FINAL REPORT
ON
UNION EXTENDED CLAIMS
CORONATION HILL GOLD MINES N.L.

JULY, 1991
CONTENTS

1.0 SUMMARY

2.0 INTRODUCTION

3.0 LOCATION AND ACCESS

4.0 GEOLOGY

5.0 MINERALISATION

6.0 WORK CARRIED OUT
   6.1 Stream Sediment Sampling
   6.2 Aeromagnetics
   6.3 Geological Reconnaissance Traverse
   6.4 Evaluation of Results

7.0 CONCLUSIONS
LIST OF FIGURES

Figure 1 - Location and Tenement Plan
Figure 2 - Regional Geology
Figure 3 - Union Extended Claims Stream Sediment Samples - Au results
Figure 4 - Union Extended Claims - Stream Sediment Sampling - Cu, Pb, Zn Results
Figure 5 - Union Extended Claims - Stream Sediment Sampling - Ag, As, Results
Figure 6 - Union Extended Claims - Aeromagnetic Contours
1. SUMMARY

The Union Extended Group of MCN's are located approximately 25 km north-northwest of Pine Creek.

The group of MCN's were the subject of a Joint Venture Agreement between Coronation Hill Gold Mines NL, and The Shell Company of Australia Limited, which commenced on the 1st July, 1988. Coronation Hill Gold Mines NL held the tenements with the Shell Company of Australia being manager and operator of the joint venture until their withdrawal effective from 14th September, 1990.

This report contains details of all work carried out on the claim areas by Shell and Coronation Hill Gold Mines. Results from the work were not encouraging and no further work was recommended.

The claims were surrendered on 14th May, 1991.

2. INTRODUCTION

The Union Extended Claims consist of a group of 78 MCN's, which were granted between the 28th October, 1988 and the 28th February, 1989 to Coronation Hill Gold Mines NL, each for a period of five years.

Tenement details regarding the MCN's are listed in the table below (See Figure 1 for locations):

<table>
<thead>
<tr>
<th>MCN NUMBERS</th>
<th>DATE GRANTED</th>
<th>EXPIRY DATE</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962 - 1965</td>
<td>28.10.88</td>
<td>27.10.93</td>
<td>57 ha</td>
</tr>
<tr>
<td>1968 - 1969</td>
<td>28.10.88</td>
<td>27.10.93</td>
<td>40 ha</td>
</tr>
<tr>
<td>1971 - 1973</td>
<td>28.10.88</td>
<td>27.10.93</td>
<td>60 ha</td>
</tr>
<tr>
<td>2116</td>
<td>28.02.89</td>
<td>27.10.93</td>
<td>20 ha</td>
</tr>
<tr>
<td>2176</td>
<td>28.10.88</td>
<td>27.10.93</td>
<td>20 ha</td>
</tr>
<tr>
<td>2247 - 2260</td>
<td>28.10.88</td>
<td>27.10.93</td>
<td>237 ha</td>
</tr>
<tr>
<td>2262 - 2269</td>
<td>28.10.88</td>
<td>27.10.93</td>
<td>132 ha</td>
</tr>
<tr>
<td>2275</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>20 ha</td>
</tr>
<tr>
<td>2278 - 2279</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>34 ha</td>
</tr>
<tr>
<td>2281 - 2282</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>36 ha</td>
</tr>
<tr>
<td>2284 - 2293</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>194 ha</td>
</tr>
<tr>
<td>2309 - 2312</td>
<td>01.12.88</td>
<td>30.10.93</td>
<td>66 ha</td>
</tr>
<tr>
<td>2313 - 2319</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>127 ha</td>
</tr>
<tr>
<td>2347 - 2358</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>186 ha</td>
</tr>
<tr>
<td>2692 - 2698</td>
<td>31.10.88</td>
<td>30.10.93</td>
<td>68 ha</td>
</tr>
</tbody>
</table>

On the 21st March, 1989 the 78 MCN's were added to the McKinlay Joint Venture, between Coronation Hill Gold Mines NL and The Shell Company of Australia Limited, which commenced on the 1st July 1988. Shell has been manager and operator of the joint venture until their withdrawal on 14th September 1990.
Combined reporting on all of the 78 MCN's was approved by the NT Department of Mines and Energy on the 23rd May, 1989.

Exploration within the group of MCN's has focused on locating near surface bulk tonnage gold mineralisation.

3. LOCATION & ACCESS

The 78 MCN's cover a total area of some 1297 hectares between the Mt Wells - Pine Creek Road and Mt Porter, some 24 km north-northwest of Pine Creek (see Figure 1).

Access to the tenement is from the Stuart Highway via Spring Hill Road or via the Mt Wells - Pine Creek Road. A gravel track from the Mt Wells - Pine Creek Road to the Union Extended alluvial mine (located in the centre of the MCN's) provides access to the northern most MCN's. The Amadeus Basin - Darwin Gas Pipeline crosses the licence area and access is also via vehicle track following this pipeline.

4. GEOLOGY

The tenements are underlain dominantly by interbedded siltstones, shales and greywackes of the Early Proterozoic Burrell Creek Formation of the Finniss River Group.

Granite of the Early Proterozoic McKinlay Granite can be found on the northern margin of the MCN's. Hornsfelsing of rocks of the Burrell Creek Formation produced by contact metamorphic effects of the McKinlay Granite is relatively common in the area close to the granite and up to hundreds of metres from the granite. Areas of weathering resistant hornfels form distinct topographic highs at the granite margin.

A north-northwesterly trending dolerite dyke marking the eastern margin of the Pine Creek Shear zone intrudes the Burrell Creek Formation in the centre of the claim areas. Evidence of shearing, probably related to this zone can be found throughout the tenements.

5. MINERALISATION

The MCN's lie in the central portion of the Pine Creek Shear zone, a structure which can be traced for a considerable distance to the north-west and south-east and which hosts major gold mineralisation at Pine Creek (Enterprise), Union Reefs, Woolwonga and Goodall.

An operating alluvial gold mine, the Union Extended mine, lies in a number of MCN's not held by the Joint Venture in the centre of the 78 MCN's.
6. WORK CARRIED OUT

6.1 Stream Sediment Sampling

A total of 33 composite 5kg, -8# BCL Au and 200, -80# Ag, Cu, Pb, Zn, As stream sediment samples were collected within the area of the MCN's. BCL Au results delineated a number of anomalous Au catchment areas, with the highest values obtained being 13.6 ppb and 9.5 ppb Au. Base metal results were low, not exceeding background levels.

6.2 Aeromagnetics

Detailed airborne magnetic and radiometric data was acquired from Aerodata Holdings, as part of a major multi-client survey over the Pine Greek Geosyncline. This survey was completed using a 200m flight line spacing, 5000m tie line spacing and 70m mean sensor height. Image processing was completed by Geoimage of Brisbane.

No discrete aeromagnetic targets were delineated. A north-northwest trending dolerite dyke forms a distinct magnetic high ridge.

6.3 Geological Reconnaissance Traverse

A geological reconnaissance traverse was carried out as part of a follow-up programme on an anomalous BCL Au stream sediment sample (13.6 ppb), which is located in a stream which drains the western block of MCN's. The results of this work indicate the anomalous sample is due to some abandoned alluvial workings, upstream from the sample site. No bedrock source for the anomalous stream sample could be located.

6.4 Evaluation of Results

Following the withdrawal of Shell from the Joint Venture a complete evaluation of results was carried out by Coronation Hill Gold Mines. Due to the mainly negative results obtained no further work was recommended on the claims.

7. CONCLUSIONS

Work carried out failed to locate significant near surface bulk tonnage gold mineralisation and no further work was recommended on the claim areas.

The claims were all surrendered on 14th May, 1991.
STREAM SEDIMENT LOCATION NUMBERS & RESULTS Cu/Pb/Zn ppm

BELOW DETECTION

Areas not controlled by McKinlay J.V.

Billiton Australia

McKINLAY J.V.
NORTHERN TERRITORY

Cu/Pb/Zn
SAMPLE LOCATIONS AND RESULTS

Author: C.R.M
Drawn: B.J.F

Scale 1:25,000
Date 4/85
Revised 9/85
Date 5/85

Sheet No.: A
Drawing No.: CAM20/27
STREAM SEDIMENT LOCATION NUMBERS & RESULTS Ag/As ppm

BELOW DETECTION

Areas not controlled by McKINLAY J.V.

Billiton Australia

The Woolrich Division of the London Borough of Southwark

Project:
MCKINLAY J.V.
NORTHERN TERRITORY

Ag/As
SAMPLE LOCATIONS
AND RESULTS (ppm)

<table>
<thead>
<tr>
<th>Author</th>
<th>C.M.B.</th>
<th>Print</th>
<th>Ch.S.</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>4/89</td>
<td>5/89</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sheet No: 5
Drawing No: 6/120/28