

A photograph of a drilling rig at sunset. The sun is low on the horizon, creating a bright glow and silhouetting the rig's structure. The sky is filled with soft, orange and yellow clouds. The company name and year are overlaid on the image.

Peripindini
Minerals Limited

2009

Crocker Well Project

- m Submission of an application for a Mining Lease at Crocker Well for the development of a uranium mine
- m Completion of 17 cored boreholes and 267 RC boreholes as part of a resource validation program to verify and upgrade the JORC compliant uranium resource from Inferred to Indicated or Measured Categories
- m Metallurgical testwork undertaken by Amdel Laboratories and ANSTO Minerals indicates Crocker Well uranium ore can be beneficiated which could result in significant advantages to processing and plant costs.



m A new revised processing circuit incorporating beneficiation by flotation, solid liquid separation by pressure filtration and a Carbonate strip followed by Sodium Diuranate (SDU) and Uranium Peroxide precipitation has been designed for treating the Crocker Well ore. Overall uranium recovery for processing the Crocker Well ore using the new circuit is 80% representing a significant improvement on the 63% previously used for the 2006 Scoping Study

m Detailed magnetic and radiometric surveys were flown during June 2009 using a helicopter based system to better define geological boundaries and to locate possible additional resources of U_3O_8 in the vicinity of Crocker Well. A detailed ground gravity survey was also completed with the assistance of the helicopter



- m Progression of a Bankable Feasibility Study together with Environmental Baseline, Hydrogeological, Geotechnical and Mining studies for the Crocker Well Development**
- m Commencement of consultations with pastoralists, indigenous groups and the local community regarding the proposed mine development at Crocker Well**



Musgrave Province Project

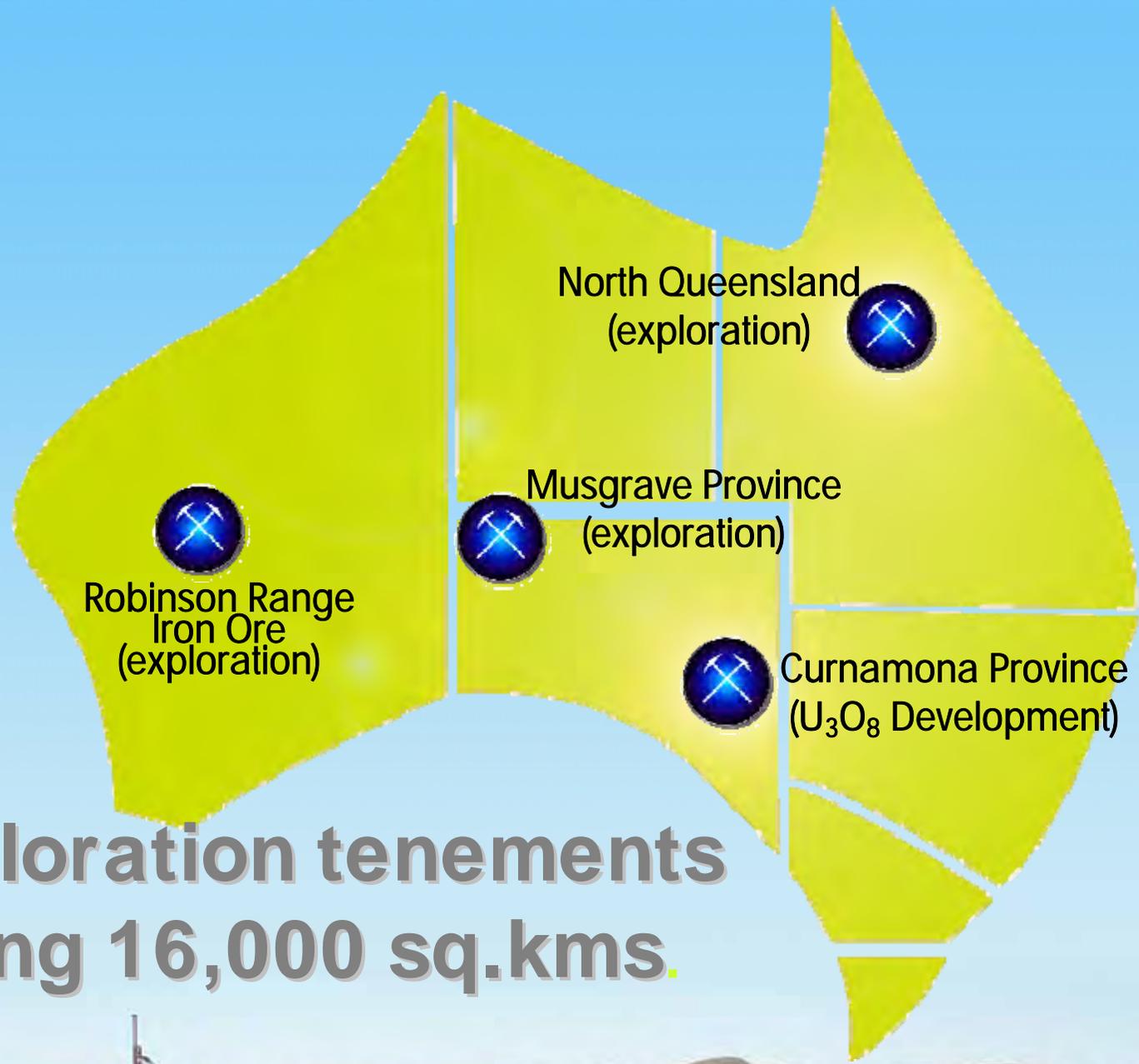
- m Completion of a Farm-in and Joint Venture Agreement with Rio Tinto Exploration Pty Limited to explore three tenement areas covering approximately 1,382 km² of ground considered prospective for Nickel Copper Sulphide mineralisation and other commodities
- m Completion of 12 fully cored boreholes for 4,665m within EL 4048 Mt Caroline. Sulphides were intersected in all boreholes confirming sulphur saturation occurred within the primary melt
- m A total of five diamond boreholes were drilled for 1,007.98m within EL 3536 Pine Ridge. Lithologies favourable for nickel-copper-chromium-PGE mineralisation and lead-zinc-silver mineralisation were intersected in all diamond boreholes



North Queensland Project

- m New vein systems identified at surface with gold grades of up to 1,710 g/t (55 oz/t) within EPM 15547 The Return. Silver grades of up to 20 oz/t also identified
- m Widespread copper (max.32.8%), gold (max. 335g/t), silver (max. 1,360g/t) and lead (max. 64.7%) mineralisation identified in rock chip samples collected from EPM 15440 Percyville
- m Confirmation of high-grade uranium (up to 3,513ppm U₃O₈), phosphate (up to 22.9%) and potash (up to 5.8%) mineralization within EPM 14834 Plain Creek.





**36 exploration tenements
covering 16,000 sq.kms.**



Curnamona Province Project

(40% PepinNini 60% Sinosteel Corporation)

Advanced Uranium Project – Crocker Well

- Strategic alliance with Sinosteel Corporation to jointly develop the Uranium Project
- Currently drilling prospects with potential to add to the uranium resource already defined at Crocker Well.

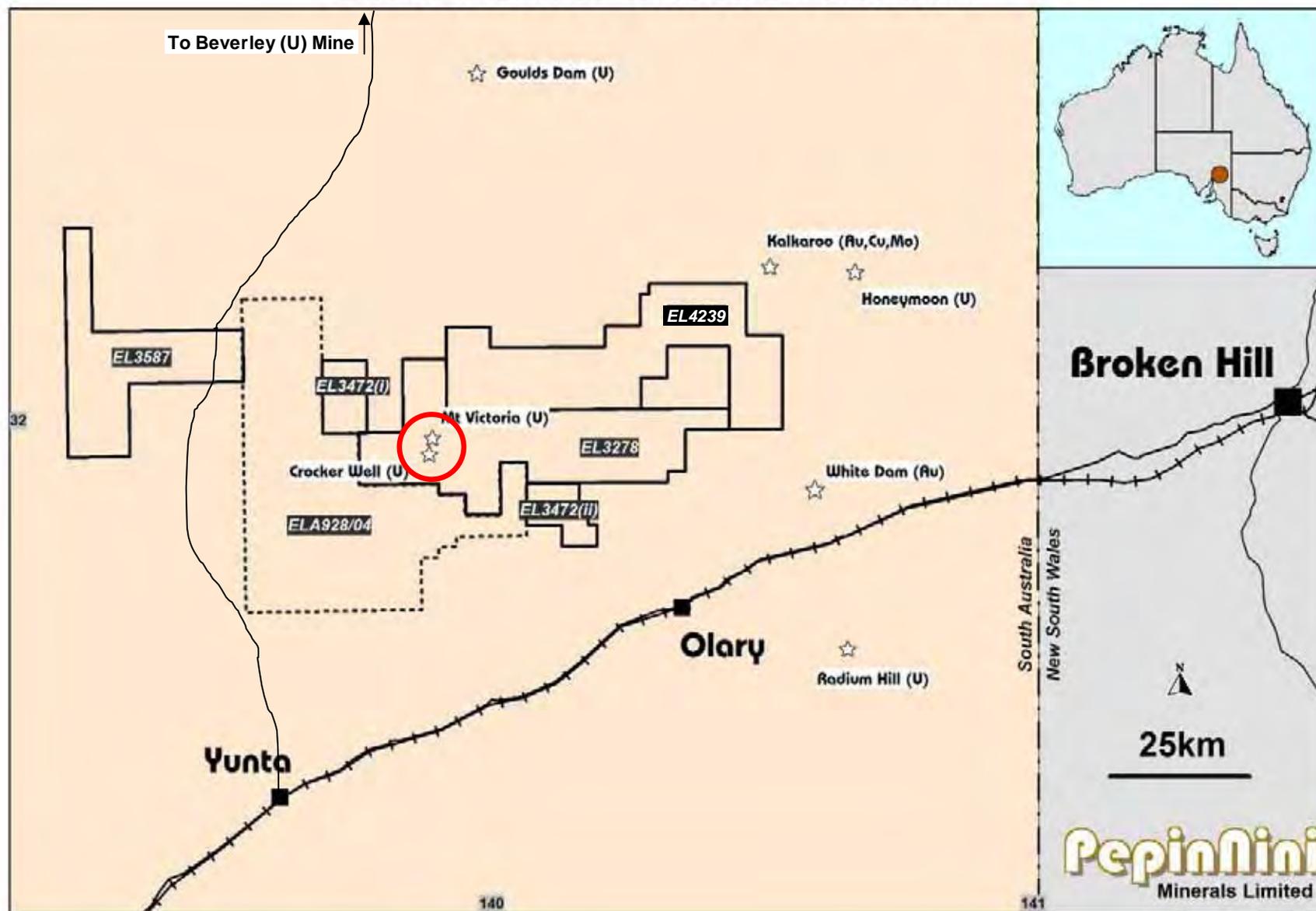
Other Projects

- 26 additional known uranium prospects to be investigated
- More than 30 Base Metal (Copper/Lead/Zinc) and Gold targets ready to drill (AUD\$6million expenditure commitment by Sinosteel under JV agreement)



PepinNini

Curnamona Project - Tenement Location Plan



5 Tenements covering 3,778 km²



Field Camp at Crocker Well



More than 300 boreholes have been completed for resource verification at Crocker Well

Recent Field Activities



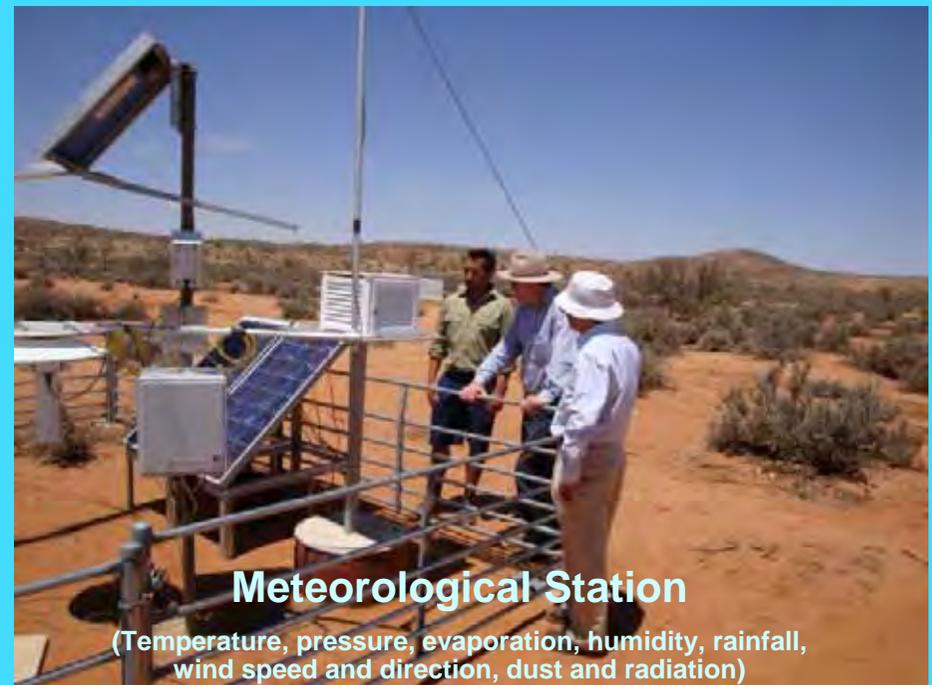
Helicopter geophysical surveys



Drilling



Sampling

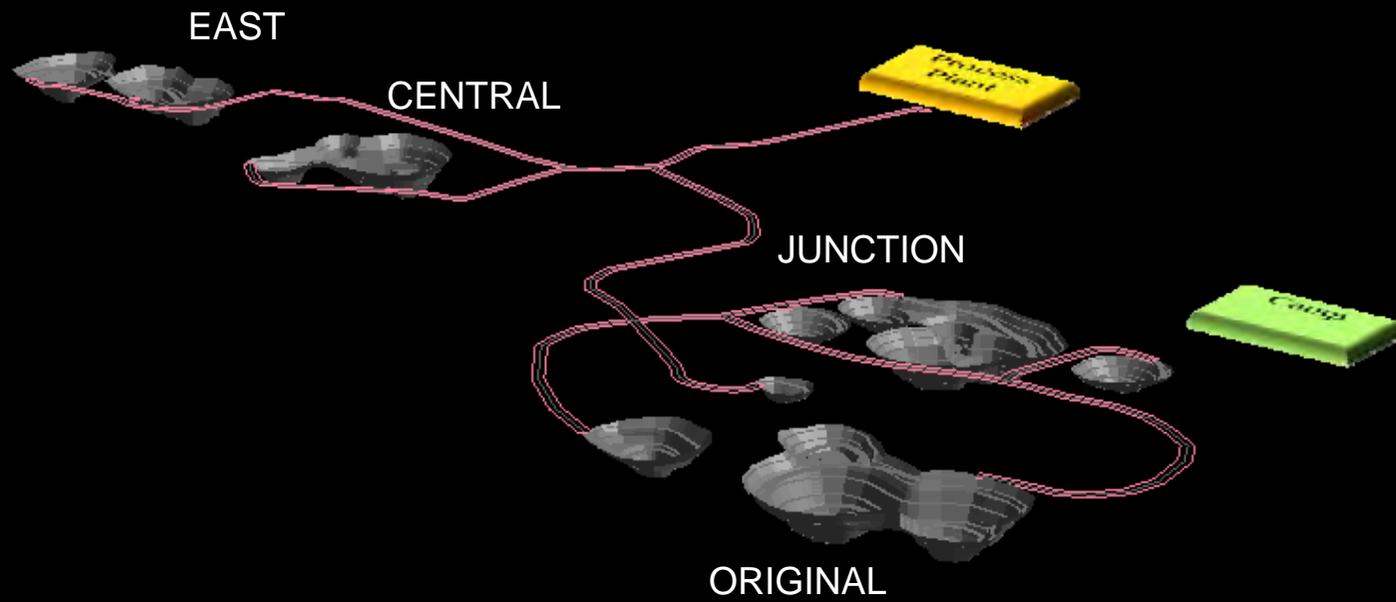


Meteorological Station

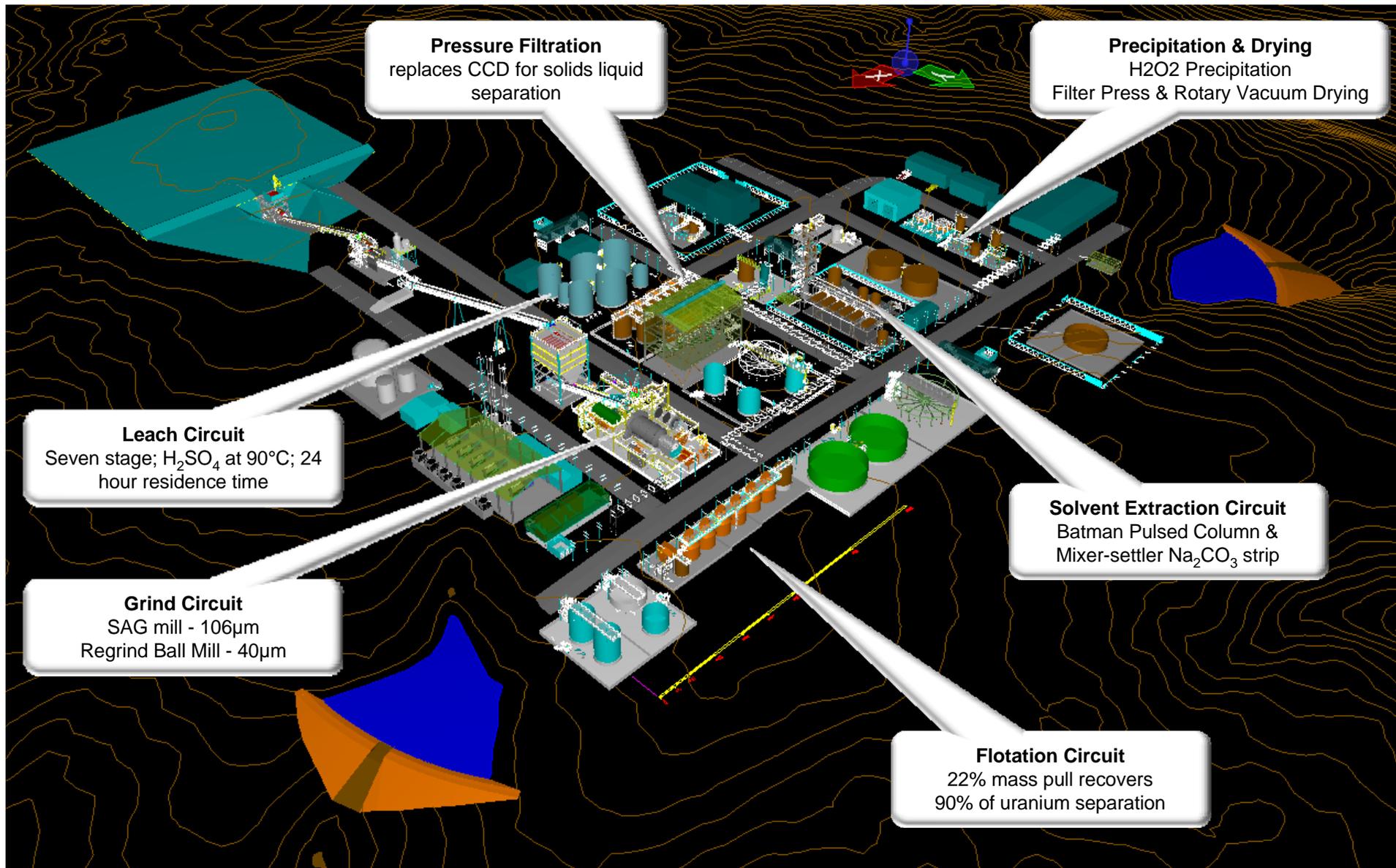
(Temperature, pressure, evaporation, humidity, rainfall, wind speed and direction, dust and radiation)



Ministerial Visit 20th January, 2009



Preliminary Mine Design



Overall Uranium Recovery = 80%

Current Proposed Processing Plant Layout



RGB Ternary Radiometrics
(50m/25m spacing, 40m height)
Dataset acquired June, 2009

Mt Victoria Prospect
250,000t @ 0.16% U₃O₈

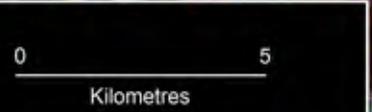
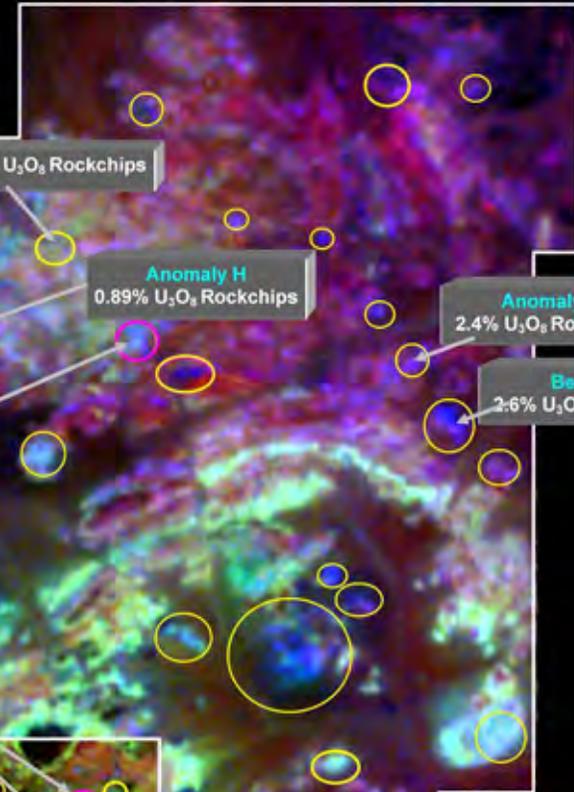
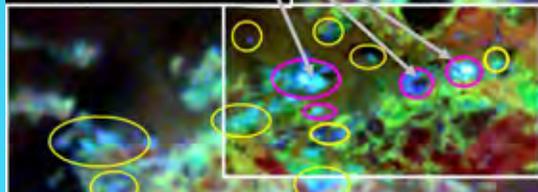
Proposed Crocker Well Mine
12.4Mt @ 0.05% U₃O₈

0.29% U₃O₈ Rockchips

Anomaly H
0.89% U₃O₈ Rockchips

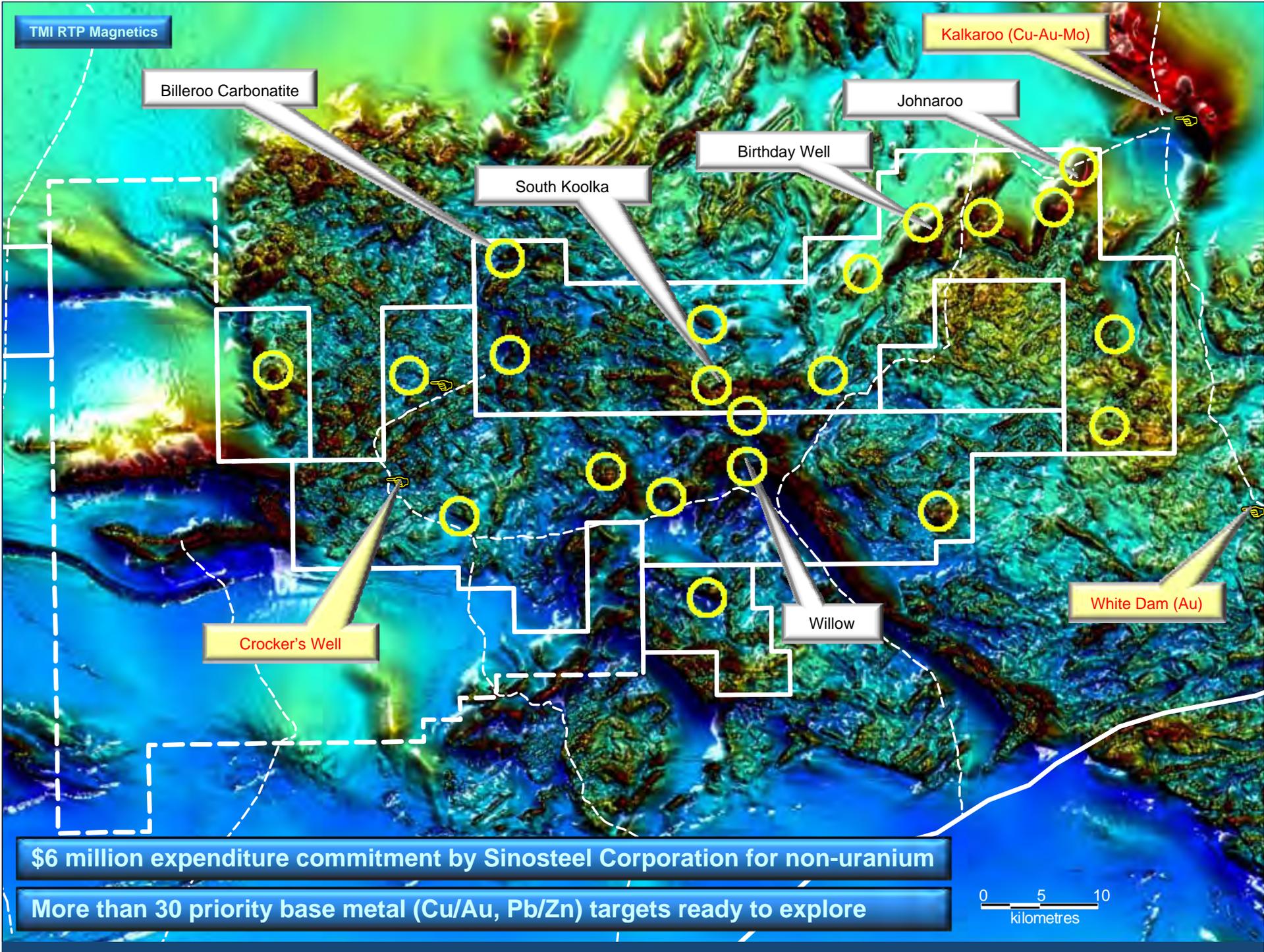
Anomaly A
2.4% U₃O₈ Rockchips

Becharoo
2.6% U₃O₈ Rockchips



○ Targets with potential for additional U₃O₈ resource to be investigated

10m @ 0.07% U₃O₈
1.2m @ 0.17% U₃O₈



TMI RTP Magnetics

Billeroo Carbonatite

Kalkaroo (Cu-Au-Mo)

Johnaroo

Birthday Well

South Koolka

[Target Area]

[Target Area]

Crocker's Well

Willow

White Dam (Au)

\$6 million expenditure commitment by Sinosteel Corporation for non-uranium

More than 30 priority base metal (Cu/Au, Pb/Zn) targets ready to explore

0 5 10
kilometres

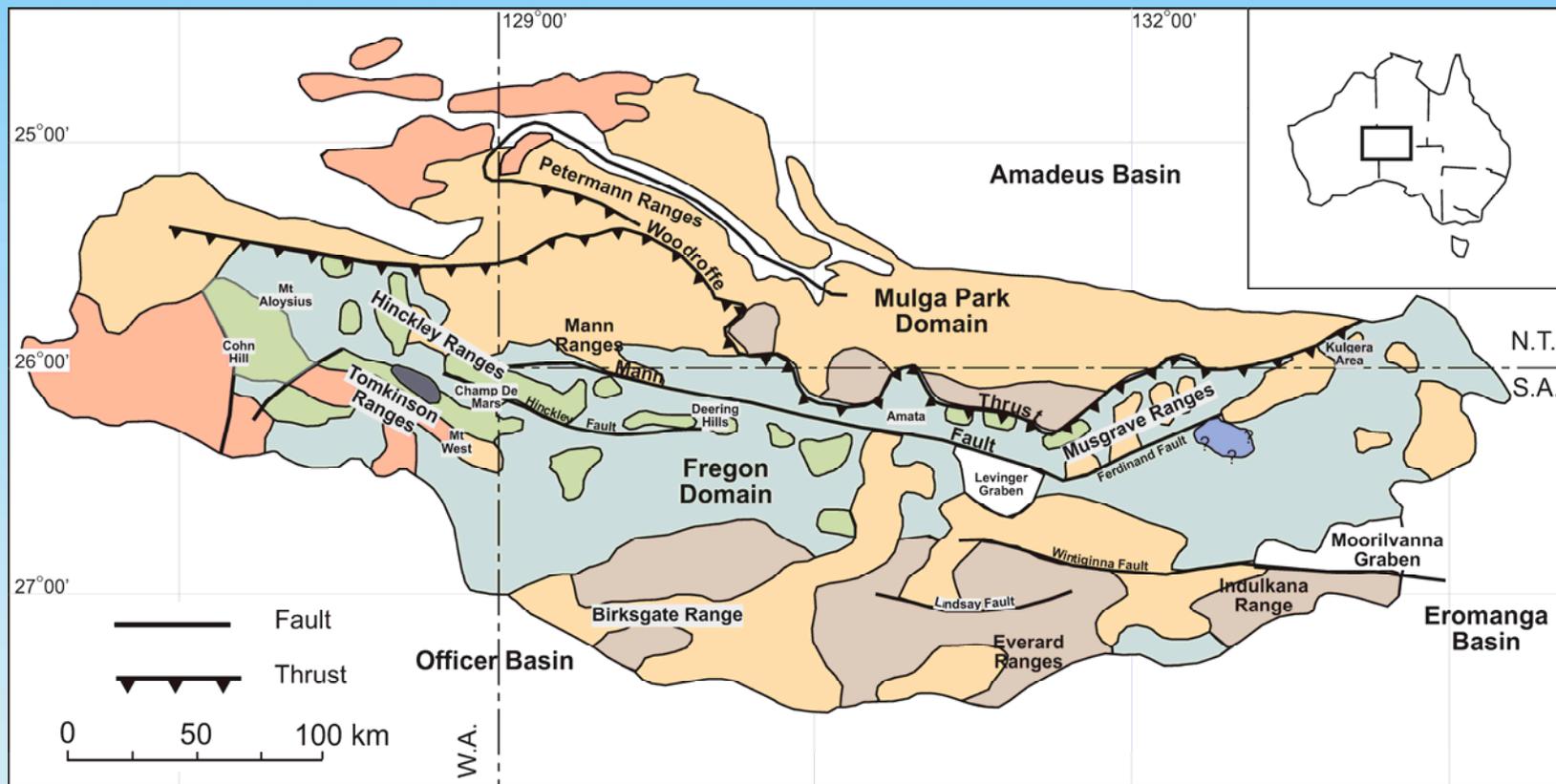


**Encouraging drill intersections by previous explorers include
10m @ 2.07g/t Au, 0.74% Cu, 5.6m @ 8.5% Cu and 32m @ 0.66% Zn**

Musgrave Province Project

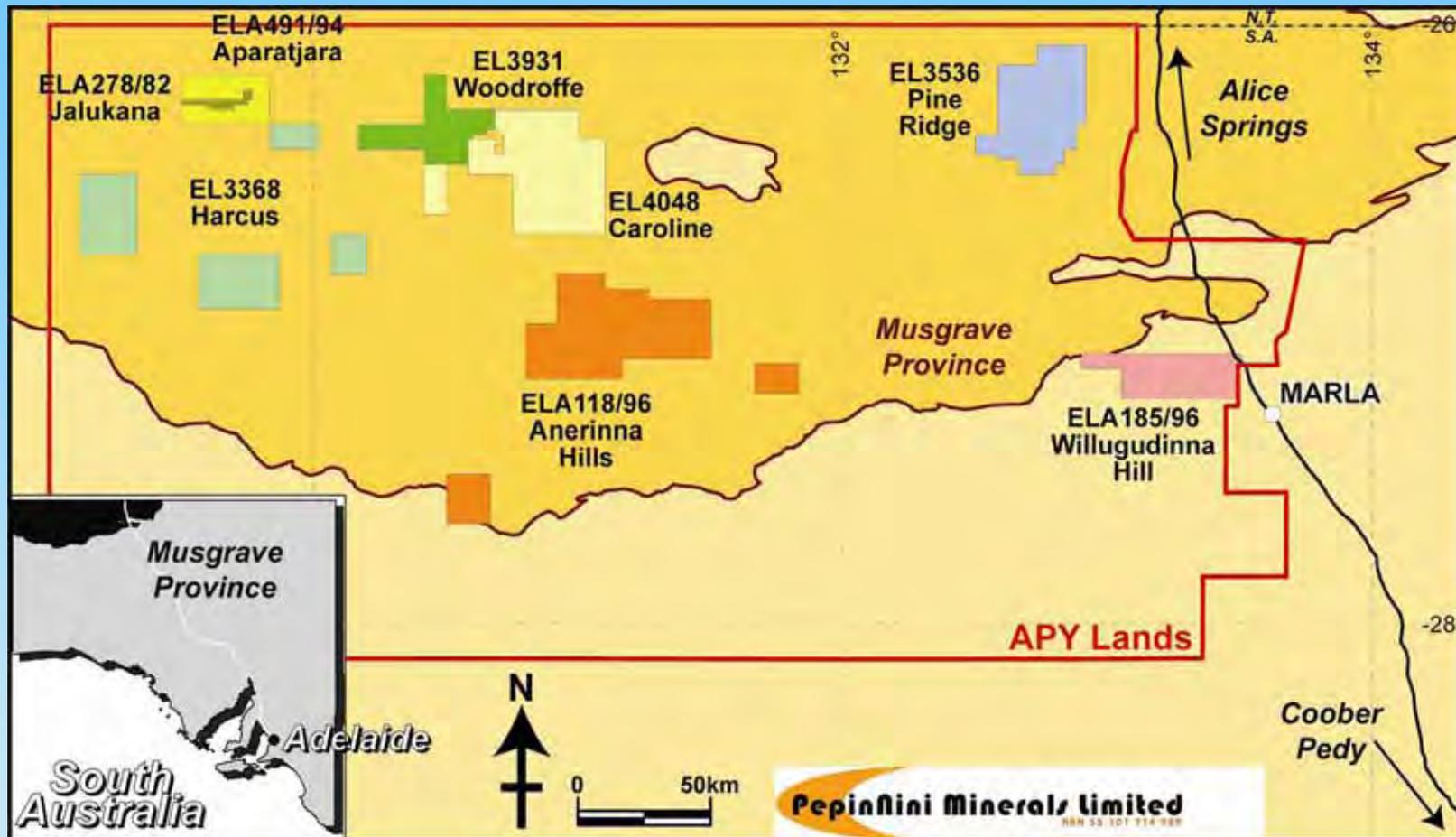
TARGETING

Nickel, copper, PGE's (Giles Complex)
Copper, lead, zinc, silver (Birksgate Complex)



Pepini

Musgrave Province Project



4 Granted Exploration Licences
4 Exploration Licence Applications
covering 9,525km²



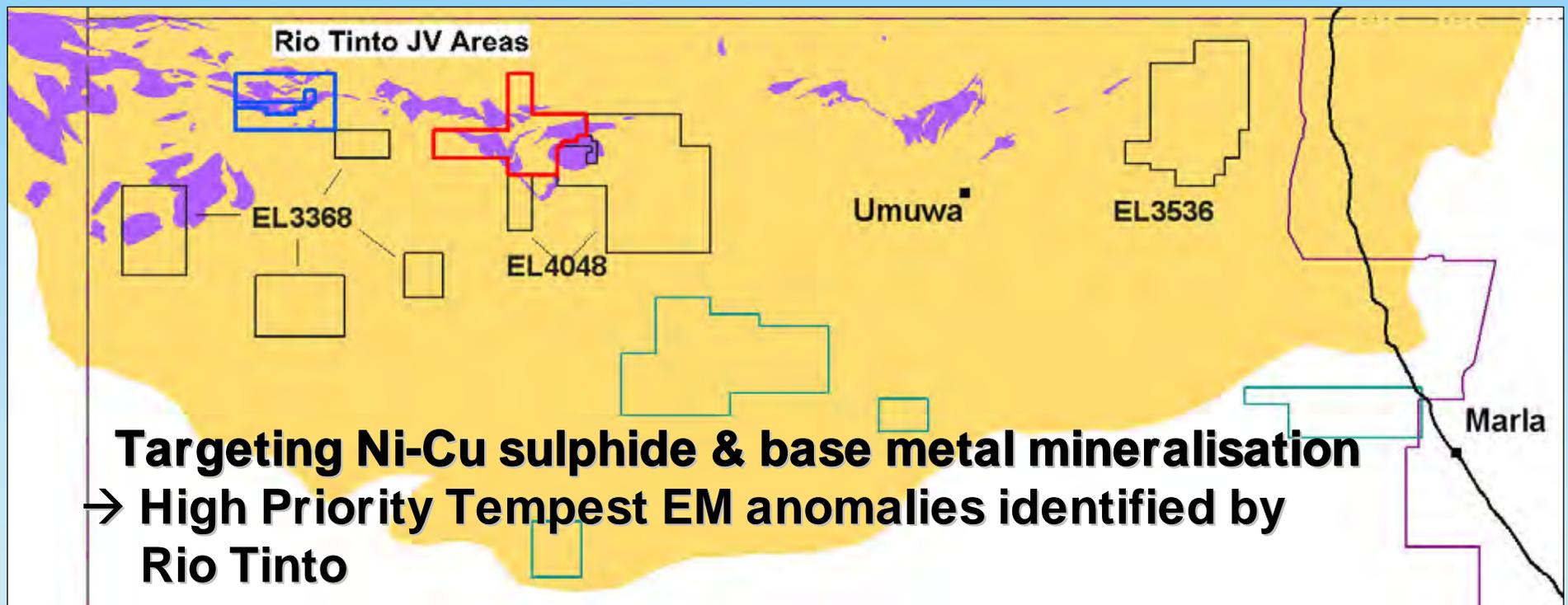
Exploration Highlights 2009



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Rio Tinto Joint Venture

- Three tenements covering 1,382m²
- Expenditure of \$4m over 4 years to earn 51%
- One tenement granted – EL3931 Woodroffe
- Two tenement applications – Jalakana & Aparatjara



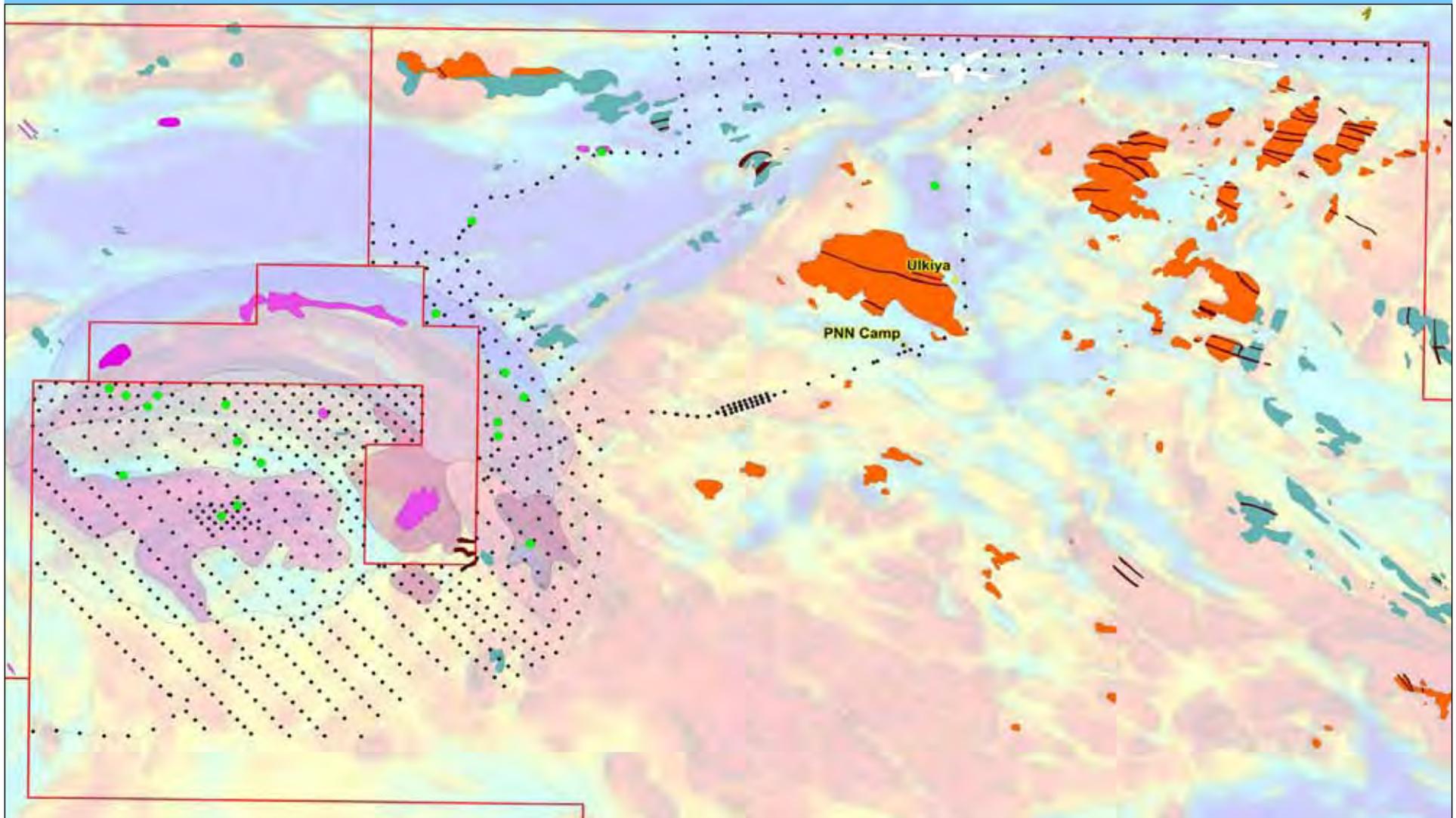
EL4048 Mt Caroline Drilling

SUMMARY

- Focusing on the Giles Complex mafic-ultramafic Caroline Intrusion – prospective for Ni-Cu sulphide & PGE mineralisation
- 19 diamond boreholes completed (7579.7m)
- 856 vacuum boreholes completed (9595.35m)
- Reprocessing & reinterpretation of Tempest EM survey data
- 7 line induced polarisation (IP) geophysical survey (14.1km)
- Coincident airborne EM, ground EM and magnetic anomalies
→ Follow up diamond and vacuum drilling



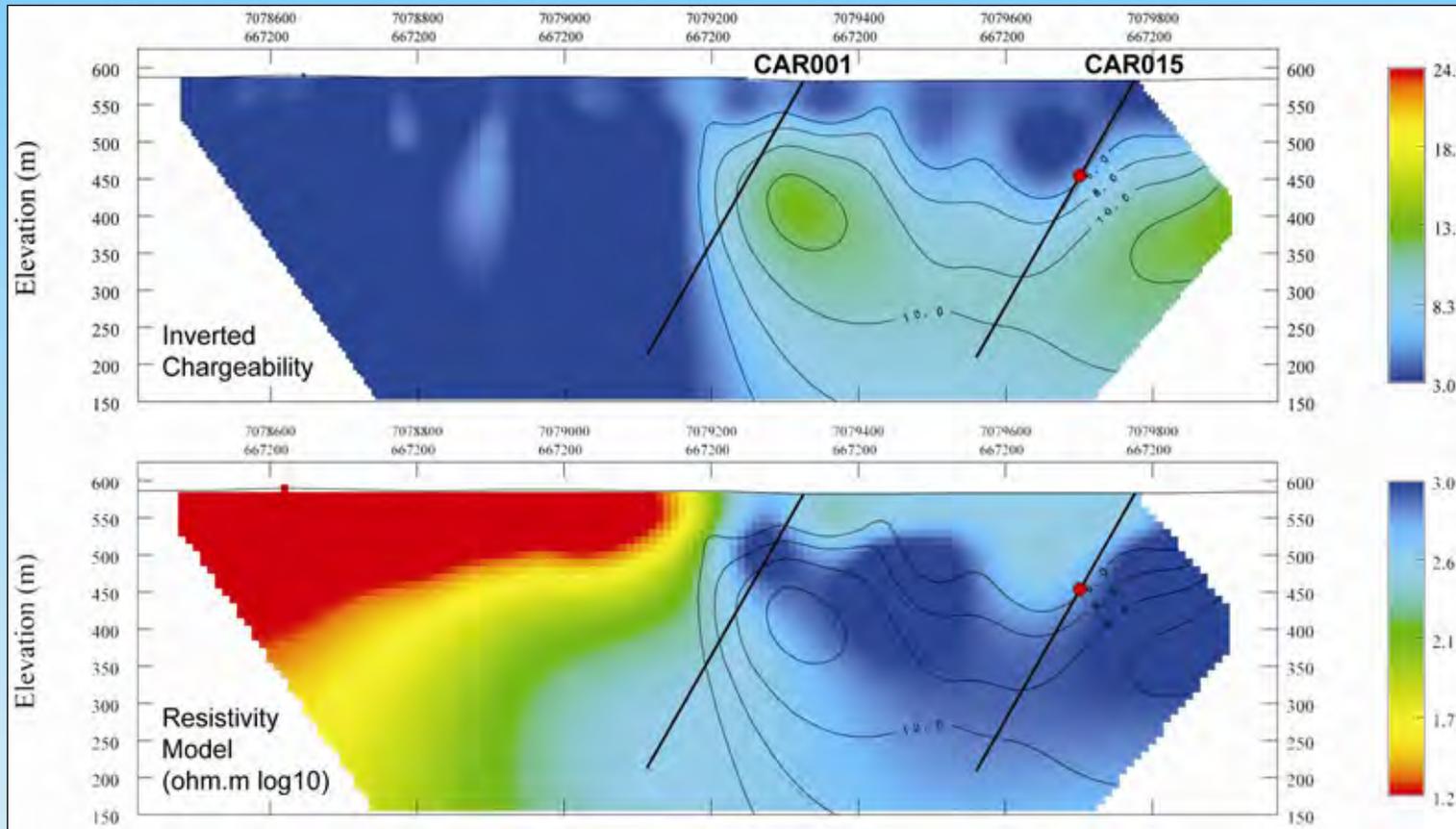
EL4048 Mt Caroline Drilling



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EL4048 Mt Caroline Drilling

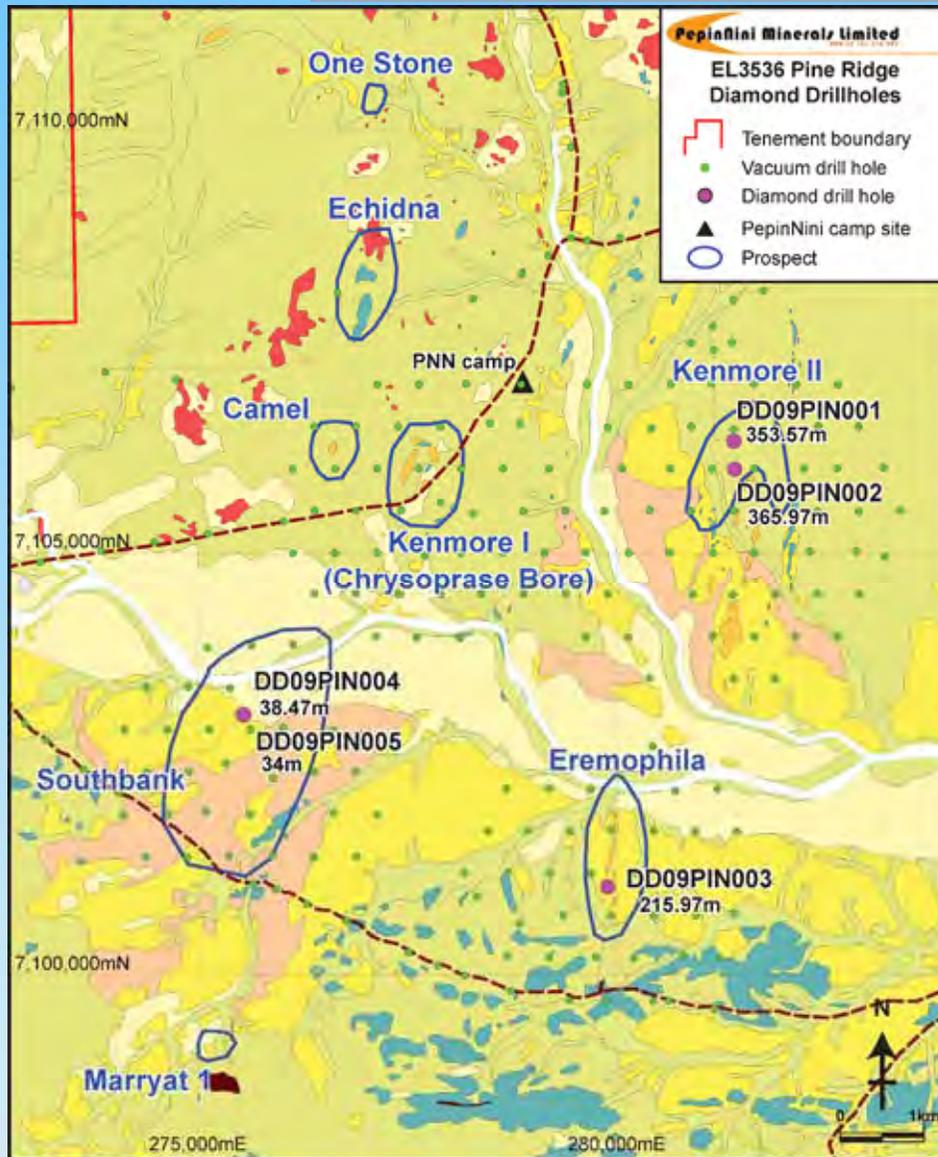
Induced Polarisation geophysical survey – 7 lines (14.1km)
Coincident EM & magnetic anomalies – follow up drilling



→ Further follow up drilling of other anomalies in tenement



EL3535 Pine Ridge



SUMMARY

Focusing on known prospects:

- Kenmore I & II
- Eremophila, Southbank

Giles Complex mafic and
- ultramafic rocks

Birksgate Complex meta-
- igneous & meta-sedimentary
rocks

5 diamond boreholes
completed (1007.98m)

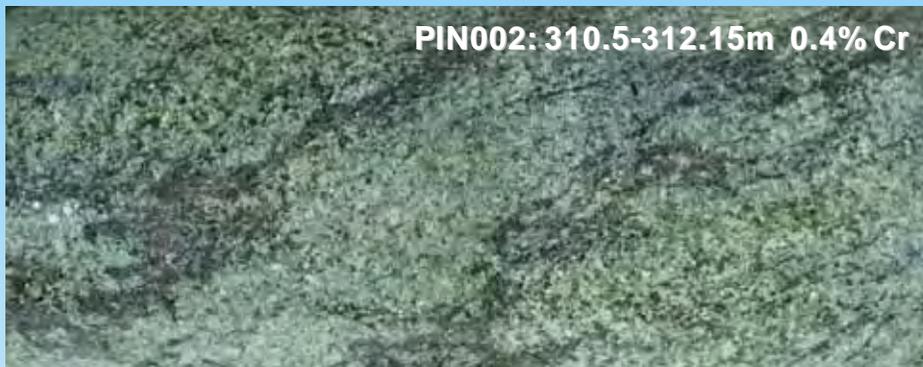
535 vacuum boreholes
completed (3445.5m)



EL3535 Pine Ridge



Mineralised migmatitic gneiss and metabasites rocks (Birksgate Complex)



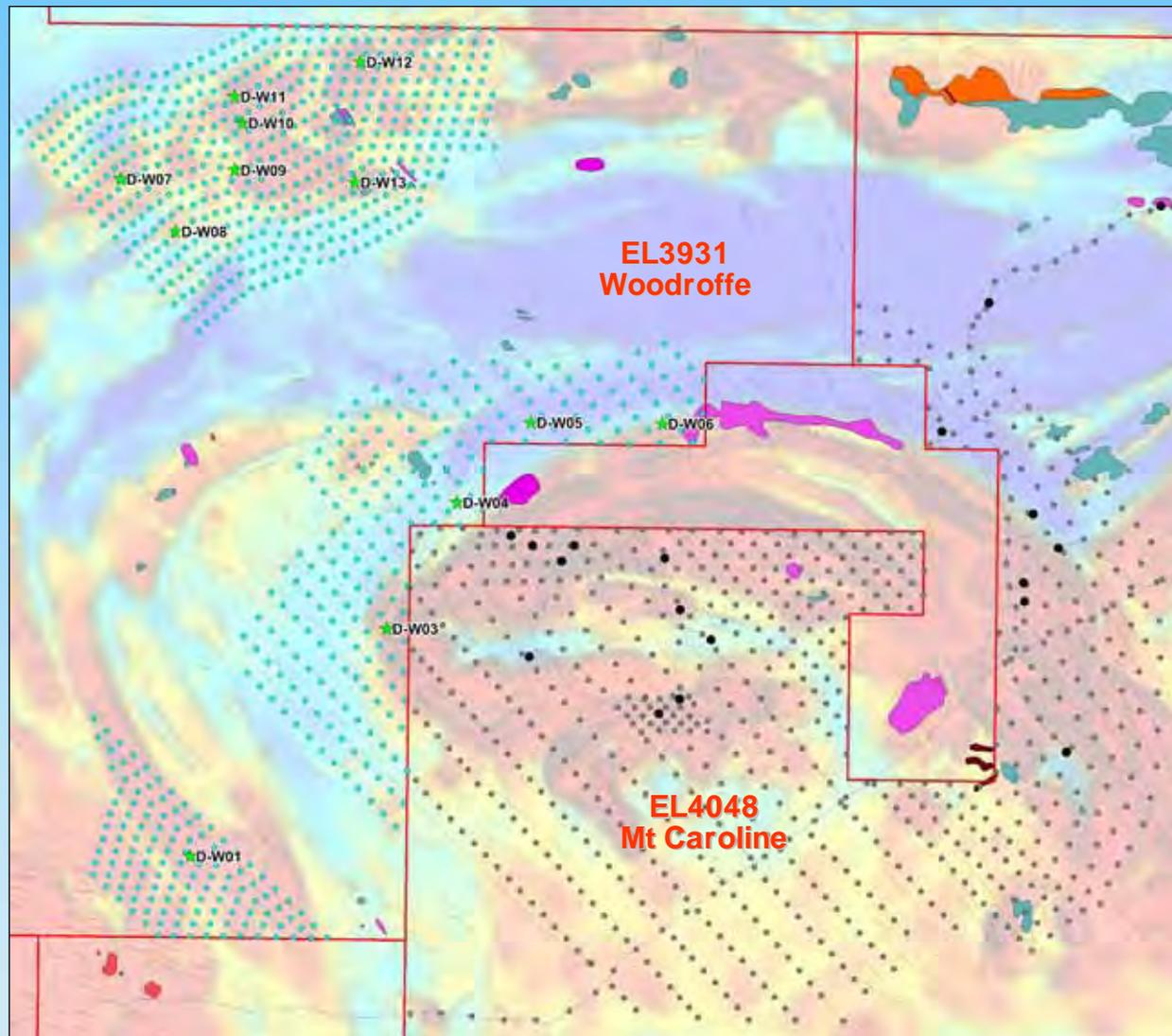
Serpentinised olivine-bearing ultramafic rocks (Giles Complex?)



**Garnetites & calcsilicates
→ Broken Hill-type?**



EL3931 Woodroffe



Focusing on:

- Giles Complex mafic ultramafic rocks (including Caroline Intrusion)
- Birksgate Complex meta-igneous & meta-sedimentary rocks

Cleared for exploration:
12 diamond boreholes
811 vacuum boreholes
→ Testing Tempest EM anomalies



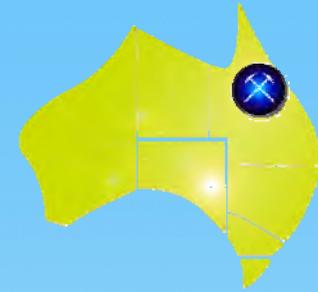
Queensland Projects

100% interest in
24 tenements

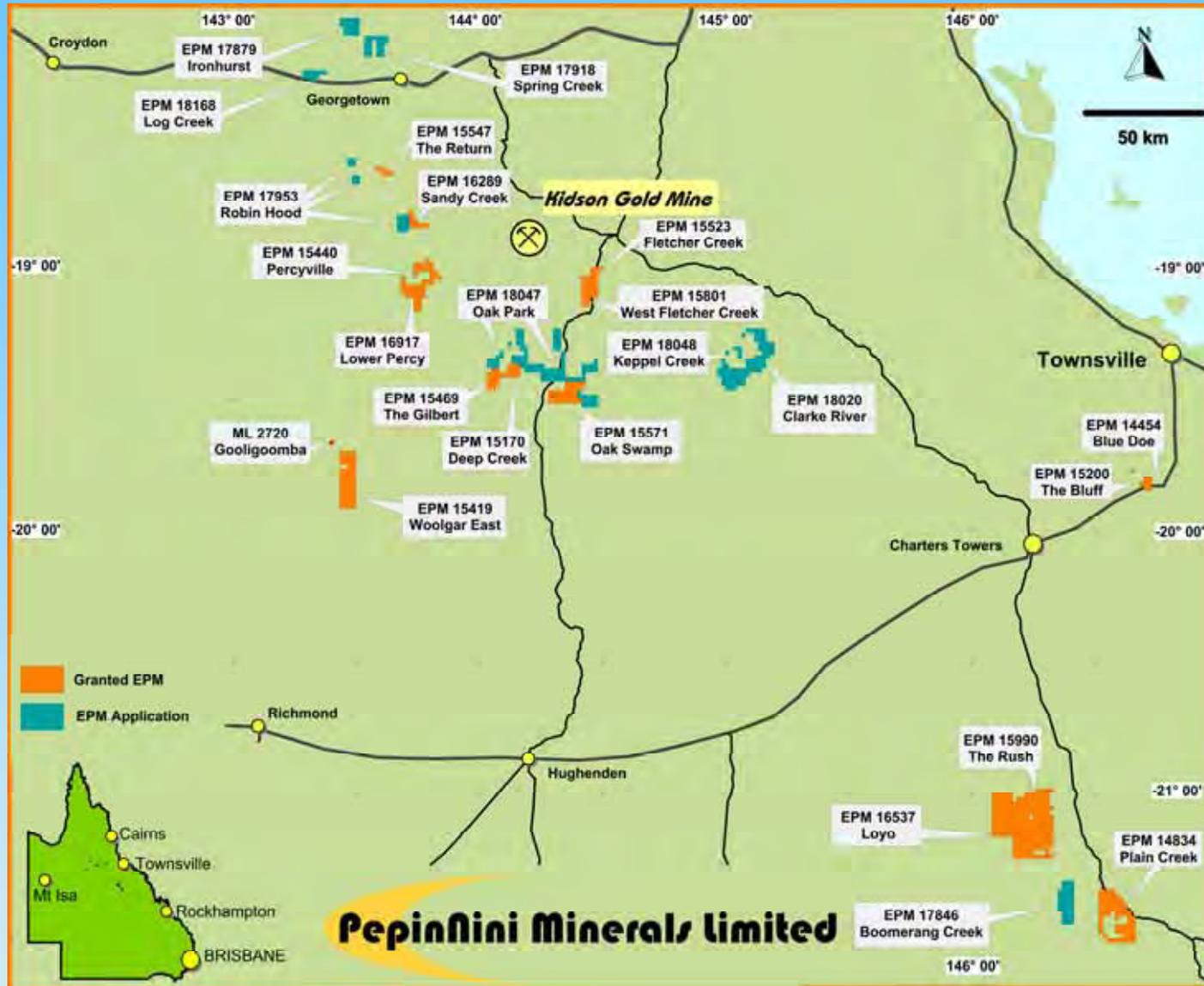
2,773
sq.kms

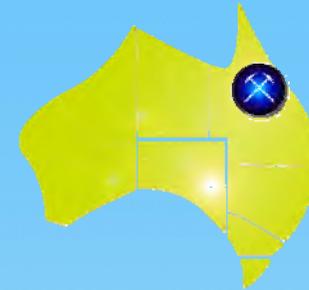


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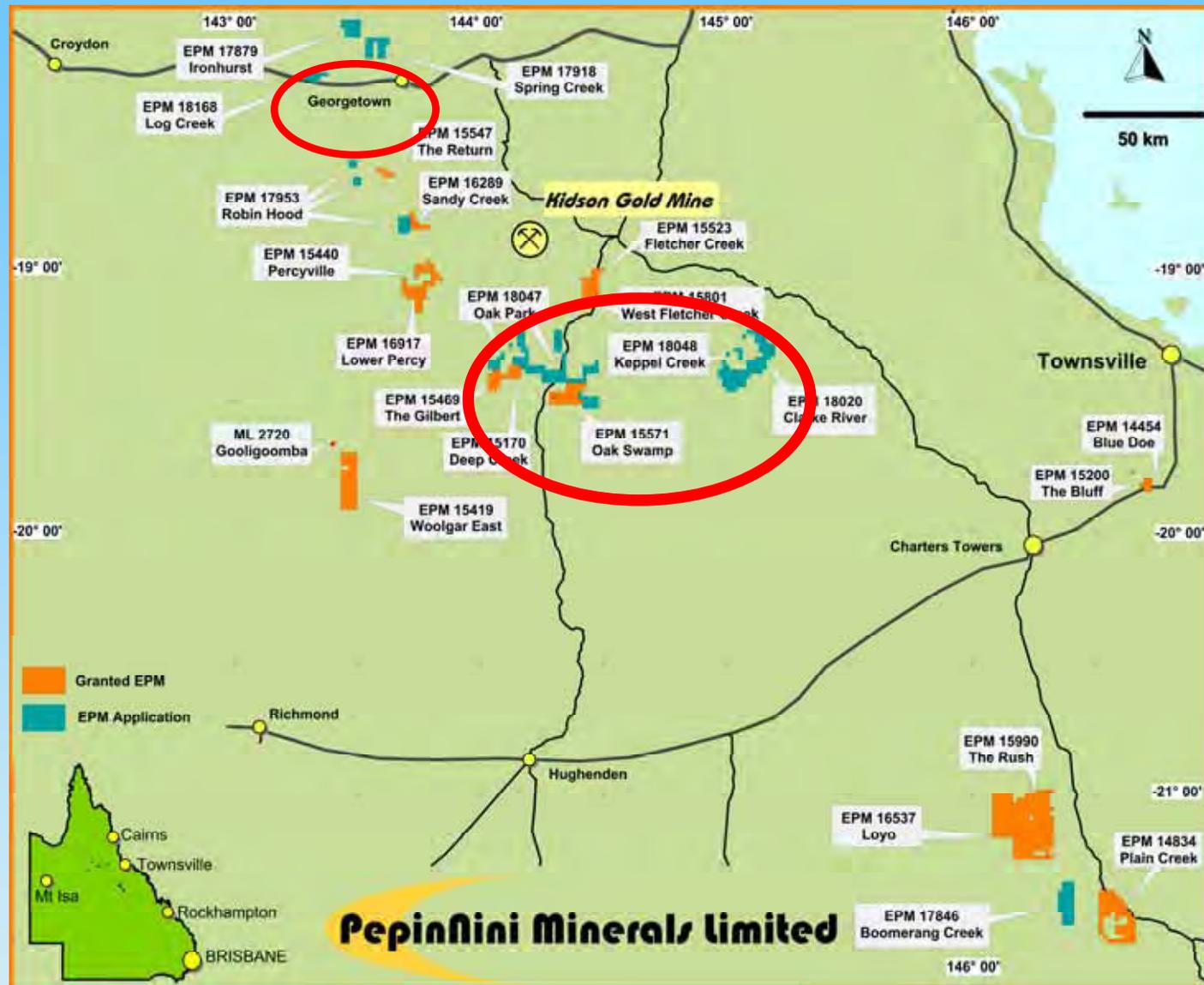


The tenements are prospective for gold, copper, base metals, uranium, phosphate and potash





uranium



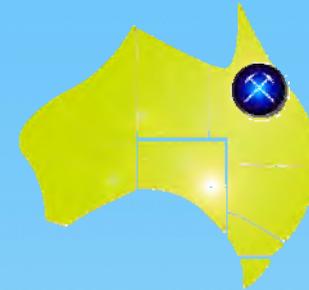
Uranium Targets

m Uranium occurrences which have been inadequately tested by previous explorers and favourable geological settings for uranium mineralisation have been identified in 10 tenements

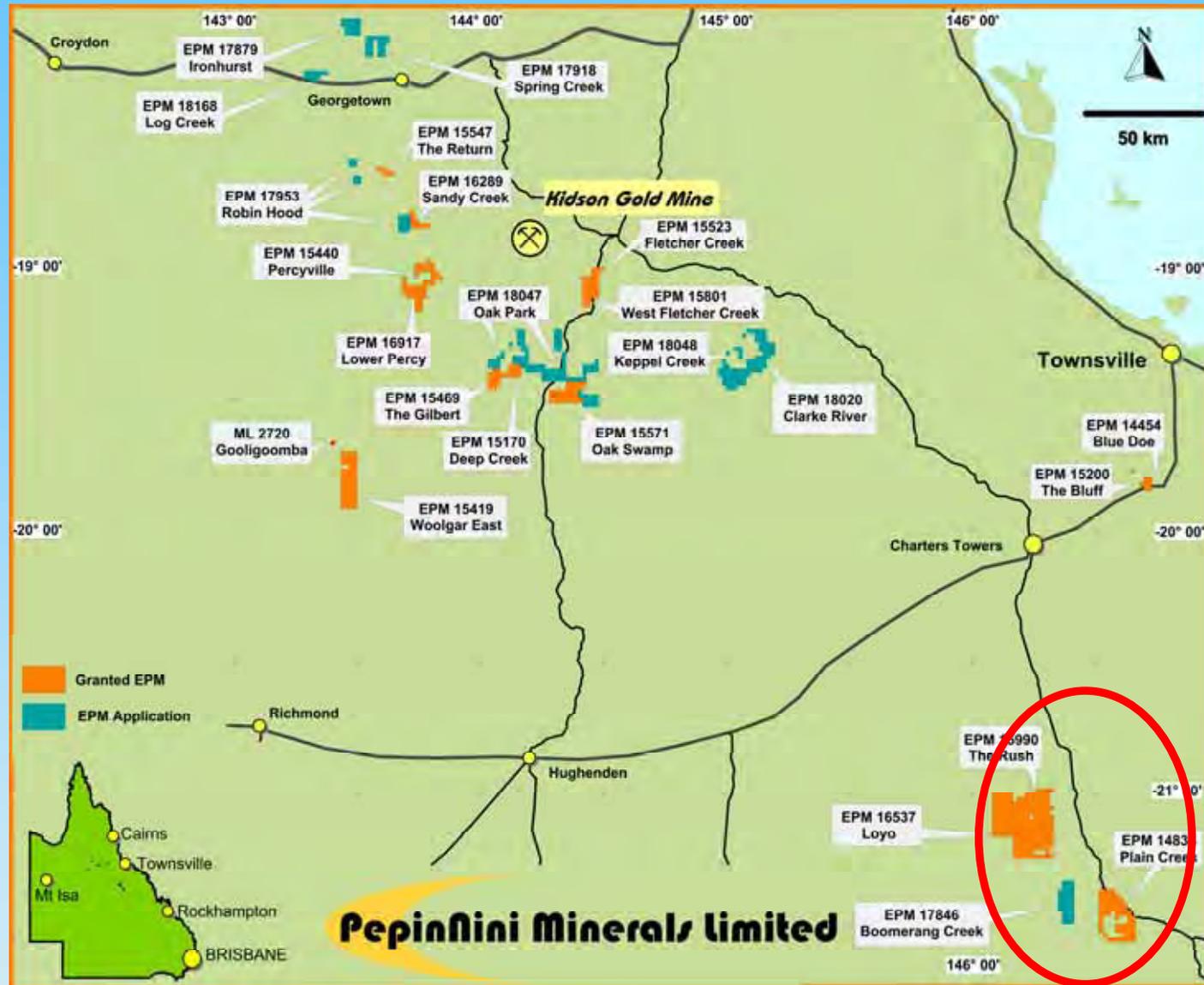
m Principal targets are hard rock volcanic type deposits similar to the nearby Maureen and Ben Lomond Uranium Deposits

m 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, phosphate and potash

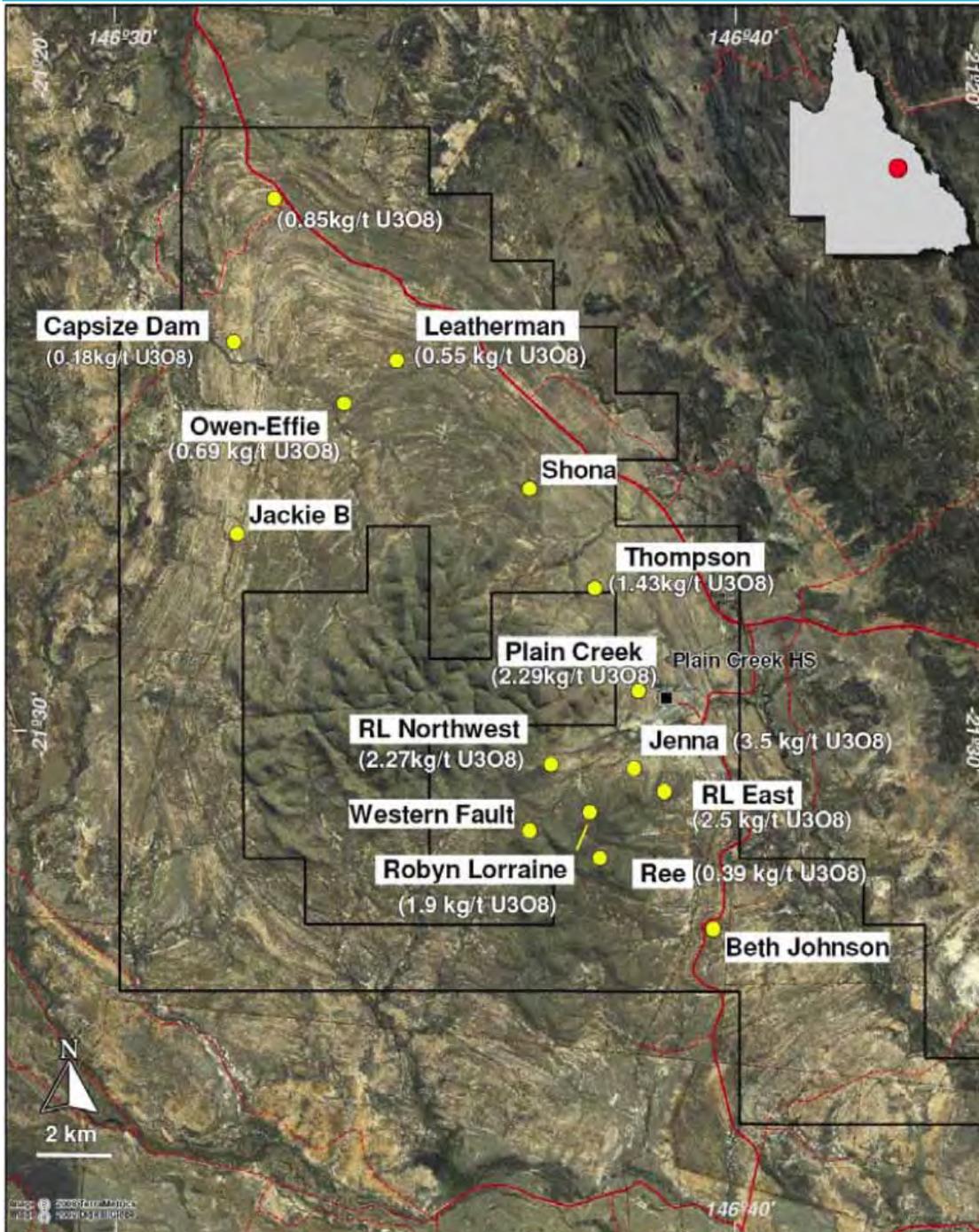


Uranium Phosphate Potash Targets

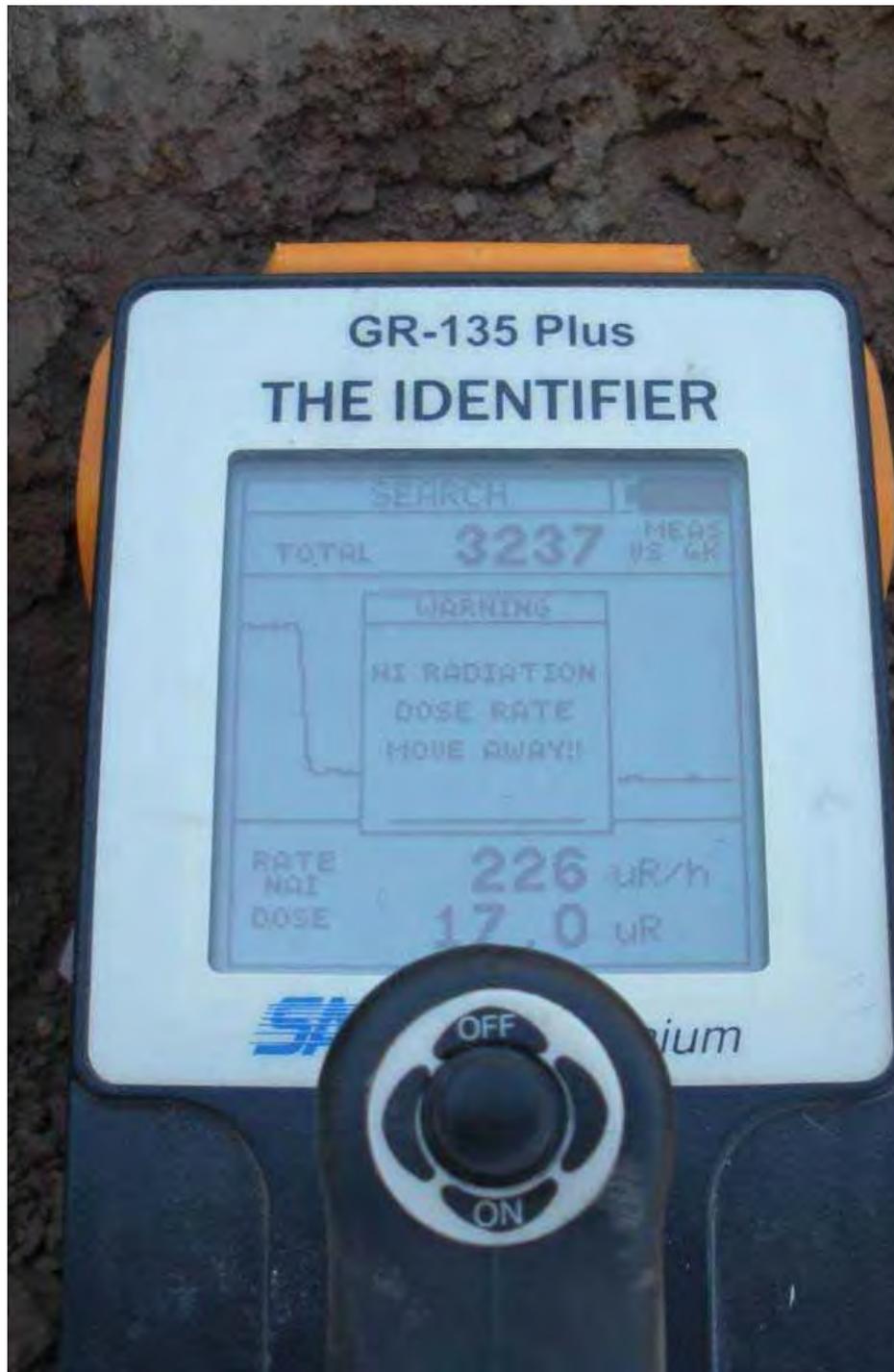


- m Numerous Uranium enriched Phosphate Rock prospects previously identified within EPM 14834 Plain Creek. Additional potential within Loyo and Rush tenements
- m Phosphate grades of up to 27% have been reported by previous explorers together with uranium grades of up to 0.42%

Plain Creek Area



- m Located within the Devonian Carboniferous Drummond Basin
- m Approx. 300kms by sealed road to the port of Townsville
- m Field reconnaissance and sampling programs have confirmed high grade uranium, phosphate and potash potential



127 Sites have been inspected and 138 surface samples collected for assays

Highest Uranium

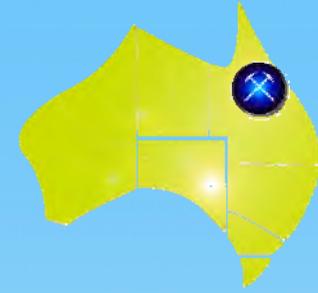
3,513 ppm U_3O_8 from
Sassafras Creek Prospect

Highest Phosphate

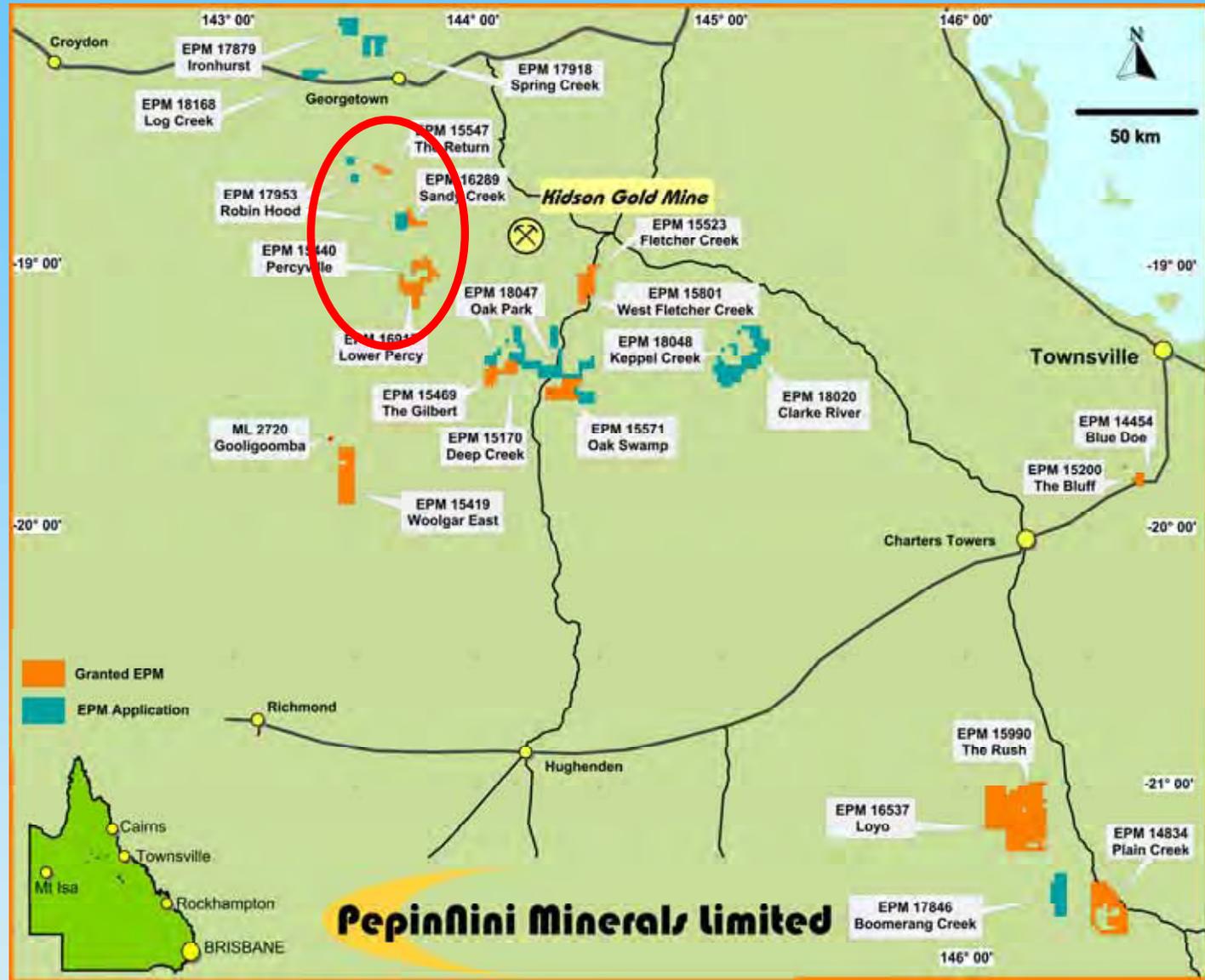
21.4% P_2O_5 from Robyn
Lorraine West Prospect

Highest Potash

5.8% from Sassafras Creek &
Homestead Prospects



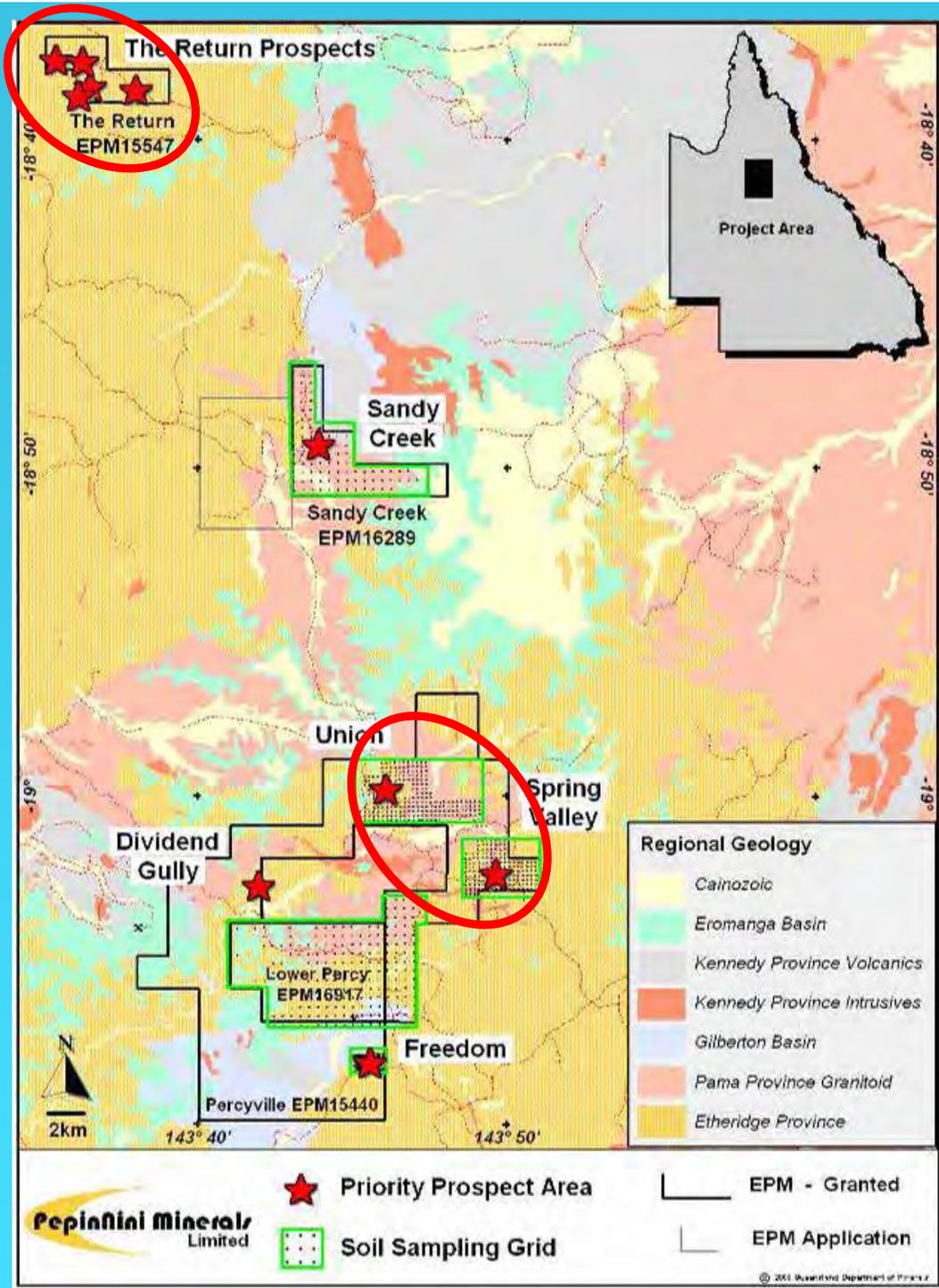
Gold and Base Metals





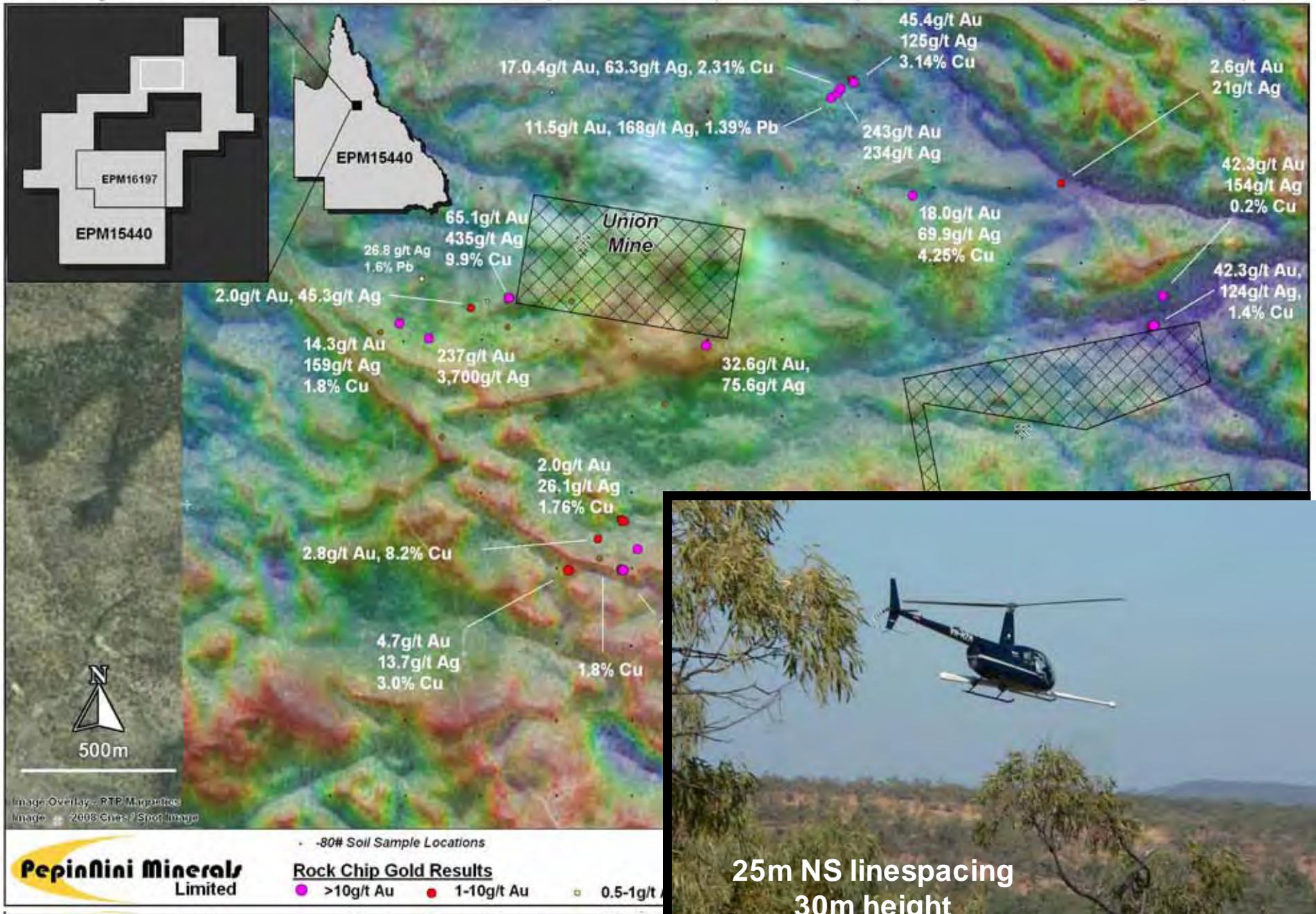
Gold & Base Metals

- m Widespread copper, gold, silver and lead mineralisation has been identified in rock chip samples
- m **335 g/t gold**, 85 g/t silver, 0.2% copper & 2.8% lead
- m 54 g/t gold, 870 g/t silver, **32.8% copper**
- m 65.1g/t gold, 435g/t silver, 9.98% copper
- m 3.6g/t gold, 653g/t silver, 20.30% copper
- m 5.65g/t gold, 42g/t silver, 5.72% copper
- m 0.7g/t gold, 22g/t silver, 16.90% copper
- m 3.72g/t gold, 732g/t silver, 13.8% copper, 1.07% lead
- m 0.6g/t gold, 637g/t silver, 11.25% copper, 3.4% lead
- m 0.27g/t gold, 165g/t silver, 10.8% lead
- m 1.63g/t gold, **957g/t silver**, **64.7% lead**

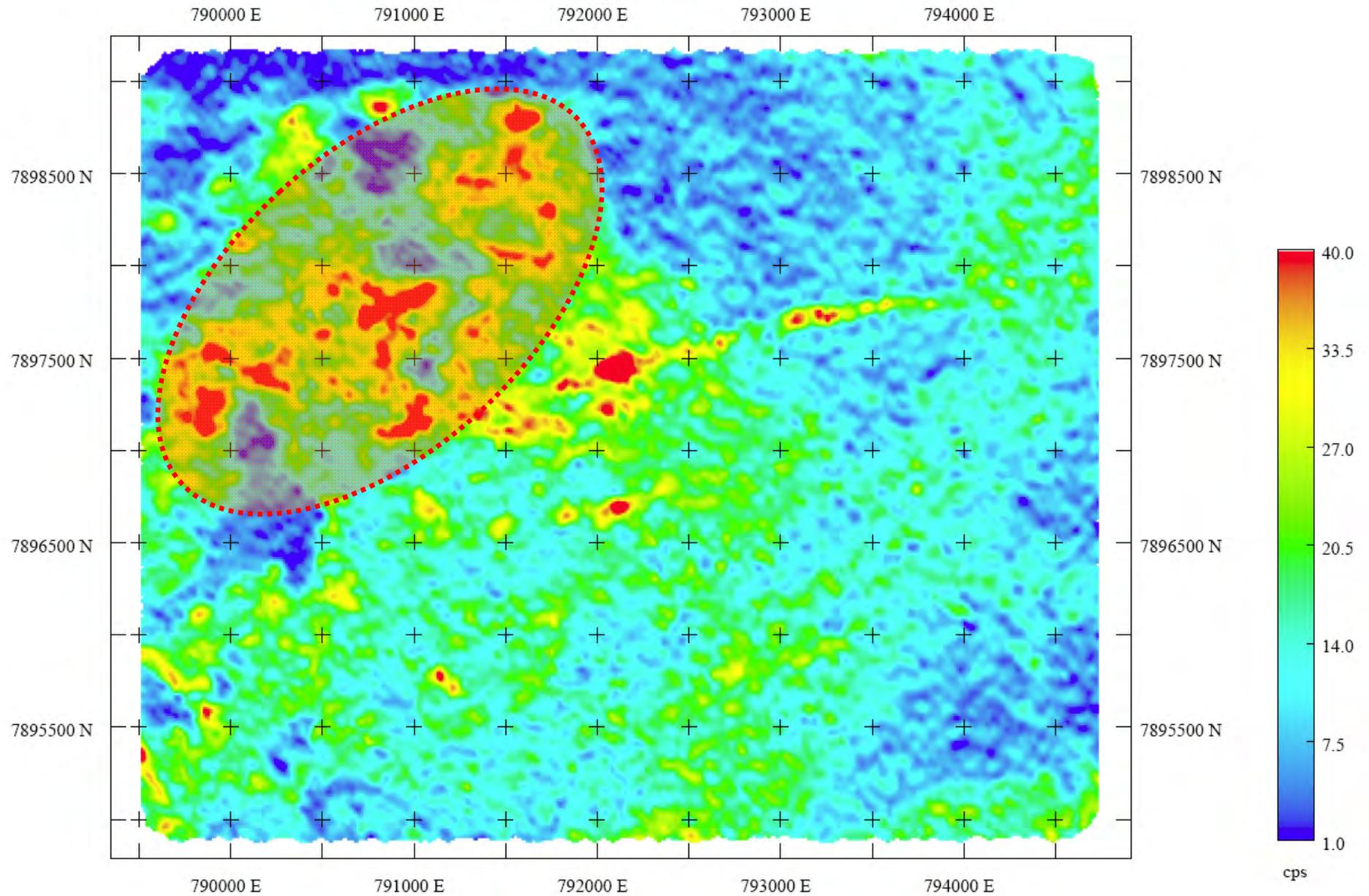


Gold & Base Metals

Percyville EPM15440 - Union Prospect Detail (Rock Chip Results & Helimagnetics)



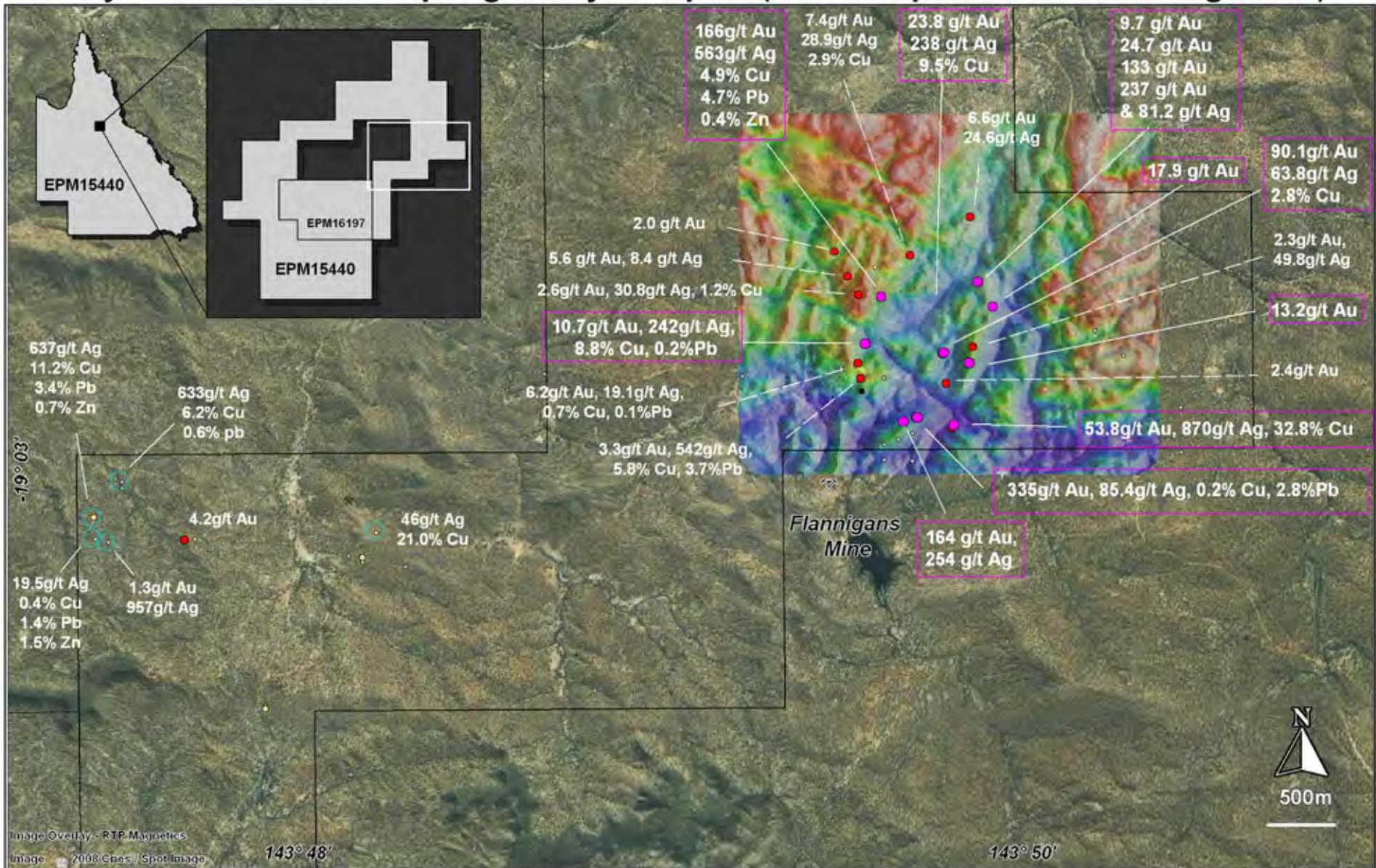
Union Project Uranium





**Primary quartz-chlorite-sulphide
ore from the Union Prospect**

Percyville EPM15440 - Spring Valley Prospect (Rock Chip Results & Helimagnetics)



Pepinini Minerals Limited

-80# Soil Sample Locations

Rock Chip Gold Results

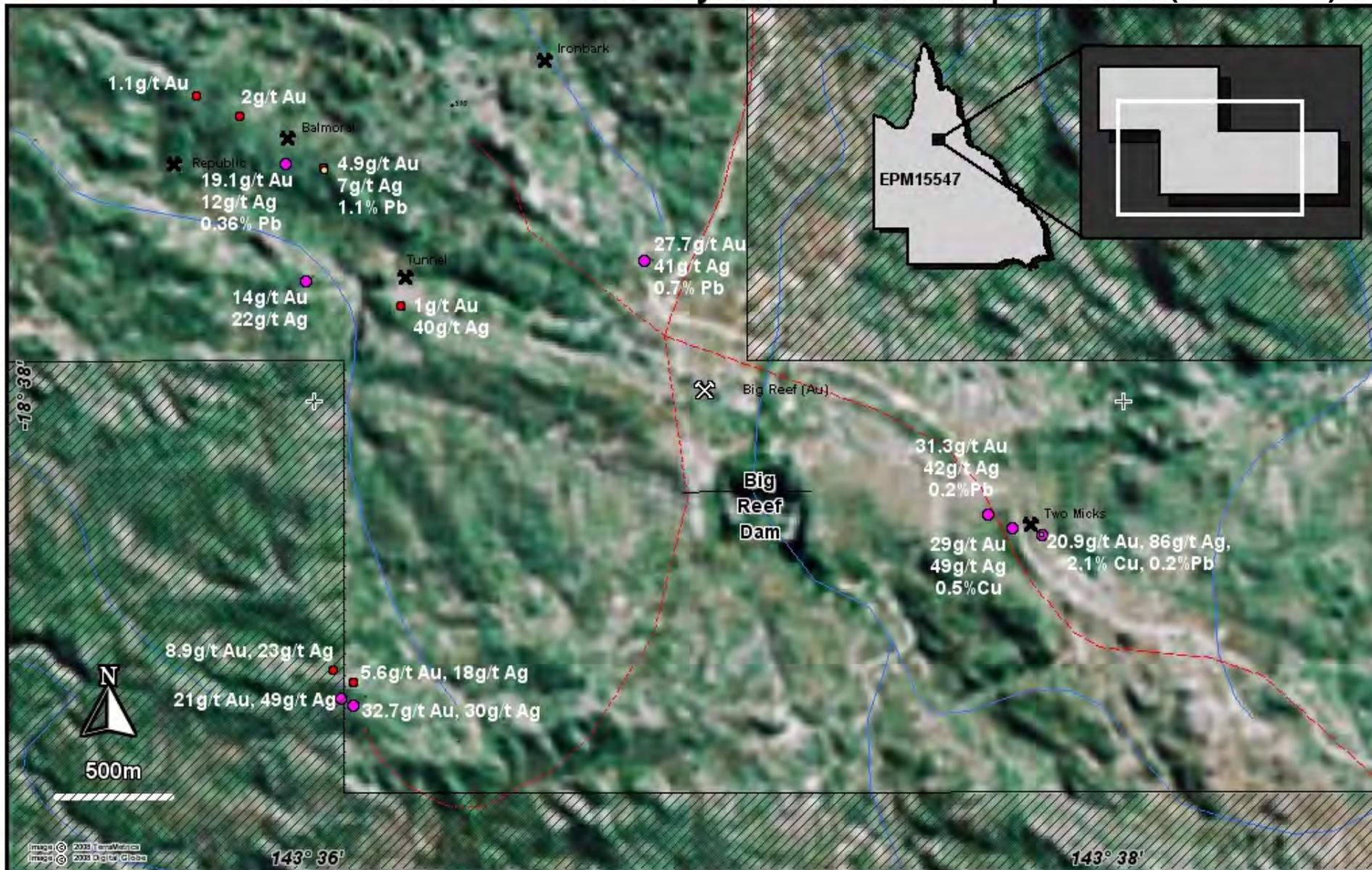
● >10g/t Au ● 1-10g/t Au ● 0.5-1g/t Au ● < 0.5g/t Au

Other



└── EPM 15440
Percyville

The Return EPM - Recent Polymetallic Rock Sample Results (Nov. 2008)



Pepinini Minerals
Limited

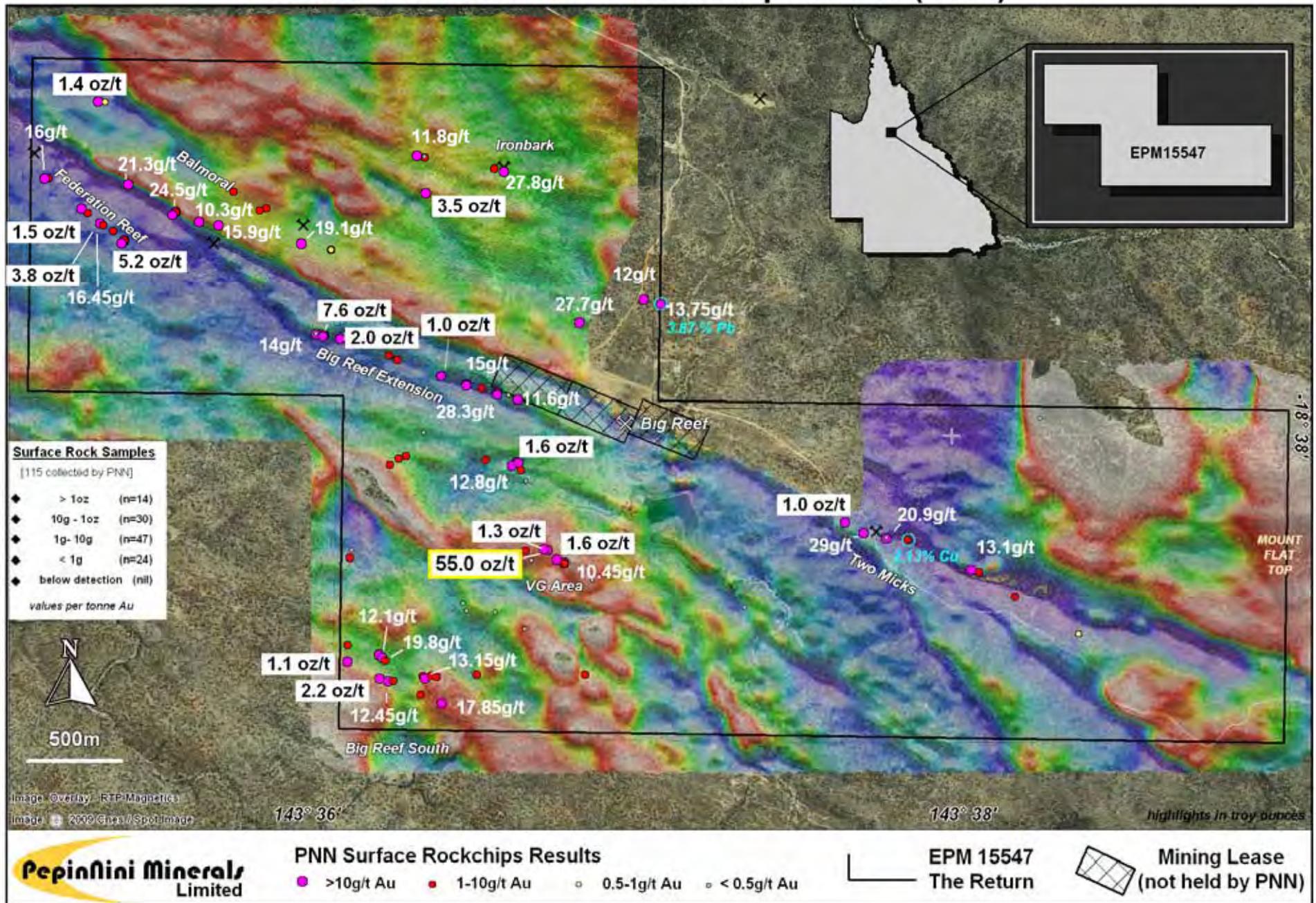
Recent Gold Results

● >10g/t Au
 ● 1-10g/t Au
 ○ 0.5-1g/t Au
 ○ <0.5g/t Au



EPM 15547
The Return

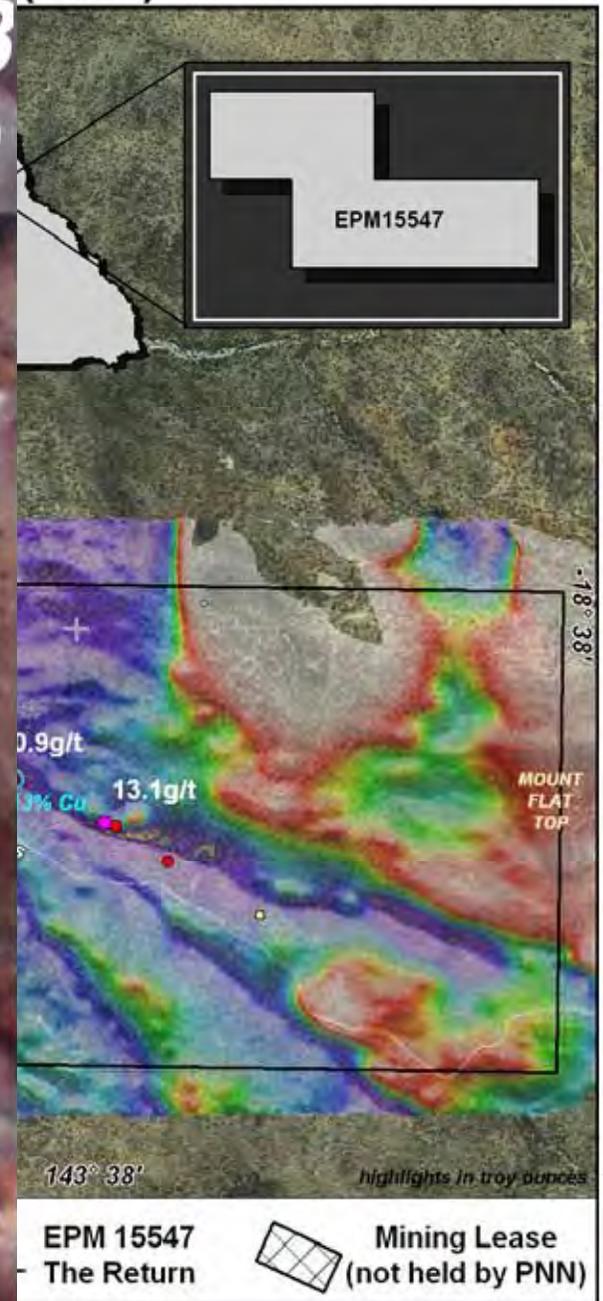
The Return EPM15547 - Rock Chip Results (Gold)



The Return EPM15547 - Red Cliff District (Gold)

SampNo: 77883
1710 ppm Au
(55.0 oz/t)

80% of the 115 surface samples that have been collected by PepinNini for assays on this tenement have returned economic grades of gold with 15% returning more than 1oz/t



Queensland Project Summary

- m 100% interest in 24 tenements covering 2,773 sq kms
- m Confirmed high grade gold, copper, uranium, phosphate and potash potential
- m Priority high grade shallow gold targets ready to drill



Pepiniini



Thank You

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