



MANTLE MINING

ASX: MNM

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ASX Release

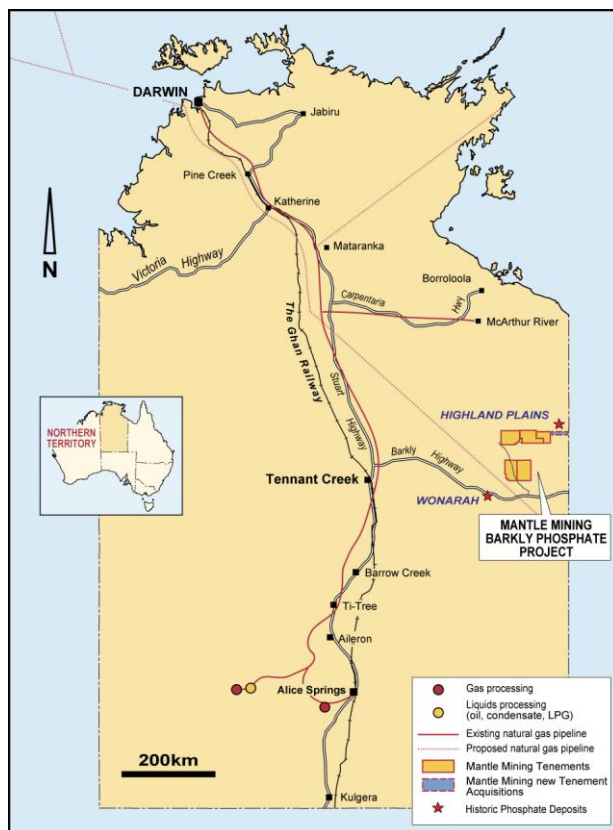
15 October 2009

Barkly Phosphate Project Tenement Granted

Highlights:

- Mantle Mining secures its 6th tenement in Australia's most prospective basin for phosphate deposits.
- Grant of EL 27037, for 6 years, consolidates 5,202km² in the Georgina Basin under Mantle control.
- The Company recently completed field reconnaissance ahead of drilling programme later this year.

Mantle Mining Corporation Limited (ASX: MNM), is pleased to report it has been granted EL 27037 for an initial 6 year period.



Mantle's new tenement is located in the Georgina Basin of the Northern Territory and is immediately adjacent to the Company's existing tenements.

The tenement is also strategically located just to the south of Phosphate Australia's (ASX: POZ) Highland Plains project which contains a maiden JORC Compliant Phosphate Rock Deposit.

Figure 1: Mantle's Barkly Project location plan.

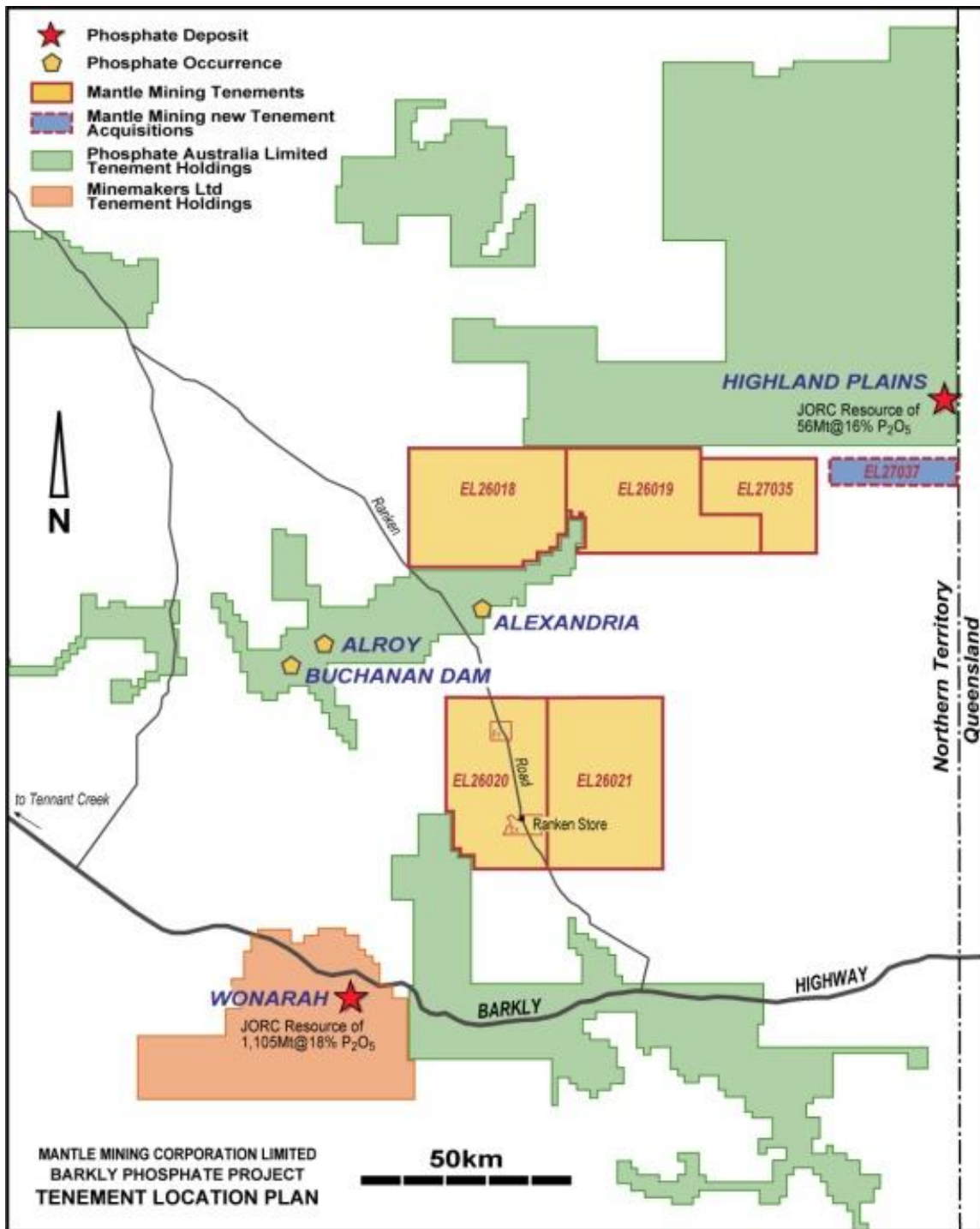


Figure 2: Mantle’s Barkly project, surrounding explorers and infrastructure location plan.

Mantle’s tenements are strategically located centrally between Minemaker’s (ASX: MAK) Wonarah deposit (JORC Compliant Indicated and Inferred Resource of 1,105Mt @ 18% P₂O₅), and Phosphate Australia’s Highland Plains deposit (JORC Compliant Inferred Resource of 56Mt @ 16% P₂O₅). The Alexandria, Alroy and Buchanan Dam phosphate occurrences also sit near Mantle’s project area (Figure 2).

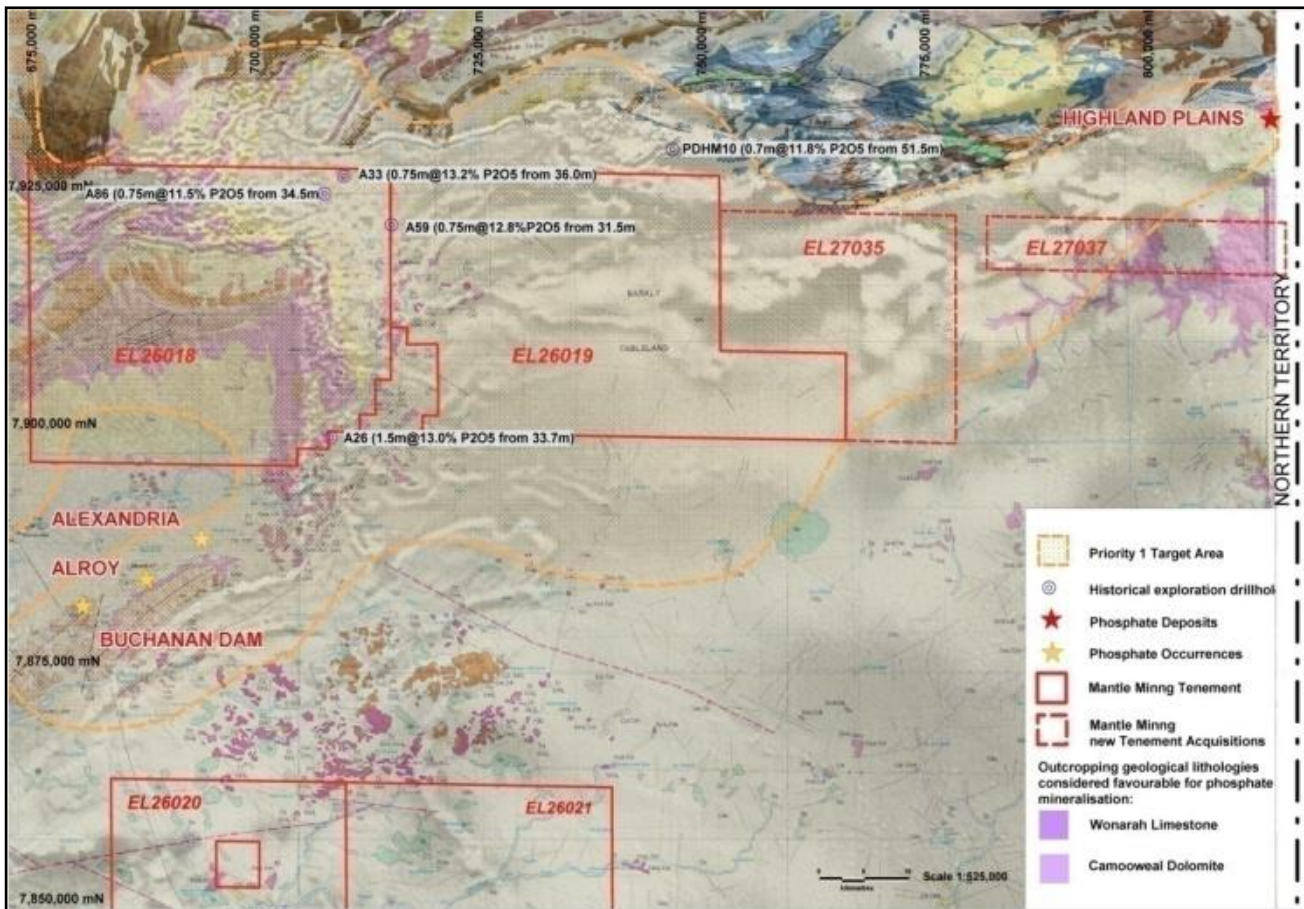


Figure 3: Phosphate intersections documented by previous explorers.

Historical drilling has confirmed the presence of phosphate rock within prospective stratigraphy underlying significant areas of Mantle’s tenements. Historic drillholes with phosphate intersections exist on EL 26018 (Figure 3, Table 1).

Historical Phosphate Rock Drilling Results over 10% P₂O₅			
<i>Hole Number</i>	<i>Depth from (m)</i>	<i>Thickness (m)</i>	<i>Grade % P₂O₅</i>
A25	33.7	1.50	13.0
A33	36.0	0.75	13.2
A59	31.5	0.75	12.6
A86	34.5	0.75	11.5

Table 1: Historical phosphate drilling on Mantle’s tenements.

The phosphate deposits in the Georgina Basin occur in relation to either the Wonarah Limestone or Camooweal Dolomite source rocks. Both source rocks occur across substantial portions of Mantle’s tenements. EL 27037 includes a large area of Camooweal Dolomite (Figure 3) as well as a number of areas considered prospective for Highland Plains arcuate embayment style phosphate enrichment zones (grey shaded areas on Figure 4).

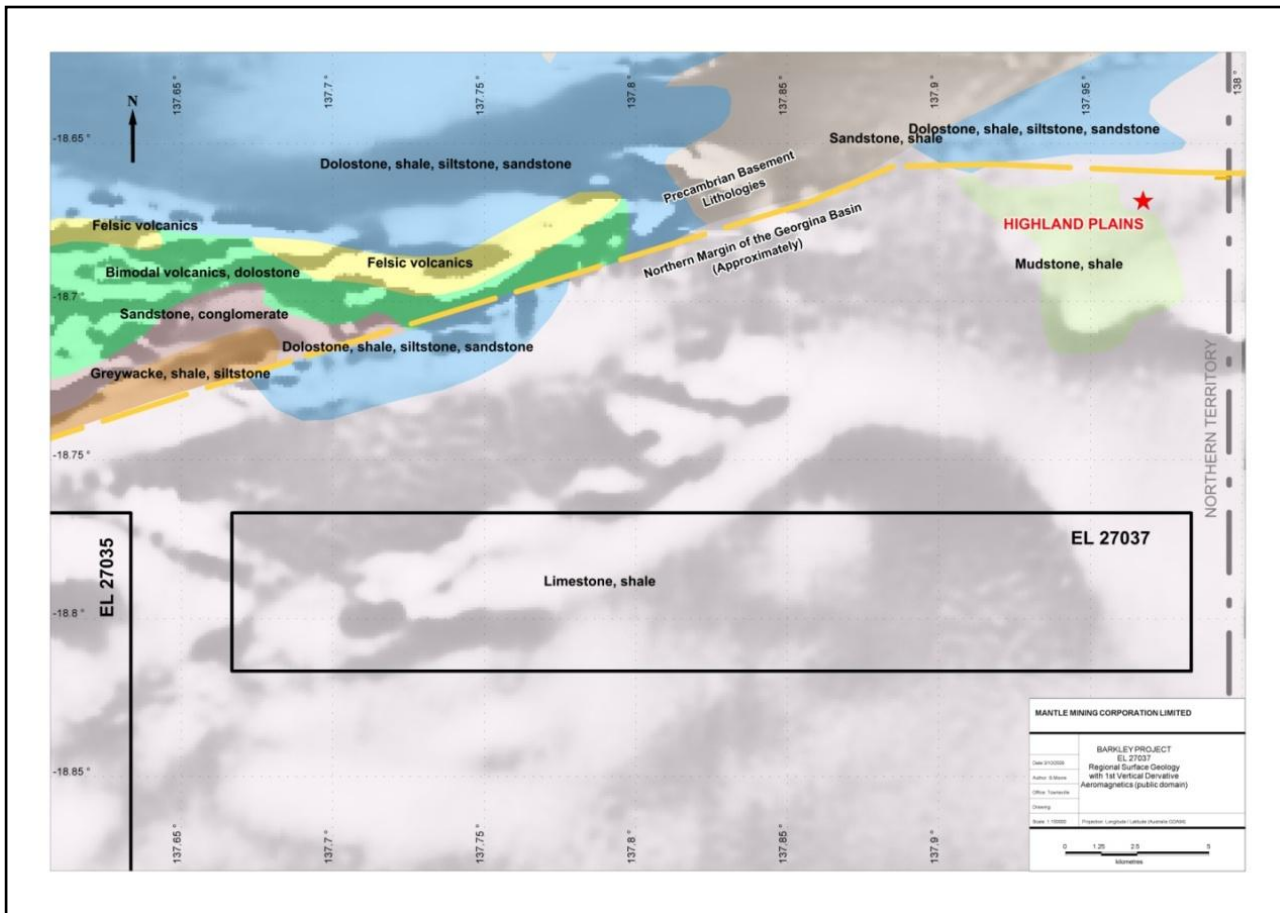


Figure 4: EL 27037 on regional geology and aeromagnetics.

Company and contract field crews have recently completed detailed site surveys and field reconnaissance work on the Barkly Project tenements in order to confirm and locate target areas for a Reverse Circulation (RC) drilling programme across the Barkly Project, anticipated to begin in late November.

For further information:

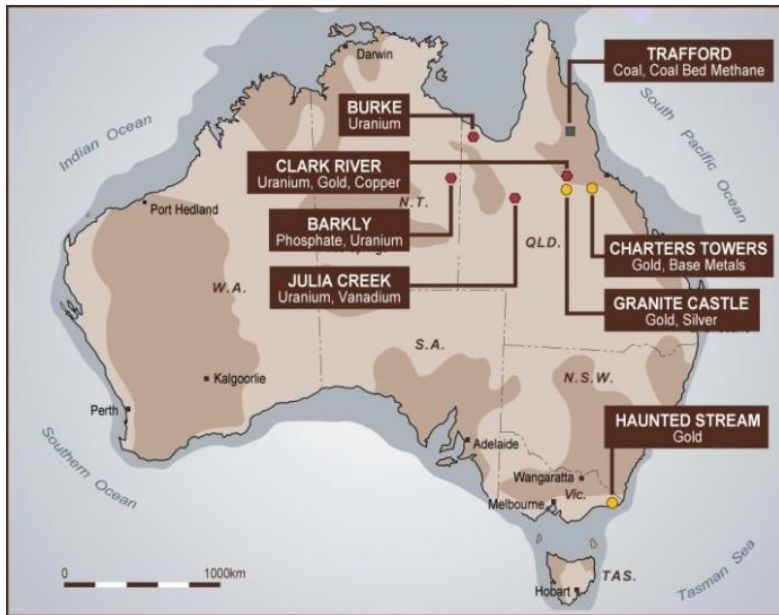
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Competent Person Statement:

The information in this report that relates to Exploration Results is based on information compiled by Mr Stuart Moore, an Executive of Mantle Mining Corporation Ltd. Mr Moore is a Member of the Australasian Institute of Mining and Metallurgy (M.AusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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". Mr Moore consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.



Mantle Mining’s Other Projects:

- Haunted Stream Gold
- Granite Castle Gold
- Charters Towers Gold
- Trafford Coal & CBM
- Julia Creek Uranium
- Clarke River Uranium
- Burke Uranium

Figure 5: Mantle Mining project locations.

In Victoria, Mantle controls a number of tenements highly prospective for gold/copper including many historical, high-grade, mines along a twelve kilometre gold anomalous corridor closely tracking the Haunted Stream fault. Anomaly 4 was recently announced as a major drill target for possible deep vein gold or porphyry copper-gold mineralisation. It is the Company’s intention to fast-track a diamond core drill hole targeted to intercept the anomaly at depth, followed by down the hole geophysics. Weather dependant, the hole is proposed for fourth quarter this calendar year. The Company was also notified of potential grant of Mining Licence 5505 located within the Haunted Stream exploration licence area.

In Queensland, Mantle’s Granite Castle and Charters Towers projects contain standard JORC compliant gold resources. At Granite Castle the JORC compliant gold/silver resource mineralisation occurs in a single sub-vertical shear, 600m long. Over 6 kms of additional, sub-parallel shears have been located, all with drillholes and/or rockchip samples at similar grades to the JORC compliant shear. The Company has designed a programme of additional soils sampling and surface based Induced Polarisation (IP) surveys in order to most effectively design a shallow drilling campaign on the next most prospective (Coronation) shear. Drilling is currently proposed for early in the new-year, weather dependant.

In Queensland, Mantle is negotiating an access agreement with the traditional custodians of Mt Mulligan – Trafford Coal & Coal Bed Methane (CBM) project. The attractiveness of using CBM for low emission power generation and sale of electricity, or supply for LNG production, is significant. The Company progressed very positive discussions with the traditional custodians towards Authorisation (signing) of an Indigenous Land Use Agreement (ILUA), however has been delayed by the advent of a Third Party claim. The Company has retained Special Counsel to work with its legal advisor, Minter Ellison, Lawyers, to resolve the claim.

In Queensland, Mantle controls a number of tenements near Julia Creek, Charters Towers and in the Gulf of Carpentaria near Westmoreland, all prospective for uranium and base metals. Value accretion from these projects is being sought from joint venture activity thereby allowing the Company to focus its own resources on its highest priority projects whilst maintaining exposure to any upsides delivered through joint venture. The Company has recently entered into its first such joint venture - with Southern Uranium Limited (ASX: SNU) - at its Mt Brown tenement. Mt Brown is immediately adjacent to SNU’s Pandanus West Project and forms part of Mantle’s Clarke River Project.