UNITED URANIUM NO LIABILITY

Geological Report on the
Northern Hercules Gold Mine
via Pine Creek - Northern
Territory

OPEN FILE

E. LARSEN
(Geologist)

Northern Hercules
31st December, 1957.

NORTHERN TERRITORY
GEOLOGICAL SURVEY
TABLE OF CONTENTS

List of Plans Page I
List of Appendices Page I

TEXT

Introduction Page 1
Summary " 1
Location and Access " 1
History and Production " 1-2
General Geology " 3
Water " 3
Ore Occurrence " 4 & 5
Conclusion " 6
Recommendation " 6
PLANS TO ACCOMPANY REPORT ON

NORTHERN HERCULES GOLD MINE

N.639 Geological Plan 200' Level Sheet 1. (1" - 20')
N.640 Geological Plan 200' Level Sheet 2. (1" - 20')
N.671 Geological Plan 300' & 400' Levels (1" - 20')
N.672 Geological Plan 300' Level (Continued) (1" - 20')
N.673 Longitudinal Projection Northern Hercules Gold Mine showing Stoping, Drill-hole Intersections and Sampling by United Uranum N.L. on 400' Level.

United Uranum N.L. Cross-Sections showing lode-behaviour below 166' Level

N.674 4800' N 1" - 30'
N.675 5000' N 1" - 30'
N.676 5200' N 1" - 30'
N.677 5400' N 1" - 30'
N.678 5600' N 1" - 30'

LIST OF APPENDICES

1. (a) Tonnages remaining in Nos 1, 2 and 3 Ore Shoots
   (b) Production 1954 - 57
2. Assay Results 400' Level - Sampling by E. Larsen
3. Diamond-drill Summary.
INRODUCTION

In preparing this Report it is the writer's intention to record all known facts and economic possibilities of the Hercules Mine prior to the flooding of the lower levels and subsequent inaccessibility of the workings.

Mining and salvage activities by the Northern Hercules N.L. ceased at midnight the 28th December 1957. The mining assets were taken over by United Uranium at that date. Existing plant and machinery will be converted and used by the new Company to treat their Uranium ores from the South Alligator River district.

It is not intended to criticise past actions and interpretations but to assess the economic value of the mine based on new data on hand. The information obtained after detailed mapping and sampling of the latest development in the mine crystallises the fact that the future of the mine would be marginal, even as a low grade proposition.

The original grades and tonnages on which the Northern Hercules prospectus was based have not been realised by later mining operations and were too optimistic.

SUMMARY

Remapping and sampling of the latest exploratory driving and X cutting will indicate that:

1. Ore reserves above the 300' horizon are depleted. Most of the old stopes are inaccessible due to caving-ins.

2. Recalculating of ore reserves in the 200'/300' blocks will show that the mineable tonnages left are insignificant. (Appendix 1)

3. The expected grades and tonnages of No 1 and No 2 ore shoots were not realised on the 400' level.

4. No 4 ore shoot or the central lode cannot be considered as an additional source of ore.

5. Exploration by driving, X cutting and drilling on the 200'/300'/400' horizons did not indicate the existence of additional mineable ore bodies.

6. The intensity of shearing is lessening on the 400' level as well as at the faces of the 200'/300' levels.

7. The overall grade of the remaining ore will be below cut-off grade.

8. There is little hope that further diamond drilling or exploration either at depth or to the west of the known lodes would disclose sizable ore bodies to justify mining operations on the present scale.

LOCATION AND ACCESS

The Hercules Gold mine is situated 34 miles by road north-east of Pine Creek siding on the Darwin-Birdum railway and 137 miles by road south-east of Darwin. The road to the Hercules mine is moderately good for the first 15 miles after which with little expense it could be made trafficable for most of the year except for short periods after heavy storms. The crossings of the Evelyn and O'Neill creeks respectively 2 M. and 3/4 miles west of the mine represent the biggest obstacles to all-weather traffic to Pine Creek.

HISTORY

Auriferous lodes were apparently discovered in this locality in the early eighties and were worked at this time by Chinese labour and abandoned at an early date. The Eureka lodes were later taken up by a Sydney Company
which worked them for a considerable time, and eventually sold out to a
party in Sydney. By 1891, the mine was being worked by a Sydney Company
known as the Eureka Gold Mining Company. It would appear that of the
two lodes known the eastern one was worked by the Company. The main shaft
sunk to a depth of 150 feet intersected the lode composed of dense pyrite.
Ore extraction was confined to the oxidized zone and this was done mainly
from the 80 level. Old tailings re-treated yielded 10 duts per ton.
The Eureka Gold Mining Company worked the mine during 1892 and 1893. During
this period oxidised ores were mined to a depth of 120 feet the gold recovered
having a low value of 50s. per oz. The sulphide ores below the zone of
oxidation were not mined.

In 1897 the leases were owned by the Northern Territories Goldfields
Company. At this time the mine was let on tribute to Chinese but later
in the year taken over by the company who sank a shaft to 141 feet; The levels were
re-opened and drives on the eastern or main lode extended.

During this period a crosscut was driven to the western lode and
a cyanide plant erected to treat 1000 tons of tailings per month.

The mine was worked by a subsidiary company until 1900; the main
shaft was deepened to 143 feet and the 132 level and winzes were put in. Four
Huntington Mills were erected and Cyanidation of tailings conducted. In
1899 the main shaft was deepened to 218 feet and a Third level opened up on the
eastern lode. The 132 level was extended on the same lode as was also the
66 level on the western lode. The ore in the workings was mainly
pyritic and the proposed treatment included crushing, roasting, milling
separation and cyanidating. In 1900 it was found that the plant failed to
recover the gold from the pyrite and the mine closed down.

From 1900 until 1908 little work was done on the lease. Underground
exploration was initiated by T. Harley in 1914 and in the same year the mine
passed into the hands of Hercules Gold Mines Limited of Perth, Western
Australia. This company initiated an exploration programme continuing
until 1937. Ore parcels from the 132 and 200 levels were sent to the
Kalgoorlie School of Mines for information regarding treatment.
The extensive plant required for the treatment of ores appears to have held
up for the time being any active exploitation of the mine. During 1935 -
1936 about twenty men were employed to keep the mine unmetered. Little or
no work was done on the property until 1954. In that year the company was
reformed as The Northern Hercules N.L. and the company ceased mining
activities in December 1957.

Available production records since 1891 are tabulated below.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TONS</th>
<th>OZS</th>
<th>Material Treated</th>
<th>Gold Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>1891</td>
<td>1880</td>
<td>1550</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1892</td>
<td>1240</td>
<td>3300</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1893</td>
<td>1275</td>
<td>1356</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1895</td>
<td>1704</td>
<td>1465</td>
<td>1940</td>
<td>1762</td>
</tr>
<tr>
<td>1896</td>
<td>704</td>
<td>795</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1897</td>
<td>538</td>
<td>194</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1898</td>
<td>300</td>
<td>65</td>
<td>12000</td>
<td>8964</td>
</tr>
<tr>
<td>1899</td>
<td>2200</td>
<td>220</td>
<td>2200</td>
<td>1270</td>
</tr>
<tr>
<td>1900</td>
<td>500</td>
<td>50</td>
<td>1200</td>
<td>526</td>
</tr>
<tr>
<td>Total</td>
<td>10341</td>
<td>8995</td>
<td>17340</td>
<td>12522</td>
</tr>
</tbody>
</table>

* Includes 5,240 tons re-cyanidating of tailings from trial parcels of
hopperings and surface material.
GENERAL GEOLOGY

The old workings and the present mine are located in the Burrell Creek formation of Lower Proterozoic age. The rocks in this formation are made up of interbedded, medium-to fine-grained sandstone, greywacke, siltstone, black, red, and grey slates and shale. The beds exposed in the mine are thickly bedded and of massive appearance. The strike ranges from 115° to 130° and the predominant dip is to the south at 65° to 75°. The strongest visible features on the field are two fractures striking at 17° and 2° respectively. These main fractures are intersected by another set making angles with them of from 40° near the lenses to 30° further to the north. It is in these subsidiary fractures, apparently the result of tectonic strain that the Hercules lodes occur. The strike range of these fractures varies from 320° to 350° and the dip is from 60° to 89° to the west.

At the north end of the mine on 300' and 200' levels appears a still younger set of fractures dipping flatly to the west. They cut the Hercules lodes obliquely and strike from 300° to 320° and dip 10° to 20° west. These quartz filled fractures have a slick-like appearance and are not mineralised. Another transverse fault system of apparently no horizontal displacement exists at the south end of the mine. Here the dip is nearly vertical and the strike due east. The vertical displacement is uncertain but could be considerable. The favourable fracture on the 300' level ends against this fault.

The three lodes occupy strong fissures of which the fillings are composed of quartz, pyrite, chalcopyrite, and crushed sedimentary rocks forming pags. Their dip and strike is variable and the lodes are striking from 300° to 350° and the dip varies from 45° to 89° west.

The main gangue mineral of the three lodes is quartz which has been replaced by calcite below the 300' level. There appears to be a rapid fall off of pyrite mineralisation below the 300' level and this is probably caused by less intensive crushing and the thinning of the shear at depth. The bulk of the ore shoots is made up of pyrite but chalcopyrite, chalcocite, arsenopyrite, sphalerite, siderite, galena, and free gold are also present. It is in this complex filling that the gold occurs as small particles in very finely fractured pyrite, or in chalcopyrite-filled fine veinlets in quartz. It appears that the pyrite of the upper levels forming limonite after oxidation set the gold free and formed a zone of enrichment above the primary sulphides.

Most of the other sulphides present carry an insignificant amount of gold. As a rule the copper rich pyrite carries the best gold values.

WATER

Water for milling and domestic use has been so far obtained from a plentiful underground supply.

The present daily yield is in the vicinity of 120,000 gallons. This could increase to 140,000 gallons a day during the wet season.

Water seepages on the lower levels have low mineral content; and seem to have their source in the extensive shear system of the mine.

If it is intended to flood the mine up to 300' level to gain a cheap and permanent water supply for the intended milling operations of the new company, in this connection, there might be a danger that increasing acidity will make this water unsuitable for drinking purposes.

A further danger of pollution exists due to the possibility of surface waters percolating through the oxidised zone, which contains copper salts and arsenopyrites.
ORE OCCURRENCES

Of the three lodes the eastern one contains the main ore shoots. Shearing in this lode has been far more intense, with wider openings and strong crushing permitting a more ready access to ore-bearing solutions.

This strong shearing is absent in the Central and Western Lodes and their resulting tightness and lack of width of opening did not permit the formation of large ore bodies.

Latest exploratory driving and X cutting did not show up the Central and Western Lodes as potential ore producers.

The Eastern Lode

No 1 Ore Shoot

On the 200⁰ level the ore channel is well developed over a distance of 400⁰. Of this, a length of 150⁰ representing the No 1 Ore Shoot gives a grade of 17.5 dwt/ton over 42⁰. This ore shoot has been mined out above the 200⁰ level and most of the stopes are inaccessible.

On the 300⁰ level the shear is reasonably well developed for a distance of 400⁰ and then dies out. The shoot itself carries values over a distance of 220⁰ of which 140⁰ averages 25 dwt/ton over 40⁰. Most of the 200⁰/300⁰ block of No 1 Ore Shoot has been stoped out.

Remaining and stoped tonnages and grade are shown in Appendix 1.

No 1 Ore Shoot dies out before reaching the 400⁰ level horizon.

Assay values from samples taken in the rises above the 400⁰ level delimit No 1 Ore Shoot as a triangular body with its lowest point 30 - 40⁰ above the 400⁰ level. The longitudinal section (Plan No 673) shows the shoot is plunging south at a steep angle.

The No 2 Ore Shoot

On the 200⁰ level, this shoot is located 250⁰ North of the No 1 Ore Shoot and is mineralised over a length of 220⁰. Of this, 150⁰ represented the mineable stope length. The ore on this level averaged 23 dwt/ton over a width of 40⁰.

The ore reserves of the No 2 Shoot on the 200⁰ level are depleted and the stopes have caved or are too dangerous to inspect.

On the 300⁰ level the ore channel has diminished to a length of 240⁰ and the mineable stope length on this horizon is 65⁰ averaging 17 dwt/ton over a width of 40⁰.

This ore shoot is only weakly mineralised on the 400⁰ level and the economic values seem to die out approximately 30⁰ above the level and the shoot shows a steep plunge to the south. The ore channel is tightening, and little crushing is present on this horizon.

The No 3 Ore Shoot

This shoot occurs 150⁰ north of No 2 shoot and contained the best grades in the mine above the 200⁰ level. The stopable strike length on this level was 206⁰ averaging 21 dwt/ton over a width of 59⁰.

The ore channel is the best developed in the mine and the infilling is compact quartz with plentiful pyrite and chalcopyrite as ore carriers.

The ore above the 200⁰ level is mined out and provided the bulk of the ore extracted in the No 3 Ore Shoot.

On the 300⁰ level the channel still exists as a strong shear but contained only low values.
The shoot is mineralised over a distance of 320', and 300' of this length averages 11.2 dwts/ton over a width of 50'. The tonnages which existed in the 200'/300' blocks were mined out and little is left in the stopes.

The 400' level North Drive did not intersect the No 3 Ore Shoot and no ore of economic cut off grade of 11.8 dwts is expected on the level.

There seems to be a decrease of values below the 200' level and this is interpreted as weakening of grade in the primary sulphide zone at depth.

The transition zone between the oxide and sulphide ores carrying the gold can be tentatively placed approximately 60' above the 300' level horizon. Intensity of shearing is the controlling factor in the mineralisation of the Hercules Lodes. This shearing shows a marked weakening and a general tightening on the 400' horizon, as well as on the extremities of the mine. It is likely also that the favourable fractures containing the Hercules Ore Shoots are located in series of competent beds permitting stronger shearing and crushing, and so providing better access to ore bearing solutions.

Lacking the crushing of the upper levels there will be insufficient width of opening to permit large tonnages of economic grade in the No 3 ore shoot on the 400' level.

The Central Lode

The Central Lode is located 200' west of the Eastern Lode. On the 200' level the lode occurs as a very tight fissure 580' North of the main shaft. The two lodes are connected by a cross cut from the foot wall drive to the air shaft. The fissure representing the Central Lode can be traced for a distance of 110' north of the Air Shaft and it is then cut obliquely by a younger quartz filled fracture which dips 15° - 20° west. The displacement of the lode is not accurately known but the movement is assumed to be north-side-east type.

At a distance of 150' north of the shaft the lode is cut by a second fracture belonging to the same system. The drive continues north for another 150' but encountered only minor shearing.

The fracture filling consists mainly of quartz, pyrite and chalcopyrite. No assay figures are available but the gold values and tonnages on this level would appear to be low. The lode has been drilled with disappointing results.

The Western Lode

This lode occurs 100' west of the Central lode and is connected to the Air Shaft by means of a cross cut. The lode has been driven on for 30' each way. The ore channel has an average width of 11/6", and the infilling consists of plentiful quartz with medium grade pyrite and chalcopyrite.

The assay results obtained from this lode intersection are disappointingly low and the average is given as 4 dwts/ton over 30".

Assuming that the behaviour of the Western Lode is similar to that of the Central and Eastern Lodes it is unlikely that the values would live far into the primary sulphide zone.

The transition zone between high and low grade has been placed 40' below the 200' level.
CONCLUSIONS

After a close study of the recent development the following conclusions have been reached.

1. The ore reserves and values have been based on too optimistic calculations.

2. Ore reserves above the 300' level were exhausted by June 1957.

3. Previous diamond drilling programmes did not indicate additional sources of ore at depth besides the known ore bodies.

4. The stopes were weak and restricted in output.

5. It has been proved that diamond drill intersections were inaccurate and the obtained grades did not coincide with later development and mining grades.

6. Possible parallel lodes belonging to the Hercules shear system will probably behave the same way as the worked lodes and are expected to be restricted in output.

These facts indicate the futility of further exploration in the mine at present gold prices and high production costs.

RECOMMENDATIONS

Exploration and development in the mine should be discontinued at present.

The favourable fissures to the north of the mine should be carefully investigated by detailed mapping on the surface. The continuation of the Hercules shear system to the south of the mine should be re-mapped and the adjacent Rhyolite Dykes closely investigated. The object should be to locate substantial low grade ore bodies in these dykes.

E. LARSEN
## APPENDIX № 1

a) Tonnages remaining №s 1, 2 & 3 ore shoots, N. Hercules Gold Mine
(Note: Central & Western Lodes are ignored)

<table>
<thead>
<tr>
<th>№1 SHOOT</th>
<th>№2 SHOOT</th>
<th>№3 SHOOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block</td>
<td>Width</td>
<td>Grade</td>
</tr>
<tr>
<td>200-300</td>
<td>42°</td>
<td>17.1 dwt/ton</td>
</tr>
<tr>
<td>300'–400'</td>
<td>40°</td>
<td>25.0 dwt/ton</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>22.6 dwt/ton</td>
</tr>
</tbody>
</table>

Grand total (including floor & slope pillars) 10,235 tons of grade 14.7 dwt/ton

b) Northern Hercules production 1954-57

<table>
<thead>
<tr>
<th>Period</th>
<th>Tons ore</th>
<th>Au produced (oz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954 - Sep. 1956</td>
<td>9,000</td>
<td></td>
</tr>
<tr>
<td>29th Sep - 6th July 1957</td>
<td>11,324</td>
<td>7,703</td>
</tr>
<tr>
<td>6th July - Dec. 1957</td>
<td>7,000</td>
<td>5,600</td>
</tr>
<tr>
<td>Total</td>
<td>27,324</td>
<td></td>
</tr>
</tbody>
</table>

Overall grade was stated to be 13 dwt/ton, recovered
APPENDIX NO.2

UNITED URANIUM UNDERGROUND SAMPLES

TAKEN AT NORTHERN HERCULES

400' LEVEL

Date: 16th December 1957

<table>
<thead>
<tr>
<th>Distance</th>
<th>Darts</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>North</td>
<td>36&quot;</td>
</tr>
<tr>
<td>20</td>
<td>&quot;</td>
<td>35&quot;</td>
</tr>
<tr>
<td>30</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>40</td>
<td>&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>50</td>
<td>&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>60</td>
<td>&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>70</td>
<td>&quot;</td>
<td>36&quot;</td>
</tr>
<tr>
<td>80</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>100</td>
<td>&quot;</td>
<td>40&quot;</td>
</tr>
<tr>
<td>110</td>
<td>&quot;</td>
<td>50&quot;</td>
</tr>
<tr>
<td>120</td>
<td>&quot;</td>
<td>50&quot;</td>
</tr>
<tr>
<td>130</td>
<td>&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>140</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>150</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>160</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>170</td>
<td>&quot;</td>
<td>40&quot;</td>
</tr>
<tr>
<td>180</td>
<td>&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>190</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>200</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>210</td>
<td>&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>230</td>
<td>&quot;</td>
<td>60&quot;</td>
</tr>
</tbody>
</table>

END OF NORTH DRIVE

Average 3.9 - 31"

<table>
<thead>
<tr>
<th>Distance</th>
<th>Darts</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>South</td>
<td>3.2</td>
</tr>
<tr>
<td>20</td>
<td>&quot;</td>
<td>2.6</td>
</tr>
<tr>
<td>30</td>
<td>&quot;</td>
<td>4.4</td>
</tr>
<tr>
<td>40</td>
<td>&quot;</td>
<td>2.4</td>
</tr>
<tr>
<td>50</td>
<td>&quot;</td>
<td>2.4</td>
</tr>
<tr>
<td>60</td>
<td>&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>70</td>
<td>&quot;</td>
<td>1.2</td>
</tr>
<tr>
<td>80</td>
<td>&quot;</td>
<td>2.8</td>
</tr>
<tr>
<td>100</td>
<td>&quot;</td>
<td>12&quot;</td>
</tr>
<tr>
<td>110</td>
<td>&quot;</td>
<td>20&quot;</td>
</tr>
<tr>
<td>120</td>
<td>&quot;</td>
<td>28&quot;</td>
</tr>
<tr>
<td>130</td>
<td>&quot;</td>
<td>28&quot;</td>
</tr>
<tr>
<td>140</td>
<td>&quot;</td>
<td>27&quot;</td>
</tr>
<tr>
<td>150</td>
<td>&quot;</td>
<td>1.2</td>
</tr>
<tr>
<td>160</td>
<td>&quot;</td>
<td>6.2</td>
</tr>
<tr>
<td>170</td>
<td>&quot;</td>
<td>26&quot;</td>
</tr>
<tr>
<td>180</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>190</td>
<td>&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>200</td>
<td>&quot;</td>
<td>1.2</td>
</tr>
<tr>
<td>210</td>
<td>&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>230</td>
<td>&quot;</td>
<td>10.8</td>
</tr>
</tbody>
</table>

END OF SOUTH DRIVE

Average 2.1 - 29"

AVERAGE OVER NORTH & SOUTH DRIVE - 3.0 darts 30"
### APPENDIX NO 3

**DIAMOND DRILL SUMMARY**

<table>
<thead>
<tr>
<th>Surface</th>
<th>Holes</th>
<th>Zone of intersection</th>
<th>R.L.</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>D.D.H., No. 1</td>
<td>4950' N</td>
<td>4950' N</td>
<td>790'</td>
<td>Grade not known</td>
</tr>
<tr>
<td>D.D.H., No. 2</td>
<td>4950' N</td>
<td>4950' N</td>
<td>695'</td>
<td></td>
</tr>
<tr>
<td>D.D.H., No. 3</td>
<td>5040' N</td>
<td>5040' N</td>
<td>690'</td>
<td></td>
</tr>
<tr>
<td>D.D.H., No. 4</td>
<td>5040' N</td>
<td>5040' N</td>
<td>670'</td>
<td></td>
</tr>
<tr>
<td>D.D.H., No. 5</td>
<td>5200' N</td>
<td>5200' N</td>
<td>760'</td>
<td>10.8 dwt over 36&quot;</td>
</tr>
<tr>
<td>D.D.H., No. 6</td>
<td>5460' N</td>
<td>5460' N</td>
<td>540'</td>
<td>Grade not known</td>
</tr>
<tr>
<td>D.D.H., No. 7</td>
<td>5700' N</td>
<td>5700' N</td>
<td>750'</td>
<td></td>
</tr>
<tr>
<td>D.D.H., No. 8</td>
<td>5805' N</td>
<td>5805' N</td>
<td>730'</td>
<td></td>
</tr>
<tr>
<td>D.D.H., No. 10</td>
<td>5990' N</td>
<td>5990' N</td>
<td>555'</td>
<td></td>
</tr>
<tr>
<td>D.D.H., No. 14</td>
<td>4865' N</td>
<td>4865' N</td>
<td>700'</td>
<td>17.8 dwt over 48&quot;</td>
</tr>
<tr>
<td>D.D.H., No. 15</td>
<td>4735' N</td>
<td>4735' N</td>
<td>720'</td>
<td>7.6 dwt over 59&quot;</td>
</tr>
<tr>
<td>D.D.H., No. 15 No. 2</td>
<td>4740' N</td>
<td>4740' N</td>
<td>670'</td>
<td>Grade not known</td>
</tr>
</tbody>
</table>
APPENDIX NO 4

BIBLIOGRAPHY

Previous references to the Hercules (or Eureka) mine have been made in the following published reports:


In addition to the above reports reference to the mine was made in a number of places in the annual reports of the Administration of the Northern Territory.

References in United Uranium N.L. report on the Northern Hercules:

Birchford R. Geology Report 1935
McLeod P. Mining Report 1956
B.M.R. Regional Mapping 1955
NORTHERN HERCULES N.L.  
Via Pine Creek N.T.  

*Section Looking North 4800'N*  
Dr. E.L. 28/1/57 N° N674
NORTHERN HERCULES N.L.
via Pine Creek N.T.
X Section looking North 5200'

Draughted: E.R.L. 28-12-1957 No N676
NORTHERN HERCULES N.L.
via Pine Creek N.T.

Section Looking North 5400' N

Drn E.L. Date 28-12-57 No. N677