



McKIMMIE CREEK EL 34/2004

**ANNUAL REPORT
FOR THE PERIOD ENDING 30th JULY 2008**

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1. SUMMARY:

This report details exploration work undertaken during the fourth year of EL 34/2004, McKimmie Creek.

No exploration was conducted on the tenement this reporting year, as efforts were focussed on completing the initial investigations for a new Tailings Storage Facility (TSF) for the Rosebery Mine, within EL 34/2004.

At the end of this reporting period, a corporate takeover of Allegiance Mining by Zinifex Ltd was finalised, thus giving Zinifex a new focus on nickel. EL 34/2004 has not previously been assessed for its nickel sulphide potential, and a suitable host rock has been identified within the tenement. This area will be the focus of exploration activity in the fifth year of EL 34/2004.

2. INTRODUCTION:

This report details exploration work undertaken on McKimmie Creek EL 34/2004 during the fourth year of this tenement.

Zinifex's main target on EL 34/2004 has been Devonian Pb-Zn vein mineralisation, with Cambrian VHMS systems as a more 'speculative' target, of sufficient tonnage and grade that can be used as mill feed to supplement current underground resources at the Rosebery Mine.

Zinifex has explored the EL using a combination of geological mapping (where possible), partial leach soil geochemistry and infill time-domain ground EM, where there is no existing coverage, or the work that has been done is considered to have been ineffective.

Although close to the town of Rosebery, access to the tenement is difficult due to the Pieman River. The sole vehicular access to the tenement is an 8.1 km long 4WD track (opened up by Comstaff in the late 1970's) that runs roughly through the centre of the tenement and originates from the Pieman Road (and associated High Voltage powerline access tracks) west of the Bastyan Dam. Several Grids were established by Comstaff between 1973 and 1985 but are now too overgrown to be of any practical use.

Recent activity by Zinifex to establish a new Tailings Storage Facility (TSF) has resulted in the extension of a good quality Forestry Tasmania road, giving new access to most parts of the tenement.

2.1 Attribution

The following personnel were responsible for the work carried out by Zinifex Rosebery Mine on the EL 34/2004 McKimmie Creek licence area during the reporting period:

Senior Geologist:	Darren Hicks– Zinifex Australia Ltd
Senior Field Officer	Craig Archer – CM Archer

3. LAND TENURE:

EL 34/2004 McKimmie Creek (17 sq km) was granted to Zinifex on 30 July 2004 for a period of 5 years. The location of the tenement is shown on Figure 1 and 2. EL 34/2004 covers ground that fell vacant on the relinquishment of EL 21/96 (Pasminco) in February 2001, EL 29/91 (Golden Reef Enterprises) in 1996 and EL 12/194 (Bruce Resources NL) in 1995.

Land covered by EL 34/2004 is a mixture of crown land designated as Multiple Use State Forest, Unallocated Crown Land, private property, part of the Mt Kershaw Regional Reserve, MDC informal reserve and some HEC land all of which are available for exploration under the Mineral Resources Development Act 1995. The licence area excludes approximately 3.5 sq km of ML 28M/1993, which impinges on the eastern boundary of McKimmie Creek.

4. GEOLOGY:

The regional geology of the tenement area is largely derived from Corbett and McNeill (1986 and 1987) and Corbett (2002).

Much of the bedrock geology of EL 34/2004 McKimmie Creek is obscured by a variable thickness of Quaternary glacial cover (approximately 75% of the area of the licence). The bedrock geology of the area can be divided into three domains, separated by major north-south regional faults:

1. The Mount Read Volcanics (MRV)
2. The “Rosebery Group” or Dundas Group correlates (as defined by Corbett and Lees, 1987)
3. Correlates of the Crimson Creek Formation or the ‘Cleveland-Waratah association’

The Mount Read Volcanics, pumice breccias and intrusives forming part of the CVC, occur in the far southeastern part of the licence area, lying above of the Rosebery fault, a moderately east dipping thrust. The MRV fall in the excluded part of the licence, within the Rosebery Mine Lease ML 28M/93.

West of the Rosebery Fault lies a predominantly sedimentary sequence that has been termed the ‘Rosebery Group’. The understanding and correlation of the ‘Rosebery Group’ has undergone considerable re-interpretation since the early work by Hills in 1914 and this evolution is summarised in Green (1983) and Corbett and Lees (1987).

It is now generally agreed that the Chamberlain shale, largely outcropping in the eastward bulge of the Rosebery Fault, immediately west of the Rosebery ore body, is a west facing correlate of the White Spur Formation (i.e., the Rosebery Hangingwall sequence). The Chamberlain shale is conformably overlain by the Stitt Quartzite (including the Munro Creek formation of Green [1983]), a prominent marker unit that has fossils indicating correlation with the Cambro-Ordovician Owen Group (Corbett, 2003). The Stitt Quartzite is in turn overlain by the Westcott Argillite, a more carbonate-rich unit. Several other units, in particular the Natone Volcanics, calc-alkaline ‘Mount Read’-type volcanics, the Salisbury Conglomerate and gabbroic bodies, have unclear stratigraphic relations to the units described above; Corbett (2002, 2003) concludes that they may be older than the Owen Group correlates (Westcott Argillite, Stitt Quartzite) due to ‘structural complexities’, whilst Parfrey (1993) argues that the Salisbury Conglomerate is part of the Westcott Argillite and that as the Salisbury Conglomerate overlies and interfingers with the Natone Volcanics (in drill hole Rosebery 1) they are also equivalent to the Westcott Argillite (implying a Owen Group age if Corbett’s correlations are correct).

The ‘Rosebery Group’ is bounded to the west by a major north-south fault, the ‘Marion Oak Fault’. To the west of this structure is a sequence of mafic greywacke and siltstone with minor tholeiitic basalt lavas that extend from south of Colebrook Hill north to the Huskisson River. These rocks were mapped, following previous workers, as Crimson Creek Formation by Corbett and McNeill (1986), however, these lithologies

are now correlated with the allocthonous early-Cambrian Cleveland-Waratah Association (Corbett, 2002 and 2004).

Two mineralised zones are known from the licence area; Salmons Lode, described by A. McIntosh Reid (1918), and minor vein style Pb-Zn mineralisation at Shell's Bastyan Dam grid (Smyth, 1983), both of which occur in lithologies mapped as Westcott Argillite by MRT (a third mineral occurrence is recorded by Green and Bamford (1986), in the Pieman River downstream of the Bastyan Dam, but little information is available on this prospect).

5. PREVIOUS EXPLORATION:

The area of EL 34/2004 McKimmie Creek has a long history of ‘modern’ exploration commencing in the 1970s, as part of EL 5/1963. In the first year of tenure previous exploration over airborne EM anomalies D1 and D2, located by Pasminco (Briggs and McNeill, 2001), has been reviewed and is summarised in Tables 1 and 2, respectively.

Table 1: Previous exploration over the area of Airborne EM anomaly D1

Reporting Period	Work Completed
1972 (Piggott, 1972)	Area covered by –80# and panned concentrate stream sediment sampling and geological mapping of creeks. Work established a geological framework for the area and located low-order stream sediment anomalies.
1973-1974 (Orr, 1974)	Stream sediment sampling was considered to have been ‘inadequate’ and soil sampling on a large grid was completed; Anomaly D1 lies just east of the sampled area. Recommend an airborne EM survey as the best way to test the area.
1975 (Butt, et al., 1975)	An Input EM survey was completed. Data was interpreted and several anomalies located, including anomaly CS10 a ‘fair’ bedrock conductor that is roughly coincident with the Pasminco D1 anomaly. No follow-up work appears to have been completed.
1983 (Dvorak, Z.)	A DIGHEM III survey was flown over the entire area of interest. Anomaly 190H was located in the area of interest and was recommended for ground follow-up.
1984 (Trussell, 1984)	The DIGHEM data were further reviewed and the 190H area recommended for ground EM follow-up, as it appeared to be a ‘thick conductor’. This work does not appear to have been done.
1998-1999 Parfrey and Simpson (1999)	Identification of priority prospect areas through the completion of an airborne EM Survey. Several discrete anomalous responses, including anomaly D1 were identified - these were considered worthy of further investigation.
2000-2001 Briggs and McNeill (2001)	Detailed interpretation of 1999 Airborne EM survey; – 6 anomalies, including D1 were recommended for follow-up, however this work was not completed.

Table 2: Previous exploration over the area of airborne EM anomaly D2

Reporting Period	Work Completed
1972 (Piggott, 1972)	Area covered by –80# and panned concentrate stream sediment sampling and geological mapping of creeks. Work established a geological framework for the area and located low-order stream sediment anomalies.
1973-1974 (Orr, 1974)	Stream sediment sampling was considered to have been ‘inadequate’ and soil sampling on a large grid was completed; this grid did not cover the ‘marshy’ area overlying anomaly D2. Recommend an airborne EM survey as the best way to test the area.
1975 (Butt, et al., 1975)	An Input EM survey was completed over the entire East Renison Block. Data was interpreted and several anomalies located, including the GAO anomaly that is roughly coincident with the Pasminco D2 anomaly.
1979 (Hall, 1979)	The GAO anomaly area was gridded (3.97km), geologically mapped, soil sampled and ground magnetic and EM (Crone shootback)

	surveys completed. It was concluded that there were no positive results and no further work was warranted.
1983 (Dvorak, Z.)	A DIGHEM III survey was flown over the entire area of interest. Anomalies 170F-180H and 190K were located in the area of interest and were recommended for ground follow-up.
1984 (Trussell, 1984)	The DIGHEM data were further reviewed and the 170F-180H, 190K area (Pasmenco anomaly D2) recommended for ground EM follow-up.
1984-1985 (Shaw and Everett, 1985; Everett, 1985)	A 5 line km grid was established, soil sampled on the southern two lines (as most grid overlaps GAO), ground magnetic and GENIE EM surveys completed and two diamond drill holes (180H/1 and 180H/2) completed for a total of 218.5m. Both holes intersected black carbonaceous shales with little geochemical encouragement and no further work was recommended.
1998-1999 Parfrey and Simpson (1999)	Identification of priority prospect areas through the completion of an airborne EM Survey. Several discrete anomalous responses, including anomaly D1 were identified - these were considered worthy of further investigation.
2000-2001 Briggs and McNeill (2001)	Detailed interpretation of 1999 Airborne EM survey; – 6 anomalies, were recommended for follow-up. Anomaly D2 was not recommended for follow-up on the basis of the lack of geochemical response in DDH 180H/1 & 2.

Table 3; Previous exploration on EL 34/2004

Reporting period	Work Completed
2004-2005 McNeill (2005)	Previous exploration reviewed and digital data compiled.
2005-2006 Skirka & McNeill (2006)	Gridding, mapping and partial leach soil sampling completed across the D2 anomaly. 3.7 line km of gridding completed, 155 (including standards and duplicates) samples collected and assayed

6. WORK COMPLETED 2007-2008 REPORTING PERIOD:

There has been no new exploratory work completed in the current reporting period. The phase of grid cutting, geological mapping and partial leach soil sampling across the D2 anomaly reported in the previous annual report downgraded the potential of this area for target mineralisation.

7. CONCLUSIONS & RECOMMENDATIONS:

There have been no exploration activities completed on the tenement this reporting year, as efforts have been focused on developing a new TSF for the Rosebery Mine.

At the end of the reporting period, Zinifex Ltd completed a corporate takeover of Allegiance Mining. This has focussed Zinifex's attention to nickel for the first time in this tenement.

An area of potential host rocks for nickel sulphide mineralisation has been identified within EL 34/2004. This area is recommended for gridding, mapping and soil sampling in the fifth tenement year, once the weather improves so as to allow access.

The northern half of the tenement is therefore recommended for relinquishment, the southern half to be retained.

8. EXPENDITURE:

Expenditure on EL 34/2004 McKimmie Creek during the 12 month period ending 30 July 2007 was \$ **8,703.55**. A detailed breakdown of this expenditure is presented below.

Personnel	\$ 4,299.75
Travel & Accommodation	\$
Consultants & Contractors	\$ 2,400.00
Geological Consultants	\$
Geochemical Consultants & Assays	\$
Geophysical Surveys & Contractors	\$
Drilling	\$
Stores & Supplies	\$
Vehicles Plant & Equipment	\$
Land	\$ 525.00
Computing	\$
Office	\$ 687.57
Administration Fee (10%)	\$ 791.32
Total Tenement Expenditure	\$8,703.55

9. KEYWORDS & LOCALITY:

Keywords

Previous Exploration, Nickel, Tailings Storage Facility

Locality

1:250,000 QUEENSTOWN SK55-5

1:100,000 SOPHIA 8014; PIEMAN 7914

1:25,000 ROSEBERY 3637

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