



ASX ANNOUNCEMENT

ASX : CXO

7th July 2015

Large zinc and lead anomaly targeted by Core's current exploration at Yerelina

HIGHLIGHTS

- **Zinc and lead anomalism identified in historic stream sediment survey**
- **Coincident zinc and lead anomaly over 30km square kilometres in size**
- **Core's current exploration efforts focussed on this broad area of anomalism and high grade surface mineralisation**
- **Results expected over coming weeks**
- **First drilling at Yerelina to commence this quarter**

Core Exploration Ltd's (ASX:CXO) soil surveys currently underway are targeting the source of zinc and lead anomalism in stream sediments covering an area over 30 square kilometres in size at Yerelina in South Australia.

A review of historic regional stream sediment sampling undertaken in the 1960's highlights a coincident zinc and lead anomaly at Yerelina including at the Great Gladstone and Big Hill prospects (Figures 1 & 2). The elevated zinc and lead geochemical anomaly is defined within surface drainages over an area in excess of 30 square kilometres.

Managing Director of Core Exploration, Stephen Biggins said "We are very excited by the results of our latest analysis which have identified highly anomalous zinc and lead over an extremely large area of 30 km². The presence of old workings, a large area of highly anomalous zinc and lead and the results of detailed magnetic surveys is potentially indicative of a substantial mineralising event."

Core's surface mapping, detailed magnetic surveys and remote sensing imagery also show clear evidence of numerous historical workings and outcropping mineralisation that can be mapped over hundreds to thousands of metres in repetitious gossanous vein sets within this 8km wide anomaly.

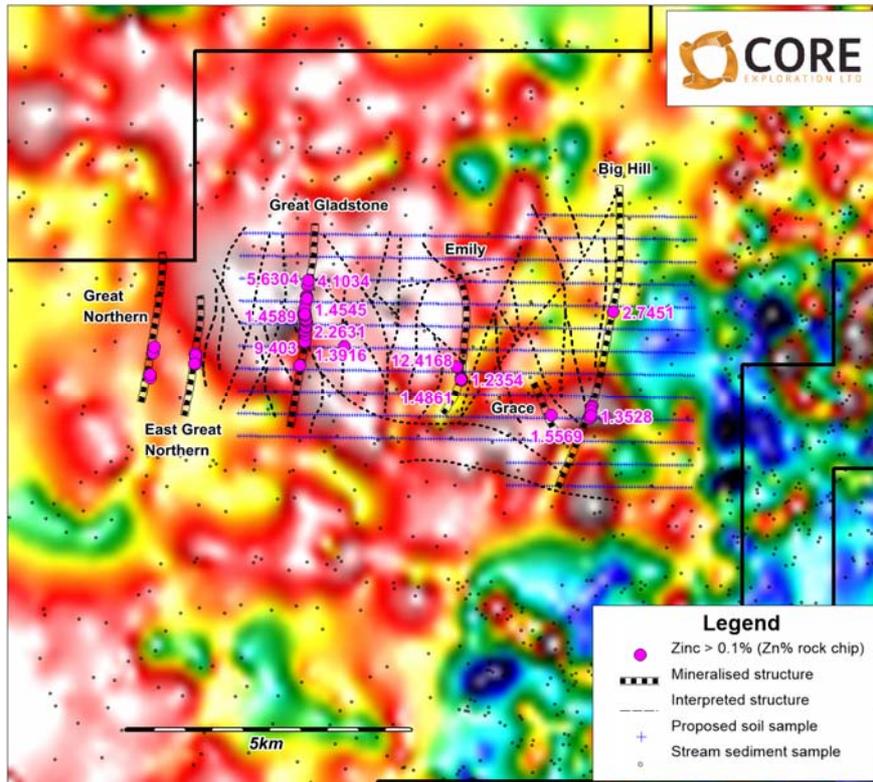


Figure 1. Zinc in stream sampling image overlain by zinc rock chip assays, mineralised and interpreted structure, Yerelina SA.

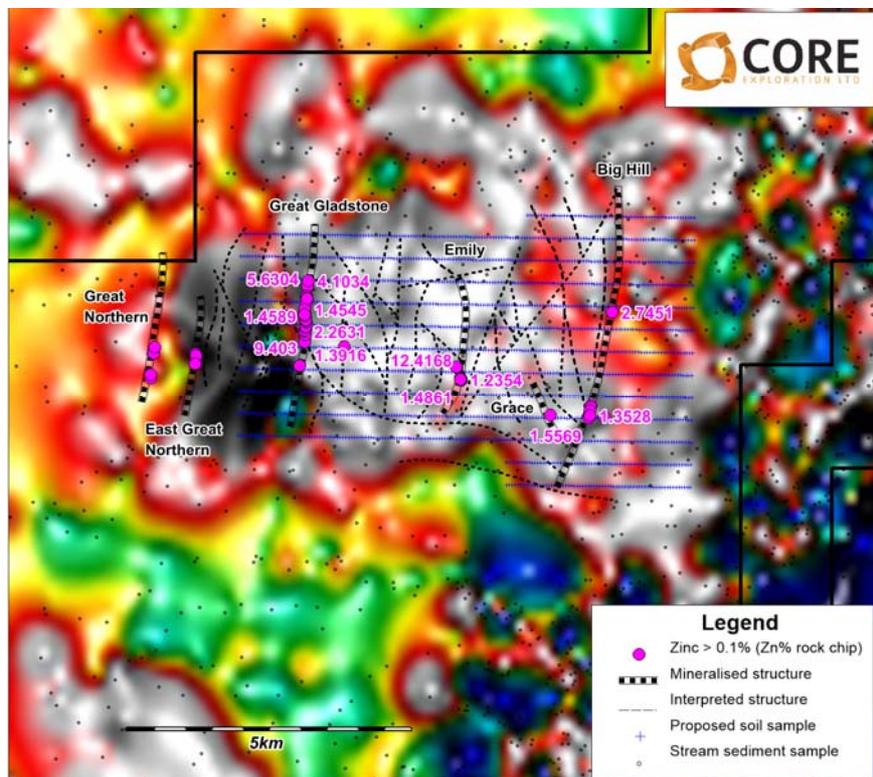


Figure 2. Lead in stream sampling image overlain by zinc rock chip assays, mineralised and interpreted structure, Yerelina SA.

Core has embarked on a soil sampling program targeting zinc and lead anomalism over the entire area highlighted by the historic stream geochemical anomaly (Figures 1 & 2). Early reconnaissance soil surveys by Core have already identified additional high grade mineralisation at surface at the new Grace Prospect (ASX: 01/06/15).

Core's Yerelina Zinc Project is highly prospective for shallow zinc mineralisation as evidenced by high grade mineralisation identified to date on at least six separate north-south structures identified by Core and anomalous zinc and lead in stream sediments over this broad area (Figures 1 and 2).

Future Work Program

Further soil and rock results are anticipated during July as current field work progresses toward the drilling of these zinc targets.

Core has also been recently awarded a grant as part of the SA Government's PACE Discovery Drilling 2015 program. The proposed PACE assisted drilling project comprises a total of six angled diamond core holes targeted under the known outcropping mineralisation.

Land access clearances have commenced to fast track the project for drilling as early as possible during Q3 2015.

For further information please contact:

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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 references information previously released under JORC Code 2012 to the ASX on 02/06/15 titled "10m wide gossan found at Yerelina Zinc Project".

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 – June 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	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<ul style="list-style-type: none"> -80 mesh sieved stream sediment samples Soil samples spacing varied on geological grounds Data sourced from the SARIG geochemical database
Drilling techniques	<ul style="list-style-type: none"> <i>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).</i> 	<ul style="list-style-type: none"> Stream sediment sampling
Drill sample	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries</i> 	<ul style="list-style-type: none"> Stream sediment sampling



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recovery	<p><i>and results assessed.</i></p> <ul style="list-style-type: none"> Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Stream sediment sampling
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p> <p><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></p> <ul style="list-style-type: none"> Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field 	<ul style="list-style-type: none"> See Sampling section above for a description of sampling and sub-sampling techniques. The nature, quality and appropriateness of the sampling technique is considered adequate for the type of mineralisation and confidence level being attributed to this sampling.



Criteria	JORC Code explanation	Commentary
	<p><i>duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Analysis was undertaken by AAS circa 1966
Verification of sampling and assaying	<ul style="list-style-type: none"> <i>The verification of significant intersections by either independent or alternative company personnel.</i> <p><i>the use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<ul style="list-style-type: none"> Data sourced from SARIG database Raw data sheets sited in historic reports
Location of data points	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Data and locations sourced from SARIG database



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	<ul style="list-style-type: none"> • Specification of the grid system used. • Quality and adequacy of topographic control. 	
Data spacing and distribution	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • stream sediment sampling spacing varied on geological grounds
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Reconnaissance stream sediment sampling only.
Sample security	<ul style="list-style-type: none"> • The measures taken to ensure sample security. 	<ul style="list-style-type: none"> • Circa 1966 data sourced from SARIG database
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> • No audits or reviews have been undertaken

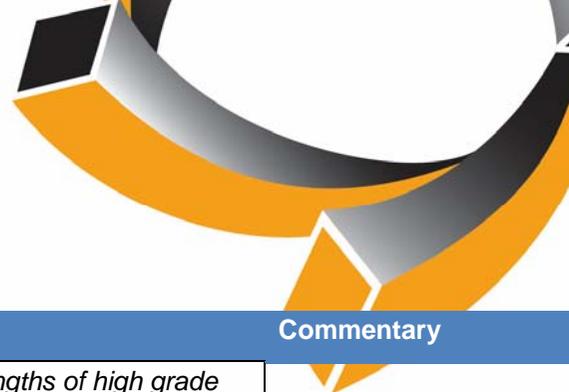
Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement	<ul style="list-style-type: none"> • Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint 	<ul style="list-style-type: none"> • Yerelina is contained within EL 5015 that is 100% held by Sturt Exploration Pty Ltd a wholly owned subsidiary of Core Exploration



Criteria	JORC Code explanation	Commentary
and land tenure status	<p><i>ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	<p>Ltd.</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> The mineralisation style targeted is silver and base-metal veining within an antiformal structure of Tapley Hill Formation
Drill hole Information	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> <i>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.</i> 	<ul style="list-style-type: none"> Initial reconnaissance stream sediment sampling only.
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Initial reconnaissance stream sediment sampling only. No metal equivalents are reported.



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	<ul style="list-style-type: none"> 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. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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'). 	<ul style="list-style-type: none"> Initial reconnaissance stream sediment sampling only.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See attached plans showing sample density.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All stream sediment samples in the area are represented in the figures
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> Subject to Board approval drilling may be undertaken



Criteria	JORC Code explanation	Commentary
	<i>including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	