ASX Release

Monday 5th October 2015 ASX : ACB

Upgrade in Letlhakane Uranium Resource

HIGHLIGHTS

- A new resource estimate has been completed utilising Localised Uniform Conditioning incorporating excellent results from the 2014 drilling programme;
- Better grade definition at the mining scale using a Specific Mining Unit (SMU) based on using surface miners and selective grade control methodology;
- Potential pit areas show higher grades;
- A large increase in lbs of uranium at a 300ppm cut-off.

A-Cap Resources Limited (the "Company" or "A-Cap") is pleased to announce the updated resource estimate for the Letlhakane uranium deposit. The resource upgrade was completed using Localised Uniform Conditioning (LUC) which takes into account mining and grade control selectivity.

The new global resource estimate is as follows:

Cut-off (U_3O_8 ppm)	Total Indicated			Total Inferred			Global Total		
	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)
100	197.1	197	85.5	625	203	280.1	822.1	202	365.7
200	59.2	323	42.2	209.7	321	148.2	268.9	321	190.4
300	22.2	463	22.7	81.6	446	80.3	103.8	450	102.9

Table 1 – LUC resource estimate

The LUC estimate best reflects the mining methodology envisaged, taking into account the surface miner's selective mining capability combined with the proposed grade control methodology. The accurate mining characteristics of surface miners and the ability to generate a detailed measure of gamma radiation on the surface during mining will ensure the optimum grade delivery to the process heap. The SMU of 20m x 4m x 0.25m forms the basis for the LUC estimation. Historic resource estimations were more reflective of conventional open pit mining and therefore had averaged resource data into blocks of bigger mining panels and smoothed or averaged the grade data.

Uniform conditioning (UC) and LUC is used for assessing recoverable resources inside a mining panel when the drill spacing does not provide sufficient coverage for direct grade estimation at the SMU scale. UC provides the proportion of SMU's inside a panel that are above cut-off and its corresponding average grade. LUC takes the UC result and localises it into SMU scale blocks, making it more suited to extraction and optimisation studies.

The 2014 drilling programmes targeted the early optimised shells which typically represent the earliest production potential. Previous results as reported to the ASX during 2014 (August 27th and December 15th) highlighted some of the better grade intersections which would be exploited early in the potential production sequence. The results of the drilling programme increased confidence in these early production areas within Letlhakane, namely Kraken, Gorgon South and Serule West. The global resource area is 14km long and 11km wide and is divided into the aforementioned main prospect areas. The Letlhakane Uranium Project is divided into prospect areas as defined in the figure below.

At a 200 ppm U_3O_8 cut-off the resource by prospect is:

2015 Mineral resource estimate for the Gojwane and Serule deposits - 200 ppm U_3O_8 cut off (LUC)											
Ore Type	Deposit	Prospect	Indicated			Inferred			Total		
			Mt	U_3O_8 ppm	U_3O_8 Mlbs	Mt	U_3O_8 ppm	U_3O_8 Mlbs	Mt	U_3O_8 ppm	U_3O_8 Mlbs
Secondary	Gojwane	Gorgon Main/West									
		Mokobaesi	2.0	371	1.6				2.0	371	1.6
		Kraken	0.1	261	0.0	0.0	202	0.0	0.1	261	0.0
	Total Secondary		2.1	367	1.7	0.0	202	0.0	2.1	367	1.7
Oxide	Gojwane	Gorgon Main/West	6.1	313	4.2	9.3	280	5.7	15.4	293	10.0
		Mokobaesi	3.4	365	2.7				3.4	365	2.7
		Kraken	3.9	310	2.6	0.7	280	0.4	4.5	306	3.1
		Gorgon South	4.4	323	3.1	2.6	292	1.6	7.0	312	4.8
	Serule	Serule East				0.5	246	0.3	0.5	246	0.3
		Serule West	0.4	302	0.2	11.7	322	8.3	12.1	322	8.6
	Total Oxide		18.1	324	13.0	24.8	301	16.4	42.9	311	29.4
Primary	Gojwane	Gorgon Main/West	15.4	280	9.5	98.2	313	67.7	113.5	309	77.2
		Mokobaesi	0.5	359	0.4	0.3	330	0.2	0.8	347	0.6
		Kraken	7.7	350	5.9	1.0	349	0.8	8.7	349	6.7
		Gorgon South	12.1	337	9.0	22.8	309	15.5	34.9	319	24.5
	Serule	Serule East				0.4	259	0.2	0.4	259	0.2
		Serule West	3.3	376	2.8	62.4	345	47.4	65.7	346	50.2
	Total Primary		39.0	321	27.5	185.0	323	131.8	223.9	323	159.4
	Total		59.2	323	42.2	209.7	321	148.2	268.9	321	190.4

Table 2 – 2015 LUC resource estimate at 200ppm cut-off.

The technical study that was completed during the year, the outcomes of which were disclosed to the ASX on the 11th September 2015, had utilised the 2012 Mineral Resource to determine the results. Following an assessment and review, the 2013 resource estimate was found to be unsuitable for mining optimisation studies. In comparison the new LUC resource has a notable grade increase over prior resource estimations due to the incorporation of mining selectivity and the assessment of recoverable grade. This is a positive outcome for the economics of the Project and will be used as the basis of future mine schedules, optimisations and financial modelling.

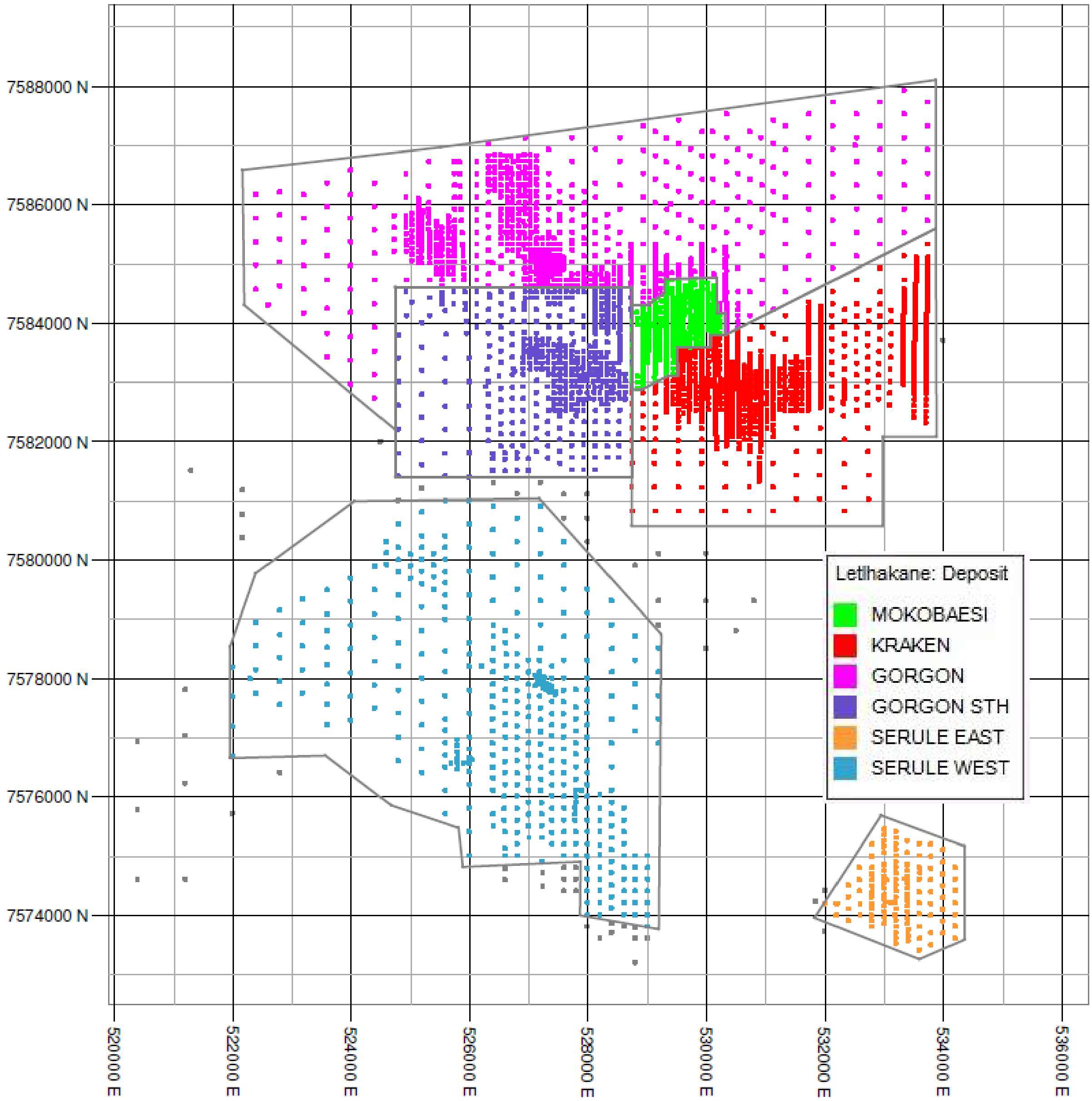

Figure 1 Drill holes and Prospect areas used in modelling

When comparing the 2015 LUC Resource against previous estimates, the LUC resource contains more tonnes and slightly more grade. The reasons are twofold:

- Firstly, the 2015 resource utilised wireframes that delineated continuity over larger areas, whereas the 2013 resource was completed using a categorical modelling approach. The global resources were similar, however it was found that the categorical approach, although correctly estimating the quantum of the uranium resource, had less continuity of grade extrapolation compared to using a wireframe.

- Secondly, the LUC result has more tonnes at higher cut-offs, as a larger initial mining block that was reporting below a cut-off now may have a higher grade recoverable proportion of the mining block represented as SMUs above the cut-off.

The 2012 and 2015 resource estimates both utilised interpreted wireframes for constraining the resource estimation. The 2015 wireframing was more selective as the 2014 grade control patterns demonstrated that the stacked mineralised lenses could be clearly delineated on a mining scale. The current wireframes incorporated less dilution in the interpreted volume than the 2012 resource. The LUC estimation method and the decreased internal dilution in the interpretation has increased the grade and produced a more accurate estimate of recoverable resources.

Cut-off (U_3O_8 ppm)	Total Indicated			Total Inferred			Global Total		
	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)
100	131.9	198	57.5	530.5	215	250.9	662.4	211	308.1
200	49.4	269	29.4	198.6	319	139.8	248.1	309	168.9
300	11.3	376	9.4	72.4	458	73.2	83.7	447	82.5

Table 3 - 2013 resource estimate for comparison (ASX announcement 30 July 2013)

Cut-off (U_3O_8 ppm)	Total Indicated			Total Inferred			Global Total		
	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)	Mt	U_3O_8 (ppm)	Contained U_3O_8 (Mlbs)
100	221.3	153	74.7	819.1	153	277.0	**1,040.5**	**153**	**351.8**
200	32.6	274	19.7	110.7	287	70.0	**143.2**	**284**	**89.7**

Table 4: June 2012 Mineral resource for comparison at 100ppm & 200ppm U_3O_8 cut-offs

Recent work completed by Perth-based resource specialists Optiro on a drill study comparison at the Kraken deposit confirmed that at a starting drill spacing of 200m by 200m, the change of contained metal is within +/-10% when infilled to 100m by 50m drill spacing. The current criteria for inferred resources is nominally greater than 100m by 100m drill spacing. A-Cap has confidence that the deposit will retain its mineralisation continuity when it is further drilled out.

The heap leach process under consideration utilises a 2 stage acid leach process with solvent extraction, ion exchange and UO_2 precipitation. Potential savings on process OPEX costs can be realised from an increase of grade. The more selective interpretation may result in a higher strip ratio than the 2.2 reported for the of 2012 resource optimisation results. OPEX costs from the technical study and the strip ratio were announced to the ASX on the 11th September 2015.

Competent person's statement

Information in this report relating to Mineral Resources is based on information compiled by Mr Ian Glacken, Principal Consultant at Optiro Pty Ltd and a Fellow of the AusIMM. Mr Glacken has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results Mineral Resources and Ore Reserves. Mr Glacken consents to the inclusion of the data in the form and context in which it appears.

Information in this report relating to Uranium Exploration results, is based on information compiled by Mr Ashley Jones, a full-time employee of A-Cap Resources Limited and a Member of AusIMM. Mr Jones has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting of Exploration Results Mineral Resources and Ore Reserves. Mr Jones consents to the inclusion of the data in the form and context in which it appears.

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For further information contact:

Paul Thomson, CEO, A-Cap Resources *+ 61 8 9278 2614*

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	• Grades for the resource estimation are a mixture of probe and chemical assays. The primary method of grade determination was through gamma logging for equivalent uranium (e U_3O_8) using an Auslog natural gamma sonde equipped with a Sodium Iodide crystal. The sonde used for the data collection was calibrated in the Adelaide Models in May of 2014 and calibration factors were obtained using the polynomial method by 3D Exploration (Pty) Ltd. Checks using a gamma source of known activity are performed prior to logging at each hole to determine crystal integrity. Readings were obtained at 5cm intervals downhole. • Chemical assays have been used to check for correlation with gamma probe grades; disequilibrium is not considered an issue for the project. Industry standard QAQC measures such as certified reference materials, blanks and repeat assays were used. Chemical assays are, in general, used in preference to probe values where both are available. • Reverse circulation (RC) chips were collected at 1m intervals over the mineralised zone. The chips were collected into plastic sample bags from a cyclone to ensure maximum recovery. The samples were split using a standard riffle splitter to around 0.25 to 0.5 kg per sample and have been sent to an accredited laboratory. Diamond samples are collected based on lithological boundaries.
Drilling techniques	• Diamond coring using NQ and PQ diameter holes. • Percussion 5¼ inch Reverse Circulation (RC); no physical samples were used for the announced results. • Hollow auger (HA) holes were drilled and half 'core' samples were obtained by cutting the sample for each metre with a blade. • Primary and oxide resources were estimated using radiometric gamma logging equipment. Secondary resources were calculated with XRF results as the primary assay and gamma if no assay was present. • Rotary Air Blast (RAB) holes were probed; no physical samples were used in the resource estimate. **Drill holes in deposit:**

	Reverse circulation (RC)	Diamond Drill Hole (DDH)	Rotary Air Blast (RAB)	Hollow Auger (HA)	Total
Number of Holes	2,948	269	25	499	3,741
Metres Drilled	137,814	12,577	2,270	3,544	149,043

Criteria	Commentary
Drill sample recovery	• Core and HA recoveries were monitored and were generally very good (>95%). • RC recoveries were monitored by weighing each 1m sample interval. • Core, chip and HA samples were logged geologically.
Logging	• For gamma logging, see sampling techniques above. • Core has been photographed.
Sub-sampling techniques	• No sub sampling was undertaken, as all results reported are derived from downhole gamma responses. Gamma responses are derived from the in situ material surrounding the hole drilled.

Criteria	Commentary
and sample preparation	• Duplicate hole logging and annual calibration were used to ensure the accuracy of the logs. The 2014 programme used an additional gamma tool and source to calculate density, which was compared against the gamma logs. • XRF assays used in the resource estimate are based upon splits from RC, HA and DDH hole types. All splitting and subsampling has been carried out according to best practice.
Quality of assay data and laboratory tests	• Calibration and control hole logging was done on a routine basis for gamma probe grades and a representative set of re-logging has also been undertaken. • A QAQC programme, including the use of standards, blanks and field duplicates, has been carried out over the drilling history of the deposit.
Verification of sampling and assaying	• Significant intersections were reviewed internally. • Data entry procedures are well established and data is held in an Acquire database. • Equivalent eU_3O_8 grade are determined by calculation from the calibration of the probes. Calibration occurred in the Adelaide test pits in Australia.
Location of data points	• Collar positions were located using a handheld GPS and surveyed after drilling using a differential GPS.
Data spacing and distribution	• Drill spacing is variable, but generally the inferred resources are drilled at 200 – 400m spacing and indicated resources at 100m spacing.
Orientation of data in relation to geological structure	• All drill holes are vertical. The mineralisation is generally flat, with 1-3 degree dip to the west most common.
Sample security	• All data used to prepare the recent exploration results were radiometric gamma log data. • Appropriate measures were taken to ensure sample security of the chemical samples used for QAQC purposes.
Audits or reviews	• Audits and reviews on sampling and assaying are not relevant as no physical samples or assays were used in the results. • Gamma data and data calculations to eU_3O_8, including deconvolution, were carried out under the guidance of David Wilson from 3D Exploration (Pty) Ltd.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	• PL45 is granted and has an approval from the DOM to extend the licence period to 30th September 2015, while that initial application for extension was applied to 31st December 2015. Subsequently a Mining Licence application was submitted over the resource area.
Exploration done by other parties	• Not material for primary deposit.
Geology	• Geologically, the Letlhakane uranium mineralisation is hosted within shallow, flat lying sedimentary rocks of the Karoo Super Group. These Permian to Jurassic aged sediments were deposited in a shallow, broad, westerly dipping basin, generated during rifting of the African continent. The source area for the sediments was the extensively weathered, uranium-bearing, metamorphic rocks of the Archaean Zimbabwe Craton which outcrops in the eastern portion of the licence area. The sandstone hosted mineralisation has roll front characteristics, where the uranium was precipitated at redox boundaries. Three ore types have been identified; Primary Ore, Secondary Ore and Oxide Ore. The most abundant is the Primary ore.
Drill hole Information	• Drill hole information has been systematically reported to the ASX since the initial drilling of the deposit in 2006. Refer to ACB ASX releases for hole details.
Data aggregation methods	• A deconvolution filter designed for the crystal length in the sonde is applied to the downhole gamma data.
Relationship between mineralisation widths and intercept lengths	• Due to the flat nature of the deposit, intersections can be thought of as being true width, as the difference of dip will fall within the fluctuations of mineralised thicknesses between holes.
Diagrams	• Appropriate diagrams and sections have been provided in the respective Exploration Results market releases to the ASX.
Balanced reporting	• Exploration Results have been reported systematically to the ASX.
Other substantive exploration data	• Metallurgical testwork has been undertaken with the latest 4 metre columns completed at ANSTO and SGS.
Further work	• Further work will include further infill drilling to take inferred resources to indicated and measured.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
Database integrity	• The database is managed by an Acquire database software interface. The database software allows validation of the dataset to be assessed. Gamma files are imported directly into the database, where e U_3O_8 grades are calculated.
Site visits	• Site visits have occurred in previous years. Ian Glacken (Optiro) and David Wilson (3D Exploration) have conducted multiple site visits.
Geological interpretation	• Mineralization wireframes were interpreted across the deposit generally at the 100ppm cut-off level. Internal dilution was incorporated to maintain continuity of lenses. Stacked lenses were resolved by separate wireframes. Geology was used in guiding mineralized interpretations and was most effective when identifiable units could be traced between holes. • Some variation in dip was modelled laterally. Small scale faulting is likely to be present, but is not possible to reflect at the current drill spacing. Flattening of the lenses was part of the estimation methodology so grade estimation is unaffected by changes in dip or possible small scale faulting.
Dimensions	• The area spans 14 km long (N-S) and up to 11km wide (E-W). The resource is from surface to approximately 125m. The deeper intersections are to the west and becomes shallower to the east.
Estimation and modelling techniques	• The estimation method used was Ordinary block Kriging (OK) into (100 x 100 x 0.25m) panels followed by Localised Uniform Conditioning as a post-processing method. This is appropriate due to the selectivity of the proposed mining and grade control methods, i.e. truck-mounted probes for grade control giving high selectivity (2 x 1 x 0.25m), followed by the use of Continuous Surface mining units, leading to an effective selective mining unit of 20 m by 4 m by 0.25m depth. • A number of previous estimates have been generated using a variety of techniques, including simple OK into large panels and probabilistic approaches using a grade-based indicator method. It is possible to reconcile the current estimation approach with the previous models. • Estimation panels reflect the size of the drilling grid and the variable drill spacing. • Estimation was into zones defined by a U_3O_8 cut-off grade of 100 ppm, with a distinction made between secondary, primary and oxide mineralisation from logging information. Each lens or set of lenses was defined as a domain within the broad mine area groupings. Moderate grade caps (top-cuts) were applied to outlier U_3O_8 grades. • Panel models were validated against the input flagged and composited drillhole (probe) data. The UC model at zero cut-off was compared against the OK model and the LUC model was compared to the UC model for selected domains. No mining, and thus no reconciliation data, was available.
Moisture	• The tonnes are based on a dry density. Density measurements are defined by lithology, and the presence of carbonates.
Cut-off parameters	• Tonnes were reported above a 100 ppm cut-off grade, reflecting the grade required to generate an average grade of the correct magnitude. Due to the use of probes and reasonably selective excavation methods (Continuous Surface Miners), any reasonable average grade can be defined above cut-off.
Mining factors or assumptions	• Surface miners are envisaged to be able to mine the flat tabular orebody with a high degree of accuracy, assuming an average mining depth of 0.25m. The Mineral Resource model reflects this selectivity in the vertical dimension and the moderate selectivity available in the horizontal directions.

Criteria	Commentary
Metallurgical factors or assumptions	• Uranium extraction by acid leach from the primary and oxide proportions of the resources has been verified by test work conducted at ANSTO and SGS.
Environmental factors or assumptions	• The Environmental, Social Impact Assessment (ESIA) was completed by consultants SLR Consultants, South Africa. The ESIA was submitted to the Botswana Department of Mines in May 2015. The ESIA consisted of several studies evaluating potential impacts of the Project, relating to: • Topography • Soil and land capabilities • Biodiversity • Surface water, including pollution • Groundwater, including pollution • Air quality • Air pollution, dust generation • Noise • Visual impact • Archaeological, cultural and heritage impacts • Radiological impacts • Socio-economic impacts • Changes in road use affecting safety • Blasting hazards • Loss of current land uses, third party infrastructure • Socio-economic benefits • Inward migration, associated social and health issues • Positive economic impact Each potential impact has been investigated to determine the significance of the impact, both unmitigated and mitigated. The assessment is currently underway with the Department of Environmental Affairs. • Waste rock will be located in dumps adjacent to the pits and will be designed to encapsulate coal waste material. • Heap Leach pads have been designed and are expandable as the project extends its life. The Heap leach pads will be rehabilitated in place progressively.

Bulk density	• Density measurements were calculated and defined by lithology within the block model.
	• Density has been physically determined by direct measurements calculated by the gravimetric method. The measurements came from:
	  • 261 waxed core samples
	  • 438 Standard core samples
	  • 30 Bulk pit samples

Criteria	Commentary
Classification	• Unclassified - A boundary string has been generated to reflect mineralisation that is deemed too thin or to low grade to be considered economic, i.e. no reasonable prospects of eventual economic extraction. This string was defined by considering spatial accumulations of tonnage and grade. Lower grade have been incorporated into the Inferred category where the lenses are stacked, increasing the grade tonnage product. • Inferred – defined by drill spacings of 400m by 400 and 200 by 200, where continuity of lenses is observed. • Indicated – Areas where the drill spacing is 100 by 100m or less. • The classification appropriately reflects the Competent Person's view of the location and confidence in the Mineral Resource estimate.
Audits or reviews	• The resource has been estimated many times over several years and has changed through additional drilling or changes in ore estimation methodology. Early estimates used indicator kriging techniques, and these were replaced by more conventional block OK methods associated with a re-evaluation of the geological interpretation. A later probabilistic (categorical kriging) approach was replaced by the current method, which considers the recoverable resources available at a mining cut-off, based upon an assumed grade control and mining method as described above. External audits have been carried out periodically of the resource estimates as part of due diligence exercises and no serious concerns have been raised.
Discussion of relative accuracy/ confidence	• The Mineral Resource has been classified on the basis of drill spacing, geological confidence and the prospects of likely eventual economic extraction. No explicit numeric assessment of the relative levels of accuracy has been carried out. The Mineral Resource is believed to be sufficiently precise and accurate to support annual to quarterly mining schedules, and as such reflects a local estimate. The generation of localised Uniform Conditioning blocks at the mining SMU scale has been carried out to assist in pit optimisation studies. • No production data is available to compare with the Mineral Resource estimate.