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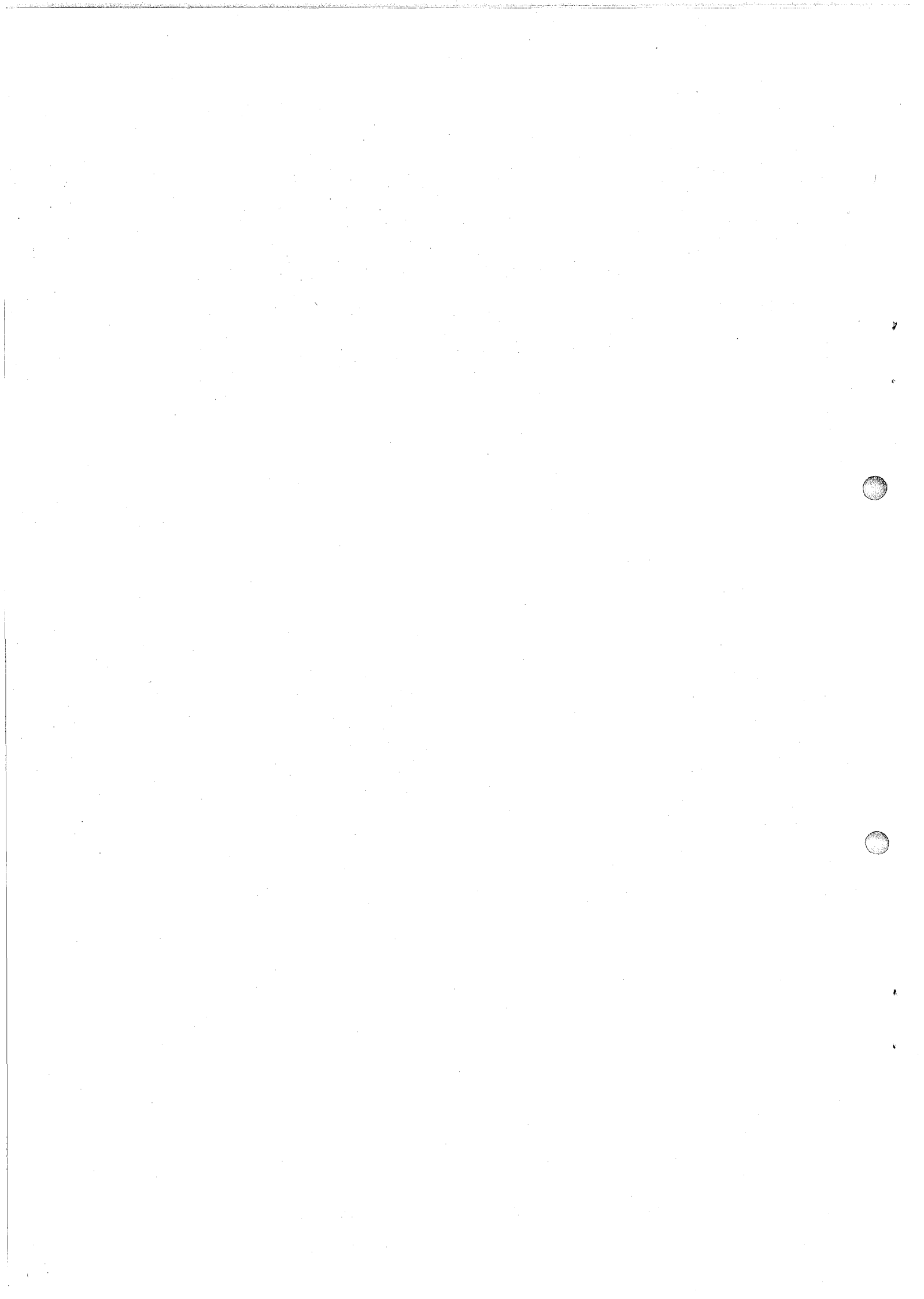
INTERNATIONAL URANIUM RESOURCES EVALUATION PROJECT

I U R E P

NATIONAL FAVOURABILITY STUDIES

NIUE

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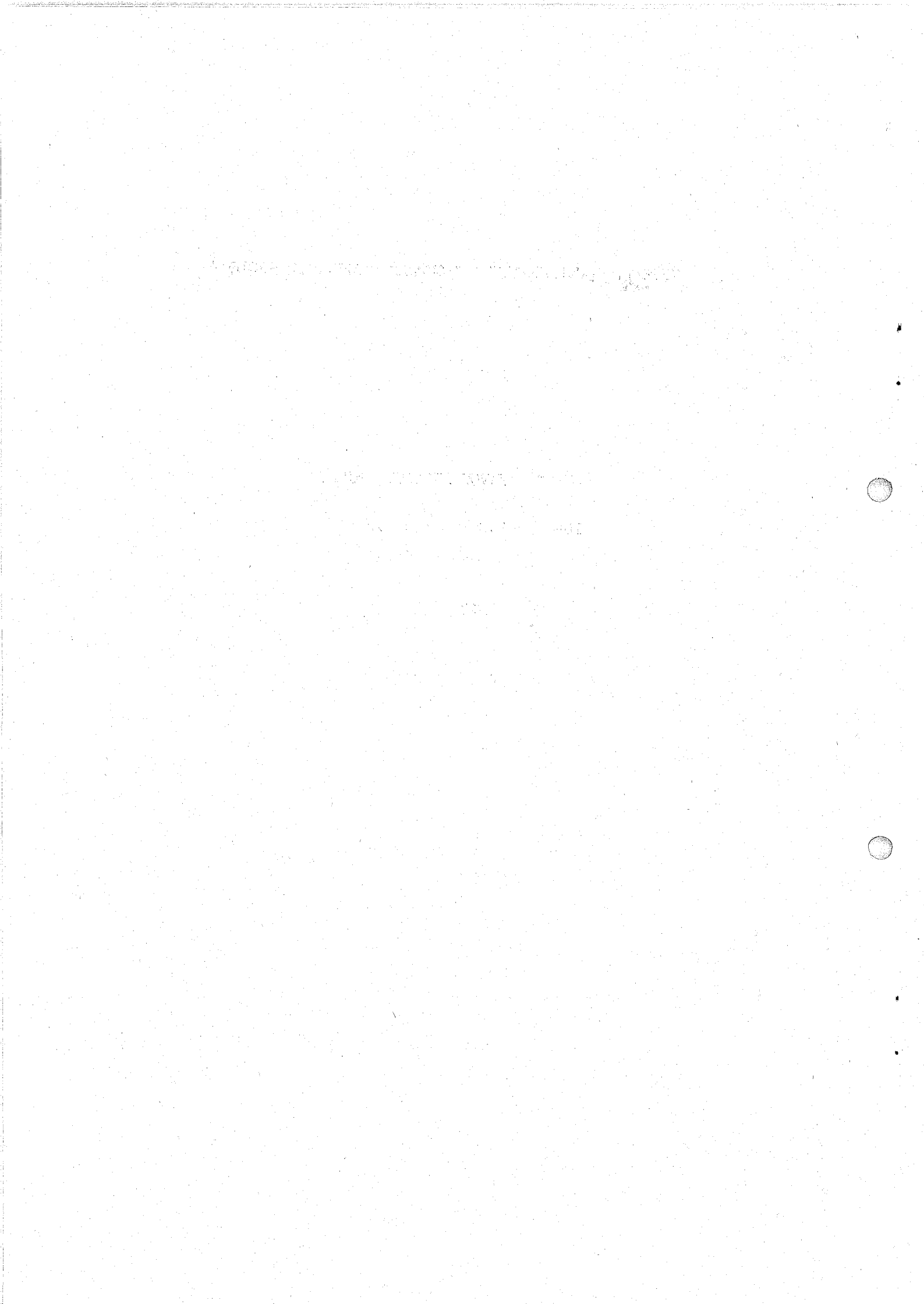
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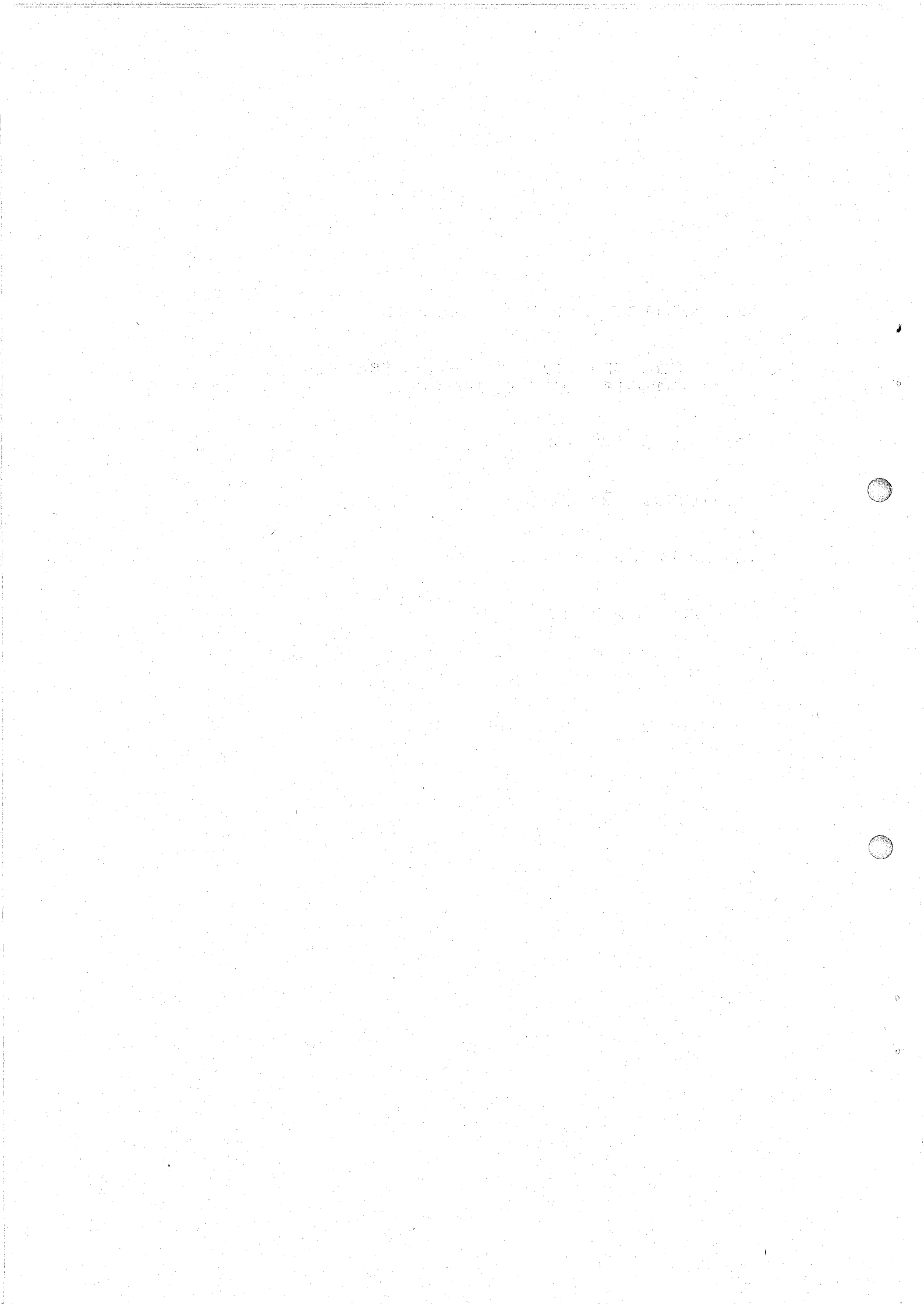
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NIUE



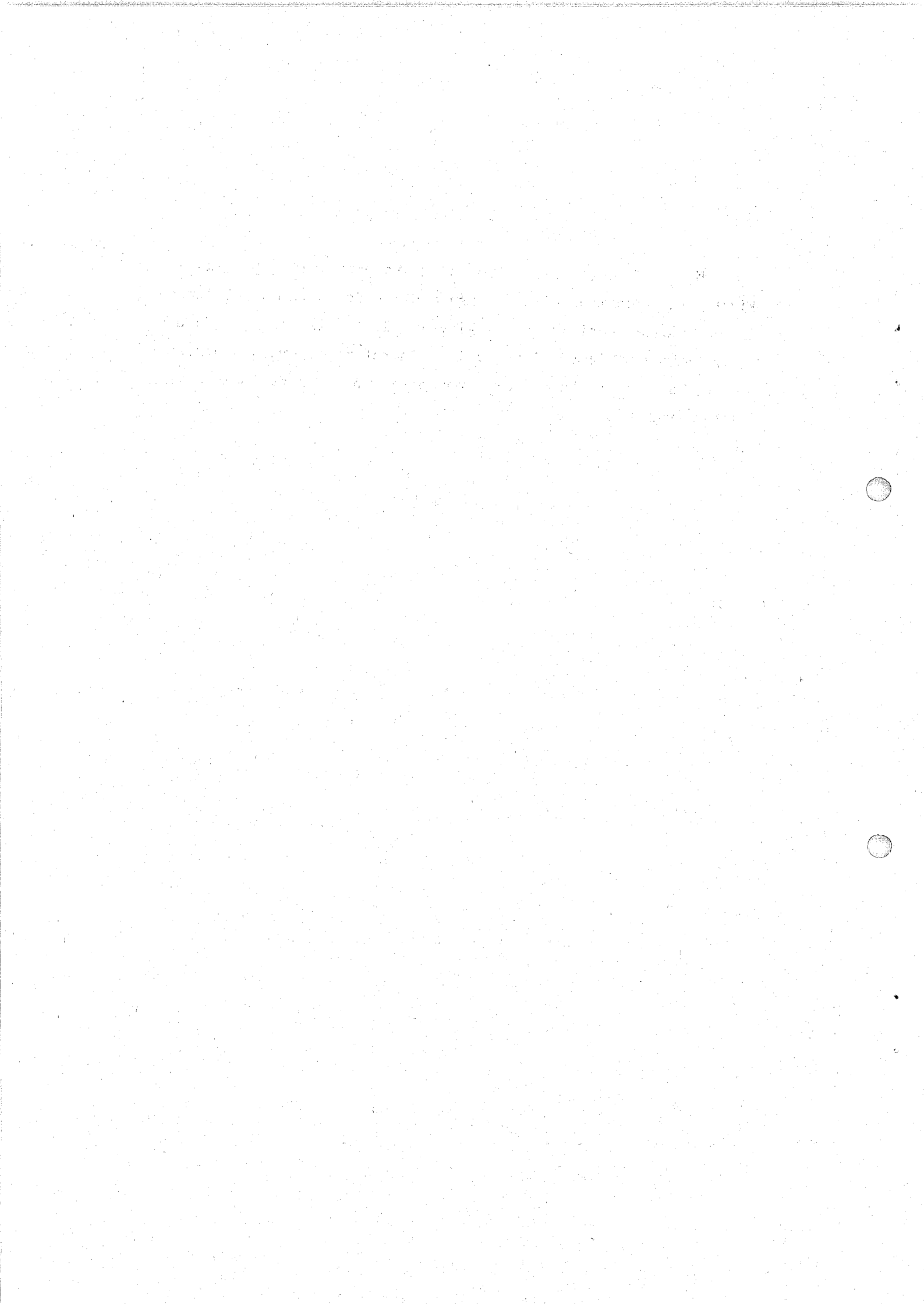
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S U M M A R Y

Niue is described as a coral island containing 259 square kilometers, located between Tonga and the Southern Cook Islands in the Central Pacific. Geologically, little is known, or can be deduced from available information, therefore reported occurrences of uranium are the basis for a potential in category 1 (less than 1,000 tonnes U).



A. INTRODUCTION AND GENERAL GEOGRAPHY

Niue is a coral island of 259 square kilometres, located about 480 kilometres east of Tonga and 930 kilometres west of the Southern Cook Islands. It is a self-governing dependency of New Zealand. Niueans have free entry to New Zealand and a sizeable resident Niuean community exists there. Emigration is continuing.

Climate

The climate of Niue is warm and pleasant throughout most of the year with occasional violent storms typical of this part of the Pacific.

Population, industry and currency

The population of Niue at the end of 1975 was 4,050. Agriculture is the main industry, and main crops are coconuts, taro, yams, limes, cassava (manioc), kumara and passion fruit. About 51,000 of the island's 64,000 acres are used for agriculture and over 13,000 acres are merchantable forest.

Vegetables, fruit, copra and handicrafts are exported to New Zealand. New Zealand aid is being employed to establish a bee industry and to introduce dairy and beef cattle for local consumption. A small forestry project is also being undertaken.

There is no mining industry on Niue.

The unit of currency is the New Zealand dollar and US\$1.00 = NZ\$1.10.

Transportation

There are 77 miles of all-weather roads and 66 miles of access and plantation roads. The best anchorage is an open roadstead at Alofi, the largest of Niue's 13 villages. A shipping service is maintained with New Zealand via Tonga, Fiji and Samoa on a regular four-weekly basis.

An airstrip of 5,400 ft, capable of taking most types of aircraft except modern jet aircraft, and a twice-weekly air service from New Zealand, via Fiji, Tonga and Western Samoa, is operated by Air NZ Ltd and Polynesian Airlines Ltd.

B. GEOLOGY OF NIUE IN RELATION TO POTENTIALLY FAVOURABLE URANIUM BEARING AREAS

Virtually nothing is known or can be deduced concerning the geology of Niue beyond the fact that it is a coral island, contains some soil, probably some limestone, and because of recent information concerning the possible existance of uranium and bauxite on the islands, possibly other rock types as well. There is no known source of geologic maps of Niue, except possibly from the New Zealand Geological Survey.

C. PAST EXPLORATION

There has been no known past exploration for uranium on Niue.

D. URANIUM OCCURRENCES AND RESOURCES

Recently there have been reports of uranium occurrences on the island, and at least one large international company has had an exploration crew on the island, but there have been no uranium resources ever published.

E. PRESENT STATUS OF EXPLORATION

Late in 1976 a uranium occurrence was reported on Niue, and by February 1977 the Mining Journal reported that Avian Mining would switch from exploration for bauxite to exploration for uranium and would commence a drilling programme the next month (March) to test uranium occurrences. Some of the land owners living in New Zealand challenged this move, but the final outcome has not been learned.

Late in 1977 it was reported that a large international company (parent of Avian?) was exploring for uranium on Niue.

77022 MJ - Avian Mining Co., will switch its prime exploration target from bauxite to uranium. Drilling will commence in March to test uranium occurrences located last year on the island.

770527 MJ - Avian Mining Co's., plans for a joint uranium prospecting programme on Niue have been challenged by some of the owners of the land who live in New Zealand.

F. POTENTIAL FOR NEW DISCOVERIES

Obviously, because of the occurrence of uranium reported on Niue, a potential is very likely. It's extent, without considerably more information would be very difficult to judge, but is probably not great.

Niue is described in non-geologic literature as a coral island, but the present press indicated that there is at least some favourability for bauxite and uranium. There must be therefore at least one other rock type-possibly described from weathering of a volcanic rock to form a laterite. If this is the host rock of the uranium occurrences it is not exactly typical - but perhaps not impossible. In any case the potential assigned is category 1 (less than 1000 tones U), but at the high end, and possibly as very low grade and as secondary minerals.

D - 1000 tonnes

Compiled by M V Hansen
IAEA, Vienna
December 1977

References

1. Europa Yearbook 1977 Vol II
2. Various Atlases
3. Mining Journal 25 Feb and 27 May 1977
4. Personal Communication

This sounds rather unusual & promotion!

