

EL 59 / 2004

CENTRAL RINGAROOMA

NORTH EAST TASMANIA

FINAL ANNUAL REPORT

FOR THE YEAR ENDING

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VOLUME 1

VAN DIEMAN MINES PTY LIMITED (In Liquidation)

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OVERVIEW

After the acquisition of the North East Tasmanian mining tenements from Mineral Holdings Australia (MHA) in 2004 and subsequent collection of the data package accompanying that acquisition, Van Dieman Mines Pty Limited (VDM) conducted a re-assessment of each of the tenements. In three instances it was obvious that the drill defined tin bearing resources trended outside the tenement boundaries. This particularly applied to EL's 10, 11 and 12 / 2000, Monarch, Endurance and Pioneer respectively.

In October 2004 VDM made application for an Exploration Licence covering the postulated resource extensions. The area applied for was in three blocks and encompassed a total area of 14 sq. km. in what is described as the central Ringarooma region. The tenement was subsequently granted in April 2005.

In 2005 following grant, VDM commenced field work within the tenements. These works were oriented to collection of survey data, specifically drill hole locations, old workings, mining cultural features and other cultural features such as roads, fence lines, etc. Work commenced on the section of the tenement located adjacent to RL 6 / 2005, Monarch. Field crews managed to locate a number of old drill holes that enabled old drill location and resource plans to be accurately digitized and added to the VDM GIS database.

Work was also undertaken on the section of the tenement adjoining the Endurance resource. Numerous old holes were located that enabled digitized locations to be corrected and a more accurate basement topographic map compiled.

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1.0 INTRODUCTION:

The tenements encompass areas immediately adjacent to existing tenements, tenements that contain substantial tin bearing alluvial resources, specifically:

- a. Four blocks to the south and west of RL 6 / 2005 - Monarch;
- b. Four blocks to the west of ML 14M / 2004 - Endurance; and
- c. Six blocks to the west and south of RL 5 / 2005 - Pioneer.

At Monarch extensive drill programs were previously undertaken by BHP, BMI Mining and AMDEX Mining. These resulted in the delineation of a tin bearing resource within RL 6 / 2005. That resource trends south eastward and runs outside of RL 6 / 2005 and into EL 59 / 2005. The VDM field crew has located numerous old drill holes and test pits and as a result it has been possible to accurately locate the resource base on modern AMG mapping.

At Endurance all old hole locations have been corrected and as a result a new and more accurate basement topographic contour map has been produced. VDM has also located further historical drill data and added this to the GIS database. Results of past seismic surveying have been assessed and a new program of GPR, Seismic and Total Field Magnetic surveying have been conducted.

2.0 LOCATION AND ACCESS:

The tenement was granted in three sections, see Figures 1, 2 and 3.

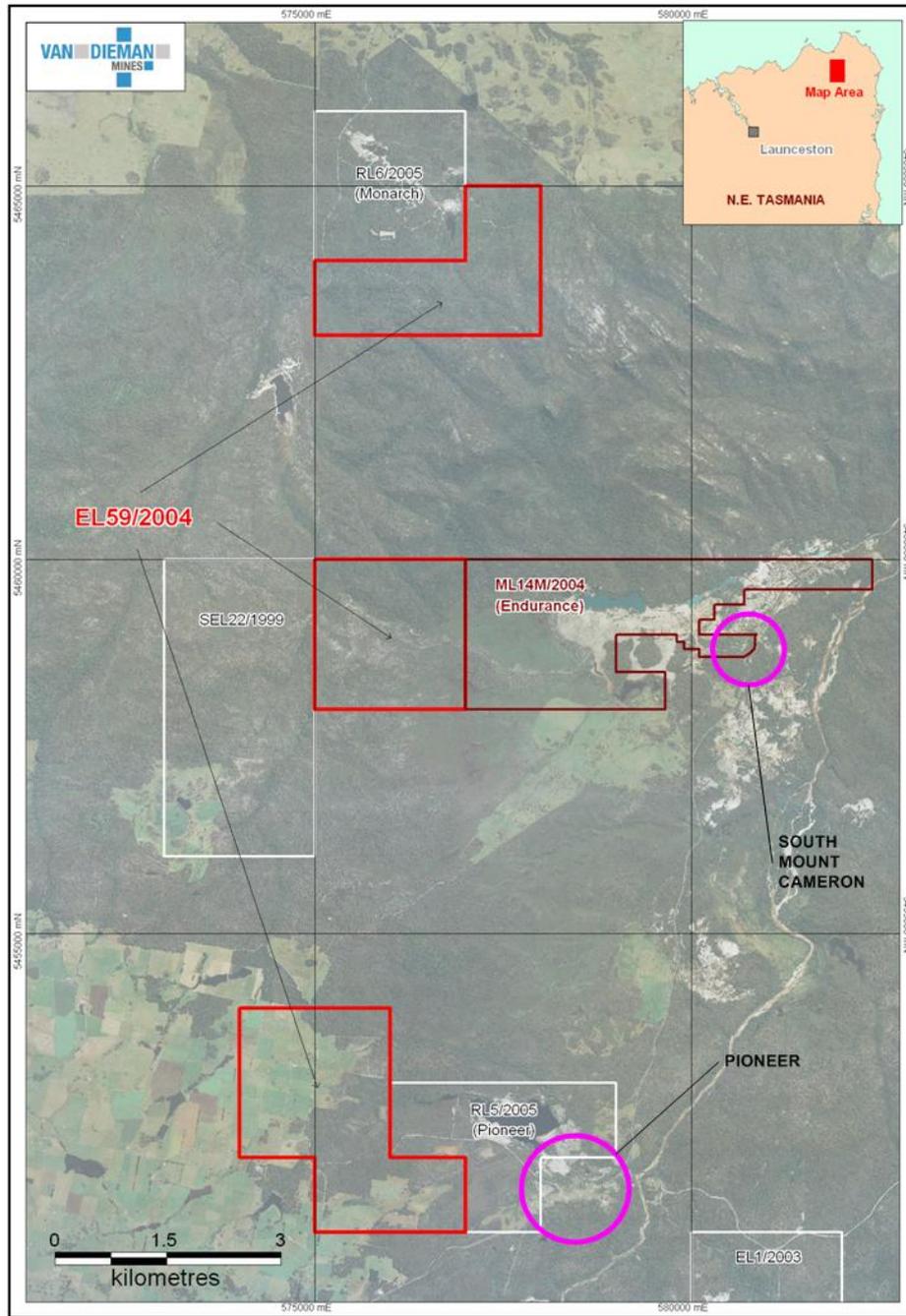


Figure 1 - Tenement Location Map (on aerial photography)

**FIGURE 1 - LOCATION PLAN
AIRPHOTO BASE**

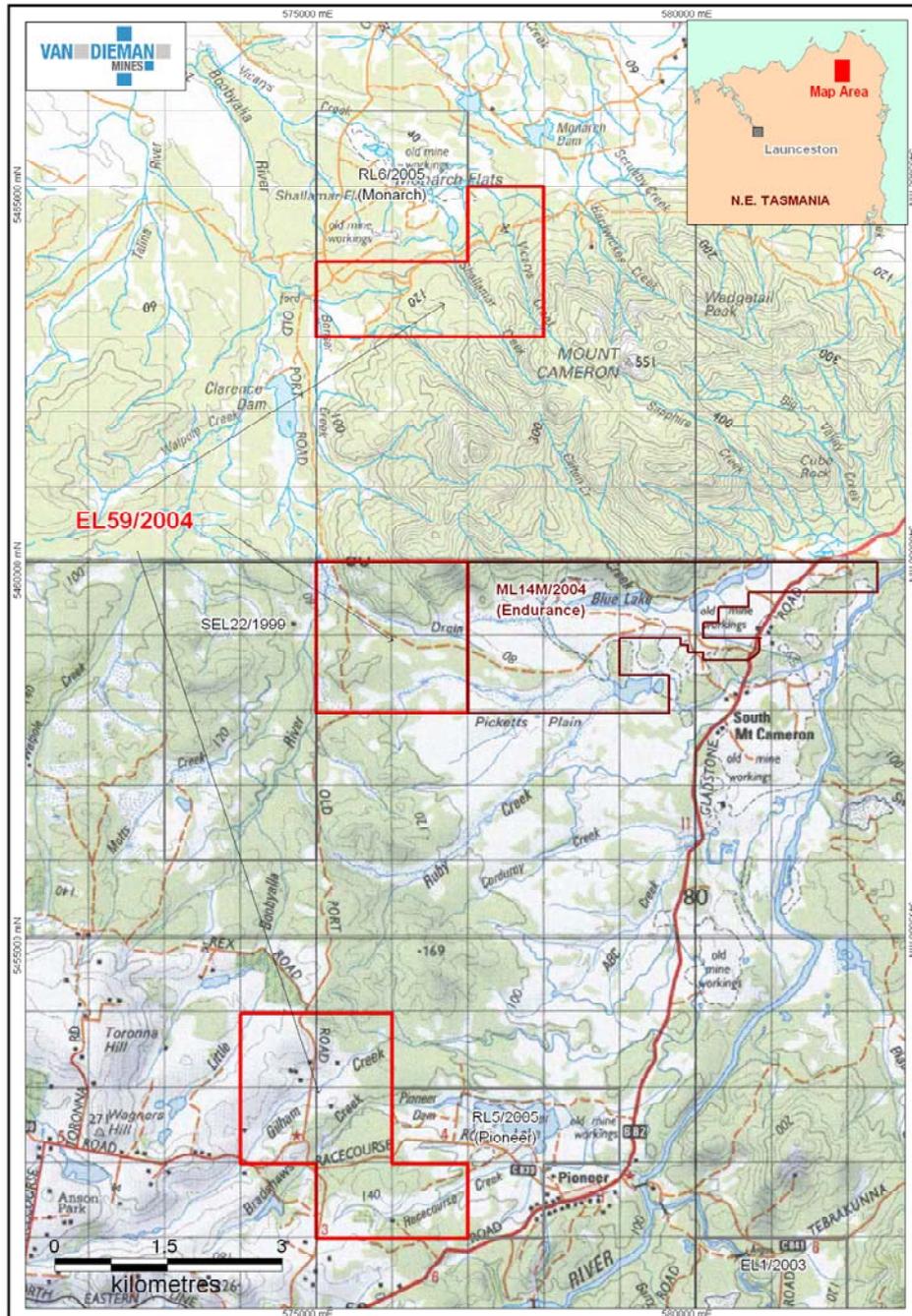


Figure 2 - Tenement Location Map (on 100K topography)

VDIMap0611-026

**FIGURE 2 - LOCATION PLAN
TOPOGRAPHIC BASE**

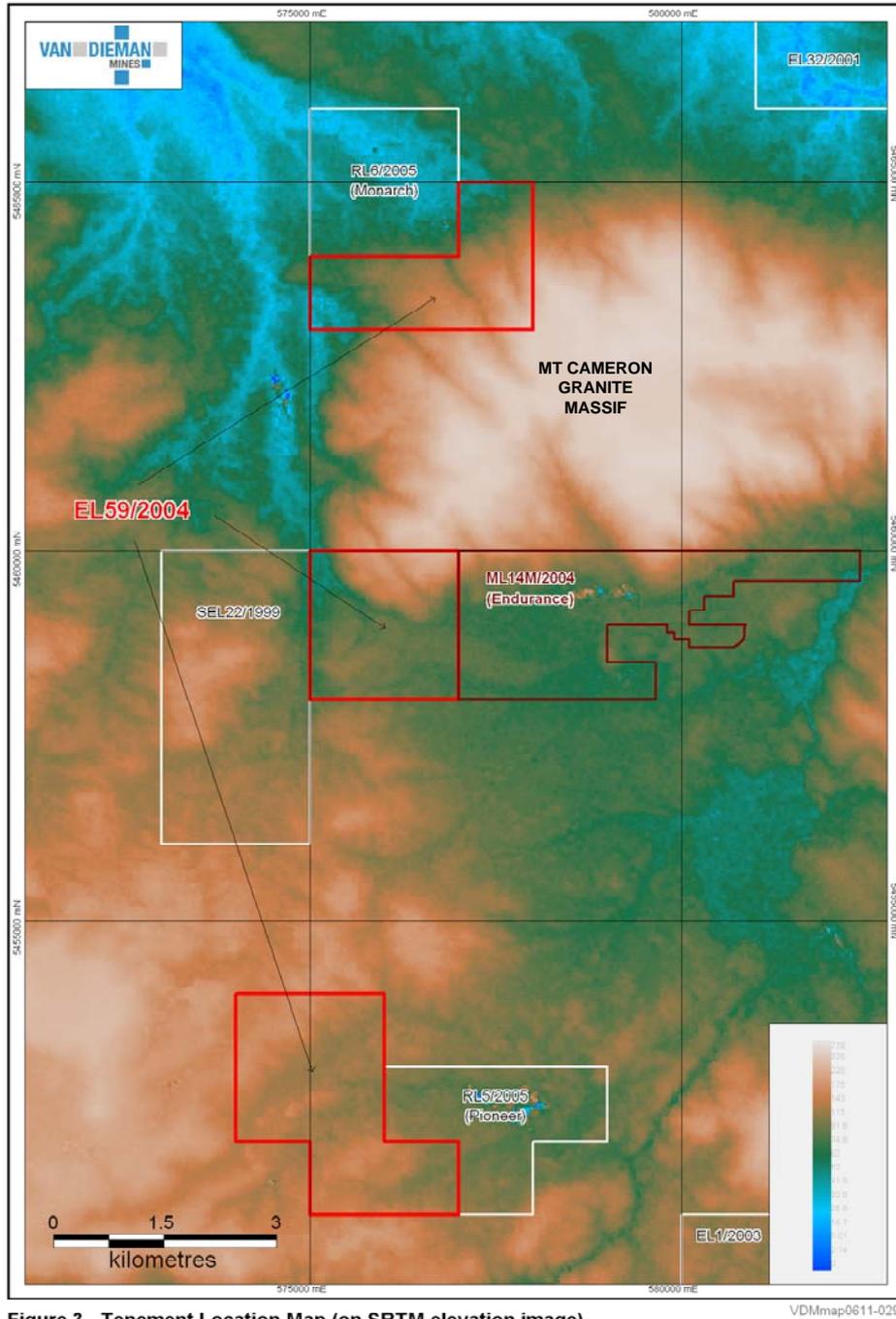


Figure 3 - Tenement Location Map (on SRTM elevation image)

VDMmap0611-029

**FIGURE 3 - LOCATION PLAN
SATELLITE IMAGE BASE**

Specifically the three sections are:

A. Monarch:

4 blocks centered approximately 8 km west of the Township of Gladstone.

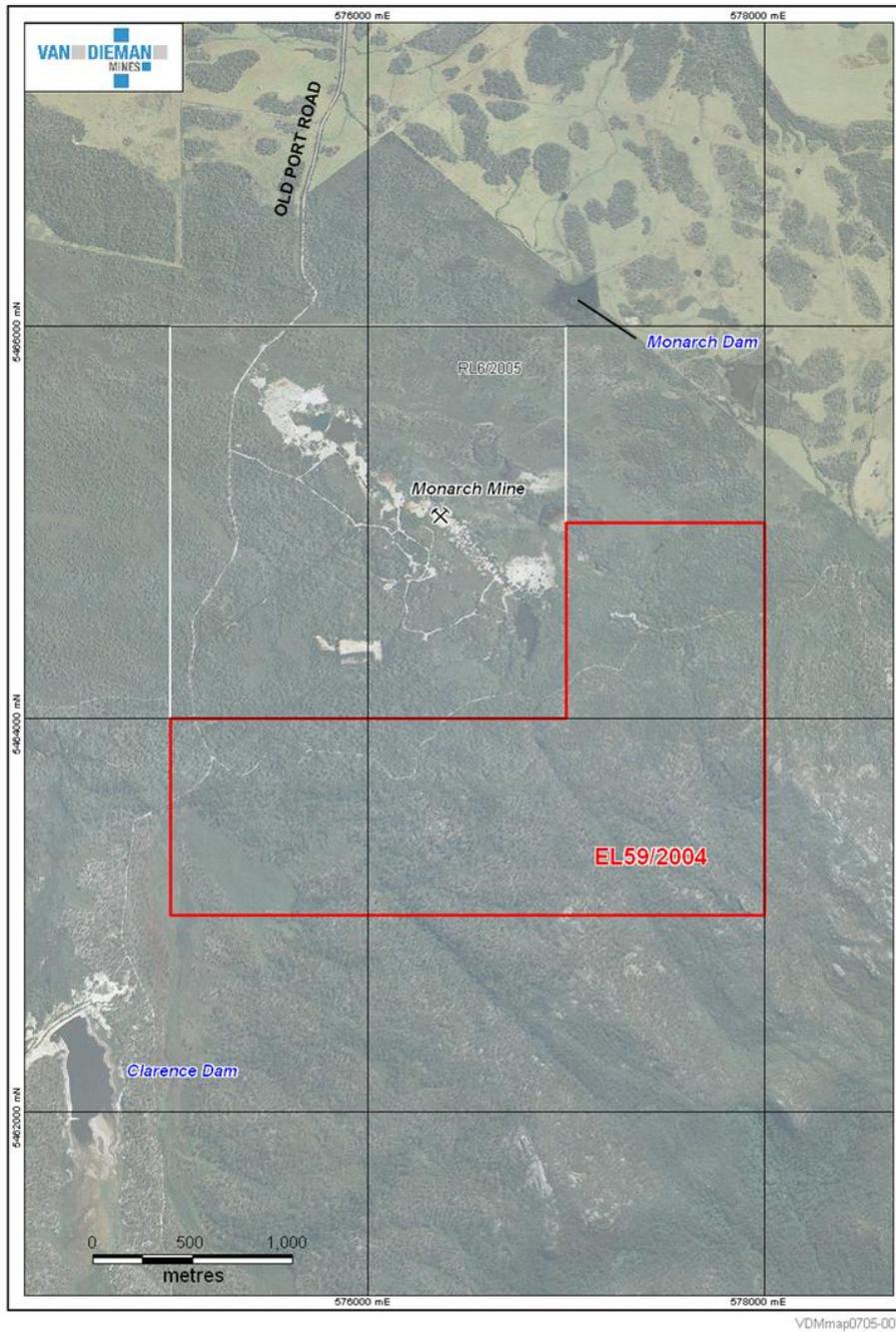


FIGURE 4: LOCATION PLAN - MONARCH SECTION

Access to the Monarch section of the tenement is via the Gladstone to Bridport Road and then southwards along Old Port Road to the Monarch turn-in. Numerous old mining tracks provide access through RL 6 / 2005 to the tenement.

B. Endurance

4 blocks centered approximately 10 km south west of the township of Gladstone and 5 km west of the Township of South Mt. Cameron.

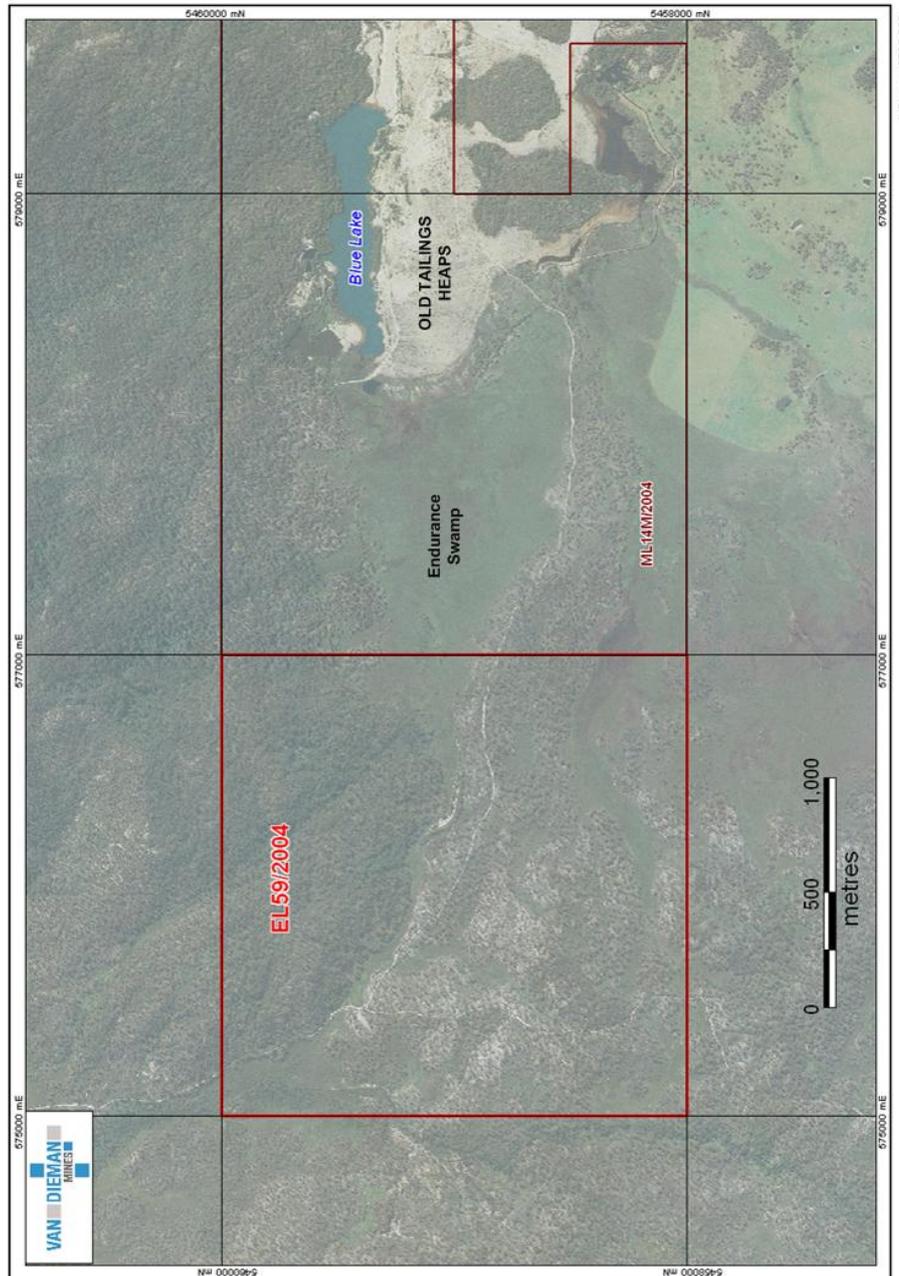


FIGURE 5: LOCATION PLAN - ENDURANCE SECTION

At Endurance access is limited to one gravel track that leaves the Old Port Road just south of Mt Cameron and runs across the southern edge of the tenement to the boundary of ML 14M / 2004.

C. Pioneer

6 blocks centered approximately 4 km north west of the Township of Pioneer.

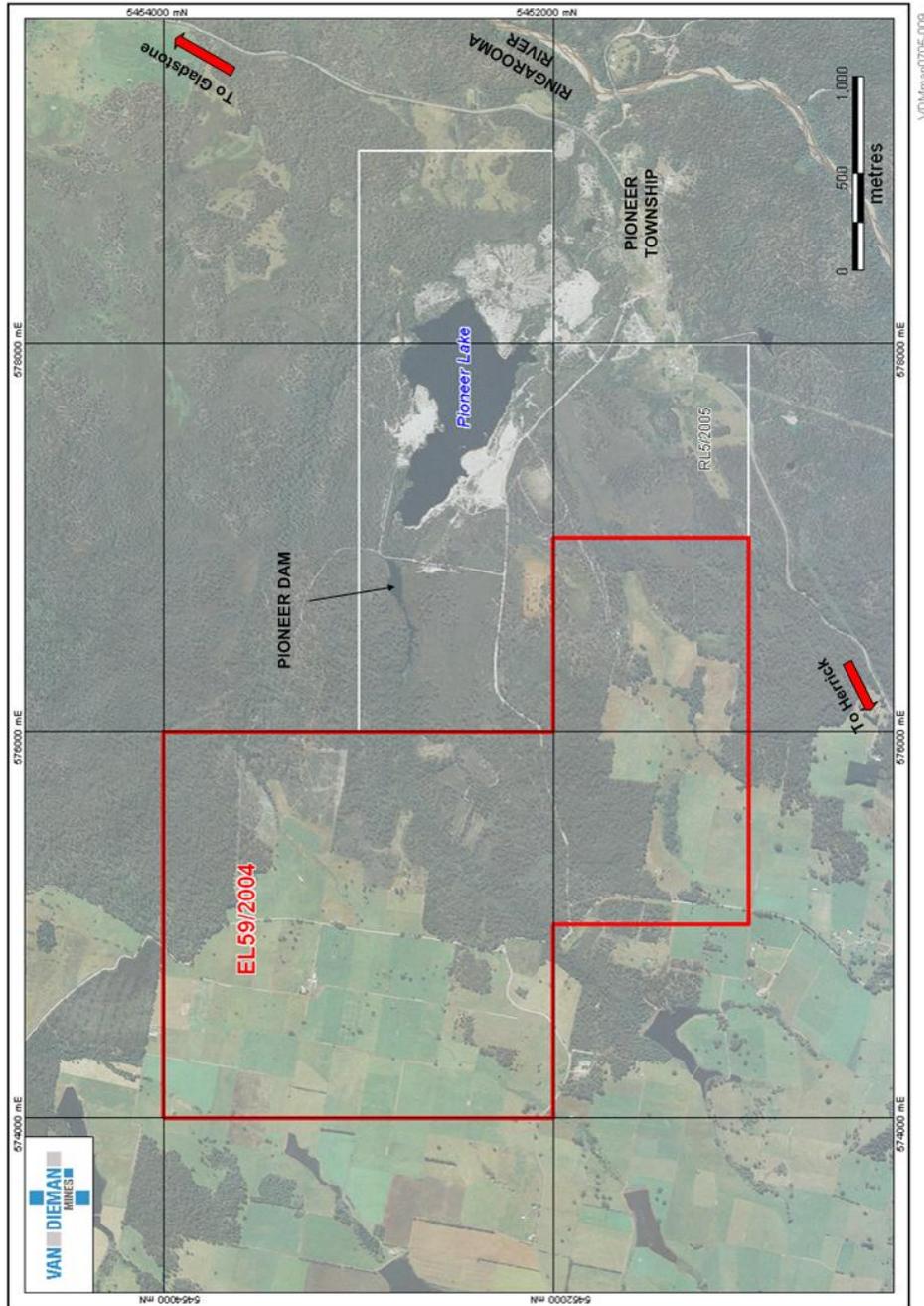


FIGURE 6: LOCATION PLAN - PIONEER SECTION

At Pioneer access is gained via the Pioneer to Winnaleah road and thence throughout the tenement via farm and bush tracks.

3.0 HISTORICAL BACKGROUND:

Alluvial tin was first worked in the general area in about the early 1880's however each of the three deposits encompassed by this tenement had distinctly different phases of historical development. Specifically:

A. MONARCH DEPOSITS:

Tin was probably first discovered in the Monarch area in the late 1800's and most initial works were carried out by Chinese miners. During the early 1900's it is likely that the Chinese miners were replaced by locally based small scale mining activities.

In 1922 the Monarch Tin Mining Company was formed and the first recorded production appeared the following year in the Report of the Secretary for Mines, Tasmania. During the period from 1922 to 1936 the company produced some 71.5 tonnes of cassiterite concentrates, see Table 1.

TABLE 1 - HISTORICAL TIN PRODUCTION AT MONARCH

YEAR	TONS OF METAL Contained in Concentrates
1923	8.99
1924	21.05
1925	6.31
1928	21.21
1929	8.80
1934	2.30
1935	2.85
TOTAL	71.51

The Monarch Company appears to have conducted some scout drilling during this period and were responsible for the large area of workings now seen in the south end of RL 6 / 2005 and within EL 59 / 2004.

Following the closure of the Monarch Company's operations the area was worked intermittently by tributors and local miners until the early 1960's at which time the area was secured as Special Prospecting Licence 339 by Mr. V. Woods of Pioneer. Woods carried out some scout drilling during the summer of 1963. In 1964 BHP took an option on the area from Woods but abandoned the arrangement in the following year after carrying out geological and geophysical surveys and a drilling program. BHP calculated the Monarch reserves as being 2,909,300 cubic yards at a grade of 5.8 oz / cubic yard of 70% SnO₂ concentrate.

In late 1965 a similar option was secured by Austminex Pty., Ltd., who after a short drilling program abandoned the arrangement.

In March 1966 Kathleen Investments (Aust) Limited secured an option arrangement with Woods the arrangement being a free option for one year followed by a twelve month extension for \$2,000.00 and a purchase exercise price of \$40,000.00. In 1966 the company carried out a limited testing program in the Bonser Creek area, they did not extend for the second year of the option.

The Endurance Tin Mining Company purchased the Monarch area from Woods in September 1968. At that time Woods was appointed as Production Manager for the Endurance operation. In December of the same year Endurance commenced the construction of a water supply dam and production commenced at Monarch prior to the purchase of the operation by B.M.I in early 1970. The Endurance operation involved hydraulic monitoring of the alluvium and gravel pumping to a set of sluice boxes with jigs. Subsequently the operation utilised scrapers and bulldozers and finally a dragline. As mining progressed B.M.I carried out an extensive program of auger drilling. The results of that program were used as mining controls, however due to poor implementation, it is almost certain that this resulted in some payable ground being overlooked. B.M.I ceased operations at Monarch in 1973.

In the late 1970s and early 1980's, the area was taken up by Amdex Mining Limited, both as an exploration licence and as individual mining leases. Amdex undertook limited test work and recalculated the resources deleting the ground previously worked by Endurance and B.M.I. Since the work by Amdex there appears to have been little further exploration and the area remained vacant until secured by Mineral Holdings in 2000.

Details of the various drilling campaigns appear as Table 2.

TABLE 2 - SUMMARY OF HISTORICAL DRILLING AT MONARCH

COMPANY	AREA	YEAR	TYPE	NO OF HOLES
Rio Tinto	Dead Horse Creek	1958	Percussion	1
Rio Tinto	Shallamar Flats	1958	Hand Plant	5
Mr. V. Wood	Monarch Flats	1964	Unknown	8
BHP	Vicary Creek	1964 - 65	Percussion	135
BHP	Bonser Creek	1964 - 65	Auger	14
Kathleen Investments	Bonser Creek	1966	Percussion	7
BMI	Monarch Flats	1970 - 72	Auger	210
BMI	Monarch Flats	1979	Backhoe Pit	10
Amdex	Monarch Flats	1980	Rev. Circulation	48
Amdex	Monarch Flats	1980	Percussion	9
Amdex	Bonser Creek	1980	Percussion	1
Amdex	Bonser Creek	1981	Percussion	9

B. ENDURANCE DEPOSITS:

The following historical data has been reproduced from a report by Amdex Mining dated 24th March 1980

Tin was discovered in the Endurance district in 1875. Initially miners exploited the shallow alluvial deposits associated with the many small, deeply incised and steeply rising streams along the southern flank of the Mt. Cameron massif. Those deposits occurred perched well above the buried Endurance deep lead. During this period the Clifton Tin Mining Company and the Endurance Tin Mining Syndicate were the major producers. The Clifton Company worked high-grade ground (2,000 to 3,000 gm/m³) along Clifton Creek and the Endurance Syndicate, shallow ground to the northwest of the Clifton workings.

The Endurance Tin Mining Company formed in 1922 acquired the assets of the Syndicate and appears to have also acquired the Clifton leases that were probably nearly completely mined. Initially the groups utilised hydraulic monitors supplied by steam driven water and gravel pumps.

A lack of adequate water supply necessitated the establishment of pumped water return system. The groups appear to have been able to exploit ground to around 10 metres in depth at grades of up to 7,000 gm/m³.

By 1928 the scarcity of an adequate supply of wood to fire the boilers necessitated the introduction in that year of diesel driven plant. Declining tin prices soon forced the closure of all operations. Small-scale tribute mining continued until the early 1930's when the Endurance Company completed a successful restructure of its share capital and acquired, for the sum of \$30,000.00, the Tasmanian assets of the Pioneer Tin Mining Company. These assets included the hydroelectric power station at the Frome Dam and this enabled the Endurance Company to electrify its operations at Endurance.

In 1934, Mr. C. Ryan, the former manager of Pioneer was appointed General Manager of the Endurance operations. Ryan commenced a scheme to exploit the remaining shallow ground and to commence operations of the deeper sections of the main lead. The Ryan plan included:

- Installation of a pumping platform on the Ringarooma River to provide water for sluicing;
- Introduction of a 254 mm gravel pump to develop the shallow ground;
- Replacement of the pontoon steam driven plant by larger gravel pumps to enable exploitation of the deeper ground; and
- Provision of a tails race to the Ringarooma River to dispose of tailings derived from the upper or eastern end of the lead.

Sluicing of the ground commenced in February 1935 following the successful commissioning of the pumping plant. Initial mining was hampered by unreliable and inadequate boring results and it proved necessary for the Company to re-drill some areas to allow for more selective mining to be implemented. By 1937 production was in full swing and in the first year of operations a total of 150.9 tonnes of high-grade tin concentrates were produced. Historical mining costs are quoted as being 7.44 cents / metre and recovery quoted as being 528 grams of SnO₂ / m³.

In 1939 as operations became more settled the Company treated some 277,500 m³ of alluvial ground for a recovery of 142 tonnes of tin concentrates, a grade of 475 grams/m³. The more efficient operations resulted in the costs being lowered to around 5.5 cents / m³.

At this time the Company estimated the deposit to contain a resource of just over 3.8 million m³ containing 1,400 tonnes of tin concentrate equating to an average grade of around 310 grams/m³. In 1940 the lead produced 130.8 tonnes of concentrate from 359,000 m³ of feed equating to an average grade of 364 grams/m³ at a cost of 6 cents / m³.

By 1945 all the economic shallow ground at the eastern end of the lead had been exhausted although the deep unexploited ground still contained 2.68 million m³. In that year the production pontoon was moved to the western central section of the lead and by 1947 the operation was confined to the main lead apart from some small-scale production of 18 tonnes of concentrate from shallow ground. Total production for the 1947 year is reported to be 134 tonnes equating to an average grade of 338 grams/m³.

In 1950 sluicing was continuing in the western section of the main lead, 108.4 tonnes being produced for the year from 325,000 m³ of wash at average grades of 333 grams/m³ however costs in working the deeper ground had risen to 19.6 cents / m³. By 1954 profitability of mining the deeper ground had become a problem, costs had risen to around 32.7 cents / m³ for a recovered grade of only 285 grams/m³.

In summary, the period 1946 to 1959 saw the Endurance Lead produce 1,220 tonnes of tin concentrates from some 3.82 million m³ of alluvial wash for an average grade of 319 grams / m³ SnO₂. Operations were hampered by the inability to dispose of tailings and from time to time the presence of abundant pyritic material.

In 1960 the Company commenced sluicing eastwards from the Blue Lake region. Production was hampered however as the lead was becoming narrow, was hard against the flanks of the massif and contained abundant large boulders in the basal layers. The average annual production for the period 1960 to 1966 was 70 tonnes of tin concentrates per annum, an average grade of 237 grams/m³.

In the period 1966 to 1968 production further declined with only 75 tonnes of concentrates being produced for the period and while the average remained at 237 grams/m³ costs had risen and operations were terminated in the east in late 1968. Operations were relocated to the western sections in the same year.

In mid-1969 the ownership flowed to the Murray - Murray - Maguire Group to and from groupings that made up the Attunga Mining Syndicate and finally to interests associated with Walter Shapaloff. In early 1970 B.M.I Mining acquired the interests of the Endurance Mining Corporation and thus of the Endurance Lead. B.M.I discontinued the mining operations in the western lead in favor of mining of shallow terrace ground to the east. In conjunction with this move the group commenced an extensive evaluation of the deposit.

In 1978 the Triako - Amdex Mining Group acquired to B.M.I tenements and continued shallow mining and exploration, their operations ceased in the early 1980's. From that time the deposit has remained idle and the resource quoted by Amdex remains largely intact.

A summary of the various drilling campaigns conducted around the Endurance area appears here as Table 3.

TABLE 3: SUMMARY OF HISTORICAL DRILLING AT ENDURANCE

COMPANY	AREA	YEAR	TYPE	NO OF HOLES
Endurance Tin Mining Co	Endurance Mine	~1940	Hand Plant	252
Endurance Tin Mining Co	Woods Hole	~1940	Hand Plant	23
W.L. Sides & Co	Woods Hole	1967	Percussion	11
Unknown	West Endurance	?	Percussion	6
Mines Dept	West Endurance	1969	Percussion	30
BMI	Phase 1 Auger	1971 - 72	Auger	266
BMI	Pahse 1 Percussion	1971 - 72	Percussion	129
Mines Dept	West Endurance	1972-73	Percussion	4
BMI	Hasties	1973	Percussion	25
Amdex	Clifton	?	Rev. Circulation	29
Amdex	Clifton	1979	Auger	7
Amdex	West Endurance	1980	Rev. Circulation	2
Amdex	Clifton	1980	Percussion	26
Amdex	Endurance Tails	1980	Percussion	7
Amdex	Clifton	1980 - 81	Percussion	14
Amdex	Nth. Edge Gutter	1980	Percussion	7
Mines Dept	West Endurance	1982	Diamond Drill	1
Anglo	Eastern Leads	1982	Percussion	29
Anglo	Endurance West	1982	Rev. Circulation	40
Anglo	Endurance East	1983	Percussion	7
Anglo	Endurance West	1983	Percussion	8
Anglo	Pickets Plain	?	Rev. Circulation	3
TOTAL				926

C. PIONEER DEPOSITS:

The following historical data has been reproduced from a report by Amdex Mining dated 24th March 1980

William Bradshaw discovered tin in the Pioneer district in 1877. The initial discovery by Bradshaw was at the junction of Bradshaw's Creek and the Ringarooma River in recent alluvium probably derived from the reworking of the Pioneer Lead by the Ringarooma River.

The Pioneer Tin Mining Company was formed in 1882 to work these shallow deposits however the operations were not successful and the workings were let on "Tribute" to Chinese miners who carried out successful operations until the late 1890's. Their activities and the working of the ground in a westerly direction led to the discovery of the rich "Pioneer Deep Lead". As a result of this discovery the Company took steps to restart the mine. They conducted drilling and constructed dams and water races prior to a restructuring of the Company in 1900.

Mining recommenced in 1900 and was carried out using hydraulic monitors with gravel being pumped to sluice boxes by steam driven pumps. Hydraulic elevators or conveyors were used to dispose of tailings. In 1909 the Company completed installation of a hydroelectric facility at the Frome Dam and during the same year the mining equipment was converted from steam to electricity.

Company operations were continued successfully until 1929 when the Ringarooma River, swollen by three days of continuous rain rose to record levels and despite pumping efforts flooded the workings. Sluicing recommenced in 1930 but declining grades and falling tin prices led to a cessation of operations in December 1931. At that time the workings were let to local "Tributors".

In October 1933 the Endurance Tin Mining Company purchased the Tasmanian assets of the Pioneer Company. Local operators continued to "Tribute" the workings until the mid 1940's. During that period the Endurance Company removed most of the plant and equipment for use at its Mt Cameron operations.

In 1935 the Austral Malay Tin Mining Company drilled 18 scout holes ahead of the old workings. Although no report is available penciled comments on a plan at the Department of Mineral Resources suggests their assessment placed the reserves at 7.6 million m³ of 297 gm SnO₂ / m³. Storey's Creek Tin Mining Company carried out further drilling during the period 1960 to 1961, drilling 15 holes in the vicinity of the old Pioneer pit.

By the time of these works the Endurance Company appears to have relinquished the Pioneer tenements favoring to retain the Frome Dam and water licenses to their Mt Cameron operations. Results of the Storey's creek drilling were disappointing, grades reported were lower than those reported in 1935 although this may be attributed to poor drilling and sampling procedures.

In the mid-1960's Utah Development Corporation acquired extensive exploration tenements in the area, these included the old Pioneer workings. In 1967 Mr. Vern Woods, a local resident, acquired the Pioneer Leases from Utah and commenced mining along the south-east edge of the old pit. Initially Woods used hydraulic monitor and gravel pumps to deliver wash to sluice boxes. Woods obtained his water supply from the Pioneer Race owned by the Endurance Company.

In 1970 B.M.I. acquired the Endurance operations and restricted the amount of water available to Woods. In 1973 Woods purchased the Frome Dam, power station and water races from B.M.I. and with larger volumes of water available was able to replace the sluice boxes with a modern jig plant.

Woods continued to mine until early 1976 when the Pioneer Operations were acquired by the Triako and Buka and operated as Kibuka Mines. Following that acquisition Amdex Mining, an associate of those groups continued to mine westward following the deep lead and in addition conducted an extensive drilling program in the area.

The estimated production from the Pioneer lead up to that period is given as Table 4.

TABLE 4: PIONEER LEAD TIN PRODUCTION

PERIOD	OPERATOR	VOLUME TREATED (m ³)	STREAMED SnO ₂ (Tonnes)
1877 - 1900	Pioneer Tin Co. & Tributors	-	500 estimated
1900 - 1931	Pioneer Tin Co.	10,915,000	9,360
1931 - 1933	Pioneer Tin Co. & Tributors	Residues	142 estimated
1933 - 1946	Tributor for Endurance Co.	Residues	100 estimated
1967 - 1976	Vern Woods	1,000,000	242
1976 - 1979	Kibuka Mines	750,000	210
TOTAL			10,554

The Kibuka operations ceased in late 1979 following the collapse of the world tin price and introduction by the Australian Government and the International Tin Council of production quotas.

Little if any work has been undertaken in the Pioneer area since that time. In 2001 the area was acquired by Mineral Holdings Australia as an effort by the principal to aggregate the alluvial resources of the Middle and Lower Ringarooma basin into an economic resource base. Acquisition of drill data has enabled Mineral Holding to reassess the resource status at Pioneer in light of modern mining and alluvial treatment techniques.

A summary of the various drilling campaigns conducted around the Endurance area appears here as Table 5.

TABLE 5: SUMMARY OF HISTORICAL DRILLING AT PIONEER

COMPANY	AREA	YEAR	TYPE	NO OF HOLES
Pioneer Tin Mining Co	Unknown	1898 - 1928	Hand Plant	224
Austral Malay	East Pioneer	1935	Hand Plant	18
Storeys Creek	Unknown	1961	Pecussion	31
Amdex	Poverty Point	1979	Auger	19
Amdex	Pioneer	1977 - 1980	Percussion	118
Amdex	Pioneer	1980	Rev. Circulation	20
Amdex	North Pioneer	1980	Auger	9
Amdex	Poverty Point	1980	Auger	11
Amdex	Pioneer	1981	Percussion	10
Anglo	Pioneer	1982	Rev. Circulation	63
Anglo	Pioneer	1983	Percussion	29
TOTAL				552

4.0 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. Historical data; mine locations, drill hole locations and geophysical data were progressively added to a regional database.

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 6 and a geological map as Figure 7.

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.

Although the basic basement and regional settings apply to all three sections of the tenement three specific geological environments are recognized, specifically these are:

- a. Monarch - A Quaternary alluvial deposit that derives its sediment load from the granitic rocks of the Mt Cameron granite massif;
- b. Endurance - The alluvial deposits lie within a deep channel deposit proximal to the south of the Mt Cameron granite massif and deriving their alluvial load in part from the massif and predominantly from overflow and reworking of Tertiary sediments derived from the ancient Dorset Lake; and
- c. Pioneer - an outwash deposit related the "Wyniford Lead" that derives its alluvial component from the Blue Tier Granite massif and from Older and Younger Tertiary Basalt flows.

Uplift and massive erosion in the Tertiary is the main influence controlling the development of all the tin bearing deposits of the north east. Locally the deposits may vary in the nature of their deposition however the sediment source of the alluvial gravels remains basically the same. In some instances granite based sediments predominate and in others meta-sediment, at Pioneer and Endurance there is a mixing of both components.

Tertiary geomorphology is not fully understood, the palaeo-channels of the ancient Ringarooma, Boobyalla and Musselroe Rivers that dominated the drainage system in the north east have yet to be accurately defined and features such as the broad Endurance channel deposit appear to contradict the generally northwards drainage system.

Periods of uplift and faulting, marine transgression and regression are also not well understood. Faulting observed in Tertiary gravels at Pioneer and postulated at Endurance indicate that the area was geologically quite unstable up to and including the period of Younger Basalt volcanism.

TABLE 6
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

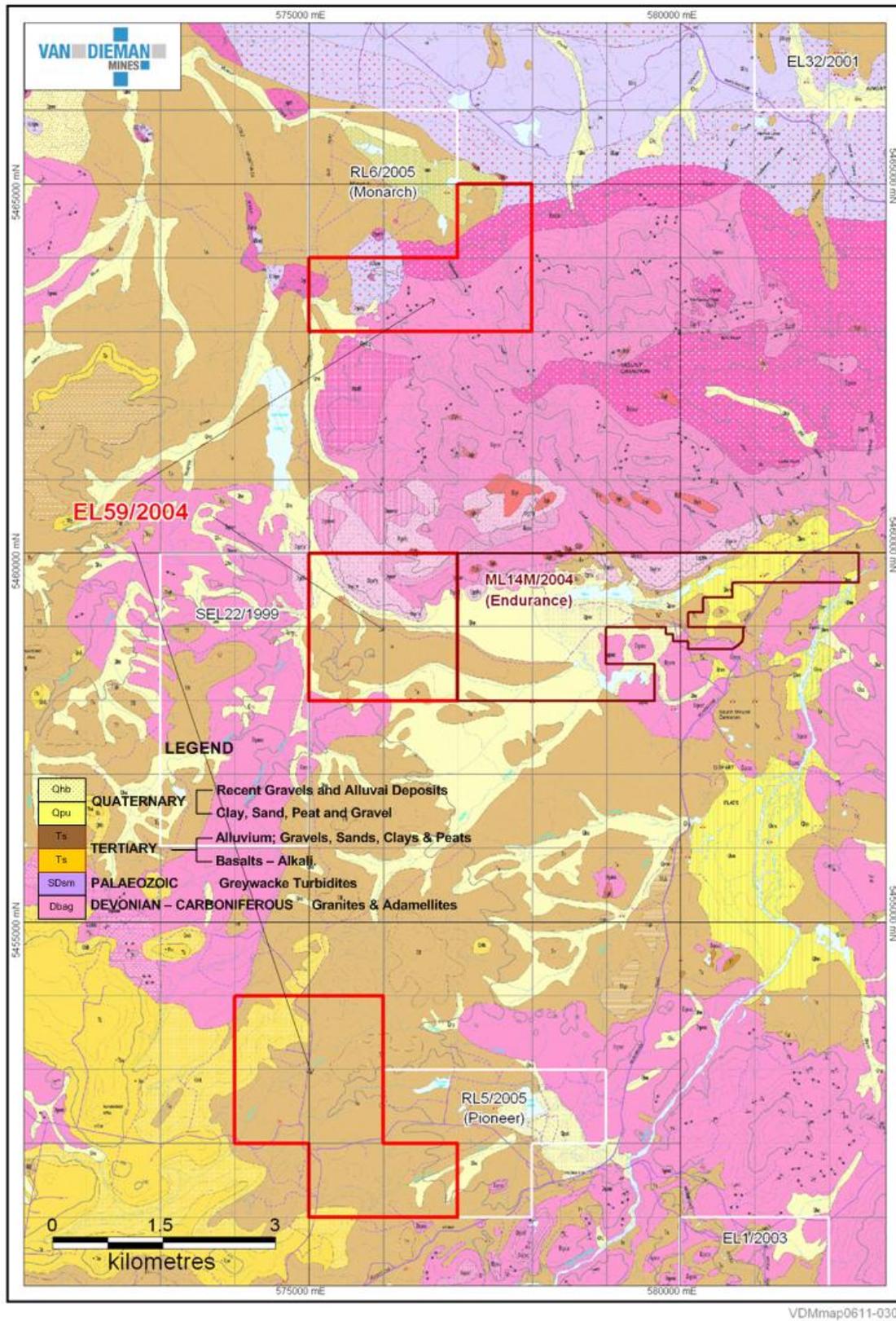


FIGURE 7 - GEOLOGICAL PLAN OF EL 59 / 2004

4.2 LOCAL GEOLOGY:

Local geological settings for each of the three sectors of the tenement are briefly described in the following text.

- A. MONARCH - lies at the north western end of the Mt Cameron granite massif. The alluvial geology at Monarch is of a local nature with the bulk of the alluvial sediments being derived as direct erosional shed from the Mt Cameron massif. Sands and gravels have a dominant granitic component although there is a minor meta-sediment fraction probably derived from weathering of local outcrops of Mathinna Beds meta-sediments and from weathering of Tertiary gravels that outcrop to the north of the tenement.

The presence of sapphire at Monarch is unusual as the area is not connected to any stream system that sheds from a basaltic source. The weathering of Tertiary alluvials is considered the most likely source of the sapphire - spinel heavy mineral fraction.

- B. ENDURANCE - The geological and genetic history of this deposit is dominated by the emplacement of the Younger Basalts down the palaeo-channel of the Ringarooma River.

With much of the north and north westward flow from the Blue Tier being diverted to the east and the previous drainage through the Boobyalla / Palaeo-Ringarooma becoming restricted if not halted, all the Blue Tier sediment load was directed to the Mt Cameron Basin, a broad flat lying area located between the Mt Cameron massif and the edge of the Blue Tier, the Dorset Lake. Initially flow was probably along the southern section of the ancient palaeo-channel although the presence of ferricretes and silcretes in the area between Pioneer and Endurance suggests that this channel was also filled by basaltic material.

The Ringarooma River was pushed to the southern edge of this area along and partly within the granite massif discharging its sediment load into the area now called Dorset Flats, the Dorset Lake. Major deviations in the course of the River were probably caused as a result of Tertiary faulting and / or the presence of more resistant granitic rocks.

As sediment load increased and the basin filled initial spillage was across a low ridge and into a narrow valley roughly conforming with the current valley of the Ringarooma River. High granite basement at the eastern end of Mt Cameron forced the stream to divert westward along and immediately adjacent to the southern flank of Mt Cameron. The geomorphology of this valley was controlled by a system of north-west to south-east trending Tertiary faults. Without exception these appear to have downthrown and northerly displaced western blocks.

The Endurance lead initially developed as a relatively narrow, very active stream, depositing high grade tin bearing basal gravels onto a highly decomposed granitic basement. The stream gradient profile was in the main west trending at shallow angles, locally faulting caused major diversions to the system and resulted in restrictions and sharp changes to that gradient. Where these bends or diversions occurred they caused some damming of the stream, above the diversions the stream usually occupied a broad valley, below it usually discharged into a deep high grade pool that gradually opened out as the gradient lessened and the stream slowed down.

The unexploited section of the resource that lies within ML 14M / 2004, east and abutting EL 59 / 2004 typifies this scenario. A broad shallow valley occupies the section east of the Tertiary fault, grades diminish slightly east to west and a small island of barren wash occurs immediately east of the fault where the stream system appears to become somewhat braided. West of the fault the tin bearing sequence thickens and the valley narrows. High grade tin bearing gravels were deposited in a deep pool immediately adjacent to, and downstream of the fault. Further west the valley starts to widen, the sequence thins and the grades commence to drop. Past water bore drilling within EL 59 / 2004, indicates that the Lead continues.

- C. PIONEER - The original Pioneer discovery was apparently made where the modern Ringarooma River cut the older Tertiary Wyniford Lead. From that point the Pioneer deposit trends north and then north-west toward the buried palaeo-channel of the Ringarooma River. The junction of these two systems is postulated to lie approximately 3 to 3.5 km north west of the Pioneer workings and within EL 59 / 2004.

The palaeo - geography of the area is somewhat problematical. The ancestral channel of the Ringarooma is marked by a linear basalt flow within the EL. The possible basalt filled channel just north of and postulated to parallel the Pioneer - Derby road may represent an unrecognised pre-basalt palaeo-channel although there is no evidence as to which direction of flow this channel may have taken. A number of alternatives exist, specifically:

- ❖ The channel may commence on the area of basement high that separates the Wyniford Lead from the present day channel of the Ringarooma River;
- ❖ The OK Lead joins the channel and both flow westward from the basement high and then joining the ancestral Ringarooma near Herrick;
- ❖ The Wyniford Lead was entrenched along and beside a granitic basement high probably in a similar fashion to the Endurance deposit probably as a result of headwater capture of the Wyniford and Gladstone Leads by a major south bank tributary of the ancestral Ringarooma; or
- ❖ If this channel in fact existed the Wyniford Lead may have cut and captured the stream prior to basalt outflow.

4.3 VDM's EXPLORATION:

A. MONARCH:

Past Work within this section has consisted of both field and office activities. Field crews located old drill holes (See Photo 1), test pit locations and old workings (See Photo 2). These are subsequently accurately located using DGPS technology and the locations then used to correct digitized plots of old data. Results of those works are presented here as Figures 8.



PHOTO 1: LOCATION PEG, DRILL HOLE MP52



PHOTO 2: OLD WORKINGS ON SHALLAMAR CREEK

Accurate plotting of the old drill hole locations has enabled VDM to create two forms of basement topographic representation, specifically conventional line contours of basement and in addition colour rendition of basement. These are presented here as Figures 9 and 10.

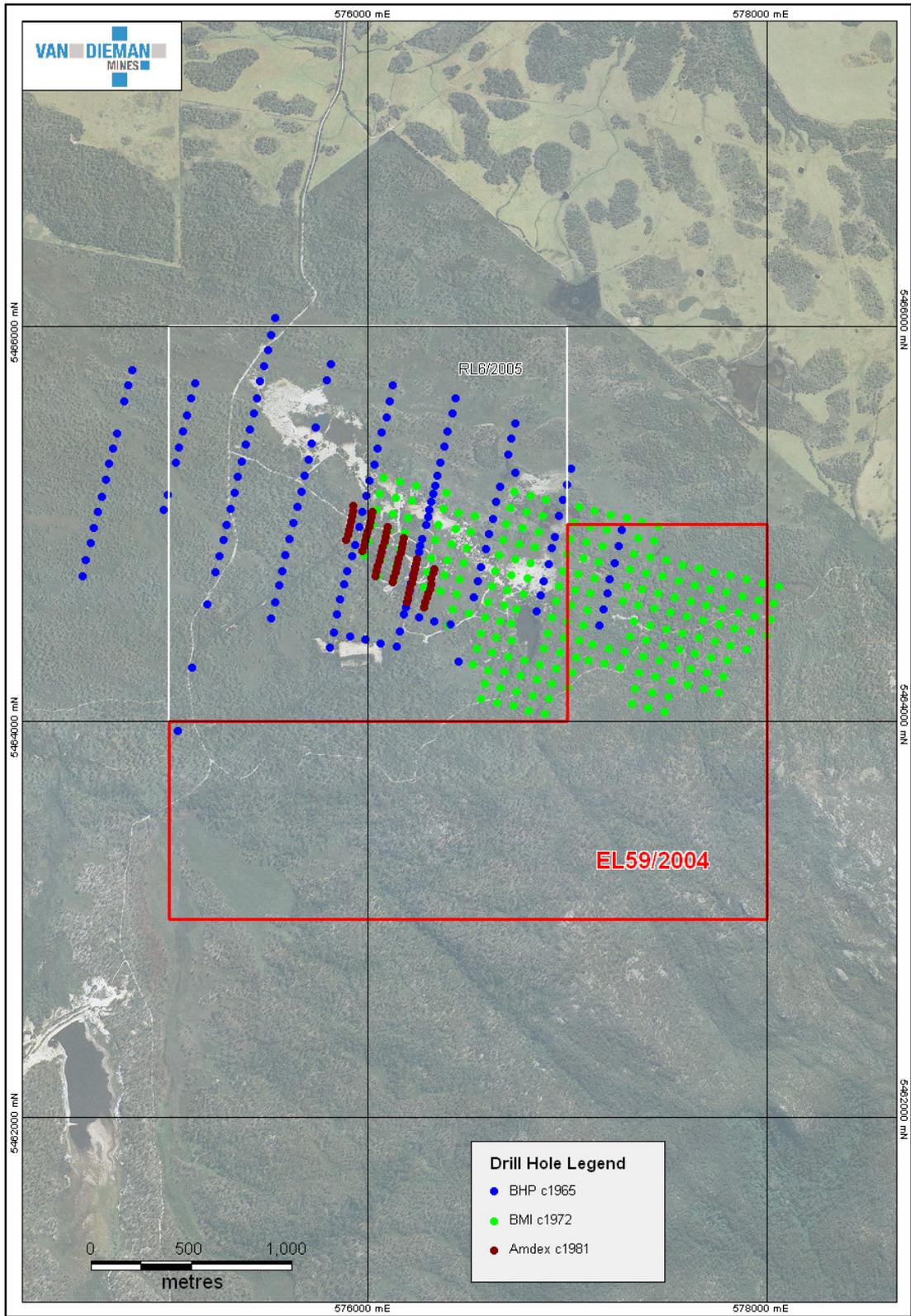


FIGURE 8: DRILL HOLE LOCATION PLAN - MONARCH

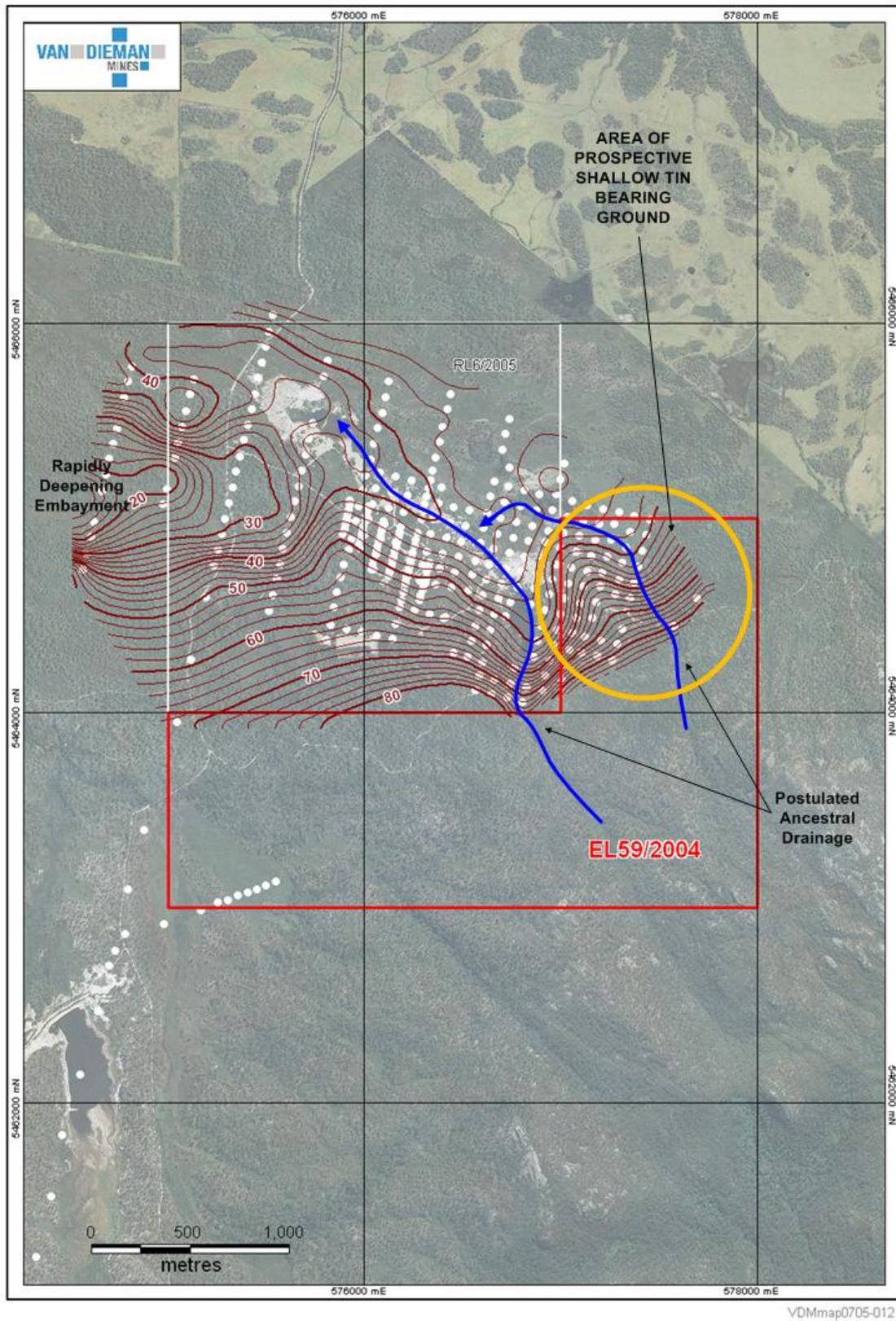


FIGURE 9: LINE CONTOUR MAP OF BASEMENT AT MONARCH

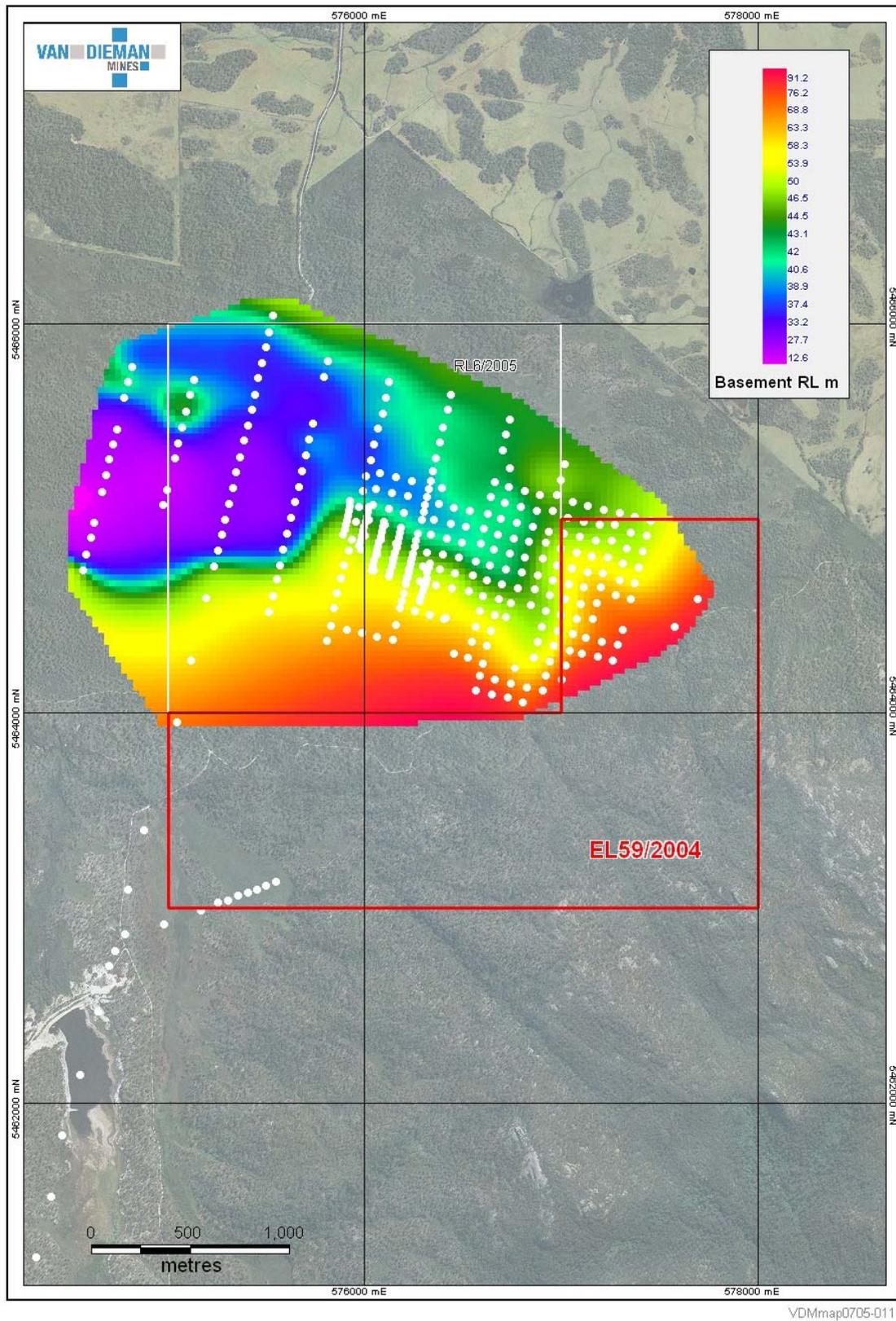


FIGURE 10: COLOUR RENDITION OF BASEMENT AT MONARCH

Results of GIS studies indicate that EL 59/2004 contains several prospective alluvial tin zones, specifically these are the shallow ground just below the steepening slope of the Mt Cameron Massif. The locations of the drill holes depicted on Figures 8, 9 and 10 are provided in AMG format in Appendix 9.1.

B. ENDURANCE:

The company has performed DGPS survey work. The basement contour map appearing in previous reporting has been upgraded and the area encompassed by the basement contouring expanded to the west and south.

The company has completed two geophysical surveys, the first ground penetrating radar and the second shallow seismic. These surveys were conducted by Alpha Geoscience of Sydney, their reports appear here as Appendix 9.2 and 9.3.

a. GROUND PENETRATING RADAR SURVEY:

Five lines of GPR were run at Endurance, specifically these corresponded to:

- A line along the road south of the main alluvial channel was run at 25MHz and 100MHz;
- A line corresponding to Drill Section 1 - Endurance was run at 25MHz;
- A line corresponding to Drill Section 2 - Endurance was run at 25MHz and 100MHz;
- A line corresponding to Drill Section 9 - Endurance was run at 100MHz; and
- A line corresponding to Drill Section 10 - Endurance was run at 100MHz.

Two profiles are attached in Appendix 6 and 7 of the Alpha report (See Appendix 9.2) as an example of the data quality and depth penetration achieved. Both profiles are collected at the Endurance site under very good conditions using the 25MHz and 100MHz antennas, respectively.

Alpha concluded that given the correlation of the GPR with a high number of boreholes in the area, the following could be determined:

- The GPR signal is subject to significant attenuation and does not penetrate deeply enough to reach the expected basement level. Thus, a comparison with the available borehole information in regards to basement level is not possible;
- The depth penetration for both antenna frequencies is clearly limited by highly conductive sediments and/or ground water. Considerable clay horizons are registered in several of the Endurance boreholes;
- Pyrite is mentioned in several borehole logs. Significant fluctuations in the groundwater level are expected to have occurred due to past mining operations. This would almost certainly have oxidised Pyrite and caused parts of the groundwater to become relatively acidic and conductive; and
- The resolution of the 100MHz antenna is observed to be better than the 25MHz, which is expected. Furthermore, the 100MHz data is less affected by tree scattering due to the lower power of the antenna.

Only two of the GPR lines were sufficiently close to the eastern boundary of EL 59/2004 to be of any significance. While the ground within the tenement is not as swampy as that encountered by Alpha during their survey it remains doubtful, given the Alpha conclusions, that GPR would be successful even on the drier ground within the tenement.

b. SEISMIC SURVEYS:

Alpha ran one line of Refraction Seismic at the Endurance site, specifically along Drill Section 9. Alpha noted that there was evidence of only three refractors in the seismic data acquired on the Endurance site, specifically:

- A shallow slow velocity layer, ~600 to 700m/sec - interpreted as recent sedimentation and topsoil, 0.5 to 5m thick;
- A faster layer, ~ 1700m/sec - interpreted as alluvium and weathered basement material, 10 to 55m thick; and
- A fast base layer ~ 3000 to 3500m/sec - interpreted as the unweathered basement granite material.

The data generated by Alpha indicated that the alluvium and weathered basement material appear to both have similar seismic velocities. Hence the boundary between the two was not delineated in the seismic line acquired.

A second approach used on the data for this site is seismic tomography. This form of data interpretation uses arrival times, and involves plotting the velocities of materials to a cross section and gridding and smoothing the data. The seismic profile is presented here as Figure 11.

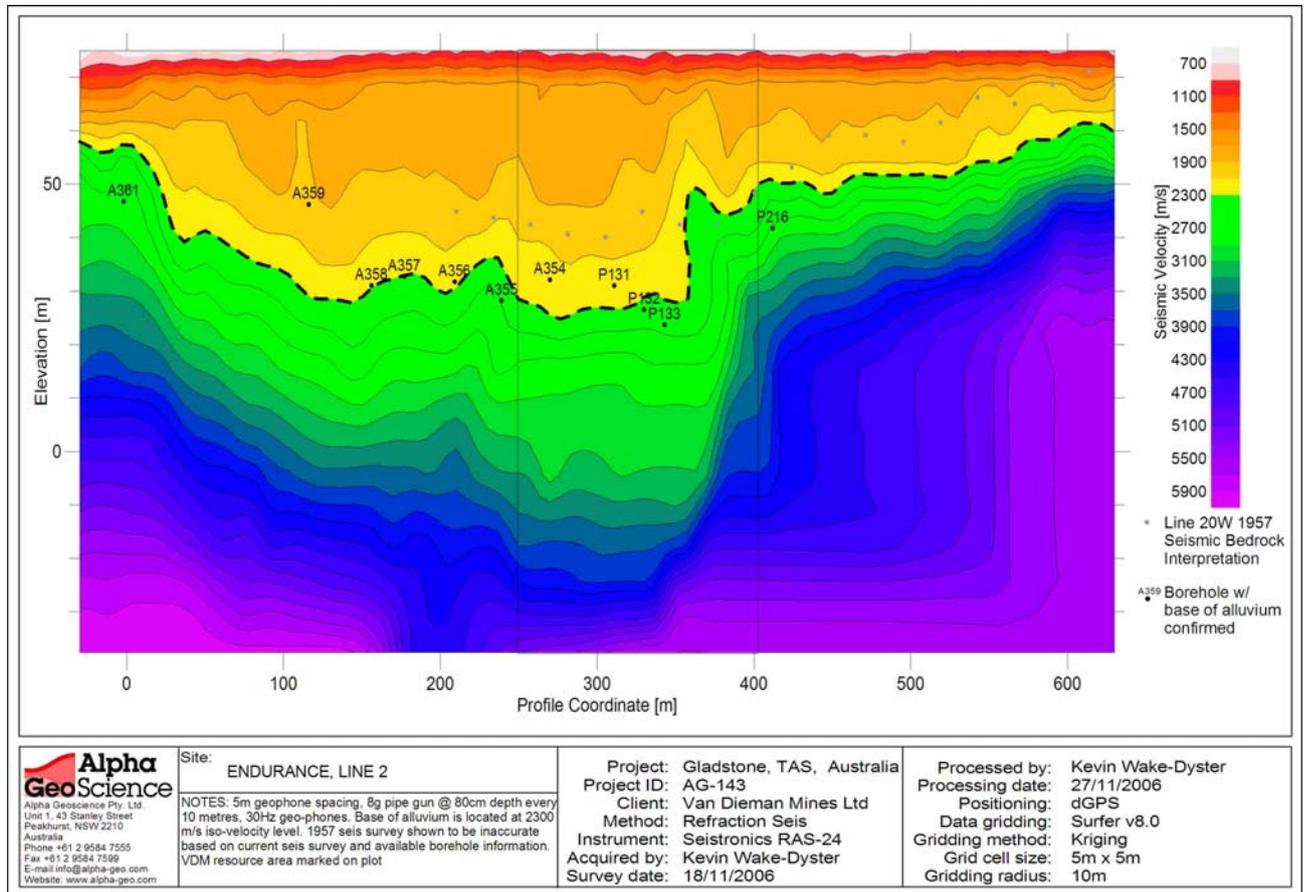


FIGURE 11: SEISMIC PROFILE - ENDURANCE LINE 1

Alpha report that the tomographic section shows correlation with the results of the drill holes along this line. Both modeled cross sections and travel time plots are presented in Appendix 9.3.

c. TOTAL FIELD MAGNETIC SURVEY:

Alpha also conducted four lines of Total Field magnetic. The magnetic data acquired across the Endurance site did not appear to show a mapable anomaly. The results are consistent with regional magnetic trend related to the regional geology, rather than localized geomorphologic palaeo-processes.

d. GIS BASEMENT MODELLING:

The continued acquisition of old drill hole data and recent DGPS survey location of drill holes has enabled VDM to update and upgrade the basement topographic map presented in previous reports. The three generations of basement topographic map are presented here along with the most recent line contour basement mapping. Figure 12 is the 2004 basement data, Figure 13 the 2006 data and Figures 14 and 15 the most recent data.

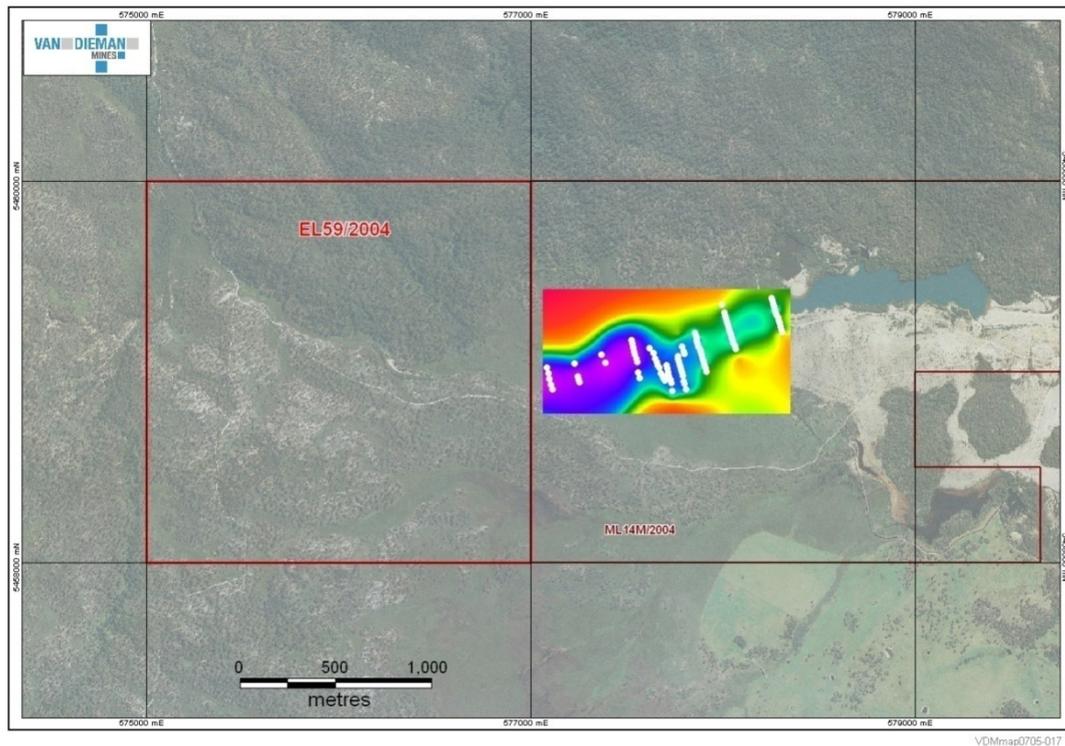


FIGURE 12: BASEMENT TOPOGRAPHIC MAPPING - ENDURANCE 2004

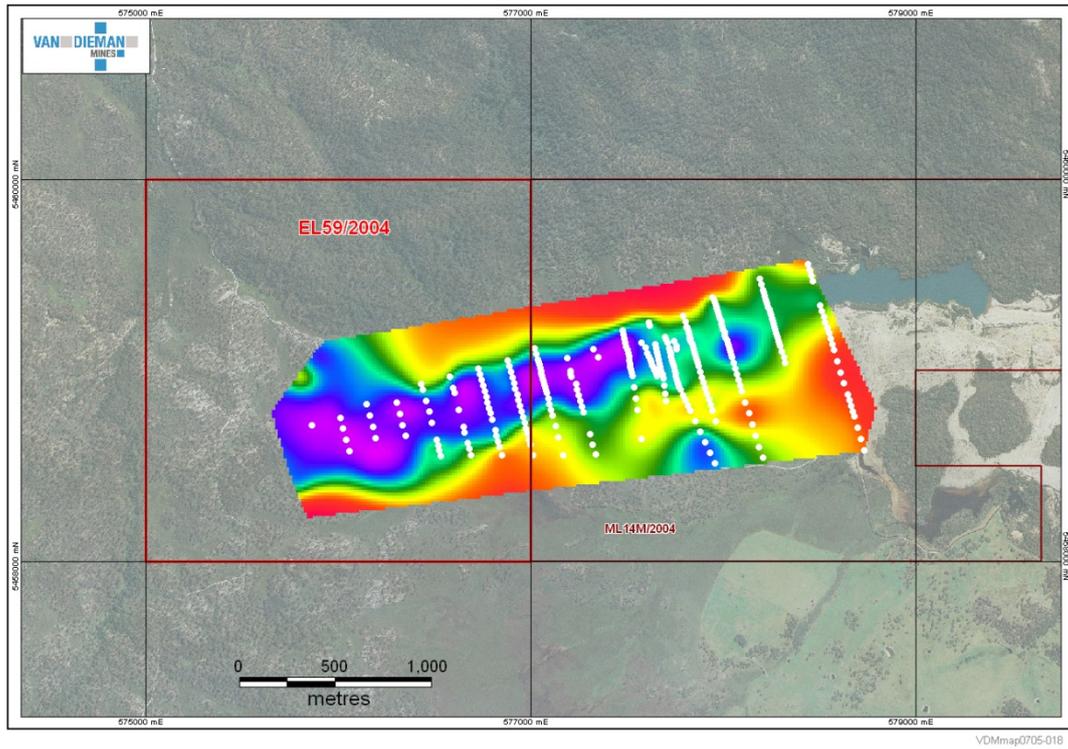


FIGURE 13: BASEMENT TOPOGRAPHIC MAPPING - ENDURANCE 2006

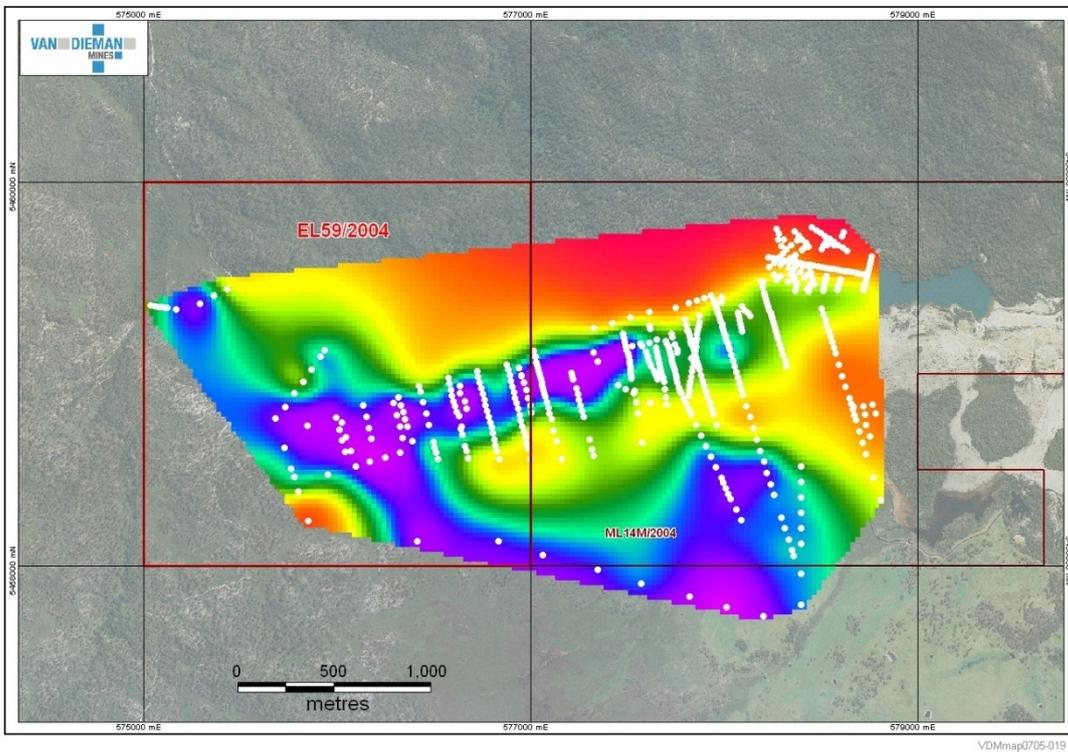


FIGURE 14: BASEMENT TOPOGRAPHIC MAPPING - ENDURANCE 2007

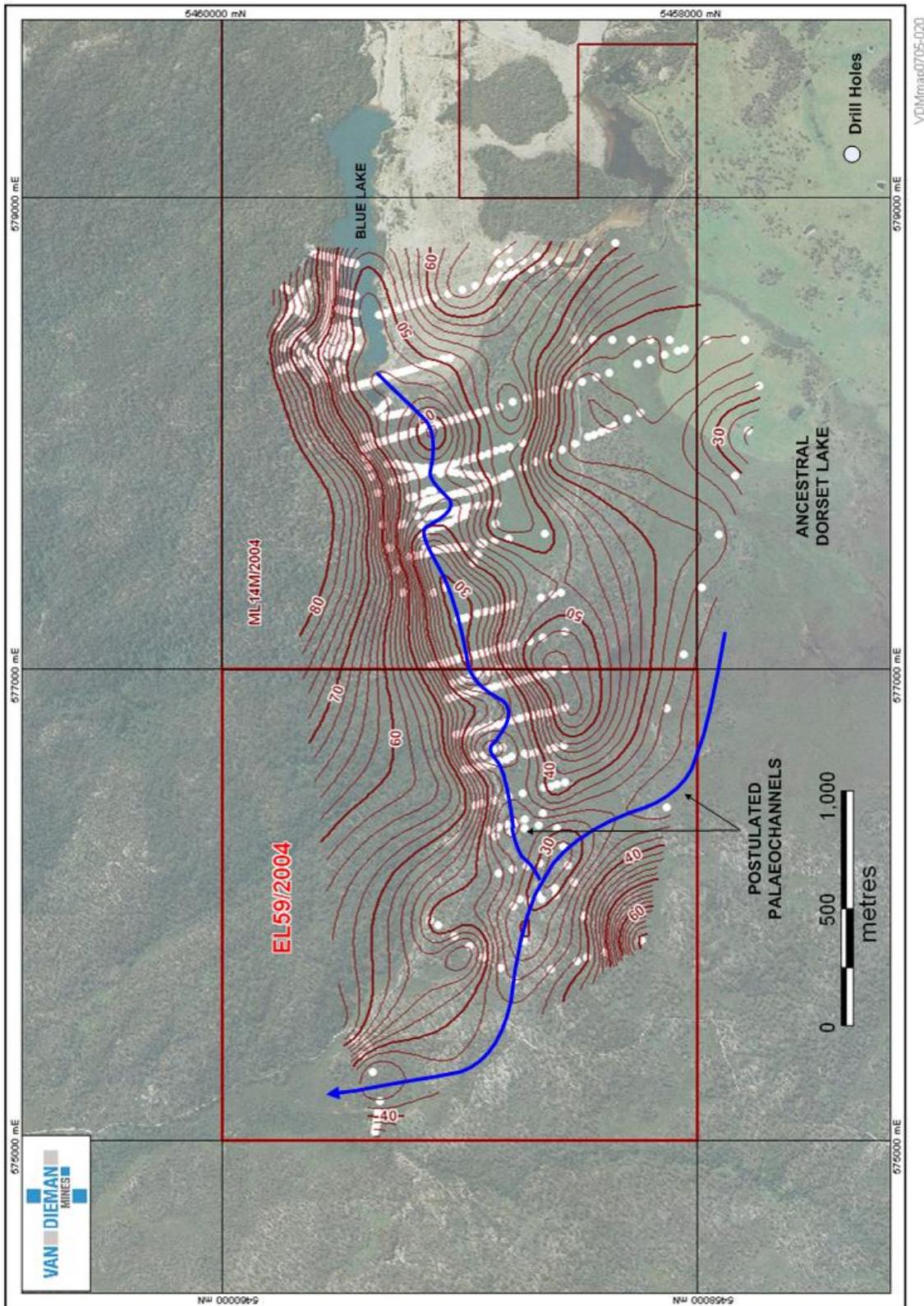


FIGURE 15: BASEMENT TOPOGRAPHIC CONTOUR MAP
ENDURANCE, 2007

Old drill hole such as that depicted in Photo 3.



**PHOTO 3: OLD DRILL HOLE WITHIN EL 59/2004
AT ENDURANCE**

The locations of the drill holes depicted on Figures 8, 9 and 10 are provided in AMG format in Appendix 9.4.

C. PIONEER:

Past field survey has been significant with new data added to the GIS database. The new data allowed X,Y and Z coordinate corrections to be applied and the basement topographic map enhanced. Figure 16 depicts current drill hole and ore resource boundaries within the adjoining VDM RL and this EL.

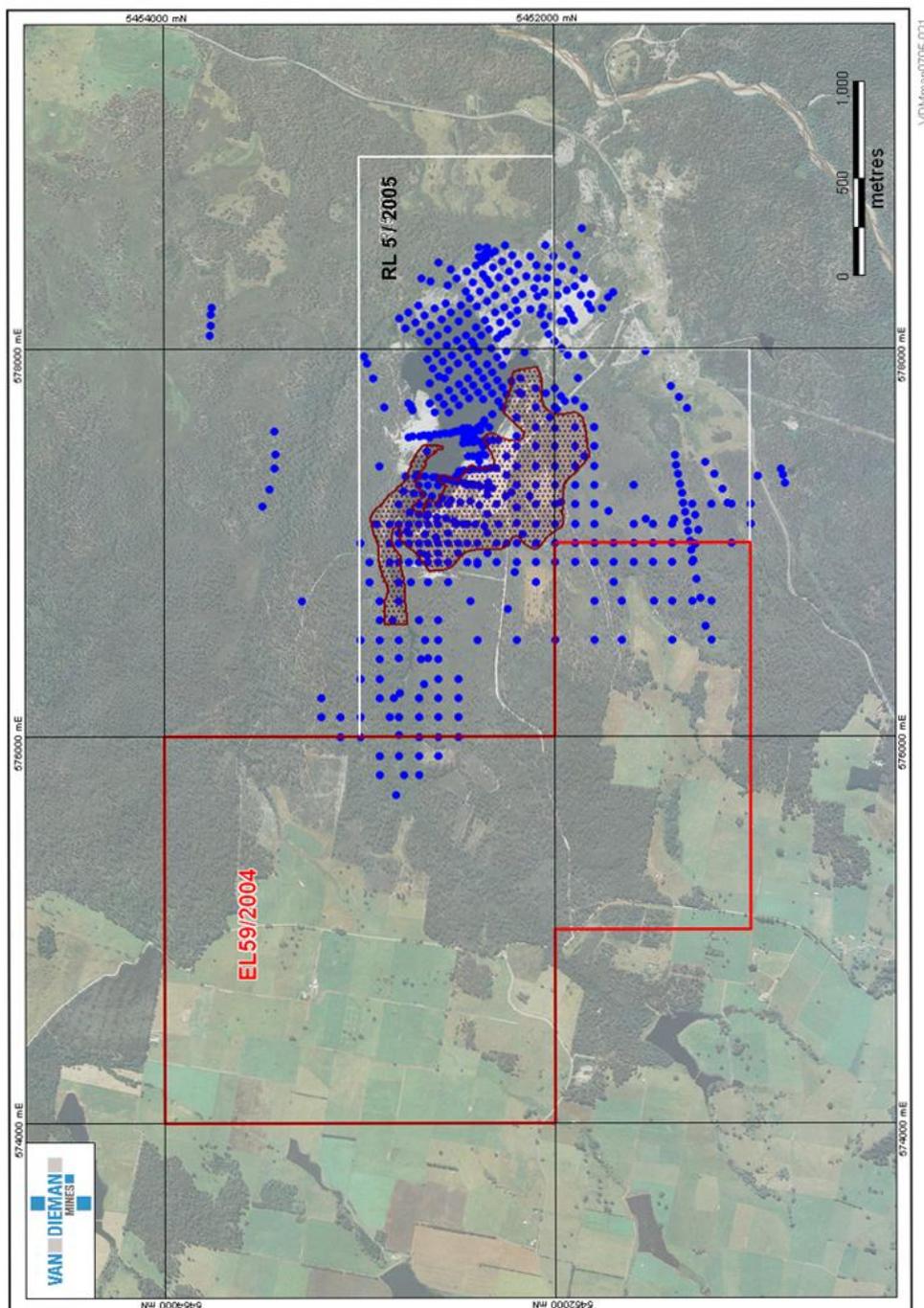


FIGURE 16: PIONEER DRILL HOLE AND RESOURCE LOCATION PLAN

Addition and accurate location of new drill hole information in the east and the west and south west of the old Pioneer Mine enabled VDM to update the basement topographic map for the Pioneer region. The three generations of basement topographic map are presented here along with the most recent line contour basement mapping. Figure 17 is the 2004 basement data, Figure 18 the 2006 data and Figures 19 and 20 the most recent data.

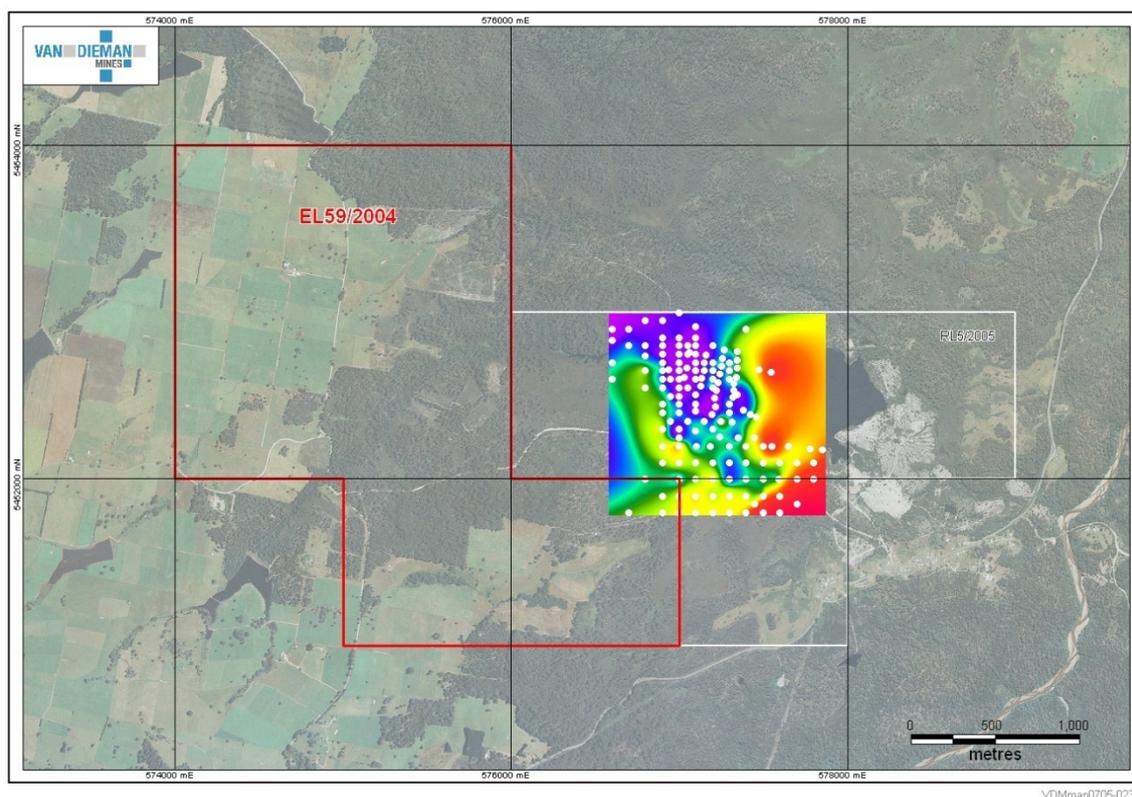


FIGURE 17: BASEMENT TOPOGRAPHIC MAPPING - PIONEER 2004

The data presented in Figure 17 represented uncorrected digitized location information taken from old Amdex drill hole and resource location maps of the period 1977 to 1983. Datasets were limited to only those areas within and immediately adjacent to the Amdex open cut workings at Pioneer. During the last three years several new sets of data were located and digitized to the VDM GIS database. In addition field crews managed to locate, in the field, many of the 1970 - 80 period drill holes. These enabled X, Y and Z controls on the digitized locations. Rapid improvements to the basement topographic may have been achieved, Figures 18 and 19 depict how addition of datasets has improved local knowledge.

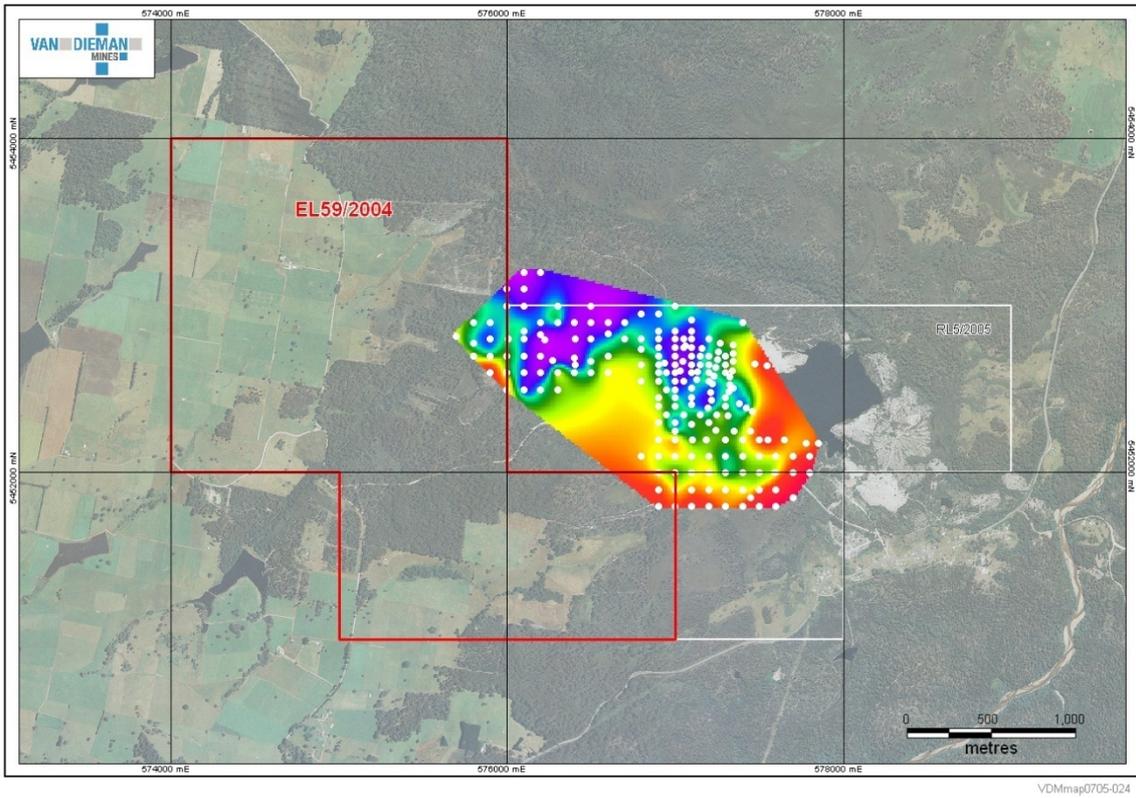


FIGURE 18: BASEMENT TOPOGRAPHIC MAPPING - PIONEER 2006

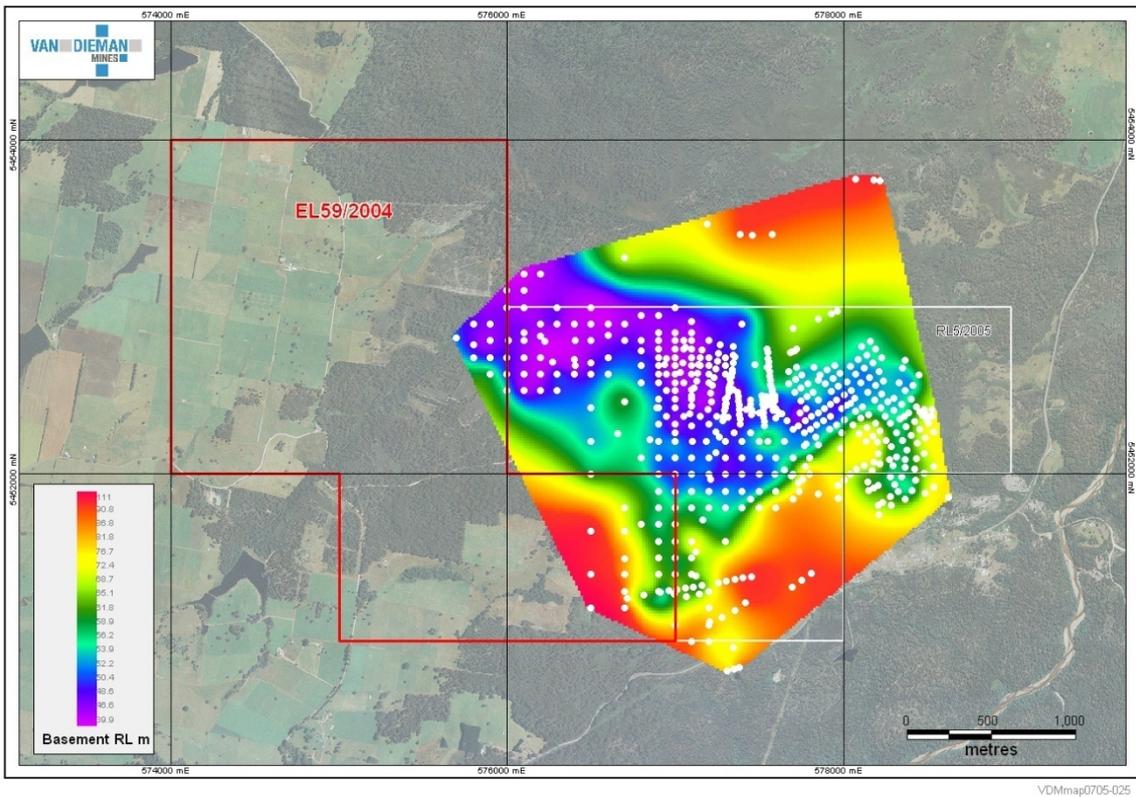


FIGURE 19: BASEMENT TOPOGRAPHIC MAPPING - PIONEER 2007

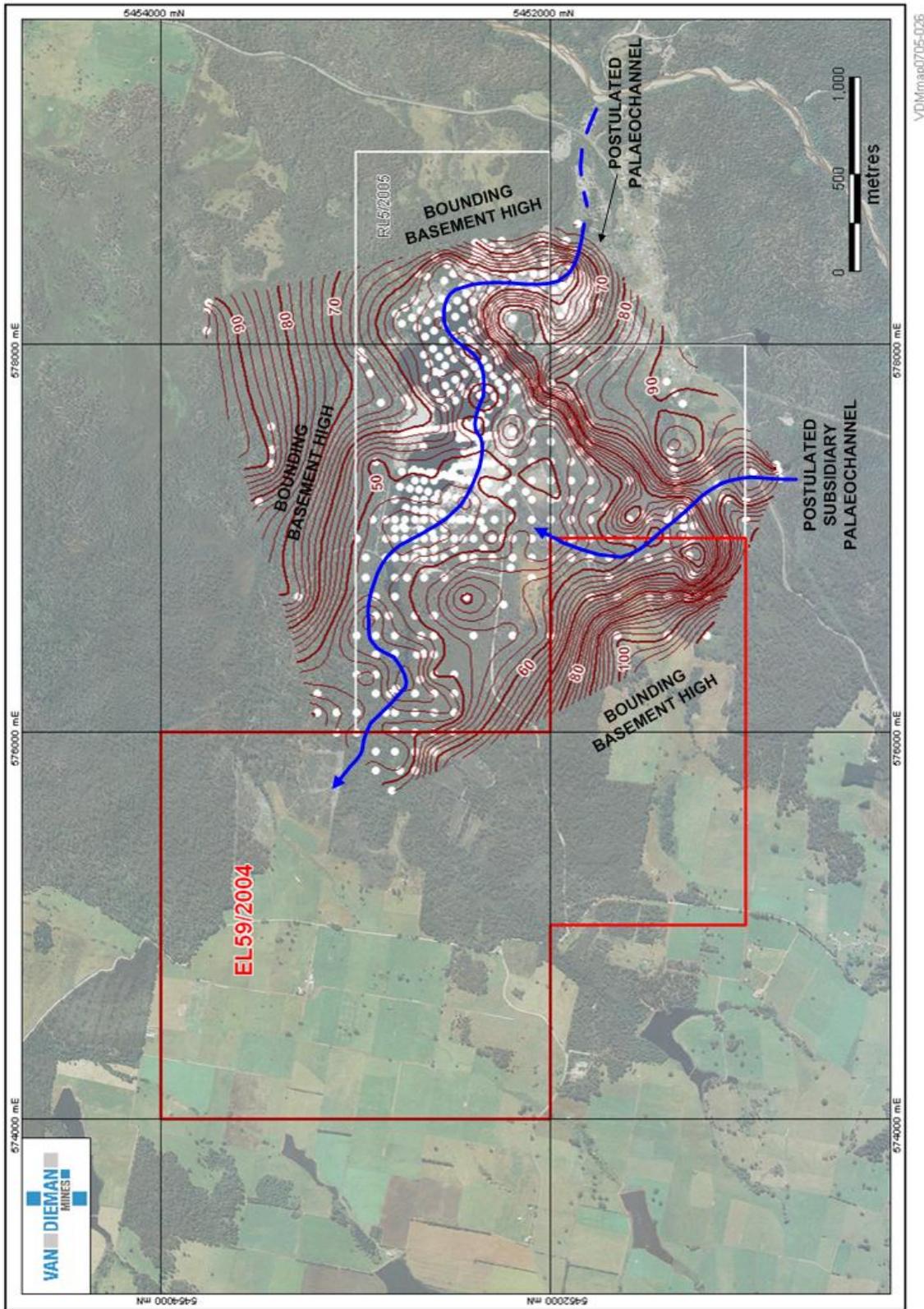


FIGURE 20: BASEMENT LINE CONTOURS - PIONEER 2007

5.0 DISCUSSION OF RESULTS:

The 2007 generation of topographic maps has shed new light on a number of geological interpretations of the alluvial orebodies at all three sites, Monarch, Endurance and Pioneer.

A. MONARCH:

Data generated by VDM has been applied on a regional basis to both EL 59/2004 and to the adjoining RL 6/2005. Basement topography indicates that a sharp change in stream profile (gradient) occurs within the small streams shedding the Mt Cameron Massif. This resulted in the deposition of a broader, fan like, alluvial deposit in the stream system below the change in gradient. Figure 9. This resulted in the deposition of the Shallamar Creek alluvial tin deposits at Monarch. Within EL 59/2004 alluvial tin potential is limited to along these steep and well incised stream systems, deposits will not be large but would be expected to contain higher grades of more coarse alluvial tin.

It is doubtful if any substantial alluvial tin deposits occur in the south west of the tenement. There is evidence of shallow workings throughout this block, all appear to be developed in eluvial material and thus are thin and erratic in nature. Basement in that area consists of Mathinna Bed meta-sediments rather than granitic rocks. Anecdotal evidence suggest the presence of minor hardrock gold deposits within this area.

B. ENDURANCE:

There have been dramatic changes in the bedrock representation within this section of the tenement. VDM has tried three ground geophysical techniques in the hope that they would define the basement basins that host the tin bearing palaeo-channels. None of these techniques met with any success due to the presence of highly conductive ground waters and difficulty in interpreting the break between highly weathered, clay rich basement and the overlying clay rich granite based alluvial sands and grits of the palaeo-channels.

Application of the GIS data to basement topographic representations has been very successful. Figures 12, 13, 14 and 15 indicate the progressive development of the basement topographic model. While the Endurance Lead remains the focus of alluvial tin mine development it now appears that that channel is subsidiary to a larger channel entering the tenement from the south east.

Previously VDM and other workers postulated that the ancestral Dorset Lake overflow was entirely responsible for the Endurance channel. While this may, in part, be true, it is now postulated that a much larger channel exists into which the smaller Endurance Channel flows. If this is the case then a major, but deeply buried, tin bearing alluvial target exists immediately at and just downstream of the confluence of the Endurance Channel with the larger north western flowing channel.

C. PIONEER:

The addition of a considerable number of new drill holes to the GIS database has resulted in a much more accurate picture of the basement at Pioneer. The new basement topographic maps, Figures 17, 18, 19 and 20 depict the development progress towards the 2007 basement plan. The tin bearing palaeo-channel has been more clearly defined and appears to indicate that the Wyniford Lead was in fact quite narrow and deeply incised into the palaeo-basement.

The major workings at Pioneer appear to have been developed at, and below, a major gradient change in that lead where the river profile flattened and a broader fan like tin bearing deposit was developed. The deposit was probably lake or swamp like. Profiles in the old pits indicate strong cross bedding and multi-directional water movement typical of a rapidly deposited fan type environment. The basement map further indicates that the fan deposit again narrows into a deeply incised, up to 50 metres, stream shedding westwards into open farmland towards the present town of Winnaleah.

In addition, a second subsidiary lead, probably the OK Lead, enters the Pioneer system from the south just to the west of Pioneer township. This lead is deeply incised and very narrow. The basement topographic depiction seen in Figure 20 indicates that erosion subsequent to the deposition of the Pioneer deposits may, during the early Tertiary and even in more Recent times, have removed much of the ancestral tin bearing OK channel to the south of Pioneer between that deposit and the current location of the Ringarooma River.

6.0 PROPOSED WORK PROGRAMS:

The current holder of this licence, Van Dieman Mines Pty Ltd, is currently in liquidation, the company having been placed in Administration on 27 February, 2009. Since the appointment of Administrators, all operations have been subject to review with the nearby Scotia Mine currently on Care and Maintenance.

The services of the company's Exploration Manager were terminated by the Company prior to the appointment of the Administrators and there have been no further exploration work on these tenements since that time. Ongoing work programs are currently subject to review and it is hoped that this review process will be finalised by the end of 2009.

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Geological Survey of Tasmania, Bulletin 35.

8.0 APPENDICES:

9.1 DRILL HOLE LOCATION DATA SHEETS, MONARCH

See Separate Electronic File EL592004_200704_02_Appendix

9.2 GPR REPORT, ALPHA GEOSCIENCE

See Separate Electronic File EL592004_200704_03_Appendix

9.3 REPORT, ALPHA GEOSCIENCE

See Separate Electronic File EL592004_200704_04_Appendix

9.4 DRILL HOLE LOCATION DATA SHEETS, ENDURANCE

See Separate Electronic File EL592004_200704_05_Appendix

9.5 DRILL HOLE LOCATION DATA SHEETS, PIONEER

See Separate Electronic File EL592004_200704_06_Appendix