



ASX Announcement

18 December 2014

Mulga Rock Uranium Project Resource Upgrade

Vimy Resources Limited ("Vimy" ASX: VMY) is pleased to announce a resource upgrade for its Mulga Rock Uranium Project (MRUP). Coffey Mining was engaged to review the updated resource estimate for Princess and to establish compliance of Ambassador, Emperor and Shogun resource estimates to the JORC Code 2012.

Vimy is pleased to provide the following key highlights:

- Princess resource estimate has increased to 3.8Mt at 480ppm U₃O₈ for a contained 4Mlbs U₃O₈, representing a 60% increase on the previous resource
- Approximately 1.9Mlbs U₃O₈ of the Princess resource is now in an Indicated Resource
- Ambassador, Shogun and Emperor resource estimates are JORC Code 2012 compliant
- Ambassador is 27.6Mt at 465ppm U₃O₈ for a contained 28.3Mlbs U₃O₈
- Shogun and Emperor have a combined resource of 27.8Mt at 512ppm U₃O₈ for a contained 31.2Mlbs U₃O₈
- Mulga Rock total resource estimate is 59.2Mt at 490ppm U₃O₈ for a contained 63.5Mlbs
 U₃O₈

Managing Director Mike Young said, "Once we completed our recapitalisation in July of this year, it was all hands on deck as we ramped up our exploration program and started our Pre-Feasibility Study. It has been a very busy time for our team as we conducted infill resource drilling, metallurgical test work and moved into our Pre-Feasibility Study. We also submitted our Environmental Scoping Document as we begin the approvals process for the Mulga Rock Uranium Project.

"It is our stated ambition to move the Mulga Rock Uranium Project into construction in the second half of 2016 with production in 2017 to meet the demand for uranium that will soon be upon us."

Mulga Rock Uranium Project

The Mulga Rock East deposit is made up of the Princess and Ambassador Resources, and the Mulga Rock West deposit consists of the Shogun and Emperor Resources (see Figure 1). The MRUP is 100% owned and operated by Vimy. The MRUP lies approximately 240km east northeast of Kalgoorlie and is situated on two granted Mining Leases (ML1080 and ML1081). Vimy holds title to approximately 757 square kilometres of exploration ground across the MRUP.

Please consider the environment before printing this announcement past Page 6.



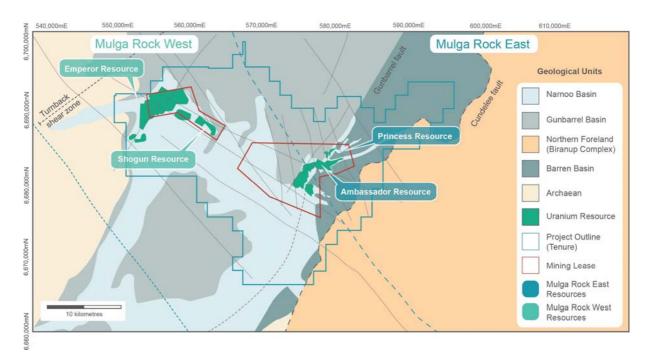


Figure 1: Location of Mulga Rock Uranium Deposits

Mulga Rock East Resource Upgrade

A twin diamond drilling program was completed in March 2014 to increase the confidence of the Princess Resource (see Figure 2). The diamond drill program has improved the geological understanding of the Princess resource in addition to providing additional information to improve bulk density estimates and adjustment of downhole geophysical logging U₃O₈ measurements used in the resource estimate.

The Princess resource estimate has increased to 3.8Mt at 480ppm U₃O₈ for a contained 4Mlbs U₃O₈ using a 200ppm U₃O₈ cut-off, a 60% increase on the previous resource estimate. Approximately 47% of the total contained U₃O₈ in the Princess resource estimate is now classified as Indicated status. This Indicated resource is associated with the thicker, high grade western zone which was the focus of the diamond drilling. JORC Table 1 is appended.

A complete list of all drill hole co-ordinates is appended to the end of this release.

Table 1: Princess Resource Estimate

Resource	Classification	Cut-off Grade (ppm U₃O ₈)	Tonnes (Mt)	U₃O ₈ (ppm)	U₃O ₈ (MIb)
Princess	Indicated	200	1.3	690	1.9
Princess	Inferred	200	2.5	380	2.1
Total			3.8	480	4.0



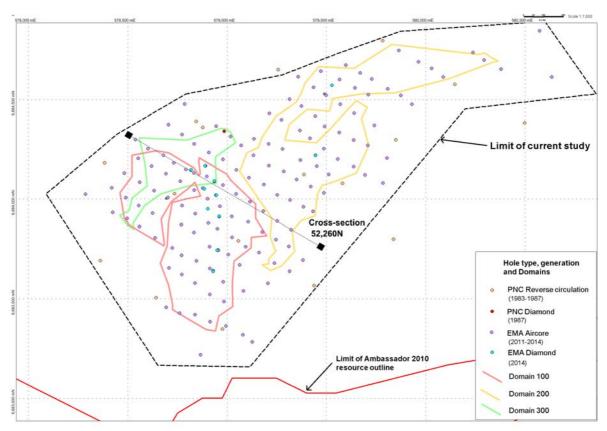


Figure 2: Princess - Collar location map and drill hole type

Princess is similar in style to the other resources at Mulga Rock, which consist of carbonaceous ore bodies containing accumulations of uranium and finely disseminated base metal sulphides associated with paleo-channel sediments (see Figure 3). Carbonaceous lacustrine and estuarine sediments have been strongly oxidised to a depth of 25-45 metres with the uranium and base metals being enriched in horizontal zones just below the redox boundary. The uranium mineralisation is mostly amorphous and adsorbed on the organic matter and is very fine grained.

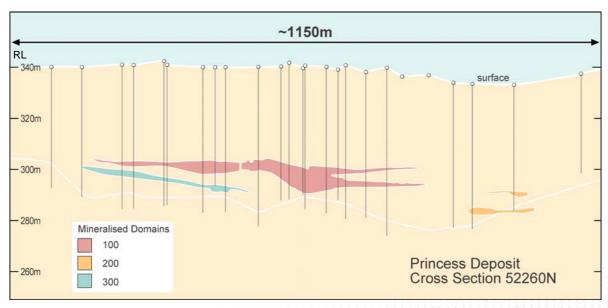


Figure 3: Princess - Schematic cross section 52260N



Uranium Overall Resource Estimate

Coffey Mining reviewed the existing resource estimates for Ambassador, Shogun and Emperor and have restated them for compliance with the JORC Code 2012.

The Ambassador resource remains unchanged at 27.6 million tonnes of ore containing 28.3 million pounds of U₃O₈ at an average grade of 465ppm U₃O₈. Similarly for the Emperor and Shogun, they remain unchanged and their estimates are provided in Table 2.

Three separate JORC Code Tables are appended for Princess, Ambassador and Mulga Rock West (Emperor and Shogun) Resources, detailing the resource estimation process according to the JORC Code 2012. Drill collar plans for Ambassador, Emperor and Shogun have been previously released to the ASX and a copy is provided in each respective JORC Table attached.

Table 2: Mulga Rock Uranium Project Total Resource

Deposit / Resource	Classification	Cut-off Grade (ppm U ₃ O ₈)	Tonnes (Mt) ³	U₃O ₈ (ppm)⁴	U₃O ₈ (MIb)
Mulga Rock East					
Princess	Indicated	200	1.3	690	1.9
	Inferred	200	2.5	380	2.1
Ambassador ¹					
Upper Lignite	Inferred	200	16.7	600	22.0
Lower Lignite	Inferred	200	3.7	320	2.6
Sandstone	Inferred	100	7.2	240	3.7
Sub-Total			31.4	465	32.3
Mulga Rock West					
Emperor ²	Inferred	200	24.1	500	26.4
Shogun ²	Inferred	200	3.7	590	4.8
Sub-Total			27.8	512	31.2
Total Resource			59.2	490	63.5

¹ Ambassador resource estimate prepared by Coffey Mining as announced to the ASX on 11 June 2010, using EMA and historic data. Emperor and Shogun estimates prepare by Coffey Mining as announced to the ASX on 13 January 2009, using historic data.

^{2.} The information for the 2009 Emperor and Shogun and 2010 Ambassador mineral resource estimates were prepared and first disclosed under the JORC Code 2004.

^{3.} t = metric dry tonnes; appropriate rounding has been applied.

^{4.} Using cut combined U₃O₈ composites (combined chemical and radiometric grades)



By-Products Resource Estimates

The Mulga Rock East uranium deposit also contains a base metal (BM) resource. An inventory for each base metal has been established that extends beyond the uranium resource. The BM resource estimate reported in Table 3 represents the portion of each BM inventory coinciding with the uranium resource. Base metals will be recovered during processing of the uranium ore, but economic extraction of BM independently of uranium is unlikely. The Princess and Ambassador base metals resources are provided in Table 3.

Scandium also coincides with the uranium resource across the Mulga Rock East deposit and is also reported.

Base metal values were not assayed during previous drilling at the Mulga Rock West deposit, and therefore no BM resource estimation can be determined at this stage. Future drilling at Mulga Rock West will address this, however the geology is very similar and Vimy expects to determine a base metal resource in due course.

Table 3: Base Metal Resource (including scandium) - Mulga Rock East

Deposit / Resource	Tonnes (Mt)	Cu (ppm)	Zn (ppm)	Ni (ppm)	Co (ppm)	Sc (ppm)
Mulga Rock East						
Princess - Indicated	1.3	750	1280	440	210	60
Princess - Inferred	2.5	270	500	250	140	20
Ambassador ^{1,2}	0.98	2100	-	-	-	-
Ambassador ^{1,2}	0.71	-	9900	-	-	-
Ambassador ^{1,2}	3.72	-	-	2500	1300	-
Ambassador ^{1,2}	2.29	-	-	-	-	110

Deposit / Resource	Classification	Cu (kt)	Zn (kt)	Ni (kt)	Co (kt)	Sc (kt)
Mulga Rock East						
Princess	Indicated	0.9	1.6	0.6	0.3	0.07
Princess	Inferred	0.7	1.3	0.6	0.4	0.04
Ambassador ^{1,2}	Inferred	2.0	7.1	9.4	4.8	0.25
Total		3.6	10.0	10.6	5.5	0.36

Note that the following cut-off grades were applied at Ambassador for definition of the BM minerlisation envelopes: Cu-1000ppm; Zn-5000ppm, Ni-800ppm, Co-500ppm & Sc-50ppm.

^{2.} Note that the mineralised tonnages for each of the base metals and scandium at Ambassador are much lower than the tonnage of the uranium resource. This is due to the fact that the base metals and scandium estimates were completed independently from uranium estimate using grade cutoff based domains. Blocks below the base metal and scandium cutoff grades but within the uranium resource were effectively assigned a zero grade. This is unrealistic as these uranium blocks will have some base metal grade albeit lower than the assigned cutoff grade. Due to these un-estimated blocks, it is expected that the actual contained base metal within the uranium resource could be higher than the amounts tabled above; overall grades remain uncertain.



Mulga Rock East Drilling Update

Aircore and diamond drilling at the Ambassador resource commenced on 27 September 2014 and was completed on 27 November 2014. The results of that drilling have not yet been included in the resource estimate provided in this announcement. A total of 130 aircore infill holes were completed along with 37 PQ diamond core holes, with both programs aimed at increasing the resource confidence.

All samples have been submitted for assaying. Assay results are expected to be released in the March Quarter of 2015, followed by an updated resource estimate.

Future drilling programs will be undertaken on the western end of the Ambassador resource along with additional programs at Shogun and Emperor.

Mike Young

Chief Executive Officer Dated: 18 December 2014

The information in this announcement relates to the Exploration Results for the Mulga Rock Resource Estimate (U₃O₈). Resource Database, Geology and Bulk Densities are based on information compiled by Xavier Moreau, who is a Member of the Australian Institute of Geoscientists. Mr Moreau is a full time employee of Vimy Resources. Mr Moreau has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Moreau consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement relates to the Mulga Rock Mineral Resource estimates (U₃O₈) is based on information compiled under the supervision of Coffey Mining as consultants to the Company and reviewed by Ingvar Kirchner an employee of Coffey Mining. Mr Kirchner consents to the inclusion, form and context of the relevant information herein as derived from the original resource reports. Mr Kirchner has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the JORC 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.



JORC Code, 2012 Edition – Table 1 Princess Resource

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

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 sampling method of drill-cuttings was determined by the location of the sample relative to the weathering front. Samples of oxidised material above the weathering front (and potential mineralisation) were laid in 1m piles in a left to right arrangement, in rows of 10 or 15. Samples from a few metres above the weathering front were recovered directly from the cyclone into plastic bags. The bags were labelled, then left open for a few weeks for the sample to dry. After drying, the bags were folded over so as to avoid contamination while awaiting sampling. Chip tray samples of one metre intervals were also collected for display and spectral analysis using a Terraspec™ SWIR/VNIR analyser. Reference samples (each weighing 0.25-0.5kg) were also taken and placed in airtight bags. The initial pXRF reading was taken on the reference samples, whereas the multiple readings were completed on the full sample in the plastic sample bags. Half core sampling was used for diamond drill holes. Due to the soft and friable nature of the mineralised zones the core was frozen prior to cutting using a diamond saw to prevent core from breaking up. Downhole logging of natural gamma was used to determine an equivalent U₃O₀ grade.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 Aircore drilling was the primary drilling method used for EMA's drilling programs at Princess. Some diamond drilling has been completed to assess potential AC sample bias, radiometric disequilibrium, moisture content and in situ bulk density measurements. The aircore drill bit has tungsten carbide blades arranged around an opening in the face of the bit. The rod string consists of an outer hollow rod, and an inner tube which extends to the hole in the bit face. Compressed air is sent down the rod string between the outer rod and inner tube, discharging around the face of the bit. The compressed air discharges into the void cut by the tungsten teeth, and travels back up the rod string via



Criteria	JORC Code explanation	Commentary
Drill sample	Method of recording and assessing core and chip	 the inner tube. Rock cuttings generated from drilling are lifted to the surface via the inner tube, and then separated from air on surface via a cyclone. The rock sample is then collected in buckets or sample bags from the base of the cyclone, and the spent air discharges from the top. No grade-loss is anticipated from material entrained in the air discharging from the cyclone. Although the uranium (and other minerals) is very fine grained, it is located below the water table or in the zone of capillary rise, ensuring that no dust is generated in the mineralised intervals. Selected holes were pre-collared using the air core and then diamond cored through the mineralised zone. Diamond core was drilled using PQ size bits with push core lifters used in soft areas to improve core recovery. AC twin holes are planned to test for grade bias in the AC samples. Analysis of a limited amount of recent twin holes at Ambassador show that a potential loss of ~15% of uranium metal associated with the aircore drilling technique Core orientation was not attempted due to the friable nature of the material which made reliable orientation difficult to extend along the core run from orientation marks. Recovery of air-core samples can be uneven due to the variable density, moisture, clay
recovery	 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. 	 and organic matter content of the sediments intersected, with adhesion of wet sample to the inside of the cyclone being the main issue within the mineralised interval. Sample flow from the cyclone is continually monitored, and drilling suspended and sample scrapped out of the cyclone where adhesion is evident. Zones of diamond drilling core loss were recorded. Where the location of the loss was known it was recorded as a separate interval. Otherwise the recovery was recorded for the drill run. Evaluation of gamma log equivalent U₃O₈ grade in areas of core loss allowed the grade bias due to core loss to be assessed on a hole by hole basis Diamond core recovery was recorded at the drill site. Intervals of loss were identified and recorded. Overall the recovery has been in excess of 80% overall.
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. 	Lithological logging of drill samples was carried out to record main lithological, sedimentological, weathering, colour, and redox features. Most of that data is captured in the form of a graphic log showing major and minor lithologies, grain size, sorting, texture, hardness, redox state and alteration or weathering features. Stratigraphy is also tentatively assigned while drilling and revised following re-logging. Comparison of drill cuttings corrected for collar RL were also carried out to validate the initial logging. All data was then entered digitally into the Company's Exploration database.



Criteria	JORC Code explanation	Commentary
	The total length and percentage of the relevant intersections logged.	 The stratigraphic boundaries determined from these graphic logs and associated cross-sections were used to model deposit geology and to delimit the ore bodies. Chip trays were also photographed at high resolution and depth matched to the graphic logs. Diamond core was logged and photographed prior to cutting. Following cutting and sampling the mineralised zones were logged and photographed in greater detail. Logging codes are the same as for air core detailed above.
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 subsampling 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. 	 Site Based Work Selection of sample composites for chemical analysis was carried out using a combination of lithological data, and down hole gamma and the pXRF data. After drying, the one metre bagged samples were weighed then split using a single tier riffle splitter. Mineralised material was sampled in one metre increments. Unmineralised reduced material above or below was composited into samples of two to four metres. The 2 to 4 m composites were generated using the spear sampling method. The remaining sample was returned to the original sample bag. The assay sample was then placed in pre-numbered bags. Samples containing an estimated grade of greater than 100ppm U₃O₈ (based on down-hole gamma or portable XRF data) were marked with pink fluoro paint to enable identification at the laboratory of potentially radioactive material. A total of 1,552 air core samples were submitted for analysis. Duplicates were collected at a rate of 1 in 20, but on a selective basis that typically produced mineralised duplicate pairs. Standards were also inserted at a similar frequency. Samples were dispatched and transported to the assay laboratory in steel drums and in accordance with conditions specified in the Company's Radiation Management Plan. Diamond Core sample intervals of 0.5m nominal length were marked on the core. Actual lengths were determined by drill runs and density determination intervals. Half core for the selected intervals was placed in a pre-numbered sample bag and recorded in the sample sheet for entry into the drill database A total of 233 diamond core samples were submitted along with 28 standards and 36 repeats (taken after coarse crush). Laboratory Based Work Following sorting and drying at the laboratory, samples were crushed to 3mm, split to produce a 2.2kg fraction and pulverised to 75microns. A small mass of the pulverised



Criteria	JORC Code explanation	Commentary
		sample was then split for assay, with the coarse fraction and pulverised residue also preserved. • Depending on the lithology and stratigraphy assigned, samples were analysed using one of three different analytical suites, and assayed as follows
		 Samples from the main mineralised interval (typically sandstone or claystone) were submitted to an aqua regia digest and analysed for uranium and a range of trace and major elements using a combination of atomic emission spectroscopy (ICP-AES) and mass spectroscopy (ICP-MS).
		 Samples of basement material were digested using a four acid mixture and analysed for a similar suite of trace and major elements by ICP-AES and ICP-MS.
		A number of strongly uranium mineralised samples (as determined from portable XRF data) were also analysed for Au, Ag, Pt and Pd by Aqua Regia.
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. 	 QA/QC of Assay Samples A comprehensive QA/QC program was carried out, comprising the use of in-house and external standards, field and laboratory duplicates, and external pulp duplicates (umpire assays). For the 2010 air core total of 86 field duplicates were submitted, along with 85 standards (Certified Reference Materials). For the 2014 diamond drilling 28 standards and 36 coarse crush duplicate splits were analysed. The in-house standards were manufactured and certified by Geostats Pty Ltd in 2010 using Mulga Rock composites generated from the 2009 drill cuttings (matrix matched). The laboratory also used a total of 80 standards in addition to the EMA standards. Field duplicates were selected on the basis of down-hole gamma and pXRF data and collected in the same manner as the original sample. Pulverisation quality achieved by the laboratory was also monitored, with one in 20 samples subject to size analysis. The pulverised material consistently had greater than 90% reporting to a sub -75 microns fraction.
		QA/QC of Gamma Data
		 QA/QC used in down hole gamma logging involved a number of repeat runs per drill hole, in particular comparing cased versus open hole data. Weekly logging of a calibration drill hole with grades up to about 1% U₃O₈ was also completed, covering the full grade range encountered at Princess.
		 Spectral and total gamma count tools were also run consecutively in a limited number of drill holes. Both of these tools were calibrated for uranium at the South Australian Government's Department of Water, Land and Biodiversity Conservation calibration



Criteria	JORC Code explanation	C	ommentary
			facility (test pits and related facilities) the Adelaide suburb of Frewville. The spectral tools were also last calibrated for thorium in 2008 at the Grand Junction calibration pits in Colorado, USA.
		•	The down-hole gamma tools were not calibrated for groundwater salinity and no correction applied to the final datasets. However the groundwater quality data collected in the course of this program suggests that groundwater salinities vary little over the mineralised areas at Princess. Salinity variations are unlikely to have generated additional variability in e U_3O_8 grades. No down hole calliper tool was run on the air core holes (the holes as air core drilling would not normally allow logging in open hole mode) so no corrections could be applied for potential cavities around the rod string (and associated lower counting rates).
		•	However, no evidence of excessive caving was observed via large volumes of sample being recovered for any mineralised intervals.
		•	The depth of investigation of total or spectral gamma tools was not measured during the program. However, the volume measured would greatly exceed the volume represented by the actual physical sample.
Gamma		•	Gamma Logging and Calculation of Equivalent Uranium Grades
Logging and Calculation of Equivalent Uranium Grades		•	All holes were gamma-probed from within the drill-pipe (cased-hole), and also to available depth in the open hole in 25 instances (24 around the western portion of the Princess Deposit). The digital raw data was processed on site via Auslog Pty Ltd's WellVision™ spectral logging software to provide industry standard LAS digital file output.
		•	Most eU ₃ O ₈ results used for the Mineral Resource Estimate were derived from an A075 33mm gamma probe manufactured by Auslog and operated by Bore Hole Geophysical Services (BHGS). Winch speed through mineralised intervals was 2-3 metres/min, giving data points over about 2 cm intervals.
		•	All cased-hole data is converted to an open-hole value by applying the casing factor applicable to the drill-pipe. A high proportion of the holes at Princess could be also logged open-hole through the mineralised intervals, allowing an accurate casing factor to be determined for the gamma tool used via comparison of open- and cased-hole data. This factor, and other constants intrinsic to the tool used, was then applied to the measured gamma data to calculate interim equivalent uranium (eU) grades. The eU grades are then converted to e U ₃ O ₈ by multiplication by 1.179. The calculations were completed by 3D Exploration Pty Ltd. The probe does not determine the Disequilibrium Factor (see below).



Criteria	JORC Code explanation	Commentary
		The tool used was calibrated for uranium at the Department for Water, Land and Biodiversity Conservation calibration pits in Adelaide.
		 The drill holes completed during the last three weeks of the program (from drill hole NNA5701 onwards) were probed with a slim-line AusLog Spectral tool operated by Missoni Investt. That tool (# T125, 33mm diameter) has a 76.2 x 25.4mm Brilliance 380 measuring crystal. Results for the spectral gamma data were also processed by 3D Exploration. The spectral tool was operated at a speed of ~0.8m/min due to the requirement for greater counting statistics to enable the discrimination of uranium and thorium.
		The thorium grade established from the "thorium window" section of the spectrum measured by the tool was stripped from the broad uranium window signal and an equivalent uranium grade derived after application of the relevant calibration factor.
		 Down hole gamma logging has a number of important advantages over chemical assaying of drill samples:
		 A much more representative sample is investigated due to a much larger volume of insitu rock being measured. This is particularly the case in rocks characterised by low bulk density such as in Mulga Rock.
		 Greater vertical resolution of the upper and lower boundaries of mineralisation. Speed of access to results (a log of total gamma results is available at the completion of running the tool).
		o Lower cost.
		 Radon accumulation down the hole (which can potentially lead to errors in estimation of grades from gamma logging) was not considered an issue during the program due to the holes being probed immediately after drilling and the small diameter of the air-core drill holes.
		 Above the weathering front and a few metres below the main mineralised zone, the logging tools were operated at ~8m/min, which is considered appropriate for stratigraphic correlation purposes.
Discussion of relative accuracy/ confidence		 Down-hole logging data was paired with chemical assay results of diamond core samples over the same interval for determination of disequilibrium in the equivalent U₃O₈ grade. Intervals of core loss were excluded. A significant disequilibrium was observed with the assay U₃O₈ being higher than the radiometric equivalent U₃O₈ grade. A polynomial regression based on the ranked paired data was used to correct the radiometric U₃O₈ values for use in the estimation.



Criteria	JORC Code explanation	Commentary
		 Comparison of aircore samples to diamond drill samples in the Ambassador deposit show an average –ve bias of 26% (air core lower values). On this basis, the assay U₃O₈ values for aircore holes were not used.
Portable XRF Logging		 All drill cuttings below the weathering front were analysed by portable XRF (pXRF) through the plastic bags on site to guide future drilling and for sample compositing purposes. These initial analyses were carried out following a comprehensive QA/QC program (detailed below). Intervals identified as significantly mineralised were further analysed by pXRF using a procedure developed in-house. This procedure involves multiple readings to be collected for each 1m sample, with an average of about 11 readings taken from 207 samples. Comparison of the pXRF averages with geochemical assays compares very favourably, and suggests that this method of assessment is a valid check on the standard sampling methodology. The pXRF data is not used directly for any purpose other than determining mineralised zones for sampling.
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. 	 The depth of down hole gamma data was checked for discrepancy between the recorded total hole depth and maximum depth of gamma logging. The difference was less than 1m on average with only a single drill hole having a significant gap in data (this being the bottom 10m in hole NNA5602). A check of drill cuttings on the un-probed interval with a hand-held scintillometer showed no uranium mineralisation. A single gap in sampling for chemical analyses was identified in drill hole NNA5645 in low grade material (between 41 and 44m). Correlation of core assay data and probe derived equivalent U₃O₈ grade is used to determine a radiometric disequilibrium correction. The data is based on 9 diamond core holes. Twinning of air core drill holes is planned to determine the extent (if any) of grade-loss of uranium (and some associated elements) in the air core samples arising from the presence of water or weak acid soluble phases.
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. 	All drill holes were surveyed using a Navcom differential Global Positioning System, with a sub metre horizontal resolution. Collar elevation was assigned from a recently acquired high resolution LIDAR dataset (with a vertical accuracy of 10cm or less).



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. 	 Drill spacing is at a nominal 100 x 80m along WNW-ESE trending traverses. The drilling pattern and placement of new tracks was slightly impacted by the presence of sand dunes, as ground disturbing activities were preferentially sited in swale areas. A total of 179 drill holes are located within the area modelled for the resource estimate Radiometric equivalent U₃O₈ readings were composited to 0.5m intervals prior to grade estimation. Base metal assay samples were composited to one metre intervals prior to grade estimation.
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. 	 The orientation of the drill traverses has tested the first order control on mineralisation, this being the strike of the Princess Trough. Drilling to date has also adequately tested the tabular nature of the mineralisation at Princess. However, it is possible that steeply-dipping structures may control the distribution of zones of high grade and thickness bodies of uranium mineralisation, and these may require angled drilling for full evaluation. Measurements at 34 drill holes using the company's Auslog deviation probe shows deviations typically between 0.5 and 2 m at a depth between 35 and 40m down hole (for an average of 1m). This deviation is not material in the current Mineral Resource Estimate (for the purpose of which all drill holes were assumed to be vertical due to their shallow depths).
Sample security	The measures taken to ensure sample security.	Samples are sealed in drum and transported by transport contractor from Kalgoorlie to the assay laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 An in-house sampling audit was carried out in September 2012, and confirmed the reliability of the procedures described above. Coffey Mining consultants have conducted a review of drilling and sampling processes

Section 2 Reporting of Exploration Results

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

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	The Princess Deposit is located about 250 km ENE of Kalgoorlie within Mining Lease M39/1080, held by Narnoo Mining Pty Ltd, a wholly owned subsidiary of Energy and Minerals Australia Limited (EMA). M39/1080 also contains the Ambassador Deposit, for which an Inferred Resource Estimate has been previously announced by EMA on 11 June 2010.



Criteria	JORC Code explanation	Commentary
	 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. 	 Ambassador is one of three historic uranium deposits that comprised the Mulga Rock Deposits. The other two deposits (Emperor and Shogun) are contained within ML39/1081, also owned by EMA. The mining leases are surrounded by a number of Exploration Licences and Prospecting Licences also owned by Narnoo Mining. The Mulga Rock Project tenements are located on Vacant Crown Land, and all were granted without objection by any Native Title party. Macquarie Bank Ltd in its capacity as trustee for the EMA Security Trust, holds a Mining Mortgage (registered with the W.A. Department of Mines and Petroleum) over the tenements as security against convertible note funding agreements entered into on 6 October 2011 and 16 November 2012. The Company has agreed to pay a royalty of 1.5% on all the gross proceeds actually received by Narnoo from selling mineral products, other than scandium, extracted and recovered from the tenements.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The area of the Princess Deposit was subject to uranium exploration by PNC Exploration Australia Pty Ltd (PNC) during the 1980's, which resulted in the discovery of the Mulga Rock Deposits. PNC completed four drill holes within the Princess Deposit area, and several intersected anomalous mineralisation. However, PNC did not complete any follow-up work in the Princess area. The Princess area was also subject to gold exploration by Eaglefield Holdings Pty Ltd and associated parties during the late 1990's, but drilling was confined to some shallow interface drilling (vacuum), typically to a depth of 6m at a nominal 400 x 100m spacing.
Geology	Deposit type, geological setting and style of mineralisation.	 Princess is a sediment-hosted uranium deposit. The mineralisation that comprises the Princess Deposit is hosted by reduced sediments of Eocene age preserved within a small trough or graben named the Princess Trough. The Princess Trough is located adjacent to the north east margin of the Narnoo Basin (the Mulga Rock Deposits are located with the Narnoo Basin. A connection between the Princess Trough and the Narnoo Basin is likely, inferred from drilling, geophysical and groundwater data. The reduced sediments that contain the Princess mineralisation are part of a package named the Narnoo Basin Sequence, and this sequence is also the host of the Mulga Rock Deposits. The Narnoo Basin Sequence consist of a multiple fining upwards packages including sandstone, claystone (typically carbonaceous) and lignite which were deposited in alluvial and lacustrine environments. Overlying the Narnoo Basin Sequence is a succession of oxidised sediments which in the Princess area are about 35m to 45m thick. Basement in the Princess area consists of both Carboniferous and metamorphosed Proterozoic rocks. The metamorphic



Criteria	JORC Code explanation	Commentary
		basement comprises a thick package of PaleoProterozoic meta-sediments of the Barren Basin (inferred), which in the Princess area consist mostly of schistose rocks. A thick saprolite is developed over the schists, and consists of a light-coloured claystone that is similar in appearance to weathered Carboniferous Shale (also capped locally by a thick saprolite).
		Basement in the western section of the Princess Trough is part of to the Gunbarrel Basin, and consists of Late Carboniferous age shale (assigned to the Paterson Formation).
		Cross sections interpreted from the drilling data suggest that small scale faulting has disrupted the basement and Narnoo Basin Sequence rocks in the Princess area. The western margin of the Princess Trough is associated with structures forming the eastern margin of the Gunbarrel Basin. The eastern margin of the Princess Trough also consists of faults of a similar strike to the western margin, but which juxtapose the Narnoo Sequence against the weathered Barren Basin rocks. Both bounding structures are clearly identified from airborne geophysical and drill hole geological datasets. Other faults of north- or northwest-trending strike have interpreted as disrupting the Narnoo Basin Sequence, and a spatial association between some of these faults and uranium mineralisation inferred. Associated mineralisation (particularly copper and gold) is potentially also associated with these faults.
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. 	 Exploration results related to the Princess deposit have been previously reported by the Company under JORC Code 2012. Grade estimation from the drilling into the block model has been completed and is a better representation of the tonnage and grade for the deposit. Grade estimation has superseded the need for reporting of exploration results from individual drill holes.



Criteria	JORC Code explanation	Commentary
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 related to the Princess deposit have been previously reported by the Company under JORC Code 2012. For the purpose of this estimate, the minimum intercept used was 0.5m or greater above 100ppm eU₃O₈ (0.01%e U₃O₈), with a maximum 1m waste length (with grades lower than 0.01%e U₃O₈), provided the aggregate grade for the interval exceeded 0.01%e U₃O₈. Downhole compositing to 0.5 metres for radiometric data and 1 metre for assay data was used. Individual values were length weight average to produce representative intervals for estimation. No metal equivalent values were used.
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'). 	Mineralisation is tabular in habit and horizontal. The vertical drill hole intersections represent true mineralization thickness.
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.	 Exploration results related to the Princess deposit have been previously reported by the Company under JORC Code 2012. A representative cross section illustrating the three main domains is provided in the main text. Relevant diagrams are otherwise incorporated as part of the resource report.
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.	 Exploration results related to the Princess deposit have been previously reported by the Company under JORC Code 2012. The data and interpretation underpinning the resource estimate are reported on a best endeavours basis and represent the most advanced assessment of the Princess Deposit, based on the data available at the time of reporting.



Criteria	JORC Code explanation	Commentary
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.	 Exploration results related to the Princess deposit have been previously reported by the Company under JORC Code 2012. A comprehensive set of groundwater samples was collected and analysed on site for pH and salinity (TDS). A total of 109 samples were collected from 58 drill holes, 24 of which are located within the Princess Deposit. Fourteen air core drill holes were also converted to piezometric bores via insertion of 25mm PVC. Measurement of the water table in these bores has been conducted on a bimonthly basis since drilling.
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. 	 Future work on the Princes Deposit will be as part of the pre-feasibility study on the Mulga Rock project. The main focus of this will be mine planning and metallurgical test work. Drilling is expected to be limited to the completion of the two diamond drill hole twins in the north eastern part of the deposit Specialised mineralogical test work will also be completed to better characterise the nature of the organic matter and its relationship with uranium, base- and preciousmetals mineralisation. Multi-tool wireline logging (likely to include sonic, resistivity, density, neutron and calliper) will be carried out in all diamond drill holes in order to better identify stratigraphic boundaries, and to provide geotechnical and hydrogeological assessment of the mineralised and overlying sediments. Some diamond holes will have slotted PVC casing installed, and initial groundwater pump testing completed. This work will provide initial data on the transmissivity of the host aquifer(s) and confirm preliminary data regarding groundwater chemistry gathered from the 2012 drilling program. Petrophysical characterisation test-work will be carried out on representative samples of drill core. This work will enable a better calibration of down hole resistivity and/or sonic wireline datasets. Initial metallurgical leach tests are planned to confirm that Princess mineralisation is amenable to the preferred process route identified for the Ambassador Deposit.



Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section)

Criteria	ction 1, and where relevant in section 2, also apply to this sect 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. 	 A number of validation tests were performed on the database, looking in particular for discrepancies in: drill hole coordinates and elevation, collar name mismatch, overlapping samples, samples beyond the end of hole depth, sample interval gaps and duplicate sample numbers. The exploration dataset passed those tests successfully.
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. 	 Ingvar Kirchner (Coffey Mining) visited site in November 2014 Xavier Moreau undertook two visits during the March 2014 drilling program and one immediately after during the sampling phase.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Diamond drilling has improved the geological understanding of the deposit. Previously the interpretation was complicated by the overprint of oxidation/lithology and stratigraphy. A simplified stratigraphic interpretation has been completed and is the basis for mineralised domain definition The deposit grades are very closely associated with the oxidation front and are concentrated close to this sub-horizontal boundary. Lithological logging in conjunction with assay and probe eU₃O₈ data have been used to define a series of mineralised domains for U₃O₈. Other subordinate metals have been broadly constrained by Leapfrog derived grade shells. The lateral structural continuity of the sub-horizontal mineralisation is reasonably predictable within the Princess Trough. Grades for most metals continue to demonstrate some variability between the still wide spaced drill holes—a function of both the hole spacing and the complex oxidation and geochemical controls on the development of the mineralisation.



Criteria	JORC Code explanation	Commentary
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The Princess Deposit consists of 3 mineralised domains that represent a practical approach to mineralisation continuity. These domains show good lateral continuity over a length of 2000m along the main axis of the Princess Trough and up to 800m wide. The majority of the mineralisation is contained in the largest body, which has a curved shape approximately 4200m wide and 1,000m long (at the south-western end of the Princess Trough). The sub-horizontal mineralisation tends to range from 30 to 50 metres below surface.
Estimation and	The nature and appropriateness of the estimation	Grade estimation was controlled using an interpreted mineralization boundary using a
modelling techniques	 The hattle 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 nongrade variables of economic significance (eg sulfur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 	 or Stade estimation was continued using an interpreted inimeralization boundary using a nominal 100ppm equivalent U₃O₀ grade threshold on the radiometric data. Leapfrog and Vulcan mine planning software was used to view grade continuity on cross and long sections and to model the mineralized domains in 3D. The 100ppm equivalent U₃O₀ grade threshold was used as it defines a relatively natural break between mineralized and non-mineralised material, and is reasonably robust to variations in grade related to disequilibrium. The cut-off used is also consistent with the previous resource estimation in other deposits in the area. Stratigraphy related mineralized domain boundaries were used as hard boundaries to restrict block estimation and composite selection to within the defined zone. The resource estimate for U₃O₀ is based on factored radiometric probe data. It is expected that the disequilibrium factors used will vary slightly - moderately as more data becomes available. The resource estimate for the subordinate/ancillary metals is based on chemical assay data. Estimated blocks are at most 120 metres, but are typically less than 50m from the nearest drill composite sample. A top-cut of 5000ppm eU₃O₆ was applied to the data for estimation purposes. Populations for the other relatively low grade metals generally did not require capping of high grades. Subordinate/ancillary elements (base metals and REE) have also been estimated using simple grade cut-off constraints, with domains that are considered to be generally independent or different to those used for the U₃O₀. The resource estimate updates a previous polygonal resource estimation for Princess that has been publically reported under JORC Code 2004. The estimation block size was 50x50x10m which is approximately half the nominal drill spacing of 100x80m.



Criteria	JORC Code explanation	Commentary
	 Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. 	 Mining is currently planned to be by shallow open pit cut and fill mining. Details are currently the subject of the updated scoping study. Mining is expected to be more selective than the current drill spacing and supported block estimation size. Block estimates were visually compared to the input composite samples in section views. Global average grades for estimates and declustered composite mean grades show a good correspondence. Mining has not commenced so no reconciliation data is available for the deposit
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 Tonnages are estimated on a dry basis. Average moisture values were determined from diamond core samples for the same lithological and domain groupings used to determine density.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 A cut-off of 200ppm equivalent U₃O₈ (similar to that applied for the Ambassador Deposit in the scoping study) was used at Princess for reporting purposes. This cut-off grade was determined during the scoping study to give the desired mill feed grade
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 Potential mining methods are similar to those identified during the Ambassador Scoping Study, i.e. a truck and shovel conventional operation with in-pit waste and tailings disposal. No recovery factor has been applied to this resource estimate given the preliminary nature of the work.
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.	 The uranium mineralisation is assumed to be similar in nature to the extensively studied mineralisation at Ambassador (despite a lower overall organic matter content). At Ambassador, spectral, mineralogical, deportment and metallurgical studies show that the bulk of the uranium is in a hexavalent ionic state and adsorbed onto organic matter, with a negligible fraction contained in refractory minerals. Recent test-work at Ambassador has shown potential recoveries greater than 80% for both lignite and sandstone-hosted mineralised material, using an atmospheric acid leach (tested in a resin-in-leach configuration).



Criteria	JORC Code explanation	Commentary
	Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	These assumptions will be tested through a work program designed specifically for the Princess Deposit.
Environmental 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.	 Scoping study identified that the most effective management of overburden storage would be to employ strip mining with the majority of waste placed in the mining void as the pit advances. This would minimize the size of above ground overburden storage areas. Likewise the scoping study recommends minimal surface tailing dam capacity for the first two years production followed by in pit tailing disposal for the remainder of the mine life. Evaluation of groundwater contamination potential was recommended for the prefeasibility study Baseline studies for environmental and social impact assessment have been conducted prior, and continued with the scoping study. The scoping study work did not identify any significant environmental or social impact risks.
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 has been determined by using readings from of downhole geophysical logging of diamond drill holes in the Princess Deposit. Physical density measurements were made to validate the downhole geophysical data. On selected intervals of core, measurements were made using two methods. 1/ Immersion in water 2/ Calliper core diameter and length. Given the generally soft and friable nature of the stratigraphic units and poor presentation/representivity of the material in core, it is considered that the geophysical readings to be more representative of the in-situ bulk density of the deposit. Dry bulk density values were determined by converting the geophysical density with moisture values for the corresponding lithology and mineralized domain type. An average density of the lithology and mineralized domain groups was used to apply average dry bulk density values to the block model. Density values measured at the Princess Deposit are consistent with density of similar materials in the Ambassador deposit. It should be noted that densities of the lignite hosted mineralisation is very low.



Criteria	JORC Code explanation	Commentary
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The applied resource classification considers the range of data sources and data quality, high confidence in the interpretations, estimation method, parameters and other inputs into the resource estimate. Drill spacing studies suggest that the deposit has sufficient drill density to support an Indicated resource. Structural continuity between drill holes is high. Grade continuity between drill holes remains moderately variable, but with spatial location well understood It is considered that the disequilibrium factors applied to the eU₃O₃ probe data will continue to vary slightly – moderately to those currently applied as more data becomes available and lateral and lithological variations are better understood. The use of the probe radiometric data is justified considering the difficulties in obtaining robust representative samples from soft unconsolidated to semi-consolidated host material. Interpretations of the subordinate/ancillary metals will continue to be refined. These components are only targeted for coincidental mining in conjunction with primary uranium mineralisation and are reported accordingly. Density factors will continue to vary slightly as more data becomes available. However, as previously noted, the densities applied to Princess lithologies and mineralisation are consistent and sufficiently similar to those derived from similar data and applied for resource estimates of the other deposits occurring at Mulga Rock. Diamond drilling in the south western part of the deposit has provided higher confidence in the geological interpretation, local disequilibrium and physical properties with a program of 9 diamond core holes twinning aircore holes in that area. Blocks in this the southwest region which showed better quality grade estimation output results were assigned to the Indicated category. Deeper cretaceous sediment hosted mineralization and the north eastern part of the deposit are not supported by diamond drilling and have been cl
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 Coffey Mining has audited the 2014 resource model and determined that the model is fit for purpose.



Criteria	JORC Code explanation	Commentary
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 resource classification represents the relative confidence in the resource estimate as determined by the Competent Person. Issues contributing to or detracting from that confidence are discussed above. No quantitative approach has been conducted to determine the relative accuracy of the resource estimate. The Ordinary Kriged estimate is considered to be a global estimate with no further adjustments for Selective Mining Unit (SMU) dimensions. Accurate mining scenarios are yet to be determined by feasibility type studies. No production data is available for comparison to the estimate. The local accuracy of the resource is adequate for the expected use of the model in the pre-feasibility study. Diamond drilling has improved the geological, physical property (density and moisture) and disequilibrium adjustment confidence in the western part of the deposit. Accuracy in other parts of the deposit will be improved with completion of diamond drilling in the eastern part of the deposit.



JORC Code, 2012 Edition – Table 1 Ambassador Resource

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

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. 	 PNC's sampling method of drill-cuttings in percussion drilling was determined by the location of the sample relative to the weathering front. RC samples/sludges representing 1 or 2m were laid to drain in bucket holes at the surface. Intervals with greater than 1,000 cps in downhole radiometric data (on an open hole equivalent basis) were grab sampled and analysed for uranium using XRF. The grab samples were described as often discrete, wet and not representative of the intervals. ½ split samples from a few metres above the weathering front were taken from the PNC drill core, and analysed for uranium and thorium. Samples were typically 20cm in length and targeted lithological boundaries. A total gamma count was also taken over a 100 second interval from a 20g samples over the range of 0.3-4MeV. No PNC aircore or RC assays were used in the Ambassador mineral resource estimate. EMA adopted a similar selective sampling protocol, also determined by the location of the sample relative to the weathering front, lithological breaks and the downhole gamma response. EMA's sampling procedure for aircore and sonic drill samples was as follows: 0.5m aircore samples were collected from about 1m above the base of complete oxidation to about 2m below the base of the main gamma peak (>100ppm eU₃O₈). 1m samples were collected in lower mineralised sediments (primarily sands and silts) characterised by lower gamma anomalies. 2m composites were generated from barren Eocene sediments and interpreted basement lithologies. Wet weights gathered shortly after drilling were used to ensure that enough material was available to sample. Where insufficient, 2 or 3 samples were composited together. Sample weights should be between 0.5kg and 4kg. All samples are reduced using a single tier riffle system. The sampling procedure for EMA's PQ diamond core was as follows:



Criteria	JORC Code explanation	Commentary
		 Gamma and XRF readings were taken at 10cm spacing along the core over anomalous gamma intervals using portable gamma spectrometer and handheld XRF units, and at 20cm intervals in barren sections.
		30-50cm intervals were collected, depending on lithological boundaries and uranium and other metals distribution.
		 Where half-core samples were required, the core was cut using a saw guide, with the full or half sample weighed in the plastic sample bag into which it is put. After weighing, the sample is allowed to dry by leaving the top of the bag open.
		Where core loss occurred, scintillometer and down hole gamma readings were used to estimate the true depth of the mineralised intersection affected by the loss.
Drilling techniques	J1 ()	 A total of 500 drillholes with assays for 31,611m were used for the 2010 Ambassador mineral resource estimate. Of these, 145 were NQ diamond, 13 were HQ diamond, 3 were 8" diamond (bulk sampling for metallurgical test-work), 18 were reverse circulation holes, 326 were aircore holes with a further 5 sonic holes.
	other type, whether core is oriented and if so, by what method, etc).	Diamond, reverse circulation and aircore drilling techniques were used by PNC to drill the Ambassador deposit.
		 The diamond drilling was typically carried out by Longyear Australia (1979, 1981 to 1989) using HQ and HQ3 wire-line drilling.
		 Aircore drilling in 1984 and pre-collars in previous years was performed by Wallis Drilling. Aircore holes and pre-collars were typically drilled using a Schramm truck mounted rig with 3 7/8"roller bits and hammer bits. The drilling in 1984 initially relied on NQ-sized inner tubes, and HQ sized inner tubes for the later part of the program.
		RC drilling was carried out by Davies Drilling of Kalgoorlie.
		• The aircore drill bit has tungsten blades arranged around an opening in the face of the bit. The rod string consists of an outer hollow rod, and an inner tube which extends to the hole in the bit face. Compressed air is sent down the rod string between the outer rod and inner tube, discharging around the face of the bit. The compressed air discharges into the void cut by the tungsten teeth, and travels back up the rod string via the inner tube. Rock cuttings generated from drilling are lifted to the surface via the inner tube, and then separated from air on surface via a cyclone. The rock sample is then collected in buckets or sample bags from the base of the cyclone, and the spent air discharges from the top.



Criteria	JORC Code explanation	Commentary
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. 	 Diamond core recovery is described as generally reasonable. However, a number of drillholes suffered from core loss and/or partial sampling based on the radiometric signature of the core. Zones of diamond drilling core loss were recorded. Based on the poorly consolidated nature of some the sands, it is likely that core loss primarily affected lower grade intervals (characterised by lower organic matter content). Recovery of air-core samples can be uneven due to the variable density, moisture, clay and organic matter content of the sediments intersected. In 1984, five aircore drillholes were drilled dry with samples taken at 25cm intervals for chemical analysis. The sample recovery from these drillholes was described as being approximately 100%.
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. 	 Lithological logging of drill samples was carried out by PNC to record main lithological, colour, and redox features. The data was captured on paper logs. That historic data was then entered digitally into the Company's Exploration database. Stratigraphic and weathering profile boundaries were inferred from these summary logs and associated cross-sections were used to model deposit geology and to delimit mineralisation outlines. Other than for some remnant aircore and RC cuttings under a thin veneer of Aeolian sands, no historical samples have been preserved. Diamond core was logged prior to bulk density measurements.
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 subsampling 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. 	 PNC Site Based Work For historic diamond holes, drill core was sawn and quarter core samples were sent for analyses. No details of duplicates/blank submissions were available at the time the Ambassador mineral resource was estimated by Coffey. EMA Site Based Work Selection of sample composites for chemical analysis was carried out using a combination of lithological data, and down hole gamma and the pXRF data. After drying, the one metre bagged samples were weighed then split using a single tier riffle splitter. Mineralised material was sampled in one metre increments. Unmineralised reduced material above or below was composited into samples of two to four metres. The 2 to 4 m composites were generated using the spear sampling



Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	method. The remaining sample was returned to the original sample bag. The assay sample was then placed in pre-numbered bags. Samples containing an estimated grade of greater than 100ppm U ₃ O ₈ (based on down-hole gamma or portable XRF data) were marked with pink fluoro paint to enable identification at the laboratory of potentially radioactive material.
		• Samples for 417 aircore, 14 PQ3 and 4 8 inch diamond drill holes were submitted for analysis, for a total meterage of 28,327m. Duplicates were collected at a rate of 1 in 20, but on a selective basis that typically produced mineralised duplicate pairs. Standards were also inserted at a similar frequency.
		• Samples were dispatched and transported to the assay laboratory in steel drums and in accordance with conditions specified in the Company's Radiation Management Plan.
		Diamond Core sample intervals of 0.5m nominal length were marked on the core. Actual lengths were determined by drill runs and density determination intervals.
		Half core for the selected intervals was placed in a pre-numbered sample bag and recorded in the sample sheet for entry into the drill database
		 Close to 500 commercial standards were submitted, with greater than 500 field duplicate results available for the elements of interest (uranium and base metals).
		EMA Laboratory Based Work
		 Following sorting and drying at the laboratory, samples were crushed to 3mm, split to produce a 2.2kg fraction and pulverised to 75microns. A small mass of the pulverised sample was then split for assay, with the coarse fraction and pulverised residue also preserved.
		Depending on the lithology and stratigraphy assigned, samples were analysed using one of three different analytical suites, and assayed as follows
		Samples from the main mineralised intervals were submitted to a modified sodium peroxide fusion (lignitic samples) or aqua regia (typically sandstone or claystone samples) digests and analysed for uranium and a range of trace and major elements using a combination of atomic emission spectroscopy (ICP-AES) and mass spectroscopy (ICP-MS).
		 Samples of basement material were digested using a four acid mixture and analysed for a similar suite of trace and major elements by ICP-AES and ICP-MS.
		A number of strongly uranium mineralised samples (as determined from portable XRF data) were also analysed for Au, Ag, Pt and Pd by Aqua Regia.



Criteria	JORC Code explanation	Commentary
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. 	 QA/QC of Historical PNC chemical data and radiometric data were used in the 2009 resource estimate. According to the available historical PNC annual reports the following assay schemes were used: Up to 1986, all core and RC samples were submitted to Amdel in Perth for either a U and Th or a 30 multi-element analysis by XRF. In 1987, Classic Laboratories in Perth were used for assaying using XRF (analysis code X1) for U and Th. In 1988 and 1989 Sheen Analytical Laboratories of Perth were used to analyse for U and Th by ICPMS. The samples were dried then pulverised using a ring pulveriser prior to analysis. Digestion was in a mixed acid digest (nitric, hydrofluoric, perchloric, then nitric and hydrochloric). Limited data is available regarding these historic assays. Comparison between XRF analysis U, Th and 30 multi-element analysis by XRF on quarter core shows a good correlation. Coffey noted that the quality of the PNC assay data ranges from moderate to good, with many of the diamond drillholes chemical assays having been sourced from hard-copy laboratory certificates. However, it also noted the lack of QA/QC data regarding standards and blanks in particular, as well as little information being available regarding exact laboratory analytical procedures. However, the laboratories used were well regarded at the time and the use of XRF and ICP-MS for uranium analysis is an industry standard today. QA/QC of Gamma Data
		 At the time the historic down hole gamma data was digitised, 3D Exploration noted some quality issues with some of the digitised logs with respects to items such as: Overlapping of the line trace Skewed scanned copies of the original logs Inaccurate capturing of the detail of sharp curves Where possible, those selected logs were re-captured.



Criteria	JORC Code explanation	Commentary
		QA/QC of EMA Assay Samples
		Samples obtained from EMA's 2009 drilling program were analysed by Ultra Trace Geoanalytical Laboratories (Ultra Trace) in Canning Vale, WA.
		 Field duplicate samples were taken every 25th and 75th samples for a total of 175 field duplicate samples collected during the 2009 drilling program.
		 Due to the majority of the duplicates being taken in non-mineralised material, only 31 of these were taken within material with a chemical assay exceeding 40ppm U₃O₈.
		Statistical analysis of the 31 mineralised duplicate data pairs indicates a high degree of repeatability with greater than 93% being within prescribed precision limits.
		• Standards are inserted as the first and 50th sample of each batch. Three commercial standards (AMIS 0054, AMIS 0097, AMIS 0098) with grades ranging from 526 to 1,410 ppm U ₃ O ₈ were submitted in the course of the 2009 drilling program. Results for all three standards under-called grades by a limited 2.9% compared to standards expected values. Given that approximately 30% of the raw chemical data within the mineralized zones reported grades in excess of 1,400ppm U ₃ O ₈ , Coffey recommended a standard with a higher expected uranium value be utilised in the future, resulting in EMA adopting additional standards.
		Blanks (pure silica) were used for calibration of the portable XRF unit but not used for chemical assays during that program.
		 Coffey reported that based on the limited field duplicate and the standard samples collected, the quality of the EMA assay data appeared to be high, with the quality of the 2009 aircore sampling and subsequent data still considered low to moderate due to the inconsistent sample recovery, and often wet samples received during drilling. Comparisons of limited diamond and aircore twins indicated that locally the aircore holes could be under calling uranium content by up to 40% relative to the diamond holes.
		 No umpire laboratory testing was carried out as part of the 2009 drilling QA/QC program by the time Coffey produced the 2010 mineral resource estimate. A subsequent umpire laboratory program was carried out subsequently, as recommended by Coffey.



Criteria	JORC Code explanation	Commentary
Gamma		Gamma Logging and Calculation of Equivalent Uranium Grades.
Logging and Calculation of Equivalent Uranium Grades		 PNC drillholes were probed with Austral L300 Middilogers (Middilogger) and Mt Sopris Series III (Mt Sopris) loggers for natural gamma radiation (gamma logs). Drillholes were probed both cased (drilling string and/or PVC) and uncased (if possible). The details of the probing are summarised below: 1983 – Middilogger only. 1984 – Middilogger only. 1985 – Middilogger or Mt Sopris (mainly Mt Sopris). 1986 – Middilogger only. 1987 – Middilogger or Mt Sopris (all 1986 drillholes were re-logged with the Mt Sopris). Only paper copies were available for the PNC gamma logs. These logs were digitised by consultants under EMA's supervision in 2008 and then processed by 3D Exploration Pty Ltd (3D Exploration) to obtain a standardised eU₃O₈ value for all drillholes. The post processing of the drillholes considered items such as:
		 Hole size correction. Casing attenuation. Probe type. K Factors. For the 2010 Ambassador estimate, both EMA and PNC downhole radiometric data were used. Prior to use in the estimate, a series of step-wise factors were applied to the radiometric
		data to bring the average grade and metal content of the radiometric-defined intervals into accordance with those defined by chemical assaying: o PNC Data: For the historical PNC drilling, the same factoring was applied as was used in the 2009 resource estimate. These were: • For eU ₃ O ₈ grades 0 to 500ppm, fact_ U ₃ O ₈ = eU ₃ O ₈ * 1.23 • For eU ₃ O ₈ grades > 500ppm to 1000ppm, fact_eU ₃ O ₈ = e U ₃ O ₈ * 1.43



Criteria	JORC Code explanation	Commentary
		• For eU ₃ O ₈ grades > 1000ppm, fact_U ₃ O ₈ = eU ₃ O ₈ * 1.0
		 For eU₃O₀ grades > 1000ppm, fact_U₃O₀ = eU₃O₀ * 1.0 EMA Data: For the EMA radiometric data, both 0.25m radiometric composites and whole interval composites were analysed against matching chemical grade data from the EMA PQ diamond holes. The analysis consisted of comparing the chemical grade of diamond drillholes to that of the raw eU₃O₀ grade for those drillholes that contained both sufficient chemical data and a complete radiometric profile. A total of 17 PQ holes were identified to be suitable for the analysis for the lignite hosted mineralisation and only 5 for the sandstone hosted mineralisation (which was considered inadequate for an appropriate analysis). For the study, intervals of missing assay information for the diamond drillholes were given a 0ppm U₃O₀ value. However, due to the selective nature of the study, this did not affect many samples. Visual analysis of the radiometric 0.25m composites indicated that there was a good correlation between the eU₃O₀ grades and the chemical grades for the sub-200ppm U₃O₀ grade population, indicating that modelling of mineralisation at a 100ppm raw eU₃O₀ grade threshold would define mineralised zones with equivalent thicknesses as those modelled based on chemical assays. After analysis of the grade scatter plots for the 0.5m composites, the whole of mineralised zone composites and the resulting raw/factored data statistics, it was decided to use a conditional factoring based upon two grade bins (0 to 200ppm eU₃O₀, and >200ppm eU₃O₀ for Zones 100 and 200. As there was insufficient data to allow an appropriate analysis of Zones 300 and 400 (only 5 intercepts), the factoring for the >200ppm eU₃O₀ grade bin was based upon the ratio between the mean of the chemical and raw eU₃O₀ grades (317ppm and 204ppm U₃O₀ respectively). The factoring for the EMA data used for the resource estimation studies was: Lignite hosted mineralisation:
		o For eU ₃ O ₈ grades 0 to 200ppm, fact_eU ₃ O ₈ = eU ₃ O ₈ * 1.0
		o For eU ₃ O ₈ grades > 200ppm, fact_eU ₃ O ₈ = eU ₃ O ₈ * 1.65
		o Sandstone hosted mineralisation:
		o For eU₃O ₈ grades 0 to 200ppm, fact_eU₃O ₈ = eU₃O ₈ * 1.0
		o For eU_3O_8 grades > 200ppm, fact_ eU_3O_8 = eU_3O_8 * 1.5



Criteria	JORC Code explanation	Commentary
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. 	 All drilling data used to support the mineral resource estimates were historic in nature with no remaining reference material, and could not be verified physically by either EMA or Coffey personnel. In 1984, five aircore holes were drilled dry with samples taken at 25cm intervals for chemical analysis. The sample recovery from these drillholes was described as being approximately 100%. A comparison study of chemical assay results between twinned diamond and aircore drill holes was undertaken in 2010 for U, Ni, Zn, Cu, V, Sc, la and Ce. That analysis indicated that the grade data derived from the aircore samples for most elements (apart from Cu and Sc) appears to be relatively low compared to the DD data, effectively under-calling the grade of those elements.
Location of data points	 Accuracy and quality of surveys used to locate drillholes (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. 	 Drillholes used in the Ambassador mineral resource estimate were surveyed using a variety of methods, being Differential Global Positioning System (DGPS, sub-m accuracy), Real Time Kinematic (RTK) GPS (decimeter accuracy), hand-held GPS (sub 10m accuracy) and translated from local grid to GDA (Geocentric Datum of Australia) with UTM grid coordinates. All surveying of PNC exploration drillholes was carried out by McGay Surveys of Kalgoorlie. Suspect historic drillhole collar locations were re-surveyed by AusEX to improve the accuracy of the database. Eastings and northings for EMA drillholes were derived from averaged handheld GPS measurements, which may have been 3m out from the true position. All drillholes coordinates in the exploration database used the MGA94 zone 51 grid system and this grid was used for the estimation. Only original collar set-ups are recorded in the database. Given that all relevant drillholes were drilled vertically and less than 100m in total depth, this was not considered a material issue.
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. 	 Drill spacing at Ambassador varied from a nominal 200 x 100 to primarily 200 x 80m along WNW-ESE trending traverses, with some infill drilling on 10m spaced drillholes. The drilling pattern and placement of new tracks was slightly impacted by the presence of sand dunes, as ground disturbing activities were preferentially sited in swale areas. Radiometric equivalent U₃O₈ readings were composited to 0.5m intervals prior to grade estimation.



Criteria	JORC Code explanation	Commentary
		 99% of the samples lengths selected for chemical analyses were 30cm or shorter. Assay samples were composited to one metre intervals to support statistical analysis prior to grade estimation. During compositing, intervals with no grade were diluted with 0ppm U₃O₈. All samples within the mineralised wireframes were composited to 1m samples with composite intervals less than 40cm being discarded. As the assay database consisted of both chemical U₃O₈ and radiometric eU₃O₈ data, a combined dataset was created for estimation purposes (referred to as combU₃O₈).
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. 	 The orientation of the drill traverses has tested the first order control on mineralisation, this being the paleodrainage underlying Narnoo Basin sequences. Drilling to date has also adequately tested the tabular nature of the mineralisation at Ambassador. However, it is possible that steeply-dipping structures may control the distribution of zones of high grade and thickness bodies of uranium mineralisation, and these may require angled drilling for full evaluation.
Sample security	The measures taken to ensure sample security.	Samples were sealed in drums and transported by transport contractor to Kalgoorlie for sample preparation and analyses.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No data is available regarding site audits by third party/consultants.



Section 2 Reporting of Exploration Results

	riteria listed in the preceding section also apply to this section)		
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 Ambassador deposit is located about 250 km ENE of Kalgoorlie within Mining Lease M39/1080, held by Narnoo Mining Pty Ltd, a wholly owned subsidiary of Energy and Minerals Australia Limited (EMA). Nearby M39/1081 contains the Emperor and Shogun Deposits, for which Inferred Resource Estimates were previously announced by EMA. The Deposits are approximately 700km east of Perth. Tenure under PNC was through six temporary reserves. The Mulga Rock Project area is remote, located within dunefields and is located within granted mining tenure on Unallocated Crown Land in the Shire of Menzies, on the western flank of the Great Victoria Desert. Access is limited and is only accessible by four wheel drive vehicles, via the Tropicana Gold Mine Access Road. The nearest residential town is Laverton which is approximately 200km to the north-west. Other regional residential communities include Pinjin Station Homestead, located approximately 100km to the west; Coonana Aboriginal Community, approximately 130km to the south-south-west; Kanandah Station Homestead, approximately 150km to the south-east; and the Tropicana Gold Mine approximately 110km to the north-east. Ambassador is one of three historic uranium deposits that comprised the Mulga Rock Deposits, within ML39/1080. The mining leases are surrounded by a number of Exploration Licences and Prospecting Licences also owned by Narnoo Mining, and all were granted without 	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 objection from any Native Title party. The area of the Ambassador Deposit was subject to uranium exploration by PNC Exploration Australia Pty ltd (PNC) during 1979 to 1988, which resulted in the discovery of the Mulga Rock Deposits. The bulk of PNC's exploration effort was focused on the Ambassador and the eastern side of the Mulga Rock Project between 1982 and 1985. A trial mining program took place within the Shogun deposit in late 1983 to obtain a bulk sample of mineralised lignite. 	
		The Ambassador area outside of residual mining leases covering the deposit was also subject to mineral sands and gold exploration by Eaglefield Holdings Pty Ltd and associated parties during the 1990's, but drilling was confined to some shallow interface drilling (vacuum), typically to a depth of 6m at a nominal 400 x 100m spacing, or aircore drillholes (between 1993 and 1999) focused primarily on gold and not assayed for uranium.	

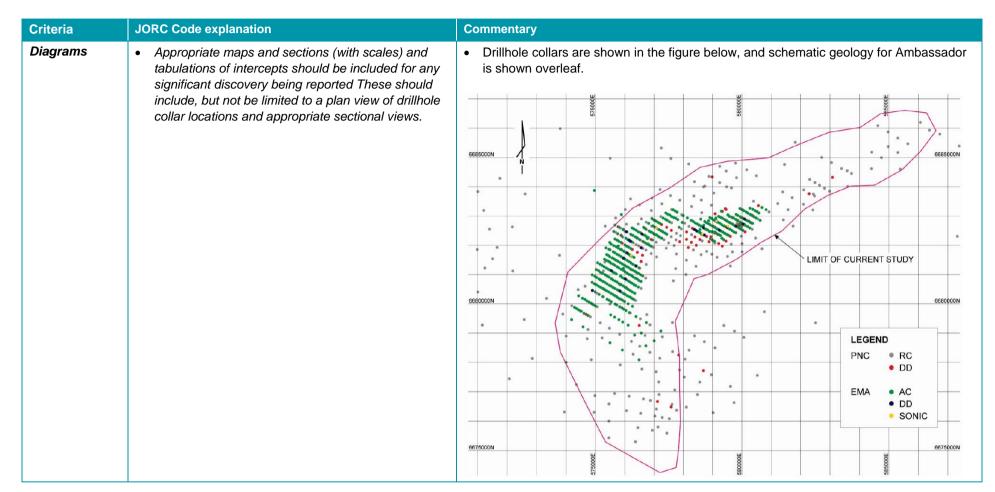


Criteria	JORC Code explanation	Commentary
		 During 2008 and 2009, EMA carried out a twin drillhole program followed by an extensive infill drilling and sampling program, with statistics as follows: 417 aircore drillholes for 27,144m 27 diamond drillholes for 1,693m 5 sonic drillholes for 306m.
Geology	Deposit type, geological setting and style of mineralisation.	Ambassador is a sediment-hosted uranium deposit. The mineralisation is hosted by reduced sediments of Eocene age preserved within a complex set of sedimentary troughs overlying an extensive long-lived paleodrainage referred to as the Mulga Rock paleochannel, itself likely to represent a dead arm of the Lake Raeside regional paleodrainage. The mineralised zones were defined based upon a combination of stratigraphy and a 100ppm comb U ₃ O ₈ lower cut-off grade. The mineralised zones were modelled to a minimum thickness of 1m.
		The reduced sediments that contain the Ambassador mineralisation are part of a package named the Narnoo Basin Sequence, and this sequence is also the host of the Mulga Rock Deposits. The Narnoo Basin Sequence consist of a multiple fining upwards packages including sandstone, claystone (typically carbonaceous) and lignite which were deposited in alluvial and lacustrine environments.
		 Overlying the Narnoo Basin Sequence is a succession of oxidised sediments which at Ambassador are about 36 to 55m thick. Pre-Eocene basement in the Ambassador area consists of both Cretaceous and Carboniferous sedimentary successions, as well as Paleoproterozoic metasediments to the east of the Gunbarrel fault. The Carboniferous sediments are assigned to the Paterson Formation and understood to be part of the Gunbarrel Basin.
		The mineralised zones for base metals were defined based upon a combination of stratigraphy and the following lower cut-off grades:
		 Ni: 800ppm Co: 500ppm Zn: 5,000ppm Cu: 1,000ppm Sc: 50ppm
		The interpreted base metal outlines were mainly stratiform in nature with the upper lignite (domain 100) hosting most of the uranium, nickel, cobalt, zinc and copper mineralisation.



Criteria	JORC Code explanation	Commentary
Drillhole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole 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. 	Exploration results related to the Ambassador deposit have been previously reported by the Company in accordance with the JORC Code 2004 on 10 May 2010.
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. 	 For the purpose of this estimate, the minimum intercept used was 0.5m or greater above 100ppm eU₃O₈ (0.01%eU₃O₈), with a maximum 1m waste length (with grades lower than 0.01%eU₃O₈). The value of 100ppm was chosen as it represents a natural break in the assay data. All uranium assays within the mineralised zones were composited to 0.5m for statistical analyses and estimation. Any missing intervals within the diamond drillholes which had chemical assays were given a grade of 0ppm U₃O₈ prior to compositing. All composites for base metals were prepared on a 1m basis, following a statistical analysis. Composite residuals of less than 0.4m were discarded.
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 drillhole 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'). 	Mineralisation is tabular in habit and horizontal. The vertical drillhole intersections represent true mineralisation thickness.







Criteria	JORC Code explanation	Commentary
		Schematic Geology and Mineralisation within the Narnoo Sequence
		Surface Approx depth Weathering Front Agamo Lignite Lignite & Sandstone U, V, REE, Sc. Ni, Co, Au Lignite U, V, REE, Sc. Ni, Co, Au Lignite Lignite & Sandstone U, Ni, Co, Zn± Cu Sandstone U
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.	The data and interpretation underpinning the resource estimate are reported on a best endeavours basis and represent the most advanced assessment of the Ambassador Deposit, based on the data available at the time of reporting.
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.	 A total of 360 historical bulk density (BD) determinations made using the water immersion method made from the whole diamond core were available for review. The PNC 1984 Annual report describes the method used to determine the dry bulk density as follows: Whole core samples were cut free of fractures and according to lithology then wrapped in Gladwrap to prevent drying and shrinkage. Wet weights and bulk volume were determined at base camp. The bulk volume was determined by displacement using a one litre measuring cylinder, with readings taken to the nearest 5cm³. Wet and dry weights and bulk volumes were then determined by Amdel in Perth. The exact method of volume determination used by Amdel is not mentioned in the 1984 report but is presumed to be the water immersion method. A cursory review of the volumes determined by PNC using the water immersion method and those determined by Amdel indicate similar results. However the PNC volume results from some



Criteria	JORC Code explanation	Commentary
		 drillholes (e.g. CD1267) indicate that the PNC field volume determinations can be lower than the laboratory volume by around 3%. The density readings indicate that the mineralised zones can have dry bulk densities ranging from 0.5t/m³ to 1.4t/m³ within the same drillhole. The historical density determinations tend to be clustered within the top portions of mineralisation, and only a few drillholes have a complete density profile through the entire mineralised sequence. Based upon an analysis of all historical density data within mineralised intervals above 100ppm U (251 samples in total), an in situ bulk density of 0.9 t/m³ was used to report the Resource estimate.
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. 	 Future drilling programs on the Ambassador Deposit will focus on areas of greatest metal accumulation and relatively thick mineralisation, supporting realistic strip ratios. Future mineral resource estimates will also rely on a detailed and more comprehensive analysis of secular radiometric disequilibrium at Ambassador, as well as some detailed 3D geological modelling. Specialised mineralogical test work might also be completed to better characterise the nature of the organic matter and its relationship with uranium, base- and preciousmetals mineralisation. Multi-tool wireline logging (likely to include sonic, resistivity, density, neutron and calliper) will be carried out in all diamond drillholes in order to better identify stratigraphic boundaries, and to provide geotechnical and hydrogeological assessment of the mineralised and overlying sediments. Some diamond holes will have slotted PVC casing installed, and initial groundwater pump testing completed. This work will provide initial data on the transmissivity of the host aquifer(s) and confirm preliminary data regarding groundwater chemistry gathered from past drilling programs. Petrophysical characterisation test-work might also be carried out on representative samples of drill core, to enable a better calibration of down hole induction and/or sonic wireline datasets. The Company will also analyse in 3D spatial relationships, trends and patterns present in its various geological datasets in order to better understand the controlling mechanisms of areas of high metal accumulation. Additional sample material generated in the course of the drilling programs discussed above will be used for preliminary metallurgical leach test-work, to confirm that mineralisation at Ambassador is amenable to the preferred process route identified for the Ambassador and Princess Deposits.



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.	 Commentary The resource estimation was based on the available historical exploration drillhole database, which was compiled by Energy and Minerals Australia in Microsoft Access. EMA has assumed responsibility for the validity of the assay data and geology. The database was reviewed and validation checks completed by Coffey prior to commencing the resource estimation study. The database was validated in Micromine software and checks made to the database prior to resource estimation included: No overlapping intervals Downhole surveys starting at 0m depth and also not exceeding the end of hole depth Consistency of depths between different data tables Check gaps in the data Irregular collar coordinates Changes that were made to the database prior to loading into mining software included: Replacing less than detection samples with a value equal to half the detection level Replacing intervals with no sample with -50ppm Replacing intervals with assays not yet received with -9999 Updating the collar RLs to ensure a consistent topographic surface The raw (prior to factoring) radiometric eU₃O₈ grades were composited to 25cm intervals to make processing and modelling more efficient. A final table of ranked assays data was used for the resource estimation with priority placed on: Diamond drilling with historical chemical data then Factored radiometric grades. For base and other metal (BOM) data, this report updates and upgrades the previous grade estimates on advice from EMA personnel regarding data quality. The BOM data derives from the EMA 2009 aircore and diamond drilling program



Criteria	JORC Code explanation	Commentary
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. 	Coffey undertook a site visit to the MRUP area in October 2009 while the drilling program was underway. A number of subsequent site visits have been conducted by Coffey personnel since 2009. It should be noted that, in this case, the site visits post-dated the PNC-era Ambassador drilling work.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Geology was not modelled, but was used in defining the mineralised zones. For the purpose of the resource estimation, the mineralisation boundaries were based upon a nominal 100ppm U₃O₈ lower cut-off defining a mineralised zone of at least 0.5m thickness and honouring, where possible, the geology. This value was chosen as it represents a natural break in the distribution of grades distinguishing mineralisation from unmineralised material. Four mineralised zones were defined for the Ambassador deposit as defined below: Zone 100 – Upper Lignite, predominantly lignite and claystone Zone 200 – Lower Lignite, mixed facies at the base of the lignite (lignite, carbonaceous sandstone and reduced sandstone) Zones 300/400 – Sandstone, reduced sandstone For the BOM models, the grade shell interpretations were undertaken utilising lower cutoff values which were provided by EMA: Ni—800ppm Co—500ppm Zn—5000ppm V—150ppm REE—500ppm Resultant BOM interpretations were subhorizontal and only partially coincident with portions of the uranium mineralised zones. Each of the BOM elements was interpreted independently. This was supported by correlation studies indicating some correlation between Ni and Co, Ce and La, but otherwise moderate to weak correlation between other elements.



Criteria	JORC Code explanation	Commentary						
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The block model is n The block model external Easting Northing Elevation 		its – Ambassador Prospe	Parent/Sub Block Size (m) 200/25 100/25			
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 nongrade variables of economic significance (eg sulfur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 	 A resource estimate reported in Accordance superseded by the 2d accordance to the JC In 1990, PNC product methods. This estimate. The 2010 resource exappropriate for this simple supersequence of the sequence of the	for Ambassador was under to the JORC Code 2010 Resource. The 20 DRC Code 2012 guidelined a report for the Ambate was not classified a stimation was completely of mineralisation. The radiometric eU ₃ O ₈ gos were applied based under a stimation: The description of the ambate was not classified a stimation was completely of mineralisation. The radiometric eU ₃ O ₈ gos were applied based under a stimation: The description of the 200 ppm → fact of the second and resource and resource and resource are the second and resource ar	ndertaken by Coffey (2004) guidelines. The Resource is now ines. The sassador deposit us according to the JOR and using Ordinary Known and the JOR and	v in January 2009 and the 2009 estimate was v being re-stated in sing polygonal estimation RC Code guidelines. Triging, which is d for disequilibrium. for zones 100 and 200 and 200 and 200 and 200 ased upon the ratio			



Criteria	JORC Code explanation	Commentary													
	 Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available. 	 Zone Zone Zone Zone Zone Zone The OK eparamete Statistica (correlation A similar necessarion Ni (upo Ni (lovo Co (upo Co (loo Cu: 4, 	ving cuts $100 - 5,0$ $200 - 90$ $300 - 1,7$ $400 - 14$ estimates rs control rs were of analysis on coeffic outlier ar y, with th per zone ver zone oper zone wer zone 500ppm 0,000ppm	were were were on the second of the second o	e ma pm n pm n e cor the s ed ba raw d of 0.9 is for lowin 0000pp 000pp	mpetesource ased elata s 96). base g cut pm pm	ed us e and on the	sing (d sel ne va ed th	grade ection riogra nat nice	to be vari n of a aphy ckel	ograr comp and c	m moo oosite the d	dels an data. ata spa were c	d a set The sar icing.	of ancillary mple search related
		progressi	vely expa	ande consi Ma	d and iderin	d less	ocks V Krigi S S S S S S S S S S S S S S S S S S	trictivenot points	orevio	mple ously Search	sear assiç	ches gned a	Min.	essive	estimation stabulated Max. No. of Comp. per Drillhole
			1	AZ 30	وان 0	AZ	الا	Az 0		200	200	200	Comp.	Comp.	per Drillnole
		100, 200, 300 and	2	30	0	120	0	0		400	400	400	12	24	4



Criteria	JORC Code explanation					Comr	nentary				
		grade es	timation	via or	all zones dinary krig y as for th	ging, as t	abulate	d below.	This resu		to enable similar
		Directional Axes									
		Element		Maj	jor		Semi-M	ajor		Minor	
			Azimu		Dip	Azin		Dip	Azin		Dip
		Ni Co	040	- 1	0	13	30	0	00		-90 -90
		Zn	000	- 1	0	00		0	00		0
		Cu	040	- 1	0	00		0	00		-90
		V Sc	130	- 1	0	13		0	00		-90 -90
		REE	000	- 1	0	00		0	00		0
		Structures					ıctures				
						First			Se	econd	
		Element	Nugget	Sill		Range (m)		Sill	Range (m)		
			(C₀)	(C ₁)	Major	Semi- Major	Minor	(C ₂)	Major	Semi- Major	Minor
		Ni	0.5	0.40	180	30	1.5	0.10	400	160	2.5
		Co Zn	0.4 0.2	0.44	100 30	100 30	1.4 30	0.16 0.15	400 740	400 740	2 740
		Cu	0.5	0.40	180	30	1.5	0.10	400	160	2.5
		V	0.2	0.35	140	80	2	0.45	480	280	5
		Sc REE	0.1 0.1	0.70	140 100	80 100	2.5 100	0.20	600 400	400 400	3 400
										400	400
			•		made con	-	-	of by-pro	oducts.		
					elements						
					x 100m x from 400r						
				_			i to iiiles	5 01 20111	spaceu c	ariiirioies,	Dut 15
		 predominantly 200m x 200m spacing. No assumptions have been made regarding SMU. 									
		Only U₃C	•			o rogara	ng one				
		•			included:						
					al review						
						ate versu	s the me	ean of the	e compos	site datas	set, including
					propriate						,
		_	-		oss sectio				-		



Criteria	JORC Code explanation	Commentary
		 An alternative estimate was also completed via Inverse Distance weighting to test the sensitivity of the reported model to the selected OK interpolation parameters. A variation in overall grade was noted in the alternate estimation with the IDW being overall 10% higher than the OK estimate. This disparity is attributed to the degree of data clustering that inverse distance methods do not address. The lateral extent of the 2010 resource compared to the 2009 resource has changed in the following manner: Decreased in some areas due to a combination of negative data obtained from the 2009 drilling programme and/or reinterpretation of mineralised zones Increased in some areas due to the inclusion of positive data for the 2009 drilling programme. The revised 2010 resource has increased by 20% in terms of contained U₃O₈ compared to the 2009 estimate. The resource estimate for the subordinate/ancillary metals is based on chemical assay data. High grade cuts were applied to the Ni, Co, Cu, Zn, V, and Sc data. The OK estimates for the BOMs were also competed using grade variogram models
		and a set of ancillary parameters controlling the source and selection of composite data. The sample search parameters were defined based on the variography and the data spacing. Variograms were generally poorly structured.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are based on a dry insitu bulk density.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 The nominal 100ppm U₃O₈ lower cut-off used to define the mineralisation was chosen as it represents a natural break in the assay data.
		 Coffey recommends that due to the likely economics of this style of low-density mineralisation, the Resource should not be reported below 200ppm U₃O₈ for traditional open-pit mining methods. It is possible that a lower cut-off could be applied to portions of the sandstone hosted mineralisation below the lignite if ISR is considered for extraction.
		The BOM tonnages are reported only for the portions of the BOM zones that are coincident with reportable portions of the uranium mineralised zones above cutoff. As BOM grades were not estimated outside of the interpreted BOM zones in part due to limited data, a fully diluted BOM grade is not reported for the uranium mineralisation. This aspect will be rectified in future models. The BOM elements are only considered



Criteria	JORC Code explanation	Commentary
		here to be potential by-products from the uranium processing, and are not likely to be individually economic commodities.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	 Traditional open pit mining is assumed for the bulk of the deposit. There is the possibility that in situ recover (ISR) methods may be appropriate for sandstone hosted mineralisation below the lignite horizon.
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.	No assumptions have been made regarding metallurgy.
Environmental 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	No assumptions have been made regarding environmental factors.



Criteria	JORC Code explanation	Commentary
	be reported with an explanation of the environmental assumptions made.	
Bulk density	 Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	Bulk density was attributed to the resource model based upon an analysis of EMA bulk density data, PNC bulk density data and reasonable analogue to the styles of mineralisation and geology. For the purposes of the estimate, a bulk density of 0.9t/m³ was applied to the upper lignite mineralisation (Zone 100), 1.3t/m³ to the lower carbonaceous clay / sandstone hosted mineralisation (Zone 200) and 1.6t/m³ to the deeper sandstone hosted mineralisation (Zones 300 and 400). Output Description:
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The grade estimates for all domains have been classified as Inferred in accordance with JORC Code 2012 (originally 2004) guidelines based on the confidence levels of the key criteria that were considered during the resource estimation. The Inferred category was applied to areas of the models which had appropriate drill spacing (at least a nominal 400m by 400m), exhibited appropriate grade continuity, and exhibited good correlation between the model and the input grades. It should be noted that the resource classification for Ambassador is now assumed to apply to the base and other metals as well as the uranium. The current estimates for the BOM elements are considered to be less robust than for the uranium, but, as reported, are still within the realms of an Inferred Resource category.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or independent technical reviews have been conducted on the Ambassador resource estimates that have involved Coffey personnel.



Criteria	JORC Code explanation	Commentary
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. 	 Due to the nature of the uranium mineralisation, the degree of radiochemical disequilibrium is likely to vary considerably between drillholes and with depth down each drillhole. The disequilibrium factoring applied for the 2010 resource estimate has resulted in satisfactory global results but significant local variations are expected. Due to the possible undercalling of assayed U₃O₈ from the EMA aircore drilling, it is considered that there is very little reliable chemical assay data available. Only the chemical assays from the EMA diamond holes are considered to be robust. Of the 3237 samples employed for the resource estimate, only 241 (or 7%) of the samples were EMA diamond drilling sourced chemical assays. Further investigation into bulk density determination, radioactive disequilibrium (both vertical and lateral) and infill drilling will be required to raise the level of resource classification.



JORC Code, 2012 Edition – Table 1 Emperor and Shogun

Section 1 Sampling Techniques and Data

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

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 sampling method of drill-cuttings in percussion drilling was determined by the location of the sample relative to the weathering front. RC samples/sludges representing 1 or 2m were laid to drain in bucket holes at the surface. Intervals with greater than 1,000 cps in downhole radiometric data (on an open hole equivalent basis) were grab sampled and analysed for uranium using XRF. The grab samples were described as often discrete, wet and not representative of the intervals. No pre-2008 aircore or RC assays were used in the resource estimate. ¼ split samples from a few metres above the weathering front were taken from the drill core, and analysed for uranium and thorium. Samples were typically 20cm in length and targeted lithological boundaries. A total gamma count was also taken over a 100 second interval from a 20g samples over the range of 0.3-4MeV. No PNC aircore or RC assays were used in the Emperor and Shogun mineral resource estimates.
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).	 Diamond, reverse circulation and aircore drilling techniques were used by PNC to drill the Emperor and Shogun deposits. The diamond drilling was typically carried out by Longyear Australia (1979, 1981 to 1989) using HQ and HQ3 wire-line drilling. Aircore drilling in 1984 and pre-collars in previous years was performed by Wallis Drilling. Aircore holes and pre-collars were typically drilled using a Schramm truck mounted rig with 3 7/8"roller bits and hammer bits. The drilling in 1984 initially relied on NQ-sized inner tubes, and HQ sized inner tubes for the later part of the program.



Criteria	JORC Code explanation	Commentary
		 RC drilling was carried out by Davies Drilling of Kalgoorlie. The aircore drill bit has tungsten blades arranged around an opening in the face of the bit. The rod string consists of an outer hollow rod, and an inner tube which extends to the hole in the bit face. Compressed air is sent down the rod string between the outer rod and inner tube, discharging around the face of the bit. The compressed air discharges into the void cut by the tungsten teeth, and travels back up the rod string via the inner tube. Rock cuttings generated from drilling are lifted to the surface via the inner tube, and then separated from air on surface via a cyclone. The rock sample is then collected in buckets or sample bags from the base of the cyclone, and the spent air discharges from the top.
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. 	 Diamond core recovery is described as generally reasonable. However, a number of drill holes suffered from core loss and/or partial sampling based on the radiometric signature of the core. Zones of diamond drilling core loss were recorded. Based on the poorly consolidated nature of some the sands, it is likely that core loss primarily affected lower grade intervals (characterised by lower organic matter content). Recovery of air-core samples can be uneven due to the variable density, moisture, clay and organic matter content of the sediments intersected. In 1984, five aircore drill holes were drilled dry with samples taken at 25cm intervals for chemical analysis. The sample recovery from these drill holes was described as being approximately 100%.
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. 	 Lithological logging of drill samples was carried out by PNC to record main lithological, colour, and redox features. That data was captured on paper logs. That historic data was then entered digitally into the Company's exploration database. Stratigraphic and weathering profile boundaries were inferred from these summary logs and associated cross-sections were used to model deposit geology and to delimit mineralisation outlines. Other than for some remnant aircore and RC cuttings under a thin veneer of Aeolian sands, no historical samples have been preserved. Diamond core was logged prior to bulk density measurements.



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 subsampling 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. 	Site Based Work Drill core was sawn and quarter core samples were sent for analyses. No details of duplicates/blank submissions were available at the time the Emperor and Shogun mineral resources were estimated by Coffey.
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. 	 QA/QC of Assay Samples Only historical PNC chemical data and radiometric data were used in the 2009 resource estimate. According to the available historical PNC annual reports the following assay schemes were used: Up to 1986, all core and RC samples were submitted to Amdel in Perth for either a U and Th or a 30 multi-element analysis by XRF. In 1987, Classic Laboratories in Perth were used for assaying using XRF (analysis code X1) for U and Th. In 1988 and 1989 Sheen Analytical Laboratories of Perth were used to analyse for U and Th by ICPMS. The samples were dried then pulverised using a ring pulveriser prior to analysis. Digestion was in a mixed acid digest (nitric, hydrofluoric, perchloric, then nitric and hydrochloric). Limited data is available regarding these historic assays. Comparison between XRF analysis U, Th and 30 multi-element analysis by XRF on quarter core shows a good correlation.



Criteria	JORC Code explanation	Commentary
		QA/QC of Gamma Data
		 At the time the historic down hole gamma data was digitised, 3D Exploration noted some quality issues with some of the digitised logs with respects to items such as:
		Overlapping of the line trace
		Skewed scanned copies of the original logs
		Inaccurate capturing of the detail of sharp curves
		Where possible, those selected logs were re-captured.
Gamma		Gamma Logging and Calculation of Equivalent Uranium Grades.
Logging and Calculation of Equivalent Uranium Grades		 PNC drill holes were probed with Austral L300 Middiloggers (Middilogger) and Mt Sopris Series III (Mt Sopris) loggers for natural gamma radiation (gamma logs). Drill holes were probed both cased (drilling string and/or PVC) and uncased (if possible). The details of the probing are summarised below:
Grades		o 1983 – Middilogger only
		o 1984 – Middilogger only
		o 1985 – Middilogger or Mt Sopris (mainly Mt Sopris)
		o 1986 – Middilogger only
		 1987 – Middilogger or Mt Sopris (all 1986 drillholes were re-logged with the Mt Sopris)
		 Only paper copies were available for the PNC gamma logs. These logs were digitised by consultants under EMA's supervision in 2008 and then processed by 3D Exploration Pty Ltd (3D Exploration) to obtain a standardised eU₃O₈ value for all drill holes.
		The post processing of the drill holes considered items such as:
		Hole size correction
		Casing attenuation
		Probe type
		o K Factors
		 Coffey performed an analysis of the processed eU₃O₈ data based upon diamond drill holes which had both chemical grades and complete radiometric profiles. The results of this study were then used in the resource estimation process. A total of 117 diamond drill holes were identified within the Emperor deposit as containing adequate chemical and radiometric assay data, quite evenly spaced in the northern and north-eastern sections of the Emperor deposit.



Criteria	JORC Code explanation	Commentary
		 After analysis of a grade scatter plot for those chemical-radiometric pairs, a conditional factoring based upon two grade bins (0 to 500 U₃O₈ and > 500ppm U₃O₈) was adopted), resulting in the following factors being applied: For e U₃O₈ grades between 0 and 500ppm, fact_eU₃O₈ = eU₃O₈ * 0.9 For e U₃O₈ grades > 500ppm, fact_eU₃O₈ = eU₃O₈ * 1.2 A series of validation checks were conducted against the disequilibrium factors used for the Emperor and Shogun deposits, including checks of the factored radiometric grades against the chemical grades on a drill hole by drill hole basis and checks or nearby or twinned drill holes comparing diamond grades against factored radiometric grades. On an overall basis, the factored radiometric data was in accordance with the chemical data population, with positive and negative variances noted on a case by case basis.
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. 	 All drilling data used to support the mineral resource estimates were historic in nature with no remaining reference material, and could not be verified physically by either EMA or Coffey personnel. In 1984, five aircore holes were drilled dry with samples taken at 25cm intervals for chemical analysis. The sample recovery from these drill holes was described as being approximately 100%.
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. 	 Drill holes used in the Emperor mineral resource estimate were surveyed using a variety of methods, being Differential Global Positioning System (DGPS, sub-m accuracy), Real Time Kinematic (RTK) GPS (decimeter accuracy), hand-held GPS (sub 10m accuracy) and translated from local grid to GDA (Geocentric Datum of Australia) with UTM grid coordinates. All surveying of PNC exploration drill holes was carried out by McGay Surveys of Kalgoorlie. Suspect historic drill hole collar locations were re-surveyed by AusEX to improve the accuracy of the database.
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. 	 Drill spacing at Emperor and Shogun varied from a nominal 500 x 220 to primarily 200 x 200m along WNW-ESE trending traverses, with some infill drilling on sub 10m spaced lines. The drilling pattern and placement of new tracks was slightly impacted by the presence of sand dunes, as ground disturbing activities were preferentially sited in swale areas.



Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	 A total of 383 and 144 drill holes were located within the area modelled for the Emperor and Shogun mineral resource estimates respectively. Radiometric equivalent U₃O₈ readings were composited to 0.5m intervals prior to grade estimation. 99% of the samples lengths selected for chemical analyses were 30cm or shorter. Assay samples were composited to one metre intervals to support statistical analysis prior to grade estimation. During compositing, intervals with no grade were diluted with 0ppm U₃O₈, affecting 112 (or 3%) of the 3,262 assay intervals for Emperor and 15 (or 1%) of the 1,616 assay intervals for Shogun. All samples within the mineralised wireframes were composited to 1m samples with composite intervals less than 40cm being discarded. As the assay database consisted of both chemical U₃O₈ and radiometric eU₃O₈ data, a combined dataset was created for estimation purposes (referred to as combU₃O₈).
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. 	 The orientation of the drill traverses has tested the first order control on mineralisation, this being the paleodrainage underlying Narnoo Basin sequences. Drilling to date has also adequately tested the tabular nature of the mineralisation at Emperor and Shogun. However, it is possible that steeply-dipping structures may control the distribution of zones of high grade and thickness bodies of uranium mineralisation, and these may require angled drilling for full evaluation.
Sample security	The measures taken to ensure sample security.	Samples were sealed in drums and transported by transport contractor to Kalgoorlie for sample preparation and analyses.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No data is available regarding site audits by third party/consultants.



Section 2 Reporting of Exploration Results

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

Criteria	preceding section also apply to this section.) 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 Emperor and Shogun Deposits are located about 250 km ENE of Kalgoorlie within Mining Lease M39/1081, held by Narnoo Mining Pty Ltd, a wholly owned subsidiary of Energy and Minerals Australia Limited (EMA). Nearby M39/1080 contains the Ambassador and Princess Deposits, for which Inferred Resource Estimates were previously announced by EMA on 11 June 2010 and 4 December 2012 respectively. The Deposits are approximately 700km east of Perth. Tenure under PNC was through six temporary reserves, of which TR7809H and 6870H covered the Emperor and Shogun Deposits respectively. The Mulga Rock Project area is remote, located within dunefields and is located within granted mining tenure on Unallocated Crown Land in the Shire of Menzies, on the western flank of the Great Victoria Desert. Access is limited and is only accessible by four wheel drive vehicles, via the Tropicana Gold Mine Access Road. The nearest residential town is Laverton which is approximately 200km to the north-west. Other regional residential communities include Pinjin Station Homestead, located approximately 100km to the west; Coonana Aboriginal Community, approximately 130km to the south-south-west; Kanandah Station Homestead, approximately 150km to the south-east; and the Tropicana Gold Mine approximately 110km to the north-east. Emperor and Shogun are two of three historic uranium deposits that comprised the Mulga Rock Deposits, within ML39/1081. The mining leases are surrounded by a number of Exploration Licences and Prospecting Licences also owned by Narnoo Mining, and all were granted without objection from any Native Title party.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The area of the Emperor and Shogun Deposit was subject to uranium exploration by PNC Exploration Australia Pty ltd (PNC) during 1978 to 1985, which resulted in the discovery of the Mulga Rock Deposits. Following the discovery of the Ambassador deposit in 1982, the bulk of the exploration effort shifted to the eastern side of the Mulga Rock Project.
		 The Emperor and Shogun deposits area outside of residual mining leases covering the deposits was also subject to gold exploration by Eaglefield Holdings Pty Ltd and associated parties during the late 1990's, but drilling was confined to some shallow interface drilling (vacuum), typically to a depth of 6m at a nominal 400 x 100m spacing.

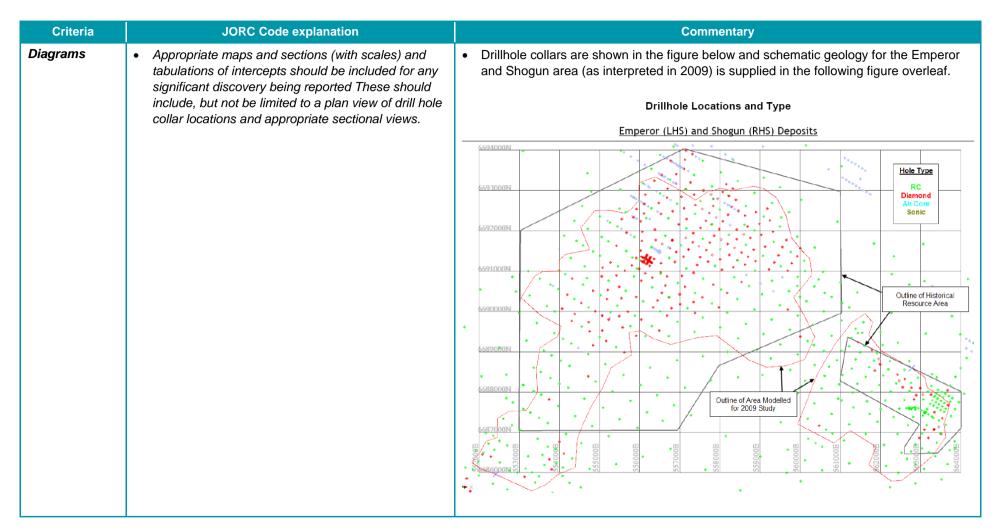


Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	• Emperor and Shogun are sediment-hosted uranium deposits. The mineralisation is hosted by reduced sediments of Eocene age preserved within a complex set of sedimentary troughs overlying an extensive long-lived paleodrainage referred to as the Mulga Rock paleochannel, itself likely to represent a dead arm of the Lake Raeside regional paleodrainage. The mineralised zones were defined based upon a combination of stratigraphy and a 100ppm combU ₃ O ₈ lower cut-off grade. The mineralised zones were modelled to a minimum thickness of 1m. A single mineralised layer was modelled for each of the deposits. The average thickness of the mineralised zones was 1.6m for Emperor and 2.1m for Shogun.
		 There is evidence for deeper primarily sand-hosted mineralisation at Emperor but the quality and quantity of the drill hole data was not sufficient to allow for geological modelling and inclusion in the original mineral resource estimate.
		The reduced sediments that contain the Emperor and Shogun mineralisation are part of a package named the Narnoo Basin Sequence, and this sequence is also the host of the Mulga Rock Deposits. The Narnoo Basin Sequence consist of a multiple fining upwards packages including sandstone, claystone (typically carbonaceous) and lignite which were deposited in alluvial and lacustrine environments.
		Overlying the Narnoo Basin Sequence is a succession of oxidised sediments which at Emperor and Shogun are about 25m to 55m thick. Pre-Eocene basement in the Emperor and Shogun area consists of both Cretaceous and Carboniferous sedimentary successions. The Carboniferous sediments are assigned to the Paterson Formation and understood to be part of the Gunbarrel Basin.



Criteria	JORC Code explanation	Commentary
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. 	The data and resource estimate have been previously reported in accordance to JORC Code 2004, and therefore are not repeated here.
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. 	 For the purpose of this estimate, the minimum intercept used was 0.5m or greater above 100ppm eU₃O₈ (0.01%eU₃O₈), with a maximum 1m waste length (with grades lower than 0.01%eU₃O₈). The value of 100ppm was chosen as it represents a natural break in the assay data. All assays within the mineralised zones were composited to 1m for statistical analyses and estimation. Any missing intervals within the diamond drillholes which had chemical assays were given a grade of 0ppm U₃O₈ prior to compositing.
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'). 	Mineralisation is tabular in habit and horizontal. The vertical drill hole intersections represent true mineralisation thickness.







Criteria	JORC Code explanation	Commentary
Criteria	JORC Code explanation	Schematic Geology and Mineralisation within the Narnoo Sequence Oxidised Sand + Claystone (35-45 m thick) White clay Lignite Carb clay
		Reduced Sand + Claystone Type 4 Linku Type 5 Arkosic Sultstone 5 m 100 m Approx scale
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.	The data and interpretation underpinning the resource estimate are reported on a best endeavours basis and represent the most advanced assessment of the Emperor and Shogun Deposits, based on the data available at the time of reporting.



Criteria	JORC Code explanation	Commentary
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.	 A total of 360 historical bulk density (BD) determinations made using the water immersion method made from the whole diamond core were available for review. The PNC 1984 Annual report describes the method used to determine the dry bulk density as follows: Whole core samples were cut free of fractures and according to lithology then wrapped in Gladwrap to prevent drying and shrinkage. Wet weights and bulk volume were determined at base camp. The bulk volume was determined by displacement using a one litre measuring cylinder, with readings taken to the nearest 5cm³. Wet and dry weights and bulk volumes were then determined by Amdel in Perth. The exact method of volume determination used by Amdel is not mentioned in the 1984 report but is presumed to be the water immersion method. A cursory review of the volumes determined by PNC using the water immersion method and those determined by Amdel indicate similar results. However the PNC volume results from some drillholes (e.g. CD1267) indicate that the PNC field volume determinations can be lower than the laboratory volume by around 3%. The density readings indicate that the mineralised zones can have dry bulk densities ranging from 0.5t/m³ to 1.4t/m³ within the same drill hole. The historical density determinations tend to be clustered within the top portions of mineralisation, and only a few drill holes have a complete density profile through the entire mineralised sequence. Based upon an analysis of all historical density data within mineralised intervals above 100ppm U (251 samples in total), an in situ bulk density of 0.9 t/m³ was used to report the Resource estimate.



Criteria	JORC Code explanation	Commentary
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	 Future drilling programs on the Emperor and Shogun deposits will focus on areas of greatest metal accumulation and relatively thick mineralisation, supporting realistic strip ratios.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this	 Future mineral resource estimates will also rely on a detailed and more comprehensive analysis of secular radiometric disequilibrium at Emperor and Shogun, as well as some detailed 3D geological modelling.
	information is not commercially sensitive.	 Specialised mineralogical test work might also be completed to better characterise the nature of the organic matter and its relationship with uranium, base- and precious- metals mineralisation.
		 Multi-tool wireline logging (likely to include sonic, resistivity, density, neutron and calliper) will be carried out in all diamond drill holes in order to better identify stratigraphic boundaries, and to provide geotechnical and hydrogeological assessment of the mineralised and overlying sediments.
		 Some diamond holes will have slotted PVC casing installed, and initial groundwater pump testing completed. This work will provide initial data on the transmissivity of the host aquifer(s) and confirm preliminary data regarding groundwater chemistry gathered from past drilling programs.
		 Petrophysical characterisation test-work might also be carried out on representative samples of drill core, to enable a better calibration of down hole induction and/or sonic wireline datasets.
		 The Company will also analyse in 3D spatial relationships, trends and patterns present in its various geological datasets in order to better understand the controlling mechanisms of areas of high metal accumulation.
		 Additional sample material generated in the course of the drilling programs discussed above will be used for preliminary metallurgical leach testwork, to confirm that mineralisation at Shogun and Emperor is amenable to the preferred process route identified for the Ambassador and Princess Deposits.



Section 3 Estimation and Reporting of Mineral Resources

Criteria listed in section 1, and where relevant in section 2, also apply to this section.)							
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. 	 The resource estimation was based on the available historical exploration drill hole database, which was compiled by Energy and Minerals Australia in Microsoft Access. The database was reviewed and validation checks completed by Coffey prior to commencing the resource estimation study. The database was validated in Micromine software and checks made to the database prior to resource estimation included: No overlapping intervals Downhole surveys starting at 0m depth and also not exceeding the end of hole depth Consistency of depths between different data tables Check gaps in the data Irregular collar coordinates Changes that were made to the database prior to loading into Surpac software included: Replacing less than detection samples with a value equal to half the detection level Replacing intervals with no sample with -9999 Replacing intervals with assays not yet received with -9999 Updating the collar RLs to ensure a consistent topographic surface The raw (prior to factoring) radiometric eU₃O₈ grades were composited to 25cm intervals to make processing and modelling more efficient. A final table of ranked assays data was used for the resource estimation with priority placed on: Diamond drilling with historical chemical data then Factored radiometric grades It was noted that a number of drill holes (notably at Shogun) were sampling and assaying was known to have been undertaken lacked assay results in the database. Historic PNC Exploration Australia Pty Ltd (PNC) chemical data and radiometric data were used in the 2009 resource estimate. Only paper copies were available for the PNC					



Criteria	JORC Code explanation	Commentary
		Hole size correction, casing attenuation, probe type, K Factors. Coffey performed an analysis of the processed e U ₃ O ₈ data based upon diamond drill holes which had both chemical grades and radiometric logs. The results of this study were used in the resource estimation process.
		3D Exploration noted some quality issues with some of the digitised logs with respect to items such as: overlapping of the line trace, skewed scanned copies of the original logs, inaccurate capturing of the detail of sharp curves. After discussion with 3D Exploration, it is Coffey's opinion that the quality of the digitising and scanning is suitable for use in the current estimation study. The quality of the historical assay data ranges from moderate to good. Many of the diamond drill holes have chemical assays which have been sourced from hard-copy laboratory certificates. It is noted, however, that the assays in the database for some drill holes (e.g. CD795 and CD1101 in the 1986 annual report) differ from those outlined in the historical reports – although the tenor of the assaying is similar.
		 The Shogun data set is missing the results from a campaign of closely spaced RC drilling. These results need to be obtained and included in any future estimation studies.
		 The combination of the lack of any QAQC data for the historical assaying, in particular for standards and blanks, and the incomplete sampling of many drillholes may limit the usefulness of portions of the historical data for the use in higher-level resource classifications.
		 In light of the results of checks made against the original local coordinates and recent re-surveying of the drillhole collars, it is suspected that a small number of drillholes in the database are incorrectly located by up to several 100's of metres. Further investigation is required to check all drillhole collars against original records.
		 Not all of the drillholes in the database have a consistent RL datum. Coffey has constructed a best-fit surface for all of the deposits with priority placed on recent survey data.
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. 	Coffey undertook a site visit to the MRD area in October 2009 while the drilling program was underway. A number of subsequent site visits have been conducted by Coffey personnel since 2009. It should be noted that, in this case, the site visits post-dated the PNC-era drilling work.
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	Geology was not modelled, although was considered in determination of the mineralisation domains.



Criteria	JORC Code explanation	Commentary						
	 Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 For the purpose of the resource estimation, the mineralisation boundaries within the two deposits were based upon a nominal 100ppm U₃O₈ lower cut-off. This value was chosen as it represents a natural break in the assay data. Separate singular mineralised domains were defined for each of the deposits. There is evidence for another mineralised zone below the main zone at Emperor, however the quality and quantity of the drillhole data is not sufficient to model this zone. Mineralisation at Emperor was coded "101" while mineralisation at Shogun was coded "102". 						
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The block model is not rotated. The block model extents are tabulated below: Mulga Rock Uranium Deposits Block Model Construction Parameters						
				Origin (m)	Extent (m)	Parent/Sub Block Size (m)		
		Emperor	Easting	551,000	9,300	100/25		
			Northing	6,685,000	9,300	100/25		
			Elevation	240	110	10/0.3125		
		Shogun	Easting	559,500	4,500	100/25		
			Northing	6,685,500	4,600	100/25		
			Elevation	240	110	10/0.3125		



Criteria	JORC Code explanation	Commentary										
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 nongrade variables of economic significance (eg sulfur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 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 	this style Prior to e After and follows: For e For e All samp composi no grade for Empe Outlier a and a top The OK paramete paramete A three p progress	e of minimal estimation of minimal estimation of the U ₃ O ₈ go U	eralisation, the rawas decorates on the management of the management of the management of the defined arch strawpanded y consider on the management of the defined arch strawpanded of the management of the manag	to 500p to 500ppn ineralisithan 40 th 0ppn w) of the am U ₃ O ₆ competine sourced based tegy wi and les	tric e Uause a copm: facton: facton being UaOs, he 1,610 application at Short ed using the control ocks no	eO ₈ gradondition of a U ₃ O ₆ trames of a ssa on of a gun. g gradon of a gun. g gradon of a gun. g gradon of a gun. g gradon of a gun. trames on of a gun.	des wen factor $3O_8 = e$ $3 = e$ 4 $5O_8 = e$ $6O_8 = e$ $6O_8$	U ₃ O ₈ * 1 composition of 2,4 gram in the omposition of the orange of	* 0.9 .2 sited to ng comp of the 3 Shogu 500ppn nodels ite data se ed for e es to su	or disequence on two grant two grant two grants and a search and a search domuccessive	propriate for uilibrium. prade bins as ples with intervals with ay intervals t Emperor t of ancillary imple search ain, applying e estimation is tabulated Max. No. of Comp. per drillhole 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4



Criteria	JORC Code explanation	Commentary
		 The resource estimate has been compared to the previous historical estimates. The 2009 Emperor estimate contains 62% less contained metal than the previous estimate. A large portion of this discrepancy may be related to the large difference in size of the areas considered for the estimation. The historical grade estimation includes regions which either had no drill holes assay data available at the time of the 2009 estimate or used grades in the database which do not support a resource estimate. Also, the historic estimate did not top cut the data. Only U₃O₈ was estimated. No assumptions were made concerning recovery of by-products. No deleterious elements were identified or estimated. The block size of 100m x 100m x 10m is considered appropriate given the drillhole spacing, which ranges from 400m x 400m to lines of 20m spaced drill holes, but is predominantly 200m x 200m spacing. No assumptions have been made regarding SMU. Block model validation included:
		 Visual and statistical review Comparison of the OK estimate versus the mean of the composite dataset, including weighting where appropriate to account for data clustering
		 Visual checks of cross sections, long sections, and plans. An alternative estimate was also completed for Emperor via Inverse Distance weighting to test the sensitivity of the reported model to the selected OK interpolation parameters. An insignificant amount of variation in overall grade was noted.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 Tonnages are based on a dry density value of 0.9t/m³. This dry density value is based upon the average dry density of 251 density readings from the Mulga Rock uranium deposits taken in material above 100ppm U₃O₈.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	• The nominal 100ppm U ₃ O ₈ lower cut-off used to define the mineralisation was chosen as it represents a natural break in the assay data. Coffey recommends that due to the likely economics of this style of low-density mineralisation, the Resource should not be reported below 200ppm U ₃ O ₈ .



Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	The assumption is that mining will be by moderate scale open pit mining.
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.	No assumptions have been made regarding metallurgical recovery (2009).
Environmental 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 assumptions have been made regarding environmental factors.



Criteria	JORC Code explanation	Commentary
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. 	 Tonnages are based on a dry density value of 0.9t/m³. This dry density value is based upon the average dry density of 251 density readings from the Mulga Rock uranium deposits taken in material above 100ppm U₃O₆. More density test work (which must include complete sampling of the mineralised profiles) is required to adequately define the density characteristics of the three deposits. It is possible that future density test work will result in different density values for the Emperor and Shogun mineralisation.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	The grade estimates for all domains have been classified as Inferred in accordance with JORC Code 2012 (originally 2004) guidelines based on the confidence levels of the key criteria that were considered during the resource estimation. The Inferred category was applied to areas of the models which had appropriate drill spacing (at least a nominal 400m by 400m), exhibited appropriate grade continuity, and exhibited good correlation between the model and the input grades.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No audits or independent technical reviews have been conducted on the Emperor and Shogun resource estimates that have involved Coffey personnel.



Criteria	JORC Code explanation	Commentary
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. 	 Due to the nature of the uranium mineralisation, the degree of radiochemical disequilibrium is likely to vary considerably laterally between drillholes, and with depth down each drillhole through the different stratigraphic units. The disequilibrium factoring applied for the 2009 resource estimate has resulted in satisfactory global result, but significant local variations are expected. A grade of Oppm U₃O₈ was used for dilution for diamond drillholes which have regions of no assaying. Sensitivity analyses conducted by Coffey indicate that at most this could have a negative impact on the grades of the diamond data by 5% to 7% (assuming all non-sampled intervals are mineralised to the same tenor as the surrounding data). This is almost certainly not the case; if an assumption is made that the non-sampled intervals are of moderate tenor, and were not sampled due to core loss, it is possible that the diamond grades have been affected in the order of 2% to 4%. Coffey considers the use of the current dilution scheme appropriate until further validation can be made of the database including verification drilling and assaying and clarification as to why the missing intervals are present (e.g. data entry errors, core loss in mineralisation, not sampled as barren).



List of holes used in 2014 Princess Resource Estimation

Hole ID	Northing	Easting	RL	Depth	Туре
CD1526	6684341.04	578985.54	339.96	51.00	DDH
NNA5512	6684614.55	579357.00	344.88	57.38	AC
NNA5513	6684561.65	579434.44	348.66	66.00	AC
NNA5514	6684521.66	579498.52	349.77	75.00	AC
NNA5515	6684476.33	579568.95	349.90	81.00	AC
NNA5516	6684431.77	579639.62	350.02	69.00	AC
NNA5517	6684220.57	579132.49	344.00	60.00	AC
NNA5546	6684113.07	578897.66	340.07	63.00	AC
NNA5547	6684026.30	579045.64	340.24	60.00	AC
NNA5549	6684148.47	578792.93	339.79	57.00	AC
NNA5550	6684220.31	578679.12	340.36	57.00	AC
NNA5551	6684252.93	578601.58	339.68	57.00	AC
NNA5552	6684182.08	578731.63	340.35	57.00	AC
NNA5553	6684130.68	578833.48	339.60	57.00	AC
NNA5554	6684070.35	578979.00	340.46	57.00	AC
NNA5555	6683986.28	579115.27	339.40	66.00	AC
NNA5556	6684129.46	578483.17	339.99	51.00	AC
NNA5557	6684008.00	578702.00	340.04	51.00	AC
NNA5558	6683966.80	578773.12	339.87	54.00	AC
NNA5559	6683926.33	578838.85	340.21	57.00	AC
NNA5560	6683880.13	578905.89	340.30	60.00	AC
NNA5561	6683851.39	578951.36	340.02	60.00	AC
NNA5562	6683808.28	579024.99	339.22	57.00	AC
NNA5563	6683761.26	579092.93	341.47	66.00	AC
NNA5564	6683933.04	578424.19	341.94	60.00	AC
NNA5565	6684024.85	578287.18	343.39	54.00	AC
NNA5566	6683861.54	578558.52	341.66	54.00	AC
NNA5567	6684168.47	579209.72	345.28	73.00	AC
NNA5568	6684138.16	579285.42	343.04	66.00	AC
NNA5569	6684098.11	579349.45	340.39	66.00	AC
NNA5570	6684062.37	579420.56	343.61	63.00	AC
NNA5571	6684030.47	579486.94	347.40	66.00	AC
NNA5572	6684270.01	579069.82	342.57	60.00	AC
NNA5573	6684366.25	578944.54	338.86	36.00	AC
NNA5574	6684304.86	579416.56	342.45	77.00	AC
NNA5575	6684397.97	579273.28	340.53	54.00	AC
NNA5576	6684431.19	579212.14	341.02	51.00	AC
NNA5577	6684344.28	579366.48	341.06	66.00	AC
NNA5578	6684603.07	579727.73	339.20	66.00	AC
NNA5579	6684672.93	579596.72	340.25	57.00	AC



Hole ID	Northing	Easting	RL	Depth	Туре
NNA5580	6684554.31	579808.57	338.80	63.00	AC
NNA5581	6684634.03	579669.81	339.85	60.00	AC
NNA5582	6684689.20	579962.82	341.98	63.00	AC
NNA5583	6684747.21	579864.01	340.36	54.00	AC
NNA5584	6684657.03	580029.61	341.95	63.00	AC
NNA5585	6684698.24	580293.75	336.74	54.00	AC
NNA5586	6684737.41	580237.27	336.29	51.00	AC
NNA5587	6684653.63	580378.67	337.97	51.00	AC
NNA5588	6684845.69	580572.06	341.21	39.00	AC
NNA5589	6684613.90	580087.68	341.56	66.00	AC
NNA5590	6684613.38	580633.03	343.73	60.00	AC
NNA5591	6684520.43	579874.35	338.95	57.00	AC
NNA5592	6684476.72	579930.44	339.54	54.00	AC
NNA5593	6684201.10	579556.76	347.66	66.00	AC
NNA5594	6684313.82	579017.30	341.01	57.00	AC
NNA5595	6684478.30	578785.51	335.79	36.00	AC
NNA5596	6684568.12	578596.25	333.66	48.00	AC
NNA5597	6684298.88	578538.17	339.75	48.00	AC
NNA5598	6684042.05	578632.98	340.22	55.00	AC
NNA5599	6684084.08	578560.28	340.38	60.00	AC
NNA5600	6683903.03	578497.00	342.48	57.00	AC
NNA5601	6683806.74	578637.03	345.21	54.00	AC
NNA5602	6683755.82	578723.59	342.28	54.00	AC
NNA5603	6683718.67	578770.33	342.50	54.00	AC
NNA5604	6683691.03	578845.50	342.30	57.00	AC
NNA5605	6683653.05	578913.23	340.26	66.00	AC
NNA5606	6683585.45	578980.33	338.00	66.00	AC
NNA5607	6683540.00	579081.28	337.80	60.00	AC
NNA5608	6684204.52	578552.15	339.67	51.00	AC
NNA5609	6684165.81	578619.31	340.79	57.00	AC
NNA5610	6684127.47	578691.61	342.24	57.00	AC
NNA5611	6684088.92	578764.08	342.43	54.00	AC
NNA5612	6684044.69	578834.44	342.80	54.00	AC
NNA5613	6684001.28	578902.04	341.48	54.00	AC
NNA5614	6683963.46	578963.67	339.83	57.00	AC
NNA5615	6683913.32	579024.01	337.74	57.00	AC
NNA5616	6683885.53	579105.38	335.55	54.00	AC
NNA5617	6683835.93	579176.77	333.52	57.00	AC
NNA5618	6684106.83	579109.44	346.24	60.00	AC
NNA5619	6684146.18	579046.55	347.00	60.00	AC
NNA5620	6684199.54	578978.80	348.92	60.00	AC



Hole ID	Northing	Easting	RL	Depth	Туре
NNA5621	6684233.68	578907.97	347.27	57.00	AC
NNA5622	6684276.88	578834.33	343.86	57.00	AC
NNA5623	6684324.03	578773.75	340.36	54.00	AC
NNA5624	6684072.96	579185.12	344.74	60.00	AC
NNA5625	6684020.49	579251.49	340.24	66.00	AC
NNA5626	6683995.20	579317.18	337.47	60.00	AC
NNA5627	6683961.36	579383.47	335.42	54.00	AC
NNA5628	6683938.17	579432.12	336.05	54.00	AC
NNA5629	6684373.73	578705.13	337.58	42.00	AC
NNA5630	6684165.71	579450.70	342.58	66.00	AC
NNA5631	6684196.39	579368.86	340.60	66.00	AC
NNA5632	6684251.37	579278.22	339.62	57.00	AC
NNA5633	6684276.56	579209.10	341.11	57.00	AC
NNA5634	6684302.38	579135.27	342.14	57.00	AC
NNA5636	6684253.49	579486.80	345.52	72.00	AC
NNA5637	6684163.07	579636.67	348.79	66.00	AC
NNA5638	6684121.37	579694.15	345.93	54.00	AC
NNA5640	6683762.31	578912.20	344.84	63.00	AC
NNA5641	6683722.83	579005.14	343.02	63.00	AC
NNA5642	6683670.86	579062.39	339.18	66.00	AC
NNA5643	6683833.40	578832.52	344.31	57.00	AC
NNA5644	6683871.84	578769.91	343.13	57.00	AC
NNA5645	6683521.64	578912.36	339.19	63.00	AC
NNA5646	6683486.41	578983.45	340.25	69.00	AC
NNA5647	6683579.36	578837.68	337.39	57.00	AC
NNA5648	6683622.12	578772.28	339.83	57.00	AC
NNA5649	6683654.42	578707.73	341.31	54.00	AC
NNA5650	6683428.14	578760.31	335.58	45.00	AC
NNA5651	6683282.63	579126.64	346.39	69.00	AC
NNA5652	6683318.36	579079.67	344.05	63.00	AC
NNA5653	6683419.58	578838.46	336.31	54.00	AC
NNA5654	6683456.85	578693.23	339.86	45.00	AC
NNA5655	6683384.65	578913.96	338.29	57.00	AC
NNA5656	6683363.20	578994.37	340.74	63.00	AC
NNA5657	6684295.90	579637.00	350.61	66.00	AC
NNA5658	6684270.19	579707.24	350.85	63.00	AC
NNA5659	6684205.48	579803.67	341.50	42.00	AC
NNA5660	6684334.53	579564.03	349.14	75.00	AC
NNA5661	6684365.15	579490.80	346.62	78.00	AC
NNA5735	6683126.10	579007.95	347.98	72.00	AC
NNA5736	6683217.70	578866.23	342.31	54.00	AC



Hole ID	Northing	Easting	RL	Depth	Туре
NNA5739	6684601.50	579565.92	341.03	63.00	AC
NNA5740	6684559.58	579643.00	340.26	66.00	AC
NNA5741	6684643.25	579471.21	340.92	54.00	AC
NNA5742	6684524.28	579710.32	339.35	57.00	AC
NNA5743	6684501.47	579313.82	341.55	51.00	AC
NNA5744	6684467.61	579374.50	342.31	54.00	AC
NNA5745	6684417.11	579443.62	344.43	69.00	AC
NNA5746	6683890.09	579251.94	333.38	57.00	AC
NNA5747	6683846.82	579321.36	332.90	51.00	AC
NNA5748	6683733.00	579160.00	341.81	76.00	AC
NNA5749	6683679.32	579237.85	334.35	54.00	AC
NNA5750	6683638.27	579314.19	337.52	39.00	AC
NNA5751	6684209.98	580765.85	338.02	81.00	AC
NNA5752	6684056.32	578418.82	342.19	57.00	AC
NNA5753	6684006.50	578489.79	341.47	60.00	AC
NNA5754	6683967.86	578555.01	341.64	54.00	AC
NNA5755	6683928.95	578624.91	342.50	54.00	AC
NNA5756	6683030.88	578780.33	346.15	51.00	AC
NNA5757	6682991.00	578852.00	346.37	93.00	AC
NNA5758	6683166.80	578935.86	345.09	39.00	AC
NNA5759	6683577.37	579204.70	336.85	40.00	AC
NNA5760	6683763.14	579310.94	333.85	57.00	AC
NNA5761	6683694.86	579382.13	337.18	39.00	AC
NNA5762	6683797.47	579245.02	332.87	60.00	AC
NNA5763	6683887.21	579498.96	336.03	42.00	AC
NNA5764	6684080.51	579784.29	342.59	42.00	AC
NNA5784	6683745.31	578953.62	344.40	39.00	AC
NNA5787	6684051.17	578884.41	341.23	36.00	AC
NND5783	6683637.04	578929.82	339.32	49.00	DDH
NND5784B	6683744.33	578950.42	344.54	52.00	DDH
NND5785	6683950.22	578902.60	339.62	50.00	DDH
NND5786	6683913.44	578960.42	339.02	51.00	DDH
NND5788	6684018.98	578946.18	340.94	54.50	DDH
NND5789	6684146.51	578819.46	339.85	49.00	DDH
NND5790	6684167.18	578889.15	343.20	51.00	DDH
NND5791	6684089.95	578935.99	340.30	53.00	DDH
NND5792	6684220.13	579444.71	342.76	49.00	DDH
NND5793	6684571.29	579527.13	343.64	51.00	DDH
NND5795	6684051.17	578884.41	341.23	50.00	DDH
RC1039	6684390.00	578845.00	337.76	44.50	RC
RC1320	6684185.85	579174.10	344.94	59.00	RC



Hole ID	Northing	Easting	RL	Depth	Туре
RC1321	6684079.00	579581.00	343.50	64.00	RC
RC1468	6684123.00	579386.00	342.77	71.14	RC
RC1471	6684298.00	579849.00	340.46	53.00	RC
RC1472	6683790.33	579056.00	339.51	65.00	RC
RC1473	6684002.63	578693.98	339.87	65.00	RC
RC1474	6684529.01	579489.00	350.43	73.00	RC
RC1475	6684096.83	580164.91	337.38	41.00	RC
RC1478	6684796.00	579782.18	339.50	53.00	RC
RC1479	6683348.01	578977.00	340.47	71.01	RC
RC1527	6684577.01	580146.00	340.17	59.00	RC
RC1530	6684181.76	578383.97	340.50	51.00	RC
RC1531	6683566.00	579437.00	346.13	47.00	RC
RC1532	6683691.90	578361.88	336.49	47.00	RC
RC1533	6683505.00	578643.00	340.97	41.00	RC

List of holes used in the 2009 Emperor and Shogun Resource Estimates Emperor

Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
AC1100	6691252	556086	327.6	45	38.75	42.75	AC
AC1102	6691285	556107	326.6	45	40	42	AC
AC1245	6692133	558251	322.0	41	32.75	34.5	AC
AC1246	6691254	556088	327.6	47	40.25	45	AC
CD0205	6692005	558859	318.9	67.7	29.55	30.55	DDH
CD0206	6692528	557994	327.7	50	38.3	39.3	DDH
CD0213	6691352	557503	319.5	53	31.4	33.5	DDH
CD0220	6690352	556733	317.6	60.2	29.6	31	DDH
CD0481	6692157	557796	322.5	45	34.9	36.3	DDH
CD0491	6692864	558228	324.3	45	36.55	39.5	DDH
CD0500	6691283	558433	317.7	54.4	29.98	30.98	DDH
CD0525	6691239	556078	328.2	51.4	41.9	44.03	DDH
CD0526	6690979	556514	323.0	44	34.5	35.5	DDH
CD0576	6686450	552074	330.8	48.3	41.2	43.1	DDH
CD0591	6694000	557146	339.0	59.2	48.87	50.4	DDH
CD0712	6691177	556157	325.2	45.2	36.8	37.8	DDH
CD0714	6692043	557989	321.4	57.4	34.69	36.41	DDH
CD0715	6691785	558422	319.1	54.4	30.54	31.8	DDH
CD0716	6691531	558846	318.0	72	29.91	30.95	DDH
CD0717	6691227	559354	318.0	65.8	29.52	31.15	DDH
CD0718	6692672	556106	337.0	58.2	47.65	48.65	DDH
CD0719	6691942	557329	325.8	50	39.07	40.07	DDH
CD0720	6691697	557740	318.7	48	31.45	33.1	DDH
CD0721	6691404	558231	316.0	56	28.9	29.96	DDH



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
CD0722	6691532	557208	322.4	54.6	34.17	35.85	DDH
CD0723	6691245	557699	316.7	45	29.15	30.9	DDH
CD0724	6690050	559688	309.6	51.4	19.8	21.25	DDH
CD0725	6691743	556048	330.5	54.2	43.9	45.6	DDH
CD0726	6691473	556484	324.5	45.5	37.5	39.9	DDH
CD0727	6691237	556879	321.9	42.4	34.7	36.6	DDH
CD0728	6690965	557338	317.4	41	28.5	30.5	DDH
CD0729	6690667	557835	315.0	41	27.82	29.1	DDH
CD0730	6689374	560001	308.5	36.4	18.6	19.6	DDH
CD0731	6691630	555423	329.7	51.4	41.1	42.1	DDH
CD0732	6691336	555914	329.8	51.4	41.89	42.89	DDH
CD0733	6691137	556247	324.1	50	35.06	36.28	DDH
CD0734	6690878	556681	322.0	42.4	33.74	34.74	DDH
CD0735	6690615	557121	317.5	38	28.83	29.83	DDH
CD0736	6690350	557565	317.6	36.4	28.8	29.8	DDH
CD0737	6691015	555622	324.6	48.4	34.71	35.71	DDH
CD0738	6690186	557010	315.0	36.2	28.66	29.66	DDH
CD0739	6690618	555482	324.0	50	32.61	33.61	DDH
CD0740	6690308	555185	322.3	45.2	33.2	34.2	DDH
CD0741	6690218	554545	324.6	62	33.5	34.58	DDH
CD0742	6690069	554061	321.0	66	31.23	32.23	DDH
CD0743	6689506	554750	314.1	36.4	27.69	28.69	DDH
CD0744	6689264	555157	311.9	33.4	21.99	22.99	DDH
CD0745	6688387	554719	307.0	34.5	18.1	19.12	DDH
CD0746	6687818	553739	319.0	72	32.27	33.36	DDH
CD0747	6686463	554108	317.4	62.5	29.97	31.22	DDH
CD0748	6686074	553802	321.0	41	30.75	31.75	DDH
CD0749	6686386	552277	331.3	52.7	42.15	44.42	DDH
CD0750	6685886	553132	324.6	40.4	35.04	36.04	DDH
CD0751	6685848	551689	334.8	62.3	42.9	44.42	DDH
CD0753	6693905	557310	338.0	56.5	48.7	49.7	DDH
CD0756	6692104	558688	320.5	47	31.12	32.12	DDH
CD0757	6692400	558202	324.8	50	36.12	38.93	DDH
CD0758	6692618	557830	324.0	48.2	34.57	36.4	DDH
CD0760	6692249	557643	322.9	45.2	35.1	36.73	DDH
CD0761	6691169	558625	313.8	55.2	24.31	25.41	DDH
CD0762	6692156	556969	327.3	52.5	41.25	42.25	DDH
CD0763	6692422	556527	329.7	75.2	43.4	44.91	DDH
CD0764	6691036	558049	311.7	46.2	23.44	24.44	DDH
CD0765	6691765	556811	326.1	46.2	39.47	41.6	DDH
CD0766	6691955	555674	331.0	51.2	43.24	44.84	DDH
CD0767	6691405	556180	325.7	48	36.95	38.95	DDH
CD0768	6691059	555980	326.0	42.2	36.52	37.7	DDH



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
CD0769	6689969	557379	315.3	35	26.25	27.25	DDH
CD0770	6690459	556554	319.0	38	30.38	31.38	DDH
CD0771	6691227	555269	325.9	45	36.94	37.94	DDH
CD0772	6689889	555483	316.4	38	27.25	28.32	DDH
CD0773	6689772	554305	311.8	36.2	20.5	21.5	DDH
CD0774	6692765	558395	324.0	54.2	43.5	44.75	DDH
CD0775	6691901	559028	319.0	39.2	29.63	30.63	DDH
CD0789	6693767	557122	336.3	50	45.81	46.81	DDH
CD0792	6692961	558071	325.8	47	37.78	38.78	DDH
CD0793	6692466	558902	323.0	50.2	32.59	33.59	DDH
CD0794	6692258	559242	321.9	62	32.08	33.6	DDH
CD0795	6692592	558283	323.1	42.3	34.5	39.7	DDH
CD0796	6692798	557935	324.8	45	35.7	40.1	DDH
CD0798	6693405	556911	335.2	54	49.79	52.17	DDH
CD0799	6693381	556542	336.5	59.1	47.64	50.42	DDH
CD0801	6691591	559559	319.0	35	28.98	30.3	DDH
CD0802	6691372	559927	318.6	39.3	28.2	29.2	DDH
CD0803	6691401	559458	319.1	38	30.2	31.55	DDH
CD0804	6691601	559124	319.4	38	28.78	29.78	DDH
CD0805	6691826	558754	318.0	36.3	29	30.35	DDH
CD0806	6692031	558421	321.2	38	32.02	33.3	DDH
CD0807	6692236	558067	322.5	54.4	33.75	35.13	DDH
CD0808	6692438	557739	323.3	43.3	36.55	37.7	DDH
CD0809	6692842	557040	328.7	48	39.65	40.65	DDH
CD0810	6693050	556691	335.1	57.1	51	52	DDH
CD0811	6692823	556683	329.8	51.3	40.75	41.75	DDH
CD0812	6692563	557101	326.0	44	37.83	39.07	DDH
CD0813	6691023	559694	319.7	35	28.9	29.9	DDH
CD0814	6691050	559227	317.3	35.1	27.92	29.72	DDH
CD0815	6691253	558887	318.6	36.3	28.25	29.25	DDH
CD0816	6691465	558540	319.0	55	30.2	31.25	DDH
CD0817	6691107	558326	317.8	36.5	29.35	30.35	DDH
CD0818	6691296	558004	315.6	36.2	27.25	28.25	DDH
CD0819	6691514	557656	320.3	37.2	32.4	34.5	DDH
CD0820	6691715	557320	322.9	39.2	35.3	37.1	DDH
CD0821	6692337	555849	336.9	57	47	52.25	DDH
CD0822	6692025	556378	331.8	60.4	46.3	47.3	DDH
CD0823	6690738	558537	308.9	27.2	18	19	DDH
CD0824	6691159	557426	318.0	36	29.2	31.05	DDH
CD0825	6691362	557095	321.7	41	34.2	36.8	DDH
CD0826	6691572	556744	324.2	44	39.3	42.15	DDH
CD0827	6691772	556393	328.2	48.35	42.35	43.35	DDH
CD0828	6691972	556056	332.8	51.2	47.84	49	DDH



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
CD0829	6690465	558176	314.6	32	25	25.9	DDH
CD0830	6690885	557047	318.1	36.1	30.5	31.65	DDH
CD0831	6691203	556529	324.0	42.05	36.3	37.3	DDH
CD0832	6691307	556357	324.8	42.3	36.08	37.08	DDH
CD0833	6691506	556022	326.7	47	40.1	42	DDH
CD0834	6690107	557976	312.6	32	22	23	DDH
CD0835	6690232	557342	316.5	36.2	29.03	30.03	DDH
CD0836	6690436	556996	317.7	38	29.7	31.1	DDH
CD0837	6690650	556637	322.0	41	34.05	35.38	DDH
CD0838	6690843	556316	325.2	46.2	36.85	37.85	DDH
CD0839	6690950	556142	327.0	45.2	41	42.5	DDH
CD0840	6691145	555801	328.3	45.4	38.53	39.9	DDH
CD0841	6690769	556037	323.6	41	34.2	35.2	DDH
CD0842	6690874	555052	328.0	45.3	40.02	41.02	DDH
CD0843	6690365	555905	324.0	40.2	37.52	38.52	DDH
CD0844	6690110	556334	320.4	40.4	32	32.81	DDH
CD0845	6689903	556682	318.0	37	30.24	31.24	DDH
CD0846	6690827	554313	330.0	47	43.28	44.3	DDH
CD0847	6690514	554839	323.9	42.3	38.75	39.7	DDH
CD0849	6689797	556043	323.0	42.2	36.26	36.94	DDH
CD0850	6689528	556484	317.9	38	29.35	30.35	DDH
CD0851	6690417	554198	325.4	42.4	36.18	37.36	DDH
CD0852	6689904	555057	321.4	39.3	33.6	35.2	DDH
CD0853	6689601	555568	321.8	42.1	36.5	37.5	DDH
CD0855	6688989	555617	319.4	36.2	30.75	31.75	DDH
CD0856	6689162	554839	314.7	36.2	26.5	27.5	DDH
CD0857	6686756	554001	315.5	37	26.2	27.46	DDH
CD0858	6686328	553744	325.0	42.2	35.15	36.2	DDH
CD1053	6692544	559182	323.0	34.3	30.8	31.8	DDH
CD1055	6691767	559659	319.7	52.1	29	30	DDH
CD1056	6691977	559322	320.5	36.2	29.3	30.3	DDH
CD1057	6692173	558978	321.0	37	30.85	32.05	DDH
CD1058	6692379	558626	322.9	42.2	33.6	35.1	DDH
CD1060	6693249	556365	335.0	54	47.2	49.35	DDH
CD1061	6692641	557385	324.0	40	33.5	34.5	DDH
CD1062	6691201	559791	318.6	39	29.35	30.35	DDH
CD1063	6691667	558194	317.5	36	28.73	30.6	DDH
CD1064	6691879	557857	320.3	51.2	32.8	33.5	DDH
CD1066	6692290	557169	324.5	46.4	39.2	40.4	DDH
CD1067	6692487	556820	326.3	51.2	38.4	39.4	DDH
CD1068	6692692	556477	332.5	49.1	41.96	42.96	DDH
CD1069	6692894	556136	335.0	57	51.08	52.08	DDH
CD1070	6692538	555924	337.2	57.3	49.9	50.9	DDH



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
CD1071	6692427	556108	339.4	54.1	49.6	50.6	DDH
CD1072	6692239	556021	342.0	63	55.3	57.5	DDH
CD1073	6692283	555548	333.7	51.2	42.6	43.6	DDH
CD1074	6691099	555078	325.5	45	38.35	39.35	DDH
CD1075	6690903	555426	323.0	39	33.1	34.3	DDH
CD1076	6690284	556444	319.8	38	32.45	33.75	DDH
CD1077	6690079	556786	318.2	35.7	29.5	30.5	DDH
CD1078	6690336	555545	321.5	42	35.7	36.72	DDH
CD1079	6690539	555205	325.0	39.2	34.6	35.6	DDH
CD1080	6690007	554885	319.4	35.3	30.15	31.15	DDH
CD1081	6689802	555229	316.7	30.3	24.7	25.7	DDH
CD1082	6689941	554378	323.3	43	36.92	37.92	DDH
CD1083	6689735	554724	319.0	36.3	30.25	31.25	DDH
CD1084	6689534	555060	312.5	29	23.8	24.8	DDH
CD1085	6691369	556043	326.4	44.2	39.9	40.9	DDH
CD1086	6691358	556065	326.4	44.4	40.1	41.6	DDH
CD1087	6691347	556083	326.4	44.1	40.3	41.8	DDH
CD1088	6691337	556100	326.2	43.1	39.1	40.25	DDH
CD1089	6691330	556119	326.0	45.4	39.55	40.55	DDH
CD1090	6691309	556146	326.0	42.3	38.8	40.3	DDH
CD1091	6691299	556169	326.0	42	38.24	39.27	DDH
CD1092	6691288	556187	326.0	42.3	37.5	38.5	DDH
CD1093	6691275	556201	326.0	45.2	40.88	41.885	DDH
CD1094	6691268	556220	326.0	43.2	39.05	40.05	DDH
CD1095	6691254	556236	326.0	43	37.54	39.1	DDH
CD1096	6691247	556255	325.9	43	38.7	40.05	DDH
CD1097	6691237	556272	325.7	44	39.85	40.85	DDH
CD1098	6691227	556289	325.2	43	38.7	39.7	DDH
CD1099	6691218	556306	325.0	42.2	37.86	38.95	DDH
CD1100	6691250	556092	327.6	48.1	41.9	44.5	DDH
CD1101	6691264	556102	327.1	51.2	41.2	43.75	DDH
CD1102	6691284	556113	326.6	45	40.05	41.8	DDH
CD1103	6691300	556123	326.2	43	37.7	39.35	DDH
CD1104	6691335	556143	325.9	44	37.9	39	DDH
CD1105	6691353	556153	325.8	45.2	39.9	41.5	DDH
CD1106	6691372	556158	325.8	43	38.4	39.4	DDH
CD1107	6691388	556174	325.7	42	37.5	38.5	DDH
CD1108	6691195	556182	325.2	44	37.54	39	DDH
CD1109	6691214	556190	326.0	44.3	39.06	40.4	DDH
CD1110	6691230	556201	326.0	44	39.21	41.1	DDH
CD1111	6691248	556210	326.0	44	39.1	40.9	DDH
CD1112	6691283	556230	325.8	42.1	38.65	40.4	DDH
CD1113	6691300	556240	325.6	42.4	38.3	40.2	DDH



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
CD1114	6691317	556250	325.4	42	38.85	40.1	DDH
CD1115	6691335	556260	325.3	41.1	37.65	39.05	DDH
CD1116	6691351	556271	325.2	41	37.38	39.2	DDH
CD1117	6692792	557827	323.8	43	33.85	39.94	DDH
CD1119	6691362	558706	317.3	50	27.8	28.96	DDH
CD1120	6691217	556111	327.0	44	39.2	40.2	DDH
CD1121	6691230	556096	327.8	46	39.8	40.8	DDH
CD1122	6691248	556061	328.6	46.2	41.9	42.9	DDH
CD1123	6691257	556043	329.0	45	40.79	41.79	DDH
CD1239	6691673	556563	325.5	42.5	38.3	40.46	DDH
CD1240	6691825	557143	323.0	39.1	35.4	36.4	DDH
CD1241	6692333	557903	323.0	39	35.03	36.03	DDH
CD1242	6691910	558597	319.7	36	32.37	33.37	DDH
CD1243	6692493	558450	323.0	42	35.15	38.3	DDH
CD1244	6692539	557556	323.0	39.3	35.04	36.47	DDH
CD1245	6692132	558254	322.0	41	33.16	34.16	DDH
CD1380	6692899	557776	325.3	45.5	41.14	42.14	DDH
CD1381	6691777	558028	319.7	36.3	32.13	34.18	DDH
CD1382	6691566	558363	317.1	36	28.95	30.48	DDH
CD1383	6691613	557477	322.5	40.2	35.06	36.37	DDH
CD1384	6691412	557815	317.0	35	28.8	29.88	DDH
RC0204	6691472	559763	318.4	77	27	33	RC
RC0211	6689903	559937	316.2	65	26	28.25	RC
RC0212	6690432	559045	318.9	77.5	29	30	RC
RC0214	6691872	556635	327.6	83	41	42.75	RC
RC0217	6688840	559269	311.8	71	21.5	22.5	RC
RC0218	6689333	558454	309.9	71	20.5	21.75	RC
RC0219	6689856	557568	314.0	71	24.25	25.25	RC
RC0220	6690354	556729	317.7	77	30.75	32	RC
RC0221	6690880	555856	325.5	83	33.25	34.75	RC
RC0222	6691383	555005	327.2	85	40	41.5	RC
RC0452	6691264	560100	319.0	71	25.75	26.75	RC
RC0453	6691719	559336	319.3	77	28.25	29.25	RC
RC0454	6692610	557837	324.0	83	33.25	35.25	RC
RC0455	6692149	558610	321.1	63	36.5	38.75	RC
RC0456	6693261	556756	334.3	59	47.25	50.75	RC
RC0457	6691133	557877	314.8	71	25	28.5	RC
RC0458	6691639	557027	323.9	83	36.5	39	RC
RC0459	6692307	556154	340.1	80	54	56	RC
RC0460	6690086	557188	315.7	71	26.75	30	RC
RC0461	6690608	556308	322.1	77	34.25	36	RC
RC0462	6689636	555769	318.0	72	32.25	33.5	RC
RC0463	6690100	554728	322.2	77	33.25	34.75	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
RC0464	6690556	553964	329.0	73	40.5	41.5	RC
RC0465	6690838	554681	326.8	81	40	41	RC
RC0466	6690006	553877	322.7	77	35	36	RC
RC0476	6690868	559943	320.7	80	30	31	RC
RC0477	6691128	559515	317.4	62	27	29.75	RC
RC0478	6691387	559073	319.0	56	28.5	29.5	RC
RC0479	6691645	558647	319.0	62	30	31.25	RC
RC0482	6692423	557375	323.5	80	35	37.25	RC
RC0483	6692666	556930	327.1	56	36.75	38	RC
RC0484	6692925	556509	331.6	56	44	45.25	RC
RC0485	6693174	556088	336.0	62	53	54	RC
RC0488	6692106	559498	320.3	77	37.25	38.25	RC
RC0489	6692355	559094	321.9	78	31	32	RC
RC0490	6692616	558650	323.8	77	38.25	39.25	RC
RC0491	6692874	558217	324.4	77	35.25	39	RC
RC0494	6693639	556935	336.0	59	48.75	51.25	RC
RC0497	6690511	559727	318.9	71	27.75	29	RC
RC0498	6690771	559297	317.5	53	26.5	27.5	RC
RC0499	6691023	558875	316.9	77	26.5	27.5	RC
RC0500	6691282	558451	317.9	77	29	33.5	RC
RC0513	6689271	560185	308.0	53	17.25	19.25	RC
RC0514	6690053	558868	308.6	68	17.75	18.75	RC
RC0515	6690310	558432	315.7	58	25.75	26.75	RC
RC0516	6690555	558024	313.5	74	24	25.25	RC
RC0517	6690827	557581	314.8	68	25	28.25	RC
RC0518	6691074	557160	319.6	74	31	33.75	RC
RC0519	6691329	556739	323.2	80	37	38	RC
RC0520	6691590	556293	328.1	86	40.5	42.5	RC
RC0521	6691842	555866	330.7	86	42	44.5	RC
RC0522	6692099	555439	331.7	68	42.75	44.75	RC
RC0523	6691734	555217	331.4	62	45	46.75	RC
RC0524	6691491	555655	329.9	86	43.5	46.25	RC
RC0525	6691233	556077	328.5	60	39.75	43.75	RC
RC0526	6690944	556522	323.5	80	35	38	RC
RC0527	6690718	556947	318.5	78	30.25	32.5	RC
RC0528	6690461	557378	317.7	74	29	30.75	RC
RC0529	6690206	557796	315.8	71	26.25	27.5	RC
RC0530	6689979	558176	308.9	65	20.25	21.25	RC
RC0531	6688930	559934	308.3	71	17	18	RC
RC0534	6689055	558919	308.8	65	19.5	20.75	RC
RC0536	6691125	555455	324.9	81	35.25	37.5	RC
RC0538	6690769	555228	324.4	80	34.75	36	RC
RC0539	6690518	555649	322.0	74	34.25	36.75	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
RC0540	6690260	556080	322.8	74	34.5	36	RC
RC0541	6690005	556510	317.0	74	28.75	29.75	RC
RC0543	6689494	557366	319.5	74	31	32.75	RC
RC0545	6688426	559055	318.7	74	28.25	30.75	RC
RC0550	6689391	556727	320.6	74	30	31	RC
RC0551	6690405	555022	323.0	74	32.5	34.25	RC
RC0552	6690928	554143	331.6	92	42.75	44.5	RC
RC0553	6689626	554550	310.8	65	24	26	RC
RC0554	6689362	554992	311.5	65	23.5	24.75	RC
RC0555	6689113	555410	318.4	71	27.5	28.5	RC
RC0560	6688256	554900	307.0	62	18.25	20.25	RC
RC0561	6688784	554026	316.5	74	27	28.25	RC
RC0564	6687929	553538	320.0	68	34.25	35.25	RC
RC0565	6687399	554387	309.3	68	21.25	22.5	RC
RC0566	6686899	555224	311.4	41	21.75	22.75	RC
RC0568	6686955	554161	315.4	77	26.75	28	RC
RC0569	6687338	552600	329.4	65	41	42	RC
RC0570	6686837	553458	324.0	89	36	37	RC
RC0571	6686583	553902	316.9	65	28.5	29.5	RC
RC0572	6686345	554316	314.2	53	22	23	RC
RC0573	6686089	554746	314.0	59	24.25	25.25	RC
RC0574	6685633	554526	310.1	53	17	18.25	RC
RC0575	6686182	553617	324.0	77	32.25	36.25	RC
RC0577	6685998	552947	324.5	86	32.5	34.25	RC
RC0578	6685745	553385	329.6	92	44.5	45.5	RC
RC0579	6685486	553821	320.5	71	30.5	31.5	RC
RC0581	6689643	556302	323.7	76	35.5	36.5	RC
RC0582	6689899	555873	321.0	80	33.25	34.25	RC
RC0583	6690152	555446	317.6	74	29.75	30.75	RC
RC0584	6690670	554587	325.1	80	38	39	RC
RC0586	6692686	559297	323.7	71	30.5	33.75	RC
RC0587	6692941	558868	325.6	77	53.5	54.5	RC
RC0591	6694094	556841	339.1	65	48.5	51.75	RC
RC0594	6685653	551578	334.6	56	39.25	40.5	RC
RC0595	6685394	552017	335.0	86	39.25	40.75	RC
RC0598	6686246	552515	333.9	84	43.75	45.5	RC
RC0680	6689548	559740	308.0	59	16.5	19	RC
RC0681	6689803	559285	307.0	47	15.25	20.25	RC
RC0682	6689185	559507	307.8	59	15.5	16.5	RC
RC0683	6689441	559077	307.0	53	15.25	16.25	RC
RC0684	6689696	558650	311.0	71	19.25	21	RC
RC0710	6691317	556134	326.0	83	39.5	42	RC
RC0711	6691286	555999	329.4	83	40	44	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
RC0713	6691069	555936	326.3	77	37.5	38.5	RC
RC0754	6686712	552225	333.3	65	40	42.5	RC
RC0885	6691797	557572	321.3	71	33	35.75	RC
RC0894	6692198	555262	332.0	65	42.5	48	RC
RC0895	6691841	555050	332.5	55	44.5	49	RC
RC0896	6692049	554704	336.2	65	51.5	54	RC
RC0897	6692248	554371	339.5	53.2	48.5	49.75	RC
RC0898	6691486	554834	329.9	92	42.75	44.5	RC
RC0900	6691129	554625	329.0	95	41.75	43	RC
RC0901	6691331	554285	336.6	71	49.5	51.5	RC
RC0902	6691536	553942	348.5	83.2	57.5	59.75	RC
RC0903	6691025	553980	335.0	88	44.25	47	RC
RC0904	6690670	553771	332.8	75	41.5	43.75	RC
RC0905	6690824	553513	335.3	73	43	45.75	RC
RC0906	6690143	553681	324.0	83.4	34.25	35.25	RC
RC0907	6690400	553251	332.8	71	39	40.5	RC
RC0908	6689709	553435	321.1	65	32.25	33.25	RC
RC0909	6689200	554289	326.4	77	34.25	36	RC
RC0910	6688693	555142	317.0	71	29	30.75	RC
RC0913	6687675	556850	318.5	59	28.75	30.5	RC
RC0914	6687495	556178	318.0	47	22.75	24.75	RC
RC0916	6689028	553605	320.0	71.2	30.75	32	RC
RC0917	6688346	553774	317.7	67	30.75	34.25	RC
RC0918	6687840	554622	314.4	71	23.75	26.25	RC
RC0919	6687323	555491	315.0	59	24.75	28.25	RC
RC0920	6687147	554809	305.2	53	17.5	20.5	RC
RC0921	6687652	553962	316.1	71	27.75	29.75	RC
RC0924	6687482	553269	312.7	77	33.75	35.5	RC
RC0926	6686645	553701	320.0	83	30	32.25	RC
RC0927	6687055	553014	326.1	83	36	38.5	RC
RC0928	6686429	553575	326.4	83	36	39	RC
RC0929	6686225	553917	321.0	77	29.5	33.75	RC
RC0930	6686123	554087	316.8	65.01	27.75	28.75	RC
RC0931	6685741	554243	313.0	59	21.5	22.5	RC
RC0932	6686778	552502	332.0	83	41	43.25	RC
RC0934	6686566	552368	328.3	77	37.25	41.5	RC
RC0935	6686098	553154	322.0	83	30.5	31.75	RC
RC0936	6686000	553318	321.0	83	29.25	32.25	RC
RC0937	6685899	553489	321.0	71	31.75	32.75	RC
RC0938	6686045	552754	326.5	89	33.75	37	RC
RC0940	6686279	551972	331.7	65	41.5	43.75	RC
RC0942	6685918	551991	333.0	78	42	43	RC
RC0943	6685713	552335	331.4	89	38	40.5	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
RC0944	6685245	553121	325.0	83	30.5	31.5	RC
RC0965	6691002	553215	333.0	60	38.25	40.75	RC
RC0966	6691192	552278	349.2	68	64.5	66.75	RC

Shogun

Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
CD0050	6687778	563516	321.0	89	30.8	32.6	DDH
CD0155	6687494	563112	319.0	45.2	28.45	30.5	DDH
CD0305	6686953	563510	318.9	46.2	28.5	31.6	DDH
CD0311	6688429	562424	319.0	74	30.9	32.8	DDH
CD0409	6687495	563348	320.3	80	30.3	31.3	DDH
CD0410	6687069	563095	325.9	82.5	36.35	37.35	DDH
CD0411	6686856	562970	327.0	86	34.5	35.5	DDH
CD0412	6688319	562608	318.0	77	27.9	29.4	DDH
CD0413	6688094	562988	319.6	75	28.7	30.2	DDH
CD0414	6687812	562839	319.7	40.5	27.85	29.4	DDH
CD0776	6687501	563113	319.0	39.1	31.54	32.78	DDH
CD0777	6687166	560468	323.1	54.2	35.25	36.25	DDH
CD0781	6686860	563202	325.3	44	35.65	37.29	DDH
CD0782	6687066	563344	319.0	40.34	28.58	30.48	DDH
CD0783	6688116	562561	317.3	33.2	27.3	28.9	DDH
CD0784	6688528	561862	315.3	34.5	25.97	26.97	DDH
CD0786	6689042	561787	321.1	41	35.7	36.79	DDH
CD0787	6689240	561452	324.8	45	41.3	43.07	DDH
CD1124	6688685	562002	316.2	33.3	25.25	29.75	DDH
CD1125	6687929	563263	324.0	44	34.59	36.6	DDH
CD1126	6687346	563545	322.4	41.4	31.5	32.5	DDH
CD1127	6688104	562777	320.5	35	28.59	29.82	DDH
CD1128	6687918	562891	318.5	33.3	27.15	28.4	DDH
CD1267	6687132	563457	319.1	33	28.15	29.15	DDH
CD1268	000000	0000000 500475	220.0	41.3	32.7	33.7	DDH
CD1200	6688280	562475	320.0	41.3	35	36	חטט
CD1385	6688823	561958	320.7	36.1	32.72	33.72	DDH
CD1386	6687933	563054	320.8	36.3	31.15	32.95	DDH
RC0190	6687254	561931	317.3	65	23.5	24.5	RC
RC0192	6687787	561032	315.2	65	28	29.25	RC
RC0194	6687176	563157	321.9	83	36.25	39	RC
RC0195	6686963	563030	328.1	89	38.25	39.5	RC
RC0196	6686692	562872	323.2	89	30	32.5	RC
RC0199	6688843	564158	326.9	53	35	36.5	RC
RC0216	6688282	560129	311.6	71	21	23.25	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
B00000	0000044	==0000	222.4		74.5	76.5	D.0
RC0296	6682214	570628	336.1	89	81.5	83	RC
RC0302	6687787	562125	318.0	77	26.5	27.5	RC
RC0304	6687379	562817	319.0	77	27	30.5	RC
RC0305	6686971	563501	319.3	72	27.25	32	RC
RC0308	6687799	562599	322.3	83	30	33.5	RC
RC0309	6688218	562390	318.0	71	25.75	28.75	RC
RC0310	6688016	562728	326.3	83	33.75	36.75	RC
RC0312	6688227	562762	321.0	77	27.5	32.5	RC
RC0313	6688556	562600	329.3	53	41.5	42.5	RC
RC0314	6688358	562932	322.2	35	31.25	32.5	RC
RC0320	6685244	567757	326.6	83	41.75	43.5	RC
RC0321	6684067	569741	337.3	95	59.25	62	RC
DOGGGG	0000707	570040	000.0	0.5	71.5	73.5	200
RC0322	6683707	570342	329.0	95	74.75	77.75	RC
RC0325	6688248	565153	327.0	53	34.5	35.75	RC
RC0326	6687719	566039	325.1	60	33.75	36.25	RC
RC0327	6687387	566638	329.5	65	50.75	52.25	RC
RC0328	6686844	567582	329.4	53	45	46	RC
RC0329	6686364	568371	327.0	77.35	51.5	52.5	RC
RC0338	6688254	567411	333.5	71	59.25	60.5	RC
RC0339	6687072	569565	334.0	71	51	52	DC.
RC0339	0007072	509505	334.0	/ 1	52.5	54	RC
RC0352	6691394	569537	347.7	47	41.75	43.5	RC
RC0359	6685816	569187	329.8	89	55.75	57.25	RC
RC0415	6688566	562194	318.0	71	27	30.5	RC
RC0416	6688780	561835	315.0	71.8	26.5	28.75	RC
RC0417	6688986	561487	315.8	71	30.25	31.25	RC
RC0418	6688410	562067	319.9	77	29.75	30.75	RC
RC0419	6688613	561720	320.0	77	31	32	RC
RC0420	6688816	561381	315.6	65	32	33	RC
RC0421	6689023	561033	316.0	71	31.75	32.75	RC
RC0422	6688172	561972	315.0	65	24	25.5	RC
RC0423	6688375	561636	314.1	65	26.25	27.25	RC
RC0424	6688585	561281	313.4	65	27.75	28.75	RC
RC0425	6688794	560917	322.9	77	35.75	37.25	RC
RC0426	6687993	561780	315.3	71	23.25	24.25	RC
RC0427	6688201	561432	319.0	77	33.25	34.5	RC
RC0428	6688421	561063	315.0	71	24.75	26	RC
RC0429	6688625	560720	314.0	65	25.75	26.75	RC
RC0431	6686739	563407	320.0	71	27.25	33.25	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
RC0432	6687167	562688	325.0	71	33.25	34.5	RC
RC0434	6687572	562001	317.8	71	26.5	28.25	RC
RC0435	6687773	561665	315.6	65	41.25	42.25	RC
RC0436	6687985	561309	315.0	65	24.75	26.25	RC
RC0437	6688190	560966	314.0	65	25	26	RC
RC0438	6688399	560616	315.0	77	23.75	24.75	RC
RC0440	6686498	563206	322.9	59	28.5	31.25	RC
RC0442	6687459	561733	317.3	71	24.25	25.25	RC
RC0443	6687613	561329	314.1	59	22.25	24.25	RC
RC0444	6687839	560951	315.8	77	27	29.25	RC
RC0445	6688768	562245	320.2	41	31.75	32.75	RC
RC0446	6688962	561918	320.8	65	31.75	33.5	RC
RC0447	6689150	561606	322.5	83	37	40	RC
RC0468	6689464	561443	323.5	47	37.75	39	RC
RC0469	6689569	561381	321.9	71	37.75	39	RC
RC0546	6687960	559938	321.0	78	30.75	32	RC
RC0599	6687714	560351	313.9	68	22.5	23.5	RC
RC0600	6687454	560786	311.6	74	23.25	24.25	RC
RC0601	6686950	561630	317.6	64	26	27	RC
RC0602	6686338	562661	327.1	82	36	37.75	RC
RC0606	6687331	560194	321.4	86	32.75	33.75	RC
RC0607	6687060	560649	323.9	68.6	36.75	38.25	RC
RC0620	6688071	567130	329.0	53	39	40	RC
RC0623	6688009	566364	330.7	53	41.25	42.5	RC
RC0625	6687831	565270	328.4	53	35	37.5	RC
RC0626	6687325	566120	325.7	47	39	40	RC
RC0628	6689741	561577	323.9	35	30.75	32.25	RC
RC0632	6684967	569929	332.4	95.1	71	72	RC
		6684425 570770	338.8	95	66.5	67.5	
RC0633	6684425				73.5	74.75	RC
RC0636	6687131	565469	330.0	53	41.75	42.75	RC
RC0640	6684365	570107	332.1	89	68.75	70	RC
RC0647	6683814	569274	332.0	73	53.5	55	RC
RC0648	6683399	569969	337.8	95	56.5	57.5	RC
RC0649	6683057	570540	330.0	77	68.25	69.75	RC
RC0653	6683025	569953	335.5	89	50	52	RC
RC0654	6682458	570766	331.4	77	71.25	72.25	RC
RC0659	6681749	570342	346.0	110	71.25	73	RC
RC0694	6687511	563122	318.8	35	24	31.5	RC
RC0695	6687508	563109	318.9	35	24.25	34.25	RC
RC0696	6687501	563118	319.0	35	26.75	34.25	RC



Hole ID	Northing	Easting	RL	Hole Depth	From	То	Туре
RC0697	6687497	563127	319.0	35	25	32	RC
RC0698	6687504	563096	319.0	35	24.623	31.25	RC
RC0700	6687488	563121	319.0	35	25.25	34.25	RC
RC0701	6687484	563129	319.0	35	28	35	RC
RC0702	6687490	563098	319.0	35	24.33	32	RC
RC0703	6687485	563108	319.0	35	27	31	RC
RC0704	6687480	563115	319.0	35	24.75	32	RC
RC0705	6687476	563103	319.0	35	24	31	RC
RC0706	6687580	563163	319.2	68	26	29.5	RC
RC0707	6687545	563027	318.0	77	26.25	31.5	RC
RC0708	6687443	563198	319.0	71	27.5	29.5	RC
RC0709	6687408	563062	319.0	71	27	31	RC
RC0973	6686300	560125	316.1	74.5	30.25	32.5	RC
RC0975	6686635	560544	320.0	83	28.75	33	RC
RC0977	6686161	562149	322.0	84	26.5	27.5	RC
RC0978	6685983	562449	324.9	78	28.25	29.25	RC
RC0979	6686209	562877	328.4	72	34.25	35.25	RC
RC0980	6686682	562085	321.0	78	29.5	30.5	RC
RC1009	6681753	569748	339.0	102	84.25	85.25	RC
					50	51	
					54	56.5	
RC1010	6681857	570971	334.8	80	57.5	59.25	RC
					60.75	62.75	
					66	67	

