ASX: CXO ANNOUNCEMENT

12th October 2018

Napperby Uranium Resource Update and Increase

HIGHLIGHTS

- **The Napperby Uranium Resource has been re-estimated to 2012 JORC Code-Inferred Mineral Resource of 9.54Mt at 382ppm U_3O_8 for 8.03 Mlb of contained U_3O_8 (at a 200 ppm U_3O_8 cut-off)**
- **New Mineral Resource estimate reflects an improved grade and increased contained uranium from the historic 2004-JORC Resource**
- **Napperby is one of the few undeveloped uranium deposits in Australia within a favourable jurisdiction where uranium is currently produced**
- **Significant potential remains to grow Napperby through further drilling of the immediately surrounding mineralisation**
- **In addition, there is substantial potential for additional uranium mineralisation within Core's large 714 km^2 prospective project area at Napperby**
- **Core has been contacted by multiple parties expressing interest in Napperby, and will assess various avenues to maximise the value to Core shareholders, whilst our focus remains on the development of the Finniss Lithium Project**
- **Uranium spot price has increased by 35% over past year as new reactor builds come on-line globally**
- **Innovative ore processing technologies are improving economics of similar uranium projects in Australia and Africa**

Core Exploration Ltd (ASX: CXO) ("**Core**" or the "**Company**") is pleased to announce that the Mineral Resource for its 100%-owned Napperby Uranium Deposit in the Northern Territory has been re-estimated to follow the JORC 2012 Code guidelines. The Napperby Uranium Inferred Mineral Resource estimation defined by SRK Consulting comprises **9.54Mt at 382ppm U_3O_8 for 8.03 Mlb of contained U_3O_8 at a 200 ppm U_3O_8 cut-off** (Table 1 and Figure 2).

Napperby also includes significant Vanadium mineralisation that represents a **9.54Mt Inferred Mineral Resource at 236ppm V_2O_5**.

Only a quarter of the known mineralised area defined by Uranerz in the 1980's at Napperby has been drilled to sufficient density to estimate a mineral resource. The larger mineralised area (25km x 5km) surrounding and adjacent to the deposit has strong potential to be incorporated into Mineral Resources through further drilling (Figure 1).

Core is also confident that further calcrete uranium mineralisation can be defined in the 750km^2 project area held by the Company (Figure 3). Potential for additional calcrete-style uranium mineralisation in the district is also highlighted by the nearby Cappers uranium resource of 7Mlb at 145 ppm U_3O_8 (Energy Metals Annual Report 2017; Figure 3).

The mineral resource re-estimation by Core supersedes a previous estimation carried out under the 2004-JORC Code by Toro Energy (Deep Yellow ASX release 9/9/2016; CXO ASX release 15/2/2017) and has resulted in an increase in the contained U_3O_8 tonnes and an improvement in average grade.

Companies such as Paladin Energy, Toro Energy and Marenica Energy are developing techniques to beneficiate mineralised material prior to delivery to a leach-processing plant. These new beneficiation improvements are designed to provide a step change to the development-economics of shallow calcrete-type uranium deposits like Napperby. For example, Marenica's U-pgrade™ technology has demonstrated on bench-scale to concentrate uranium by a factor of 50, while reducing the mass to 2% of the original feed, with process recovery >70% (MEY:ASX 25/09/18).

Most importantly, Napperby is located in the NT, a low-risk Australian jurisdiction with a long consistent history of uranium production. The Ranger Uranium Mine in the NT has been operating since 1981.

In the context of the uranium price increasing 35% over the past 12-months, Core has received expressions of interest from multiple parties with respect to Napperby. As at October 2018, globally there are about 50 new reactors under construction, compared to 450 operating in 30 countries.*

To enable Core to remain focussed on the development of the Finniss Lithium Project and also achieve full value of the Napperby Uranium Deposit for shareholders, Core will now commence engaging with these parties regarding a sale or partial sale of Napperby.

*world-nuclear.org

Core's MD Stephen Biggins commented:

"The upgrade of Napperby to JORC 2012 guidelines is particularly exciting during a time of increasing uranium prices. Core notes with interest that the spot uranium price has increased close to 35% over the past year.

We remain committed to moving as quickly as possible towards development of our Finniss Lithium Project, and to this end, with the Resource estimate now completed, we can move forward on divestment discussions on Napperby to extract value for Core shareholders"

Cut-off (U_3O_8 ppm)	Ore Tonnage (Mt)	Grade U_3O_8 (ppm)	Metal (U_3O_8 t)	Metal (U_3O_8 Mlb)	Vanadium (V_2O_5 ppm)
200	9.54	382	3643	8.03	236

***Table 1**. Inferred Mineral Resource Estimate for Napperby Uranium Deposit at 200ppm U_3O_8 cut-off.*

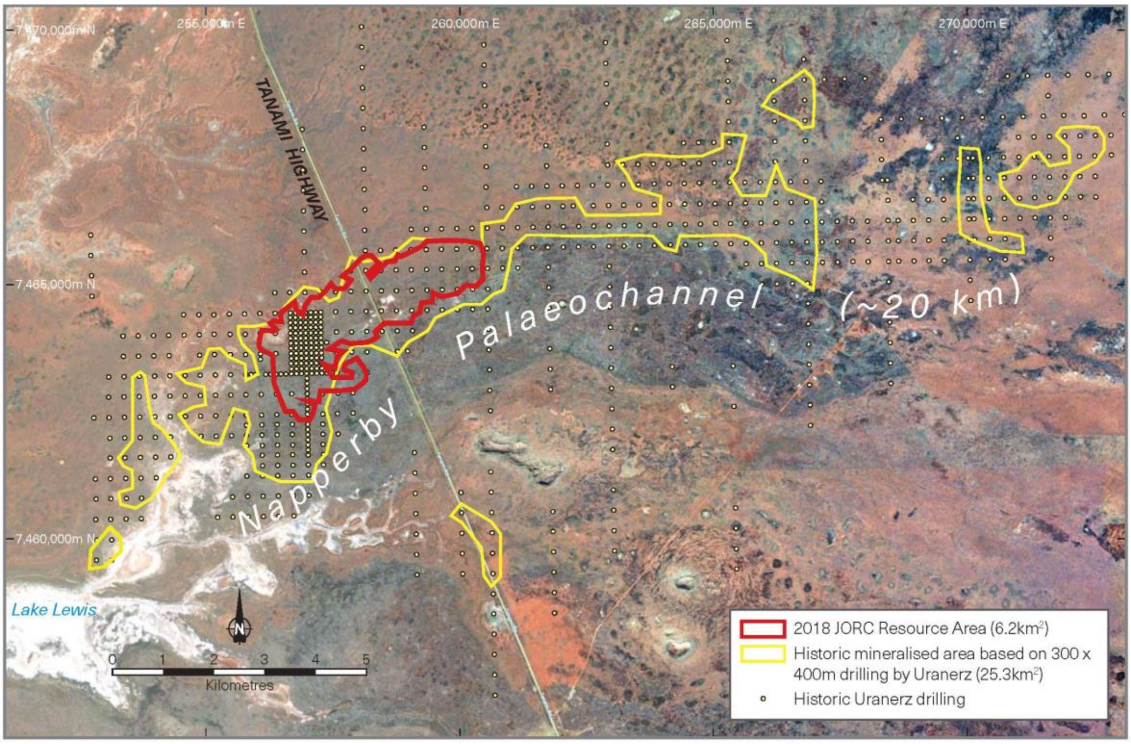

***Figure 1**. Outline of the Mineral Resource area versus the historic mineralised area defined by Uranerz.*

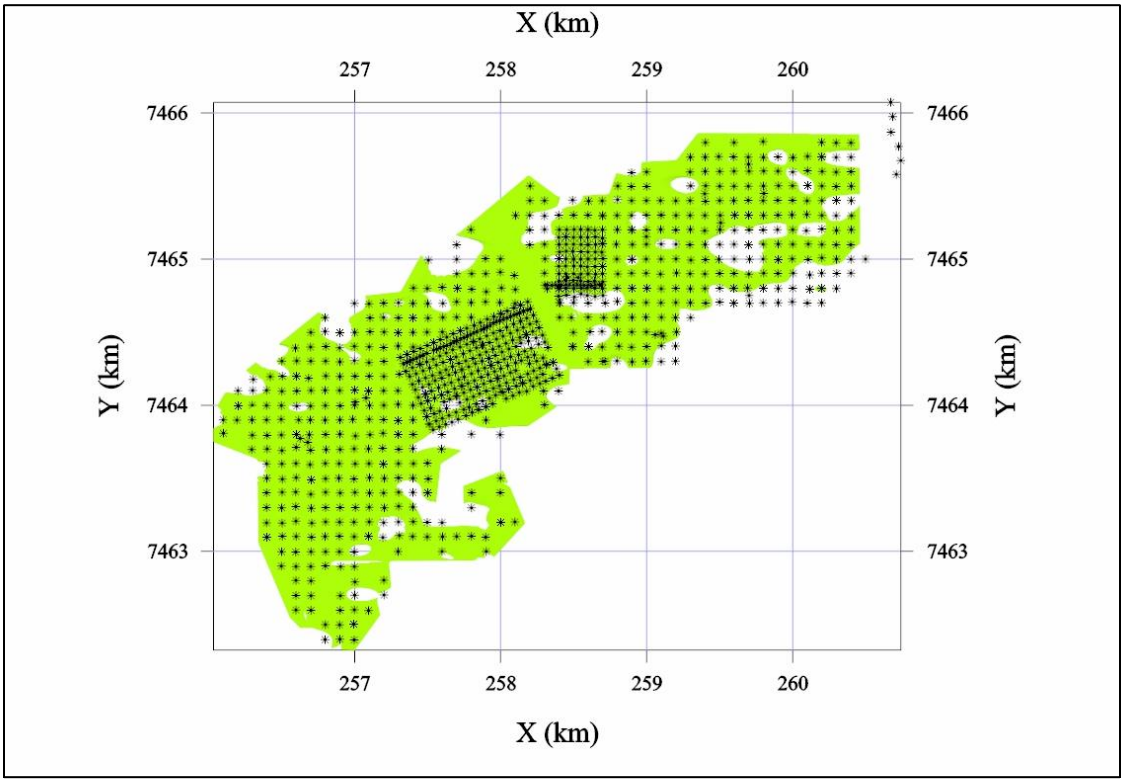

***Figure 2**. Plan view of drill holes and the mineralisation model at Napperby*

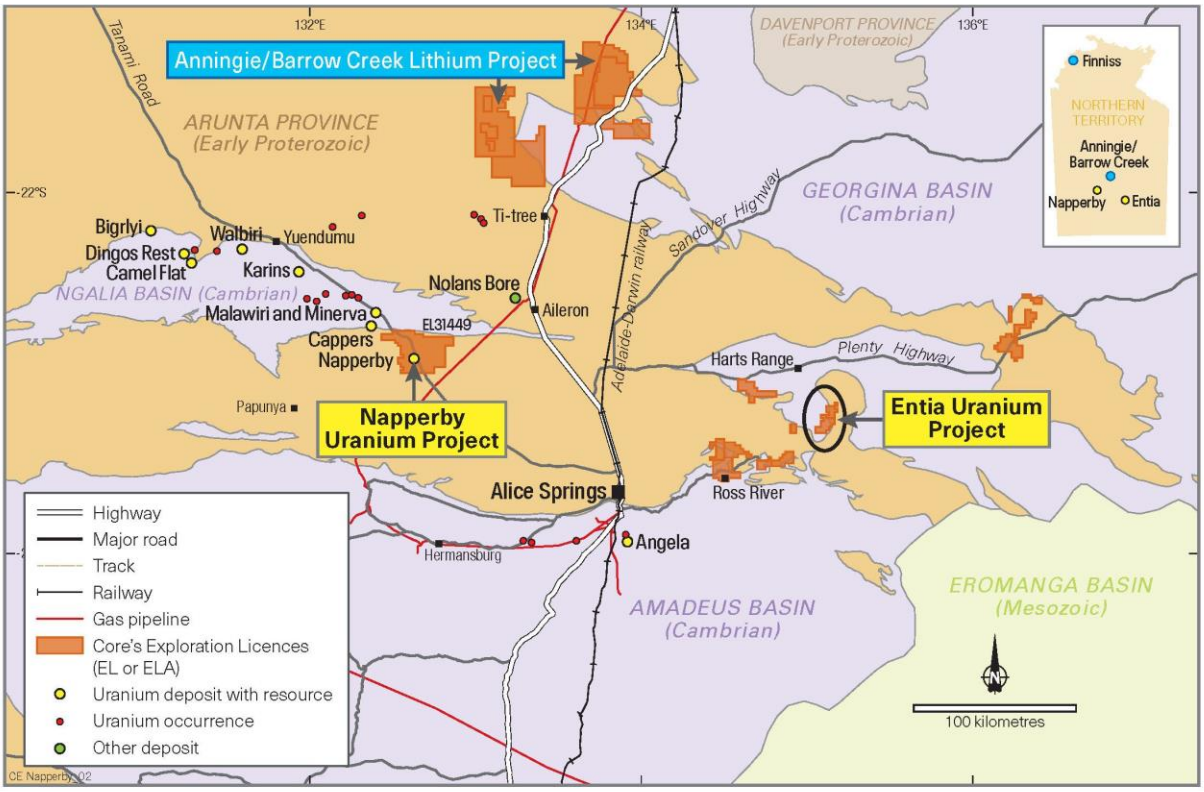

***Figure 3.** Location of Napperby Uranium Project with respect to Core's NT uranium assets*

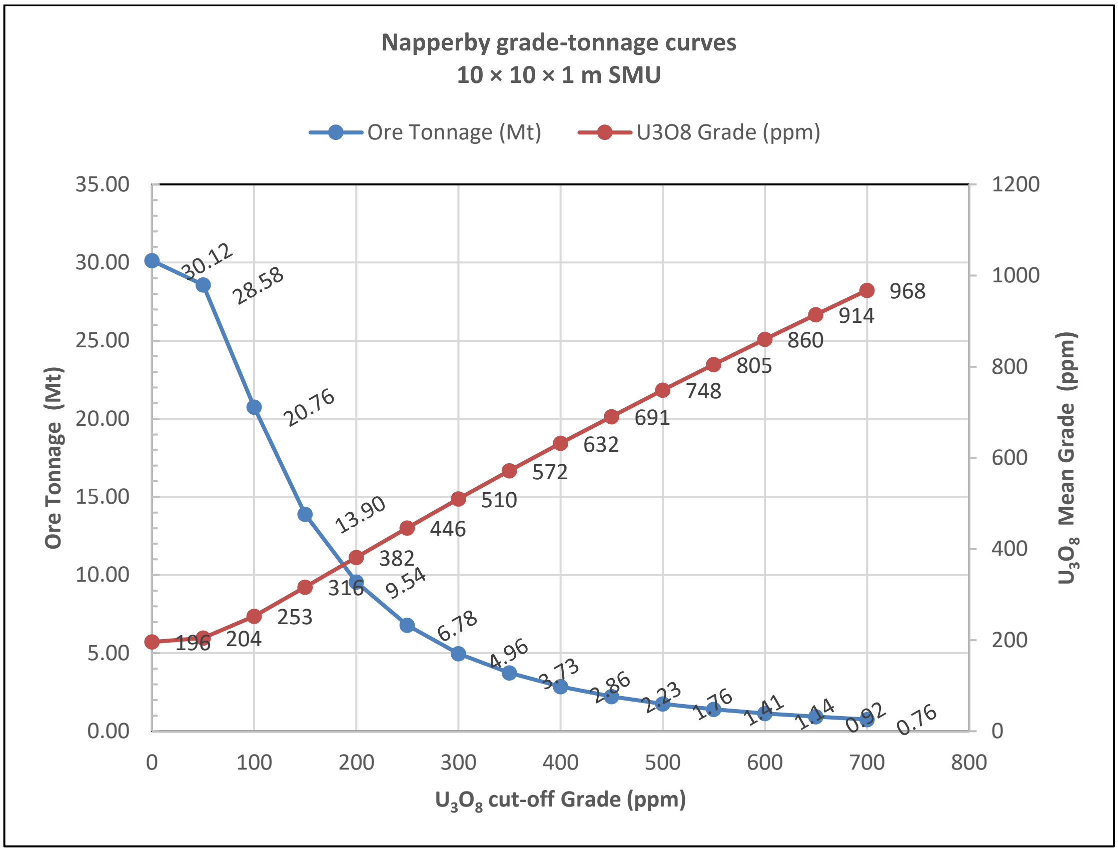

***Figure 4**. Grade tonnage (GT) curve for the Napperby Mineral Resource estimate.*

Summary of Mineral Resource Estimate and Reporting Criteria

The results of the Mineral Resource Estimate ("MRE") are provided in Table 1 and Figure 4.

Background and Scope

The Napperby Uranium Deposit was originally discovered by CRA Exploration and Uranerz in the late 1970's during the course of regional auger drilling exploration. By the early 1980's they had defined a mineralised zone over some 20 kilometres in strike length (outlined in Figure 2), then named "New Well" Prospect, via aircore drilling (820 holes).

Following a period of quiescence in the uranium market, Deep Yellow Ltd undertook an initial drill program of aircore and auger in 2005-2006, covering a small part of the resource outlined herein (831 holes). Under an option agreement, Toro Energy Ltd (Toro) undertook further exploration in 2006 to 2009, including detailed aircore, sonic and auger drilling programs (1,475 holes). This led to the estimation of a resource in 2009, the data from which is the basis of the current re-estimation. The project has since been dormant in the face of a depressed uranium market and was relinquished in 2017. Core applied for and was granted EL31449 and now has 100% ownership of all minerals.

SRK Consulting was contracted by Core to undertake the MRE for the Napperby Uranium Deposit. SRK undertook the previous MRE for Toro Energy in 2009 using similar methodologies, however, the data has effectively been re-assessed and a new block model developed. SRK built a new mineralisation model using Leapfrog and Vulcan software, taking the original 2009 model parameters into account. There have been no further drillholes considered as part of the re-estimation. Only chemical assay data has been utilised for this MRE.

Geology and geological interpretation

The extensive mineralised zone at Napperby occurs within 3 to 8 metres of the surface in semi-consolidated and unconsolidated sediments along a Tertiary palaeochannel that flows into Lake Lewis. While it is classed as "calcrete style", it is almost exclusively hosted by clayey sand sediments below the calcrete surface. In this respect, it is geologically similar to a number of operating and approved calcrete-uranium projects in Australia and Africa, including Yeelirrie (Cameco), Wiluna (Toro) and Langer Heinrich (Paladin).

Uranium is exclusively contained in a bright yellow vanadium-bearing mineral called carnotite (Figure 5). It is regarded as forming during the process of outflow of groundwater into an evaporative environment, whereby the uranium precipitates as a vanadate in the near surface. Most calcrete style deposits are modern accumulations that are actively moving along the groundwater system. They are thus affected by the disequilibrium between uranium and its radiogenic daughter isotopes that are measured by tools such as gamma ray probes. The use of chemical assays overcomes any issues associated with disequilibrium.

Figure 5 *– Example of carnotite in sonic drill core from Napperby*

Drilling techniques and hole spacing

The Napperby drill hole database used for the MRE contains a total of 900 holes:

- Deep Yellow - Auger drillhole assays and collars (prefix "NP"): 262 holes
- Toro Energy – Auger drillhole assays and collars (prefix "NA"): 123 holes
- Toro Energy – Sonic drillhole assays and collars (prefix "NS"): 515 holes

All of holes have been drilled in a vertical orientation to depths of up to 17m, but the average is 9.4m deep. None of the aircore holes have been used for the MRE.

The Deep Yellow drilling is on a different grid orientation and spacing to the Toro drilling (Figure 1). The Toro holes are mostly on 100 × 100 m grid and cover a total area of ~740 ha, whereas the Deep Yellow holes are on a 50 × 50 m grid, covering ~57 ha.

Sampling and sub-sampling

Auger drillholes were sampled on either a 0.5m or 1m basis, with a large split collected from the bulk spoils at site via either channel sampling (Deep Yellow) or riffle splitting (Toro).

Sonic cores of average 0.5m length were cut in half at site and submitted to the laboratory without further splitting.

Sample analysis method

The samples upon reaching the laboratory were sorted and dried. Primary preparation has been by Boyd crushing the whole sample. The samples were then split to obtain a sub-fraction, which has then been pulverised to 90% passing 75µm.

Toro assayed for a multi-element suite that included U and V at ALS Laboratory by 4-acid-digest ICP-AEA, ICP-MS and XRF pressed pellet, the latter being the routine method. Detailed trials were undertaken to establish the preferred (reliable) method. Matrix-matched standards were created from this process, using a variety of other laboratories and methods, including NAA at Becquerel.

Deep Yellow assaying was done at ALS Laboratory by XRF pressed pellet for U and V.

Standards, blanks and duplicates have all been applied in the QAQC methodology. Sufficient accuracy and precision have been established for the type of mineralisation encountered and is appropriate for QAQC in the MRE.

Cut-off grades

The MRE for the Napperby Deposit has been reported at a cut-off grade of 200ppm U_3O_8, which represent the most likely cut-off compared to similar style deposits, but the choice will depend on economic assumptions to be determined by Feasibility Studies. Grade-tonnage curve shows the sensitivity of the resources to the cut-off grade (Figure 4).

A top cut of 2,500 ppm U_3O_8 was applied, based on results of statistical analysis and variography.

Marenica's U-pgrade™ technology has demonstrated on bench-scale to concentrate uranium by a factor of 50, while reducing the mass to 2% of the original feed, with process recovery >70%. To date, Langer Heinrich is the only deposit of this "calcrete style" to be developed and operated. Core believes it will able to take advantage of modern advances in beneficiation, such as optical and X-ray sorting, to develop a functional beneficiation technique.

If these techniques prove successful, it is inevitable that a lower cut-off grade can be applied to mining. This is very important for Napperby, as the Grade-Tonnage curve is steep at lower grades, potentially increasing the economic uranium in the current wireframe to 12.88 Mlb at 50 ppm U_3O_8 cut-off (Figure 4). This is not inconceivable, as many calcrete resources are now estimated at these low cut-offs, for example, the Marenica Project resource is 276Mt at 94ppm U_3O_8 for 57 Mlb using a 50ppm cut-off.

Mineralisation model

The mineralisation model was built following the same method described in SRK's 2009 MRE for Toro, with a 50 ppm cut-off to define the footwall and hanging wall. The modelling was done using a combination of Leapfrog and Vulcan software to obtain a reasonably smooth envelope reflecting the mineralised layer as well as possible within the constraint of the large drill spacing (50 m or 100 m typically) compared to a very narrow vertical thickness (a few metres maximum). A plan view of the model is shown in Figure 2.

Estimation methodology

There are several considerations that drive the choice of estimation method:

- Link with the likely mining method and mining selectivity: The Napperby mineralisation will likely be mined by open pit, possibly using some form of continuous miner. At the mining stage, the mineralisation will be defined by grade control, probably through gamma measurements.

- Link between drilling density, mining selectivity and the continuity of the grade: In an ideal scenario, SMU size blocks are estimated directly by Kriging, for instance. Unfortunately, given the current drilling density and limited grade continuity, this is not an option and it was necessary to use a non-linear estimation method, where the proportion and grade of SMU parcels are estimated within suitably large panels.

- Tests done by SRK and described in SRK's 2009 report show that a Gaussian-based uniform conditioning method is applicable to Napperby.

Uniform conditioning is performed in two steps:

1. Ordinary Kriging of panels of a suitable size which will give the grade to which the local grade-tonnage curve will be conditioned

2. Estimation within each panel of the proportion of ore above a given cut-off grade and its average grade for a given SMU size.

Note that uniform conditioning is only used for U_3O_8; estimation of V_2O_5 is done by ordinary Kriging as there are less composites to consider.

The mineralisation model indicates a 50 × 50 × 1 m panel size is the most appropriate to use. The SMU size depends essentially on the selectivity of the mining operation and this has not yet been studied in detail. However, it likely that there is potential for very selective mining based on the possible use of continuous miners and radiometric data for grade control. Based on a plausible SMU, SRK chose blocks of 10 × 10 × 1 m.

An average density of 1.73 t/m^3 was applied for the MRE, which was established in a 2007 study undertaken by FinOre. Density data was also supplied by Core via various other methods is consistent with the expected values for the lithologies present and the degree of porosity.

The re-estimated MRE differs from that carried out in 2009 for Toro, with a slightly decreased gross tonnage (9.34→9.54 Mt; 2%), increased grade (359→382ppm U_3O_8; 6%) and increased contained U_3O_8 (7.39→8.03 Mlb; 9%) at a 200 ppm U_3O_8 cut-off, which are linked to a tightening of the mineralisation model and the use of a higher top-cut.

Classification criteria

The current drill spacing is too wide to adequately understand the lateral continuity of the mineralisation, and the local estimation of 50 × 50 × 1 m panels is therefore of lower confidence. In addition, in the drilled areas of higher density where Deep Yellow holes are present, there is potential bias with respect to the Toro drillholes. Because of these uncertainties, the Mineral Resources are classified as Inferred according to the JORC Code (2012) guidelines. The classification reflects the view of the Competent Person.

Mining and Metallurgy

No detailed mining methodologies or metallurgical recoveries have been applied to the MRE. The comparable style Wiluna Deposit in WA (Toro) will be mined by open pit, possibly using some form of continuous miner. At the mining stage, the mineralisation will be defined by grade control, probably through gamma measurements. Metallurgical sighter test work was carried out by Toro for Napperby and found similar characteristics to other calcrete style deposits. Further test-work is planned by Core to determine the metallurgical amenability of the mineralization to on-site beneficiation, where there has been considerable technological advancement in recent years.

Eventual Economic Extraction

It is the view of the Competent Person that at the time of estimation there are no known issues that could materially impact on the eventual extraction of the MRE.

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Competent Persons Statements

The Mineral Resource estimation results in this report are based on, and fairly represent, information and supporting documentation compiled by Dr David Rawlings and reviewed by Messrs David Slater and Daniel Guibal. Dr David Rawlings is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and a full-time employee of Core Exploration Ltd. The Mineral Resource estimation was completed by Mr Daniel Guibal, who is a Fellow of the AusIMM and an Associate Corporate Consultant of SRK Consulting (Australasia) Pty Ltd. The estimation was peer reviewed by Mr David Slater, who is a member of the AusIMM and a full-time employee of SRK Consulting (Australasia) Pty Ltd.

Dr David Rawlings and Mr Daniel Guibal have sufficient experience which is relevant to the style of the mineralisation and type of deposit under consideration, and to the activity being undertaken, to qualify as Competent Persons (Geology and Resource evaluation respectively) as defined in the 2012 Edition of the JORC Code.

JORC Code, 2012 Edition – Table 1 Report Template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• For resource estimation purposes: ○ 262 auger holes (60 cm diameter) drilled by Deep Yellow (1 m samples) ○ 123 auger holes (30 cm diameter) drilled by Toro Energy (0.5 m samples) ○ 515 sonic core holes (145 mm outside diameter, 100 mm core diameter) drilled by Toro Energy (0.5 m samples). • Toro auger bulk samples weighing ~60 kg for every 0.5 m were split en mass at site once dry and the resulting sub-sample (average 16 kg) was submitted to the laboratory. • Toro sonic cores of average 0.5 m length were cut in half and submitted to the laboratory without further splitting (average 7 kg). • Deep Yellow auger samples of ~250 kg per metre were channel sampled from the bulk 1 m interval sample to obtain a 20 kg sub-sample that was riffle split at site to create a 1–2 kg assay sample, which was submitted to the laboratory. • At ALS Laboratory, all samples underwent drying (110 °C), Boyd crushing, splitting (if sample was large) and milling in LM5s to 90% passing 75 microns. Weighing was done before and after drying. • Toro assayed for a multi-element suite that included U and V at ALS Laboratory by 4-acid-digest ICP-AEA, ICP-MS and XRF pressed pellet, the latter being the routine method. Detailed trials were undertaken to establish the preferred (reliable) method. Matrix-matched standards were

		created from this process, using a variety of other laboratories and methods, including NAA at Becquerel. • Deep Yellow assaying was done at ALS Laboratory by XRF pressed pellet for U and V. • All Toro holes were gamma probed for disequilibrium studies via quantitative comparison to the chemical assay data. Gamma-derived grade values were not used in the estimation of the resource.
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.).*	• Wide diameter (300 mm or 600 mm diameter auger flight) auger holes were drilled using a Kelly-drive piling rig operated by Australasian Piling Co, Adelaide. • Sonic holes were drilled using a sonic core rig operated by Boart Longyear, Perth. Most had 145 mm hole diameter, but also some larger diameter 210 mm holes were drilled for groundwater studies. Sonic drilling was trailed by Toro and then, on account of its superiority, rolled out for all future resource drilling that required chemical assays. Sonic drilling to that point had largely been reserved for environmental applications, such as investigating chemical dispersion in unconsolidated sediments. • Aircore holes were trailed to provide chemical assay data, but there were recovery issues. There are a large number of aircore holes with only gamma-derived grade data, but these have not been used in the estimation. • All holes are vertical. • In 2005–2006, Deep Yellow excavated trenches 6–7 m deep in three sites. The trenches were channel sampled down 1 m spaced vertical channels; the 1 m samples taken were not used in this resource estimate.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of*	• Recovery percentage for each sample interval was visually estimated at site, but data was superseded in due course by a more precise system, whereby wet and dry sample weights were recorded to track recovery, using sample drill length and hole diameter. • Auger holes were considered as showing good recoveries in general, but site geologists noted that in wet unconsolidated materials, the recovery

	fine/coarse material.	from the auger flight deteriorated and required multiple passes with the auger to compile a complete and representative bulk sample of the interval. Where clayey material adhered to the auger flight, it had to be manually removed before moving on to the next interval. Repeated auger passes led to partial collapse and widening of the hole, which translates to contamination or dilution of subsequent samples. This is tempered by the sample size being so large that these effects are negligible. • Recovery for sonic drilling was excellent and was maximised by managing drilling rate of penetration and hydrostatic load to prevent loss of sample from drill bit annulus. Samples were immediately placed in plastic sleeves to prevent loss of fines and moisture. • Contamination in sonic drilling only occurred in the top few metres, above the mineralisation, and was easily removed from the sample tubes. Casing was introduced to minimise this. • Auger samples were piled onto geotextile mats, where the sample volume could be assessed and bottom of the hole measured. The mat contents were then dried, weighed and split using a large riffle splitter with vibrating solenoids. • Aircore holes give poor recoveries, and as such were not used in this resource estimation. Historic Uranerz aircore drilling used the Wallis system and recoveries were substantially better, so Core considers that, if using correct technique, aircore can be a valid exploration and resource infill drilling tool.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Lithological logging was done for all samples. Volumetric (%) estimates were made of the various lithologic components, colour, oxidation state, gamma reading, wetness. • Sonic cores were logged at the centimetre scale and were therefore of sufficient quality to provide a detailed insight into regolith, infer depositional regimes and enhance understanding of processes governing mineralisation. Visible details include fining-upwards sequences, redox boundaries, fine laminae and coarse sand scouring.

		• Auger samples were logged at 0.5–1 m scale. • Paleochannel system, evidence of several mineralised horizons at different levels, but continuity was not easy to assess at 100 m drill spacing. • Overall, geology logging of drillholes was sufficient for resource estimation.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Auger and sonic core sub-sampling methods described above. • Toro sample preparation techniques (screening and splitting) appear adequate, as demonstrated by duplicate regime and twins of auger-sonic and sonic-sonic. • Toro instituted a regime of field duplicates, preparation of duplicates and analytical duplicates, beyond the laboratory's QA/QC regime. All data was assessed regularly for uniformity. Umpire assays were also regularly obtained from independent laboratories. No significant sampling issues were identified. • Sample sizes, particularly the auger ones, are much larger than in typical exploration programs and therefore adequate for the nuggetty mineralisation that characterises Napperby and other calcrete-style uranium deposits.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• QA/QC program included field/ laboratory duplicates and matrix-matched standards. • QA/QC performance has been documented and indicates good agreeance. • Assay method routinely used is XRF pressed pellet, which is routine for this style of mineralisation and best matches the NAA method, which is considered definitive (but too costly and slow to roll out). • Toro undertook considerable test-work and umpire analyses using different methods at different laboratories, all indicating this was the most appropriate assay method. • High levels of Strontium in some samples were found to affect XRF spectra for Uranium, but not sufficient in quantum or spatial extent to warrant an alternate assay technique.

		• PFN tool was used in 18 holes to compare to gamma and assay measurements. • Reputable laboratory (ALS) used for routine assaying.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Toro twinned five high-grade Deep Yellow holes, and the results suggested that the Deep Yellow NP (auger) holes were biased high, but this might partially be a result of the 'return to the mean' statistical phenomenon. Follow-up twinning of 11 holes with more representative grades around the mean grade showed very little differences. • Toro twinned a sufficient number of its own sonic and auger holes to provide a reliable understanding of small-scale variability. • Umpire samples showed excellent agreeance with the original data. • Data was largely digitally entered into Tablets; data was verified and uploaded into DataShed. • No adjustments to the assay data have been carried out.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill hole collars collected by DGPS. During 2016 and 2007, data was collected by BB Surveys from Alice Springs, who established a base station. In 2008, Toro purchased a post-processed DGPS unit (Magellan) and collected collars from that point forward. • During the Toro DGPS survey, checks of 2006 Deep Yellow and 2007 Toro collars showed there were errors in elevation (RL) at a decimetre scale and these were rectified by BB Surveys. • GDA94 Zone 53.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• Drilling is mostly 100 × 100 m, which is insufficient to define continuity of the mineralisation at a local level. • Approximately 100 Toro holes were drilled at 50 × 50 m spacing (including a line at 25 m spacing). • Central zone of the orebody was drilled at 50 × 50 m (Deep Yellow) with one drilling line drilled at 25 m spacing. • Samples were composited to 1 m. Deep Yellow auger samples are 1 m long, while Toro sonic and auger samples are 0.5 m long.

Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The orientation of the sampling is correct (vertical holes for a sub-horizontal mineralisation). • No bias due to geometry. • Holes are too short to justify downhole surveys.
Sample security	• *The measures taken to ensure sample security.*	• Toro samples were weighed, catalogued, batched then road-freighted to ALS in Adelaide on dedicated loads for processing. The sample volumes were large, for auger in particular (~16 kg each), and it is therefore unlikely the samples were changed significantly during transport. Sample receipts and dispatches were audited regularly. • Sampling process was supervised by Exploration Manager.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Internal Toro reviews of sampling representivity were undertaken during the resource drilling. • SRK undertook an audit of the dataset prior to resource calculation.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• EL31449 was granted on 7 September 2017 for a period of 6 years and is held by Uranium Generation Pty Ltd, a 100% owned subsidiary of Core Exploration Ltd. There are no related royalty arrangements, contracts or caveats. The tenement is in good standing with the NT Department of Primary Industry and Resources. • The resource area lies within the Napperby Pastoral Lease and has been subject to previous heritage clearances by Deep Yellow and Toro Energy. There are no significant heritage or land ownership related impediments to the future exploration or mining of the resources.

Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• All modern exploration to date was carried out by Deep Yellow and Toro (2005–2009). Prior to 2005, exploration was carried out by Paladin and Uranerz. All exploration was focused on uranium mineralisation. • The Napperby (New Well) deposit was first discovered and explored by CRA Exploration and Uranerz in the late 1970s and early 1980s. They drilled wide-spaced auger and aircore holes and defined a 'mineralised area', but did not publish a mineral resource. • The deposit remained dormant for over a decade until Paladin applied for the ground in the early 2000s. Deep Yellow subsequently acquired the Project from Paladin in 2005, then after undertaking drilling, secured an option to purchase with Toro Energy Ltd. • In 2007, Toro Energy drilled 515 sonic core holes, 123 auger holes and 814 aircore holes, followed in 2008 by a further 333 sonic core holes and 784 aircore holes. • Following that work, in 2009, Toro Energy expanded the historic Napperby resource by 400% to a JORC Code Inferred Mineral Resource of 9.34 Mt at 359 ppm (0.036%) U_3O_8 for 3351 t (7.39 Mlb) of contained uranium oxide using a 200 ppm U_3O_8 cut-off (Toro Energy, ASX release on 03/03/2009). Only 50% of the known mineralised area was included in the 2009 Mineral Resource. • This option to purchase was not eventually executed following Scoping Studies that concluded the Project was uneconomic at the current scale/ grade. In 2010, the Project fell 100% back into the hands of Deep Yellow. No further exploration took place. The Napperby deposit and a small part of the original EL24246 was relinquished in October 2016. • Core has inherited an excellent database that includes 2,308 auger, sonic core and aircore drillholes from Toro/Deep Yellow, downhole gamma and assay data, PFN and disequilibrium data, metallurgical test-work, scoping study, airborne electromagnetics and high-resolution magnetics/ radiometrics, gravity, and baseline groundwater environmental monitoring data. Core has also digitised the 820 Uranerz drillholes, including assay and gamma data. • Toro undertook metallurgical test-work from bulk representative samples

		derived from Napperby in 2008 and 2009, aimed at characterising the ore and gangue, determining how suitable the mineralisation is for beneficiation and the optimal conditions for leaching. Tests included comminution, scrubbing and column leach trials (Toro Energy, ASX release on 09/06/2009). • Toro proceeded to a Scoping and Conceptual Study conducted by URS Australia, which examined various conventional mining and processing options available at the time, such as heap leach, agitated leach, direct precipitation and resin-in-pulp. • Alternative mining cut-off grades and the potential for nearby deposits were also considered, as was initial up-front beneficiation. A high-level review of infrastructure requirements, environmental management and CAPEX and OPEX scenarios was also undertaken.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Napperby Project (historically known as the New Well deposit) comprises an extensive, consistently mineralised zone within 2–10 m of the surface in semi-consolidated and unconsolidated sediments within a Tertiary paleochannel over a 20 km length (striking NNE) in the Arunta Region in the Northern Territory. • Carnotite mineralisation resides mostly in sands and sandy clays as finely disseminated particles and blobs up to 5 cm long, but can also be found in overlying calcrete as joint coatings. • The current geological model has it that uranium is released from basement rocks into the aquifer system due to the presence of acidic-oxidised surface waters. Uranium is carried in solutions with vanadium until it reaches a critical point of supersaturation, caused by evaporation. Uranium precipitates as a vanadate, along with carbonate and silica within the paleochannel system. It is thus effectively controlled by the modern groundwater regime.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of*	• N/A (reporting of resources) • None-the-less, a spatial distribution of drillholes can be found in the figures in the release above. This is sufficient given the large number of drillholes, their shallow nature and vertical orientation.

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	the drill hole collar ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	
Data aggregation methods	• *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.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Sample compositing reported here are calculated length weighted averages of the assays. Length weighted averages are acceptable method because the density of the rock is effectively constant.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	• The mineralisation lenses are horizontal in nature, and given all the drill holes are vertical from the surface, they are perpendicular to mineralisation. The mineralisation widths quoted here are therefore true widths.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See figures in report.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• No exploration results are reported or discussed.

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._	• All meaningful and material data reported.
Further work	• _The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling)._ • _Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive._	• No immediate on-ground exploration is planned at this stage. Core will largely be undertaking studies involving beneficiation to improve the head grade to any proposed processing plant. • If successful, Core would look to expand the resource by incorporating the existing gamma-derived uranium grades from historic aircore holes. • Economic considerations would determine the next step, which could potentially be to undertake broader-scale and infill drilling to expand the resource and improve the category of part of the resource.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• _Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes._ • _Data validation procedures used._	• Logging data was entered into a template with fixed formatting and authority tables. The template was directly imported into DataShed by the database manager, who identified any validation errors to be corrected by the author. Assay data files were imported into the same DataShed database and undergo the same validation of data fields. QA/QC of the data takes place to identify outliers and check validity with the laboratory. • Data provided to SRK for resource estimation was exported from DataShed to an Access database. • Data validation originally by Toro, confirmed by Core. • QA/QC data was reviewed by SRK in 2009. The same dataset (from 2009)

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		was used for this resource estimate.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• David Rawlings (CP) visited the site for Toro throughout the period between 2007 to 2009.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The geological model is a paleochannel with mineralisation clay-calcrete hosted. • Model was based on Leapfrog contouring at 50 ppm threshold (see report). • The predominant drill spacing (100 × 100 m) is too wide to obtain an accurate local representation of the mineralised horizon.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource*	• The Napperby deposit is surficial with a vertical thickness of ~2–10 m. The explored along-channel strike length that is subject of MRE is 5km and the width across channel is 1–1.5 km • See figures in report.
Estimation and Modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.*	• Details of the estimation are given in the report. • Statistical analysis of 1 m composites in the mineralisation model was undertaken. • Top-cut used was 2,500 ppm. • Variography based on Gaussian transformed values of the grade, and back-transformation. • Ordinary Kriging of 50 × 50 × 1 m panels using the following Kriging neighbourhood parameters: – ellipsoid radii 200 × 200 × 4 m – minimum 5 composites – maximum 56 composites – 8 sectors. • A larger (400 × 400 × 8 m) ellipsoid was used to estimate panels not estimated within the first run.

	• *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	• Validation of the Kriging results by comparison with the composites and swath plots. • Uniform conditioning with 10 × 10 x1 m SMU reflects a more realistic selectivity level. • V_2O_5 was estimated on the same 50 × 50 × 1 m panels using ordinary Kriging.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnes have been estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Grade-tonnage curve shows the sensitivity of the resources to the cut-off grade. • A 200 ppm U_3O_8 cut-off may represent the most likely cut-off compared to similar deposits, but the choice will depend on economic assumptions to be determined by a Scoping or Feasibility Study.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The only assumption made is the size of the SMU (10 × 10 × 1 m), which is based on a likely open-cut, selective mining method.
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.*	• Not considered at this stage.
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*	• No environmental assumptions have been made during the MRE.

	potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Constant, historical density of 1.73 t/m3 was used. • Samples taken in 2008 and submitted to ALS and AMDEL for determination of bulk density. Results were not fully compiled and assessed by Toro, but are a potentially good source of data to derive a more appropriate bulk density. Preliminary assessments suggest the 1.73 t/m3 value used for this resource estimate is conservative. • Sonic probe data provides a wet density only. Assumptions need to be made to convert to a moist or dry density. Toro had begun assessments of these correction factors for several different lithology types.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *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).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Resources are classified as Inferred; drill spacing insufficient to evaluate the continuity of the mineralisation. • There is uncertainty with respect to the Deep Yellow high grades, which may be biased high. • The CPs are satisfied with this classification, which reflects the degree of knowledge of the orebody.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• This Mineral Resource estimate has not been audited by an external party.
Discussion of relative accuracy/confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the MRE as per the guidelines of the 2012 JORC Code. • The statement relates to global estimates of tonnes and grade. • The current estimate is consistent with SRK's 2009 estimate; the increase in grade is linked to a tightening of the mineralisation model and the use of a higher top-cut.

	the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The quality of the estimation, as measured by the slope of regression obtained in panel Kriging is not very good. This is consistent with the resource being classified ion the Inferred Mineral Resource category.