### PARTIAL RELINQUISHMENT REPORT

**Talton**  
*(EL 27846)*

<table>
<thead>
<tr>
<th>Title Holder:</th>
<th>NATURAL RESOURCES EXPLORATION PTY. LTD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator:</td>
<td>Natural Resources Exploration Pty. Ltd.</td>
</tr>
<tr>
<td>Tenement Manager:</td>
<td>Nicole Munro, Natural Resources Exploration Pty. Ltd.</td>
</tr>
<tr>
<td>Titles / Tenements:</td>
<td>EL(s): 27846</td>
</tr>
<tr>
<td>Project Names:</td>
<td>Talton</td>
</tr>
<tr>
<td>Report Title:</td>
<td>Partial Relinquishment Report – Talton (EL27846)</td>
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<td>Partial Relinquishment Report</td>
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<tr>
<td>Author(s):</td>
<td>Munro, N; Ansell, D</td>
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<td>NRE_NT2012: Talton - Partial Relinquishment Report</td>
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<td>Target Commodity / Commodities:</td>
<td>Base Metals and Rare Earth Elements</td>
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<tr>
<td>Date of Report:</td>
<td>12 November 2012</td>
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Summary

Section 94 of the Mineral Titles Act requires the submission of an Annual Report prepared by the titleholder for each exploration licence. This Partial Relinquishment Report for EL27846 offers a summary of the activities undertaken on the relinquished area for the life of the permit, including any results produced by those activities.

Natural Resources Exploration (‘NRE’) is the sole titleholder and operator of EL27846. NRE was granted EL27846 on 11 August 2010 for a term of six (6) years. NRE was subsequently granted the approval from the Department of Resources to incorporate this tenure into Group Technical Reporting for the project area known by NRE as its GR177-10 ‘Jervois Project’.

NRE believes that the Jervois Project offers the opportunity to delineate significant base metal mineralisation, positioned in a location close to Alice Springs which offers excellent logistics and access to infrastructure. The work and expenditure program for EL27846 consisted of a geological and geophysical review of existing data and information towards determining the location of possible base metal mineralisation within the tenement. NRE carried out a detailed desktop evaluation but also a detailed ground geological assessment of EL27846.

NRE has conducted extensive office-based studies and field work during the second term of the Exploration Licence EL27846, forming part of its Jervois Project. NRE conducted an extensive review of all previous exploration within the Project area, completed two (2) helicopter reconnaissance assisted field trips, geological mapping of the area, sampling programs (soil and rock chip sampling) and a ground magnetics sub-audio magnetics (‘SAM’) survey.

In relation to the relinquishment area, no samples were taken as there were no viable safe helicopter landing areas in the initial areas of interest in the tenement. Although no samples were collected from within the relinquished area itself, NRE based its conclusions on the results of samples collected in the surrounding tenements within the region.

NRE has concluded that the potential for mineralisation within this area is much lower than the remaining tenement area. NRE has delineated this area and nominated same after its extensive review of all previous exploration data and its newly acquired data in relation to this ground.
1. Introduction

Natural Resources Exploration’s (‘NRE’) rationale and objectives for EL27846, more commonly known by NRE as its Talton Prospect, considered the evaluation of potential base metals and rare earth elements mineralisation within the tenement.

NRE also considered the potential for these forms of mineralisation across a broader area being known as NRE’s ‘Jervois Project’ which lies in the Northern Territory’s Aileron Province of the Arunta Region.

EL27846 was granted to NRE on 11 August 2010, consisting of a total of 58 sub-blocks. The tenement is located entirely within the Palaeoproterozoic Aileron Province. There are two major geological provinces recognized in the area: the Georgina Basin and the Arunta Block. The Georgina Basin is a mixture of sandstone and calcareous sedimentary rocks, which overlies granitic intrusions and metamorphics of the Arunta Block. Figure 1 identifies the location of the relinquished area subject of this report.

Figure 1. Location Map of Relinquished Area
EL27846 ranges from a vast terrain of flat sandy area to undulating hilly ground with isolated rugged rocky outcrops. The relinquishment area is located on flat lying ground between Arthur Creek and Marshal River. The Jervois Range can be found to the northwest of the relinquished area whilst the Talton Range lies to the southeast. Figure 2 shows the topography within relinquished area.

Figure 2. Topographic Map of Relinquished Area

NRE’s exploration activities for EL27846 and its Jervois Project have included two (2) helicopter assisted reconnaissance programs, soil sampling, geological mapping and associated rock chip sampling as well as analysis of water bore cuttings on a regional scale.

Currently, office-based exploration activities continue with results confirming the need for follow up work in relation to the remainder of the overall Jervois Project.

2. History

EL27846 was granted to NRE for six (6) years commencing on 11 August 2010, as the sole titleholder and operator. NRE has recently nominated to relinquish 13 sub-blocks with the
remainder of the permit comprising of 45 sub-blocks. Figure 3 below identifies both the retained permit area and the relinquished permit area.

Figure 3. Relinquished Area & Permit Area Map

![Relinquished Area & Permit Area Map]

The relinquished Sub-blocks subject to this report are as listed in Table 1 below.

Table 1. Relinquishment Area Sub-block Identification

<table>
<thead>
<tr>
<th>Block Identification</th>
<th>Sub-block(s)</th>
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<tbody>
<tr>
<td>2285</td>
<td>O, P</td>
</tr>
<tr>
<td>2286</td>
<td>L</td>
</tr>
<tr>
<td>2358</td>
<td>Z</td>
</tr>
<tr>
<td>2359</td>
<td>V</td>
</tr>
<tr>
<td>2431</td>
<td>C, D, E, H, J, K</td>
</tr>
<tr>
<td>2432</td>
<td>F, G</td>
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</table>

Figure 4 below illustrates the blocks and sub-blocks which have been nominated for relinquishment.
Native Title

There are currently no Native Claims over the relinquished area.

Pastoral Leases

Both the relinquished area and retained permit area are located over surface lands that are comprised primarily of Perpetual Pastoral Leases, namely ‘Jervois’ NT Portion 366 PPL 962 and ‘Tarlton Downs’ NT Portion 367 PPL 898. These Perpetual Pastoral Leases areas are found on Figure 5.
3. Geology

3.1 Regional Geology

EL27846 and its surrounding tenures within the Jervois Project sit entirely within the Palaeoproterozoic Aileron Province. There are two major geological provinces recognised in the area: the Georgina Basin and the Arunta Block. The Georgina Basin is a mixture of sandstone and calcareous sedimentary rocks, which overlies the granitic intrusions and metamorphics of the Arunta Block.

The Jervois Project area has fairly limited outcrop with the majority of the area covered by a mixture of Quaternary sand, sand dunes, sandy soil and Cenozoic regolith. The main outcrops found in this area are Paleoproterozoic Arunta Block migmatites and Proterozoic granitic intrusives of the Jervois Granite, Mount Teitkens and undifferentiated suites. Several units of these granites are commonly found intruding the Arunta Block migmatites.

The regional geology is shown in Figure 6.
3.2 Permit Geology

The permit / local geology within the area subject of relinquishment is largely covered in Quaternary sands, dunes/sandy soils and minor Cenozoic lag with only approximately 5% of the tenure containing outcrop. There are small outcrops of the Jervois Granite and the Mount Teitkens Granite Complex scattered throughout the tenure. In the western part of
this tenure there are several small outcrops of Paleoproterozoic leucocratic migmatites commonly intruded by the Mount Teitkens Granite Complex. There are no known mineralisation occurrences within this tenure. The permit geology is illustrated in Figure 8 below.

The permit geology is illustrated in Figure 8 below.

**Figure 8. Permit Geology Map of the Relinquished Area**

### 4. Exploration Objectives and Rationale

The objective of NRE’s exploration program on EL27846 is to consider and evaluate the potential for base metals and rare earth elements mineralisation in the region. The Aileron Region has been explored for base metals, uranium, diamonds and rare-earths. There has been exploration for a variety of commodities across the Jervois Project targeting mainly base metal mineralisation. Investigations were primarily aimed towards locating any outcropping of mineralisation and any indicators of possible subsurface mineralisation across the project area.
5. **Exploration Activities carried out on the Relinquished Area**

NRE’s exploration activities during the term of the permit and in particular, of the relinquished area, consisted of both office-based and field activities. An initial regional assessment of the areas within NRE’s Jervois Project for base metals was conducted during the initial term.

NRE conducted an extensive review of all previous exploration within the Project area, completed two (2) helicopter reconnaissance assisted field trips, geological mapping of the area, sampling programs (soil and rock chip sampling) and a ground magnetics sub-audio magnetics (‘SAM’) survey.

An array of material was assessed prior to field work, to assist with optimal target generation. This material included an extensive review of historic exploration conducted over the relinquished area. There has been a number of previous exploration tenements over the subject relinquished area (*Figure 9* below).

*Figure 9. Historical Tenements over the Relinquished Area*

![Historical Tenements over the Relinquished Area](image)

The Aileron Region has been explored for base metals, uranium, diamonds and rare-earths. There has been exploration for a variety of commodities across the Jervois ELs targeting mainly base metal mineralisation. A list of the previous exploration reports in relation to the relinquished area is shown in *Table 2* below.
Table 2. Historical Reports

<table>
<thead>
<tr>
<th>TENURE</th>
<th>PERIOD</th>
<th>COMPANY REPORTS</th>
<th>COMPANY</th>
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<tbody>
<tr>
<td>EL 740</td>
<td>1972 - 1974</td>
<td>CR1974-0174</td>
<td>Attura Mining Company, Petrocarb Exploration, Wilstone, Union Corporation (Australia)</td>
</tr>
<tr>
<td>AP 3161</td>
<td>1971 - 1972</td>
<td>CR1972-0016</td>
<td>Petrocarb Exploration</td>
</tr>
</tbody>
</table>

NRE’s exploration program for the second term of EL27846 consisted of extensive desktop and office-based studies. NRE completed two (2) reconnaissance helicopter assisted field trips of the Jervois Project during the second term; the first in late 2011 and the second in early 2012. NRE visited local landholders, assessed a number of field targets across the Jervois Project area and carried out geological field mapping. The field trips proved successful in evaluating the tenements on the most effective and timely manner possible.

Assessment of the field targets involved an initial low fly over before determining whether a landing was viable for each target site. For the Talton Prospect, it was not viable for a safe landing on the target sites, so no rock chip samples were taken. Although no samples were collected from within the relinquished area itself, NRE based its conclusions on the results of samples collected within the surrounding tenements in the region.

Aerial observations of EL27846 were made during the helicopter reconnaissance programs. There are small outcrops of the Jervois Granite and the Mount Teitkens Granite Complex scattered throughout the tenure. In the western part of this tenure there are several small outcrops of Paleoproterozoic leucocratic migmatites commonly intruded by the Mount Teitkens Granite Complex.

NRE also engaged Terra Search Pty. Ltd. to attend the Northern Territory’s Alice Springs Core Facility to analyse a number of cuttings available from historically drilled water bores within its project areas. There were no water bores located within the relinquished area however NRE tested those water bores within the retained area and surrounding tenements in order to gain a better understanding of the region.

NRE lodged an Exploration Report with the Northern Territory Department of Resources’ Geoscience Division on 12 September 2011. This report was required in respect of the XRF
assaying of water bore chips at the Alice Springs Core Facility. The Exploration Report was titled ‘XRF & ALS Assaying of Water Bore Chips – Core Facility: Alice Springs’.

6. Reports lodged during the reporting period

NRE lodged an Exploration Report with the Northern Territory Department of Resources’ Geoscience Division on 12 September, 2011. This report was required in respect of the XRF and ALS Assaying of Water Bore Chips at the Alice Springs Core Facility. The Exploration Report was titled ‘XRF & ALS Assaying of Water Bore Chips – Core Facility: Alice Springs’.

NRE also lodged its Year 2 Group Annual Technical Report with the Northern Territory Department of Resources on 19 July 2012, the report of which covered a number of tenures forming NRE’s ‘Jervois Project’.

NRE believes no other reports needed to be lodged during the reporting period.

7. Conclusions

Natural Resources Exploration’s exploration activities focused on delineating surface targets within the relinquished area with the aim of identifying any base metals and rare earth elements mineralisation in the region.

NRE conducted both office-based studies and field operations on EL27846 during the term of this tenure. NRE carried out a detailed geological assessment of the relinquished area which included considerable research prior to two (2) helicopter reconnaissance programs evaluating the area. Research included review and compilation of the data in the Northern Territory Geological Services’ (NTGS) open file reports, air photo imagery and examination of the latest geological maps. Also carried out XRF analysis of water bore cuttings across the broader area known as NRE’s ‘Jervois Project’, held at the Alice Springs Core Library.

In relation to the relinquished area, NRE has concluded that the potential for mineralisation within this area is much lower than the remaining tenement area. NRE has delineated this area and nominated same after its extensive review of all previous exploration data and its newly acquired data in relation to this ground.
8. Bibliography


Note these (and many more) references are also located in the References section of the Mt Drummond 1:250,000 geological map series explanatory notes.