



ASX ANNOUNCEMENT

ASX : CXO

4th October 2012

Core extends base and precious metal exploration by 1,000km² around Fitton Project, S.A.

- Core's tenements now cover over 1,000km² around its Fitton project where it is exploring for copper, uranium and gold mineralisation
- Newly granted tenement EL 5015 is also prospective for base and precious metals
- Up to 203 g/t silver and 13.34 % combined lead and zinc assays from sampling of old workings on new EL 5015
- Mineralised breccia hosted within fault zones interpreted to be up to 1.5km long.
- Numerous further targets at historical mines, interpreted faults and outcropping gossan within Core's 1,000km² tenement package.

Core Exploration Limited (ASX:CXO) is pleased to announce highly promising assay results from newly granted EL 5015 Yerelina, which covers close to 1,000 square kilometres adjacent to the Company's Fitton Project in northern South Australia.

The granting of EL 5015 greatly increases the Company's exploration footprint in the Fitton area adjacent to EL 4569 which Core is actively exploring for outcropping, shear hosted copper, uranium and precious metal mineralisation (Figure 4). This newly granted tenure is also highly prospective for shallow base and precious metal mineralisation (Table 1 and 2).

Four historical workings, operating in the late 19th and early 20th century, are recorded from within EL 5015. These old workings are located in an apparent east – west trend over 8 kilometres (Figures 2, 3 & 4). The limited documented information about the historical workings indicates that high grades of silver (Ag) and lead (Pb) were mined. Core's mapping and sampling around and along strike from these workings has confirmed silver, lead and zinc mineralisation.

Core's analysis of modern satellite imagery and the Company's recently completed detailed heli-borne magnetic and radiometric survey data has identified that these workings are hosted by a large scale system of repeated north/south regional structures over many kilometres (Fig 2 & 3).

Historic Target	Gold	Silver	Copper	Lead	Zinc	Pb+Zn
Great Gladstone	0.02 g/t	203g/t	0.2%	5.0%	2.3%	7.30%
Emily	0.01 g/t	12.1 g/t	0.3%	0.9%	12.4%	13.34%
Big Hill	0.01 g/t	5.9 g/t	0.0%	1.7%	0.6%	2.35%

Table 1. Summary of best results of reconnaissance sampling of 3 historic mine workings, EL 5015.



Initial Investigations on EL 5015

Core has undertaken reconnaissance mapping and sampling within the new EL 5015. To date, the Company has visited three of the four historical workings and confirmed that they are associated with north – south striking iron rich gossaneous breccias that appear to have in filled fractures that cross cut the Adelaidean Tapley Hill Formation strata (Figure 1).

Core identified up to 10 historical shafts at the Great Gladstone workings that appear to be up to 30m deep (Figures 1 & 5). Great Gladstone is recorded to have produced high grade silver and lead. Recent field mapping has also identified surface expressions of secondary copper oxide (malachite, azurite). Primary sulphides in existing mullock heaps indicate primary mineralisation at depth. Sampling of the mullock heaps as well as from in situ iron rich gossan produced assay values up to 11.27 % combined lead (Pb) + zinc (Zn) and up to 203 g/t silver (Ag) (Table 2).

The Great Gladstone workings are aligned north – south over approximately 1km and have been dug into a semi continuous 0.5m to 2.5m wide iron rich brecciated gossan. Furthermore Core observed that the iron rich breccia is found to not only occur infilling north – south fractures, but also extend along the east – west bedding planes of the Tapley Hill Formation. This observation provides a mechanism for the mineralising fluid to have travelled and accumulated at depth, layer parallel to stratigraphy.



Figure 1: Example of in situ gossan (dark rock) on edge of mullock heap, from within Great Gladstone, EL 5015.

Initial investigations at the Emily workings identified two historical shafts 50 metres apart both dug into an, up to 2m wide, north – south striking iron matrix rich breccia filled fault. Samples from the Emily working assayed at up to 13.34% combined Pb + Zn.

The Big Hill workings are comprised of a single drive shaft into a significant iron rich breccia gossan. This gossan is up to 250m long, striking north – south and up to 20m wide pinching out at both the northern and southern ends. This is the most significant outcropping gossan identified by Core at this stage. Samples taken from the historic workings at Big Hill as well as from along the gossaneous outcrop assayed at up to 2.35% combined Pb + Zn with the majority of samples from the large gossan above 1% combined Pb + Zn.

Core completed a heli-magnetic survey over the historical mine areas on EL 5015 at the same time as the adjacent Fitton EL 4569 in an attempt to map the faults that have been identified as hosting the mineralised Pb + Zn + Ag mineralisation. Preliminary interpretations of the data indicate that there is a strong correlation between the magnetics and the known distribution of the faults from the reconnaissance mapping (Figure 2). This correlation will be used to develop further sampling targets in the area.

Name	Easting	Northing	Historic target	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Pb + Zn %
MP00514	330156	6673510	Gladstone	124.4	360	5994	5124	1.11
MP00515	330138	6673278	Gladstone	203	1639	50323	22631	7.30
MP00516	330165	6673344	Gladstone	23	1136	18665	94030	11.27
MP00517	330158	6673324	Gladstone	10.8	59	10046	7493	1.75
MP00518	330145	6673122	Gladstone	48	29	17931	2313	2.02
MP00519	330145	6673093	Gladstone	0.5	310	7311	4323	1.16
MP00569	332914	6672472	Emily	12.1	395	32285	12354	4.46
MP00570	332906	6672497	Emily	3.5	5541	1743	14861	1.66
MP00573	332831	6672691	Emily	24.2	420	38457	7938	4.64
MP00576	332910	6672480	Emily	12.1	2501	9213	124168	13.34
MP00581	335204	6671851	Big Hill	8.7	40	1462	13528	1.50
MP00582	335204	6671851	Big Hill	2.6	53	1220	15569	1.68
MP00584	335220	6672000	Big Hill	1.6	217	4891	6657	1.15
MP00585	335203	6671938	Big Hill	5.9	141	17436	6049	2.35
MP00586	335189	6671846	Big Hill	9.7	345	4140	6100	1.02

Table 2: Rock chip assays from EL 5015 Yerelina with combined lead and zinc assays above 1%

Notes to Table 2:

Au: FA25//AA Lead Collection Fire Assay:

Ag, Pb: 4A/MS 4 Acid Digest Mass Spectrometry:

Cu, Zn: 4A/OE 4 Acid Digest Inductively Coupled Plasma Optical Emission Spectrometry

The presence of this mapped surface mineralisation and alteration may or may not extend at depth and this can only be confirmed by drilling

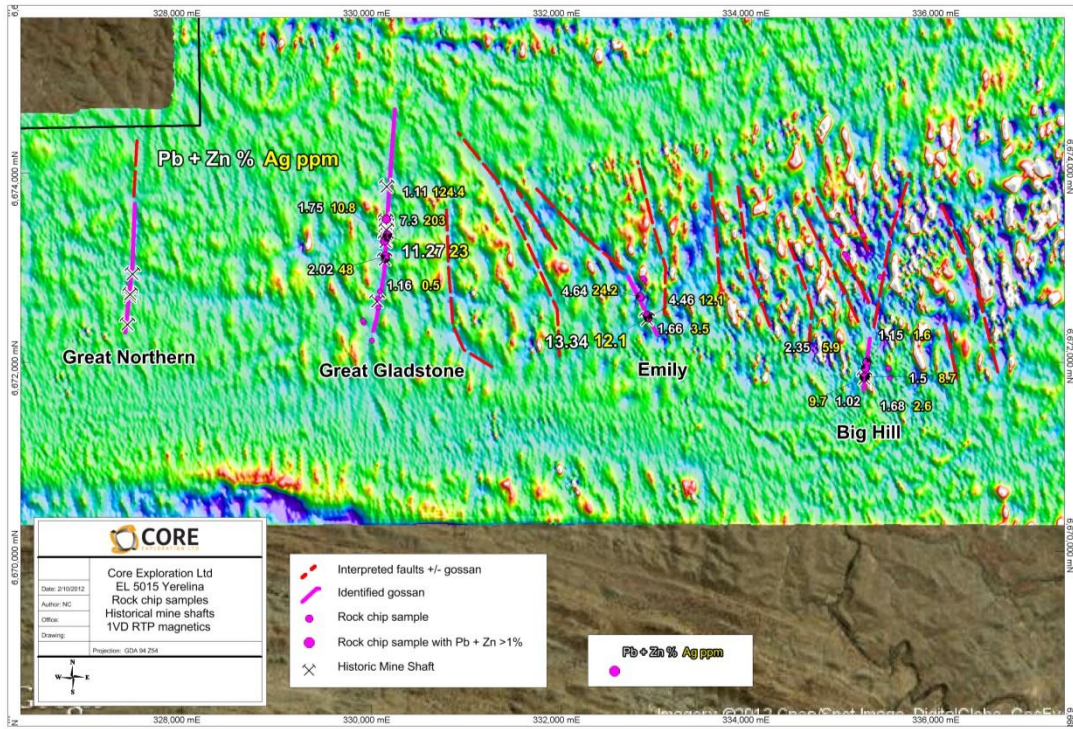


Figure 2. Outcrop samples with significant silver, lead and zinc assays and historic working locations overlain on magnetic image, EL 5015.

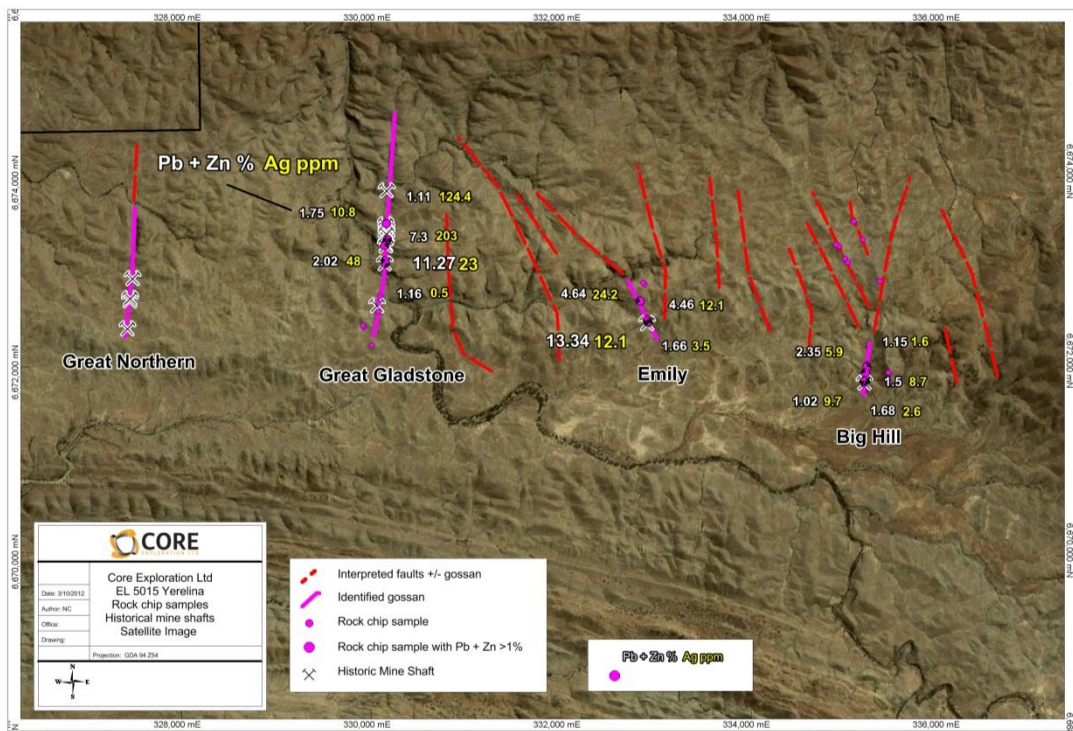


Figure 3. Outcrop samples with significant silver, lead and zinc assays and historic working locations overlain on satellite image, EL 5015.



Future Work Program

Further mapping and sampling is planned at this tenement in 2012 and will include mapping and sampling at the fourth historical workings (Great Northern) and at other potential extensions of gossan identified from interpretations of satellite imagery and newly acquired airborne magnetic data.

Core will undertake petrophysical analysis of the mineralised samples in an attempt to develop geophysical methods that could map mineralisation at depth. This data, in conjunction with surface mapping and sampling, will allow the company to develop a targeted drilling program focusing on near surface high grade mineralisation in 2013.

Core will also utilise existing and new data to evaluate the tenement for extensions to the shear hosted copper +/- uranium and gold mineralisation model that it has developed providing drill ready magnetic targets within the adjacent Fitton tenement.

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The information in this report has been compiled by Stephen Biggins (BSc(Hons)Geol, MBA) as Managing Director of Core Exploration Ltd and 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. As a Competent Person, he has a minimum of 5 years relevant experience in the style of mineralisation and types of activities being reported and has given written consent to the above report in the form and context in which it appears.

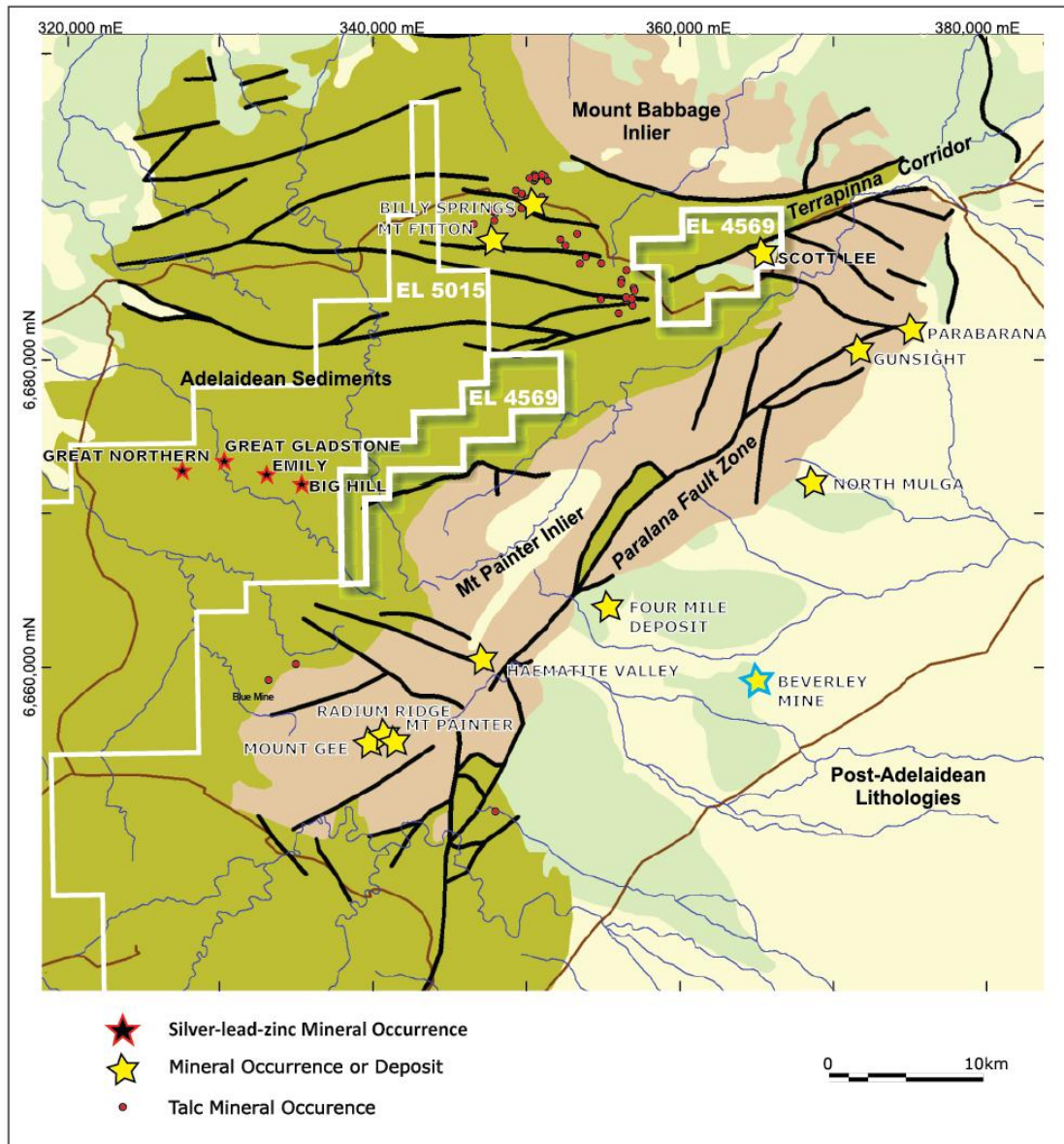


Figure 4: Core’s new EL 5015 Yerelina in and EL 4569 Fitton and surrounding mineral occurrences and mines, northern South Australia.



Figure 5: Looking south from northern end of sampled mullock at Great Gladstone. Workings and brecciated fault zone are highlighted on the next ridge southward.