ASX ANNOUNCEMENT

ASX : CXO

23rd December 2014

Elevated copper in early stage drilling from Virginia

HIGHLIGHTS

- **Results for the first 5 holes at Virginia received from Core's recent RC drill program**
- **Core's drilling has intersected elevated copper related to chargeable IP targets at Virginia**
- **Assays for the remaining 7 drill holes from Virginia Prospect in early January**
- **Assays from additional prospects tested by Core in the Copper Royals district also to be received in early January**

Core Exploration Ltd (ASX:CXO) has received initial RC drill results in the first batch of assays from its recent reverse circulation (RC) drilling at its Virginia Prospect in the Northern Territory. Approximately one third of the assays from samples submitted for analysis from the latest NT drilling have been received to date.

Core recently completed the Company's first drilling program at the Virginia Prospect in an area never drilled before. Core's RC drilling at Virginia is aimed at testing the source of the elevated copper in outcrop and soil geochemistry mapped for over 1.5 km of strike at Virginia.

Twelve RC holes were drilled at the Virginia Prospect for a total of 1,253 metres to depths up to 120 metres (Figures and Tables 1 & 2).

Following up on the surface copper anomalism and prior to drilling, Core's geophysical surveys also identified new targets below the outcropping copper mineralised zone at Virginia. Core interprets that these geophysical targets may be related to the copper mineralisation mapped and sampled at surface.

The first batch of assays to date have confirmed a mineralised structure at depth below surface geochemical anomalism related to the chargeable zones in Core's previous IP geophysics. Geophysics has been proven to successfully map the mineralised structure in this virgin terrain.

Core's initial drilling at Virginia has intersected sulphide mineralisation comprising fracture filling and disseminated pyrite (iron sulphide) which is common throughout and localised chalcopyrite (copper sulphide). Malachite and azurite (copper oxides) minerals extend from surface to 10-20m metres depth.

Drilling intersected cyclical sequences of variably garnet and silica altered Riddock Amphibolite that dip approximately 10°-20° to the northwest. There is evidently some association of sulphides with the garnet alteration with very coarse garnets rimmed by pyrite.

Core looks forward to receiving the assays for the remaining RC drill samples from seven other holes drilled holes at the Virginia Prospect in early January. Core also anticipates interpreting the complete set of drill results when received and the final modelled AEM data in January to determine how effectively the conductive target has been tested at depth.

Core is also expecting additional assays from the laboratories in early January from the Company's recent reconnaissance RC drill program, which tested a number of prospects in the Copper Royals district.

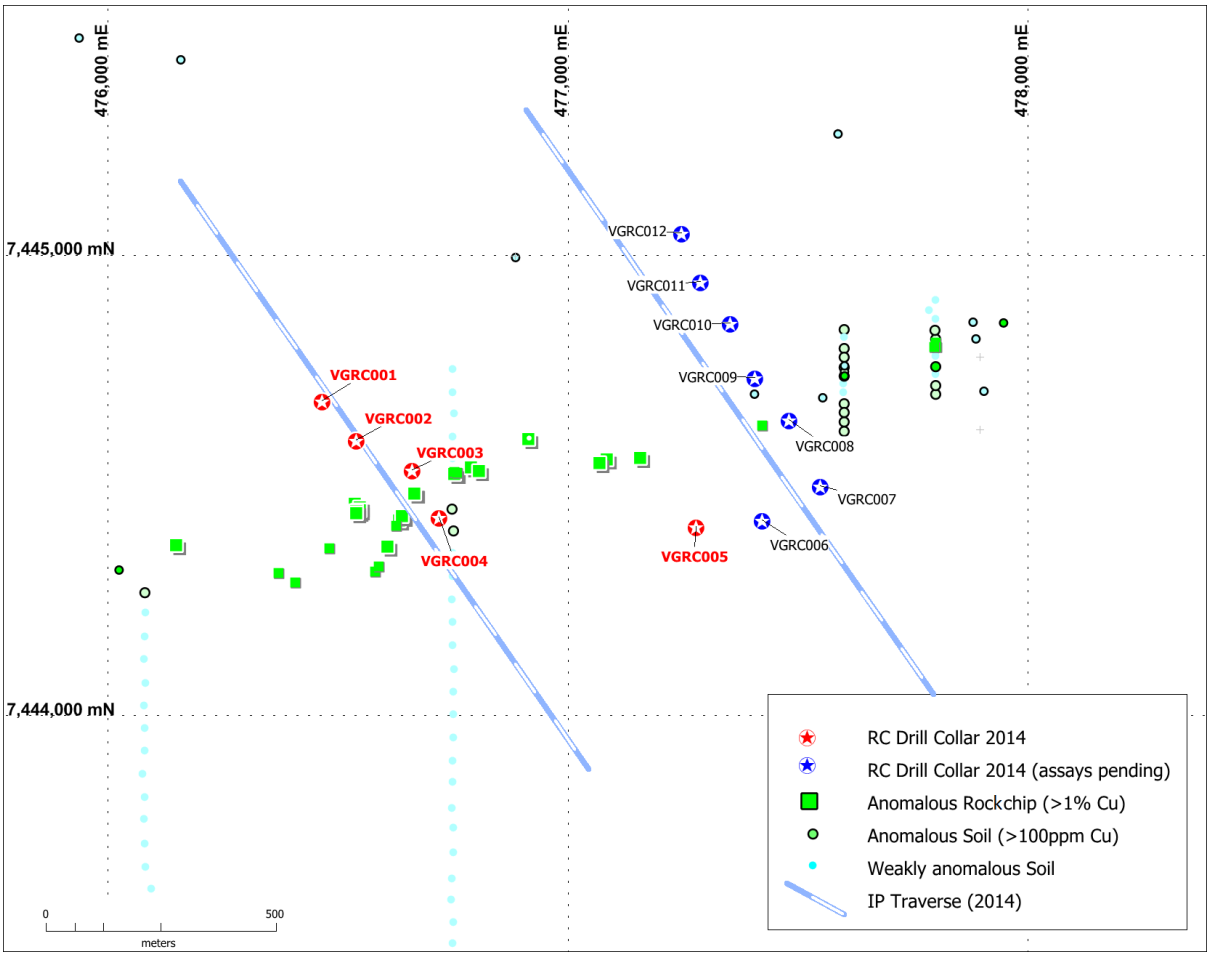

Figure 1. Drilling results and collar locations overlain on geology, Virginia Prospects, NT.

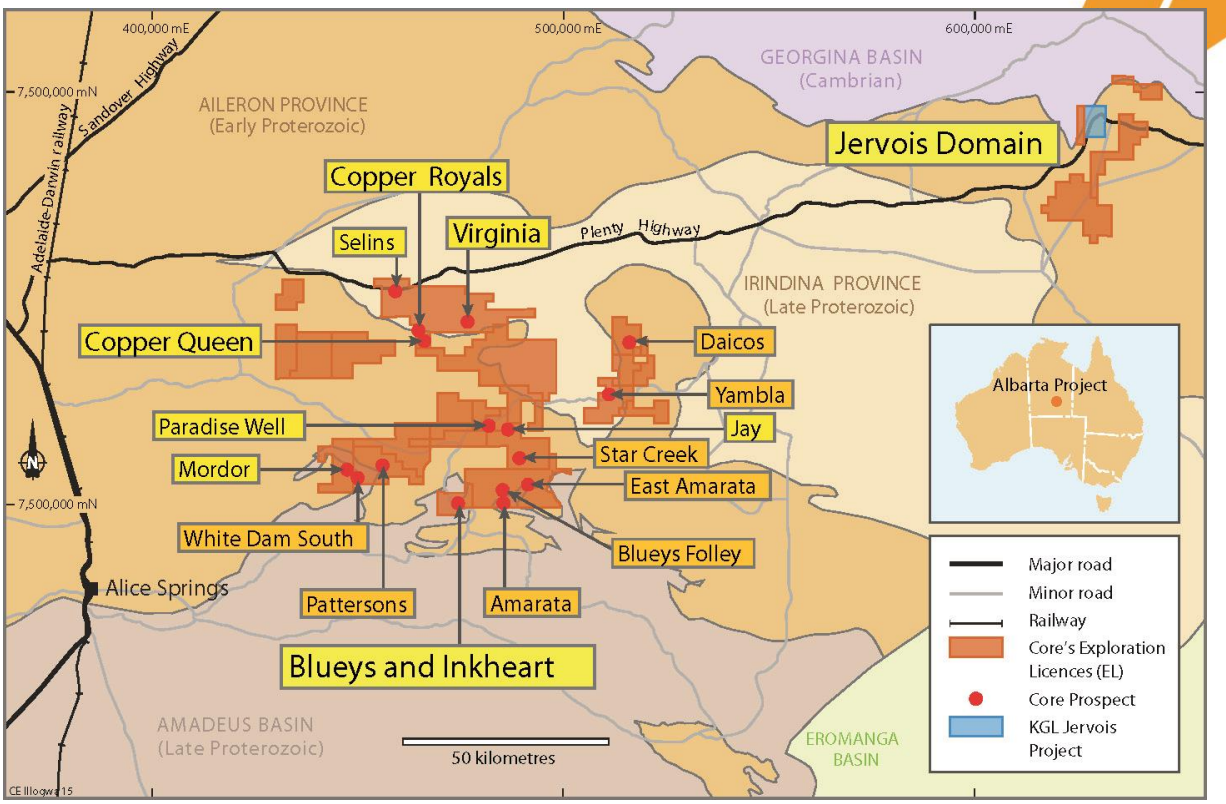

Figure 2. Core's 100% owned Albarta Project prospects and tenements on regional geology, NT

Hole ID	from	to	width	Cu ppm	Cu %
VGRC001	93	99	6	1502	0.2
VGRC002	51	54	3	4337	0.4
VGRC003	3	6	3	8686	0.9
VGRC004	NSA				
VGRC005	NSA				

Table 1. Reverse circulation drill assay results, Virginia Prospect, NT. (NSA = no significant assay)

Hole_ID	Easting	Northing	RL	DIP	Azimuth	Total Depth
VGRC001	476465	7444684	685	-90	0	120
VGRC002	476539	7444598	691	-90	0	110
VGRC003	476661	7444533	699	-90	0	120
VGRC004	476720	7444431	694	-90	0	108
VGRC005	477279	7444411	712	-70	350	99
VGRC006	477422	7444424	704	-70	355	99
VGRC007	477549	7444499	698	-90	0	51
VGRC008	477480	7444643	699	-90	0	120
VGRC009	477406	7444734	692	-90	0	108
VGRC010	477353	7444853	684	-90	0	99
VGRC011	477288	7444943	677	-90	0	99
VGRC012	477247	7445049	665	-90	0	120
					Total Metres:	**1253**

Table 2. Reverse circulation drillhole information, Virginia Prospect, NT.

For further information please contact:

Stephen Biggins
Managing Director
Core Exploration Ltd
08 7324 2987
info@coreexploration.com.au

John Field
Field Public Relations

08 8234 9555
john@fieldpr.com.au

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Stephen Biggins (BSc(Hons)Geol, MBA) as Managing Director of Core Exploration Ltd who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Biggins consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Virginia RC Drilling – November 2014– JORC 2012

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (egg 'RC 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 (egg submarine nodules) may warrant disclosure of detailed information.*	• All RC drill cuttings were spear sampled. • All drilled intervals were sampled as 3-metre composites with samples collected using a spear • Each one metre drilled interval is qualitatively annotated with a sample quality based on weight and moisture content.
Drilling techniques	• *Drill type (e.g. core, RC, 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).*	• Bullion Drilling were contracted to undertake RC drilling • All drilling was face sampling with a 4" Slimline RC Hammer • The majority of RC drilling was drilled vertically. VGRC005 and VGRC006 were drilled at -70 to the north. No downhole surveys were undertaken
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure*	• A visual estimate of recovery over individual one-metre drilled estimates was recorded. • RC drilling only so no assessment of sample representivity or sample bias available.

Criteria	JORC Code explanation	Commentary
	representative nature of the samples. • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	
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.*	• Drill cuttings are qualitatively logged and photographed • Qualitative logging includes lithology, colour, mineralogy, description, marker horizons, weathering, texture, alteration and mineralization
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.*	• See sampling section above for a description of sampling and sub-sampling techniques. • Sample sizes are considered appropriate for the expected grainsize of mineralisation. • Every twentieth sample submitted for analysis was sampled was duplicated. Certified standards were submitted in sequence for every 25 samples submitted. • Subsampling techniques are undertaken in line with standard operating practices in order to ensure no bias associated with sub-sampling. • The nature, quality and appropriateness of the sampling technique is considered adequate for the type of mineralisation and confidence level being attributed to this initial reconnaissance drilling program.
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*	• A certified and accredited global laboratory (Intertek-Genalysis) was used for all assays. • Sample preparation was undertaken in Alice Springs with analysis undertaken at Intertek's Adelaide laboratory.

Criteria	JORC Code explanation	Commentary
	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.*	• Samples were analysed using Intertek's 4A/OM10 technique which involves near-total 4 acid digest and analysis using ICP-OES and ICP-MS for 46 elements. In addition gold was analysed using a 25g fire-assay / AAS technique • Internal certified laboratory QAQC is undertaken by Intertek. • Duplicates and certified standards were inserted in sequence as detailed above.
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.*	• Primary data is captured directly into an in-house referential and integrated database system designed and managed by the Exploration Manager. All assay data is cross-validated within the database by various integrity scripts and externally using MapInfo drill hole validation checks including interval integrity checks. • Laboratory assay data is not adjusted.
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.*	**<u>Collar co-ordinate surveys</u>** • All coordinates are recorded in GDA 94 MGA Zone 53. • Surveys have been undertaken by Core Exploration staff using a hand-held GPS this tool has an accuracy of approximately 3m. • Topographic control uses the DTM generated by the VTEM 200m airborne survey recently conducted over the Virginia Prospect **<u>Down hole surveys</u>** • No downhole surveys were undertaken
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.*	• Initial reconnaissance RC drilling only. • See drilling section above regarding composite sampling

Criteria	JORC Code explanation	Commentary
	• *Whether sample compositing has been applied.*	
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.*	• Initial reconnaissance drilling only
Sample security	• *The measures taken to ensure sample security.*	• Sample Intervals are put into individually numbered calico sample bags and are then loaded into cable tied bulka-bags before being dispatched to Intertek-Alice Springs for sample preparation. • Assay pulps are returned to Core Exploration from contracted laboratories on a regular basis and stored securely for future reference.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been undertaken

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.*	• The Virginia prospect areas is contained within EL 29689 that is 100% held by DBL Blues Pty Ltd a wholly owned subsidiary of Core Exploration Ltd. • Core Exploration manages EL 29689. • EL 29689 is located on Mt Riddock Station. • All drilling was undertaken outside of Heritage, Conservation or National Parks on EL 28136. • • All work was undertaken within the scope of the Exploration Mining Management Plan (EMMP) that was approved by NTDME
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical exploration is limited to surface rockchip and soil geochemistry. In 2014 CXO collected two lines of dipole-dipole IP and flew a VTEM supermax AEM survey
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Geology comprises Proterozoic geology of the Harts Range Group including the Riddock Amphibolite Member and Naringa Calc-silicate Member and Bruna Gneiss. • Drilling is targeting Cu mineralisation.

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
		• Drill hole information is recorded within the CXO in-house database with all collar locations listed in the table accompanying this document.
		• No material information is excluded.

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	• *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.*	• Aggregated intersections have been calculated for copper and lead using a 0.1% cut-off. Minimum intersection widths are 3m and up to 3m of internal dilation are included • No metal equivalents are reported.
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').*	• Initial reconnaissance drilling only thus geometric relationship of mineralisation to vertical drill orientation unknown.
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 attached plans showing drill hole density and sections as well as the tabulated drill hole information data accompanying this document.
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.*	• See attached table of intersections. • Reported intersections use the criteria detailed in the above section "data aggregation methods".
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.*	• Due to the drilling technique primary textures are hard to distinguish or are obliterated. • Significant groundwater was present in VGRC002 and VGRC003 below 50m depth. • Multi-element geochemistry assaying (47 elements) including gold by fire-assay is routine for all sampling. Some elemental associations are recognised within certain lithologies within the region and are

Criteria	JORC Code explanation	Commentary
		used as a tool to assist in interpretation of original lithologies where alteration affected the ability to visually determine the lithology.
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.*	• Subject to Board approval further drilling may be undertaken