

SUNRISE EXPLORATION PTY LTD

Annual/Relinquishment Report

TASMIN SANDS PROJECT

For the Period

23 August 2006 to 22 August 2008.

Exploration Activities On Tenement:	Exploration Licence 22/2005
Sheet 1:50,000:	Strahan 7913N
Sheet 1:250, 000	Sk 55-5 Queenstown
Tenement Holder:	Sunrise Exploration Pty Ltd
Address:	6-10 Douro Place, West Perth. WA 6005
Project Operator:	Pelican Resources Limited
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ABSTRACT

Historical heavy mineral sands evaluations in the Strahan area focussed on Ocean Beach where concentrations of zircon, rutile, ilmenite and chromite are readily observed.

However, a limited amount of work, including drilling, on the Quaternary and Tertiary sediments to the east of Ocean Beach indicated the presence of relatively large tonnages of sand containing ~1 % heavy minerals with local intersections of between 2 -10 %.

These need to be evaluated fully and this was the intended focus of exploration on E22/2005.

The relevant historical data has been accessed and copied where required.

The tenement was relinquished on 24th July, 2008.

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1. Introduction

1.1 Exploration Rationale

The presence of heavy minerals along Ocean Beach in the Strahan area on the west coast of Tasmania is obvious to anybody walking along the beach. Most of the historical exploration was biased towards evaluating the heavy mineral content of the beach sands.

Later work, in the late 1980's suggested the possibility of strand line/dunal concentrations containing an estimated 75Mt sand at ~1% HM within which were intersections of 2-10% HM.

Evaluation of these would be the exploration focus on this tenement.

1.2 Location and Access

EL 22/2005, 101 sq km in area, is situated on the west coast of Tasmania centered on approximately 5340000N and 360000E (AGD 1966 AMG Zone 55). The tenement lies to the north, west and southwest of the small town of Strahan.

Access to most of the tenement north of Strahan is along the approximately north to south surfaced Strahan to Zeehan highway. Southwards, the tenement is accessed by the Macquarie Heads gravel road. Several small tracks lead westwards from the main roads whilst the portion of the tenement under plantation is served by numerous forestry roads (Figure 1).

1.3 Tenements

On the 7th June, 2005, Sunrise Exploration Pty. Ltd., a wholly-owned subsidiary of Pelican Resources Limited, applied for an Exploration Licence located around the small town of Strahan, Western Tasmania.

Subsequently, on the 27th July, 2005 the Registrar of Mines of the Department of Infrastructure, Energy and Resources advised of proposed variations to the application to minimize public concerns. These included the excision of the town of Strahan and the area adjacent to Macquarie Harbour. Ocean Beach and the immediately adjacent dune system were also excluded as part of the general policy prevailing in Tasmania.

On 6th September, 2005 the application for the reduced tenement of 101 sq km was put forward to the Minister for Infrastructure, Energy and Resources with the recommendation that it be granted.

Subsequently, three written objections to the granting of the tenement were lodged with the Department of Infrastructure, Energy and Resources and a meeting to discuss these objections was held in Strahan on November 15th, 2005.

Ultimately, pursuant to a hearing at the Magistrates Court in Hobart on the 18th July 2006, the Order was made to strike out the objection under Rule 83 of the Civil Rules. EL 22/2005 was eventually granted on the 23^d August 2006 and is valid for a period of five years from that date.

After assessing available data and engaging a consultant geologist to review the heavy mineral potential, the tenement was relinquished on the 24th July, 2008.

1.4 Tenure

EL 22/2005 which is 101 sq km in area was granted to Sunrise Exploration Pty. Ltd. for a period of five years from the 23^d August 2006.

Sunrise Exploration Pty. Ltd. is a wholly-owned subsidiary of Pelican Resources Limited and both companies have the same addresses.

Registered Office: Level 1, 284 Oxford Street, Leederville, W A 6007

Exploration Office: 6-10 Douro Place, West Perth, WA 6005

2.0 Geology

The geology of the area is shown on the Strahan 1:50,000 geological map 7913N published by the Tasmanian Department of Mines. These show the majority of the area under tenement to be underlain by Tertiary and Quaternary deposits.

The Tertiary sequence, comprising sandstones, siltstones, clays and conglomerates, contain lignite horizons. The overlying Quaternary sediments consist of marsh and swamp deposits together with stabilized and mobile dune sands, beach sands and gravels.

A series of at least 5 shore lines were noted between Strahan Airport and Ocean Beach at altitudes of between 18m and 22m above sea level.

However, a subsequent reappraisal of the area by P. Woods in 1887 suggests that the Tertiary 'basement' which comprises an unsorted mixture of grain sizes from angular silt to rounded cobbles is an outwash moraine. He also considers that the terraces are therefore primary features (alluvial terraces) and not secondary wave cut platforms.



FIGURE 1.
Tenement Location
Plan



Scale: 1:100 000

3.0 Review of Previous Exploration

The presence of heavy minerals along Ocean Beach in the Strahan area is obvious to anybody walking along the beach. As a result, most of the historical exploration was biased towards evaluating the heavy mineral content of the beach sands.

Reports were obtained from the Mines Department, Tasmania and are summarized below.

⇒ ? **Late '60s Australian Titan Products Pty. Ltd. and Strahan Sands Pty. Ltd.**

Apparently proved up a resource along Ocean Beach of:

Rutile 12,000 tons (0.9%)
Zircon 38,000 tons (2.7%)
Chromite 11,500 tons (0.8%)
Ilmenite 11,500 tons (0.8%)
Garnet 30,000 tons

They observed that the ilmenite was of poor quality and the rutile and zircon were iron stained.

⇒ **1971. Electrolytic Zinc Company of Australia Limited.**

Drilled auger holes along lines 300m (1000 feet) apart with hole spacings of 7.5m (25 feet). Most of the holes were on the beach but a few on the back dunes. Samples were separated out by bromoform and heavy mineral contents estimated.

The heavy minerals at Strahan were predominantly confined to the beach between high and low water levels, but some high grade intersections were made in the immediately adjacent back dunes. The results indicated a resource of 1,450,000 Mt sand containing an average of 9.8% HM on the beach. Tonnages of the various HM component minerals were given as (with approximate calculated in situ grade in parenthesis):

Rutile 2,800 tons (0.19%)
Zircon 6,700 tons (0.46%)
Leucoxene 4,000 tons ((0.27%)
Ilmenite 11,500 tons (0.79%)
Chromite 7,700 tons (0.53%)
Cassiterite 430 tons (0.03%)

These values are considerably lower than those obtained previously, especially the rutile and zircon values.

There are comments about the difficulty of obtaining a clean ilmenite product because of the chromite.

⇒ **1981. CRA Exploration Proprietary Limited – EL 47/80**

Completed six rotary/diamond drill holes for an advance of 547 metres, searching for brown coal to the north and south of Strahan. Most of the holes intersected low to very low HM, but hole ST1, drilled immediately to the west of Strahan, intersected three metres with an abnormally high HM content.

⇒ **1983. Consolidated Goldfields (Aus.) Pty. Ltd.**

Assessed the geomorphology of the area and concluded that the characteristics were different to those at Eneabba. They downgraded the potential for significant deposits along palaeo-strand lines.

⇒ **1984. Newmont Holdings Pty. Ltd. – EL 4/84**

Conducted an exploration programme including grab and channel sampling together with auger drilling of both the Ocean Beach and the inland dunes/strand lines.

Results indicated a possible resource of:–

Ocean Beach - 2.14 Mt sand containing an average of 0.95% cassiterite, 1.1% rutile, 2.1% zircon, 3.6% ilmenite, 2.4% chromite and 16 ppb gold.

Inland strand lines - at least 8 Mt sand containing unknown HM content.

They concluded that the inland strand lines had been insufficiently tested.

⇒ **1990. Aztec Exploration Limited.**

1985-1987. Reappraisal of the geology, air photograph interpretation, target area selection.

1987-1988. Purchased and interpreted aeromagnetic data. No positive results as basement magnetism masked features associated with HM concentrations.

Conducted a reconnaissance field trip to select target areas. They concluded that the previously interpreted strand lines were possibly a glacial feature.

Drilled 180 RC holes for 2632 metres using a Toyota Land cruiser-mounted rig.

1988-1989. Analyzed select drill samples for % HM and % slimes and prepared five composite samples from Ocean Beach and determined HM species

They proved an Indicated Resource of 2.1 Mt sand grading 9% HM along Ocean Beach and beneath the immediately adjacent dunes. The HM fraction comprises the following, with percentages given as in situ values.

Chromite 1.81%
Ilmenite 0.80%
Leucoxene 0.25%
Leucoxene/rutile 0.50%
Zircon 0.68%
Monazite 0.03%

Additionally, the inland dune fields contained an estimated 75Mt sand at ~1% HM within which were intersections of 2-10% HM, suggesting the possibility of strand line/dunal concentrations.

1989-1990. After various discussions it was decided that the possibility of mining was very low and the project terminated.

⇒ **1994. Australian Zircon Pty. Ltd. – EL6/1992**

Collected six samples of beach sand from the southern part of Ocean Beach to provide a bulk sample for metallurgical testwork. Concluded that metallurgical grade chromite and premium grade zircon concentrates might be achievable, rutile concentration would require extra plant but a saleable ilmenite product would be difficult to obtain.

4.0 Exploration Activities Completed by Sunrise Exploration Ltd

4.1 During Reporting Period 2006 – 2007

Work on EL 22/2005 was limited to assessing historical data and preparing for the 2007-2008 field season. Work comprised:

- Visiting the Mineral Resources Department in Hobart to view and acquire geological maps and historical plans
- Assessing all available historical data; this is summarized above
- Paying two brief field visits to the tenement area to briefly examine geology, access and to examine areas of exclusion such as the Henty Dunes. One of the visits was prior to the granting of the tenement, the other subsequent to the granting

4.2 During Reporting Period 2007 – 2008

In November 2007, a Consultant Geologist, Vince Roberts and Associates, was commissioned to conduct an assessment of EL 22/2005 using available Public Domain data. A summary of this work is given below.

“This report is intended to provide a preliminary assessment of EL 22/2005 and adjacent ground, with recommendations for the direction of future exploration. The work has consisted of a GIS compilation and preliminary interpretation of readily available data. This was followed by a brief perusal of Open File company reports of past, relevant exploration in the district.

Particular aspects to be assessed were:

- *The potential for important extensions to the east and west of the known heavy mineral sand deposits - i.e. under, or within the Henty Sand Dunes and/or the Quaternary sediments and shallow submarine mineralisation, respectively*
- *The possibility of additional deposits at fossil strand lines.*

The major feature of the study was that the “MAGMAP04_1VD_IMAGE” airborne magnetic image (1st Vertical Derivative) showed a recognisable response which straddles the present Ocean Beach strand line (refer Figure 5). The response shows as around 1.2 km wide and is continuous over at least 35 km length of coast adjacent to EL 22/2005. However it is offset, so that around 60% of its width plots on open ground on the western (seaward) side of the water line and around 15-20% (eastern side) occurs within the tenement. This response is superimposed across the magnetic trends caused by the basement rocks and overlaps the known heavy mineral deposit which has a significant magnetic content (magnetite, chromite and ilmenite). The anomaly is therefore interpreted as probably due to a large heavy mineral deposit, of which the known deposit forms less than 5% (refer details below).

Most other aeromagnetic responses over the EL appear to be reflecting basement rocks and basement structure, trending around 280°-315°. However a few small magnetic responses (less than 2 sq km area) could be indicating deposits near the confluence of the Badger and Henty Rivers.

All channels of the aero radiometrics show a marked, continuous anomaly corresponding to that part of the strand line immediately west of the southern half of the EL (refer Figures 6 – 9). This response is almost certainly related to surface exposure of heavy minerals. The lack of radiometric response over the northern part of the “magnetic strand line”, indicates that the heavy mineral deposit is not exposed at surface. This radiometric anomalism may prove to be a useful indicator of the presence of heavy minerals, but does not in itself indicate a significant level of thorium or uranium mineralisation. The mineral monazite is the expected source of the thorium and uranium radiation, but past exploration indicates a very low monazite content in the known deposit. Therefore future exploration should address the source (mineral) of the thorium and uranium responses.

Much of the EL seems to be dominated by the reasonably steep topography of basement formations, so that the possibility of significant, inland palaeo strand lines is essentially confined to some low-lying areas near to the northern and southern ends of the EL. Other than the present strand line, no residual terraces could be identified, though one or more could be present in the low-lying areas, at the 8 to 20 metre R L range. Following their exploration drilling in the area, Aztec Mining speculated on a large, low grade deposit associated with sand dunes on and adjacent to the southern part of the Sunrise tenement (refer below for detail).

Around the northern part of Macquarie Harbour, including around Macquarie Heads, a prominent magnetic response (on “MAGMAP04_1VD_IMAGE”, refer Figure 5) and some associated radiometric responses follow the offshore side of the strand line in a similar fashion to the Ocean Beach anomaly. This extensive anomaly, up to 3 km wide near Strahan, is also thought to be probably indicating a heavy mineral deposit. The anomaly does not extend significantly onto EL 22/2005, but a very substantial part appears to be over available ground.

Past exploration has been preliminary, but drilling by Aztec Mining (1987-89) indicated two heavy mineral deposits in the vicinity of the southern end of the Sunrise EL. Aztec carried out broad spaced R C drilling over exposed mineralisation adjacent to Ocean Beach (within the strip of now “Unavailable Land”) and reported a deposit, within a 9 km X 100 m X 2 m zone, calculated as 2.1 m tonnes containing 9% heavy minerals which included 1.81% chromite, 0.80% ilmenite, 0.25% leucoxene, 0.50% leucoxene/rutile, 0.68% zircon and 0.03% monazite. The contained mineral value was calculated at about \$7.00/per

tonne at 1989 spot prices. On the basis of reconnaissance R C drilling in the dune area between Macquarie Harbour and the coast, Aztec speculated on variable grades of mineralisation totalling more than 75 m tonnes and averaging 0.5% - 1.5% heavy minerals.

Clearly attention to the offshore potential is a high priority for this project. Action on tenement acquisition is an urgent requirement, followed by a more detailed geophysical appraisal which is expected to confirm and refine the present interpretation”.

The full report is appended together with a CD entitled “Strahan Mineral Sands Project EL 22/2005 Tasmania. November, 2007”. This contains scanned copies of all data used

5.0 Conclusions

The heavy minerals on Ocean Beach have been evaluated several times over the last 4 decades and there is considerable data on the mineralogy of these occurrences. However, it is obvious that the heavy minerals on the beach are derived from the marine erosion of the Quaternary and Tertiary material to the east of Ocean Beach.

Limited work by such companies as CRA, Newmont Holdings and Aztec Exploration Limited indicated that the inland dunes contain considerable tonnages (estimates range from 8mt to 75mt) material containing an average of ~1% heavy minerals with local intersections of 2-10% HM.

The heavy mineral potential of the area inland of Ocean Beach has yet to be fully evaluated.

A recent assessment of Public Domain data, including airborne magnetics, showed a recognisable magnetic response which straddles the present Ocean Beach strand line. The response shows as around 1.2 km wide and is continuous over at least 35 km length of coast adjacent to EL 22/2005. However it is offset, so that around 60% of its width plots on open ground on the western (seaward) side of the water line and around 15-20% (eastern side) occurs within the tenement. This response is superimposed across the magnetic trends caused by the basement rocks and overlaps the known heavy mineral deposit which has a significant magnetic content (magnetite, chromite and ilmenite). The anomaly is therefore interpreted as probably due to a large heavy mineral deposit, of which the known deposit forms less than 5% (refer details below).

Additionally, a few small magnetic responses (less than 2 sq km area) could be indicating deposits near the confluence of the Badger and Henty Rivers.

6.0 Statement of Expenditure

6.1 During Reporting Period 2006 – 2007

Expenditure for E22/2005 for the period 01/07/2006 to 30/06/2007 is detailed below.

Salaries	\$7,449.29
Travel and accommodation	\$4,500.92
Tenement rates and rents	<u>\$1,773.01</u>
	\$13,723.22
Administration**	<u>\$3,517.66</u>
TOTAL	<u>\$17,240.88</u>

** Note. The administration component is in excess of the 10% as it takes into consideration the travel costs to Strahan and Hobart incurred in the process of consulting with objectors to the granting of the tenement and attending a subsequent hearing at the Magistrates Court in Hobart. Salaries, totaling 4 days work were not included in the above.

6.2 During Reporting Period 2007 – 2008

Salaries	\$10,908.33
Tenement rates and rents	<u>\$1,894.21</u>
	\$12,802.54
Administration	<u>\$1,280.20</u>
TOTAL	<u>\$14,082.74</u>

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