



SOCK CREEK EL 30/2000

**FIFTH AND FINAL ANNUAL REPORT
FOR THE PERIOD ENDING 30th May 2006**

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Date: 2nd June 2006

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1. SUMMARY

This report details work undertaken on exploration licence 30/2000 Sock Creek (Bulgobac) during the fifth year of the licence. The principal exploration targets sought within the licence area are Hellyer or Rosebery-type volcanogenic Pb-Zn-Cu-Ag-Au massive sulphide deposits.

Work completed during the reporting period has comprised:

- Cutting of 9.9 line km of new grid, to test for geochemical anomalism between the Animal Creek Greywacke and the top of the CVC, and surveying of this grid with GPS.
- Partial leach soil sampling of the new grid (418 samples including standards and duplicates).
- Geological mapping of the 2004/05 Sock Creek grid, the new Sock Creek grid and the upper and lower sections of the Bulgobac River.
- One diamond drillhole (SCS5: 523m) at the Sock Creek South area.
- A DHEM survey on drillhole SCS5.

No significant anomalies have been located by this work.

2. INTRODUCTION

This report details work undertaken on exploration licence 30/2000 Sock Creek (Bulgobac) [Figure 1], between 23 January 2005 and 30 May 2006, the fifth year of the licence.

The Sock Creek licence covers a portion of the Cambrian Mount Read Volcanics to the southwest of the Que River and Hellyer Mines in Western Tasmania (Figure 2). The principal exploration targets sought within the licence area are Hellyer- or Rosebery-type volcanogenic Pb-Zn-Cu-Ag-Au massive sulphide deposits. Correlates (the Sock Creek Volcanics) of the Que-Hellyer Volcanics, which host the Que River and Hellyer mines, extend across the licence area. Access into the tenement is provided by forestry tracks extending west and then southwest from the High Point on the Murchison Highway (A10). The main Bulgobac River track from High Point has been reopened for 4WD vehicles to approximately 5391800mN, 384800mE (AGD66) after which access is by foot only. An historic exploration track from the Bulgobac River track has been reopened for 4WD access to the SCS5 drill site at 374525mE, 5390970mN. Foot access is available to the southern part of the tenement via grid lines trending NW from the Murchison Highway near Animal Creek.

Exploration activities undertaken during this reporting period have consisted of partial leach soil sampling, geological mapping, diamond drilling and a DHEM survey.

2.1 Attribution

The following personnel were responsible for the work carried out by Zinifex Rosebery Mine on the Sock Creek licence, EL 30/2000, area during the reporting period:

Senior Geologist:	Andrew McNeill – Zinifex Rosebery Mine.
Contract Geologist:	Mick Skirka - Skirka Geological Services.

3. LAND TENURE

Sock Creek EL 30/2000, covering 14 sq. km, was granted to Pasminco Australia Limited on 23rd February 2001 for a period of 5 years (Figure 1). EL 30/2000 covers ground that fell vacant on the relinquishment of EL 37/89 (Pasminco) on 2nd September 2000. Land covered by EL30/2000 is all Crown Land designated as State/Multiple Use Forest and MDC (Forestry Commission) Informal Reserves, all of which are available for exploration under the Mineral Resources Development Act 1995.

On April 5th 2004 the name of Pasminco Australia Limited was changed to Zinifex Australia Limited as part of a float of some assets.

An application for extension of the license was submitted to MRT in January 2006. However, due to the lack of a significant result from drillhole SCS5, this application has been withdrawn.

4. GEOLOGY

EL 30/2000 covers two main groups of the Cambrian Mt Read Volcanics - the Central Volcanic Complex (CVC), and correlates of the Dundas Group, including the Que-Hellyer Volcanics (Komyshan, 1986; Corbett and McNeill, 1986; Figure 2).

The CVC outcrop in the far southeastern part of the EL and comprises rhyodacitic lavas and volcanoclastics. These rocks are assigned to the Mt Block Volcanics.

The Dundas Group and correlates conformably overly the CVC on a gradational west facing and dipping contact, and are shown as Cycle 2 (Tyndall Group) rocks on Figure 2. The lower part of the Dundas Group comprises the Black Harry Beds and Animal Creek Greywacke; sediment dominated sequences that pass up into the Sock Creek Volcanics, a complex of shales, intrusive quartz-feldspar porphyries and dacitic to basaltic lavas with minor volcanoclastics. The Sock Creek Volcanics are geochemically distinct to the Que-Hellyer Volcanics, but, are considered to be their time equivalents south and west of the Mt Charter Fault. Overlying the Sock Creek Volcanics are equivalents of the Southwell Subgroup (felsic volcanoclastics and sediments).

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.

Two ?Cambrian zinc-dominated and gold/silver-poor sulphide occurrences are known on the EL. These are:

- 1) Sphalerite with lesser pyrite-galena-chalcopyrite in net-veins on the contact between quartz-feldspar porphyry and black shale at Sock Creek (best intersection of 1.7m @ 10% Zn, with a general tenor around 2-5% Zn over 5-10m.).
- 2) Weak disseminated sphalerite in black shale at Sock Creek South (best intersection of 1m @ 2.5% Zn).

5. PREVIOUS EXPLORATION

The area of EL 30/2000 Sock Creek 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 since the granting of EL 30/2000 is summarised in Table 3.

Note that the north eastern part of EL 30/2000 overlaps with the western part of the High Point Prospect. However, the majority of this prospect is on vacant ground to the east and previous exploration will not be discussed in this report (see McNeill and Simpson (2000) for a summary).

Table 1: Exploration on the area of EL 30/2000 prior to 1990

Reporting 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	- costeaning 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; 14 holes total for 2326m; intersected Sp-Gn-Cpy vein mineralisation; best intersection 1.7m@ 10.19% Zn in SK1
1975 (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). 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.

Table 2: Exploration on the area of EL 30/2000 after 1990

Reporting 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 entitled "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.
1993-94 (Purvis, 1994)	DHEM survey of BHD4 (Sock Creek); review of previous work indicated potential for low grade/ tonnage mineralisation at Sock Creek.
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)	- ML application (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.
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.

Table 3: Exploration on EL 30/2000

Reporting 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.

6. WORK COMPLETED 2005-2006 REPORTING PERIOD

Work completed during the fifth year of tenure focussed on partial leach soil sampling and geological mapping across the license and the drilling of a single diamond drillhole (SCS5) with subsewuent DHEM survey at the Sock Creek South area.

6.1 Partial leach Soil Survey

A total of 9.9 line km of new grid was cut and surveyed with GPS. The entire grid was soil sampled for partial leach geochemistry in order to test for geochemical anomalism between the Animal Creek Greywacke and the top of the CVC.

Randomised sample numbers were used in partial leach sampling to reduce the effect of analytical variations. The partial leach soil samples were collected at 25m intervals, at or near a grid peg, and involved digging a hole with a pick, removing the organic rich A-horizon and collecting approximately 500g of sample from the nominal B horizon. The samples were then placed in ziplock plastic bags and, once returned to the field office, the bags were stored open to prevent anaerobic reactions. When a batch of 400 samples was collected, the sample bags were sealed and the samples despatched to Amdel in South Australia for analysis by partial leach technique DL42. Elements determined were Ag, As, Au, Ba, Bi, Cd, Cu, Co, Mo, Pb, Ni, Y, Zn and the rare earth elements Ce, Eu, Gd, La and Sm. The pH of the leachate, after digestion, was also determined. Results are included as Appendices 1 and 2 and sample locations are shown on Plan 1.

Three duplicate and two standard samples were collected per 100 samples. The field duplicates were also analysed in duplicate to allow assessment of both the sample and laboratory variance. Additionally at each sample site a small amount of soil was collected and stored in a chip tray for reference and to allow soil colour to be recorded. Soil colour was assigned from a Munsell Colour chart with 19 colours and was then assigned to one of six colour groups.

The 418 samples (including duplicates and standards) collected for this program were analysed as part of two batches (SDS 4555 and 4556).

No samples are obviously contaminated, however, 20 samples, 5% of the data set, have a low (pH<8.0) post-digest pH. At these 'low' pHs the speciation of reagents in DL42 may change and the resulting assays may be unreliable. These 20 samples would previously not have been considered in the analysis of the data set. However, test work at Amdel indicated that decreasing the sample:liquid from 10:1 (method DL42) to 5:1 (method DL43) could buffer the solution to a higher, acceptable, final pH (for samples with a post-digest pH of >7.2) and not significantly affect the precision of the analysis. Accordingly all 20 samples, with low post-digest pH, were re-assayed with the new protocol with the result that all samples had post-digest pHs of >8.0. In the preliminary interpretation discussed below the low (pH 6.9-7.95) samples from the original dataset have had their assay results replaced by the re-assayed.

Gridded images of the raw partial leach soil data, combined with data from previous surveys, are presented as Figures 3-11.

Several anomalies are evident:

- Several lines returned multi-element anomalism from samples adjacent to the Murchison Highway, particularly lines 4800N and 6800N. These anomalies are attributed to contamination from the adjacent Murchison Highway;
- A broad, multi-element anomaly was identified on Line 5200N which could not be attributed to contamination, culture or drainage. The anomaly, characterised by spiky Ag-Cu-Cd-Pb-Zn values from 2 to 8 times background, did not extend to adjacent lines (spaced at 400m intervals). However, infill sampling on 200m spaced lines is recommended.

6.2 Geological mapping

Geological mapping during the reporting period comprised 9.0 line km of traverses on the 2004-05 grid, 9.9 line km of traverses on the newly established grid, limited mapping of creek and tracks that cross cut the grids and traverses along the upper and lower parts of the Bulgobac River.

Outcrop on the grid is poor averaging <10% and bedrock is locally obscured by fluvioglacials. Outcrop geology has been combined with mapping from McNeill and Poltock (2004) and McNeill and Skirka (2005) and is presented as Plan 2.

Detailed interpretive geology in the vicinity of the Sock Creek Prospect has been taken from Purvis (1993) and previous mapping by Barwick (1991), Komyshan (1986) and Corbett and Komyshan (1989) has been used to aid in interpretation and defining regional trends. Drilling logs from historic drillholes at Sock Creek South have also been used to assist interpretation in areas of poor outcrop in the southwestern part of the license area. A geological interpretation of the license area is shown on Plan 3.

6.2.1 Stratigraphy

The current mapping has not changed the geological interpretation provided by McNeill and Poltock (2004), which is presented below:

Cambrian lithologies include the dacitic Sock Creek lavas, rhyolitic quartz feldspar porphyry intrusives (QFP), siltstone and micaceous - feldspathic wackes (Animal Creek Greywacke) and felsic volcanoclastic sandstones. Dolerite mapped by Barwick (1991) occurs as boulders in glacials and Tertiary basalt and is restricted to the western margin of the grid.

The sequence is interpreted as west facing with shallow to moderate dips to the NW. Small wavelength folds have been described by Purvis (1993) in the vicinity of the Sock Creek Fault.

Cambrian

From east to west the sequence includes:

- Dark bluish grey, fine grained to very fine grained, siliceous volcanoclastic siltstone/sandstone (Ebh). Distinct basaltic appearance with typical conchoidal fracture. Includes minor fine grained to medium grained, micaceous sandstone and matrix supported coarse grained volcanoclastic lithic wacke. Interpreted Black Harry Beds correlate.
- Dark grey siltstone and micaceous, feldspathic wackes (Eag). Siltstones are cleaved and thickly bedded; the latter is frequently difficult to see. Mn wad in streams appears to be associated with this lithology. These lithologies form the upper part of the Animal Creek Greywacke.
- Dacite lavas (Edi), Barwick's 1991 lithogeochemistry defines the lavas as mildly peralkaline intermediate – felsic, trachyte – comendites. Lavas are texturally variable and include amygdaloidal, fine-grained aphyric, perlitic and quartz feldspar porphyritic flows. Amygdales are elongate, aligned and filled with quartz and or chlorite. In the southern part of the mapped area the Dacite lavas include mixed unit (Exv) of lava breccia and quartz-feldspar-phyric epiclastics.
- Amygdaloidal basalt and basaltic hyaloclastite (Eb). This unit outcrops poorly in the southwestern part of the licence and can be correlated with basaltic lithologies intersected in drillholes at Sock Creek South. Whole Rock geochemistry results from this unit suggests a correlation with the Hellyer-Que River sequence.
- Grey siltstone and sericitized quartz crystal rich volcanoclastic sandstone (Esh), this equates with Purvis's epiclastic unit between the dacites and QFP, the prospective horizon at Sock Creek Prospect.
- Rhyolitic quartz feldspar porphyry (Eqfp). Barwick (1991) described the porphyry as a typical late stage MRV calcalkaline rhyolite. Variably porphyritic with glassy – fine to medium grained crystalline groundmass. Interpreted as a sill emplaced within the basal section of a siltstone horizon i.e. the siltstone at Sock Creek Prospect may have been contiguous with that in Bulgobac River in the western part of the grid. However Purvis (1993) considered it extrusive based on peperitic contacts with siltstone in Sock Creek drill cores.
- Siltstone and crystal sandstone of Bulgobac River (Esh and Exv). Siltstones are not unlike those on the SE flank of the grid but are associated with feldspar > quartz crystal volcanoclastic sandstone rather than micaceous greywacke.

Tertiary

A remnant of a Tertiary basalt flow is located on the western end of 7000N and on the nearby access track. The basalt is fine grained to slightly plagioclase and olivine porphyritic.

Quaternary

A small area of gravel to boulder size glacials has been preserved between lines 7000N - 7200N / 2350E. The basal section is composed of mixed provenance,

well rounded cobbles in clayey matrix and is exposed on the road at 386475E 5392,900N. 75m SE along this road cobble to ~5m boulder size deposits of granite, harnessed basic – intermediate rocks occur. The dolerite described by Barwick 1991 is part of the glacials. The source area for the glacials is a granite contact aureole with Cambrian age mafic – intermediate volcanics / intrusives, most likely on the eastern flank of the Meredith Granite

6.2.2 Structure

All lithologies strike NE and dip NW at shallow to moderate dips, cleavage is moderately well developed with steep NE trend. At the Sock Creek Prospect Purvis (1993) has identified small wavelength, NE trending syncline / drag folds associated with the Sock Creek Fault. A prominent set of NW trending sub parallel faults between lines 6600 – 7000N equates with Barwick's X Fault / Collins Cross Fault (Purvis, 1993) and has been interpreted to represent a splay of the Mt Charter Fault (see Purvis, 1993 and Corbett and Komysan, 1989). McNeill and Poltock (2004) interpreted the fault as sinistral with a horizontal displacement of ~400m, further east Corbett and Komysan (1989) interpreted it as a steep north dipping normal fault with significant but unspecified throw.

The Sock Creek fault is sub-parallel to stratigraphy and has only been identified as isolated occurrences of sheared volcanics and siltstone. Silicified and quartz veined siltstone at 7400N / 2150E and 7600N / 2075E may represent the northern continuation of the fault.

6.2.3 Mineralisation

No significant mineralization or alteration has been noted in the current mapping.

Previous mapping has identified the following points of interest;

- Quartz vein stockwork in dacite on lines 5800 – 6200N ~2700E.
- Trace pyrrhotite / arsenopyrite 7200N 2925E.
- Traces of pyrite in siltstones and greywacke.
- Leached limonitic quartzose float at 7200N 2385E.

The Sock Creek Prospect lies within the grid but has very limited surface expression. Mineralization has been described by Purvis (1993) as vein style with sphalerite dominant and subordinate pyrite, galena and chalcopyrite. Veining is hosted within the quench brecciated QFP contact with black shales at the intersection of the Sock Creek and Collins Cross Faults. For a more detailed description of the mineralisation refer to Purvis (1993).

6.3 Diamond Drilling

One diamond drillhole was completed at the Sock Creek South area during the reporting period for a total of 523m.

Sock Creek South area.

The Sock Creek South area is located in the south western part of license, approximately 2.5 km southwest of the Sock Creek prospect. The area came to the attention of BHP/Comstaff in 1987 (EL5/63) following a UTEM survey that identified an anomalous response (Anomaly G), subsequently confirmed by a Sirotem survey (Anon, 1988). A 50m dipole-dipole survey over the EM anomaly identified a shallow chargeable anomaly and two shallow diamond drillholes tested the anomaly (SCS2 and SCS3) with the best result 1.0m @ 2.55% Zn from 127m in SCS3 (Anon, 1988). The UTEM coverage was extended to the southwest in 1989 and the Anomaly G response was traced a further 1200m along strike. Drillhole SCS4 targeted the EM anomaly approximately 1200m southwest of SCS3 and intersected minor sphalerite in qtz-calcite veins over a distance of 74m (Wilde and Kerr, 1989; no assays reported). DHEM surveys in SCS2, SCS3 and SCS4 were inconclusive with identified anomalies attributed to a self-response and surficial glacial sediments. The main UTEM anomaly was attributed to current channelling within a fault zone.

Pasminco Exploration acquired the Sock Creek South area under EL37/89 and completed a review of the area, which included relogging of drillcore and selected whole rock geochemistry. The Sock Creek South sequence was interpreted to correlate with the Que-Hellyer Volcanics and additional exploration was recommended (Huns in Lorrigan, 1991). Exploration by Pasminco/Zinifex under EL30/2000 has comprised partial leach soil sampling and geological mapping. A weak to moderate Pb-Zn-Cd anomaly with coincident spiky anomalous Bi-As and soil pH was identified sub parallel to and approximately 250m east of BHP's Anomaly G EM response.

A single diamond drillhole (SCS5) was proposed to test the geochemical anomaly and the prospective stratigraphy mid-way between SCS3 and SCS4.

Diamond Drillhole SCS5.

Drillhole SCS5 was collared at 384525mE, 5390970mN (AMG66_55) on 16/01/2006 and completed at 523.0m on 7/03/2006. Drillhole collar and survey data are contained in Appendix 3, sampling and assay data are included in Appendix 4 and a detailed geological log is included in Appendix 5. A summary log of the drillhole is presented in Table 4 below:

The drillhole failed to intersect any significant mineralisation with minor sphalerite mineralisation observed within the mixed sediments beneath the upper basalt at approximately 105m – 145m (<1%), and trace sphalerite observed in the lower basalt unit at approximately 390m.

Table 4: Summary Log, SCS5

From (m)	To (m)	Description
0	42.6	Quartz – Feldspar Porphyry.
42.6	53.4	Feldspar-phyric, polymict, volcanoclastic sandstone
53.4	105.6	Amygdaloidal basalt and pyroxene-fsp phyric basalt.
105.6	109.8	Poorly sorted volcanoclastic sandstone to lithic wacke.
109.8	135.6	Feldspar phyric felsic volcanic breccia. Minor pyritic black shale 124.7m-125.4m with minor sphalerite (2-3%).
135.6	147.25	Graded poorly sorted, coarse grained volcanoclastic mass flow to volcanoclastic siltstone/sandstone. Trace to minor sphalerite.
147.25	153.5	Weakly amygdaloidal, fine grained basalt. Trace disseminated pyrite.
153.5	166.7	Volcanoclastic sandstone/conglomerate to lithic wacke.
166.7	172.0	Feldspar phyric dacite breccia
172.0	378.3	Massive to flow banded, variably feldspar phyric dacite lava. Amygdaloidal toward base.
378.3	402.7	Amygdaloidal basalt. Peperitic upper margin. Trace disseminated sphalerite
402.7	471.2	Interbedded pyritic mudstone, siltstone and fine grained sandstone.
471.2	523.0	Micaceous greywacke with minor interbedded siltstone.

Twenty samples (including one standard) were analysed at Aminya, Burnie for Cu, Pb, Zn, Ag, Fe, Mn, As and Sb (by ICP), Au (by ppb fire assay) and Ba (by XRF).

Best results from SCS5 were 0.6m @ 1.5% Zn, 0.4% Pb from 124.7m associated with pyritic black shale and 1.0m @ 1.3% Cu, 0.2% Pb from 143.0m associated with Qtz-pyrite-chalcopyrite veining adjacent to a small fault.

6.4 Whole Rock Geochemistry

Seven samples (including one standard) were collected and sent to Amdel, Adelaide for whole rock geochemistry. Four of the samples were from the main dacitic lavas with two samples from the lower basalt interval. Results are presented in Appendix 4b. Dacite samples displayed no evidence of VHMS style alteration with negligible Na-depletion and weak alteration signatures. Mafic samples had Ti/Zr and P₂O₅ values similar to other Sock Creek mafic units.

6.5 DHEM

During April 2006, Outer Rim Exploration completed a Down Hole EM survey on drillhole SCS5. A single transmitter loop was used and single component data was collected at 25m intervals over the entire length of the drillhole. The operations report and results of this survey are contained in Appendix 6.

Data collected from this survey were reviewed by consultant geophysicist Jovan Silic. No anomalies that could be attributed to massive sulphide mineralisation were identified.

7. CONCLUSIONS & RECOMMENDATIONS

A program of partial leach soil geochemistry, geological mapping, diamond drilling and DHEM surveying was completed during the fifth year of tenure of EL30/2000. This work has focussed on exploring the northeast striking contact between the Central Volcanic Complex and Southwell sub-group correlates, along a strike length of some 4.4 km, for Rosebery and Hellyer style VHMS deposits.

The Sock Creek South area is now considered to have been effectively tested by drilling and DHEM. Anomalous partial leach soil geochemistry is attributed to weak base metal mineralisation beneath the upper basalt unit, probably concentrated and upgraded by local drainage. Anomalous EM responses reported by BHP/Comstaff (attributed by BHP to either glacial cover/self-response and/or fault related) were not identified by the DHEM survey in SCS5 and no anomalies that could be attributed to massive sulphide mineralisation were observed.

Partial leach soil geochemistry and geological mapping over the prospective stratigraphy is now essentially complete, however some infill soil geochemistry is recommended to follow up the anomaly on Line 5200N.

Recommendations for additional work that has not been completed during the current tenure include:

- Previous UTEM and DHEM data be reviewed to assess its effectiveness and whether any targets have been missed.
- Infill partial leach soil sampling on 200m spaced lines to follow up the anomaly identified on Line 5200N.

8. ENVIRONMENT AND REHABILITATION

Surface disturbance activities undertaken during the reporting period comprised:

- One drill pad including two in ground sumps at the SCS5 drill site.
- Restoration of the Bulgobac River Track from High Point and reopening of an historic exploration track from the Bulgobac River track to the SCS5 drill site.

Rehabilitation of the SCS5 site is planned for May 2006 (following completion of DHEM survey) and further works on the access tracks will be performed in consultation with the Environmental Officer, MRT and Forestry Tasmania personnel (to be either gated or rehabilitated).

9. EXPENDITURE

Total expenditure for all work undertaken by Zinifex Rosebery Mine within Sock Creek EL 30/2000, for the period 01/01/2005 to 30/5/2006 was **\$229,699.43**. A detailed expenditure statement is given below.

Computing	\$2,833.45
Drilling	\$75,220.42
Geochemical Assays	\$18,213.98
Geoscience Consultants	\$17,270.00
Land & Environment	\$478.79
Depreciation, Office, Sundry	\$
Other Contractors	\$54,346.76
Personnel Costs	\$33,123.30
Stores & Supplies	\$7,210.96
Travel & Accommodation	\$120.00
Vehicles, Plant & Maintenance	\$
Administration Fee 10%	\$20,881.77
Total	\$229,699.43

10. KEYWORDS & LOCALITY

Keywords

SOCK CREEK, SOCK CREEK SOUTH, GEOCHEMISTRY, SOIL GEOCHEMISTRY, PARTIAL LEACH, ZINC, MAFIC, VOLCANICS, QUEHELLYER VOLCANICS, MOUNT READ VOLCANICS, GEOLOGY

Locality

1:250,000 BURNIE SK55-3
1:100,000 SOPHIA 8014
1:25,000 CHARTER 3839, BLOCK 3838

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