ANNUAL REPORT

EL 8065

for

Terra Resources NL  50%
Compass Resources NL 50%

June 1995

by

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EL8065
3 BLOCKS
10 sq kms

Area to be dropped
1.0 INTRODUCTION AND TENURE

Exploration Licence 8065 (South Howley) is located 135 kilometres south-east of Darwin. The title is cut by the Stuart Highway and the Dorat Road, road distance to Darwin is 165 kilometres. The Hayes Creek Roadhouse is about 5 kilometres to the south (fig 1). The tenement is held 50% by Terra Resources NL and 50% by Compass Resources NL. The tenement comprises three blocks, one of which was relinquished in March 1995.
SOUTH HOWLEY
GEOLOGICAL SETTING AND TENURE
TERRA RESOURCES N.L.
2.0 GEOLOGICAL SETTING

EL 8065 covers some 4.5 kilometres of strike length of the Middle and Upper Koolpin Formation, Gerowie Tuff and Mount Bonnie Formation of the Early Proterozoic South Alligator Group, and of the Burrell Creek Formation of the overlying Finniss Group. Numerous semi-conformable sills of pre-orogenic Zamu Dolerite intrude the Koolpin Formation and Gerowie Tuff.

The Koolpin Formation consists of sulphidic carbonaceous siltstones and mudstones, ferruginous chert, iron formation, carbonates and phyllitic mudstones which are considered to represent significant chemical precipitates and exhalites deposited in a deep water, low energy pelagic environment. The Burrell Creek Formation consists dominantly of greywakes siltstones and mudstones which were deposited in a high-energy flysch environment. The Mount Bonnie Formation is a transitional unit which contains interbedded units of both Koolpin facies and Burrell Creek facies rock. The Gerowie Tuff is comprised of tuff, tuffaceous chert and tuffaceous siltstone continue through the Mount Bonnie Formation and, in places, into the lower Burrell Creek Formation.

In the South Howley area (fig 2) this sequence of sediments, volcanics and intrusives is folded about moderately tight, north-west plunging axes and the folds are overturned to the west. The outcrop pattern is dominated by the Cosmo Anticline, the axis of which passes just to the south-west of EL 8065 and continues north-west and then north for over 30 kilometres. The Cosmo Howley Mine is located on the crest of this structure towards its southern end. The Fleur de Lys, Chinese Howley, Big Howley, Bridge Creek, Mount Paqualin and Goodall areas of gold mineralisation occur at intervals further north. EL 8065 encompasses a portion of the south-east limb of this major structure and includes at least two significant parasitic anticline-syncline couplets (fig 3). Regional greenschist facies metamorphism accompanies this deformation. The post-orogenic intrusive Cullen Granite crops out five kilometres south of the licence area. Numerous photo-linears cut the title and there is some indication on published maps that these may have resulted in repetition of the sequence in places through this has yet to be confirmed by detailed mapping.

Aeromagnetic contour patterns strongly indicate the presence of pyrrhotite as the dominant sulphide phase in the sulphidic carbonaceous sediments of the Koolpin Formation and also suggest that the mine sequence at Cosmo Howley is represented in EL 8065.
SOUTH HOWLEY
PROSPECT GEOLOGY, PREVIOUS EXPLORATION AND TARGETS, WEST BLOCK.
TERRA RESOURCES N.L.

Figure 3
3.0 MINERALISATION STYLE/EXPLORATION MODEL

Known mineralisation in the vicinity of EL 8065 is of four types.

Of prime interest is gold mineralisation of the Cosmo-Howley/Golden Dyke style which is hosted by silicate-sulphide facies cherty iron formations in the middle and upper levels of the Koolpin Formation (fig 4). At Golden Dyke (and adjacent smaller deposits) the mineralisation occurs as a stratiform lens on the western side of the Golden Dyke Dome. At Cosmo Howley similar stratiform mineralisation occurs on the limbs and the crest of the Cosmo Anticline where it has been complicated by, and possibly remobilised and upgraded by, strong axial plane faulting. To date no mineralisation of this type has been discovered below the iron formations in the Middle Koolpin Formation.

Around the Golden Dyke Mine there is extensive development of bedded tourmalinite (5-30 metres thick, several kilometres in strike extent) at the same stratigraphic level as the gold mineralisation but laterally removed from it. In that area lenses of stratiform gold mineralisation (and tourmalinites) occur in at least two and possibly more stratigraphic levels in and above the middle of the Koolpin Formation.

Of secondary interest in this area is sulphide-associated gold mineralisation in the Zamu Dolerite sills which occur at several levels in the Koolpin Formation and overlying Gerowie Tuff. Mineralisation of this style occurs at Margaret Diggings 20 kilometres east of South Howley. The gold occurs mainly in discontinuous quartz-sulphide veins and reefs which are apparently not concentrated enough to form coherent mineable resources. Some disseminated mineralisation is also present. In the Margaret Diggings area the gold is considered by some to be merely a remobilisation of stratiform gold mineralisation from enveloping units of the Koolpin Formation. There has been an intensive effort by some organisations to explore for this style of gold mineralisation in dolerites in this region using dolerite-hosted gold mineralisation at Kalgoorlie as the empirical model.

Of lesser importance in EL 8065, but of major importance in the immediate surrounds and at other Terra Prospects, is quartz-stockwork-type gold mineralisation (fig 4). Stockwork-type gold mineralisation, of which the Enterprise Mine at Pine Creek (1.3 million ounces of production and resources) and Batman deposit and Mount Todd further to the south (2-3 million ounces of reserves and resources) are the prime examples, is extensively developed along the crest and limbs of the Yam Creek Anticline 12 kilometres east of EL 8065 and at Fountain Head 12 kilometres to the north-east. North of Pine Creek gold mineralisation of this style has only been found in the Mount Bonnie and Burrell Creek Formations which successfully overlie the Gerowie Stratiform polymetallic base metal mineralisation (with associated gold) occurs 12 kilometres to the east of EL 8065 at Mount Bonnie and Iron Blow. In both cases it is hosted by the lower Mount Bonnie Formation. While there have been several intense exploration programmes in the region seeking this type of mineralisation in the carbonaceous sediments of the underlying Koolpin Formation, they have met with only very limited success. The existence of this type of mineralisation in EL 8065 cannot be entirely ruled out, but it represents a low priority target.
GENERALISED MODEL FOR DEVELOPMENT OF GOLD DEPOSITS HOSTED BY QUARTZ VEINS IN THE PINE CREEK GEOSYNCLINE (from Nicholson and Eupene, 1984)
TERRA RESOURCES N.L.
Stratiform gold mineralisation hosted by pyritic cherts and banded iron formation in the Gerowie Tuff is known at the Zapopan mine and it is possible that this style of mineralisation is present within the Gerowie Tuff at South Howley.

Because of the stratigraphic position of the South Howley titles the exploration programme outlined below for South Howley has been designed to concentrate on discovery of stratiform lenses of Cosmo Howley/Golden Drake-type gold mineralisation primarily in the Middle and Upper Koolpin Formation.
4.0 PREVIOUS EXPLORATION AND MINING HISTORY

Extensive exploration and mining activity has been conducted in the near vicinity of South Howley for over 100 years. The bulk of the mining activity has centred on the Cosmo Howley, Chinese Howley and Big Howley line of mineralisation to the immediate north-west of EL 8065. One old pit has been identified near the western boundary of EL 8065 and minor old eluvial? diggings have been mapped in the centre of the western block but there is no other evidence of mining within the title.

The record of corporate exploration activity over EL 8065 extends from the period 1975-1979 but prior to that time the area had been the subject of mapping exercises by the Aerial Geological and Geophysical Survey of Northern Australia in 1939, and the Bureau of Mineral Resources in 1952 and in the 1960s.

CRA Exploration Pty Ltd (CRAE) explored the south-eastern part of EL 8065 in 1977-78 for base metals. After initial reconnaissance exploration, which included three soil sample traverses (54 samples) across the Koolpin Formation in the northern half of the block, they concentrated their attention on the western limb of the Cosmo Anticline, to the west of the present title.

In 1977-79 Geopeko conducted an airborne geophysical survey over the area and completed a programme of reconnaissance traverse mapping as part of their regional base metal search. This did not result in the identification of any targets for detailed investigation within the South Howley title.

A decade later, however, detailed exploration was conducted on several targets within EL 8065 but on this occasion the target had switched to gold.

The western block of EL 8065 was explored by Union Oil Development Company (UODC) and later Kakadu Resources Limited (Kakadu) from 1986 (fig 3). Initial rock chip and stream sediment sampling programmes were directed towards assessment of the Middle and Upper Koolpin Formation as sampling of this unit in a road cutting 700 metres west of EL 8065 had returned 46.6 metres at 2.5g/t gold. Within EL 8065 four of 26 rock chip samples returned over 0.1g/t gold with a maximum value of 0.97g/t gold. These were accompanied by arsenic levels to 640 ppm and arsenic values up to 1040 ppm were obtained in samples in which no gold was detected.

Over the next two years the area from which these samples were collected was subjected to gridding, geological mapping, soil sampling (621 samples, -30#), ground magnetics (no base station control), costeansing (29 costeans, 3040 metres, 588 samples) and RC drilling (5 holes, 260 metres, 130 samples) (fig 3). This work identified zones of anomalous gold and arsenic in soils and in the costeans an anomalous gold in the RC drill holes but it did not locate any economically significant gold mineralisation.
Minor additional exploration of this block was completed in 1989-90 by Kakadu in association with Compass Resources NL (Compass). This located two areas of anomalous gold mineralisation (by rock chips) in the south of the western block (0.2-0.4 g/t gold in quartz veins and gossanous iron formation) and a weakly anomalous drainage (BLEG stream sediment samples) in the north-east of the same block (0.2-0.9 ppb gold). No subsequent work was carried out by these parties.

The continuation of the Koolpin Formation into the south-eastern block of EL 8065 was explored in some detail in 1987-88 by Norgold Limited (Norgold) in a joint venture with Oceania Exploration Pty Ltd (Oceania) who had earlier geologically mapped the area and conducted systematic soil and chip sampling. Norgold completed BLEG stream sediment sampling maximum 3.8 ppb Au in EL 8065 and excavated a series of ten costeans (975 metres total, 209 samples) at 200 metre intervals across selected portions of the Middle Koolpin Formation where the earlier soil sampling had identified anomalous levels of arsenic (up to 110 ppm) and/or base metals (especially zinc up to 1160 ppm). Only gold analyses were completed on these samples. The best result was an interval of 19 metres at 0.1 g/t gold with a maximum value of 0.23 g/t gold. While anomalous gold levels were detected in several other costeans the values were all less than 0.1 g/t gold.

Carpentaria Gold Pty Ltd (Carpentaria) held the south-east block of EL 8065 between 1988-90. They completed a close-spaced (7-8 samples per square kilometre) BLEG stream sediment sampling programme across the block and a large area to the west and south-west. Only two samples in EL 8065 exceeded 1 ppb gold. These adjacent samples were from drainages along the Middle Koolpin Formation where it had previously been tested by Norgold/Oceania.
5.0 EXPLORATION UNDERTAKEN/EXPENDITURE

Following last year's report, a drilling programme was proposed for EL 8065 to test for gold mineralisation.

The Company's consulting geologist prepared a drill programme after a review of the previous work and a site mapping programme. This involved checking previous hole locations and orientations, access and sites for the proposed drill holes.

The recommended programme was accepted by Terra Resources as operator of the Joint Venture but delays in a fund raising by the Company precluded the Company from proceeding with the programme before the wet season. It is hoped that funding for the Company can be arranged so that the programme can be completed this year.

Expenditure

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Consulting geologist</td>
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</tr>
<tr>
<td>Vehicle/Accommodation</td>
<td>$ 350</td>
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<tr>
<td>Report Preparation</td>
<td>$ 600</td>
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<tr>
<td>Overheads</td>
<td>$ 350</td>
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$ 3,950

A variation of covenant has been requested for the current year.
6.0 PROPOSED EXPENDITURE

The proposed expenditure for the current year remains unchanged at $10,000. This will entail an RC drilling programme on the licence area.