

POZ MINERALS LIMITED

ABN 51 129 158 550



HIGHLAND PLAINS PROJECT & EXPLORATION TARGETS

EXPLORATION LICENCE EL25068

ANNUAL GEOLOGICAL REPORT FOR THE PERIOD ENDED 7 AUGUST 2018

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SUMMARY

Tenement EL25068 is in the Barkly Tablelands of the Northern Territory on the Mount Drummond, Alroy and Ranken 1:250,000 map sheets. The area experiences a sub-tropical climate with the wet season occurring from November to March. During this time the area can be difficult to traverse by vehicle as access roads become flooded. In the dry season the area is accessible by 4WD vehicle via pastoral tracks from the western and eastern sides of the tenements.

Phosphate Australia Limited pegged the tenement in November 2005 after a target analysis of the area using publicly available remotely sensed data. The ground was chosen due to numerous Uranium channel radiometric anomalies coupled with the existence of published phosphate and iron occurrences.

On 11th November 2016 Phosphate Australia Limited changed its name to POZ Minerals Limited. EL25068 is 100% held by POZ Minerals Limited.

Permit	Area km ²	Application Date	Grant Date	Comments
EL25068	36.86	24-Nov-05	8-Aug-06	100% POZ

No on-ground work was undertaken on the tenement during the reporting period.

1.0 INTRODUCTION

This annual report details all exploration activities carried out on tenement EL25068 between 8 August, 2017 and 7 August, 2018. EL25068 was pegged by Phosphate Australia in November 2005 as a result of Uranium channel radiometric highs and the presence of known mineral occurrences within the tenements. The tenement is 100% owned by POZ Minerals Limited.

Tenement EL25068 was pegged over the historical Highland Plains phosphate occurrence, as well as numerous iron occurrences in the west. The Highland Plains deposit is coincident with a Uranium channel radiometric high and contains a historical ore reserve estimate from previous exploration activities in the 1960s.

Phosphate Australia Limited ("POZ") was listed on the Australian Stock Exchange on July 1st, 2008 and the Highland Plains occurrence was the focus of the Company's Initial Public Offering. Since then exploration has focussed on drilling at Highland Plains to generate a JORC-compliant Inferred Resource of 56 Million Tonnes @ 16% P₂O₅ with a contained Western Mine Target Zone ("WMTZ") from near surface of 14 Million Tonnes @ 20% P₂O₅ using a 15% cutoff. On 11th November 2016 Phosphate Australia Limited changed its name to POZ Minerals Limited.

The Company will continue to develop the Highland Plains Phosphate Project and explore other potential opportunities for mineralisation within the EL25068.

2.0 TENURE

The Highland Plains tenement EL25068 was pegged on 24 November 2005 by Nicholson Resources Limited, which later became Phosphate Australia Limited, and then POZ Minerals Limited. It was granted on August 8, 2006 and is currently 36.86 km² in extent

A summary of tenement details is given in Table 1

TABLE 1: Tenement Details

Permit	Area km ²	Application Date	Grant Date	Comments
EL25068	36.86	24-Nov-05	8-Aug-06	100% POZ

3.0 BACKGROUND INFORMATION

3.1 LOCATION & ACCESS

Tenement EL25068, known as the Highland Plains Project, is situated around 410 kilometres from Mt Isa in Queensland. Access to the tenement is along the Barkly Highway to Camooweal, and thence via the unsealed gazetted Rocklands Road and station tracks heading north along the Northern Territory Border.

Figure 1 shows a tenement location map and geology of the Northern Territory Area.

Figure 1: Location Map



3.2 TOPOGRAPHY

The topography of the Highland Plains area consists of hummocky hills in the west, which define the Western Mine Target Zone (WMTZ). Here phosphatic siltstone is just below the soil horizon. Heading east from the WMTZ, the central area becomes more subdued, typical of an alluvial washout zone or alluvial fan which has eroded the tops of the hills. As the phosphatic zones dip to the east, weathering has not eroded the ore and it is intersected at depths from 15 metres. The topography over the ore zone to the east is also fairly flat, however the topography over the ore zone to the north and south in these areas consists of prominent hills which separate the Cambrian sequences from the lower lying Proterozoic sequence shales.

In the distance and partly off the tenement, a cliff formation of Proterozoic Sequences bounds the ore zone to the north and west. In the south, a quartzitic promontory has defined the southern part of the zone. These cliffs make up a C-shaped embayment where the sea level once transgressed, providing a trapping environment and quiet conditions with upwelling cold waters suitable for phosphorite deposition

3.3 CLIMATE

The Northern Territory experiences a tropical weather pattern. The dry season occurs from roughly April until November each year. November to March is the wet season when rain and thunderstorms can be significant.

Weather generally reaches the mid 30°C mark by early September and by late October approaches 40°C. In addition the cycles of heat causing cloud buildup followed by rain become more frequent, and by December there can be daily cloudbursts with associated lightning.

Access to Highland Plains is typically across black soil plains and areas of fine red bulldust and hence access to the project can be difficult, particularly after rain.

The Lancewood Creek in the southern part of the Highland Plains project area is prone to flash flooding after a rainy outburst, making the creek impassable for a couple of days.

4.0 GEOLOGY

4.1 REGIONAL GEOLOGY

Highland Plains falls within the Palaeozoic Georgina Basin, an intracratonic sedimentary basin comprised of shallow marine successions up to 450m thick. Typically the successions consist of carbonate and marine clastic rocks, evaporites, fluvial and lacustrine continental sandstones, glaciogenic sediments, shale and siltstone overlain by marine carbonates and clastic rocks of Cambrian to Ordovician age (McCrow, 2008). In parts this is overlain by Silurian to Early Carboniferous terrestrial sediments.

Within the central region, the Platform has been subdivided into an eastern Undilla Sub-basin and a western Barkly Sub-basin, separated by the Alexandria-Wonarah Basement High.

During the early middle Cambrian, a sea level transgression inundated the central Basin depositing sediments within a tectonically quiescent platform. By the middle Cambrian phosphogenesis became widespread as a result of cold water upwelling from deeper marine conditions. Numerous phosphate deposits occur within the Georgina Basin, deposited in restricted marine embayments. These embayments form the basement topography which controlled the phosphorite deposition. Black soil horizons – a weathering product of the dolostones and limestones - have subsequently covered the topography, leaving flat and featureless terrain in parts.

The embayment was bound by land to the North, South and West and had restricted flow out of the Burke River Outlier to the east (McCrow, 2008).

Today the basin is surrounded by the Nicholson and MacArthur Sub-Basins in the North, the Tennant Inlier to the West and the Arunta Province to the South.

Facies changes within the successions make stratigraphic associations between different parts of the Basin difficult.

4.2 LOCAL GEOLOGY

The Highland Plains Phosphate Project consists of siltstones, cherty siltstones, sandy siltstones and ferruginous sandy siltstones overlying banded, alternating dark and creamy claystones that show distinctive leisenberg textures and form the basal unit of the economic phosphate horizon. These units are of Cambrian age and belong to the Lower Border Waterhole Formation.

In the Western area, phosphatic siltstones may be found near surface just below the soil horizon, typically associated with manganese, which either appears as a pressure intergrowth or in dendritic growth patterns.

The phosphate occurs in two horizons now defined as the upper and lower zones of the Western Mine Target Zone ("WMTZ").

In the Central area the topography is mainly flat, compared to the hummocky hills in the west. This central area consists of outcropping barren white siltstones, reddish white sandy siltstones and remnants of black soils eroded from the dolostones/limestones. These overlie phosphatic siltstones and cherty phosphatic siltstones which occur at depth.

To the east the area continues to be flat, but the ore zone is bound by hummocky hills to the north and south, similar to those in the WMTZ.

A conglomerate marker horizon may be intersected in the western edges of the Central Zone, consisting of well-rounded pebbly clasts ranging from millimetres to several centimetres in size.

A large slump block occurring in the Central Zone suggests an alluvial fan grew after the sea level regressed, and was supplied from the Proterozoic cliffs to the North. These cliffs are part of the Bluff Range Formation.

The phosphatic siltstone horizons dip generally to the east at roughly 30°. Variable dips suggest structural activity such as faulting and possibly gentle folding at oblique angles. A graben structure may also have caused the Central Zone structure.

The Lancewood Creek follows a fault line bounding the deposit to the south. This normal fault has dropped the southern block and has subsequently become infilled by dolostones and

dolomites of the Camooweal Formation. The younger Bush Limestone conformably overlies the sequence closer to the fault.

Siltstone sequences may in parts underlie this Formation at depth, however drilling to date to the south of the fault has not confirmed this theory and the dolomites may occur to around 100 metre depths.

Barren siltstone sequences and limestone occur to the south of the ore zone. This possibly ties in with the barren siltstones in the central part of the ore zone which could represent another, later, sea level transgression. The conglomerate may represent this sea level stand in the middle of the sequence.

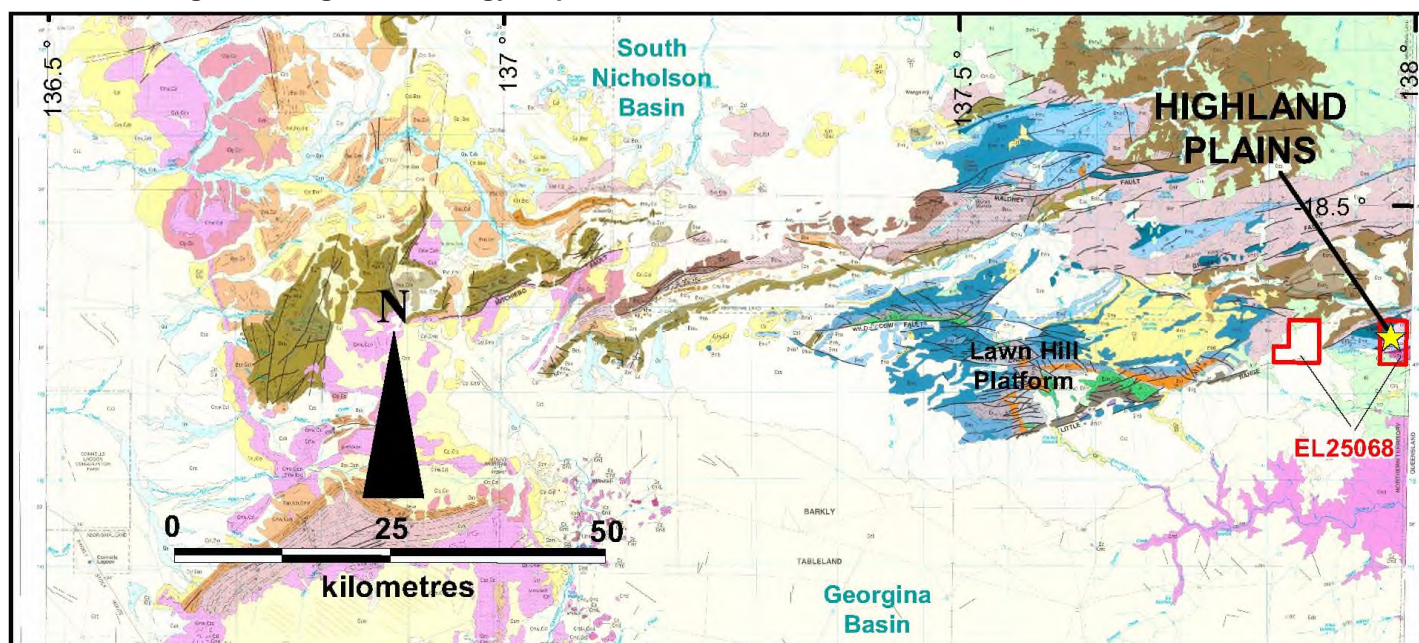
The above allows the phosphate depositional environment to be reconstructed. Proterozoic metasedimentary cliffs to the north and west formed a quiet marine embayment and thus a trapping environment as the sea transgressed to the northwest. This warm embayment had upwelling cold water from the deep ocean creating the right temperature, pH and Eh conditions for phosphorite precipitation.

In the southwest, a quartzitic horizon, probably once a sandbar, controlled sedimentation to an eddying environment within the C-shaped embayment, effectively depositing the phosphorite in northwest-southeast bands.

The phosphorite occurrences at Alexandria, Buchanan Dam and Alroy probably formed under similar conditions as Highland Plains, but are now geomorphologically very different.

The Proterozoic embayment is now a basement feature and the siltstone sequences are covered over by the Camooweal Dolostones which have weathered to flat, barren, black soils plains.

Figure 2: Regional Geology Map



4.3 Previous exploration

Australian Geophysical carried out extensive phosphate exploration in 1968 which led to the development of a resource at Highland Plains. This figure was based on 36 holes for 1,184 metres of drilling and work included geological mapping, soil sampling, percussion drilling and

some deep rotary percussion drilling. Australian Geophysical defined two zones as the Basal and Upper Phosphate Zones within the Lower Border Water Hole Formation, with the Basal Phosphate Zone occurring as the base of the Cambrian sequence unconformably overlying Proterozoic basement.

The resource of 82.6 Million Tonnes @ 20% P₂O₅ is a historic resource and is not JORC compliant.

5.0 WORK BY POZ MINERALS

No on-ground work was undertaken by POZ Minerals during the reporting period. During this time the Company has searched for a Strategic Partner to develop the Highland Plains phosphate deposit.

6.0 SUMMARY AND CONCLUSION

Phosphate Australia is continuing its search for a Strategic Partner to assist in developing the Highland Plains phosphate mine and associated infrastructure. This will continue to be a focus of the company in the coming reporting period.

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