

THE TANAMI ROAD

The Aboriginal-owned

YUENDUMU MINING COMPANY N.L.

Submission to

**PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS**

THE PROJECT

Context Summary

This submission relates to the September 1973 proposal by the Department of Northern Australia for the construction of five Northern Territory Development Roads. These are:

- Petermann Road from Eridunda to Ayers Rock.
- Jay Creek/Hermannsburg.
- Jay Creek/Glen Helen.
- Tanami Road from Stuart Highway to Yuendumu.
- Daly River Road.

The first four of these are in the Centre. The Glen Helen and Ayers Rock roads are scheduled to receive a 6.2m seal; the others 3.7m.

Total estimated cost is \$19.35 million. The Tanami road is the longest (271 km) and the Petermann Road is the costliest (\$6.65 million).

Estimated cost of the Tanami Road is \$5.65 million, or \$21,000 per km.

The Australian Government Department of Housing and Construction prepared evidence for the Parliamentary Standing Committee on Public Works in October 1975.

Planning is scheduled to be carried out in the Darwin Regional Office of the Department.

Construction will be carried out by both Departmental direct labour and contract.

The Yuendumu Mining Company aspires to the contract for supply of road building materials for its end of the Tanami road.

The Bureau of Roads has recommended a five-year expenditure of \$118.5 million on roads in the Northern Territory. The Yuendumu Mining Company is vitally concerned that whatever form the programme takes, the Tanami road should be built according to plan, as soon as is practicable.

THE TANAMI ROAD

*A major future development
and defence link?*



*The road to Yuendumu.
The waterlogged Tanami road, cut by Napperby Creek in flood,
heads northwest across the Stuart Bluff Range towards Yuendumu.
Photo taken late March 1976.*

THE SUBMISSION

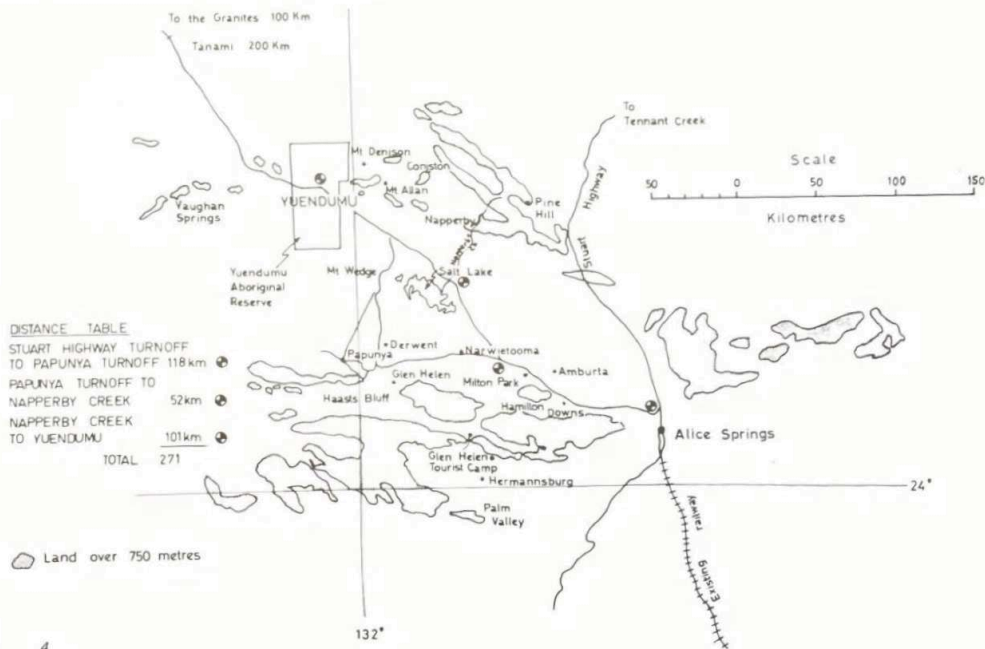
Prepared on behalf of
the Yuendumu Mining Company

This submission is presented on behalf of the Yuendumu Mining Company, an entirely Aboriginal-owned organisation which, after an unsuccessful beginning in copper mining, has recently flourished as a supplier of road and building materials.

The road development project to seal the road from the Stuart Highway north of Alice Springs to Yuendumu—the national importance of

which is made explicit in these pages—represents an outstanding opportunity for this company to establish itself as a truly significant and effectual Aboriginal enterprise.

As such it will be of inestimable importance to the people of Australia's largest and most important tribal Aboriginal community who comprise the shareholders in the company.



INTRODUCTION

"Sealing the four road sections proposed for the Centre will also facilitate greater involvement and participation of local communities in their own economic and social development, thus materially assisting in the co-ordination and development of the region as a whole. (Proposal for Construction of Northern Territory Development Roads, 1973)"

This submission is a plea from the Yuendumu Mining Company for favourable consideration of the Tanami road proposal, since it represents the Yuendumu community's brightest prospect, and can be argued to be the most important of the four road projects on all but purely touristic grounds.

The Yuendumu Mining Company has made uniquely substantial achievements in the sphere of Aboriginal activities. The company was incorporated in 1970 and reconstructed in 1974. Since then it has contributed impressively to the internal economy of the community, grossing figures of up to \$1000 per day from the supply of aggregate to local construction projects. The Company currently owns close to \$100,000 worth of heavy equipment and is establishing a garage and maintenance shop to handle outside maintenance and repair work as well as the servicing of its own machinery. The company has effective control of the main sources of supply of road materials in the area: consequently it is in an overwhelmingly favourable position to seek and obtain the separate contract for the supply of road materials to a major construction project involving the sealing of the Tanami road.

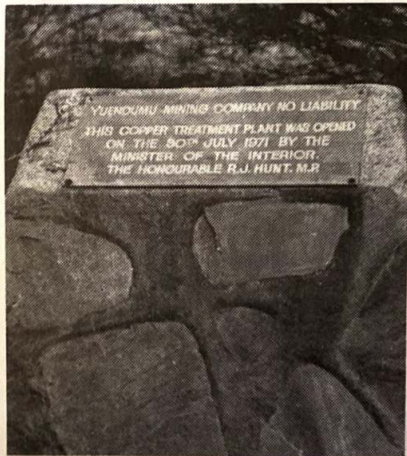
The present economic climate has put paid to whatever chances of success there were for a number of Aboriginal enterprises in the Centre. The Yuendumu Mining Company stands out amongst these for its effectiveness, but as a supplier of construction raw materials to projects reliant on grant funds the company is very vulnerable to cutbacks. On the other hand, its involvement in a major project at this time would consolidate the promise it has shown, and go a long way towards putting Yuendumu, the largest of the communities affected by the roads proposed in the overall programme, into a unique category of self-reliance amongst Aboriginal communities in the Northern Territory.

No subsidy for a project of dubious merit is involved in the Tanami road proposal. In terms of its logical ultimate destination the Tanami road, linking the railhead at Alice Springs with the Kimberley region of North West Australia, with large potential energy and mineral resources, seems by far the most important of the roads proposed. This is true of the present and potential beef cattle traffic, and of the mineral potential in the immediate area affected by the present proposal.

These themes are briefly developed in this submission, which also includes pertinent facts on the Yuendumu Mining Company and the community.

*The Road Proposal from
the Yuendumu Community viewpoint*

SOCIAL AND ECONOMIC ASPECTS



*Cairn commemorating the opening
of the Yuendumu Mining Company's copper leaching plant
by Ralph Hunt in 1971.*

The Yuendumu settlement has a strong claim to be the most important Aboriginal settlement in Australia. Success in any sphere at Yuendumu carries a proportionate degree of sociological importance. The main economic consideration in the context of this proposal is the opportunity cost of not building the road. Yuendumu is run at a formidable cost to the Australian taxpayer, and it is likely to remain a welfare trap for a long time to come. In these circumstances the road construction project is a providential way out, and it represents the first opportunity for any real contribution in return for years of subsidy.

Some 2300 Aborigines and over a hundred Europeans are reliant on the Tanami road for their main communication with the outside world. The road's present unreliability in times of wet weather is a serious logistic handicap. At times the Yuendumu community has been reduced to parlous state and has had to be supplied by airdrops. To some extent the ill-effects on communications of the weather pattern since the last cycle of prolonged drought in the Centre (1958-1966) are unavoidable, but most of the all too frequently imposed hardships from this cause in recent years stemmed from the vulnerability to even a moderate amount of rain of both the existing road and the Yuendumu airstrip.

The adverse economics of the present road fall into a number of diverse but obvious categories which would be difficult to quantify, but which would—as they apply to the community—add up to a substantial total in practical terms. High vehicle maintenance costs, loss of matériel

(shaken off transports), and frequent severe mutilation of the road surface after its use by heavy trucks or four-wheel-drive vehicles when wet, are immediately apparent factors.

It may be, however, that the more intangible results of the present road's shortcomings are the more important. Economically, the loss of time is a material factor, but, socially, uncertainty in the case of medical emergency is the most serious, and there is no doubt that having to interrupt projects for lack of supplies, going short of food, enduring the frustration of being stranded or the frequent uncertainty of knowing whether it will be possible to leave or to return to the community at a given time are more than a mere nuisance. They represent a permanent social handicap affecting life on the settlement, aggravating the problems of remoteness in a way that must increase tensions for all residents.

All these factors contribute to load the odds against success in any sphere at Yuendumu. Social development at Yuendumu has up until now been crippled by the lack of any economic base, despite large infusions of finance which have made it the repository of a very substantial public investment since it was originally established as a Baptist Mission station after the Second World War. The Government took over responsibility for the settlement shortly afterwards, and it has since grown to a community of over 1000 people.

Yuendumu is the main centre for the Walpiri people, the largest surviving tribal group of Australian Aborigines with numbers approaching three thousand.

The community now stands at a very important crossroads, with alternatives obvious to any person in the least familiar with the position of the Aboriginal in today's society.

MINERALS

The Tanami road serves an area which, for uranium potential, represents the second major province after the Alligator Rivers in the Northern Territory.

Mining has grown to become by far and away the main income earner in the Northern Territory, as is clearly shown by the figures quoted on page 2 of the original proposal for the construction of the five roads. The value of mineral production increased tenfold in a decade, to more than \$125,000,000 in 1973/74. The inception of big new uranium mines in the Alligator Rivers area is likely to see this figure more than double in a short time.

Until now, the area served by the Tanami road has produced only modest amounts in the way of mining revenue, although a number of mining activities have been carried on in the area. Historically, the old Granites/Tanami goldfield had a brief period of importance, but produced only some 10,000 ounces, and was the smallest of the main Northern Territory goldfields. Gold leases are still active in the area, and new extractive technologies may bring about some future production. Tin, wolfram, and copper, as well as

tantalite and some other rare minerals, have been mined in the district. For some years the Yuendumu Mining Company was sporadically active in mining copper. Sulphuric acid to leach the ore was hauled to Yuendumu over the Tanami road, and the bags of copper cement produced at the small leaching plant were trucked back to Alice Springs for dispatch to Port Kembla.

Even on the small scale applying to these operations, the shortcomings of the present road represented a significant handicap. Sulphuric acid is typically not a commodity suitable for haulage in quantity for long distances over roads of uncertain condition. It is a commodity required in large amounts for the treatment of uranium ores and, while this consideration may be somewhat premature, it does point up the fact that all the logistics applying to a developing mining field are critically affected by the limitations of its main supply route.

NGALIA BASIN

Uranium Province.

The Ngalia Basin originally attracted the attention of mineral explorers because of the geological similarities to the extensive uranium areas of Colorado in the United States and Gabon in West Africa. The Carboniferous Mt Eclipse sandstone unit cropping out along the northern margin of the basin has been proved to contain a number of encouraging prospects.

A joint-venture consisting of Central Pacific Minerals, Urangesellschaft and Co., Agip Nucleare, Magellan Petroleum, and the Australian Atomic Energy Authority (whose share is currently being tendered for sale) has been intensively exploring the Ngalia Basin, with expenditures up to \$500,000 per year since the

commencement of the programme in 1970. In 1975 four drilling rigs were active in the area and this level of activity is being maintained and shows every sign of increasing as the result of governmental policy changes.

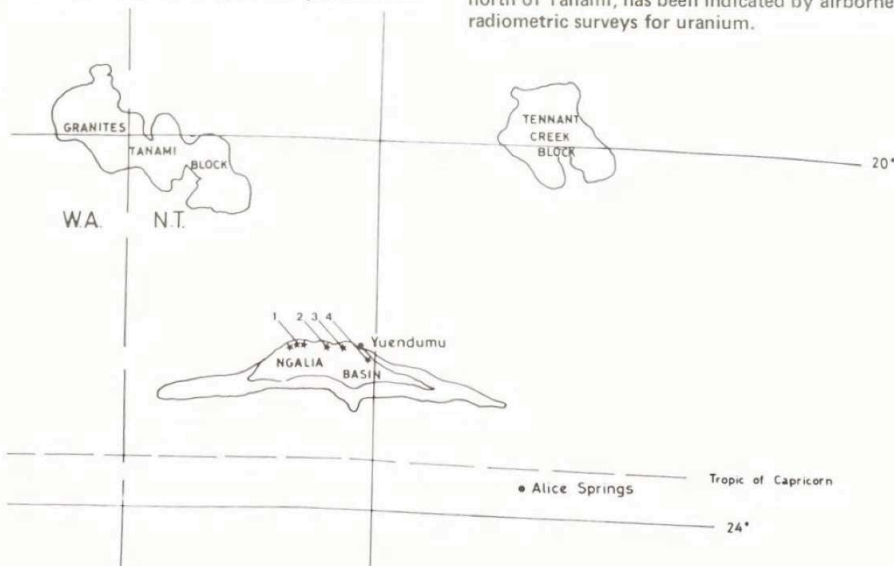
Results to date have been very encouraging. A number of drilling intersections of high-grade uranium have been made.

The Yuendumu Mining Company has an interest in Exploration Licence No. 605, in which the most promising results have been obtained.

MT WINNEKE AREA

An area of possible future interest, to the north of Tanami, has been indicated by airborne radiometric surveys for uranium.

- Uranium Occurrences
- 1 Biglryi Prospect
 - 2 Dingo's Rest Prospect
 - 3 Walbiri Prospect
 - 4 Rinkabeena Prospect



THE KIMBERLEYS

*The mineral potential
of the Kimberleys
is certain to have a bearing
on the future importance
of the Tanami road.*

BASE METALS

The area has been considered promising in exploration terms since the early 1960's when to all intents it was virgin territory in this respect. Major iron ore deposits have been known on the islands of Yampi Sound since the turn of the century, and have been mined since 1951. Gold was worked in the same general period as the Tanami field, but no major mineral deposits apart from iron have yet been exploited.

Within the last decade, major deposits of bauxite have been proved on the Mitchell Plateau and, at the present time, developments in base metal exploration have reached a very interesting phase. The Fitzroy Trough area holds a strong promise of becoming a significant lead-zinc-silver as well as a copper-nickel province. Expenditures on exploration in the vicinity of Kununurra have run into large sums and future developments will of necessity be large enough to place the area in the category of an important base metal mining area.

OFFSHORE OIL AND GAS

The North-West Shelf has been recognised during the last decade as Australia's most promising hydrocarbon prospect. Most developments have taken place in the southern areas of the Shelf and to date have been almost entirely confined to gas discoveries. In the northern parts, towards which the Tanami road points, the Browse and Bonaparte Gulf Basins represent large areas of potential hydrocarbon-bearing sediments and structures. Gas has been proved in a number of wells, including the Petrel and Tern discoveries, the Sunrise and Troubadour wells, and the promising but far offshore well at Scotts Reef.

OTHER ENERGY

It has been claimed that the world's greatest tidal potential is to be found in the gulfs and sounds of the Kimberley area. The range of tides reaches 22 metres and may represent a very large future energy resource.

BEEF CATTLE

The Tanami road is by far the most important beef road of the four proposed, carrying four times as many cattle as the others put together. It serves a number of large cattle stations (see map—local geography, page 4) and at current levels of usage moves the equivalent of at least twenty per cent of the area's total cattle population each year.

The future of the beef industry, which is currently at a low ebb, depends generally upon export markets and, locally, on the continuance of good seasons and the containment of costs. The role of a sealed road in the latter respect has been well noted in a number of studies.

TOURISM

Tourism has a limited present potential in connection with the Tanami road, particularly the section beyond the Papunya turnoff, in which the special interest of the Yuendumu Mining Company lies. Yuendumu, in contrast to the terminals of the other roads proposed in the Centre, is not a tourist destination, and, in the short term, the industry holds relatively little potential for the people of Yuendumu.

The Yuendumu Reserve carries some 3000 head of cattle—a small number in comparison with some of the nearby stations, but sufficient to give the Yuendumu community a stake in the fortunes of the beef industry locally.

At the present time the road through to the Kimberleys is in sporadic use as a cattle route, with the direction of traffic depending on markets. This little-known fact points up the certain importance of a high-standard road link in the future. When this time comes, cattle from the Kimberleys may be expected to be moved over it in large numbers to southern markets, and, in the opposite direction, from the Centre to export facilities at Wyndham and Derby.

In the longer term, the Kimberleys as the ultimate destination of the Tanami road, would make this a very important tourist route, and the involvement of the Yuendumu Community and the Company in the provision of accommodation for travellers, vehicle repair and maintenance facilities and petrol sales, would become highly significant.

GEOGRAPHICAL AND STRATEGIC IMPLICATIONS

*The Tanami road
as a future landbridge.*

From Yuendumu the Tanami road heads north-west for 600 kilometres across some of the most empty and desolate areas of the Australian continent, towards the Kimberleys. Although cattle trains currently use this route, and it was a historical means of access to the region, the track between Tanami and Halls Creek is not shown on all road maps. In the minds of most people the link between the Centre and this remote and little-developed but resource-rich area hardly exists at present. It requires little imagination, however, to appreciate the potential Australia-wide significance of an effective future landbridge between the two regions.

Alice Springs would become a key nodal centre. With the town's emergence as a standard-gauge railhead, joined to the trans-continental line, the Tanami road would bring the Kimberleys 1200 kilometres closer to the country's main rail system, and make the region more accessible to Adelaide than to Perth.

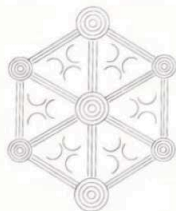
The scale of the importance of this landbridge would depend to a large extent on developments in the Kimberleys and surrounding areas. The potential is suggested in the section on Minerals in this submission, and in the possibilities surrounding large future agricultural and water developments, represented to date by the Ord River scheme. It calls for vision to assert that

these will ultimately be of great national importance as is confidently believed in the West. These developments can be expected to have consequences far outside the limits of Western Australia and the existence of an alternate, high-standard inland route of supply from the main eastern centres may well prove critical in establishing their viability. Certainly the enormous costs of offshore oil and gas development in the northern part of the North-West Shelf should be beneficially affected.

The completed Tanami road, from the railhead at Alice Springs to the shores of the Timor Sea, would represent the only inland access to the entire Kimberley region. All the main existing routes are close to the coast, vulnerable to cyclones or floods, and their use would be particularly easily subjected to seaborne interdiction in time of hostilities. The area would be the most easy part of Australia to isolate completely. This fact is a manifest one, pointing to the conclusion that it is in the National interest that the Tanami road should be continued through to its logical destination in the not too distant future.

The section of the Tanami road from Alice Springs to Yuendumu, with which this submission is concerned, deserves to be assessed in the light of the potentially very much more important project of which it represents the first section.

THE YUENDUMU MINING COMPANY N.L.



The Yuendumu Mining Company was incorporated as a no liability company on 20th February 1969.

All shares in the company are owned by members of the Walpiri tribe, 83 per cent resident at Yuendumu, with the remainder resident at Mt Allan station and Hooker Creek. The Chairman of the Company, Tim Langdon Japangardi, is also Chairman of the Yuendumu Council. The board members are all Walpiri residents of Yuendumu, but the company's manager and chief mechanic are European. At the present time an average of ten Aborigines are employed (although this figure varies upwards when a demand for gravel products is indicated) and the company is contributing at the rate of \$50,000 annually in wages to the community.

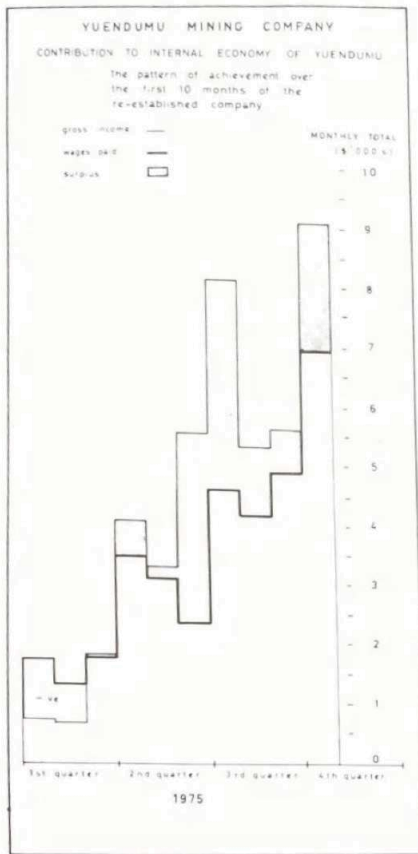
The company originally evolved from a prospecting party which was instituted to make use of the outstanding ability of tribal Aborigines to detect subtle signs of mineralisation. This ability, combined with their knowledge of the country, enabled them to discover over a hundred small occurrences of copper. Subsequently, a number of uranium occurrences were discovered by Aboriginal prospectors from Yuendumu. This came about as the result of an agreement between Central Pacific Minerals and the Yuendumu Mining Company, one of the terms of which was that Aboriginal prospectors should be employed by the Joint Venture in the Ngalia Basin.

A copper mining and leaching operation commenced in 1970 and continued until 1974. This venture was not a success, and it was

subsequently established by consultants that the ore treated was too low in grade and too high in iron content for there to be any hope of achieving economic results by the simple method of leaching with sulphuric acid. In addition, available copper reserves were assessed as very small.

An alternative method of electro-winning was investigated and the proposal was put forward that the operation should be redesigned to produce only some 100 kilograms of copper per day, and to establish a local metal artifact industry to allow the copper to be marketed at a substantially higher price than could be obtained from the raw product. At the same time the company would become involved in crushing and screening operations to supply construction and road building projects.

In August 1974 the Department of Aboriginal Affairs approved a total of up to \$271,000 over a two-year period to establish these ventures. The company had to be almost entirely re-equipped as the existing plant and equipment was either derelict or unsuitable. It was found that the demand for gravel was greater than anticipated, and that good opportunities also existed for contracting with heavy earthmoving equipment. At the same time rapidly rising costs had put the electro-winning project out of reach, and inflation had had a particularly bad effect on the price of crushing equipment. But, by a fortunate circumstance, it proved possible, by careful choice of screening equipment, to obtain high-quality and entirely acceptable gravel products without crushing.



The Company's first year after its re-establishment was very promising. Over \$100,000 worth of equipment was acquired and regular employment for an average of ten Aborigines has been maintained. In order to service its equipment the company requires adequate maintenance facilities. A spare parts shop has been established and a garage capable of accommodating the largest equipment is under construction. A cash flow of \$50,000 per year is projected from the provision of spare parts, repair and maintenance work, and the sale of petrol to non-company customers. Promising Walpiri employees are being trained in a number of technical skills.

Other current projects involve the winning of eluvial wolfram from Mt Doreen, and the supply of construction flat rock to Alice Springs (back-loaded at favourable freight rates). In 1975, when demand for gravel products was high, the company was able to gross substantial daily figures and to obtain a tantalising picture of prospects in store for it if activity were to continue at the same high level.

Circumstances have made this impossible and the Company's most promising project for 1976, on which cash flow projections for the present year were based, was to supply sand for the new pipeline which was planned to give Yuendumu an adequate water supply. This project has been indefinitely deferred.

The Company also aspires to house-construction projects in the future, using local materials, and is keeping closely in touch with the Ngalia Basin uranium scene, by joint-venture agreements

and the acquisition of exploration licence areas.

The brief period of success enjoyed by the Yuendumu Mining Company largely came about as the result of its taking a realistic attitude to its opportunities. Circumstances changed too soon for it to reach profitability and have left it in a vulnerable position. Should no suitable future projects eventuate its continued existence can only be sustained by grant funds—a state of affairs that appears unnecessary and pointless when so many legitimate projects remain to be undertaken. The Company is confident that despite necessary cutbacks opportunities will continue to be available.

THE RAW MATERIAL

The Yuendumu Mining Company controls extensive areas of the quartzite formation which represents the only obvious source of raw material for the north-western portion of the proposed Tanami road project. This control is effected by:

1. The location of the deposits within the Yuendumu Reserve.
2. Special Mining Leases applied for.

The Vaughan Springs quartzite formation crops out near Yuendumu, along the northern rim of the Ngalia Basin, and also in the Stuart Bluff Range, which represents the southern rim, near Napperby Creek. The Yuendumu location is decidedly more favourable in both quality and quantity. Several million cubic metres of suitable scree material is present, representing an abundant source far in excess of the total requirements for the total road project.

APPROACH TO ROAD CONTRACT



Obsolete jaw-crushers in the copper leaching plant. These low-capacity crushers reduced the ore to minus $\frac{3}{4}$ in. for heap leaching.

PLANT

The approach to the road contract will be entirely dictated by the end product specifications and the requirements of the constructing authority. It may be that to achieve required specifications the Company will have to acquire crushing and screening equipment considerably in excess of present plant. If end product specifications so indicate it is expected that the Department of Construction will design a flow sheet for the crushing plants incorporating the required number of crushers, screens, and conveyors. Alternatively this will be done by engineering consultants.

FINANCE

The financial requirements will vary widely depending on the plant indicated. They may be modest, or they may represent larger sums than the company has received to date.

In the latter case the projected income from the supply of materials (again dependent on the product specifications and price) will be drawn up into a submission for a loan from the Aboriginal Loans Commission of the Aboriginal Benefits Trust Fund, or, if indicated, from a commercial financial organisation. Lease financing will also be considered.

EXPANDING WORKFORCE

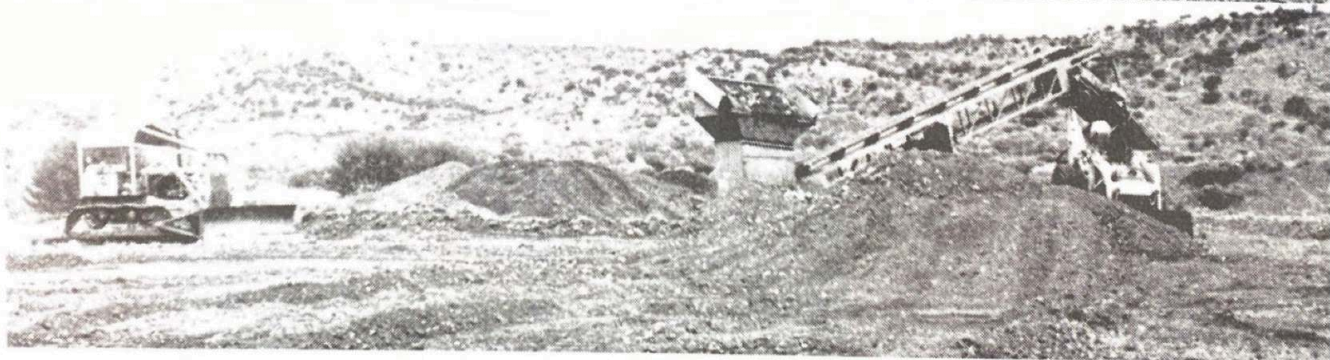
In keeping with its pragmatic approach the Company will expand its workforce for the project with effective personnel, non-Walpiri or non-Aboriginal if need be. Some of the key personnel to date have been part-Aboriginal and it is anticipated that in any event most of the personnel requirements will be able to be met from within the broader Aboriginal community.

At the present stage the Walpiri ownership of the company is considered to be more important than exclusive Walpiri staffing, which may be impractical owing to a shortage of skilled operators. The Company's record to date is felt to give sufficient credibility to the assertion that an effective team can be assembled.

TECHNICAL BACK-UP AND CONTINGENCY PLANNING

The Company will ensure that adequate technical advice is available to it and that all contingencies are provided for.

Ideally, the company would prefer to start supplying raw materials well in advance of the start of construction, so that it could take advantage of a generous lead time to build up stockpiles at designated sites. This would be subject to the terms of the contract, but it could mean that the Company would enjoy a cash flow some considerable time before the commitment of the main funds for the construction of the road.



*The Powerscreen.
Mobile screening plant on site in the company's quarry.
This piece of equipment was the key to the company's success in 1975.*



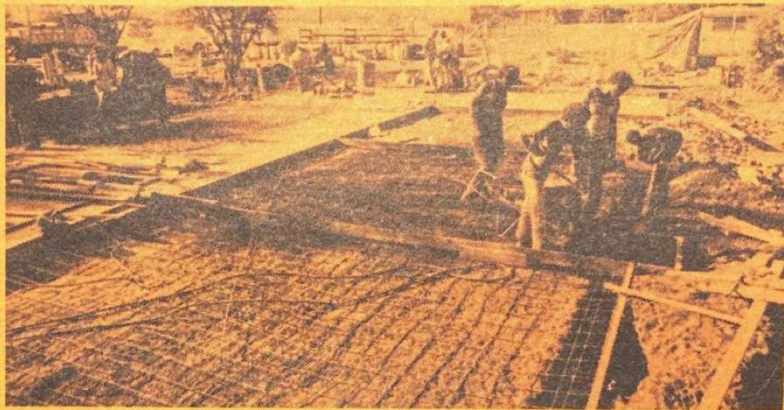
*Items of
company equipment*



*Work on the floor of the
Yuendumu Mining Company's maintenance shop in March 1976.*

*This shed will be large enough
to accommodate the heaviest equipment
and will house machine tools
and servicing gear for trucks and bulldozers.*

*The 180-square-metre shed is situated
to the rear of the company offices and parts shop
and is scheduled for completion in June 1976.*



EQUIPMENT

**Currently operated
by Yuendumu Mining Company.**

Powerscreen—Mobile Screening plant, 140 t.p.h. capacity.

Caterpillar D6 bulldozer 6A, hydraulically
operated tractor mounted 5-tyne ripper.

Scoopmobile LD5, 4 w.d. front-end loader.

John Deere backhoe/loader combination.

Allis Chalmers 45 tandem grader.

Atlas Copco 170 cu ft/min mobile compressor.

Diamond T9 cu.m. tip truck, Cummins 186 diesel.

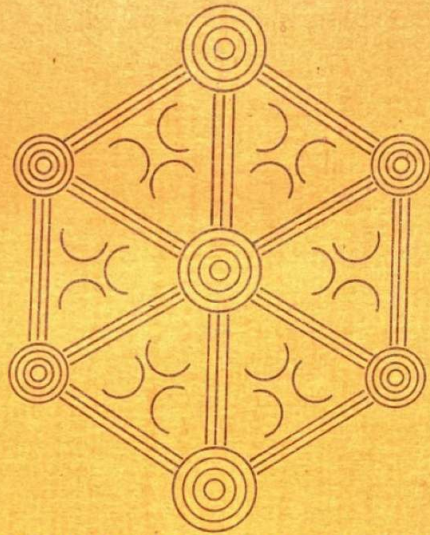
ACCO International 9 cu.m. tip truck, Perkins 6364 diesel.

Ford 3 cu.m. tip truck.

Dodge 3 cu.m. tip truck.

2 Toyota Landcruisers.

SAIMPE lathe, sundry water tankers, concrete mixers etc.



YUENDUMU MINING COMPANY N.L.

