Energy Metals Limited

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Resource Estimate Update

LAKESIDE URANIUM PROJECT
Cue, WA

- **Uranium Resource Estimate of 960 tonnes U_3O_8 (at 200ppm cut-off grade) obtained for the Lakeside Deposit.**
- **Mineral Resource increase of 256% over previous estimation.**

Energy Metals Limited (ASX: EME) is pleased to announce that a JORC-reported Mineral Resource estimate of 2.74Mt at an average grade of 350 ppm U_3O_8 for 960 tonnes or 2.12Mlb U_3O_8 (at a cut-off grade of 200ppm U_3O_8) has been completed at the Lakeside deposit within its 100% owned Lakeside Project (WA) (Figure 1). The Mineral Resource is based on JORC (2012) definitions and the reported resource is classified as Inferred.

The Lakeside deposit, located 20km west of Cue, within the Yilgarn region of WA, is a surficial style of uranium. The deposit is hosted in calcrete and calcareous sediments within a palaeochannel and playa lake system at shallow depths, typically less than 7m below surface. The deposit has a similar geological setting to the Yeelirrie, Centipede, Lake Way and Lake Maitland deposits, also located in the region.

An initial resource estimate of 270 tonnes U_3O_8 at an average grade of 400 ppm U_3O_8 at a cut-off grade of 200ppm U_3O_8 was previously reported for the Lakeside deposit under the JORC (1996) code. The latest estimate represents a significant increase in contained uranium as a result of EME exploration activities in the period 2007 to 2014.

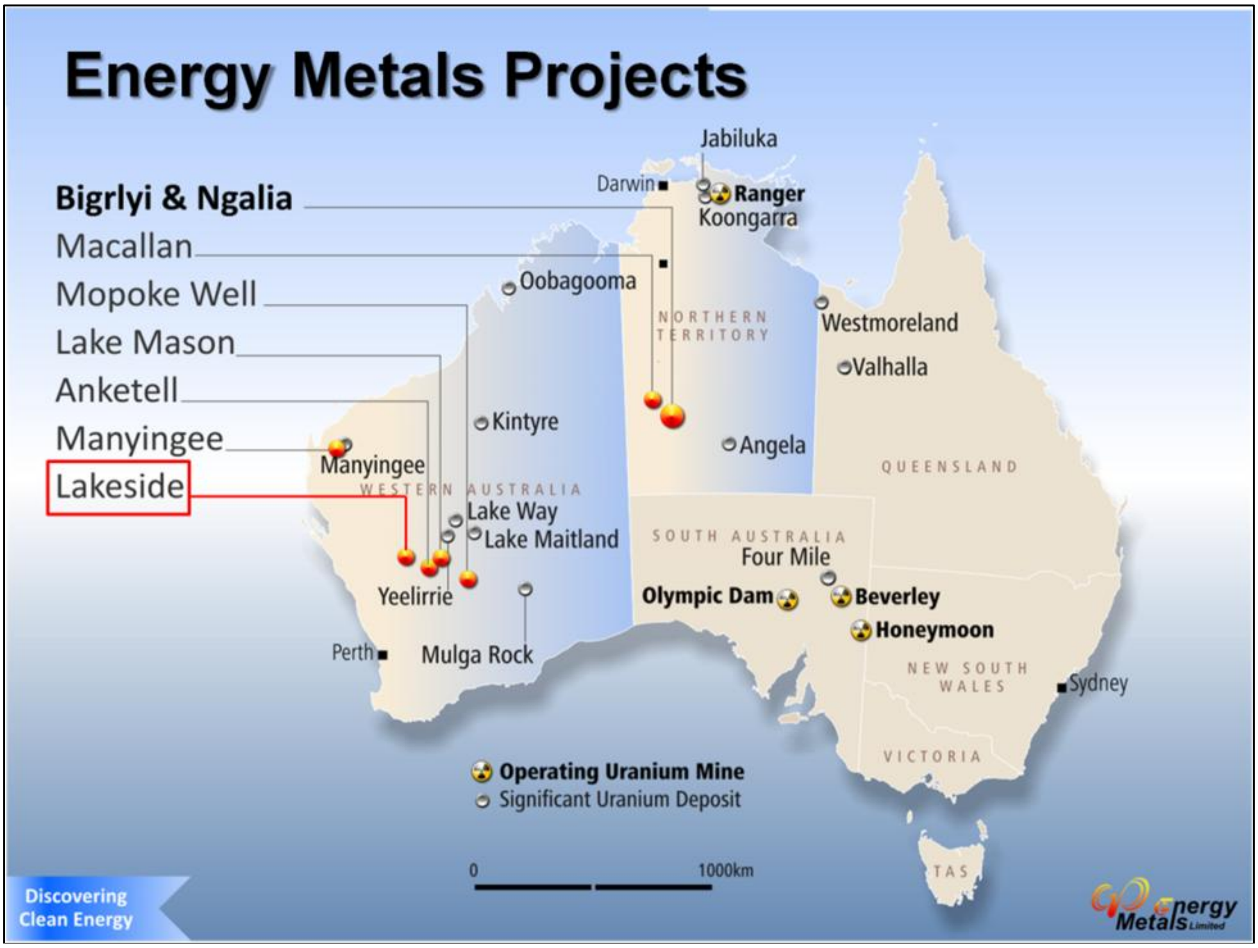

Figure 1. Location of Energy Metals projects with the Lakeside project indicated.

The latest Mineral Resource estimate for the Lakeside deposit was completed by consultants CSA Global Ltd (CSA). The Mineral Resource Estimate (Table 1) has been classified as Inferred and contains 2.12Mlb U_3O_8 at a 200ppm cut-off or 2.84Mlb U_3O_8 at a 100ppm cut-off. In addition, an Exploration Target representing unclassified resources of 310,000 tonnes at an average grade of 450 ppm U_3O_8 at a 200ppm cut-off (140 tonnes of U_3O_8) has been outlined.

Table 1: Lakeside Inferred Resource Estimate at 200ppm & 100ppm U_3O_8 cut-off grades

Tonnes (Million)	Cut-off Grade U_3O_8 (ppm)	Average Grade U_3O_8 (ppm)	Contained U_3O_8 (tonnes)	Contained U_3O_8 (Mlb)
2.74	**200**	**350**	**960**	**2.12**
5.02	**100**	**257**	**1,289**	**2.84**

Tonnes are metric (2204.62 pounds), figures may not total due to round-off errors.
Significant figures do not imply precision.

The Mineral Resources have been classified and reported in accordance with JORC (2012) requirements. The resource classification is based on the assessed level of confidence in sample methods used, geological interpretation, drill spacing and geostatistical measures.

For resource modelling purposes a database was assembled from available historical data (BHP, Uranex and Acclaim) and EME drill hole information. The database contains data from 604 drill holes, and includes over 44,000 gamma log data points, over 1,400 chemical assays for U_3O_8 and 2,800 logged lithology intervals. It was found that chemical assay U_3O_8 values were generally significantly higher than the logged radiometric eU_3O_8 values presumably largely due to radioactive disequilibrium, a common feature of surficial uranium deposits. In view of the extensive comparative chemical assay data available for this deposit, it was determined that a correction factor could be applied to all eU_3O_8 values. A comparison between U_3O_8 ppm grades and eU_3O_8 grades with the correction applied shows close agreement (average 228 ppm and 229 ppm, respectively).

Uranium grades >50ppm U_3O_8 were used to model mineralised envelopes and wireframe models were constructed. As this process progressed it became clear that mineralisation was distributed in three different domains which are interpreted as separate palaeochannels (Figure 2). For geostatistical analysis purposes and for the construction of the block model, the data was composited into 0.25m and 0.5m intervals respectively. Uranium grades were interpolated into the block model using the ordinary kriging method by a series of iterations. The completed model for the deposit was checked visually and also by alternative interpolation methods and was found to be of high confidence.

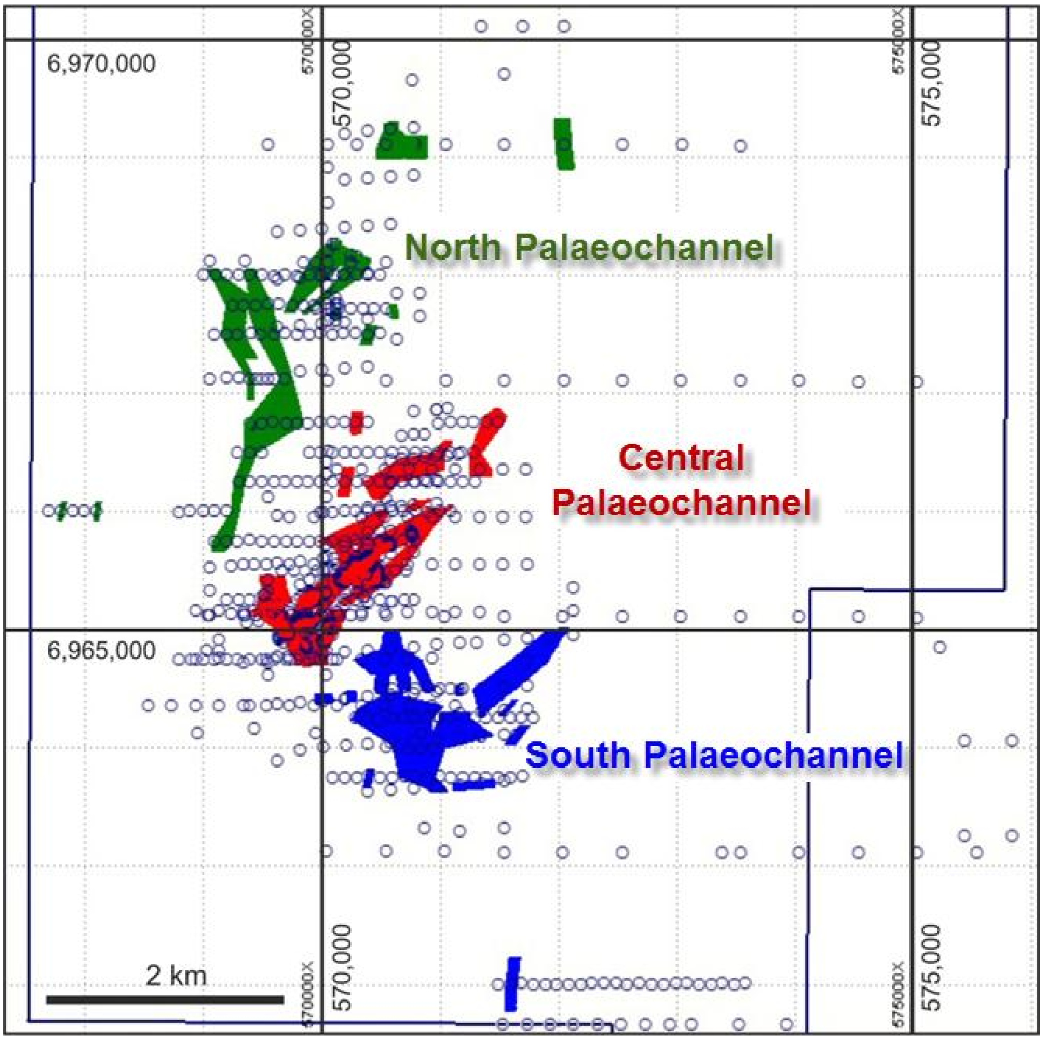

Figure 2. Plan of the Lakeside deposit showing the historical and EME drill hole collar distribution (circles) and the mineralised palaeochannel domains.

A gridded model was generated for the wireframes in order to visualise the uranium grade times thickness (G*T) characteristics of the deposit based on the block models. Uranium G*T is calculated by multiplying the vertical size of the block model cells by the uranium grade (Figure 3). The uranium distribution is concentrated within the central palaeochannel which holds 75% of the resource at 200ppm U_3O_8 cut-off (Table 2).

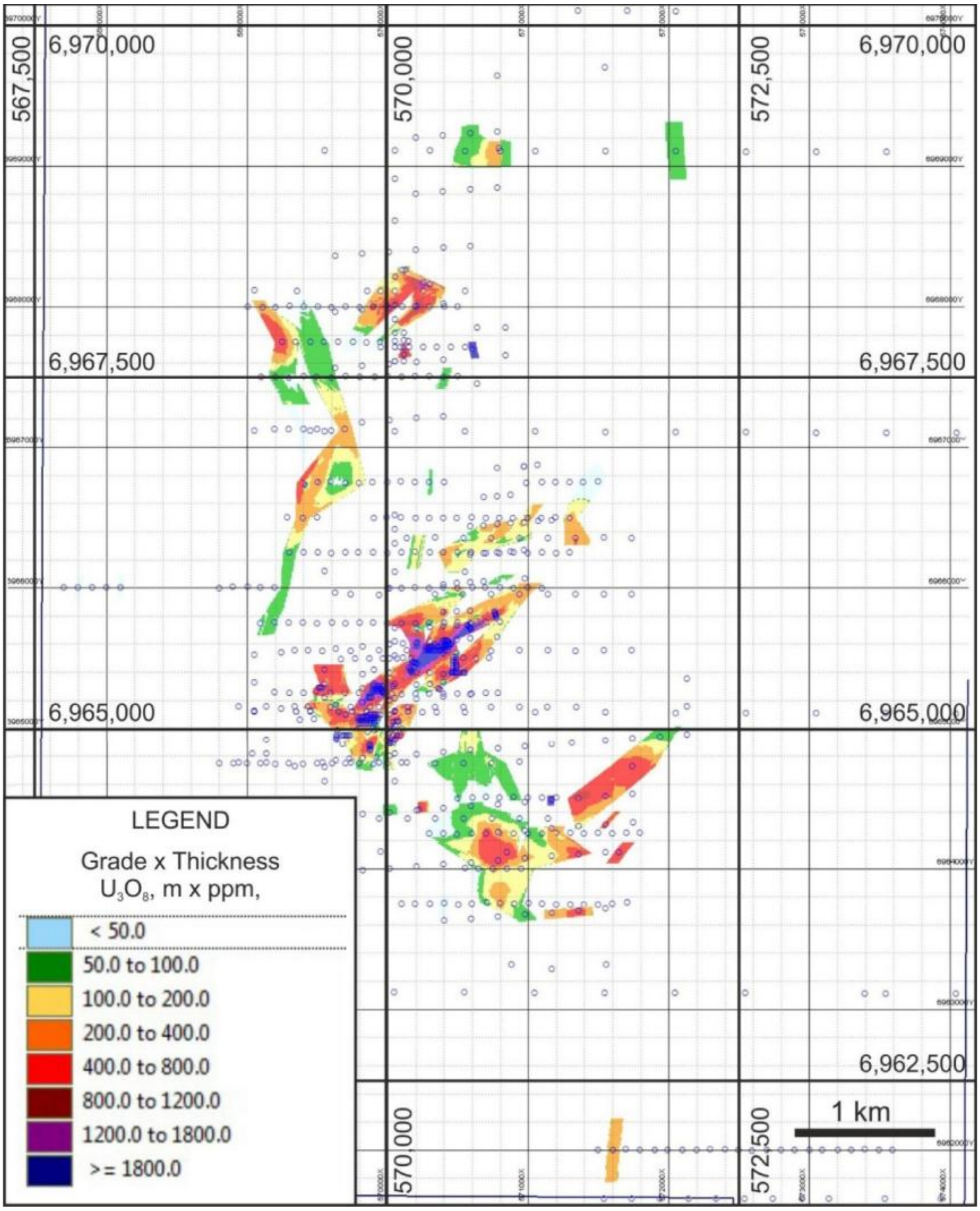

Figure 3. Distribution of Grade (ppm U_3O_8) x Thickness (metres) for the Lakeside deposit based on the block models.

Table 2: Estimate of Mineral Resources for the Lakeside project at 200ppm U_3O_8 cut-off categorised by palaeochannel.

Category	Palaeo channel	Volume	Tonnes	Grade		Mineral Resources		
				U	U_3O_8	U	U_3O_8	U_3O_8
		'000 m^3	' 000 t	ppm	ppm	Tonnes	Tonnes	M lb
Inferred	South	66	118	193	227	23	27	0.06
Inferred	Central	1,040	1,872	326	385	611	720	1.59
Inferred	North	417	751	241	284	181	213	0.47
Inferred	**Total**	**1,523**	**2,741**	**297**	**350**	**814**	**960**	**2.12**

The Lakeside project is located approximately 160km to the west of Energy Metals' Lake Mason project (3.7Mlb U_3O_8) and 110km northwest of Energy Metals' Anketell Project (7Mlb U_3O_8). The Lakeside resource estimate takes Energy Metals' total uranium inventory in the central Yilgarn area to 16.1Mlbs U_3O_8 at a cut-off grade of 100ppm U_3O_8. The Company will continue to look at opportunities to expand and upgrade resources in the area and evaluate possible development options. In order to maintain the Company's interest in the project until uranium market conditions improve, Energy Metals has applied for a Retention Licence to cover the resource area.

For and on behalf of the Board

Weidong Xiang
Managing Director
3rd June 2014

Competent Persons Statement

The information in this report that relates to Mineral Resource estimation is based on information compiled by Dr Maxim Seredkin, Resource Consultant Geologist, and Mr Dmitry Pertel, Principal Consultant Geologist. Dr Seredkin and Mr Pertel are members of the Australian Institute of Geoscientists (MAIG) and are employees of CSA Global. Dr Seredkin and Mr Pertel have 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 is a Competent Person as defined by the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)", and they consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Information in this report relating to exploration results, data, cut-off grades and QAQC analysis is based on information compiled by Dr Wayne Taylor and Mr Lindsay Dudfield. Mr Dudfield is a member of the AusIMM and the AIG. Dr Taylor is a member of the AIG and is a full time employee of Energy Metals; Mr Dudfield is a consultant to Energy Metals. They both have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Dr Taylor and Mr Dudfield both consent to the inclusion of the information in the report in the form and context in which it appears.

Information in this report relating to the determination of the gamma probe results and geophysical work is based on information compiled by Mr David Wilson. Mr Wilson is a member of the AusIMM and the AIG. Mr Wilson is a consultant to Energy Metals. He 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 "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Mr Wilson consents to the inclusion of the information in the report in the form and context in which it appears

The following commentary is provided to ensure compliance with the JORC (2012) requirements for the reporting of Mineral Resource Estimates as discussed above for the Lakeside Deposit on tenement E21/120.

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (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.*	• The Lakeside prospect was primarily sampled by aircore (AC) drilling on drill lines with a nominal 100m spacing (Eastings). Parts of the target area located on the lakebed of Lake Austin were sampled by hand auger methods on a 50 x 50m grid. Drill holes were vertical to optimally intersect the mineralisation in flat lying horizontal beds. Aircore drill holes were probed by a 33mm calibrated Auslog downhole gamma tool to obtain a total gamma count reading with depth at 2-5 cm intervals (see below for tool calibration information). • The total count gamma logging method used here is a common method used to estimate uranium grade where the radiation contribution from thorium and potassium is small (as is the case for calcrete-hosted, sandy clay deposits like Lakeside considered here). Background gamma rays from thorium and potassium add the equivalent of a few parts per million to the equivalent uranium values and are relatively constant in each geological unit. Gamma radiation is measured from a volume surrounding the drill hole that has a radius of approximately 35cm. The gamma probe therefore samples a much larger volume than AC drill spoil or drill core samples recovered from a drill hole of normal diameter. Accordingly, radiometric gamma logging was used as the primary sampling method for definition of mineralisation at the Lakeside deposit; in cases where gamma logs were unavailable, chemical assay data was used. • Estimates of uranium concentrations derived from gamma ray measurements are based on the commonly accepted initial assumption that the uranium is in secular equilibrium with its daughter products (radionuclides), which are the principal gamma ray emitters along the U-series decay chain. If uranium is in disequilibrium as a result of the redistribution (depletion or enhancement) of uranium

Criteria	JORC Code explanation	Commentary
		relative to its daughter radionuclides, then the true uranium concentration in the holes logged by the gamma probe method will be higher or lower than those reported. Comparison of chemical assays and gamma log eU_3O_8 values at Lakeside indicate that gamma log measurements under-report actual U_3O_8. However, no special investigations of possible disequilibrium have been undertaken to date. The comparison between gamma logging and assaying has been used for disequilibrium estimation. This methodology is quite imprecise, but is acceptable for Inferred Resources. • Routine chemical assays were carried out on ca.3 kg size, half-metre bulk samples of AC drill spoils over mineralised intervals or on one metre hand auger samples. Sampling was undertaken using industry standard QAQC practices. Routine chemical assay for Uranium and Vanadium were undertaken by four acid digest, ICP-MS/OES methods or in the case of multielement analysis, lithium metaborate-tetraborate fusion followed by ICP-MS/OES methods (see below for further details).
Drilling techniques	• *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).*	• Aircore (AC) drilling was predominantly used at the Lakeside prospect. AC drilling utilized both blade (89mm diam.) and hammer (90mm diam.) methods. Hand augers (HA) with a 50mm diam. clay bit were used to sample areas of the lakebed surface in areas inaccessible to vehicles.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Assessment of AC drill spoil recovery was made as a visual estimate (percent recovery). Only poor sample recovery was commented on and this information was entered into the company's database. Except in some deeply weathered, water-saturated zones (generally located outside mineralized intervals) estimated sample recoveries were high. The drilling company's practice was to use appropriate drilling techniques to maximize sample recovery. No relationship has been identified between sample recovery and grade of mineralisation.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or*	• Most mineralised AC drill chip samples and all HA samples were geologically logged with information on lithology, colour, grain-size, oxidation state, alteration, cementation, weathering and other features recorded digitally. All coded data was verified according to Energy Metals standard logging look-up tables. Chip trays were

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	costean, channel, etc) photography. • *The total length and percentage of the relevant intersections logged.*	archived at the EME Osborne Park sample storage facility. Approximately 83% of AC chip tray samples drilled by EME have been photographed and spectrally logged as part of a Hychips study. Acclaim drill holes were geologically logged however the database from the earliest drill holes (BHP & Uranex) did not include lithological logging.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No samples of core were submitted for chemical assay. • AC drill spoils were sampled off the cyclone to yield one ca.3-5 kg bulk sample which was collected in a green plastic bag (2007-2010 programs) or calico bag (2012). In all AC programs the bulk material was sampled by methodical spearing to provide a primary sample for assay. The primary and duplicate samples supplied for assay generally consisted of moist sandy clays and/or calcrete. • In general the sampling preparation technique adopted by EME has proven to be effective in supplying a representative and repeatable sample as found by routine QAQC comparison. The collection of bulk sample into bags without being split off the cyclone and the use of a spear for sampling is appropriate due to the sticky nature of the clays. • As previous explorers Acclaim primarily used eU_3O_8 values derived from radiometric logging they did not submit any samples for assay. In 2007 EME did not submit any QC for lab testing as radiometric logging was the preferred sampling method. From 2008 to 2014 field QC procedures involved the insertion of a set of QC samples comprising a field standard, a blank and a duplicate at the approx. frequency of 1 QC set per 25 samples. No duplicate samples were supplied for hand auger samples as all the primary material was analysed. • Radiometric logging was used as the primary sampling method and because gamma radiation is measured from the entire volume surrounding the drill hole at a radius of approximately 35cm it can be regarded as representative of the in-situ material. • Chemical assay sample sizes of 3-5 kg are considered to be appropriate for the style of mineralization found here (calcrete and sandy clay hosted uranium) taking into consideration the fine to medium grained nature and mineralogy of mineralized intersections containing ≥100ppm U_3O_8. Samples were pulverised in a low-Cr steel

Criteria	JORC Code explanation	Commentary
		ring mill so that 85% passed 75 microns grain size.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Uranium was assayed by four acid digest/ICP-MS with Vanadium assayed by four acid digest/ICP-OES or for mulitelement analysis lithium metaborate/tetraborate fusion analysed by ICPMS/OES. Both methods give a total digest for calcrete-hosted uranium. • The gamma tools used for downhole gamma ray measurements were calibrated in Adelaide at the SA Department of Water in calibration pits constructed under the supervision of the CSIRO; the tools are recalibrated annually. Energy Metals and gamma logging contractors run regular checks to ensure the accuracy and reproducibility of probe data using a standard radioactive source. The raw gamma ray data was converted from counts per second to equivalent U_3O_8 values (eU_3O_8 in ppm) using the probe calibration factors determined in Adelaide together with an attenuation factor, determined onsite, due to drill rod characteristics. Additional factors take into account differences in drill-hole size and drill-hole water levels. The eU_3O_8 data is filtered (deconvolved) to more closely reproduce true grades and thicknesses, essential where narrow mineralised zones are encountered. The various calibration factors, deconvolution parameters and eU_3O_8 determinations were compiled and/or calculated by David Wilson BSc MSc MAusIMM from 3D Exploration Pty Ltd based in Perth, Western Australia. • EME QC procedures for laboratory assay work specify insertion of a set of standard reference materials (SRM) QC samples comprising a field standard, a blank and a duplicate at the approx. frequency of 1 QC set per 25 samples. Assessment of the QAQC data has confirmed that the accuracy and precision of the laboratory test work is of an acceptable standard.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant uranium intersections were verified by specialist geological personnel from the Uranium Resources Company (URC), Beijing, China; URC is the technical arm of the China General Nuclear Power Corporation (CGNPC), the major shareholder of Energy Metals Ltd. • No modern holes have been twinned at the Lakeside deposit. • Primary data (sampling intervals, associated sample numbers and

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		standard insertion etc) from the field were recorded in hardcopy. Prior to 2013, sampling data was later entered into an Excel spreadsheet in Perth office and validated by importation into an Access database. After 2012 electronic data was entered into a Micromine template where it is validated before being imported into a SQL/GeoBank database. A Geobank dispatch is created and a sample register is filled out. Upon return of the analytical data a Geobank receipt is created and the results stored in the Geobank database. For the earlier data hard copies exist for sample intervals, sample dispatches, work orders, laboratory receipts and analytical reports. Electronic copies of these documents are also available. • No adjustments were made to analytical assay data. The eU_3O_8 values based on gamma logging have been converted to U_3O_8 using a radioactive equilibrium factor (REF) determined from a comparison between deconvolved eU_3O_8 data and chemical assay U_3O_8 data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Location control of historical holes used in the 1998 resource estimate is quoted by Snowden Consultants as being accurate to 5m; this level of accuracy has been confirmed by georeferencing of historic maps containing collar, pits and trench locations and by previous explorers Acclaim Uranium who confirmed the location of some historical collars by DGPS. Holes drilled by Acclaim Uranium in the 1990's were surveyed using an Omnifix 12PW1 DGPS accurate to 50 cm. All EME collar pickups were conducted by external contractors using RTK DGPS accurate to better than 0.1 m with the exception of six holes drilled in early 2007 that only have an accuracy of handheld GPS (accurate to approx. ±4 m in the horizontal plane). All measurements are based on existing site control points which were previously occupied by a GPS base station and resolved using the Geoscience Australia GPS processing service AUSPOS. Elevations are Derived AHD heights computed using the AUSGeoid09. The centre of the drill collar cap was measured. In 2007/08 and 2010 collars were surveyed by Navaids using an Ashtech Z-Extreme dual frequency GPS receiver. The precision quoted by Navaids was 0.03 m in the horizontal and 0.04 m in the vertical plane. The 2012 program was accurately surveyed by BHGS Pty Ltd with the

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		locations recorded in GDA94 zone 50 by a Magellan ProMark 500 PP-RTK survey instrument and locations are accurate to ±0.01 m in the horizontal plane and ±0.02 m in the vertical plane. Collar coordinates for the 2014 hand auger program were recorded by hand-held GPS with RL's estimated by interpolation of previous RTK survey elevations close by. • Historical drill hole locations were designed on two separate local grids. Acclaim transformed these grids into GDA84. Upon transfer of the Acclaim and historical data into the EME database a conversion of datum to GDA94 (MGA50) was undertaken. All data and coordinates for the project are located on the MGA94 grid, Zone 50 using the GDA94 datum. Co-ordinates are displayed as Eastings and Northings. • Topographic control of EME drilling collars by DGPS are quoted as being accurate to ±0.04m (Navaids) or ±0.02 m (BHGS). As all holes were vertical and primarily ≤51m depth no inclination measurements or down-hole surveys were undertaken.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Historically the Lakeside deposit was drilled on a coarse grid with a nominal spacing of 500m between holes (Eastings) and 2000m spacing between lines (Northings) These grids were subsequently infilled by Acclaim Uranium at 200 x 400m and then by EME at a spacing of approx. 100 x 250m down to 50 x 50m locally for shallow drill holes. An estimate of the overall density of drill data equates to grids of approximately 100m x 200m size over the three main mineralised domains. • Energy Metals and consultants CSA Global consider the spacing sufficient to establish continuity of geology and grade for the purposes of estimation of an inferred mineral resource for the Lakeside deposit. • Downhole gamma logs measured at 5 cm spacing were composited to 0.5m intervals. Geochemical assay data were composited to 1m for historical data and 0.5m for post-1998 data.
Orientation of data in relation to	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation*	• Uranium mineralisation is hosted by stratiform calcrete or calcretised sediments located within a palaeochannel network and exhibits no structural control. Mineralisation is controlled by physical and chemical characteristics of the host rock such as permeability and is

Criteria	JORC Code explanation	Commentary
geological structure	*of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	influenced by fluctuations in the groundwater table. • Drilling has been conducted perpendicular to bedding that hosts the mineralized zones and no bias of sampling related to orientation of these zones has been identified.
Sample security	• *The measures taken to ensure sample security.*	• The chain of custody of samples including dispatch and tracking is managed by Energy Metals staff. Samples are stored in a designated fenced area at site prior to transport to the assay laboratory by Energy Metals personnel. Sample pulps are returned to EME's Osborne Park sample storage facility for archive on completion of assay work.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A data review was conducted at the time of the 1998 resource estimate (Snowden Consultants) which confirmed the validity of historical data. EME's downhole gamma probe logging procedures were reviewed and updated in 2012 with the assistance of David Wilson (3D Exploration Pty Ltd) and geophysical personnel from Paladin Energy Ltd. In 2013 a comprehensive data review of EME's WA uranium properties (2006 to 2012) was conducted by Matthew Wheeler, principal consultant of Terramin Geoservices. As part of the review previous EME data was validated and data handling practices updated including improvements to Energy Metals data management systems. Energy Metals considers its current exploration database is of sufficient quality to carry out the resource estimation. In 2014 all the EME Lakeside radiometric logging data was reprocessed using new calibration factors due to an update of the grades at the Adelaide calibration pits.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure	• *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,*	• The Lakeside deposit is located on E21/120 which is 100% owned and operated by Energy Metals. • The exploration licence is located within the Austin Downs Perpetual

Criteria	JORC Code explanation	Commentary
status	*historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	Pastoral Lease, which is covered by the WAJARRI YAMATJI Native Title Claim by (WC2004/0101). • The exploration licence is held in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous scout drilling, pitting and trenching was conducted at the Lakeside prospect by Dampier Mining Company Ltd (BHP) and Uranex Pty Ltd in the early to late 1970s and in 1980, respectively. Acclaim Uranium NL/Equinox Resources NL conducted resource drilling and exploration auger drilling in the mid to late 1990's. Only historical data that was verified by Snowden Consultants or by Energy Metals staff/consultants was used for resource estimation purposes.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geology of the Lake Austin (Lakeside) uranium deposit has been investigated previously. Basement granitoids of the catchment area are considered to be the probable source rocks for the uranium. Calcrete has been deposited as a sheet (platform) in the axes of the larger valleys, and the Lake Austin playa has formed in the lowest part of the landscape. Calcrete, calcretised sandy clays, and the lake sediments of the playa, are the hosts to uranium mineralisation. A surface cover of sand or alluvium up to 2m thick may be present locally. The calcrete varies in colour and hardness. On the platform it is up to 14m thick but thins towards the lake to about 4m. It consists of calcite and dolomite with opaline silica in siliceous zones together with some gypsum and detrital quartz, feldspar, goethite and kaolinite. Uranium mineralisation tends to be concentrated along the axis of several small palaeochannels.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.*	• All drill hole information used for resource estimation purposes has previously been reported in Quarterly Reports and ASX releases by EME from 2007-2014 and has been reported by Acclaim Uranium, Lakeside Uranium Project, Resource Estimation, April 1998 (Snowden Associates Pty Ltd). Acclaim drill hole data has only been used for wireframe modelling due to existing data solely being radiometric. Acclaim drillholes were excluded from grade estimation and block modelling due to the existence of adjacent EME drill holes and the validity of EME data.

Criteria	JORC Code explanation	Commentary
	• *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.*	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results, i.e. mineralised intercepts, are reported as either equivalent U_3O_8 values (eU_3O_8) from processed gamma logs or as chemical assay U_3O_8 values in parts per million (ppm) by weight. Gamma log intersections have been composited from 5cm deconvolved eU_3O_8 values. A cut-off of 50ppm eU_3O_8 has been used with a minimum thickness of 0.2m and a maximum internal dilution of 0.2m and no external dilution. Chemical assay U_3O_8 values have been determined for 0.5m samples of AC (post-1996) or 1.0m (pre-1996) drill spoils.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• The stratigraphy is predominantly flat lying. All holes have been drilled vertical at -90 degrees, perpendicular to bedding planes and true widths of intersections are estimated to be 100% of the reported downhole widths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Refer to figures in the body of the text.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• All exploration results have previously been reported.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Vanadium is routinely assayed together with uranium, however, the recovery of vanadium is not an economic proposition at present nor is it likely to be in the near future; consequently vanadium has not been considered for resource estimation purposes.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• No further work is planned at Lakeside at present until the project

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	economics improve.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *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.* • *Data validation procedures used.*	• Historical, Acclaim and EME data is available from read only individual Microsoft Access databases. All databases have been converted and validated in Micromine
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• No site visits were undertaken by the competent person (resource estimation) or CSA staff. • CSA has relied on Energy Metals and previous reports for all data regarding the deposits, and given the current stage of the project CSA considers this appropriate.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The geological interpretation is based on detailed observational logging of rock characteristics in the field, the chemical composition of samples defined by assaying and gamma logging and the mineralogical composition identified from spectral Hylogging. Samples are grouped into consistent lithological codes, developed by Energy Metals. CSA reviewed these codes and the geological data and found it to be consistent and reasonable. • Drill hole intercept logging, gamma logging and assay results have formed the basis for the geological interpretation. • CSA believes the geological interpretation is reasonable for the deposit type and level of complexity of the geology, and possible variations to the geological interpretation would not materially affect the estimate. • Solid wireframe geological models were created from strings (≥ 50 ppm U_3O_8), which define the mineralized envelopes. Surface maps of palaeochannels have been taken into account for generation of the wireframe models.

Criteria	JORC Code explanation	Commentary
		• Lithological domains (for example, gypcretes separately from calcretes) have not been determined due to an absence of geological data for the earliest stages of exploration. The known distribution of gypcretes is small and given the current stage of the project CSA considers the lithological interpretation appropriate. • Geological boundaries were used to guide the interpretation of mineralised lenses. Due to the simplicity of the deposit type, density of drilling and ease in recognition of mineralisation, CSA are confident that the geological interpretation of the mineral deposit is sufficient and an accurate representation of the distribution of mineralisation.
Dimensions	• *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.*	• The mineral resource is made up of two mineralised domains orientated S-N or SW-NE but is divided into three palaeochannels (North, Central and South) for the block model. Total dimensions are approximately 5.7km N-S and 2.7km E-W. Mineralisation occurs at a depth of between 0m and 7m and ranges between 0.2m and 7m thick, averaging 1.63m thickness.
Estimation and modelling techniques	• *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.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.*	• Geological modelling and resource estimation were completed using Micromine 2013 (Build 14.0.4.890). The wireframe models of palaeochannels ($U_3O_8 \geq 50$ ppm) have been used for constraining the block model. A top cut of 1,700 ppm U_3O_8 has been applied. Half metre composites were used for grade estimation in the block model. • The project has been divided into two structural domains for grade estimation: (1) south-west – north-east direction of palaeochannels and (2) south – north direction of palaeochannels. U_3O_8 cut grades were interpolated into the block model using ordinary kriging method by a series of iterations. Search and estimation parameters are provided in the report. The interpolation was carried out separately for each domain and wireframe in order to exclude the influence of samples from adjacent wireframes. • The completed model for the deposit was checked visually and also using alternative interpolation methods (Inverse Distance Weighted Squared and Inverse Distance Weighted Cubed). There was a difference less than 2-4% between methods. • Previous Mineral Resource estimation was undertaken in 1978 (Uranex Pty. Ltd.), 1980 (Gilfillian and Associates), and 1998

Criteria	JORC Code explanation	Commentary
	• *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	(Snowden). • There are no by-products to recover. • There are no known mineralised intersections involving significant levels of deleterious elements, and gypcretes from which uranium cannot be extracted by alkaline solutions are sparsely distributed. • The dimensions of the parent block were set to 10 x 10 x 0.5 m with sub-celling into 5 sub-cells: the maximum density of the geological exploration grid is 10-20 x 10-20 m; the typical dimension of the geological exploration grid is 100 x 200-400 m; and thickness of mineralised bodies is from 0.1 to 7 m, average 1.63 m.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages are estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A cut-off grade of 200 ppm U_3O_8 was used based on general experience. No special estimation of cut-off grade was used at this stage.
Mining factors or assumptions	• *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.*	• The mining method best suited to this deposit may be shallow pitting. No special estimation has been conducted to determine dilution and losses.
Metallurgical factors or assumptions	• *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.*	• There has been no special investigations of metallurgical parameters at this stage. Special investigations to be considered in the future include extraction of uranium from calcrete deposits by heap leaching and alkaline solutions.
Environmental factors or	• *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*	• No special investigations on environmental impacts have been conducted at this stage.

Criteria	JORC Code explanation	Commentary
assumptions	*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.*	
Bulk density	• *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.* • *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.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• No determinations of the bulk density values for the Lakeside project were made. The bulk density value of 1.8 t/m^3 was used for the project, which was based on the determinations for the similar Lake Maitland project in Western Australia, which is located some 325 km to the east of the Lakeside project.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• CSA has considered several factors to classify Mineral Resources, such as search ellipse dimensions, geological data and exploration grid size. • Indicated Mineral Resources cannot be estimated without bulk density determination for the Lakeside project as well as the full verification of previous stages of exploration (BHP & Uranex). • The main palaeochannels have been classified as Inferred Mineral Resources and the minor mineralised bodies intersected by several drill holes have been classified as Exploration Targets (unclassified resources)
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The geological and block models as well as Minerals Resource estimation has been reviewed by Dmitry Pertel, the manager of Resource Geology in CSA Global
Discussion of relative accuracy/ confidence	• *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*	• The Mineral Resources have been classified and reported in accordance with JORC 2012. Resource classification is based on confidence in sample methods used, geological interpretation, drill spacing and geostatistical measures for Inferred Mineral Resources.

Criteria	JORC Code explanation	Commentary
	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. • *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.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	