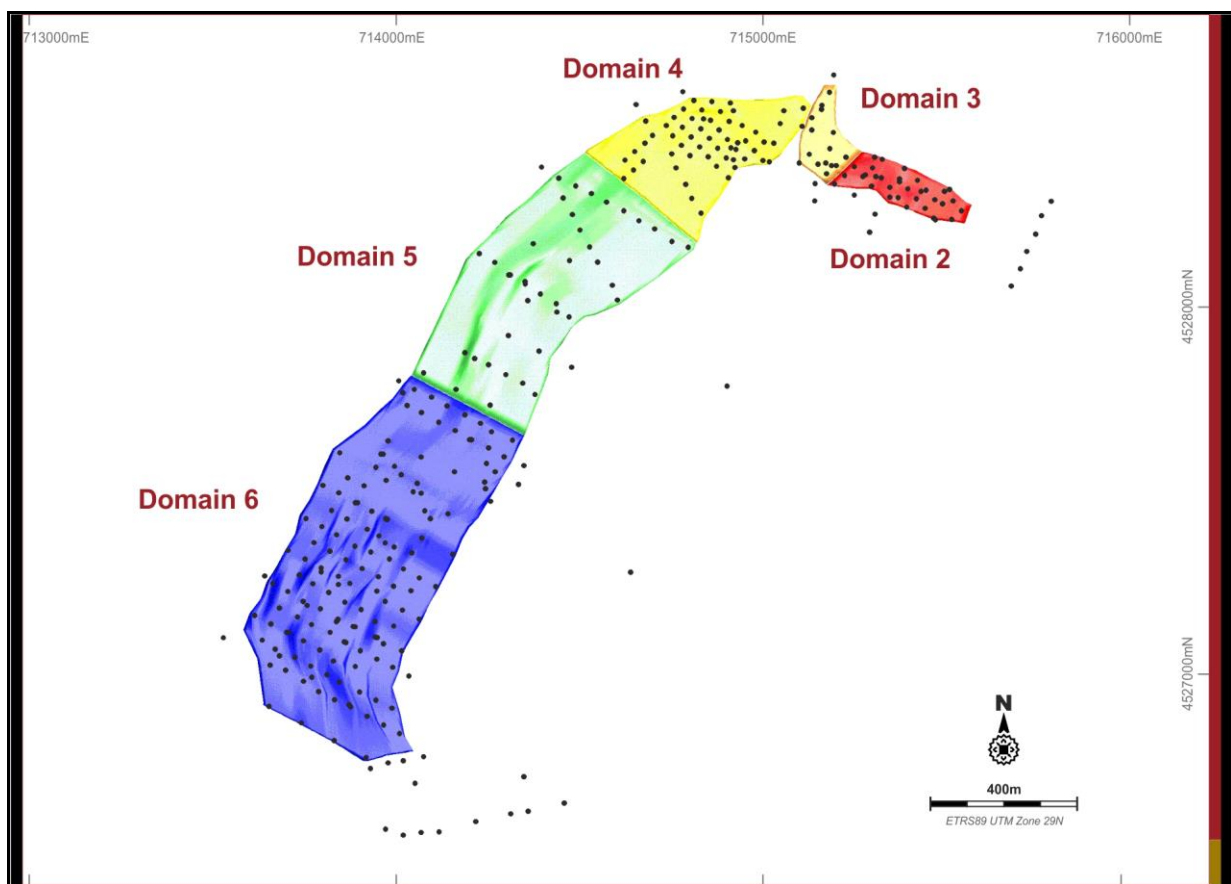


Figure 5: Plan showing MRE domains and drill hole collars.

## Cut-off Grades

The MRE has been reported using a cut-off grade of 200 ppm  $U_3O_8$ , which is consistent with the grade used to report previous MRE's for this style of mineralisation.

## Mining and Metallurgical methods and parameters

Based on the results of metallurgical testwork carried out on representative samples from the Zona 7 deposit and the shallowness of the deposit, it is assumed that the Zona 7 MRE could potentially be extracted using open pit mining methods, with the recovery of uranium through the application of acid heap leach methods.

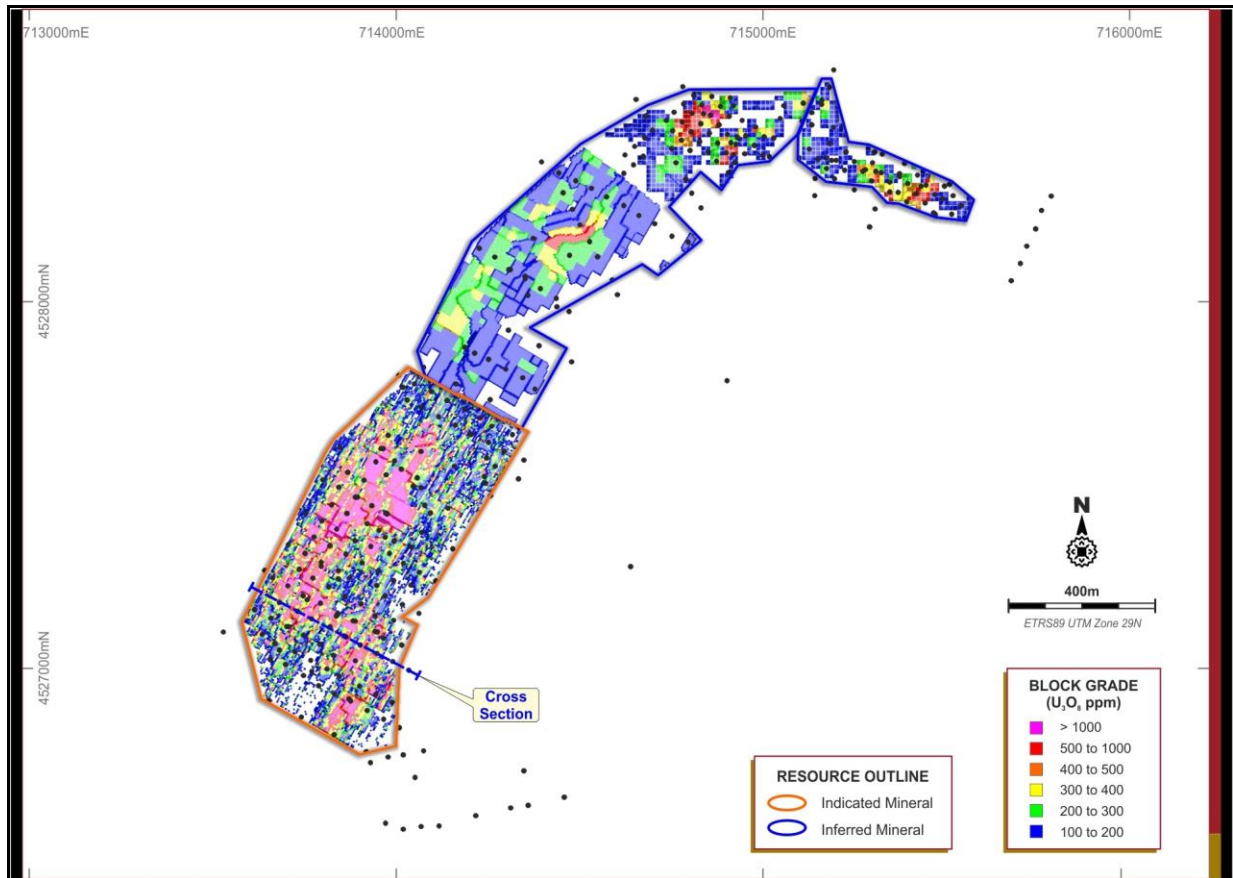


Figure 6: Plan of the resource block model showing grade distribution

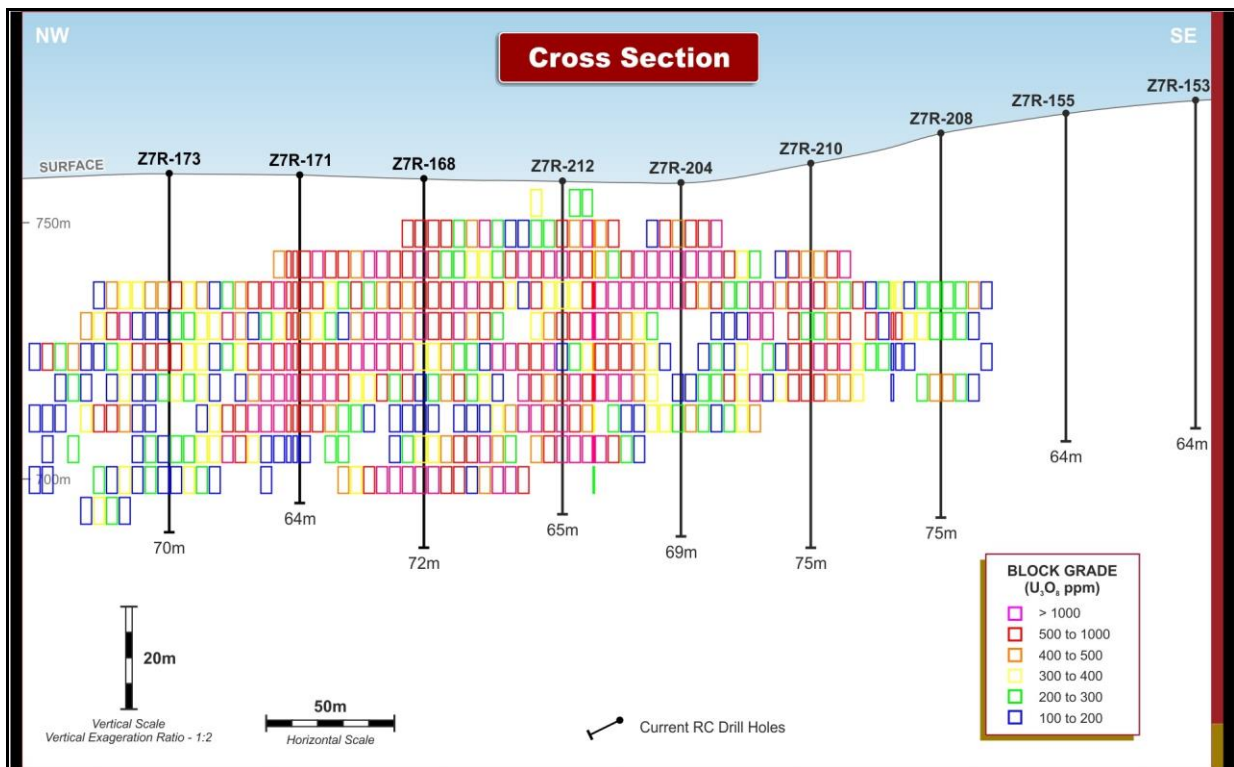


Figure 7: Oblique section through the resource block model showing grade distribution above 100 ppm  $U_3O_8$



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Bulk density values were updated for Domains 5 and 6 from 462 solid-fluid pycnometer measurements, a 50% increase in bulk density data. Updated in-situ dry bulk densities were applied to all Domain 5 and 6 blocks in the resource model based on the degree of weathering as follows: 2.28 t/m<sup>3</sup> for completely weathered material; 2.40 t/m<sup>3</sup> for partially weathered material; and 2.64 t/m<sup>3</sup> for fresh rock. Note that both the bulk density and MRE are unchanged for Domains 2, 3 and 4 which were unaffected by the 2015 drilling program.

Validation of the models included visual inspection of the grade distribution compared to the drill hole data, comparison of block model and drill hole statistics and creation and assessment of swath plots. Overall the grade estimate showed a good representation of the drill hole data for the resource.

### Mineral Resource Estimate and Classification Criteria

The MRE for Zona 7 Domains 5 and 6 has been updated, incorporating additional drilling and sampling information from the 2015 drilling campaign.

The MRE has been classified and is reported as Indicated and Inferred based on guidelines recommended in the JORC Code (2012). The reported MRE has been classified with consideration of the quality and reliability of the raw data, the confidence of the geological interpretation, the number, spacing and orientation of intercepts through the mineralised zones, and knowledge of grade continuity gained from observations and geostatistical analysis. There is adequate mining, metallurgy and processing knowledge from feasibility studies on geologically similar deposits within the region to imply reasonable prospects for eventual economic extraction.

When classifying the resource estimate the following has been considered:

- Quality and reliability of raw data (sampling, assaying, surveying);
- Confidence in the geological interpretation;
- Number, spacing and orientation of intercepts through mineralised zones;
- Knowledge of grade continuities gained from observations and geostatistical analyses; and
- The potential prospect for eventual economic extraction.

The MRE is reported at a cut-off grade of 200 ppm U<sub>3</sub>O<sub>8</sub> (Table 2), along with estimates showing the range of U<sub>3</sub>O<sub>8</sub> cut-off grades that would span the range applicable to open pit mining (Table 3).

**Table 2: Zona 7 - Mineral Resource Estimate**

Zona 7 - Mineral Resource Estimate as at 5 October 2015			
Reported at a cut-off grade of 200 ppm U <sub>3</sub> O <sub>8</sub>			
Resource Category	Tonnage (million tonnes)	Grade (U <sub>3</sub> O <sub>8</sub> ppm)	Contained U <sub>3</sub> O <sub>8</sub> (million pounds)
Indicated	17.1	735	27.8
Inferred	4.9	333	3.6
<b>Total</b>	<b>22.1</b>	<b>645</b>	<b>31.4</b>

*All figures are rounded to reflect appropriate levels of confidence. Apparent differences occur due to rounding.*





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*Table 3: Zona 7 - Grade Tonnage Table*

<b>Zona 7 - Mineral Resource Estimate as at 5 October 2015</b>			
<b>Lower Cut-off Grade (U<sub>3</sub>O<sub>8</sub> ppm)</b>	<b>Tonnage (million tonnes)</b>	<b>Grade (U<sub>3</sub>O<sub>8</sub> ppm)</b>	<b>Contained U<sub>3</sub>O<sub>8</sub> (million pounds)</b>
100	35.6	455	35.7
<b>200</b>	<b>22.1</b>	<b>645</b>	<b>31.4</b>
300	15.4	819	27.8
400	11.5	979	24.9
500	9.0	1,132	22.3



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**Table 4: Salamanca Project Global Mineral Resource Estimate**

Deposit Name	Resource Category	October 2015		
		Tonnes (Mt)	U <sub>3</sub> O <sub>8</sub> (ppm)	U <sub>3</sub> O <sub>8</sub> (Mlbs)
<b>Retortillo</b>	Measured	4.8	412	4.4
	Indicated	11.7	349	9.0
	Inferred	0.2	373	0.1
	<b>Total</b>	<b>16.6</b>	<b>367</b>	<b>13.5</b>
<b>Zona 7</b>	Indicated	17.1	735	27.8
	Inferred	4.9	333	3.6
	<b>Total</b>	<b>22.1</b>	<b>645</b>	<b>31.4</b>
Las Carbas	Inferred	0.6	443	0.6
Cristina	Inferred	0.8	460	0.8
Caridad	Inferred	0.4	382	0.4
Villares	Inferred	0.7	672	1.1
Villares North	Inferred	0.3	388	0.2
<b>Total Retortillo Satellites</b>	<b>Inferred</b>	<b>2.8</b>	<b>492</b>	<b>3.0</b>
<b>Alameda</b>	Indicated	20.0	455	20.1
	Inferred	0.7	657	1.0
	<b>Total</b>	<b>20.7</b>	<b>462</b>	<b>21.1</b>
Villar	Inferred	5.0	446	4.9
Alameda Nth Zone 2	Inferred	1.2	472	1.3
Alameda Nth Zone 19	Inferred	1.1	492	1.2
Alameda Nth Zone 21	Inferred	1.8	531	2.1
<b>Total Alameda Satellites</b>	<b>Inferred</b>	<b>9.1</b>	<b>472</b>	<b>9.5</b>
<b>Gambuta</b>	<b>Inferred</b>	<b>12.7</b>	<b>394</b>	<b>11.1</b>
<b>Salamanca Project</b>	<b>Measured</b>	<b>4.8</b>	<b>412</b>	<b>4.4</b>
	<b>Indicated</b>	<b>48.8</b>	<b>528</b>	<b>56.8</b>
	<b>Inferred</b>	<b>30.4</b>	<b>422</b>	<b>28.3</b>
	<b>Total</b>	<b>84.1</b>	<b>483</b>	<b>89.5</b>

All figures are rounded to reflect appropriate levels of confidence. Apparent differences occur due to rounding.



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### **Competent Persons Statement**

*The information in this report that relates to the 2015 Exploration Results and Mineral Resources for Zona 7 is based on information compiled by Malcolm Titley, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Titley is employed by Maja Mining Limited, an independent consulting company. Mr Titley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Titley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to 2014 Exploration Results is extracted from the reports entitled 'Thick, High Grade Mineralisation Intersected at Zona 7' dated 18 August 2014 and 'Further Thick, High Grade Drill Intersections at Zona 7' dated 10 November 2014 which are available to view on Berkeley's website at [www.berkeleyenergy.com](http://www.berkeleyenergy.com). The information in the original ASX Announcements is based on information compiled by Robert Behets, a Competent Person who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Behets is a holder of shares, options and performance rights in, and is a director of, Berkeley Energy Limited. Mr Behets has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.*

*The information in this report that relates to the Mineral Resources for Retortillo is extracted from the report entitled 'March 2015 Quarterly Report' dated 29 April 2015 and is available to view on Berkeley's website at [www.berkeleyenergy.com](http://www.berkeleyenergy.com). The information in the original ASX Announcement that relates to the Mineral Resources for Retortillo was based on information compiled by Malcolm Titley, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Titley is employed by Maja Mining Limited, an independent consulting company. Mr Titley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.*

*The information in this report that relates to earlier Exploration Results and Mineral Resources (other than the Zona 7 and Retortillo deposits) (refer ASX announcements dated 31 July 2012, 31 October 2012, 7 August 2013 and 26 September 2013) is based on information compiled by Craig Gwatkin, who is a Member of The Australasian Institute of Mining and Metallurgy and was an employee of Berkeley Energy Limited at the time of initial disclosure. Mr Gwatkin has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gwatkin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

*The information in this report that relates to the Pre-Feasibility Study (refer ASX announcement dated 26 September 2013) is based on information compiled by Neil Senior of SENET (Pty) Ltd. Mr Senior is a Fellow of The South African Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Senior consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.*

### **Forward Looking Statement**

*Statements regarding plans with respect to the Company's mineral properties are forward-looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that the Company will be able to confirm the presence of additional mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.*



### Appendix A: JORC Code, 2012 Edition – Table 1 report

#### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	<p>Berkeley diamond drill (DD) core was sampled using 0.25-1.85m intervals in the mineralised zones, including areas of internal low grade or waste. In addition, the sampling was extended 3 to 5m up and down hole from the interpreted mineralised zone. Half or quarter core was used for sampling.</p> <p>Berkeley reverse circulation (RC) drill samples are collected over 1m intervals. Multiple methods were used to determine uranium mineralisation intervals including down hole gamma analysis, hand held scintillometer measurements and portable XRF analysis. Intervals containing uranium mineralisation were selected and submitted for laboratory assay analysis.</p> <p>Junta de Energía Nuclear (JEN) DD core was sampled using 0.25m, 0.50m and 1.00m intervals in the mineralised zones, with 0.25m intervals being the most frequent sample length.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p>Standards and blanks are inserted into the sample stream to assess the accuracy, precision and methodology of the external laboratories used. In addition, field duplicate samples are inserted to assess the variability of the uranium mineralisation. Approximately 15-20% of all samples relate to quality control. In addition, the laboratories undertake their own duplicate sampling as part of their internal QA/QC processes. Examination of the QA/QC sample data indicates satisfactory performance of field sampling protocols and assay laboratories providing acceptable levels of precision and accuracy.</p> <p>Berkeley drill hole collar locations were surveyed by qualified surveyors (Cubica Ingeniería Metrica S.L.) using standard differential global positioning system (DGPS) equipment achieving sub decimetre accuracy in horizontal and vertical position. Down-hole surveys were undertaken using a Geovista down-hole deviation probe. Measurements are taken every 1cm down hole and averaged every 10m. No strongly magnetic rocks are present within the deposit which may affect magnetic based readings.</p> <p>Berkeley uses two down-hole gamma probes to provide eU<sub>3</sub>O<sub>8</sub> ("equivalent" U<sub>3</sub>O<sub>8</sub> grade and e-grade) data. The probes were originally calibrated by the manufacturer (Geovista, UK) and are currently sent, on an annual basis, to Borehole Wireline Pty Ltd in South Australia for their recalibration in their test pits. Calibration includes the determination of k-factor, deadtime, bore hole diameter and fluid corrections, which are reported in the "Primary Probe Calibration" document. All parameters are then applied during the in-house e-grade calculation process.</p> <p>JEN sampled whole core using 0.25m, 0.50m and 1.00m interval lengths. QA/QC protocols used are unknown.</p>
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i>	<p>RC drill samples are collected over 1m intervals, manually homogenised before being split on site using a three tier riffle splitter to provide an approximate 3-5kg sample. In rare cases, wet samples are split using a cone and quarter method.</p> <p>Scintillometer measurements are taken on all samples and this data is used to select the samples to be sent to external laboratories for sample preparation and analysis. Indicative mineralised intervals are determined from this data and the sampling extended up and down hole by at least 2-5m.</p> <p>Samples are further split in the core shed using a scoop such that 0.7-1kg samples are sent to the preparation laboratories of ALS and AGQ (Seville, Spain) and analytical laboratory of ALS (Loughrea, Ireland). Samples are dried, fine crushed down to 70% below 2mm,</p>



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Criteria	JORC Code explanation	Commentary
		<p>split to obtain 250g and pulverised with at least 85% of the sample passing 75µm. 10g of sample is used for uranium analysis by pressed powder X-ray fluorescence (XRF) method (2013, 2014 and 2015 drilling campaigns).</p> <p>Samples from the 2007 and 2008 drilling campaigns were sent to Actlabs Canada for uranium analysis by the Delayed Neutron Counting (DNC) method.</p> <p>JEN core samples were prepared in internal company laboratories and assayed for uranium using XRF, Atomic absorption spectroscopy (AAS) or fluorometric methods.</p>
<b>Drilling techniques</b>	<i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	<p>Berkeley drilling comprised both DD (HQ) and RC drilling using a 140mm diameter face sampling hammer.</p> <p>For angled DD oriented core was achieved using DeviCore measurements (2014 and 2015 drilling campaigns).</p> <p>The historical JEN drilling is DD (NQ), which accounts for approximately 21% of the total drilling.</p>
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	<p>Berkeley and JEN DD typically recorded overall core recoveries in excess of 90%, which is considered acceptable.</p> <p>Berkeley RC drill samples are collected over 1m intervals through a cyclone. Plastic sample bags are strapped to the cyclone to maximise sample recovery. Individual sample bags were not weighed to assess sample recovery but a visual inspection was made by the Company geologist to ensure all samples are of approximately equivalent size.</p>
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	<p>The DD drilling rigs used face discharge bits to ensure a low contact between the rock and drilling fluids, minimising ore washing. Core was cut using a water saw with care taken to ensure minimal ore loss.</p> <p>The RC drilling rigs utilised suitably sized compressors to ensure dry samples where possible. Plastic sample bags were strapped to the cyclone to maximise sample recovery. Sample logs record whether the sample was dry, moist or wet.</p>
	<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>	<p>Due to the solubility and mobility of the uranium minerals the use of water in core recovery in DD is controlled.</p> <p>There is no known relationship between sample recovery and grade.</p> <p>The core and RC sample recoveries are of an acceptable level and no bias is expected from any sample losses.</p>
<b>Logging</b>	<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>	<p>Berkeley logging of DD core included recording descriptions of lithology, age, colour, oxidation, mineralisation, alteration, weathering, structures, textures, grain size and mineralogy.</p> <p>Berkeley geotechnical logging of DD core included recording descriptions of integrity (recovery and RQD), materials (lithology, rock strength and depth oxide staining), structures (type, angle, contact type, infill, weathering)</p> <p>Berkeley structural logging of DD core included recording descriptions of structure type, structural angles, contact type, infill, line type and slip direction.</p> <p>Berkeley alteration logging of DD core included recording descriptions of metamorphic textures, alteration mineralogy and mineralisation style.</p> <p>Berkeley geological logging of RC chip samples included recording descriptions of lithology, weathering, alteration and mineralisation. A scintillometer reading of counts per second (cps) was recorded for each 1m sample (quantitative).</p> <p>JEN geological logging of DD core included recording descriptions of lithology, iron oxides, sulphides, uranium mineralogy, fracturing and no recovery zones.</p>



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Criteria	JORC Code explanation	Commentary
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Geological logging is qualitative in nature.  Berkeley DD core boxes and samples and RC samples and chip trays were photographed.  JEN did not take photographs of drill core.
	<i>The total length and percentage of the relevant intersections logged.</i>	All DD and RC drill holes were logged in full by geologists employed by the Companies.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Berkeley DD core was sampled using 0.25-1.85m intervals in the mineralised zones, including areas of internal low grade or waste. In addition, the sampling was extended 3-5m up and down hole from the interpreted mineralised zone. Half or quarter core was used for sampling.  JEN DD core was sampled using 0.25m, 0.50m and 1.00m intervals in the mineralised zones, with 0.25m intervals being the most frequent sample length. Whole core was used for sampling.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Berkeley RC drill samples were collected at 1m intervals. RC intervals were sampled by splitting dry samples in the field to 3-5kg using cone and quarter method (2008 and 2013 drilling campaigns), three tier riffle splitter (2014 drilling campaign) or manually homogenised before being split on site using a three tier riffle splitter (2015 drilling campaign) and further split in the core shed to 0.7-1kg using a scoop. Where samples were wet they were dried prior to spitting. In rare cases, wet samples were split using a cone and quarter method.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Berkeley samples (2013, 2014 and 2015 drilling campaigns) were sent to ALS and AGQ laboratories for preparation and ALS laboratories for analysis. Samples were dried, fine crushed down to 70% below 2mm, split to obtain 250g and pulverised with at least 85% of the sample passing 75µm. 10g of sample was used for uranium analysis by pressed powder XRF method. Samples from the 2007 and 2008 drilling campaigns were sent to Actlabs Canada for uranium analysis by the DNC method. These methods are considered appropriate for this style of uranium mineralisation.  JEN core samples were prepared and assayed for uranium at internal company laboratories using XRF, AAS or fluorometric methods.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Previous field tests have determined that the sample size and method of sampling produce representative RC samples. QA/QC procedures involved the use of standards, duplicates and blanks which were inserted into sample batches at a frequency of approximately 15-20%.  Quality control procedures used by JEN are unknown.
	<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>	Duplicate splits of RC samples were taken every 10m down hole within the sampled intervals by Berkeley. The results from these duplicates generally show acceptable repeatability, however indications of inhomogeneity were observed in a number of duplicates.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The uranium is typically very fine grained. Previous test work carried out by Berkeley using different sample sizes demonstrated that the selected sample size is appropriate.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Berkeley assayed samples for uranium using the DNC method during the 2007 and 2008 drilling campaigns and pressed powder XRF during the 2013, 2014 and 2015 drilling campaigns. These analytical methods report total uranium content.  JEN assayed samples for uranium were completed at internal company laboratories using XRF, AAS or fluorometric methods. No QA/QC data is available for this historical data.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading</i>	Down-hole gamma logging was undertaken for all probe accessible holes drilled by Berkeley to provide eU <sub>3</sub> O <sub>8</sub> ("equivalent" U <sub>3</sub> O <sub>8</sub> grade) data. The down-hole gamma response was converted to eU <sub>3</sub> O <sub>8</sub> by correcting for radon, hole diameter, air/water and a deconvolution



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Criteria	JORC Code explanation	Commentary
	<i>times, calibrations factors applied and their derivation, etc.</i>	filter was also applied. eU <sub>3</sub> O <sub>8</sub> data was only considered in the mineral resource estimation process when chemical assay data was not available.
	<i>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.</i>	Standards, blanks and duplicates were regularly inserted into the sample stream by Berkeley, with approximately 15-20% of all samples related to quality control. The external laboratories used also maintain their own process of QA/QC utilising standards, pulp repeats, sample duplicates and blanks.  Review of the Berkeley quality control samples, as well as the external laboratory quality QA/QC reports, has shown no sample preparation issues, acceptable levels of accuracy and precision and no bias in the analytical datasets.  JEN used internal company laboratories. No QA/QC data is available for this historic data.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Reported significant intersections were checked and verified by Senior Geological management and Independent CP Malcolm Titley.
	<i>The use of twinned holes.</i>	No twinned holes were drilled for the current mineral resource estimation process.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All primary data was recorded in templates designed by Berkeley. Assay data from the external laboratory is received in spreadsheets and downloaded directly into an Access Database managed by the Company. Data is entered into controlled excel templates for validation. The validated data is then loaded into a password secured relational database by a designated Company geologist. Daily backups of all digital data are undertaken. These procedures are documented in the Berkeley Technical Procedures and Protocols manual.  JEN primary paper data was digitalized and recoded following the Berkeley protocols. The validated data was then loaded into a password secured relational database by a designated Company geologist.
	<i>Discuss any adjustment to assay data.</i>	Uranium (ppm) assays received from the external laboratory were converted to U <sub>3</sub> O <sub>8</sub> (ppm) using the stoichiometric factor of 1.179.
<b>Location of data points</b>	<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>	Berkeley drill hole collar locations were surveyed by qualified surveyors (Cubica Ingeniería Metrica S.L) using standard DGPS equipment achieving sub decimetre accuracy in horizontal and vertical position.  Berkeley down-hole surveys were undertaken using a Geovista down-hole deviation probe. Measurements were taken every 1cm down hole and averaged every 10m. No strongly magnetic rocks are present within the deposit which may affect magnetic based readings.  JEN holes were drilled on grid coordinates and were not surveyed after drilling.
	<i>Specification of the grid system used.</i>	The grid system is ETRS 1989 UTM Zone 29N.
	<i>Quality and adequacy of topographic control.</i>	Topographic control was based on a digital terrain model with sub metric accuracy sourced from the Spanish Geographical Institute (Instituto Geográfico Nacional) and was verified through detailed drill hole collar surveys by a qualified surveyor using a DGPS.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The majority of the Berkeley drilling was undertaken on a notional 50m by 50m grid within Domain 6 and 100m by 100m is the other smaller domains, with section lines orientated approximately perpendicular to the interpreted strike of the mineralisation.  The historical JEN drilling was completed on a closer spaced 35m by 35m grid within the previous resource area.



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Criteria	JORC Code explanation	Commentary
	<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>	The data spacing (notionally 50m by 50m) is considered sufficient to assume geological and grade continuity, and allow the estimation of Indicated Mineral Resources.
	<i>Whether sample compositing has been applied.</i>	No compositing of RC samples in the field has been undertaken.
<b>Orientation of data in relation to geological structure</b>	<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>	The mineralised zone is a 2-3km scale fold structure with the dominant strike direction being NNE-SSW. Despite the general dip of the host geological units and structures ranging from 50-80°, the mineralised zone is interpreted to be sub-horizontal to shallowly dipping due to the nature of the mineralisation processes.
	<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>	The majority of DD and RC drill holes are vertical. Due to the interpreted flat lying nature of the mineralisation, no sampling bias is considered to have been introduced by the orientation of the drilling.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by Berkeley. Samples were transported from the drill site by Company vehicle to a sample preparation shed where samples were prepared for dispatch. Samples were sent directly from the sample preparation shed to the laboratory using a certified courier or a Berkeley owned vehicle authorised for radioactive materials transport. No other freight was transported with the samples which were taken directly from the Berkeley facility to the external laboratory. Sample submission forms were sent in paper form with the samples as well as electronically to the laboratory. Reconciliation of samples occurred prior to commencement of sample preparation for assaying.  The historical drilling samples were prepared and analysed using internal company laboratories. The chain of custody is unknown.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques and procedures, as well as QA/QC data, are reviewed internally on an ongoing basis. Malcolm Titley (CP, Geology Consultant, Maja Mining Limited) has independently reviewed the sampling techniques, procedures and data. He has completed site visits to review and inspect the application of procedures. These reviews have concluded that the sampling and analytical results have resulted in data suitable for incorporation into the MRE.

## 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>	<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>	The Zona 7 Prospect lies on the Alisos Investigation Permit PI 6605-20 which is 100% owned by Berkeley Minera España S.L, a wholly owned subsidiary of Berkeley Energy Limited.  The Alisos Investigation Permit is currently in the second year of its second three year term and will expire on 4 January 2017.  No historical sites, wilderness or national parks are located within the Permit. The Zona 7 Prospect is located adjacent to the village of Villavieja de Yeltes.
	<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>	Tenure in the form of an Investigation Permit has been granted and is considered secure. There are no known impediments to obtaining a licence to operate in this area.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Previous exploration at Zona 7 was completed initially by JEN and then Empresa Nacional de Uranio S.A. (ENUSA), both Spanish state run companies, from the late 1950's through to the mid 1980's. Work completed by JEN and ENUSA included mapping, radiometric surveys, trenching and diamond and open-hole drilling.  A detailed data assessment and verification of the historical data supplied by JEN and ENUSA has been undertaken by Berkeley. No





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Criteria	JORC Code explanation	Commentary
		significant issues with the data were detected.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The uranium mineralisation is hosted within Ordovician metasediments adjacent to granite. The mineralisation typically occurs as a sub-horizontal to shallowly dipping layer occurring between surface and 100m depth. The style of the uranium mineralisation includes veins, stockwork and disseminated mineralisation in joint/fracture filling associated with brittle deformation. Uraninite and coffinite are the primary uranium minerals. Secondary uranium mineralisation is developed in "supergene-like" tabular zones corresponding to the depth of weathering. Most of the mineralisation is hosted within partially weathered and unweathered metasediment. This deposit falls into the category defined by the International Atomic Energy Association (IAEA) as Vein Type, Sub Type Iberian Type.
<b>Drill hole Information</b>	<p><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></p> <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>	No new exploration results are included in this release.
	<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>	All Berkeley drill holes within the resource area have previously been reported in releases to the ASX providing collar easting, northing, elevation, dip, azimuth and length of hole and mineralised intercepts as encountered.
<b>Data aggregation methods</b>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	No new exploration results are included in this release. All Berkeley drill holes within the resource area have previously been reported.
	<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>	No new exploration results are included in this release. All Berkeley drill holes within the resource area have previously been reported.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values were used.
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>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.</i>	All drilling was planned in such a way as to intersect expected mineralisation in a perpendicular manner. The uranium mineralisation is interpreted to be flat lying to shallowly dipping so the majority of the RC holes were drilled vertically. The previously reported (no new exploration results are included in this release) down-hole intervals were therefore interpreted to approximate true widths.
	<i>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').</i>	The previously reported (no new exploration results are included in this release) down-hole intervals were interpreted to approximate true widths.
<b>Diagrams</b>	<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>	Appropriate diagrams, including a drill plan and cross sections, are included in the main body of this release.
<b>Balanced reporting</b>	<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>	No new exploration results are included in this release. All Berkeley drill holes within the resource area have previously been reported.



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Criteria	JORC Code explanation	Commentary
<b>Other substantive exploration data</b>	<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>	Down-hole gamma logging of all Berkeley holes was undertaken to provide eU <sub>3</sub> O <sub>8</sub> data. Prior comparisons of eU <sub>3</sub> O <sub>8</sub> data with chemical assay data have shown that on average eU <sub>3</sub> O <sub>8</sub> tends to underestimate at higher grades (>600ppm) and overestimate at lower grades (<100ppm). Accordingly, the eU <sub>3</sub> O <sub>8</sub> data is not considered of sufficient quality to replace chemical assay data for the purposes of resource estimation. The Mineral Resources reported in this release are estimated using chemical assay data as the primary method for grade estimation in the resource modelling process and eU <sub>3</sub> O <sub>8</sub> data is only used where there were no assay data available.
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	Further work planned for the Zona 7 Prospect includes infill drilling that would be focused on improving geological confidence and resource classification.  The mineralisation remains open along the north-western margin and along strike, with both areas to be targeted in subsequent drilling campaigns  Geological studies will include detailed interpretation of lithology, structure and weathering and an assessment of potential relationships between these factors and uranium grade distribution.  Further work is also planned on a number of other exploration targets within the Retortillo Region.
	<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>	These are shown in the main body of this release.

### Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<i>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.</i>	Drill hole data is stored in a password protected relational database (Access). Drill data recorded in a spreadsheet is transferred to the database by the project geologist who is responsible for reviewing and validating the data. Assay data is received from the external laboratories in digital format and is loaded directly into the database.  Geological logging is restricted to appropriate codes relevant to the local geology, mineralisation, weathering and alteration setting. A copy of the master database is linked to Surpac mining software for Mineral Resource Estimation (MRE).
	<i>Data validation procedures used.</i>	Database validation checks including collar survey position, down hole survey control, assay limits, e-grade profiles, sample intervals and logging codes are completed prior to the data being transferred to the master database.
<b>Site visits</b>	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	Sampling techniques and procedures, as well as QA/QC data, are reviewed internally on an ongoing basis. Malcolm Titley, (CP, Geology Consultant, Maja Mining Limited) has reviewed the sampling techniques, procedures, data and resource estimation methodology. He has undertaken a number of site visits, the most recent being in August 2015, to review and inspect the application of these procedures. He concludes that the sampling and analytical results available are appropriate for estimation of the Mineral Resource.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	Site visits have been undertaken.
<b>Geological interpretation</b>	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	The confidence of the geological interpretation is appropriate for the current level of resource estimation. The resource is defined within mineralised envelopes which encompass all zones of significant mineralisation.



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Criteria	JORC Code explanation	Commentary
	<i>Nature of the data used and of any assumptions made.</i>	Geology and mineralisation interpretation is based on geological logging and sample assays derived from RC and DD drilling, along with cross sectional interpretations which include surface mapping information and geophysical studies.
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	Structural studies show dips of structures vary between 50° and 80° however; the uranium mineralisation has undergone supergene remobilisation in the first 5-10m and is interpreted to be flat lying to shallowly dipping and generally within 100m from surface.
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	On the deposit scale the uranium grade is controlled by both lithology and structure, while on a local scale the grade is interpreted to be more influenced by structure.
	<i>The factors affecting continuity both of grade and geology.</i>	Geological logging and uranium assay of samples from drill holes has demonstrated the continuity of the grade and lithology between mineralised sections. Breaks in continuity are likely due to structural offsets, some of which have been observed or interpreted from surface mapping.
<b>Dimensions</b>	<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>	The Zona 7 uranium mineralisation covers an area of approximately 3.0km by 0.4km and generally occurs within 100m of surface.
<b>Estimation and modelling techniques</b>	<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>	<p>A mineralised envelope at Zona 7 is created encompassing all zones of significant mineralisation. A number of different domains have been interpreted.</p> <p>Geostatistical variogram modelling was used to determine appropriate parameters for estimation of uranium grade using Ordinary Kriging (OK) (for all Domains) followed by the application of Uniform Conditioning (UC) and Local Uniform Conditioning (LUC) using Isatis Software, in order to simulate the grade tonnage distribution based on a Selective Mining Unit (SMU) of 5m x 5m x 6m for Domain 6 only.</p> <p>Surpac software was used for mineralisation volume interpretation and uranium grade estimation.</p> <p>Three sources of drillhole uranium grade data was used:</p> <ul style="list-style-type: none"> <li>• Chemical U<sub>3</sub>O<sub>8</sub> (ppm): 68%</li> <li>• Down hole radiometric equivalent eU<sub>3</sub>O<sub>8</sub> (ppm): 15%</li> <li>• Background based on XRF and radiometric results (10 ppm U<sub>3</sub>O<sub>8</sub>): 17%</li> </ul> <p>The drill hole spacing for Domain 6 is nominally 50m by 50m, with 100m by 100m spacing in the remaining smaller domains. Some of the historical JEN DD was drilled at a spacing of 35m by 35m.</p> <p>Five mineralisation domains were identified (D2, D3, D4, D5 and D6). 1m samples were used to estimate grade into 25m by 25m by 6m parent blocks using OK.</p> <p>Note that the Berkeley 2015 drilling infilled domains 5 and 6 only. So no changes have been made to the MRE previously reported in November 2015 for domains 2, 3 and 4.</p> <p>In order to reduce local bias due to extreme high grades, top cuts were applied:</p> <ul style="list-style-type: none"> <li>• D2: 1,800ppm U<sub>3</sub>O<sub>8</sub></li> <li>• D3: none</li> <li>• D4: 3,400ppm U<sub>3</sub>O<sub>8</sub></li> <li>• D5: 1,300ppm U<sub>3</sub>O<sub>8</sub></li> <li>• D6: 5,5950ppm U<sub>3</sub>O<sub>8</sub></li> </ul> <p>Number of 1m samples required to make an estimate:</p> <ul style="list-style-type: none"> <li>• Minimum samples = 6</li> </ul>



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Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Maximum samples = 30</li> </ul> <p>Search ellipse radii variable per domain in meters, along strike/down-dip/across-strike:</p> <p>1<sup>st</sup> pass</p> <ul style="list-style-type: none"> <li>D2: 40/6/20</li> <li>D3: 55/6/20</li> <li>D4: 55/6/20</li> <li>D5: 95/6/50</li> <li>D6: 45/6/30</li> </ul> <p>2<sup>nd</sup> pass</p> <ul style="list-style-type: none"> <li>D2: 60/6/40</li> <li>D3: 80/6/40</li> <li>D4: 80/6/40</li> <li>D5: 140/6/100</li> <li>D6: 90/6/60</li> </ul> <p>3<sup>rd</sup> pass</p> <ul style="list-style-type: none"> <li>D2: 120/6/60</li> <li>D3: 160/6/80</li> <li>D4: 160/6/80</li> <li>D5: 280/6/150</li> <li>D6: 160/6/80</li> </ul> <p>Search orientation variable per domain (dip, plunge, dip dir):</p> <ul style="list-style-type: none"> <li>D2: (130, 0, 0)</li> <li>D3: (165, 0, 0)</li> <li>D4: (50, 0, 0)</li> <li>D5: (40, 0, 0)</li> <li>D6: (30, 0, 15)</li> </ul> <p>In-situ dry bulk densities were assigned based on zones of weathering intensity and used to estimate tonnage.</p>
	<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>	<p>The current resource estimate was compared with the previous resource estimate (November 2014) which was based on earlier drill campaigns (historical, 2007, 2008, 2013 and 2014) and to a polygonal estimation. Both of which support the current results.</p> <p>No mining production has taken place at Zona 7.</p>
	<i>The assumptions made regarding recovery of by-products.</i>	The resource model only estimates uranium.
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i>	At this stage, there are no deleterious elements or other non-grade variables identified as being of economic significance at Zona 7.
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	The uranium grade is estimated into the 25m (X) by 25m (Y) by 6m (Z) blocks using OK. This compares to the average drill spacing of 50–100m in X and Y. UC and LUC were used to estimate the expected grade tonnage distribution for the chosen SMU of 5m x 5m x 6m in Domain 6 which contains >88% of the resource, and contains the material classified as Indicated, and is targeted for mining in the early years of production. This SMU size was chosen to match the feasibility study open cut mining methodology. OK was used to estimate grade in the remaining smaller domains which account for <12% of the MRE and which have wider spaced drill data classified as Inferred material.
	<i>Any assumptions behind modelling of selective mining units.</i>	SMU dimensions have been chosen based on results of the current open pit feasibility study with load and haul being conducted with 125 tonne backhoe excavators and 100 tonne



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Criteria	JORC Code explanation	Commentary
		dump trucks.
	<i>Any assumptions about correlation between variables.</i>	Uranium is the only economic metal estimated in the current resource model.
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	<p>Geological interpretation controlled the volume of the resource estimate by restricting the interpretation of the mineralisation volume and associated samples to material with continuity above a 100 ppm U<sub>3</sub>O<sub>8</sub> grade.</p> <p>The domains are based on geology, structure and uranium grade with defined zones of mineralisation that show continuity along and across strike.</p> <p>A further division of the model into completely weathered, partially weathered and fresh rock is applied by triangulated surfaces interpreted from the logging of the drill samples. This division is only applied for density and reporting purposes.</p>
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	Uranium grade distribution exhibits a strong positive skewness, so a top cut was applied to reduce local bias by extreme grades outliers around the 97.5 population percentile. The domains were assessed independently and a top cut grade was determined for each domain.
	<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>	Validation of the MRE included visual inspection of the grade distribution compared to the drill data, comparison of block model statistics to the sample statistics and generation of swath plots. These confirmed that the MRE appropriately represents the grade and tonnage distribution of the uranium mineralisation at the confidence levels reported.
<b>Moisture</b>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	The resource tonnage is reported on a dry bulk density basis. In-situ dry bulk density measurements were completed on dry DD core and using a solid pycnometer method for RC samples. Sample grades are reported using dry weight. No moisture content of DD core has been determined.
<b>Cut-off parameters</b>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	The MRE has been reported using a 200ppm U <sub>3</sub> O <sub>8</sub> cut-off grade. Recent feasibility studies on adjacent properties have demonstrated that a 100ppm U <sub>3</sub> O <sub>8</sub> cut-off is economic. Based on the current uranium market, reporting of the MRE at a 200 ppm cut-off grade is both justifiable and consistent with previous published MRE's for this style of mineralisation.
<b>Mining factors or assumptions</b>	<i>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.</i>	<p>The resource can potentially be extracted using open pit mining methods, with the recovery of uranium through the application of acid heap leach methods.</p> <p>Indicative parameters used for pit optimisation purposes in recent feasibility studies on adjacent properties are:</p> <p>Uranium selling price: US\$65/lb U<sub>3</sub>O<sub>8</sub>,  Total Mining Cost: US\$3.9/lb U<sub>3</sub>O<sub>8</sub>  Mining recovery: 97.5%  Mining dilution: 2.5%  Plant Process Cost: US\$6.25/lb U<sub>3</sub>O<sub>8</sub>  Recovery U<sub>3</sub>O<sub>8</sub>: 85%  Royalties: 1.2%</p>
<b>Metallurgical factors or assumptions</b>	<i>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.</i>	Metallurgical testwork on representative samples across a range of ore types has been undertaken for Zona 7. The results of this testwork showed the mineralisation to be amenable to convention acid heap leach, with uranium recoveries in the order of 85% with a low acid consumption of 12-18 kg/t.
<b>Environmental factors or assumptions</b>	<i>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</i>	It is planned that all spent heap leach (ripios) material will be returned to the open pit which will be lined so as to encapsulate the ripios. Any Naturally Occurring Radioactive Material (NORM) or Acid Rock Drainage (ARD) waste will also be stored within the



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Criteria	JORC Code explanation	Commentary
	<i>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.</i>	lined pit.  An Environmental Scoping Study will serve to define the scope and content of the Environmental and Social Impact Assessment.
<b>Bulk density</b>	<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>	Bulk density values were derived from 462 solid-fluid pycnometer measurements. These values have been validated with DD core bulk density results obtained using the water immersion method. The in-situ dry bulk density values are:  Completely weathered: 2.28 g/cm <sup>3</sup> Partially weathered: 2.40 g/cm <sup>3</sup> Fresh rock: 2.64 g/cm <sup>3</sup>  The bulk density values have been updated from those previously used in the November 2014 MRE based on a 50% increase in bulk density data. The values shown above have been used to estimate tonnages for the updated domains 5 and 6. Bulk density values used for domains 2, 3 and 4 are unchanged from those used in the November 2014 MRE.
	<i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i>	Fresh and slightly weathered rock is competent enough to ensure the method used takes into account any rock porosity. A factor derived from comparison with DD core was used to adjust the weathered material.
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	The density measurements have been classified by weathering intensity, defined by the geological logging. Three dominant zones have been identified, namely: completely weathered; partially weathered; and fresh rock. The average of the density data from each zone was applied in the resource model.
<b>Classification</b>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	The reported MRE has been classified as Indicated and Inferred after consideration of the following: <ul style="list-style-type: none"> <li>• Adequate geological evidence and drill hole sampling is available to assume geological and grade continuity.</li> <li>• Adequate in-situ dry bulk density data is available to estimate appropriate tonnage factors.</li> <li>• Adequate mining, metallurgy and processing knowledge to imply potential prospect for eventual economic extraction.</li> </ul>
	<i>Whether appropriate account has been taken of all relevant factors (ie 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>	The reported MRE has been classified with consideration of the quality and reliability of the raw data, the confidence of the geological interpretation, the number, spacing and orientations of intercepts through the mineralised zones and knowledge of grade continuity gained from observations and geostatistical analysis.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The reported MRE and its classification are consistent with the Competent Person's (CP) view of the deposit. The CP was responsible for determining the resource classification.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	Berkeley has undertaken a review of the previous MRE and concluded that the estimate was developed using industry standard methods and that the estimate was considered to reflect the understanding of the geology and grade continuity.  Malcolm Titley (CP, Geology Consultant, Maja Mining Limited) reviewed the reported MRE and concluded that the estimate appropriately represents the grade and tonnage distribution of uranium mineralisation at confidence levels commensurate with the Indicated resource classification.
<b>Discussion of relative accuracy/</b>	<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</i>	The confidence level is reflected in the resource classification category chosen for the reported MRE. The definition of Indicated and Inferred Mineral Resources is appropriate for the level of study



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<b>confidence</b>	<i>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>	and the geological confidence imparted by the drilling grid.  The reported MRE is considered appropriate and representative of the grade and tonnage at the 200ppm U <sub>3</sub> O <sub>8</sub> cut-off grade. The application of geostatistical methods has helped to increase the confidence of the model and quantify the relative accuracy of the resource on a global scale. It relies on historical data being of similar standard as recent infill drilling. The relevant tonnages and grade are variable on a local scale and have been simulated using UC and LUC for SMU dimensions of 5m by 5m by 6m for Domain 6.  The CP considers that the current drilling grid is insufficient for classification of the Mineral Resource as Measured.
	<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>	The Zona 7 deposit is likely to have local variability. The global assessment is an indication of the average tonnages and grade estimate for each geological domain.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	No production has been carried out at Zona 7.