



Copper Exploration on the Yorke Peninsula and South Australia

Managing Director's Presentation
South Australian Resources and Energy Investment Conference
Adelaide 30th April 2012

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Investment Overview

- Core Exploration (ASX:CXO) offers an investment opportunity into one of the world's leading copper mining and exploration provinces.
- Core's first diamond drilling program intersected copper mineralisation on the 100%-owned Yorke Peninsula Project (YP) in South Australia
- Copper sulphides found with zones of IOCG (Iron Oxide Copper Gold) style alteration and in large-scale structural setting
- New drill results of multiple intersections grading up to 0.45% Copper at Wauraltee Prospect confirm fertility of YP for copper mineralisation*
- Remaining 50% of assays from YP drilling expected in mid-May
- Drilling to recommence on YP in June 2012

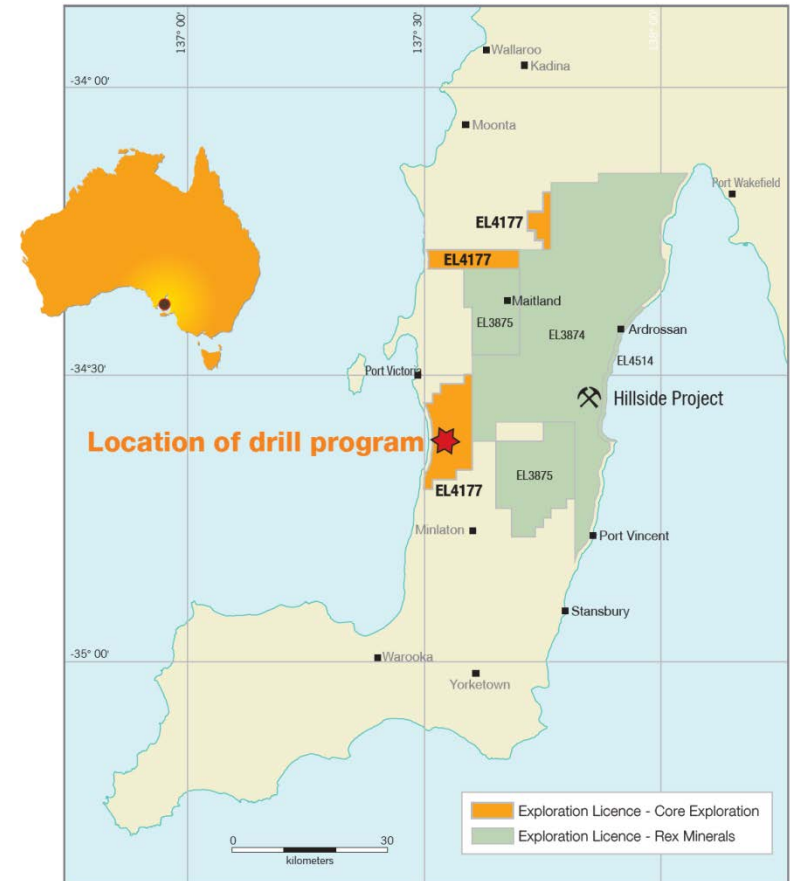
**Tight capital structure with huge-leverage to
exploration success**

*refer table of drill assays on page 8

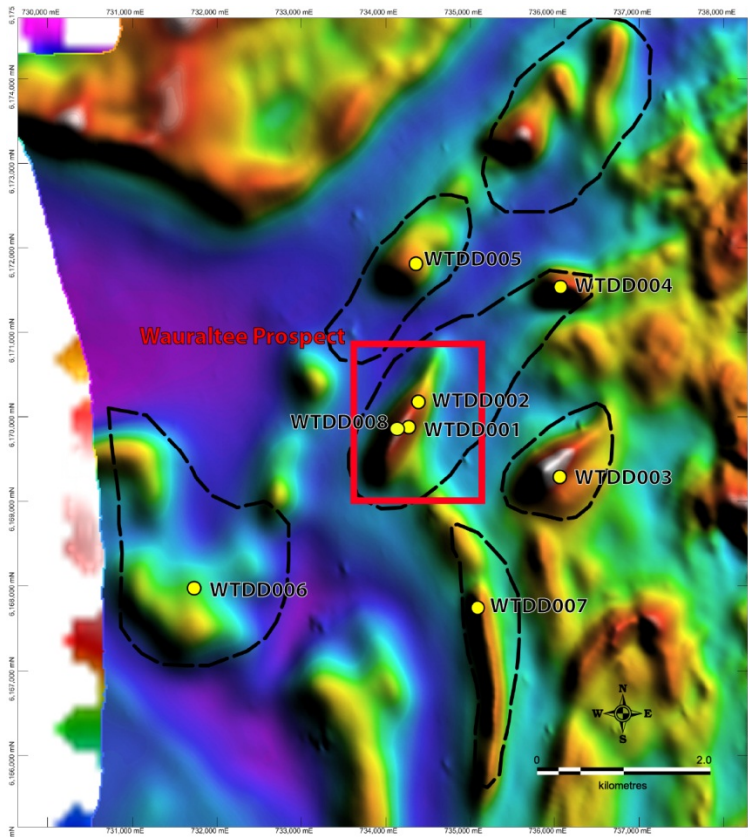


Yorke Peninsula Project - Copper

- Project covers 243km² in analogous geological setting adjacent to Rex Minerals' Hillside tenements
- Core's recent diamond drill program has intersected copper mineralisation associated with IOCG-style mineralisation
- YP Project within Olympic IOCG province (e.g. Olympic Dam, Prominent Hill, Carrapateena)
- Remaining drill assays to be received in May
- Drilling to recommence in June 2012



Drilling recently completed on YP

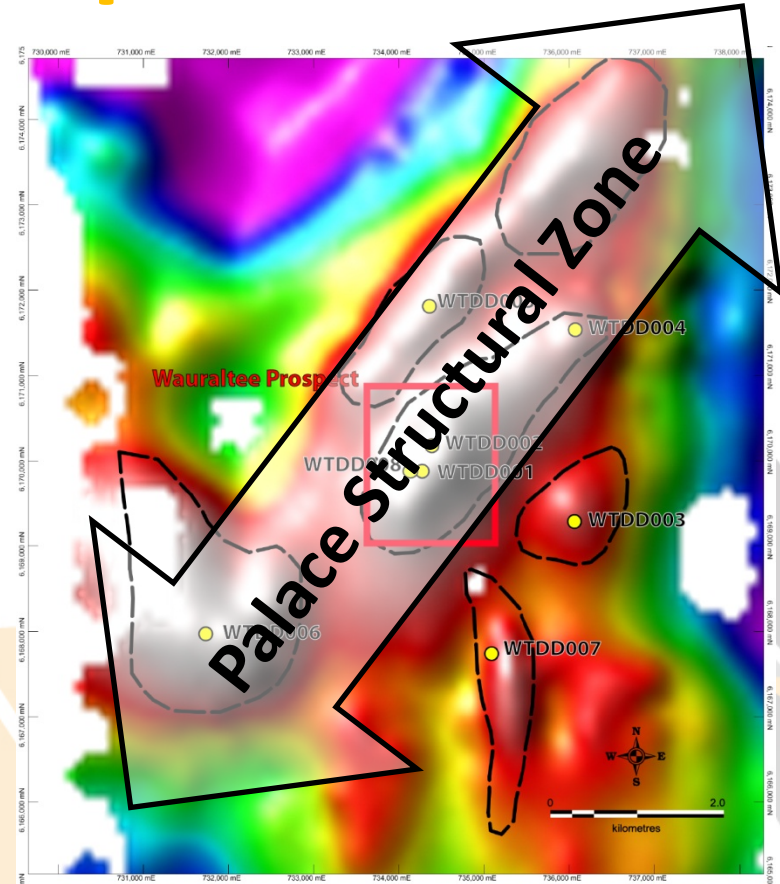


Total Magnetic Intensity with Completed Diamond Drill Holes

● Drill hole location



Iron oxide Copper-Gold Target



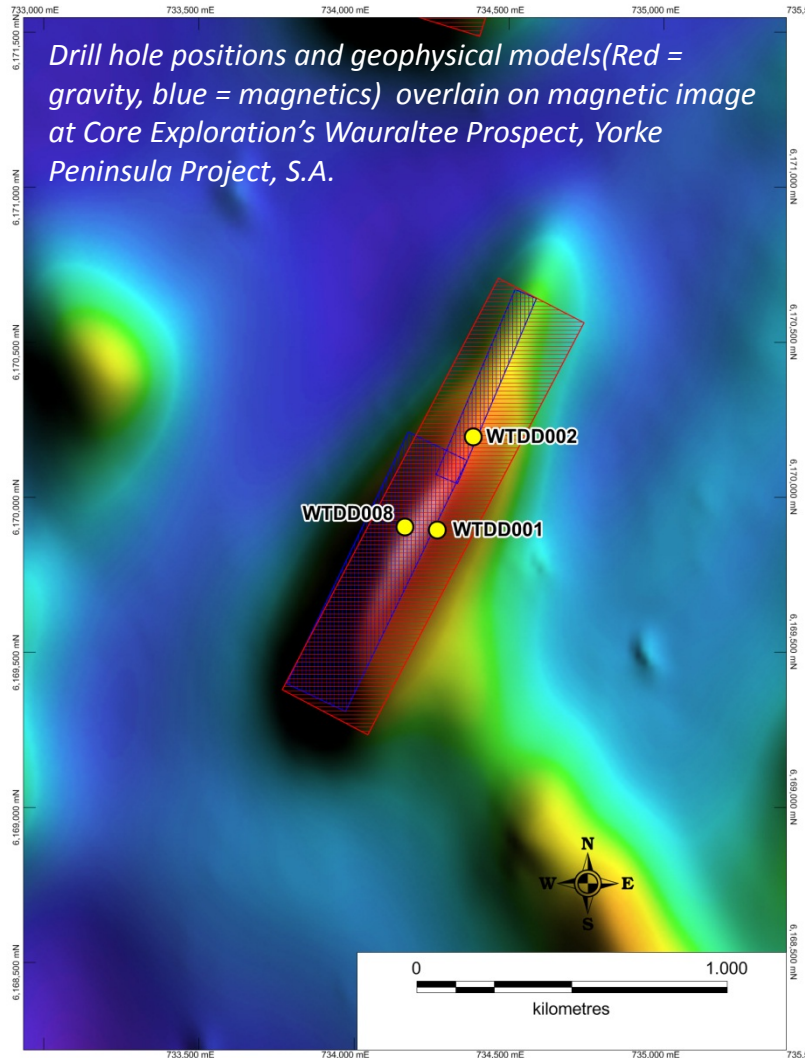
Residual Gravity with Completed Diamond Drill Holes

● Drill hole location



Iron oxide Copper-Gold Target

Wauraltee Prospect - Copper sulphides with IOCG style alteration



- Copper sulphides intersected in all 3 holes drilled at Wauraltee Prospect
- Only 350m of the 1,500m length of the Wauraltee geophysical model tested by drilling so far
- Alteration (up to 15m wide) consist of albite-epidote-amphibole-carbonate +/- magnetite, pyrite + chalcopyrite + trace chalcocite.
- Zones of alteration and mineralisation steeply dipping and same orientation as main Palace Structural Zone (PSZ)
- Opens potential of 12km PSZ to host copper deposits and control IOCG mineralisation
- Similarities to Hillside structural setting within the nearby Pine Point Fault Zone

Wauraltee Drilling - zones of interest



Hole	From	To	Comments
WTDD001	161m	217.5m	Deformed and altered dolerite, with epidote + amphibole + carbonate + albite alteration and veining, variable pyrite and minor chalcopyrite.
WTDD002	151	247.5	Deformed and altered coarse grained gabbro with 10cm to 1m thick zones alteration and veining of carbonate + amphibole + biotite + albite + epidote +/- minor chalcopyrite + pyrite + trace chalcocite.
WTDD008	188.05	205	Felsic intrusive dominated by pervasive red rock alteration of albite + epidote, pyrite +/- magnetite, amphibole and chalcopyrite. Small veins of pyrite and lesser chalcopyrite occur throughout this interval.

Zone of intense amphibole rich alteration with associated chalcopyrite in drill hole WTDD002 at 247.5m.

Yorke Peninsula - Significant copper drill intersections received to date



Drill Hole	Prospect	Depth from (m)	Depth to (m)	Interval (m)	Cu (%)
WTDD001	Wauraltee	227	228	1	0.45
WTDD002	Wauraltee	148	150	2	0.10
		159	160	1	0.07
		165	166	1	0.26
		181	185	4	0.06
		201	202	1	0.05
		241	243	2	0.19
		249	250	1	0.25
WTDD003		No significant assays			
WTDD004		Assays yet to be received			
WTDD005		No significant assays.			
WTDD006		Assays yet to be received			
WTDD007		Assays yet to be received			
WTDD008	Wauraltee	Assays yet to be received			

Samples were collected from half NQ drill core. A 40g charge of pulverised sample was digested with Aqua Regia. Analysis was undertaken by ICP-MS/ICP-AES

Albite dominant ("Red-rock") alteration and sulphide veining comprising pyrite (iron sulphide) and minor chalcopyrite (copper sulphide) in drill hole WTDD008 at 199m.

Yorke Peninsula Project's increasing prospectivity

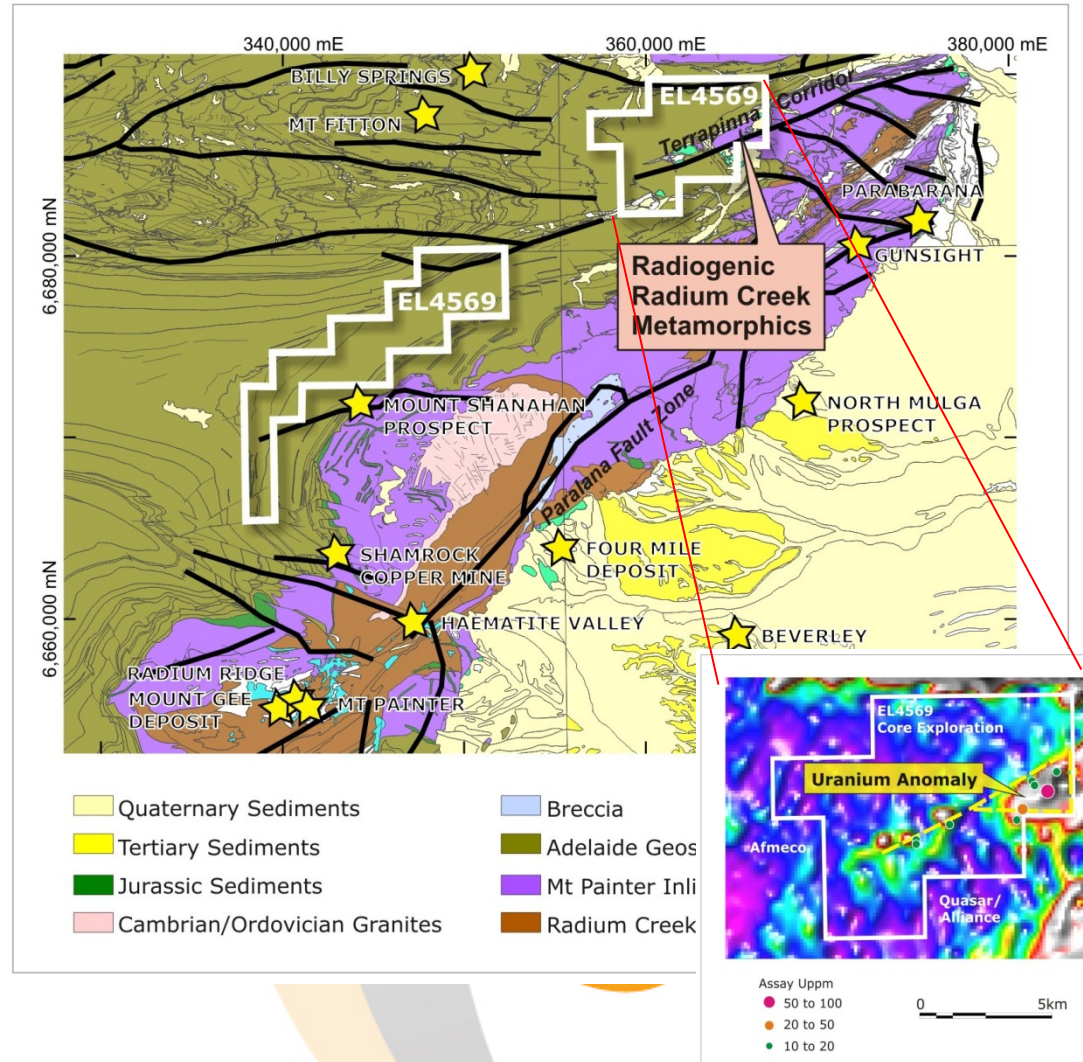
- ✓ Source for mineralisation
 - ✓ Hiltaba age granites and synchronous alteration confirmed
- ✓ Pathway for mineralisation
 - ✓ IOCG style alteration orientated with large-scale structural directions
- ✓ Trap (Targets) for mineralisation
 - ✓ Geophysics has defined a number of large-scale gravity/mag targets within Palace Structural Zone
- ✓ Fertility for mineralisation
 - ✓ Core's early exploration drilling confirms alteration system is fertile with copper
 - ✓ Hillside is local example of the regions potential

YP Project : Next Steps

- Receive and interpret remaining 50% of assay results of recent 2,000m diamond drill program
- Prospect scale geophysics of Wauraltee and other high-priority targets in and around the 12km Palace Structural Zone – Currently underway
- Phase 2 diamond drilling program at Wauraltee Prospect – commence June 2012
- Drill new targets prioritised on new geological and geophysical data and interpretations from recent drilling - commence July/Aug 2012

Fitton Project : Copper/Uranium in northern South Australia

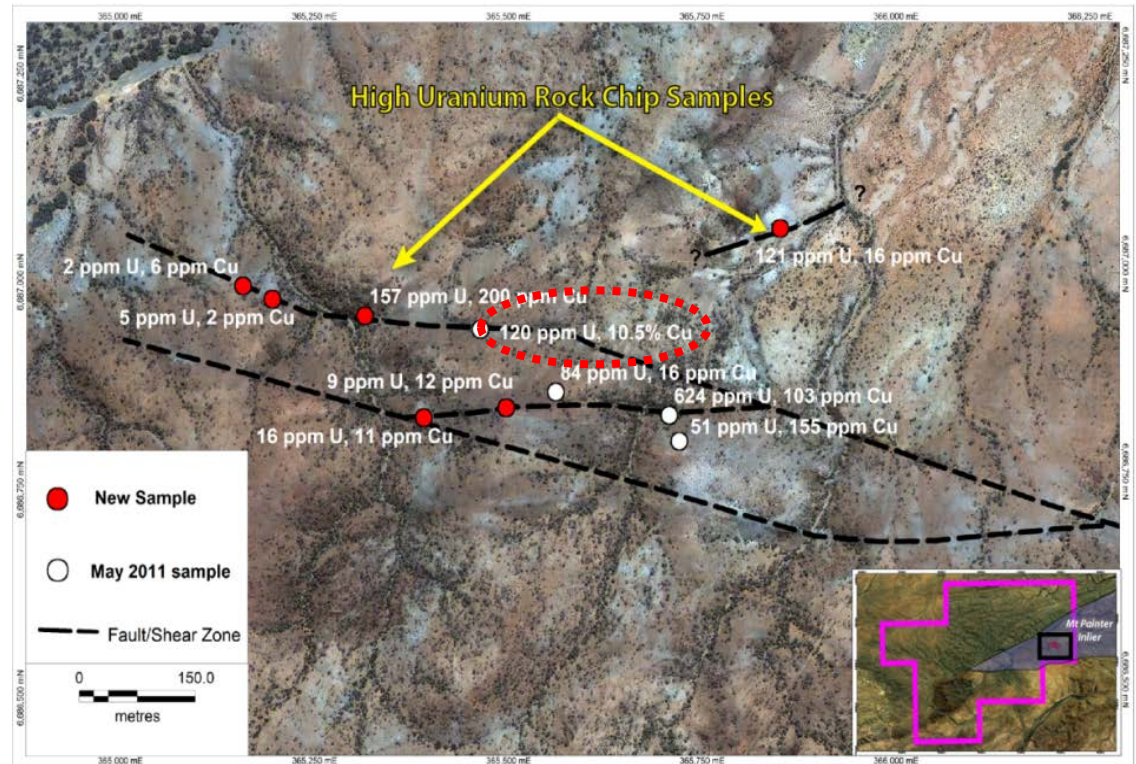
- Mines and large deposits within the region:
 - Beverley Uranium Mine
 - Four Mile
 - Mt Gee
- Proven world-class uranium mining district
- Similar primary polymetallic prospects (U/Cu/REE, etc) directly to the east of Fitton e.g. Gunsight, Parabaranna



Fitton Project

Outstanding early results

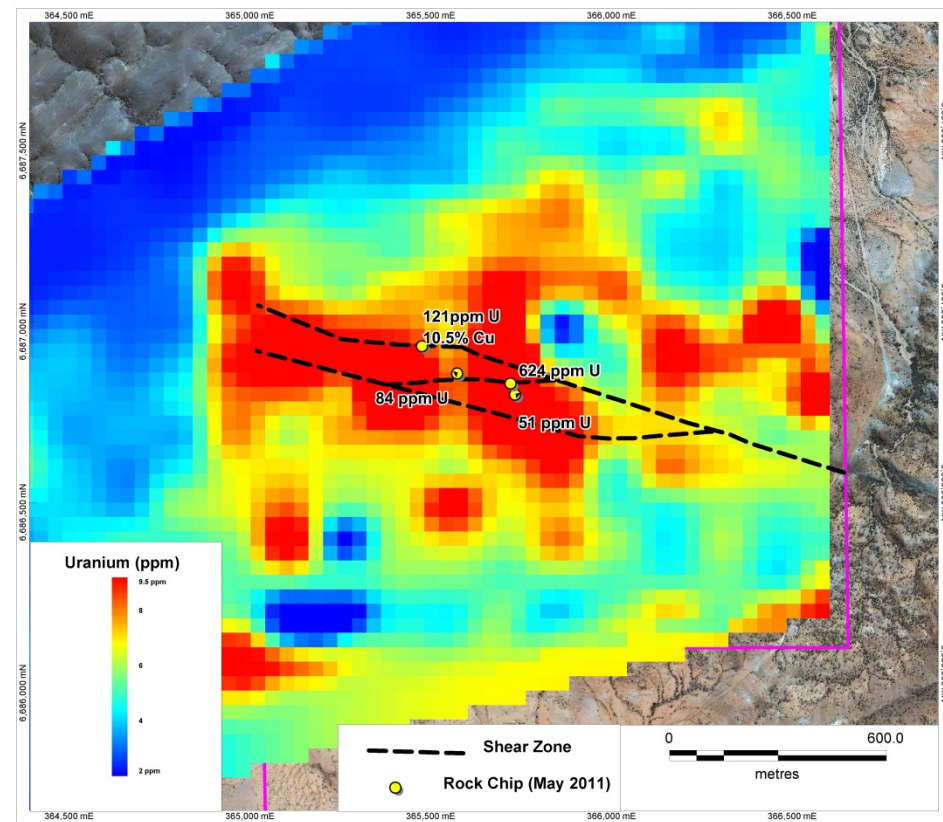
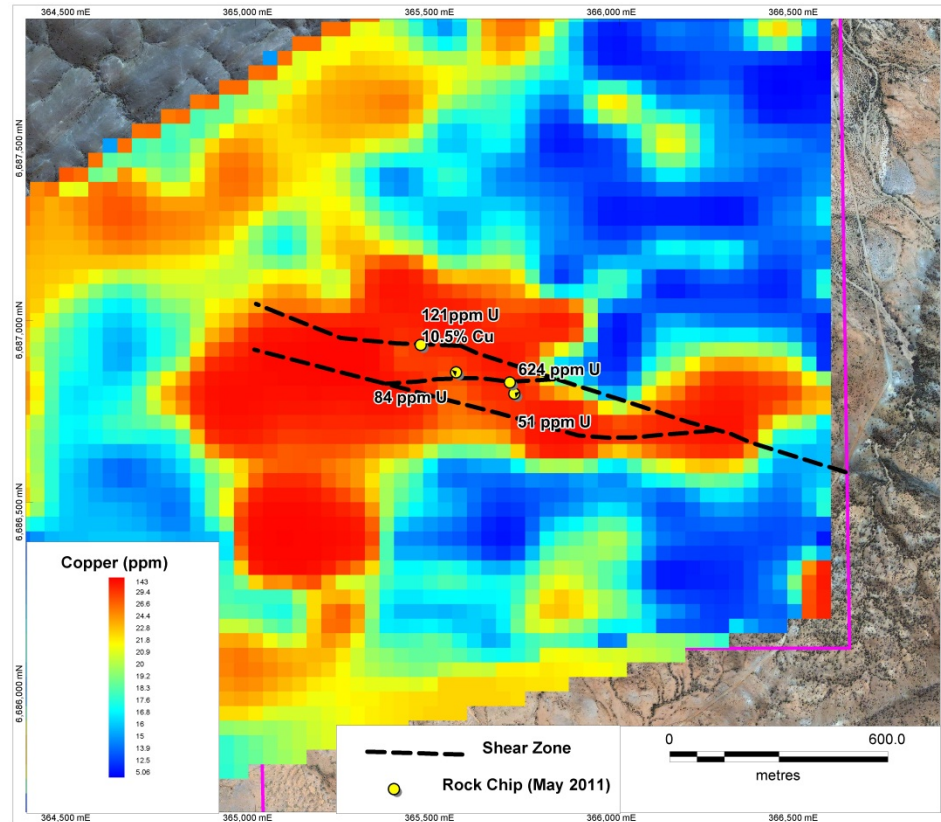
- **10.5% copper and 624ppm uranium** in outcrop samples
- 2,000m long shear zone mapped in granite
- Coincident anomalous copper and uranium in soils
- Soils indicate elevated metals in zone up to 1,000 wide



Fitton Project

Copper in soils

Uranium in Soils



Fitton Project

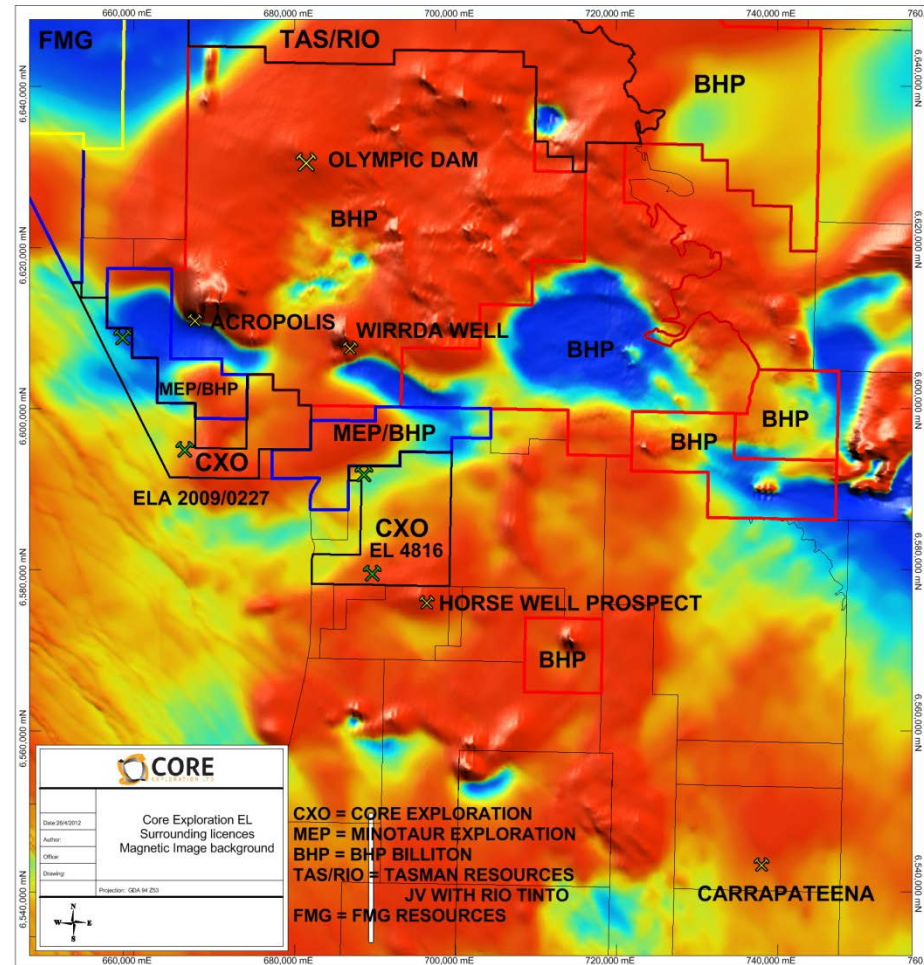
Latest field observations – April 2012

- Malachite staining in outcropping portion of shear zone mapped over 100m
- Numerous surface samples taken with copper staining and highly anomalous scintillometre readings (i.e. Copper +/- Uranium)
- Rock chip assay results expected mid-May
- Drilling scheduled for early Q3 2012



Roxby Downs Project, S.A. - IOCGU

- ◆ Two tenements covering over 400km² in the core of the Olympic Dam / Carrapateena IOCGU Zone
- ◆ Project located 40km south of Olympic Dam and within 10km of BHPB's Wirrda Well and other IOCGU prospects
- ◆ EL 4816 with 10km gravity feature recently granted
- ◆ Offer of grant of 2nd EL (ELA 09/227) just received by Core and grant to be finalised soon
- ◆ With all tenure granted Core will now be in a position to introduce a Senior Partner to take project forward



Forward Exploration Program

- Remaining assays from recent YP drilling expected in May
- Expanded diamond drilling to re-commence in June on Yorke Peninsula
- Assays from continuing rock-chip and mapping on Fitton project expected mid-May
- Grant of 400km² ELs expected soon near BHPB's Olympic Dam and Wirrda Well
 - Opens option to introduce senior partner

Project	Q2 2012	2H 2012
Yorke Peninsula	Drilling	Drilling
Fitton	Geochem/ Geophysics	Drilling
Roxby South	Grant of ELs	Transaction?

Summary

- Copper mineralisation hit in first diamond drill program on the Yorke Peninsula in S.A.
- Currently undervalued with huge upside leveraged to copper exploration success (tight capital structure - only 41.5M shares)
- Well funded to execute strategy, deliver results and value growth in 2012



CXO : Capital Structure

- Shares on issue 41.5M
- Options (25c) 8.5M
- Share Price ~\$0.15
- Market Cap (undiluted) ~\$6.2M
- Cash (31 Mar 2012) \$3.1M

**Huge upside leveraged to copper exploration
success on Yorke Peninsula and S.A.**





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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.