



**PASMINCO ROSEBERY MINE**

**MT SALE EL 14/1998**

**ANNUAL REPORT FOR THE PERIOD  
ENDING 11th AUGUST 2002**

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## **1. SUMMARY**

This report details exploration completed on the Mt Sale licence (EL 14/1998) during the fourth year of tenure.

No fieldwork was completed during the reporting period however, results of sampling of small prospects, completed in 2001, and results from partial infill leach soil sampling on the adjacent ML 28M/93 were interpreted. Results from the small prospects do not warrant follow-up, but partial leach soil “Anomaly 1” extending from ML 28M/93 onto EL 14/1998 is recommended for drill testing in the coming year.

## **2. INTRODUCTION**

This report details exploration activities completed by Pasminco Exploration on the Mt Sale (EL14/1998) tenement during the fourth year of tenure.

The Mt Sale licence covers a portion of the Mount Read Volcanics to the north and east of the Rosebery Mine lease (28M/93) in Western Tasmania (Figures 1 and 2). The principal exploration targets sought within the licence area are Rosebery or Hellyer-type volcanogenic Pb-Zn-Cu-Ag-Au massive sulphide deposits. The area is heavily vegetated, rugged and poorly accessible. Access into the area is provided by 4WD tracks in the western portion, and by boat from lake Rosebery in the northern portion.

Exploration activities undertaken during the reporting period have focussed on interpreting data collected during the previous reporting period and interpreting results from the adjacent ML 28.M/93

### **2.1 Attribution**

The following personnel were responsible for the work carried out by Pasminco on the Mt Sale EL 14/1998 licence during the reporting period:

Senior Geologist: Andrew McNeill – Pasminco Rosebery Mine

## **3. LAND TENURE**

Mt Sale EL 14/1998 (Figure 1), initially 39 sq km was granted to Pasminco Australia Ltd. on 10<sup>th</sup> October 1998 for a period of five years. The tenement area has since been voluntarily reduced to 18 sq km (McNeill and Simpson, 2001b). EL 14/1998 overlaps with and lies immediately to the east and north of the Rosebery Mine Lease (28M/93), and has its northern boundary abutting Goldfield's EL 35/2000 (previously Pasminco's Burns Peak EL [44/1988]). The area of the Mt Sale tenement area has been previously held under a number of other exploration licences, which include Mt Black EL 1/62 and EL 12/88.

Land tenure is a mixture of land vested in the HEC (Predominantly the area around the Bastyan Dam and power station), unallocated Crown Land, Informal Forestry Reserves, State Forest and Forest Reserves.

## **4. GEOLOGY**

The Mt Sale tenement covers an area of largely Cambrian Central Volcanic Complex (CVC) rocks, which form part of the central north-south trending axis of the Mt Read Volcanic belt (MRV), Figure 2. The western edge of the tenement is situated to the east

the Rosebery mine sequence, while the eastern margin of the licence lies west of the NNE trending Henty Fault. The Mt Sale licence is centred on the Mt Black Volcanics, part of the CVC, which form the central axis of the MRV in the Rosebery area.

Geology of the Mt Sale licence is dominated by the Mt Black Volcanics, a thick sequence of mafic to intermediate dacite and andesite lavas, lava breccias and related intrusions which are separated by relatively minor horizons of fine to coarse grained volcaniclastic sediments (Gifkins, 2001).

The Mt Black Volcanics structurally overlie the Rosebery mine sequence, east of the Rosebery orebody. They have strong chemical similarities to the feldspar-phyric pumice breccias in the Rosebery Footwall sequence and have therefore have been correlated with them by a number of authors. The most significant difference between the Mt Black Volcanics/Rosebery mine Footwall sequence and Host/Hangingwall sequence is the absence of volcanic quartz in both the Footwall and Mt Black Volcanic sequences. The contact between the Rosebery Hangingwall and Mt Black Volcanics dips to the east at 45 degrees sub parallel to the Rosebery Fault. This contact is interpreted to be a thrust fault (the Mt Black Fault), which has emplaced the Mt Black Volcanics west over the Rosebery Mine sequence.

## 5. PREVIOUS EXPLORATION

Part of the current Mt Sale tenement area has been previously explored under the Mt Black EL 1/62 held by the Electrolytic Zinc Co. of Australasia and various JV partners between 1962-1988, and Mt Black EL 12/88 between 1988-1995 (Austmin Resources/Climax Mining JV and Austmin Resources/Pasminco Australia Ltd JV). Table 1, partly derived from Saxon (1995), provides a summary of important work undertaken specifically within the Mt Sale area.

**Table 1: Summary of Previous Exploration**

<b>YEAR</b>	<b>COMPANY</b>	<b>WORK COMPLETED</b>	<b>RESULTS</b>
1971	<b>EZ</b> (Anon)	Stream sediments	On margins of tenement area
1974-75	<b>EZ</b> Williams (1975)	Griding, IP, soil sampling – Bobadil area	Pb-Zn anomalism followed-up by infill sampling and pitting; no bedrock source
1979	<b>EZ-Getty</b>	Gradient array IP, magnetics Mt Black, Langdons, Mt Sale areas	Numerous IP responses recorded.
1979	<b>EZ-Getty</b> Howland-Rose (1979)	Dipole-dipole IP - Mt Black, Mt Sale areas	IP responses downgraded.
1979	<b>EZ-Getty</b> Mill (1980)	Aeromag, photogeol, INPUT EM, general IP, magnetics, soil geochem, mapping - Cutty Sark, Mt Sale areas	Soil anomalies, mag anomalies Cutty Sark area.
1979-80	<b>EZ-Getty</b> Mill et al. (1980)	Mapping, soil geochem, gradient array IP - Langdons, Mt Sale, Mt Black areas	Several anomalies outlined in Mt Sale area
1980-81	<b>EZ-Getty</b> McDonald (1981)	IP, soil geochem, pits - Mt Sale area	No significant anomalies recorded
1982-83	<b>EZ-Getty</b> Mathison and McDonald (1983)	Review of exploration over EL 1/62	Recommended follow-up Langdons and Cutty Sark for Au

**Table 1: Summary of Previous Exploration (cont.)**

<b>YEAR</b>	<b>COMPANY</b>	<b>WORK COMPLETED</b>	<b>RESULTS</b>
1983-1984	<b>EZ-Getty</b> Fitzgerald et al. (1984)	DIGHEM III survey  Recce gridding, mapping, VLF-EM, rock and soil sampling at Mt Black  DDHs CS1 (451.4m) and BD1 (283.2m), gridding, UTEM, mapping and rock-chip sampling at Cutty Sark - Bobadil	Highlighted area of interest at Mt Black  Results provided encouragement for detailed follow-up in 1984-85  Drilling failed to intersect significant mineralisation or alteration. Recommended that Cutty Sark workings be investigated for Au-Cu
1984-1985	<b>EZ-Getty</b> McDonald (1985)	Drill core geochemistry and petrology and review of Au potential at Cutty Sark- Bastyan Dam  Detailed gridding, mapping, VLF-EM, magnetics and soil and rock-chip sampling at Mt Black  Grid cutting prior to UTEM surveys.	Work on DDH CS1 and HEC holes did not provide encouragement. Some potential for Au  No significant mineralisation or anomalism located. No further work recommended
1986	<b>EZ-Billiton</b> Randell et al. (1986)	UTEM, mapping, rock-chip and soil sampling at Mt Black, Mt Sale and Langdons prospects.  Regional BCL stream survey  Mapping, rock-chip sampling, DHEM (in CS1), re-logging of core and CSAMT at Cutty Sark-Bastyan Dam	No anomalous base metal geochemistry associated with UTEM anomalies.  No repeatable anomalies.  Conclude that best target to north of EL; recommend extending DDH CS1
1987	<b>EZ-Billiton</b> Randell et al. (1987)	No further work at Cutty Sark. Tenement relinquished	N/A
1989	<b>Austmin</b> Hine and Scott (1989)	Diamond drillholes MBD1-4, targeting weak UTEM responses	Holes all intersected barren lavas

**Table 1: Summary of Previous Exploration (cont.)**

<b>YEAR</b>	<b>COMPANY</b>	<b>WORK COMPLETED</b>	<b>RESULTS</b>
1990-91	<b>Pasminco-Austmin</b> Purvis (1991)	Diamond drillhole BY1 (562.45m) near Bastyan Dam	No significant mineralisation or host rocks were intersected. Best intersections; 0.5m @ 2.1% Zn, 0.1% As & 13.5m @ 0.5% Zn.
1991-92	<b>Pasminco-Austmin</b> Purvis (1992)	Diamond drillhole BY2 (412.5m), nth shore of Lake Rosebery. DHEM Survey DDH BY1  Geological mapping, litho-geochem and isotope sampling in Bastyan Dam area. Evaluate Cutty Sark magnetic anomaly and visit old workings Re-log MBD1-4	No sulphides or significant alteration zones were intersected.  No off-hole conductors detected.  N/A
1998-99	<b>Pasminco</b> Parfrey (1999)	Partial leach soil sampling, part of an orientation survey. Work Focused on the Mt Black Volcanics/Rosebery Mine host contact.	Eighty three (83) partial leach soil samples collected. No areas of significant anomalism identified.
1999-00	<b>Pasminco</b> McNeill & Simpson (2000)	Extended the partial leach soil sampling coverage over the prospective Rosebery and Mt Black Fault sequences.	167 PL soil samples collected. Interpretation not completed.
2000-01	<b>Pasminco</b> McNeill & Simpson (2001a)	Review previous exploration over the eastern part of the tenement and digital compilation of data.  Interpretation of previous years Partial Leach Soil Sampling.  Sample prospects in the northern part of the tenement for Pb-isotope analysis.	No significant targets, recommend that eastern 21 sq km of tenement be relinquished.  Confirmed continuation of Anomaly 1; one further line of infill sampling required.  Results not received.

## **6. WORK COMPLETED 2000-2001 REPORTING PERIOD**

### **6.1 Partial Leach Soil Geochemistry**

Partial leach soil sampling on ML 28M/93 located two anomalous trends (Edwards et al., 1999) extending north onto EL 14/1998. The Bastyan Dam Survey, covering from the Rosebery Mine Lease Boundary north to Lake Rosebery (McNeill and Simpson, 2001) confirmed that the anomaly continued onto EL 14/1998 Mt Sale.

No further sampling was done on EL 14/1998 during the reporting period, however, a line of infill sampling was completed on ML 28M/93 (Edwards et al., 2002) at 3250N. This line confirmed the tenor and continuity of “Anomaly 1”.

### **6.2 Small Prospects**

To further evaluate the potential of the tenement, samples were collected from three prospects on the southern shore of Lake Rosebery. Two samples from each of the Cutty Sark and Langdons workings and one sample of a small Py-Gn-rich clast, from near the Bastyan Dam spillway massive sulfide clasts, were submitted for Pb analysis (McNeill and Simpson, 2001a). Sample locations and results are presented as Appendix 1. All samples returned Devonian signatures. These results have downgraded the exploration potential of these prospects.

Four rock-chip samples, from the Robbie Burns and Cutty Sark prospects, were also submitted to Analabs for assay (McNeill and Simpson, 2001a) and results are included in Appendix 2. Results were as expected.

## **7. CONCLUSIONS AND RECOMMENDATIONS**

No fieldwork was completed by Pasminco on EL 14/1998, Mt Sale, in the period August 2001 to 11<sup>th</sup> August 2002. The lack of fieldwork was a direct result of a severely reduced resources and exploration budget, culminating in August 2001, with the disbanding of the Exploration Division and the transfer of responsibility for district exploration to Rosebery Mine.

Results of sampling small prospects on EL 14/1998 have not provided any encouragement for further follow-up. However, partial leach soil sampling on the adjacent ML 28M/93 has confirmed the continuity and tenor of “Anomaly 1” (McNeill and Simpson, 2001; Edwards et al., 2002). Previous drill tests of the Rosebery ore position beneath Anomaly 1 have been at >500m below surface and the two drill holes (CS1&CS2) directly over the anomaly failed to reach the ore position. It is therefore recommended that geophysical coverage over Anomaly 1 be reviewed prior to drill testing.

## 8. EXPENDITURE

Expenditure on the Mt Sale Licence during the reporting period totalled \$6,213. A summary of the expenditure distribution is tabulated below:

Personnel	\$3,044
Travel and Accommodation	\$0
Geoscience Consultants	\$0
Geochemical Consultants & Assays	\$1,929
Drilling	\$0
Other Consultants	\$0
Stores & Supplies	\$0
Vehicles Plant & Equipment	\$0
Land	\$0
Computing	\$0
Office	\$676
Administration Fee 10%	\$564
<b>Total Tenement Expenditure</b>	<b>\$6,213</b>

## 9. KEYWORDS AND LOCALITY

### Keywords

Mt Sale, Mt Black, Bastyan Dam, Langdons, Cutty Sark, Geochemistry - Partial Leach, Pb-isotopes, geochemistry-soil.

### Locality

1:250,000 SK55-3 Burnie

1:100,000 Sophia 8014

1:25,000 Rosebery 3637; Tullah 3837

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