DAVIES HILL

E.L. 28/95

FINAL YEAR REPORT

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INTRODUCTION

In compiling this fifth and final year exploration report, right from the bloody outset I warn the Crown, and all who wade through it, not to expect an orthodox report.

I am not prepared to diligently compile hundreds of pages of elaborate mineral exploration obfuscations, in order to conceal, a lack of exploration success.

The report is an itemised account of six years of Mount Read Volcanics and Tasmanian wide, mineral exploration research, written in a loose handed and first person narrative, as compiled by a prospector under no illusions of its authenticity and veracity.

I work by myself and I am in no doubt of it.

I intend to use the occasion of this report, as a rare forum, for me to formally raise, and to put on the public record, several extremely contentious and unique, Tasmanian mineral exploration observations, that I made over the course of the license tenure.

I believe the critical importance of these, largely geophysical observations, demands that I address any perceived lack of professional exploration acumen.

I am not an exploration geologist or geoscience researcher of any kind, nor do I claim to be anything other than a passioniate prospector and typist.

For the sake of honest interpretation, I ask the officers of the Crown, and other readers, to review this most unorthodox report, with a degree of professional latitude, and to weigh up exactly what it is that I say, as opposed to how I say it, or, how long it takes me to bloody say it.

Generally speaking, I assume the interested reader will have a comprehensive understanding of Tasmanian geology, modern era geophysical exploration techniques and their history of application in the Mt. Read Volcanics.

This won't be the case with too many, so if the going gets a little tough down the track, and believe me it does, then I advise it be read over a period of time.

Then read the bastard again, and again if necessary.

At the time of writing the Tasmanian exploration opinions that I report, are held by me alone.

The Crown should be in no doubt that I believe every word that I now report to it.

Whether the Crown believes what I report, is of course, the Crowns choice.

Whether the individual reader does, is of no consequence to me because my report is compiled for the Tasmanian Crown alone.

Any professional references that I may use, are not intended as bullshitting camouflage, in order to haphazardly support scientifically untested exploration opinions, rather, to truthfully illustrate the diversity of the mainstream Tasmanian geo science expertise, that has helped me to form those opinions.

Honesty and integrity are my only guidelines, and I can do no more than adhere to these two principles of prospecting, in a first person narrative.

As I have found it to be the case, the two most reliably mentioned words, as used by the global mineral exploration and geoscientific research fraternity, are the words, probable and inconclusive.

May the reader consider those two words, and reflect that they are not mentioned elsewhere in this report.

EXPLORATION AIMS

My intention, in applying for the Davies Hill exploration license, was to follow up a little known Western Tasmania prospecting observation that was made by the well known Queenstown area, hermit gold prospector, the late Jack Stephens 1920-1993.

Jack had worked the nearby Diamond Hill/Diamond Creek alluvial gold patches as far back as the early 1930's with his father and other West Coast prospectors.

Jack enlisted in the A.I.F. at the outbreak of the Second World War and returned to Queenstown, shell-shocked.

Around 1947 he went bush.

He never came in until 1992.

He lasted a year in the 'city', Queenstown and died.

Throughout the forty years or more that he lived bush, Jack never collected a military, or any pension.

He wanted nothing to do with the 'real world'.

He lived entirely on the gold he recovered in his pan, which, over the decades, he would regularly barter for supplies, from trusted Queenstown shopkeepers.

Jack always had gold and had panned nearly every creek on the western flanks of the West Coast Range, from Mt Darwin to Lake Margaret.

Soon after Jack had finally been persuaded to move, in the late 1980's, from his Diamond Hill corrugated tin shanty, to a small garden shed, not more than 150 metres north of my own back door, thieves from Gormanstown raided his old Diamond Hill shanty and stole a vegemite jar, over half full of fine, alluvial gold.

In terms of longevity and earnestly paying your own way, I realise now that Jack Stephens is undoubtedly the most successful gold prospector, who ever panned a creek in Tasmania.

Although Jack never did find the elusive big one, he did hold his own rock solid views, on the origin of the alluvial gold that he had followed up the courses of the Pearl and Diamond creek systems, north of Queenstown, till the day he died.

Jack was of the firm opinion that the fine alluvial gold that he had long panned from both these creeks, had its source origins near the foot of Davies Hill, where both of these creeks commence.

I first heard of Jack’s observations around 1994 and on the strength of them I later applied for the Davies Hill exploration license, was granted it, then set to the task of following up Jack’s problematic hidden lode.

My exploration aims were as minimal as my budget.

Follow up Jacks lead, find the bloody thing and find it on the cheap.

I was unemployed at the time and had nothing to lose except a wife and kids.

EXPLORATION PHILOSOPHY

In my application for the Davies Hill exploration license I wrote that I believed it was possible for low budget amateur explorers to successfully complete preliminary mineral exploration anywhere in Tasmania.

My sincerity was based on an innate belief in myself.....and that's about it.

I believed that if any working man could find an alleged hidden orebody, then that man was more than likely me.

A first class, bloody dickhead I must have been.

As far as I was concerned, two key philosophical presumptions, persistence and multi skilling would drive my minimalist exploration budget.

I planned to utilise the storehouse of historical and modern era Tasmanian exploration data, on open file at the Rosny Park offices of Mineral Resources Tasmania, and to explore the license area with an absolute minimum of environmental impact.

I aimed to get in, do the work needed and to get out.

Throughout the license period I adhered to the exploration philosophy outlined, and believe that I have honoured the original agreement that I made with Mineral Resources Tasmania.

Without cutting it too fine, I did it my way, armed only, with little more than a lateral thinking mind and the ever reliable professional expertise, and consummate good will, shown to me, by the officers of Mineral Resources Tasmania.

There was for me, simply no other exploration philosophy to follow.

EXPLORATION REVIEW: A LAYMANS CONDENSED VERSION

1995 to 1997

Throughout the first two years of the license period I completed over 200 kilometres of reconnaissance traverses throughout the 2 square kilometre license area and its adjacent surrounds, lugging around either a compass, pelican pick, shovel, ground magnetometer or metal detector.

I identified flora and fauna, located lithological outcrops and collected hundreds of rock samples.

I collected stream sediment samples, walked every inch of numerous creek systems, panned the alluvials, dug shallow pits, marked all manner of trails or magnetometer grids with stringline or tape and generally blundered my way through the thick regrowth scrub forest that cloaks Davies Hill.

I studied the Yolande license aeromagnetics and gravity data…and wondered what the flaming hell it all meant.

I read any map, exploration report or academic research paper, pertaining to the Mt.Lyell and Lake Margaret areas, or Western Tasmanian exploration, that I could lay my hands on.

I did a lot more than just this, though I never got to complete half of my initially stated exploration goals, because, for much of this period I was unemployed, or, working on the north island.

Inevitably, I concluded that there was not a hope in hell that I could find even a brass razoo on Davies Hill, from off-shore, so I pulled the pin on a job, as ground support superintendent, on the rail station project at Homebush Stadium, Sydney, and returned home to Western Tasmania.

1998-2001

Soon after returning home, I had the good fortune to share a frank discussion with Tasmanian consulting geophysicist Dr. David Leaman, in relation to his preliminary consultancy report on the Yolande aeromagnetic survey, Pasminco Exploration, July 1993.

This discussion finally prised open the duck shit, from my amateur prospectors eyes and awakened me to the abysmal reality of my own situation as I realised that all my blunderings across Davies Hill were of no intrinsic value whatsoever, unless I first knew what it actually was, that I was actually looking for in the first place.

I certainly did not know, what I was meant to be looking for, and as far as modern era geologic, geomorphologic and geophysical prospecting went, I was the original geologic nonentity without a bloody clue.

Or as my wife might say, the prospector from hell.

As I could not afford to finance a university degree in macramé, let alone one in exploration geophysics, I pointedly made an agreement with myself, to get cracking and lift my bloody game, so to speak.

Since that long ago frank discussion, (arranged by the officers of the MRT) I believe I succeeded in broadening my own limited earth science horizons.

I researched the histories, development and current applications of geo science disciplines such as paleomagnetics, tectonics, lithospherics, geomorphology, geochemics, palaeontology, seismology, mineralogy, sedimentology, residual gravity, geology, physiography and petrology.

I endeavoured to gain an understanding of the main theories and scientific principles 'behind' each of these exploration and landform, geosciences.

In particular I focused on the development of modern era geophysical exploration techniques such as Bouguer gravity mapping, aeromagnetics, induced polarity, radiometrics, Turam, resistivity, equipotential, as well as numerous other techniques now in use.

I researched the geophysical exploration histories of mineral provinces found throughout the five continents.... from the Urals to Rossarden, from the Witswatersrand basin to the Canadian Archean shield, or, from Davies Hill to Grasberg or Voisey Bay.

This applied geoscience research was made easier for me to understand in a practical context, because I sought out jobs that apply to Tasmanian mineral exploration.

I offsided on large and small diamond drill rigs on various projects across Tasmania, including Scamander, Hellyer, Savage River, Mt Sedgewick, Mt Victoria, Mt Lyell, Comstock, and in my own flaming backyard.

I cast a mineralogical and petrologic eye over, each and every centimetre of the thousands of metres of core that I helped haul out of the ground, and studied every relevant exploration document that I could get my grubby hands on.

Its noisy work diamond drilling, so I pulled the pin and took on another low paid job, driving TORO 50 D trucks, on 12 hr roster, down the road at the Prince Lyell Copper Mine.

As the altered volcaniclastic schists, that I haul to the u/g crusher each day, are identical in nature, to the type that I am seeking at nearby Davies Hill, I endeavoured to take every opportunity to study them close up, from numerous geoscience perspective's.

With particular emphasis and sustained focus, on, Mt. Lyell crystallography, mineralogy, lamprophyres, zonation chemistries, aeromagnetics, lithospherical basement in relation to existing surface geomorphology, mine planning as well as regional greenfields exploration, from a historical, current and future perspective.

It may not be applied, academically pure, research, though I go at it hard, all the same.

I've learnt that it beats paying for the flamin knowledge.

I found that every single rock I studied, helped me see the bigger picture a little bit more clearly, in relation to the MRV volcaniclastic zonation parameters, as painstakingly outlined by Groves, Solomon, Large, and the rest of them..

In a mineralogical context, I collected the widest array of Mt Lyell rock types known, from both surface expression as well as from deep stratigraphic horizons.

In the context of the development of ancient, acidic hydro thermal vent system activity, I know these rocks contain fine examples of molybdenum, chalcopyrite, galena, hematite, magnetite, barite, zinc, gold, tellurium, fluorite, ankerite, calcite, gypsum, rhodocrosoite, sericite, chlorite, siderite, chromite and lamprophyres, too mention a few.

I believe also, that thanks to my daily, focused, decline research pursuits, that I now know where the 'next' Prince Lyell will be found…there's at least another two of them, just around the proverbial geophysical corner… though I'll have to leave that account, for another report, some other time.

As a direct consequence of my statewide VHMS prospects research, I managed to put together the largest collection of, decent sized, Tasmanian VHMS mineral specimens and assorted rocks, that will be found anywhere in this state, nor to forget well over two hundred Tasmanian maps.

As a general rule I can identify the individual characteristics and prospect source of all these weighty rocks, given that I carried some of the bastards several kilometres or more.

Any of these mineral specimens are available for study, or permanent loan, by any Tasmanian geology institution, geo science student, or public school that may care to utilise them.

All they ever need to do is ask.

EXPLORATION SUMMARY

Throughout the license tenure I searched far and wide in the pursuit of knowledge, whatever form it came my way, that might help me to understand the nature of, and maybe even pinpoint, the elusive whereabouts of Jack Stephen's problematic hidden 'lode'.

Simply put, with bugger all funds and no geologic training, I had no other bloody choice.

Initially, I drew on my own career experiences as a hardrock miner, of gold, copper, bismuth, scheelite, coal, silver, lead, tin, iron and zinc.

As a tunneller or shaftsinker, driving or benching through granite, conglomerate, sandstone, basalt, mudstone, limestone, shale and innumerable life threatening sedimentary complexes.

As a Tasmanian mining contractor, employed at Bold Head, Dolphin, Beaconsfield, Renison, Roseberry, Henty, Prince Lyell, Hellyer and Savage River.

As an Australian miner, moving rock in the Tennant Creek Inlier, the Lachlan Fold Belt, the Eromanga Basin, the Mt. Isa Inlier, the Goonumbla Volcanics, the Melbourne Warp, the New England Fold Belt, the Hunter Valley, the Bowen Basin, the Snowy Mountains, the Mt. Read Volcanics and the Grey coal basin of Westlands, New Zealand.

As all the dozens of shows that I'd busted my back in, had already been found anyway, I knew I'd have to pull the finger out, if I was going to find Jack's show, if it was to be found.

So I visited over a hundred Tasmanian gold, VHMS, tin or iron prospects.

I travelled by car, as well as foot, thousands of lonesome kilometres.

I bailed up and grilled for information, hundreds of Tasmanians, as well as dozens of older, western prospectors.

I met, talked with, and privately analysed the career backgrounds of many professional geologists, as well as a few geoscientists.

I collected and studied thousands of rocks and hundreds of maps.

I read over a million words, compiled over the last 200 years, pertaining to the earth sciences and Tasmanian and global mineral exploration.

I devoured hundreds of old Tasmanian mine geology and prospecting accounts, dating back to the first reliably reported mineral prospect evaluation at Yorktown in 1805.

I studied thousands of illustrative earth science figures.

I drew hundreds of dodgy, pencil drawn maps.

I noticed strange radio interference, over the gravity low, contact zone, with several regional magnetic lows.

I stumbled upon, identified and mapped, numerous surface expression, VHMS alteration indicators, throughout the Davies Hill license and immediate environs.

I found evidence of weathered Tyndall group sediments.

I found barite.

I found evidence of Lyell type altered volcanic schists.

I found evidence of alluvial gold in Diamond Creek, as well as, minor tellurium in quartz.

I found reliable historical evidence that the shales adjacent to Davies Hill, had produced nugget gold and were considered by local gold prospectors to be the best ground for gold panning, north of Queenstown

I drilled, logged and paid for an exploration diamond drill hole.

I know that I did all of the above, and a helluva lot more than this brief overview may suggest, though relevance must prevail.

I am now of the rock solid view, that Jack Stephens, Diamond Creek alluvial gold source hypothesis was essentially correct.

I believe that the 'source', is, shedding gold from roughly where Jack said it would be found, at the head of Diamond Creek, directly adjacent to the southern slopes of Davies Hill.

In an academically concise context, what Jack was looking for, is,

"a concealed, low temperature, syn-eruptive sub aqueous origin, crystal rich volcaniclastic megaturbidite, or ,Tyndall group metafacies sandstone unit, stratigraphic horizon, of late Cambrian/early Ordovician age, which developed as a thick interbedded layer of fine grained sedimentary detritus, deposited over ancient, relatively shallow marine environments.

These ancient marine environments were previously affected by long periods of acidic hydrothermal vent system activity.

The marine environments were, in turn, both magmatically and tectonically challenged, to a near vertical extent, in the process, causing the Tyndall group metafacies unit member to become a metamorphosed, mineralised horizon, which, today, can be found replicated at depth, throughout the Tasmanian landmass as well as numerous other areas of the east coast of Australia, including the Goonumbla Volcanics, the Pine Creek Inlier, the Hill End Trough and the Bindook Volcanics.

In an MRV, stratigraphic context, the fine gold found in the acidic soils along the course of Diamond Creek, has its origins from a concealed, though gravity responsive, Ordovician lithologic horizon, that trends NW/SE, dips steeply at 80 degrees to the south west and which forms, in part only, the eastern synclinal limb, of, an altered, magnetically responsive Cambrian quartz lithic shale horizon.

These gravity and magnetically responsive, altered Cambro/Ordovician lithologies are buttressed up against, a steeply dipping, kilometre long X 400 metre wide slab, of part extrusive, ancient oceanic crust, or Cambrian felspathic quartz hornblendes, that is named incidentally, in honour of Joseph Davies, the first manager of the Beaconsfield gold mine, Tasmania's most famous gold mine, and one of Australia's most profitable mines ever exploited."

Now, to summarise the exploration of the small, 2 square kilometre Davies Hill license, is not as easy as might be first assumed, because modern era exploration prospecting, is a very intriguing scientific endeavour, full of lows and highs, much more so in the MRV.

As the Crown might expect, I had been hoping to announce a successful resolution of my exploration license tenure, with news of a 70 metre VHMS mineralised intersection, or similar, but alas, deep holes are presently out of my fiscal reach and joint (ad) venturers, are difficult to segregate from the international crowd of MRV exploration 'wouldbes', and 'couldbes'.

So I'll just stick to the Davies Hill exploration highs.

Because in the Tasmanian mineral exploration game, the highs are the only things worth reporting.

Unfortunately, the real highlights of my license tenure, are, for me at least, difficult to explain subjects, that require several pages of detailed explanation.

And even then, I am sure the Crown will be sceptical to say the least.

So in the interests of plain geospeak, I'll keep it specific.

Trust me.

EXPLORATION ABSTRACT

Applied geophysical research and methodical terrestrial prospecting, carried out over the Davies Hill exploration license area, 3 kilometres north west of the Mt. Lyell Cu/Au field, has defined three magnetic low anomalies, that are found adjacent to an implied gravity low, that is comprised of a thick sequence of altered black shales, with historically reported, as well as modern, Au values in evidence.

Analysis of recently produced modern era Tasmanian geoscientific maps in conjunction with analysis of a controversial Tasmanian geophysical basement model, as first published in 1992, has led the author to the contentious geophysical observation that altered carbonate lithologies associated with Tasmanian Paleozoic volcaniclastic mineralised horizons, auriferrous conglomerate metasediments and Cretaceous, oil or gas basin sedimentary structures, can be reliably identified throughout the entire Tasmanian landmass, by their common, paleomagnetic intensity signatures.

Detailed geomorphic and mineral prospect analysis of the recently produced 1:100,000 Mount Read Volcanics aeromagnetics composite map, in conjunction with the fundamental principles outlined in the 1992 Tasmanian geophysical basement model, leads the author to conclude that this 1:100,000 aeromagnetic image map, provides the foundation stepping stone, for the development of a world first, ultra reliable and globally applicable, paleomagnetics contrived, hardrock and sedimentary, chronologic timescale map that allows geophysic image interpreters, to effectively understand, the tectonic development of the lithosphere, in a way previously thought impossible.

In plain speak layman description, you know those big, colourful, aeromagnetic wall mosaics, always found on exploration office walls, that absolutely no geologist can make any sense of ?

Well, now they can.

But only if they get off their arses and fervently endeavour, to take a genuine, multi discipline, total geoscience approach, to the difficult craft of interpreting aeromagnetic and residual gravity images.

THE PALEOZOIC TASMANIAN WITWATERSRAND

Jack Stephens was right all along.

Davies Hill is lousy with fine gold.

What Jack will never know is that his lonely and intrepid Western Tasmanian prospecting work has contributed, I believe, to the premature understanding of the origins of the laterally widespread, hardrock and alluvial gold that is found right across the Tasmanian landmass.

Scientifically untested and a personal view only it may be, but its a Tasmanian minerologic perspective well worth highlighting.

It is my belief that Tasmania is, 'the next Witwatersrand'.

The same kind of weakly magnetic, stratabound shale, limestone and dolomite horizons, that 'point the road' to the enormous Proterozoic, gravity responsive, auriferous conglomerate metasediments of the world famous South African and Rhodesian gold and copper provinces, can also be found right across this island, 'pointing the road' to our own, much younger, gravity responsive, Tasmanian Paleozoic, auriferous conglomerate metasediments.

It is the gold that sheds from these, mainly vertical lying, Paleozoic metasediments that help form the auriferous alluvials, that are reported in hundreds of Tasmanian drainage systems today, including of course, those as found right throughout the MRV.

I believe these conglomerate metasediments originally formed as marine deltas, composed of material derived from ancient eroded landscapes and volcaniclastic ejectamenta, slowly deposited over limestone shelves that developed over existing, acidic hydrothermal vent systems, in both shallow and deep water environments, which in turn, were subjected to the dynamic, earthly metamorphic devices, of tectonism, volcanism and the periodic rise and fall of sea levels.

In Western Tasmania there are five metafacies conglomerate/sandstone stratigraphic units recognised, in the very well studied, MRV, Cambro/Ordovician metasediments, Tyndall group.

Any one of these five, mineralogically nondescript conglomerate units, can be found, throughout Tasmania, generally at topographic elevations above 400 meters, or at the base of deep valleys cut by major river systems.

From a geophysical perspective, the most important unit in the MRV conglomerate group, is the hematite, barite and chromite altered, Owen Pioneer sandstone/conglomerate unit.

In the Mount Read Volcanics, the Owen Pioneer beds outcrop at the North Lyell and Prince Lyell, Razorback, Iron Blow, Cape Horn and Comstock copper/gold deposits, throughout the Linda Valley, on Mt. Owen, along both sides of the Queen River valley, as well as being reliably reported outcropping, at the South Henty gold prospect.

There are several other conglomerate units found throughout the MRV, with similar characteristics to the Owen Pioneer unit, which were expertly analysed by Tasmanian Mines Department geoligists in the 1950's, and well known for there stratigraphic association with various Zeehan or Dundas area, mineral prospects.

As a simple guide, the Owen Pioneer unit is the dark purple quartz lithic conglomerate horizon, often found where Gordon limestones outcrop.

Where outcropping, it is essentially, no more than a surface expression indicator, of an ancient geophysical basement, sedimentary lithology.

Although altered and formed in a marine environment, the Owen Pioneer unit has no magnetic signature to speak of.

Generally speaking, the units only exploration significance, is, that they often accompany, altered and weakly magnetic Precambrian to Tertiary shale units, Precambrian dolomite units and Cambrian to Tertiary limestones.

At least one of these pyroclastic or carbonaceous lithologies is always reported at any of the more well known Tasmanian mineral deposits, including Renison, Bischoff, Oceana, Curtin Davis, Roseberry , North Lyell, Cape Horn, Tasman Crown, Hercules, Ring River, Magnet, Farrel, Beaconsfield, to name only a few.

They are also reported, at literally hundreds of lesser known, minor VHMS or gold prospects, as currently mapped throughout the MRV and across the state.

Just like their much older South African Proterozoic conglomerate counterparts, the Tasmanian Paleozoic, Owen Pioneer conglomerate unit, is quite susceptible to standard residual gravity exploration techniques.

This, as a result of the high densities of the minor hematite, chromic oxide and barite alteration characteristics, which result in excess mass, thus causing moderate, though entirely measurable, density ratios, enabling accurate stratigraphic delineation, at depth, by determining the applicable seismic velocity parameters.

My prospect analysis, of the 1:100,000 Western Tasmanian composite aeromagnetics map, suggests that the inferred structural boundaries, of these concealed, carbonaceous marine origin lithologies, are readily identifiable, if the composite map is used in conjunction with the impressive array of MRT produced, modern era, high quality Tasmanian geoscience maps now available, especially so, the 1:500,000 Tasmanian Residual Gravity Anomaly Map.

For all intents and purposes, I believe, with as open a mind as I can attain that we have one of the great auriferous provinces of the world, right here.

It is not the much-vaunted MRV that I speak of; it is the island landmass that we like to call home.

Or as l now refer to it, the Tasmanian Volcanics

The sustained, vigorously researched, cutting edge, Tasmanian geoscientfic groundwork, needed to verify this opinion has, I attest, already been reliably carried out over the last sixty years, by an illustrious array of modern era Tasmanian geoscience leaders, including Leaman, Solomon, Groves, Davidson, Reid, Richardson, Bishop, LoftusHills, Davidson, Large, Blisset, Guline, McPhie as well as other acclaimed geoscientists, such as Etheridge, Veevers and Powell.

If I am wrong, then I'll tell you now, plainly and succinctly, so are they.

I believe that I only did the detailed, MRV and Tasmania wide, exploration geoscience cross analyses and prolonged petrology research, that the above mentioned researchers never really had the time to do, themselves, though continually advise that it should be done or rather, must be done.

Though never did.

I rely strictly on my own, collective, interpretations, of each of their(s) various, published Tasmanian and mainland research papers, and only report this Davies Hill exploration highlight, because I know I have put in, the research hard yards, to validate it, without any shred of earth science doubt.

There is not a hope in hell I would even consider raising it, if this were not the case.

I also had the invaluable edge, of an extremely intelligent wife playing the role of ruthless devils advocate.

As the daughter of a quite brilliant and renowned South African gold and base metal explorationist, I know that she compares admirably with any geological tutor.

As luck would have it, the relentless, twenty year long, South African sponsored exploration drilling campaign, undertaken at the nearby Henty/Mt. Julia gold projects, just up the road a bit,

has saved me a lot of money, by reliably confirming that the Henty/Julia auriferous lithologies, are not the first of there type, discovered in Tasmania, or Australia for that matter.

I know it, and I'm confident that my South African neighbours surmise it as well.

Several diamond drilling programmes completed throughout the MRV over the last forty years have intersected similar, fine grained, sericitic, massive quartz, auriferous Cambro/ Ordovician metasediment lithologies, as are now precisely delineated and expertly ratified, at the Henty/Julia projects.

These early, copper focused drilling projects, were carried out by Mt. Lyell Mining and Railway Company drilling teams throughout the company's major exploration tenement, 9/66.

Modern evidence of these early Henty style intersections can be verified today, by a range of reliable sources, either living, in old reports, or contained in old diamond drill core trays, that can be sourced from the TMR core library and the CMT, drill core storage sheds.

The projects where these Henty/Julia style lithologies were reliably intersected include, the Razorback, Linda, Gormanston, Corridor, Cape Horn and Lake Margaret road, project, all completed in the 1960's and early 1970's.

Similar, Henty/Julia alteration, was also found over wide intervals, during the excavations of the Crotty Dam headrace and surge tunnels in 1988, as well as the Murchison Dam / Mackintosh Lake, surge tunnel in 1981

At Mount Lyell, as late as 1991, a Henty style, massive quartz auriferous horizon, with an accompanying lamprophyre dyke, was recognised, over a 25 metre diamond drill hole interval, by a supervising geoligist who recommended immediate further detailed work be done.

As none of these above mentioned drilling or tunnelling projects were actually targeting auriferous metasediments, no further work was carried out on them.

Gold wasn't worth a lot of money in those earlier times, and Tasmanian hydro projects come at a price.

In the case of the Mt. Lyell auriferous horizon, the supervising geologist initially planned to complete a masters thesis, on the premise, that extensions of these, obvious to him, Henty MQ horizons, were about the place.

Unfortunately for him, he ran into a brick wall of incomprehending doubt about his conclusions, not from his own boss, but from the senior mining management of the company, who declined to pursue his geological hypothesis any further.

EXPLORATION IMPLICATIONS

My Tasmania wide prospect analysis, has led me to the contentious conclusion that all the known hard rock gold, VMS or VHMS prospects, discovered in western and eastern Tasmanian terrains over the last 150 years have identical, regional, palaeomagnetic response signatures and predictable geologic correlates.

I believe my work implies, that each of these hard rock prospects, had quite similar, or replicated, minerologic evolutions, no matter what period of time they originally formed ie. Tertiary to Archean.

Obviously, this opinion, applies globally.

I believe our Tasmanian orebodies, formed in both shallow and deep, marine environments, that were associated with acidic hydrothermal vent systems which were active for lengthy spans of time, over laterally widespread distances, and which operated, under a prolific range of different temperature constraints, and tidal, or deep sea current, influences.

These black smoker and white smoker, vent systems, as they are more commonly known, have already had millions of words written about them, since they were first reported, by French marine scientists in 1978, and have led to a revolution in man's understanding of the development of minerals

Over 200 active systems have since been found throughout the oceans of the world, and more than a few of them have been found to operate over hundreds of square kilometres.

Over a hellishly long span of time, limestone shelf development occurred over these acidic vent systems, as a natural consequence of the abundant marine life forms, that inevitably develop due to favourable conditions. ie; heat, water, carbon, sulphates, sulphides = life.

But enough of the Tasmanian mineralogical origin, history lesson.

There are three, weakly magnetic, pyroclastic and carbonaceous, geology correlates, that can be recognised, that apply to all mapped Tasmanian gold or VHMS prospects, one of which, will always be found.

Either dolomite, limestone or altered black shales, will inevitably be found to occur in, some nearby surface expression outcrop, or, below surface, stratigraphic environment.

It is also the case that fossils will often be found nearby, or, will be noted in regional mapped lithilogies.

By paleomagnetic inference, these weakly magnetic horizons, can be reliably observed to occur, adjacent to gravity lows and magnetic lows, in replicated lithospheric sequence, all throughout both east and western Tasmanian terrains.

Although an enormous amount of level headed, geologic and geophysical research has already been devoted to the understanding of these MRV carbonaceous lithologies, not a real lot has come of it, largely because, the work has been relatively discipline segmented, over many decades, by many geoligists, geoscientists and exploration companies, that it is a difficult task to collate, analyse and compare the numerous forms of relevant information available.

Hence, their critical importance, as blindingly obvious, geophysical vectors for Paleozoic type mineral exploration, has, been underestimated by Tasmanian explorationists.

In a nutshell, these carbonate lithologies are geophysical exploration signposts that point the road to the auriferous metasediments, as well as the VHMS and polymetallic prospects.

As I am aware that mainstream geologic personnel, will be greatly bemused to learn that a truck driving nonentity, would countenance disseminating such a notion, then I certainly do not mind reporting, that I can delineate, these well disguised, paleozoic auriferous metasediments, at depth.

It's actually not that hard to do, given that South African gold explorers have developed, practised and refined the techniques, over nearly seventy years.

With the aid of the recently completed Western Tasmania composite aeromagnetics map and the North West aeromagnetics map, I have found it to be a fairly straightforward geologic, strato-tectonic and geomorphologic assessment task.

For the record, my prospect analysis of the 1998, 1:500,000 Tasmanian Residual Gravity Anomaly Map, categorically suggests , that every mapped VHMS, tin, magnetite, magnesite, gold , lignite, shale oil or oil soak, surface expression indicators, can now be shown to be reliably associated with moderate density, carbonate stratigraphies, that developed over ancient marine basins, subjected to later periods of granitic volcanism.

Personally, I find the gravity anomaly map to be a tremendously more useful geophysics tool, with which to predict, where the implied volcaniclastic structural boundaries, of these carbonate horizons will occur, underfoot, much more so, than the aeromagnetic maps.

Even at 1:500,000 scale, I believe that reliable, localised gravity assessments can be made.

These carbonates stick out like dog's balls.

It helps though, if you, the geophysical interpreter, understand that every induced polarity anomaly that has been observed throughout the MRV, since the I.P. technique was first successfully applied in the MRV in 1959, is now magnetically identifiable, with the aid of the datum corrected, 1:100,000 MRV aeromagnetics composite map, as well as higher resolution, smaller scale, aeromagnetic colour drapes, such as the Yolande, 1:50,000 image.

In short, a skilled aeromagnetic interpreter can literally see the I.P. anomalies, as well as the implied structural boundaries of the carbonates.

Literally.

The Crown should be in no doubt about this last statement, whatsoever.

I have done too much detailed MRV regional geologic, geomorphic and physiographic research, prospect by little known prospect, bearing by bearing, to believe otherwise.

As far as I can be sure, no one else in the world has recognised this aeromagnetic / induced polarity association.

I finally stumbled onto it nearly a year ago, after five years of slow and methodical, evaluation, of the Yolande license aeromagnetics and gravity data. Pasminco Exploration, 1993.

The point must be made, that it was only possible for me to validate, these contentious conclusions, as a result of the production of the new Tasmanian geoscience maps, as described, as well as the splendid achievements at the Henty mine.

I am more than happy to debate these viewpoints with senior officers of the Crown, or any dedicated Australian geophysicist, or petrologist.

I have found that there it is no sense talking it over with exploration geologists, because I have yet to find one, who fully understands these maps, in any multi-discipline cognitive sense, period.

Their eyes glaze over, with righteous indignity.

From a geophysical prospecting perspective, the above mentioned maps, as well as the 1998 Tasmanian Time and Space diagram map and the 1998 Tasmanian Stratotectonics Elements Map, are the only Tasmanian geoscience maps worth reading.

There is no doubt in my mind, that the soon to be published, datum corrected, North West and Western Tasmanian composite aeromagnetics map, will add hundreds more, of these quite easily identified, geophysical signposts, to the ever growing Tasmania wide list.

I am also of the earnest opinion that there is not just gold or base metals in our onshore landmass either, we have more than a few oil basins as well.

I submit that the same carbonate sediment structures that compose the Bass, Otway, Yolla and Gippsland oil and gas basins, are also found replicated throughout Tasmania.

This is not idle, ill considered, ill informed and spurious laymans conjecture.

The new MRT maps simply do not lie.

Otherwise the sciences that are behind the actual creation of the maps, would be wrong.

It is only the multi discipline failings, of the individual geophysical interpreters and exploration consultants, who currently utilise these newly created modern era maps, that is in obvious question.

It is now my considered opinion, that underneath the landscapes of this poor island state, we have our own Grasbergs, Escondidas, Ok Tedis, Bouganvilles, Mt. Isa's, Broken Hills, Mt. Morgans, Alumbrera's, Western Deeps, Bingham Canyons, Ballarats and Bendigo's.

They are very well concealed, no doubt, and will take some finding, of course, though the Crown should be in no doubt, that they are out there, waiting to be targeted and intersected.

Time and exploration persistence, I know, will prove me right.

Having made these extremely contentious Tasmanian mineral exploration claims, I humbly issue a Western Tasmanian prospecting challenge, to any serious minded Australian mineral exploration geoscientist, who earnestly values, their own individual career contributions, to their respective earth science disciplines, to rigorously assess and vigorously debate, my own, allegedly multi-discipline correct, Tasmanian prospecting conclusions.

I am acutely aware that these unorthodox, paleomagnetic and residual gravity derived conclusions, challenge accepted mainstream exploration ideologies.

Although, if our dedicated Australian earth science leaders are as serious and passioniate, about their own alleged, multi-discipline exploration geoscience nous, as I know they claim to be, then they will readily surmise that they have not one fucking whit to lose, and maybe something to gain, by accepting this very seriously proposed, ideological mineral exploration geoscience debate, as faithfully put to each of them, by a truck driver.

All I ask is that they take up the challenge on my turf, in the MRV.

My challenge remains open, till the day I die, or, god forbid, someone pays me to keep my opinions to myself.

Which ever comes sooner.

I look forward to robust debate, I really do.

Though I certainly don't count on robust debate actually happening, given the dearth of humble men and women in the Australian mineral exploration game.

If the officers of the Crown know of any themselves, they know where I can be found, opposite the peaks of Lyell, Sedgewick, Geike, Owen, Murchison, Darwin and Huxley.

EXPLORATION RATIONIALES. THE RIGHT MODEL.

It is true to say, that none of my Tasmanian prospecting conclusions would have been possible for me to conceive, without the aid of a reliable Tasmanian geophysical basement model.

They're not easy to come by that's for sure.

As luck would have it, Dr. David Leaman's, Cambrian Keys, replicated melange, basement model, published in 1992, has provided me with a reliable Tasmanian basement model. Please refer to Davies Hill final reports, 98/99 and 99/2000, re: my initial, poorly outlined opinions, on Dr. Leaman's replicated melange model.

Paradoxically, the crescendo, of all knowing silence, that these two reports received, proved entirely fortuitous, in that it left me no option but to undertake the diligent geoscience research necessary, in order to fully understand, the scientifically unsubstantiated exploration assertions, that I reported, in relation to Dr. Leaman's replicated melange concepts.

Over the last twelve months of this E.L. license tenure, I have sincerely and strenuously attempted, by every means available to me, to discredit, demolish or find implicit scientific fault, with Dr. Leaman's replicated melange basement rationales, using, as my control, the fundamental principles of the exploration geo sciences, as we like to think we know them.

Because I knew therein only, would lie the truth.

I gave it my best shot, bloody oath I did, but to no avail.

It came up trumps against any geoscience argument that I could throw at it.

I am in no doubt that Dr. Leaman's, controversial, Tasmanian geophysical basement model can be absolutely, 100%, relied on, no matter what geoscience methodology you care to assault it with, either geomorphically, geologically or geophysically.

Dr. Leaman's basement model, as published in 1992, is comprehensively validated, not by me, but with the printing of the 1995 Tasmanian Total Magnetic Intensity Map, the 1996 Tasmanian Residual Gravity Anomaly Map and unquestionably so, with the 2000, MRV Aeromagnetics Composite Map.

The maps don't lie.

Otherwise the geoscientific foundations that they rely on are wrong.

And that, as already stated, is simply not the case.

I humbly advise all dedicated Australian mineral explorationists to find the time to cast a learned eye, over the illustrative figures that Dr. Leaman presented in his paper, then to study the new Tasmanian geoscience maps and they will, ever so slowly, finally come to realise exactly why I hold these earnest opinions.

Dr. Leaman's Tasmanian geophysical basement model concepts apply nationwide and world wide, and have immense implications, not just for future global mineral exploration, but for any person laterally skilled enough, to master the basic tenets of the replicated melange.

His simplistic, wide ocean floor, marine origin, mineralised/tectonic concepts, are simply correct, because the Tasmanian landmass did have, contrary to popular, Tasmanian academic conjecture, a very simple origin.

Whilst I certainly believe that my prospecting and geoscience research, completely validates Dr. Leamans replicated melange concepts, I believe that it was the complex, scientifically precise

manner, that Dr. Leaman described his 1992 conceptual model, that completely baffled anyone who read the paper, and caused them to give up on it.

I don't blame them.

An ordinary, generic brand Rhodes scholar would break down and cry trying to decipher it.

It's easy to see why now, because his 1992 paper was, literally, decades ahead of its time.

It needs to be remembered, that Dr. Leaman's paper, was published with the sole intent, to actively stimulate and promote Tasmanian, geophysical designed, mineral exploration, the same forward thinking philosophy, that has under written, Mineral Resource Tasmanias creation, of the best possible, modern era, Tasmanian geoscience maps.

I am of the opinion that in future years to come, Dr. Leaman's 1992 Cambrian Keys treatise, will come to be regarded as the basic geoscience instruction manual, as used by all Australian mineral and oil explorationists, and the 1996, Tasmanian Residual Gravity Anomaly Map and the 2000, MRV composite aeromagnetics map, will be remembered as the first basic road maps to the instruction manual.

I sincerely believe that Cambrian Keys, will become to be regarded as a landmark international geoscience research paper of the highest possible calibre, not just because of its implied benefits for Tasmanian and Australian mineral exploration, but because its fundamental geophysical criteria, can be shown to apply to any landmass, anywhere on this planet.

It is Nobel laureate, ground breaking, scientific work, and I promise to do everything in my own limited powers to ensure that Dr. Leaman's life's work, is accorded the international acclaim, that it so richly deserves.

I cannot help but feel disillusioned with myopic Tasmanian explorationists, who, it seems to me, do not have much capacity for what I call normal, broad scale, bigger picture, minerologic lateral thinking.

The on ground evidence has been there for some time now.

It has been mapped and precisely recorded over the last 120 years.

It is on display on the shelves of the MRT library and my own kitchen table and walls.

That it has taken a Queenstown prospector to fully compute, the intrinsic global importance of the work of, one of their own, an exceptionally gifted, Tasmanian geoscientist who has spent over forty years contributing to the geophysical awareness of the Australian landmass, is a bit rough.

As I know full well, that only a series of well executed, geophysically designed, deep hole diamond drilling campaigns, will successfully validate any of these contentious Tasmanian exploration viewpoints, I can only say that I am ready to undertake the first, such drilling campaign, at Davies Hill, with any Australian resident, or corporate exploration entity, endowed with the power of vision, and risk capital, to fund such a drilling project.

I have been ready to drill for some time now, and have several compelling geophysical targets to aim for, all situated on the southern side of Davies Hill, concealed deep underneath altered Cambro/Ordovician black shales.

I can wait, but I know that Tasmania cannot afford to.

In the context of Dr. Leaman's basement predictions, when my unbridled faith in them is eventually proved right, by conventional researchers, then our states mineral and oil exploration futures, are extraordinarily bright, to put it in the most conservative light possible.

It must not be forgotten, the new modern era, MRT produced gravity and aeromagnetic maps simply do not lie.

Only those who claim to be able to interpret them without a 100% reliable, geophysical basement model, are lying.

I call those unknowing duds, the make believers.

It is well worth mentioning one last rationale, that has given me a modicum of scientific clout, in my own attempts to justify these opinions.

In 1984, Dr. Leaman reported, that he had concluded that Western Tasmanian mineral indicators appeared to be associated with magnetic lows, found adjacent to gravity lows.

In my 98/99 final report, I reported pretty much the exact same observation, and named the indicators you could find, if you looked hard enough.

I had no absolutely no knowledge whatsoever, of Dr. Leaman's 1984 geophysical observation, until November 2000, when I happened to come across a reference to it, in an obscure MRT Tasmanian geophysics manual, Western Tasmanian Geophysical Signatures, published in 1988.

Sadly, no mineral explorationist in Australia appeared to have listened to Dr. Leaman then, and except for my own, much later, Davies Hill prospecting research, no one still has.

I put it to the officers of the Crown, as well as the 'professional' reader, that if two MRV researchers, using two completely unrelated research methodolgies, could arrive at exactly the same mineral exploration conclusion, then those MRV conclusions can be justifiably considered to be scientifically valid, mineral exploration viewpoints, worthy of further scientific consideration, at the very least.

As I am the first to admit that my MRV observations demand applied academic research, of the highest calibre, then I have no problems whatsoever, in offering personal and extended research assistance, to any Tasmanian geoscience undergraduate seeking a masters thesis, research opportunity of a lifetime.

All they need be is lateral thinking.

EXPLORATION SPINOFFS: A BIRDS EYE, X RAY VIEW OF THE LITHOSPHERE

Strangely enough, in the process of trying to demolish Dr. Leaman's basement model, I inadvertently recognised a completely new, radical, Tasmanian mineral exploration observation, of my own, that has global applications, if not universal ones.

In my 98/99 final report, I raised the idea that it should be technically feasible, to devise an offshore/ onshore, paleomagnetic and gravity based, hardrock chronologic timescale map.

I suggested it would most likely be a very difficult task, but not beyond the realms of scientific imagination, given that a brilliant Tasmanian born and trained, oil geophysicist, has already devised a globally applicable, chronologic off-shore, Quaternary to Cretaceous, sediments map, by simply utilising the principles of seismology (Davidsons, Global Compressional Pulse Model, 1995) in conjunction with a lifetime of global siesmic research endeavours.

I now firmly believe that it is indeed, entirely possible, for Tasmanian geoscientists, to create (not fabricate), a globally applicable, chronological paleomagnetic intrusives and sedimentary timescale map, that readily stands the test of time, by recording time, as it were, by its preordained, remnant paleomagnetic intensity signature response.

This 'earth sciences signature map', would inherently apply to any Phanerozoic, Proterozoic, Palaeozoic, Carboniferous or Tertiary environment.

One size fits all.

As I have already used this geophysical interpretation technique, in conjunction with existing MRT produced geology mapping, to very accurately predict, the sedimentary and igneous lithologies encountered, at three widely spaced Tasmanian drilling projects, I realise now that it is entirely feasible, to devise such an unorthodox map.

Theoretically, it only requires normal magnetic latitude adjustments, to adapt this aeromagnetic/geologic interpretative technique, for mineral, oil or palaeontology exploration purposes, anywhere on this planet, or indeed, similar planets to our own.

This combined, Tasmanian aeromagnetic, gravity and geologic prospecting technique, based on Dr. Leaman's Tasmanian basement model concepts, will, I predict, be found to apply to any known mineral province, oil basin or fossil environment.

Because, where minerals form in a marine environment, so too, does life.

As I now see it, one doesn't come without the other.

From my own global analysis of modern era mineral deposits and black smoker marine environments, l realised that it really does not matter one bloody iota, how old the original crustal rocks are themselves, because each and every mineralising epoch/event has been a mere replicated version of an earlier, identical marine event, and further, is indelibly imprinted with a replicated and thoroughly recognisable, computer induced, paleomagnetic signature.

There are of course, numerous metamorphic, petrologic, geochemic and tectonic variables which most certainly need to taken into account, (far too numerous to detail herein) although, the upshot, is that all carbonate mineralised horizons in Tasmania, no matter how old, can be accurately targeted above the alleged stratigraphic 'source', using conventional, two dimensional, second generation, aeromagnetic digitised colour drapes.

I know this to be accurate, because I have reliably observed it to be the case, in over one hundred mapped Tasmanian prospects.

From Balfour to Scamander, Port Davey to Beaconsfield and Grassy to Killecrankie.

It does not matter one iota, if the surface expression sedimentary rocks are allegedly non magnetic, it's what's deep underneath them, or, the alteration within in them, that really counts.

When these observations are applied with third generation geophysical techniques, such as electro aeromagnetic three dimensional technology, then the implied global exploration benefits are immense, and should, I predict, if ever I am to be taken seriously, provide thesis opportunities for thousands of future geoscience graduates throughout the current millennium.

For instance, I believe that I can now reliably predict where Tasmanian surface alteration indicators will be found to occur, utilising either Bouguer line maps or aeromagnetic colour drapes.

I have personally identified so many of them, throughout the last two years, that I can now validate and successfully apply this exploration technique, anywhere in Tasmania, or the mainland, given the right geoscience and geomorphology maps are available… just try me.

I can predict where Eo Cambrian fossils will, in all likelihood, be found to occur.

Where komaatite basalts will be intersected.

Where Tyndall group conglomerates will be intersected.

Where magnetic susceptibility anomalies will definetly occur.

Where physiographic implied tectonic trend lines can be observed.

Where any gravity lows or magnetic lows are to be found.

Where chloritic zonation will start and end.

Where Devonian granitic plutons, Cambrian andesitic bosses and Precambrian ultra mafic suites will be found to outcrop.

As I have no access to any exploration technologies, except the basic modern era geoscience maps themselves, I am in no doubt, that there is unbelievable scope for many more terrestial exploration insights, to be made.

In making these straight out of left field (or Mars maybe) statements, I readily acknowledge the raucous howls, of prolonged laughter, ringing out around the academic traps, as made, by the more enlightened.

It is only natural, but they can laugh till the cows come home.

I thank my lucky stars, that I endured not one second of formal, orthodox geologic training, apart from a few thousand rounds on the deck, otherwise I would never have been able to make the lateral, geoscience connections, had I been trained to think in the commercially acceptable, mainstream geologic mindset, that prevails.

Of course, as the professionally trained and self appointed, geologic adjudicators, will themselves reliably attest, they're only human after all, and paradigms are always enormously difficult to digest, no matter what the industry or scientific discipline context, in which they are first reported.

That's why I fully expect this Davies Hill Final Exploration Report, to be hidden away on the lonely shelves of the MRT's august exploration library, along with all the other Tasmanian exploration antiquities of old, not to be perused, by any lateral thinking bastard for decades to come.

Pretty much the same fate as Dr. Leaman's replicated melange treatise.

Because that's the nature of global mineral exploration research.

Historically speaking, it is always an intellectually debilitating, lengthy and protracted exercise, for any person involved in the geoscience industries to have their 'high risk' ideas, studiously and rigorously investigated, by others 'more' learned.

As an unaligned and unaccredited Tasmanian prospector, I expect nothing less, and do not foresee anything to come of this Final Report, for some time to come.

I'm just not that naive a Tasmanian mineral prospector, when it comes to dealing with modern era, Australian mineral explorationists and their own fiercely protected egos.

It took nearly sixty years before the unconventional plate tectonic theories, of an obscure German meteorologist, Alfred Wegener, were first considered, by more learned men, as being sound, rational and worthy of applied scientific consideration.

Personally, I don't plan on waiting that long, because I believe that Tasmania simply cannot afford to waste such an unequivocably unique mineral exploration research opportunity.

There is scientific substance in my reported observations, I know it to be true, but it would seem that there is little substance in the minds of many Australian mineral explorationists.

I know that our state is in need of the jobs that go hand in hand with economic, mineral prospect discovery, although, I am also acutely aware, that it is simply not the role, of Mineral Resources Tasmania, to investigate contentious, uncredentialled exploration announcements, as these outlined above.

Knowing this to be the case, I put it to the Director of Mineral Resources Tasmanian, Dr. Tony Brown, that the Tasmanian geophysical mineral exploration observations, that I allege to have made, are merely, the first scientific harvest of the fruit borne, from the blossoming tree of geophysical discovery, that was planted in 1995, with the ten year plan, by the MRT, to focus its activities on the business of making Tasmanian mineral exploration easier for those parties so inclined to undertake the risk.

As a prospector it is true that I have limited contacts, limited budget and unlimited passion for Tasmanian exploration.

I can do no more than faithfully report to the Crown, via the officers of the MRT, the honestly appraised Tasmanian exploration conclusions, that I assert to have made, as a consequence of my application for the Davies Hill exploration license.

Which is why I would like to finish this Davies Hill highlights review on a long-term positive note, by explaining, in a roundabout, generalised manner, a geoscientific matter of great significance.

As a self financed trainee geophysical interpreter and Tasmanian exploration license holder of no repute, I realised early on, that apart from never being taken seriously, I would have no hope of accessing new third generation geophysic exploration techniques such as electro aeromagnetic 3D modelling, hyper spectral scanning, infra red satellite photo images or the revolutioniary Falcon gravity device.

As a result of my own relatively no win situation, over the last two years, I gradually taught myself how to construct my own three dimensional, computer unaided, basement tomographic mapping…and eventually, to deconstruct the surface topography, back to its original, pre-tectonic displacement, 'idealised', ancient basement topography.

It's all done in my head of course, and with pencils.

It is really only possible if you have the aid of existing second generation geophysical data, such as gravity line models, Bouguer maps, aeromagnetic maps as well as a good understanding of the science of geomorphology.

I have concluded that it really is not that hard a task to surmount, even an enjoyable one, as long as you, the conceptual basement interpreter, remember always to stick to the fundamental principles behind the development of each of the various and pertinent, geophysical techniques, dependent as they are on the basic rock properties such as density, mass, conductivity, porosity, ionic polarity and remnant magnetism.

And don't fear the tiresome unpaid work, of prolonged and obscure geoscience research.

Because every now an again, you learn something positive, and all the hundreds of late nights and pricks of mornings are totally forgotten.

Late last year whilst scrutinising the MRV aeromagnetics composite map, laid out on the floor of a fellow prospectors loungeroom, it struck me, like an electric cattle prod, that the only way to interpret this map, was to 'view' it, as though you were flying above the earth, in a U2 spy plane, at around 120,00feet altitude.

I realised that this ‘ view’ was only possible to conceive, only, if you could believe what your eyes were telling you.

Obviously, to be able to believe what your eyes were suggesting, you would first need an ultra reliable geophysical basement model, and secondly, you would need to have a fairdinkum understanding of the fundamental principles, behind the craft of paleomagnetic interpretation.

From what I have already learnt about the science of paleomagnetics, I know it to be quite easily, by a long way, the hardest of all the exploration geoscience disciplines to fathom, and an exceptionally difficult science to master.

Very few men on this earth ever master it.

Many can fathom it, sure, but seldom few master it.

This is the reality of the science, even though literally millions of words have been written since the early 1950’s, by learned men and women from all corners of the earth, grappling with the myriad difficulties of the science, as they tried their absolute hardest, to make sense of what their eyes were telling them.

With the advent of second generation paleomagnetic breakthroughs, such as digitised colour magnetic drapes, in the late 1960’s, the science took off in a big way, with many major discoveries of economic importance being made around the world by competent geophysicists, working in tandem with competent exploration geologists.

From my own perspective, I believe the hardest thing to master about colour aeromagnetic imagery interpretation, is knowing what to believe, or, to put it succinctly, trusting in what you believe your eyes are telling you.

As I came to realise, you simply cannot trust your own calculated lithology interpretations unless you have a reliable geophysical basement model.

It is quite impossible to trust any interpretation without a legitimate basement model.

A basement model, assuming it is derived from reliable geoscientific rationales, is, without doubt, the most important requirement for the interpretation of aeromagnetic imagery.

Only when you have that reliable basement model, from which to form your own calculated surface geology and geomorphologic exploration rationales, will you, the aeromagnetic interpreter, have any realistic chance, whatsoever, of accurately delineating a well concealed orebody.

Without one, you are simply looking for Dr. Leaman’s proverbial needle in a haystack, or just pushing shit up hill.

The lack of a reliably accurate basement model, has been the bane of Tasmanian and Australian mainland geophysical explorationists, for many a year.

In our own island state, the geophysical exploration successes achieved at Savage River, Western Tharsis, Corridor, Que River, Hellyer, Avebury and South Savage River only serve to remind us of the sheer unreliability of our current, accepted, Tasmanian basement models.

In order to even remotely comprehend a standard issue, aeromagnetic digital colour image, you need to know that the image itself represents no more than a computerised measurement device that digitally and very precisely records, by colour coding, an obscure nanotesla scientific scale, that was originally devised to record the remarkably faint paleomagnetic field, intensity signatures, that are inherent to all landforms on earth.

Therein lies the difficulty in understanding the science itself, because the only way to comprehend it, is to know that the scale used to measure the intensity response, literally compresses the whole earthly paleomagnetic range, into, less than a bees dick.

I understand well, why many expert Tasmanian exploration geoligists actually fear the science of paleomagnetics itself, and refer to it as voodoo geology, on account of the replicated mineral exploration drilling failures that generally accompany its use.

All the same, as I don’t have a professional reputation to protect, I’m certainly not afraid of losing what I don’t have.

So it really doesn't matter to me what mainstream explorationists make of it, when I now report, the honestly made, Tasmanian geophysical discovery of the millennium.

It may only be a new millennium, although, this alleged discovery will definitely last more than a thousand years.

I wish to announce a Tasmanian concluded, aeromagnetic interpretative technique that will, so I believe, change forever, the way that modern era earth scientists currently interpret the tectonic evolution of the lithosphere.

Yes, it's a big statement, I know, but I would not be submitting it if I were not supremely comfortable with the prediction itself.

I have discovered that not only does Dr. Leaman's Tasmanian geophysical basement model allow aeromagnetic imagery interpreters to confidently rely, on their own well calculated Tasmanian lithology interpretations, it also makes it possible, for them to view the digital image itself, as though it were an X-ray, three dimensional view, of the lithosphere itself.

Because essentially that is exactly what existing second generation, aeromagnetic maps really are, or what they really portray.

A three dimensional X-ray image of the lithosphere.

I have decided to name this X-ray perspective, Leaman's Perspective, in sincere honour of his outstanding, lifetime contributions to the earth sciences.

As a Tasmanian prospecter, that's how I call it.

To take Leaman's perspective, one natural, global step further, it can be shown, to be seen to apply, I humbly predict, to any part of the planet that has had high resolution, large area, aeromagnetic surveys employed.

I further submit that it has universal applications of incalculable research importance.

For the first time in the modern era history of the paleomagnetic sciences, this alleged discovery, allows the competently trained, multi-discipline aware, aeromagnetic interpreter, to accurately breakdown the colour coded nanotesla spectrum range, into a quantifiable, chronologically precise, igneous and sedimentary, surface expression order.

With only a hint of poetic largesse, it is, in explicit lithological essence, the Holy Grail, globally applicable, aeromagnetic exploration solution, that provides the eternal key, to unlocking the vast amounts of geoscientific information, that are actually contained in all aeromagnetic and gravity colour coded maps.

It eliminates the brain pain out of aeromagnetic interpretation that's for flamin' sure.

I have tried my damnedest to work out why no-one else has recognised this before me, given that I'm just a schmuck from Queenstown, and I have concluded that every one else who interprets these colourful, high tech and largely unintelligible aeromagnetic images, simply view them out of focus.

Right out of focus.

Completely unbeknownst to themselves.

By this I mean, that all modern era geophysical image interpreters, tend to view these images in large scale formats, as in 1:10,000 scale, expertly believing that bigger is better, when really, the only possible way to make any reliable sense of the colour coded, digitised, nanotesla bee's dick measurement scale, is to view them in as small a format, as is possible. ie; 1:100,000 format.

You have to pull right back, or literally defocus, in order to get the right, or best, focus.

Put another way, in order to get a true micro perspective, you need to take a macro perspective.

I believe there is simply no other way to reliably view these images, because the nanotesla, bee's dick scientific measurement scale, irrefutably demands that the interpreter, take a step back, right back into the atmosphere, if you like, before they can make any rationally informed

judgement, about the underlying lithologies, excepting, the normal, high magnetic range, igneous suppositions, as known by competent mineral exploration geophysicists.

Only when they finally accept this unorthodox, interpretative 'viewpoint', will they ever have any realistic hope of reliably deciphering the paleomagnetic images before their eyes.

Exploration geophysicists have confused the issue even further, by adding more and more, digitised colour spectrums to these images, supposedly, to make the job of interpretation easier, when, on the contrary, it actually clouds the image into a meaningless, colourful montage.

My X-ray perspective of the lithosphere, as ever so briefly outlined above, simply would not have been possible without the production of the datum corrected, 1:100,000 MRV aeromagnetics composite map; the 1:100,000 North West aeromagnetic map; Dr. Leaman's 1992, Tasmanian replicated melange basement model; Professor Etheridge's 1984 work on Bass Strait transform fault structures; Professor Alan Davidson's 1995 work, on globally synchronous compressional pulses; L.R. Richley's, 1976 Land Systems of Tasmania, Region 3; the dynamic MRV geology mapping led by Dr. Keith Corbett and Mineral Resources Tasmania. 86/96

Utilised in collaborative, geoscientific tandem, the above named maps, allow the MRV aeromagnetic image interpreter, quite an extraordinary X-ray perspective, of the Tasmanian lithosphere itself, that it makes your spine tingle with stunned amazement.

And by Christ, as an underground atheist, it takes a helluva lot to stun me.

As I am aware that few people will ever share this unique view of the earth, and actually understand what it is, they are really looking at, then I regard myself a fortunate man.

Because I know in my heart, that I am witness to the birth of a geoscientific paradigm, that will change the way that all geoscientists, no matter what discipline, view the evolution of the earth.

I tried damned hard to disprove this long range, best focus, paleomagnetic analytic, X-ray perspective.

I analysed from a modern era geomorphologic perspective, every hill, every hummock, every ridge, every mountain, every plateau, every major river system and every major and minor mineral prospect, that is covered by the 1:100,000 MRV composite map, in conjunction with; the 1:500,000 Tasmanian Residual Gravity Anomaly Map, satellite photographs of the West Coast, nor to forget, a veritable nightmare of Tasmanian geologic maps.

Objectively speaking, it is a hell of a lot of ground to physically cover, although, in all the MRV terrains that I observed, I could not find geomorphologic fault, either surface expression outcrop or drainage system, with the X-ray image perspective.

It also stacks up perfectly, with Tasmanian historical and modern era mapped geology and previously interpreted stratotectonic fault lines.

I am inclined to believe that it is the very minor magnetite % concentrations, contained in the various MRV carbonate lithologies, that provides the ' visual', paleomagnetic/geological, 'key' to this previously totally unrecognised X-ray perspective.

What else could you assume?

I believe it is possible to take this MRV lithospheric perspective, one step further, in that (as previously reported), I have recognised that every induced polarity survey anomaly, so far recorded in the survey areas covered by the datum corrected, 1:100,000 MRV composite map, is acutely identifiable, as a distinct, though very weak, paleomagnetic intensity response.

As any competent geophysicist will tell you, an I.P. anomaly will always have some form of alteration, whether it be graphite, magnetic pyrhotite, minor magnetite or minor sulphides.

Otherwise it isn't an I.P. anomaly.

I happen to believe that these newly recognisable, aeromagnetically responsive, I.P. anomalies, are in fact, the well concealed, altered carbonate lithologies, that point the road to the Paleozoic auriferous Henty style metasediments.

In closing, I know that all of the above, will come as a Richter scale magnitude shock, to any dedicated Australian mineral exploration geophysicist or geologist, I can only say that anything is now possible, if you have a reliable geophysical basement model.

And in Tasmania, we most certainly have.

EXPENDITURE

I believe I have spent around $30,000 in the preliminary exploration phase of my Davies Hill exploration license endeavours.

My wife thinks it's a helluva lot more.

It has been very difficult for me to justify expenditure in my quarterly reports that I am compelled to complete.

The majority of my exploration activities have been accomplished sitting at my kitchen table, scrutinising maps and geoscientific paraphernalia of innumerable kind.

Those who know me will attest that I have not shirked my fiscal responsibilities to the Crown over the five year exploration license period.

Although I'm quite sure that the Crown will beg to differ.

It's hard spending money when you haven't got it.

And I firmly believe that there is no sense whatsoever, in hiring experts who only value your acquaintance for the money they can generate from you.

Three years ago I finally devised an expenditure formula, that I was happy with (though I don't know about you fellas) that I hoped would satisfy the Crown when it finally came to this final account.

I reckoned on 10 hours per week, conservative, time spent researching or prospecting, at a cost of $10 an hour, which worked out to $1200 a quarter, or $4800 a year.

I hoped that the $10,000 dollar exploration hole that I drilled as well as the myriad other expenses that I incurred would help make up any implied difference.

I have not claimed any expenses incurred for taxation purposes.

No one forced me to apply for the E/L and I am of the philosophy that it is wrong to seek taxation benefits in order to find, for your own financial benefit, something, which the Crown already owns.

That's my philosophy.

I know I did more than ten hours a week, bloody oath I did, though I'm more than happy to stick with my original formula because I am satisfied that it is a fair and reasonable, expenses formula to apply, especially so when you consider that I spent not one red cent on expert advice, apart from my annual data retrieval sorties, across the central plateau, to the offices of the MRT at Rosny Park.

Just to put the Crown clearly in the fiscal picture, around eighteen months ago, a very well credentialled mainland based mineral exploration consultant, gave me his opinion on the expenses that he would himself have charged, for the prospecting and geoscience research that I had carried out so far, and he quoted a minimum cost of $150,000.

That was his opinion, and who am I to argue the point?

But to put my own incurred exploration expenses in another perspective light, just over two months ago, I had the extreme pleasure of witnessing a presentation update, on the revolutionary new 'Falcon' aero gravity, exploration technology, as developed by BHP in conjunction with the U.S. navy, at a reputed all up development cost of over $400 million dollars.

Without a doubt, it was a quite breathtaking technological achievement, of the highest magnitude, only made possible, so the BHP bloke said, as a result of the brilliant mathematical abilities of a Tasmanian born physicist, Professor Frank McCracken.

Well done Frank.

Funnily enough, after I went home and gave the matter serious and thorough thought, I concluded that I can actually do the same thing, that Frank can, with my own newly described, geophysical interpretative techniques, as developed by me for around $30,000.

Only a hell of a lot better.

I'll let the Crown be the judge.

END NOTES

Before I commenced compiling this report I was well aware that I was not a trained geoscience technical report writer of any persuasion.

I deliberated on this disadvantage for a good length of time before deciding on the final presentation format, realising that it was the natural way for me to get my exploration opinions and conclusions across.

In the interests of truth, and for what its worth, I am a graduate copywriter and corporate speech writer of formidable and proven repute, who just happens to be a miner, by choice.

Without going into lengthy detail, I have got the runs on the board as far as communicating in the written form.

I have submitted reams of very difficult material, to some of the largest multi national corporations on this earth, although, this Davies Hill final report has been the hardest intellectual exercise of my life, by far and away.

I attempted to take out the complexity and boorishness of normal exploration report formats, and simply tried to make the report an interesting read, by humanising it, in the ambiguous hope that I could actually get these unorthodox geophysical concepts across.

I also want every professional person who reads it, to read it right through to the very end.

Whether they understand or believe the alleged exploration significance of it, is entirely up to the mind of the professional individual.

That's not my problem and it is no skin off my nose if they don't.

I report what my mind and my heart compels me to report.

And that is all I have attempted to do, honestly and sincerely.

There are many people I would like to thank, for their advice and help over these last few years, my expert diamond drilling mates from Low Impact Diamond Drilling, Roseberry, Lance Stebbings and Mick Dunham, loom at the forefront of these obligatory thank yous.

Without the exploration hole that Lance drilled, and the work, encouragement and timely friendship they both gave me, I would still be looking for Dr. Leaman's needle in the haystack.

I would like to pay sincere tribute to the following MRT officers, who have helped me more than they will ever know, by providing me access to their minds and their professional expertise, without fail, each and every time I visited Rosny Park, Hobart, Tasmania.

They made it feel like a home away from home.

Thank you Dennis Burgess, David Green, Bob Richardson, Kylie Lau, David Gatehouse and Cathy Purser.

It would be entirely remiss of me not to single out, for special mention, Mr. Michael Ayers, the previous Director of Mineral Resources Tasmania, whose own vision, and faith, in the capacities of the ordinary Tasmanian working man, allowed me to undertake diligent exploration of the Davies Hill exploration license, in the first place, thus causing a major precedent in Tasmanian exploration, by letting the little guys have a go at exploring ground, that was previously only ever granted to major corporate entities.

Bravo, Michael Ayers, Bravo!

Because without his powerful, long range vision, none of my alleged Tasmanian geophysical and prospecting insights and discoveries, would ever have seen the light of day.

I take my hat off to you sir.

Thank you also to the many fine men who donated crystal and rock specimens to me, from every corner of the Prince Lyell copper mine, thus enabling me to gain, an ideal, below ground perspective of the MRV, that a petrologist could only ever dream of having.

And thanks to my wife and kids, for the loan of their kitchen these last six years.

I told them all something good would come of it.

And I was right.

PLAIN AND SIMPLE PROSPECTING

As a Tasmanian prospector with an interest in rocks and the earth sciences, I don't mind saying that I've had a gutfull of the intellectualised industry geospeak, used to explain the formulaic idiosyncrasies, of individual exploration research endeavours.

In the cloak and dagger world of modern era corporate mineral exploration, I've learnt that it pays to have the interpretative skills of an Egyptian hieroglyphic analyst to be able to decipher the murky academic obfuscation's of the average research report.

I have noted that each and every year, hundreds of researchers from all branches of the geosciences, prepare research papers to present to their colleagues, announcing all manner of exciting observations or discoveries they made, or at least believe they have made..(been there done that), which are photo-copied by their specialist industry colleagues, and then taken home and placed on a library shelf or stuffed in a cardboard box and carried out to the backyard shed, ready to be tossed out, in twenty years time, still unread.

I have accumulated quite a number of these globally compiled earth science research papers myself, and often ponder the space that they take up on my own library shelf, given that I'm the only working person I know, who might be remotely interested in reading them again.

Now I am quite aware that nothing I ever say or do will change the way that geoscientists communicate their ideas to each other, though it seems to me, that if they cared to explain their ideas in plain language, then maybe a lot more people would take an interest in these disciplines.

Because to the ordinary man in the street it is bloody confusing to comprehend the intellectualised minutiae of what the geoscientists plainly regard as normal plain speak.

Out of the hundreds of research papers I've read, I've yet to come across a paper that simply explains modern prospecting, in a manner easily understood by those unfamiliar with the game, but who might be stimulated enough into taking it up themselves, if they had a list of the things they need to know.

So in the interests of promoting Tasmanian prospecting, I propose to take this rare opportunity, via this Final Report, to put on the public record, a few of the basic, modern era prospecting insights that I have acquired traipsing through the Tasmanian bush.

From my perspective, if only one person ever takes the time to follow them up, then this well intentioned exercise, will have been immensely worthwhile.

1. The most important thing you need to have, is an understanding of where the hell magnetic north is. Once you have that under your belt, everything else falls into pIace, it is not easy to learn, but it is absolutely critical to all that you do.

2. The key words to master are patience, inquisitiveness and persistence. Nor to forget igneous, sedimentary and metamorphic.

3. Do not bother going out in the bush unless you first know what you are looking for, otherwise you're just wasting valuable breath.

4. In the modern era, you are not looking for mineral outcrops, although good luck if you do happen to find one. Simply look for indicators that are associated with the development of ancient marine environments.

5. The indicators are many and varied, generally speaking, when you find one in isolation, it is of no great consequence, though if you happen to find a few of them in a localised area they can take on new and important meaning.

6. Look for things that shine, or that simply look out of place. Pick the bastard up.

7. Look for jasper, barite, altered quartz, flourite, pyrite, acid soaks, shales, fossil evidence, conglomerate veining in sediments, fine alluvial gold, limestone outcrops, ferrugenous agglomerates, limonite, dolomite or altered limestone, lignite, chlorite, calcite, anhydrite, gypsum, sericite, siderite..that's enough to start with.

8. If you know an area has mapped mineralisation, then you will always find some form of botanical evidence, in the form of blackwoods, red or white waratahs, or you may recognise a change in the general density of the bush, either from very thick understory, to very sparse. Tasmanian prospecters have known this for over 140 years.

9. Do your prospecting after a good hard rain, in morning sunlight, and ideally, take another pair of eyes along with you

10. Take good advantage of every bushfire that comes your way and remember always carry a stick to hit the ground with to let the Joe Blakes know you're coming their way.

11. Walk creek beds during summer dry spells and inspect every inch of them.

12. Forget all of the above unless you hold a Tasmanian exploration license.

13. Never believe that you, a geologic layman, cannot get an exploration license over prospective ground, because you can. All you need to do is, your homework, then apply, keep to your word and to follow it through to the best of your abilities.

14. Never take on ground that has not had an aeromagnetic survey already completed over it. Never.

15. Never believe you cannot grasp the fundamentals of geophysical exploration. These sciences were only invented to help find the thing you're looking for. Believe in yourself and put the time in and you will find that it slowly comes to you.

16. Never trust a geological map until you have walked the ground, or at least seen for yourself what the cartographer was implying.

17. Never forget that over 80% of all the orebodies ever mined, were found by ordinary men, just like yourself.

18. Use every available resource, that you can think of, to explore and to understand the ground underfoot. No matter how insignificant it may seem at the time, every insight gained, from whatever source, will eventually add to your understanding of the numerous geoscientific problems you will encounter.

19. Relish the challenge, keep your wits about you and if you have any problems in selecting prospective Tasmanian ground, you know who to call.

20. Trust in the people behind Mineral Resources Tasmania. They are your allies.