ASX ANNOUNCEMENT

ASX : CXO

3rd June 2014

Exciting copper drill targets identified at Virginia Prospect

Albarta Project, NT

HIGHLIGHTS

- **Core's recent IP survey finds strong chargeable drill targets down dip from surface copper mineralisation at the Virginia Prospect**
- **75 rock-chip sampling assays average 2.4% copper (up to 34.0%) at surface within stratiform copper horizon over 1km in length**
- **The depth to the drill target zone is shallow, generally less than 100m**
- **There has been no previous geophysics or drilling at Virginia**
- **Core to immediately commence work on approvals to enable drilling in Q3 2014**

Core Exploration Ltd (ASX:CXO) is pleased to announce the identification of exciting drill targets at its Virginia copper Prospect which is part of the broader Albarta Copper IOCG Project in the Northern Territory (Figure 4). An induced polarisation (IP) survey has identified the drill targets below a 1km long stratiform copper horizon located at surface.

Two IP transects, each measuring 1.5 km long, were conducted over an outcropping stratiform copper horizon to map potential mineralisation at depth as the horizon dips to the north beneath the surface (Figure 1). Significantly, the results from both IP survey transects show a consistent chargeable layer, coincident with the outcropping copper mineralised horizon, dipping shallowly to the north at approximately 20-30 degrees. The depth to the drill target zone is shallow, generally less than 100m (Figures 2 & 3).

Rock chip samples taken by Core and previous explorers contain up to 34% copper with an average of 2.4% copper from 75 samples of the mineralised horizon at Virginia (Table 1). The mineralised horizon extends over 1 km along strike in an east-northeast direction and is hosted in a leucocratic garnet gneiss band that is typically 3-5m thick and outcrops over widths of up to 100m at surface due to its shallow dip (Figure 1).

On the back of these good results, Core has immediately commenced work on securing all necessary approvals to enable drilling at Virginia in Q3 2014.

An application has also been made by Core for co-funding of drill costs through the 2014 Northern Territory Government Geophysics and Drilling Collaboration program.

The Virginia Prospect is located within the Irindina Province a block of Neoproterozoic to Cambrian rocks comprising a series of high grade metsedimentary units, metamorphosed granitic and mafic units and late mafic and ultramafic intrusives. The Basil Copper-Cobalt Deposit identified by Mithril in 2009 (Inferred mineral resource estimate of 26.5Mt@ 0.57% Cu, 0.05% Co at a 0.3% Cu Cut Off) is located 50km south east of Virginia, with the Riddock Amphibolite Member unit of the Irindina Province interpreted to host both Basil and Virginia.

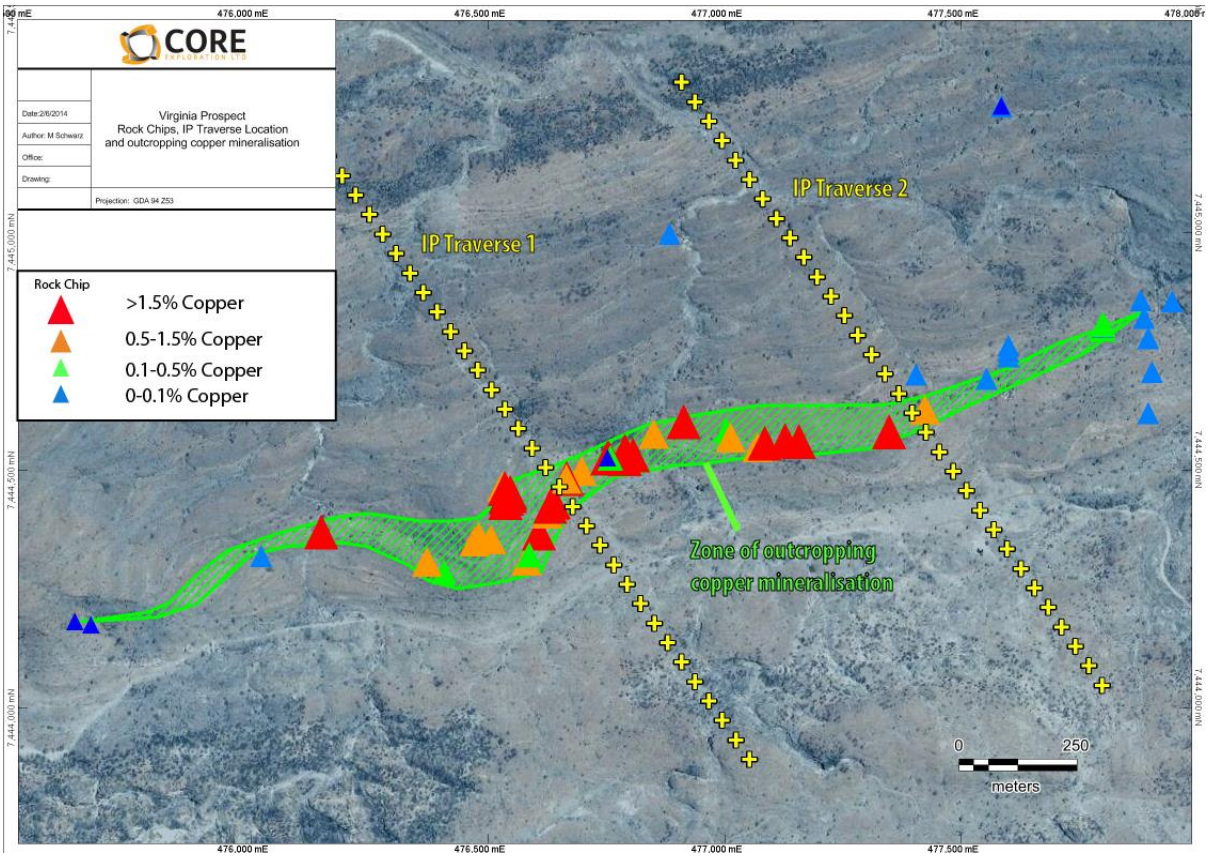

Figure 1. The Virginia Prospect showing copper in rock chips, induced polarisation transect locations and outcropping copper mineralisation.

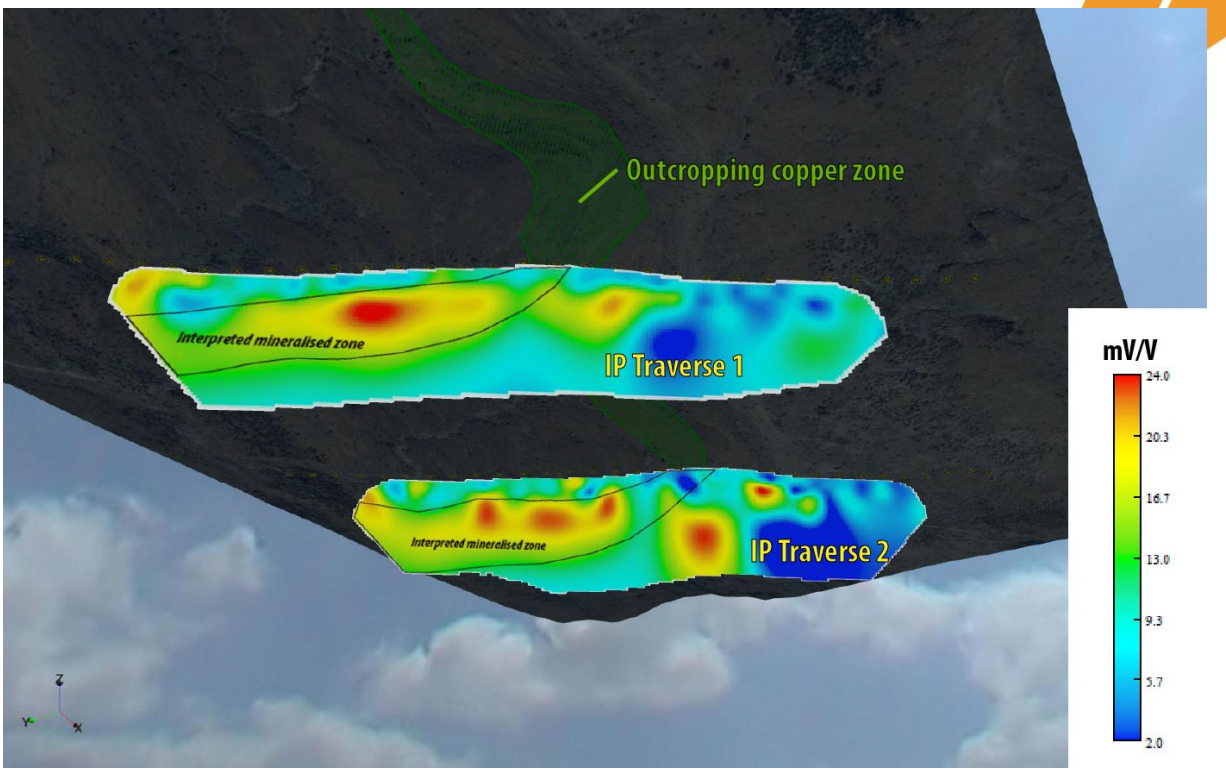

Figure 2. **North-east view** of induced polarisation sections showing interpreted zone of subsurface mineralisation coincident with a chargeable zone.

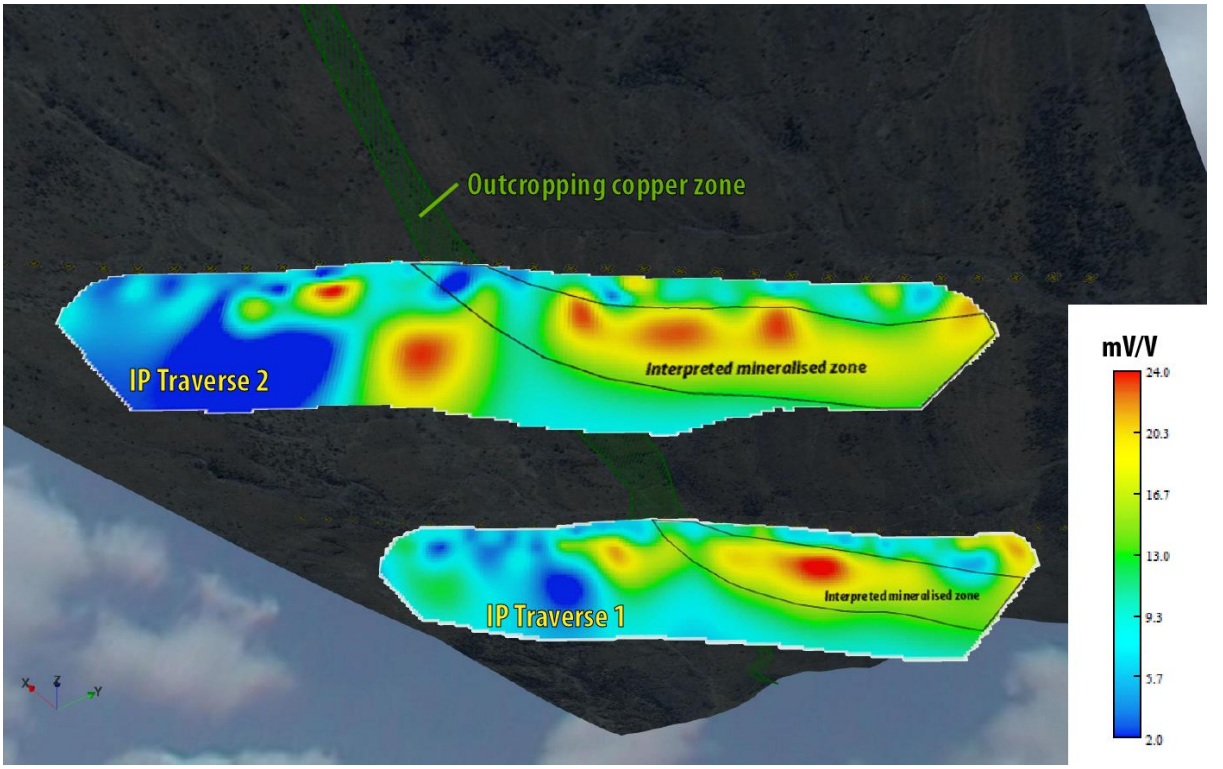

Figure 3. **South-west view** of induced polarisation sections showing interpreted zone of subsurface mineralisation coincident with a chargeable zone.

The identification of the new copper targets at the Virginia prospect follows on from the successful completion of the company's maiden drilling program at the Blueys and Inkheart prospects. The program was completed on schedule and all drill core samples have now been submitted for assaying with results expected over coming weeks.

Albarta Project Background

Core's Albarta project covers over 2,000km^2 of the newly-recognised, highly prospective IOCG Aileron Province, 100km NE of Alice Springs in the NT. Core's tenements include a number of significant copper (+/- silver, gold, uranium, REE and PGE) mineral occurrences. The Company believes that the existing evidence of mineralisation and confirmed IOCG prospectivity by Geoscience Australia verifies the strategy that Core has pursued to build a strong position in Australia's new copper IOCG exploration hot-spot.

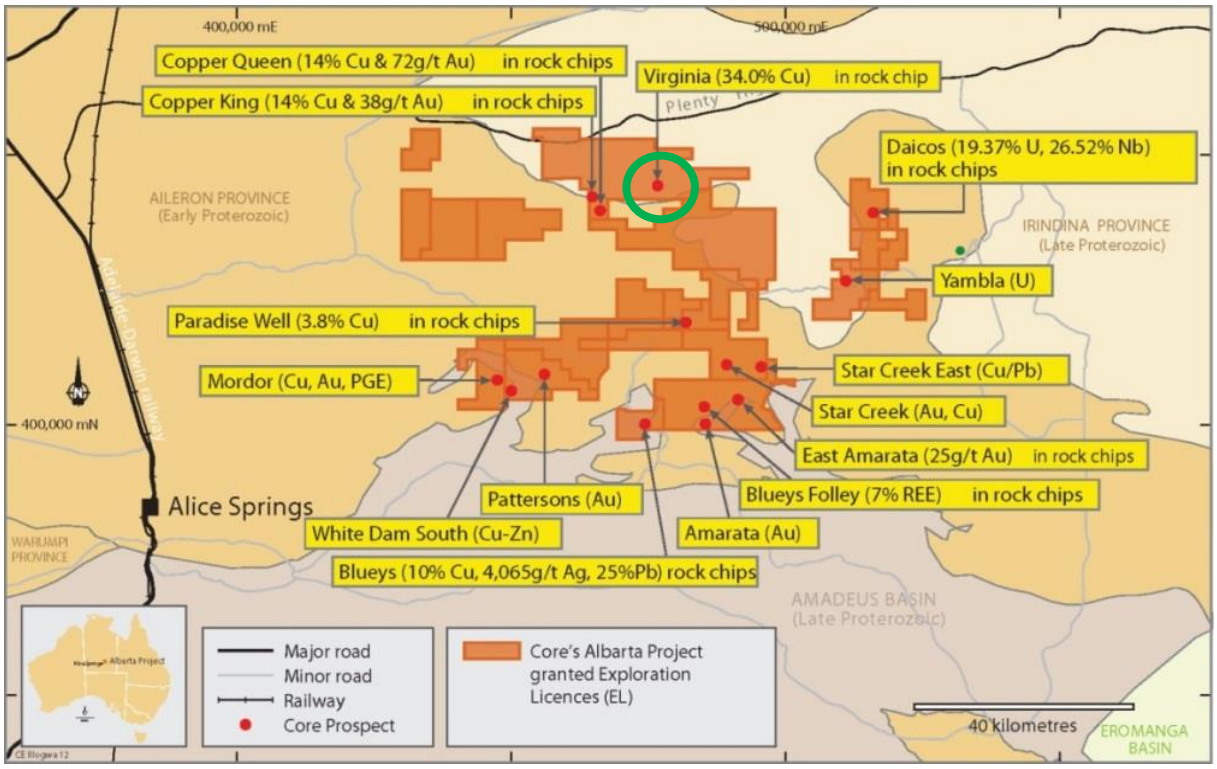

Figure 4. Virginia Prospect within Core's Albarta Project tenements overlain on regional geology, NT.

This report includes exploration information that was prepared and first disclosed by Core under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

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

Table 1. Rock chip results from the Virginia Prospect including historical exploration and samples taken by Core Exploration.

Sample	Source	Easting	Northing	Cu (ppm)	Cu (%)
HRCRC0936	Tanami Gold NL	476643	7444432	10400	1.0
HRCRC1003	Tanami Gold NL	475629	7444180	26200	2.6
23056	Pasminco Exploration	476884	7444998	17	0.0
23057	Pasminco Exploration	476884	7444998	6	0.0
149367	Pasminco Exploration	476022	7444319	430	0.0
HRK136	Tanami Gold NL	477802	7444798	1045	0.1
HRK137	Tanami Gold NL	477797	7444799	1064	0.1
HRK138	Tanami Gold NL	477799	7444801	15	0.0
HRK139	Tanami Gold NL	477800	7444808	1448	0.1
HRK140	Tanami Gold NL	477947	7444856	392	0.0
HRK168	Tanami Gold NL	477586	7445266	11	0.0
HRK118	Tanami Gold NL	476158	7445428	14	0.0
HRK119	Tanami Gold NL	475935	7445475	34	0.0
HRK126	Tanami Gold NL	477896	7444620	6	0.0
HRK127	Tanami Gold NL	477903	7444708	21	0.0
HRK128	Tanami Gold NL	477896	7444778	6	0.0
HRK129	Tanami Gold NL	477886	7444820	91	0.0
HRK130	Tanami Gold NL	477879	7444858	10	0.0
HRK131	Tanami Gold NL	477554	7444693	13	0.0
HRK133	Tanami Gold NL	477600	7444740	273	0.0
HRK134	Tanami Gold NL	477600	7444750	216	0.0
HRK135	Tanami Gold NL	477600	7444762	56	0.0
HRCRC0938	Tanami Gold NL	476590	7444322	4150	0.4
HRCRC0563	Tanami Gold NL	476754	7444525	0	0.0
HRK307	Tanami Exploration NL	477586	7445266	60000	6.0
HRCRC0954	Tanami Gold NL	476540	7444444	139000	13.9
HRK132	Tanami Gold NL	477405	7444701	24	0.0
HRCRC0941	Tanami Gold NL	476633	7444424	20000	2.0
HRCRC0935	Tanami Gold NL	476637	7444429	6200	0.6
HRCRC0937	Tanami Gold NL	476582	7444310	6450	0.6
HRCRC0939	Tanami Gold NL	476609	7444368	51300	5.1
HRCRC0940	Tanami Gold NL	476627	7444410	7750	0.8
HRCRC0942	Tanami Gold NL	476640	7444434	21600	2.2
HRCRC0943	Tanami Gold NL	476640	7444434	52800	5.3
HRCRC0945	Tanami Gold NL	476668	7444483	23300	2.3
HRCRC0946	Tanami Gold NL	476791	7444540	18900	1.9
HRCRC0947	Tanami Gold NL	476807	7444532	33600	3.4
HRCRC0948	Tanami Gold NL	476915	7444602	340000	34.0
HRCRC0949	Tanami Gold NL	476915	7444602	77300	7.7

Sample	Source	Easting	Northing	Cu (ppm)	Cu (%)
HRCRC0950	Tanami Gold NL	477071	7444549	14800	1.5
HRCRC0951	Tanami Gold NL	477086	7444557	19200	1.9
HRCRC0952	Tanami Gold NL	477159	7444560	52400	5.2
HRCRC0953	Tanami Gold NL	477424	7444628	7150	0.7
HRCRC0955	Tanami Gold NL	476545	7444448	29100	2.9
HRCRC0956	Tanami Gold NL	476548	7444446	41600	4.2
HRCRC0957	Tanami Gold NL	476548	7444453	47800	4.8
HRCRC0958	Tanami Gold NL	476537	7444461	27500	2.8
HRCRC0959	Tanami Gold NL	476545	7444443	13400	1.3
HRCRC0960	Tanami Gold NL	476541	7444441	21100	2.1
HRCRC0961	Tanami Gold NL	476540	7444445	88700	8.9
HRCRC0964	Tanami Gold NL	476482	7444361	6250	0.6
HRCRC0965	Tanami Gold NL	476408	7444287	2400	0.2
HRCRC0966	Tanami Gold NL	476373	7444308	9400	0.9
HRCRC0562	Tanami Gold NL	476757	7444525	29200	2.9
HRCRC0562	Tanami Gold NL	476757	7444525	0	0.0
HRCRC0563	Tanami Gold NL	476754	7444525	18600	1.9
HRCRC0564	Tanami Gold NL	476754	7444528	3660	0.4
HRCRC0565	Tanami Gold NL	476760	7444526	2970	0.3
HRCRC0967	Tanami Gold NL	476149	7444371	25300	2.5
HRCRC1002	Tanami Gold NL	475663	7444174	21800	2.2
HRCRC0944	Tanami Gold NL	476667	7444483	11500	1.2
1191	Core Exploration	476637	7444432	18359	1.84
1192	Core Exploration	476540	7444445	144222	14.42
1193	Core Exploration	476700	7444500	9030	0.9
1194	Core Exploration	476759	7444525	4755	0.48
1195	Core Exploration	476791	7444524	40836	4.08
1205	Core Exploration	476473	7444351	11313	1.13
1206	Core Exploration	476508	7444355	5295	0.53
1207	Core Exploration	476538	7444432	57564	5.76
1208	Core Exploration	476532	7444466	6911	0.69
1209	Core Exploration	476852	7444577	11734	1.17
1210	Core Exploration	477005	7444584	3506	0.35
1211	Core Exploration	477014	7444570	6797	0.68
1212	Core Exploration	477129	7444563	35839	3.58
1213	Core Exploration	477349	7444581	81021	8.1

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.

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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• Rock chip sampling was undertaken by Core Exploration as part of reconnaissance mapping and prospecting. Samples were taken when visible mineralisation was observed as well as of separate identified lithological units, or when alteration or veining was observed. Previous explorers sampling is interpreted to have been collected along similar criteria. Historical assays were sourced from the NTGS geochemistry database
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Not applicable as no drilling has been 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 representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade*	• Not applicable as no drilling has been undertaken

Criteria	JORC Code explanation	Commentary
	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.*	• Not applicable as no drilling has been undertaken
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.*	• Not applicable as no drilling has been undertaken
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Rock chip samples collected by Core Exploration were sent to Genalysis for 4A/MS 4 Acid Digest Mass Spectrometry: and 4A/OE 4 Acid Digest Inductively Coupled Plasma Optical Emission Spectrometry. Previous company's rock chip samples collected by Pasminco Exploration were assayed at Australian Laboratory Services (ALS) using Fire Assay technique for Au (PM219) and ICPOES for all other elements (IC582). Previous company's rock chips collected by Tanami Gold NL in 2001, rock chips are listing as having been submitted to Amdel (now Bureau Veritas) and assayed using FA3 (Fire assay) and AA2 (Atomic Absorption spectrometry).

Criteria	JORC Code explanation	Commentary
		•
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Not applicable as no drilling has been undertaken. Historical assays were sourced from the NTGS geochemistry database
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 coordinate information was collected using hand held GPS utilising GDA 94, 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.*	• Data spacing for rock chip samples are displayed in the diagrams.
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.*	• Surface rock-chip sampling has been taken along the mineralised structure (Figure 1). The presence of mapped surface mineralisation and alteration may or may not extend at depth and this can only be confirmed by drilling.
Sample security	• *The measures taken to ensure sample security.*	• Core Exploration samples were labeled and bagged and sent straight to the geochemistry laboratory. No information as to any sample security processes for previous explorers samples.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Not applicable as no audits or reviews of sampling techniques 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 area is located within EL 29689. EL 29689 is currently held 100% by Core Exploration. It is located on pastoral land within Mt Riddock Station.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Virginia Prospect was first rock chip sampled by Pasminco Exploration and then followed up by Tanami Gold NL in 2001. To this point it has only been rock chip and soil sampled at the prospect scale.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geology of EL 29689 is dominated by rocks of the Aileron Province and the Irindina Province. The Aileron Province is comprised of metasedimentary pelites, calc-silicates as well as granites and mafic lithologies. Amphibolites and high grade metamorphic rocks are dominant within the Irindina Province which underwent high grade metamorphism during the Ordovician Larapinta Event. The Aileron Province area was deformed during the Alice Springs Orogeny (300-400Ma) which juxtaposed the Irindina Province against the Aileron Province.

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.*
		• Not applicable as no drilling has been undertaken

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 (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable as no data averaging has been used.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• As the geochemical results thus far collected by Core Exploration are from surface any potential depths of mineralisation or orientations can only be inferred from geological observations on the surface and hence are speculative in nature.
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 release
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.*	• Previous explorers and Core Exploration's rock chip samples from the Virginia Prospect are listed in Table 1. They are displayed in Figure 1 with the Cu % displayed as colour coded symbols based on grade, the details of which are illustrated on Figure 1.
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,*	• See release details

Criteria	JORC Code explanation	Commentary
	groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Core plans to collect further IP traverses at Virginia to best target potential mineralisation before undertaking a first phase reconnaissance drilling program at Virginia once appropriate clearances and approvals are granted.