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7,456 TONNES U₃O₈ MAIDEN JORC RESOURCE WALBIRI & SATELLITE DEPOSITS (NT)

HIGHLIGHTS

- Inferred resources of 7,037 tonnes eU₃O₈ at 641ppm (200ppm cut-off) obtained for the Walbiri uranium deposit confirming Walbiri as the third largest uranium deposit in Central Australia after Angela and Bigrlyi.
- Inferred resources of 260 tonnes eU₃O₈ at 259ppm and 159 tonnes eU₃O₈ at 321ppm for the Sundberg and Hill One deposits (200ppm cut-off).
- Uranium potential of the Ngalia Basin (NT) further demonstrated, supporting EME's strategy of ongoing review of historical deposits in the region.

Significant drill hole intercepts include:

- 7.5m at 1,098ppm eU₃O₈ from 187.1m in WPH07
- 3.0m at 1,740ppm eU₃O₈ from 139.9m in NGDD18
- 6.8m at 646ppm eU₃O₈ from 139.5m in NGRH37A
- 1.0m at 5,340ppm eU₃O₈ from 171.7m in WPD15

Energy Metals Limited (ASX: EME) is pleased to advise that uranium resource estimates have been obtained for the historical Walbiri deposit and two satellite deposits, Sundberg and Hill One, located 75km by road from the Bigrlyi Deposit in the Ngalia Basin, Central Australia (Figure 1). The deposits lie on granted tenements EL24463, ELR45 and EL30145.

The Walbiri Range area was recognised as prospective for sandstone-hosted uranium following the discovery of outcropping carnotite mineralisation by Central Pacific Minerals (CPM) in late 1971. Subsequent exploration work, including the drilling of 57 exploration holes, was carried out by CPM in the period 1972 to 1976. EME acquired CPM's interest in the project in 2005, including all the historical exploration records which are now held in EME's archives.

The Ngalia Basin, which is some 12,600 km² in size, is recognised as one of the Northern Territory's significant and most prospective uranium provinces (JSU Ngalia Basin Uranium Mineral System Project, Northern Territory Geological Survey, Record 2012-003). In 2014, EME began a program of systematic documentation and evaluation of historical uranium deposits and prospects located on its Ngalia Basin tenure. Because of the thoroughly and meticulously kept CPM exploration records for Walbiri and adjacent satellite deposits, it was recognised that these data would be of sufficient quality to proceed with JORC-compliant resource estimation provided geological criteria such as continuity of mineralisation and appropriate drill hole density could be demonstrated. A review by EME's resource consultants CSA Global Ltd confirmed that appropriate criteria were met for Walbiri and its satellite deposits, and EME elected to proceed with the resource estimation.

The latest available historical resource estimate for the Walbiri deposit (non-JORC) was undertaken by the Australian Mineral Development Laboratories (AMDEL) in November 1976 using chemical assay data and employing geostatistical constraints. An estimate of 4,789 tonnes U_3O_8 was obtained for an average grade of 1,140 ppm U_3O_8 (cut-off grade not specified). An earlier, widely quoted historical "resource" for the Walbiri deposit of 690 tonnes U_3O_8 at a grade of 1,620 ppm was actually derived from a preliminary resource calculation for a single lens of mineralisation of 743m length and 113m width using a 1,000 ppm cut-off grade. Although this estimated tonnage is not indicative of the deposit as a whole, the estimate has been variously quoted as such over the intervening 40 years giving the impression that Walbiri was not a uranium deposit of significance.

Exploration Results

Walbiri and its satellite deposits are a tabular, sandstone-hosted, uranium-vanadium style of deposit similar to the nearby Bigrlyi deposit. Mineralisation is hosted in the Mt Eclipse sandstone which is comprised dominantly of arkose, sub-arkosic sandstone and shale deposited in an ancient fluvial channel and alluvial fan system. Mineralisation is stratiform in nature and occurs within a number of semi-continuous lenses confined by shale bands; the dominant lens occurs immediately above a shale marker band termed the 'C-shale'. Mineralisation is hosted in reduced, grey-green coloured, pyrite-bearing rocks typically near the interface with oxidised mottled or red-coloured rock units. Uranium tends to be variably distributed along strike and at depth probably due to both primary depositional features, including the abundance of detrital clay clasts and channel morphology, and the effects of later uranium remobilisation.

The dimensions of the main Walbiri mineralised domain are approximately 3.6 km along strike with an average plan width of 300 m and maximum modelled plan width of 1,100 m. The total combined strike length of the Walbiri deposit and its two satellite deposits (Sundberg and Hill One) is 8.7 km. Stratigraphy and mineralisation dips between 10° and 18° to the SW and the width of the mineralised interval varies from 0.2m to 7.5m, averaging 1.3m thickness. Mineralisation extends from surface and plunges toward the SE with the deepest drill intercept being 230m below surface. Drill hole collar locations and other drilling details are provided in Annexure 1.

Uraninite and coffinite are the dominant uranium minerals in the sub-surface and they occur in close association with pyrite, ferroselite, and detrital-origin phyllosilicate minerals including biotite, clays and chromium-bearing chlorite. Walbiri and the satellite deposits are characterised by low levels of carbonate cement.

All CPM's drill holes were logged open-hole, by independent geophysical contractors, using downhole gamma probe tools (for further details see the comments with regard to JORC reporting

below). The downhole gamma probe was used as the primary analytical tool to measure eU_3O_8 grade. Drill core samples were assayed for uranium, however, these data are not considered to be sufficiently robust nor representative to be used in the resource estimation. Historically a number of samples were assayed to determine the extent of possible radiometric disequilibrium; although the data are somewhat variable it was concluded that significantly mineralised zones are most likely in equilibrium. This view is supported by a comparison of assay and gamma log U_3O_8 data, and therefore application of a disequilibrium correction is not considered to be warranted at this stage (i.e. radioactive equilibrium factor or REF has been assigned a value of 1).

Drill hole information and gamma log data for all drill holes, including associated metadata and probe calibration records, were compiled from EME's archives. Historical gamma logs were archived as a compilation of analogue printouts on paper charts; these were scanned at high resolution, digitised and converted to counts per second (cps) data at 10cm intervals downhole. Using the calibration data and hole information the cps data were reprocessed to yield deconvolved eU₃O₈ values according to well established methods. Significant intercepts (minimum width 0.3m, maximum internal dilution 0.3m, cut-off grade 100ppm eU₃O₈, and grade x thickness value >100) are detailed in Annexure 2. All relevant drilling data, gamma logging data and geological data including lithological logs have been converted to digital format, verified and loaded into EME's database (a summary of the information is provided in Table 1 below).

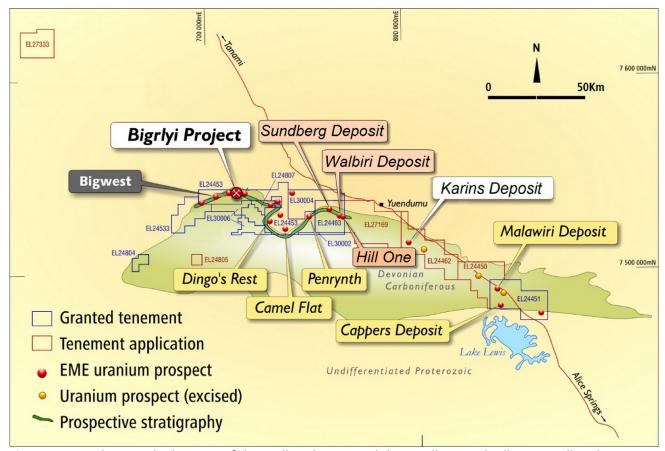


Figure 1. Map showing the location of the Walbiri deposit and the Sundberg and Hill One satellite deposits in relation to the Ngalia Basin (in green), EME tenement boundaries and various deposits and prospects (significant deposits on EME tenure are identified).

Table 1. Database Summary used in the Resource Estimation

Category	Total
Number of drill holes	66*
Total metres drilled	10,018.71
Number of downhole survey records	66
Number of gamma logged intervals (at 10 cm)	79,505
Number of mineralised intervals based on 10 cm gamma-logging	94
Number of assays	395
Number of assays used for REF estimate purposes	58
Number of intervals with lithological data	4,573

^{*57} CPM drill holes and 9 Alcoa drill holes. The latter holes, drilled mainly to the west of Sundberg, do not have available gamma logs and were used to constrain lithological continuity and the extent of mineralisation only.

Land tenure

Just over one half of the Walbiri deposit and most of the Sundberg and Hill One satellite deposits are located within granted tenement EL24463, which is 100% EME owned. The remainder of the Walbiri deposit and a portion of the Hill One deposit are located on granted joint venture tenement ELR45, which is a joint venture between EME (41.9%) and Paladin Energy Ltd (PDN: 58.1%) with EME as the operator of the joint venture. About one third of the Sundberg deposit is located on granted tenement EL30145 which is a joint venture between EME (53.3%), Paladin Energy Ltd (PDN: 41.7%) and Southern Cross Exploration (SXX: 5%) with EME as the operator of the joint venture.

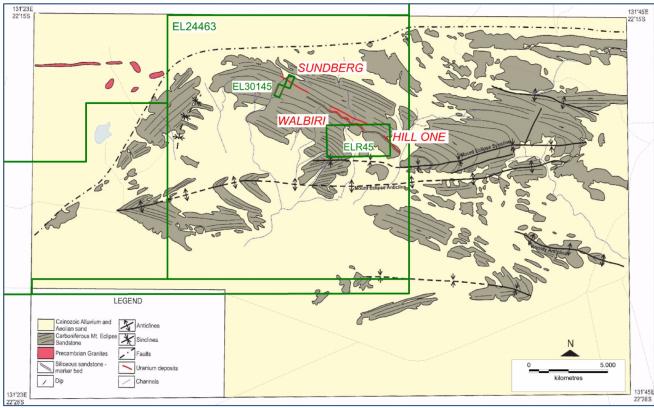


Figure 2. Map showing the location of Walbiri, Sundberg and Hill One deposits in relation to tenement boundaries (green), outcropping sandstone (grey), surface mineralisation (red lines), bedding planes and syncline/anticline axes. Northern boundary of Ngalia Basin (dot-dash line) and drainages (blue) are shown.

The deposits are all located on the Mt Doreen pastoral lease over which a Native Title claim was determined by consent in 2013. Currently, resource areas of the Walbiri, Sundberg and Hill One deposits are affected by Aboriginal heritage zones which restrict access and limit ground disturbing activities within the area.

Resource Estimation Procedure

Mineralised envelopes at a 100ppm eU_3O_8 cut-off grade were interpreted and wireframed (Figures 3 & 4). The wireframes were constrained by surface outcrops and constructed on the basis of a sectional interpretation in which the boundaries were extrapolated to half the nominal section spacing beyond the extents of current drilling. For profiles containing only one drill hole, an average bedding dip was assumed. Using the digital lithological logs, digital models were also generated for the three shale horizons (A, B & C-shales) which bound internal sandstone sub-units (Figure 3).

The downhole eU_3O_8 data were composited over mineralised intervals using the following parameters: minimum thickness 0.3m, 100ppm eU_3O_8 cut-off grade, 0.3m maximum width of internal waste, no external dilution, and minimum grade-thickness of 30 ppm·m. A REF value of 1 was applied ($U_3O_8/eU_3O_8=1$) and statistical and geostatistical analyses were then performed. The block model was created and filled following application of a coordinate transformation to provide a constant orientation of mineralisation for interpolation purposes. Because the distribution of uranium grades consists of several populations the Multiple Indicator Kriging (MIK) method was used for interpolation of grades in the block model. The dimensions of the parent blocks were set at 10x10x0.5 m with sub-celling applied at the boundaries of the model. An average bulk density of 2.56 t/m³, as measured from Walbiri core samples held in EME's core facility, was used. The distribution of U_3O_8 grade x thickness values obtained is shown in Figure 5 and the resulting resource estimate, which is classified as inferred, is provided in Annexure 3 for various cut-off grades as well as splits for both deposit and joint venture interest.

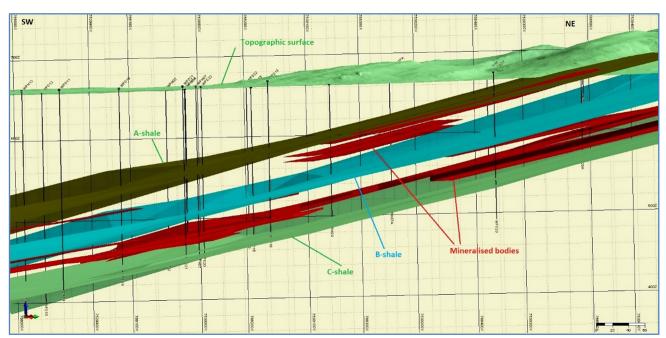


Figure 3. A SW-NE cross-section through the Walbiri Deposit showing wireframe models of lithological domains (brown: A-shale; blue: B-shale and green: C-shale) and mineralised bodies (red). Topographic surface and drill hole traces also shown.

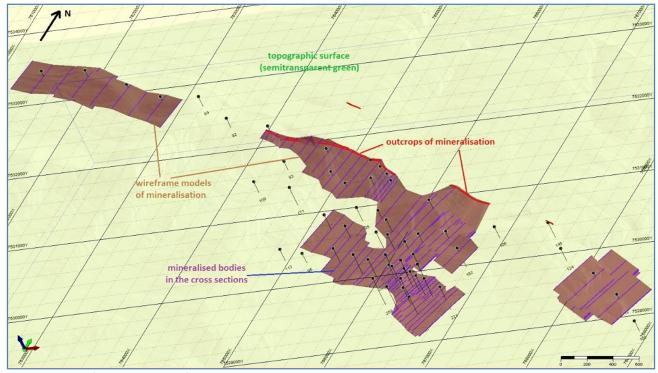


Figure 4. Wireframe models of the mineralised bodies. Outcropping mineralisation shown in red.

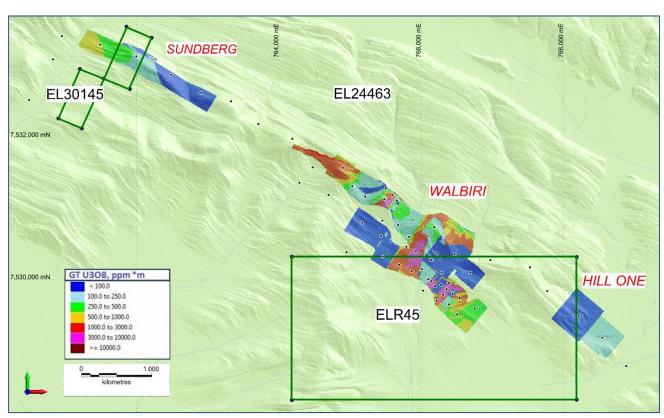


Figure 5. Distribution of U₃O₈ grade x thickness (GT) for the Walbiri and satellite deposits.

Summary

The Mineral Resources are summarised in Table 2 for a 200ppm U₃O₈ cut-off grade:

Table 2: Estimate of Mineral Resources for the Walbiri and Satellite Deposits (Ngalia Basin)

Category		Volume	Tonnes	Gra	Grade		Mineral Resources	
	Deposit	'000 m ³	'000 t	U₃O ₈ ppm	U %	U₃O ₈ Mlb	U₃O ₈ tonnes	
Inferred	Hill One	192	494	321	0.027	0.350	159	
Inferred	Walbiri	4,274	10,983	641	0.054	15.514	7,037	
Inferred	Sundberg	391	1,005	259	0.022	0.574	260	
Inferred	Total	4,857	12,482	597	0.051	16.438	7,456	

Notes:

- 1. The Mineral Resources are for a 100% interest in the associated joint ventures and not the Mineral Resources attributable to the individual joint venture partners.
- 2. Mineral Resources are based on 200 ppm cut-off grade per resource block.
- 3. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 4. Mineral Resources are based on JORC-2012 definitions.
- 5. Mineral Resources are based on a bulk density of 2.56 t/m^3 .
- 6. Rows and columns may not add up exactly due to rounding.

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.

With the mineral resources defined here, the Walbiri deposit is confirmed as the third largest uranium deposit in the southern Northern Territory after Angela and Bigrlyi, and is the second largest deposit in the Ngalia Basin (Table 3). These results affirm the standing of the Ngalia Basin as one of Australia's significant uranium provinces.

Table 3: Mineral Resources of the three largest uranium deposits in the Alice Springs region

Deposit	Basin	Energy Metals' Interest (%)	No. Resource Drill Holes	Cut-Off U₃O ₈ Grade (ppm)	Average U₃O ₈ Grade (ppm)	U ₃ O ₈ tonnes
Angela ¹	Amadeus	0	794	300	1,310	13,980
Bigrlyi	Ngalia	53.3	1,057	250	818	12,230
Walbiri	Ngalia	73.4	47	200	641	7,037

¹ Paladin Energy Ltd (100%)

Because the resource is based on a relatively small number of drill holes compared with the other deposits, Energy Metals believes there is considerable scope for expansion of the resource by both in-fill and along strike extensional drilling. In particular, mineralisation is open to the SE and is likely

to be repeated in folded strata of the Mt Eclipse syncline and anticline to the south of the current resource area. In fact, an Induced Polarisation geophysical survey completed in 2013 has delineated a chargeable unit (i.e. prospective reduced sandstone) in the predicted stratigraphic position for Walbiri mineralisation folded around the southern limb of the Mt Eclipse syncline some 2 km south of the resource area; this represents a prime target for future drill testing.

Due to the proximity of the Walbiri and Bigrlyi deposits (Figure 1), EME considers that a combined future mining development would have a positive impact on project economics through both shared capital costs and increased project mine life. Although mineralisation at Walbiri is known to have certain favourable metallurgical characteristics such as low carbonate content, little work has been done on Walbiri since 1976; modern investigations of deposit metallurgy, hydrology, rock properties and uranium series equilibrium, in addition to drill test work, will be required to advance the project in the medium term. Energy Metals remains committed to its strategy of data compilation, resource evaluation and drill testing of historical uranium deposits on its Ngalia Basin tenure.

For and on behalf of the Board.

Weidong Xiang Managing Director 27th October 2015

Competent Persons Statement

The information in this report that relates to Mineral Resource estimation is based on information compiled by Mr Dmitry Pertel, Principal Consultant Geologist, CSA Global Ltd and Dr Maxim Seredkin, Principal Consultant Geologist, CSA Global Ltd. Information in this report relating to the interpretation and determination of gamma probe results is based on information compiled by Mr Evgeny Sirotenko, consultant geophysicist, under supervision of Dr Maxim Seredkin, Principal Consultant Geologist, CSA Global Ltd. Mr Pertel is a member of the Australian Institute of Geoscientists (MAIG) and is an employee of CSA Global. Dr Seredkin is a Fellow of the Australasian Institute of Mining and Metallurgy (FAusIMM), a member of the Australian Institute of Geoscientists (MAIG), and is an employee of CSA Global. Mr Pertel and Dr Seredkin 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 Competent Persons as defined by the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)", and Mr Pertel and Dr Seredkin both 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.

Annexure 1. Collar coordinates for historical drilling at the Walbiri deposit and satellite deposits, GDA94 datum, Zone 52.

			GDA54 (latum, zone	JZ.				
HOLE NUMBER	DEPOSIT	EASTING (m)	NORTHING (m)	ELEV- ATION (m)	DRILL TYPE*	DIP (deg- rees)	TRUE AZI- MUTH (deg- rees)	TOTAL DEPTH (m)	Hole Completion Date
NGDD07	Walbiri	765595	7531202	718.2	DD	-90	5	53.63	20/09/1972
NGDD08	Walbiri	765659	7531123	705.8	DD	-90	5	64.64	29/09/1972
NGDD09	Walbiri	765501	7531296	731.2	DD	-90	5	55.8	1/10/1972
NGDD10	Walbiri	765031	7531324	725.4	DD	-90	5	91.44	5/10/1972
NGDD11	Walbiri	765483	7531140	738.7	DD	-90	5	104.24	10/10/1972
NGDD12	Walbiri	765173	7530807	671.5	DD	-90	5	216.4	24/10/1972
NGDD13	Walbiri	765678	7530779	669.5	DD	-90	5	100.89	11/11/1972
NGDD14	Walbiri	766184	7530745	729.9	DD	-90	5	100.58	17/11/1972
NGDD15	Walbiri	764900	7531580	772.1	DD	-90	5	102.7	27/11/1972
NGDD17	Walbiri	765439	7530624	666.2	DD	-90	5	165.2	1/12/1972
NGDD18	Walbiri	765926	7530411	678.7	DD	-90	5	165.2	10/12/1972
NGDD19	Walbiri	764699	7531199	707.9	DD	-90	5	170.7	20/12/1972
NGRH01	Walbiri	764476	7531588	698.7	PH	-90	5	82.6	19/08/1973
NGRH02	Walbiri	764290	7531371	687.6	PH	-90	5	109	27/09/1973
NGRH03	Walbiri	766475	7530368	670.9	PH	-90	5	26	11/08/1973
NGRH03A	Walbiri	766472	7530367	670.8	PH	-90	5	97.25	17/08/1973
NGRH04	Walbiri	766287	7530113	663.1	PH	-90	5	169	26/08/1973
NGRH05	Walbiri	766975	7530284	710.9	PH	-90	5	106	21/09/1973
NGRH11	Walbiri	764189	7531989	776.1	PH	-90	5	85	14/10/1973
NGRH12	Walbiri	763713	7532197	757.9	PH	-90	5	92	17/10/1973
NGRH36	Walbiri	765793	7530472	673.8	PH	-90	5	161	18/11/1973
NGRH37A	Walbiri	766139	7530288	676.4	PH	-90	5	166	15/11/1973
NGRH38	Walbiri	765214	7531179	697.9	PH	-90	5	29	not specified
NGRH50	Walbiri	765457	7530839	681.5	PH	-90	5	128	5/11/1973
WPH01	Walbiri	765690	7530220	662.1	PH	-90	5	218.5	2/02/1975
WPH02	Walbiri	765865	7530129	660.1	PH	-90	5	208.04	13/02/1975
WPH03	Walbiri	765459	7530335	666.5	PH	-90	5	216.08	15/03/1975
WPH04	Walbiri	766146	7529989	660.8	PH	-90	5	191.83	24/03/1975
WPH05	Walbiri	766196	7529919	662.1	PH	-90	5	94	13/03/1975
WPH06	Walbiri	764951	7530395	679.3	PH	-90	5	113.04	21/03/1975
WPH07	Walbiri	766359	7529878	664.9	PH	-90	5	207.84	26/04/1975
WPH08	Walbiri	766541	7529754	666.5	PH	-90	5	212.55	17/09/1975
WPH09	Walbiri	766752	7529606	668.6	PH	-90	5	220.7	14/10/1975
WPH10	Walbiri	766218	7529711	663.1	PH	-90	5	253	27/10/1975
WPD11	Walbiri	766389	7529664	664.5	PD	-90	5	247.42	21/04/1976
WPD12	Walbiri	766507	7529526	663.8	PD	-90	5	256.25	29/04/1976
WPD13	Walbiri	766028	7529854	660.4	PD	-90	5	259.44	5/05/1976

WPD14	Walbiri	766103	7530016	660.9	PD	-90	5	187.3	11/05/1976
WPD15	Walbiri	766195	7530055	661.7	PD	-90	5	187.12	15/05/1976
WPD16	Walbiri	766219	7530382	672.5	PD	-90	5	125.75	29/05/1976
WPD17	Walbiri	765833	7530611	684.6	PD	-90	5	133.47	1/06/1976
WPD18	Walbiri	766392	7529963	669.5	PD	-90	5	189.34	5/06/1976
WPD19	Walbiri	766307	7529798	663.7	PD	-90	5	226.92	12/06/1976
WPD20	Walbiri	766279	7529933	663.8	PD	-90	5	205.62	18/06/1976
WPD21	Walbiri	766441	7529810	665.1	PD	-90	5	208.69	23/06/1976
WPD22	Walbiri	766014	7530157	666.2	PD	-90	5	187.57	27/06/1976
WPD23	Walbiri	766694	7530109	674.8	PD	-90	5	181.67	2/07/1976
NGRH06	Hill One	767530	7530183	752.6	PH	-90	5	144.6	10/11/1973
NGRH07	Hill One	767773	7529851	720.0	PH	-90	5	123	9/11/1973
NGRH08	Hill One	768214	7529497	687.5	PH	-90	5	151	7/11/1973
NGRH09	Hill One	768545	7529199	662.8	PH	-90	5	112	8/11/1973
NGRH10	Hill One	768880	7528801	659.1	PH	-90	5	100	11/11/1973
NGRH13	Sundberg	763327	7532516	780.3	PH	-90	5	94	21/10/1973
NGRH14	Sundberg	762911	7532637	745.8	PH	-90	5	92	23/10/1973
NGRH15	Sundberg	761997	7533148	738.7	PH	-90	5	99	25/10/1973
NGRH45	Sundberg	762483	7532891	726.1	PH	-90	5	97.5	27/10/1973
NGRH46	Sundberg	761493	7533314	672.2	PH	-90	5	105	3/11/1973
MD007	Sundberg	761456	7534413	673.0	PH	-60	25	100	4/07/1978
MD008	Sundberg	762153	7534207	679.0	PH	-60	205	152	15/07/1978
MD013	Sundberg	760108	7532421	654.1	PH	-60	27	200	19/08/1978
MD014	Sundberg	760492	7532535	659.9	PH	-60	27	149	21/08/1978
MD015	Sundberg	760951	7533431	671.1	PH	-60	40	200	23/08/1978
MD016	Sundberg	761192	7534039	673.0	PH	-60	35	200	25/08/1978
MD025	Sundberg	760829	7533106	659.7	PD	-60	140	325.2	26/03/1980
MD019	Other	761260	7529206	637.2	PH	-90	5	200	2/08/1979
MD020	Other	760035	7529280	636.1	PH	-90	5	200	3/08/1979
KDU - Dorce	ussian Halar	DD - Diam	and Drill Co	ro. DD - Diar	mand Tai	1			

^{*}PH = Percussion Hole; DD = Diamond Drill Core; PD = Diamond Tail

Annexure 2. Significant eU_3O_8 (Deconvolved Gamma Log) intercepts from the Walbiri and satellite deposits based on the criteria: Minimum width 0.3m, maximum internal dilution 0.3m, 100ppm eU_3O_8 cut-off grade; Grade x Thickness >100. Grade x Thickness (GxT) values >1000 are highlighted in bold italics.

Hole	From	То	Width	eU₃O ₈	G×T
Number	(m)	(m)	(m)	(ppm)	(ppm·m)
NGDD10	45.2	45.8	0.6	324	194
	67.6	68.5	0.9	2210	1989
NGDD11	72.0	73.3	1.3	1269	1650
	73.9	75.4	1.5	1181	1772
NGDD12	144.1	144.9	0.8	192	154
NGDD13	76.8	77.3	0.5	369	185
	82.2	84.1	1.9	150	285
NGDD14	87.0	89.1	2.1	603	1266
	89.5	91.0	1.5	372	558
NGDD15	39.3	41.8	2.5	820	2050
NGDDIS	82.7	85.3	2.6	644	1674
NGDD18	139.9	142.9	3.0	1740	5220
	10.0	16.1	6.1	433	2641
NGDD07	16.9	21.1	4.2	583	2449
	22.1	25.1	3.0	198	594
	63.5	64.1	0.6	305	183
NGRH15	96.3	96.8	0.5	207	104
	68.0	68.6	0.6	201	121
	138.6	139.1	0.5	406	203
NGRH37A	139.5	146.3	6.8	646	4393
	88.1	88.7	0.6	511	307
NGRH03A	90.0	91.6	1.6	455	728
146111105/1	93.0	95.1	2.1	265	557
NGRH46	48.3	50.8	2.5	202	505
NGRH09	43.7	44.1	0.4	395	158
140111105	46.2	46.8	0.6	273	164
	162.6	163.0	0.4	718	287
WPD11	200.8	201.3	0.5	339	170
	211.2	212.6	1.4	416	582
	169.1	171.1	2.0	244	488
WPD12	175.0	175.6	0.6	214	128
	225.9	227.5	1.6	678	1085
WPD14	98.8	99.4	0.6	213	128
51 '	166.8	170.6	3.8	484	1839
	144.6	145.1	0.5	296	148
WPD15	169.0	170.7	1.7	365	621
	171.7	172.7	1.0	5340	5340
WPD16	106.8	109.4	2.6	513	1334
WPD18	172.3	174.6	2.3	393	904

	199.6	204.0	4.4	523	2301
WPD19					
	204.5	204.9	0.4	2554	1022
WPD20	179.8	181.4	1.6	586	938
WPD21	190.3	193.4	3.1	555	1721
WPD22	170.7	171.4	0.7	159	111
VVPDZZ	172.3	174.0	1.7	904	1537
WPH01	194.2	194.9	0.7	234	164
WPHUI	195.4	200.5	5.1	372	1897
	215.3	216.3	1.0	485	485
WPH10	218.1	219.4	1.3	364	473
	220.5	221.1	0.6	1825	1095
	186.5	188.0	1.5	276	414
WPH02	189.6	192.1	2.5	348	870
	193.4	195.9	2.5	835	2088
WDUO4	177.0	181.6	4.6	993	4568
WPH04	182.1	183.1	1.0	353	353
WPH07	187.1	194.6	7.5	1098	8235
WPH08	187.7	190.1	2.4	916	2198
WPH09	124.6	125.7	1.1	251	276
NGDD08	29.6	30.5	0.9	250	225

Annexure 3. Walbiri deposit and Satellite deposits Resource Report.

Cut-off	Volume		Average	U₃O ₈	U₃O ₈
U ₃ O ₈ ppm	'000 m ³	'000 tonnes	Grade U₃O ₈	Mlb	tonnes
		Hill O	ppm One Deposit		
			nergy Metals		
1,000	0	0	-	0.000	0
750	0	0	-	0.000	0
500	2	6	550	0.007	4
400	8	19	452	0.019	8
300	81	208	362	0.166	75
200	189	486	323	0.346	157
100	487	1,252	201	0.555	252
0	487	1,252	201	0.555	252
		JV Paladin and E	nergy Metals (EL	R45)	
1,000	0	0	-	0.000	0
750	0	0	-	0.000	0
500	0	0	1	0.000	0
400	0	0	-	0.000	0
300	0	0	-	0.000	0
200	3	8	208	0.004	2
100	295	759	122	0.205	93
0	295	759	122	0.205	93
		Total, Hi	Il One Deposit		
1,000	0	0	-	0.000	0
750	0	0	-	0.000	0
500	2	6	550	0.007	3
400	8	19	452	0.019	9
300	81	208	362	0.166	75
200	192	494	321	0.350	159
100	782	2,011	171	0.759	344
0	782	2,011	171	0.759	344
			piri Deposit		
4.000	2.11		nergy Metals	2.022	4.422
1,000	341	877	1,598	3.090	1402
750	744	1,911	1,167	4.915	2229
500	1,063	2,732	998	6.011	2727
400	1,367	3,512	876	6.786	3078
300	1,886	4,847	730	7.798	3537
200	2,301	5,913	644 516	8.402	3811
100	3,119	8,015	516	9.119	4136
0	3,330	8,559	486 Energy Metals (EL	9.178	4163
		JV Falaulii aliu E	Therey ivietals (EL	N H J)	

1,000	284	730	1,920	3.090	1402
750	429	1,102	1,554	3.775	1712
500	750	1,927	1,147	4.872	2210
400	1,014	2,607	965	5.545	2515
300	1,441	3,703	781	6.374	2891
200	1,973	5,070	636	7.112	3226
100	2,310	5,936	565	7.394	3354
0	2,325	5,975	562	7.400	3357
		Total, W	/albiri Deposit		
1,000	625	1,607	1,744	6.180	2803
750	1,172	3,013	1,308	8.691	3942
500	1,813	4,659	1,059	10.883	4936
400	2,381	6,119	914	12.331	5593
300	3,327	8,551	752	14.172	6428
200	4,274	10,983	641	15.514	7037
100	5,428	13,951	537	16.513	7490
0	5,655	14,534	517	16.578	7520
		Sundb	erg Deposit		
		100% E	nergy Metals		
1,000	0	0	-	0.000	0
750	0	0	-	0.000	0
500	0	0	-	0.000	0
400	3	7	410	0.006	3
300	52	133	322	0.095	43
200	292	750	252	0.416	189
100	550	1,413	203	0.633	287
0	550	1,413	203	0.633	287
	JV Palad	in, Energy Meta	ls & Southern Cro	ss (EL30145)	
1,000	0	0	-	0.000	0
750	0	0	-	0.000	0
500	0	0	-	0.000	0
400	2	5	410	0.004	2
300	54	139	325	0.100	45
200	99	255	281	0.158	72
100	161	414	246	0.224	102
0	161	414	246	0.224	102
		Total, Sui	ndberg Deposit		
1,000	0	0	-	0.000	0
750	0	0	-	0.000	0
500	0	0	-	0.000	0
400	5	12	410	0.010	5
300	106	273	323	0.194	88
200	391	1,005	259	0.574	260
100	711	1,827	213	0.857	389
0	711	1,827	213	0.857	389

	Combined Deposits									
1,000	625	1,607	1,744	6.180	2803					
750	1,172	3,013	1,308	8.691	3942					
500	1,815	4,665	1,059	10.890	4940					
400	2,393	6,150	912	12.361	5607					
300	3,514	9,031	730	14.532	6592					
200	4,857	12,482	597	16.438	7456					
100	6,922	17,789	462	18.130	8224					
0	7,149	18,372	449	18.195	8253					

Note: All figures in the tables are rounded, and therefore the total sums might not be the direct sum of the input figures

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 Walbiri, Sundberg and Hill One Deposits located on tenements EL24463, ELR45 and EL30145.

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 primary sampling instrument at the Walbiri and satellite deposits was the downhole gamma tool (or 'probe') which was used to obtain a total gamma count reading down each drill hole. Drilling was by rotary percussion (PH) and diamond core drilling (DD) methods with NE-SW oriented drill lines on 100 - 150 m spacing and closer 50 m spacing within the primary mineralised zones. Away from the primary zones the spacing varied from 250 m to 500 m. Drill holes were mostly vertical to optimally intersect shallow-dipping mineralisation. Original analogue gamma log data was digitised at 10 cm intervals downhole and converted to standard format LAS files followed by calculation of equivalent U₃O₈ (eU₃O₈) grades (see below for further information on gamma log processing procedures). 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 sandstone-hosted deposits of the Bigrlyitype considered here). Gamma radiation is measured from a volume surrounding the drill hole that has a radius of approximately 35 cm. Therefore the gamma probe samples a much larger volume than drill spoil or drill core samples recovered from a drill hole of normal diameter; gamma logging is considered to provide a more representative sample of the mineralised body and is preferred over geochemical assay of drill samples for resource estimation purposes. Estimates of uranium concentration determined 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 relative to its daughter radionuclides, then the true uranium concentration in the holes logged using the gamma probe will be higher or lower than
Drilling	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) 	 Rotary percussion and diamond drilling methods were used by Central Pacific Minerals (CPM) between the years 1972 – 1976 and by Alcoa in the period 1978 -

techniques	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).	1980. The 1972 program primarily consisted of NQ diamond drilling from surfa with a reduction in diameter to BQ at depth. The later programs included rotar percussion pre-collars between 50 - 100m depth with NQ diamond tails and all pure rotary percussion from surface to target depth. Rotary percussion drilling used 6 - 6 1/8" tri-cone roller bits and 11 – 12 cm diameter air-hammer. Hole s ranged from 7.6 to 16.5 cm and were primarily cased with NQ and NW casing the pre-collar depths.	ry Iso J sizes
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. 	 Drill spoil recovery is not relevant to the sampling method used (i.e. downhole gamma logging). Drill core from CPM exploration programs in the period 1972-1976 is archived Energy Metals core storage facility and at the NTGS Alice Springs core library Core recoveries at the time of drilling were noted by CPM to be better than 94 	l in /.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	Twenty-two historical diamond core holes were re-logged by EME geologists for lithology, colour, grain-size, stratigraphic unit, oxidation state, alteration, cementation, weathering and other features; data was recorded digitally and of was photographed. Scintillometer and Niton portable XRF measurements were undertaken at 20 cm intervals through mineralised zones to confirm the width mineralisation. The coded data was verified according to EME's standard logg look-up tables. The re-logs were found to be in good agreement with previous logging records, which provided confidence in the quality of original CPM logg and permitted EME to proceed with digitisation of the remaining CPM historical drill core logs. Rotary percussion drill chip samples were logged at the time of drilling by CPM geologists and the hard copy lithological logs were converted to digital format EME geologists using EME's standard codes.	core re of ging s ging, al

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.

 Core was originally split into samples of half core for assay work. Half core was quartered for duplicate checks. Historically, CPM assayed for uranium and vanadium. The assay data were not used for the resource estimation work as they are not considered sufficiently robust nor representative in comparison with the gamma logging measurements. However, assay data has been used to evaluate the Radioactive Equilibrium Factor.

Quality of assay data and laboratory tests

- The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.
- For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.
- Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.
- The gamma tools used for downhole gamma ray measurements were calibrated and operated by geophysical contractors Austral United Geophysical (AUG) during the period 1972 1973 then McPhar Geophysics Pty Ltd until 1975 and after this time by Geoex Pty Ltd of South Australia who acquired the assets of McPhar. Calibration information including k-factors and deadtime corrections and hole information including hole diameter, casing depths/type and fluid levels/type were recorded for each hole. The accuracy and reproducibility of the probe data were monitored using two on-site standard radioactive sources (a low-level and a high-level source) and the monitoring data was included on each paper log and deemed satisfactory.
- In 1972 holes were probed by AUG using a combination tool #326E (S.P., resistivity and gamma); which included a Sodium lodide (NaI) 1 x ¾ inch detector crystal. In 1973 AUG switched to a different NaI probe of the same make and size detector (#223). A primary run was undertaken for each hole and if warranted a separate run over mineralised intervals was completed. Post-1975, drill holes were probed with the L1 or lithology gamma probe which employed a sensitive 4 x 1 inch NaI detector crystal. Intervals of significant mineralisation (off-scale on the L1 probe) were re-probed with the O1 or 'ore' gamma probe which employed the less sensitive 1 x ¾ inch NaI detector crystal. No gamma log data was available for holes drilled by Alcoa (western margin of the Sundberg prospect).
- Approximately 75% of the drill holes (those with a standing water level) were
 logged electrically to provide downhole electric potential and resistivity data. This
 data has not been digitised or used for resource estimation purposes.
- The counts per second (cps) downhole gamma data were recorded on paper charts with an analogue pen recorder; for some 1975 1976 holes (WPH) the cps data was also recorded in digital printout form for the O1 probe.
- Logging parameters including the time constant, logging speed and chart scale

- were recorded. Both L1 and O1 paper logs were digitised by EME's geophysical contractor and converted into digital standard- format LAS files.
- LAS file data were converted to equivalent U₃O₈ values (eU₃O₈ in ppm) using the specified probe calibration factors and taking into account drill hole size, fluid levels and other parameters. The eU₃O₈ data was filtered (deconvolved) to correct for smearing of the gamma signal at mineralised interfaces so that true grades and thicknesses more closely reproduce actual grade. The eU₃O₈ grades were calculated by consultant geophysicist Mr Evgeny Sirotenko under the supervision of Dr Maxim Seredkin using the well-established methodology of Khaikovich and Shashkin, widely tested and upheld in the evaluation of uranium deposits in Kazakhstan and the former USSR.

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.

- LAS files from four holes with significant uranium intersections were independently reprocessed and deconvolved by consultant geophysicist Mr David Wilson of 3D Exploration Pty Ltd. Comparison of eU₃O₈ grade composites between the Wilson and Sirotenko datasets indicates that agreement is within 4% which is deemed satisfactory.
- No twinned holes are available from the historical dataset.
- Historical data including paper gamma logs, assay certificates and lithological logs were stored in archive boxes in EME's library. The data is a complete record of CPM's exploration works conducted from 1972 through 1976.
- Historically, CPM undertook 'closed can' eU₃O₈ and uranium assay measurements at The Australian Mineral Development Laboratories (AMDEL), Adelaide, on 103 core samples in order to evaluate possible uranium series disequilibrium and determine a REF value applicable to the deposit. A scattered distribution with an average U₃O₈/eU₃O₈ value of 1.12 +/- 0.36 (1σ) was obtained, however, AMDEL commented that "primary ore grade mineralisation was in equilibrium". As an additional check, a comparison was made between available chemical assay and gamma log eU₃O₈ data from 58 separate intervals (this report). Excluding outliers a U₃O₈/eU₃O₈ value of 0.98 was obtained and with outliers a value of 0.89 was obtained. Because these various measurements provide no corroborating evidence for a systematic deviation from 1 within statistical error, the REF for resource estimation purposes at Walbiri at this stage is best assigned a value of 1. This is consistent with the REF used for the nearby Bigrlyi deposit. However, further detailed investigations and verification of historical data may in the future lead to refinement of the REF applied at Walbiri.
- No adjustments were made to eU₃O₈ assay data other than the standard reprocessing (deconvolution) discussed above.

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.
- Hole collar locations were determined using three independent datasets. The
 primary dataset comprised CPM's original exploration drill hole plans, which were
 scanned at high resolution and carefully georeferenced to allow extraction of hole
 coordinates. The drill collars locations were compared with drill sites identifiable

	•	Specification of the grid system used. Quality and adequacy of topographic control.		from high resolution digital aerial photographic images and with the same drill sites converted from CPM's original local coordinate grid. Agreement between the three data-sets was found to be excellent and the accuracy of the collar coordinates is judged to be better than +/-10 m in the horizontal plane. The coordinates are located on the MGA94 grid, Zone 52 using the GDA94 datum (refer Annexure 2). In the vertical plane topographic control was provided by a Digital Elevation Model (DEM) generated from a high resolution aerial photographic survey flown in 2011. Accuracy is judged to be at least +/- 0.5 m in the vertical plane. All CPM holes were drilled vertically and as no surveys were undertaken, were assumed to have remained vertical to the end of hole. A number of Alcoa drill holes were angle holes; as no downhole surveys were undertaken the starting dip and azimuth were assumed until end of hole.
Data spacing and distribution	•	Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied.		The Walbiri deposit was drilled on NE-SW panels spaced at 100 - 150 m. Within strongly mineralised zones infill drilling was conducted on 50 m spaced panels with 100 – 200 m step-outs (depending on topography and access) to test down dip continuity. Away from the main zone limited down-dip drilling has been completed and the spacing between holes is 450 - 500 m. EME and CSA Global consider the spacing sufficient to establish continuity of geology and grade for the purposes of estimation of an inferred mineral resource. Downhole gamma logs were digitised at 10 cm intervals and were composited (refer EME database) for resource reporting purposes.
Orientation of data in relation to geological structure	•	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	Several investigations have shown that Bigrlyi-style (tabular stratiform sandstone-hosted) uranium mineralisation as found at Walbiri exhibit no significant structural control. Mineralisation is controlled by physical and chemical characteristics of the host rock such as permeability and redox state and is influenced by primary depositional and sedimentological features. The deposit occurs in shallowly dipping beds and was sampled by vertical drill holes. The downhole gamma probe data was subsequently corrected for mineralised zone boundary effects by deconvolution. There is therefore no bias of sampling related to orientation of the mineralised zones.
Sample security	•	The measures taken to ensure sample security.	•	Not applicable.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	•	No audits or reviews of sampling techniques were undertaken.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 Approx. 54% of the Walbiri deposit and most of the Sundberg and Hill One satellite deposits are located within granted tenement EL24463, which is 100% EME owned. Granted joint venture tenement ELR45 covers 46% of the Walbiri resource which is a joint venture between EME (41.9%) and Paladin Energy Ltd (PDN: 58.1%). EME is the operator of the joint venture. Granted joint venture tenement EL30145 covers 28% of the Sundberg resource which is a joint venture between EME (53.3%), Paladin Energy Ltd (PDN: 41.7%) and Southern Cross Exploration (SXX: 5%). EME is the operator of the joint venture. A Native Title Claim covering the Mt Doreen pastoral lease on which the Walbiri and satellite deposits are located, was granted by consent on 2-July-2013. The Ngalyia Aboriginal Corporation is the relevant Registered Native Title Body Corporate and holds the native title interests of the traditional owners. Currently, resource areas of the Walbiri, Sundberg and Hill One deposits are affected by Aboriginal heritage zones which restrict access and limit ground disturbing activities within the area.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 All the exploration data reported here is the result of drilling programs undertaken by CPM over the period 1972 to 1976 and Alcoa over the period 1978 to 1980. EME acquired CPM's interest in the project in 2005 including all historical data and archived drill core.
Geology	 Deposit type, geological setting and style of mineralisation. 	 Walbiri and its satellite deposits are Bigrlyi–style, tabular, stratiform, sandstone- hosted uranium deposits of Carboniferous age located on the northern margin of the Ngalia Basin in the Northern Territory.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the 	Refer to Annexure 1.

	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 equivalent U₃O₈ values (eU₃O₈) from processed gamma logs. For reporting purposes (see Annexure 2) significant gamma log intersections have been composited from 10 cm deconvolved eU₃O₈ values using the following criteria: a cut-off grade of 100 ppm U₃O₈, a minimum thickness of 0.3 m, a maximum internal dilution of 0.3 m, no external dilution and a grade x thickness value of >100. A Radioactive Equilibrium Factor (REF) value of 1 was applied, i.e. U₃O₈ / eU₃O₈ = 1.
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'). Based on geological mapping work by CPM geologists and structural measurements of drill core, sandstone beds hosting mineralisation are shallowly dipping (broadly between 10 and 20 degrees). All CPM holes have been drilled vertically and true widths of intersections are approximately 95% 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 significant results have been reported (see Annexure 2). Historical results have previously been reported and are available as open file reports from the NTGS.
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. Preliminary metallurgical test work involving acid and alkaline leach tests on composite mineralised samples were undertaken by AMDEL in March 1976. AMDEL reported high levels of extraction with a best result of 99% using a pH 1.5 leachate over 24 hours; acid consumption was low (3 to 5 kg/tonne). Petrographic studies were undertaken by AMDEL in 1973-1976 who reported uraninite and coffinite as the dominant uranium minerals in association with pyrite and ferroselite. More recently (2014) petrographic work conducted by the CSIRO has shown a close association between uranium and detrital-origin phyllosilicate

		minerals including biotite, clays and chromium-bearing chlorite; Walbiri and satellite deposits are characterised by low levels of carbonate cement.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or largescale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Future exploration activities are planned to test extensions and stratigraphic repeats of Walbiri mineralisation in folded strata of the Mt Eclipse syncline and anticline to the south of the currently known extent of the Walbiri resource. Additional work is planned to rigorously assess the nature and extent of possible uranium series disequilibrium within various mineralised domains to provide a better estimate of the Radioactive Equilibrium Factor (REF).

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. 	 Data used in the Mineral Resource estimate was sourced from the original hardcopy. Hardcopy data was converted to digital format and collated, tabulated and verified before being validated upon importation into EME's Geobank database. CSA Global were provided with a validated Micromine database by EME. Relevant tables from the database were exported to Micromine .DAT format for import into Micromine 2014 software prior to use in the Mineral Resource estimation. Validation of the imported data included checks for missing, duplicated and/or incorrectly recorded collar locations, survey data, sample data, gamma log data and lithological log data. Original historical gamma logs were reprocessed and deconvolved to yield eU₃O₈ (ppm) values which correlated well with the historical information stored in EME's archives.
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 (Mineral Resource Estimation) or CSA Global staff. CSA has relied on EME for all data regarding the deposits, and given the current stage of the project, 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 	There is a reasonable level of confidence in the geological interpretation of Walbiri and the adjacent satellite deposits. The geology is traceable and reasonably continuous between drill holes and sections. Geological controls such as the dip of the sedimentary rocks and the definable shale marker beds have been used to constrain the extrapolation of mineralisation within stratigraphic bounds. It is recommended in future exploration programs that several holes are 'twinned' to validate the historical data and a more detailed estimation of the Radioactive Equilibrium Factor (REF) be undertaken.

	geology.	 Geological structure and gamma logging have formed the basis for the geological interpretation. The REF is assumed to be 1 based on comparison of gamma and assays measurements in drill holes (58 pairs) and historical closed can eU₃O₈ and assay measurements (103 samples). Further work may be required to better define the limits of the mineralisation, particularly with depth, but no significant downside changes to the currently interpreted mineralised volume are anticipated. Mineralisation is primarily concentrated within sandstones between siltstone/claystone ('shale') lenses and interlayers that form lower and upper confining layers. Grade continuity is controlled by a reduced zone within partially oxidised sandstones and siltstones; regionally the deposits are hosted along the northern margin of the Ngalia Basin, which is an elongate intracratonic depression about 300 km long (east-west) and 40 km wide (north- south) on average. This basin is filled with late Proterozoic to Palaeozoic aged sedimentary rocks, predominantly continental-marine arkosic sandstone, and Neoproterozoic glacigene deposits and quartities.
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.	 marine arkosic sandstone, and Neoproterozoic glacigene deposits and quartzite. Mineralisation is stratiform in nature but is variably distributed along strike and at depth due to probable epigenetic modification of the deposit. The dimensions of the Walbiri mineralised domain is approximately 3.6 km along-strike with an average plan width of 300 m and maximum modelled plan width of 1,100 m. The total combined strike length of the Walbiri deposit and its two satellite deposits (Sundberg and Hill One) is 8.7 km overall. Stratigraphy and mineralisation dips between 10 and 18 degrees to the SW. The mineralised interval varies from 0.2 m to 7.5 m, averaging 1.3 m. The model extends from surface to 230 m below surface.
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 byproducts. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid 	 Gamma logging has been used for the definition of mineralised intervals and interpretation (wireframing) of mineralisation. The REF is assumed to be 1. The model consists of 35 mineralised domains defined by wireframe models. Grade estimation was carried out using the Multiple Indicator Kriging (MIK) method using Micromine 2014 software. Downhole and directional indicator semivariograms have been used for to define the distance of interpolation. No top cutting of extreme grade values was undertaken. Several in-house, non-JORC, historical resource estimates were undertaken for the Walbiri deposit. In the latest available estimate (November 1976), Australian Mineral Development Laboratories (AMDEL) obtained an estimate of 4,789 tonnes U₃O₈ for an average grade of 1,140 ppm U₃O₈ (cut-off grade not specified) using chemical assay data and employing geostatistical methods. No mining has taken place. No assumptions have been made regarding recovery of by-products. No other elements were estimated.

mine drainage characterisation).

• In the case of block model interpolation, the block size in

The block model was constructed using a 10 m E by 10 m N by 0.5 m RL

parent block size, with sub-celling to 2 m E by 2 m N by 0.1 m RL for domain

	•	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. 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.	•	volume resolution. The parent cell size was chosen on the basis of the morphology of mineralised lenses and in order to avoid the generation of unrealistically large blocks. The sub-celling size was chosen to maintain the resolution of the mineralised bodies. The sub-cells were optimised in the models where possible to form larger cells. The search ellipse radii were determined from the ranges of semivariograms: the main direction being along strike of mineralised bodies (range 90 m), the second direction being down dip of mineralised bodies (range 188.7 m) and the range of the third direction was set at 2.5 m. The first radial dimensions were 10 x 10 x 0.3 m, the second 60 x 127 x 0.3 m, and the third 90 x 188.7 x 0.5 m. The model cells that did not receive grades from the first runs were then estimated using radii incremented by the 90 x 188.7 x 0.5 m (2.5 m). No selective mining units were assumed in this estimate. Geological boundaries were used to guide the interpretation of mineralised lenses. Specifically, mineralisation occur within the shallow dipping 10-18° Mt Eclipse Sandstone. For the satellite deposits, the sections contain one drill hole only. Grade envelopes at 100 ppm eU ₃ O ₈ were defined for interpretative purposes. A 200 ppm eU ₃ O ₈ cut-off grade was applied to mineralisation inside envelopes. No top cuts have been applied at this stage. Validation of the block model consisted of a comparison between the block model volume and the wireframed volumes. Grade estimates were validated by visual comparison with the drill data. Grade estimation was verified by IDW2 and Ordinary Kriging without a top cut applied and with a top cut of 4,100 ppm U ₃ O ₈ applied. The block model compared favourably with grade composites for a series of sections in different directions (north, east). No reconciliation data is available at this early stage of the project.
Moisture	•	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	•	The 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 100 ppm U_3O_8 has been used for interpretation and a cut-off grade of 200 ppm U_3O_8 has been used for resource reporting. Based on CSA's experience with this type of deposit, this is considered a reasonable cut-off grade which could result in eventual economic extraction.
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	•	At this stage of resource development it is assumed that mining would be by open pit and/or underground methods. Future hydrogeological investigations and leaching tests would be useful in determining whether solution mining may be possible.

		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.		
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.	•	Metallurgical and hydrological test work is required to determine if the deposit is amenable to solution mining and/or heap leaching. There is a requirement for a certain level of natural permeability and for mineralisation to occur below the water table if in-situ recovery is to be considered. Hydrological pumping cluster tests would need to be undertaken if the deposit is found to be amenable to in-situ extraction processes.
Environmen- tal factors or assumptions	•	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	•	No detailed assumptions regarding possible waste and process residue options have been made at this early stage.
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.	•	Bulk density testing was carried out on both mineralised and un-mineralised drill core. EME supplied CSA Global with a table comprising 144 bulk density determinations from 11 drill holes. The rock types found at Walbiri include arkose, sub-arkosic sandstone and shale. Density estimates were obtained using the Archimedes method on the selected core samples. The balance was calibrated using two standard weights. Hairspray was used to seal the exterior to account for natural porosity (voids) when necessary. Test work to date has shown that there are no significant density differences due to sample porosity or alteration type. An average bulk density of 2.56 t/m³ has been applied to all material in the models.
Classification		The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all	•	CSA Global has considered several factors in the classification of the Mineral Resources such as search ellipse dimensions, geological data and exploration drill hole grids. The Walbiri deposit has been classified as Inferred due to: the

	relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	 limited data available for REF definition, the need to verify historical gamma logging by drilling twin holes, and the fact that some exploration sections are based on single drill holes (Sundberg and Hill One deposits). The Inferred classification has taken into account all available geological and sampling information, and the classification level is considered appropriate. The Mineral Resource estimate appropriately reflects the views of the Competent Persons.
Audits or reviews	 The results of any audits or reviews of Mineral Resource estimates. 	 No audits of the Mineral Resource estimate has been undertaken at this time.
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 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. 	 The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as Inferred as per the guidelines contained in the 2012 JORC Code. The resource statement refers to global estimation of tonnes and grade. No production data is available for comparison.