



ASX ANNOUNCEMENT

26th November 2015

Zinc grades in mineralised breccia zones confirm significant system at Yerelina

HIGHLIGHTS

- Drill assays at Great Gladstone up to 6% zinc within a 17m intersection of mineralised breccia grading at 1.4% zinc plus lead and 19g/t silver
- 33m intersection of oxidised breccias and veining drilled at Big Hill also has elevated zinc assays
- Assays show that mineralisation and alteration zones are wider than indicated at surface
- Assays confirm multiple 1km-3km long structures within an 8km wide zone at Yerelina are mineralised at depth
- Discordant mineralised structures interpreted to represent surface expression of a new substantial carbonate rich, sediment hosted zinc (possibly MVT) system at Yerelina
- Next step is to test the large tonnage, stratiform targets in the known reef limestone layers within the host Tapley Hill Formation for MVTs

Zinc assays from broad mineralised breccia zones indicate that Core Exploration Ltd (ASX:CXO) has possibly discovered a new MVT system on the Yerelina Zinc Project, which covers a total area of 1,000km² in northern South Australia.

A 17m intersection from 145m depth of mineralised breccia and veining at the Great Gladstone prospect averages a zinc plus lead grade of 1.4% and 19g/t silver and includes higher grade zones of 4m at 3% Zinc, 1% lead and 59g/t silver from 150-154m (YRDH003).

The 33m intersection (approx. true width) of oxidised breccias and veining at Big Hill prospect, 5km to the east of Great Gladstone, also contained consistently elevated zinc levels. Due to the near





surface oxidation of base metals sulphides, zinc levels at Big Hill were lower and averaged 0.2% zinc over 33m from 14m-47m depth - YRDH005.

The mineralised zones intersected by both YRDH003 and YRDH005 are located down dip of outcropping mineralised gossans. Surface channel sampling of these gossans at Great Gladstone and Big Hill returned significant zinc, lead and silver assays. The gossans are interpreted as the mineralised surface expression of a fault zones mapped at surface and by magnetics over 1km-3km (Figure 1).

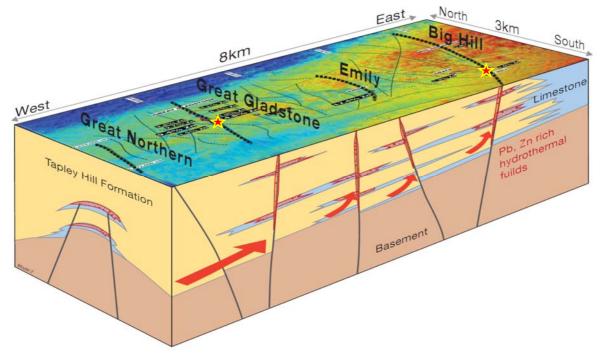


Figure 1. Conceptual block model showing mineralised structures and stratiform MVT zinc targets with magnetic image, Yerelina, SA.

Many (MVT and other) sediment hosted zinc deposits (e.g. Lennard Shelf in WA) have strong structural control or influence on mineralising fluid movement through the sedimentary package as observed at Yerelina. Often this is associated with mineralised breccias and veining and alteration in fault zones and zones of shearing as observed at Yerelina.

Typically the economic scale of these deposits is driven by stratiform (often flat lying) deposits proximal to the identified discordant mineralised structures /transport system.

The geology and system at Yerelina has potential to host large stratiform deposits in association within the known calcareous and limestone host facies within the Tapley Hill Formation proximal to recently drilled and also other known mineralised discordant structures (Figure 1).

Whilst further geology and exploration work is required to confidently compare the project area with MVT analogues, CXO is encouraged by the initial correlations, giving the Company confidence that the project area could contain a large and repeated mineralised system.





Great Gladstone Prospect

A 9.8m section of mineralised breccias and veining was intersected by diamond drill hole YRDH003 from a depth of 144m downhole. Zinc assays of drill core show that mineralisation extends well beyond the observed zone of brecciation and veining (Figure 2).

Drilling intersected higher grades of 4m @ 3% zinc, 1% lead and 59g/t in an intense breccia zone within a broader 17m-wide lower grade halo of mineralisation, veining and alteration assaying at 1.4% combined zinc and lead and 19g/t silver (Figure 2 and Table 1).

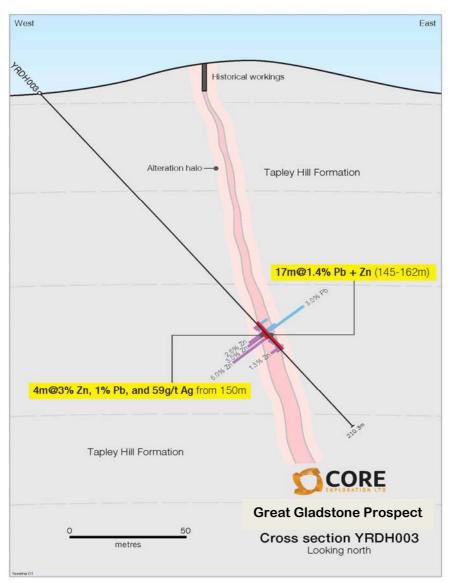


Figure 2. Drill hole trace and interpreted geological cross section, YRDH003 Great Gladstone Prospect, Yerelina Project South Australia.

Breccias consist of rotated slate clasts in a predominantly siderite-carbonate-quartz matrix with a polyphase banded breccia/vein overprinting of sphalerite and silica along with ribbons of sphalerite and galena mineralisation (Figures 2 and 3).





The mineralised zone intersected in YRDH003 is located down dip of outcropping mineralised gossans. The gossans are interpreted as the mineralised surface expression of a fault zone thought to be up to 1.5km long (Figures 1, 2 & 4).

Core's previous mapping campaigns have defined high grade zinc, lead and silver mineralisation extending over 1 kilometre at Great Gladstone. Of the 38 samples taken along a 1 km section of fault zone at Great Gladstone, 34 returned combined lead and zinc assays in excess of 1% and over 1 g/t silver with the best assay at 14.7% zinc. Lead values peaked at 12.7% and silver at 567 g/t (Figure 4).

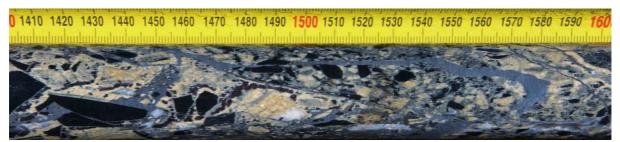


Figure 3. YRDH003 150.2m - Mineralised Breccia (slate, siderite-calcite-quartz-sphalerite-galena)

Core's analysis of modern satellite imagery and the Company's detailed heli-borne magnetic and radiometric survey data have identified that historic workings at Great Gladstone, Big Hill and other prospects are hosted by a large-scale 3km x 8km system of repeated north/south regional structures (Figure 4).

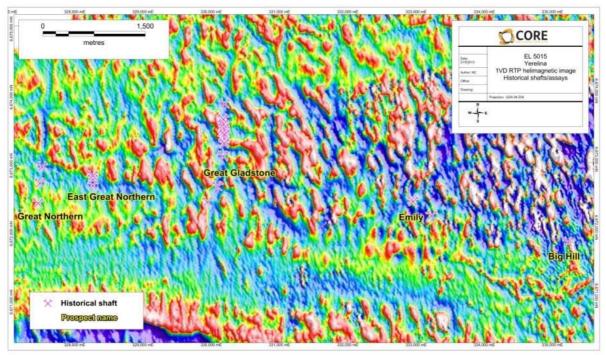


Figure 4: 1VD RTP magnetic image highlighting relationship of structures to historic workings, Yerelina Project, SA.





Big Hill Prospect

Diamond drilling has intersected a broad 30m wide zone of intermittent breccia and veining at the Big Hill Prospect. Assays confirm this broad zone was mineralised as illustrated by the elevated zinc results of 33m at 0.2% zinc (Figure 5).

Drilling identified the zone of brecciation and elevated zinc is 300% wider than the 10m wide gossan observed and sampled at surface at Big Hill (Figure 5).

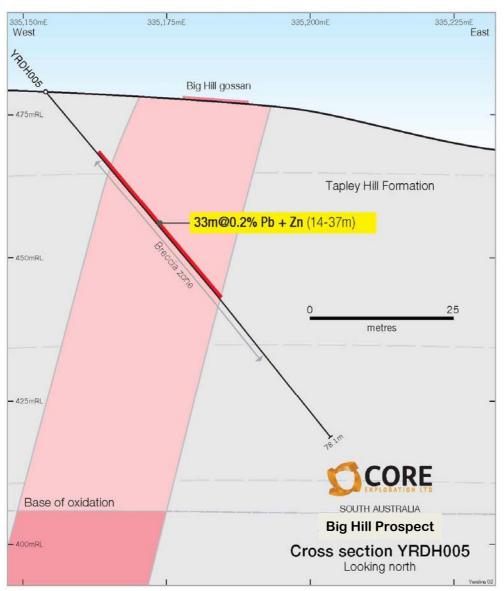


Figure 5. Drill hole trace and interpreted geological cross section, YRDH005 Big Hill Prospect, Yerelina Project South Australia.





It is also expected that deeper drilling beneath the base of oxidation will hit zinc and lead sulphides and higher grades.

The mineralised zone intersected in YRDH005 is located down dip of a 10m wide outcropping mineralised gossans. Surface channel sampling of these gossans have also returned significant zinc, lead and silver assays (Figure 5).

The Big Hill gossans and breccia zone are the mineralised near surface expression of the north-south Big Hill fault zone mapped over 3,000m long (Figure 4 & 5).

Grades of 2.7% zinc in surface rock chips has been recorded 2,000m to the north of YRDH005 along the same Big Hill fault zone.

Zinc and lead mineralisation is interpreted to have been hosted in carbonate-quartz-goethite veining and breccias as indicated by leached sulphides (goethitic boxworks and voids) at various intervals within a 30m intersection (approx. true width) from 14m to 60m depth downhole (Figure 6).

The host rocks at Big Hill have more sandy, carbonate-rich interbeds s indicating shallowing toward, platform carbonate rich facies. Also the degree of oxidation, veining and structural complexity is significantly higher than at Great Gladstone.

Numerous fault zones and veining, with alteration selvedging and discrete zones of intense brecciation were identified, but strong weathering has leached much of the sulphide minerals leaving goethite stained vuggy voids in breccias and fault zones and haematite (marcasite) in veins interpreted after sulphides.

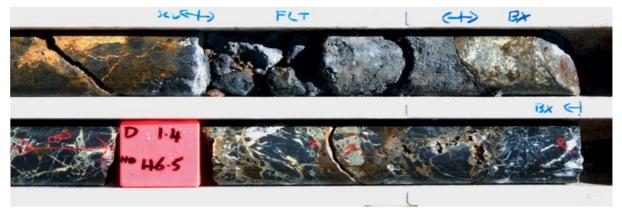


Figure 6 YRDH005 Fault and mineralised breccia at 45.7-46.7m





Yerelina: Carbonate rich, sediment hosted, low T/P zinc deposits (MVT)

Core's recent diamond core drilling and assays indicate that a substantial late stage, sediment hosted, carbonate rich, low temperature and pressure (T/P) zinc, lead and silver mineralising system (possibly MVT) has been active over large area at Yerelina.

Many (MVT or other) sediment hosted zinc deposits (e.g. Lennard Shelf in W.A) have strong structural control or influence on mineralising fluid movement through the sedimentary package as observed at Yerelina. Often this is associated with mineralised breccias and veining and alteration in discordant fault zones and zones of shearing as observed at Yerelina.

Typically the economic scale of these deposits is driven by stratiform (often flat lying) deposits proximal (close to) to the identified discordant mineralised structures/fluid transport system.

The Tapley Hill Formation (THF) is both the source and host of numerous base metal occurrences in the, intracratonic basinal sediments of the 200km x 600km Adelaide Geosyncline in South Australia. Recent research has shown that the calcareous shales of Tapley Hill Formation (THF) transition eastward into shallow shelf and reef limestone facies of the time equivalent Balcanoona Limestone (Oodnaminta Reef) as well as the THF containing numerous, but variable limestone interbeds and large (+100m) allocthanous blocks of reef carbonate as mega-breccias (Figure 7).

Limestones are ideal reactive and permeable host rocks for stratiform zinc deposits in MVT systems.

Yerelina has the host geology, structure and mineralising processes to host large stratiform zinc deposits in association within the known calcareous and limestone host facies within the Tapley Hill Formation proximal to recently drilled and the many other known mineralised discordant structures.

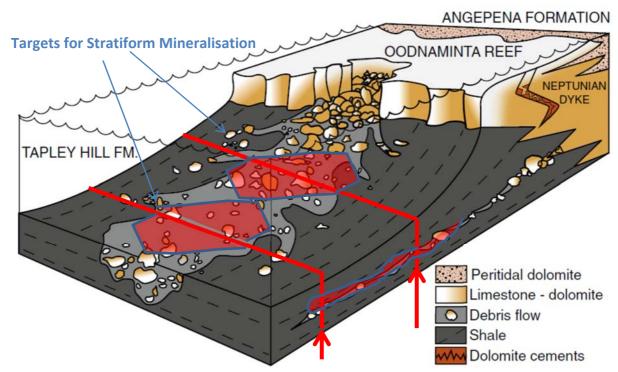


Figure 7. Limestone MVT targets within the Tapley Hill Formation. The THF facies changes into the Balcanoona Limestone (Ood. Reef) in the Yerelina Project area. (from Hood and Wallace 2012).





Hole ID	Easting	Northing	Intersection
YRDH001	328171	6672700	6m @ 0.2% Pb + Zn [92-98m]
			2m @ 0.3% Pb + Zn [112-114m]
YRDH002	330078	6673496	2m @ 0.9% Pb + Zn & 24g/t Ag [307-309m]
YRDH003	330082	6673506	17m @ 1.4% Pb + Zn & 19g/t Ag [145-162m] including:
			*4m@ 3% zinc, 1% lead and 59g/t Ag [150-154m]
			1m @ 3.0% Zn, 3.0% Pb & 152g/t Ag [151-152m]
			1m @ 6.0% Zn, 0.6% Pb & 34g/t Ag [153-154m]
			1m @ 1.3% Zn & 0.2% Pb [160-161m]
YRDH004	330083	6673506	Not sampled
YRDH005	335154	6671835	*33m @ 0.2% Pb + Zn [14-37m] including:
			11m @ 0.4% Pb + Zn [14-25m]

Table 1. Significant drill intersections

Hole_ID	Easting	Northing	RL	DIP	TAZ	Total Depth	Completion
DH001	328171	6672700	403.4	-60	111.5	150.6	10/09/2015
DH002	330078	6673496	395.6	-60	126	348.3	24/09/2015
DH003	330082	6673506	397	-50	90	210.3	19/09/2015
DH004	330083	6673506	397	-50	36.5	249.6	28/09/2015
DH005	335154	6671835	479	-50	84.5	78.1	01/10/2015
				Total Metres Drilled		1036.9m	

Table 2. Drill collar table.





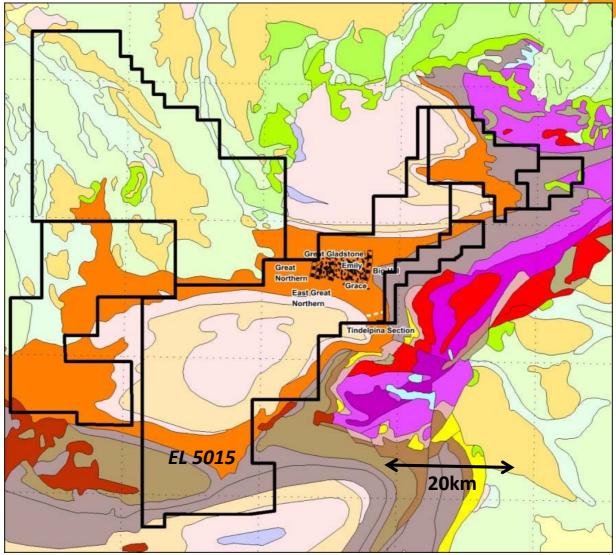


Figure 8. Yerelina Project (EL 5015), CXO's surrounding 2,500km² of tenure and regional geology showing extent of target Tapley Hill Formation (and equivalents) in orange.

For further information please contact:

Stephen Biggins
Managing Director
Core Exploration Ltd
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.





This report also 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. The information in all previous announcements has been compiled by Mr Stephen Biggins as the Competent Person and who provided his consent for all previous announcements. The information that was reported in announcements previously released under JORC Code 2004 is the announcement dated 19/03/2013 titled "High Grade Lead-Zinc-Silver Assays from S.A. Project"

Yerelina Diamond Core - November 2015- 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.	 Only veined and brecciated sections of core were sampled Samples composited on 1m intervals from ½ cut NQ2 diamond core except for duplicate samples where each duplicate pair is made up of composited ¼ NQ2 core.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	 Samples were halved 10mm around from the orientation line when present Where core was too fractured to be cut 50% of the representative material was composited along the 1 meter interval
	Aspects of the determination of mineralisation that are Material to the Public Report.	 Duplicate samples were taken on every twentieth sample number in sequence. A certified standard was inserted in sequence on every 25th sample number
	• In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	Drill type (eg core, RC, 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).	NQ2 Diamond Core
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Full geotechnical logging including recovery was undertaken with recoveries consistently >95%
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	No sample bias is expected to be present
	Whether a relationship exists between sample recovery and grade	

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. 	 All core was qualitatively logged in detail including lithology, colour, weathering, texture, grainsize, alteration and mineralisation. Quantitative geotechnical logging included measuring recovery, number of breaks, length of pieces >10cm, longest piece, RQD, magnetic suseptibility. The majority of the core was orientated and structurally logged 		
Sub-sampling	If core, whether cut or sawn and whether quarter, half or all core			
techniques	taken.	See Sampling section above for a description of sampling and sub-		
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	 sampling techniques. Sample sizes are considered appropriate for the expected grainsize 		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	of mineralisation.		
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Every twentieth sample collected for analysis was duplicated. A certified standard was analysed in sequence every 25 analyses.		
	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.	Subsampling techniques are undertaken in line with standard operating practices in order to ensure no bias associated with subsampling.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	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 diamond drilling program.		
Quality of assay data	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered	A certified and accredited global laboratory (Intertek-Genalysis) was used for all assays.		
and	partial or total.	Sample preparation and analysis undertaken at Intertek's Adelaide laboratory.		
laboratory	 For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument 	Samples were analysed using Intertek's 4A/OM10 technique which		

Criteria	JORC Code explanation	Commentary
tests	make and model, reading times, calibrations factors applied and their derivation, etc.	involves near-total 4 acid digest and analysis using ICP-OES and ICP-MS for 46 elements.
		Internal certified laboratory QAQC is undertaken by Intertek.
	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.	Duplicates and certified standards (OREAS 134B & 99B) 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.	Primary data was captured directly into an in-house referential and integrated database system designed and managed by the Exploration Manager. All analysis data is cross-validated within the database by various integrity scripts.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Analysis data is not adjusted.
	Discuss any adjustment to assay data.	
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 coordinates are recorded in GDA 94 MGA Zone 54. Collar locations were surveyed were undertaken by Core Exploration staff using a hand-held GPS. This tool has an accuracy of approximately 3m. Downhole survey were collected nominally every 30m depth by United Drilling Services using an electronic down hole survey system. Elevation data was read off the DTM survey collected by Daishsat for Core Exploration in 2012 during the heli-borne magnetic / radiometric survey (50m flight lines)
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 	 Initial reconnaissance drilling only. No inference regarding continuity can be made. Samples were composited using Mapinfo's compositing algorithm applying a 0.1% Pb+Zn cut-off. Minimum intersection length was 1 metre and no internal dilution was included except those listed with

Criteria	JORC Code explanation	Commentary
	classifications applied.	an asterix which did include up to 2 metres of internal dilution.
	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. 	 It is evident from structural logging some of the intersections may be sub-parallel to the vein orientations as illustrated on the YRDH003 section. The orientation of drilling at Great Gladstone was not optimal for the east dipping vein sets.
Sample security	The measures taken to ensure sample security.	 Drill core trays were steel strapped onto pallets for transport to Euro Exploration Services' Hendon warehouse for cutting by the exploration manager. Birdsville Transport undertook the freight transportation and the exploration manager cut the steel strapping once delivered in Hendon. Euro Exploration Services undertook sampling and also delivered the cut samples to the laboratory. Pulp samples are retained by the company for future reference and are stored in CXO's Adelaide office
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. 	 Yerelina is contained within EL 5015 that is 100% held by Sturt Exploration Pty Ltd a wholly owned subsidiary of Core Exploration Ltd. Core Exploration manages EL 5015. EL 5015 is located on Mt Freeling Station. All drilling was undertaken outside of Heritage, Conservation or National Parks on EL 5015.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Modern exploration is very limited in the Yerelina area however extensive historical workings dating back to 1908 are evident as a number of shafts and drives
Geology	Deposit type, geological setting and style of mineralisation.	The mineralisation style targeted is silver and base-metal veining within an antiformal structure of Tapley Hill Formation which is considered to be MVT-style.
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. If the exclusion of this information is justified on the basis that the 	See table included in this announcement
	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	In reporting Exploration Results, weighting averaging techniques,	 Intersections are calculated using combined Pb + Zn grades with a

Criteria	JORC Code explanation	Commentary
aggregation methods	 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. 	minimum cut-off of 0.1% Pb+Zn. No internal dilution is included except for those intersections tabled with an asterix.
Relationship between mineralisatio n 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'). 	 Intersections are down hole length only and true widths are not reported. Structural logging suggests some of the drilling may be sub-parallel to vein orientations as illustrated on the attached section for YRDH003
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 and sections.
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.	Only zones with strong veining and brecciation were sampled. It is considered zones not sampled are unlikely to carry additional grade.
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.	Exploration activity is very limited at Yerelina however CXO collected heli-magnetic and radiometric data in 2012, undertook previous rock-chip sampling of anomalous gossans / historical mullock piles and submitted a limited number of samples for petrology.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Subject to Board approval additional drilling may be undertaken
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	