EXPLORATION LICENCES 7137, 7240, 7241 & 7242,
IN THE ROPER RIVER AREA NORTHERN TERRITORY

ANNUAL REPORT FOR 1992

Prepared for Mr G Fanning,

by

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GEONORTH Pty Ltd,
Darwin NT.

January 1993.
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1. INTRODUCTION.

Exploration Licences 7137, 7240, 7241 and 7242 presently enclose a combined area of some 87 square kilometres, in the Roper River region of the Northern Territory, located approximately 450 kilometres southeast of Darwin and 200 kilometres east-southeast of Katherine (Figures 1 & 2).

They fall within the 1:100,000 sheet areas of Mais and Chapman, and the Urapunga and Hodgson Downs 1:250,000 sheets, and form part of the Roper Valley and Hodgson Downs Pastoral Leases.

Good all weather access to the district is obtained by means of the mainly sealed Roper Highway which joins the Stuart Highway 425 km south of Darwin. Access into the various prospect areas is by unsealed station tracks.

Topography is undulating to moderately rugged, and consists of a series of steep ridges and escarpments, formed by Proterozoic sandstones, separated by broad floodplains along the main rivers such as the Roper and Hodgson. Vegetation is mainly open savannah, with a scattering of small eucalypts and acacias, and locally dense thickets of lancewood (Acacia shirleyi) on the rocky escarpments. The sole land use is beef cattle production.

The Exploration Licences were applied for in October 1990, with the object of assessing previously reported iron ore resources, in the context of new infrastructure developments in the region, new technology in iron and steel production, and anticipated markets for value-added iron and steel raw materials in Southeast Asia.

This report describes the work carried out during the second year of the Licences.
2. TENURE.

The details of the tenements are as follows:-

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<th>Expiry Date</th>
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<td>7240</td>
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All are held in the name of Geoffrey Fanning.

At the end of the second year the areas of the Licences were reduced by 50% in accordance with the terms of the Licences. The limits of the reduced areas are shown in Figures 3 and 4.
3. GENERAL GEOLOGY OF THE IRONSTONES.

3.1. REGIONAL SETTING.

Regional geology is shown on the 1:250,000 Geological Series sheets Urapunga and Hodgson Downs (BMR 1964), relevant portions of which are reproduced in Figures 5 and 6.

The Roper River area lies in the northwestern part of the Middle to Upper Proterozoic McArthur Basin, and is underlain by dominantly shallow marine clastic sediments, belonging to the Roper Group, which are intruded by large dolerite sills. These rocks are unmetamorphosed, and only gently folded, except in proximity to a series of NNW and WNW faults which traverse the region.

The Roper Group comprises mainly quartz sandstones, with subordinate siltstones and shales. The McMinn Formation, which occurs near the top of the Proterozoic succession, includes the Shirwin Ironstone Member which contains beds of oolitic and pisolitic ironstone interbedded with ferruginous sandstones and shales. These pisolitic ironstones are the target of the present exploration project.

The Shirwin Ironstone Member contains up to six ironstone beds, which individually may vary from one to ten metres thickness, contained within a total thickness of approximately 100 metres of strata. The ironstone beds appear to be lensy, or to grade laterally into non-ferruginous strata. They are relatively resistant, and may form prominent escarpments with, in places, extensive outcrops following down the dip slopes.

The most extensive developments of ironstone are recorded in the vicinity of Shirwin Creek, in the northern part of EL 7241. From here ironstones have been traced along a strike length of nearly 100km to near Beswick in the west, and for about 80km to Hodgson Downs in the southwest. Isolated occurrences are also present near Towns River 100km to the southeast.
3.2. PETROLOGY OF THE IRONSTONES.

The primary (ie. unoxidised) ironstones consist dominantly of oolitic to pisolithic siderite and hematite, with minor oolitic chamosite, and a cement of siderite and specular hematite. Silica occurs as clastic quartz grain cores to oolites and as cryptocrystalline silica in the matrix. Magnetite is present at some localities but pyrite is insignificant.

In the oxidised zone (from surface to depths of between 6m and 15m) the siderite and chamosite are altered to hematite and ochreous limonite.

In the Shirwin Creek area (EL's 7241 & 7242) most of the ironstones are strongly cross-bedded, well sorted, medium-grained arenites, consisting of various proportions of well rounded clastic quartz grains and ferruginous oolites. They are generally low grade (35% to 50% Fe) and pass laterally into ferruginous sandstones with increasing relative abundance of detrital quartz grains. At outcrop they are usually hard and resistant, due (at least in part) to supergene silicification.

At Hodgson Downs the main ironstone is a massive, poorly-bedded, uniformly textured hematitic oolite/pisolite, with a grain size of 1mm to 2mm, and a hematite matrix. Clastic quartz grains are scarce and occur only as cores to some of the oolites. It is relatively high grade (50% to 55% Fe) and uniform along a nearly continuous outcrop of more than 20 kilometres. Although it is a relatively soft formation it usually forms the lip of the escarpment because of its massive structure.

A similar bed of soft hematite pisolite is locally present as the bottom ironstone bed at Shirwin Creek.

At Mount Fisher (EL 7240), the main bed of ironstone is an exceptionally coarse-grained pisolite, consisting (at outcrop) of densely packed hematite pisoliths of uniform 4mm diameter in a matrix of hematite ooliths and detrital quartz of about 1mm grain size (Plate 4). This is probably the equivalent of the bottom bed at Shirwin Creek.
4. PREVIOUS EXPLORATION WORK.

The only past exploration work which was significant with regard to the iron ore potential of the Roper area was that carried out by BHP between 1955 and 1957. They completed regional and detailed geological mapping, channel sampling of ironstone outcrops, blasting and sampling, drilling of 31 diamond drill holes and metallurgical testing of composite samples.

The bulk of the surface mapping and sampling work was done in the Shirwin Creek and Mount Scott areas (EL's 7241 & 7242), and these also yielded the bulk samples used in the metallurgical test work.

Diamond drilling was done at Hodgson Downs (ten holes in EL7137), at Shirwin Creek (eleven holes in EL7241), Mount Fisher (three holes in EL7240) and Mount Scott (one hole in EL7242).

The specific details of BHP's work are dealt with in the discussions of the results for each Exploration Licence.
5. WORK CARRIED OUT DURING THE CURRENT PERIOD.

Prior to commencing field surveys, photogeological interpretation maps were prepared for each Exploration Licence using enlargements to 40,000 scale of the 1:80,000 RC9 monochrome air photography of 1969. The interpretations were revised after completion of the field work, and are included as Figures 7 to 10.

Field activities comprised reconnaissance mapping, to verify the interpreted outcrop area of the ironstone beds and establish their thickness and lithology, and collection of bulk samples from selected sites. The sample sites were chosen as providing good exposure of ironstone judged on field characteristics to be of good grade and representative of a substantial body of material. The bulk samples were analysed by AMDEL for CaO, Fe, Al$_2$O$_3$, TiO$_2$, Mn, P, MgO, SiO$_2$, S and loss on ignition. Sample locations are shown in Figures 7 to 10, and the analytical report is included as Appendix I.

In addition to the field work, considerable time and effort was put into discussions with a number of parties who were interested in joint venturing on the project. Discussions are continuing at the time of writing, with expectations of an early favourable outcome.

Total expenditures incurred during the second year of the Exploration Licences are estimated to have been as follows:

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TOTAL $22,060.
A breakdown of this total expenditure by specific EL area is as follows:

| EL 7137 | 9,300 |
| EL 7240 | 2,160 |
| EL 7241 | 4,700 |
| EL 7242 | 5,900 |

**TOTAL $ 22,060.**
6. DISCUSSION OF RESULTS.

6.1 Exploration Licence 7137, Hodgson Downs.

The exploration target here is a single bed of ironstone which forms a nearly continuous outcrop (locally disrupted by faulting) along a length of some 15 kilometres on the southeastern margin of a shallow synclinal fold (Figure 7). In the northeast, the dip of the formation is relatively high at angles up to 20° to the northwest; in the central part of the outcrop gentle dips of about 5° to the west predominate; in the south, in the axial region of the fold, bedding is near horizontal.

The bed is massive, and of uniform thickness of between 3.5 and 4.5 metres. It has clearcut contacts, at the hangingwall with a thinly bedded white quartz sandstone, and in the footwall with grey-brown ferruginous sandstones and siltstones.

The lithology is very uniform, and consists of closely packed hematite ooliths/pisoliths, of about 1mm diameter, in a matrix of earthy and specular hematite. Very well rounded quartz grains of 0.2 to 1.0mm size, form cores to some ooliths, and irregular sandy pockets within the rock. The formation is soft, but due to its massive unbedded nature forms a prominent escarpment (Plates 1 & 2).

Analyses of two bulk samples (327526 & 327527) from the southern part of the outcrop reported 54.1% Fe and 51.3% Fe over measured vertical thicknesses of 2.5m and 4.2m respectively, which are somewhat less than the full formation thickness. Silica contents at 17.7% and 19.9% are surprisingly high considering the low content of visible quartz grains, and may in part reflect supergene silicification. Phosphorus contents are low (0.09% and 0.10%) as is sulphur (0.05% or less).

The area of outcrop of the ironstone bed within the EL is estimated from air photography to be about 300 hectares; including areas with shallow overburden an estimated areal extent of about 400 hectares of ironstone would be
potentially available for open pit mining. Assuming an average thickness of 3.5 metres, and an average bulk density of 3.0 tonnes per cubic metre, this implies a resource of about 40 million tonnes.

The drill testing of the deposit in 1957 by BHP comprised eleven holes which intersected the ironstone bed at depths of between 16 and 71 metres. Locations of the drill holes are only known approximately; it is indicated by the intersection depths that the holes are mostly sited well down dip from the portions of the bed which could be considered as possibly exploitable by open pit mining. The drill core is described as consisting of chamosite, siderite and hematite, and in all cases is probably primary unoxidised material. The thickness ranged from 0.4 to 5.1 metres, with grades of between 21.9% and 45.6% Fe, and with between 14% and 42.4% SiO₂. The best intersections were as follows:

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<td>45.6</td>
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<td>WZ6</td>
<td>4.5m</td>
<td>42.9</td>
<td>12.5</td>
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Discounting three intercepts which contained less than 30% Fe, the average of the remaining eight intercepts was 38.6% Fe and 18.1% SiO₂ over 3.3m. This may be considered as a reasonable indication of the composition of the deposit in the primary zone down dip from the open pit resource. The recent sampling indicates that the oxidised ironstone is relatively enriched in iron and silica compared to the primary zone, perhaps due to the leaching of carbonate radicle in the siderite.

The depth of oxidation is unknown, and may be quite variable. On a conservative assumption that the formation is entirely oxidised to a vertical depth of ten metres below surface, the total resource of oxidised pisolite is probably about twice that present below the areas of its outcrop.

The above considerations indicate that EL7137 has potential for a resource of about 60 million tonnes of oxidised pisolite ironstone containing 50% to 55% Fe and 15% to 20% SiO₂.

- 9 -
This is in reasonable conformity with previous estimates by Cochrane (BHP 1955) that "some 30 million tonnes averaging 50% Fe would be reasonably accessible", and by Canavan (1965) of 200 million tonnes grading between 37% and 52% Fe and 7% and 16% SiO₂; the latter estimate presumably includes large tonnages of deep unoxidised ironstone which could not be regarded as a resource in the foreseeable future.

6.2 Exploration Licence 7240, Mount Fisher.

Here the main ironstone bed dips gently southeast forming a strong escarpment on the northwestern margin of a shallow basinal fold (Figure 8). The outcrop length is about 3.5 kilometres within the EL, and is usually narrow (averaging about 50m) with the bed soon disappearing down-dip beneath an overlying white flaggy quartz sandstone. The outcrop is disrupted by a large number of small faults with vertical displacements of 5 to 10 metres.

The ironstone is massive and poorly bedded (Plate 3) with a uniform thickness of between 3 and 4 metres. It has a distinctive lithology consisting of large spherical hematite pisoliths, averaging 4mm diameter, in a matrix of fine hematite ooliths and well rounded quartz grains (Plate 4).

A single bulk sample (327529) of a 4.0m thickness of the pisolite contained 46.2% Fe and 26.3% SiO₂, with relatively high phosphorus (0.23%) and low sulphur (less than 0.05%).

Four holes were drilled in this vicinity by BHP, and two appear to have been within the current EL. As at Hodgson Downs all the drilling intersected the ironstones deep in the primary zone (22 to 80m) well below any conceivable depth for open pit mining. The only hole of interest in the present context was M17 which intersected 3.75m @ 47.2% Fe and 26.3% SiO₂ from 22 metres.

This hole was situated about 600m southwest of the outcrop of the main ironstone at the escarpment edge (Figure 8). A second ironstone bed, overlying the main one, is interpreted in this vicinity from air photography. It is possible that the drill intercept may be of this upper bed.
Making similar assumptions to those applied to the Hodgson area it is estimated that the main ironstone bed in EL7240 has potential for a resource of about 4 million tonnes in the oxidised zone.

The resource is probably of lower grade and higher in silica than the Hodgson resource because of the high sand content of the matrix. However the texture of the rock is such that the hematite pisolites and oolites freely break away from the sandy matrix, suggesting that a simple benification by crushing, screening and gravity separation may be possible.

The possibility of a substantially larger resource is indicated by the presence of a second ironstone bed, and extensions of both beds along strike to the south of the present EL area.

Canavan (1965) gives a resource of 9 million tonnes @ 47% Fe and 26% SiO₂ in "minor deposits" which are presumed to include this one.

6.3 Exploration Licence 7241, Shirwin Creek.

The Shirwin Ironstone Member forms extensive outcrop on the main escarpments and dip slopes at the northern and eastern margins of a major regional syncline (Figures 6 and 9). A strike length of some 12 kilometres is included in the EL area.

The Shirwin Ironstone Member includes three main ironstone beds. The two upper beds, which crop out mainly on the extensive dip slopes, are ferruginous oolitic sandstones containing a high proportion of detrital quartz. They are low grade and silica-rich. They were the object of most of BHP's exploration work, and are estimated to have a resource of 200 million tonnes containing 27% to 33% Fe and 40% to 45% SiO₂ (Canavan 1965). These formations are not considered to be of interest in the present context.

The lower ironstone bed is soft and poorly exposed, and forms restricted outcrop soon disappearing beneath thick overburden. In character it is similar to the formations at Hodgson and Mount Fisher, being a massive, uniform
hematitic pisolite. It is the main target in EL7241 for the present exploration project.

During the 1992 field work only one good exposure for bulk sampling was located (327522). This was a thin (0.5m) coarse grained pisolite bed which may not be the main formation.

In 1956 BHP collected bulk samples at ten exposures of the lower bed. These gave average analyses of 45.8% Fe and 28.5% SiO₂, and an average thickness of 7.3 metres. The data indicate that some of the samples include intervals of low grade material. A recalculation using a 45% Fe cut off gives an average grade of 52.3% Fe and an average thickness of 5.1 metres.

BHP estimated that the lower bed contained a resource of 56.2 million tonnes, with a stripping ratio of 2.3 to 1. Applying the 45% cut off, this resource is reduced to approximately 30 million tonnes.

Metallurgical test work was also undertaken by BHP on a composite sample of the bottom pisolite ironstone from this locality (BHP, 1958). The head grade of the sample was 45.8% Fe and 28.5% SiO₂. A process of roasting, wet magnetic separation, demagnetisation and classification produced a concentrate grading 64.9% Fe and 7.35% SiO₂, containing 88.7% of the original iron. Gravity separation using jigs did not produce worthwhile concentration. Lower grade ironstones from the upper beds failed to respond usefully to any method of beneficiation.

6.4 Exploration Licence 7242, Mount Scott.

In this Licence the Shirwin Ironstone Member forms two separate areas of outcrop (Figure 10). In the east it forms a strong outcrop along a mainly easterly facing escarpment on the eastern edge of a north-south syncline (Plates 5 & 6): dips are very gently towards the west or nearly horizontal. In the western area, separated from the eastern outcrop by a north-south fault zone, the ironstones form an extensive outcrop towards the bottom of a shallow westerly dipping dip-slope. This is essentially the southern extension of the ironstones of the Shirwin Creek Area.
In the eastern outcrop the ironstones occur along a strike length of some nine kilometres. There are two main beds of hard, sandy, cross bedded ferruginous oolite, separated by about seven metres of sandstone and siltstone. One bulk sample was collected (327528) over a 4.5 metre thickness of the upper bed. This reported 50.4% Fe and 23.8% SiO₂, with low phosphorus and sulphur. BHP obtained an average of 46.9% Fe over 4.5m thickness for four samples from the upper bed, and an average of 45.4% Fe over 3.4m for two samples from the lower bed.

The western ironstones crop out over a length of some five kilometres, and a width averaging about 400 metres. There is a single bed of sandy, cross-bedded oolite. Bulk samples taken by BHP averaged 43.6% Fe over a thickness of 3.1m for five samples.

No indications of an underlying, high grade pisolitic bed were seen in these areas. The ironstones observed are all of the relatively silica-rich types which form the upper beds at Shirwin Creek. They are unlikely to be amenable to benefication and are accordingly afforded low priority in the present project, although the potential tonnages are quite large, possibly in the order of 50 million tonnes.

6.5 General Discussion.

The ironstones of the Roper River region are typical of a category of oolitic marine iron ores which were formerly exploited worldwide on a huge scale, notably in Alsace/Lorraine, the Clinton ores of eastern USA, and the Northampton Sands and Cleveland Hills ironstones in England. The composition of the Roper "ore" is quite similar to that of the "soft" i.e. oxidised Clinton ores which contained 50.44% Fe, 12.1% SiO₂, 0.46% P and 0.07% S. The unweathered "hard" ore by comparison contained 37.0% Fe and 7.14% SiO₂. Typical ore from Lorraine contained 31% to 40% Fe, from 7% to 20% SiO₂ and 1.6% to 1.8% P. Average Cleveland Hills ore contained 30% Fe, 8.51% SiO₂ and 1.3% P (all analyses from Lindgren 1933). This suggests that on global comparisons the oxidised pisolitic "ores" of the Roper are relatively high in iron and silica, and low in phosphorus.
Low grade iron ores are still used widely for domestic steel production, both in Europe and USA, and particularly in industrialising economies such as China. However for export they have been entirely superseded by high grade ores such as those from Brazil and the Pilbara. It is obvious that the Roper "ores", even if beneficiated, cannot compete seriously with the Pilbara in the export market, although particular market niches in Asia may be available.

If the Roper resource is to be fully exploited it needs to be viewed in the context of processing to value-added products such as iron sponge, cast iron or steel, making optimum use of particular favourable factors, including such things as; easy mining and easy crushing; reasonable proximity to gas pipeline, adequate water supplies, limestone flux, infrastructure and workforce; good road access and proximity to potential sea and/or rail transport; proximity to expanding markets (southeast Asia) and situation in the developing Gulf Region; no exceptional environmental sensitivities.

Exploration of the iron resource is at an early stage, and ore reserves are not yet identified. However, on the results so far, it can be expected that continued exploration would have a high probability of identifying a resource of more than 50 million tonnes at grades exceeding 50% Fe within the current group of Exploration Licences, with the possibility of substantially greater resources in the region as a whole. The identification of ore reserves demands consideration of economic factors and is beyond the scope of this report.

The magnitude of the resource appears adequate to support a mini steel mill producing up to one million tonnes of steel annually. Whether the metallurgy and economics could be (or become) favourable remains to be established. There is no point in pushing ahead much further with exploration work until these factors are better evaluated.
7. CONCLUSIONS AND RECOMMENDATIONS.

1. The best prospects for commercial iron ores in the Roper areas lie in the oxidised portions of bedded pisolitic, hematitic ironstones. These have been recognised in EL's 7137, 7240 and 7241, but are apparently absent from EL 7242.

2. Exploration work to date is of a preliminary nature. It is sufficient to infer a resource of oxidised pisolite totalling approximately 94 million tonnes, at grades of 46% to 55% Fe, and containing 15% to 29% SiO₂, with low sulphur and phosphorus.

3. It is recommended that work during the third year of the Licences should have four principal objectives:-

   (i) to firm up resources of about 10 million tonnes to "indicated" status in selected portions of EL's 7137 and 7241, and obtain representative composite samples for metallurgical testing.

   (ii) to determine the potential for developing an economic process for benification of the "ores".

   (iii) to make a preliminary assessment of the suitability of the "ore", or beneficiated "ore", for presently available or future high technology processing using natural gas.

   (iv) to make preliminary studies of the economic feasibility of available options for mining, processing, transport and marketing.

4. It is recommended that a minimum expenditure of $ 50,000 should be applied to this program during 1993. The breakdown of this expenditure by area would be:-

   EL7137  $ 21,000  EL7240  $ 4,000
   EL7241  $ 21,000  EL7242  $ 4,000
8. REFERENCES.


APPENDIX I.

Analytical Report.
Amdel Laboratories Limited
Brown Street, Thebarton, 5031
Telephone: (08) 416 5300 Facsimile: (08) 234 0321

Mr Alan Ciplys
Amdel Laboratories Limited
PO Box 58
BERRIMAH
NT 0828

FINAL ANALYSIS REPORT

Your Order No: 2DN1276 Our Job Number : 2AD3296

Samples received : 13-NOV-1992 Results reported : 04-DEC-1992
No. of samples : 5
Report comprises a cover sheet and pages 11, 1 to 1

This report relates specifically to the samples tested in so far as that
the samples as supplied are truly representative of the sample source.

Note:
If you have any enquiries please contact Miss Anne Reed quoting the
above job number.

Approved Signatory:

for John Waters
Laboratory Manager - Adelaide

CC Mr Alan Ciplys NT

Report Codes:
N.A. - Not Analysed.
L.N.R. - Listed But Not Received.
I.S. - Insufficient Sample.

Distribution Codes:
CC - Carbon Copy
EM - Electronic Media
MM - Magnetic Media

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<td>&lt;0.05</td>
</tr>
<tr>
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<td>0.05</td>
</tr>
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<td>327528</td>
<td>0.05</td>
</tr>
<tr>
<td>327529</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

Units: %
DL: 0.05
Scheme: MET6A
EXPLORATION LICENCE 7137

TENEMENT MAP

Figure 3.
CAINOZOIC  Qa alluvium
           Czs soils

PROTEROZOIC  Pdz dolerite sills

Roper Group  Pry Kyalla Member  EL 7137 GEOLOGICAL MAP
(McMinn  Prz Sherwin Ironstone Mmr.  scale 1 :: 250,000
Formation)  Prk Moroak Sandstone Mmr.

figure 5.
CAINozoic  Qa alluvium
           Czs soils

PROTEROZOIC  Pdz dolerite sills

Roper Group  Pry Kyalla Member
(Mcminn)     Prz Sherwin Ironstone Mmr.
Formation     Prk Moroak Sandstone Mmr.

EL'S 7240, 7241 & 7242

GEOLOGICAL MAP

scale 1 : 250,000

figure 6.
Legend:

Cainozoic:
- Ga alluvium.

Proterozoic: Roper Group:
- Pd dolerite.

Ironstone Member. Prz pisolite ironstone.

Undifferentiated:
- Pr sandstone, siltstone, shale.

- + horizontal bedding.
- / bedding trace - low dip.
- \ bedding trace - moderate dip.
- \ bedding trace - steep dip.
- --- edge of major escarpment.
- _____ fault.
- 325716 bulk sample site & number.

EXPLORATION LICENCE 7241
Shirwin Creek
PHOTO GEOLOGICAL INTERPRETATION MAP
Figure 9.
LEGEND.

CAINozoic.
Qa alluvium.

PROTERozoic: Roper Group.
Rd I dolerite.

McMinn Ptz. Shirwin Prz ferruginous colitic sandstone.
Ironstone Member. PrzP pisolite ironstone.

Undifferentiated. Pr sandstone, siltstone, shale.

++ horizontal bedding.
\% bedding trace - low dip.
\% bedding trace - moderate dip.
\% bedding trace - steep dip.
--- edge of major escarpment.
--- fault.

\% bulk sample site & number.

--- main road.
--- bush track.
--- approximate EL boundary.

EXPLORATION LICENCE 7242
Mount Scott

PHOTOGEOPHICAL INTERPRETATION MAP

Figure 10.
PLATE 1. Pisolitic ironstone bed 4.5 m thick, averaging 51.3% Fe. Hodgson Downs locality.

PLATE 2. Escarpment formed by pisolitic ironstone bed, looking NE from locality shown in Plate 1.
PLATE 3. Massive pisolite ironstone 4.0m thick, averaging 46.2% Fe, rests on thinner-bedded quartz sandstone; Mount Fisher locality.

PLATE 4. Detail showing coarse pisolite texture; same site as Plate 3.
PLATE 5. Current bedded sandy oolitic ironstones, 4.5m thick, averaging 50.4% Fe, rest on quartz sandstones; Mount Scott locality.

PLATE 6. Escarpment formed by sandy oolitic ironstones overlying quartz sandstones; Mount Scott locality.