HELIX RESOURCES N.L.

ACN 009 138 738

INCORPORATED IN WESTERN AUSTRALIA

Level 2, 1 Havelock Street, West Perth, 6005 P.O. Box 825 West Perth WA 6072

Telephone 61 (8) 9321 2644 Facsimile 61 (8) 9321 3909

TECHNICAL REPORT NO. 2215
DELNY – NORTHERN TERRITORY
EL 9373

1ST ANNUAL REPORT FOR THE PERIOD
12 DECEMBER 1996 to 11 DECEMBER 1997

ALCOOTA 1:250,000 MAP SHEET
HELIX RESOURCES NL 100%

A.F. BECKWITH
January 1998
Ref: 5181
Contents

1. Summary
2. Introduction
3. Geology
4. Work Completed
5. Expenditure for the Period
6. Proposed Expenditure
7. Conclusions and Recommendations
8. References

List of Figures

Figure 1 Location Map
1.0 SUMMARY

HELIX RESOURCES NL was granted EL9373, Delny, on 12 December 1996 for a period of 5 years and is located approximately 120km northeast of the town of Alice Springs in the Northern Territory.

Work completed during the first year of tenure has been restricted by the issue of Native Title over pastoral leases and therefore the implications related to exploration access over such lands. However limited office based work has been completed with the acquisition of available colour photography and the initiation of a detailed photogeological and regolith interpretation over the entire tenement.

First pass results of this work indicates the area is underexplored for precious and base-metal mineralisation and also the area is apparently very amenable to modern low level reconnaissance geochemical sampling methods, which are known to be extremely effective elsewhere in the region.

Expenditure for the period totals $7,181 with the 1998 proposed programme estimated to cost $60,000. This 1998 programme is scheduled to commence in early 1998 and is expected to include mapping and stream sediment, rockchip and lag sampling of the entire tenement and follow-up if results warrant.
2.0 INTRODUCTION

The tenement EL 9373 was granted to HELIX RESOURCES NL on the 12th December 1996 for a period of 5 years.

The tenement is located approximately 120km northeast of Alice Springs (Fig 1) on the southeastern portion of the Alcoota 1:250,000 map sheet, immediately north of the Harts Range Police Station and covers areas of the following pastoral leases;

- Delny Station
- MacDonald Downs Station
- Mt Riddock Station

Access to the area is via the Stuart Highway north of Alice Springs and then east along the Plenty Highway, from the highway access is via a good network of existing unsealed station roads and tracks.

The area is comprised mostly of undulating rises and sandy alluvial flats together with a series of more elevated ridges rising some 120m above the surrounding plains. The area is generally sparsely vegetated with more dense vegetation occurring within and adjacent the extensive drainage system dissecting the tenement area. The dominant drainage direction is to the north and northeast along the Bundey River and Fraser Creek tributaries respectively. The region has a typical semi-arid continental climate with an average rainfall of approximately 300mm and the area is used for open cattle grazing.

Two stock routes traverse the area and are the Sandover Stock Route on the western boundary of the tenement and the Jervois Stock Route which crosses east-west along the southern portion of the area.

3.0 GEOLOGY

The geology of the area is dominated by three main groups and is essentially a sequence of metamorphic rocks of amphibolite to upper amphibolite facies assigned to the Arunta Complex.

Group 1
The Strangeway Range Metamorphic Complex consisting of dominately felsic to mafic granulite and minor gneisses. The units included within the tenement area include the Mapata Gneiss and Kanandra Granulite. The Mapata Gneiss includes biotite-quartz-feldspar gneiss typically with quartzo-feldspathic segregations, biotite schist, and amphibolite. The Kanandra Granulites includes felsic gneiss, mafic granulite, biotite-garnet-potassium feldspar-quartz migmaitite, minor calc-silicate gneiss; rare cordierite bearing felsic gneiss.

Group 2
The Harts Range Group is interpreted to overly the Strangeways Range Metamorphic Complex and probably includes the Delny Gneiss and Delmore Metamorphics. The Harts Range Group consists of leucocratic biotite-quartz-feldspar gneiss, meta calc-silicate rock, flaggy quartzite, biotite quartzite; minor diopside quartzite; rare calcite bearing gneiss, amphibolite; minor quartz and garnet bearing amphibolite through to pelitic and semi-pelitic, calcareous psammitic and felsic gneisses. This group occurs mostly to the immediate south of the tenement.
FIGURE 1. TENEMENT LOCATION
The Delny Gneiss consists of leucocratic biotite-microcline-muscovite-quartz gneiss with clots of muscovite, biotite muscovite schist, meta-psammite and pelite, amphibolite, and very minor calc-silicate gneiss. This unit outcrops in the northern portion of the tenement.

The Delmore Metamorphics consists of calc-silicate rocks, microcline-bearing pelitic gneiss, epidote quartzite, anthophyllite-chlorite-cordierite rock and rare epidosite. The unit is evident in the north portions of the tenement and beyond to the north.

Group 3

The last major group is the Ledan Schist which unconformably overlies the Delny Gneiss and the Delmore Metamorphics which in turn is overlain by the Utopia Quartzite.

This group consists of muscovite-quartz schist, muscovite-biotite-quartz schist, tourmaline quartzite, minor para-amphibolite, metamorphosed chert, conglomerate and boulder beds. The Utopia Quartzite includes quartzite, granule conglomerate and ironstone lenses.

Intruded into this sequence is a number of granites including the Mount Swan Granite, Queenie Flat Granite and Ida Granite. They range from a gneissic biotite granite with microcline phenocrysts to porphyritic biotite gneissic adamellite through to gneissic biotite granite with rare granite. The outcropping granites are focussed in the northern portions of the tenement and beyond and appear to be controlled by the major NW trending structures traversing the area.

Throughout the central portions of the tenement is a relatively well preserved or partially preserved Tertiary laterite development which has since been dissected by a well defined drainage system.

Other recent sedimentation includes red brown soils, colluvium and alluvium with wind blown sands.

4.0 WORK COMPLETED

Exploration activities undertaken during the period have been restricted to research and aerial photography acquisition as the company has refrained from in field exploration pending further legal advice regarding Native Title particularly related to pastoral leases and the validity of tenements.

Firstly, office based research has highlighted the area as underexplored for precious and base metals and is considered amenable to low level regional geochemical sampling.

A detailed photogeological and regolith interpretation, at 1:50,000 scale has been initiated and is expected to be finalised in the very near future. This interpretation is based on colour 1:50,000 photographs, which are of very good quality and clarity.

First pass assessment of the photography indicates much of the area is amenable to a combination of stream sediment sampling of the well-developed drainage pattern throughout the tenement. This drainage clearly dissects most of the geological units in the area including the laterite development. Many other areas of subcrop to outcrop would appear suitable for both rockchip and detailed lag sampling. These sampling media are known to be very effective in the region in detecting low order regional indicators to bedrock mineralisation.
Legal advice provided to the company, related to Native Title and the Wik decision, suggests all pastoral leases and or crown land in Australia may be subject to Native Title Claims. Therefore the company directors considered it appropriate to restrict exploration on all areas where activities had not already commenced prior to the Wik decision pending legal clarification. Since this time the company has reconsidered this position and now feels it can proceed with non intrusive exploration activities without detriment to either title or Native Title considerations. Therefore based on this company decision we are now eager to initiate our planned reconnaissance exploration programme.

5.0 EXPENDITURE FOR THE PERIOD

Expenditure for the period from 12 December 1996 to 11 December 1997 totals:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$2,859</td>
</tr>
<tr>
<td>Travel and Accommodation</td>
<td>$1,412</td>
</tr>
<tr>
<td>Data Acquisition</td>
<td></td>
</tr>
<tr>
<td>Aerial photographs and maps</td>
<td>$956</td>
</tr>
<tr>
<td>Tenement Costs</td>
<td>$1,175</td>
</tr>
<tr>
<td>Overheads</td>
<td>$779</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$7,181</strong></td>
</tr>
</tbody>
</table>

6.0 PROPOSED EXPENDITURE

The proposed first pass sampling and mapping programme is aimed at completing a comprehensive surficial geochemical sampling programme that targets indicators to bedrock mineralisation within the tenement.

This programme is designed to encompass the entire tenement area with appropriate and effective sampling methods directed to the specific field mapped regolith profile and therefore sample environment.

The programme is to supervised by company geologists with in excess of eight years field experience in the Alice Springs - Tanami region.

The programme will include
- Reconnaissance geological and regolith inspection
- Detailed photogeological and regolith interpretation
- Mapping of geological framework and regolith environment
- Stream sediment sampling
- Lag sampling
- Rock chip sampling

On completion of the initial programme results will be evaluated and follow-up programme designed if warranted.

The proposed programme is estimated to cost approximately $60,000
7.0 CONCLUSIONS AND RECOMMENDATIONS

Initial assessment of the area has highlighted the tenement to be prospective for precious and basemetal mineralisation. The region and in particular the specific tenement area is highly amenable to a number of modern low level reconnaissance geochemical methods that have not been previously used in this area.

First pass detailed photogeological and regolith interpretation has commenced and field investigations are planned to commence during early February 1998.

The programme proposed includes completion of the photo-based interpretation, field inspection for sampling suitability and reconnaissance lithological examination, detailed stream sediment, rockchip and lag sampling of all areas deemed suitable for each method, in conjunction with field mapping of bedrock lithologies and regolith definition. The total cost of the proposed programme is estimated at $60,000.

Dependent on results, further work would include detailed follow-up sampling for increased anomaly definition. Subsequent assessment of any anomalous areas would be subject to the legal advice related to Native Title and Wik rulings. This work is anticipated to include RAB and or vacuum drilling, and possible costeaming leading to detailed RC drilling if necessary.
8.0 REFERENCES