

# **ASX Announcement**

8 November 2016



## **Resource Update for Mulga Rock Project**

Vimy Resources Limited ("Vimy" ASX: VMY) is pleased to announce the results from the updated Shogun and Emperor Resource Estimates for its Mulga Rock Project (MRP). The estimate was completed in-house and validated by the independent resource consultant, AMC Consultants. The estimate is based on extensive infill (Shogun) and twin (Emperor) drilling programs completed and announced earlier this year.

The key highlights are:

- Greater than 36Mlbs U<sub>3</sub>O<sub>8</sub> of overall Mulga Rock Project classified as Indicated: Close to 50% of the total Mulga Rock Project resource is now in the Indicated Mineral Resource category, totalling 23.0Mt at 710ppm U<sub>3</sub>O<sub>8</sub> for 36.3Mlbs U<sub>3</sub>O<sub>8</sub>;
- Increased uranium grade for the Shogun resource: the Shogun Mineral Resource grade has increased from 550 to 580 ppm U<sub>3</sub>O<sub>8</sub>; and
- Excellent continuity of Indicated status material: a high conversion is expected from Indicated Mineral Resources to Probable Ore Reserve.

Under the Mulga Rock Project Pre-Feasibility Study (PFS), the Shogun pit commences in Year 9 of the mine schedule; with the increase in uranium grade and continuity of the Indicated Mineral Resource, it is likely that the revised Ore Reserve, which is part of the ongoing Definitive Feasibility Study (DFS), will bring this material forward in the DFS schedule.

Vimy Managing Director and CEO, Mike Young said, "Approximately half of the total Mulga Rock Project Mineral Resource is now at the Indicated Resource status. Vimy anticipates that the majority of this will be converted to Probable Ore Reserves, which will underpin project financing and offtake contract discussions currently underway.

Coupled with positive developments on the permitting front, this puts us on track to be the first uranium mine in Western Australia. An Ore Reserve update for the Mulga Rock Project will be completed during this quarter".

### **Mulga Rock Project**

The Mulga Rock Project is 100% owned and operated by Vimy and lies approximately 240km east northeast of Kalgoorlie, situated on two recently granted Mining Leases (M39/1104 and M39/1105). Vimy holds title to approximately 757 square kilometres of exploration ground across the Project.

The Mulga Rock West Deposit (MRW) comprises the Shogun and Emperor resources (Figure 1). The Shogun resource is a flat-lying deposit that is approximately 4 km in length and 1 km wide. It has been extensively drilled with a total of 429 aircore and reverse circulation (RC) holes for a total depth of 22,973 metres, and 49 diamond holes for 2,303 metres.

The Emperor resource extends over 8km in length and is more than 3km wide. The Emperor resource comprises a total of 524 aircore and reverse circulation holes for a combined depth of 33,881 metres, 263 diamond holes for 12,259 metres and one sonic drill hole for 48 metres.

A complete list of all drill holes for both resources is appended at the end of this release.



The updated Resource Estimate has significantly increased the geological confidence of the Shogun resource therefore enabling completion of the DFS Ore Reserve and mine schedule. The Emperor resource is better defined as a result of the 2015-2016 twin drilling program, however further exploration upside is present and this will be pursued through ongoing exploration activities. An executive summary of the Resource Estimates follows this section, and the corresponding JORC Table 1 is appended to this announcement.

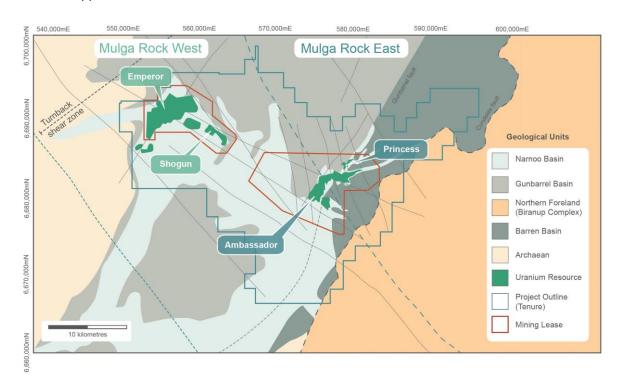


Figure 1: Location and geology of Mulga Rock Uranium Deposits - including faults

#### Mulga Rock West Resource Upgrade

The 2016 Shogun and Emperor resources have been reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, (JORC Code 2012).

An infill drilling program at Shogun was completed earlier this year, as announced to the ASX on 25 February 2016. The program comprised 162 air core and 15 diamond core holes in the Shogun resource area, for a total of 7,096 metres. In Emperor, 25 twin aircore and diamond holes for a total of 2,470 metres were also drilled, primarily to verify bulk density and to establish radiometric disequilibrium factors.

Figure 2 provides a collar map of the drilling completed at Shogun, along with the Inferred and Indicated resource boundaries. The drill results reaffirm the quality of the Shogun uranium resource with 16 drill holes returning intercepts above 1,000 ppm (0.10%) U<sub>3</sub>O<sub>8</sub>. The best intercept was recorded from drill-hole NNA6410, with 9.0m at 2,500 ppm (0.25%) U<sub>3</sub>O<sub>8</sub> from 31.0 metres.





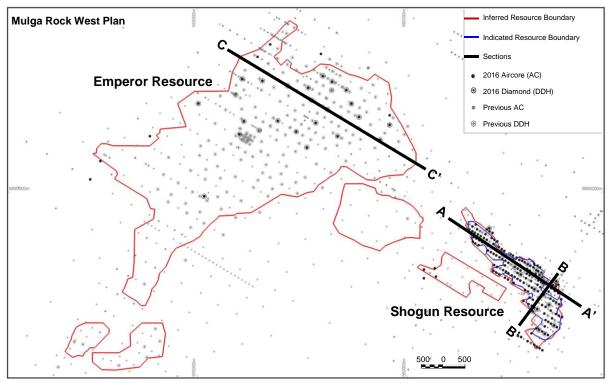


Figure 2: Mulga Rock West - collar location map and drill hole type

The Shogun Resource Estimate (Table 1) is 3.0Mt at 580ppm U<sub>3</sub>O<sub>8</sub> for 3.8Mlbs U<sub>3</sub>O<sub>8</sub>, with 76% of the Mineral Resource classified as Indicated.

The Indicated Resource shows excellent continuity along the entire length of the PFS Shogun optimised pit shell. The Indicated Resource is generally associated with paleochannel-edge facies associated with higher grades due to greater fines and organic matter accumulation.

It is expected there will be a very good conversion from Indicated to Probable Ore Reserve and this will support the DFS mine design for Shogun, which proposes to use an in-pit crusher conveyor (IPCC) method for removing the overburden within the Shogun pit.

Pit optimisation studies, mine design and scheduling are underway using the updated resource.

Table 1: Mulga Rock West Mineral Resource Estimate - October 2016

Deposit	Classification	Cut-off Grade (ppm U₃O <sub>8</sub> )	Tonnes (Mt)	U₃O₅ (ppm)	U₃O₅ (MIb)
Emperor	Inferred	150	30.8	440	29.8
Shogun	Indicated	150	1.9	680	2.9
Shogun	Inferred	150	1.1	390	0.9
Mulga Rock West	Inferred	150	31.9	440	30.7
Mulga Rock West	Indicated	150	1.9	680	2.9
Total Resource		150	33.8	450	33.6



### **Mulga Rock Mineral Resource Estimate and Ore Reserve**

The Mineral Resource for the entire Mulga Rock Project (Table 2) comprises 67.8Mt at 510ppm U₃O₀ and 76.8Mlbs contained U<sub>3</sub>O<sub>8</sub>. Approximately 50% of the total Resource Estimate is now in the Indicated category, at an aggregate uranium grade of 710 ppm U<sub>3</sub>O<sub>8</sub>.

Table 2: Mulga Rock Uranium Project Total Resource - October 2016 - Individual deposits

Deposit / Resource	Classification	Cut-off Grade (ppm U₃O <sub>8</sub> )	Tonnes (Mt) <sup>4</sup>	U₃O (ppm) <sup>5</sup>	U₃O <sub>8</sub> (Mlb)
	М	ulga Rock East			
Princess <sup>2</sup>	Indicated	150	1.3	690	1.9
Princess <sup>2</sup>	Inferred	150	2.5	380	2.1
Ambassador <sup>3</sup>	Indicated	150	19.8	720	31.5
Ambassador <sup>3</sup>	Inferred	150	10.4	330	7.7
Sub-total			<b>34.1</b> <sup>1</sup>	580	43.2
	М	ulga Rock West			
Emperor	Inferred	150	30.8	440	29.8
Shogun	Indicated	150	1.9	680	2.9
Shogun	Inferred	150	1.1	390	0.9
Sub-total			33.7	450	33.6
Total Resource			67.8	510	76.8

- 1. Appropriate rounding has been applied.
- The Princess resource estimate was reviewed by Coffey Mining and announced to the ASX on 18 December 2014.
- The Ambassador resource estimate was reviewed by AMC Consultants and announced to the ASX on 23 June 2016.
- 4. t = metric dry tonnes; appropriate rounding has been applied.
- 5. Using cut combined U<sub>3</sub>O<sub>8</sub> composites (combined chemical and radiometric grades).

Table 3: Mulga Rock Uranium Project Total Resource - October 2016

Deposit / Resource	Classification	Cut-off Grade (ppm U₃O <sub>8</sub> )	Tonnes (Mt) <sup>2</sup>	U₃O <sub>8</sub> (ppm)³	U₃O <sub>8</sub> (MIb)
Mulga Rock East	Indicated	150	21.1	720	33.4
Mulga Rock East	Inferred	150	12.9	340	9.8
Sub-total			<b>34.1</b> <sup>1</sup>	580	43.2
Mulga Rock West	Indicated	150	1.9	680	2.9
Mulga Rock West	Inferred	150	31.9	440	30.7
Sub-total			33.8	450	33.6
Total Resource			67.9	520	76.8

- 1. Appropriate rounding has been applied.
- 2. t = metric dry tonnes; appropriate rounding has been applied.
- 3. Using cut combined U<sub>3</sub>O<sub>8</sub> composites (combined chemical and radiometric grades).

The information in Tables 2 and 3 above that relates to the Princess Resource is extracted from ASX announcement entitled "Improved economics for the Mulga Rock Project increases the Mineral Resource Estimate" released on 17 September 2015 and is available to view on asx.com.au ASX:VMY. The information in Tables 2 and 3 above that relates to the Ambassador resource is extracted from ASX announcement entitled "Significant Resource Upgrade for Mulga Rock Project" released on 23 June 2016 and is available to view on asx.com.au ASX:VMY. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



Analysis of base metals within the uranium mineralisation domains at Shogun and Emperor shows poor continuity, low grades and overall low metal content within the MRW uranium resource. As a result, the base metals have not been reported on the basis that they do not have a reasonable chance of eventual economic recovery. Recent geological work has established that the Mulga Rock West deposit does not share the same geological provenance for base metals as the Mulga Rock East deposit.

### **Geology of the Mulga Rock Uranium Deposit**

The Mulga Rock uranium deposits are hosted by Cretaceous to Late-Eocene lacustrine and estuarine sediments comprising fine-grained clastic sands, silts and clays, and organic carbon derived from plants. Uranium and base metal minerals are predominantly associated with supergene enrichment within carbonaceous-rich sediments at, or just below, the current weathering boundary.

The sediments have been strongly oxidised by weathering to depths of between 25-45 metres. The uranium and base metals have been leached from the weathered zone and re-precipitated in horizontal zones at the weathering, or reduction-oxidation (redox), boundary. The uranium mineralisation is mostly amorphous and has been adsorbed on to the carbonaceous material or precipitated as very fine-grained uraninite (UO<sub>2</sub>).

The mineralised zones are similar in geology, mineralogy and host rock material across all deposits.

A long section of the Shogun Mineral Resource is shown in Figure 3, along with a typical cross section in Figure 4. The cross sections show the resource block model with a 150 ppm  $U_3O_8$  cut-off grade. The uranium domain is located directly below the redox boundary that is predominantly located within younger Eocene sediments.

The uranium mineralisation is located proximal to the redox boundary within carbonaceous material, ranging in thickness from 1 to 6 metres.

A typical long section for the Emperor resource is shown in Figure 5, and it displays similar geology to the other Mulga Rock Project Mineral Resources. Previous drilling at Emperor has been limited to the upper domain with exploration upside remaining for lower mineralised domains. Future drill programs at Emperor will explore these lower domains to quantify the potential increase in thickness and contained metal of the deposit.

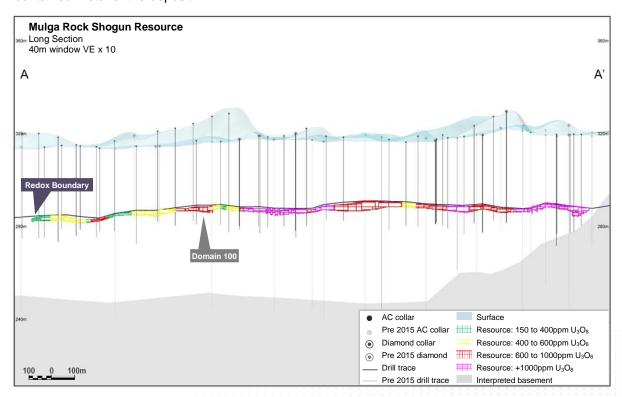


Figure 3: Shogun Resource – Schematic long section A-A' – vertical exaggeration 10x



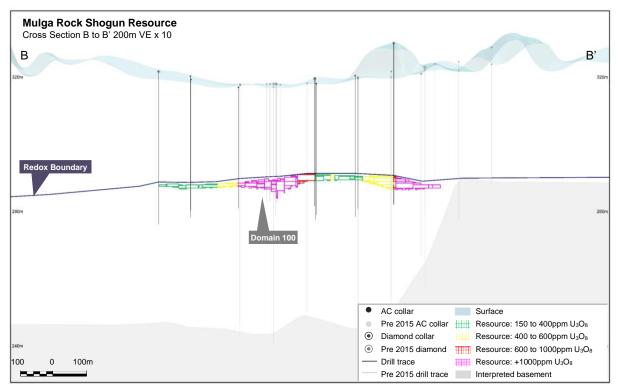


Figure 4: Shogun Resource – Schematic cross section B-B'- vertical exaggeration 10x

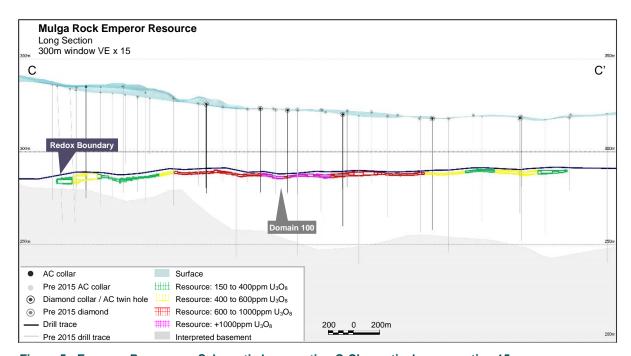


Figure 5: Emperor Resource – Schematic long section C-C' – vertical exaggeration 15x



Mike Young

**Managing Director and CEO** 

Dated: 8 November 2016

The information in this announcement that relates to the Exploration Results for the Mulga Rock Resource Estimate (U<sub>3</sub>O<sub>8</sub>), Resource Database, Geology and Bulk Densities is 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 that relates to the Mulga Rock Mineral Resource estimates (U<sub>3</sub>O<sub>8</sub>) is based on information compiled under the supervision of AMC Consultants as consultants to the Company and reviewed by Ingvar Kirchner an employee of AMC Consultants. 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'.



# **Executive Summary**

Shogun and Emperor are two of four uranium deposits comprising the Mulga Rock Project (MRP). The MRP is located approximately 240km east-northeast of Kalgoorlie in Western Australia. The area of the Shogun and the Emperor Deposits was subject to uranium exploration by PNC Exploration Australia Pty Ltd (PNC) during 1979 to 1988, which resulted in the discovery of uranium. The MRP currently comprises the Emperor, Shogun, Ambassador and Princess uranium deposits which are located within Mining Leases (ML) 39/1104 and 39/1105.

This report documents an updated 2016 Mineral Resource for the Shogun and Emperor uranium deposits completed by Vimy Resources Ltd (**Vimy**) under the supervision of AMC Consultants (**AMC**). The report complies with disclosure and reporting requirements set forth in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves of December 2012 (the JORC Code) as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia (**JORC**).

Coffey Mining Pty Ltd (**Coffey**) generated a Mineral Resource for Shogun and Emperor in January 2009 following a small drilling program in 2008 aimed at confirming the tenor of mineralisation at MRP. Uranium data only was examined.

A material amount of additional infill drilling has been completed in 2015 and 2016 at Shogun, and has been used in an updated Mineral Resource. The updated Shogun Mineral Resource will be used in a Feasibility Study. A more limited amount of additional drilling (primarily twin holes) has been completed by Vimy at Emperor, for the purpose of verifying assumptions around bulk densities and radiometric disequilibrium.

The Shogun and Emperor deposits are supergene deposits associated with multiple phases of weathering, the most recent of which have occurred within the last 300,000 years. The mineralogy of the MRP is complex, with over 50 minerals being recognised at Shogun in addition to the common rockforming minerals. The bulk of the uranium occurs as diffuse concentrations, too fine to be resolved by scanning electron microscopy (SEM), and disseminated evenly throughout the organic rich sediments. The major zone of uranium accumulation within the deposit occurs as a sub-horizontal planar body that is strongly correlated with both the unpressurised groundwater surface and fine textured, carbonaceous sediments such as lignites and lignitic clays. It is theorised that uranium (and other base metals within the deposit) were transported laterally from source materials in oxidised form by acidic, meteoric flow. The metals were then concentrated and eventually fixed (reduced) in the anoxic, capillary fringe at the surface of the water table. Uranium reduction and fixation (U<sup>6+</sup> to U<sup>4+</sup>) is thought to be largely biogenic (enzymatically catalysed reduction by U-bacteria). The anoxic (reduced) capillary fringe is much thicker in fine textured sediments (such as lignites) than in coarser textured sediments such as carbonaceous sands. As such, most uranium accumulation in the MRP is similarly correlated with organic-matter rich materials at the water table surface. Uranium accumulation does occur at the water table surface in medium to coarse sands, but is generally too thin to be of commercial value. More redox active metals (such as Cu, Ni and Zn) tend to reduce and fix at redox interfaces below the water table surface. Mineralisation, therefore, is controlled by the lithological and geochemical properties of the sediments rather than by stratigraphy. Suitable lithological and geochemical environments for significant metal accumulation occur in both remnant carbonaceous Cretaceous sediments and Eocene palaeochannel sediments.

Eocene palaeochannel sediments exclusively host the mineralisation in the deposit. Uranium mineralisation commences at depths ranging from 15m to 64m at Emperor, reflecting the combination of a slight dip to the mineralised surface and the topography of the area. Uranium mineralisation at Shogun commences at depths ranging from 23-42m.

Vimy is responsible for the drill hole database and geology used in the resource estimate with data compiled in a Datashed database system.

#### Mulga Rock Project

Mulga Rock West October 2016 Resource Estimate Reported in Accordance with JORC Code 2012



The Mineral Resources for the Shogun and Emperor Deposits contain:

- a total of 478 drill holes (totalling 25.3km of drilling) of which 446 holes contained either radiometric or assay data at Shogun
- a total of 787 drill holes (totalling 46,2km of drilling) of which 653 holes contained either radiometric or assay data at Emperor.

The holes comprise a mixture of data including:

- Recent radiometric probe data primarily from aircore (AC) and reverse circulation (RC) holes.
- Historical and recent chemical assay data primarily from diamond core holes (DC).
- Some historical radiometric data for PNC drill holes.

The drill holes within the Shogun project area comprise:

- 235 AC holes (11,097m total).
- 49 DC holes (2,303m total).
- 194 RC holes (11,876m total).

The drill holes within the Emperor project area comprise:

- 224 AC holes (13,681m total).
- 263 DC holes (12,259m total).
- 300 RC holes (20,200m total).

Drill holes that were omitted tended to lack both radiometric and/or assay data for a variety of reasons. The drill locations and types are shown on Figure 1.

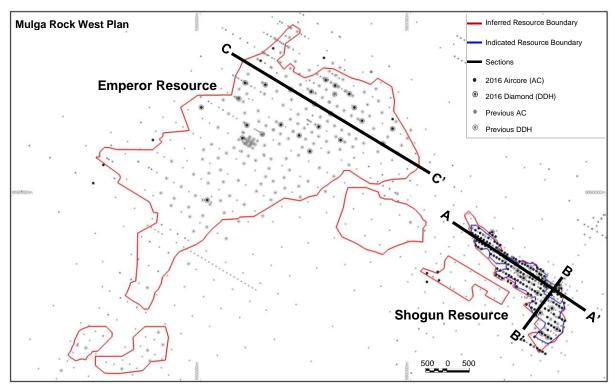
The mineralised zones were defined by interpretation of stratigraphy, geology, and anomalous grades.

Using geology and stratigraphic positions, the uranium mineralised zones were further defined using a  $eU_3O_8 > 100$ ppm cut-off grade (prior to disequilibrium correction, for percussion drilling) and/or chemical  $U_3O_8 > 100$ ppm cut-off grade (for diamond drilling). A minimum thickness of 0.5m and maximum 1m internal dilution was allowed for in definition of the mineralisation domains. This protocol defined two uranium mineralised zones of which the north eastern Domain 100 zone is both the most laterally extensive and highest grade. Schematic cross sections and long sections of the mineralisation relative to the palaeochannels and stratigraphy are shown in Figures 2, 3 and 4.

A similar process was followed to define mineralised domains at Emperor, which is characterised by a much larger footprint.







In order to address potential disequilibrium and sample quality issues, 15 "twin" DC and AC holes were completed in 2015-2016 at the Shogun deposit, and 25 "twin" DC and AC holes at the Emperor deposit. A detailed study was completed to assess the following aspects:

- Gamma-derived eU<sub>3</sub>O<sub>8</sub> between the DC and AC holes. Outcomes were as follows:
  - Global statistical calculations confirmed earlier reports that the gamma-derived eU<sub>3</sub>O<sub>8</sub> from the twin DC and AC holes were comparable despite possible variations in hole diameters, casing, hole condition etc. Minor variations between twin holes are noted, but are assumed to be caused by short range variability in both geology and mineralisation—those assumptions were validated by other test work.
- Chemical assay-derived U<sub>3</sub>O<sub>8</sub> between the DC and AC holes. Outcomes were as follows:
  - Samples derived from the DC holes are typically of good quality.
  - The effects of sample smearing and non-selective interval dilution in the 2016 study are apparent within a number of the AC holes, although there are also examples where this effect is either minimal or absent.
  - As a result, U<sub>3</sub>O<sub>8</sub> values derived from AC holes are likely to be low biased in terms of grade and high biased in terms of interval width.
  - For the purposes of resource estimation, eU<sub>3</sub>O<sub>8</sub> (corrected for disequilibrium) should be used in preference to U<sub>3</sub>O<sub>8</sub> assays for the AC holes. This would also apply to other drilling techniques such as RC and rotary mud, where the likelihood of smearing and/or sample contamination is typically high.



Figure 2 Shogun Resource – Schematic long section A-A' (50,920N) – vertical exaggeration 10x

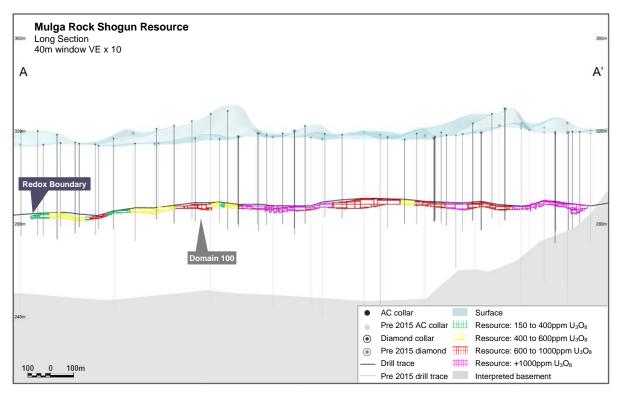
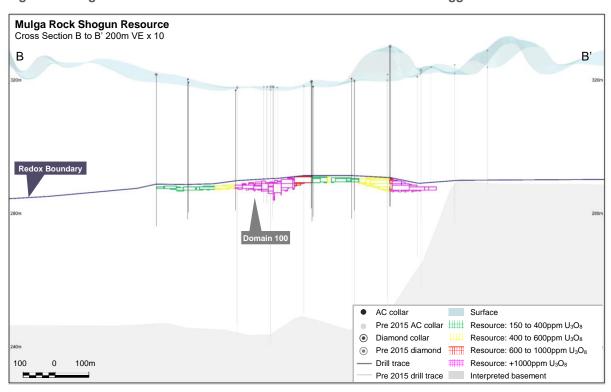


Figure 3 Shogun Resource - Schematic cross section B-B' - vertical exaggeration 10x



Pre 2015 drill trace



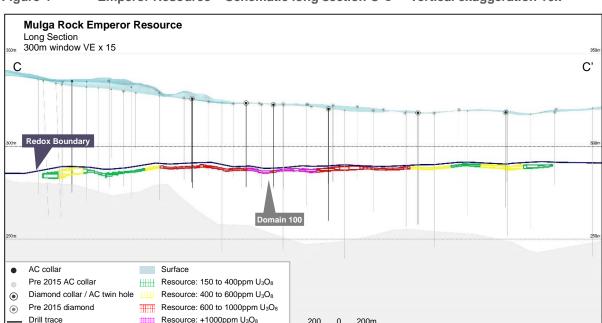


Figure 4 Emperor Resource – Schematic long section C-C' – vertical exaggeration 10x

 Base metal (BM) assays between the DC and AC holes were not considered for the purpose of this estimate given the very low and inconsistent base metal grades.

The net conclusions from the twin hole study—as it affects the data used for the resource estimate—are as follows:

- AC eU<sub>3</sub>O<sub>8</sub> data (corrected for disequilibrium) should be used in preference to the AC chemical assay U<sub>3</sub>O<sub>8</sub> data due to sample quality/potential smearing issues where possible.
- Chemical U<sub>3</sub>O<sub>8</sub> data should be used from the DC holes where possible.

Interpreted basement

- Disequilibrium corrections derived from DC eU<sub>3</sub>O<sub>8</sub>/U<sub>3</sub>O<sub>8</sub> sample interval pairs are valid to be extrapolated from the DC holes to the AC holes.
- AC chemical assay data for the BMs, for which there is no equivalent radiometric determination, are to be used "as-is" under the assumption that metal and grades reporting within the uranium domains are likely to be low and conservative.

As is normal for most uranium deposits, the radiometric equivalent  $U_3O_8$  ( $eU_3O_8$ ) grades require adjustment for disequilibrium using regression equations derived from the comparison of paired assay results with composited radiometric logging from the various phases of DC drilling. In the majority of cases at Shogun, the radiometric  $eU_3O_8$  grades for similar intervals are lower than the corresponding chemical assays for  $U_3O_8$ , requiring general positive adjustments to the radiometric data to emulate the accurate chemical assay data. To obtain a robust global estimate of the disequilibrium, each of the two uranium domains was first split into groups (based on the data type/vintage) and then further split into distinct grade bins. These grade bins were determined based on apparent "natural breaks" in the dataset identified in Q-Q plots and statistics. Specifically, disequilibrium corrections (regression formulae for the Q-Q data) were derived for:



### Shogun

For Domain 100 PNC data where eU<sub>3</sub>O<sub>8</sub> data was derived from digitised logs, two grade bins and respective correction factors were utilised.

For Domain 100 Vimy data from holes drilled between 2008 and 2016, four grade bins were used and respective correction factors were utilised.

### Emperor

For domain 100 PNC data, where eU<sub>3</sub>O<sub>8</sub> data was derived from digitised logs, five grade bins and respective correction factors were utilised.

For domain 100 Vimy data from holes drilled between 2008 and 2016, three grade bins were used and respective correction factors were utilised.

Any radiometric data below  $eU_3O_8$ =5ppm for the Vimy data and 50 ppm for the PNC data within the uranium domains were not corrected for disequilibrium as the material was considered to be internal dilution and the corrections applied within that grade range were likely to be both minimal and inaccurate. The disequilibrium adjustments were validated by the domains. When compared to the raw  $eU_3O_8$  dataset, the disequilibrium corrected data (hereafter referred to as  $eU_3O_8$ d) is significantly closer statistically to the assay-derived  $U_3O_8$  data.

The hybrid data set ( $eU_3O_8d$  data primarily from the AC/RC holes, and  $U_3O_8$  data primarily from the DC holes) for both Shogun and Emperor data were composited to 0.5m intervals utilising a residual retention process to avoid loss of data at the downhole margins. Relatively light high-grade cuts were applied to the hybrid  $U_3O_8$  data and BM 0.5m composite data.

For Domains 100 and 200 at Shogun and 100 at Emperor, which are essentially relatively thin and flatlying zones, the  $0.5m~U_3O_8$  composite data (plus any residuals) were re-composited to the full vertical width of the domains such that a single composite of variable width represents each drill hole.

The block model dimensions at Shogun cover a region of roughly 4.5km x 4.6km, with Emperor's block model covering a region of 10.3 km x 10.0km. Parent block dimensions for the Shogun block model are 50mE x 50mN x 10mRL with sub-celling down to 10mE x 10mN x 0.25mRL, and 100mE x 100mN x 10mRL with sub-celling down to 25mE x 25mN x 0.25mRL for the Emperor block model.

For mineralised domains at Shogun and Emperor, an Accumulation Estimation process using Ordinary Kriging (OK) is used to estimate the hybrid  $U_3O_8$  and BM data. The full thickness composite intervals of varying lengths are used to calculate [grade x thickness] accumulation variables; the thickness is expressed as millimetres in order to keep the thickness roughly the same order of magnitude values as the  $U_3O_8$  grades. Variogram models are generated for the  $U_3O_8$  [grade x thickness] accumulation variable. Estimation of the [grade x thickness] accumulation variable and [thickness] service variable is done using OK and identical search and variogram model parameters. Block grades for  $U_3O_8$  are then back-calculated from the block accumulation and service variables (grade = [grade x thickness] / [thickness]). The accumulation estimate was run in a parent block utilising an exaggerated height to prevent inadvertent different parent block estimates in the Z dimension. The resultant blocks were then cut back to the original sub-cells and parent blocks governing the remainder of the model.

Bulk density data (wet, dry, and moisture) was attributed to the resource model based upon an analysis of immersion bulk density data, wireline density logs for DC holes, and ultimately a hybrid data set coded for the key lithologies (basement, carbonaceous clay, claystone, conglomerate, carbonaceous clay, laterite, lignitic clay, sandstone, and siltstone). Use of the wireline density data in conjunction with the [weight/volume] methods generated a more comprehensive data set across the range of lithologies for use in modelling without some of the biases related to selection of competent units of core for weight/volume measurements. Dry bulk density values range from 0.65t/m³ (for lignite-lignitic clay) to 1.83 t/m³ (for basement sediments) in the range of material associated with the uranium mineralisation.



Bulk densities were applied to the block models using indicator derived fractions for the 9 key lithologies listed above. The indicators were estimated into the block model using Inverse Distance (Power=1) method. The indicator estimates were constrained within Domains 100-200, and then background material separately above and below Domains 100-200. Results between the indicator lithology fields were normalised to 1.0, and a lithology-based bulk density assigned on a majority basis to the blocks. Therefore, bulk density values assigned to blocks can be variable, dependent on variations in lithology and domain constraints.

Average bulk densities and moistures for the classified portions of the Shogun domains are given in Table 1.

Table 1 Average density and moisture values for the classified portions of the uranium mineralisation domains

Deposit	Domain	Bulk density dry (t/m³)	Moisture (% of dry BD)	Bulk density wet (t/m³)
Emperor	100	1.00	60	1.51
Shogun	100	0.87	67	1.40
Shogun	200	0.98	59	1.50

Note: Appropriate rounding has been applied.

Redox boundary, water table, and stratigraphy were flagged in the block model based on interpreted wireframe surfaces provided by Vimy geologists.

The summarised Shogun Mineral Resource Statement in Table 2 has been reported in accordance with the guidelines as set out in the JORC Code (2012). The resource estimate has been classified as a combination of Indicated and Inferred Resource based on the confidence of the input data, drill hole spacing, geological interpretation, and grade estimation. The resource classification assumes potential exploitation by conventional open cut mining methods.

Table 2 Shogun Mineral Resource table by uranium domain, October 2016

October 2016 Shogun Mineral Resource  $U_3O_8 \mbox{ Reported by Uranium Domains using a Lower Cutoff of 150ppm $U_3O_8$} \label{eq:solution}$  Assuming open cut mining

Accumulation method / Ordinary Kriging Grade Estimates within Parent Cells of 50m by 50m by 10m

Using Cut U<sub>3</sub>O<sub>8</sub> Composites (combined chemical and radiometric grades)

Rounded figures, sums may vary slightly

	Resource Classification						Total		
Uranium	Indicated		Indicated Inferred				Total		
Domain	Tonnage (Mt)	U₃O <sub>8</sub> (ppm)	Metal (Mlb)	Tonnage (Mt)	U₃O <sub>8</sub> (ppm)	Metal (Mlb)	Tonnage (Mt)	U₃O <sub>8</sub> (ppm)	Metal (Mlb)
100	1.90	680	2.9	0.46	540	0.6	2.37	650	3.4
200				0.59	270	0.4	0.59	270	0.4
Total	1.90	680	2.9	1.05	390	0.90	3.0	580	3.7



The summarised Emperor Mineral Resource Statement in Table 3 has been reported in accordance with the guidelines as set out in the JORC Code (2012). The resource estimate has been classified as an Inferred Resource based on the confidence of the input data, drill hole spacing, geological interpretation, and grade estimation. The resource classification assumes potential exploitation by conventional open cut mining methods

Table 3 Emperor Mineral Resource table, October 2016

October 2016 Emperor Mineral Resource

U<sub>3</sub>O<sub>8</sub> Reported by Uranium Domains using a Lower Cutoff of 150ppm U<sub>3</sub>O<sub>8</sub>

Assuming open cut mining

Accumulation method / Ordinary Kriging Grade Estimates within Parent Cells of 100m by 100m by 10m

Using Cut U<sub>3</sub>O<sub>8</sub> Composites (combined chemical and radiometric grades)

Rounded figures, sums may vary slightly

Uranium	Inferred				Total	
Domain	Tonnage (Mt)	U <sub>3</sub> O <sub>8</sub> (ppm)	Metal (Mlb)	Tonnage (Mt)	U <sub>3</sub> O <sub>8</sub> (ppm)	Metal (Mlb)
100	30.76	440	29.8	30.76	440	29.8
Total	30.76	440	29.8	30.76	440	29.8

#### Mulga Rock Project

Mulga Rock West October 2016 Resource Estimate Reported in Accordance with JORC Code 2012



#### Footnotes for Tables 2 and 3

#### **Notes**

- Appropriate rounding has been applied in the tables above.
- The Shogun and Emperor Mineral Resources are reported in accordance with the JORC Code 2012 guidelines.
- The Mulga Rock Project is located approximately 240km east-northeast of Kalgoorlie in the state of Western Australia.
- Ambassador, Princess, Emperor and Shogun are sediment-hosted uranium deposits. The mineralisation is hosted primarily by
  reduced sediments of Eocene age preserved within a complex set of sedimentary troughs overlying an extensive long-lived
  palaeodrainage referred to as the Mulga Rock palaeochannel.
- Drill spacing at Shogun varies from nominal 100 m spaced WNW-ESE fences and typical 80m drill spacing along the fences, with some local close-spaced infill drilling with hole twinning, with drill spacing at Emperor typically 200m x 200m along WNW-ESE fences
- The current MRP Shogun drilling database comprises 478 drill holes. Of these 478 drill holes, 49 were DC holes, 194 were RC and 235 were AC. The current MRP Emperor drilling database comprises 787 drill holes. Of these, 224 were aircore holes, 263 diamond holes and 300 reverse circulation holes. The current MRP Emperor drilling database comprises 788 drill holes, including 300 reverse circulation holes, 263 diamond drill holes, 224 aircore holes and 1 sonic hole.
- Hole types are a mix of diamond core, reverse circulation and air core holes. Due to concerns regarding sample collection quality and recovery, the use of aircore chemical assays in the 2016 resource estimate is very limited. Radiometric eU<sub>3</sub>O<sub>8</sub> data adjusted for disequilibrium is used in preference for the aircore type holes.
- 2008-2016 Vimy and historical PNC chemical data and radiometric data were used in the 2016 resource estimate of U<sub>3</sub>O<sub>8</sub>.
- Multi-element data used for estimates of the base and other metals is sourced from Vimy chemical assay data.
- AMC note that the quality of the PNC assay data ranges from moderate to good, with many of the diamond drill holes chemical assays having been sourced from hard-copy laboratory certificates. However, it also noted that there is a lack of QA/QC data regarding standards and blanks in particular, as well as little information being available regarding exact laboratory analytical procedures. 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 Vimy assay samples since 2008 are of current industry standard and outlined in the JORC Code 2012 Table 1 Section 1. Field duplicates, standards, and blanks were routinely submitted.
- Radiometric logging of the PNC and Vimy drill holes was conducted. Appropriate post-processing was completed on the data for conversion to a standardised eU<sub>3</sub>O<sub>8</sub> value for all drill holes.
- In the majority cases at Shogun at Emperor, the radiometric eU₃O₃ grades for similar intervals are lower than the corresponding chemical assays for U₃O₃, requiring positive adjustments to the radiometric data to emulate the accurate chemical assay data. Data for each of the four uranium domains were split into groups (based on the data type/vintage) and then further split into distinct grade bins. These grade bins were determined based on apparent natural breaks in the dataset identified in Q-Q plots and statistics. Specifically, disequilibrium corrections (regression formulae for the Q-Q data) were derived for:
  - o Domain 100 and 200 Vimy data, for holes drilled from 2008 to 2016.
  - Any radiometric data below eU<sub>3</sub>O<sub>8</sub> =5 to 50ppm (Vimy and PNC respectively) within the uranium domains were not
    corrected for disequilibrium.
- The Shogun and Emperor mineralisation boundaries were based on a combination of geology/stratigraphy and a nominal 100ppm U<sub>3</sub>O<sub>8</sub> lower cut-off (chemical assay data, and non-disequilibrium corrected eU<sub>3</sub>O<sub>8</sub> data) 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 non-mineralised material.
- As the assay database consists of both chemical U<sub>3</sub>O<sub>8</sub> data and radiometric eU<sub>3</sub>O<sub>8</sub> data, the combined dataset is used with priority
  given to chemical assay data from the diamond drill holes; otherwise the factored radiometric data was used.
- Statistical analyses were completed on the raw sample data and the 0.5m composite data. High grade cuts were applied as follows:
  - $_{\odot}$   $\,$  Domain 100 and 200 Shogun 7,000ppm  $U_{3}O_{8}$
  - o Domain 100 Emperor 2,900ppm U<sub>3</sub>O<sub>8</sub>
- Grade variography was generated for the grade estimation by Accumulation Method via Ordinary Kriging. The Shogun directional
  variography was moderately well-structured for Domain 100, and very weakly structured for 200. The Emperor variograms were
  modelled as isotropic variography was moderately well-structured for Domain 100, but poorly structured for the limited data in
  Domain 200.
- Grade estimates were generated for parent blocks of size 50m (X) x 50m (Y) x 10m (Z) with sub-blocks of size 10m x 10m x 0.25m at Shogun. Larger parent blocks of 100m (X) x 100m (Y) x 10m (Z) were used at Emperor. The block XY dimensions are approximately half of the nominal drill spacing. X and Y coordinates correspond to UTM Northing and Easting (Grid GDA94 Zone 51) respectively and Z corresponds to Australian Height Datum.
- Grade estimates were generated by Accumulation Method (grade x thickness) via Ordinary Kriging for Domains 100 and 200 U<sub>3</sub>O<sub>8</sub>, and for the base and other metals in Domain 100 (Domain 200 lacked sufficient data). Appropriately cut and composited data were used for the various methods utilised.
- Bulk densities were estimated in the block model using indicator fractions flagging the key rock types present. Bulk density values were derived from analysis of Archimedean data and selective use of corrected gamma probe data as documented by Vimy. Lithology dry bulk densities range from 0.65 t/m³ for lignitic clay material to 1.87 t/m³ for basement material. The uranium domains contained a mix of lithology types, and the domain average densities and spatial variations reflect that.
- The grade estimates for all zones have been classified as Indicated and Inferred under the JORC Code 2012 guidelines based on the confidence levels of the key criteria that were considered during the resource estimation.
- The reporting block cut-off grade of 150ppm U<sub>3</sub>O<sub>8</sub> currently reflects an expected open pit mining scenario reliant on mechanised strip mining equipment to allow bulk removal of overburden. Feasibility Study level mining studies are currently in progress.





## JORC Code, 2012 Edition – Table 1 Shogun and Emperor Resources (September 2016)

Material discussed in Section 1 and 2 below refer primarily to 2015-2016 drilling. Sections relevant to historical datasets have been documented in past releases to the ASX, in particular that dated 13 January 2009.

## **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>The sampling interval of the drill-cuttings was determined by the location of the sample relative to the weathering front which is visually identifiable</li> <li>Samples from a few metres above the weathering front were recovered directly from the cyclone into plastic bags. The bags were labelled and, if wet, left open to dry. Samples were taken at half metre intervals from a few metres above the weathering front to several metres below the uranium mineralised zone as determined with handheld radiometric analysis. Sampling then reverted to 1m samples until the end of hole (EOH).</li> <li>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 with a diamond saw to prevent core from breaking up.</li> <li>Natural gamma downhole logging was used to determine an equivalent U₃O₃ grade, using gamma probes calibrated for uranium on 5 August 2015 at the South Australian Government's Department of Water, Land and Biodiversity Conservation calibration facility (test pits and related facilities) in the Adelaide suburb of Frewville. Wireline density probes used to measure in-situ bulk density were also calibrated at the same facilities at the time. Daily calibrations on the gamma tools were carried out using a Cs¹³² jig, with additional calibrations run through a calibration bore at Mulga Rock during the drilling program.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).	<ul> <li>The drilling program at Shogun and Emperor comprised reverse circulation, aircore and diamond core techniques.</li> <li>A range of aircore drill bits were used to deal with varying formation hardness, ranging from tungsten carbide blades arranged around an opening in the face of the bit to bits fitted with PCD buttons.</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>The diamond drilling was completed using the triple tube method, which comprises outer PQ3 diameter (~122mm) drill rods and an internal barrel. Core orientation could not be done owing to all holes being vertical.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Recovery of air core samples can be uneven due to the variable density, moisture, clay and organic matter content of the sediments intersected. Preferred use of radiometric data for these holes alleviates sample recovery and sample interval issues.</li> <li>Diamond drilling core loss was recorded. Overall recovery in diamond drill holes within the mineralised zones is adequate with losses occurring predominantly in loose sands, which are low grade or barren.</li> <li>Evaluation of gamma log eU<sub>3</sub>O<sub>8</sub> grade in areas of core loss allowed the grade bias due to core loss to be assessed on a hole by hole basis.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>Lithological logging of all drill samples was carried out to record lithological, sedimentological, weathering, colour, and redox features. Stratigraphy is also assigned while drilling but may be revised following re-logging. The stratigraphic boundaries determined from graphic logs, and associated cross-sections, were used to model deposit geology.</li> <li>Diamond core was logged and photographed prior to cutting.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> </ul>	<ul> <li>Site Based Work</li> <li>Selection of sample composites for chemical analyses was carried out using a combination of lithology logging, down-hole gamma logging, and portable XRF data.</li> <li>After drying, the bagged samples across the mineralised zone were weighed, then split using a single tier riffle splitter. Duplicates were taken as a 50% riffle split from the original sample.</li> <li>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.</li> <li>Diamond core sample intervals were determined based on drill runs and geological information and minimum 10cm sample size, the smallest interval adequate for assay.</li> <li>Laboratory Based Work</li> <li>Following sorting and drying at the laboratory, samples were crushed to 3mm, split and pulverised to 75 microns. Approximately 100g of the pulverised sample was then split for assay, with the coarse fraction and pulverised residue also preserved.</li> </ul>



Criteria	JORC Code explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	<ul> <li>Samples from the main mineralised interval were submitted and analysed for uranium and a range of trace and major elements via fused bead laser ablation, using a combination of atomic emission spectroscopy (ICP-AES) and mass spectroscopy (ICP-MS). The sample was fused with a 12:22 lithium borate flux including 5% LiNO<sub>3</sub>.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established</li> </ul>	<ul> <li>QA/QC of Assay Samples</li> <li>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).</li> <li>Two sets of matrix-matched Certified Reference Material standards (CRMs) were used, both manufactured and certified by Geostats Pty Ltd. A 1:20 ratio for standards and 1:30 ratio for duplicates were included in the samples despatched. The laboratory also used in-house standards and performed repeats. Field duplicates were selected on the basis of down-hole gamma and portable XRF data and collected in the same manner as the original sample.</li> </ul>
Discussion of relative accuracy/confidence		<ul> <li>15 diamond-aircore twin holes have been completed at Shogun and 25 at Emperor to determine whether (if any) sample bias is occurring between aircore and diamond drilling, with analysis on-going. However, previous work by the Company has shown that sample bias, if present, does not represent a material risk to resource estimation.</li> </ul>
Portable XRF Logging		<ul> <li>All drill cuttings were analysed by portable XRF on site to help guide drill targeting and for sample compositing purposes. The portable XRF data is not used directly for any purpose other than determining mineralised zones for sampling, and grade variability. Portable XRF data is not used in resource estimation.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>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 and therefore does not represent a material risk to the resource estimate.</li> <li>Diamond-aircore twin holes are used to compare both chemical assay and radiometric data within individual holes and between hole types.</li> <li>Correlation between core assay data and probe derived equivalent U<sub>3</sub>O<sub>8</sub> grade is used to determine radiometric data disequilibrium correction.</li> </ul>
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine	<ul> <li>All drill holes were surveyed using a Differential Global Positioning System in Real- Time Kinematics (RTK) mode, with a sub-decimetre horizontal resolution.</li> </ul>



Criteria	JORC Code explanation	Commentary
	workings and other locations used in Mineral Resource estimation.  Specification of the grid system used.  Quality and adequacy of topographic control.	<ul> <li>The MGA94, zone 51 grid system was used.</li> <li>Azimuth and inclination data from wireline tools were used to calculate the approximate deviation of each drill hole.</li> <li>Topography is defined by a high-definition LIDAR survey over the project area and validated against Differential GPS data.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill spacing is at a nominal 100 x 80m along WNW-ESE trending traverses.</li> <li>The data spacing and distribution is sufficient to establish the degree of geological continuity and grade continuity appropriate for Mineral Resource estimation.</li> <li>Sample compositing was used only outside of the mineralised zones.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Vertical drilling to-date adequately tests the simple, sub-horizontal and tabular nature of the mineralisation at Shogun. The geometry of the mineralisation is well understood and predictable.</li> <li>Aircore and diamond core are consistently drilled at least 6m past the base of uranium mineralisation to allow for effective wireline logging of mineralised intervals.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples are sealed in individual bags, packed in drums and transported from site to the trucking depot in Kalgoorlie, then onto the assay laboratory in Perth, with full chain of custody maintained and documented throughout transport.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>Coffey Mining Consultants conducted an audit of drilling and sampling processes in 2014, confirming the reliability of the procedures described above.</li> <li>AMC Consultants have similarly reviewed the drilling and sampling processes.</li> </ul>



## **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Shogun and Emperor Deposits are located about 240 km ENE of Kalgoorlie within Mining Leases M39/1105 and surrounding E39/876 &amp; 877, held by Narnoo Mining Pty Ltd, a wholly owned subsidiary of Vimy Resources Limited (Vimy).</li> <li>Mining Leases M39/1105 and E39/876 &amp; 877 are located on Vacant Crown Land and not subject to a native title claim.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The areas of the Shogun and Emperor Deposits were explored for uranium by PNC Exploration Australia Pty Ltd (PNC) during the 1980's, which resulted in the discovery of the Mulga Rock Deposits. The bulk of PNC's exploration effort was focused on the Shogun and Emperor (Mulga Rock West) between 1980 and 1982.</li> <li>A trial mining program took place within the Shogun deposit in late 1983 to obtain a 20t bulk sample of carbonaeous mineralised material.</li> <li>In 2008, Vimy drilled two confirmatory diamond drill holes in Shogun for a total of 135m, a further 10 diamond drill holes at Emperor for a total of 757m, along with one 48m deep sonic drill hole.</li> <li>During 2011-2012, Vimy carried out a wide spaced aircore drilling program consisting of: <ul> <li>20 aircore drill holes for 1,374m at Shogun and</li> <li>20 aircore drill holes for 1,424m at Emperor.</li> </ul> </li> <li>During 2015-2016, Vimy carried a further twin and resource drill-out program, as follows: <ul> <li>Shogun:</li> <li>181 aircore drill holes for a total of 7,320m</li> <li>15 diamond drill holes for 735m.</li> </ul> </li> <li>Emperor: <ul> <li>44 aircore drill holes for a total of 2,460m</li> <li>25 diamond drill holes for 1,158m.</li> </ul> </li> <li>The complete datasets used for resource estimation purpose comprised the following combined number of drill holes and metres:</li> </ul>



Criteria	JORC Code explanation	Commentary
		Shogun:  235 aircore drill holes for 11,096m  194 reverse circulation drill holes for 11,875m  49 diamond drill holes for 2,303m  A total of 478 drill holes and 25,275m.  Emperor:  224 aircore drill holes for 13,681m  300 reverse circulation drill holes for 20,200m  263 diamond drill holes for 12,259m
		<ul> <li>1 sonic drill hole for 48m</li> <li>A total of 788 drill holes and 46,188m.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>Shogun and Emperor are sediment-hosted uranium deposits. The mineralisation that comprises the Shogun and Emperor resources is hosted by reduced Late Eocene sediments preserved within the Narnoo Basin. 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. 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, now buried, of the Lake Reside regional paleodrainage.</li> <li>Overlying the Narnoo Basin Sequence is a succession of oxidised sediments which at Shogun are about 25 to 40m thick, and about 25 to 55m thick at Emperor. Pre-Eocene basement in the Shogun and Emperor area consists of both Cretaceous and Carboniferous sedimentary successions, with shallow Archaen weathered metamorphic</li> </ul>
Drill hole	A summary of all information material to the	basement present to the west and northwest of Emperor.      All relevant drill hole collar data pertaining to this release is provided in the tables
Information	understanding of the exploration results including a tabulation of the following information for all Material drill holes:  o easting and northing of the drill hole collar  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.	<ul> <li>attached to this announcement.</li> <li>The Mulga Rock deposits are shallow and horizontal and therefore all holes are vertical.         Therefore, no dip nor azimuth data are included in the tables.     </li> </ul>



Criteria	JORC Code explanation	Commentary
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>For the purpose of this estimate, the minimum intercept used was 0.5m or greater above 100ppm eU<sub>3</sub>O<sub>8</sub> (0.01%eU<sub>3</sub>O<sub>8</sub>), with a maximum 2m waste length (with grades lower than 100ppm eU<sub>3</sub>O<sub>8</sub>). The value of 100ppm was chosen as it represents a natural break in the assay data.</li> <li>All uranium assays within the mineralised zones were composited initially to 0.5m for statistical analyses and estimation. Following application of high grade cuts to the 0.5m composite data, the uranium and base and other metal data were re-composited to full-zone width, variable length composites for Domains 100 and 200 for use in the Accumulation Method estimate applicable to those relatively narrow mineralised zones.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>Mineralisation is tabular and horizontal. The vertical drill hole intersections represent approximate true mineralisation thickness.</li> <li>While studies are currently in progress, it is apparent that the downhole probes used to measure the eU₃O₀ data in the aircore holes tend to provide exaggerated thicknesses at lower grades (after disequilibrium corrections) for similar contained metal compared to corresponding twin diamond drill holes with chemical assays. This is considered to be due to the increased "window" and relative sample support for the probe data, particularly in low density material typical of the Domain 100 and 200 mineralisation. The difference in contained metal for the different analytical methods is not significant and therefore does not represent a material risk to the resource estimate.</li> </ul>
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.	Three representative cross sections and a plan view of all drill collars are provided in the main text of this release.



Criteria	JORC Code explanation	Commentary		
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 drilling program underpinning this mineral resource update infills a previously defined resource envelope and chemical grades and intercepts are consistent with earlier results.		



## 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.

#### Radiometric disequilibrium

- In order to quantify the disequilibrium corrections required for the Shogun resource
  update, all suitable diamond drill holes with both assay and radiometric data available in
  these areas have been compiled and examined. There are several vintages and types
  of diamond drill hole data available in these areas, including:
  - Original PNC diamond drill holes (CD series), drilled between 1979 and 1988, using original assay data and radiometric data derived from digitised paper logs.
  - o Original PNC diamond drill holes (CD series), drilled between 1979 and 1988, which were re-entered and re-logged with modern gamma tools in 2008. Original assay data was used, and deconvolved eU₃O<sub>8</sub> calculated using the modern gamma logs.
  - A limited number of diamond holes completed by Vimy in 2008-2009 (NND series).
     Original assay and deconvolved eU₃O<sub>8</sub> calculated from gamma are available for these holes.
  - The diamond drill holes (15 and 25 respectively) completed as part of the 2015-16 Shogun infill and Emperor twin programs by Vimy. Original assay and deconvolved eU₃O<sub>8</sub> calculated from gamma are available for these holes.
- Suitable diamond data was divided up based on the new mineralised domains, and the
  assay data that occurred within these domains was composited to 0.5m. The average
  eU3O8 value over the same interval (using depth shifted radiometric data where
  appropriate) was then calculated so it could be compared to the assay data. There are
  two domains within the Shogun deposit (Domain 100, Domain 200), which contain a
  mixture of the old and new data described above, and represents the Eastern Domain
  100 and Western Domain 200 portions of the deposit. The Emperor deposit is
  defined by a single domain (Domain 100).
- Disequilibrium analysis was carried out over datasets split based on historical or Vimy drilling generations and then assigned to the combined Domains 100 and 200. The grade bins used in that analysis were determined based on apparent "natural breaks" in the datasets compared.
- Linear and polynomial regressions were derived from Q-Q plots that provided the best fit to the data, for particular grade ranges, with the adjusted radiometric dataset checked graphically and through residual mean squares to ensure that the curve was forced through the point of original and high correlation (R<sup>2</sup>) were achieved. Excellent results were achieved using this method.
- In order to validate the disequilibrium adjustments on a global level, the various datasets have been recombined according to domain and analysed statistically. When compared to the raw eU<sub>3</sub>O<sub>8</sub> dataset, the disequilibrium corrected data is significantly closer statistically to the assay-derived U<sub>3</sub>O<sub>8</sub> data.
- For the domains estimated, there is a good correlation between the U<sub>3</sub>O<sub>8</sub> and the factored eU<sub>3</sub>O<sub>8</sub> datasets.



Criteria	JORC Code explanation	Commentary
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Additional work is planned to:         <ul> <li>Accurately measure moisture values for different ore types and in situ bulk densities.</li> <li>Relate the density data to logged lithologies for use in composite data analysis.</li> <li>Refine the lithological groups used in the lithological indicator used to assign bulk densities to the ore and waste materials.</li> </ul> </li> <li>Generate a pattern of very close-spaced drilling for evaluation of short-range variability of the mineralisation, evaluation of drilling and grade control spacing and different hole types and data types.</li> </ul>



## **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	<ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>The resource estimation was based on both the available historical exploration and more recent drill hole database. Data is managed by Vimy in a Datashed database system.</li> <li>Vimy has assumed responsibility for the validity of the drill hole data and geology.</li> <li>The database was reviewed and validation checks were completed prior to commencing the resource estimation study.</li> <li>Changes that were made to the database prior to loading into mining software included: <ul> <li>Replacing samples with "less than detection" with a numeric value equal to half the detection level</li> <li>Identifying intervals with no samples/assays/radiometric data and setting appropriate bespoke priorities for those intervals.</li> </ul> </li> <li>The deconvolved radiometric eU<sub>3</sub>O<sub>8</sub> grades (prior to disequilibrium factoring) were composited to 0.5m intervals in conjunction with the assay data to allow processing and comparison on a relatively common sample interval and support.</li> <li>A final table of ranked assay data was used for the resource estimation with priority placed on: <ul> <li>Diamond drilling with chemical data, then</li> <li>Disequilibrium factored radiometric grades for aircore and RC holes.</li> </ul> </li> <li>For base and other metal (BM) data, analyses have been collected since the 2011-2012 aircore drilling program. Validation and conversions for modelling purposes would have followed similar procedures as outlined above for U<sub>3</sub>O<sub>8</sub> apart from the fact that chemical assay data was used for all BM estimates.</li> </ul>
Site visits	<ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul> <li>Ingvar Kirchner (Coffey Mining; now AMC Consultants) visited site in November 2014. Ellen Maidens, Vimy Resource Estimation Geologist, visited site in November 2015.</li> <li>Several other people employed by Coffey Mining visited site during 2012.</li> <li>Xavier Moreau undertook multiple site visits during the 2011-2012 and 2015-2016 drilling programs.</li> </ul>
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> </ul>	<ul> <li>Stratigraphy was modelled, and influences the limits of the interpreted mineralised zones.</li> <li>Diamond drilling has improved the geological understanding of the deposit. A simplified stratigraphic interpretation has been completed and is the basis for mineralised domain definition.</li> <li>The deposit grades are very closely associated with the weathering-related reduction-oxidation front and are concentrated close to this sub-horizontal boundary.</li> </ul>



Criteria	JORC Code explanation	Сс	Commentary				
	The factors affecting continuity both of grade and geology.	<ul> <li>For the purpose of the resource estimation, the mineralisation boundaries were based on lithological logging and a nominal 100ppm U<sub>3</sub>O<sub>8</sub> cut-off to define a mineralised zone of at least 0.5m thickness and honouring, where possible, the geology/stratigraphy. Thi value represents a natural break in the statistical distribution of grades distinguishing mineralised from non-mineralised material. Two uranium mineralised zones were defined for the Shogun deposit marking different positions, with the Domain 100 interpreted as an old arm of a meandering river in a flood plain environment.</li> <li>The general geology and interpretations have been validated against a small PNC-era test pit at Shogun, and similar recent Vimy test pits at Ambassador.</li> </ul>					
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan	•	The block model is no				
	width, and depth below surface to the upper and lower limits of the Mineral Resource.	•	• The mineralised zones are consistently sub-horizontal and sit approximately 25 to 35m below surface at Shogun and 25m to 55m at Emperor.				
	ilifilits of the Milheral Resource.	•	The block models exte				
			Mulga Rock Uranium Deposits – Shogun Deposit September 2016 Block Model Construction Parameters				
				Origin (m)	Extent (m)	Parent/Sub Block Size (m)	
			Easting	559500	4500	50 / 10	
			Northing	6685500	4600	50 / 10	
			Elevation	240	110	10 / 0.25	
			Mulga Rock Uranium Deposits – Emperor Deposit September 2016 Block Model Construction Parameters				
				Origin (m)	Extent (m)	Parent/Sub Block Size (m)	
			Easting	551000	10300	100 / 10	
			Northing	6685000	10000	100 / 10	
			Elevation	240	110	10 / 0.25	
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.	<ul> <li>Vimy, under the supervision of AMC Consultants, estimated the Mineral Resource for Shogun and Emperor deposits as at 20 October 2016.</li> <li>U<sub>3</sub>O<sub>8</sub> grade estimation was completed using an Accumulation Method assisted by Ordinary Kriging (OK) for the mineralised zones.</li> <li>The estimation was appropriately constrained with geological mineralisation interpretations and sub-domains.</li> <li>In the majority of cases at Shogun and Emperor, the radiometric eU<sub>3</sub>O<sub>8</sub> grades for similar intervals are lower than the corresponding chemical assays for U<sub>3</sub>O<sub>8</sub>, requiring</li> </ul>					



Criteria	JORC Code explanation	Commentary
	<ul> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of byproducts.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulfur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	positive adjustments to the radiometric data to emulate the accurate chemical assay data. Data for the uranium domains were split into groups (based on the data type/vintage) and then further split into distinct grade bins. These grade bins were determined based on apparent natural breaks in the dataset identified in Q-Q plots and statistics. Specifically, disequilibrium corrections (regression formulae for the Q-Q data) were derived for:  □ Domain 100 PNC data where eU₃O₂ data was derived from digitised logs  □ Domain 100 PNC data where the holes were re-logged in 2008  □ Domain 100 and 200 Vimy data, for holes drilled from 2008 to 2016.  ■ All samples within the mineralised wireframes were composited to 0.5m samples for statistical and data-type comparison purposes.  ■ A high grade cut of 7,000ppm was applied to the eU₃O₂d 0.5m composite data for the uranium domains. Similarly, high grade cuts were applied to the composite data for the BM elements. All data was subsequently re-composited to single full zone width intervals having variable lengths.  ■ The Accumulation Method OK estimate was completed using U₃O₂ and BM accumulation variable variogram models. The sample search parameters were defined based on the estimation methods, variography and the data spacing.  ■ A two-pass search with hard boundaries was used for the Domains 100 and 200.  ■ Mining is currently planned to be by open pit mining. Details are the subject of a Feasibility Study currently underway.  ■ Mining is expected to be more selective than the current drill spacing and supported block estimates were visually compared to the input composite samples in section views. Global average grades for estimates and de-clustered composite mean grades show a good correspondence.  ■ No assumptions were made concerning recovery of by-products.  ■ No deleterious elements were estimated.  ■ The parent block sizes of 50m x 50m x 10m at Shogun and 100m x 100m x 10m at Emperor are considered appropriate given the drill hole spacing.  ■ No assumptions have b



Criteria	JORC Code explanation	Commentary
		<ul> <li>Improved resource classification with increased drilling density within the Domain 100 of the Shogun mineral resource.</li> <li>Changes to thicknesses largely related to changes in treatment of radiometric disequilibrium, resulting in thinner mineralised zones.</li> <li>Material revisions to dry densities related to additional data—both Archimedean and gamma downhole geophysical logging.</li> <li>The 2016 Emperor Mineral Resource has not resulted in major changes to its lateral extent due to the limited amount of holes drilled over the area since PNC activities. The 2016 Mineral Resource for Emperor has increased by approximately 6% in terms of contained U<sub>3</sub>O<sub>8</sub> metal compared to the previous Inferred January 2009 estimate reported at the 150ppm U<sub>3</sub>O<sub>8</sub> cut off. The 2016 Mineral Resource for Shogun has decreased by approximately 23% in terms of contained U<sub>3</sub>O<sub>8</sub> metal, albeit reported against a different volume.</li> <li>The Mulga Rock West combined resource has increased by 2% overall.</li> </ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>Tonnages and metal are reported on a dry basis, requiring a dry in situ bulk density. Wet density and moisture are also estimated in the block model for mining studies and metallurgical purposes.</li> <li>Moisture is primarily measured through data collected for wet and dry mass during bulk density determinations and is reported by Vimy as relative to dry mass.</li> <li>Specific sets of in situ bulk densities and moistures were assigned to the ore material, waste material located below the main redox boundary and oxidised overburden material.</li> </ul>
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>The nominal 100ppm U<sub>3</sub>O<sub>8</sub> lower cut-off used to define the mineralisation was chosen as it represents a natural break in the data population for assays of mineralisation.</li> <li>A cut-off grade of 150ppm U<sub>3</sub>O<sub>8</sub> is currently applied for reporting purposes assuming open-pit mining methods. Mining studies are currently in progress.</li> </ul>
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.	<ul> <li>Relatively shallow open pit mining, incorporating in-pit waste and tailings disposal within another mined out deposit is assumed for the bulk of the deposit.</li> <li>No recovery factor has been applied to the U<sub>3</sub>O<sub>8</sub> in this estimate.</li> </ul>



Criteria	JORC Code explanation	Commentary
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.	<ul> <li>No factors have been applied regarding metallurgy.</li> <li>At Ambassador, Emperor and Shogun, spectral, mineralogical, deportment and metallurgical studies show that the bulk of the uranium is in a hexavalent ionic state and adsorbed onto carbonaceous-clay matter, with a negligible fraction contained in refractory minerals.</li> <li>Recent test work on Princess and Ambassador has shown potential recoveries approximating 90% for a range of ores rich in carbonaceous matter, using an atmospheric acid leach (tested in a resin-in-leach configuration).</li> </ul>
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.	<ul> <li>The November 2015 Pre-Feasibility 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, in combination with a conventional truck and shovel fleet. This would minimise the size of above ground overburden storage areas and support continuous 'real-time' rehabilitation practices.</li> <li>The Mulga Rock Project Public Environmental Review (PER) document was lodged and accepted for public comment by the EPA on 12 November 2015. The public comment period closed on 8 March 2016, with the EPA advising Vimy in early July that Vimy's response to submissions were adequate. In mid-August, the EPA recommended the project for Conditional Approval. Subsequent appeals have since been heard by the WA Appeals Convenor, with State and Commonwealth Ministerial decisions expected by the end of 2016.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Bulk density has been determined by using both gamma downhole geophysical logging of diamond drill holes in the Shogun and nearby Emperor deposit and Archimedean data from core samples.</li> <li>The Archimedean density measurements have also been used to validate and correct the downhole geophysical data where applicable.</li> <li>Dry bulk density values were determined by converting the geophysical density with moisture values for the corresponding lithology and mineralised domain type.</li> <li>A probability based lithological model has been used to assign variable bulk density values to the block model.</li> <li>Density values assigned to the Shogun and Emperor deposits are lower than that of similar materials for the Ambassador/Princess deposits, likely to be due to a greater organic carbon content in the ore. Facies variations at Emperor and Shogun are reflected in bulk densities within the mineralised domains.</li> </ul>



Criteria	JORC Code explanation	Commentary
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	The Mineralised Resource has been classified as a combination of Indicated and Inferred material, in accordance with JORC Code 2012 guidelines based on the confidence levels of the key criteria considered during the resource estimation such as data quality, drilling density, and apparent grade and/or spatial continuity of the mineralisation.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	AMC has audited the 2016 Shogun and Emperor Mineral Resource models and determined that the models are fit for purpose.
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul> <li>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.</li> <li>No quantitative approach has been conducted to determine the relative accuracy of the resource estimate.</li> <li>The Ordinary Kriged estimate is considered a global estimate with no further adjustments for SMU dimensions. The project's Definitive Feasibility Study is currently assessing accurate mining scenarios.</li> <li>No production data is available for comparison to the estimate.</li> <li>The local accuracy of the resource is adequate for the expected use of the model in the Feasibility Study.</li> <li>Due to the nature of the uranium mineralisation, the degree of radiochemical disequilibrium is likely to vary considerably between drill holes and with depth down each drill hole. The disequilibrium factoring applied for the 2016 resource estimate has resulted in satisfactory global results but local variations are expected.</li> <li>Diamond drilling has improved the geological, physical property (density and moisture) and disequilibrium adjustment confidence in the Shogun and Emperor deposits.</li> <li>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 further.</li> </ul>



## List of holes used in 2016 Shogun Resource Estimation - Grid GDA94 Zone 51

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
AC0974	560202.60	6686838.93	318.0	74.0	AC
AC0976	560803.73	6686962.38	322.2	68.0	AC
AC0981	561219.38	6687196.50	313.5	57.0	AC
AC0982	560540.41	6688082.48	313.0	78.0	AC
AC0983	563033.48	6686600.97	324.0	84.0	AC
AC0987	564599.94	6689548.73	341.9	74.5	AC
AC0988	564335.12	6689219.98	332.0	56.5	AC
AC0995	565718.99	6687911.14	326.5	50.5	AC
AC0998	567434.31	6687856.62	334.6	72.0	AC
AC1130	565725.53	6687559.06	327.2	50.5	AC
AC1133	565888.85	6687159.12	322.7	48.0	AC
AC1180	564855.58	6688078.06	336.0	52.0	AC
AC1181	564704.75	6688516.21	330.7	47.0	AC
AC1182	564680.34	6689014.02	333.5	53.0	AC
AC1183	564921.13	6689357.11	342.5	65.0	AC
AC1184	563988.16	6689426.97	337.1	64.0	AC
AC1185	564470.18	6689383.94	335.2	58.2	AC
AC1186	563781.04	6689885.90	341.6	47.0	AC
AC1187B	563968.04	6690470.68	348.0	40.0	AC
AC1188	562768.03	6686517.13	327.9	47.0	AC
AC1189	562411.62	6686502.16	320.9	29.0	AC
AC1190	560545.18	6686048.84	321.9	82.0	AC
AC1191	559685.18	6686563.06	318.5	76.0	AC
AC1192	559671.51	6685993.64	318.0	77.4	AC
AC1193	560019.33	6685786.14	323.3	82.0	AC
CD0050	563515.70	6687778.17	321.0	89.0	DDH
CD0155	563112.01	6687493.83	319.0	45.2	DDH
CD0175	563687.46	6687675.70	323.0	41.0	DDH
CD0179	563566.93	6687864.05	325.1	35.0	DDH
CD0305	563509.91	6686952.63	318.8	46.2	DDH

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD0311	562423.66	6688428.50	319.0	74.0	DDH
CD0408	563670.59	6688039.76	325.9	36.0	DDH
CD0409	563348.00	6687495.11	320.3	80.0	DDH
CD0410	563094.74	6687068.64	325.9	82.5	DDH
CD0411	562969.90	6686855.49	327.1	86.0	DDH
CD0412	562607.62	6688318.43	318.2	77.0	DDH
CD0413	562987.54	6688093.26	319.6	75.2	DDH
CD0414	562839.21	6687811.46	319.7	40.5	DDH
CD0776	563112.51	6687500.52	319.0	39.1	DDH
CD0777	560467.94	6687165.71	323.4	54.2	DDH
CD0778	565195.05	6687858.46	327.0	46.5	DDH
CD0781	563202.10	6686860.19	325.3	44.0	DDH
CD0782	563344.06	6687065.68	319.1	40.3	DDH
CD0783	562561.44	6688115.84	317.2	33.2	DDH
CD0784	561862.43	6688528.11	315.3	34.5	DDH
CD0785	561985.16	6688688.94	316.0	32.0	DDH
CD0786	561786.71	6689041.40	321.1	41.0	DDH
CD0787	561476.95	6689230.13	324.8	45.0	DDH
CD1124	562002.33	6688684.53	316.2	33.3	DDH
CD1125	563263.21	6687928.80	324.0	44.0	DDH
CD1126	563545.43	6687345.89	322.4	41.4	DDH
CD1127	562777.08	6688103.54	320.5	35.0	DDH
CD1128	562891.08	6687917.91	318.5	33.3	DDH
CD1267	563457.30	6687131.80	319.1	33.0	DDH
CD1268	562461.74	6688289.34	320.0	41.3	DDH
CD1385	561957.90	6688822.82	320.7	36.1	DDH
CD1386	563054.10	6687932.54	320.7	36.3	DDH
NN0119	564657.37	6689012.59	332.7	67.0	AC
NN0120	564571.49	6689063.82	330.2	70.0	AC
NN0121	564142.10	6689320.00	336.8	71.0	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NN0122	564227.97	6689268.76	334.8	71.0	AC
NN0123	564877.68	6689381.88	341.8	75.0	AC
NN0126	564313.85	6689217.53	332.1	80.0	AC
NN0127	564802.05	6689450.28	342.3	78.0	AC
NN0141	564716.16	6689501.52	342.6	69.0	AC
NN0142	564630.28	6689552.75	342.7	76.0	AC
NN0143	564859.63	6689741.98	337.2	69.0	AC
NNA5713	562564.00	6688343.00	318.8	72.0	AC
NNA5714	562817.00	6688183.00	320.0	75.0	AC
NNA5715	563130.00	6688070.00	325.6	57.0	AC
NNA5716	563369.00	6687853.00	322.0	54.0	AC
NNA5717	563038.00	6687833.00	326.1	81.0	AC
NNA5718	562769.00	6687990.00	323.3	81.0	AC
NNA5719	562475.00	6688171.00	317.8	72.0	AC
NNA5720	563503.00	6687552.00	318.5	69.0	AC
NNA5721	563636.00	6687474.00	322.5	78.0	AC
NNA5722	563289.00	6687498.00	319.7	60.0	AC
NNA5723	563015.00	6687645.00	319.8	78.0	AC
NNA5724	563130.00	6687367.00	318.6	75.0	AC
NNA5725	563348.00	6687218.00	316.7	75.0	AC
NNA5726	563546.00	6687250.00	319.8	69.0	AC
NNA5727	563439.00	6687019.00	320.5	81.0	AC
NNA5728	563587.00	6686912.00	318.4	51.0	AC
NNA5729	563341.00	6686784.00	321.1	81.0	AC
NNA5730	563466.00	6686694.00	319.7	48.0	AC
NNA5731	563142.00	6686527.00	323.2	75.0	AC
NNA5732	563279.00	6686460.00	323.5	42.0	AC
NNA6000	565180.00	6687875.00	327.1	54.0	AC
NNA6001	565362.00	6687788.00	330.9	54.0	AC
NNA6002	564433.00	6689290.00	250.0	57.0	AC
NNA6003	564546.00	6689474.00	337.4	69.0	AC
NNA6004	564720.00	6689705.00	342.0	57.0	AC
NNA6383	562044.78	6688772.39	322.5	39.0	AC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6384	562109.63	6688732.51	323.8	42.0	AC
NNA6385	562176.66	6688695.04	325.8	42.0	AC
NNA6386	562244.64	6688649.13	328.9	45.0	AC
NNA6387	562304.59	6688607.41	330.2	51.0	AC
NNA6388	562418.46	6688548.58	320.6	39.0	AC
NNA6389	562453.18	6688529.32	320.1	39.0	AC
NNA6390	562512.64	6688493.94	320.6	39.0	AC
NNA6391	562595.94	6688444.70	323.7	42.0	AC
NNA6392	562663.16	6688391.51	320.4	36.0	AC
NNA6393	562728.50	6688369.33	318.5	36.0	AC
NNA6394	562791.24	6688334.53	318.3	36.0	AC
NNA6395	562862.20	6688291.18	318.4	36.0	AC
NNA6396	562930.67	6688252.63	318.7	36.0	AC
NNA6397	562998.05	6688213.19	323.0	39.0	AC
NNA6398	563067.33	6688146.43	318.6	36.0	AC
NNA6399	562136.04	6688599.68	318.4	36.0	AC
NNA6400	562226.09	6688545.68	318.1	36.0	AC
NNA6401	562296.36	6688504.35	319.1	39.0	AC
NNA6402	562371.40	6688458.98	320.6	42.0	AC
NNA6403	562511.62	6688392.22	321.7	45.0	AC
NNA6404	562680.56	6688275.24	320.0	36.0	AC
NNA6405	562849.71	6688175.52	319.0	39.0	AC
NNA6406	562912.01	6688136.97	317.9	36.0	AC
NNA6407	563050.19	6688059.79	320.9	39.0	AC
NNA6408	563142.21	6688033.57	320.3	42.0	AC
NNA6409	563208.25	6687986.44	320.8	42.0	AC
NNA6410	563530.96	6687762.04	321.3	42.0	AC
NNA6411	562400.60	6688325.20	318.8	45.0	AC
NNA6412	562553.71	6688223.60	318.7	39.0	AC
NNA6413	562623.82	6688182.17	320.0	39.0	AC
NNA6414	562693.20	6688142.97	323.0	39.0	AC
NNA6415	562840.01	6688064.53	319.9	39.0	AC
NNA6416	562906.09	6688026.93	320.4	39.0	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6417	562974.57	6687985.56	319.2	36.0	AC
NNA6418	563114.84	6687903.44	324.9	42.0	AC
NNA6419	563185.52	6687861.04	328.9	45.0	AC
NNA6420	563235.88	6687836.86	331.1	48.0	AC
NNA6421	563420.57	6687720.38	320.5	42.0	AC
NNA6422	562617.43	6688081.65	321.3	39.0	AC
NNA6423	562694.69	6688046.39	325.2	42.0	AC
NNA6424	562820.49	6687958.52	318.1	36.0	AC
NNA6425	562942.42	6687890.43	320.2	36.0	AC
NNA6426	563095.94	6687803.10	327.2	45.0	AC
NNA6427	563162.41	6687746.77	321.4	42.0	AC
NNA6428	563304.08	6687671.72	320.9	39.0	AC
NNA6429	563359.95	6687639.44	320.3	36.0	AC
NNA6430	563660.67	6687458.31	322.9	45.0	AC
NNA6431	562404.70	6688073.63	318.3	36.0	AC
NNA6432	562481.20	6688024.89	322.1	39.0	AC
NNA6433	562549.79	6687988.20	322.9	39.0	AC
NNA6434	562618.00	6687941.17	326.0	45.0	AC
NNA6435	562685.86	6687900.60	328.7	45.0	AC
NNA6436	562767.52	6687850.14	321.9	42.0	AC
NNA6437	562890.11	6687774.91	318.7	36.0	AC
NNA6438	562959.86	6687733.26	319.3	39.0	AC
NNA6439	563025.71	6687693.93	319.8	36.0	AC
NNA6440	563105.80	6687646.03	319.1	39.0	AC
NNA6441	563242.43	6687560.34	320.7	42.0	AC
NNA6442	563404.41	6687468.25	320.4	36.0	AC
NNA6443	563473.05	6687422.83	321.1	36.0	AC
NNA6444	563538.94	6687384.59	322.7	39.0	AC
NNA6445	563608.87	6687340.75	323.5	39.0	AC
NNA6446	563368.79	6687325.60	317.3	36.0	AC
NNA6447	562908.42	6687496.94	318.4	36.0	AC
NNA6448	562987.40	6687446.34	318.0	36.0	AC
NNA6449	563206.50	6687322.16	317.5	36.0	AC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6450	563287.23	6687276.09	316.2	75.0	AC
NNA6451	563411.30	6687188.17	317.4	33.0	AC
NNA6452	563536.06	6687109.77	320.0	42.0	AC
NNA6453	563606.20	6687066.83	321.8	45.0	AC
NNA6454	563679.97	6687036.18	323.5	39.0	AC
NNA6455	562761.48	6687414.28	318.8	39.0	AC
NNA6456	562882.26	6687341.52	319.3	39.0	AC
NNA6457	562954.14	6687301.28	320.4	39.0	AC
NNA6458	563022.11	6687258.97	321.3	42.0	AC
NNA6459	563089.68	6687223.89	321.5	42.0	AC
NNA6460	563258.52	6687117.58	320.9	42.0	AC
NNA6461	563649.20	6686881.13	319.8	36.0	AC
NNA6462	563286.54	6686963.84	322.1	42.0	AC
NNA6463	563351.55	6686921.51	321.7	42.0	AC
NNA6464	563417.57	6686875.75	320.8	42.0	AC
NNA6465	563489.34	6686831.19	319.3	42.0	AC
NNA6466	563557.45	6686795.26	318.1	39.0	AC
NNA6467	563267.25	6686813.33	322.7	42.0	AC
NNA6468	563064.26	6686764.68	324.7	45.0	AC
NNA6469	563130.63	6686728.00	323.2	42.0	AC
NNA6470	563208.58	6686690.69	321.1	39.0	AC
NNA6471	563270.38	6686642.15	320.8	39.0	AC
NNA6472	563343.57	6686606.16	321.0	45.0	AC
NNA6473	562951.71	6686648.62	323.0	39.0	AC
NNA6474	562628.86	6686589.77	324.2	42.0	AC
NNA6475	562704.14	6686560.54	327.3	42.0	AC
NNA6476	562858.04	6686462.27	331.0	48.0	AC
NNA6477	562938.92	6686416.79	327.8	45.0	AC
NNA6478	563016.99	6686376.33	324.9	45.0	AC
NNA6479	563074.10	6686332.74	324.0	45.0	AC
NNA6480	563145.53	6686292.44	324.3	42.0	AC
NNA6481	563210.88	6686246.62	326.5	42.0	AC
NNA6619	563463.73	6687795.34	321.2	48.0	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6683	561627.97	6689235.66	324.3	48.0	AC
NNA6687	561886.24	6689117.87	325.1	39.0	AC
NNA6688	561953.23	6689069.30	326.9	42.0	AC
NNA6689	562025.30	6689036.67	324.9	42.0	AC
NNA6691	561453.13	6689239.50	324.6	48.0	AC
NNA6692	561546.68	6689188.02	322.9	48.0	AC
NNA6693	561660.26	6689120.61	322.9	42.0	AC
NNA6694	561727.54	6689079.54	322.1	45.0	AC
NNA6695	561858.89	6689002.25	321.2	45.0	AC
NNA6696	562004.50	6688913.94	317.8	36.0	AC
NNA6697	562071.97	6688871.48	318.2	36.0	AC
NNA6698	562138.91	6688834.59	319.0	39.0	AC
NNA6699	561473.83	6689114.67	322.3	48.0	AC
NNA6700	561544.70	6689073.43	321.3	45.0	AC
NNA6701	561605.94	6689036.79	321.6	45.0	AC
NNA6702	561678.97	6688996.49	320.0	45.0	AC
NNA6703	561745.14	6688954.83	316.6	39.0	AC
NNA6704	561820.18	6688910.67	315.9	39.0	AC
NNA6705	561887.50	6688870.67	318.4	39.0	AC
NNA6706	561574.27	6688936.38	315.7	39.0	AC
NNA6707	561639.31	6688901.21	316.4	36.0	AC
NNA6708	561708.34	6688859.25	316.2	36.0	AC
NNA6709	561780.53	6688817.34	315.2	36.0	AC
NNA6710	561914.60	6688735.06	316.1	42.0	AC
NNA6712	561916.24	6688616.76	316.4	36.0	AC
NNA6713	561984.82	6688577.72	317.8	36.0	AC
NNA6714	562052.85	6688537.73	319.3	36.0	AC
NNA6715	562115.13	6688498.39	319.4	36.0	AC
NNA6716	562190.56	6688454.39	317.1	36.0	AC
NNA6717	562257.03	6688414.01	319.3	39.0	AC
NNA6718	562328.97	6688372.48	318.8	42.0	AC
NNA6721	562320.83	6688262.51	318.4	36.0	AC
NNA6723	562063.86	6688270.75	317.6	36.0	AC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6724	562133.59	6688227.34	314.9	33.0	AC
NNA6725	562210.14	6688193.65	316.6	33.0	AC
NNA6726	562277.09	6688151.79	317.0	33.0	AC
NNA6727	562345.45	6688114.80	317.4	33.0	AC
NNA6728	562042.76	6688125.38	314.5	33.0	AC
NNA6729	562115.84	6688092.03	314.1	33.0	AC
NNA6730	562183.14	6688050.91	314.1	30.0	AC
NNA6731	562320.50	6687969.68	314.7	30.0	AC
NNA6732	562394.99	6687925.34	315.7	33.0	AC
NNA6734	562528.88	6687846.69	319.3	36.0	AC
NNA6737	562799.51	6687677.44	318.8	36.0	AC
NNA6738	562873.22	6687639.50	318.2	36.0	AC
NNA6758	560651.92	6688194.66	312.7	30.0	AC
NNA6769	560394.48	6688164.26	314.0	33.0	AC
NNA6773	560678.09	6687996.62	312.4	33.0	AC
NNA6783	560390.30	6687956.25	312.0	33.0	AC
NNA6792	563443.82	6687004.37	320.6	39.0	AC
NNA6798	561554.81	6688826.33	316.0	45.0	AC
NNA6799	561615.24	6688784.79	315.6	45.0	AC
NNA6800	561694.16	6688742.64	315.4	45.0	AC
NNA6801	563592.34	6687801.79	321.2	45.0	AC
NNA6803	563507.04	6687656.99	320.4	45.0	AC
NNA6804	563592.72	6687603.09	320.2	45.0	AC
NNA6805	563114.60	6688123.85	319.8	39.0	AC
NNA6809	563017.21	6688297.53	323.4	45.0	AC
NNA6810	563096.16	6688256.39	323.9	45.0	AC
NNA6811	563157.34	6688214.87	323.7	42.0	AC
NNA6812	563545.12	6687817.57	321.1	45.0	AC
NNA6835	565659.05	6687600.93	328.1	51.0	AC
NNA6836	565808.24	6687515.39	326.7	48.0	AC
NNA6837	565770.90	6687454.71	324.5	48.0	AC
NNA6838	565680.65	6687489.66	324.1	48.0	AC
NNA6839	565752.89	6687295.64	321.3	48.0	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6840	563190.21	6688091.33	321.2	42.0	AC
NND5002	563342.23	6687072.64	318.9	70.0	DDH
NND5003	562475.29	6688279.38	320.7	75.0	DDH
NND6560	562865.90	6688291.45	318.4	36.0	DDH
NND6561	563065.02	6688147.07	318.5	36.0	DDH
NND6562	562296.05	6688506.73	319.2	37.5	DDH
NND6563	562511.43	6688394.27	321.7	42.0	DDH
NND6564	563206.22	6687986.11	320.9	42.0	DDH
NND6565	562552.19	6688221.97	318.7	39.0	DDH
NND6566	563237.67	6687836.34	331.2	48.0	DDH
NND6567	562694.34	6688044.74	325.2	42.0	DDH
NND6569	563027.58	6687694.92	319.7	36.0	DDH
NND6570	563242.45	6687558.58	320.6	38.0	DDH
NND6571	563369.58	6687327.28	317.4	36.0	DDH
NND6572	563088.80	6687222.27	321.6	45.0	DDH
NND6573	563486.62	6686834.92	319.4	45.0	DDH
NND6574	563130.64	6686725.54	323.1	39.3	DDH
NND6575	563268.71	6686640.80	321.0	45.0	DDH
OF0008	561837.17	6691684.87	328.7	143.0	RC
RC0002	562237.24	6685627.41	326.0	209.0	RC
RC0009	564790.57	6689922.92	339.6	215.0	RC
RC0050	563515.70	6687778.17	321.0	89.0	RC
RC0051	566302.15	6686111.14	335.4	65.0	RC
RC0068	563095.07	6690756.27	342.0	65.0	RC
RC0120	561222.22	6689139.45	318.7	71.0	RC
RC0154	562944.55	6687593.74	318.0	71.0	RC
RC0155	563112.01	6687493.83	319.0	77.0	RC
RC0156	563284.63	6687390.85	318.4	77.0	RC
RC0157	563456.39	6687288.38	318.2	77.0	RC
RC0158	563628.15	6687185.91	330.9	53.0	RC
RC0159	563241.98	6687709.74	320.6	83.0	RC
RC0160	563070.57	6687810.84	326.7	83.0	RC
RC0161	563327.86	6687658.51	320.7	77.0	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0162	563413.74	6687607.27	319.1	77.0	RC
RC0163	563499.62	6687556.04	319.0	65.0	RC
RC0164	563585.50	6687504.80	321.3	47.0	RC
RC0165	563757.26	6687402.33	324.2	41.0	RC
RC0166	563292.71	6687794.76	322.7	77.0	RC
RC0167	563378.07	6687742.67	321.0	65.0	RC
RC0168	563463.95	6687691.43	320.6	65.0	RC
RC0169	563548.97	6687640.71	320.5	47.0	RC
RC0170	563634.85	6687589.47	321.2	47.0	RC
RC0171	563192.34	6688013.00	321.0	59.0	RC
RC0172	563343.94	6687880.64	323.9	65.0	RC
RC0173	563429.82	6687829.40	323.1	47.0	RC
RC0174	563601.58	6687726.93	322.0	47.0	RC
RC0175	563687.45	6687675.70	323.0	41.0	RC
RC0176	563859.22	6687573.23	324.8	41.0	RC
RC0177	563395.69	6687967.37	323.0	41.0	RC
RC0178	563481.56	6687916.15	325.6	47.0	RC
RC0179	563566.93	6687864.05	325.1	41.0	RC
RC0180	563361.88	6687904.87	325.0	35.0	RC
RC0181	563737.84	6687762.10	323.0	35.0	RC
RC0182	563275.00	6688153.50	320.6	26.0	RC
RC0183	563436.45	6688057.18	329.9	41.0	RC
RC0184	563531.78	6688000.31	324.9	35.0	RC
RC0185	563617.65	6687949.07	324.2	35.0	RC
RC0186	563703.53	6687897.84	323.0	35.0	RC
RC0187	563789.93	6687847.46	323.8	35.0	RC
RC0188	563961.18	6687744.13	325.9	41.0	RC
RC0189	563402.22	6688368.70	324.5	35.0	RC
RC0190	561931.31	6687253.85	317.3	65.0	RC
RC0191	563744.89	6688164.28	324.5	37.0	RC
RC0192	561032.41	6687786.65	315.3	65.0	RC
RC0193	564089.26	6687958.83	324.0	41.0	RC
RC0194	563157.40	6687175.65	321.9	83.0	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0195	563030.34	6686962.66	328.1	89.0	RC
RC0196	562872.04	6686691.46	323.2	89.0	RC
RC0197	563870.41	6688374.68	328.7	47.2	RC
RC0198	563997.64	6688589.90	324.5	35.0	RC
RC0199	564157.70	6688842.58	326.9	53.0	RC
RC0200	563136.08	6689450.90	331.8	95.0	RC
RC0201	562272.99	6689965.81	333.8	35.0	RC
RC0202	561429.65	6690468.94	334.6	79.0	RC
RC0224	560382.43	6686730.49	321.0	59.0	RC
RC0270	561217.17	6686232.48	323.3	83.0	RC
RC0280	560704.83	6685373.68	324.5	89.0	RC
RC0281	562416.92	6684353.44	333.2	65.0	RC
RC0288	563681.02	6686208.83	328.7	47.0	RC
RC0289	564617.05	6685673.70	331.2	71.0	RC
RC0290	565471.56	6685163.92	327.9	59.0	RC
RC0302	562124.80	6687787.02	318.0	77.0	RC
RC0303	562467.46	6687582.59	318.0	71.0	RC
RC0304	562817.32	6687378.53	319.0	77.0	RC
RC0305	563500.93	6686970.71	319.3	72.0	RC
RC0306	563844.44	6686765.77	326.9	47.0	RC
RC0307	562251.84	6688005.84	314.7	71.0	RC
RC0308	562598.80	6687798.85	322.3	83.0	RC
RC0309	562390.06	6688217.98	318.0	71.0	RC
RC0310	562728.42	6688016.12	326.3	83.0	RC
RC0311	562423.66	6688428.50	319.0	74.0	RC
RC0312	562762.02	6688226.64	321.0	77.0	RC
RC0313	562599.98	6688556.20	329.3	53.0	RC
RC0314	562932.34	6688357.93	322.2	35.0	RC
RC0315	562722.92	6688773.97	328.1	41.0	RC
RC0316	563282.86	6688439.92	323.2	31.0	RC
RC0317	564548.14	6687295.08	323.0	41.0	RC
RC0318	565327.94	6686693.51	324.0	53.0	RC
RC0319	567137.90	6685599.81	325.3	59.0	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0325	565153.39	6688247.40	327.0	53.0	RC
RC0326	566038.81	6687719.17	325.1	60.0	RC
RC0327	566638.35	6687387.10	329.5	65.0	RC
RC0328	567477.16	6686840.23	329.4	53.0	RC
RC0335	562344.90	6691378.47	335.7	59.0	RC
RC0336	564184.65	6690814.23	352.0	59.0	RC
RC0337	565568.11	6689463.70	339.7	59.0	RC
RC0338	567701.70	6688178.31	333.5	71.0	RC
RC0345	564489.46	6691541.82	343.0	59.0	RC
RC0415	562194.36	6688565.30	318.0	71.0	RC
RC0416	561835.39	6688779.46	315.0	71.8	RC
RC0417	561487.06	6688986.11	315.8	71.0	RC
RC0418	562066.64	6688409.77	319.9	77.0	RC
RC0419	561719.86	6688613.15	320.0	77.0	RC
RC0420	561380.65	6688815.53	315.6	65.0	RC
RC0421	561032.83	6689023.03	316.0	71.0	RC
RC0422	561972.20	6688171.81	315.1	65.0	RC
RC0423	561635.98	6688374.58	314.1	65.0	RC
RC0424	561281.05	6688585.11	313.3	65.0	RC
RC0425	560916.93	6688793.92	322.9	77.0	RC
RC0426	561780.42	6687992.47	315.3	71.0	RC
RC0427	561431.75	6688200.49	319.0	77.0	RC
RC0428	561062.47	6688420.79	315.0	71.0	RC
RC0429	560719.81	6688625.22	314.0	65.0	RC
RC0430	563725.11	6686548.17	324.1	35.0	RC
RC0431	563406.49	6686738.25	320.0	71.0	RC
RC0432	562687.68	6687167.09	325.0	71.0	RC
RC0433	562324.94	6687378.83	318.0	77.0	RC
RC0434	562001.17	6687572.00	317.8	71.0	RC
RC0435	561664.53	6687772.83	315.6	65.0	RC
RC0436	561308.98	6687984.94	315.0	65.0	RC
RC0437	560966.33	6688189.37	314.0	65.0	RC
RC0438	560615.94	6688398.41	315.0	77.0	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0439	563588.23	6686265.00	329.9	41.0	RC
RC0440	563206.10	6686497.99	322.9	59.0	RC
RC0441	562427.18	6686956.86	323.0	83.0	RC
RC0442	561780.59	6687404.85	317.3	71.0	RC
RC0443	561328.55	6687612.45	313.9	59.0	RC
RC0444	560951.43	6687838.44	315.8	77.0	RC
RC0445	562245.31	6688767.80	320.2	41.0	RC
RC0446	561917.59	6688962.14	320.8	65.0	RC
RC0447	561605.50	6689149.49	322.5	83.0	RC
RC0467	561271.45	6689342.97	322.1	71.0	RC
RC0468	561443.41	6689463.56	323.5	47.0	RC
RC0469	561380.76	6689569.25	321.8	71.0	RC
RC0472	563317.82	6687354.75	317.8	80.0	RC
RC0599	560350.63	6687713.62	313.9	68.0	RC
RC0600	560786.04	6687453.86	311.6	74.0	RC
RC0601	561630.23	6686950.22	317.6	64.0	RC
RC0602	562660.95	6686337.64	327.2	82.0	RC
RC0603	563089.49	6686081.98	330.2	50.0	RC
RC0604	563520.95	6685823.41	335.5	44.0	RC
RC0605	564395.72	6685302.70	330.0	62.0	RC
RC0606	560194.00	6687330.58	321.4	86.0	RC
RC0607	560649.22	6687059.94	324.1	68.6	RC
RC0608	561086.86	6686796.25	320.6	56.0	RC
RC0609	562873.09	6685729.00	327.2	56.0	RC
RC0610	563827.21	6685159.78	334.8	80.0	RC
RC0612	563068.04	6685130.60	335.0	48.0	RC
RC0614	562370.11	6684960.10	338.7	66.0	RC
RC0615	562864.47	6684654.69	332.0	50.0	RC
RC0616	563068.59	6691672.19	336.3	53.0	RC
RC0617	562287.21	6690928.48	338.7	59.0	RC
RC0618	563205.26	6690380.78	341.0	41.0	RC
RC0619	566306.02	6688532.07	331.6	59.0	RC
RC0620	567010.63	6688102.50	329.0	53.0	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0622	565490.64	6688488.69	327.3	45.2	RC
RC0623	566363.93	6688008.45	330.7	53.0	RC
RC0624	567220.50	6687491.02	327.4	65.0	RC
RC0625	565269.51	6687831.11	328.4	53.0	RC
RC0626	566120.23	6687324.75	325.7	47.0	RC
RC0627	567008.63	6686775.36	329.8	59.0	RC
RC0628	561577.26	6689740.42	323.9	35.0	RC
RC0629	562007.17	6689485.11	326.3	29.0	RC
RC0630	562441.72	6689225.86	328.0	29.0	RC
RC0634	562055.12	6689171.21	324.0	35.0	RC
RC0635	564578.95	6687663.19	328.5	47.0	RC
RC0636	565469.01	6687131.02	330.0	53.0	RC
RC0637	566321.33	6686609.49	327.0	65.0	RC
RC0642	564946.17	6687035.38	325.8	41.0	RC
RC0643	564457.86	6687325.55	323.1	59.0	RC
RC0644	565058.19	6686413.12	325.4	65.0	RC
RC0645	565946.05	6685797.26	326.8	59.0	RC
RC0694	563122.26	6687511.01	318.8	35.0	RC
RC0695	563108.55	6687507.55	318.9	35.0	RC
RC0696	563117.49	6687501.05	319.0	35.0	RC
RC0697	563126.58	6687496.79	319.0	35.0	RC
RC0698	563095.70	6687503.57	319.0	35.0	RC
RC0699	563103.43	6687498.96	319.0	35.0	RC
RC0700	563121.46	6687488.20	319.0	35.0	RC
RC0701	563129.19	6687483.58	319.0	35.0	RC
RC0702	563097.79	6687489.51	319.0	35.0	RC
RC0703	563107.75	6687484.73	319.0	35.0	RC
RC0704	563114.96	6687479.26	319.0	35.0	RC
RC0705	563102.63	6687476.14	319.0	35.0	RC
RC0706	563163.25	6687579.71	319.2	68.0	RC
RC0707	563027.00	6687544.56	318.0	77.0	RC
RC0708	563197.89	6687442.60	319.0	71.0	RC
RC0709	563061.64	6687407.44	319.0	71.0	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0871	565065.09	6688784.49	338.8	56.5	RC
RC0973	560125.23	6686299.36	316.1	74.5	RC
RC0975	560544.39	6686635.02	320.0	83.0	RC
RC0977	562149.13	6686160.90	322.0	84.0	RC
RC0978	562449.36	6685982.96	324.9	78.0	RC
RC0979	562876.51	6686209.04	328.4	72.0	RC
RC0980	562084.70	6686681.43	321.0	78.0	RC
RC0984	563373.05	6686397.22	327.9	42.0	RC
RC0986	562714.89	6690673.33	343.0	44.5	RC
RC0996	567001.17	6687146.20	333.0	62.5	RC
RC0997	566784.40	6687758.77	329.3	48.0	RC
RC1131	566569.39	6687056.79	328.2	60.0	RC
RC1132	565887.76	6686882.38	324.8	54.0	RC
RC1134	566214.57	6686977.35	323.1	60.0	RC
RNN0014	563295.86	6690634.14	349.1	69.0	AC
RNN0015	565074.86	6689741.66	340.3	45.0	AC
RNN0016	564694.31	6689328.25	333.0	60.0	AC
RNN0017	564549.95	6689449.30	336.6	69.0	AC
RNN0018	564356.06	6689483.47	335.8	54.0	AC
RNN0019	564271.50	6689009.90	330.0	51.0	AC
RNN0020	564447.80	6689149.26	330.9	54.0	AC
RNN0021	564142.68	6689086.76	332.5	39.0	AC

<sup>&</sup>lt;sup>1</sup> AC – Aircore drill hole; RC – Reverse circulation drill hole; and DDH – Diamond drill hole



## List of holes used in 2016 Emperor Resource Estimation - Grid GDA94 Zone 51

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD1118	556904.53	6691474.25	323.0	42	DDH
RC0110	560759.69	6695141.00	343.8	64	RC
RC0114	560027.87	6692760.79	328.0	53	RC
RC0115	558334.67	6693769.76	331.8	59	RC
RC0116	554378.13	6696137.98	400.2	41	RC
RC0121	558358.12	6690851.76	308.3	65	RC
RC0122	555644.19	6692459.08	335.7	59	RC
RC0123	553238.45	6693903.16	375.1	47	RC
RC0125	559516.42	6687248.30	318.0	71	RC
RC0126	556934.71	6688786.19	321.2	77	RC
RC0127	554370.19	6690313.82	325.0	83	RC
RC0128	551730.94	6691886.04	357.9	77	RC
RC0134	557986.23	6684673.65	323.5	84	RC
RC0135	555404.88	6686210.16	316.0	53	RC
RC0136	552839.49	6687738.31	323.4	53	RC
RC0137	550275.31	6689264.58	349.4	41	RC
RC0139	551307.76	6685161.08	335.1	41	RC
RC0526	556521.78	6690943.82	323.2	80	RC
CD0205	558859.45	6692004.61	318.9	67.7	DDH
CD0206	557994.41	6692527.43	327.8	50	DDH
CD0207	557145.14	6693030.14	328.5	52.5	DDH
CD0213	557503.37	6691351.54	319.6	53	DDH
CD0220	556733.31	6690351.66	317.3	60.2	DDH
RC0203	560564.84	6690984.86	326.4	47	RC
RC0204	559763.44	6691471.50	318.4	77	RC
RC0205	558859.45	6692004.61	318.9	77	RC
RC0206	557998.51	6692523.55	328.0	83	RC
RC0207	557139.63	6693025.78	328.6	59	RC
RC0208	556289.48	6693542.46	338.4	65	RC
RC0209	555527.50	6693988.92	343.0	41	RC
RC0210	557377.46	6694339.66	341.1	65	RC
RC0211	559936.78	6689902.83	316.2	65	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0212	559045.07	6690431.40	318.9	77.5	RC
RC0213	557509.33	6691356.00	319.5	77	RC
RC0214	556635.06	6691871.43	327.6	83	RC
RC0215	554787.47	6692969.03	339.4	47	RC
RC0216	560129.28	6688281.98	311.5	71	RC
RC0217	559269.23	6688839.59	311.8	71	RC
RC0218	558454.39	6689332.62	309.7	71	RC
RC0219	557567.83	6689855.91	314.0	71	RC
RC0220	556728.92	6690354.05	317.7	77	RC
RC0221	555856.01	6690879.60	325.5	83	RC
RC0222	555005.31	6691382.33	327.2	85	RC
RC0223	554115.19	6691871.44	341.7	56	RC
RC0225	558667.41	6687753.64	314.6	71	RC
RC0226	557766.53	6688291.09	310.0	71	RC
RC0227	556137.61	6689386.33	320.7	76	RC
RC0228	555263.85	6689986.78	316.0	71	RC
RC0229	553573.60	6691113.93	340.0	64	RC
RC0230	552870.94	6691512.82	346.6	45	RC
RC0231	558146.48	6686899.97	319.2	77	RC
RC0232	557278.75	6687418.81	317.0	53	RC
RC0233	556426.31	6687926.20	318.7	53	RC
RC0234	555599.11	6688423.19	319.0	77	RC
RC0235	554712.17	6688943.02	313.8	71	RC
RC0236	553862.28	6689460.52	319.9	77	RC
RC0237	552983.10	6689964.08	329.0	41	RC
RC0238	559002.35	6686390.53	316.7	77	RC
RC0239	558502.14	6685550.12	321.4	89	RC
RC0240	557638.19	6686065.53	316.3	35	RC
RC0241	556763.07	6686587.62	319.7	65	RC
RC0242	555938.73	6687110.86	322.0	71	RC
RC0243	555079.63	6687607.08	315.7	77	RC
RC0244	554219.32	6688105.19	313.6	71	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0245	553357.29	6688610.15	320.9	41.1	RC
RC0246	552497.15	6689110.49	329.0	35	RC
RC0248	557014.64	6685098.42	319.3	35	RC
RC0249	555941.98	6685334.28	315.7	74	RC
RC0250	554538.52	6686729.35	307.0	59	RC
RC0251	553700.34	6687229.39	318.0	77	RC
RC0252	552053.42	6688384.27	325.9	14	RC
RC0254	556995.58	6684124.73	321.2	59	RC
RC0255	555792.70	6684888.86	317.6	76	RC
RC0256	554909.54	6685405.26	315.0	65	RC
RC0257	554070.65	6685913.88	313.6	65	RC
RC0258	553210.71	6686404.79	323.0	81	RC
RC0259	552347.64	6686913.87	333.0	77	RC
RC0260	551506.24	6687394.87	337.0	29	RC
RC0261	556116.29	6683485.85	318.9	89	RC
RC0262	555340.05	6683957.08	317.4	95	RC
RC0263	554491.43	6684517.03	316.7	77	RC
RC0264	553641.73	6685025.11	320.1	77	RC
RC0265	552697.08	6685577.03	327.1	95	RC
RC0266	551836.10	6686072.05	334.5	62	RC
RC0267	550947.11	6686588.44	342.8	41	RC
RC0268	556993.83	6682965.93	320.5	59	RC
RC0333	559093.51	6693318.22	327.0	59	RC
RC0334	560924.45	6692225.90	328.0	60	RC
RC0342	559302.85	6694637.25	348.5	22	RC
RC0343	561031.61	6693605.90	337.5	50	RC
RC0344	562747.82	6692580.86	339.4	59	RC
RC0452	560099.87	6691263.91	318.8	71	RC
RC0453	559336.35	6691719.10	319.3	77	RC
RC0454	557837.15	6692609.85	324.0	83	RC
RC0455	558610.07	6692148.73	321.1	63	RC
RC0456	556756.12	6693260.37	334.4	59	RC
RC0457	557877.05	6691132.81	314.8	71	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0458	557026.86	6691638.84	323.8	83	RC
RC0459	556154.06	6692306.65	340.3	80	RC
RC0460	557187.75	6690086.19	315.8	71	RC
RC0461	556308.27	6690607.33	322.2	77	RC
RC0462	555769.11	6689635.28	318.0	72	RC
RC0463	554728.30	6690100.17	322.2	77	RC
RC0464	553963.97	6690556.16	329.0	73	RC
RC0465	554681.34	6690837.34	326.8	81	RC
RC0466	553876.86	6690006.11	322.7	77	RC
RC0470	561029.85	6689778.54	322.5	71	RC
RC0477	559515.36	6691127.64	317.5	62	RC
RC0478	559073.15	6691386.89	319.0	56	RC
RC0681	559284.47	6689802.92	307.0	47	RC
CD0481	557796.20	6692156.54	322.4	45	DDH
CD0491	558227.48	6692863.26	324.2	45	DDH
CD0500	558432.77	6691282.43	317.7	54.4	DDH
CD0525	556078.18	6691239.20	328.0	51.4	DDH
CD0526	556514.11	6690979.11	323.0	44	DDH
CD0591	557145.77	6693999.26	339.0	59.2	DDH
CD0714	557988.64	6692042.59	321.5	57.4	DDH
CD0715	558422.30	6691784.75	319.3	54.4	DDH
CD0716	558846.24	6691530.40	318.0	72	DDH
CD0717	559353.83	6691227.37	318.0	65.8	DDH
CD0718	556106.44	6692672.21	336.7	58.2	DDH
CD0719	557328.76	6691941.90	325.9	50	DDH
CD0720	557739.78	6691696.79	318.8	48	DDH
CD0721	558230.84	6691404.01	315.8	56	DDH
CD0722	557208.04	6691531.92	322.4	54.6	DDH
CD0723	557698.62	6691244.42	316.9	45	DDH
CD0724	559687.84	6690049.86	309.6	51.4	DDH
CD0725	556048.41	6691742.70	330.3	54.2	DDH
CD0726	556483.90	6691472.67	324.2	45.5	DDH
CD0727	556879.46	6691236.67	321.9	42.4	DDH



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD0728	557337.83	6690964.64	317.4	41	DDH
CD0729	557834.84	6690666.91	315.0	41	DDH
CD0730	560000.79	6689373.71	308.4	36.4	DDH
CD0731	555423.10	6691629.88	329.4	51.4	DDH
CD0732	555914.19	6691336.24	329.7	51.4	DDH
CD0733	556246.55	6691136.68	323.8	50	DDH
CD0734	556680.63	6690878.22	321.7	42.4	DDH
CD0735	557121.15	6690615.02	317.2	38	DDH
CD0736	557565.04	6690349.55	317.3	36.4	DDH
CD0737	555621.97	6691014.41	324.5	48.4	DDH
CD0738	557010.01	6690185.74	315.0	36.2	DDH
CD0739	555481.61	6690617.26	324.0	50	DDH
CD0740	555185.00	6690307.47	322.3	45.2	DDH
CD0741	554545.05	6690217.95	324.6	62	DDH
CD0742	554060.89	6690068.66	321.0	66	DDH
CD0743	554750.03	6689506.14	314.1	36.4	DDH
CD0744	555157.10	6689263.29	311.9	33.4	DDH
CD0745	554719.23	6688386.85	307.0	34.5	DDH
CD0746	553739.16	6687817.58	319.0	72	DDH
CD0747	554107.86	6686462.27	317.4	62.5	DDH
CD0748	553801.85	6686074.25	321.0	41	DDH
CD0749	552276.93	6686385.47	331.3	52.7	DDH
CD0750	553131.75	6685885.97	324.6	40.4	DDH
CD0751	551689.35	6685847.53	334.8	62.3	DDH
CD0752	551774.86	6685532.18	334.0	45.1	DDH
CD0753	557309.77	6693904.82	338.1	56.5	DDH
CD0756	558687.57	6692104.09	320.6	47	DDH
CD0757	558201.98	6692400.14	324.6	50	DDH
CD0758	557830.10	6692617.55	324.0	48.2	DDH
CD0759	557357.94	6692895.74	326.2	48	DDH
CD0760	557643.35	6692248.48	322.6	45.2	DDH
CD0761	558625.17	6691169.32	313.8	55.2	DDH
CD0762	556968.77	6692155.59	327.3	52.5	DDH

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD0763	556527.12	6692421.56	329.5	75.2	DDH
CD0764	558049.10	6691035.58	311.7	46.2	DDH
CD0765	556810.81	6691764.77	326.4	46.2	DDH
CD0766	555673.78	6691954.76	330.7	51.2	DDH
CD0767	556179.70	6691404.84	325.7	48	DDH
CD0768	555980.28	6691058.89	325.8	42.2	DDH
CD0769	557379.33	6689969.08	315.3	35	DDH
CD0770	556553.65	6690458.85	319.0	38	DDH
CD0771	555269.03	6691226.96	326.0	45	DDH
CD0772	555483.44	6689888.38	316.4	38	DDH
CD0773	554305.18	6689771.54	311.8	36.2	DDH
CD0774	558394.58	6692764.78	323.9	54.2	DDH
CD0775	559028.42	6691901.22	319.2	39.2	DDH
CD0844	556334.05	6690109.87	320.4	40.4	DDH
RC0473	561215.84	6690108.59	324.9	44	RC
RC0474	560788.16	6690363.74	327.0	56	RC
RC0475	560357.05	6690620.93	325.6	50	RC
RC0476	559942.47	6690867.39	320.6	80	RC
RC0479	558647.00	6691644.62	319.0	62	RC
RC0480	558218.46	6691900.27	319.5	80	RC
RC0481	557790.79	6692155.42	322.4	78	RC
RC0482	557374.74	6692422.27	323.5	80	RC
RC0483	556929.60	6692665.71	327.1	56	RC
RC0484	556508.99	6692924.76	331.4	56	RC
RC0485	556088.23	6693173.40	336.0	62	RC
RC0486	560367.48	6691587.03	322.5	53	RC
RC0487	559926.92	6691849.85	321.8	59	RC
RC0488	559497.52	6692106.03	320.3	77	RC
RC0489	559094.27	6692355.73	321.9	78	RC
RC0490	558649.71	6692615.32	323.8	77	RC
RC0491	558216.87	6692873.55	324.4	77	RC
RC0492	557795.44	6693098.18	328.2	59	RC
RC0493	557355.69	6693383.82	334.0	59	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0494	556934.51	6693638.46	336.0	59	RC
RC0495	560591.57	6690002.96	323.3	71	RC
RC0496	560159.07	6690261.56	321.3	65	RC
RC0497	559726.79	6690511.04	318.8	71	RC
RC0498	559297.43	6690770.55	317.4	53	RC
RC0499	558875.43	6691023.14	316.9	77	RC
RC0500	558450.44	6691282.38	317.9	77	RC
RC0501	558003.96	6691542.67	316.0	77	RC
RC0502	557574.56	6691798.84	321.4	77	RC
RC0503	557153.25	6692055.98	325.8	83	RC
RC0504	556717.27	6692311.66	327.6	83	RC
RC0505	556292.30	6692563.77	334.6	59	RC
RC0506	555866.46	6692820.32	336.0	59	RC
RC0507	551713.59	6685003.98	335.2	77	RC
RC0508	558724.53	6690637.24	312.7	76	RC
RC0509	559497.75	6690160.81	312.3	65	RC
RC0510	560328.87	6689670.73	318.9	65	RC
RC0511	560793.79	6689392.89	321.3	71	RC
RC0512	560587.63	6689020.22	314.2	65	RC
RC0513	560184.55	6689270.87	307.6	53	RC
RC0514	558867.86	6690052.29	308.2	68	RC
RC0515	558432.45	6690309.64	315.6	58	RC
RC0516	558023.76	6690555.04	313.5	74	RC
RC0517	557580.84	6690827.02	314.6	68	RC
RC0518	557159.63	6691074.06	319.6	74	RC
RC0519	556738.50	6691328.99	323.2	80	RC
RC0520	556293.46	6691589.65	328.1	86	RC
RC0521	555866.36	6691842.07	330.2	86	RC
RC0522	555438.91	6692098.54	331.4	68	RC
RC0523	555216.92	6691733.79	331.2	62	RC
RC0524	555654.57	6691491.19	329.5	86	RC
RC0525	556077.23	6691233.07	328.5	60	RC
RC0527	556946.93	6690717.77	318.2	78	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0528	557377.77	6690460.74	317.5	74	RC
RC0529	557796.39	6690205.92	315.4	71	RC
RC0530	558175.96	6689978.67	308.9	65	RC
RC0531	559933.91	6688929.89	308.3	71	RC
RC0532	560363.31	6688673.72	311.1	71	RC
RC0533	559759.82	6688554.66	309.6	65	RC
RC0534	558918.58	6689054.75	308.7	65	RC
RC0535	558001.36	6689606.89	314.5	71	RC
RC0536	555454.84	6691124.33	325.1	81	RC
RC0537	554587.76	6691639.22	331.3	65	RC
RC0538	555228.27	6690768.39	324.4	80	RC
RC0539	555649.08	6690517.35	322.0	74	RC
RC0540	556080.18	6690260.15	322.8	74	RC
RC0541	556510.10	6690004.84	317.0	74	RC
RC0542	556937.78	6689749.69	322.0	74	RC
RC0543	557366.31	6689494.02	319.5	74	RC
RC0544	558190.76	6689002.17	319.5	74	RC
RC0545	559054.69	6688426.21	318.7	74	RC
RC0546	559937.55	6687960.06	321.1	78	RC
RC0547	559302.86	6687851.98	320.9	74	RC
RC0548	558446.78	6688371.12	317.3	74	RC
RC0549	557569.35	6688886.30	316.9	74	RC
RC0550	556727.25	6689390.74	320.5	74	RC
RC0551	555021.83	6690404.81	323.0	74	RC
RC0552	554142.77	6690928.08	331.6	92	RC
RC0553	554549.93	6689625.53	310.8	65	RC
RC0554	554992.21	6689361.66	311.5	65	RC
RC0555	555409.58	6689112.66	318.4	71	RC
RC0556	556252.92	6688609.54	318.6	65	RC
RC0557	557131.08	6688104.28	317.9	65	RC
RC0558	556567.70	6687282.90	319.9	44	RC
RC0559	555765.37	6687782.53	330.1	80	RC
RC0560	554899.64	6688255.94	307.0	62	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0561	554025.88	6688784.19	316.5	74	RC
RC0562	553177.42	6689278.73	327.2	44	RC
RC0563	552675.67	6688435.74	323.3	20	RC
RC0564	553537.54	6687928.54	320.0	68	RC
RC0565	554386.94	6687398.51	309.3	68	RC
RC0566	555224.27	6686898.97	311.4	41	RC
RC0567	556069.32	6686394.82	318.3	53	RC
RC0568	554160.64	6686954.78	315.4	77	RC
RC0569	552600.22	6687337.25	329.4	65	RC
RC0570	553458.13	6686837.08	324.0	89	RC
RC0571	553902.44	6686582.49	316.9	65	RC
RC0572	554316.18	6686344.96	314.2	53	RC
RC0573	554746.44	6686088.29	314.0	59	RC
RC0574	554526.01	6685632.91	310.1	53	RC
RC0575	553617.04	6686182.17	324.0	77	RC
RC0576	552092.47	6686492.02	330.3	62	RC
RC0577	552946.76	6685997.50	324.5	86	RC
RC0578	553385.41	6685745.12	329.6	92	RC
RC0579	553820.82	6685485.36	320.5	71	RC
RC0580	554242.66	6685236.03	318.4	65	RC
RC0581	556301.95	6689642.27	323.7	76	RC
RC0582	555872.55	6689898.44	321.0	80	RC
RC0583	555446.08	6690151.71	317.6	74	RC
RC0584	554587.25	6690669.75	325.1	80	RC
RC0585	559718.51	6692466.79	325.0	47	RC
RC0586	559297.12	6692685.54	323.7	71	RC
RC0587	558868.07	6692940.35	325.6	77	RC
RC0588	558435.49	6693228.66	327.2	53	RC
RC0589	558018.20	6693452.03	330.6	59	RC
RC0590	557570.19	6693741.43	337.0	59	RC
RC0591	556840.77	6694093.92	339.1	65	RC
RC0592	556711.40	6694253.78	340.8	47	RC
RC0593	556510.91	6693887.93	341.7	59	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0594	551578.02	6685653.12	334.6	56	RC
RC0595	552017.03	6685393.53	335.0	86	RC
RC0596	551149.00	6685896.26	341.4	53	RC
RC0597	552568.68	6685080.73	330.1	92	RC
RC0598	552514.99	6686245.78	333.9	84	RC
RC0680	559740.26	6689547.64	307.7	59	RC
RC0682	559507.09	6689184.53	307.8	59	RC
RC0683	559076.83	6689441.21	307.0	53	RC
RC0684	558650.01	6689695.85	311.0	71	RC
RC0710	556134.14	6691316.71	325.8	83	RC
RC0711	555998.97	6691285.45	329.3	83	RC
RC0712	556164.87	6691181.86	324.7	81	RC
RC0713	555936.33	6691069.10	326.3	77	RC
RC0754	552225.01	6686712.22	333.3	65	RC
RC0886	560149.64	6694126.24	339.2	54	RC
AC0864	559495.42	6693078.44	327.0	48	AC
AC0865	552822.02	6690867.14	334.0	76	AC
AC0866	557326.72	6694127.73	339.8	61.64	AC
AC0868	556944.14	6694114.93	339.6	66	AC
AC0869	559530.39	6692330.96	322.7	50.5	AC
AC0873	553589.34	6691747.33	349.5	52	AC
AC0877	560121.12	6691006.22	320.0	36	AC
AC0878	554566.60	6692616.38	341.7	48	AC
AC0880	560616.40	6690466.21	331.0	60	AC
AC0881	559925.79	6690642.31	321.7	38	AC
AC0882	559562.92	6690851.32	318.0	72	AC
AC0883	559992.34	6690360.70	317.3	62.5	AC
AC0884	559539.88	6694495.85	346.6	50.5	AC
AC0887	559333.82	6690502.43	317.3	72	AC
AC0888	559006.62	6690697.63	316.5	77.5	AC
AC0889	558660.52	6690904.11	317.5	74.5	AC
AC0891	560339.32	6689173.06	308.2	60	AC
AC0925	555012.32	6692350.47	335.7	68.5	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
AC0947	561043.22	6690211.57	325.0	62.5	AC
AC0949	551912.27	6684220.54	330.1	78	AC
AC0950	552338.23	6683966.42	327.6	96	AC
AC0951	551658.85	6683786.01	333.0	44.5	AC
AC0952	561003.69	6690723.05	328.8	56.5	AC
AC0953	552499.27	6683285.79	324.8	86.5	AC
AC0989	560463.77	6690801.79	325.1	50.5	AC
AC0992	553083.64	6688174.88	324.8	42	AC
AC1137	552958.92	6690415.24	331.0	52	AC
CD0576	552074.06	6686449.44	330.8	48.3	DDH
CD0788	558152.71	6693156.36	328.0	49.1	DDH
CD0789	557121.82	6693766.71	336.3	50	DDH
CD0790	556766.91	6693744.34	338.5	61.2	DDH
CD0791	557101.83	6693534.11	334.3	57	DDH
CD0792	558070.88	6692960.64	325.8	47	DDH
CD0793	558901.85	6692466.06	323.0	50.2	DDH
CD0794	559242.46	6692258.20	321.9	62	DDH
CD0795	558282.93	6692591.79	323.3	42.3	DDH
CD0796	557935.46	6692798.06	324.8	45	DDH
CD0797	557262.12	6693197.02	328.9	52.3	DDH
CD0798	556910.68	6693405.00	335.4	54	DDH
CD0799	556542.43	6693381.09	336.5	59.1	DDH
CD0800	556908.59	6693170.70	332.0	56	DDH
CD0801	559559.41	6691591.24	319.0	35	DDH
CD0802	559926.61	6691371.96	318.6	39.3	DDH
CD0803	559458.40	6691401.15	319.1	38	DDH
CD0804	559123.55	6691600.84	319.6	38	DDH
CD0805	558753.74	6691825.47	318.0	36.3	DDH
CD0806	558421.32	6692030.49	321.3	38	DDH
CD0807	558066.70	6692235.36	322.5	54.4	DDH
CD0808	557739.06	6692437.49	323.2	43.3	DDH
CD0809	557040.08	6692842.02	328.7	48	DDH
CD0810	556690.79	6693050.08	335.1	57.1	DDH

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD0811	556683.45	6692822.49	329.8	51.3	DDH
CD0812	557101.35	6692563.24	326.0	44	DDH
CD0813	559693.61	6691022.69	319.9	35	DDH
CD0814	559226.69	6691049.72	317.4	35.1	DDH
CD0815	558886.64	6691253.12	318.5	36.3	DDH
CD0816	558539.92	6691465.12	319.0	55	DDH
CD0817	558326.27	6691107.01	317.8	36.5	DDH
CD0818	558003.75	6691295.97	315.6	36.2	DDH
CD0819	557655.49	6691513.74	320.4	37.2	DDH
CD0820	557319.79	6691714.83	322.3	39.2	DDH
CD0821	555849.45	6692336.63	336.9	57	DDH
CD0822	556378.28	6692024.62	331.8	60.4	DDH
CD0823	558536.74	6690738.18	308.9	27.2	DDH
CD0824	557426.45	6691158.26	318.0	36	DDH
CD0825	557095.44	6691361.75	321.9	41	DDH
CD0826	556743.66	6691571.73	324.4	44	DDH
CD0827	556392.92	6691771.63	328.4	48.35	DDH
CD0828	556056.15	6691971.57	332.8	51.2	DDH
CD0829	558176.37	6690464.28	314.6	32	DDH
CD0830	557046.92	6690885.13	318.2	36.1	DDH
CD0831	556529.21	6691202.83	323.7	42.17	DDH
CD0832	556357.17	6691307.11	324.5	42.3	DDH
CD0833	556022.46	6691505.92	326.4	47	DDH
CD0834	557976.04	6690106.71	312.4	32	DDH
CD0835	557342.21	6690231.34	316.4	36.2	DDH
CD0836	556995.58	6690436.18	317.8	38	DDH
CD0837	556637.27	6690650.20	322.3	41	DDH
CD0838	556315.89	6690843.11	325.2	46.2	DDH
CD0839	556142.25	6690949.74	327.0	45.2	DDH
CD0840	555801.34	6691145.25	328.3	45.4	DDH
CD0841	556036.73	6690768.79	323.6	41	DDH
CD0842	555052.21	6690873.43	328.0	45.3	DDH
CD0843	555904.99	6690364.67	324.0	40.2	DDH



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD0845	556681.86	6689902.37	318.0	37	DDH
CD0846	554312.81	6690826.64	330.0	47	DDH
CD0847	554838.91	6690513.94	323.9	42.3	DDH
CD0848	555699.94	6690001.43	318.8	35	DDH
CD0849	556043.45	6689796.49	323.0	42.2	DDH
CD0850	556484.05	6689527.45	317.8	38	DDH
CD0851	554198.43	6690416.29	325.4	42.4	DDH
CD0852	555057.22	6689903.94	321.4	39.3	DDH
CD0853	555567.85	6689600.47	321.8	42.1	DDH
CD0854	555910.52	6689396.04	321.5	43	DDH
CD0855	555617.41	6688988.68	319.4	36.2	DDH
CD0856	554839.22	6689161.82	314.7	36.2	DDH
CD0857	554000.96	6686755.44	315.5	37	DDH
CD0858	553743.58	6686327.92	325.0	42.2	DDH
CD1052	558322.07	6693047.51	326.3	48.3	DDH
CD1053	559182.06	6692543.42	323.0	34.3	DDH
CD1054	560008.29	6691564.19	319.3	53	DDH
CD1055	559658.85	6691766.81	319.9	52.1	DDH
CD1056	559322.40	6691977.62	320.5	36.2	DDH
CD1057	558978.17	6692173.65	321.0	37	DDH
CD1058	558625.64	6692379.18	322.8	42.2	DDH
CD1059	557594.31	6692987.13	327.3	46.3	DDH
CD1060	556365.46	6693248.96	334.8	54	DDH
CD1061	557385.16	6692640.78	324.0	40	DDH
CD1062	559790.77	6691201.16	318.5	39	DDH
CD1063	558194.35	6691666.63	317.5	36	DDH
CD1064	557856.96	6691879.14	320.4	51.2	DDH
CD1065	557515.91	6692071.38	322.8	47	DDH
CD1066	557168.80	6692289.67	324.2	46.4	DDH
CD1067	556820.28	6692486.38	326.3	51.2	DDH
CD1068	556476.77	6692691.32	332.5	49.1	DDH
CD1069	556136.44	6692893.97	337.2	57	DDH
CD1070	555923.50	6692537.77	337.2	57.3	DDH

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD1071	556107.61	6692426.89	339.5	54.1	DDH
CD1072	556021.08	6692238.43	341.9	63	DDH
CD1073	555547.67	6692282.75	333.6	51.2	DDH
CD1074	555077.57	6691098.29	325.6	45	DDH
CD1075	555425.54	6690902.43	323.1	39	DDH
CD1076	556444.01	6690283.32	319.8	38	DDH
CD1077	556785.85	6690078.70	318.2	35.7	DDH
CD1078	555545.43	6690335.81	321.6	42	DDH
CD1079	555204.48	6690539.21	325.0	39.2	DDH
CD1080	554885.46	6690006.41	319.4	35.3	DDH
CD1081	555228.97	6689801.47	316.7	30.3	DDH
CD1082	554378.33	6689940.99	323.3	43	DDH
CD1083	554723.56	6689735.03	319.0	36.3	DDH
CD1084	555060.21	6689534.20	312.5	29	DDH
CD1085	556042.93	6691368.81	326.4	44.2	DDH
CD1086	556065.38	6691357.98	326.1	44.4	DDH
CD1087	556082.50	6691347.23	326.0	44.1	DDH
CD1088	556099.73	6691337.02	325.9	43.1	DDH
CD1089	556118.78	6691329.84	325.8	45.4	DDH
CD1090	556145.64	6691308.70	326.0	42.3	DDH
CD1091	556169.13	6691298.42	325.9	42	DDH
CD1092	556186.57	6691287.70	325.9	42.3	DDH
CD1093	556201.31	6691274.38	326.0	45.2	DDH
CD1094	556220.36	6691267.55	325.9	43.2	DDH
CD1095	556235.62	6691253.34	326.1	43	DDH
CD1096	556255.02	6691246.80	325.8	43	DDH
CD1097	556272.02	6691236.27	325.8	44	DDH
CD1098	556289.18	6691226.97	325.5	43	DDH
CD1099	556305.56	6691217.28	325.2	42.2	DDH
CD1100	556092.11	6691249.28	327.4	48.1	DDH
CD1101	556101.81	6691263.77	326.8	51.2	DDH
CD1102	556113.24	6691283.33	326.4	45	DDH
CD1103	556123.25	6691299.88	326.0	43	DDH



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
CD1104	556143.05	6691335.21	325.8	44	DDH
CD1105	556152.56	6691352.46	325.6	45.2	DDH
CD1106	556157.49	6691371.50	325.8	43	DDH
CD1107	556173.63	6691387.71	325.5	42	DDH
CD1108	556182.13	6691195.16	325.2	44	DDH
CD1109	556189.62	6691213.28	326.2	44.35	DDH
CD1110	556200.66	6691229.88	326.6	44	DDH
CD1111	556210.29	6691247.76	326.6	44	DDH
CD1112	556230.46	6691282.69	325.5	42.1	DDH
CD1113	556240.19	6691299.82	325.4	42.4	DDH
CD1114	556250.22	6691317.12	325.3	42	DDH
CD1115	556260.33	6691334.57	325.2	41.1	DDH
CD1116	556270.92	6691350.82	325.1	41	DDH
CD1117	558106.87	6692696.96	323.8	43	DDH
CD1119	558706.20	6691361.27	317.3	50	DDH
CD1120	556110.65	6691216.75	326.9	44	DDH
CD1121	556095.66	6691229.26	327.6	46	DDH
CD1122	556060.51	6691248.04	328.5	46.2	DDH
CD1123	556042.47	6691256.90	329.0	45	DDH
RC0872	553788.58	6692104.72	342.7	42.5	RC
RC0874	553269.60	6691295.31	339.3	48.5	RC
RC0876	559973.39	6695608.95	343.6	60	RC
RC0892	555515.70	6693022.48	338.0	65	RC
RC0893	555492.37	6692548.55	339.1	65	RC
RC0894	555261.56	6692197.93	332.0	65	RC
RC0895	555050.21	6691841.21	332.5	55	RC
RC0896	554704.20	6692048.71	336.2	65	RC
RC0897	554380.36	6692253.13	336.2	53.2	RC
RC0898	554834.27	6691485.93	330.0	92	RC
RC0899	554420.36	6691742.57	334.5	44	RC
RC0900	554624.53	6691128.58	329.0	95	RC
RC0901	554285.30	6691330.95	336.6	71	RC
RC0902	553941.79	6691535.90	348.5	83.2	RC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0903	553980.46	6691024.91	335.0	88	RC
RC0904	553771.09	6690670.06	332.8	75	RC
RC0905	553513.45	6690823.77	335.3	73	RC
RC0906	553681.18	6690142.64	324.0	83.4	RC
RC0907	553250.92	6690399.33	332.8	71	RC
RC0908	553434.97	6689708.47	321.1	65	RC
RC0909	554289.12	6689200.05	326.4	77	RC
RC0910	555141.55	6688692.67	317.0	71	RC
RC0911	556015.81	6688171.10	320.4	71	RC
RC0912	556687.13	6688351.67	318.6	53	RC
RC0913	556850.21	6687674.47	318.5	59	RC
RC0914	556178.03	6687494.42	318.0	47	RC
RC0915	555320.96	6688005.74	309.2	65	RC
RC0916	553605.43	6689028.04	320.0	71.2	RC
RC0917	553773.50	6688345.54	317.7	67	RC
RC0918	554621.99	6687839.34	314.4	71	RC
RC0919	555491.26	6687323.08	315.0	59	RC
RC0920	554809.47	6687146.43	305.2	53	RC
RC0921	553961.84	6687652.12	316.1	71	RC
RC0922	553094.80	6688168.22	324.7	47	RC
RC0923	552668.59	6687840.27	328.4	41	RC
RC0924	553268.89	6687482.13	312.7	77	RC
RC0926	553700.77	6686644.58	320.0	83	RC
RC0927	553013.74	6687054.46	326.1	83	RC
RC0928	553575.26	6686428.35	326.4	83	RC
RC0929	553917.06	6686224.43	321.0	77	RC
RC0930	554087.11	6686122.98	316.8	65.01	RC
RC0931	554243.44	6685740.93	313.0	59	RC
RC0932	552501.65	6686777.74	332.0	83	RC
RC0933	552157.61	6686981.82	333.0	41	RC
RC0934	552367.89	6686565.25	328.3	77	RC
RC0935	553154.20	6686097.32	322.0	83	RC
RC0936	553318.23	6685999.46	321.0	83	RC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RC0937	553488.78	6685898.88	321.0	71	RC
RC0938	552753.88	6686045.04	326.5	89	RC
RC0939	551908.31	6686548.32	332.3	41.09	RC
RC0940	551972.10	6686278.54	331.7	65	RC
RC0941	551648.36	6686122.34	336.5	41	RC
RC0942	551991.01	6685917.92	333.0	78	RC
RC0943	552335.39	6685712.46	331.4	89	RC
RC0944	553120.84	6685245.04	325.0	83	RC
RC0945	551461.98	6685419.57	336.6	53	RC
RC0946	552160.20	6684653.69	339.8	105	RC
RC0948	551485.45	6684475.18	343.9	59	RC
RC0965	553214.59	6691002.07	333.0	60	RC
RC0966	552277.55	6691191.97	349.2	68	RC
AC0796	557942.27	6692792.45	324.3	44	AC
AC0867	550932.62	6691197.85	361.8	72	AC
AC0870	552879.66	6691201.89	344.2	53	AC
AC0890	551634.08	6689619.57	341.6	24	AC
AC1008	555011.45	6693314.92	340.2	53.25	AC
AC1050	552025.17	6690548.37	335.2	74	AC
AC1051	551420.06	6690908.21	346.2	66	AC
AC1059	557594.31	6692987.13	327.3	40.25	AC
AC1100	556086.27	6691252.13	327.6	45	AC
AC1102	556107.11	6691285.11	326.6	45	AC
AC1138	550747.56	6690108.87	344.2	59.5	AC
AC1139	550163.18	6690138.43	344.7	71.5	AC
AC1195	554080.44	6689318.73	323.5	77.2	AC
AC1196	553796.94	6688913.78	319.0	58.25	AC
AC1197	554242.66	6688647.88	314.0	71	AC
AC1198	553529.08	6688496.02	320.0	58.5	AC
AC1199	553995.94	6688207.02	312.9	65	AC
AC1200	553352.95	6688015.37	314.7	66	AC
AC1201	553097.14	6687578.77	314.6	77	AC
AC1202	553491.64	6687353.90	319.4	77.42	AC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
AC1203	552808.83	6687175.54	328.0	83	AC
AC1204	552690.22	6686672.23	326.0	82	AC
AC1205	558408.33	6695169.74	355.1	53	AC
AC1206	561630.17	6694622.86	345.0	71	AC
AC1245	558251.27	6692132.39	322.1	41	AC
AC1246	556088.16	6691253.34	327.6	47	AC
CD0712	556156.84	6691176.35	325.0	45.2	DDH
CD1239	556562.85	6691672.31	325.5	42.5	DDH
CD1240	557142.74	6691824.41	322.7	39.1	DDH
CD1241	557902.67	6692333.21	323.0	39	DDH
CD1242	558597.30	6691910.05	319.7	36	DDH
CD1243	558449.53	6692492.53	323.0	42	DDH
CD1244	557556.07	6692538.82	323.0	39.3	DDH
CD1245	558253.89	6692131.26	322.0	41	DDH
RC1194	560042.92	6688134.74	312.7	59	RC
CD1380	557776.02	6692898.52	325.5	45.5	DDH
CD1381	558028.06	6691776.76	319.7	36.3	DDH
CD1382	558363.04	6691566.12	317.2	36	DDH
CD1383	557477.27	6691612.35	322.5	40.2	DDH
CD1384	557815.29	6691411.85	317.0	35	DDH
RC1329	561250.58	6694849.31	349.2	77	RC
RNN0001	556437.87	6692469.99	331.0	70	AC
RNN0002	555980.30	6692745.30	291.3	66	AC
RNN0003	555775.06	6692867.75	336.3	65	AC
RNN0004	555808.39	6692363.45	336.1	63	AC
RNN0005	555925.19	6692293.76	338.9	75	AC
RNN0006	556707.32	6693282.72	334.9	60	AC
RNN0007	556836.14	6693205.88	333.1	57	AC
RNN0008	557209.49	6693480.35	334.0	60	AC
RNN0009	556979.34	6693617.66	335.4	60	AC
RNN0010	556892.60	6693669.41	336.7	60	AC
RNN0011	555841.18	6692828.30	336.0	60	AC
RNN0024	555847.20	6692342.62	336.7	63	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
RNN0025	555059.61	6689906.01	321.0	75	AC
RNN0026	553840.13	6690633.54	332.0	66	AC
RNN0027	555256.99	6689846.48	316.6	72	AC
RNN0028	555536.17	6692043.77	331.0	70	AC
RNN0029	555193.50	6692248.19	332.0	55	AC
NN0001	557487.75	6693790.62	337.1	38	AC
NN0002	556890.88	6694146.70	339.6	53	AC
NN0003	556122.12	6693638.84	339.0	94	AC
NN0004	555950.36	6693741.31	340.4	54	AC
NN0005	555778.60	6693843.78	340.4	45	AC
NN0006	555606.84	6693946.25	341.4	36	AC
NN0007	556474.23	6693428.77	337.3	66	AC
NN0008	556622.79	6693340.14	335.7	81	AC
NN0009	556899.33	6693175.16	332.1	66	AC
NN0010	556592.38	6693841.53	340.9	66	AC
NN0011	556678.26	6693790.30	339.9	63	AC
NN0012	556799.35	6693718.05	338.1	63	AC
NN0013	556844.87	6693690.90	337.5	72	AC
NN0014	557019.21	6693586.89	335.0	69	AC
NN0015	557064.72	6693559.74	334.8	69	AC
NN0016	557401.87	6693841.85	337.5	75	AC
NN0017	557163.13	6693984.28	339.0	120	AC
NN0018	554633.15	6688995.98	315.3	27	AC
NN0019	554461.39	6689098.44	319.3	24	AC
NN0020	555831.73	6692833.93	336.0	60	AC
NN0021	556250.45	6693073.21	333.1	60	AC
NN0022	556422.21	6692970.74	332.0	63	AC
NN0023	556593.97	6692868.27	330.7	37	AC
NN0024	556765.73	6692765.80	328.8	30	AC
NN0025	556934.31	6694609.86	346.0	33	AC
NN0026	557106.08	6694507.39	344.0	33	AC
NN0027	557449.59	6694302.46	340.5	31	AC
NN0028	557793.11	6694097.52	338.0	32	AC

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NN0029	558308.39	6693790.11	332.3	28	AC
NN0030	558136.62	6693892.58	334.7	33	AC
NN0103	556210.46	6692607.99	336.6	86	AC
NN0104	556124.58	6692659.23	336.9	86	AC
NN0105	556038.70	6692710.46	333.2	86	AC
NN0106	555908.17	6692788.33	336.1	86	AC
NN0107	555777.63	6692866.22	336.3	86	AC
NN0108	556210.09	6693097.28	333.9	83	AC
NN0109	556121.64	6693150.06	335.4	86	AC
NN0110	556587.62	6693349.48	335.9	86	AC
NN0111	556509.46	6693396.11	336.8	86	AC
NN0112	556800.23	6693711.72	338.1	86	AC
NN0113	556929.05	6693634.86	336.1	86	AC
NN0114	556976.28	6693606.68	335.5	86	AC
NN0115	557026.95	6693576.45	335.0	86	AC
NN0116	557100.81	6693532.39	334.4	86	AC
NN0117	561740.64	6692906.92	338.3	80	AC
NN0118	561654.76	6692958.16	337.4	67	AC
NN0124	561568.87	6693009.39	336.1	75	AC
NN0125	561482.99	6693060.63	335.3	28	AC
NN0128	561397.11	6693111.86	334.6	72	AC
NN0129	561311.24	6693163.10	333.3	78	AC
NN0130	561225.36	6693214.33	331.0	73	AC
NN0131	561139.48	6693265.57	329.5	75	AC
NN0132	561053.60	6693316.80	329.5	75	AC
NN0133	561627.68	6693498.32	338.6	75	AC
NN0134	561541.80	6693549.55	339.0	51	AC
NN0135	561455.91	6693600.79	339.5	69	AC
NN0136	561370.03	6693652.02	339.8	75	AC
NN0137	561284.15	6693703.26	340.1	69	AC
NN0138	561198.27	6693754.49	340.9	70	AC
NN0139	561112.39	6693805.73	342.4	66	AC
NN0140	561499.58	6693283.62	333.5	60	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NLA145	556245.57	6692284.29	338.7	81	FDAC
NLA146	555781.78	6691897.24	331.0	61	FDAC
NN0149	559070.80	6694092.15	329.0	70	FDAC
NN0174	560710.08	6693521.73	330.6	89	FDAC
NSA0147	556330.38	6691567.62	327.1	69	FDAC
NSA0148	556364.73	6691547.13	326.3	48	FDAC_S
NSA0150	556399.08	6691526.63	325.4	44.5	FDAC
NSA0151	556433.44	6691506.13	324.9	77	FDAC
NSA0152	556467.79	6691485.65	324.7	47	FDAC
NSA0153	556502.14	6691465.15	324.3	54	FDAC
NSA0154	556746.63	6691562.66	324.1	40	FDAC
NSA0155	556712.28	6691583.16	324.5	47.5	FDAC
NSA0156	556484.97	6691475.40	324.5	45	FDAC
NSA0157	558264.03	6692603.20	323.1	42.2	FDAC
NSA0158	558229.68	6692623.70	323.1	44.2	FDAC
NSA0159	558195.33	6692644.19	323.1	41.3	FDAC
NSA0160	558262.32	6692604.23	323.1	41	FDAC
NSA0161	558268.33	6692600.64	323.1	62	FDAC
NSA0162	558457.26	6692487.92	323.0	61	FDAC
NSA0163	558367.09	6692541.72	323.1	41.1	FDAC
NSA0164	558118.04	6692690.30	323.7	42	FDAC
NSA0175	556493.56	6691470.27	324.5	44	FDAC
NSA0176	556476.38	6691480.52	324.6	44	FDAC
NSA0177	556493.49	6691493.60	324.7	45.3	FDAC
NSA0178	556488.37	6691485.01	324.6	44.7	FDAC
NSA0179	556498.62	6691502.19	324.8	44.7	FDAC
NSA0180	556471.98	6691457.53	324.4	44.7	FDAC
NSA0181	556731.17	6691571.89	324.3	41.7	FDAC
NSA0182	556732.88	6691570.86	324.3	46.4	FDAC
OF0007	556602.48	6694803.16	347.3	61	RC
AS2004	557518.00	6692735.00	326.0	47.5	SO
NND5004	557938.31	6692795.29	324.2	75	DDH
NND5005	556740.93	6691564.39	324.3	77	DDH

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NND5006	556015.33	6691510.64	326.4	81	DDH
NND5007	556492.99	6691470.37	324.2	57	DDH
NND5008	557211.19	6691535.95	322.5	88	DDH
NND5009	556813.41	6691760.86	326.3	75	DDH
NND5010	558074.40	6692228.93	322.6	83	DDH
NND5011	558459.67	6692492.11	323.1	82	DDH
NND5012	558289.16	6692593.09	323.4	76	DDH
NND5013	558222.37	6692864.20	324.2	63	DDH
NNA5494	557670.00	6691909.00	321.7	81	AC
NNA5495	557591.00	6691785.00	321.0	78	AC
NNA5497	557557.00	6691704.00	320.7	78	AC
NNA5498	557546.00	6691814.00	322.0	81	AC
NNA5499	557628.00	6691765.00	320.6	76	AC
NNA5698	559640.00	6690073.00	309.0	60	AC
NNA5699	559222.00	6690338.00	315.7	75	AC
NNA5700	559348.00	6690242.00	314.9	72	AC
NNA5701	559502.00	6690171.00	312.7	63	AC
NNA5702	559580.00	6690341.00	315.8	69	AC
NNA5703	559383.00	6690004.00	308.0	60	AC
NNA5704	559709.00	6689880.00	308.2	63	AC
NNA5705	559580.00	6689903.00	308.0	60	AC
NNA5706	552782.00	6690894.00	334.5	62	AC
NNA5707	552911.00	6690815.00	334.4	82	AC
NNA5708	553528.00	6690810.00	334.7	82	AC
NNA5709	553775.00	6690673.00	332.6	96	AC
NNA5710	556539.00	6693155.00	334.9	63	AC
NNA5711	556682.00	6693055.00	335.4	63	AC
NNA5712	556819.00	6692920.00	331.9	60	AC
NNA6005	557603.00	6692747.00	326.1	57	AC
NNA6006	557702.00	6692685.00	327.4	78	AC
NNA6007	558040.00	6692755.00	323.9	78	AC
NNA6008	557856.00	6692835.00	324.6	63	AC
NNA6009	558141.00	6692904.00	324.9	75	AC



Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NNA6010	558308.00	6692800.00	324.1	81	AC
NNA6011	558431.00	6692991.00	325.9	75	AC
NNA6012	557037.00	6693805.00	336.4	60	AC
NNA6013	557089.00	6694037.00	339.7	63	AC
NNA6014	556611.00	6693338.00	335.7	60	AC
NNA6482	555998.63	6691376.64	326.8	48	AC
NNA6483	558847.57	6691785.18	318.0	60	AC
NNA6484	557987.01	6692754.62	324.4	48	AC
NNA6485	555914.66	6692315.00	337.9	60	AC
NNA6486	558544.01	6692424.02	323.2	45	AC
NNA6487	556434.61	6693212.49	335.1	60	AC
NNA6488	557637.80	6692476.89	323.2	45	AC
NNA6489	558196.50	6692418.30	324.0	54	AC
NNA6490	559576.70	6691597.92	319.2	39	AC
NNA6491	558664.27	6692103.17	320.8	45	AC
NNA6492	559346.61	6691241.54	318.2	51	AC
NNA6493	556065.85	6692685.67	336.8	60	AC
NNA6494	557817.17	6691644.19	317.7	60	AC
NNA6495	558338.90	6691328.41	317.4	54	AC
NNA6497	556915.70	6691695.08	325.1	57	AC
NNA6498	557351.55	6691436.39	321.2	45	AC
NNA6499	557719.16	6692185.04	322.4	45	AC
NNA6500	558101.91	6691956.75	320.1	60	AC
NNA6501	556472.30	6691469.01	324.5	51	AC
NNA6502	557151.55	6692520.09	325.6	48	AC
NNA6503	556548.57	6692639.37	331.7	51	AC
NNA6504	556108.49	6691683.55	331.1	51	AC
NNA6505	559577.21	6691825.98	319.9	42	AC
NNA6614	557607.51	6691061.27	315.8	36	AC
NNA6615	555023.41	6692104.47	334.2	54	AC
NNA6616	558207.01	6692622.67	323.3	45	AC
NNA6618	555162.70	6689902.28	317.8	39	AC
NND6576	555998.42	6691374.57	326.8	48.1	DDH

Hole ID	Easting	Northing	RL	Depth	Type <sup>1</sup>
NND6577	558846.79	6691783.57	318.0	35.8	DDH
NND6578	557986.81	6692757.21	324.3	46.5	DDH
NND6579	555914.87	6692313.11	338.0	60	DDH
NND6580	558546.13	6692425.10	323.2	45	DDH
NND6582	557639.82	6692477.88	323.3	45.2	DDH
NND6583	558198.06	6692415.21	324.2	58.2	DDH
NND6584	559577.59	6691595.60	319.2	36.1	DDH
NND6585	558665.83	6692100.42	320.8	42.7	DDH
NND6586	559345.51	6691239.96	318.3	41	DDH
NND6587	556065.71	6692688.42	336.8	55	DDH
NND6588	557816.54	6691647.09	317.8	42	DDH
NND6589	558338.11	6691331.06	317.4	55.5	DDH
NND6591	556916.20	6691696.62	325.1	48	DDH
NND6592	557352.53	6691437.75	321.2	42.1	DDH
NND6593	557717.92	6692187.54	322.4	44	DDH
NND6594	558100.94	6691959.27	320.1	40.2	DDH
NND6595	556473.30	6691470.13	324.5	44.8	DDH
NND6596	557150.04	6692522.93	325.7	45	DDH
NND6597	556548.74	6692641.79	331.8	50.7	DDH
NND6598	556107.98	6691681.82	331.1	51	DDH
NND6611	557607.53	6691062.76	315.7	43.5	DDH
NND6612	555025.11	6692105.71	334.1	52.5	DDH
NND6613	558206.87	6692624.85	323.3	46	DDH
NND6617	555162.66	6689900.44	317.9	39	DDH
NNA6842	559068.05	6692948.08	323.6	51	AC
NNA6843	556734.00	6693508.00	326.9	60	AC
NNA6844	557942.91	6693282.65	328.6	51	AC
NNA6845	558201.47	6694658.34	341.6	60	AC
NNA6846	552690.85	6690738.17	332.3	66	AC
NNA6847	552452.46	6690302.74	339.5	66	AC
NNA6848	553870.02	6691330.76	337.7	63	AC

<sup>&</sup>lt;sup>1</sup> AC – Aircore drill hole; RC – Reverse circulation drill hole; and DDH – Diamond drill hole