

Crocker Well Uranium Project South Australia

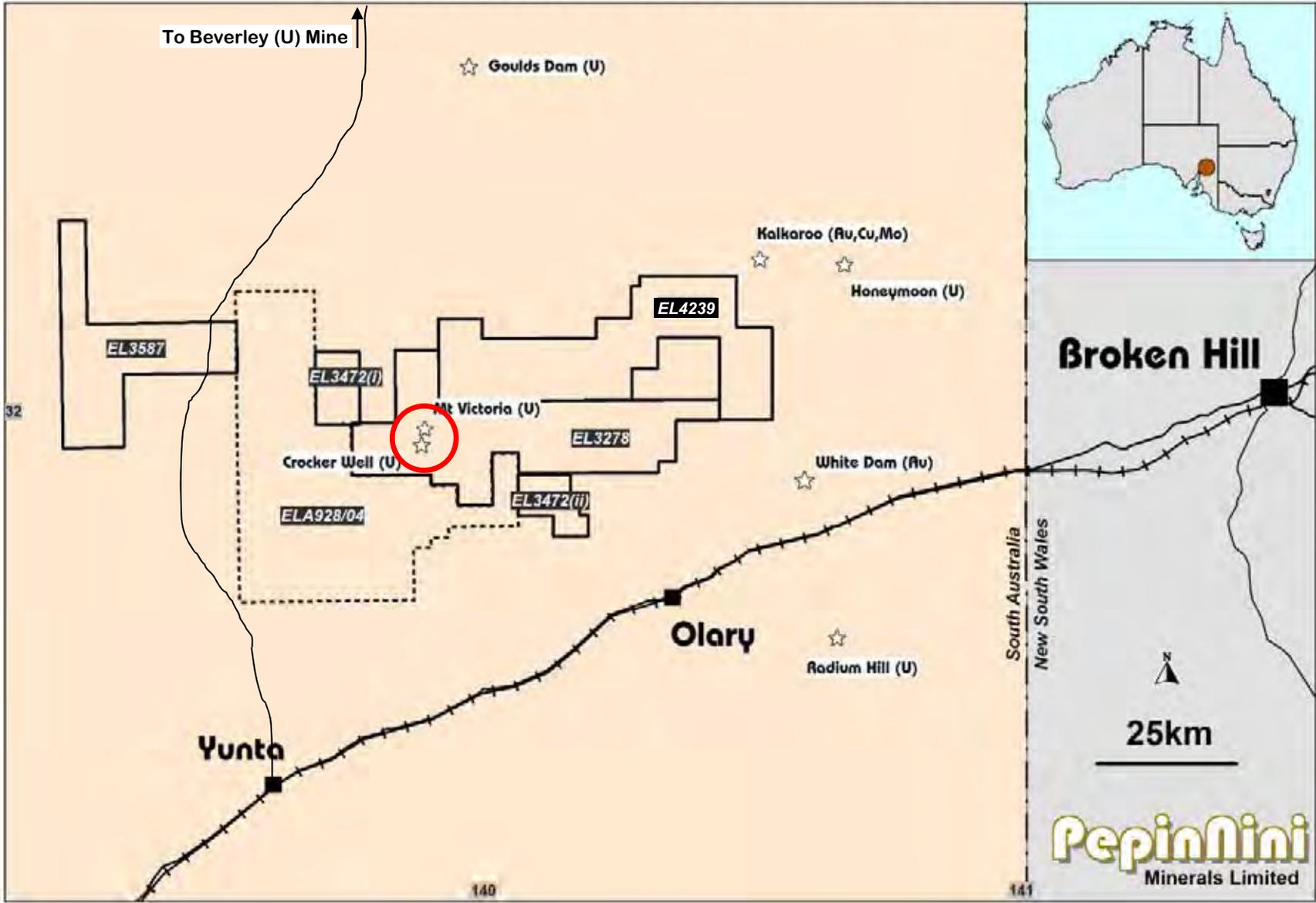


Crocker Well Introduction

(40% PepinNini 60% Sinosteel Corporation)

- Originally discovered in 1951 by South Australian Department of Mines & Energy following up a regional airborne radiometric survey.
- Further exploration by Esso in 1970's but abandoned in 1978.
- Current tenure picked up as vacant land by Norman Kennedy in 2005 primarily for Copper-gold & base metals.
- After a review of the uranium potential, a strategic alliance with Sinosteel Corporation was established in 2007 to jointly develop the Uranium Project.
- Aim is to be in production in 2012.
- More than AUD\$14million already committed to the completion of a Bankable Feasibility Study.
- Project managed by **SPCM** (Sinosteel-PepinNini Curnamona Management Pty Ltd)

Curnamona Project - Tenement Location Plan



5 Tenements covering 3,778 km²

Geological Setting

(Ethiudna Granitoid Complex)



- 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; older more mafic granitoids; and migmatitic meta volcano-sediments

- Uranium mineralisation is coarse grained Thorium Brannerite.

- Dominant alteration is F-bearing phlogopite.

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



**“Adamellite” – Phlogopite Trondhjemite
(main host to mineralisation)**



**Sodic Alaskite
(minor host to mineralisation)**



**“Breccia” – Phlogopite matrix
(minor host to mineralisation)**



**Granodiorite & Tonalite
Older intrusives (xenoliths)**

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 U₃O₈ for approximately 7 years

SPCM Drilling

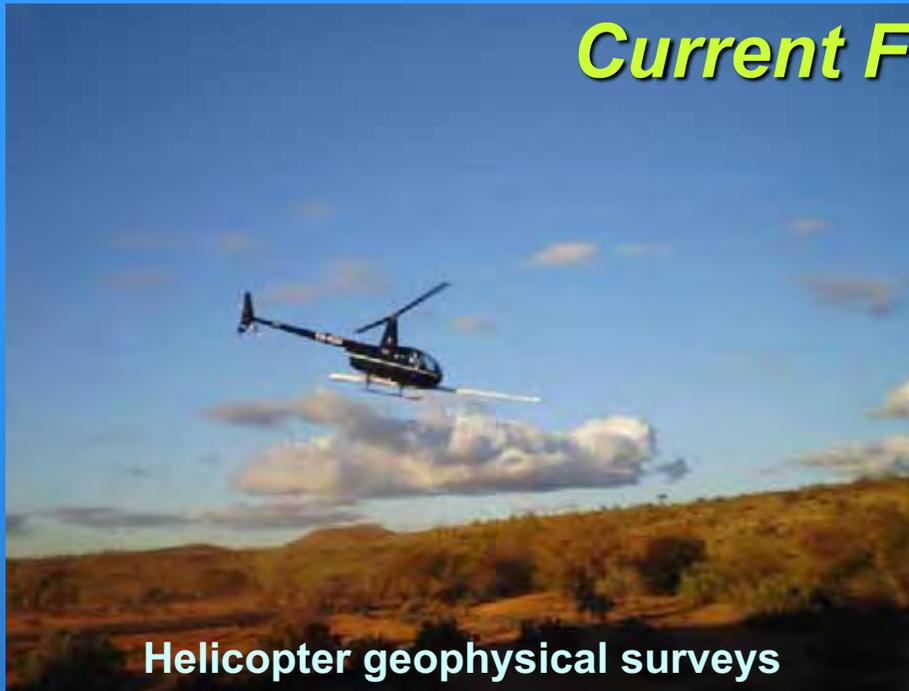


- 19 core holes (1,938m)
- 294 RC holes (29,658m)
- Plus Geotechnical & Hydro-geological holes



Field Camp at Crocker Well

Current Field Activities



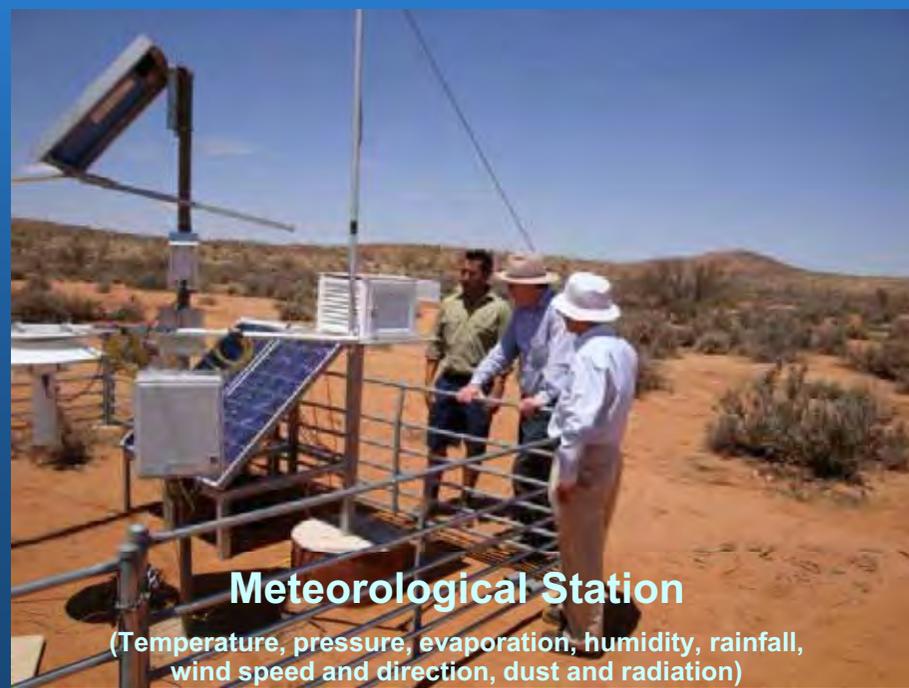
Helicopter geophysical surveys



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 2011 and 2012**





BFS Partners

Resource Estimation

H&S

Mining



Metallurgical Testing

amdel
MINERAL LABORATORIES

Ansto

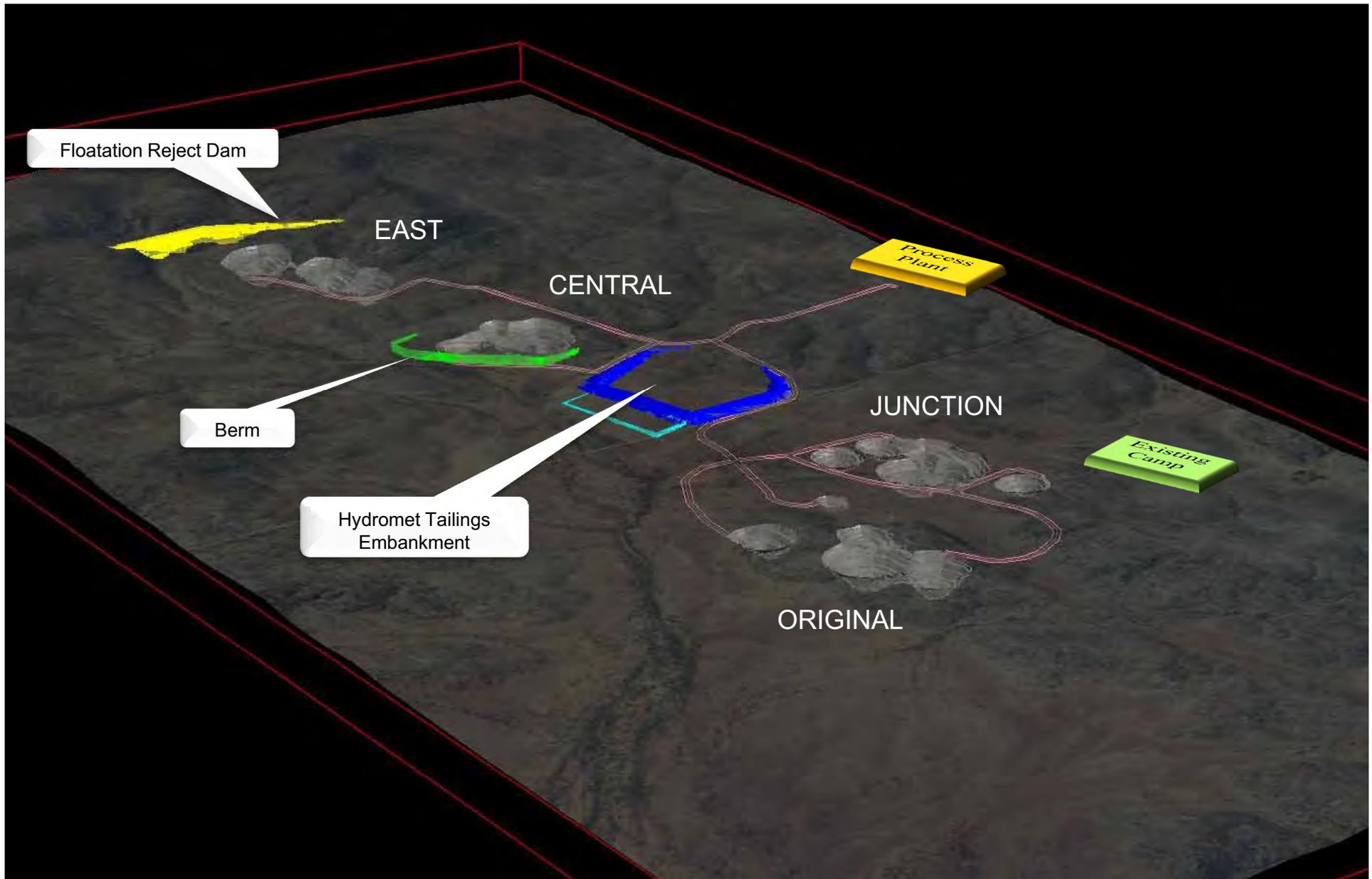
Regulatory Approvals and EIS

URS

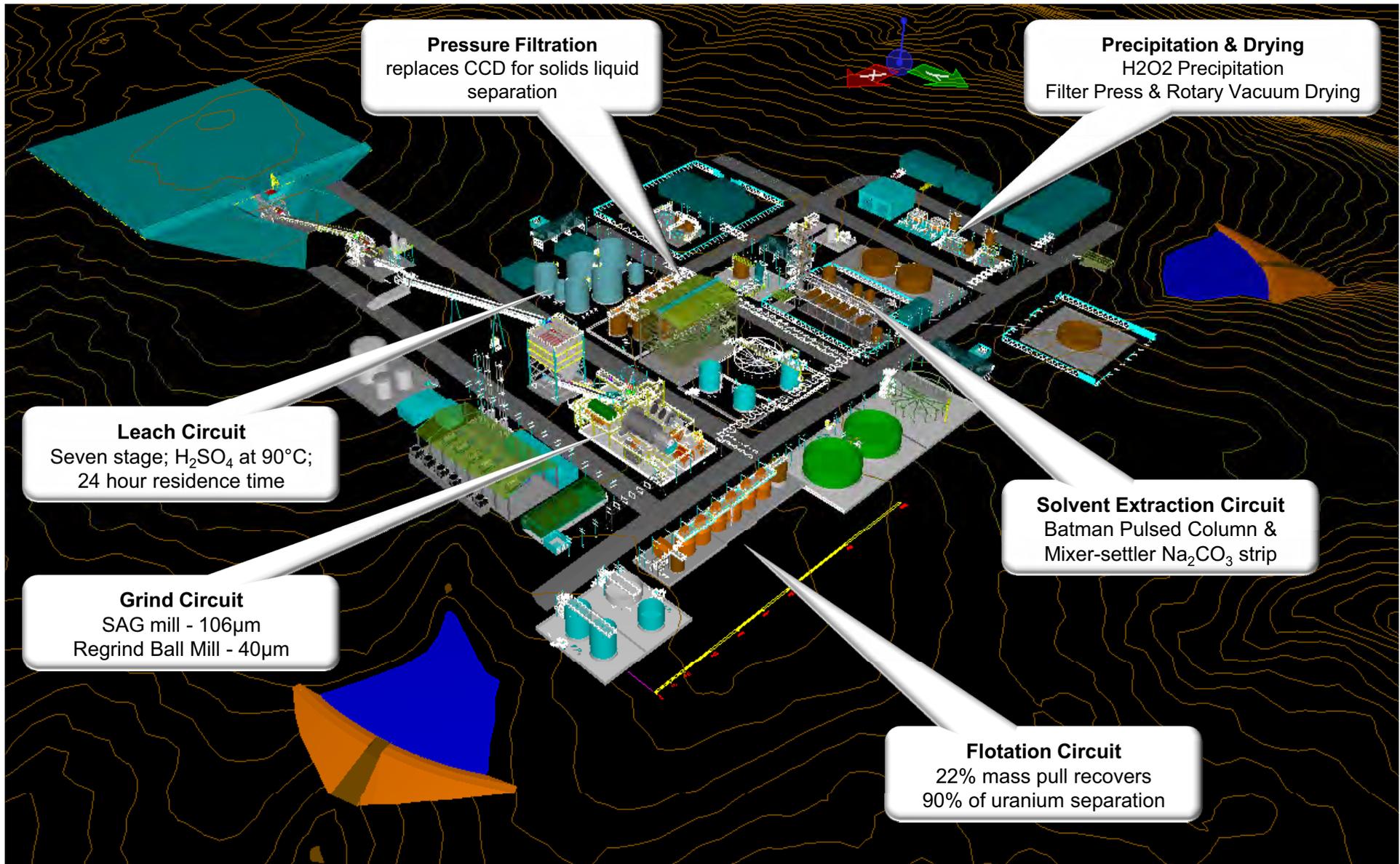
KBR

Bankable Feasibility Study

BATEMAN
- process plants that work



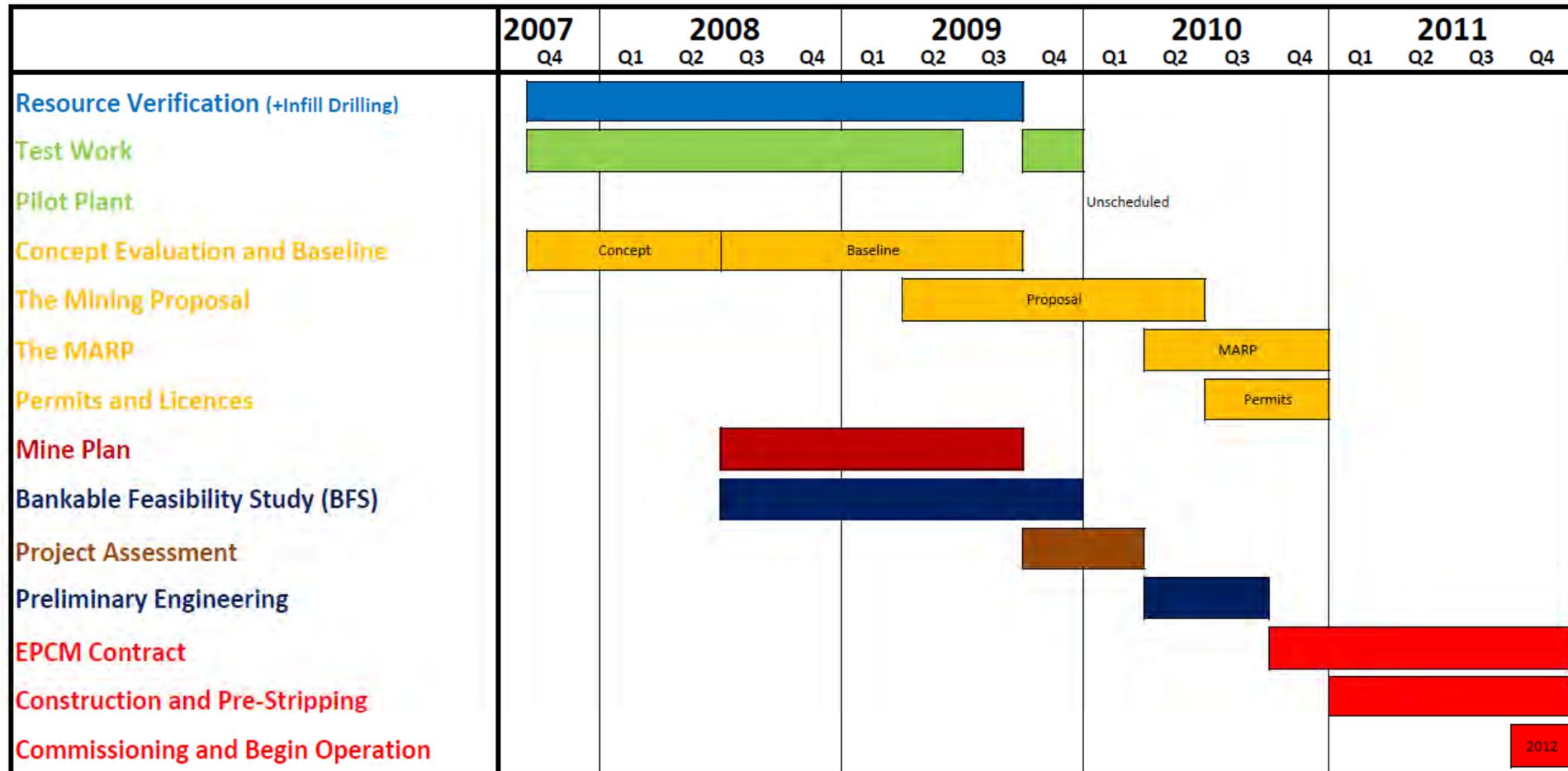
Preliminary Mine Design



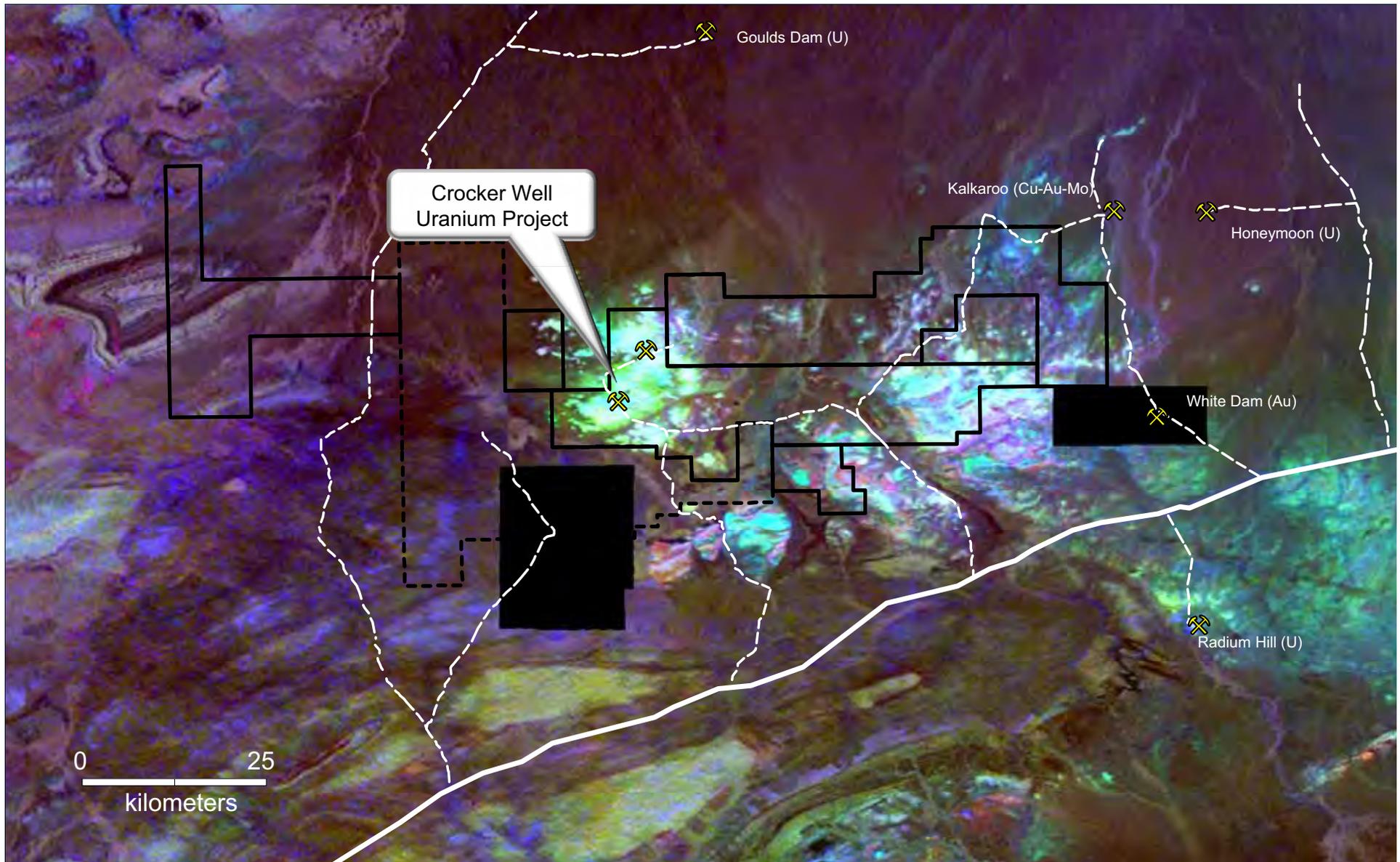
Overall Uranium Recovery = 80%

Current Proposed Processing Plant Layout

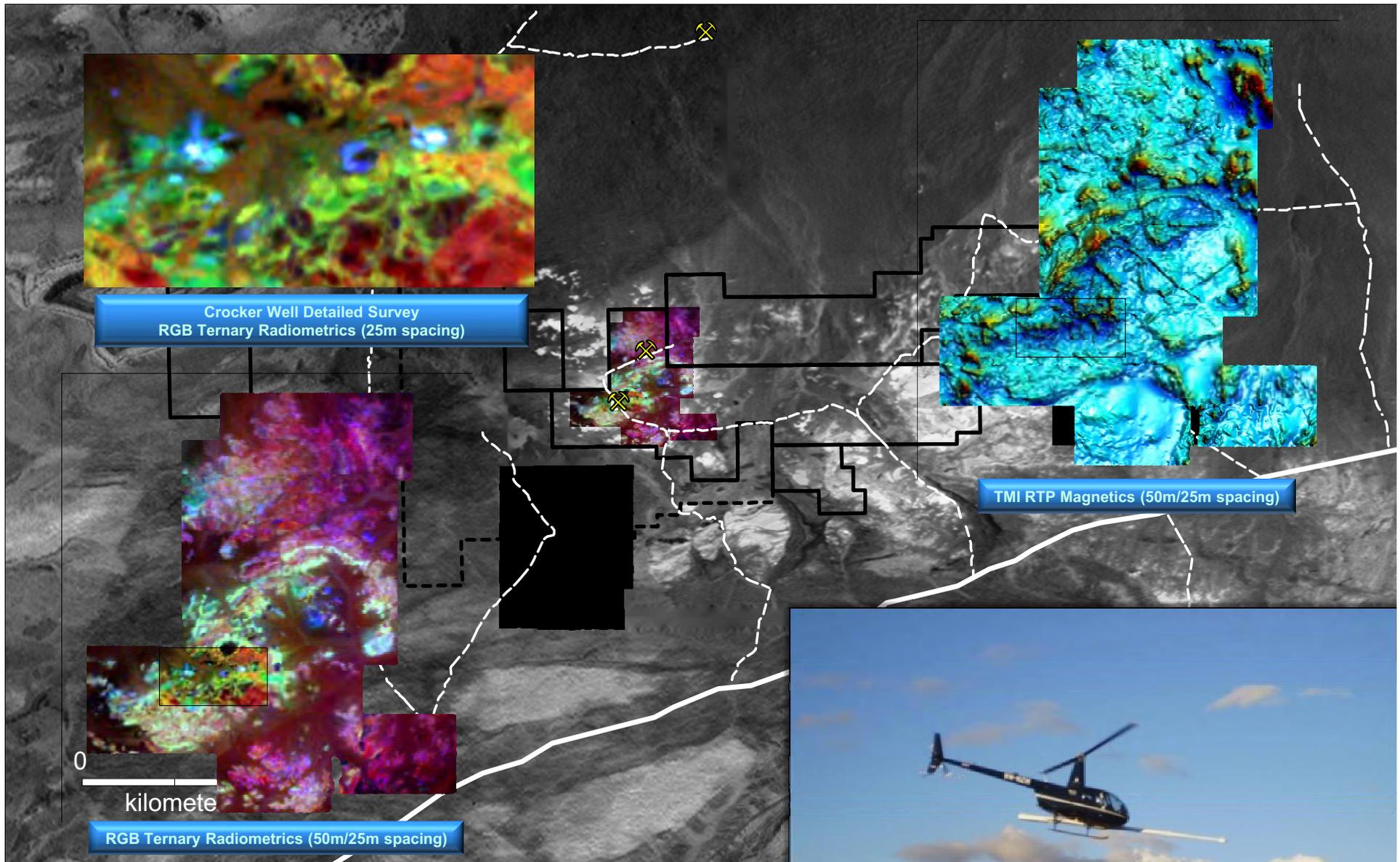
Crocker Well Uranium Mine - Basic Project Schedule



Crocker Well - Project Schedule

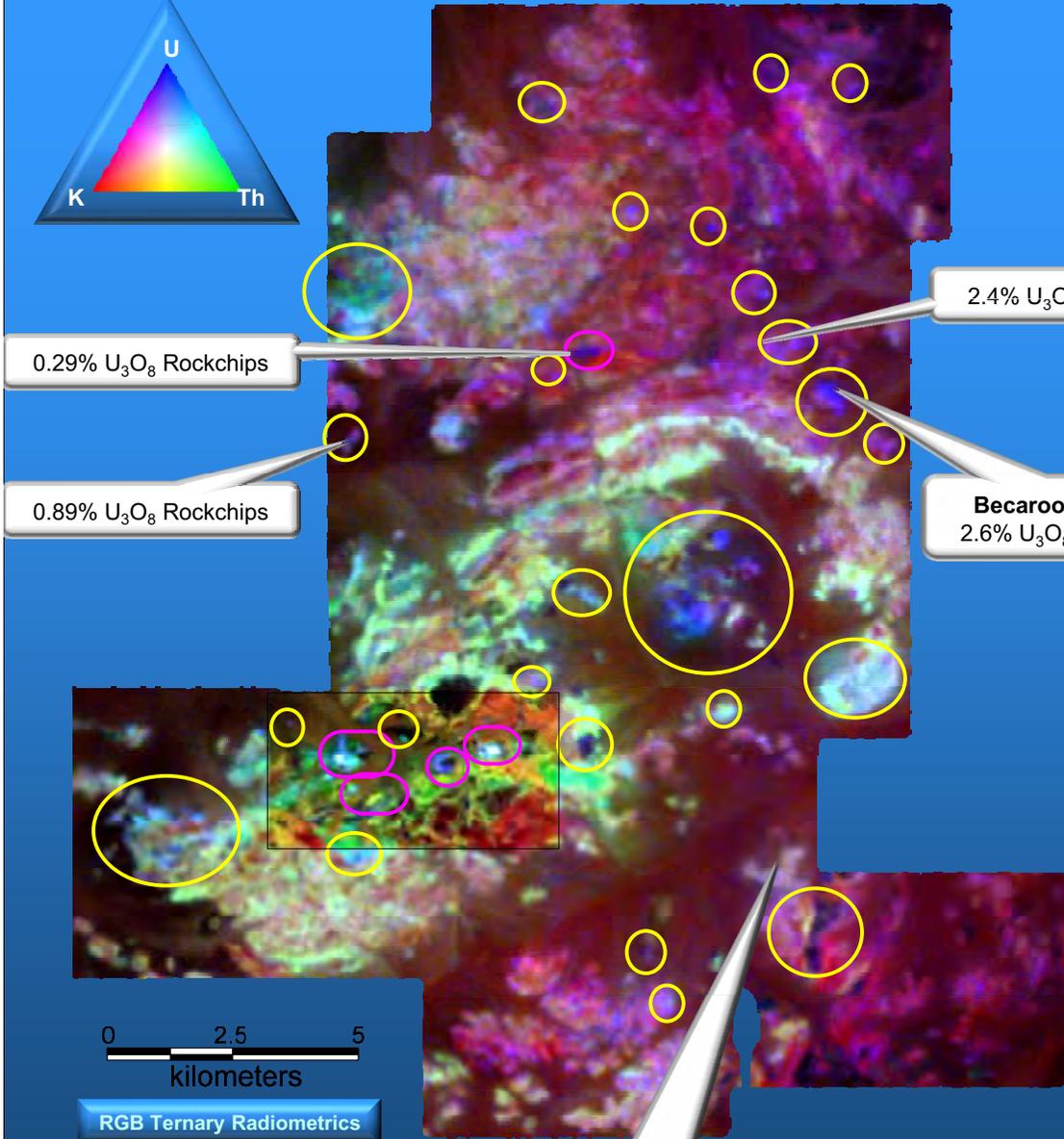
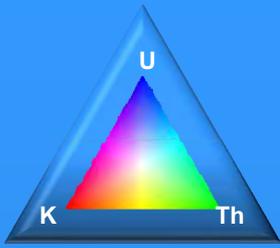


- 26 additional known primary uranium prospects other than Crocker Well and Mt Victoria
- Potential for intrusion related, unconformity and palaeo-channel sandstone uranium deposits



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





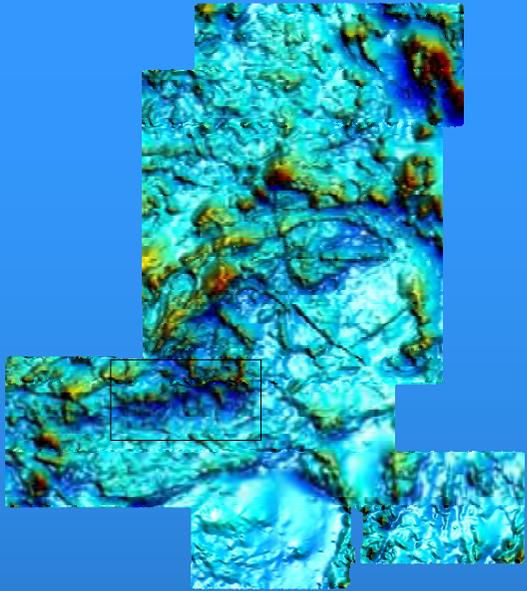
0.29% U_3O_8 Rockchips

0.89% U_3O_8 Rockchips

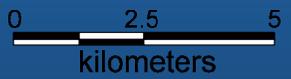
2.4% U_3O_8 Rockchips

Becaroo Prospect
2.6% U_3O_8 Rockchips

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

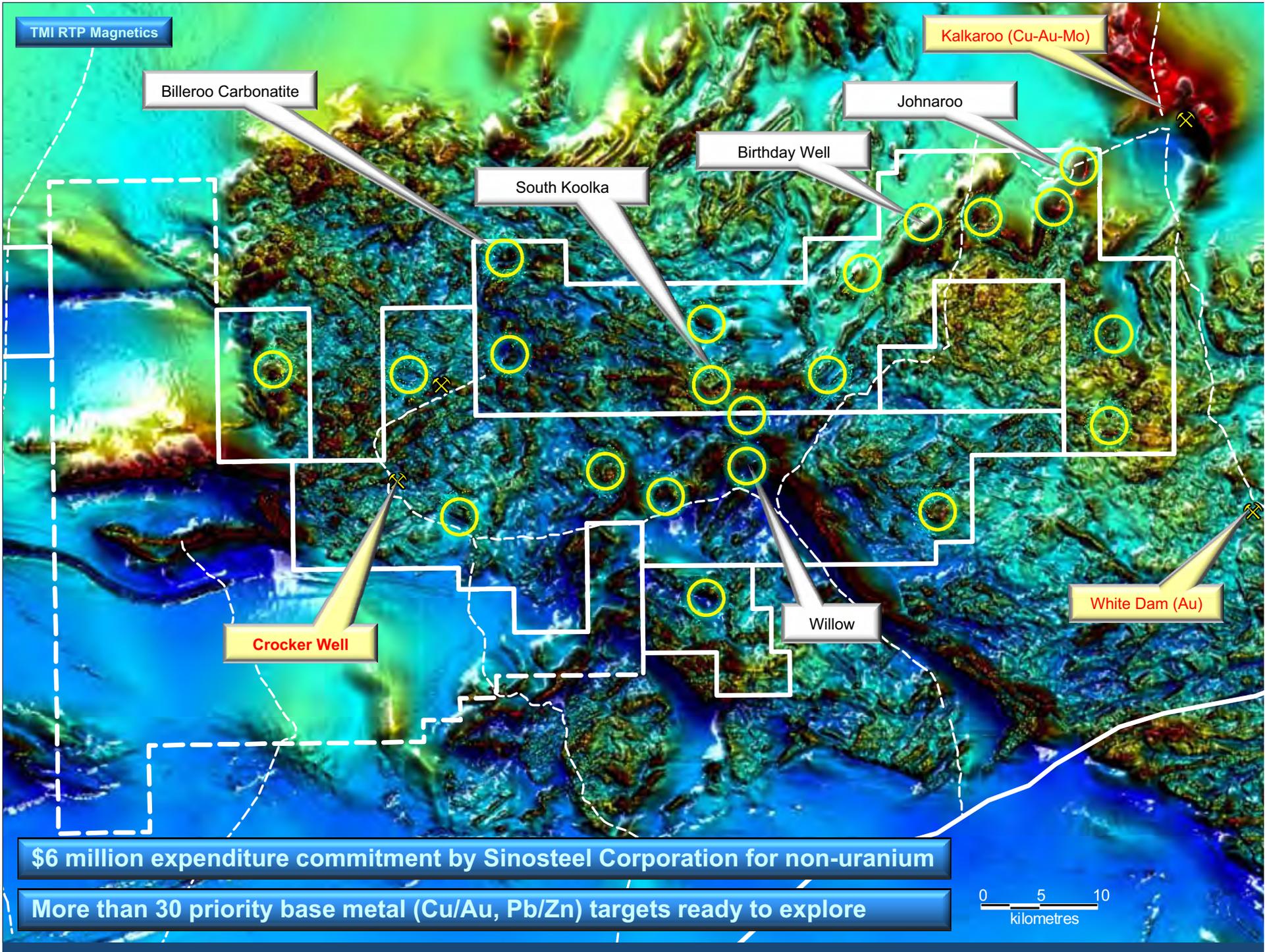


TMI RTP Magnetics



RGB Ternary Radiometrics

- 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 late 2009





Thank You

Disclaimer:

- The information in this presentation is published to inform you about PepinNini Minerals Limited and its activities. All reasonable effort has been made to provide accurate information, but we do not warrant or represent its accuracy and we reserve the right to make changes to it at any time without notice.
- To the extent permitted by law, PepinNini Minerals Limited accepts no responsibility or liability for any losses or damages of any kind arising out of the use of any information contained in this presentation. Readers are advised to consult a stockbroker or professional adviser before making any investment decisions.
- 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 "Australian 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

PepinNini