GBE EXPLORATION PTY LTD
ACN 121 535 948

FINAL REPORT EL31391

“Indiana Project”

(Reporting Period 26/04/2018 – 11/04/2019)

Project Title Holder: GBE Exploration Pty Ltd

Distribution

1. Kalia Ltd
2. GBE Exploration Pty Ltd
3. Department of Primary Industry and Resources

Author: R Henderson
Date: 11 April 2019

Keywords
Indiana Project, Irindina Basin, nickel, copper, PGE.
TITLE PAGE

Titleholder
GBE Exploration Pty Ltd

Operator (if different from above)

Titles/Tenements
EL31391

Mine/Project Name
Indiana Project

Report title including type of report and reporting period including a date
Final Report EL31391 26 April 2018 to 11 April 2019

Personal author(s)
Rob Henderson

Corporate author(s)
GBE Exploration Pty Ltd

Target Commodity or Commodities
Nickel, Copper, Cobalt, Platinum Group Elements (PGE), Lithium

Date of report
11 April 2019

Datum/Zone
GDA94 Zone 53

250 K mapsheet
Illogwa Creek SF53-15

100 K mapsheet
Quartz 5951
TABLE OF CONTENTS

TITLE PAGE

1. BACKGROUND
   1.1 INTRODUCTION
   1.2 LOCATION AND ACCESS
   1.3 TENURE
   1.4 REGIONAL GEOLOGY
   1.5 EXPLORATION RATIONALE
   1.6 LANDOWNERS

2. EXPLORATION HISTORY
   2.1 PRE KALIA EXPLORATION COMPLETED

3. WORK COMPLETED DURING THE PERIOD OF TENURE

4. EXPENDITURE

5. COPYRIGHT STATEMENT

LIST OF FIGURES

Figure 1. EL31391 Location
Figure 2. EL31391 Outcrop Geology
Figure 3. Generalised Resource Location

LIST OF TABLES

Table 1. EL31391 Tenement Details.
Table 2. EL31391 Expenditure Details
1. BACKGROUND

1.1 INTRODUCTION

This Final Report pertains to Exploration Licence 31391 for the period 26 April 2018 to 11 April 2019. EL31391 formed part of the Indiana Project and together with EL31275 and EL31542 was part of GR462 for reporting purposes.

The Indiana Project was assembled to target the potential for base and precious metal sulphide mineralisation within the Riddock Amphibolite and later intrusives gabbros within the Irindina Province utilising the Baldrick and Blackadder Prospects that are within the tenement area and the neighbouring Basil resource as analogues for ongoing exploration. Additionally, the presence of historic mica mines within pegmatites is an indication of potential for pegmatites to host metals within the tenement.

Corporate restructure of GBE Exploration and subsequent prioritisation of alternate projects has led to the decision to relinquish EL31391.

1.2 LOCATION AND ACCESS

EL 31391 is situated in the Harts Range region approximately 150 km ENE of Alice Springs. The tenement can be located by reference to the Illogwa Creek SF53-15 1:250000 scale map sheet and the Quartz 5951 1:100,000 scale map sheets.

The tenement can be accessed by station and exploration tracks south from the Plenty Highway.
### 1.3 TENURE

Tenement details for EL31391 are detailed in Table 1 below.

<table>
<thead>
<tr>
<th>Title</th>
<th>Graticular Blocks</th>
<th>Area</th>
<th>Grant Date</th>
<th>Relinquishment Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL31391</td>
<td>38</td>
<td>119.8</td>
<td>26/04/2017</td>
<td>11/04/2019</td>
</tr>
</tbody>
</table>

**Table 1. EL31391 Tenement details**

### 1.4 REGIONAL GEOLOGY

The Indiana project is situated over the margin of the outcropping Aileron Province and the undercover Irindina Province.

The Irindina Province is comprised of the Harts Range Group, a volcano-sedimentary succession that was metamorphosed to amphibolite-granulite facies during the Larapinta Event (475-460 Ma). Lithostratigraphic and geochronological data indicate that the Harts Range Group correlates with Neoproterozoic to Cambrian sediments of the adjacent Amadeus and Georgina Basins. It is therefore
likely that the Harts Range Group was deposited in a basin contiguous with, and possibly linking, the Amadeus and Georgina Basins. As the Harts Range Group underwent high grade metamorphism, sedimentation continued unabated in the Amadeus and Georgina Basins. This implies that the Larapinta Event only affected the Irindina Province.

Structural and lithological evidence suggest that the Larapinta Event occurred within an extensional regime and may have resulted in deep rifting and sedimentary burial depths of up to 30km, accounting for the high metamorphic facies observed. Processes such as mantle upwelling and magmatism may have also influenced the metamorphic grades.

The Harts Range Group was inverted back to its near-surface position during the Alice Springs Orogeny (450-300 Ma). During this time numerous mafic-ultramafic conduit and sill-like intrusions are thought to have been intruded. This collective of mafic-ultramafic intrusions has been termed the Lloyd Gabbro Suite (409Ma) and are considered prospective for Ni-Cu-PGE mineralisation.

Where outcrop is available the dominant stratigraphic units are the Irindina Gneiss and the Riddoch Amphibolite. The Irindina Gneiss is a quartz-feldspar-biotite +/-garnet gneiss with interbedded massive amphibolites with lesser calc-silicates and marble. The Riddoch amphibolites are massive to compositionally layered amphibolite intercalated with garnet-biotite-feldspar-quartz gneiss and rare quartzitic units.

The area has been subjected to intense deformation and metamorphism.
Figure 2. EL31391 Outcrop Geology
1.5 EXPLORATION RATIONALE

The exploration targets for GBE Exploration are Ni-Cu-PGE sulphide mineralisation hosted within mafic-ultramafic intrusions, and lithium-bearing pegmatite.

The occurrence of mafic-ultramafic igneous-related nickel, PGE, chromium, and cobalt is closely related to mafic-ultramafic igneous rocks derived from the mantle. Based on known resources in Australia, the continent appears to be under-represented in world-class intrusion-hosted nickel, PGE, and chromium deposits despite Australia’s favourable geology for such deposits.

Provinces and regions with predicted high to moderate potential with no known major deposits of tholeiitic intrusion-hosted Ni-Cu-PGE sulphides include the Southern Aileron Province (Northern Territory and Western Australia), including a series of mostly-concealed Paleoproterozoic intrusions; also, units within the Warakurna Event (~1050 Ma); and the Irindina Province and its extensions eastwards under cover, including the Cambrian Riddock Amphibolite (part of the ~510 Ma Kalkarindji Event).

Extensive geophysical exploration by previous explorers have identified several prospects with limited ground follow-up exploration.

Evidence of such processes have been recorded locally within the “Blackadder” and “Baldrick” gabbroic Intrusions and the neighbouring Basil resource.

1.6 LANDOWNERS

Landowners over whom the granted exploration licence lies is the Indiana Station (Perpetual Pastoral Lease).

2. EXPLORATION HISTORY

2.1 PRE GBE-EXPLORATION COMPLETED

The project area is considered prospective for;

- Ni-Cu-PGE mineralisation associated with mafic and ultramafic intrusions
- “Basil type” Cu-Co semi-massive sulphides
- Vein-style REE-Th mineralisation
- Uranium mineralisation

Previous companies initially targeted the East Arunta Province on the basis that conceptually, it presented a favourable environment for the formation of significant base metal sulphide deposits, particularly nickel sulphides. The area had not seen any significant systematic base metal exploration nor had any base metal sulphide mineralisation been identified until Mithril discovered the
Blackadder Nickel - Copper Prospect (Huckitta Project) in 2008 (rock chip sample values up to 9.8% copper, 3.8% nickel, 1.7g/t PGE’s).

Ongoing exploration by Mithril identified over 20 new mineral prospects of outcropping copper-cobalt (including Basil), nickel-copper, gold, and Iron Oxide Copper Gold (IOCG) mineralisation throughout the region.

The most significant of these prospects is the 100% - owned Basil Copper Cobalt Deposit (EL26942) where in early 2012, Mithril delineated a JORC 2004 Code - compliant Inferred Mineral Resource of 26.5Mt @ 0.57% copper, 0.05% cobalt from surface.

![Figure 3. Generalised Resource Location](image)

The Basil deposit lies within a broader 10-kilometre-long trend (within amphibolites and calcsilicate rock types in the Riddock Amphibolite of the Irindina Province on the contact with the Aileron), with drill testing of Basil having been conducted over only 4km of the trend. Drilling intersected significant copper sulphides (chalcopyrite) in most of drill holes with better intercepts including 85.7m @ 0.51% copper, 0.06% cobalt from shallow depths. Mineralisation is typically matrix to semi—massive sulphide with pyrrhotite > pyrite > chalcopyrite. The deposit remains open in all directions with geophysical surveying (gravity, magnetic modelling, and electromagnetics) all highlighting the extensional potential of the deposit.

Mithril noted there is good potential to discover higher grade copper mineralisation at the Manuel prospect, located approximately 5km east of Basil, where drilling has confirmed the presence of massive copper sulphides (up to 3.4% copper over narrow intervals) down-dip of outcropping gossans. Downhole EM on these holes indicates a large offhole conductor that has not been drill tested.
3. WORK COMPLETED DURING THE PERIOD OF TENURE

Work completed on EL31391 included

- Data review
- GIS, including spatial database compilation, locating and referencing satellite and geophysical imagery, plus conversions between local grids and regional projection systems.

Following the comprehensive data review the Edmund area stood out as a prime target for further base and precious metal exploration. However, a change in corporate strategy during the period of tenure precluded field work being undertaken. Marketing of the project failed to attract interest and the decision was made to relinquish the tenement prior to anniversary.

4. EXPENDITURE

<table>
<thead>
<tr>
<th>Title</th>
<th>Expenditure Year 1</th>
<th>Expenditure Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL31391</td>
<td>$25449</td>
<td>$3623</td>
</tr>
</tbody>
</table>

Table 2. EL31391 Expenditure Details

5. COPYRIGHT STATEMENT

This document and its contents are the copyright of Kalia Limited (Kalia). The document has been written by Kalia Limited for submission to the Northern Territory Department of Primary Industry and Resources as part of the tenement reporting requirements as per Regulation 86 of the Minerals Titles Act.

This report may be released to open file as per Regulation 125(3)(a).