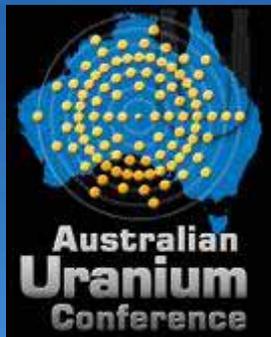


Pepinini Minerals Limited



July
2009

Diversified Near Term Uranium Production Company



Capital Structure

(12th July, 2009)

- 78,202,499 shares on issue
- Currently 1,992 shareholders
- 57% of issued capital held by top 20 shareholders
- Currently capitalised at AUD\$24 million
- Current cash AUD\$11.5 million (+ AUD\$6 million expenditure from Sinosteel)

12 month share price



Corporate



Norman Kennedy
Chairman & Managing Director
Exploration Geologist for over 30 years



Christopher Lambert
Non-executive Director
London based financial background



Rebecca Holland-Kennedy
Executive Director & Company Secretary
Administration and Exploration Geologist
for over 30 years



Albert Harris
Non-executive Director
Management of Petroleum and
Exploration Industry companies
for over 55 years

Management

Phil Clifford

Exploration Manager

Ex Rio-Tinto

Dr Lachlan Rutherford

Exploration Manager – Musgrave SA

Ex Primary Industries & Resources SA

Gary Ferris

Exploration Manager – Queensland

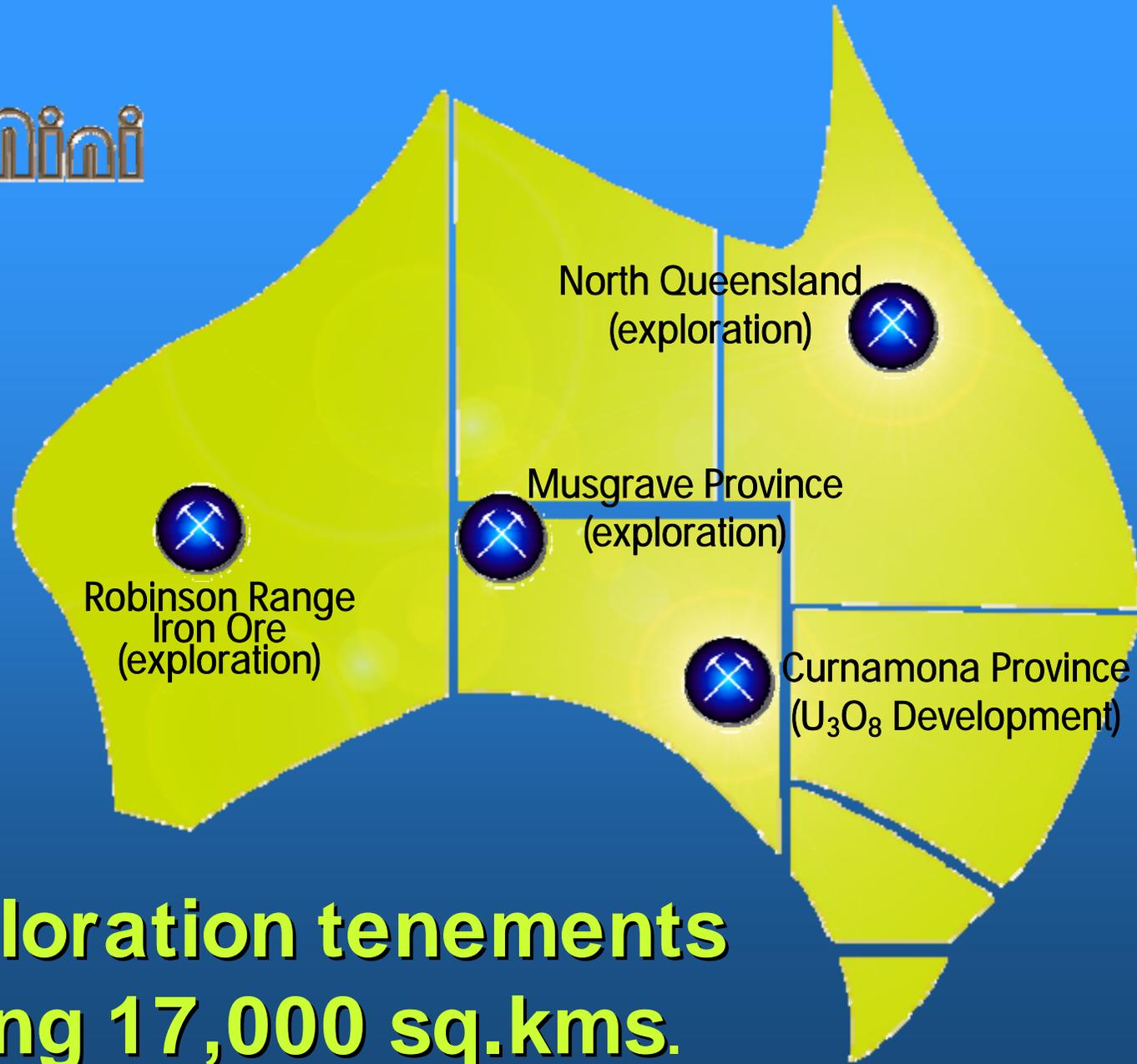
Ex Primary Industries & Resources SA

Colin Skidmore

Exploration Manager Uranium & New Projects

Ex Uranium One (Honeymoon)

Pepinini



**43 exploration tenements
covering 17,000 sq.kms.**

Uranium Projects Summary

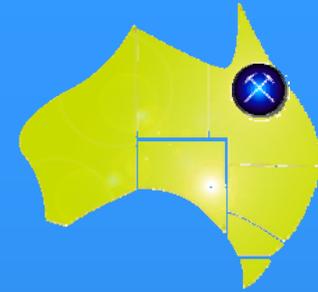
- **Advanced South Australian uranium project targeting production for 2011**
- **19.8mlb U₃O₈ JORC Compliant Inferred Resource**
- **Strategic alliance with Sinosteel Corporation to jointly develop the Uranium Project at Crocker Well**
- **26 known primary uranium prospects ready to drill for potential additional U₃O₈ Resource**
- **Large portfolio of Queensland exploration tenements prospective for uranium**



Queensland Uranium Projects

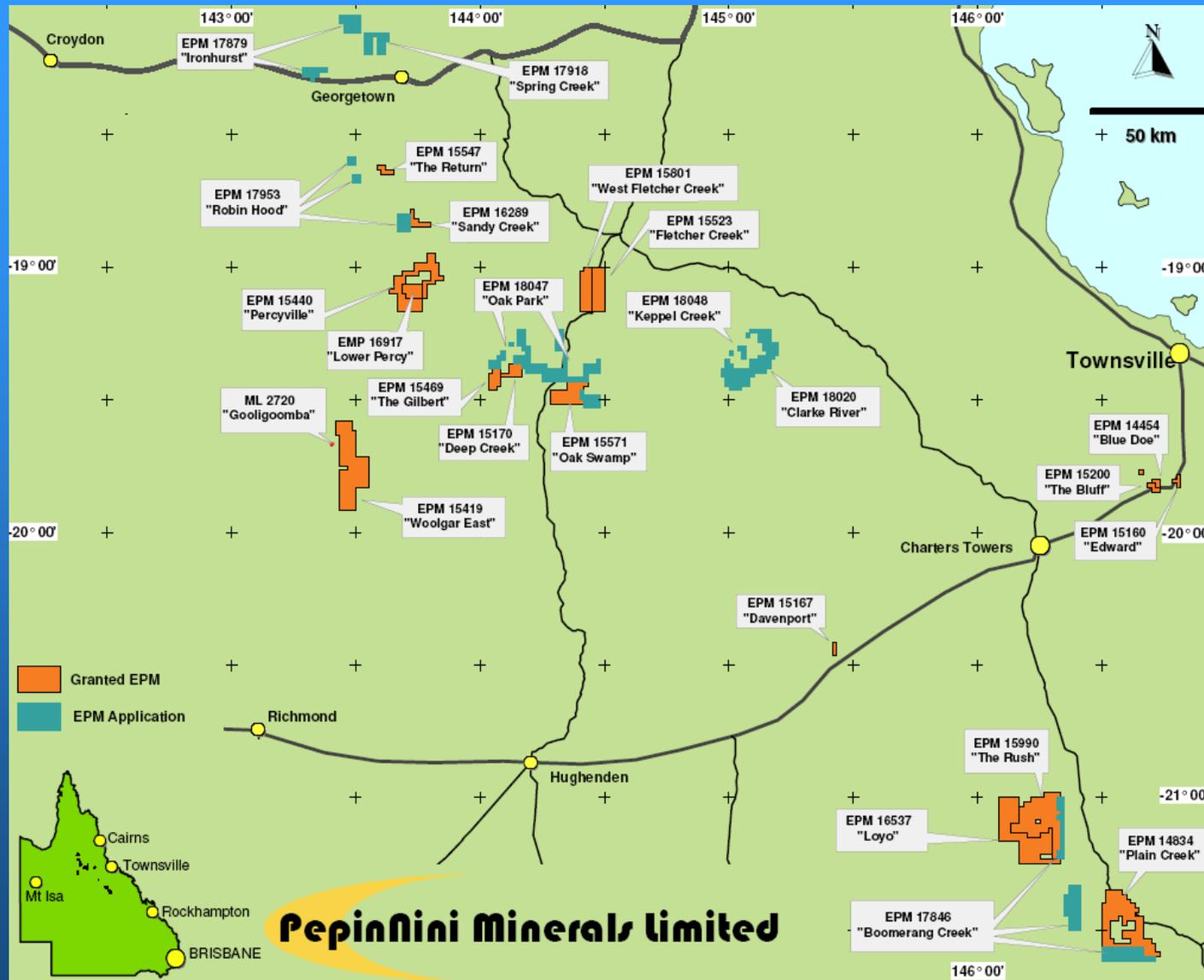


Pepinini



100%
interest in
25
Tenements
2,975
sq.kms

The tenements
are prospective
for gold, copper,
base metals,
uranium,
phosphate and
potash



North Queensland Project



Uranium Targets

- Uranium occurrences which have been inadequately tested by previous explorers and favorable geological settings for uranium mineralisation have been identified in 15 tenements
- Principal targets are hard rock volcanic type deposits similar to the nearby Maureen and Ben Lomond Uranium Deposits. Ben Lomond represents one of the highest value per tonne uranium resources in Australia with an average grade of 0.25% U_3O_8 and molybdenum credits of 0.15%
- Uranium enriched phosphate prospects have also been identified with P_2O_5 grades of 22% and U_3O_8 of 0.42%

Crocker Well Uranium Project South Australia



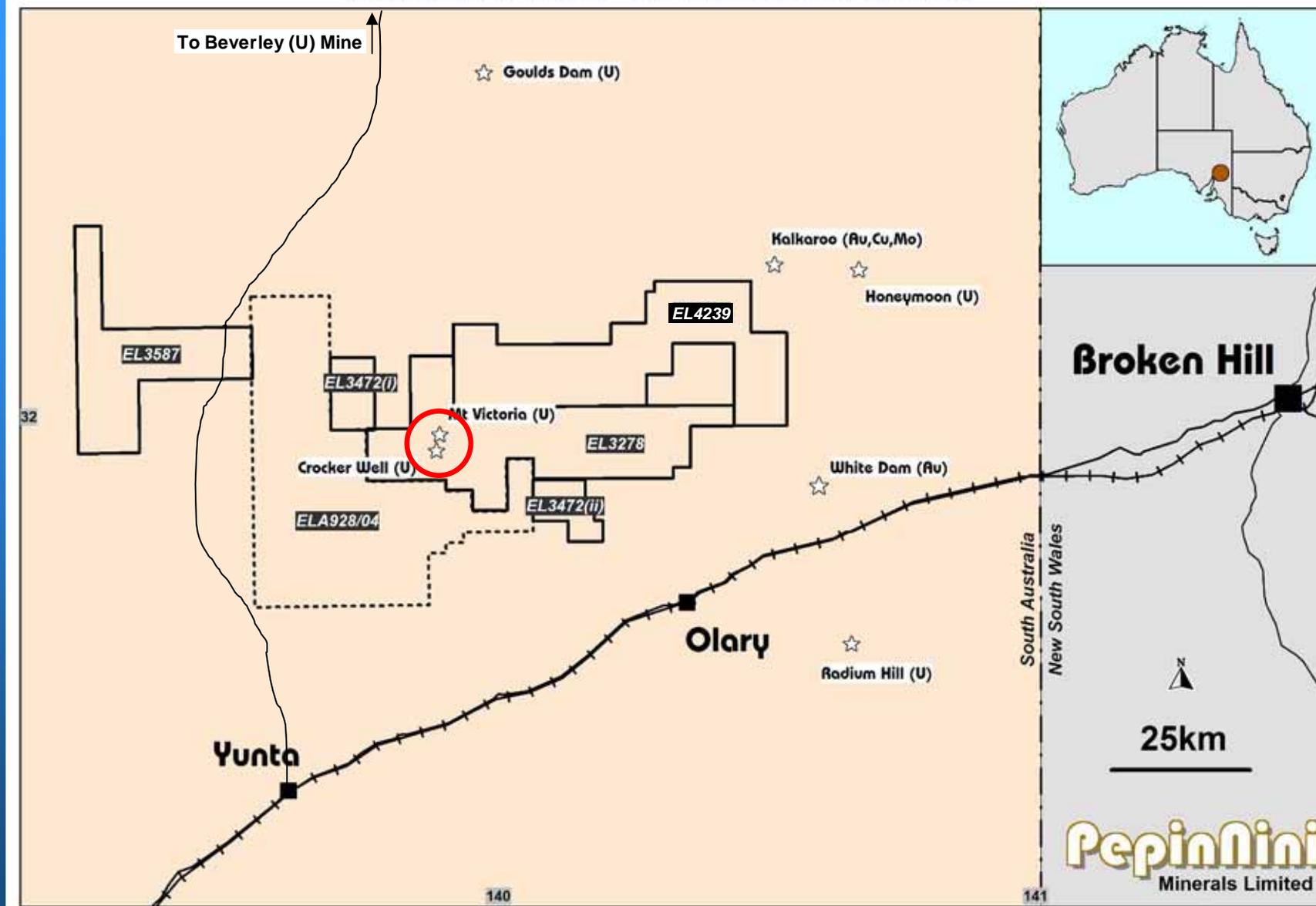
Curnamona Province Project

(40% PepinNini 60% Sinosteel Corporation)

Advanced Uranium Project – Crocker Well

- Strategic alliance with Sinosteel Corporation to jointly develop the Uranium Project
- Aim to be in production in 2011
- More than AUD\$14million already committed to the completion of a Bankable Feasibility Study
- Close to established transport corridor currently used by the Beverley Uranium Mine
- 26 additional known uranium prospects to be investigated

Curnamona Project - Tenement Location Plan



5 Tenements covering 3,778 sq kms

JORC Resource

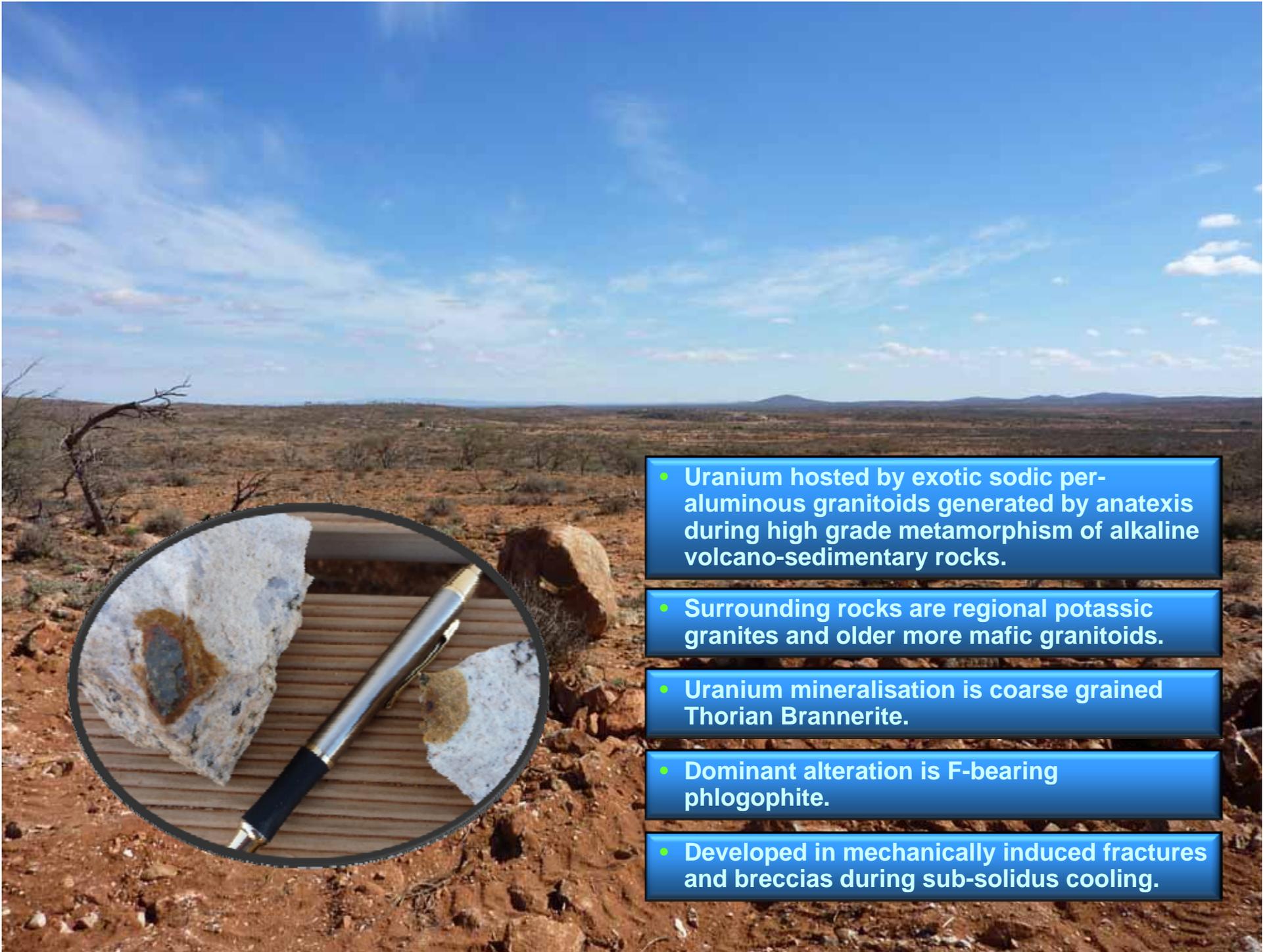
Crocker Well and Mt Victoria Deposits

(estimated by Hellman & Schofield September, 2005)

Category	Pounds (U ₃ O ₈)	Tonnes (U ₃ O ₈)	Cut-off Grade	Ave. Grade
Inferred	19,800,000 lbs	8,981 tonnes	250ppm	447ppm
Inferred	14,850,000 lbs	6,736 tonnes	300ppm	529ppm



Current drilling program designed to upgrade sufficient Inferred Resource to Indicated or Measured status to allow production of 300tpa to 400tpa U₃O₈ for approximately 7 years



- Uranium hosted by exotic sodic per-aluminous granitoids generated by anatexis during high grade metamorphism of alkaline volcano-sedimentary rocks.

- Surrounding rocks are regional potassic granites and older more mafic granitoids.

- Uranium mineralisation is coarse grained Thorian Brannerite.

- Dominant alteration is F-bearing phlogopite.

- Developed in mechanically induced fractures and breccias during sub-solidus cooling.



More than 220 boreholes completed in 2008 for resource verification.

An additional 77 boreholes completed in 2009.

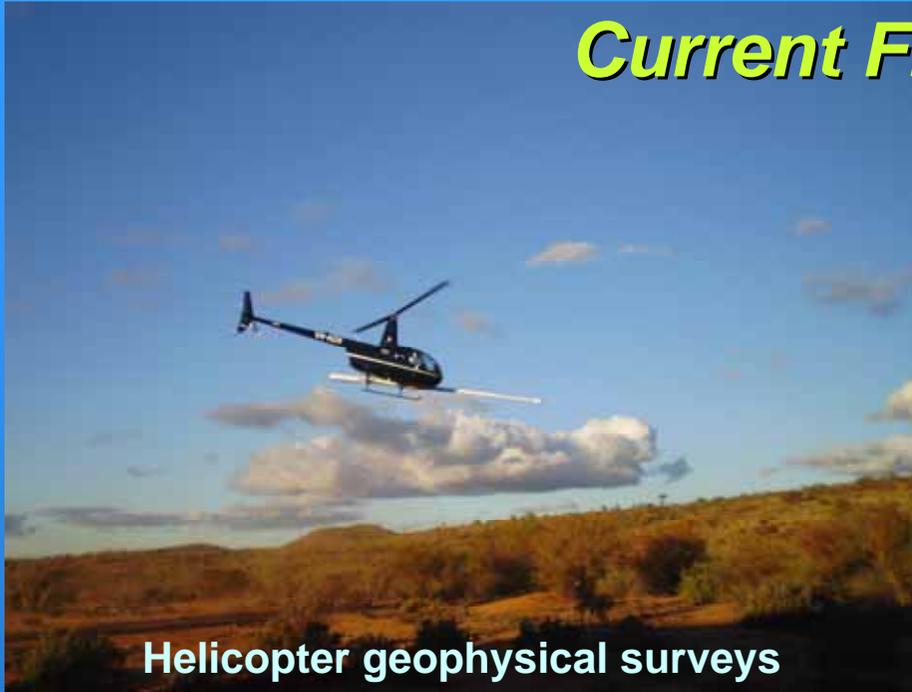


Field Camp at Crocker Well



Ministerial Visit 20th January, 2009

Current Field Activities



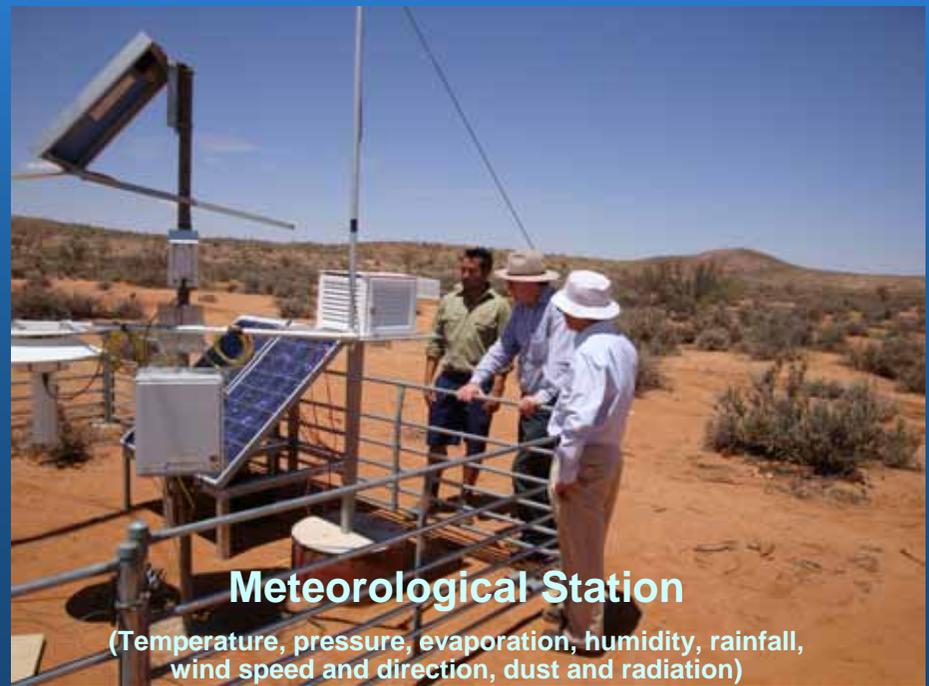
Helicopter geophysical surveys



Drilling



Sampling



Meteorological Station

(Temperature, pressure, evaporation, humidity, rainfall, wind speed and direction, dust and radiation)

Recent Developments

- **Lodgement of a Referral under the Commonwealth Government Environment Protection and Biodiversity Conservation Act for the development of a uranium mine at Crocker Well (August, 2008)**
- **Submission of an application for a Mining Lease at Crocker Well – (September, 2008)**
- **Consultation with the traditional owners, government, pastoralists and the local community is progressing**
- **Subject to approvals, construction, commissioning and operation is scheduled for 2010 and 2011**





Crocker Well

Bankable Feasibility Study

Resource
Validation



Mining



Metallurgical testing

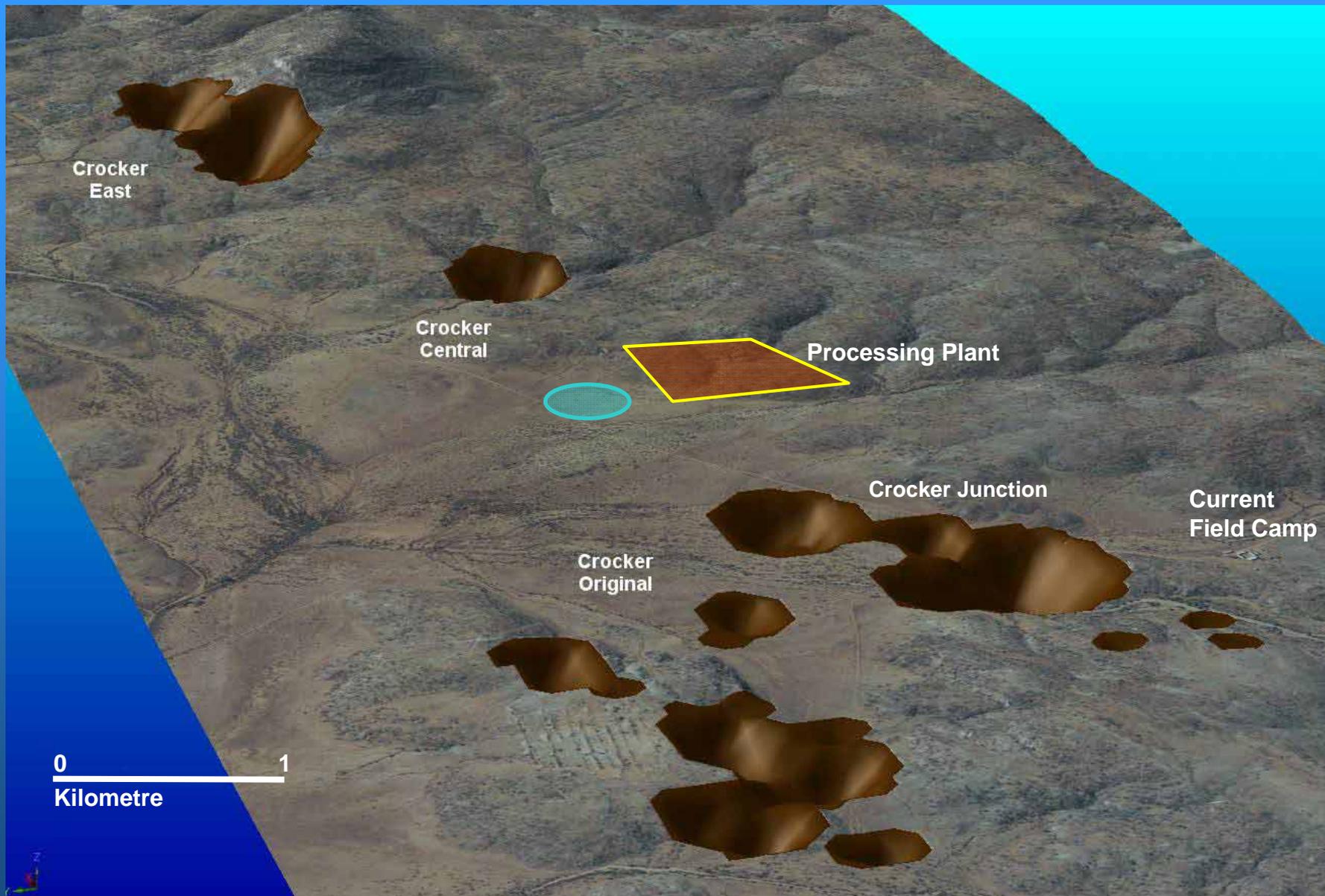


Regulatory Approvals and EIS

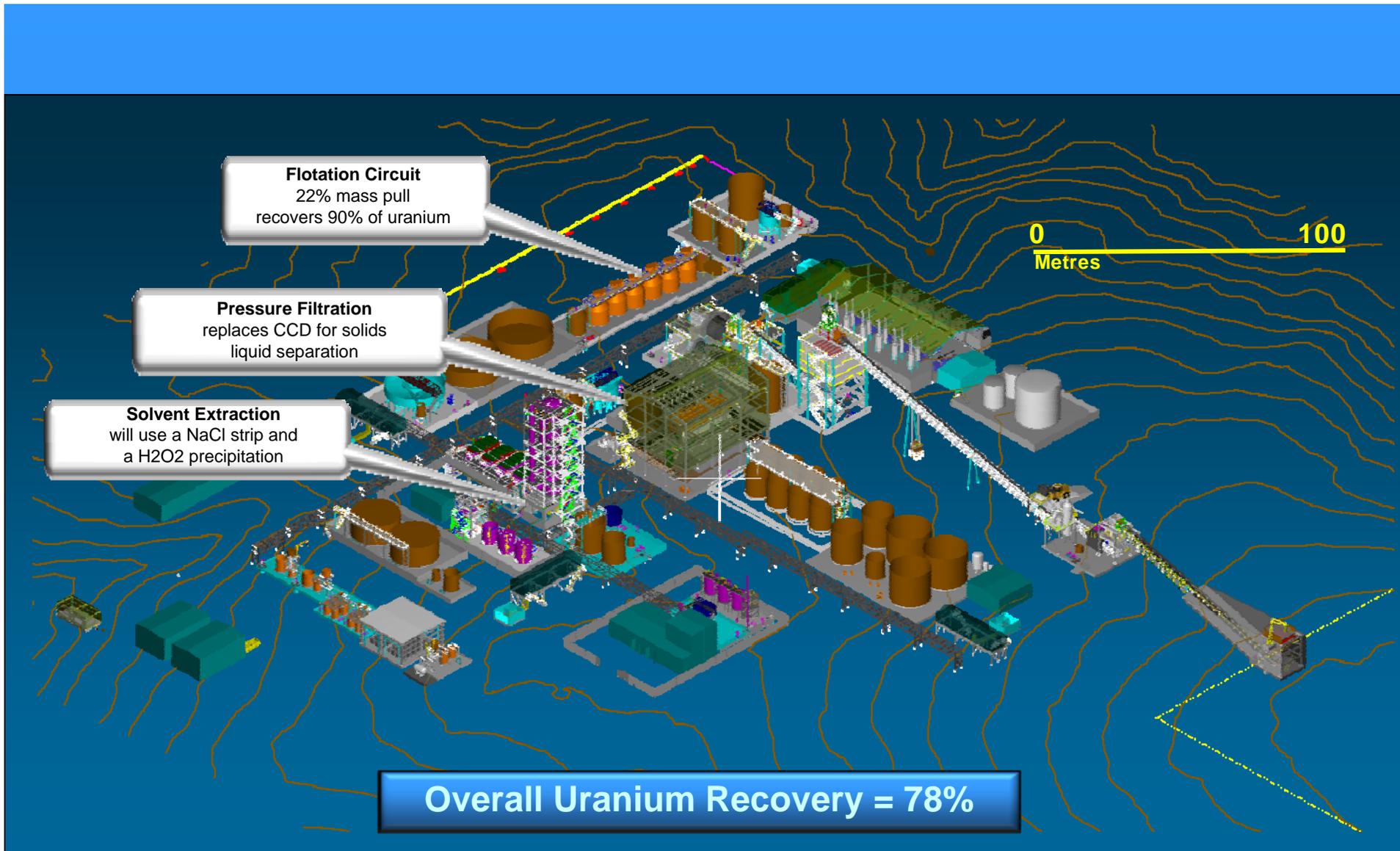


BFS





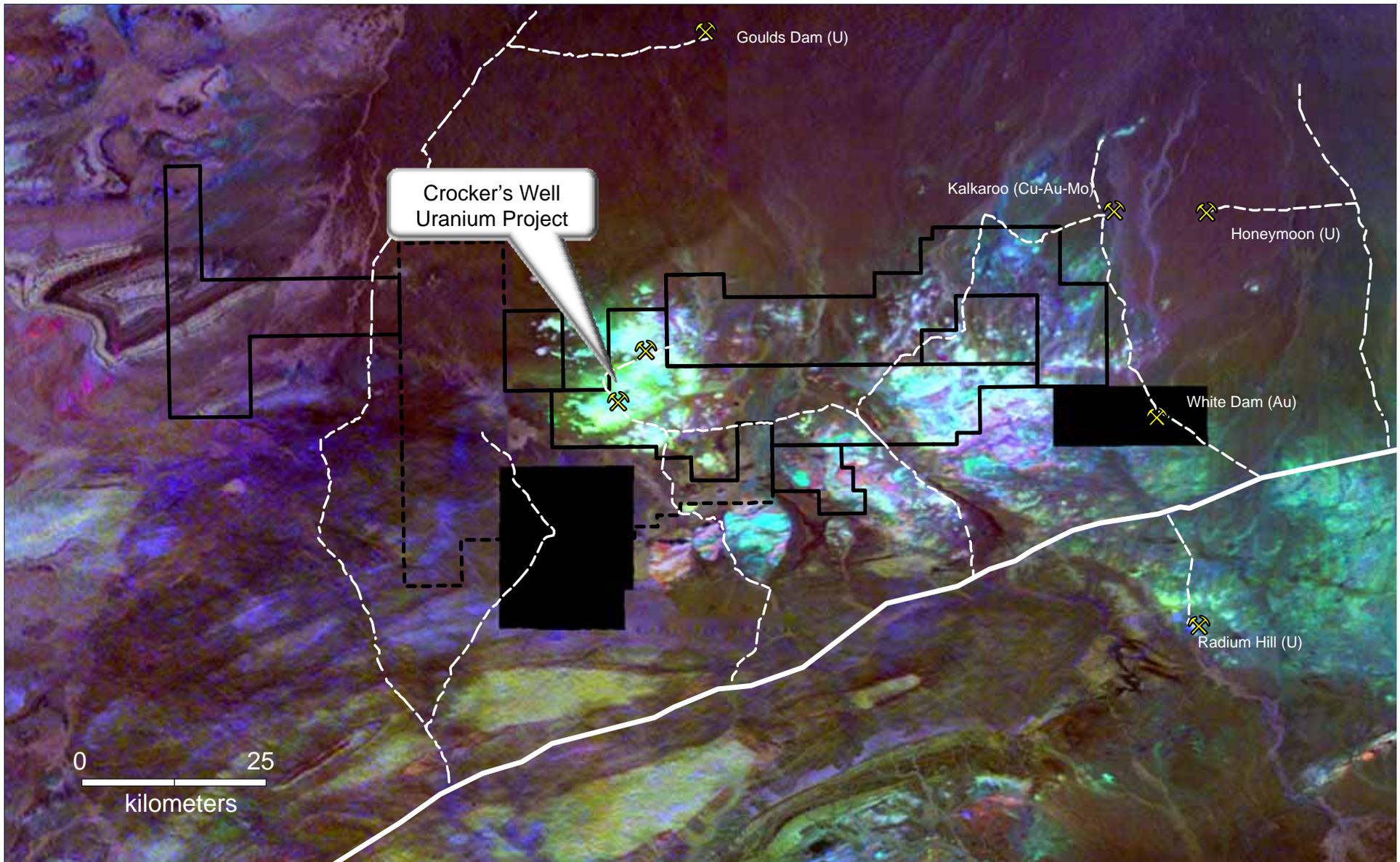
Preliminary Pit Optimisation



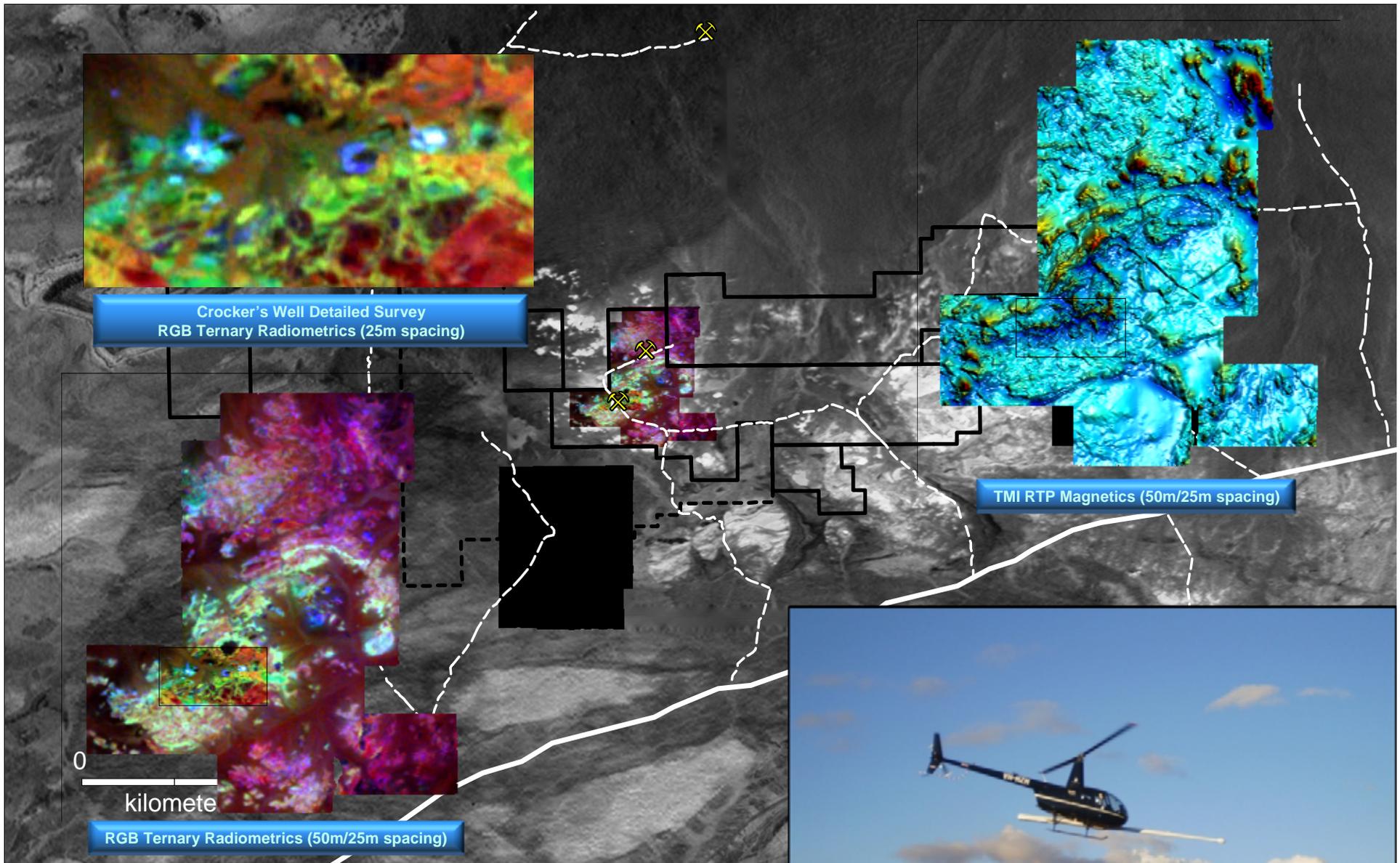
Current Proposed Processing Plant Layout

	2007				2008				2009				2010				2011			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Resource Verification (+Infill Drilling)	[Blue Bar]				[Blue Bar]				[Blue Bar]											
Test Work	[Green Bar]				[Green Bar]				[Green Bar]											
Pilot Plant																				
Concept Evaluation and Baseline		Concept				Baseline														
MARP and Permits/Licences							Proposal			MARP	Permits									
Mine Plan			[Red Bar]			[Red Bar]														
Bankable Feasibility Study (BFS)			[Dark Blue Bar]				[Dark Blue Bar]													
Project Assessment																				
Detailed Design																				
EPCM Contract																				
Construction																				
Commissioning and Begin Operation																				

Crocker Well - Project Schedule

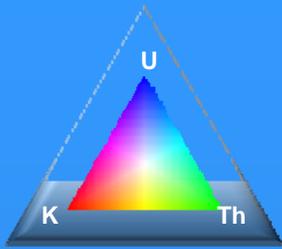


- 26 additional known primary uranium prospects other than Crocker Well and Mt Victoria
- Potential for intrusion related, unconformity and palaeo-channel sandstone uranium deposits



- Recent High Resolution Geophysics at 50m and 25m flight lines at 40m height
- Magnetics, Radiometrics & Gravity datasets collected





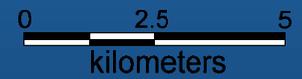
0.29% U_3O_8 Rockchips

0.89% U_3O_8 Rockchips

2.4% U_3O_8 Rockchips

2.6% U_3O_8 Rockchips

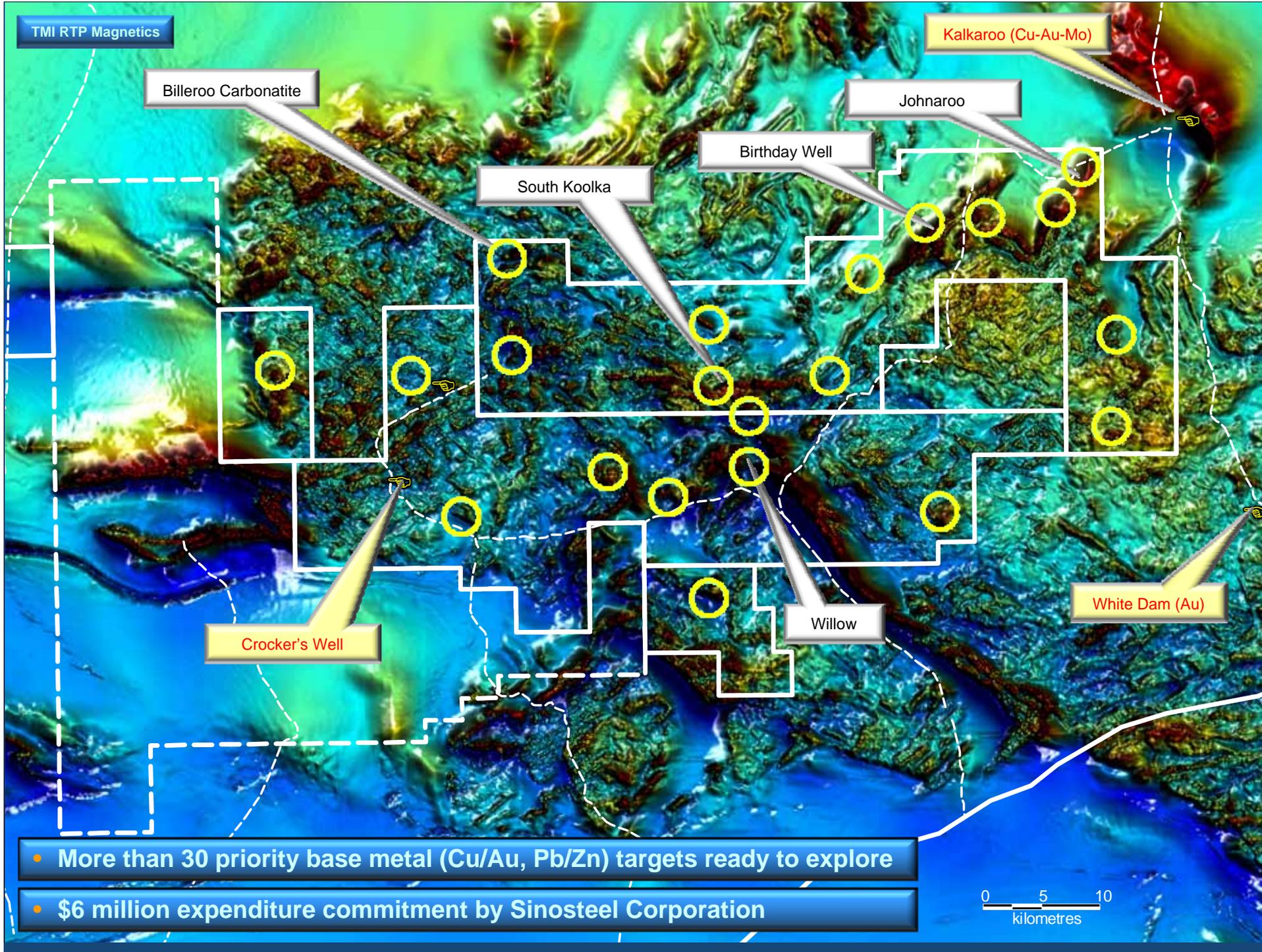
10m @ 0.07% U_3O_8
1.2m @ 0.17% U_3O_8



RGB Ternary Radiometrics

TMI RTP Magnetics

- Known uranium deposits better characterised
- Many new targets identified, some very close to planned development
- Anomalous Rock chips up to 2.6% U_3O_8 in known but untested targets
- Allows robust geological model to be interpreted from solid geology and structural architecture
- Ground truth and exploration drilling commences Q3/2009



- More than 30 priority base metal (Cu/Au, Pb/Zn) targets ready to explore
- \$6 million expenditure commitment by Sinosteel Corporation



Thank You

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- The information in this presentation that relates to Exploration Results and Mineral Resources is based on information compiled by Norman Kennedy BSc MAusIMM. Norman Kennedy is the Managing Director of PepinNini Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Norman Kennedy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

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