

## WHYTE RIVER PROJECT (SAVAGE RIVER GROUP) TASMANIA EL36/2003

# ANNUAL PROGRESS REPORT FOR PERIOD 30<sup>TH</sup> JULY 2009 – 29<sup>TH</sup> JULY 2010

## **Tenement Holder/Manager**

Bass Metals Ltd. 16 Thelma Street West Perth, WA, 6005

Geologist(s):

Stuart Owen Exploration Manager, Venture Minerals Ltd.

Kim Denwer Exploration Manager, Bass Metals Ltd. Hellyer Exploration Base, TAS

#### **Prepared By:**

Sally Bates, *B.App.Sc (Geol)* Tenement Geologist Hellyer Exploration Base, TAS

**Distribution:** Mineral Resources Tasmania Bass Metals Ltd Pioneer Nickel Ltd Venture Minerals

#### Disclaimer

The conclusions and recommendations expressed in this report / table represent the opinions of the Authors based upon the data available and provided to them. The opinions and recommendations provided from this information are in response to a request from the client and no liability is accepted for commercial decisions or actions resulting from them.

Note: All figures and grids are according to the GDA94, Zone 55 datum unless otherwise stated

Hellyer Exploration Base (Hellyer Mine Site), Cradle Mountain Link Rd, HELLYER / WARATAH Area PO Box 1467, BURNIE TAS 7320 Telephone (03) 6439 1464 & (03) 6439 1420 – Facsimile (03) 6439 1465 www.bassmetals.com.au

## EXECUTIVE SUMMARY

Bass Metals Ltd (BSM) commenced management of the Whyte River exploration licence (EL36/2003) in April 2005. On 13<sup>th</sup> August 2008 Bass Metals and Venture Minerals initiated a joint venture. Under the joint venture agreement between Venture Minerals and Bass Metals; Venture Minerals solely fund all exploration expenditure in respect of exploration for Iron, Tin and Tungsten on the Joint Venture tenements during the farm-in period (2009-2011) For the 6<sup>th</sup> year of tenure ended 29<sup>th</sup> July 2010.

Work conducted on the licence was completed by Venture minerals and includes:

- Rock chip sampling and geological mapping;
- Re-assay of historic drilling Goldstream-Titan JV drill holes;
- Drilling A 3 hole 392.6m helicopter supported diamond drilling programme was completed at the Doctors Creek Prospect. Magnetic targets were tested for Savage River type mineralisation however drilling confirmed that the magnetite is poddy in nature and is sulphidic at shallow depth.

**Expenditure** – Reporting period \$279,699

Total to date \$645,732

CONTENTS	Page
<ol> <li>INTRODUCTION</li> <li>1.1 Tenure</li> <li>1.2 Location &amp; Access</li> <li>1.3 Geology Overview</li> <li>1.4 Exploration Rationale</li> </ol>	<b>1</b> 1 5 7
<ul> <li><b>2. Exploration History</b></li> <li>2.1 Prospecting and Exploration pre-EL36/2003</li> <li>2.2 Previous Exploration EL36/2003</li> </ul>	<b>7</b> 7 8
<ul> <li>Work Done/Results during the reporting period (30 July 2009 – 29 July 2010)</li> <li>3.1 Introduction</li> </ul>	<b>16</b> 16
<ol> <li>PROPOSED EXPLORATION</li> <li>ENVIRONMENT</li> <li>EXPENDITURE</li> <li>REFERENCES</li> </ol>	23 24 25 26
Appendix A: Geological locations Appendix B: Rock chip samples and assays Appendix C: Drill hole collars Appendix D: Drill core logs Appendix E: Drill core assays Appendix F: Drill core magnetic susceptibility and recovery Appendix G: Down hole surveys	
LIST OF FIGURES Figure 1. Whyte River licence (EL31/2003) location map Figure 2. Regional geology and licence boundary Figure 3. 1:25K geology of the Lucy Spur Area Figure 4. Aeromagnetic image of Lucy Spur Area Figure 5. Foot track cut for access to anomaly Figure 6. Drill Hole Locations Figure 7. Drill Sections DC001 & DC003	4 6 13 14 15 21 22
LIST OF TABLES Table 1. Rock chip samples from area of magnetite-replacement target Table 2. Selected assays for magnetite-hematite rock chip samples Table 3: Significant Fe re-assay intercepts from Goldstream drill holes at R area Table 4. Location, orientation and depth for Doctors Creek drill holes	10 17 locky River 19 21
Table 5. Significant Fe re-assay intercepts from Venture drill holes at Docto Table 6. EL36/2003 Programme & budget for 2010-2011 Table 7. Expenditure 31 July 2009 to 30 July 2010	ors Creek 21 23 25

## 1. INTRODUCTION

# This report is a summary of the exploration activities conducted on the Whyte River licence EL36/2003, for the period of 29<sup>th</sup> June 2009 to 30<sup>th</sup> June 2010.

#### 1.1 Tenure

Pioneer Nickel Ltd. (PIO) was the sole legal and beneficial owner of this tenement until it entered a Farm-in Joint Venture Agreement with Bass Metals Ltd (BSM) on 27<sup>th</sup> April 2005. The Pioneer Agreement granted Bass Metals an option over the farm-in to earn a 70% interest in the Pioneer Tenements (EL31/2003 & EL36/2003).

On 13 August 2008 BMS : PIO entered into a commodity based Joint Venture Agreement with Venture Minerals Ltd (VMS). This agreement gave VMS the option to earn a 70% interest in respect of Fe, Sn & W only and PIO to revert to a 2% NSR, while BSM retain 30%.

BMS fulfilled the PIO earn-in option requirements and the 70% interest was transferred to BMS on 9<sup>th</sup> December 2009. PIO retained the remaining 30%.

On 21 October 2009 an extension was granted for another year. This licence covers an area of 44km<sup>2</sup> and comprises:

- Informal Reserve
- Regional Reserve
- State Forest

## 1.2 Location & Access

The tenement is located approximately 30 km southwest of the township of Waratah and 10km south of the Savage River township on the west coast of Tasmania (Figure 1). The unsealed Corinna Road cuts across the northern part of the licence and access to the historic alluvial gold mining area around the confluence of Rocky River with Whyte River is relatively simple via a number of 4WD tracks. Access to the remainder of the licence is much more difficult because of the deeply gorged terrain and very thick vegetation (much of it regrowth after forest fires). The most common vegetation communities in the area are rainforest and related scrub, and wet eucalyptus forest. The entire length of the Bowry Formation (prospective for iron ore) within EL36/2003 was prospected by Venture Minerals in the 2009 – 2010 period and the following more detailed comments are made regarding access:

#### Rocky River to Coundon Creek

Access to the Rocky River area is via a well-maintained 4WD drive track, using quad bikes from the Brown Plains gravel pit, crossing the Whyte River, which is possible only following a period of dry weather. A campsite at 349692mE 5390017mN MGA55 is sufficient for 2-3 small tents, and is reasonably sheltered from wind. During dry weather, Rocky River provides the closest potable water source identified, hence bringing in drinking water is advisable.

The terrain in this area is generally steep and causes access difficulties in places. Waterfalls and large cliffs are common, often causing significant delays in accessing outcrops, particularly in creeks. Some waterfalls and cliffs proved impassable.

The LIST 1:25,000 topographic maps are unfortunately not particularly accurate in this area, with slopes expected to be cliff-forming often easily accessible, and slopes marked as more gentle being impassable. Rocky River itself is impassable in the middle of the magnetic anomaly due to cliffs and a deep chasm, and hence the river up and downstream must be accessed separately.

The bush is generally easy to moderate to travel through, with predominant large regrowth after a bushfire (estimate 20-40 years of regrowth), with minor old growth *Nothofagus* forest. Some areas have scrub, dense small regrowth and cut rush, causing slow travel.

The remnants of several cut tracks were discovered, occasionally flagged and dated 1996-1997. The only of these which proved useful follows a ridge south of, and parallel to Nolan Ck and allows access to Rocky River (although the track was not able to be followed to the river).

A track was flagged from the campsite heading directly south, to enable access to the southern part of the anomaly (refer map – approximate position only). This follows a ridge west of the Cataract Ck tributary closest to the campsite, although walking down the tributary was subsequently found to be easier. The track then leads up the southern bank, along the N-S oriented ridge, where it branches, as marked by double flagging around a small tree. A western branch leads into a Nolan Ck tributary and terminates here, which is of little use. The eastern branch leads into Nolan Ck, up the southern bank, and through mature Beech forest down into Rocky River. It then heads up the steep southern bank of the Rocky River, and follows this ridge due south. Walking time to Rocky River is approximately 1 hour, and roughly 2 hours to ridge point 349650; 5388200.

South of 5387800mN the vegetation becomes dense and scrubby. The flagged track here leads into a tributary of Coundon Creek in attempt to avoid the thickest scrub, which extends considerably beyond that shown on the topographic map. While mature growth is shown in creeks on the topographic map, these areas tend to be relatively thick with horizontal and small growth. Walking pace decreases significantly south of 5387800mN and this area was ultimately accessed from the south (Paradise Creek below) using helicopter support.

#### Paradise Creek to Coundon Creek

Access to the Paradise Creek area is currently relatively easy via the Whaleback Ridge by quad bike along a 5 km track (about an hour travel time). The track terminates at a reasonable campsite at c. 349,328E 5383838N (MGA55) with room for 2-3 tents. From the campsite a cut track (not by Venture) heads towards Paradise Creek for several hundred metres. It is possible to travel by foot and prospect without cut tracks north to Paradise River and south to Finlay Creek without too much trouble. The area between Paradise Creek and Coundon Creek is more difficult and ultimately this was covered in one c. 10 day campaign by dropping a 2 person crew off near the old mine around the end of the Lucy Spur water race.

#### **Doctors Creek**

Access to the Doctors Creek Prospect is also relatively simple, via approx. 2.6 km of foot track (travel time 1 to 1.5 hours) from the nearest power line service tracks between the

Reece Dam and Pieman Road. The initial 1.2 km of foot track is across an open button grass ridge, the remainder along a cut track through thick tea tree scrub to the edge of the plateau above Doctors Creek and Owen-Meredith River. Within the prospect there are numerous fallen trees that make travelling in the area slow but not impossible.

The licence area can be found on the Meredith and Livingston 1:25,000 topographic map sheets.



Figure 1. Whyte River Exploration Licence (EL36/2003) with localities and roads

#### **1.3 Geology Overview:**

EL36/2003 is located in an area generally referred to as the Corinna Goldfields, an area of historically significant alluvial gold production in north-western Tasmania. Quartz-rich Tertiary gravels are widespread as remnant deposits on ridge tops throughout the tenement, and immediately underlain by a sequence of north striking, strongly deformed Neoproterozoic meta-sedimentary and meta-igneous rocks of the Arthur Metamorphic Complex, Keith Schist and Oonah Formation. The western part of the licence is underlain by chloritic schists with lesser amphibolite, and minor phyllite, dolomite, magnesite, and ultramafic schists (Arthur Metamorphic Complex), and the eastern part by quartz-mica schist, quartzite, phyllite and rare dolomite (Keith Schist and Oonah Formation). A distinctive belt of strongly deformed serpentinite, amphibolite, albitic schist (albitite), magnesite, talc schist, magnetite-chlorite schist, and massive magnetite rock loosely referred to the Bowry Formation runs approximately north-south through the centre of the licence. The very distinctive magnetic ridge associated with this unit no doubt reflects the presence of magnetite-rich schists and massive magnetite bodies. A mixture of quartz-rich sedimentary and mafic igneous protoliths has been widely recognised with the Bowry Formation, and recent work by Bottrill & Taheri (2007) suggests the unit also includes dismembered and highly metamorphosed iron skarns.



Figure 2. Regional Geology showing licence area boundary

#### **1.4 Exploration Rationale:**

The Whyte River licence was acquired through a joint venture arrangement because of the perceived gold, iron-ore and nickel potential within the tenement.

Hard rock results to date do not explain the level of alluvial gold reported. Gold grain morphology studies conclude a local source for the gold grains studied. Previous companies have systematically explored the tenement area; however they do not appear to have followed up the low level soil anomalies generated in sampling programmes on the Lucy Spur, Lefroy Ridge East and Rocky River prospects.

A large magnetic feature within the Tyennan Metamorphics which host the Savage River Iron ore deposit is of a similar size and intensity to other iron ore resources known along strike. The iron ore target is less than 20km via road from Savage River Mine.

Also of interest is an interpreted ultramafic unit identified as a nickel-skarn target by Geoinformatics. The interpreted unit is located adjacent to a major belt-parallel structure in the vicinity of the Meredith Granite.

## 2. EXPLORATION HISTORY

#### 2.1 Prospecting and Exploration pre-EL36/2003:

There are no accurate historical records for the Corinna Goldfield as it is thought that most of the gold found was taken directly to Victoria. The first known gold discovery from the area was in 1879 with alluvial gold found at Middleton's Creek to the west of the current Whyte River tenement. By 1881 workings at Nancy Creek, Lucy Creek and Paradise River were all reporting the discovery of coarse gold. All the above areas are roughly covered by the current mining lease (7M/1997).

In 1882 a 7.5kg gold nugget was recovered from 5-6 feet of gravel from Rocky River. This area produced further finds of coarse gold until 1900 with notable nuggets of 130 and 39 ounces being unearthed. After the turn of the century (1900) small scale alluvial mining has been on-going in the area until the present day. Historic hard-rock mining has been small scale with the largest mine being the Rocky River Mine which operated between 1895 and 1900. Modern sampling conducted by the Goldstream -Titan JV showed the mineralisation at the Rocky River Mine to be low grade.

The iron ore bodies in the Whyte River area have long been recognised, and government geologist Reid (1924) identified and describes many of the massive magnetite-hematite bodies in the Whyte River area, including "a body of iron ore 300 feet in width... exposed to a depth of 100 feet" in the Doctors Creek - Duffer Creek area. The most significant identified prospect is the Rocky River magnetite deposit, tested with surface sampling (gossanous material), an adit, several trenches and test pits, and 2 drill holes. Most of the old workings at Rocky River are associated with a thin (approx. 4 m wide) high grade Savage River-type talcose magnetite rock flanked by a broad (estimated 60 m) low grade banded magnetite-pyrite-quartz-chlorite schist which locally has some potentially medium grade magnetite lenses. Historic channel sampling returned up to 6 m at 65.6% Fe, grab samples 63.0% Fe, 66.3% Fe, 69.6% Fe.

## 2.2 Previous Exploration EL36/2003:

The Whyte River area has historically been explored by several companies, most notably;

#### Pre 1961 Rio Tinto Exploration

- Conducted regional airborne magnetic surveys.
- Examined regional airborne magnetic anomalies identified as massive magnetitepyrite mineralisation within the Bowry Member. Drilling of these targets resulted in the conclusion that the targets were of no further interest.

#### 1961 to 1988 Savage Resources (formerly Industrial and Mining Investigation)

- Continued to examine the magnetic anomalies identified by Rio Tinto.
- Following the discovery of the Savage River Mine (Magnetite-Pyrite) exploration focused on similar deposits which resulted in the generation of some possible Fe resources (non-JORC compliant) in the area. The first being 30 Mt grading 28% Fe at Long Plains South and the other being the Rocky River Deposit of 4 Mt at 10-15% Fe. Only the Rocky River prospect is located on the Whyte River tenement.
- As Savage Resources the company continued to explore the area for a wide range of commodities including gold, diamonds and base metals.
- Some drilling of gold targets was conducted. Results from the drilling was generally disappointing, however a close association between magnetite and gold was noted.

#### 1989 to 1990 Aberfoyle Resources Ltd

• Aberfoyle's aim of exploration was to assess the potential of the dolomite/mudstone contacts in the south of the Corinna Road for Brookside style Au. A stream sediment and creek traverse mapping program was undertaken, with disappointing results. 34 rock chip samples and 23 stream sediment samples were taken. (Henham, 1990).

1991 Outokumpu Exploration

- Conducted exploration over the southern half of the current Whyte River tenement.
- Work carried out included geological mapping, soil and rock chip sampling and limited amounts of stream sediment sampling.
- Minor anomalous gold and copper results were identified on the eastern boundary of the Bowry formation; whilst on the western boundary of the same formation magnetite-pyrite lenses return low values for gold and copper but up to 70% Fe.

#### 1993 Fodina

- Conducted eight profile traverses detailing geology between Rocky River and the Owen Meredith River.
- Information collected during these traverses included mapping geology, sampling rock chips and the B/C soil horizon and recording ground magnetic of gold through the surveyed area. The grain morphology studies indicated a proximal source for the alluvial gold.

- Some coarser gold grains were used in polished section studies to investigate inclusions in the grains.
- The inclusion and fineness studies both confirm the morphology studies results for a localised source for the alluvial gold.
- Helimag surveys at 50m line intervals were conducted; however the results of these surveys have only had minor initial processing.
- Later close-spaced (50m spacing) stream sediment sampling was conducted to determine prospect boundaries.
- Reconnaissance diamond drilling, C horizon soil sampling and rock chip sampling from the southern adits and hydraulic workings from Lucy Spur were also completed by Goldstream/Titan.
- From stream sediment sampling south of the Owen Meredith River it was determined that this area of the Bowry Formation is not prospective for gold.

#### 1995 to 2000 Goldstream Mining NL/Titan Resources NL

- The Goldstream/Titan joint ventures primary interest in this EL was gold. In the first instance 115 stream sediment samples were taken between Browns Plain and the Pieman River, these were paned and recovered a total of 378 individual gold grains. Mineral inclusions identified in polished sections of the gold grains are also consistent with derivation of the gold from the local metamorphic rocks. (Turner, N.J. Oct 1997)
- First pass drilling at Lefroy Ridge East returned a best value of 167ppb Au, with anomalous copper also present. Rock chips returned gold values of generally less than 20ppb collected mostly in the northern and western parts of the Lucy Spur prospect. Mineralisation of Lucy Spur appears to be restricted to the stope. A 10m wide zone was delineated in the lower adit with anomalous metal values ranging 37-270ppb gold and 43.5-250ppm antimony. Copper is also anomalous. (Turner, N.J. Dec 1997)
- Closely spaced stream sediment sampling found gold anomalism in both the Rocky river Prospect and east from the Lefroy Ridge East Prospect. 1420 samples were collected indicated that there is a northerly trending structure which probably links through to the hydraulic workings. (Turner, N.J. July 1998)
- Targeting an aeromagnetic anomaly Goldstream undertook C-horizon soil sampling on sections of and established grid using either a jacro auger or a Wacker bottom hole sampler. A ground magnetic survey was undertaken along with a Genie EM survey and 2 diamond drill holes totalling 193m. 50% of the tenement was relinquished after the testing of this target. (Newnham, L.A., 2000)

#### 2006 – 2007 Bass Metals Ltd.

The section below reports on exploration activities between 31 July 2006 to 30 July 2007. A reconnaissance field trip was undertaken to assess vehicle access into the licence area. Two rock chip samples were collected from the area of the magnetite target. Then using the captured data and targeting assembled by Geoinformatics during the previous year a soil geochemistry program was designed to test the interpreted ultramafic unit identified by Geoinformatics as a nickel-skarn target.

#### Field Trip

A field trip was undertaken to look at access and outcrop in region of magnetic anomaly considered prospective as Fe-replacement target. Access is via a well-known 4WD track off the Corinna Rd approximately 14km past Savage River township heading towards Corinna. This track crosses the magnetic anomaly at right angles and provides good vehicular access to a point, and then access is limited to quad bike or foot access only. Off the track the terrain is steep and well forested.

Sub-cropping saprolite after sediments was visible along parts of the track. Bedding was sub-parallel to the magnetic anomaly and regional geology as expected with zones of moderate Fe-staining and some bedding parallel quartz vein boudins. Otherwise little outcrop encountered. Two rock chip samples from the area of the magnetic anomaly were collected with variable results (Table 1). For full assay results see Appendix 1.

#### Table 1. Rock chip samples from area of magnetite-replacement target

Sample	Easting	Northing	Au_ppm	Fe_%	Description
WR001	349600	5389850	0.01	37.8	Iron stone float
WR002	349500	5389860	<0.01	2.75	Quartz vein in Fe-stained sediments

#### Soil Geochemistry Program

The programme was proposed as a first pass multi-element soil grid to test the Geoinformatics nickel-skarn target where an ultramafic sequence at the base of the Rocky Cape Group lies adjacent to the major thrust contact in the eastern part of the tenement. The ultramafic has not been mapped on surface but can be traced as a highly magnetic body east of the Tyennan Metamorphics within the Burnie and Oonah Formation.

#### 2007 – 2008 Bass Metals Ltd.

Cancellation of the proposed soil geochemistry program -

After numerous site visits to assess the river crossing and due to the Whyte River being impassable for an exceptionally long period of time this program has been cancelled and will be replaced by a program that can be undertaken over areas of accessibility.

#### Geological mapping -

A mapping trip to the area allowed identification of sub-cropping ironstone along the 4WD access track. Four rock chip samples were assayed (WR03-WR06).

#### Review and re-assaying of historic drilling completed by Goldstream -

Reports of the diamond drilling completed at Whyte River/Rocky River previously by Goldstream were reviewed. It was realised that Goldstream had only assayed the drill samples for Au, Ag, As, Cu, Zn and Pb, but not for Fe. These samples were available

from the Mineral Resources Tasmania sample archive in Hobart and it was decided that intervals from 68.45m to 81m (12.51m) and 247.65m to 254m (6.35m) of drill hole RRDDH3 (which was drilled up to 286.8m from the western edge of the Bowry Formation eastward beneath the Old Rock River Mine Workings) should be analysed for Iron.

An average value of 44.1% of Fe for 5.6 meters (75.4m - 81m) with a max Fe value of 54.3% was observed in the massive magnetite body. A low average value of 17.8% of Fe (with the maximum Fe value of 32% was returned from the same core in the hematite schist interval between 251.2m - 254m (2.8m). Refer to previous years report for results.

#### Float geochemical sampling -

During a field traverse the Rocky River mine adit was located and two float samples from the dump at the entrance of the adit returned NITON assay values of 37.8% Fe.

#### Preliminary ground magnetic survey design -

A preliminary map for a ground magnetic survey was prepared depicting a 1.8km long NNW/SSE base line with 10 EW cross line each 200m long and 200m apart.

#### 2008 – 2009 Bass Metals Ltd.

The Lucy Spur prospect is significant in that it is a bedrock gold deposit within a district renowned for alluvial gold operations and has been the source of the largest nuggets found in Tasmania. While it is not suggested that all of the alluvial gold has been sourced from one deposit, investigation into the controls on gold mineralisation at Lucy Spur may lead serve as a window into the underlying prospectivity of the tenement as a whole.

The Lucy Spur historic mine workings consisted of three adit levels intersecting a greisenised porphyritic granite intruding chloritic schists. Some of the mine development appears to be focussed on the brecciated contact between the above mentioned rock types. Further work is required to ascertain the controls on mineralisation at this prospect.

Mapped alteration zones are broadly east-west striking and dip moderately to the south. Two diamond drill holes (Goldstream Mining NL/Titan Resources NL JV – 1999) collared to the east of the adits were drilled at -45 degrees W and WNW and it is possible that these have not adequately tested the alteration zones which appear to have an east-west orientation from mapping (by Goldstream geologists) of the mine workings.

The majority of rock-chip sampling in the accessible adits yielded Au assays <150ppb Au with exceptions including:

 0.74g/t Au, 1.4g/t Au, 2.25g/t Au, 1.85g/t Au, and a single sample of pug in a fracture assayed 102.4g/t Au.

Previous mapping indicates another intrusion underlying the Lucy Spur Hydraulic workings. Adits in this area were sampled and anomalous gold values returned (highest being a 2m composite sample of 6.27g/t Au)

The host rock to gold mineralisation at the Lucy Spur historical gold workings is a dark grey siliceous breccia (intense phyllic alteration of a precursor porphyritic granitic rock) and higher gold values are related to stockwork quartz veins containing iron oxides or having brown/red pug as a selvedge; hosted within chloritic schists. Intrusive rocks occur at a smaller scale than has been captured by government mapping (Figure 3).

The granitic rocks in the area have been dated at 777Ma and are interpreted to represent an intrusive event associated with the Wickham Orogeny. The only other intrusive rocks of this age in Tasmanian are found on King Island.

Previous explorers have conducted significant soil traverses and rock chip sampling in the areas illustrated on Figure 3. This work was focussed on covering areas of known workings.

Investigation of the aeromagnetic data has resulted in several magnetic highs being recognised, one of which is coincident with the historical gold working (Figure 4). Note the black line on Figure 4 representing an outline of a buried Proterozoic pluton? Current interpretation is that the magnetic highs may represent alteration associated with apophyses from the main intrusion which may represent intrusive-related mineralisation potential. Note that the Lucy Spur adits were located on the flanks of one of these magnetic highs (Figure 4).

The Bowry Formation is enriched with respect to Fe, Cu, and Au and exploration of the area will be conducted in order to assess any IOCG deposit potential within these Proterozoic rocks. Research is currently being undertaken by Bass Metals Ltd geologists into the genesis of the Bowry Formation (and Timbs group in general) and Ahrberg Group. This will be undertaken in conjunction with field checking of outcrop at the location of the magnetic highs. Findings from the ongoing MRT research into the Savage River deposit petrography and genesis will be incorporated when results become available.

Figure 3. 1:25k geology of the Lucy Spur area. All rock types are Proterozoic in age, green representing amphibolites with pyrite and magnetite occurrences and grey represents chloritic schists. Coloured dots represent soil sample locations and stars are rock-chip localities.



Figure 4. Aeromagnetic image of the Lucy spur area illustrating the isolated magnetic highs, one of which is coincident with mapped granite at the Lucy Spur Adits. Narrow black line represents approximate outline of a potential Proterozoic pluton at deeper level.



#### 2008 – 2009 Venture Minerals

Venture Minerals investigated a magnetic anomaly over the Bowry Formation near the junction of the Owen-Meredith River, Doctors and Duffers Creeks during June 2009. This anomaly was selected because of the report by MacIntosh-Reid (1924) who described a considerable body of hematitic iron ore from this vicinity and its close proximity to Venture's Stanley River DSO project. The exploration model was a zone of supergene iron enrichment in pyrite- magnetite- bearing chlorite schists close to a prominent erosion surface. Access was via a north north-west trending ridge. Sections of this ridge carry very thick scrub so permission was sought and granted by MRT to cut a foot track into the target area which followed remnants of an Outokumpu(?) 4WD track.

12 rock chips were collected. (Refer to Appendix 1 for assay results) With the exception of ironstone samples, iron grades were uniformly low, reflecting only incipient iron enrichment. Samples were generally ferruginous chloritic schist. See figure 5 below for map of access track cut.



#### Figure 5. Foot track cut for access to anomaly

No further work is proposed to assess this magnetic anomaly at this stage.

# 3. WORK DONE/RESULTS during the reporting period – (29<sup>th</sup> June 2009 – 30 June 2010)

#### 3.1 Introduction

EL36/2003 Whyte River is grouped along with EL31/2003 Heazlewood and together referred to as the Savage River Group. Venture Minerals has conducted an exploration program over areas of interest during the last 12 months; this work has consisted of:

- a. Rock chip sampling and geological mapping
- b. Re-assay of historic drilling Goldstream-Titan JV drill holes
- c. Venture Minerals Drilling Doctors Creek Prospect

Venture's aim for 2009-2010 was to reconnaissance map and rock chip sample the entire 12.5 km length of the magnetic ridge within the Bowry Fm in EL36/2003, then drill test any potentially coherent zones of massive hematite-magnetite rock for DSO quality iron ore. The mapping and rock chip sampling was conducted on a campaign basis throughout 2009 into early 2010, with the bulk of the work done in the September 2009 to January 2010 period. Application was made in October 2009 for environmental approval an after some lengthy delays getting suitable specialists to conduct the required environmental surveys approval was gained for the drilling in February 2010. Two drill pads for helicopter supported drilling were then prepared on what appeared to be the most continuous and thickest massive hematite-magnetite body, the Doctors Creek prospect. Three diamond holes for 393 m were drilled in March – April period 2010. All three holes intersected magnetite-hematite mineralisation, but thickness and continuity was too poor to justify further drilling. More details on this work are given below.

#### 3.1 a) Rock Chip Sampling and Geological Mapping

Mapping and magnetic imagery suggests the presence of at least eight lenses of massive magnetite-hematite bodies greater than >400 m strike extent each scattered along the strike of the Bowry Fm within EL36/2003. Most exposures comprise a few square metres of outcrop and talus on thickly vegetated ridges and small bluffs in gullies. The most extensive exposures observed were those at Rocky River and Doctors Creek, where bluffs of massive ironstone reach c. 50 m continuous exposed strike extent and 10-20 m estimated true thickness. Intermittent exposures together with the magnetic imagery suggest some of the massive magnetite-hematite lenses reach up to 1.2 km long but thickness is likely to be <<20 m.

At surface the massive hematite-magnetite rock is typically vuggy (from weathered sulphides) with an incipiently brecciated texture. Some of the hematite appears to be supergene, but as shown in the drill holes some hematite is hydrothermal (typically with a platy specular habit). A total of 104 rock chip samples were collected and assayed for a multi-element suite including Fe by XRF on fused glass beads (see Appendix B). The magnetite-hematite rock typically has weak vanadium (up to 0.6%) and copper (up to 0.5%) mineralisation, and on a negative note phosphorus up to 0.65% (Table 1 below). Phosphorus levels were found to be highly variable within the same exposure (eg cf RRC002 & RRC017 in Table 1). Vanadium mineralisation was identified in some of the massive hematite-magnetite rock at all prospects, but copper mineralisation is more

restricted to the Paradise Creek and Rocky River lenses as well as being negatively correlated with vanadium. Samples were not assayed for gold (not part of the Bass – Venture JV).

Prospect	Sample	E_MGA55	N_MGA55	Magsus	Fe %	Cu	P %	V ppm
Destave Creek		047010	5001000	10-351	C4 C		0.0101	4400
Doctors Greek	RRAAUIU	347813	5381990	19.5	64.6	120	0.0101	4490
Doctors Creek	RRAA011	347790	5381981	138	66.8	130	0.0067	1530
Doctors Creek	RRAA016	34/926	5382051	6.5	62.6	130	0.0612	3490
Doctors Creek	RRAA020	347731	5381908	na	66.4	140	0.0083	1075
Doctors Creek	RRAA027	347528	5381733	na	64.9	180	0.0413	>5600
Doctors Creek	RRAA029	347766	5382000	na	67.1	160	0.0042	5490
Doctors Creek	RRC010	348177	5382179	>1000	65.9	300	0.0112	1055
Doctors Creek	RRC011	348170	5382166	>1000	65.7	300	0.0072	2820
Doctors Creek	RRC021	347740	5381896	na	68.1	80	0.02	3826
Doctors Creek	RRC022	347703	5381931	na	67	340	0.04	1087
Doctors Creek	RRC023	347808	5381992	na	66.1	70	0.003	6387
Doctors Creek	RRC027	347458	5381610	43	60.3	237	0.0574	<6
Doctors Creek	RRC028	348170	5382160	>1000	69	38	0.0054	612
Doctors Creek	RRC031	348252	5382392	>1000	69.1	198	0.647	3020
Doctors Creek	RRC032	348168	5382189	>1000	66.8	134	0.012	3040
Doctors Creek	RRC024	347823	5381998	na	44	1540	0.009	1115
Paradise Creek	RRAA035A	348785	5383905	na	66.6	120	0.317	3110
Paradise Creek	RRC025	348791	5383898	na	66.7	160	0.342	2874
Paradise Creek	RRC039	348898	5384302	>1000	65.6	361	0.0075	1210
Paradise Creek	RRC040	348872	5384194	>1000	64.4	878	0.0844	1415
Paradise Creek	RRC035	349283	5385291	287	41.1	1890	0.0166	119
Paradise Creek	RRC036	349261	5385308	146	45.2	1645	0.024	41
Paradise Creek	RRC037	349285	5385331	793	37.8	5200	0.0164	65
Rocky River	RRC060	349298	5385750	104	44.3	1280	0.0712	69
Rocky River	RRC065	349315	5385578	223	52.2	1300	0.0551	53
Rocky River	RRC067	349316	5385580	21	39.3	1330	0.0084	31
Rocky River	RRC002	349105	5390701	305	65.24	305	0.2488	3238
Rocky River	RRC003	349050	5392500	590	60.7	242	0.1161	2824
Rocky River	RRC004	349017	5392333	250	65.31	467	0.3448	2728
Rocky River	RRC017	349111	5390706	na	56.1	230	0.057	2768
Rocky River	RRC018	349060	5390336	na	63.7	190	0.058	3305
Rocky River	RRC019	349006	5392550	na	64.3	160	0.121	3356
Rocky River	RRC020	349022	5392501	na	67.8	<10	0.024	4084
Rocky River	RRC056	349822	5388839	462.3	58.2	250	0.0388	21

#### Table 2: Selected assays for magnetite-hematite rock chip samples

#### Notes on the geology of the Doctors Creek and Paradise Creek areas

The vuggy magnetite-hematite rock at Doctors Creek is reasonably coarse grained with crystals visible up to 2 mm, and forms a rib on the north side of the creek up to c. 15 m wide and up to 15 m high in stepped benches. Only float boulders of magnetite-hematite ironstone were found in the Paradise Creek area, both in creeks and on ridgelines, but no definite outcrop. Generally the best place to find ironstone is on spurs on the western edge of the magnetic highs. The vugs in the ironstone appear to represent weathered

sulphides, probably pyrite, which was both banded and disseminated. Magnetite float that occurs in the prospect can be very weathered and sometimes appears weakly sheared. Magnetite-hematite ironstone is exposed in Doctors Creek itself where it appears to comprise 2 lenses of ironstone approx 3 m wide hosted within talc-pyrite and chlorite-pyrite schists. Thickness of the magnetite-hematite lens is estimated to range from 5-15 m, and dip 50-70 degrees to the SE. Impurity levels were below DSO thresholds for all ironstone samples.

The main host unit at Doctors Creek is pyritic chlorite schist, locally deeply weathered to ferruginous clay with relict foliation. The chlorite schist in the Paradise Creek area appears to contain more pyrite than Doctors Creek, and a 0.75 m thick massive pyrite vein was observed in Tandy Creek c. 348772mE 5383850mN MGA55 hosted by a chlorite-pyrite-magnetite schist approx 20-30 m east of the inferred (from float) position of the ironstone. The chlorite schist is less weathered on steep hillsides and creek beds where foliation can be easily measured. Quartz veining is widespread within the chloritic schist and generally parallel to the foliation. In some of the better exposures (creek beds) isoclinally folded quartz veins are common. Pyrite, and possibly pyrrhotite, is typically most abundant adjacent to the contact with ironstone where it reaches around est. 30% of the schist.

Packages of thin to medium bedded quartz-rich wackes and argillite and quartzofeldspathic schist are interspersed with the chloritic schist, and well exposed in Doctors Creek both east and west of the ironstone lens.

A massive, equigranular quartz and feldspar-rich granite or albitite (see Bottrill & Taheri 2007 for albitite) is locally exposed to the east of the ironstone, in places containing veinlets and disseminations of platy hematite. Milky vein quartz and quartzite float is very common on the ridgelines overlying the chlorite schists and possibly derived from the nearby (east) Keith Schist and Oonah Formation.

The strongest foliation ( $S_1$ ) and bedding ( $S_0$ , latter only locally recognised) typically dips 50-70 degrees towards 130 degrees MGA in the Doctors Creek area, and 60-75 degrees towards 110 degrees MGA in the Paradise Creek area.  $S_1$  appears to be axial planar to locally observed isoclinal folds. A crenulation cleavage is commonly evident but reliable orientations were not obtained.

Poles to S<sub>1</sub> from Doctors Creek and Paradise Creek areas



No. of Data = 29 Mean Principal Orientation = 59/117Mean Resultant dir'n = 50-106Mean Resultant length = 0.73Calculated. girdle: 42/249Calculated beta axis: 48-069

#### 3.1 b) Re-assay of historic drilling Goldstream-Titan JV drill holes

Historical drill holes RRDDH1, RRDDH2 and RRDDH3 from the Rocky River prospect drilled by Goldstream in 1996-1997 were examined at the MRT core library in Mornington. Goldstream did not assay for iron or iron ore relevant elements, so selected intervals re-sampled and submitted for assay of major and selected trace elements by XRF on fused disks (ALS Chemex method XRF12). Pulps from Bass's re-sampling of RRDDH3 were also resubmitted for assay by XRF on glass beads. Results are listed in Appendix E and summarised in Table 2 below.

In addition to the narrow (<10m) near massive magnetite zones, magsus and logging indicates the presence of 40-70 m near true thickness zones of banded and disseminated magnetite mineralisation within chlorite-amphibole-albite schist after gabbro. Thirty metres was assayed from the broad magnetite-rich zone in RRDDH2 returning 16 m at 17% Fe from 270 m and 14 m at 27% Fe from 314 m. Magnetic susceptibility for the same intervals is 240 and 440 x  $10^{-3}$  SI units respectively and is probably too low for reasonable Fe mass recovery (significant Fe is probably held in chlorite and amphibole). The upper magnetite zone in RRDDH3 returned 5.4 m at 44% Fe from 75.4 m and magnetic susceptibility suggests DTRs would be reasonable. Unfortunately Fe grades and magnetic susceptibility through the rest of the hole are too low to support this narrow high grade magnetite zone.

Table 3: Significant Fe re-assay intercepts from Goldstream drill holes at Rocky River area

Hole	East MGA55	North MGA55	RL m	Azi MGA	Dip	EOH m	From m	To m	Interval m	Fe %	S %	Ρ%	Cu ppm	V ppm
RRDDH2	349882	5389994	2240	270	-45	350	316	324	8	33.1	>3.3	0.053	793	124
RRDDH3	349152	5390154	2098	112	-45	287	75.4	81	5.6	44.1	>4.7	0.039	789	1932

## 3.1 c) Venture Minerals Drilling – Doctors Creek Prospect

Three diamond core holes as listed in Table 3 were drilled at Doctors Creek Prospect in the March-April period 2010 to test the down dip extent, thickness, weathering state and grade of massive magnetite lenses observed at surface. The drilling was conducted by Van Dieman Holdings using two helicopter portable drill rigs (Longyear 38 and Longyear 44).

All drill holes were drilled towards the northwest. DC001 & DC003 were drilled from the same site at the southwest end of the prospect, DC002 near the middle of the target strike extent. The drilling confirmed surface observations with the entire sequence dipping between 50° and 70° to the northeast, roughly parallel to the prominent schistosity. The hangingwall comprises mainly chloritic schist (doleritic protolith) with minor unfoliated fine grained feldspathic granitoid or albitite (as described from Savage River mine by Bottrill & Taheri, 2007). Clay weathered zones extend to c. 40 m beneath surface in the hangingwall. This is followed by a brecciated serpentinite fault zone with lenses of chloritic schist, massive magnetite-hematite and pyrite-magnetite-hematite rock, and minor pods of felsic schist. Drilling conditions were very difficult within the serpentinitic fault zone and recoveries were erratic. The footwall appears to comprise a sequence of quartz-rich felsic schist (after quartz-rich sediments?) and deeply weathered (to 100-150 m beneath surface) talc schist, dolomitic schist and possibly magnesite with minor felsic schist. Up to 2-3% magnetite and pyrite are disseminated throughout the felsic, mafic and ultramafic schists.

DC001 and DC003 encountered only minor bands up to 0.9 m thick of magnetitehematite rock within the serpentinite fault zone. The upper magnetite-hematite zone in DC001 and DC003 is deeply weathered to black and brown magnetic clay, the lower magnetite-hematite zone is largely unweathered and includes estimated 1-2% pyrite.

DC002 intersected a combined thickness of c. 7 m of mainly magnetite-hematite rock spread through approx. 15 m of serpentinite fault zone. A few percent of pyrite is disseminated through all of the observed magnetite-hematite lenses, along with bands up to 20 cm thick of semi-massive pyrite. The hematite occurs with fresh pyrite and does not appear to be a weathering product.

Thickness and continuity of the magnetite-hematite rock together with presence of sulphide at 40 m or less beneath surface are not encouraging for DSO or magnetite resource potential. Samples were submitted to ALS Chemex for assay. Refer to figure 6 for drill hole locations. Assay results are given in Appendix E and summary intercepts given in Table 5.

Figure 6. Drill Hole Locations



Hole	E_MGA55	N_MGA55	RL2000	Azi_MGA	Plunge	EOH_m	Date_finished
DC001	347451	5381558	2190	320	-45	66.2	23/03/2010
DC002	347920	5381915	2175	305	-45	187.4	8/04/2010
DC003	347451	5381558	2190	320	-65	139	31/03/2010
TOTAL						392.6	

## Table 5: Significant Fe re-assay intercepts from Venture drill holes at Doctors Creek

Hole	East MGA55	North MGA55	RL m	Azi MGA	Dip	EOH m	From m	Tom	Interval m	Fe %	S %	Ρ%	Cu ppm	V ppm
DC001	347451	5381558	2190	320	-45	66.2	34	39.4	5.4	34.4	2.5	0.096	720	38
includes							35.5	37	1.5	54.3	<0.01	0.107	1230	31
DC001							61.4	62.4	1	42.3	1.1	0.024	670	38
DC002	347920	5381915	2175	305	-45	187	155	156.8	1.8	23	>6	0.071	1580	627
DC002							163.6	171.4	7.8	37.5	15	0.024	749	2428
includes							167.2	169.2	2	56.5	2.8	<0.001	770	3190
DC003	347451	5381558	2190	320	-65	139	41.2	43	1.8	26.5	0.3	0.059	950	35

Refer to Figure 7 below for drill sections of DC001 & DC003

Figure 7. Drill Sections DC001 & DC003







Lithologic Codes	Description
Regolith (R*)	
R	undifferentiated regolith
RCAC	calcrete
RSIC	silcrete
RFEC	ferricrete
RL	undifferentiated laterite
RU	in situ laterite
BLT	transported laterite
RCLY	in situ clay
RSAP	undifferentiated saprolite
RGOS	gossan ("iron cap") = iron oxide rock formed by weathering of sulphide rick rock. Textural or mineral prefix as appropriate (e.g. aciRGOS = acicular gossan, mcRGOS = malachite gossan)
Unconsolidated Sediments	(S*)
S	undifferentiated sediment
SLG	lateritic gravel
SGVL	unconsolidated gravel
SPCS	unconsolidated pebbly or cobbly sands
SAND	unconsolidated sand
SIL I SMUD	unconsolidated slit
SCLY	unconsolidated clav (transported)
cyRB	regolith breccia with clay matrix
Sedimentary Rocks (S*)	
SS gzSS volcSS lithSS	$>75\%$ sandstone (undifferentiated) over minimum 5m logging interval prefixes $g_z = g_{uartz}$ lith = lithic
ccSS	volc = volcanogenic. cc = calcareous
SM	>75% mudstone over minimum 5m logging interval
ST	>75% siltstone over minimum 5m logging interval
SSM	25-75% sandstone & mudstone over minimum 5m logging interval
SST	25-75% sandstone & siltstone over minimum 5m logging interval
SMH	shale
SML	slate
SMA	arginite (weakly metamorphosed mudstone)
SGRT	orit
SSPC	pebbly or cobbly sandstone
SSIC	intraclastic sandstone and conglomerate
SCG	conglomerate
SCGR	mud chip conglomerate (rip-ups)
SCGM	monomict conglomerate
SCGP	polymict conglomerate
	monomici breccia
SCB OSCB STSCB POSCB	undifferentiated carbonate, prefixes on - politic, st - stromatolitic, hc - bioclastic
SLST	limestone
SDOL	dolomite
STIL	tillite
STUF	tuffite (redeposited)
SLAP	redeposited lapilli-stone
	chert
	banded iron tormation
Igneous Rocks (U* for Ultra	mafic, M* for Mafic, I* for Intermediate, F* for Felsic)
ŬМ	undifferentiated ultramafic
UDUN	dunite
UHAR	harzburgite
UPX	pyroxenite
USERP	serpentinite
ULAY	ultramafic lamprophyre
UK	komatiite (undifferentiated)
UKSTX	spinifex textured part of komatiite flow
UKoOC	olivine orthocumulate part of komatiite flow
UKoMC	olivine mesocumulate part of komatiite flow
MG	gabbro
MGL	leucogabbro
	aoierite
IVID	ναδαιι

Lithologic Codes	Description
	high magnosium basalt
MBP	nillow-basalt
MBHY	basaltic hyaloclastite
MLAP	mafic lapilli-stone
MTUF	mafic tuff
IA	andesite
	dionite
FG	undifferentiated resist fock
FGRA	granite
FGRD	granodiorite
FDIO	diorite
FMOZ	monzonite
FTUE	felsic tuff
FV	undifferentiated felsic volcanic rock
FRHY	rhyolite
FDAC	dacite
Metamorphic & Metasomati	c Rocks (Z^)
mZSCH	undifferentiated scrist
	feldspar, quartz, accessory leucoxene etc
fZSCH	undifferentiated felsic schist, domianted by quartz & feldspar, muscovite, & accessory mafic minerals
btZSCH, btclZSCH, tcZSCH,	biotite schist, biotite-chlorite schist, etc using mineral code prefixes for only the distinguishing
ZGNS	
btZGNS, kspZSCH, etc	biotite gneiss, k-feldspar gneiss, etc using mineral code prefixes for only the distinguishing minerals
ZAMP	undifferentiated amphibolite
	hornfels, up to 2 lower case mineral prefixes as appropriate (eg. muZHF, andZHF etc)
amZHF bt7HF	biotite bornfale, fine grained brownish bornfale, brownich colour caused by microrcrystalline biotite
512111	should give brown scratch
pxZHF	pyroxene hornfels, fine grained whitish to whitish green hornfels
axZHF	axinite hornfels, fine grained purplish hornfels
qzZHF	hard bronze grey microcrystalline quartz with common to abundant pyrrhotite hornfels, should give
7MPB at7MPB ol7MPB	DIACK SCRATCH
doZMRB. etc	
atZXS	porphyroblastic garnets in pyroxene+calcite matrix (if <10% px then it will be a gtZMRB), commonly
9(2)(0	also minor amphibole, magnetite, pyrrhotite etc in matrix. Vesuvianite commonly partly replaces
	garnet and this lith is completely gradational with veZXS
veZXS	tabular, porphyroblastic, and orbicular vesuvianite in pyroxene-calcite matrix.
	alors with 50% area view aliving twigally partly replaced by corporting with abundant fina
012.85	skam with >50% granular olivine, typically partly replaced by serpentine with abundant line disseminated magnetite, commonly also irrgeular patches of whitish to pale green pyroxene
lpZXS	leopard skarn = olivine skarn with highly irregular granitic blobs & dyklets rimmed by pink garnet, then
r -	pale green pyroxene, then locally green phlogopite. Granitic blobs & dyklets are typically partly
	replaced by pyroxene (=endoskarn)
amZXS	skarn with >50% amphibole as massive felted bands and/or pseudomorphs of garnet set in other
amvoZXS	minerais. Lesser carbonate, magnetite, pyrrnotite, vonsenite.
	mass of radiating needles forming matrix between amphibole and/or vesuvianite after porphyroblastic
	garnet.
ammtZXS	amphibole-magnetite skarn, 25-50% amphibole & 25-50% magnetite typically as matrix flood around
amaa7VC	ex-garnet porphyroblasts
ampozAS mtZXS	ampnibole-pyrmotite skarn, 25-50% ampnibole & 25-50% pyrmotite
	massive bands. Minor amphibole, pyrrhotite and carbonate.
voZXS	>50% vonsenite, typically occuring as clusters of radiating needles.
poZXS	>50% banded semi-massive to massive pyrrhotite.
pyZXS cdZXS	>50% banded semi-massive to massive pyrite.
SULAS	20.0 suchte skam, includes suchte skam win prismatic quartz (sqp) and magnetite atolis (s+p), common accessories cassiterite. k-feldspar
btZXS	>50% brown-black, books common in coarse examples along with fluorite.
srZXS	translucent to flakey pale & dark green serpentine skarn, formed from olivine skarn
ZGRS	Undifferentiated greisen comprising fine saccharoidal aggregate of quartz and muscovite. Feldspar
	phenocrysts typically replaced by pyrrhotite.

Lithologic Codes	Description
ZQT	tourmaline "greisen" = granite in which feldspar phenocrysts are replaced by tourmaline and groundmass comprises saccharoidal quartz and minor fine muscovite.
Veins (V)	
*V	Veins, up to 2 key mineral prefixes as appropriate (eg qzV, qztuV), only use in Lith1 column
*VB	Vein breccias, up to 2 key mineral prefixes as appropriate according to mineralogy of cemment (eg clccVB), only use in Lith1 column
Hydrothermal Breccias, Fau	ults and Shear Rocks (X*)
ХНВ	hydrothermal breccia
XMYL	mylonite
XFB	Fault breccia - incohesive >30% clastic
XFG	Fault gouge - incohesive <30% clastic
XFC	Fault cataclasite - cohesive more than >30% clastic
No Recovery & Cavitie	s (N*)
NCAV	cavity
NREC	no sample recovery (unknown problems)
NSAV	sample no longer available (applies to relogging)

Mineral	Codes
ac	actinolite
ak	ankerite
al	almandine
and	andalusite
ano	anorthite
am	amphibole
ana	anatase
asp	arsenopyrite
as	arsenates
aug	augite
ax	axinite (Ca-Mg-Al borosilicate)
az ba	baryte
Bi	native bismuth
bt	biotite
cb	undifferentiated carbonate
cc	calcite
cd	cordierite
cdp	chrome diopside
cl	chlorite
сру	chalcopyrite
cpx	chromite
crp	chrysoprase
crt	chrysotile
CS	cassiterite
CV	chenevixite
da	danalite
dd	diamond
di	diopside
do	dolomite
ep fe	epidote fe-oxide or hydroxide
fl	flourite
fsp	feldspar
ga	galena
go	goethite
gr	graphitic
he	hematite
hb	hornblende
ilt	illite
il	ilmenite
Ka ken	Kaolin undifferentiated k-feldspar
ky	kyanite
lau	laumontite
lm	limonite (undifferentiated iron oxyhydroxide)
lo	lollingite
lw lx	leucoxene
mc	malachite
mi	mica (undifferentiated)
mg	magnesite
mon	montmorillonite
ms	moissanite
mt	magnetite
mu	muscovite
mz	monazite
ol	olivine
or	orthoclase
ops	opaline silica
ph	pniogopite Inlagioclase
po	pyrrhotite
рр	ругоре
prh	prehnite
pv px	perovskite
pv vd	pyrote
qz	quartz
rd	rhodochrosite
rf	rock tragments
sa	saponite
sc	scorodite
se	sercite
sd	siderite
sn	siliceous
sr	serpentine
sph	sphalerite
sp	spinel
sb	stilbite
SX	sulphide
SXO	oxidised sulphide
tc	talc
ti	titanite (sphene)
tr tu	tremolite
tz	topaz
VO	vonsenite (Fe borate)
ve	vesuvianite (idocrase)
zin	zinnwaldite
∠e zr	zircon

Texture Co aci	des acicular, mineral specific types coded with mineral code followed by a (eg mta = acicular magnetite)
amg anh	amygdaloidal anhedral
bdn bpd	boudins
bru	boxwork
col	cauliflower texture (of mineral growth)
den dis	denantic disseminated
euh	euhedral
roi gph	graphic & micrographic texture (as in granites)
grn	granular, mineral specific types coded with mineral code followed by g (eg mtg = granular magnetite)
gtp Iam	specifically garnet or ex-garnet porphyroblastic texture laminated
mas	massive
mot mta	mottled acicular magnetite (after vonsenite)
mtg	granular magnetite
mzn oph	mineral zoning in fine laminae
orb	orbicules of any mineral, typically concentrically layered or zoned, mineral specific types coded with mineral code followed by o (eg veo = vesuvianite orbicules)
pbl	porphyroblastic, large metamorphic or metasomatic minerals in a finer matrix, mineral specific types coded with mineral code followed by p (eg gtp = garnet porphyroblastic)
pcl ppv	porphyroclastic porphyritic
psm	general prismatic texture code which could apply to a number of minerals
ruc	rip-up clasts; distinguish in comments between Carter's-like (small, platy), and large & irregular
sch	cleaved
shz	shear or shear zone
spk	dark minerals such as biotite or magnetite scattered though paler matrix
s+p	specifically salt and pepper skarn with atoll textured magnetite with microscopic dz prisms and feldspar, in siderite matrix
spt	spotted, such as spotting in a hornfels
sqp stwk	stockwork
sub	subhedral
tab	tabular, mineral specific types coded with mineral code followed by t (eg vet = vesuvianite tablets)
tuf	tuffaceous
ves	vesicular telefonse service its texture
wrg	wrigglite
0	
bkn	weak core broken by drilling (typically near beginning of hole)
brc	brecciated
fit frc	fault fracture zone
ftz	fault or fault zone
mct slk	microfaults- displacement <1cm scale slickensides
ssf	small-sclae faulting (>1cm, <core diameter)<="" td=""></core>
BCA	acute angle between core axis and bedding (=alpha)
SCA FCA	acute angle between core axis and cleavage or schistosity (=alpha) acute angle between core axis and fault (=alpha)
Sedimenta lam	ry Beααing Codes laminated (<10mm)
tnb	thin bedded (10-100mm)
mdb tkb	medium bedded (100-300mm) thick bedded (>300mm)
vtkb	very thick bedded (>1m)
Sedimenta	ry Grain size
svfg	very fine grained <64 um (mud, silt & clay)
siy smg	medium grained 0.25 to 0.5mm (medium sand)
scg	coarse grained 0.5 to 2 mm (coarse sand)
svcg	very coarse grain >2mm (2 - 4mm granules, 4 - 16mm peobles, 16-256 mm cobbles, >256 mm boulders)
1	
<b>Igneous &amp;</b> ifa	Metamorphic Grain Size fine grained <1 mm
img	medium grained 1-5 mm
icg	coarse grained 5-30 mm
.49	
Weathering	
vw	very weatherid, both FRIMART LEATURE & MINERALOGT DESTRUTED by Weathering, no Sulphide, generally dominated by Fe and Al oxides and/or silica (= laterite, duricrust, lateritic gravel & massive textureless clays)
mw	moderately weathered, PRIMARY TEXTURE REMAINS but MINERALOGY SECONDARY clays (=
ww	saprome) weakly weathered, MAINLY PRIMARY TEXTURE & MINERALOGY, low clay content, partially oxidised sulphide (= saprock & fresh rock with iron staining and clay development restricted to fractures)
fr	frach (competentiate) primary taytura & minorationy without significant iron atoining on fractures)
	neen teenperetely primary texture a mineratogy without significant ifon stalling on fractures)

Moisture Codes				
S	Sloppy			
M	Moist			
)	Dry			
Colour Codes				
	light (e.g. Ign = light green, Igy = light grey)			
ł	dark (e.g. dgn = dark green, dgy = dark grey)			
ok	black			
bl	blue			
on	brown			
DZ	bronze (e.g. sulphides such as pyrrhotite & pyrite)			
cm	cream			
gn	green			
ду	grey			
<k td="" 🛛<=""><td>khaki</td></k>	khaki			
og	orange			
vc	olive			
ok	pink			
ol	purple			
rd	red			
vt	white			
/w	yellow			
	-			
Sample Re	covery Codes			
deally mea	sured as weight in kg, below codes for estimates			
е	excessive			
9	good			
n	moderate			
)	poor			
ı	none			

## 4. PROPOSED EXPLORATION

At least eight lenses of massive magnetite-hematite bodies greater than >400 m strike extent each were identified within the Bowry Fm in EL36/2003. Chip sampling of weathered surface outcrops returned DSO quality iron ore grades although textural observations and previous drilling indicated that most or all of the massive hematitemagnetite bodies would contain sulphides beneath the weathered zone estimated to extend up to 50 from surface. The most extensive exposures at Rocky River and Doctors Creek suggested some lenses may reach 10-20 m true thickness. A reconnaissance drilling programme was planned to test the depth to top of fresh sulphides and thickness of some of the identified hematite-magnetite lenses. Thickness and continuity of iron ore mineralisation appears to be best at Rocky River and Doctors Creek. Venture chose to drill test the Doctors Creek Prospect because of proximity to DSO targets at Livingstone Creek (approx. 12-15 km by mainly existing road to the east of Doctors Creek) and historic drilling at Rocky River had not been very encouraging for iron ore.

Three diamond core holes for c. 393 m were drilled into Doctors Creek iron ore target in the March – April period 2010. All three holes intersected southeast dipping magnetite-hematite mineralisation, but thickness and continuity was too poor to justify further drilling. Unfortunately the mineralisation at Doctors Creek appears to comprise dismembered blocks of massive hematite-magnetite within a serpentinitic fault zone and no further work at the prospect is recommended.

Fe occurrences between Doctors Creek and Rocky River appear to be even less significant at surface and no further iron prospecting work is planned, although the Paradise Creek copper occurrences may worthy of further attention starting with a thorough literature search on historic copper prospecting in the area. DSO potential at the Rocky River Prospect is also considered very limited. There remains some potential for significant magnetite mineralisation at the Rocky River Prospect, particularly over the very strong eastern magnetic anomaly. The following programme and budget is proposed for EL36/2003 with each stage somewhat contingent on the previous:

Table 6:	EL36/2003	Programme &	budget for 2010-2	2011
----------	-----------	-------------	-------------------	------

Activity	Budget
Review copper & gold prospecting data for Paradise Creek area, compile maps in MapInfo plan work programme if suitable targets can be identified	\$ 10,000
Review & reinterpret historic drilling and prospecting at Rocky River Prospect focussing on the eastern magnetic anomaly, 3D and geophysical modelling, estimate magnetite resource potential	\$ 20,000
Mapping and rock chip sampling of the Rocky River Prospect, focussing on the eastern magnetic anomaly to confirm magnetite resource potential and suitability for further drill testing	\$ 20,000
TOTAL	\$ 50,000

#### **5. ENVIRONMENT**

The company has environmental policies in place that minimise the impact that exploration activities have on the environment. The policies include guidelines on how to reduce the risk of spreading plant diseases and weeds as a result of day-to-day exploration tasks.

The attached Environmental Activity Map (Figure 5) shows the location of the Exploration Licence relative to conservation areas. BSM is aware that the Whyte River EL contains environmentally sensitive areas and all guidelines have been adhered to in relation to those detailed below.



Figure . Environmental Activity Map

## 6. EXPENDITURE

July 2009 - July 2010				
Geoscientific Costs	Geology	138,187		
	Geochemistry	11,037		
	Geophysics			
	Remote Sensing			
idding Costs	Gridding			
Drilling & G	Drilling	96,815		
	Land Access Costs			
	Rehabilitation Costs			
	Feasibility Study Costs			
	Other Costs	28,782		
	Admin Costs	4,879		
	Total - eligible	\$279,700		

Table 7. Expenditure 30 July 2009 to 29 July 2010\*Includes expenditure figures up to 31st May 2010Total includes a commitment from Venture Minerals of \$266,939

The Whyte River tenement is part of the Savage River Group along with EL31/2003 Heazlewood; the total expenditure up to the  $31^{st}$  May 2010 for this group is \$1,587,913 against a required group expenditure of \$458,499.

#### 7. REFERENCES

Annette, R.W. and Shannon, C.H.C, 1987, Annual Report on investigation within Exploration License 4/61 West Coast Tasmania, Savage Resources Ltd.

**Atkinson, W.J, 1960**, Report on the Rocky River Area Iron Deposits, N.W. Tasmania, Rio Tinto Australia Exploration Pty Ltd.

**Bottrill, R. S., & Taheri, J. 2007**. Petrology of the host rocks, including mineralisation and adjacent rock sequences, from the Savage River mine. Tasmanian Geological Survey Record 2007/05

**Bottrill & Taheri, 2008/05**. Savage River mine by Bottrill & Taheri in Tas Geol Survey Record 2007/05

**Henman, R.J., 1990.** Exploration Licence 35/85 Corinna West Tasmania Report on Exploration to 20<sup>th</sup> April 1990. Aberfoyle.

**MacIntosh-Reid, A. 1924.** Preliminary report on the occurrence of iron ore at Meredith, Paradise, Rocky and Whyte Rivers. Department of Mines, Unpublished Report.

**Newnham, L.A., 2000.** EL43/94 Corinna Area. Review of data on Alpine Grid. Goldstream Mining NL.

**Turner, N.J. 1997.** Exploration Licence No. 43/94 Corinna, Western Tasmania Annual Report to 4/2/97. Goldstream Mining NL.

**Turner, N.J., 1997.** Exploration Licence no 53/94 Corinna, Western Tasmania Annual Report to 4/1/98. Goldstream Mining NL.

**Turner, N. J., 1997.** Exploration Licence No 43/94 Corinna Annual Report, Western Tasmania. Unpublished report for Goldstream Mining NL, available from Mineral Resources Tasmania (TCR97-4108).

**Turner, N.J., 1988.** EL43/94 Corinna, Western Australia Annual Report to 4/1/99. Goldstream Mining NL.

**Poltock, R. 1994,** Relinquishment and Annual Report to 10 May 1994 EL14/89 Corinna, EL56/89 Corinna and EL2/93 Pieman River, Fodina Minerals Pty Ltd.

**Reid, A.M., 1924,** Preliminary Report on the Occurrence of Iron Ore at Meredith, Paradise, Rocky and Whyte Rivers, Tasmanian Iron and Steel Company.

**Shannon, C.H.C, 1985**, Report on Field investigation within Exploration License 4/61 West Coast Tasmania, Industrial and Mining Investigations Pty Ltd.

Appendix A: Geological locations Venture Minerals Appendix B: Rock chip samples and assays Venture Minerals Appendix C: Drill hole collars Venture Minerals Appendix D: Drill core logs Venture Minerals Appendix E: Drill core assays Venture Minerals Appendix F: Drill core magnetic susceptibility and recovery Venture Minerals Appendix G: Down hole surveys Venture Minerals