

ASX RELEASE | 8 September 2015 | ASX BKY

IMPRESSIVE METALLURGICAL TESTWORK RESULTS ON ZONA 7

Metallurgical testwork results have confirmed that the Zona 7 ore is amenable to low cost heap leaching through the proposed processing facilities at the Company's 100% owned Salamanca Project located in Western Spain.

Testwork on representative samples across a range of ore types has indicated that recoveries of over 85% can be expected with low acid consumption (12-18 kg/t) and at a coarse crush size. The ore is easy to crush and has a low abrasion index. It also exhibits good geotechnical properties, suitable for high lifts on the heap leach pads.

The high recoveries were achieved very rapidly in less than thirty days of leaching with virtually 100% of the soluble uranium going into solution and therefore readily recoverable in the proposed processing facilities.

The Zona 7 deposit is located within 10 kilometres of the approved location of the proposed processing plant and currently hosts an Inferred Mineral Resource Estimate of 23.2 million tonnes averaging 589 ppm U_3O_8 for 30.1 million pounds of U_3O_8 (at a 200 ppm U_3O_8 cut-off grade).

Recently announced infill drill results have confirmed the broad thickness and high grade of the shallow deposit. The final infill drill results and an upgraded Mineral Resource Estimate are due to be reported in September.

These highly impressive metallurgical testwork results are important as they enhance the economic significance of the Zona 7 deposit and support the Board's decision to rapidly incorporate the deposit into the overall development plans of the Salamanca Project.

For further information contact:

Paul Atherley
Managing Director
+44 207 478 3900

Hugo Schumann
Corporate Manager
+44 207 478 3900

info@berkeleyenergy.com

Competent Persons Statement

The information in this announcement that relates to the 2015 Metallurgical Testwork Results for Zona 7 is based on information compiled by Mintek under the supervision of Mr. David Dodd, who is a Fellow of the Southern African Institute of Mining and Metallurgy. Mr. Dodd is independent of Berkeley and is an independent consulting metallurgist affiliated to MDM Engineering Limited an independent engineering company based in South Africa. Mr Dodd has sufficient experience which is relevant to metallurgical processing of 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. Dodd 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 announcement that relates to the 2015 Exploration Results is extracted from the report entitled 'Drilling Confirms Broad High Grade Mineralisation at Zona 7' dated 1 September 2015 which is available to view on Berkeley's website at www.berkeleyenergy.com. The information in the original ASX Announcement that relate to the 2015 Exploration Results 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 independent of Berkeley and Director of Maja Mining Limited, an independent consultancy based in the UK. 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. 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 announcements.

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. The information in the original ASX Announcements that relate to the 2014 Exploration Results 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. 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 announcements.

The information in this report that relates to the Mineral Resources is extracted from the report entitled 'Salamanca Project Total Resource increased by 43% to 88.2 Mlbs U_3O_8 following substantial increase in Zona 7 Resource' dated 26 November 2014 and is available to view on Berkeley's website at www.berkeleyenergy.com. The information in the original ASX Announcement that relates to the Mineral Resources for Zona 7 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 independent of Berkeley and Director of Maja Mining Limited, an independent consultancy based in the UK. 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.

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: Details of the Zona 7 Metallurgical Test Work Program

Mintek of South Africa evaluated the heap leach amenability of Zona 7 ore based on leach recoveries, acid consumption and the hydraulic performance by testing representative samples of partially weathered and fresh ore at 12mm and 40mm crush sizes respectively.

Three diamond drill composites were used for testing, namely Composite A (partially weathered, low grade, 145kg), Composite C (fresh, low grade, 157kg) and Composite D (fresh, high grade, 155kg). Chemical head assays of the composites returned grades of 249 U₃O₈, 292 U₃O₈ and 1,380 ppm U₃O₈ for Composites A, C and D respectively.

Bond crushability work index testwork results indicates that the ore can be classified as soft to very soft to crush. Bond abrasion index values (Ai) of 0.1 g, 0.05 g and 0.02 g were obtained for Composites A, C and D respectively, indicating that the material was of low abrasion tendency.

Bond crushability work index test results

Sample Designation	C _{Wi} (kWh/metric ton)		
	75 th Percentile	Maximum	Minimum
Composite A	10.52	14.25	4.55
Composite C	11.29	16.78	4.29
Composite D	8.41	13.20	4.01

The primary uranium minerals are uraninite and coffinite. Diagnostic leach test results indicated 99% soluble uranium in Composite D, 96% in Composite C and 75% in Composite A.

Six one metre column leach tests using the three composite samples at crush sizes of 80% passing 12mm and 80% passing 40mm were loaded with wet agglomerates (agglomerated with 98% H₂SO₄ and synthetic raffinate) and irrigated in open circuit with synthetic raffinate for 30 days.

The column tests yielded total uranium extractions of 97% (98% of soluble uranium) at the 12mm crush size and 94% (95% of soluble uranium) at the 40mm crush size for the high-grade, fresh material (Composite D) and 94% (97% of soluble uranium) at the 12 mm crush size and 85% (90% of soluble uranium) at the 40 mm crush size for the low-grade, fresh sample (Composite C). The column tests yielded total uranium extractions of 74% on both crush sizes (98-100% of soluble uranium) for the low-grade, partially weathered material (Composite A).

Importantly, the leach kinetics observed in the testwork program were very favourable across all samples, and over 90% of uranium recovery was achieved after 20 days which confirm the amenability of the ore to the proposed design of the heap leach facilities.

Acid consumption was recorded at 11.9, 17.9 and 14.9 kg/t respectively for Composites A, C and D after 30 day leaching.

Geomechanical testing was performed only on leach residues, as the residues normally contain more fines and therefore have lower hydraulic conductivities and greater compressibility than feeds i.e. representing a worst case scenario. The results indicate that all of the composites meet the criteria of a minimum porosity of 30% (SG below 1.85) at the proposed stacking height of six metres indicating that the ore is suitable for percolation leaching and that the assumed stacking height is appropriate.