

RL 23 / 1987
FOSTERS MARSHES
NORTH EAST TASMANIA

VAN DIEMAN
ANNUAL REPORT
25TH APRIL 2005
MINES

VAN DIEMAN MINES PTY LIMITED

25TH April 2005

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OVERVIEW

During 2004 title to this tenement was transferred from Mineral Holding Australia Pty Limited to Van Dieman Mines Pty Ltd (VDM). That company is a wholly owned subsidiary of a United Kingdom publicly listed AIM (Alternative Investment Market - London Stock Exchange) company, Van Dieman Mines Plc. Due to budgetary constraints Mineral Holdings had conducted little work during the early part of 2004.

In early 2004 VDM commenced a re-assessment of the Mineral Holdings database and as part of that work began to compile all available drilling data into a GIS database. This has enabled VDM to update drilled resources on the Great Northern Plains and assess the resources within RL's 15 and 23 / 1987. All available map data has been digitised and added to the GIS database and the company intends to conduct DGPS spot check surveying within the tenement during the next twelve months to verify accuracy of location and RL's of drill holes.

VDM as a result of the re-assessment has delineated a substantial resource base which is quoted jointly for the two RL's. Specifically the "Measured Resource" comprises some 36.8 million bank cubic metres (bcm) of marine / terrestrial sediments containing between 260 and 282 gm / bcm of SnO₂.

The work by VDM is ongoing and the company hopes within the next twelve months to have upgraded the "Measured Resources" to "Proven and Probable Reserves". It is anticipated that ongoing survey work will enable some potential peripheral tin bearing ground to be upgraded and included into the resource base.

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Coordinates AMG in AGD66 Zone 55

1 INTRODUCTION:

The tenement encompasses part of the Great Northern Plains tin bearing Tertiary embayment. To the south of the tenement an area of elevated basement forming the Aberfoyle Hill topographic feature, this is recognized as the southern limit of the Great Northern Plains embayment.

VDM is at present updating its GIS database; old drill records, old survey plans and other quantitative data are progressively being added and this information is being linked to a vast amount of data already in place from the Great Northern Plains embayment area. Encom, a Sydney based GIS consultancy group has been contracted to undertake this work. In addition VDM has recently acquired a Trimble DGPS survey unit and will commence a surveying program of the tenement. Data to be collected will include:

- Location old mine cuts;
- RL's and locations of any exposed basement;
- Relocate old drill sites, both AMG coordinates and RL's; and
- Survey pick-up of any significant cultural features such as old tracks, water races, etc.

Previous work within the area recognized that the embayment contained a substantial tin bearing marine and terrestrial resource. This resource is detailed in Table 1, and is considered, at this time, to be contained in two areas, Fosters Marshes contained within RL 15 and RL 23 / 1987 and Braithwaite's contained solely within RL 23 / 1987. Areas peripheral to these resources also contain tin bearing alluvium however the accuracy of data is questionable and at this time the areas can only be considered as prospective.

During the next twelve months VDM intends to consolidate the database and through site survey work bring much of the data in the peripheral zones into the resource category. In addition it is proposed to JORC the "Resources" into "reserves", this procedure is well underway and subject to mining and associated engineering feasibility studies and associated economic assessments should be completed within this twelve monthly period.

TABLE 1
RL 23 / 1987 - RESOURCE TABULATION

ZONE	VOLUME bcm	GRADE gm / bcm SnO ₂	COMMENT
Fosters Marshes	31,600,000	260.36	Contained within RL's 15 & 23/1987.
Braithwaites	5,162,000	281.97	Totally within RL 23/1987
TOTAL			

2 LOCATION AND ACCESS:

The tenement is located approximately 10 km northwest of the Township of Gladstone. The centroid of the area is located at 579,000mE; 5,472,000mN AMG and encompasses the southern section of the Great Northern Plains. Figure 1.

Access is via a heavily overgrown mine track from the old Dorset Tin Shed site on the Great Northern Plains both along the northern side of McGregor's lagoon past the old Government Dam to the East and West Aberfoyle workings and eastward from the old tin sheds to the Rushy Lagoon property boundary. VDM has lodged a "Work Program Application" to clear these tracks and to re-establish drainage as part of work commitments for adjoining tenements.

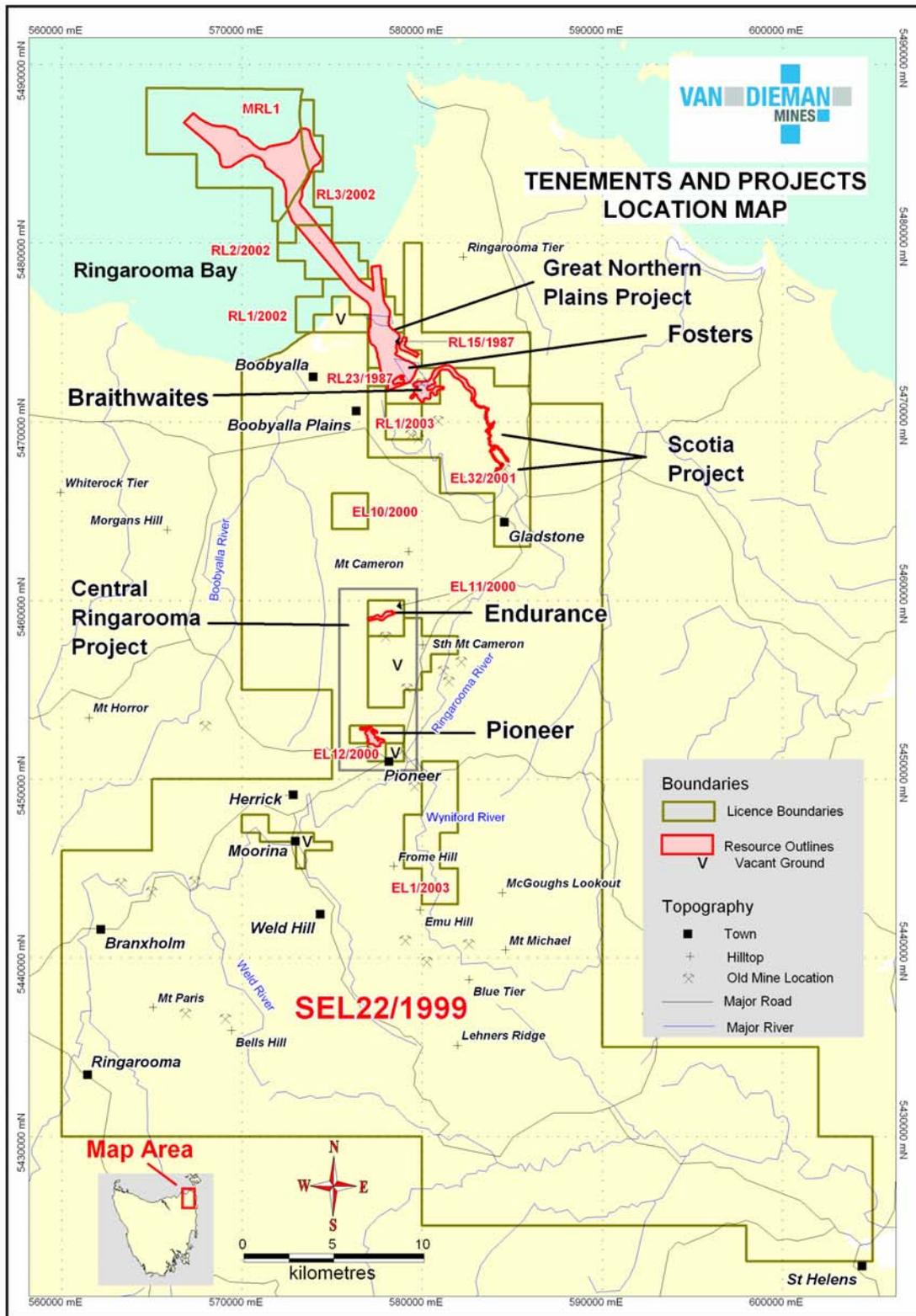


FIGURE 1 - LOCATION PLAN

3 HISTORICAL BACKGROUND:

Alluvial tin was first worked in the early 1880's in the Aberfoyle, McGregor's, Beltz and Taylor's areas, just south of RL 23/1987. The following text provides a summarized history of the main mining activity in the region around RL 23 / 1987.

A. BELTZ WORKINGS:

Commenced by H. Beltz in 1911 and operated for a number of years.

Working continued by Ogilvie & Packett until water supply was cut-off in 1922.

In 1917 Roach drilled 39 bores in this area of those 23 drilled as three lines ahead of the face.

Subsequent drilling by Carey indicated deeper ground to the NW.

Little work after 1922.

B. MCGREGOR'S WORKINGS:

History uncertain but worked prior to 1902.

Government drilled a line of bores, No 6 Line in 1902.

Mallinson worked an area to the west of McGregor's.

Difficulty encountered with water supply, main workings worked by races but became "Tailed In".

C. ABERFOYLE WORKINGS:

In 1906 the New Aberfoyle Company commenced operations.

New Aberfoyle succeeded in 1909 by the Aberroe Tin Mining Co. N. L..

The latter group did not register its operations until 1912.

Mining continued until around 1916 at which time many of the working faces were connected resulting in three main worked cuts; the Eastern, the Main and the Western or Curnow's workings.

There are no production records for the early production years up to 1906.

From 1906 to 1916 the New Aberfoyle and Aberroe companies produced some 129.3 tons of concentrate with peak production of 22 tons occurring in 1910.

Development of all these deposits was limited by water supply and operating hydraulic head. Water races were developed from the Boobyalla River and across the Ringarooma River by an inverted siphon system and from the Mt Cameron Water Race.

Work in the area and more specifically in the Great Northern Plains appears to have recommenced in about 1935, specifically these works include:

- 1935 - Austral Malay drilled on the Great Northern Plains just north of Aberfoyle;
- 1955 - 56 - Dorset Tin Dredging investigated the area and drilled north and east of Aberfoyle looking for a dredge path onto the Great Northern Plains;
- 1958 - Rio Tinto Exploration drilled in the region but generally west and east of Aberfoyle;
- 1966 - Utah development conducted regional auger drilling in the general area and it is believed conducted some backhoe pitting near Aberfoyle;
- 1967 - The Mines Department drilled a line of holes just north of Aberfoyle from the Delta Workings eastward to the Scoloch Lead;
- 1971 - Portland Holdings carried out pitting and auger drilling in the immediate vicinity of the old alluvial workings:
Portland reported some excellent grades however their testing was not sufficient to define further resources or the directions in which the alluvial leads were trending.
- 1974 - Mines Department Tasmania conduct geophysical survey of area.
- 1978 - Preussag Australia conducted work in the region including several lines of drill holes one of which was located just north of the Aberfoyle workings.
- 1978 - Renison Limited conduct assessment of area.
- 1980 to 83 - Hellyer conduct comprehensive drilling program across the area
- 1995 - MacArthur carries out independent assessment of the area for Mineral Holdings which was subsequently updated by mason in 2001.

Since the work by MacArthur and a review of that work in 2001 by Mason no other work was undertaken until VDM commenced its studies in 2003.

4 GEOLOGY

Since acquiring tenure to this property VDM has continued to reassess the regional geological setting particularly as it pertains to the alluvial deposition during the Tertiary period. Construction of a Tertiary basement map has confirmed the presence of a major marine embayment developed partly within RL 23/1987. This feature is flanked to the south by an area of basement high, the Aberfoyle Hill area, the Great Northern Plains sediment pile within the southern section of the embayment deposit is apparently draped against this feature.

4.1 REGIONAL SETTING

It is not proposed to provide a detailed description of the older geological units, a brief outline of the nature of each major unit is provided, in tabulated form. Table 2 and a geological map as Figure 2.

The tabulation sets out the significance of each unit. It is the Tertiary units, in particular the basal sections, that are of economic significance as they contain the heavy mineral concentrations; cassiterite, tantalite, gold and sapphire being the most economically important.

The Tertiary marine embayment is a significant local feature and appears to have hosted a number of regressive and transgressive phases during that period. The presence of the embayment is supported by drill data (Great Northern Plains drilling (See Figure 3), by previous gravity geophysical surveys conducted by Shell Exploration in 1981 (See Figure 5) and by aeromagnetic data (See Figure 4). Both terrestrial and marine sediments are represented in the Tertiary profile at within area and the southern section along the basement high may host a near shore deltaic type and shoreline beach type environment with terrestrial sediments; grits, pebble and cobble beds representing terrestrial channel fill deposits and thick sands containing shelly fossils the near shore marine environment.

The current shoreline at Ringarooma Bay hosts major aeolian and marine sand beds, their deposition caused by dominant westerly winds. It is most likely that a similar climatic environment existed during the Tertiary with sand build-up at Aberfoyle, deep inside the embayment being driven by both tidal and climatic factors and also by alternating periods of transgression and regression.

TABLE 2
REGIONAL GEOLOGICAL SETTING
MAJOR GEOLOGICAL UNITS

AGE	UNIT	DESCRIPTION	SIGNIFICANCE
DEVONIAN - CARBONIFEROUS	Blue Tier Batholith	Porphyritic fine to coarse grained granite / adamellite and biotite-hornblende granodiorite	Forms the tin rich Mt Cameron Massif to the south of Aberfoyle and basement around the southern edge of the Tertiary marine embayment. Locally may be a source of tin.
JURASSIC	Dolerite	Dolerite	Forms a resistant basement outcrop and is the bounding feature of the eastern edge of the Tertiary marine embayment. Sporadic outcrops may occur resting on granite basement along the southern edge of the embayment
ORDOVICIAN TO DEVONIAN	Mathinna Beds	Quartzwacke turbidite sequence locally hornfelsed adjacent to granite bodies	Forms basement in parts of the Aberfoyle area and its low weathering resistance may lead to the development of tin rich Tertiary channels cut into this unit.
TERTIARY	Unnamed	Sands, clays and gravels, locally bouldery. Lignite zones at some localities. Some evidence of ferricrete and silcrete development.	Basal layers are generally tin (cassiterite) enriched, locally of economic significance. Also known to contain gold, sapphire, rutile, zircon and ilmenite.
QUATERNARY	Unnamed	Highly variable; sands, clays, peats, Aeolian dune deposits, swamp and marsh deposits.	Locally represent overburden zones over Tertiary tin bearing alluvial deposits

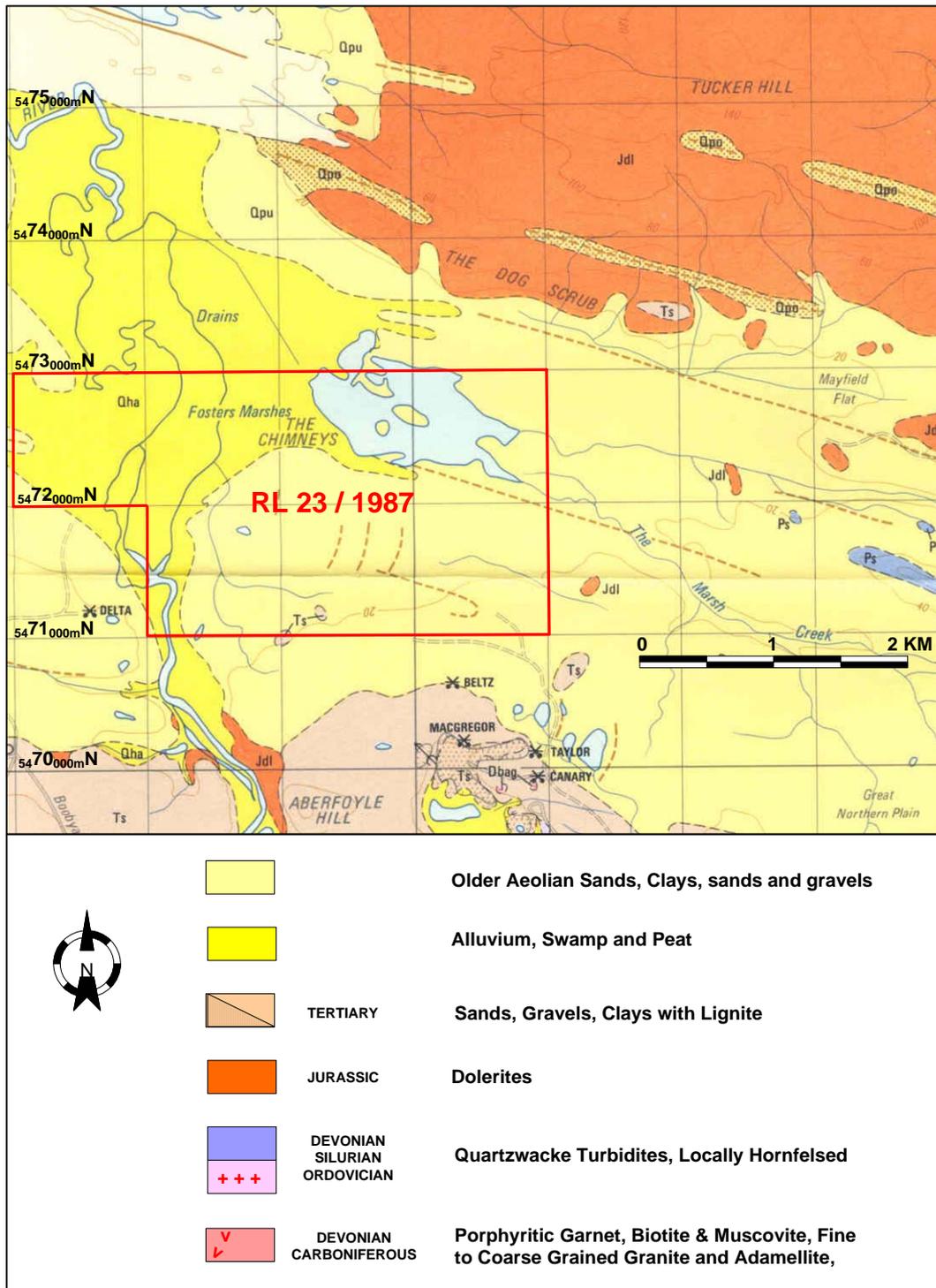


FIGURE 2 - GEOLOGICAL PLAN OF RL 23 / 1987

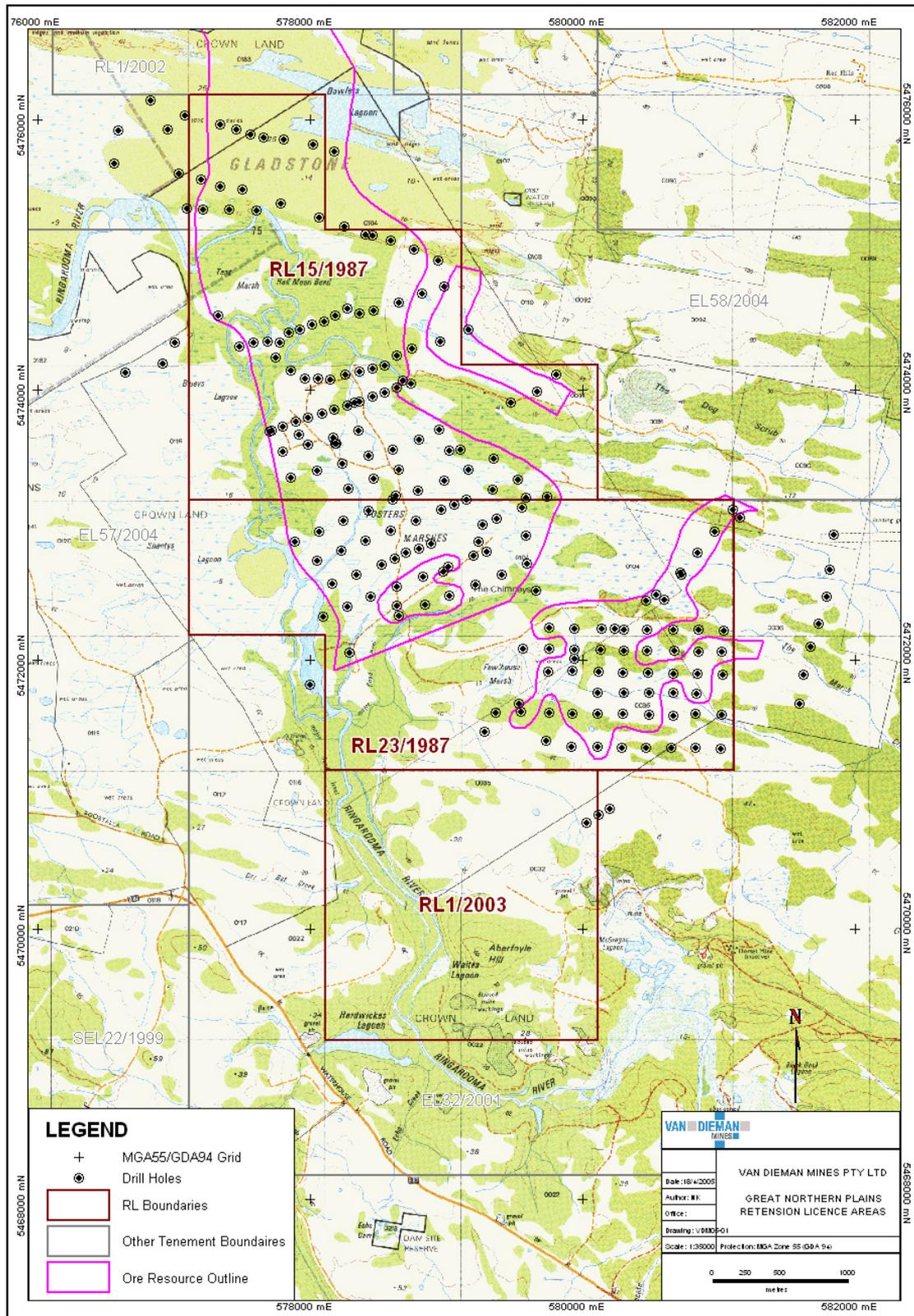


FIGURE 3 - DRILL HOLE LOCATION PLAN
GREAT NORTHERN PLAINS

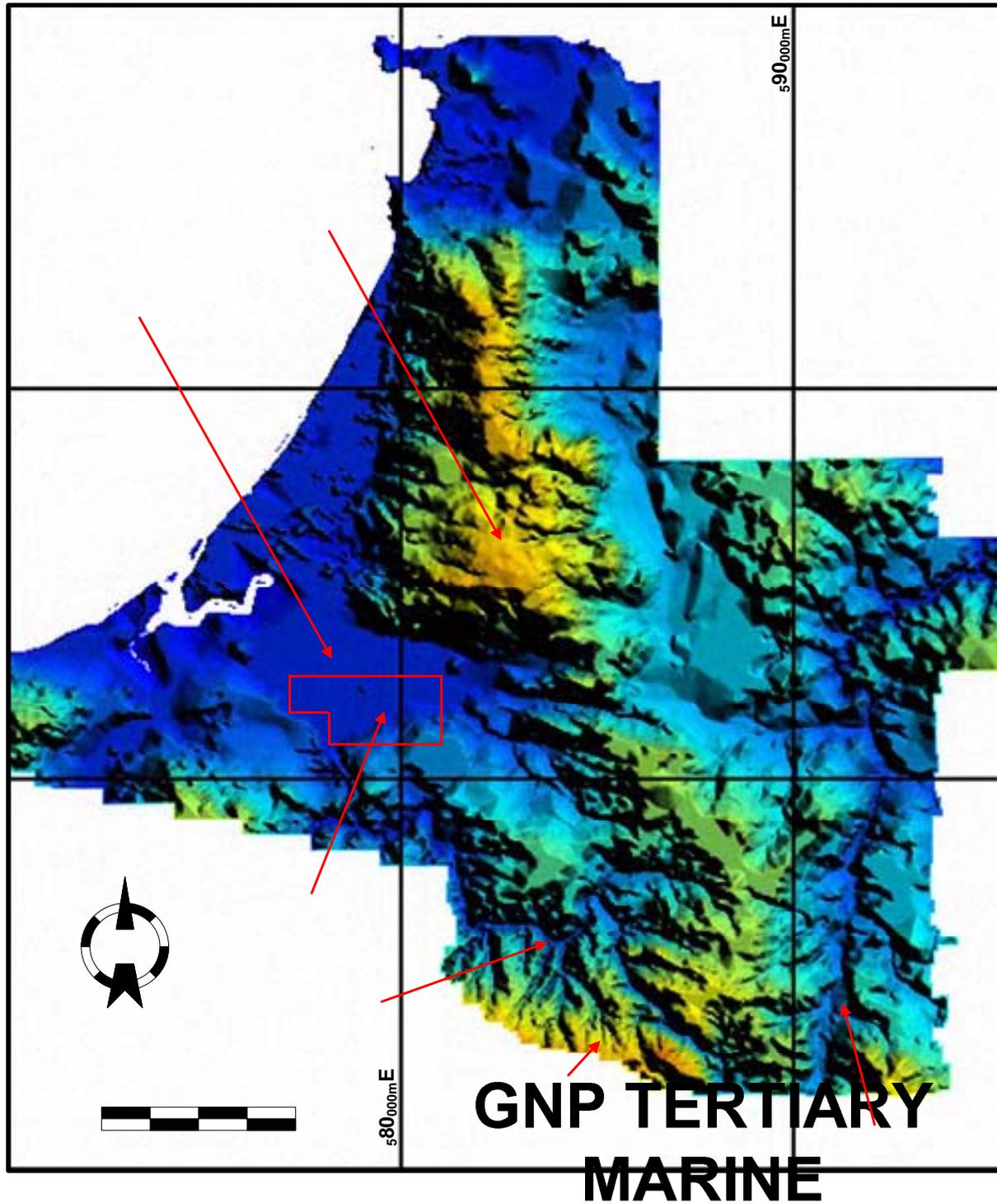


FIGURE 4 - AEROMAGNETIC MAP
After MRT "Aeromagnetic and Radiometric Data - Gridded Data & Images,
January 2005"

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4.2 LOCAL GEOLOGY:

P. B. Nye in his 1932 report on the restoration of the Mt Cameron Water Race probably provides the most comprehensive and detailed description of the local geology of the workings on the Great Northern Plain peripheral and to the south of the tenement. Some of Nye's descriptive material is reproduced here.

A. CANARY WORKINGS:

Are well south of the tenement however they form the south eastern section of the workings peripheral to the southern boundary of RL 23/1987, Figure 2. The alluvium within these workings averages 6 to 9 metres in depth and is deposited on a soft granitic basement. Like the adjoining Taylor's Workings the sequence consists of an alternating sequence of fine gravels, grits, coarse and fine sand and towards basement coarser gravels. The surface gravels and pebbly grits consist of well rounded quartz and associated granitic material, the fine sands of granitic quartz. Nye suggests that the surface layers are of estuarine origin and are related to material within the marine embayment on the Great Northern Plain within RL 23/1987.

B. TAYLOR'S WORKINGS:

Lie north of the Canary Workings and consist of a long cut trending roughly east, Figure 2. The alluvium is between 3 and 6 metres in depth and is deepening eastward. The upper layers consist of grits, sands, pebbly gravels, the basal tin bearing horizon, about 1 to 1.5 metres in thickness, consists of gravels and grits and rests on granite basement. Nye also interprets the upper horizons as estuarine.

C. BELTZ WORKINGS:

The northern most workings close to the southern boundary of RL 23/1987, Figure 2. These workings, approximately 6 metres in depth, do not appear to have bottomed, the upper layers are predominantly of sandy material with some fine pebbles. A line of 23 holes drilled by Roach in 1917, ahead of the face (northwards) intersected ground grading between 290 and 890 gm/bcm.

This ground is reported to extend into the Fosters region, RL 23/1987 and is deepening northwards.

D. **McGREGOR'S WORKINGS:**

A very extensive series of workings that are located on a strip of ground between Beltz Workings and the Ringarooma River. The workings appear to occupy a section of elevated basement that forms the southern edge of the marine embayment. Nye reports that the ground was worked to about 5 metres and was not on bottom. This is supported by field observation, the base of the workings appears to be on a fine clayey marine sand although Nye reported the presence of large boulders of Mathinna Beds and Dolerite that he interpreted to represent beach deposits derived from nearby Aberfoyle Hill.

Drilling conducted within the tenement by Hellyer in the late 1970's and early 1980's is extensive. Detailed logs are available but have not as yet been transferred to the VDM database. When this work is complete a series of lithologic and assay sections will be prepared.

In the period 1971 to 1973 WANEX conducted extensive drilling to the north of these workings toward the southern boundary of RL 23/1987. Results of this work are not available in Departmental archives however from partial reports in the Mineral Holdings files the holes all appear to have been drilled to 50 foot depths and many did not reach basement.

4.3 RECENT EXPLORATION:

In 2001 Mineral Holdings Australia (MHA) conducted a program of pitting and bulk sampling at Aberfoyle and Taylor's Workings. Results for the Aberfoyle test work has been included in reports for RL 1/2003 At Taylor's Workings Mineral Holdings excavated 7 pits, all were cut down old worked faces using a 35 tonne excavator.

Specifically this program consisted of:

➤ SAMPLE EXCAVATION:

Samples were excavated from old working faces by channeling to bedrock using a 35 tonne hydraulic excavator with samples being trucked to a central processing point.

➤ SAMPLE PROCESSING:

Samples were processed through a small mechanized test unit comprising feed bin, trommel, two hutch jig and sluice. The jigs were ragged with steel shot to maximize tin recoveries.

➤ ANALYSIS:

Concentrate samples were submitted to two laboratories for analysis, Amdel in South Australia and Aminya in Burnie. The non-metallic gem components were hand picked, sized and weighed. All results were converted to grades as grams / m³.

It is not proposed to detail these results in this report, the reader is referred to previous reports by Mineral Holdings. A number of lessons were learnt as a result of the MHA pitting, specifically:

- The shallow nature of the ground and the lack of large boulders lends the deposit to a Caldwell type drilling program with larger samples being processed through a small gravity circuit. Pitting is not cost effective.
- The use of ragging in the jig circuit while maximizing tin recovery leads to major sapphire losses. Any circuit used must be a dual type designed to recover tin in a ragged jig environment and sapphire in a non-ragged environment.
- Concentrate analyses should be directed to Sn, Ta, Nb and Au, experience suggests other heavy mineral concentrations are sub-economic.
- Sapphire sorting should be done on a dual basis of color and size fractions.

5. GREAT NORTHERN PLAINS RESOURCES

5.1 THE SETTING

These deposits were originally considered to be of alluvial derivation. Nye in 1932 was the first to recognise the marine nature of the deposits and more importantly that the local setting was far from simple and probably involved true marine estuarine conditions as well as some near-shore or shoreline swamp deposits and a series of strand line sand deposits.

The presence of marine shells at Monarch and at the Aberfoyle Workings supports a marine environment. Nye reported the presence of carbonaceous silt, coalified wood fragments and peaty zones from many of the old drill holes. Coalified wood and authigenic pyrite recovered from bulk samples at Taylor's Workings during recent work by Mineral Holdings supports Nye's observations. Thick sand zones around the McGregor's Workings and in recent pits excavated in the Wanex area support the reported presence of beach sand strand-line deposits that locally may be enriched in heavy minerals.

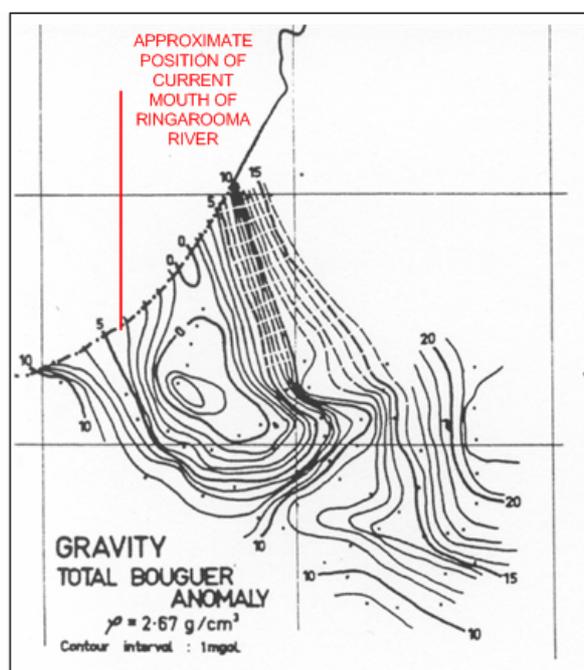


FIGURE 5: BOUGUER GRAVITY MAP
After Shell 1981

In 1981 Shell conducted regional gravity and magnetic surveys over a broad area from Boobyalla River to Gladstone. The results of the gravity survey are most significant as they clearly outline a broad and relatively deep marine embayment in the GNP area. See Figure 5 and is supported in the aeromagnetic data reproduced in Figure 4. The gravity low zone corresponds very closely to the drill defined resource that turns northward from a general north westerly directional trend to cross the coast well east of the present mouth of the Ringarooma River. The marked eastward bulge in the south eastern corner of the embayment is thought to represent the estuarine mouth of the Scotia Lead.

5.2 THE RESOURCES:

The assessment produced by Nick Macarthur in 1995 assumed that the resource would be exploited by dredging although he did consider a number of possible dry mining scenarios. At no time did he attempt to dissect the project into its various components although he did comment that he felt that barren overburden could be economically pre-stripped from the deposit. In this report the project has been dissected into its geological and mining components specifically:

- The upper zones of non, or sub-economic, sandy clays and pebbly beds that have here been referred to as “Overburden”; and
- The basal, economic, gravel and boulder beds, cassiterite and heavy mineral bearing, here referred to as “Ore”.

The resource figures quoted by Macarthur are “Top to Bottom”, that is they include barren overburden and accordingly the grades are diluted by thick overburden intervals. Further Macarthur has reported all grades in terms of metallic tin, not SnO₂. The highest grades quoted by Macarthur of 136 g/m³ Sn were derived using a 90 g/m³ cut-off and clearly included barren overburden. A grade of 136 g/m³ is sub-economic at current tin prices.

The most reliable data available are the Santos / Hellyer and Preussag drilling and the most recent of the Mines Department drill programs. VDM has been unable to locate volume data in relation to sample intervals from the Santos / Hellyer and some of the Mines holes there is sufficient confidence in those data to enable significant conclusions to be drawn.

Recalculation of the resource base includes tabulation of the Santos / Hellyer, Pruessag and Mines Department data, those data appear as Appendices 9.1 and 9.2. Those data are being progressively converted into a GIS database and in the next report will be provided as Mapinfo .tab files.

The Reserves / Resources are quoted here using the JORC Reporting Code. While drill data and analysis are considered to be adequately reliable and the regional geological analysis indicates the general continuity of the palaeo-channel into and through the marine embayment drilling in some sections is incomplete in so far as:

- Many drill holes failed to penetrate to basement and thus have not intersected and sampled the basal zones which have consistently proved, in adjoining deposits, to contain heavy mineral enrichment;
- Many sections remain open and require additional holes to close out the lateral extensions of the resource; and
- There is strong evidence to suggest original grade calculation errors caused by overestimating drill core volumes.

The project is subdivided onto sections, the division being made on the basis of the JORC status of the sections. The reader is referred to Figure 3 in which boundaries and other significant features are depicted. A check list for the “Estimation and Reporting” of this resource appears as Appendix 9.5.

The “Reserve / Resource” calculations were determined in the following manner:

- i All old logs were checked and data transferred to Excel Spreadsheets, those sheets providing depths of overburden and ore with grades of ore zones quoted as gm / BCM of SnO₂ at 70% Sn;
- ii The resource calculations assume a 100 gm / BCM of SnO₂ at 70% Sn cut-off grade;
- iii Grades below that figure that are located within the geological boundaries of the resource were included in the grade calculation;

- iv Sectional summaries were then prepared and grades weighted over the corresponding ore interval, an average grade for each section computed;
- v Diagrammatic cross sections were prepared at a horizontal scale of 1:10,000 and a 10 X vertical exaggeration, that is, 1:1,000 scale;
- vi Ore zones were plotted on sections and the following mining batters inserted:
 - Ore a vertical batter; and
 - Overburden a 60^o batter.(These batters were selected based on batters observed in existing mine openings and old open cuts);
- vii Ore and overburden zones were measured by a variety of techniques, specifically:
 - For each section using a digital planimeter, multiple readings averaged to obtain cross sectional areas;
 - For the areal extent of the deposit as depicted on Figure 3 using both planimeter and Mapinfo software;
- viii. Volumes were determined by several methods, specifically:
 - using Simpsons Modified Rule;
 - A simple area x depth calculation was made to check the Simpsons calculations; and
 - Using Discover and Mapinfo software to compute polygonal volumes.
- ix. Grade for the total resource was again computed from “weighting” the grade against volumes.

Sufficient reliable data exist that enable an accurate geological model to be prepared, sectional data are considered sufficiently reliable to enable the project to be classified as “Measured Resources”

Details of resources are provided in tabulated form, Table 3.

**TABLE 3
ORE RESOURCES
GREAT NORTHERN PLAIN**

AREA	VOLUME ORE IN million bcm 2003	VOLUME O/BURDEN million bcm 2003	GRADE Gm / bcm SnO ₂ 2003	VOLUME ORE IN bcm 2004	VOLUME O/BURDEN bcm 2004	GRADE Gm / bcm SnO ₂ 2004	COMMENT
FOSTERS	42,973,231	92,348,293	266.05	34,100,000	77,417,000	260.36	Part Only within RL 23/1987
BRAITHWAITES	6,055,955	15,720,074	343.69	5,162,000	14,462,000	281.97	Totally within RL 23/1987

In addition to these Measured resources the tenement is also considered to contain other prospective ground, specifically:

i Delta Area - Indicated Mineral Resource

5.5 million BCM of gravel wash at an estimated grade of 250.00 gm / BCM of SnO₂ concentrate at 70% Sn.

(1,375 tonnes SnO₂).

ii Chimneys Area - Inferred Mineral Resource

7.5 million BCM of gravel wash at an estimated grade of 250.00 gm / BCM of SnO₂ concentrate at 70% Sn.

(1,875 tonnes SnO₂).

iii Braithwaites - Indicated Mineral Resource

379,481 BCM of gravel wash at an average grade of 99.03 gm / BCM of SnO₂ concentrate at 70% Sn.

(38 tonnes SnO₂).

iv Braithwaites - Inferred Mineral Resource

1,670,621 BCM of gravel wash at an estimated grade of between 100 and 300 gm / BCM of SnO₂ concentrate at 70% Sn.

(334 tonnes SnO₂).

6. PROPOSED WORK PROGRAMS:

In line with work programs within adjoining tenements VDM intend to carry out DGPS survey work to locate more accurately old drill holes and other significant mining related features. This will require the establishment of a local GPS beacon to provide "cm" survey accuracy.

Encom are to finalise the audit of drill records and a new set of lithologic drill logs are to be prepared. In relation to JORC Coding mining and metallurgical studies of the orebody will be completed, a set of economic feasibility spreadsheets prepared and the resource coded to reserve status.

Once old data has been accurately located, VDM plan to conduct JORC coding of the resources to bring them into Proved and Probable Reserve categories. Progress toward JORC status is well advanced with Encom having commenced an audit of the GIS database and transfer of all data to Mapinfo .tab files. These works should be completed during 2005 - 2006.

7. CONCLUSIONS:

In addition to JORC Coding of the current resource base the production of a basement topographic map based on GIS data will assist in planning ongoing drill programs aimed at further defining ore boundaries and areas currently defined as Inferred or Indicated. The complex nature of the sequence, that is, a mixing of marine and terrestrial sedimentation, has, to date confused interpretation. Bedrock contours may assist in defining boundaries between marine and terrestrial sequences.

VDM believe a significant shallow economic tin resource can be delineated to JORC standard in the zone immediately north of the old worked areas in the southern section of the marine embayment of the Great Northern Plain proper.

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9. APPENDICES

9.1 PREUSSAG DRILL DATA SHEETS:

GREAT NORTHERN PLAIN - DRILL HOLE SUMMARY PREUSSAG

HOLE NUMBER	SAMPLE NUMBER	SECTION			VOL m ³	CONC WEIGHT gm	Sn				
		FROM m	TO m	INT m			%	Sn gm	SnO2 gm	SnO ₂ g/m ³	SnO ₂ 70% SnO ₂
RDH 1	1	0.00	2.61	2.61							
	2	2.61	5.31	2.70							
	3	5.31	8.21	2.90							
	4	8.21	11.11	2.90							
	5	11.11	14.01	2.90							
	6	14.01	16.91	2.90							
	7	16.91	19.81	2.90	0.077	4.0	67.1	2.68	3.41	44.3	50.0
	8	19.81	21.21	1.40							
	O/B	0.00	16.91	16.91							
	INT	16.91	19.81	2.90							50.0
RDH 2	1	0.00	2.61	2.61							
	2	2.61	5.31	2.70							
	3	5.31	8.21	2.90							
	4	8.21	11.11	2.90							
	5	11.11	14.01	2.90							
	6	14.01	16.91	2.90							
	7	16.91	19.81	2.90							
	8	19.81	20.81	1.00	0.026	0.2	72.5	0.15	0.18	7.1	8.0
	9	20.81	21.50	0.69	0.018	3.7	72.5	2.68	3.41	189.3	213.9
	10	21.50	22.70	1.20							
	O/B	0.00	20.81								
	INT	20.81	21.50	0.69							213.9
RDH 3	1	0.00	2.61	2.61							
	2	2.61	5.31	2.70							
	3	5.31	8.21	2.90							
	4	8.21	11.11	2.90							
	5	11.11	14.01	2.90	0.077	13.3	70.4	9.36	11.89	154.4	174.5
	6	14.01	16.91	2.90	0.077	23.6	70.4	16.61	21.10	274.0	309.7
	7	16.91	19.81	2.90	0.077	6.0	70.4	4.22	5.36	69.67	78.73
	8	19.81	22.71	2.90	0.077	1.4	70.4	0.99	1.25	16.26	18.37
	9	22.71	45.60	22.89							
	O/B	0	11.11	11.11							
	INT	11.11	19.81	8.70							233.0

GREAT NORTHERN PLAIN - DRILL HOLE SUMMARY PREUSSAG

HOLE NUMBER	SAMPLE NUMBER	SECTION			VOL m ³	CONC WEIGHT gm	Sn				
		FROM m	TO m	INT m			%	Sn gm	SnO2 gm	SnO ₂ g/m ³	SnO ₂ 70% SnO ₂
RDH 4	1	0.00	2.61	2.61							
	2	2.61	4.97	2.36							
	3	4.97	7.89	2.92							
	4	7.89	10.77	2.88							
	5	10.77	13.67	2.90							
	6	13.67	16.57	2.90	0.077	4.30	73.30	3.15	4.00	51.99	58.74
	7	16.57	17.00	0.43	0.011	100.80	73.30	73.89	93.84	8530.52	9639.49
	8	17.00	22.70	5.70							
	O/B	0.00	13.67	13.67							
	INT	13.67	17.00	3.33							1295.9
RDH 5	1	0.00	2.61	2.61							
	2	2.61	5.61	3.00							
	3	5.61	8.61	3.00							
	4	8.61	9.00	0.39	0.011	1.4	70.9	0.99	1.26	114.60	129.5
	5	9.00	11.51	2.51							
	O/B	0.00	8.61	8.61							
	INT	8.61	9.00	0.39							129.5
RDH 6	1	0.00	2.61	2.61							
	2	2.61	5.51	2.90							
	3	5.51	8.00	2.49							
	O/B	0	8.0	8.0							
RDH 7	1	0.00	2.61	2.61		Trace					
	2	2.61	5.61	3.00	0.080	4.5	71.0	3.2	4.1	50.7	57.3
	3	5.61	7.61	2.00	0.053	5.8	71.0	4.1	5.2	98.7	111.5
	4	7.61	8.61	1.00	0.027	4.6	71.0	3.3	4.1	153.6	173.6
	5	8.61	14.61	6.00							
	O/B	0.00	5.61	5.61							
	INT	5.61	8.61	3.00							132.2

GREAT NORTHERN PLAIN - DRILL HOLE SUMMARY PREUSSAG

HOLE NUMBER	SAMPLE NUMBER	SECTION			VOL m ³	CONC WEIGHT gm	Sn					
		FROM m	TO m	INT m			%	Sn gm	SnO2 gm	SnO ₂ g/m ³	SnO ₂ 70% SnO ₂	
RDH 8	1	0.00	2.61	2.61		trace						
	2	2.61	5.61	3.00		Trace						
	3	5.61	8.61	3.00		Trace						
	4	8.61	11.61	3.00	0.080	0.50	69.70	0.35	0.44	5.53	6.25	
	5	11.61	14.61	3.00	0.080	12.30	69.70	8.57	10.89	136.10	153.79	
	6	14.61	15.71	1.10	0.029	7.60	69.70	5.30	6.73	231.98	262.14	
	7	15.71	18.61	2.90								
	O/B	0.00	11.61	11.61								
	INT	11.61	15.71	4.10								182.9
RDH 9	Not Drilled											
RDH 10	1	0.00	2.61	2.61	0.069	1.70	70.70	1.20	1.53	22.12		
	2	2.61	5.61	3.00	0.080	3.60	70.70	2.55	3.23	40.41		
	3	5.61	8.61	3.00	0.080	4.60	70.70	3.25	4.13	51.63		
	4	8.61	11.61	3.00	0.080	1.30	70.70	0.92	1.17	14.59		
	5	11.61	12.00	0.39	0.011	12.20	70.70	8.63	10.95	995.84	1125.30	
	6	12.00	15.21	3.21								
	O/B	0.00	11.61	11.61								
	INT	11.61	12.00	0.39								1125.30
RDH 11	1	0.00	2.61	2.61	0.069	Trace						
	2	2.61	5.61	3.00	0.080	Trace						
	3	5.61	8.61	3.00	0.080	Trace						
	4	8.61	11.61	3.00	0.080	Trace						
	5	11.61	14.61	3.00	0.080	0.30	60.20	0.18	0.23	2.87	3.24	
	6	14.61	17.61	3.00	0.080	1.00	60.20	0.60	0.76	9.56	10.80	
		17.61	19.61	2.00	0.053							
RDH 12	1	0.00	2.61	2.61	0.069	Trace						
	2	2.61	5.61	3.00	0.080	Trace						
	3	5.61	8.61	3.00	0.080	Trace						
	4	8.61	11.61	3.00	0.080	Trace						
	5	11.61	14.61	3.00	0.080	0.10	72.10	0.07	0.09	1.14	1.29	
	6	14.61	17.61	3.00	0.080	12.30	72.10	8.87	11.26	140.78	159.09	
	7	17.61	18.50	0.89	0.025	1.40	72.10	1.01	1.28	51.28	57.94	
	8	18.50	21.81	3.31								
	O/B	0.00	14.61	14.61								
	INT	14.61	18.50	3.89								128.70

GREAT NORTHERN PLAIN - DRILL HOLE SUMMARY PREUSSAG

HOLE NUMBER	SAMPLE NUMBER	SECTION			VOL m ³	CONC WEIGHT gm	Sn					
		FROM m	TO m	INT m			%	Sn gm	SnO2 gm	SnO ₂ g/m ³	SnO ₂ 70% SnO ₂	
RDH 13	1	0.00	2.61	2.61	0.069	Trace						
	2	2.61	5.00	2.39	0.064	Trace						
	3	5.00	5.61	0.61	0.016	Trace						
	4	5.61	8.61	3.00	0.080	Trace						
	5	8.61	11.61	3.00	0.080	0.30	65.90	0.20	0.25	3.14	3.55	
	6	11.61	14.61	3.00	0.080	3.40	65.90	2.24	2.85	35.57	40.19	
	7	14.61	15.61	1.00	0.027	2.50	65.90	1.65	2.09	77.49	87.57	
	8	15.61	17.61	2.00	0.053	4.50	65.90	2.97	3.77	71.06	80.30	
	9	17.61	19.10	1.49	0.040	3.20	65.90	2.11	2.68	66.95	75.66	
	10	19.10	20.61	1.51	0.040							
RDH 14	1	0.00	2.61	2.61	0.069							
	2	2.61	5.61	3.00	0.080							
	3	5.61	8.61	3.00	0.080							
	4	8.61	11.61	3.00	0.080							
	5	11.61	14.61	3.00	0.080	0.40	62.80	0.25	0.32	3.99	4.51	
	6	14.61	17.61	3.00	0.080	24.40	62.80	15.32	19.46	243.26	274.88	
	7	17.61	23.61	6.00								
	O/B	0.00	14.61	14.61								
INT	14.61	17.61	3.00								274.88	
RDH 15	1	0.00	2.61	2.61	0.074							
	2	2.61	5.61	3.00	0.080							
	3	5.61	8.61	3.00	0.080							
	4	8.61	11.61	3.00	0.080							
	5	11.61	14.61	3.00	0.080							
	6	14.61	16.60	1.99	0.131	0.6	70	0.42	0.53	4.1	4.6	
	7	16.6	21.81	5.21								
RDH 16	1	0.00	2.61	2.61	0.069							
	2	2.61	5.61	3.00	0.085							
	3	5.61	8.61	3.00	0.085	Trace						
	4	8.61	11.61	3.00	0.085							
	5	11.61	15.00	3.39	0.111							
	6	15.00	17.61	2.61	0.074	3.10	65.50	2.03	2.58	34.85	39.38	
	7	17.61	19.00	1.39	0.040	4.60	65.50	3.01	3.83	95.66	108.10	
	8	19.00	19.91	0.91								
O/B	0.00	17.60	17.60									
INT	17.60	19.00	1.40								108.10	

GREAT NORTHERN PLAIN - DRILL HOLE SUMMARY PREUSSAG

HOLE NUMBER	SAMPLE NUMBER	SECTION			VOL m ³	CONC WEIGHT gm	Sn				
		FROM m	TO m	INT m			%	Sn gm	SnO2 gm	SnO ₂ g/m ³	SnO ₂ 70% SnO ₂
RDH 17	1	0.00	2.61	2.61	0.069						
	2	2.61	5.61	3.00	0.080						
	3	5.61	8.61	3.00	0.080	Trace					
	4	8.61	11.61	3.00	0.080						
	5	11.61	14.61	3.00	0.080	2.10	67.60	1.42	1.80	22.54	25.47
	6	14.61	17.61	3.00	0.080	28.10	67.60	19.00	24.12	301.56	340.76
	7	17.61	20.10	2.49	0.066	4.30	67.60	2.91	3.69	55.93	63.21
	8	20.10	22.21	2.11							
	O/B	0.00	14.61	14.61							
	INT	14.61	20.10	5.49							214.89
RDH 18	1	0.00	2.61	2.61	0.069						
	2	2.61	5.61	3.00	0.080						
	3	5.61	7.00	1.39		Trace					
	4	7.00	14.61	7.61	0.202						
	5	14.61	17.61	3.00	0.080	4.60	64.70	2.98	3.78	47.25	53.39
	6	17.61	19.00	1.39	0.037	25.80	64.70	16.69	21.20	572.96	647.45
	7	19.0	20.61	1.61							
	O/B	0.00	14.61	14.61							
	INT	14.61	19.00	4.39							241.49
RDH 19	1	0.00	2.61	2.61	0.069	Trace					
	2	2.61	5.61	3.00	0.080						
	3	5.61	8.61	3.00	0.080	Trace					
	4	8.61	11.61	3.00	0.080						
	5	11.61	14.61	3.00	0.080						
	6	14.61	16.00	1.39	0.037	3.1	70.0	2.17	2.76	74.5	84.2
	7	16.0	20.61	4.61							
RDH 20	1	0.00	2.61	2.61	0.069	Trace					
	2	2.61	5.61	3.00	0.080	Trace					
	3	5.61	8.61	3.00	0.080	Trace					
	4	8.61	11.61	3.00	0.080						
	5	11.61	14.61	3.00	0.080						
	6	14.61	16.00	1.39	0.037						
	7	16.00	18.61	2.61	0.069						
	8	18.61	21.61	3.00	0.08	1.80	66.30	1.19	1.52	40.96	46.29
	9	21.61	22.61	1.00	0.027	4.60	66.30	3.05	3.87	56.13	63.43
	10	22.61	23.61	1.00	0.027	0.60	66.30	0.40	0.51	18.71	21.14
	11	23.61	24.30	0.69	0.018	6.00	66.30	3.98	5.05	280.67	317.16
	12	24.30	26.61	2.31							
	O/B	0	23.61	23.61							
	INT	23.61	24.30	0.69							317.16

GREAT NORTHERN PLAIN - DRILL HOLE SUMMARY PREUSSAG

HOLE NUMBER	SAMPLE NUMBER	SECTION			VOL m ³	CONC WEIGHT gm	Sn				
		FROM m	TO m	INT m			%	Sn gm	SnO2 gm	SnO ₂ g/m ³	SnO ₂ 70% SnO ₂
RDH 21	1	0.00	2.61	2.61	0.069	0.1	70	0.07			
	2	2.61	5.61	3.00	0.080						
	3	5.61	8.61	3.00	0.080	Trace					
	4	8.61	11.61	3.00	0.080						
	5	11.61	14.61	3.00	0.080						
	6	14.61	17.61	3.00	0.080						
	7	17.61	20.61	3.00	0.080	0.1	70.0	0.07	0.09	1.11	1.26
	8	20.61	22.08	1.47	0.039	0.9	70.0	0.63	0.80	20.52	23.18
		22.08	25.61	3.53							
RDH 22	1	0.00	2.61	2.61	0.069						
	2	2.61	5.61	3.00	0.080						
	3	5.61	8.61	3.00	0.080						
	4	8.61	11.61	3.00	0.080						
	5	11.61	14.61	3.00	0.080						
	6	14.61	17.61	3.00	0.080	Trace					
	7	17.61	19.00	1.39	0.036	0.50	70.00	0.35	0.44	12.35	13.95
	8	19.00	19.61	0.61							
RDH 23	1	0.00	2.61	2.61	0.069						
	2	2.61	5.61	3.00	0.080						
	3	5.61	8.61	3.00	0.080						
	4	8.61	11.61	3.00	0.080						
	5	11.61	12.61	1.00	0.027						
	6	12.61	13.61	1.00	0.027	0.3	70.0	0.21	0.27	9.88	11.16
	7	13.61	17.61	4.00	0.106						
RDH 24	1	0.00	2.61	2.61	0.069	0.01					
	2	2.61	8.61	6.00	0.160						
	3	8.61	10.10	1.49	0.039						

9.2 GNP DRILLING DATA SHEETS - FOSTERS MARSHES:

GREAT NORTHERN PLAIN DRILLING DATA SHEET

BLOCK NO	HOLE NO	O/B DEPTH m	WASH		
			DEPTH m	GRADE g/m ³	WEIGHTED
BL 1					
	H69	26.00	4.00	131.89	527.56
	H70	22.00	5.50	222.90	1225.95
	H71	26.00	3.00	392.50	1177.50
	H72	20.00	3.00	61.60	184.80
	H73	20.00	4.00	307.90	1231.60
	H74	22.00	9.50	275.30	2615.35
	H75	24.00	8.00	177.95	1423.60
TOTALS		160.00	37.00		8386.36
AVERAGES		22.86	5.29	226.66	
BL 2					
	H20	22.00	4.00	147.30	589.20
	H20A	22.00	4.00	214.40	857.60
	H21	20.00	8.00	227.70	1821.60
	H22	24.00	12.00	224.80	2697.60
	H42	16.00	6.00	493.10	2958.60
	H43	16.00	4.00	226.80	907.20
	H44	14.00	8.00	157.86	1262.88
	H49	16.00	6.00	344.14	2064.84
	H48	16.00	12.00	330.50	3966.00
TOTALS		166.00	64.00		17125.52
AVERAGES		18.44	7.11	267.59	
SB					
	H/SB1	12.00	16.50	231.10	3813.15
	H/SB2	18.00	7.50	237.40	1780.50
	H/SB3	22.00	9.00	208.10	1872.90
TOTALS		52.00	33.00		7466.55
AVERAGES		17.33	11.00	226.26	

GREAT NORTHERN PLAIN DRILLING DATA SHEET

BLOCK NO	HOLE NO	O/B DEPTH m	WASH		
			DEPTH m	GRADE g/m ³	WEIGHTED
BL 3					
	H13	10.00	16.00	261.70	4187.20
	H15A	6.00	8.00	379.20	3033.60
	H16	6.00	8.00	1018.00	8144.00
	H17	10.00	10.00	246.00	2460.00
	P20	23.61	0.69	317.16	218.84
	H78	6.00	8.00	359.20	2873.60
	H79	15.00	3.00	13.90	41.70
	H80	12.50	6.00	365.80	2194.80
	H81	14.50	3.50	213.30	746.55
	H82	13.50	7.80	294.30	2295.54
	H83	14.50	6.50	219.10	1424.15
	H85	14.50	5.50	402.10	2211.55
	H88	15.00	6.00	266.70	1600.20
	H90	15.00	6.00	598.00	3588.00
	CDH1	6.00	7.80	305.10	2379.78
	CDH2	14.10	6.44	115.10	741.24
TOTALS		196.21	109.23		38140.75
AVERAGES		12.26	6.83	349.18	
BL 5					
	H23	14.00	6.00	250.30	1501.80
	H24	14.00	6.00	210.90	1265.40
	H25	8.00	8.00	64.15	513.20
	CDH4	7.50	9.20	186.71	1717.73
	H37	14.00	8.00	396.10	3168.80
	H84	12.50	7.00	260.30	1822.10
	H91	14.00	4.00	269.30	1077.20
	H92	14.50	5.50	287.90	1583.45
	H93	15.00	4.00	216.80	867.20
	H94	12.00	7.50	218.00	1635.00
TOTALS		125.50	65.20		15151.88
AVERAGES		12.55	6.52	232.39	

GREAT NORTHERN PLAIN DRILLING DATA SHEET

BLOCK NO	HOLE NO	O/B DEPTH m	WASH		
			DEPTH m	GRADE g/m ³	WEIGHTED
BL 6					
	P14	14.60	3.00	274.88	824.64
	P16	17.00	1.40	108.10	151.34
	P17	14.61	5.49	214.89	1179.7461
	H110	14.50	4.00	110.65	442.60
	H111	16.50	2.00	205.60	411.20
	H112	12.00	8.50	515.50	4381.75
	H114	16.00	5.00	304.40	1522.00
	H115	14.00	6.50	504.90	3281.85
	H116	14.00	6.50	286.30	1860.95
	H117	14.00	6.50	218.40	1419.60
	H118	13.50	6.00	483.80	2902.80
	H119	12.50	5.50	287.90	1583.45
	H120	12.50	6.00	718.20	4309.20
	H121	14.50	3.50	115.80	405.30
TOTALS		200.21	69.89		24676.43
AVERAGES		14.30	4.99	353.08	
BL 7					
	H07/00	12.00	9.00	199.05	1791.45
	H07/02	16.00	4.00	334.50	1338.00
	H07/04	17.00	3.00	358.90	1076.70
	H07/06	14.00	6.00	98.67	592.02
	P18	14.61	4.39	241.49	1060.14
TOTALS		73.61	26.39		5858.31
AVERAGES		14.72	5.28	221.99	
BL 8					
	H08/02	11.00	3.50	249.80	874.30
	H08/04	11.00	8.50	103.00	875.50
	H08/06	12.00	6.00	16.20	97.20
	H32	12.00	6.00	173.79	1042.74
	H33	12.00	7.00	287.60	2013.20
	H34	12.00	4.00	315.50	1262.00
	H37	14.00	8.00	397.53	3180.24
	CDH5	11.50	6.40	212.54	1360.26
TOTALS		95.50	49.40		10705.44
AVERAGES		11.94	6.18	216.71	

GREAT NORTHERN PLAIN DRILLING DATA SHEET

BLOCK NO	HOLE NO	O/B DEPTH m	WASH		
			DEPTH m	GRADE g/m ³	WEIGHTED
BL 9					
	H09/03	14.00	2.00	138.30	276.60
	H09/05	14.00	4.00	359.60	1438.40
	H09/07	12.00	5.50	283.30	1558.15
	H39	12.00	6.00	95.58	573.48
	P13	14.61	4.49	80.38	360.91
TOTALS		66.61	21.99		4207.54
AVERAGES		13.32	4.40	191.34	
BL 10					
	H10/00	8.00	8.50	200.63	1705.36
	H10/02	13.50	4.00	261.00	1044.00
	H10/04	12.00	4.50	288.40	1297.80
	H10/06	14.00	3.50	263.80	923.30
	H10/08	15.00	3.00	351.60	1054.80
	H10/10	12.00	6.00	402.10	2412.60
	H10/12	12.00	6.50	338.10	2197.65
	H10/16	15.00	4.50	270.80	1218.60
TOTALS		101.50	40.50		11854.11
AVERAGES		12.69	5.06	292.69	
BL 11					
	H11/02	10.00	5.50	198.04	1089.22
	H11/04	12.00	5.00	384.20	1921.00
	H11/06	14.00	5.50	231.80	1274.90
	H11/08	14.00	5.50	463.30	2548.15
	H11/10	14.00	5.00	148.40	742.00
	H11/12	14.00	2.00	20.40	40.80
	H11/13	14.00	3.00	996.90	2990.70
	H11/14	12.00	8.00	746.50	5972.00
	H11/16	14.00	6.50	271.40	1764.10
	H11/18	12.00	3.50	111.22	389.27
TOTALS		130.00	49.50		18732.14
AVERAGES		13.00	4.95	378.43	

GREAT NORTHERN PLAIN DRILLING DATA SHEET

BLOCK NO	HOLE NO	O/B DEPTH m	WASH		
			DEPTH m	GRADE g/m ³	WEIGHTED
BL 12					
	H95	13.00	6.00	117.53	705.18
	CDH 9	12.00	7.00	247.80	1734.60
	H12/02	14.0	5.5	391.7	2154.35
	H12/04	11.0	8.0	178.8	1430.4
	H12/05	10.5	7.5	288.7	2165.25
	H12/06	14.0	3.5	276.8	968.8
	H12/07	10.0	4.0	367.1	1468.40
	H12/08	12.5	2.0	244.5	489.0
	H12/12	14.0	3.0	478.9	1436.7
	H12/13	13.0	7.0	196.9	1378.3
	H12/15	11.0	4.0	247.5	990.0
	H12/17	8.00	7.50	201.20	1509.00
	P8	11.60	4.10	182.90	749.89
TOTALS		154.60	69.10		17179.87
AVERAGES		11.89	5.32	248.62	
BL 13					
	H13/02	15.00	5.00	162.20	811.00
	H13/04	16.00	6.50	431.90	2807.35
	P10	11.61	0.39	1125.30	438.87
	H13/12	12.00	4.50	625.60	2815.20
	H13/13	10.00	6.50	295.30	1919.45
TOTALS		64.61	22.89		8791.87
AVERAGES		12.92	4.58	384.09	
BL 14					
	H14/16	16.00	5.50	473.50	2604.25
	H14/18	6.00	10.00	101.17	1011.70
	H14/20	10.00	6.50	168.77	1097.01
	P12	14.61	3.89	128.70	500.64
TOTALS		46.61	25.89		5213.60
AVERAGES		11.65	6.47	201.37	

9.3 RESOURCE CALCULATORS - FOSTERS MARSHES :

GREAT NORTHERN PLAIN DRILLING DATA SHEET

SECTIONAL SUMMARY

BLOCK NO	HOLE NO	O/B DEPTH m	WASH		
			DEPTH m	GRADE g/m ³	WEIGHTED
BL 1		22.86	5.29	226.66	1198.0514
BL 2		18.44	7.11	267.59	1902.84
SB		17.33	11.00	226.26	2488.85
BL 3		12.26	6.83	349.18	2383.7972
BL 5		12.55	6.52	232.39	1515.1882
BL 6		14.30	4.99	353.08	1762.6019
BL 7		14.72	5.28	221.99	1171.6622
BL 8		11.94	6.18	216.71	1338.1795
BL 9		13.32	4.40	191.34	841.50724
BL 10		12.69	5.06	292.69	1481.7631
BL 11		13.00	4.95	378.43	1873.214
BL 12		11.89	5.32	248.62	1321.5285
BL 13		12.92	4.58	384.09	1758.3734
BL 14		11.65	6.47	201.37	1303.3995
TOTALS		199.88	83.97		22340.952
AVERAGES		14.28	6.00	266.07	
STRIPPING RATIO			2.4 : 1		

ORE RESOURCE CALCULATION SHEET

PROJECT: Great Northern Plain TENEMENT: RL 23/1987 DATE: 21/11/2003

ORE ONLY

FOSTERS MARSH AREA

SECTION NUMBER	DATA						
	AVERAGE	SEPARATION m	SECTIONAL AREA m ²	AVERAGE GRADE g / m ³	WEIGHTED A X G	VOLUME m ³	WEIGHTED GRADE g / m ³
0			8,225	226.66	1,864,279		
0 - BL 1	Average	450		226.66		3,701,250	838,925,325
BL 1			8,225	226.66	1,864,279		
BL 1 - BL 2	Average	450		254.96		5,844,058	1,489,987,933
BL 2			18,425	267.59	4,930,346		
BL 2 - BL 3	Average	775		296.94		11,000,963	3,266,591,558
BL 3			10,350	349.18	3,614,013		
BL 3 - BL 5	Average	405		296.41		3,817,265	1,131,491,446
BL 5			8,530	232.39	1,982,287		
BL 5 - BL 6	Average	210		353.08		1,724,727	608,966,643
BL 6			7,900	353.08	2,789,332		
BL 6 - BL 7	Average	205		227.04		1,736,041	394,144,032
BL 7			9,050	221.99	2,009,010		
BL 7 - BL 8	Average	200		218.86		2,207,270	483,088,567
BL 8			13,150	216.71	2,849,737		
BL 8 - BL 9	Average	175		207.42		1,793,575	372,019,475
BL 9			7,600	191.34	1,454,184		
BL 9 - BL 10	Average	200		255.53		2,047,960	523,321,722
BL 10			13,130	292.69	3,843,020		
BL 10 - BL 11	Average	200		330.73		2,354,987	778,860,285
BL 11			10,470	378.43	3,962,162		
BL 11 - BL 12	Average	200		163.30		2,247,706	367,050,443
BL 12			12,025	248.62	2,989,656		
BL 12 - BL 13	Average	200		293.71		1,767,941	519,269,099
BL 13			6,000	384.09	2,304,540		
BL 13 - BL 14	Average	200		287.86		1,266,900	364,695,889
BL 14			6,675	201.37	1,344,145		
BL 14 - 00	Average	200		201.37		1,462,588	294,521,290
00			7,970	201.37	1,604,919		

ORE RESOURCE CALCULATION SHEET

PROJECT: Great Northern Plain **TENEMENT:** RL 23/1987 **DATE:** 21/11/2003

ORE ONLY

FOSTERS MARSH AREA

SECTION NUMBER	DATA						
	AVERAGE	SEPARATION m	SECTIONAL AREA m ²	AVERAGE GRADE g / m ³	WEIGHTED A X G	VOLUME m ³	WEIGHTED GRADE g / m ³
TOTAL							11,432,933,707
AVERAGES				266.05		42,973,231	
CONTAINED TIN CONCENTRATE					11,433	tonnes	
<i>PREVIOUS RESOURCE</i>				195.4		34,700,000	
<i>CONTAINED TIN CONCENTRATE</i>					6,780	tonnes	

ORE RESOURCE CALCULATION SHEET

PROJECT Great Northern Plain

TENEMENT: RL 23/1987

DATE:

20/09/2002

OVERBURDEN ONLY

FOSTERS MARSH AREA

SECTION NUMBER	DATA						
	AVERAGE	SEPARATION m	SECTIONAL AREA m ²	AVERAGE GRADE g / m ³	WEIGHTED A X G	VOLUME m ³	WEIGHTED GRADE g / m ³
0			29,505.00				
0 - BL 1	Average	450				13,277,250	
BL 1			29,505				
BL 1 - BL 2	Average	450				14,083,897	
BL 2			33,125				
BL 2 - BL 3	Average	775				18,450,828	
BL 3			15,580				
BL 3 - BL 5	Average	405				6,583,380	
BL 5			16,940				
BL 5 - BL 6	Average	210				3,155,064	
BL 6			14,475				
BL 6 - BL 7	Average	205				3,394,502	
BL 7			16,180				
BL 7 - BL 8	Average	200				2,685,309	
BL 8			10,850				
BL 8 - BL 9	Average	175				2,736,062	
BL 9			20,970				
BL 9 - BL 10	Average	200				4,176,488	
BL 10			20,795				
BL 10 - BL 11	Average	200				4,532,229	
BL 11			24,580				
BL 11 - BL 12	Average	200				5,104,327	
BL 12			26,475				
BL 12 - BL 13	Average	200				4,974,121	
BL 13			23,300				
BL 13 - BL 14	Average	200				4,867,997	
BL 14			25,395				
BL 14 - 00	Average	200				4,326,839	
00			18,080				

ORE RESOURCE CALCULATION SHEET

PROJECT Great Northern Plain

TENEMENT: RL 23/1987

DATE:

21/11/2003

ORE ONLY

FOSTERS MARSH AREA

SECTION NUMBER	DATA						
	AVERAGE	SEPARATION m	SECTIONAL AREA m ²	AVERAGE GRADE g / m ³	WEIGHTED A X G	VOLUME m ³	WEIGHTED GRADE g / m ³
TOTAL							0
AVERAGES				0.00		92,348,293	
CONTAINED TIN CONCENTRATE					0	tonnes	
<i>PREVIOUS RESOURCE</i>						34,700,000	
<i>CONTAINED TIN CONCENTRATE</i>					0	tonnes	
SUMMARY SHEET							
		ORE			42,973,231	m ³	
			Grade	266.05		gm / m ³	Conc at 70% Sn
			Conc	11,433		tonnes	Conc at 70% Sn
		OVERBURDEN			92,348,293	m ³	
		STRIPPING RATIO		2.1 : 1			Overburden : Ore

9.4 GNP DRILLING RESULTS - BRAITHWAITES:

GREAT NORTHERN PLAIN DRILLING DATA SHEET

BRAITHWAITES DEPOSIT - PROVEN RESERVE

BLOCK NO	HOLE NO	O/B DEPTH m	WASH			PREVIOUS			COMMENT
			DEPTH m	GRADE g/m ³	WEIGHTED	DEPTH m	GRADE g/m ³	WEIGHTED	
BW									
	MD14/21	1.50	16.80	113.00	1898.40	22.90	17.00	389.30	Book 3 Logs NTB ?
	MD17/23	3.00	1.50	124.50	186.75	6.10	29.00	176.90	Book 3 Logs
	MD17/22	12.19	1.52	94.90	144.25	13.70	25.00	342.50	Book 3 Logs
	MD17/21	4.57	6.10	197.15	1202.62	10.70	119.00	1273.30	Book 3 Logs NTB ?
	MD17/20	7.62	6.10	614.06	3745.77	16.80	231.00	3880.80	Book 3 Logs NTB ?
	CDH8	15.50	3.00	655.12	1965.36	18.50	113.50	2099.75	
	MD17/18	18.29	3.05	269.95	823.35	21.30	29.00	617.70	Book 3 Logs NTB ?
	MD17.5/25	9.14	6.10	430.25	2624.525	15.2	141.0	2143.2	Book 3 Logs
	MD17.5/23	7.62	4.57	276.67	1264.38	18.30	75.00	1372.50	Book 3 Logs
	MD17.5/22	12.20	3.05	189.50	577.98	16.80	46.00	772.80	Book 3 Logs
	MD17.5/21	6.10	4.57	314.45	1437.04	12.20	67.00	817.40	Book 3 Logs NTB ?
	MD18/25	7.62	3.05	634.83	1936.23	10.7	119.0	1273.3	Book 3 Logs
	MD18/24	6.10	4.60	239.90	1103.54	11.00	71.00	781.0	Book 3 Logs
	MD18/23	9.10	9.19	657.33	6040.86	18.30	233.00	4263.9	Book 3 Logs
	MD18/22	9.10	6.10	278.75	1700.38	15.20	87.00	1322.4	Book 3 Logs
	MD18/21	6.10	6.10	271.75	1657.68	12.20	100.00	1220.00	Book 3 Logs NTB ?
	MD18/20	19.80	3.05	837.00	2552.85	22.90	91.00	2083.90	Book 3 Logs NTB ?
	MD18/19	19.80	3.05	216.55	660.48	22.90	25.00	572.50	Book 3 Logs NTB ?
	MD18.5/26	19.80	3.96	465.47	1843.26	22.80	71.00	1618.80	Book 3 Logs
	MD18.5/25	18.20	6.20	609.80	3780.76	24.40	120.00	2928.00	Book 3 Logs
	MD18.5/22	7.62	3.05	240.28	732.85	12.20	54.00	658.8	Book 3 Logs
	MD18.5/21	18.29	4.57	197.77	903.81				Book 3 Logs
	MD18.5/20	18.29	4.57	211.28	965.55				Book 3 Logs
	MD19/21	18.29	3.05	103.41	315.40	21.3	12.0	255.6	Book 3 Logs
	MD19/22	13.72	4.57	255.91	1169.5	14.3	42.0	600.6	Book 3 Logs
	MD19/23	13.72	2.74	162.52	445.3	16.5	50.0	825.0	Book 3 Logs
	MD19/19	19.81	3.05	169.05	515.60	22.90	17.00	389.30	Book 3 Logs NTB ?
	MD19/20	18.28	3.05	214.77	655.05	24.40	9.00	219.60	Book 3 Logs NTB ?
	P2	20.81	0.69	213.90	147.59	21.80	4.00	87.20	Theoretical Volume
	P3	11.10	8.70	233.00	2027.10	22.70	50.0	1135.0	Theoretical Volume
	P4	13.80	3.30	1295.90	4276.47	17.00	162	2754.0	Theoretical Volume
	P5	8.60	0.40	129.50	51.80	9.00	41.0	369.0	Theoretical Volume
	CDH7	7.00	1.00	239.66	239.66	8.00	52.10	416.80	
	HBT1/6	2.00	8.50	640.92	5447.82	10.50	364.20	3824.10	Low Recovery
	HBT1/7	2.00	2.50	159.01	397.53	4.50	72.00	324.00	
	HBT1/8	7.00	1.50	186.85	280.28	8.50	28.90	245.65	Low Recovery
	HBT1/9	14.00	10.00	239.23	2392.30	24.00	73.60	1766.40	
	H86	6.00	3.50	218.28	763.98	9.50	64.40	611.80	
39 holes	H87	18.00	2.00	326.10	652.20	20.00	26.10	522.00	NTB
		451.68	172.40		59526.24				

9.5 RESOURCE CALCULATOR - BRAITHWAITES:

ORE RESOURCE CALCULATION SHEET

PROJECT: Braithwaites

TENEMENT: RL 23 / 1987

DATE: 22/11/2003

ORE ONLY

CALCULATION BY SECTION

SECTION NUMBER	DATA						
	AVERAGE	SEPARATION m	SECTIONAL AREA m ²	AVERAGE GRADE g / m ³	WEIGHTED A X G	VOLUME m ³	WEIGHTED GRADE g / m ³
0			0.00	0.00	0.00		
0 - 18	Average	100		226.54		13,333	3,020,533
18			400	269.95	107,980		
18 - 19	Average	200		209.71		171,999	36,069,818
19			1,425	192.80	274,740		
19 - 20	Average	200		405.96		485,997	197,293,185
20			3,600	490.33	1,765,188		
20 - 21	Average	200		266.62		1,245,746	332,138,489
21			9,300	180.02	1,674,186		
21 - 22	Average	200		235.35		1,221,544	287,490,480
22			3,400	235.35	800,190		
22 - 23	Average	200		279.02		676,998	188,896,868
23			3,370	552.23	1,861,015		
23 - 24	Average	200		496.27		591,147	293,367,676
24			2,560	422.60	1,081,856		
24 - 25	Average	200		497.40		712,509	354,400,012
25			4,670	538.40	2,514,328		
25 - 26	Average	200		433.40		811,035	351,506,629
26			3,470	292.10	1,013,587		
26 - 00	Average	100		292.10		115,667	33,786,233
00			0	0.00	0		
TOTAL							2,077,969,922
AVERAGES				343.69		6,045,975	
CONTAINED TIN CONCENTRATE					2,078	tonnes	
<i>PREVIOUS RESOURCE</i>					<i>244.44</i>	<i>5,520,000</i>	
<i>CONTAINED TIN CONCENTRATE</i>					<i>1,349</i>	<i>tonnes</i>	

ORE RESOURCE CALCULATION SHEET

PROJECT: Braithwaites

TENEMENT: RL 23 / 1987

DATE: 21/11/2003

OVERBURDEN ONLY

CALCULATION BY SECTION

SECTION NUMBER	DATA						
	AVERAGE	SEPARATION m	SECTIONAL AREA m ²	AVERAGE GRADE g / m ³	WEIGHTED A X G	VOLUME m ³	WEIGHTED GRADE g / m ³
0			0.00				
0 - 18	Average	100				114,333	
18			3,430				
18 - 19	Average	200				1,498,947	
19			12,505				
19 - 20	Average	200				2,756,425	
20			15,100				
20 - 21	Average	200				2,508,668	
21			10,150				
21 - 22	Average	200				2,400,291	
22			9,150				
22 - 23	Average	200				1,883,138	
23			8,700				
23 - 24	Average	200				1,343,055	
24			4,910				
24 - 25	Average	200				1,225,332	
25			7,430				
25 - 26	Average	200				1,677,217	
26			9,380				
26 - 00	Average	100				312,667	
00			0				
TOTAL							
AVERAGES						15,720,074	

ORE RESOURCE CALCULATION SHEET

PROJECT: Braithwaites

TENEMENT: RL 23 / 1987

DATE:

22/11/2003

CALCULATION BY AREA

	AREA MEASURED FROM PLAN			ORE OUTLINE				1,277,670.00	m ²
				SURFACE OVERBURDEN				1,649,000.00	m ²
	DEPTHS			ORE				4.42	m
				OVERBURDEN				11.58	m
	VOLUMES			ORE				5,647,957	m ³
		Simpsons		OVERBURDEN				16,947,671	m ³
		<i>Simpsons Modified</i>						16,902,015	m³
	CONTAINED CONCENTRATE							1,950.13	tonnes
	STRIPPING RATIO							3.0 : 1	
	SUMMARY SHEET		BY SECTION						
			ORE					6,045,975	m ³
			Grade	343.69	gm / m ³				Conc at 70% Sn
			Conc	2,077.97	tonnes				Conc at 70% Sn
			OVERBURDEN					15,720,074	m ³
			STRIPPING RATIO	2.6	: 1				

9.6 ESTIMATING AND REPORTING CHECK LIST:

CRITERIA	COMMENT
Mineral Resource Estimate	The Ore Reserves quoted for the Fosters Marshes and Braithwaites Areas were derived from previously defined mineral resources. The calculations used to define the resources were simplistic and based on an "Area X Depth" calculation. Conversion to O Reserves involved construction of cross sections and the application of sectional areas to Simpsons Rule for volume calculation.
Cut-off Grades	A 100 gm / bank cubic metre (BCM) were applied to drill data and in particular historical tabulations provided by Hellyer Mining, All intersections that exceeded that cut-off were included in the reserve calculations. Holes below cut-off but clearly within the reserve boundaries were included in average grade calculations. Where analyses and results were reported as Sn these were converted to SnO ₂ concentrate of 70% Sn grade by using the factor 1.44 x.
Mining Factors	Mining by double suction cutter dredging. Pre-stripping of vegetation and 3 metres of topsoil and overburden. Pit slopes taken as 70° for overburden and vertical for ore, based on observed slope stability in large open pits in the fringes of this deposit. Grades are quoted as "recovered" as hand concentration of samples implies losses similar to those anticipated in conventional gravity circuits. Dilution has not been applied as over drilling and over sampling of drill holes implies dilution in reported results.
Metallurgical	The use of conventional jig based gravity circuits employs know and well tested circuitry. No known deleterious elements reported from analytical test work. Sales contracts sourced. Sampling considered to be representative of the orebody exhibited in consistency along and between sections.
Database	Database accumulated from records of Mineral Resources, Tasmania and Mineral Holdings Australia. Data cross checked for accuracy between company records and Department. Transcribed assay data checked, drill data transferred into electronic format and checked.

<p>Geological Interpretation</p>	<p>Geological data used in re-interpretation was drawn from selected historical references, these are noted with the symbol ## in the bibliography. Recent interpretation has been made after due consideration of all available data and site assessments conducted during exploration.</p> <p>Re-interpretation of the deposit as a reworking of the palaeo-channel into a broad blanket deposit has altered the interpreted boundaries. Further this interpretation confirms geophysical evidence for a marine embayment scenario active during the Tertiary period of deposition.</p> <p>The embayment defines the margins of the deposit and confines the zone in which heavy minerals are confined, reworking by wave action is interpreted to have caused some disruption to the deposit continuity along the eastern fringe where strand line type deposits are interpreted to occur.</p> <p>Marine reworking coupled with estuarine nearshore and perhaps deltaic type environment defines a drop in grade along the southern edge of the deposit.</p>
<p>Cost & Revenue Factors</p>	<p>Detailed Pro-forma sheets set out all financial models used in the pre-mining feasibility.</p> <p>Capital costs taken from actual manufacturers estimates.</p>
<p>Market Assessment</p>	<p>Current market updates for all commodities</p>
<p>Other Matters</p>	<p>No matters have been indicated by way of native title, lands, environmental, legal, marketing, social or governmental that affect viability.</p> <p>Titles in good standing</p>
<p>Classification</p>	<p>Given the finite geological interpretation and well defined resource boundaries, correlation between and along sections the Proven reserve status is applied</p>
<p>Audits</p>	<p>Previous assessments critically reviewed, cross checking of volumes and grades undertaken.</p>