

#### Fitton high-grade uranium discovery South Australia

Paydirt Uranium Conference Adelaide, South Australia 29<sup>th</sup> April 2013

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## Core Exploration's SA and NT Projects

Fitton
Uranium

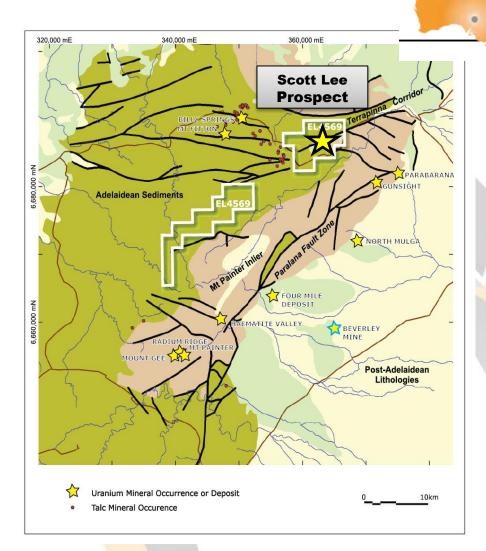
#### **Core: CXO Investment Summary**

- Core has made an outstanding new discovery of high grade uranium in its maiden drilling program on the 100% owned **Fitton Project in S.A.** 
  - Maiden drill program at Fitton in 2012 had spectacular high grade uranium results:
    - 5m @ 2,540ppm U<sub>3</sub>O<sub>8</sub> (0.25%)
  - Substantial new drill intersections extends the strike length and depth of the uranium discovery at **Fitton**
    - 8m averaging 1393 cps (max 4120 cps)
    - 77m averaging 442 cps (max 2545 cps)
- Core's Albarta Project in the NT is in Australia's newest IOCG copper exploration hotspot
  - Core's Albarta Project covers over 2,000km² in Australia's new Aileron IOCG Province
  - Recent results up to 9% copper and >1,500g/t silver Blueys Prospect
  - Exploration currently underway and first drilling Q3



## Fitton uranium discovery: in proven world-class uranium mining province

- Large mines, mine developments and deposits within the region:
  - Beverley Mine 46Mlb  $U_3O_8$ Resource 7.7 Mt @ 0.27% (21,000T  $U_3O_8$ )
  - Four Mile Project 71Mlb  $U_3O_8$ Resource 9.8 Mt @ 0.33% (32,000T  $U_3O_8$ )
  - Mt Gee  $69Mlb U_3O_8$ Resource 51.0 Mt @ 0.06% (31,400T  $U_3O_8$ )
- Proven world-class uranium mining district
- Core's high-grade uranium discovery at Fitton only 25km from Beverley and Beverley North uranium mines and new Four Mile mine development



## Fitton: one of the best new uranium discoveries in the region since Four-Mile

- Core's exploration work and current drilling at Fitton has now confirmed that :
  - uranium mineralisation outcrops (up to 0.30% U<sub>3</sub>O<sub>8</sub> at surface)
  - uranium mineralisation contains high grade (up to 5m @ 0.25% U<sub>3</sub>O<sub>8</sub>)
  - indications of uranium mineralisation over substantial intersections (up to 77m @ 440 cps)
  - uranium mineralisation has been drilled and is open below 150m depth
  - the Scott Lee structure controlling mineralisation has been drilled over
     1km of strike and is open in both directions



# Fitton uranium exploration steps to new discovery

- ✓ Jan 2011 50ppm U3O8 in regional PIRSA sampling
- ✓ July 2011 600ppm found in first focussed mapping
- ✓ Nov 2011 soil sampling defines 1,500m long anomaly
- ✓ Jun 2012 3,300ppm high-grade uranium found in outcrop
- ✓ Nov 2012 Discovery RC drill program hits high grade uranium mineralisation
- ✓ April 2013 2<sup>nd</sup> RC drill program extends strike and depth of mineralisation
- ✓ May 2013 Assays to be received from 2<sup>nd</sup> RC drill program

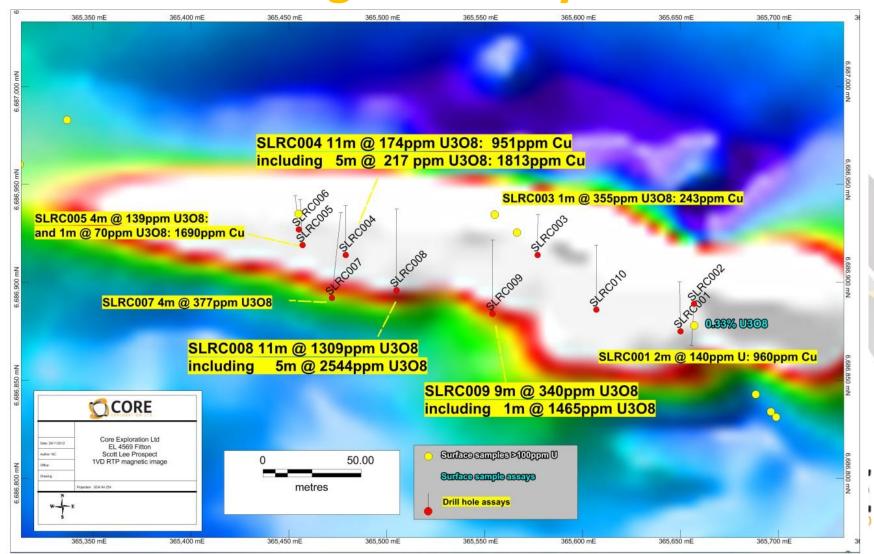


# Fitton high-grade uranium discovery: Exciting 2012/2013 drill results

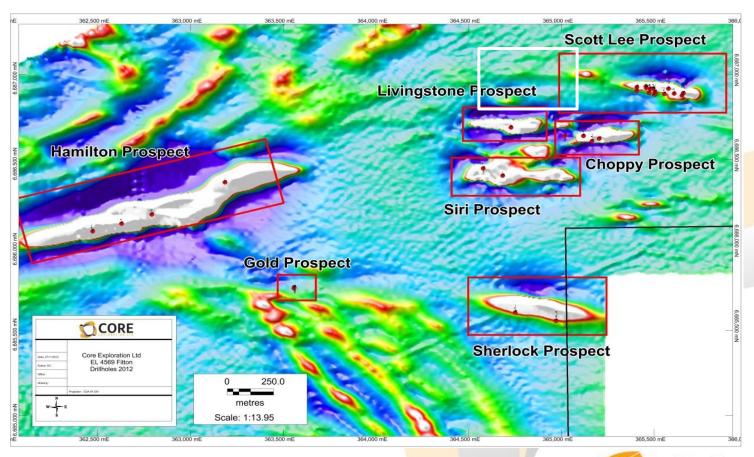
One of the best uranium discoveries in the region since Four Mile

Hole	ID	MGA_East	MGA_North	From	То	Width	U3O8 ppm	Cu ppm
SLRC0	001	365650	6686875	24	26	2	140	960
SLRCO	003	365577	6686914	25	26	1	355	243
SLRCO	004	365479	6686914	21	32	11	174	951
includ	ling			27	32	5	217	1813
SLRCO	005	365457	6686919	20	24	4	139	127
SLRCO	005			28	29	1	70	1690
SLRCO	07	365472	6686892	58	62	4	377	<100
SLRCO	800	365505	6686896	49	60	11	1309	<100
includ	ling			51	56	5	2544	<100
SLRCO	009	365554	6686884	60	69	9	340	<100
includ	ing			67	68	1	1465	<100
SLRC0	)11	365494	6686915	21	32	11	103	<100
SLRCO	)12	365501	6686880	76	105	29	100	155
SLRCO	)14	365406	6686901	33	34	1	121	<100
				48	49	1	184	<100
				63	64	1	273	<100
HLRCC	001	362471	6686080	51	54	3	104	<100

# Fitton: Scott Lee Prospect 2012 RC Drilling Discovery Results

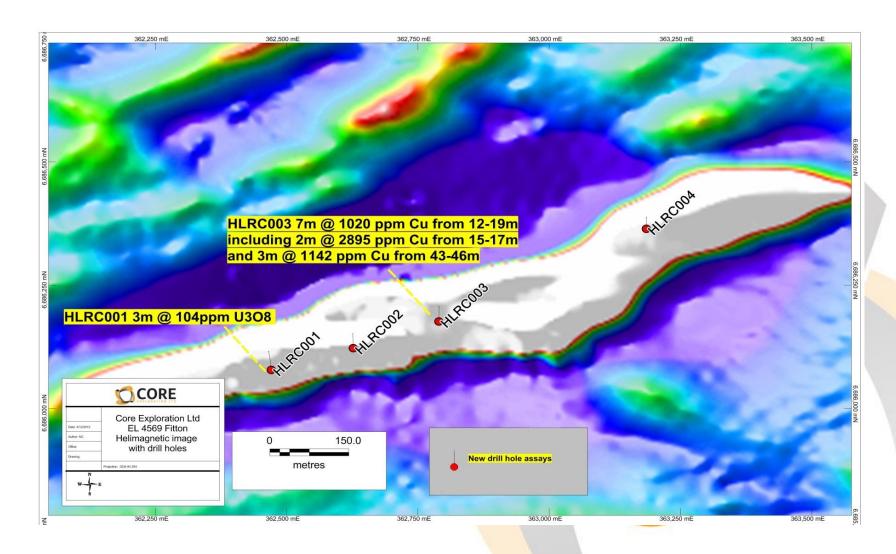


## Fitton RC Drilling Program: magnetic anomalies drilled in 2012

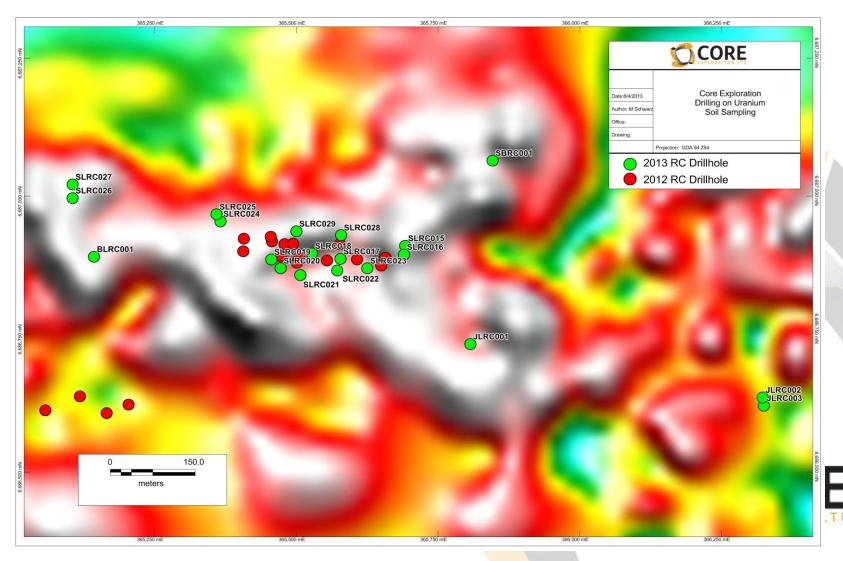




#### Also Hamilton Prospect: Large early stage uranium target



# Scott Lee 2013 RC Drilling: extends strike and depth



## Scott Lee 2013 RC Drilling: Assays to be received by May

#### Highly anomalous scintillometer measurements of current RC drilling include:

Hole ID	Easting MGA94	Northing MGA94	from	to	min (cps)	max (cps)	Interval (m)	Average (cps)
SLRC016	365690	6686895	12	17	300	490	5	396
SLRC017	365578	6686887	52	60	430	4120	8	1393
SLRC018	365528	6686897	36	40	300	520	4	370
			54	57	520	920	3	713
SLRC021	365507	6686858	113	118	340	1330	5	674
SLRC022	365572	6686866	78	80	350	1600	2	975
			88	97	320	3551	9	1234
SLRC023	365625	6686870	46	52	360	820	6	600
SLRC026	365105	6686997	26	28	400	5500	2	2950
SLRC028	365579	6686930	53	64	330	6190	11	2404
			53	60	1280	6190	7	3445
			71	87	330	2545	16	885
SLRC029	365500	6686937	81	158	174	1500	77	400
			81	98	277	660	17	458
			128	158	263	1500	30	519

Note: Counts per second (cps) readings are not directly or uniformly related to uranium grades of the rock sample measured, and should be used only as a preliminary indication of the presence of uranium minerals. All intersections are down-hole widths and true thickness is yet to be determined. Drill holes SLRC028 and SLRC029 were drilled down dip of the target mafic schist.

### Scott Lee 2013 RC Drilling: CPS readings an indicator of grade

The figure on the next slide compares the scintollometre (counts per seconds - CPS) readings between:

- the first RC drill program SLRC001-SLRC0014)
- and recently completed second RC program (SLRC015-SLRC029).

Results from the first round drilling in 2012 showed a correlation between high cps readings and high uranium assay grades

Therefore, the high CPS readings from the current drilling indicate potential for further high grade intersections at Scott Lee



# Scott Lee 2013 RC Drilling: Assays to be received in May

Comparison of CPS readings between 2012 and 2013 RC drilling at Scott Lee:

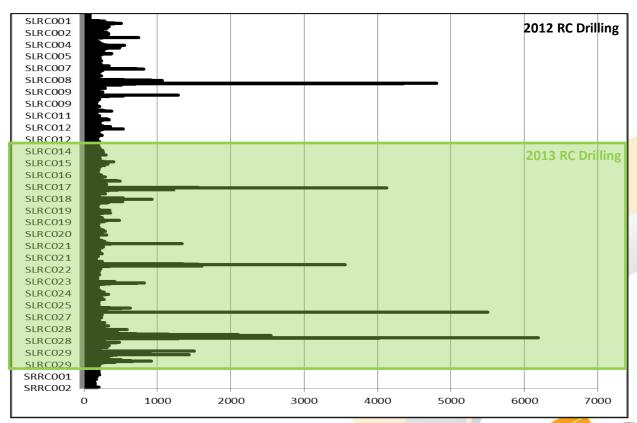
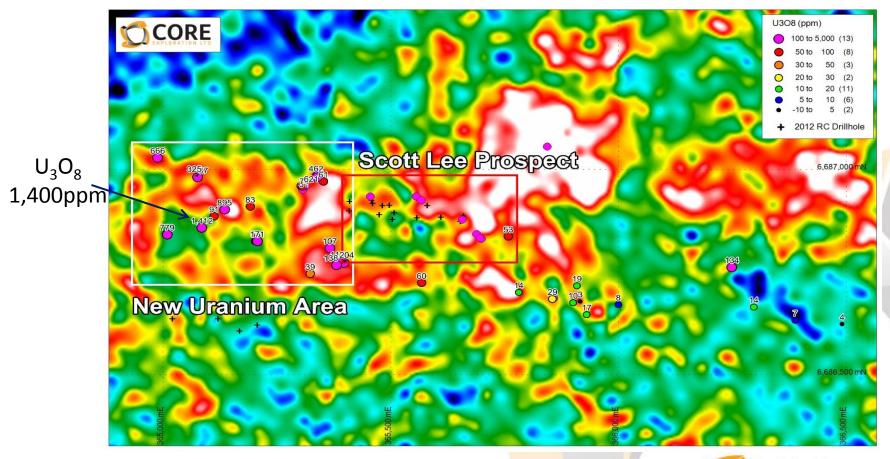


Figure 1#. Comparison of scintollometre readings (CPS) of drilling on Scott Lee Prospect, Fitton Project.

Note: Counts per second (cps) readings are not directly or uniformly relat<mark>ed to ur</mark>anium grades of the rock sample measured, and should be used only as a preliminary indication of the presence of uranium minerals. All intersections are down-hole widths and true thickness is yet to be determined. Drill holes SLRC028 and SLRC029 were drilled down dip of the target mafic schist.

#### Western extension to Scott Lee - more uranium found at surface





# Fitton uranium 2013: next stages of work

- Receive and report assays from recently completed RC drill program
- Interpret data with a focus on predicting high-grade for next drill program
- Plan further RC drilling to extend mineralisation and target high grade
- Possible diamond drilling component in next drill program for structural control on high grade
- Review petrophysics of mineralised sections to define best electrical geophysical method to target more high grade at Scott Lee
- Roll-out successful geophysics along with mapping and sampling to target more mineralisation over larger Fitton area



## Uranium prices forecast to rise: Uranium the standout commodity?

#### Prices

- Uranium prices plummeted post GFC and Fukushima
- Prices have created unsustainable underinvestment in supply

#### Supply

- Price needs to increase for supply to keep up with growing demand
- End of the MegaTons-to-MegaWatts program late 2013 removes more supply

#### Demand

- New government in Japan assessing re-start up of reactors in 2013
- Demand continuing to grow in China and India

#### Uranium Sector

- Increased M&A (average value US\$3.80/lb\*)
- Exploration success being recognised (TSXV.AMW)



<sup>\*</sup> Source: Cantor Fitzgerald Canada Research

#### **Forward Exploration Program**

Project	Q2 2013	Q3 2013	Q4 2013	
Fitton, S.A	RC Drilling	Geophysics	Drilling*	
Albarta, N.T	Sampling/Mapping	Sampling/Mapping	Sampling/Mapping	
	Soils	Soils	Soils	
	Geophysics	Geophysics	Geophysics	
		Drilling*	Drilling*	



#### **Summary**

- Core's shareholders are exposed to the immediate upside and in the future as uranium prices rebound of the outstanding new discovery on the 100% owned **Fitton Project**, in S.A. Uranium mineralisation at **Fitton**:
  - Outcrops
  - Contains high grades
  - Drilled from surface and open at 150m depth
  - Within structure that is over 1km long
  - In world-class uranium mining province
  - RC Drill assays expected by May 2013
- Core's Albarta Project is a valuable position in new Australian copper IOCG exploration hotspot in the NT:
  - Core has rights to 20 tenements covering over 2,000km<sup>2</sup> in a new IOCG terrain
  - Multiple occurrences of grade copper mineralisation at surface a strong indicator of prospectivity
  - Ground-breaking IOCG exploration strategy underway
  - Exploration underway targeting drilling Q3 2013

#### **CXO: Corporate Summary**

#### **Capital Structure**

•	Shares on	issue	49M
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• Options 11M

• Share Price ~\$0.07c

Market Cap (undiluted) ~\$3.5M

• Cash (31 Dec 2012) \$1.7M







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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.