

**SOCK CREEK PROJECT  
TASMANIA  
EL20/2010**

**ANNUAL PROGRESS REPORT  
17<sup>th</sup> December 2010 – 16<sup>th</sup> December 2011**

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**Distribution:**

Mineral Resources Tasmania  
Clancy Exploration  
Bass Metals Ltd

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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 otherwise stated**

## **EXECUTIVE SUMMARY**

Bass Metals Ltd (BSM) commenced management of the Sock Creek exploration licence (EL20/2010) on 16 December 2010. This tenement is in joint venture with Geoinformatics Exploration Australia where Bass Metals is the Holder/Manager. For this 1<sup>st</sup> year of tenure ended 16 December 2011 work conducted on the licence has included -

- SWIR data collection, 320 spectral measurements from 5 holes.
- Commencement of initial review with focus on reviewing all geophysical surveys and soil sampling survey which analysed for elements known to be potential pathfinders

**Expenditure –** Reporting period \$17,135.77

Total to date \$17,135.77

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## **1 INTRODUCTION**

**This report is a summary of the exploration activities conducted on the Sock Creek licence EL20/2010, for the period 17th December 2010 to 16th December 2011.**

### **1.1 Tenure**

EL 20/2010 was granted for five years to Bass Metals Ltd (BSM) on 16<sup>th</sup> December 2010.

### **1.2 Location and Access**

The tenement arises from the relinquishment of EL33/2006 by MMG and is located 8km south-west of the Hellyer Mine and 3km East of the Murchison Highway. Access into the area is via Forestry tracks beginning on the High Point of the Murchison Highway.

The licence area lies on the Charter (#3839) and Block (#3838) 1:25,000 topographic map, the Burnie (#SK55-3) 1:250,000 and the Sophia (#8014) 1:100,000 sheets.

### **1.3 Geology Overview**

EL 20/2010 covers three main stratigraphic associations. Basal sediments of the Black Harry beds and Animal Creek Greywacke which are overlain by the Sock Creek Volcanics (SCV). The SCV's are predominantly a felsic intrusive quartz-feldspar porphyries sequence with more distal volcanoclastics, shales and dacitic to basaltic lavas with minor volcanoclastics. The basalts are a thin amygdaloidal unit. The SCV is correlated with the Que Hellyer volcanics. Overlying the SCV are a complex of shales, intrusive quartz-feldspar porphyries and dacitic to basaltic lavas with minor volcanoclastics correlated with the Southwell Group.

The sequence is interpreted as west facing with shallow to moderate dips to the NW.

The Palaeozoic rocks are unconformably overlain by Tertiary basalt, in the north of the tenement, and/or Quaternary glacials, to the west and south. Major structures on the EL include the N-S trending Mt Charter Fault, in the Northeast corner of the tenement. The regional magnetic and gravity data highlight the presence of several major, apparently deep-seated, unmapped or poorly mapped structures trending broadly E-W.

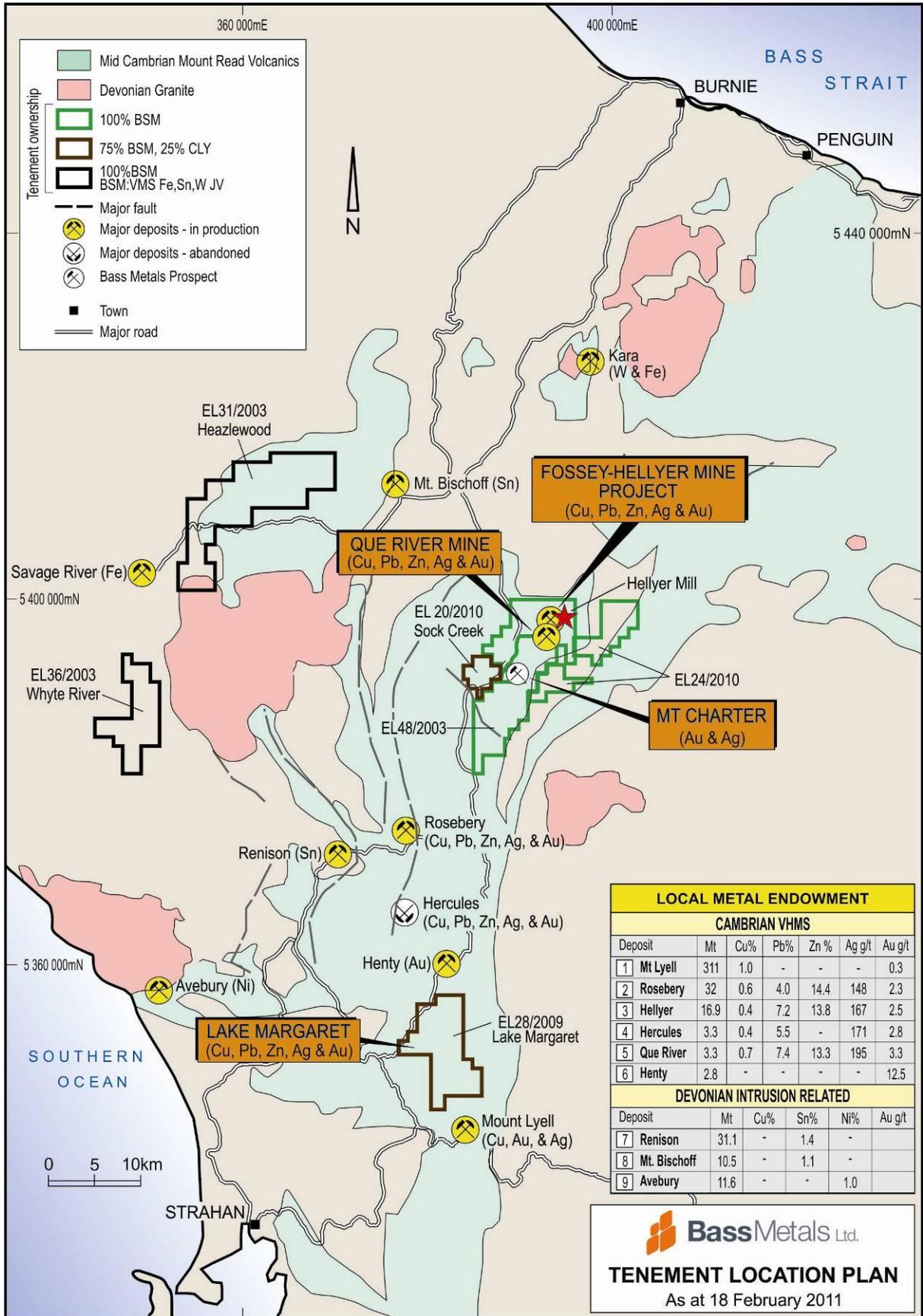
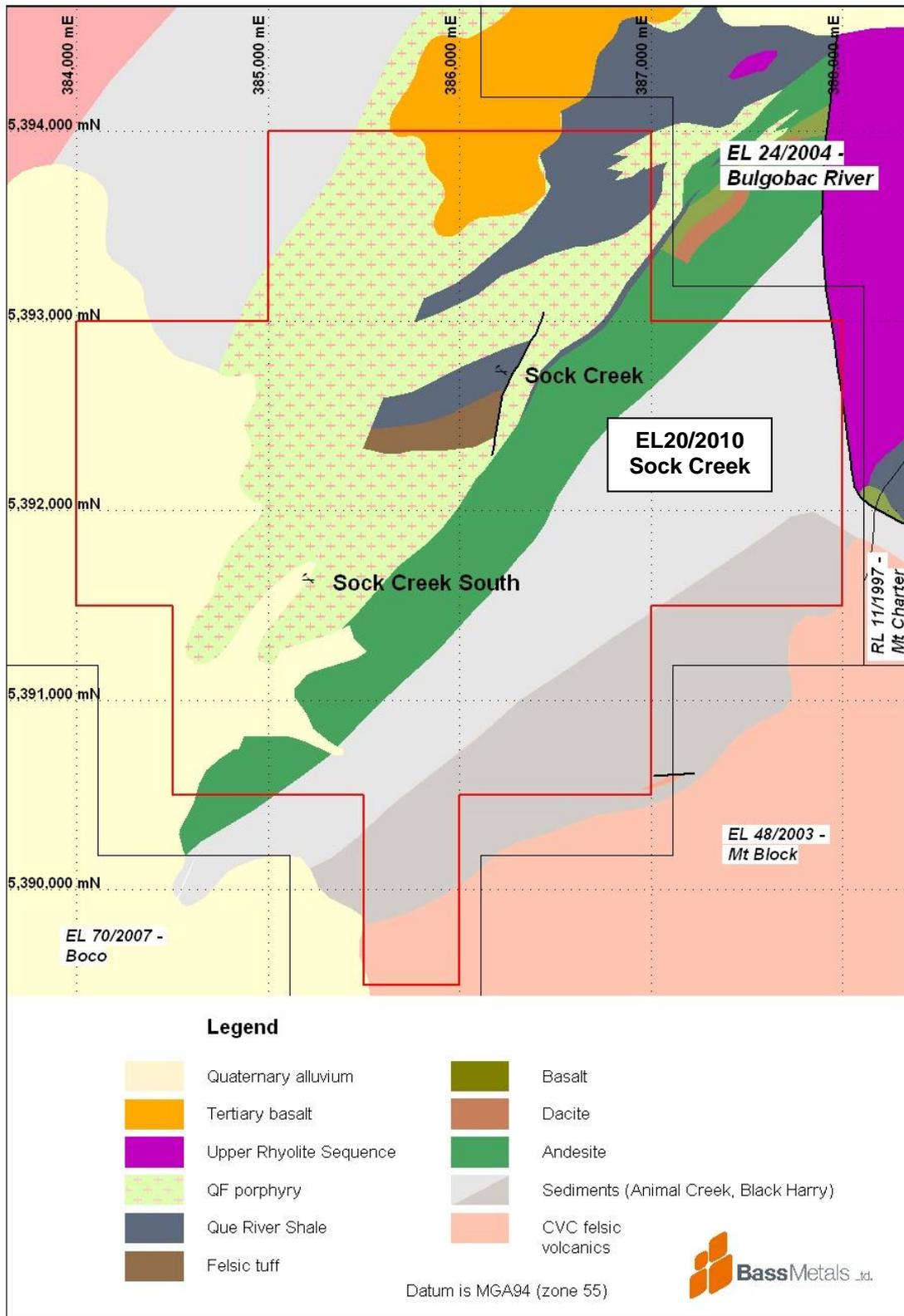


Figure 1. Location Map



**Figure 2. Regional Geology Map (AGD94, Zone 55)**

## 2.0 EXPLORATION HISTORY

### 2.1 Prospecting and Exploration pre-EL 20/2010

Exploration on EL Sock Creek has focused on the Sock Creek and South Creek South Prospects – discussed later. Both prospects are Cambrian(?) zinc-dominated and gold/silver-poor sulphide occurrences. A total of 25 diamond drill holes have been completed for 5,567 metres.

#### Exploration History:

The area of EL 20/2010 Bulgobac River has a long history of ‘modern’ exploration. From 1963 until 1989 the current tenement area was part of Comstaff’s EL 5/63. Exploration undertaken by Comstaff and JV partners Preussag (post-1977) and BHP (post-1985) is summarised in Table 1. After the statutory relinquishment of EL 5/63, Pasminco were granted EL 37/89 Bulgobac Hill and commenced exploration in the area in 1990. Work undertaken by Pasminco between 1990 and 2000 is detailed in Table 2. Work completed by Pasminco/Zinifex on EL 30/2000 from 2000 – 2006 is summarised in Table 3 and work completed on EL 33/2006 is summarised in Table 4.

**Table 1: Work Completed on Comstaff’s EL 5/63.**

Period	Work completed.
1970-1971 (Chisholm, 1971)	-80# stream sediment sampling on 150m intervals, minor soil sampling on access roads; weak anomalies located.
1971-1974 -	costeaming on imperial grid; geological mapping, soil sampling – poorly documented and primary data not located.
1974-1976 (Keane and Orr, 1976)	- Diamond drilling on metric grid at the Sock Creek Prospect. 14 holes total for 2326m; SK1 – SK14. Intersected Sp- Gn-Cpy vein mineralisation; best intersection 1.7m@ 10.19% Zn in SK1. Numerous wide intersections of several thousand ppm zinc, SK5- numerous 1-2m wide interval +1% Zn and Pb SK4 all < 1%
1976 (Butt et al., 1976)	Area flown with INPUT airborne EM. No significant anomalies in the current licence area.
1977 (Hopwood, 1977)	Drill core re-logged (SK1-6, 10 and 11), prospect geology reviewed and concluded that low potential for large tonnage deposit.
1978 (Orr, 1978)	Reviewed previous work on the Sock Creek area and recommended further stream sediment and soil sampling and EM.
1979 (Hall, 1979a,b)	Further review of Sock Creek prospect; concluded that mineralisation does not represent a major prospect and no further work was recommended.
1985-1986 (Anon, 1986)	Bulk Cyanide leach and –80# stream sediment samples collected over licence area. No significant anomalies located.
1986-1987 (Anon, 1987)	Cutting of grid for UTEM survey; Drill holes re-logged; summary drill logs and cross sections are presented.
1987-1988 (Anon, 1988)	- UTEM survey located Zone G – Sock Creek South; followed-up by a fixed loop SIROTEM and IP surveys and Drilling of DDH SCS1-3 (352m) intersecting weak Zn mineralisation (best: 1m @ 2.55% Zn from 126 – 127m in SCS 3). DHEM completed in SCS2 and 3.
1988-1989 (Wilde and Kerr, 1989)	UTEM over the Southern extent of Sock Creek South; DDH SCS4 (201.4m) was drilled to test EM anomaly; DHEM completed.

This tenement was relinquished and the ground was picked up By Pasminco as EL 37/89 Bulgobac River. Work completed on EL 37/89 is summarised in Table 2.

**Table 2: Exploration on the area of EL 37/89 after 1990 by Pasminco**

Period	Work completed.
1990-91 (Lorrigan, 1991)	Photogrammetry to produce accurate base maps, high resolution aeromagnetic survey, collection of physical properties data from existing drill core (SK1-12), Relogging of Sock Creek South drill core and volcanological/lithogeochemical review of the prospect.
1991-92 (Purvis, 1992)	- Geological mapping, additional gravity data were collected. An Honours thesis "Geology and mineralisation of the Sock Creek and High Point Areas, Western Tasmania" (Barwick, 1991) was completed.
1992-93 (Purvis, 1993)	At Sock Creek Previous drilling, UTEM data and the Geology of the prospect were reviewed and new geological cross-sections compiled, infill gravity data was collected and a diamond drill hole (BHD4, 617m) completed as a deep test of the mineralised zone. The hole was sited 150 west of the Sock creek fault and was designed to test below the known mineralisation. No mineralisation was intersected.
1993-94 (Purvis, 1994)	DHEM survey of BHD4 (Sock Creek); review of previous work indicated potential for low grade/ tonnage mineralisation at Sock Creek. The review at Sock Creek found thayat there is slight potential for up to 200,000 t of open pittable mineralisation grading 5 – 10% around holes SK1 & 2. Good overview of geology and mineralisation. Lead and sulphur isotopes indicate Cambrian.
1994-95 (Purvis, 1995)	Completion of analysis of stratigraphy & volcanic facies in western part of Que-Hellyer Basin, using lithogeochem & petrological data from 19 drill holes.
1995-96 (McGunnigle, 1996; Purvis, 1996)	<b>ML application</b> (depth limited to 100m) over Sock Creek prospect by J.G. Purvis resulting in drilling of two holes (SC1 & SC2) with minor Pb – Zn intersections. SC1 intersected 3m @ 1.6%Zn from 34.05 – 37.05m and 21m @ 2.1% Zn from 44.3 – 45.3 metres. SC2 intersected 1.7m @ 10.2% Zn from 51.7 – 53.4m and 1m @ 2.1 % Zn from 36 – 37m. Subsequent to these holes to lease application was withdrawn
1996-97 (Basford and Murphy, 1997)	- Geological & geochemical data review. Minor grid cutting (4.4 line km) and soil sampling on northern section of licence as part of a program on EL 19/94.

This tenement was relinquished and then picked up as EL 30/2000 again by Pasminco.

**Table 3: Exploration on the area of EL 30/2000 after 2000 by Pasminco/Zinifex**

Period	Work completed.
2001-02 (McNeill, 2002)	Previous exploration data reviewed and digitally compiled; old DDH collars surveyed in AMG coordinates; 5 km line cutting completed at Sock Creek prospect for soil sampling program.
2002-03 (McNeill, 2003)	3 line km of grid were cut and this and the 5 km cut previously was partial leach soil sampled. Two anomalous zones, requiring some follow-up work, were located.
2003-04 (McNeill and Poltock, 2004).	-6.8 line km of grid were cut and partial leach soil sampled. -Geological mapping of all grid cut since the granting of EL 30/2000.
2004-05 (McNeill and Skirka, 2005)	Cutting of 9.0 line km of new grid and surveying of this grid with DGPS. - Partial leach soil sampling of the new grid (423 samples including standards and duplicates). - Additional geological mapping in the

	northern part of the license area.
2005-06 (Skirka and McNeill, 2006).	Cutting of 9.9 line km of new grid. Partial leach soil sampling of the new grid (418 samples including standards and duplicates). - Geological mapping of the 2004/05 Sock Creek Grid, this new grid and also the lower sections of the Bulgobac River. - One diamond drillhole (SCS5: 523m) at the Sock Creek South prospect - Downhole EM surveying of SCS5. This hole was targeted at an partial leach anomaly and failed to intersect any mineralisation.

**Table 4: Exploration on EL 33/2006**

2007-08 (Hicks, 2008)	<ul style="list-style-type: none"> <li>- Four diamond drillholes (BHD-7 to BHD-10 for 1480m) at Sock Creek</li> <li>- Geological logging and assaying of core</li> </ul> <p>Drillhole <b>BHD-7</b> was designed to test a large gap in favourable stratigraphy between SCS5 and BHD4.</p> <p>Drillhole <b>BHD-8</b> was sited to test the potential of the Sock Creek Fault as a possible Cambrian growth structure, midway between this fault and the Mt Charter Fault to the northeast.</p> <p>Drillhole <b>BHD-9</b> was designed to test the stratigraphic position adjacent to, but on the NE (or downthrown, basinal side) of the Sock Creek structure where deep drilling is absent.</p> <p>Drillhole <b>BHD-10</b> was positioned to test the contact between the Black Harry Beds (BHB) and the CVC volcanics, in an area of elevated partial leach soil geochemistry.</p> <ul style="list-style-type: none"> <li>- Cutting of 4.1 line kms of loop access around these 4 holes</li> <li>- Downhole EM surveying of all four drillholes</li> </ul>
2008-09 (Hicks, 2009)	Reporting on DHEM survey
2009-2010 (Stewart, 2009)	Review and relinquishment.

### **3.0 WORK COMPLETED during the reporting period - (17<sup>th</sup> December 2010 – 16<sup>th</sup> December 2011)**

Previous exploration results were compiled with all data captured digitally.

#### Short Range Infrared Range (SWIR) data collection

Bass Metals is conducting an alteration study of the whole Sock Creek tenement similar to that conducted over the Que-Hellyer Volcanics. To date a total of 320 spectral data samples have been taken. This study will almost certainly recognise and define alteration 'hot spots' which have not been recognisable to the naked eye and have been looked over in the past. See Appendix 1 (Digital Copy Only) for SWIR results.

Historically 5,566 metres of drilling have been completed in the Bulgobac are with 4,489m and 1,077m in the Sock Creek prospect and Sock Creek South Prospects respectively. The Sock Creek prospect has a best drill intersection of 1.7m @ 10% Zn and Sock Creek South prospect has a best drill intersection of 1m @ 2.25 % Zn.

### **4.0 PROPOSED EXPLORATION FOR 2011-12**

Completion of the alteration study; by analysing the remaining 757m of core by SWIR; and collecting trace element lithogeochemical samples of all existing drill core and significant outcrop ~200 samples.

Re-log drill core and re-map significant parts of the licence area.

Complete initial review with focus on reviewing all geophysical surveys and soil sampling survey which analysed for elements known to be potential pathfinders.

### **5.0 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.

## 6.0 EXPENDITURE

**Table 3 Expenditure 17<sup>th</sup> December 2010 to 16<sup>th</sup> December 2011**

*\*Expenditure reported is up to and including 30<sup>th</sup> Sept 2011*

December 2010 - December 2011		
Geoscientific Costs	Geology	14,797.19
	Geochemistry	
	Geophysics	
	Remote Sensing	
Drilling & Gridding Costs	Gridding	
	Drilling	1,316.18
	Land Access Costs	
	Rehabilitation Costs	
	Feasibility Study Costs	
	Other Costs	224.4
	Admin Costs	798
	<b>Total - eligible</b>	<b>\$17,135.77</b>

Total expenditure up to the 30th September 2011 for the Sock Creek tenement is \$17,135.77

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**APPENDIX 1**  
**SWIR DATA**  
**(DIGITAL COPY ONLY)**