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For further information, contact:

Dr Weidong Xiang
Energy Metals Limited

Telephone: 61 8 9322 6904
Facsimile: 61 8 9321 5240
Email: enquiry@energymetals.net
Level 2, 8 Colin Street
West Perth WA 6005

PO Box 1323
West Perth WA 6872

This report and further information are available on Energy Metals' website at:

www.energymetals.net

NGALIA REGIONAL PROJECT EXPLORATION UPDATE BIGWEST DRILLING PROGRAM

HIGHLIGHTS

- **3m @ 413ppm U_3O_8 from 111m in BWRC1337 including 1m @ 518ppm U_3O_8 from 112m**
- **2m @ 892ppm U_3O_8 from 176m in BWRC1347 including 1m @ 1,129ppm U_3O_8 from 176m**
- **2m @ 627ppm U_3O_8 from 106m in BWRC1367 including 1m @ 1,079ppm U_3O_8 from 106m**
- **3m @ 474ppm U_3O_8 from 140m in BWRC1390 including 1m @ 1,221ppm U_3O_8 from 140m**
- **1m @ 4,906ppm U_3O_8 from 143m in BWRC1392**

Energy Metals Limited (ASX: EME) is pleased to announce results from Phase-2 of its RC drilling program recently completed at the Bigwest target (EME 100%), located on the northern margin of the Ngalia Basin approximately 8km west of the Bigrlyi Joint Venture tenements in the Northern Territory (Figure 1).

Phase-1 of the RC drilling program, resulted in the discovery of significant uranium mineralisation along the Unit B – Unit C sandstone contact that extends to the west from the Bigrlyi deposit. A further 53 RC holes (total 9,085m) have now been completed at Bigwest in the Phase-2 program. In addition, 22 reconnaissance holes (total 2,937m) have been completed at the Autobahn target, located approximately 15km west of Bigrlyi.

The program at Bigwest was aimed at establishing the continuity, width, and tenor of uranium mineralisation along the Unit B – Unit C contact. Drilling was undertaken at a spacing of approximately 50m around previous significant intercepts; additional holes were designed to test the Unit C – Unit D contact at depth below the weathering profile.

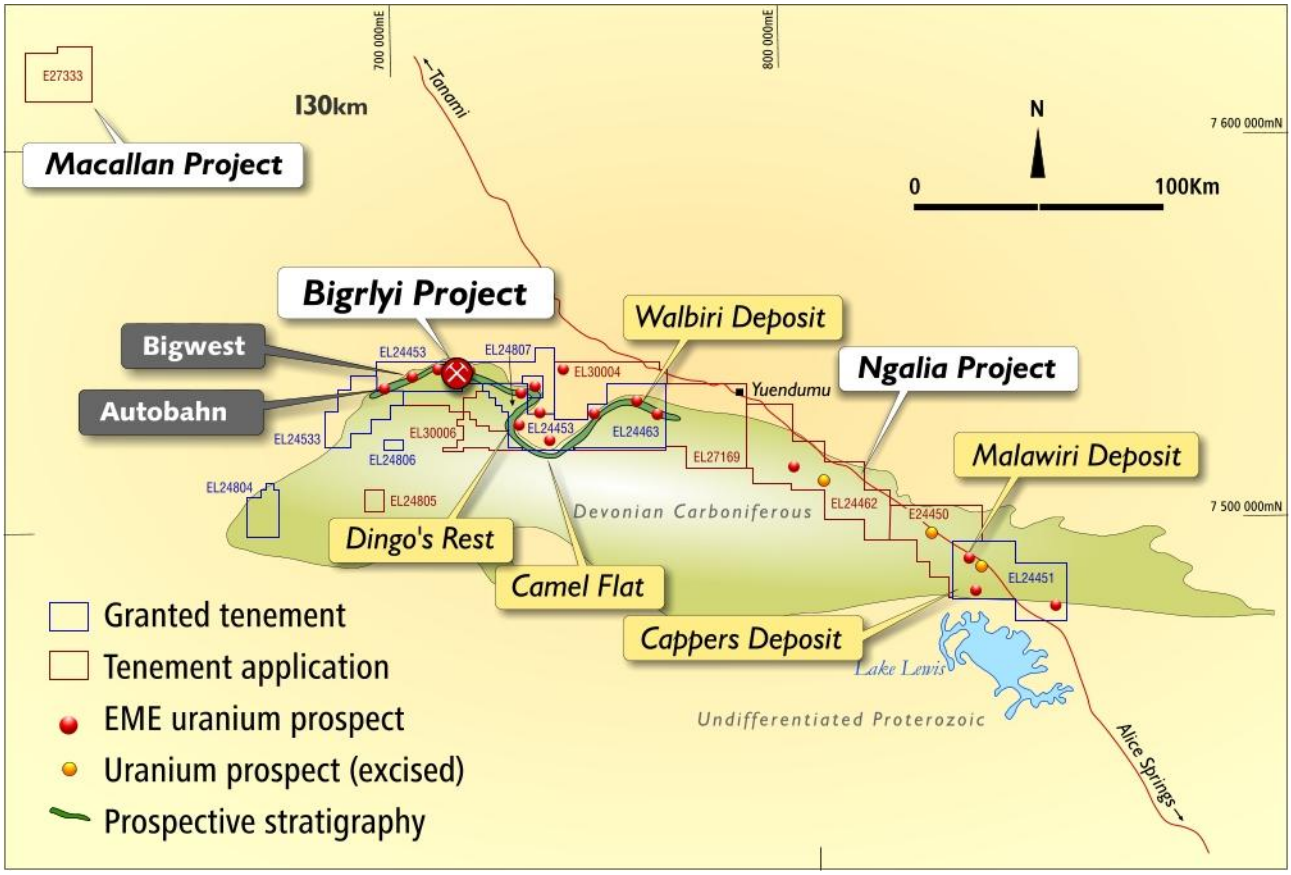

Figure 1. Location plan for the Ngalia Regional Project showing location of the Bigwest and Autobahn target areas

Processed down-hole gamma logs and/or chemical assay results have now been received for all holes, the locations and details of which are listed in Annexure 1. Both gamma log (eU_3O_8) and chemical assay (U_3O_8) results are available for most holes; however, in several cases difficult ground conditions prevented gamma probe access and anomalous intercepts were instead identified by hand-held scintillometer and portable XRF measurements of drill spoils. There are two holes (BWRC1376, BWRC1390) where gamma logs could not be measured over a mineralised interval and only chemical assay results are reported for those holes. Significant gamma log intercepts are reported in Annexure 2 and significant intercepts based on chemical assays are reported in Annexure 3 (see the section below for an explanation of the terms used and for additional information and qualifications associated with the results).

Results from the Bigwest target have been encouraging with 32 out of 59 holes reporting intercepts with U_3O_8 grade (ppm) multiplied by thickness (metres) values greater than 100, and 17 holes having intercepts >400 (Figure 2). Numerous significant intersections occur over a strike length of 2km on the Unit B – Unit C contact (southern redox boundary in Figure 2) including **1m @ 4,906ppm U_3O_8 from 143m (1.05m @ 5,799ppm eU_3O_8 from 142.4m) in BWRC1392**, which is the highest grade intercept yet reported from Bigwest. Most intercepts include anomalous V_2O_5 with a maximum value of **1.05% V_2O_5** reported over 1m in BWRC1337 (Annexure 3). Difficult ground conditions were encountered in the vicinity of the Unit C – Unit D contact (northern redox contact in Figure 2) due to deep weathering, and attempts to test for mineralisation at this contact have not been successful to date.

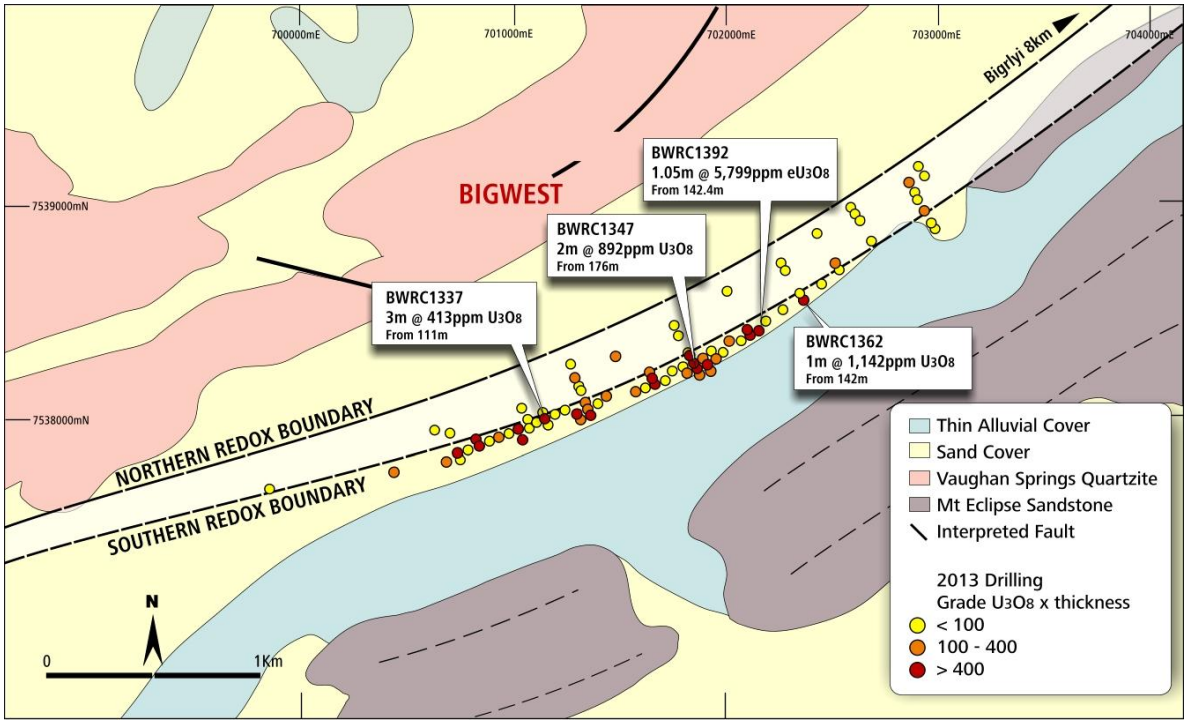

Figure 2. Hole collar locations at the Bigwest target with significantly mineralised holes shown in red (grade multiplied by thickness >400 ppm·m)

At the Autobahn target reduced sandstone units were encountered at depth in a number of holes giving an indication that conditions are favourable for the occurrence of uranium mineralisation; however, only one hole (BWRC13101) recorded a significant intercept. The Autobahn target area shows unexpected structural and stratigraphic complexity and further work is required to trace the prospective horizons from the adjacent Bigwest target.

The Phase-1 and Phase-2 drilling programs at the Bigwest target have successfully tested the distribution and grade of uranium mineralisation at approximately 50m intervals along 2 km of strike-length west of Bigrlyi. Energy Metals considers that Bigwest, as a potential satellite deposit to the main Bigrlyi deposit, is capable of contributing additional uranium resources to Bigrlyi project as a whole. The data are considered to be of sufficient density and quality to proceed with estimation of an initial mineral resource, and mineral resource consultants CSA Global have been appointed for this purpose.

For and on behalf of the Board

Weidong Xiang
Managing Director
30th January 2014

In accordance with the 2012 JORC reporting guidelines, a summary of the information associated with these exploration results is as follows:

The Bigwest and Autobahn targets are located on Exploration Licences EL24453 and EL24533, respectively, which are 100% owned and operated by Energy Metals Ltd.

Bigrlyi and associated satellite deposits and exploration targets are tabular, stratiform, sandstone-hosted uranium-vanadium deposits of Carboniferous age located on the northern margin of the Ngalia Basin (NT). The prospective stratigraphy lies within a geological unit known as the Mt Eclipse Sandstone. The 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 Bigwest target was tested by reverse circulation (RC) drilling on drill lines with a nominal 50m spacing (eastings). Drill holes were angled at a nominal 60 degrees to the north to optimally intersect the mineralisation in steeply south-dipping beds. All intersections are down-hole widths with the true thickness estimated to be 75- 80% of the down-hole thickness, based on the dip of the stratigraphy in outcrop to the north and south of the drilling area and from geological interpretation.

Drill holes were probed by a 33mm calibrated Auslog down-hole gamma tool to obtain a total gamma count reading with depth at 5cm intervals. Uranium mineralisation grades derived from the down-hole gamma ray logging results are annotated with a sub-prefix 'e' because they have been determined as uranium equivalent grades. The eU_3O_8 results were calculated by David Wilson BSc, MSc, MAusIMM, from 3D Exploration Pty Ltd based in Perth, Western Australia using raw gamma probe data supplied by Energy Metals Ltd.

A significant intercept is defined using a 100ppm U_3O_8 or eU_3O_8 cut-off grade with a minimum thickness of 1m and a maximum internal dilution of 3m and no external dilution. The "inc." intersections are determined using a 500ppm U_3O_8 or eU3O8 cut-off grade with a minimum thickness of 1m and a maximum internal dilution of 3m and no external dilution. Gamma log intersections are composites of 5cm deconvolved eU3O8 data determined using a calibrated gamma probe. Chemically assayed intersections have been determined from ca.3-5 kg size sub-samples of metre-interval RC drill spoils. Samples were measured for uranium using the pressed-powder-pellet XRF method.

Because of differences in sampling width and differences in sampling volumes, chemical assay U_3O_8 results may not exactly match the processed gamma log eU_3O_8 values. Gamma radiation is measured from a volume surrounding the drill hole that has a diameter of approximately 70cm. The gamma probe therefore samples a much larger volume than RC drill spoil or drill core samples recovered from a drill hole (diameter of ca.14cm in this case). There are 16 holes with eU_3O_8 >100ppm but with gamma log intercepts <1.0m width that do not classify as significant intercepts as listed in Annexure 2, however, based on chemical assay data sampled over metre intervals, these holes have intercepts that classify as significant (see Annexure 3).

Annexure 1. Collar coordinates for the 2013 RC Phase-2 drilling
at the Bigwest and Autobahn Targets

HOLE NUMBER	EXPLORATION TARGET	EASTING (m)	NORTHING (m)	ELEVATION (m)	TOTAL DEPTH (m)	TRUE AZIMUTH (degrees)	DIP (degrees)
BWRC1301	BIGWEST	702902	7539190	642.2	121	325	-60
BWRC1334	BIGWEST	702513	7538738	647.1	96	325	-60
BWRC1335	BIGWEST	701350	7538069	645.2	168	333	-60
BWRC1336	BIGWEST	701244	7538065	644.8	108	333	-60
BWRC1337	BIGWEST	701150	7538023	644.3	132	333	-60
BWRC1338	BIGWEST	700933	7537940	643.2	144	333	-60
BWRC1339	BIGWEST	700445	7537781	644.0	192	345	-60
BWRC1340	BIGWEST	699854	7537702	644.0	276	333	-60
BWRC1341	BIGWEST	701438	7538130	645.6	144	333	-60
BWRC1342	BIGWEST	701654	7538208	646.4	126	325	-55
BWRC1343	BIGWEST	701747	7538249	646.9	132	325	-55
BWRC1344	BIGWEST	701928	7538334	647.7	150	325	-60
BWRC1345	BIGWEST	702014	7538384	648.1	114	325	-60
BWRC1346	BIGWEST	701830	7538314	647.2	90	325	-60
BWRC1347	BIGWEST	701861	7538257	647.5	198	325	-60
BWRC1348	BIGWEST	701140	7538052	644.3	96	333	-60
BWRC1349	BIGWEST	701162	7537996	644.4	180	333	-60
BWRC1350	BIGWEST	698289	7537297	645.0	60	337	-60
BWRC1351	AUTOBAHN	694350	7536054	645.0	90	335	-60
BWRC1352	AUTOBAHN	694371	7536002	645.0	108	335	-60
BWRC1353	AUTOBAHN	694391	7535943	645.0	114	335	-60
BWRC1354	AUTOBAHN	694409	7535892	645.0	174	335	-60
BWRC1355	AUTOBAHN	694429	7535840	645.0	90	335	-60
BWRC1356	BIGWEST	701307	7538174	645.1	186	333	-62
BWRC1357	BIGWEST	700842	7537901	642.7	162	333	-60
BWRC1358	BIGWEST	701666	7538185	646.5	180	325	-60
BWRC1359	BIGWEST	702113	7538413	648.3	162	325	-60
BWRC1360	BIGWEST	702183	7538470	648.5	132	325	-60
BWRC1361	BIGWEST	702270	7538532	648.6	120	325	-60
BWRC1362	BIGWEST	702365	7538572	648.4	168	325	-60
BWRC1363	BIGWEST	702449	7538644	647.7	144	325	-60
BWRC1364	BIGWEST	702530	7538711	646.9	138	325	-60
BWRC1365	BIGWEST	701778	7538407	647.3	120	325	-60
BWRC1366	BIGWEST	701399	7538090	645.4	180	333	-60
BWRC1367	BIGWEST	701299	7538045	645.1	168	333	-60
BWRC1368	BIGWEST	701893	7538303	647.5	156	325	-60
BWRC1369	BIGWEST	701802	7538261	647.1	168	325	-60
BWRC1370	BIGWEST	701911	7538275	647.6	204	325	-60

BWRC1371	BIGWEST	701824	7538327	647.2	216	325	-50
BWRC1372	BIGWEST	701316	7538020	645.1	216	333	-60
BWRC1373	BIGWEST	701197	7538044	644.6	120	333	-60
BWRC1374	BIGWEST	701112	7538007	644.2	138	333	-60
BWRC1375	BIGWEST	701066	7538017	643.9	96	333	-60
BWRC1376	BIGWEST	701078	7537985	644.0	150	333	-60
BWRC1377	BIGWEST	700980	7537957	643.4	150	333	-60
BWRC1378	BIGWEST	700887	7537921	643.0	150	333	-60
BWRC1379	BIGWEST	700830	7537929	642.6	120	333	-60
BWRC1380	BIGWEST	700791	7537883	642.5	72	333	-60
BWRC1381	BIGWEST	700752	7537837	642.2	102	333	-60
BWRC1382	BIGWEST	700704	7537955	642.2	168	333	-60
BWRC1383	BIGWEST	701620	7538166	646.4	180	325	-60
BWRC1384	BIGWEST	701640	7538234	646.4	90	325	-60
BWRC1385	BIGWEST	701716	7538201	646.6	174	324	-60
BWRC1386	BIGWEST	701817	7538235	647.1	198	325	-60
BWRC1387	BIGWEST	701875	7538227	647.6	270	325	-62
BWRC1388	BIGWEST	701925	7538244	647.5	270	325	-62
BWRC1389	BIGWEST	701950	7538303	647.7	192	325	-60
BWRC1390	BIGWEST	701988	7538333	648.0	174	325	-60
BWRC1391	BIGWEST	702070	7538387	648.1	168	325	-60
BWRC1392	BIGWEST	702154	7538429	648.5	174	323	-60
BWRC1393	AUTOBAHN	694451	7535789	645.0	120	335	-60
BWRC1394	AUTOBAHN	694471	7535737	645.0	120	335	-60
BWRC1395	AUTOBAHN	693868	7535623	645.0	168	335	-60
BWRC1396	AUTOBAHN	693115	7535307	645.0	120	335	-60
BWRC1397	AUTOBAHN	693138	7535240	645.0	168	335	-60
BWRC1398	AUTOBAHN	693301	7535359	645.0	156	335	-60
BWRC1399	AUTOBAHN	693181	7535692	645.0	174	335	-60
BWRC13100	AUTOBAHN	693201	7535628	645.0	94	335	-60
BWRC13101	AUTOBAHN	693226	7535564	645.0	180	335	-60
BWRC13102	AUTOBAHN	693547	7535521	645.0	114	335	-60
BWRC13103	AUTOBAHN	693883	7535577	645.0	234	335	-60
BWRC13104	AUTOBAHN	693250	7535495	645.0	137	335	-60
BWRC13105	AUTOBAHN	693275	7535426	645.0	138	335	-60
BWRC13107	AUTOBAHN	693562	7535475	645.0	150	335	-60
BWRC13106	AUTOBAHN	694148	7535731	645.0	108	335	-60
BWRC13108	AUTOBAHN	694165	7535691	645.0	90	335	-60
BWRC13109	AUTOBAHN	694610	7535920	645.0	90	335	-60
BWRC13110	BIGWEST	702198	7538444	648.6	180	325	-60
BWRC13111	BIGWEST	702138	7538455	648.4	126	325	-60
BWRC13112	BIGWEST	702168	7538402	648.5	204	325	-62
BWRC13113	BIGWEST	702085	7538461	648.2	72	325	-60

Annexure 2. Significant eU_3O_8 (Processed Gamma Log) results from the 2013 RC Phase-2 Drilling Program at Bigwest.

Hole Number	From (m)	To (m)	Width (m)	eU_3O_8 (ppm)
BWRC1337	104.48	105.48	1.00	117
and	110.33	113.83	3.50	295
BWRC1342	106.53	110.03	3.50	258
BWRC1347	176.11	177.71	1.60	932
inc	***176.41***	***177.41***	***1.00***	***1,334***
BWRC1359	129.72	131.07	1.35	561
BWRC1367	105.74	107.64	1.90	283
BWRC1368	117.93	118.93	1.00	286
BWRC1370	167.79	170.09	2.30	438
and	176.04	178.94	2.90	413
BWRC1372	198.97	200.42	1.45	218
BWRC1379	93.19	95.89	2.70	185
BWRC1387	247.54	248.84	1.30	434
BWRC1392	142.39	143.44	1.05	5,799
BWRC13101	128.28	129.28	1.00	107
BWRC13112	177.40	178.40	1.00	422

Annexure 3. Significant U_3O_8 & V_2O_5 chemical assay results from the 2013 RC Phase-2 Drilling Program at Bigwest.

Hole Number	From (m)	To (m)	Width (m)	U_3O_8 (ppm)	V_2O_5 (ppm)
BWRC1334	65	66	1	189	146
BWRC1335	145	146	1	103	553
BWRC1337	111	114	3	413	7,498
inc.	***112***	***113***	***1***	***518***	***10,550***
BWRC1338	125	126	1	145	1,403
BWRC1339	171	172	1	155	2,553
BWRC1341	117	118	1	175	4,302
BWRC1342	106	110	4	356	2,185
inc.	***106***	***107***	***1***	***714***	***4,481***
inc.	***109***	***110***	***1***	***624***	***3,070***
BWRC1345	94	95	1	202	259
BWRC1346	66	68	2	217	468
BWRC1347	176	178	2	892	1,073
inc.	***176***	***177***	***1***	***1,129***	***441***
BWRC1357	125	126	1	541	3,660
BWRC1358	160	161	1	627	3,356

BWRC1359	130	131	1	471	1,051
BWRC1362	142	143	1	1,142	605
BWRC1367	106	108	2	627	303
inc.	***106***	***107***	***1***	***1,097***	***407***
and	151	152	1	313	1,166
BWRC1368	118	119	1	346	459
BWRC1370	167	169	2	498	262
inc.	***167***	***168***	***1***	***868***	***368***
and	175	178	3	341	1,006
inc.	**177**	**178**	**1**	**620**	**2,258**
BWRC1372	198	200	2	323	808
BWRC1376	124	125	1	143	1,312
BWRC1377	126	127	1	243	1,280
BWRC1379	94	96	2	248	2,365
BWRC1383	147	148	1	127	773
BWRC1384	67	68	1	412	807
BWRC1386	177	178	1	250	1,141
BWRC1387	247	249	2	420	955
inc.	***247***	***248***	***1***	***717***	***1,121***
BWRC1388	222	223	1	125	339
and	236	237	1	107	791
BWRC1389	163	164	1	110	204
BWRC1390	140	143	3	474	714
inc.	***140***	***141***	***1***	***1,221***	***1,503***
BWRC1392	143	144	1	4,906	1,519
BWRC13110	150	151	1	179	341
BWRC13111	96	97	1	127	148
BWRC13112	177	178	1	409	420

Competent Persons Statement

Information in this report relating to exploration results, data and cut-off grades 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.

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 Bigwest target was sampled by reverse circulation (RC) drilling on drill lines with a nominal 50m spacing (eastings). At both Bigwest and Autobahn drill holes were angled at a nominal 60 degrees to the north to optimally intersect the mineralisation in steeply south-dipping beds. Drill holes were probed by a 33mm calibrated Auslog downhole gamma tool to obtain a total gamma count reading with depth at 5cm 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 sandstone-hosted deposits of the Bigrlyi-type 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 RC drill spoil or drill core samples recovered from a drill hole of normal diameter. • Estimates of uranium concentrations based on 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 those reported in the announcement. Previous chemical assays from Bigrlyi and surrounding deposits have generally confirmed the gamma intersections and as such Energy Metals believes that the uranium in the system is in equilibrium with its daughter products. • Routine chemical assays were carried out on ca.3 kg size, metre-sample RC drill spoils split from the cyclone over mineralised intervals. Sampling was undertaken using industry standard QAQC practices. Chemical assays for uranium were obtained by pressed powder pellet XRF (<1% U) or lithium borate fusion disc XRF for cases where U >=1% (see below for further details).

Criteria	JORC Code explanation	Commentary
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).*	• The drill type was reverse circulation (RC) drilling with a bit diameter of 140mm. No diamond core drilling has been undertaken at Bigwest or Autobahn.
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 RC drill spoil recovery was made as a visual estimate (percent recovery) 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 (>90%). 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 mineralization.
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.*	• All RC drill chip samples were geologically logged with information on lithology, colour, grain-size, stratigraphic unit, 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 archived at the Bigrlyi camp sample storage facility

Criteria	JORC Code explanation	Commentary
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.*	• RC drill spoils were sampled off the cyclone via a cone splitter to yield two ca.3-5 kg sub-samples (primary assay and duplicate sample) and ca.40kg of bulk material which was collected in a large bag. The bulk material was sampled by random spearing and/or riffle splitting to provide additional samples for check assay. • 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. • Sample preparation of RC drill spoils involved riffle splitting the sample to a maximum sub-sample size of 3kg; this was followed by pulverization in a low-Cr steel ring mill so that 85% passed 75 microns grain size. The unpulverised remainder was bagged and retained. • Sub-sample sizes of 3-5 kg are considered to be appropriate for the style of mineralization found here (tabular sandstone-hosted uranium) taking into consideration the nature and mineralogy of mineralized intersections containing >100ppm U_3O_8.
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 XRF using the pressed powder pellet (PPP-XRF) method for samples containing <1% U. This method gives total uranium content and is accurate for low strontium matrices as found at Bigrlyi and surrounding deposits. In addition to normal laboratory QC procedures, two certified reference materials with chemical matrices matching the sandstone-deposit-style were run as laboratory standards at a frequency of approx. 1 standard per 25 samples for the PPP-XRF assay work. At levels equal to or above 1% U (i.e. beyond the calibration limit of the PPP-XRF method), uranium was assayed by oxidizing lithium borate fusion disc XRF, the oxidizing lithium borate fusion provides complete dissolution of the rock matrix. • 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 runs regular checks to ensure the accuracy and reproducibility of probe data on site by daily measurements of a standard radioactive source and by fortnightly

Criteria	JORC Code explanation	Commentary
		measurements down a standard test hole. 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.
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 on site 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 holes were twinned at Bigwest or Autobahn. • Primary data was collected in the field into a Micromine Field Marshal template operating on a toughbook computer. The information was validated by import into Micromine and then dispatched to Perth office for compilation into an SQL database. • No adjustments to assay data as reported by the laboratory were made.
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.*	• Coordinates are located on the MGA94 grid, Zone 52 using the GDA94 datum. • Hole collar locations for the 2013 drilling are based on hand-held GPS measurements (accuracy +/- 4m in the horizontal plane). • In the vertical plane, topographic control at Bigwest was provided by a high resolution digital elevation model (DTM) determined by SGM photogrammetric methods and based on a 2011 airborne digital line sensor (ADS) survey. At Autobahn no DTM is currently available and a nominal elevation of 645m was assigned. A planned DGPS collar survey will provide accurate coordinates later in 2014. • Down-hole surveys were undertaken with a single-shot tool (Reflex EZ-Shot or Globaltech) every 30m and at EOH depth. QC involved field checks using a test stand. Initial collar orientations were aligned by compass and goniometer.

Criteria	JORC Code explanation	Commentary
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 Bigwest target was drilled on lines with a nominal 50m spacing (eastings). • Energy Metals consider the spacing sufficient to establish continuity of geology and grade for the purposes of estimation of an inferred mineral resource. • Downhole gamma logs measured at 5cm spacing have been composited to 0.5m and 1m intervals. Samples for geochemical assay were not composited.
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 mineralization exhibits 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. • Drilling has mostly been conducted perpendicular to bedding planes that host 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 fenced yard at site prior to transport to the assay laboratory by Energy Metals personnel or by contractors Alice Springs Bush Haulage and Mining Services. Sample pulps are returned to site for storage and archive on completion of assay work.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• 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. Geochemical sampling procedures were reviewed in 2013 with tests conducted to ensure optimal sampling methods were in place. Improvements to Energy Metals data management procedures were made in 2012; Energy Metals considers its current exploration database is of sufficient quality to carry out resource estimation work.

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.*	• The Bigwest and Autobahn targets are located on Exploration Licences EL24453 and EL24533, respectively, which are 100% owned and operated by Energy Metals Ltd. • The exploration licences are located within the Mt Doreen Perpetual Pastoral Lease Native Title Claim (NTD39/2011) which was determined by consent on 3/7/2013. • The exploration licences are held in good standing with no known impediments.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• No other company exploration drilling has previously been conducted at the Bigwest prospect. Several percussion holes, without significant result, were previously drilled at Autobahn by Central Pacific Minerals NL in 1975.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Bigrlyi and associated satellite deposits are tabular, stratiform, sandstone-hosted uranium-vanadium deposits of Carboniferous age located on the northern margin of the Ngalia Basin (NT).

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 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.*
		• Refer to Annexure 1 in the body of the text.

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*	• Exploration results, i.e. mineralized 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. Assay U_3O_8 values have been

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	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.*	determined from metre samples of RC drill spoils. A cut-off of 100ppm U_3O_8 has been used with a minimum thickness of 1m and a maximum internal dilution of 3m and no external dilution. All reported *including (inc.)* intersections are determined using a 500ppm U_3O_8 cut-off with a minimum thickness of 1m and a maximum internal dilution of 3m and no external dilution. Because of the larger sampling width and differences in sampling volumes, chemical assay results may not exactly match the processed gamma log eU_3O_8 values.
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 and structural measurements of drill core, beds have been upturned and are steeply dipping, typically at 70 to 80 degrees. Most holes have been drilled at -60 degrees perpendicular to bedding planes and true widths of intersections are estimated to be 75% to 80% 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 as defined above have 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 considered to be an economic proposition at present nor is it likely to be in the near future.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale 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.*	• Some core drilling is planned at Bigwest and further exploration drilling is planned at Autobahn in the 2014 season.