Report :file11-2008/ 4

ANNUAL REPORT FOR THE PERIOD 16/12/2011 TO 16/12/2012

MT.CAMERON EXPLORATION LICENCE

EL 11/2008

Author

J.I.Stewart M. Sc
B. Sc (Hons)
MAIMM, MAIG,
Dip.Ed

DATE: 4thDec.2012

COPIES:

- **MRT**, Tin Dragon,
- JI Stewart -Perth

ABSTRACT

EL 11/2008 Mount Cameron was granted on 16thDecember 2008 .It is 50sqkm in area and was applied for to explore for the potential for open pittable disseminated tin, gold (and other heavy mineral) deposits that might in part be responsible for the extensive alluvial-colluvial deposits mined in the drainages on the perimeter of the paleohigh to Mt.Cameron.

This concept has been further evaluated in the 2011-2012 period during the research of the historical maps housed at the MRT ,Van Diemen Mining Reports on the Endurance and Endurance West ,and Monarch resources.

Work during the annual period comprised research and evaluation of the tenement in more detail in the following areas ;

-- at its southern boundary ,specifically Clifton and New Clifton and analogue positions

-- in the perimeters of the Monarch Resource to the north, east and south.

--and the structural –textural feature of the Mt Cameron Massif utilizing pre 1960s aerial photography from the MRT map room, and various satellite images from the 1980s to 2011.

Potential for shallow colluvial and bedrock cassiterite occurs;

---in the Clifton area

--- in analogue positions along the sw toe of Mt Cameron.

Particularly along the intersection of large NNW –trending structures and the fertile Endurance Structurally controlled drainage.

---The area along the northern toe of the Mt Cameron Massif - in the hinterland of Monarch.

CONTENTS

1.INTRODUCTION

Exploration Rational – see previous reports.

License

Tenement Number EL11/2008

Beneficial Holder

The Tenement was transferred by James Stewart. P.O.Box 7298,Karawarra,PERTH 6152 to Tin Dragon Pty Ltd in 2011.

This will help to consolidate the resource potential areas along the northern perimeter of the old Endurance Dredging and the Monarch Resource area.

Area

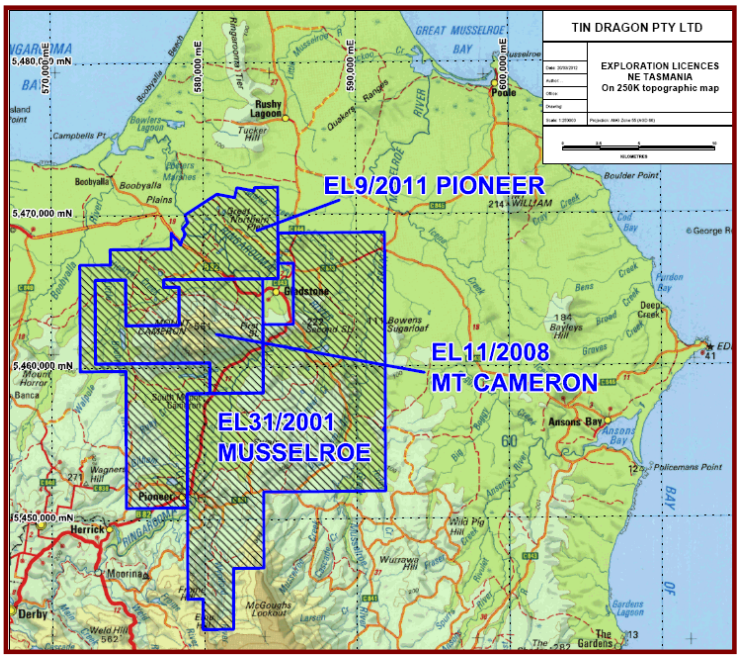
The project area is currently encompassed by a 50 sq. km Exploration Licence, EL 11 / 2008. The current rental has been paid to extend the full 50sq.km of tenure to yr 2013.

Specifically:

Date of Grant	16 / 12 / 2008
Date of Expiry	16 / 12 / 2013

Tenement Location

The Mount Cameron Project is located in north east Tasmania approximately 85 kilometers north east of the City of Launceston .Mt Cameron is a Granite massif just west of the Pioneer to Gladstone Road. Access to the perimeter of the project area is excellent. However, assess to the core of the tenement is extremely limited. An all weather sealed road services the townships of Gladstone and Pioneer and a well formed gravel track provides heavy vehicle access from that public road to the project site.



The Tenement is located over the land tenure known as private land, Crown land, Forest Reserve and State Forest.

Reporting Period is 16th December 2011 to 16th December 2012.

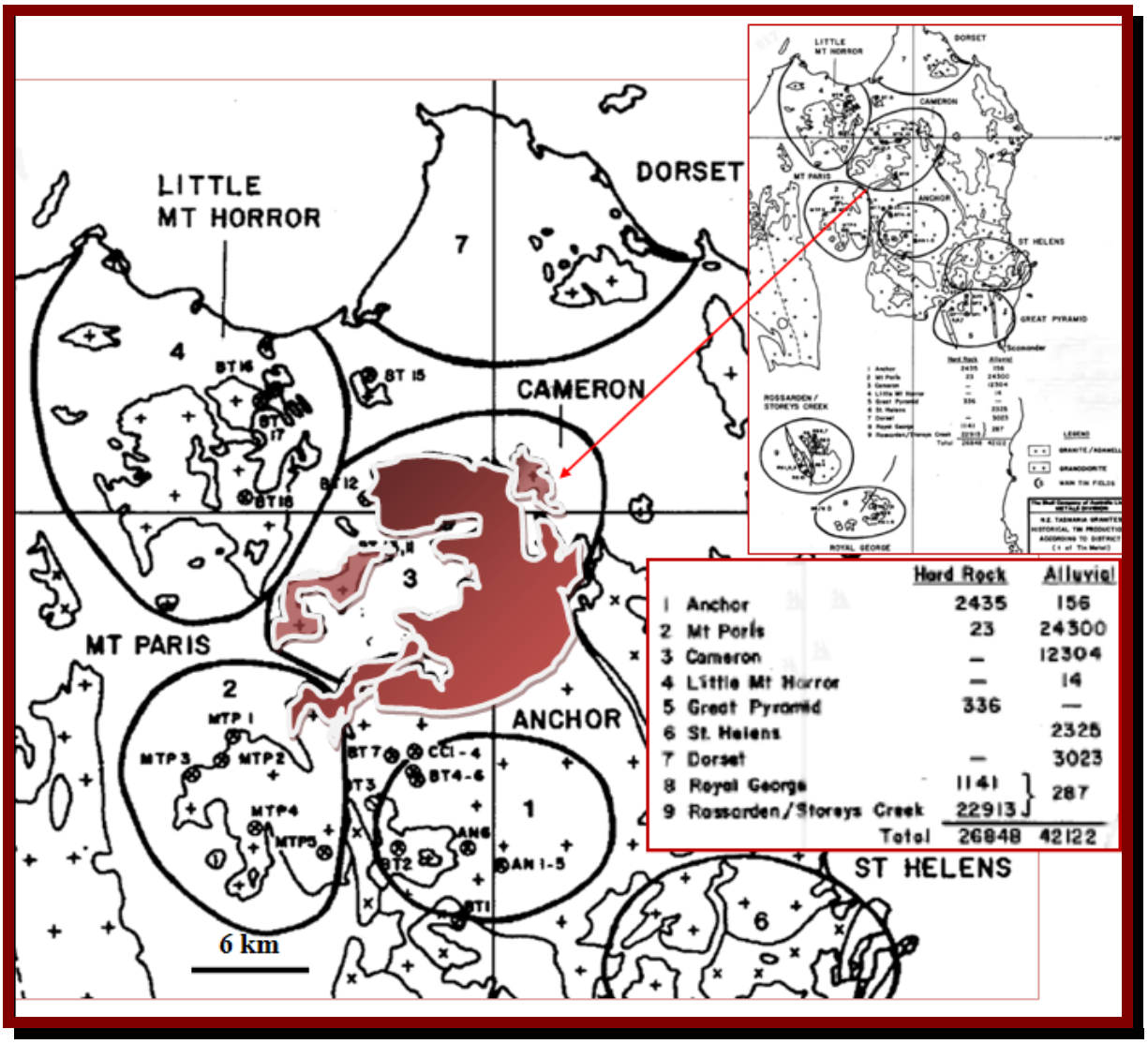
2.REVIEW OF PREVIOUS WORK

Prior to Current Tenement – see previous Annual Report file11-2008/ 01

3.Regional Geology and Mineralisation – see previous Annual Report file11-2008/02.

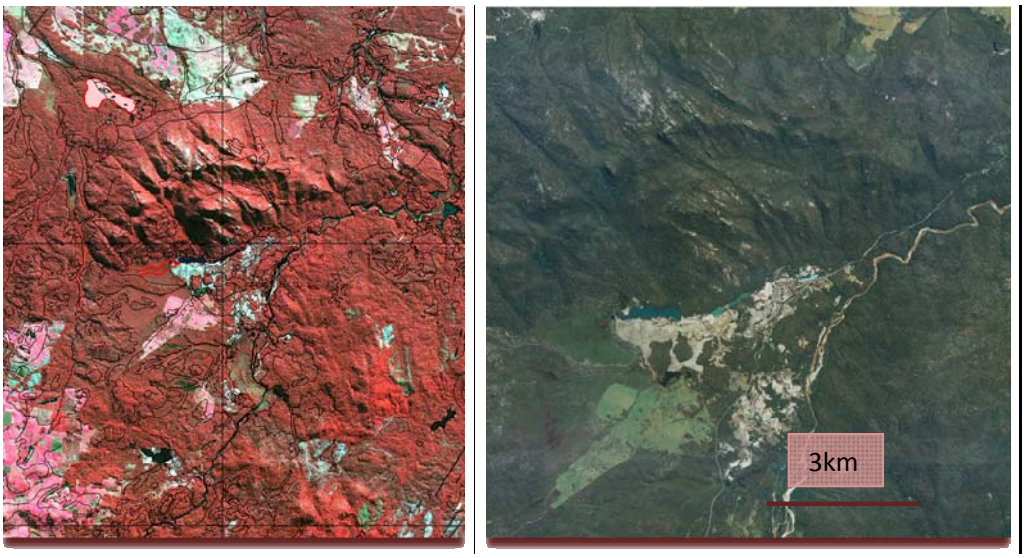
Mount Cameron is massif of granite/adamellite mapped on the northern part of the Blue Tier Batholith for which it has a petrogenetic affinity. Length wise it has an E-W (northern margin) to west south westerly (southern margin) trend becoming SW on its western extremity.

This is partly manifested by a shallow recent sediment block to the south and a very significant fault corridor along its southern flank. On the Southern Flank this regional scaled faulting hosts the Endurance Tin System, between 6 and 8 km long. The Fault Corridor is a long lived ,westerly downward stepping brittle megafault swarm in “granite”.



		Hard Rock	Alluvial
1	Anchor	2435	156
2	Mt Paris	23	24300
3	Cameron	—	12304
4	Little Mt Horror	—	14
5	Great Pyramid	336	—
6	St. Helens		2325
7	Dorset	—	3023
8	Royal George	1141	287
9	Rossarden/Storeys Creek	22913	
	Total	26848	42122

When the tinfields of NE Tasmania are grouped by spatial relationship it is apparent that the Mount Cameron Block (Billiton-1991) is host to an endowment by production of over 12,304 tonnes of Cassiterite (the Rossarden Block hosts 23,000 tonnes and Mt.Paris Block 24,300 tonnes).



The structural character of the Mt.Cameron massif is dominated by (figures above);

-- The WSW trending slice through the massif – hosting the Endurance “gutter” over 6to 8km in length

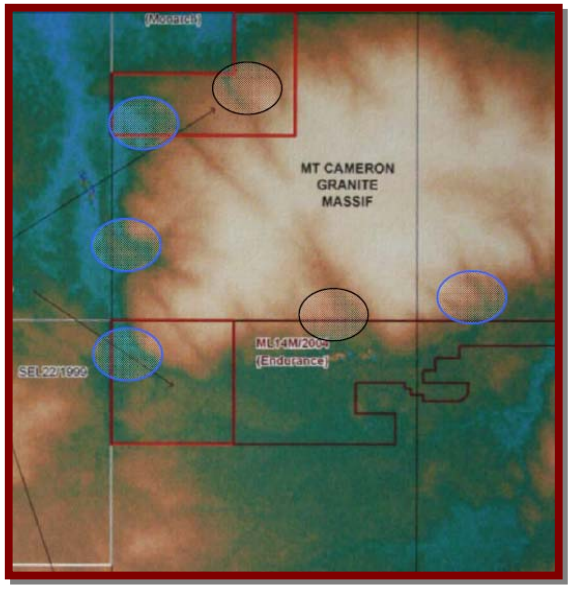
-- Arcuate rinds and zonation in the core of the massif?

-- A series of >9km long radiating fractures- centered on the Wyniford Lead area. These transect >60% of the outcropping massif and are ;

-Influential in hosting the Monarch alluvial blocks

- The wedge shaped alluvial-colluvial and debris fans off the slopes of Mt Cameron

- And the systematic transverse and vertical fault blocks along the length of the Endurance “gutter”.



--Effective in the recycling and redeposition of Sn-Ti-Zr-(Au) etc in the “western block down” array.

4.EXPLORATION COMPLETED DURING CURRENT REPORT PERIOD

Prospect based exploration Activities

1.Further data compilation especially in the Monarch (1a) and Clifton (1b) areas and

2.Further investigation of prospectivity on the Mt Cameron tenement.

1a -MONARCH TIN DEPOSIT and surrounds on EL 11/2008

Monarch itself lies on the northern flank of Mt Cameron.

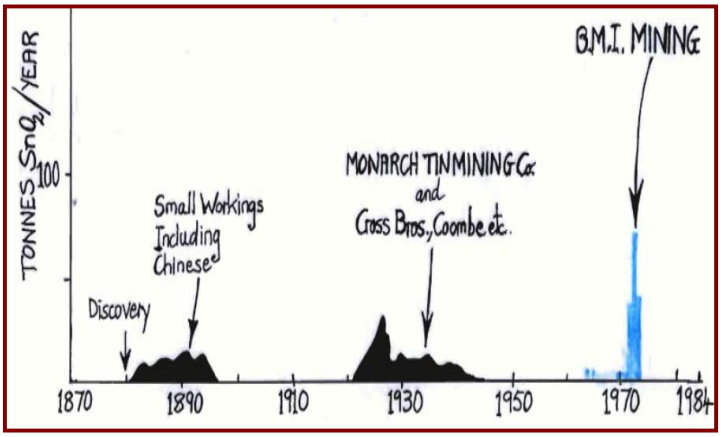
The project occupies a relatively flat basin –like depression immediately adjacent to the north and NW slopes of Mt Cameron at elevations of around 50 meters ASL. From the southern boundary of the project the topography rises sharply to the peak of Mt Cameron at an elevation of 550to 600meters ASL. To the north the basin is bounded by a low ridge of granitic and Tertiary alluvial rocks that rise some 25 meters above the basin floor.

History

1800s Tin was discovered at the Monarch site in the 1800s and was initially worked by Chinese prospectors. Production records are incomplete.

1922 to 1936 The Monarch Tin Mining Company worked the area and historical production up to and including the period was approximately 71.5 tonnes of concentrate. During the 1930s drilling was undertaken.

Monarch Recorded Tin Production	
Year	**Tonnes Sn-Conc.**
1923	8.99
1924	21.05
1925	6.31
1928	21.214
1929	8.8
1934	2.3
1936	2.85
Total	**71.514**



1963 V.Woods undertook mining and drilling.

BHP entered into a Joint Venture with Woods over the mine and surrounds (SPL399).

Drilling completed was on 322meter spaced lines and 80.5m hole spacing.

They were able to outline a resource of **2,909,300 Cu yds at 5.8oz Sn conc. per cu. yd** (for **470.1tonnes** concentrate). Their work was primarily in five resource blocks or three NW-trending mineralized zones (coinciding with the current drainages)-W.S.Chesnut 1965.

The tin wash layers are between 15 and 20ft thick.

Seismic geophysical lines were trialled around the northern and western rim of the Mt Cameron Massif with the aim of locating “gutters’ in the granite basement.

1965 Austminex Pty Ltd

1966 Kathleen Investments conducted limited testing on Bonser Creek.

Consultant to Kathleen Investments (Hughes 1967) considered that the BHP resources estimate was too conservative.

The Company undertook 50 backhoe pit tests...”unfortunately in the most promising areas the hoe could not bottom the leads. In one hole that bottomed at 11ft 6 inches the last foot returned tin at 10lbs /cu.yd. Hughes recommended a programme of drilling up stream of the alluvials –40holes at 20ft depth.

1968 The Endurance Tin Mining Co purchased the property, and produced 355tonnes of cassiterite.

1970 to 1973 Blue Metal Industries (BMI) took over the area .They undertook mining and extensive auger drilling until mine closure in 1973.

According to Ingram (1977-in Yim 1990) BMI produced 52tonnes of tin concentrate between

1970-1972. Infill auger holes were on 80m x 80m spacing. BMIs D-Block resource coincides with the BHPs B-Block. At the time that area was concealed by a large BMI waste dump and treatment plant.

1974 Geologist Thomas reported that Quirk had difficulty reconciling the old cross-sections with plan records and consequently calculated a smaller tonnage of 1,400,000 cu.yds with a grade of 5.6 oz (or 266.7gms) / cu.yd.

Recovered mining grades tended to be higher than those indicated by drilling.

1977 to 1980 Amdex Mining Ltd drilled 44 reverse circulation holes (100meter spaced lines and 25 meter hole spacing) and 9 cable tool holes and also completed further ore reserve definition.

They outlined possible Resources of 1,800,968 cubic meters grading 353gm/cu.m *OR* **2,437,032 cu.m at 296.7gm/cu.m** for 636 and **723 tonnes**, respectively, of 70% tin concentrate.

1980- 2000 no significant work undertaken at Monarch. AMDEX (1981) recalculated the possibility of 3million cubic meters grading 250gms cassiterite in a series of channels and fan deltas, complicated by marine incursion in the west.

2000 Mineral Holdings explored the area under EL 10/2000 .Consultants Nuigini Resources undertook ore reserve calculations as well as 10 trial pits in the SW resource area (B-lens).

Their work estimated that A+B+E lenses contained 556,751 BCM grading 1.22kg tin conc. per BCM (for **687 tonnes Sn conc**.) as well as 19gm/BCM ZrO2 and 48gm/BCM of rutile -illmenite.

Indicated resources at D-lens were calculated as 59,100 BCM at 139gm/BCM.

Mineral Holdings concluded that their work confirmed the tenor and general outline of BHPs work.

2001 Nuigini Resources Pty Ltd (Kinnane 2001) also reported:

> A+B+E Lenses 556,751 cu.m at 1.22kg (1,220gm/cu.m) Sn conc. /BCM (679tonnes Sn conc.; waste: ore 3.5:1)-excluding the overburden material.
>
> Indicated Resource D-lens 59,100 cu.m at 139gm Sn. conc.
>
> Zr 19gm /cu.m and 48gm/cu.m Rutile, Ilmenite.
>
> Nuigini-Resources (2001)..”indicated recoverable quantities of zircon, rutile, ilmenite, monazite”...”further exploration around the southern and eastern boundaries of the resource can be expected to further increase the resource”....

- Nuigini Resources (2003) interpreted that ***E-Block (in the SE) was open to the SE but outside its tenure holding at the time***

2003 McPherson Duncan Associates calculated that the resources were worth a$3,500,000 based upon a prevailing tin price of A$7,465.

2003-2008 Van Diemen Mines held the property with work limited to data entry to electronic format and resource calculations.

Askins and Stewart secured the surrounding area and undertook data compilation and remote sensing studies as part of the overall ***Mt Cameron Exploration Licence***.

2009-2010 Van Diemen Mines forfeited their tenure.

2011 Tin Dragon Pty Ltd applied for and was granted an Exploration Licence over the Monarch deposit bringing together all the know resources, their extensions and other potential targets.

Geological Setting

Regional

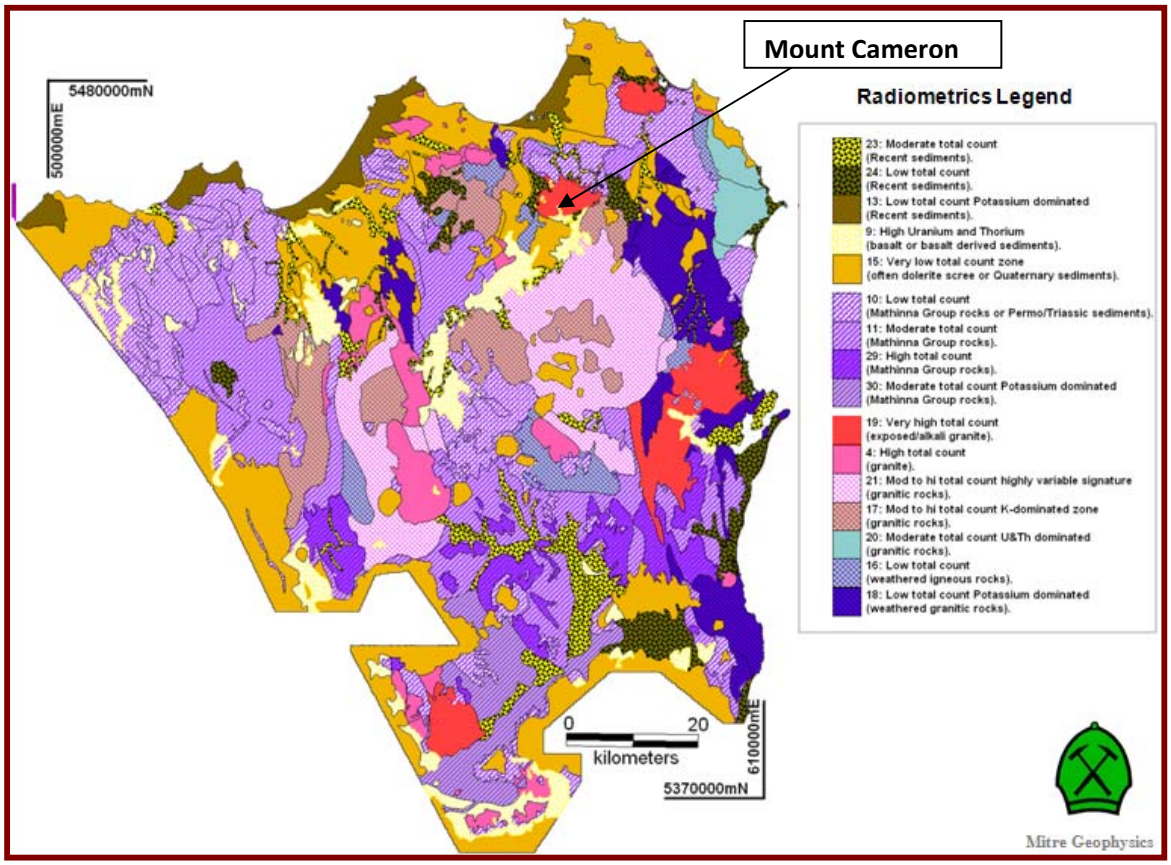
The basement at Monarch is dominated by a suite of Paleozoic acid igneous intrusive and metasediments. Cassiterite bearing alluvials developed on the older units are of Tertiary age.

Devonian-Carboniferous Intrusives

The Mt Cameron massif bounding the project to the south consists of a sequence of acid igneous rocks; coarse grained inequigranular to porphyritic, coarse grained biotite and biotite/muscovite granites and adamellite.

The two mica granites are generally topaz bearing and the biotite is often altered. Cassiterite has been detected occasionally.

Mt Cameron is one of the 2 most radiometric and more “alkalic” granite plutons in the Blue Tier Batholith (see below).



On the southern flank of the massif a number of medium grained granitoid “facies “have been observed.

Mathinna Beds

Metasediments of Ordovician to Devonian age are located to the north and east of the Monarch area. Locally they exhibit contact metamorphic effects and include psammites, spotted pelitic rocks and schist.

Straddling the eastern margin of the Monarch area the sediments exhibit the effects of contact hornfelsing. If so this would be a prospective location for primary tin, tungsten bearing vein arrays.

The East Monarch sediment – granite contact has not been explored and is partly soil covered.

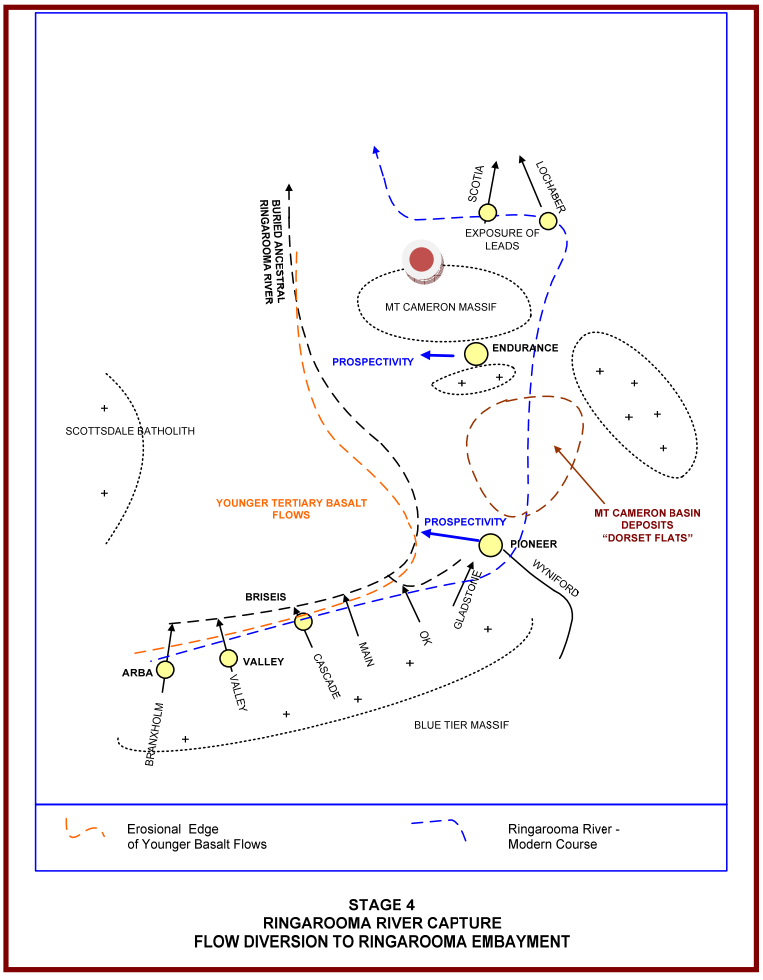
Cainozoic

Tertiary Alluvials

The Monarch alluvials are almost certainly both Tertiary and Quaternary in age.

The Monarch tin system is an isolated drainage off the northern face of Mt Cameron. It is very difficult to relate this area to the various postulated courses of the Ringarooma paleodrainage without contemplating its presence across the submerged Mt Cameron massif and subsequent stripping during isostatic uplift and/or retreat of the alluvial –marine drainage “front”.

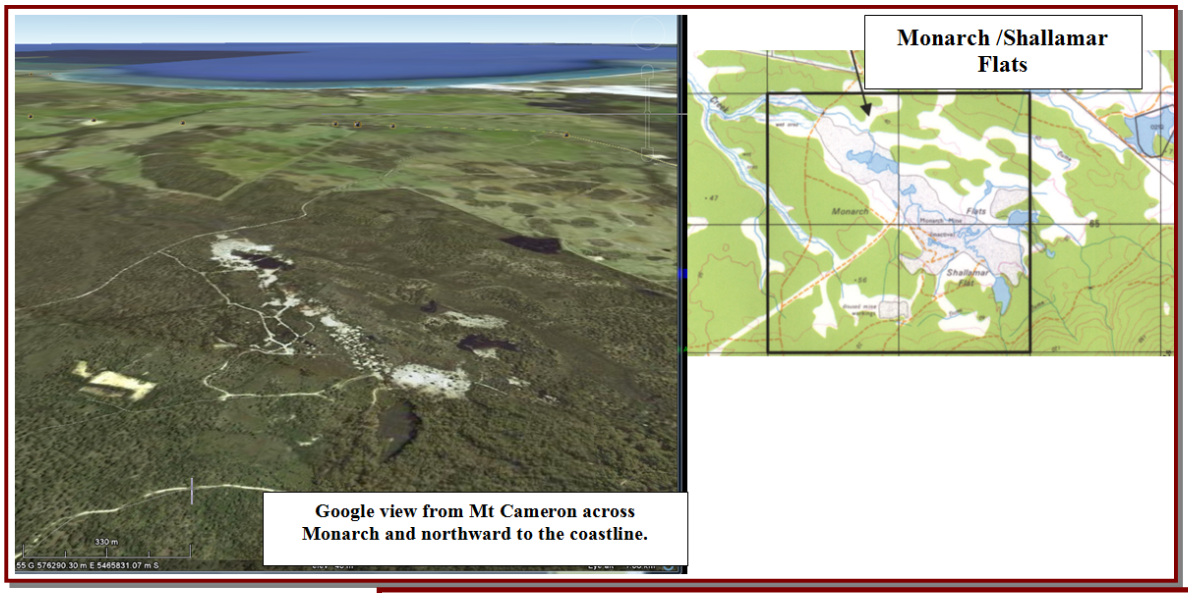
MONARCH



STAGE 4
RINGAROOMA RIVER CAPTURE
FLOW DIVERSION TO RINGAROOMA EMBAYMENT

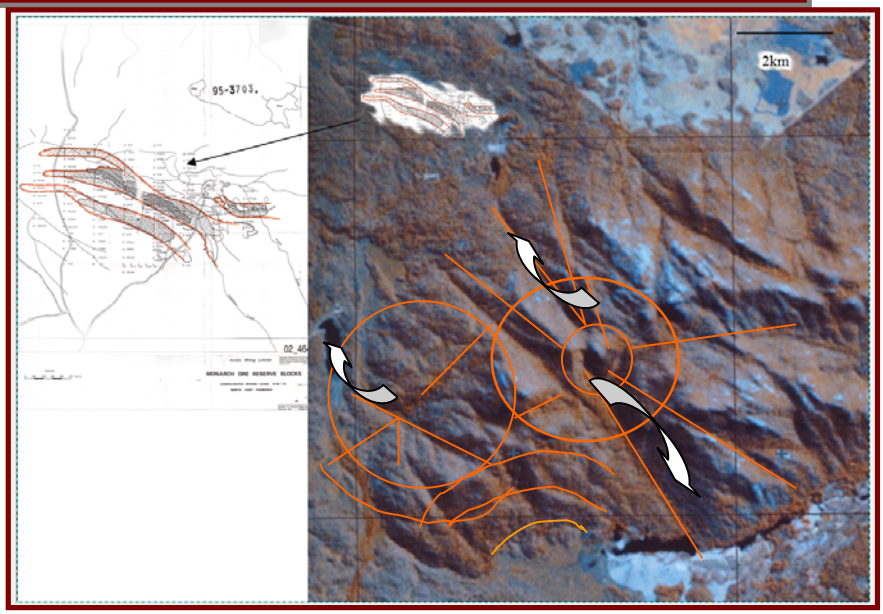
Local Geology

In its presently preserved position the Monarch tin system is characterised by at least 4 NW trending, sub parallel, stanniferous drainage corridors or streams in a 2,000meter x 2,000 meter block. The Vicarys Creek, Shallamar Creek and Little Boobyalla Rivers are the central drainage in the Shallamar or Monarch Flats (see topographic map below).Locally the drainages are also characterised by pods or flats of sedge, wet heath, and button grass.

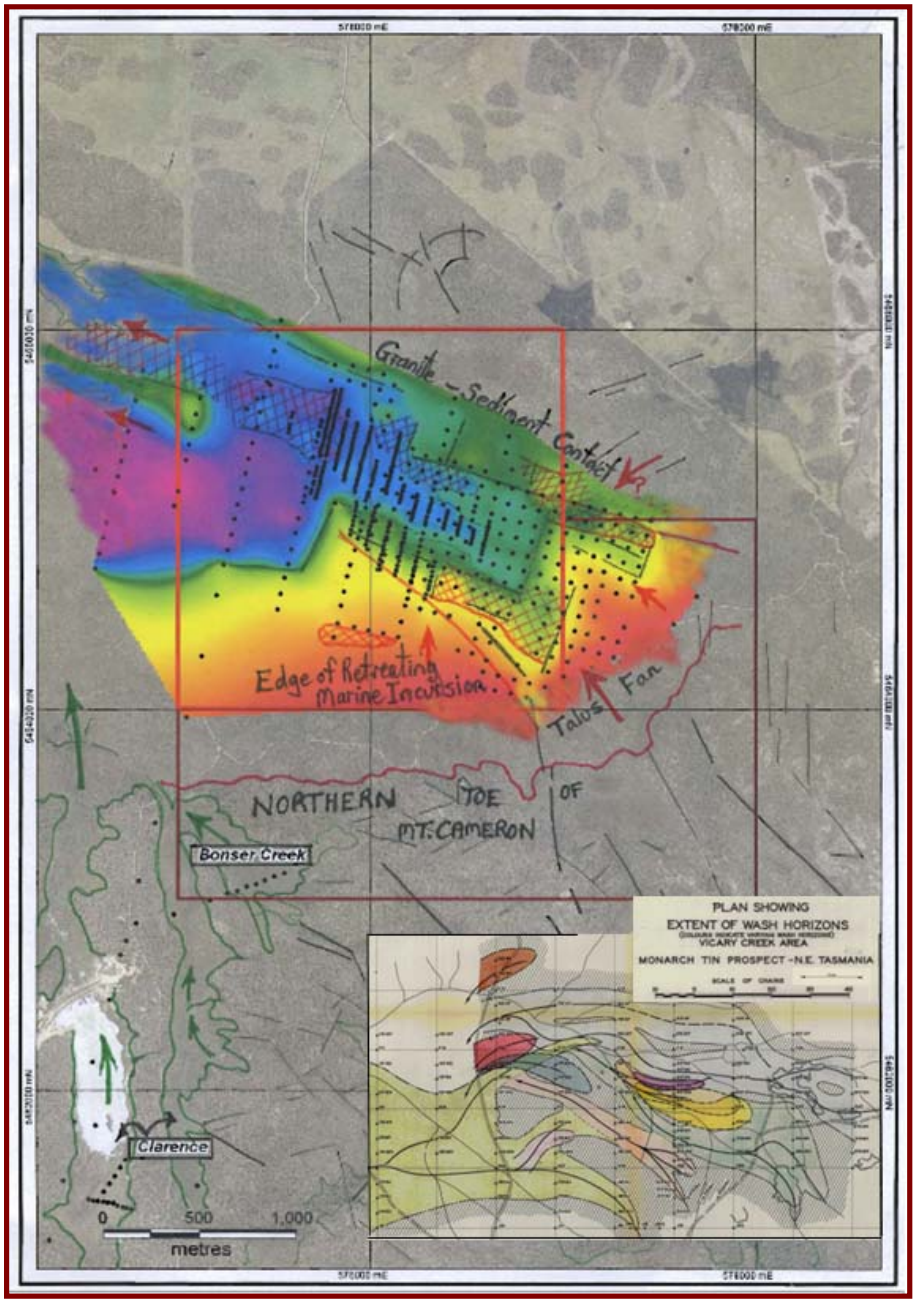


The alluvial tin deposits mimic the trend of the current creek systems (resource blocks A to E by AMDEX – inset to right) and in part the trend of large brittle fault arrays that pass through the Mt Cameron massif .

Satellite imagery suggests a possibility of eroded cupolas in the core of the massif.

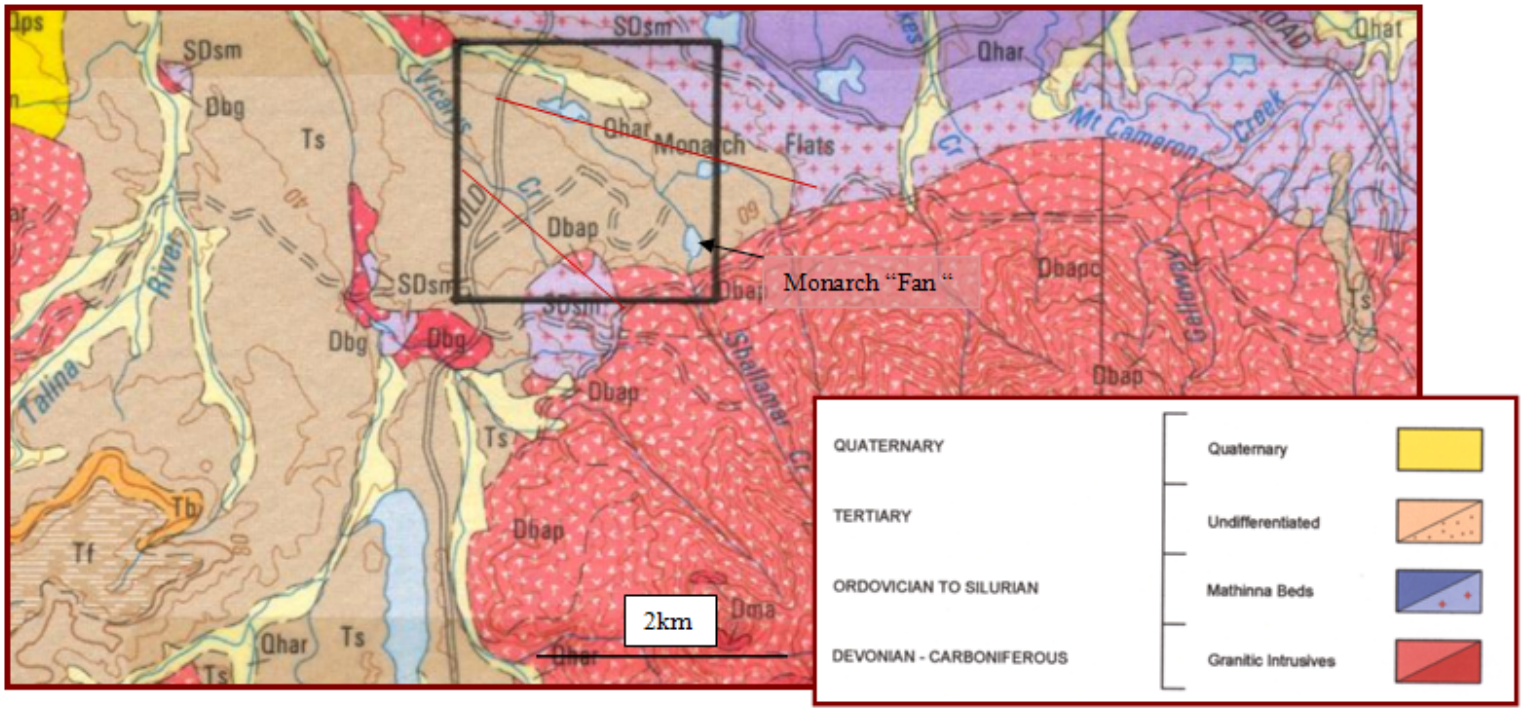


The contoured “wash” zones (coloured inset right, depth to bedrock isopachs constrained by drilling) , overlapping lower grade tin bearing material, and alluvium isopachs (image below showing drilling depth to basement, and near mine potential) at Monarch suggests deposition of gravels, reworking of older cover, and slumping being parallel to the “range –front” (toe of Mt Cameron).



The Monarch stanniferous “alluvials” (Tertiary and Quaternary host sediments) are underlain by weathered granite basement (Devonian-Carboniferous) against a NW trending contact with Ordovician-Silurian Sediments (Mathinna Beds).

The geological contact is regional in nature (5km in length) and appears to be intruded by a dyke of “granitoid” .The array of Ordovician – Silurian? sediments, a swarm of E-W jointing to the east and a 1km diameter circular feature suggest the possibility of primary tin located at the head of the alluvial/reworked colluvial Monarch Fan.



Potential

Based upon the reconstruction of catchment size, source–trap relationships and recycling potential of the alluvial systems in the region;

1.a. The endowment of the entire Monarch fan with ore blocks A to E and intervening material- 600 to 1500 tonnes cassiterite potential.

b. The multiple layers of tin bearing wash, bulk treatment of the wash zones .

c. The extension of Blocks A,B and E to the south and SE up against the granite contact- incremental tonnages and/or gradation into semi colluvial and elluvial zones.

d. The extension of the tin wash to the west –following the E-W trending exhumed range front.

e. the extension of the primary tin drainage to the NW for 2,800 meters along the prominent sediment –granite contact.

2.a. The potential for blind, analogue Monarch alluvial-fan systems 2km to the west (Monarch West fan).

b. the northern extension of the Clarence Deep Lead .

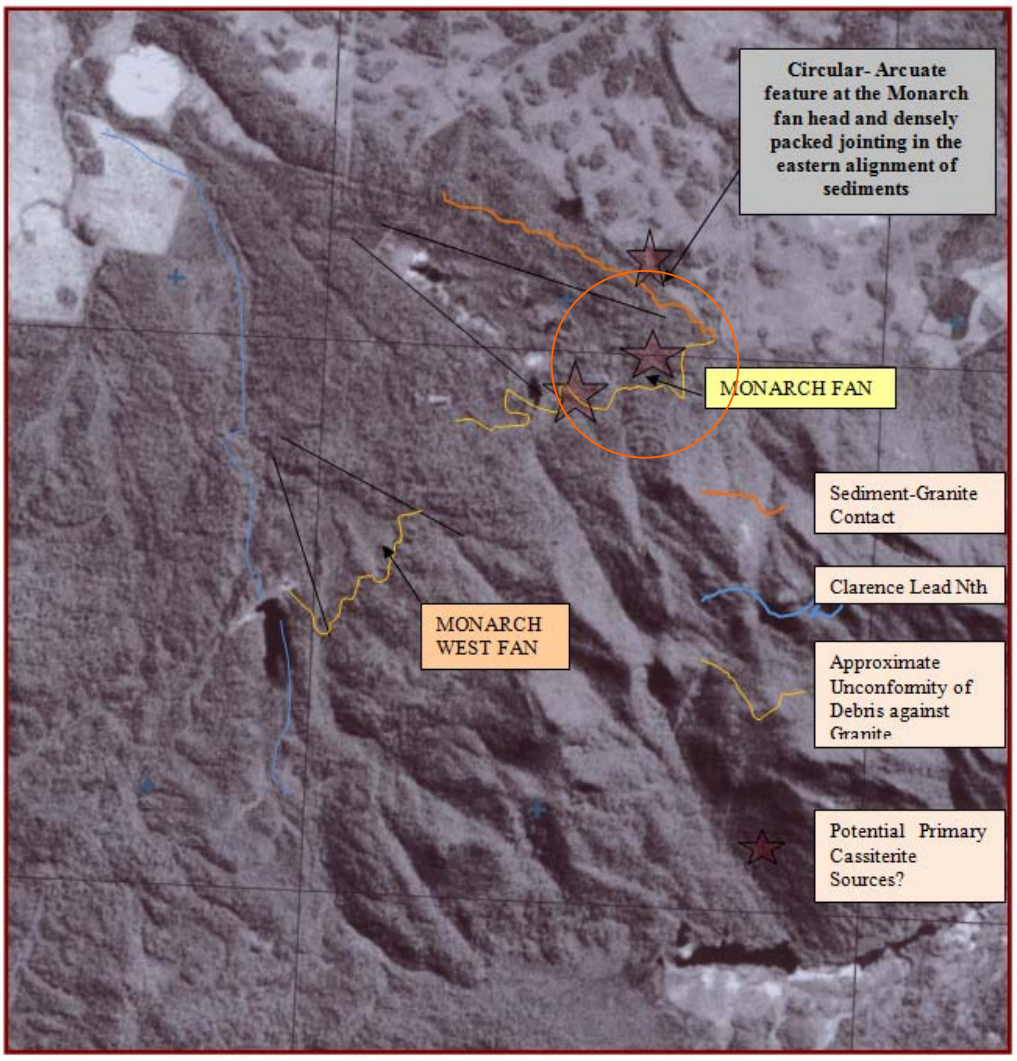
c. the confluence of the Clarence Deep Lead and Monarch West Fan. Potential target. Surficial cover of as little as 5meters conceals important cassiterite deposits in the region.

3. The potential for primary cassiterite mineralisation

- at or near the granite-sediment contact (sheeted fracture swarms in granite or hornfelsed sediments) ,"contact greisens", Cinovec styled greisens, Anchor styled greisens.

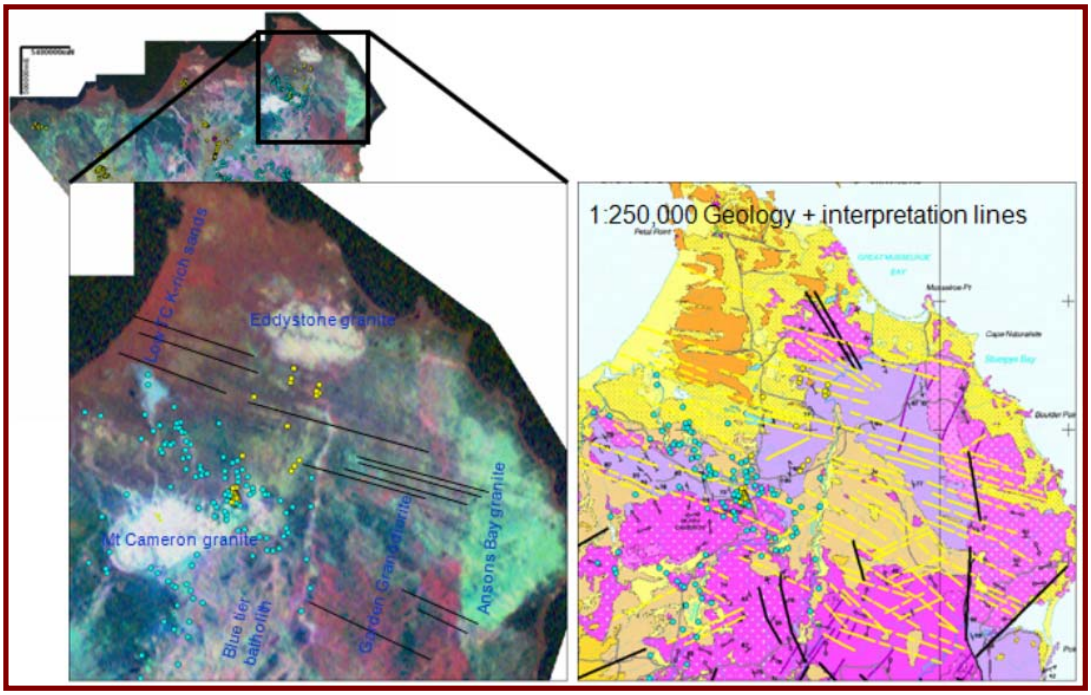
-Geologically the “wash” zones are located in NW pointing wedge between sediments and granite. Giving a fan shape.AMDEX, BMI and VDM referred to ore block E which fans outward in the eastern contact area .They regarded the mineralisation to be open to the ENE.This wedge position appears to have funneled the alluvial wash into the Monarch system , from a primary tin.

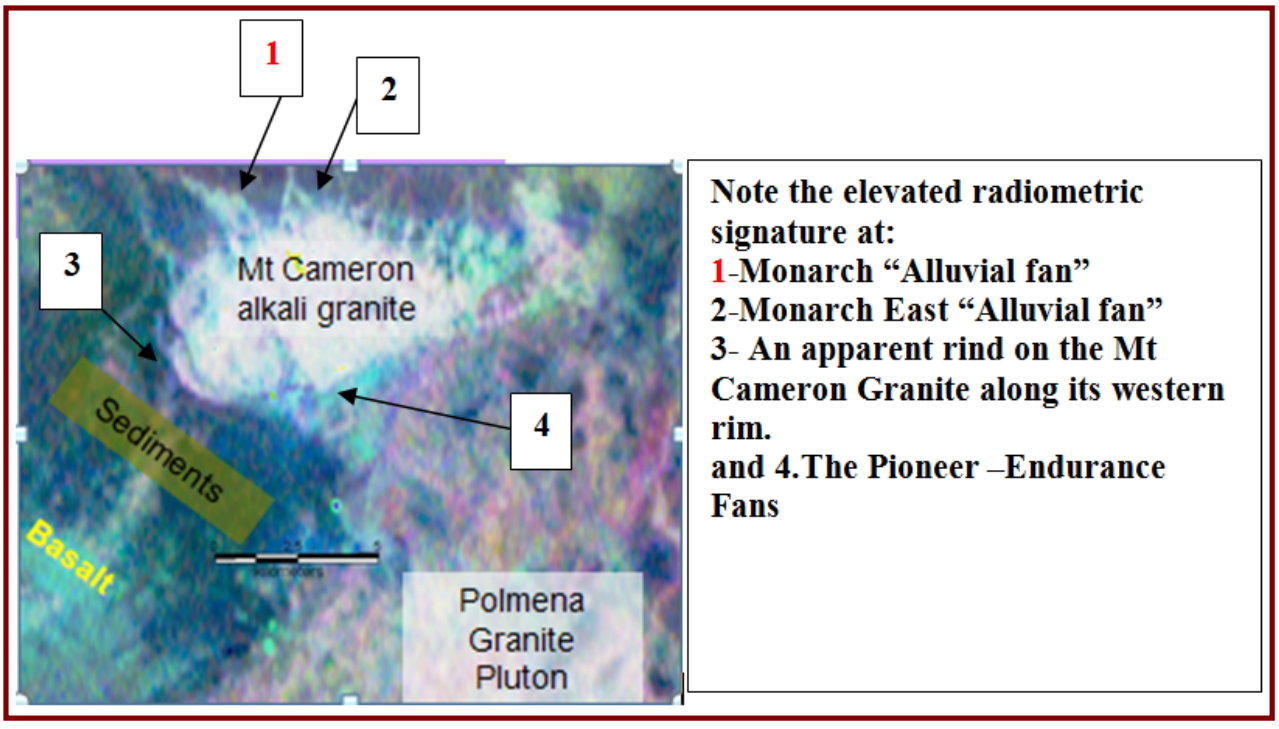
This wedge on is a 1km diameter circular feature intersected by an array of joint swarms from the east (see below).



Potential for Monazite-Zircon Heavy Minerals

MRT geophysics,2008, shows a significant radiometric anomaly on the Monarch Fan sourced locally into the massif itself . An as yet unquantified quantity of monazite does occur in the Monarch alluvials . Testing of mine waste and tailings and future drilling is highly recommended.





Local Geology of Monarch Alluvials

The sedimentary sequence hosting the Monarch Alluvial tin deposits is highly variable, ranging from shallow "lag" type deposits along the slopes of Mt Cameron to thick marine reworked sediments along Vicary Creek in the west towards the Boobyalla River.

In the SW area (B-Block) overburden (mineralised and unmineralised) comprises ;

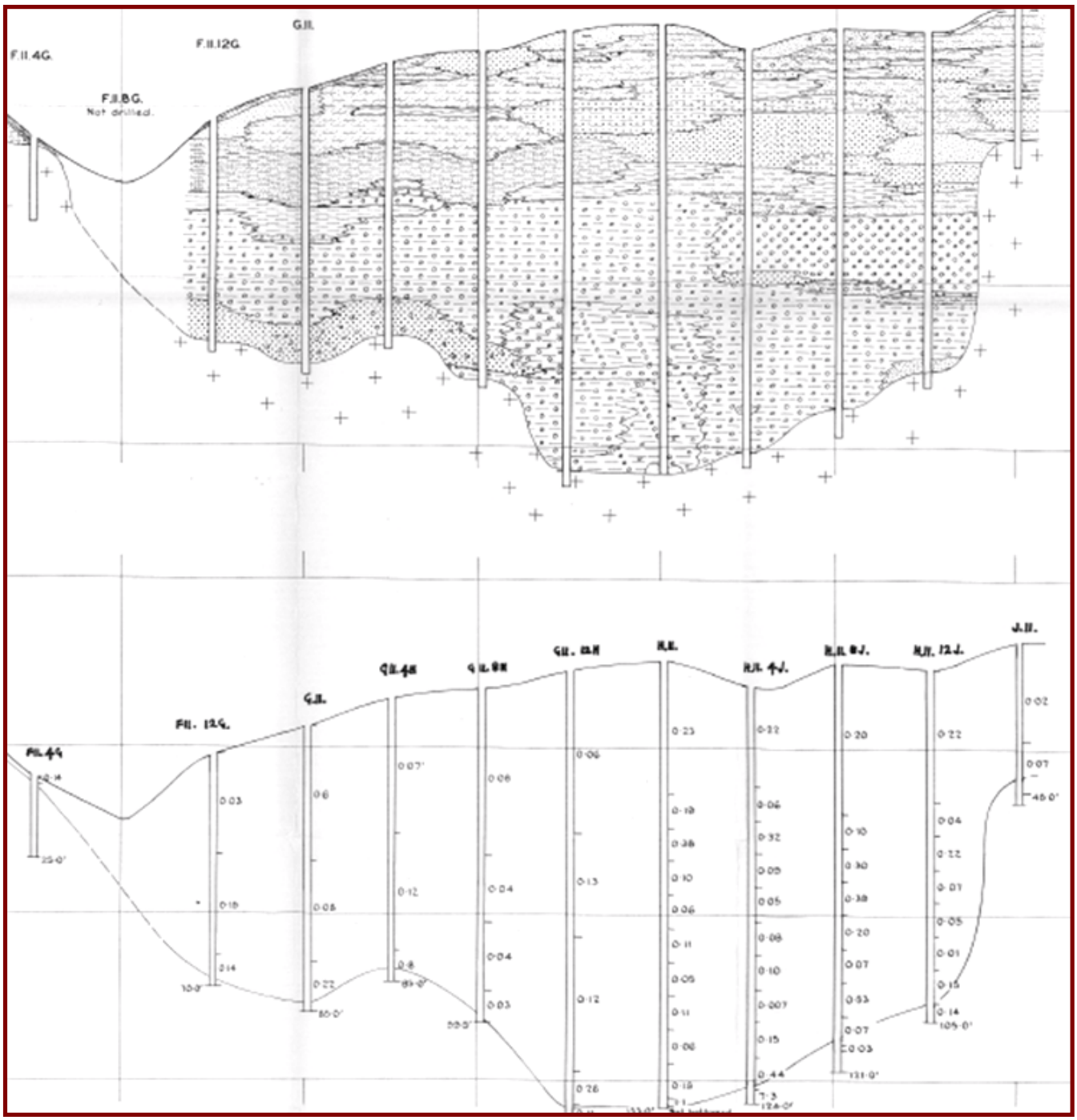
- 0 to 0.5meters of black sandy and humic topsoil. Includes gravels and quartz grits
    - Discontinuous layers of fine sands
- 1.0 to 4.7 meters of yellowish to brown clayey sands and sandy clays with minor heavy minerals. Increasingly mottled with depth.
- 0.5 to 1.5 meters of reddish brown cobbly and bouldery sands, some ferruginous hardpan layers, and important heavy minerals. In general this zone is referred to free running sands (sandy-gravelly , occasionally bouldery wash) and Sn wash passing downward to decomposed granite.
    - Mottled grey gritty clay with silt and sometimes gravel and/or grey clay-sandstone wash and rarer mature quartz wash or birds-eye wash?
- Soft white decomposed granite.

    - The cassiterite bearing deposits occur as both stream alluvials developed along and parallel to the modern drainage system and deep marine reworked ground (with lens like cassiterite bearing bodies that may represent marine strand lines).
    - In the SW-ore blocks there is evidence of a remnant marine incursion with the presence of shells and pyritic cement.
    - Cassiterite grain size is generally less than 1.0mm.However coarser grains and composite grains locked with quartz are found in the eastern resource area.
    - In the SW resource area the cassiterite is associated with free running sandy to gravely (occasionally bouldery) wash.

RESOURCES

MINERAL RESOURCES of MONARCH MINE AREA

Company	Volume	Grade	Category	Tonnes Cassiterite
BHP-1963-1965	2,909,300 cu.yds	5.8oz	Resources	470.1
Hughes-1967				BHP t and g conservative
BMI 1974	1,400,000	5.6		266.7
AMDEX-1980	1,802,000	353	200gm cutoff	636
	2,437,000	296.7.	100gm cutoff	723
MINERAL HOLDINGS -2000	556,751	1.22kg	A+B+Elenses	679
	59,100	139gm	D-Lense	



Soil.

Fine sand.

Drift.

Wash.

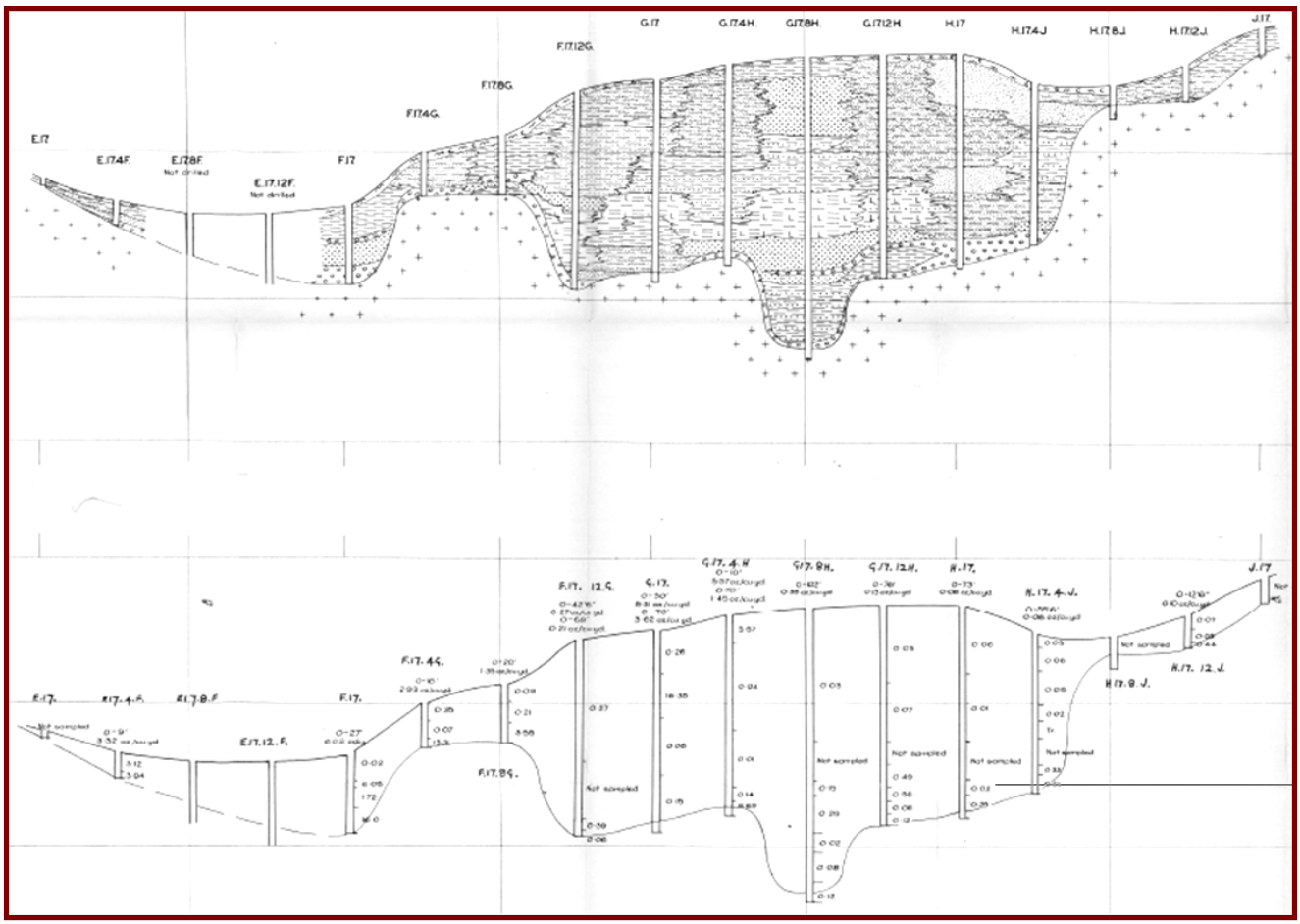
Muds and clays.

Cemented.

Lignite.

Pyrite.

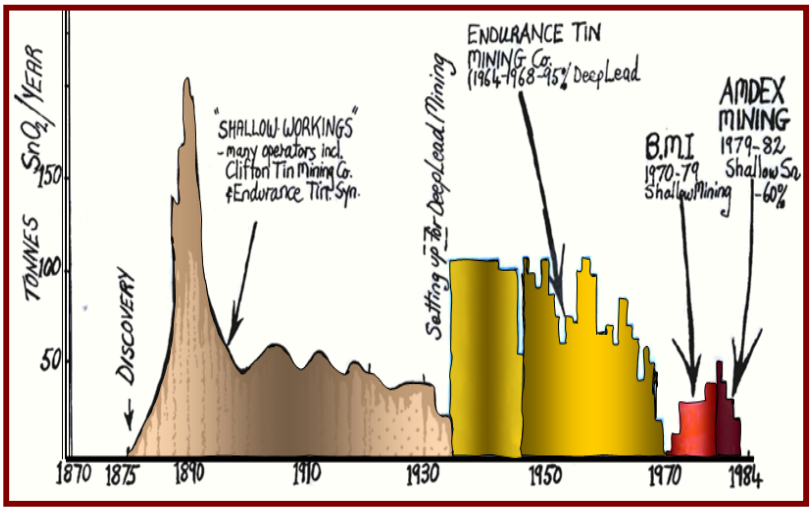
Tailings.


E.17
E.17.4F.
E.17.8F.
Not drilled
E.17.12F.
Not drilled
F.17
F.17.4G.
F.17.8G.
F.17.12G.
G.17
G.17.4H.
G.17.8H.
G.17.12H.
H.17
H.17.4J.
H.17.8J.
H.17.12J.
J.17
E.17.
E.17.4.F.
E.17.8.F.
E.17.12.F.
F.17.
F.17.4G.
F.17.8G.
F.17. 12.G.
G.17.
G.17. 4.H
G.17. 8H.
G.17. 12H.
H.17.
H.17. 4.J.
H.17. 8 J.
H.17. 12.J.
J.17
Not sampled

1b- CLIFTON TIN DEPOSIT and surrounds on EL 11/2008

History -1875

Tin was discovered in the **shallower eastern deposits of the Endurance Fault Corridor**. 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.

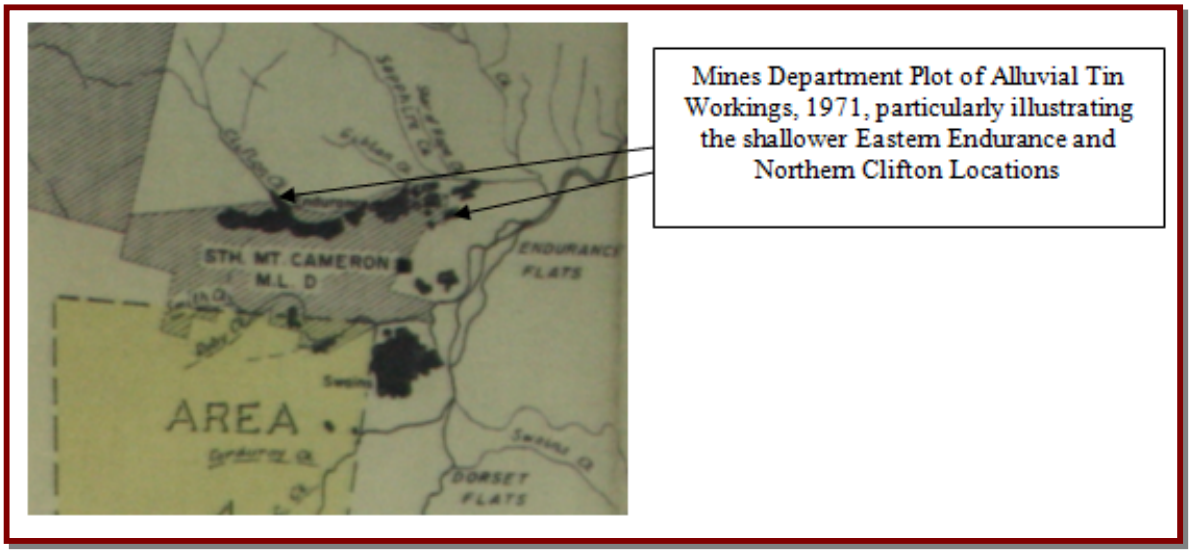


Individual miners and syndicates worked at grades of greater than 1lb Cassiterite /cubic yard (0.59kg/m.cu).There are no records of this work.

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.

Tin Dragon is compiling as much Clifton related data as possible but given the time frame of its discovery and exploitation records are scant indeed.



Mines Department Plot of Alluvial Tin Workings, 1971, particularly illustrating the shallower Eastern Endurance and Northern Clifton Locations

New Clifton is located upstream from the original Clifton workings.

These deposits are located in a seemingly perched position to the north of the Central Endurance historical deposit. Clifton seems to have produced 2,135 tonnes of tin conc. to 1970.

For some time the ownership was separate to the main Endurance mineralisation.The cassiterite was reputedly well sorted (Yim 1990)?? and high grade (2,000 to 3,000 gm/cu m)

New Clifton contains tin of moderate sorting and with work conducted after the Clifton production period it is unsure at this stage just what resource is located there.

1980-1981 Clifton Extended was discovered by AMDEX (Morrison 1981) .

The 85 tonnes of cassiterite was suitable for open cut, gravel pump mining.

The deposit (averaging 450 gm/cu.m) is at a depth of 15.5 to 24.2 meters down to granite basement. It is the downslope extension of Clifton and passes into the Endurance Lead. Very high grade patches were present e.g. Drillholes EP 37 and 45 returned 1,885gm/m and 1,832g/m over 22.5 and 24.2 meters, respectively.

There would seem to be potential for further Clifton styled deposits along the toe of Mt Cameron for perhaps 2,000m to the west. For an E-W zone around 1km long , as well as in the topographic expression of the NNW trending Fault Graben between Endurance and Monarch Fault , there is still the possibility of elluvial cassiterite shedding from bedrock within the Mt Cameron EL 11/2008?

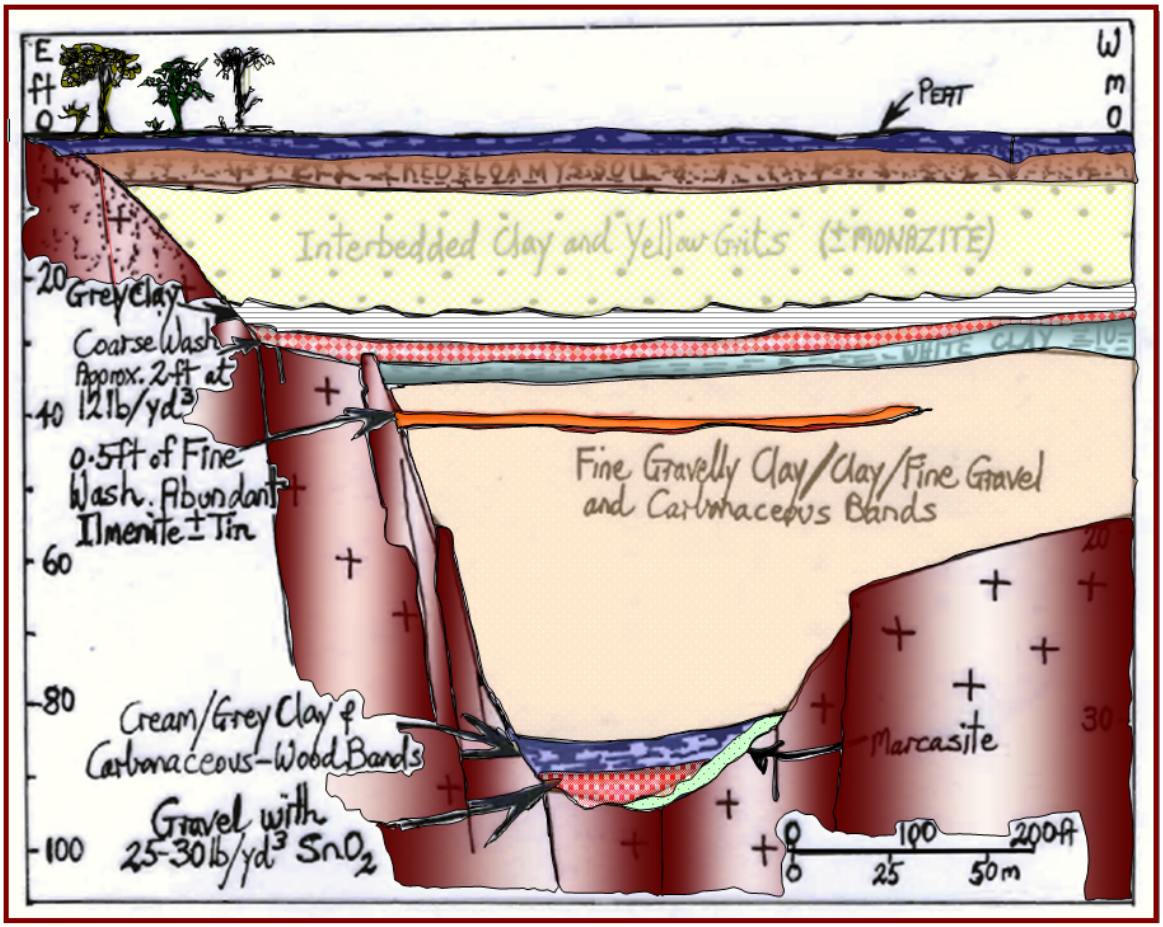
TOP: Alluvial-colluvial deposits in tin workings at New Clifton (Yim 1990).

BELOW: New Clifton basal horizon 1980.

Nature of the tin bearing horizons

Figure Left Clifton Extended work face showing the colluvial and/or saprolite bedrock or debris.

Figure Below The Clifton tin horizons are located from surface to 5 meters depth. In the Endurance Gutter there are 3 to 5 distinct heavy mineral horizons.



Mine geologists recognised at least 4-5 distinct heavy mineral layers at Endurance-Clifton.

AMDEX-BMI, in treating the drillhole data in their ore reserves at Endurance, treated the upper layers of the Endurance stratigraphy as the mineable material, whereas VDM preferred to selectively remove the clayey horizons and treat the mineralisation as discrete layers in sandy gravel.

The multiple layers of cassiterite, ilmenite and monazite (as recognized by the Operators of Endurance) presumably mark the composition of the sediment provinence as erosion and redeposition progressed through time. For example, the monazite and cassiterite from granite, gold from Mathinna Beds, Sapphire from basalts-tuffs, ilmenite from granite and mafic rocks.

J.Newton-Smith of Aust AngloAmerican (1981) in Joint Venture with AMDEX contended that alluvial cassiterite in the Boobyalla Depocentre was of 3 types depending upon the sedimentological disposition;

- Type 1 Occurs in deeply buried alluvials (stratified gravels, trough and planar x-bedded sands and peat).The cassiterite is black and brown and associated with abundant ilmenite and monazite.

- Type 2 Tributaries and gutters to deep leads. Cassiterite is black and occurring in poorly sorted boulder rich sediments-without associated accessory heavy minerals. e.g. Clifton is buried by <20m of overburden is in the upper fan fluvial facies and cassiterite more proximal to its source?

-Type 3 cassiterite is in shallow, surficial deposits (generally upward fining sequences of pebbles-sand-clay).it is red, yellow and black with accessory spinel (hercynite) and gold e.g. Pioneer and Riverside.

On the other hand Yim (1990), in assessing the provenance of the NE Tasmanian tin deposits, examined the trace elements in cassiterite the ratio of monomineralic cassiterite versus composite grains, grain size distribution and distinctive heavy mineral assemblages, and dates of minerals and sedimentary facies for each alluvial tin area in NE Tasmania.

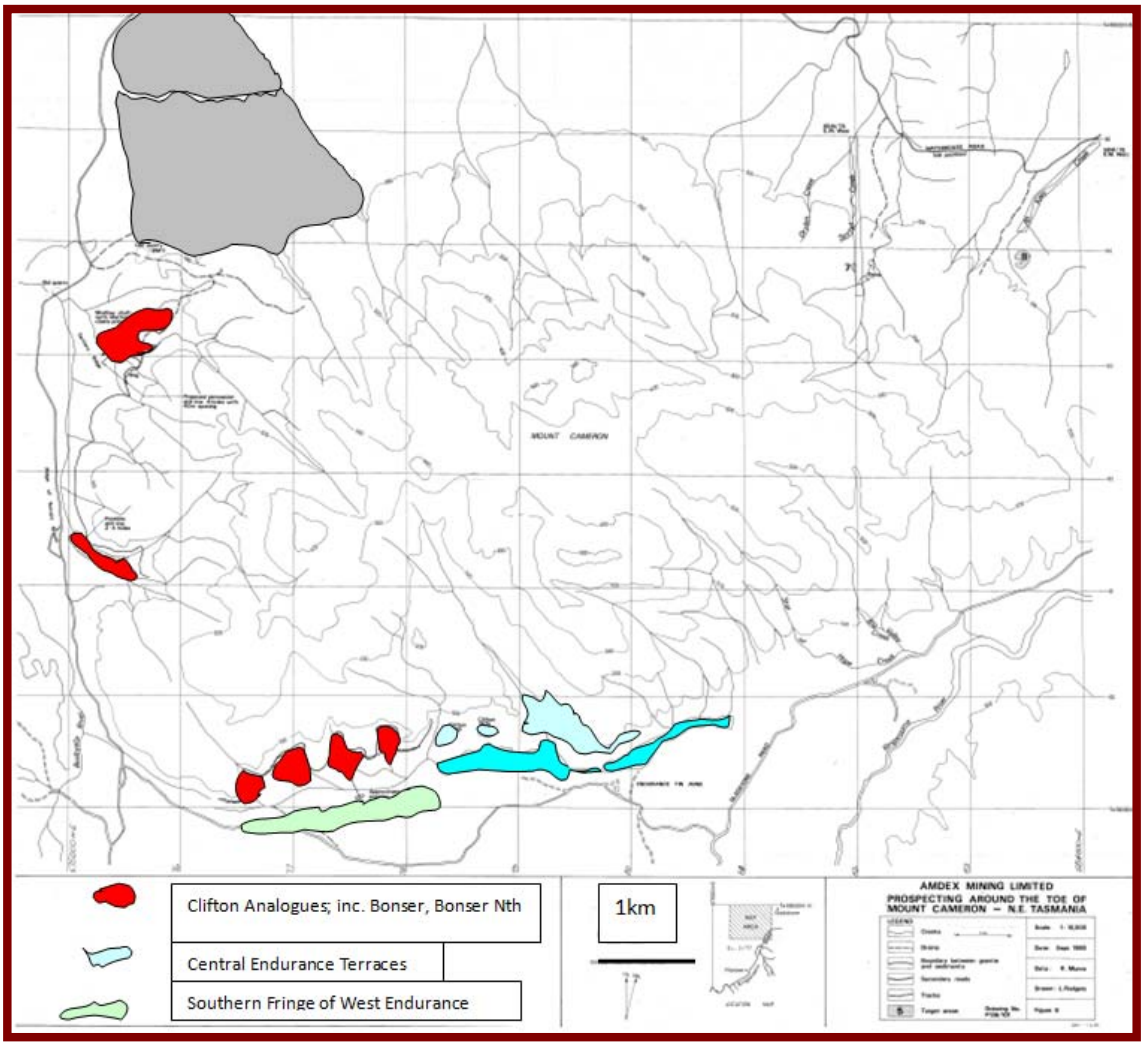
It has been concluded that the **Mt Cameron alluvial cassiterite crystals are more enriched in Nb, Ta, and Zr** whereas the Blue Tier derived cassiterite is more enriched in tungsten. At Mt Cameron the studied cassiterite grains tend to have a strong population of plus 2mm diameter and commonly associated with composite cassiterite grains.

Yim (1990) concludes that the source of cassiterite into the Clifton –Endurance system is proximal rather than being transported long distances from the Blue Tier Batholith.

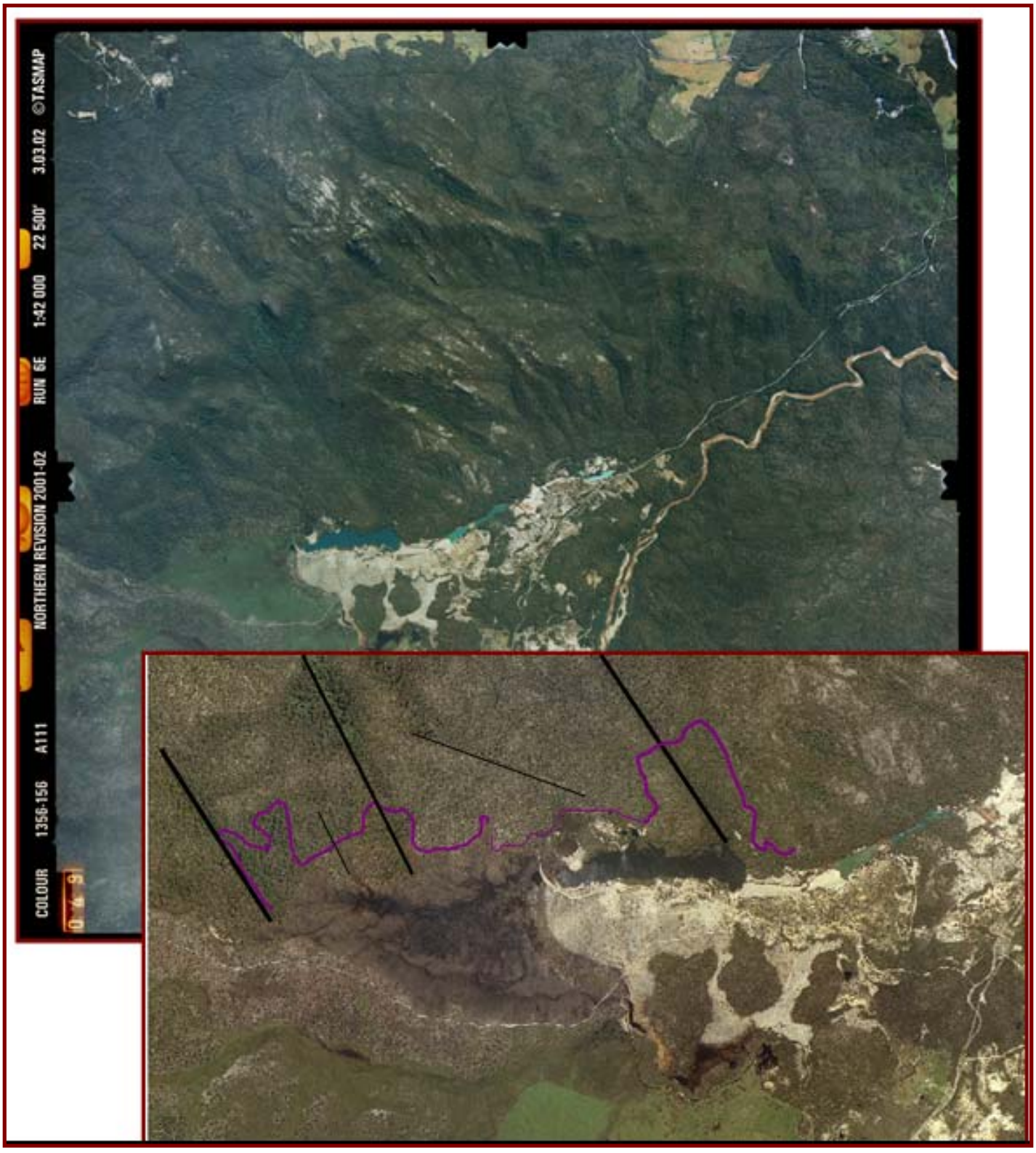
Mining by BMI in 1980 recovered coarse to very coarse (up to 2mm) cassiterite from Clifton.

There remains good potential:

--for Clifton type deposits along the northern flank of the Endurance Western Resource area (red targets 1 to 4 drawn by AMDEX- The last operators at Endurance partially tested target 1 only).



Mapping the debris fans off the southern toe of Mt Cameron is possible utilizing older aerial photographs in the Tasmanian dry season. The colluvium is nutrient deficient and flora is stressed (see below).From this it would seem that there is good potential for Clifton styled cassiterite deposits (see maroon lines in figure below).

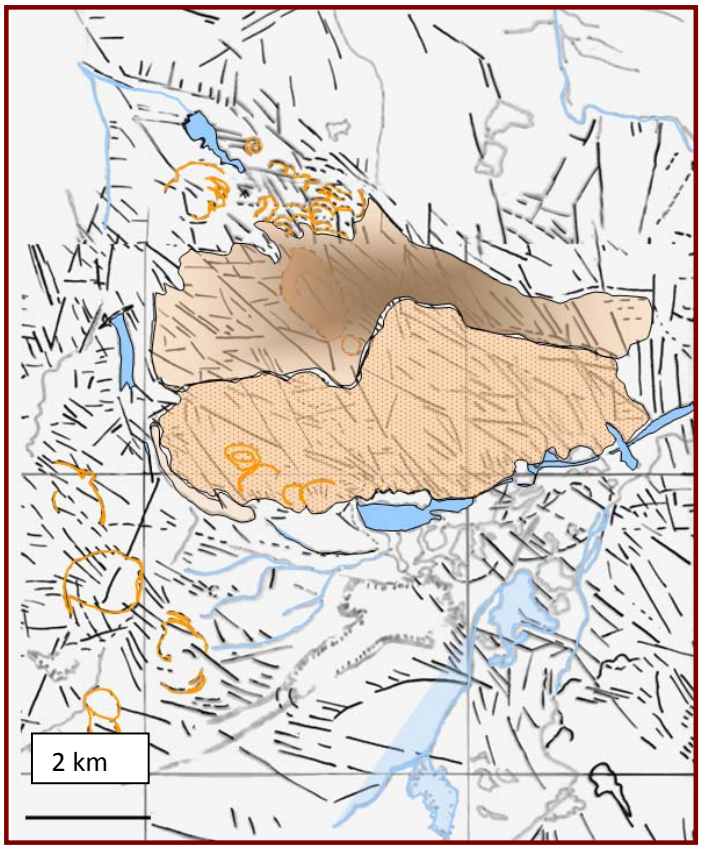


2.Further investigation of prospectivity on the Mt Cameron tenement.

Compilation and investigations are underway for other potential at Mt Cameron;

Hardrock Potential and Conceptual Models

Given that Mount Cameron appears to have been significantly uplifted and eroded the main potential for preserved primary tin would be;

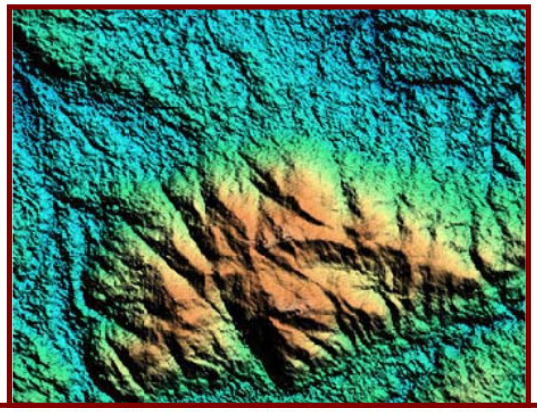


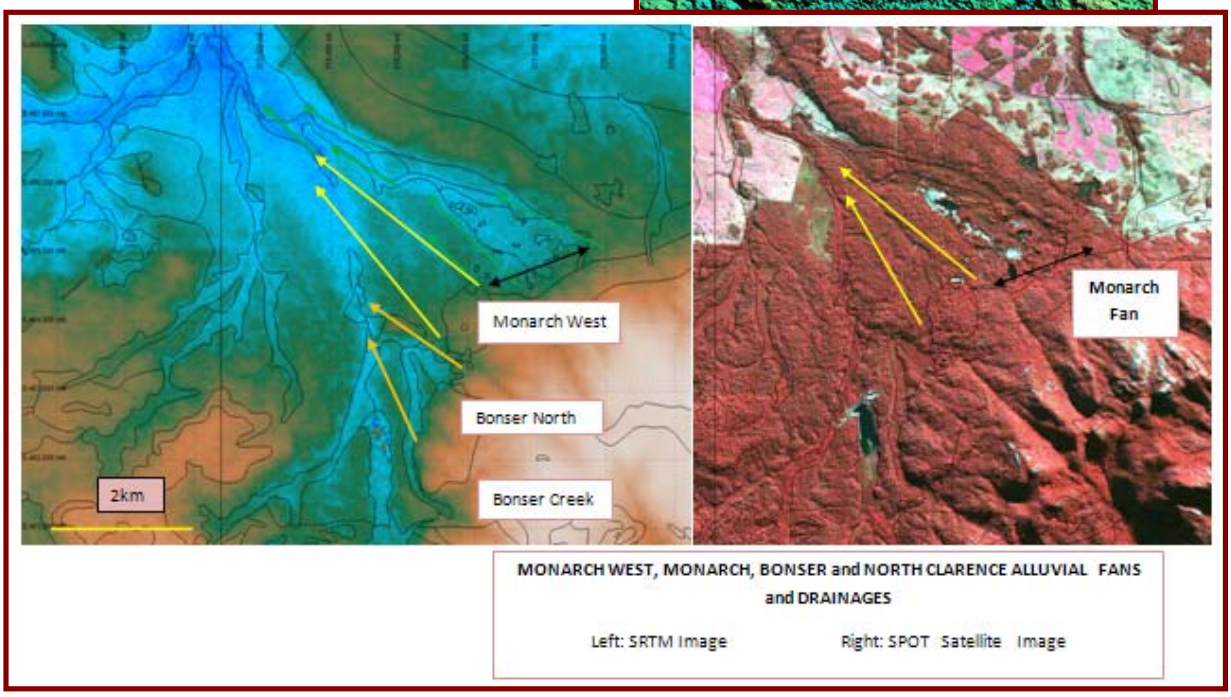
- in the hinterland and SE wedge of the Monarch Fan
- at Monarch West Fan (a string of circular features and Mathinna Bed remnants-orange in adjacent figure)
- The western slope of Mount Cameron at Bonser and Clarence ??
- North, cupola – apogranite styled Cinovec-Sailor analogue disseminated tin in subhorizontal greisens and unloading joints (see headwaters of Monarch in orange).

- The remainders of Mt Cameron, as well as the Pioneer area, are also potential for Anchor-greisen and Zaiiplats (Sn)-Timbarra (Au) styled subhorizontal sheets or disseminated cassiterite deep in the granite. A broad spaced stream sediment survey is warranted. In the Pioneer area drilling in the 1970s by Santos encountered disseminated tin in greisen-the source of the extensive Pioneer alluvial tin system remains unexplained,

- **Monarch West Fan** The depocentre for both the Monarch and Monarch West Fan is shown on SRTM,SPOT imagery etc.

  --The zone has not been tested and may host an endowment similar to the Monarch area



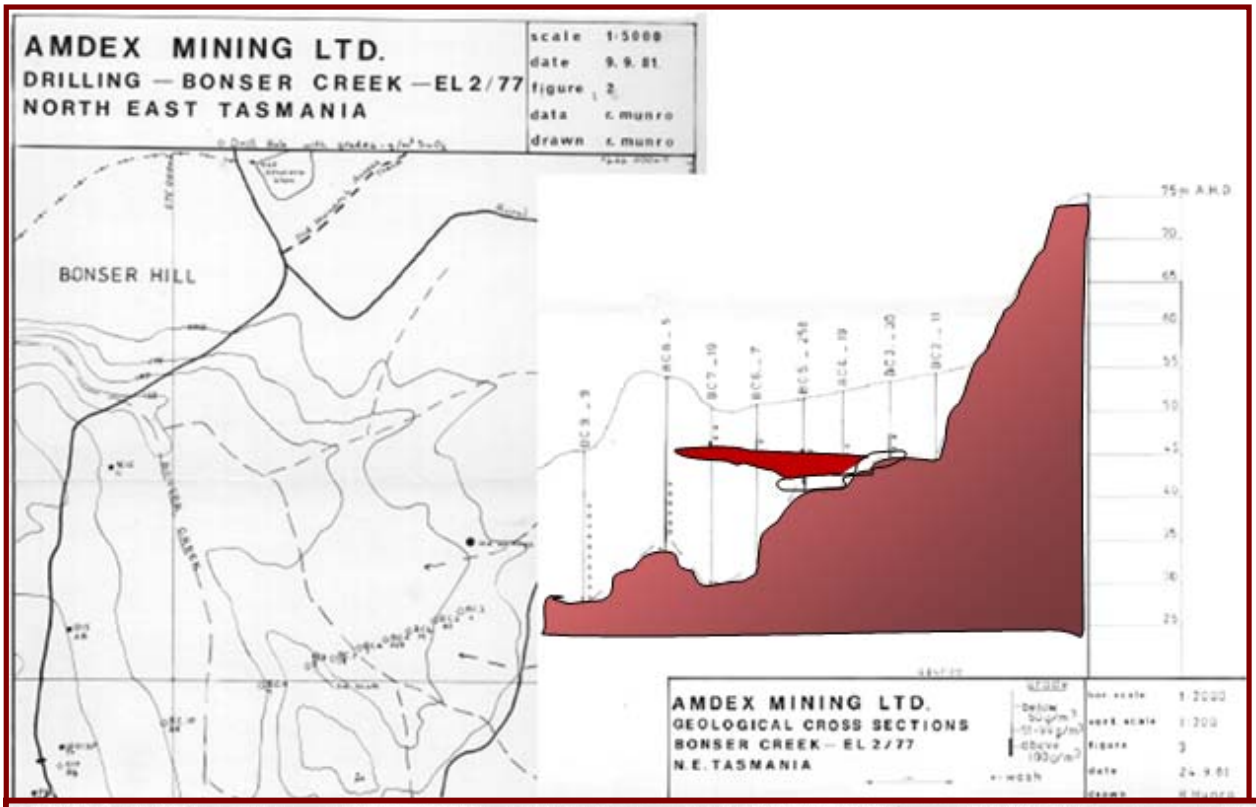


Bonser Creek

The Bonser Creek prospect took the attention of AMDEX whilst searching for Clifton analogues.

They completed initial drilling and located encouraging tin against a steeply dipping granite contact.

The area is potentially interesting as it drains into Clarence and has a reasonable drainage basin. Note the two drill logs with tin grades – below.



AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: STH.MT. CAMERON-BONSER CREEK Hole No: B.C.5 Collar Co-ordinates: ..... mN ..... mE Drilling Method: Percussion

Surface R.L: 51.3 m Basement R.L: 42.8 m Cutting Shoe / Bit diameter: 16.02 Theoretical Volume: 40.3

Date: 10/9/81 Driller: G. Selby Assistant: B. Blake Sample Washer: S. Moore Geologist: R. Munro

Section From	Section To	Sample No.	Recovered Volume (l)	Weight Conc. (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO_2)	Grade • g SnO_2/m^3	Grade + g SnO_2/m^3	Description of Sample
0	2	5478	27LTRS	133.1	0.11	0.21	7.7	6.5	Black mud, c & f sand, heavy drift. Ilmenite, pyrite.
2	4	5479	24 "	157.9	0.02	0.05	1.8	1.4	Mud, c & f sand, heavy drift. Ilmenite, pyrite.
4	6	5480	16 "	126.1	0.06	0.11	6.7	3.3	C & f sand, black mud. Ilmenite, pyrite.
6	8	5481	30 "	124.4	12.04	21.40	713.3	663.6	C & f sand, med & lge. wash, heavy drift. Tin, ilmenite.
8	9	5482	17 "	133.9	5.44	10.40	612.1	645.5	C & f sand, decomposed granite. Sm. amount tin, pyrite.
9	10	5483	16½"	159.3	1.34	3.05	184.8	189.2	Decomposed granite. Pyrite.
10	11	5484	12½"	128.9	0.08	0.15	11.8	9.1	Decomposed granite.

AMDEX MINING LIMITED - NORTH EAST TASMANIA DRILL LOG

Area: STH.MT. CAMERON-BONSER CREEK Hole No: B.C.5 Collar Co-ordinates: ..... mN ..... mE Drilling Method: Percussion

Surface R.L: 51.3 m Basement R.L: 42.8 m Cutting Shoe / Bit diameter: 16.02 Theoretical Volume: 40.3

Date: 10/9/81 Driller: G. Selby Assistant: B. Blake Sample Washer: S. Moore Geologist: R. Munro

Section From	Section To	Sample No.	Recovered Volume (l)	Weight Conc. (g)	Conc. Assay (%Sn)	Recovered Tin (g SnO_2)	Grade • g SnO_2/m^3	Grade + g SnO_2/m^3	Description of Sample
0	2	5478	27LTRS	133.1	0.11	0.21	7.7	6.5	Black mud, c & f sand, heavy drift. Ilmenite, pyrite.
2	4	5479	24 "	157.9	0.02	0.05	1.8	1.4	Mud, c & f sand, heavy drift. Ilmenite, pyrite.
4	6	5480	16 "	126.1	0.06	0.11	6.7	3.3	C & f sand, black mud. Ilmenite, pyrite.
6	8	5481	30 "	124.4	12.04	21.40	713.3	663.6	C & f sand, med & lge. wash, heavy drift. Tin, ilmenite.
8	9	5482	17 "	133.9	5.44	10.40	612.1	645.5	C & f sand, decomposed granite. Sm. amount tin, pyrite.
9	10	5483	16½"	159.3	1.34	3.05	184.8	189.2	Decomposed granite. Pyrite.
10	11	5484	12½"	128.9	0.08	0.15	11.8	9.1	Decomposed granite.

- **Bonser Creek North**

The area within spatial influence of Bonser and the West Monarch Fan. It has a drainage area of potential importance with unknown potential.

5.DISCUSSION OF RESULTS

Further data compilation was undertaken specifically in the Monarch area and the Clifton area.

New target positions have been generated.

6.CONCLUSIONS

Recommendations and Proposed Future Exploration

Generation of targets for future exploration ongoing in the areas denoted during the 2011-2012 programme and other areas mentioned in section 4.2.

Specifically;

-- sourcing and field verification of hard rock potential in SE Monarch

-- potential under the now abandoned 1882 plant site where resources exist.

--search for workings at the head of the West Monarch Fan

-- potential hardrock sources at and for Bonser Creek, Clarence, and Sexton Creek (in the headwaters of Scotia

-- reconnaissance over the possible cupola positions at;

-- the Massif Core

-- east of Bonser, and

-- north of the Endurance West Resource.

7.ENVIRONMENT

Surface Disturbing Operations; No surface disturbing operations conducted during the period.

Surveys

Rehabilitation; Not Applicable during the reporting period

8.EXPENDITURE

Expenditure on exploration for the period 16December 2010 to 11November 2011 was reported.

9.REFERENCES

Yim,W.S.Wyss.,1990 heavy Mineral Provenance and the Genesis of Stanniferous Placers in NE Tasmania. unpublished PhD Thesis ,University of Tasmania.

Kinnane , N.R 2002. Mineral Holdings Pty Limited .The Endurance Project EL 11/2000 Preliminary Re assessment of the Western Resource Area.

Kinnane , N.R 2003. The Endurance Project EL 11/2000 .Mt Cameron, Gladstone District NE Tasmania – Reassessment for van Diemen Mines Pty Ltd

.