

**EXPLORATION LICENCE 4/2006
NINE MILE BEACH
KING ISLAND**

**FINAL REPORT ON EXPLORATION
DECEMBER 2009**

**For
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ABSTRACT

EL 4/2006 was granted to Mineral Holdings Australia Pty Ltd from 29th March 2007 for a period of 5 years over an area of 107 sq km in State Waters off Nine Mile Beach in NE King Island. The Licence covers exploration for all Category 1,3,5(a) and category 5(b) minerals.

The Licence was applied to cover the sediment accumulations of the present delta of the Sea Elephant River in the south and of a possible submerged beach parallel structure to the north representing a previous delta or palaeochannel of the river or an ancient strand line of Nine Mile Beach.

The exploration target was heavy mineral sands containing rutile, ilmenite and zircon,(as well as possible credits of cassiterite, gold, rare earths and platinoids). Adjacent onshore deposits at Naracoopa and Cowper point contain an estimated 25 million tonnes of 5% combined rutile and zircon.

Over the period 1965-1969 Ocean Mining AG carried out bathymetric and seismic surveys in the Nine Mile Beach area and developed 11 jet-lift drillholes as an initial test of the area. The technique was largely unsuccessful and because a better sampling system was not available they relinquished the licence.

Mineral Holdings Australia Pty Ltd held Exploration Licence 7/1997 in the off shore Nine Mile Beach area from 19097 to 2001. They used scuba divers to obtain samples of active seafloor sediments. Some 16% of the samples returned values in the range of 0.3 to 1.7% combined rutile and zircon. The better grades occurred in a zone parallel to the existing shoreline and the distribution suggests one or more palaeostrandlines within 1 to 3km off shore.

Mineral Holdings considered a bulk sampling program using a suitable dredger or pump survey vessel but for various reasons the equipment could not be arranged and in view of the large expenditure requirements MHA has decided to relinquish the tenement.

1.0 INTRODUCTION

EL 4/2006 was granted to Mineral Holdings Australia Pty Ltd from 29th March 2007 for a period of 5 years over an area of 107 sq km in State Waters off Nine Mile Beach in NE King Island. The Licence covers exploration for all Category 1,3,5(a) and category 5(b) minerals.

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The exploration target is heavy mineral sands containing rutile, ilmenite and zircon,(as well as possible credits of cassiterite, gold, rare earth and platinoids). Adjacent onshore deposits at Naracoopa and Cowper point contain an estimated 25 million tonnes of 5% combined rutile and zircon.

Previous work by MHA has suggested the presence of a number of offshore strandlines and a suitable dredger was thought to become available once the dredging of Port Phillip Bay is completed during 2009. The dredger is no longer available and MHA has now decided to relinquish the area.

2.0 PREVIOUS EXPLORATION

Over the period 1965-1969 Ocean Mining AG carried out bathymetric and seismic surveys in the Nine Mile Beach area. They identified a major sediment filled channel off Sea Elephant Beach (south of EL 4/2006) and two smaller “channels” one off Cowper Point off the southern section of Nine Mile Beach and a second zone further north off the northern section of the beach. Up to 72 feet (22 metres) of sediment was interpreted in the northern channel, 60 feet (18.3m) in the channel off Cowper Point and 84 feet (25.6 m) in the large channel structure off Sea Elephant Beach.

The surveys were followed up by a program of 11 jetlift drillholes. The program was unsuccessful partly due to rough weather and only about half the suction “core” was recovered. Only hole 9, in the southern target, showed any elevated values of Ti and Zr, (630ppm TiO₂ and 442ppm ZrO₂). A better sampling system was not available and OMAG relinquished title in 1969.

Mineral Holdings Australia Pty Ltd held Exploration Licence 7/1997 in the off shore Nine Mile Beach area from 1997 to 2001. Only the northern two “channels” located by OMAG were included as these were within the 3 nautical mile limit. The larger southern area off Sea Elephant Beach was omitted as it was not thought possible that the licence in Commonwealth waters would be granted before the expected date of arrival of the

dredge, Volvox Delta. As it turned out the dredge was not made available to the project as it was required elsewhere.

While awaiting the arrival of a suitable dredge to carry out a bulk sampling program, Mineral Holdings used scuba divers operating from abalone boats equipped with GPS for navigation to obtain samples of active seafloor sediments.

Grab sampling of seabed sediments was carried out initially using a jar collecting about 0.4 – 0.6 kg sand (samples 1-88) and later using a 0.75 m long bait pump for greater depth penetration of up to 0.6 m (samples 101 – 193) samples 89 to 100 were never collected. The samples were collected on east-west lines 900m apart with samples every 500m in the Cowper point anomaly closing to 250m in the northern area. The GPS location, water depth, type of sediment and seabed condition was recorded at each sample site.

Individually the TiO₂ values range from 0.02 % to 1.29% and ZrO₂ values from 0.001% to 0.409%. There is a distinct tendency for the two values to vary sympathetically. The rutile and zircon values show no correlation with the “channels” identified by OMAG tending to occur along the western margin directly off shore from Nine Mile Beach. The zone is parallel to the existing shoreline and suggests one or more strand lines within 3 Km of the existing beach.

Tin concentrations reach 100g/t Sn in 4 samples and over 50g/t in 23. The values tend to be grouped towards the north and southern margins of the licence. The highest tin values do not correspond to the highest rutile and zircon value sites.

The results were considered quite encouraging but the large suction dredge booked to collect a series of bulk samples was no longer available and, because of the high cost of maintaining title to the area EL 4/2006 has been relinquished.

3.0 PROPOSED PROGRAM

Mr. Thomas of MHA has continued discussions with Boskalis Offshore Dredging BV. They initially indicated they would be keen to take a percentage interest in the area and would be in a position sample the area as soon as the channel deepening of Port Phillip Bay is completed by the end of 2009. However attempts to gain a third party to share the costs has been unsuccessful and a decision has been made to relinquish the title to EL 4/2006.

4.0 ENVIRONMENT

As this licence was to involve offshore exploration some special clauses were added to the licence conditions.

- no exploration within 200m to seaward of high water mark
- access only from established marine facilities and

- staff not to access beaches or rocks adjacent to the licence for recreational purposes.

As yet no on site exploration activity has taken place. There has been no impact on the environment and no rehabilitation is necessary,

5.0 EXPENDITURE

The exploration program is entirely dependent on the availability of a suitable dredge for bulk sampling. No on site work has therefore been carried out and expenditure for 2008 has been limited to \$ 7,198.92.

6.0 REFERENCES

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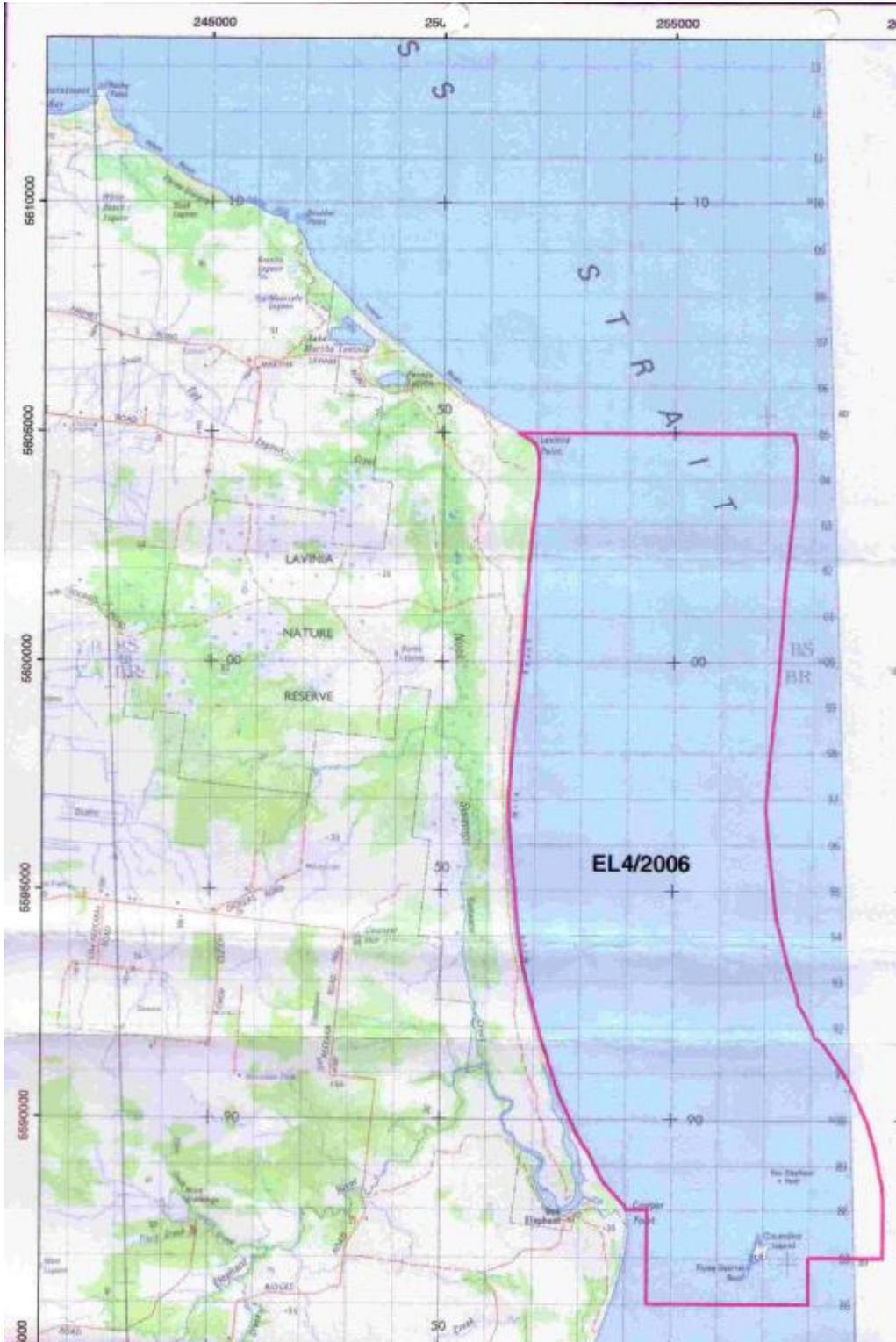
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PLAN 1. Location diagram EL 4/2006 Nine Mile Beach (GDA 66 grid)