EL 32 / 2001

SCOTIA

NORTH EAST TASMANIA

RELINQUISHMENT REPORT

19TH APRIL 2007

VAN DIEMAN MINES PTY LIMITED
PREPARED BY:
Neil R. Kinnane – Director
Exploration and Development

3rd April 2007

OVERVIEW

In 2004 the tenement was transferred from Mineral Holdings Australia Pty., Ltd., to Van Dieman Mines (VDM). VDM immediately 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 enabled VDM to update drilled resources contained within the Scotia and Lochaber leads and led to the Company's pegging and application for ML 15M / 2004. The area now encompassed by that tenement is part of the Exploration Licence that has been relinquished. Information pertaining to the current Mining Lease area is considered confidential and will not be presented in this, the Relinquishment Report. That information has been presented in other Annual Reports by VDM.

The area to the south of ML 15M/2004 has been inspected by field crews and the company's consultant geologist on several occasions. Their work indicates that there is little potential for the discovery of substantial (economic) alluvial tin deposits within that section of the tenements. The larger alluvial and eluvial deposits were extensively worked during the period 1885 to approximately 1925 and have been all but exhausted. The hardrock potential is now considered to be restricted to low grade greisens and small high grade quartz veins.

On the basis of field work the company has decided that, in addition to the area now encompassed by ML 15M/2004, the area within EL 32/2001 south of that tenement has insufficient tin bearing potential to warrant continued occupancy and thus has been relinquished.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1.0 INTRODUCTION:

The original area of the tenement encompasses a large tract of the Great Northern Plain lying immediately adjacent to and north of the Ringarooma River and an area encompassing the north eastern slope of the Mt Cameron granite massif. Alluvial tin and sapphire targets within the tenement occur in both areas however work completed by VDM and the previous tenement holder indicated that the larger of those occur in the Great Northern Plain section. The major deposits are located within the Scotia - Lochaber Lead. These include potential subsidiary Leads; Newhaven, Mallinson's, Doone's and Richards & Murray's that lie to the west of the main lead. In the north western section of the tenement and still within the Great Northern Plains, field work continues to be concentrated on defining the limits of old workings such as Taylor's, Beltz and MacGregor's and old drill hole locations peripheral to those workings.

In the area in the south, along the eastern and north eastern flanks of Mt Cameron, there are a number of old worked deposits, the largest of those, the "Fly By Night" is located in the headwaters of the creek of that name and extends across into the headwaters of Ah Kaws Creek. The major portion of that deposit was removed by past miners and it is unlikely that any substantial tin bearing alluvial resources remain. Field work has failed to locate any significant alluvial deposits in the streams shedding this area. Previous exploration defined a low grade tin bearing greisens deposit in the area of the "Fly By Night" mine. Grades, even at the current high metal price, remain sub-economic.

The company's consultant geologists have recommended that VDM relinquish the area immediately south of ML 15M / 2004, that is, the area encompassed within the eastern and north western flanks of Mt Cameron. In addition the area now encompassed by ML 15M / 2004 is also included in the area encompassed.

Results of all exploration within the area of ML 15M / 2004 have been reported in the Annual Report, EL 32 / 2001 for 2006. Those data are considered confidential and are not included in this report.

2.0 LOCATION AND ACCESS:

The tenement is centered approximately 4 km northwest of the township of Gladstone and encompasses the south and south eastern section of the Great Northern Plains and the eastern and north eastern flanks of Mt Cameron. The Ringarooma River forms the boundary between these two geographic zones. The centroid of the area is located at 583,000mE; 5,469,000mN AMG. See Figures 1, 2 and 3.

Access to the Great Northern Plains section of the tenement is via a track from the Cape Portland Road north to the site of the old Dorset Tin Shed site on the Great Northern Plains. From that point the track splits with diversions along the Ringarooma River west to Aberfoyle Hill and east past the old Government dam to the Rushy Lagoon boundary fence.

The southern section is centered on the township of Gladstone. Access through the area is provided by the Gladstone to Bridport and Gladstone to Pioneer roads. From those roads graveled tracks provide access to old tin deposits such as the Fly By Night and along Ah Kaws Creek.

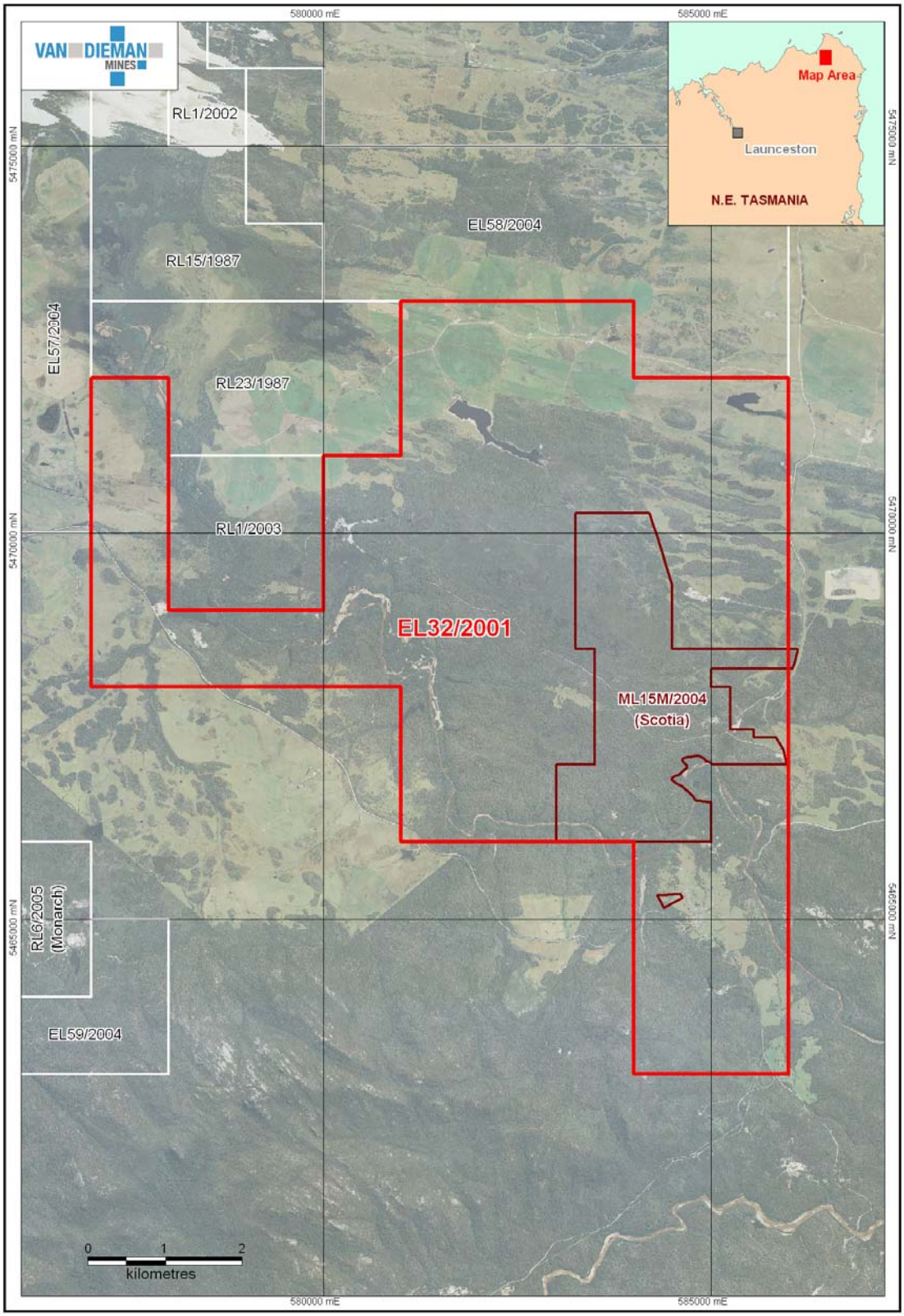

Figure 1 - Tenement Location Map (on aerial photography)

VDMmap0610-021

FIGURE 1 - LOCATION PLAN

AIRPHOTO BASE

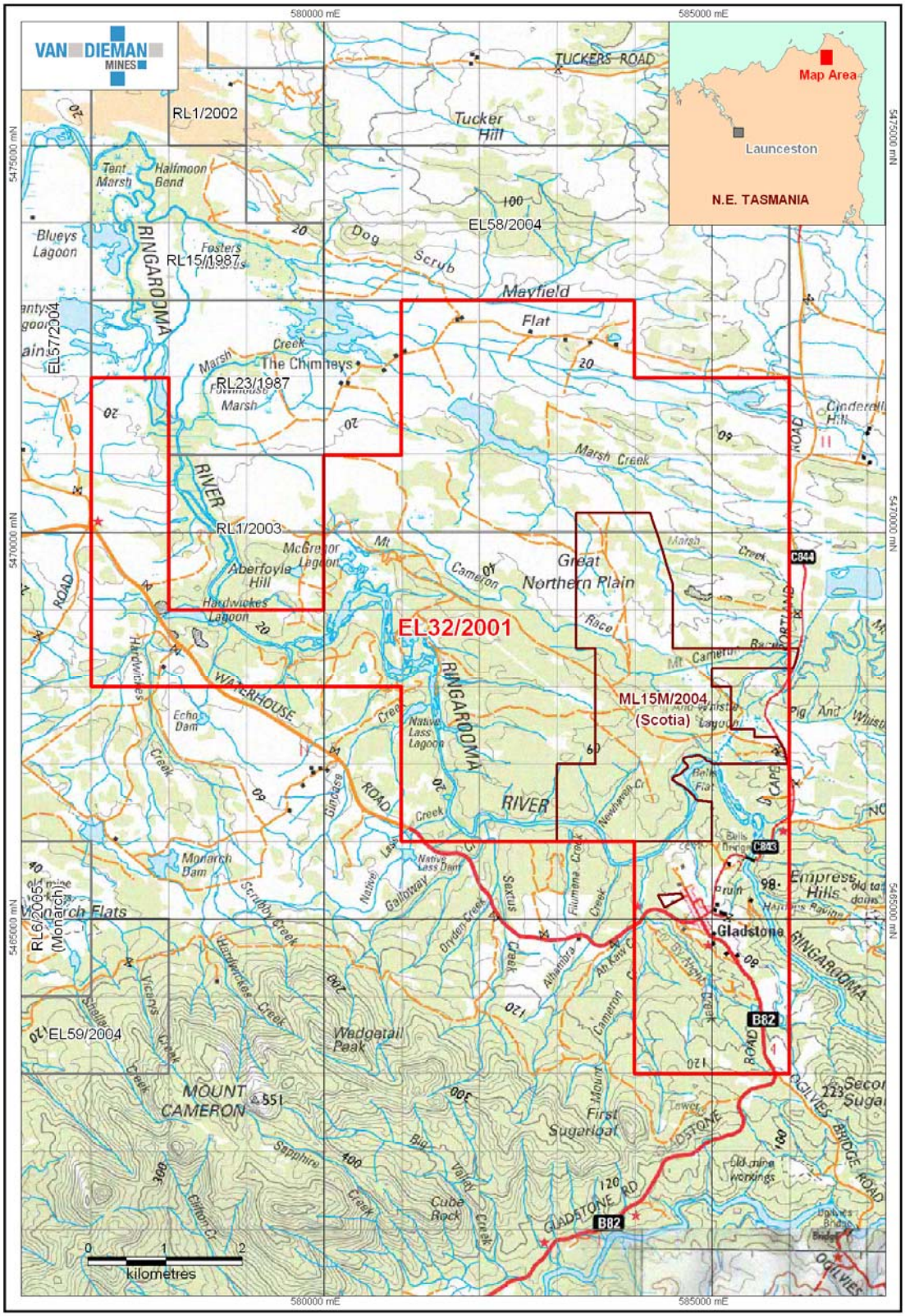

Figure 2 - Tenement Location Map (on 100K topography)

VDMmap0610-022

FIGURE 2 - LOCATION PLAN

TOPOGRAPHIC BASE

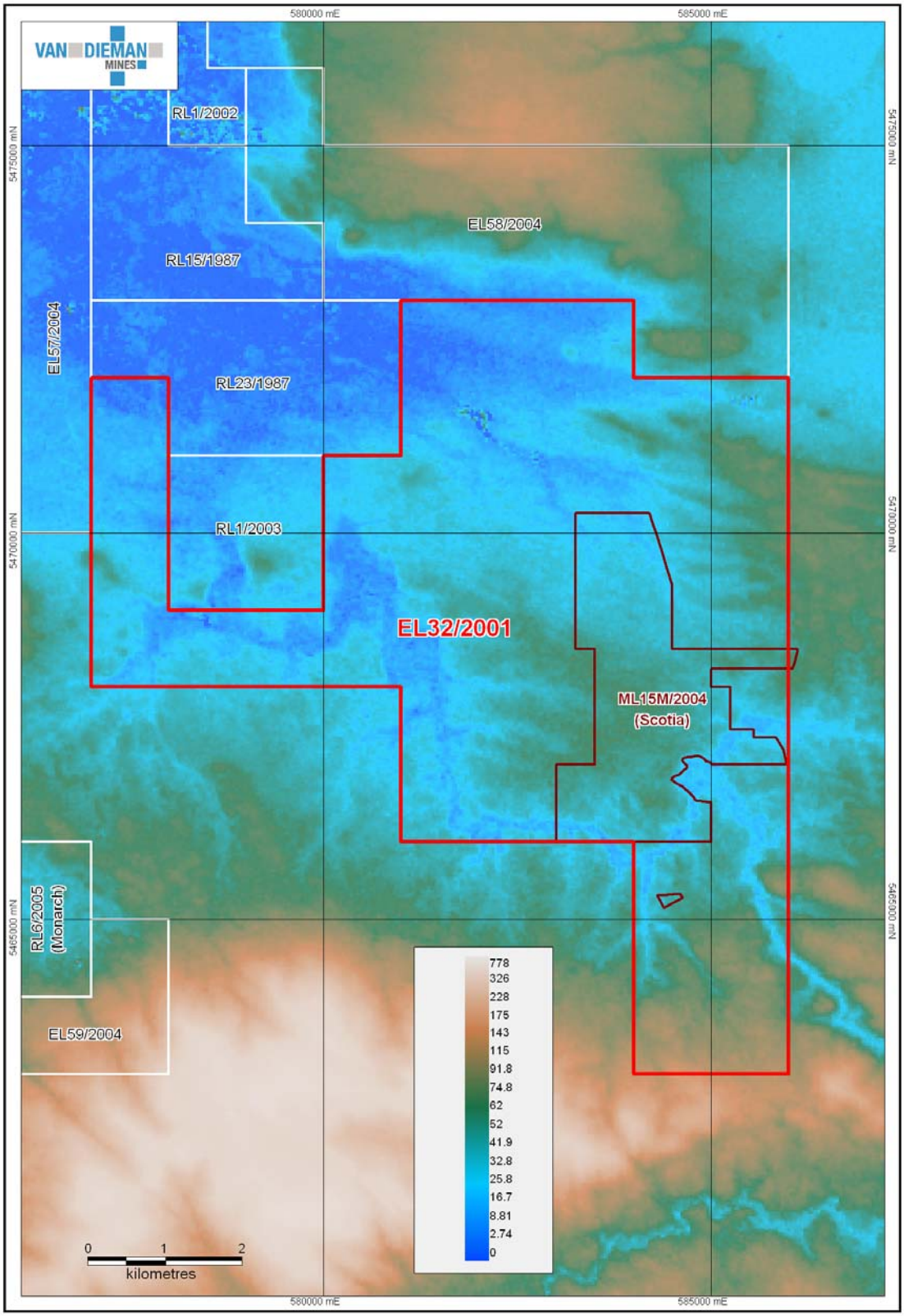

Figure 3 - Tenement Location Map (on SRTM elevation image)

VDMmap0611-003

FIGURE 3 - LOCATION PLAN

SATELLITE ELEVATION IMAGE BASE

3.0 EXPENDITURE STATEMENT:

Expenditure for the period of nine months ending 31st December 2006 is quoted below as no final figures for the year to 31st March 2007 were available at the time of preparation of this report.

Expenditure	Period Ending 31st December 2006	$79,751.00
Accrued Expenditure	Period Ending 31st December 2006	$428,283.00

(Indicates an expenditure in excess of the statutory requirement)

4.0 RELINQUISHMENT:

The area relinquished is set out in Figure 4.

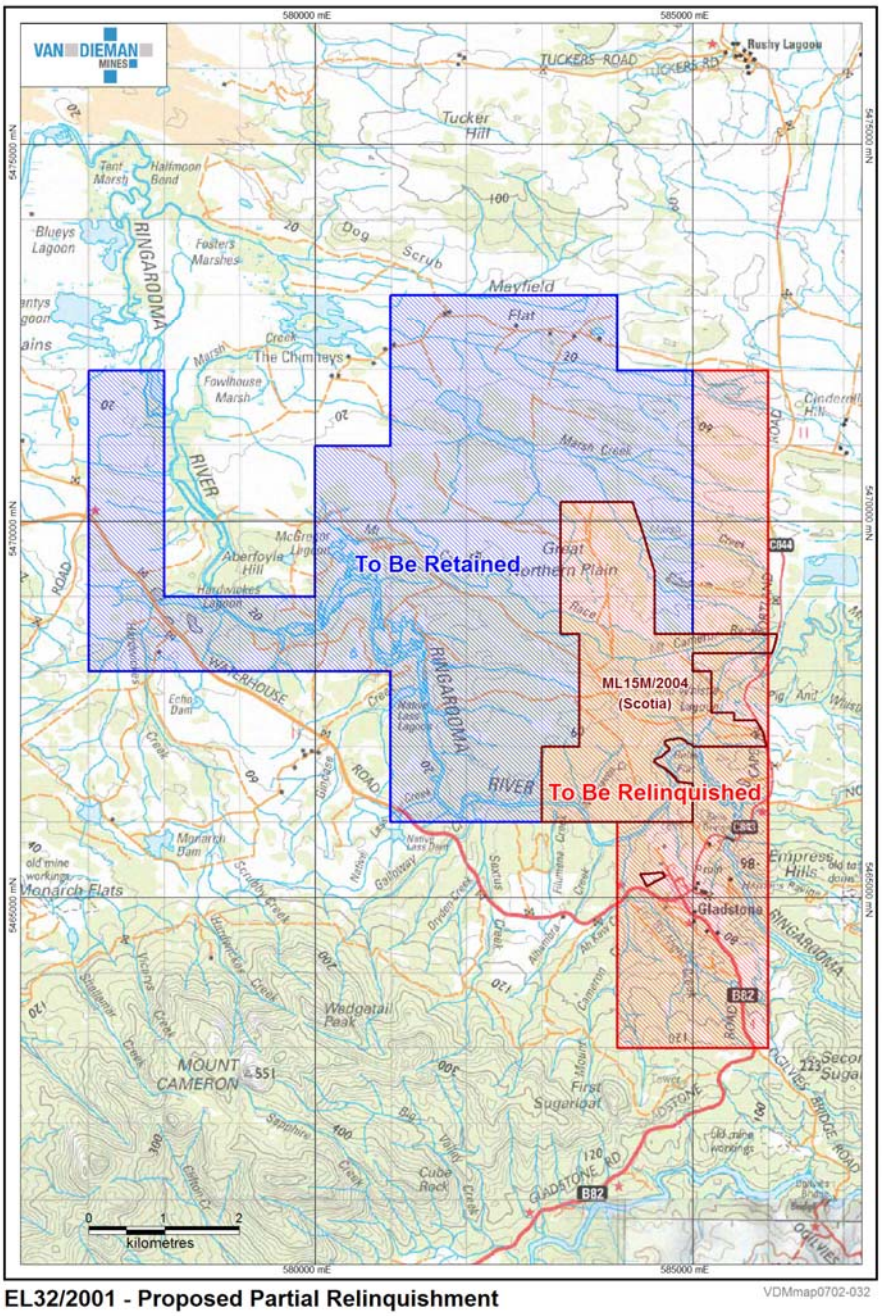

FIGURE 4 - AREA OF RELINQUISHMENT

5.0 HISTORICAL BACKGROUND:

Alluvial tin was first worked in the general area in about the early 1880's. During the period from 1880 to about 1920 alluvial workings were developed along the northern bank of the Ringarooma River from Scotia, Lochaber, Mallinson's, Doone's, Richards and Murray's in the south. In the central section and again along the northern bank of the River workings were developed at Black Duck, Wainwright's and Richardson's. In the north and north- west very extensive workings were developed at Aberfoyle, MacGregor's, Beltz, Taylor's, Canary and the Roy areas.

More specifically historical details of old works include:

THE GREAT NORTHERN PLAINS SECTION:

THE NORTHERN WORKINGS

A. ABERFOYLE WORKINGS:

Alluvial tin was first worked in the Aberfoyle area in the early 1880's. For a number of those early years the main workings were controlled by the Aberfoyle Company and peripheral workings such as the Boomerang and Sea-Shell were operated by You Hen and other Chinese miners. The company has recently located several Chinese dwelling and camp areas along the south western edge of the Aberfoyle workings.

In 1906 the New Aberfoyle Company commenced operations and was 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 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.

It is doubtful if any further development occurred at Aberfoyle after 1916 probably due to a large fall in tin prices after 1918.

B. MacGREGOR'S WORKINGS:

Working probably commenced at MacGregor's around the same time as at Aberfoyle. Few records have been obtained however the earliest Departmental work appears to have occurred in 1902 with the drilling of four holes, Government Line 6, in the floor of the MacGregor open cut. In addition to this program, in 1917 the Department (Roach's Drilling) put down a further 127 drill holes to the south and the west of the workings.

Nye (1932) reported that Mallinson worked ground close to those holes and is reported to have recovered some 37 tons of tin from the ground he worked. Nye reports that this equates to a return of 1.5 lb / cubic yard.

The MacGregor workings appear to have been developed by means of a series of tails races along the eastern edge of the deposit. Mallinson and several others who also worked the area appear to have used a power plant (probably steam driven) to operate nozzles and an elevator.

C. BELTZ WORKINGS:

This large worked area immediately north east of MacGregor's was first developed by H. Beltz in about 1911 as ML's 7037/M, 7038/M and 7092/M. Beltz operated for a number of years and the workings were taken over by Ogilvie and Packett who continued until the water supply was cutoff in 1922.

In 1917 the Department (Roach) put down 39 drill holes in the vicinity of these workings and at the time of the Nye inspection in 1932 some of those holes had been worked away. The mine appears to have been developed using water from the No. 1 Government Dam using a long pipe column. Working ceased when the water was cut-off in 1922.

D. WORKINGS BETWEEN BELZ & CANARY:

Nye listed three small workings just to the south east of Beltz workings. The main working was developed by Taylor in about 1913 and the other two appeared to be small workings developed on either side of a short creek by Chinese diggers. The latter workings probably pre-dated Taylor. The current workings described as "Taylor's" are now far larger than those mapped by Nye and appear to have encompassed and expanded the old Chinese workings. The ground was worked using water from the No. 1 Government Dam.

E. CANARY WORKINGS:

These consist of three mine faces of which the largest is the Roy face. They appear to have been developed early in the local mine development process as Nye (1932) stated that the workings were abandoned and Twelvetrees (1916) stated that the workings were "unremunerative".

THE CENTRAL WORKINGS

A. RICHARDSONS WORKINGS:

These were situated within lease 9997/M and were probably developed around 1905 to 1906. The mine was worked using water from the Black Duck Dam which derived its water from the Mt Cameron Water Race.

Four small workings are located just north of Richardson's along the edge of the high bank of the Great Northern Plain. In 1917 the Department (Roach) put down a line of five drill holes east of the southernmost of those workings. Results were disappointing and the workings were not extended to the east.

B. WAINWRIGHT'S WORKINGS:

These workings were apparently developed within lease 9998/M around 1906 and take the form of a long narrow open cut apparently following a section of tin bearing valley infill.

C. BLACK DUCK WORKINGS:

These workings, developed to about 6 metres in depth are located on an alluvial terrace immediately east of the Ringarooma River. The workings were abandoned by 1899 and were not resumed after that date. The ground was bored by the Department (Roach) in 1917 however the plan and results appear to have been lost.

THE SOUTHERN WORKINGS

A. DOONE WORKINGS:

Included in this section are the Doone, Richards & Murray's and Cross workings. The Doone mine appears to have been developed before 1885 and was actively working during the period 1893 to 1898. There are no records of production. The Richard's and Murray's mine was developed later, around 1917 and work continued on that deposit for several years until the closure of the water race in 1922. There is no reference to the Cross workings which appear to be an easterly extension of the main Doone Lead.

Five small workings exist south of the Doone Lead and include Watt's Workings situated immediately adjacent to the Ringarooma River. These workings were apparently developed in a recent terrace of the river and commenced around 1916.

REGIONAL SYNOPSIS

The main workings appear to have been abandoned around 1922 when the water race was closed. After that period the area underwent a number of phases of exploration including:

After 1922 most work in the region was drill based, specifically:

- 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:

Sea-Shell Workings	7 Channeled pits;
	1 Auger hole; and
	2 Percussion drill holes.
Curnow's Workings	2 Channeled pits; and
	1 Percussion drill hole.
Aberfoyle Hill	3 Pit samples; and
	3 Percussion drill holes.

  Portland Holdings reported some excellent grades however their testing was not sufficient to define further resources or the directions in which the alluvial leads were trending.
- 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.

Mineral Holdings conducted bulk testing at Aberfoyle and at Taylor's in 2001.

THE MT CAMERON SECTION:

THE GOLD WORKINGS

The area in and immediately around the township of Gladstone and along Fly By Night Creek form the Gladstone Goldfield. Discovery, at the Blue Bell Reef, appears to have been around 1870 and by the 1880's there was quite a rush to the field. By 1883 production had dwindled although efforts were made to redevelop several deposits as late as 1909. The reefs were quite irregular and mineralization sporadic. Tungsten veins were also recorded from the old gold workings.

THE TIN WORKINGS

The “Fly By Night” mine was probably discovered around 1880 and was worked continuously for about 40 years until the early 1920’s. This tin bearing deposit, a greisen, is located at the contact of the Mt Cameron granites and the Mathinna Bed slates. Cassiterite mineralization appears to have occurred as disseminated material in the greisens and as mineralised quartz veins.

A number of the streams shedding these greisens zone were worked for many years, probably first by the Chinese miners at locations such as Ah Kaws Creek. Alluvials in these stream systems were of limited extent and most of the deposits were probably exhausted by the 1920’s.

6.0 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 to the north of the tenement. The main Scotia – Lochaber Leads flow into this embayment in the vicinity of Mayfield Flats.

6.1 REGIONAL SETTING

It is not proposed to provide a detailed description of the older geological unit. A brief outline of the nature of each major unit is provided, in tabulated form, as Table 1, and a geological map as Figure 4.

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 the Tertiary period. The presence of the embayment is supported by drill data, those data being encompassed in Annual reports for RL's 15 and 23 / 1987, by previous gravity geophysical surveys (Shell Exploration Bouguer Gravity, 1981) and by aeromagnetic data.

Both terrestrial and marine sediments are represented in the Tertiary profile at Aberfoyle and the area including MacGregors, Beltz and Taylor's workings may also host sediments with a marine association. The Scotia and Lochaber Lead channels appear, in their upper sections (the southern end), to contain only terrestrial sediments, gravels, boulder deposits and sands and clays. In the northern section above Stinking Creek the channel broadens as it approaches the embayment and at this location there may be a marine component present in the sediment profile.

TABLE 1
REGIONAL 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 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 sections near Aberfoyle and Monarch and its low weathering resistance may lead to the development of tin rich Tertiary channels cut into the 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. Swamps and marshy deposits	Locally represent overburden zones over Tertiary tin bearing alluvial deposits. Some recent gravels may be tin bearing

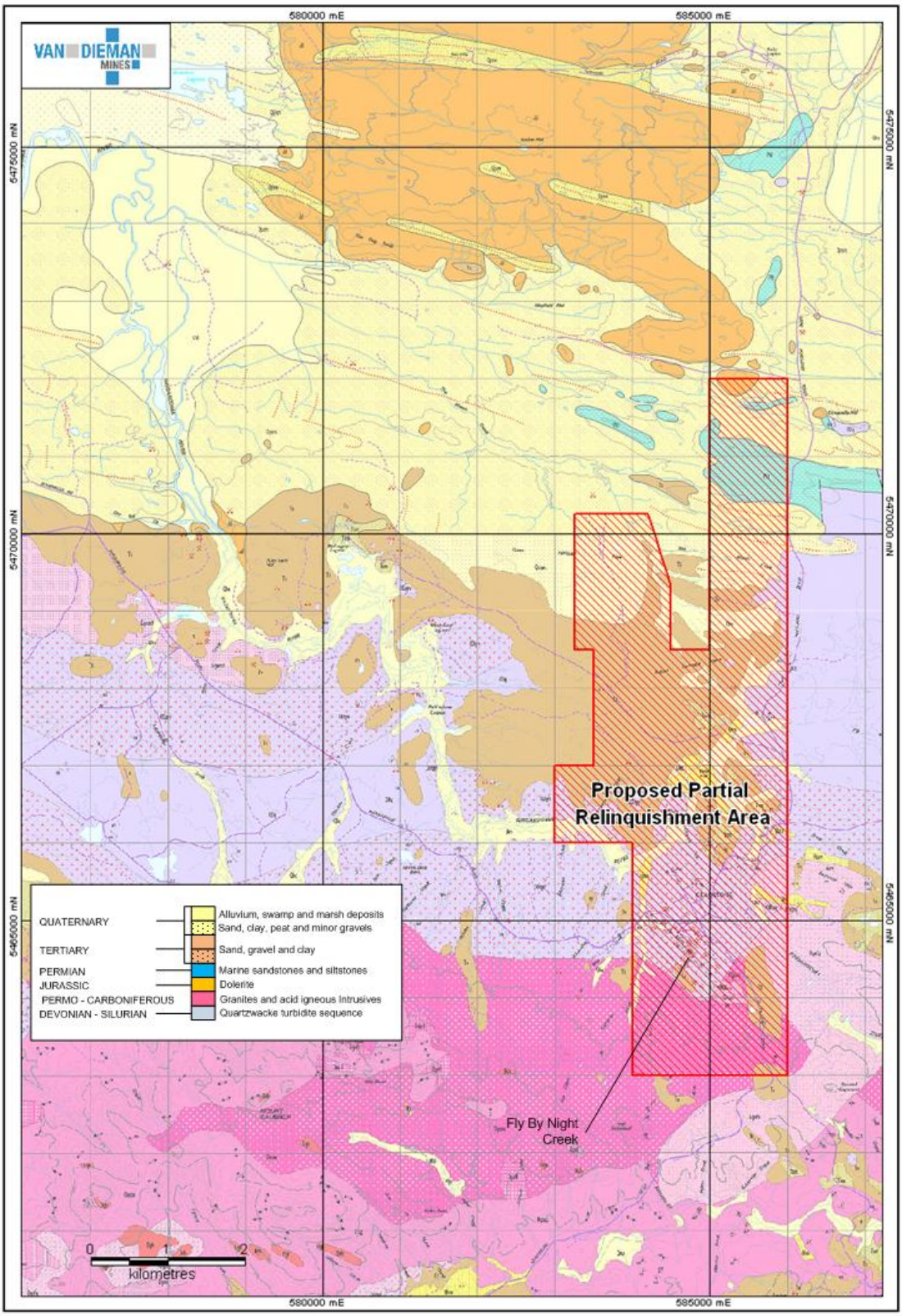

FIGURE 5 - GEOLOGICAL PLAN OF RELINQUISHMENT AREA

The Mt Cameron granite massif hosts a number of cassiterite bearing acid igneous deposits. Cassiterite occurs either disseminated in micaceous granitic greisens or as coarse grains within quartz and quartz pegmatite veins cutting the main granite body, the greisens or contact metamorphic metasediments. The greisens bodies are usually located within the granite along and immediately adjacent to the contact with the Mathinna Bed metasediments.

At least part of the alluvial cassiterite occurring within the tenement is derived from these deposits although those alluvials are usually proximal to the granite body. Deposits such as Scotia derive their cassiterite both from the Mt Cameron body and from the tin bearing granites of the Blue Tier.

6.2 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 Great Northern Plains section of EL 32 / 2001. It is not proposed to detail the geology of that area and its workings as that material has been provided as part of the Annual Report. It also forms part of the confidential information pertaining to ML 15M/2004.

a. THE ALLUVIAL DEPOSITS:

Two major alluvial deposits occur. The oldest are the blanket like Tertiary units into which are incised a series of palaeo-channels or leads. Draped over those deposits are younger Quaternary alluvials. Both deposits are in part cassiterite bearing.

i. THE TERTIARY UNITS:

The Tertiary sediment sequence is, on a regional basis, relatively consistent in its nature although there is a marked increase in white to yellowish sandy horizons in the northern section of the tenement. These sandy horizons have, in the past, been mistaken for the younger Quaternary Aeolian dune sands. This does not appear to be so, heavy mineral and fossil evidence suggests these are in fact of marine derivation; either beach sands or near-shore sand deposits.

Generally the sequence consists of:

0 to 0.5 m	Sandy soils usually humic and vegetation rich.
0.5 to 1.0 m	Cemented gritty sands and clayey sands
1.0 to 5.0 m	Granitic based sandy clays and clayey sands with gritty and pebbly horizons
5.0 to 15.0 m	Gravelly sands, gravels, clay horizons often containing abundant coalified wood, vegetation fragments and lignite.
15.0 to 30.0 m	Coarse gravels and bouldery sediments interspersed with sandy grits and sands, this layer is usually tin rich.
Basement	Variable, either Mathinna Bed metasediments, decomposed granite or dolerite.

Currently it is very difficult to accurately determine the sequences in any of the worked areas and much of the current knowledge base is derived from old reports or old drill logs. Slumping of pit walls, heavy vegetation re-growth and general pit degradation help to mask most of the exposures. Similarly exposures in the floors of most pits are poor and only rarely are floors and / or basement exposed.

Cassiterite mineralisation is widespread throughout the Tertiary units. For the most part cassiterite and the related heavy mineral assemblage are restricted to the basal gravel and boulder sections of the incised deep leads such as Scotia, Lochaber and Doone's. At a number of locations however cassiterite is recorded higher in the sediment profile possibly as a result of local reworking of, or more localized shedding of, cassiterite in to the sediment train. In the north of the tenement and outside of the area relinquished there is evidence to support some concentration of cassiterite due to marine reworking.

ii. THE QUATERNARY UNITS:

These units are represented either by recent residual soils draped over the Tertiary units, as recent stream alluvial deposits, as dune blown sands or as swamp peat like deposits. Within the Licence it is the former two units that are the most significant.

In the area around Gladstone and Mt Cameron the Quaternary units are represented by cassiterite bearing eluvials or as semi-mature stream bed deposits; gravels, sands and boulder material. Many of these deposits have been worked for cassiterite particularly the eluvials immediately adjacent to cassiterite bearing greisens or quartz veins. Most of the streams in this area have been the sites of extensive alluvial mining.

To the North on the Great Northern Plains these deposits are quite variable. The extensive alluvials within the entrenched Ringarooma River system are highly variable and are masked by thick deposits of old tailings sand. Much of the River below Gladstone was dredged during the period 1955 to 1965. Elsewhere the unit consists of thin humic sands, peaty sands, peaty clays and dune sands.

6.3 RECENT EXPLORATION:

Over the past year VDM has continued to conduct DGPS survey pick-up of cultural heritage features including old drill holes, old workings and associated test pits, tracks, water races and dams. These features have been added to the company GIS database and form part of the confidential data package.

The company's consultant geologists have inspected the areas in the south of the tenement and concluded that it does not contain any significant alluvial or eluvial deposits. Most of the cassiterite bearing deposits were extensively worked over a 40 year period from about 1880 to 1920. An extensive work program consisting of geological mapping, geophysical surveys (GPR, Seismic and Total Field Magnetics) and DGPS surveying have been conducted within the area now encompassed by ML 15M / 2004. That area has been included in the area relinquished however as those works are considered confidential and have not been reported here. Those data are reported in the Annual Report for the Year Ending 19th April 2007.

7.0 CONCLUSIONS:

Exploration works over the period of tenure has resulted in the company delineating a section of the tenement for relinquishment. The area being relinquished comprises:

i. GREAT NORTHERN PLAINS SECTION:

An area now encompassed by ML 15M / 2004. All data pertaining to that area is considered confidential.

ii. MT CAMERON SLOPES:

The area of the tenement south of ML 15M / 2004 encompassing the old Gladstone Goldfield and the general Fly By Night tin deposits, Fly By Night and Ah Kaws Creeks.

8.0 BIBLIOGRAPHY:

Baster, L. R, 1972. Preliminary Report on the Dorset Dredge Project, Tasmania.
Unpub. Wanex Mining Pty. Ltd. Report

Baster, L. R, 1971 - 72. Drill Logs – Dorset tin Division.
Unpub. Wanex Mining Pty. Ltd. Report

Kinnane, N. R. 2000. Assessment, Great Northern Plains Project. NE Tasmania.
Niugini Resources Pty Limited.

Leaman, D. E. 1974. Summary of Geophysical Work, Gladstone Area.
Tech. Report, Tasmanian Department of Mines.17, p88.

Nye, P. B. 1932. Report on the Proposed Restoration of Syphon at Site of Old No. 6 Syphon, Mt Cameron Water Race.
Unpublished Report 17, 1932A, Tasmanian Department of Mines.

Nye, P. B. 1970. Geological report on the Great Northern Plains and the Alluvial Deposits Therein.
Unpublished Report to Portland Holdings Pty., Ltd.

Roach, H. 1916 – 1917, Historical Drill Records
Tasmanian Department Of Mines

Twelvetrees, W.H. 1916 The Gladstone Mineral Field
Geological Survey Bulletin No 25, Mines Department of Tasmania.