

**PASMINCO EXPLORATION**

**LINDA EL 13/99**

**FINAL RELINQUISHMENT REPORT**

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## **1 SUMMARY**

This report summarises exploration completed on EL 13/99 Linda, which Pasminco has proposed for relinquishment

Pasminco's exploration in Tasmania is focussed on key horizon(s) within the Mt Read Volcanics. The most important contact is thought to be at, or near, the top of the CVC. This stratigraphic position is postulated on EL 6/98 at the Beatrice prospect, and by extrapolation also may occur under glacial cover .on EL 13/99 Linda.

A small gridding and partial leach sampling program completed in January 2000 covered potential extensions to a Zn partial leach soil anomaly on the adjacent EL 6/98 anomaly with negative results. The lack of other obvious Pb-Zn-rich Cambrian VHMS targets on EL 13/99 has led to a recommendation for relinquishment.

## 2 INTRODUCTION

This report summarises exploration work completed during the life of EL 13/99 Linda. This tenement (6.5 sq km, formerly part of ETA area 500) was granted to Pasminco Exploration on 18 June 1999 and comprises two blocks in the Comstock and King River Valleys (Figure 1).

Work on this tenement comprises, a small (94 sample) partial leach soil sampling program to close-off an anomaly located by the 1998/1999 Beatrice soil surveys on the adjacent EL 6/98 Queenstown. Given the lack of encouraging results it has been decided to relinquish the tenement.

### 2.1 Attribution

The following personnel were responsible for the work carried out in the Linda Valley area during this period of tenure:

Senior Geologist	Andrew McNeill, Pasminco Exploration Rosebery.
Contract Geologist	Kim Denwer, Pasminco Exploration Rosebery.
Report Compilation	Kirsten Simpson, Pasminco Exploration Melbourne.

## 3 TENURE

EL 13/99 (6.5 sq km, formerly part of ETA area 500) was granted to Pasminco Exploration on 18 June 1999 and for technical and cost reporting purposes has been combined with EL 24/96 Walford Peak, EL 6/98 Queenstown, EL 20/98 Lake Beatrice and EL 10/99 Lake Margaret to form the Queenstown North Project (Table 1). The project was initially formed by the amalgamation of reporting and expenditure commitments for EL 24/96 Walford Peak, EL 6/98 Queenstown and EL 20/98 Lake Beatrice on 23<sup>rd</sup> March 1999. EL's 10/99 Lake Margaret and EL 13/99 Linda were subsequently amalgamated after their granting on 27<sup>th</sup> July 1999 and 18<sup>h</sup> July 1999 respectively.

**Table 1. Queenstown North Project; constituent Tenements.**

<b>Licence Number</b>	<b>Licence name</b>	<b>Date Granted</b>	<b>Area (Sq km)</b>
EL 24/96	Walford Peak	26 <sup>th</sup> November 1996	44
EL 6/98	Queenstown	30 <sup>th</sup> January 1998	33
EL 20/98	Lake Beatrice	4 <sup>th</sup> November 1998	10.47
EL 10/99	Lake Margaret	27 <sup>th</sup> July 1999	5
EL 13/99	Linda	18 <sup>h</sup> July 1999	6.5

## **4 REGIONAL GEOLOGY**

Three VHMS prospective geological environments occur around a core of Owen Conglomerate forming the West Coast Range in the area covered by the Queenstown North Project (Figure 2; derived from the published 1:25,000 scale government geology maps). These environments are the Walford Peak area on the eastern flank of the range, the West Sedgwick area on the western flank of the range and the Beatrice area on the northern flanks of the Comstock Valley that cuts through the range.

The Linda Valley Exploration Licence is situated within the Beatrice area. Boyd (1994) describes the geology of this area as lying on the steep southern slopes of Mt Sedgwick where the prospective volcanics are exposed in a window through the Owen Conglomerate formed by the valleys of Itat and Porphyry Creeks. Lavas, volcanoclastics and a black shale unit striking N-S are interpreted on published maps (Corbett and Jackson, 1987) as being CVC correlates. A large quartz feldspar porphyry sill (or series of sills) intrudes these rocks. Volcanic sandstones and conglomerates of the Tyndall Group and the Cambro-Ordovician Owen Conglomerate unconformably overlie these units.

The top of Mt Sedgwick is columnar jointed Jurassic Dolerite interpreted as a remnant of a dolerite sheet (The lack of a strong magnetic signature suggests it is not a plug) that intrudes Permian tillite, which is exposed on the SE flank of the Mountain. Much of the area of EL 13/99 Linda is covered by a variable thickness of Quaternary glacial deposits that mask the underlying bedrock geology.

## **5 PREVIOUS EXPLORATION**

Previous exploration on EL 13/99 has been reported in Denwer et al (2000b), from which the following has been extracted.

A review of the 1998/99 Partial leach sampling program at the Beatrice Prospect (on EL 6/98) indicated the presence of three Zn soil anomalies one of which, in the SE corner of the grid, was not closed off and potentially extended onto EL 13/99 Linda Valley (Denwer et al., 2000a). To detail this anomaly a total of 2.8 line km of new grid was cut and surveyed with DGPS and then sampled for partial leach geochemistry.

B-horizon 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. A small additional amount of soil was collected at each sample site and placed in a chip tray for reference and to allow colour assignment. The samples were placed in clip lock plastic bags and once returned to the field office the bags were opened to prevent anaerobic reduction reactions. The bags were left opened until a batch of 300 samples was collected and then they were closed for dispatch.

Three duplicate samples were collected for every 100 samples and these duplicate samples were replicated at the lab. The duplicate field sample enabled evaluation of the site variance and the replicate sample enabled evaluation of the laboratory variance.

A total of 100 samples were collected (see figure 3 for sample locations) and despatched to Amdel for analysis. The samples were analysed using partial leach technique DL42 followed by ICP-MS with data recorded for Ag, As, Au, Ba, Bi, Cd, Cu, Co, Mo, Ni, Pb, Ni, Zn, Zr and the rare earth elements La, Ce, Sm, Eu, and Gd. Assay results are included as Appendix 1.

Although standard results were generally good, a major concern with this data was the high number of samples with low (<8.0) post digest pH readings. Approximately 30% of the samples from this area had low pH's compared with <10% normally. The reasons for this are not obvious; there seems to be no correlation between soil colour (or colour group), post-digest pH and(or) soil Zn assay. The main conclusion is however, that the Linda Valley survey has not increased the size or coherence of the Zn anomaly and it now appears that the anomaly is spatially coincident with the base of the Owen Conglomerate. No further work is recommended at this time.

## **6 WORK COMPLETED DURING THE 2000-2001 REPORTING PERIOD**

No work has been carried out in the Linda tenement area since the submission of the Queenstown North Project combined annual report in October 2000 (Denwer et al., 2000b).

## **7 CONCLUSIONS & RECOMMENDATIONS**

EL 13/99 Linda Valley was acquired to cover the southern extension of the Beatrice Prospect on EL 6/98, and in particular to cover a Zn partial leach anomaly, on the southernmost line of the Beatrice grid, that was open to the south and east. A small griding and partial leach sampling program completed in January 2000 covered potential extensions to this anomaly with negative results. It is recommended that the tenement now be relinquished as:

1. The untested part of the tenement is interpreted to be underlain by Late Cambrian to Ordovician sediments that are not prospective for VHMS deposits.
2. The title of EL 6/98 immediately to the north is being divested by Pasminco. EL 13/99 was acquired to protect potential southern extensions of the Beatrice Prospect on EL 6/98 and the relinquishment of EL 6/98 removes the major rationale for retaining EL 13/99.

## 8 EXPENDITURE

Total expenditure for the Linda licence area for the five-month period to the end of March 2001 was \$979.37. A summary of the expenditure breakdown is given below:

Personnel Costs	\$770.04
Land & Environment	\$96.52
Depreciation, Office, Sundry	\$23.78
Administration Fee 10%	\$89.03
<b>Total Project Expenditure</b>	<b>\$979.37</b>

## 9 KEYWORDS & LOCALITY

### Keywords

ZINC, LEAD, COPPER, GOLD, MOUNT READ VOLCANICS, TYNDALL GROUP, CVC, SOIL GEOCHEMISTRY, PARTIAL LEACH, MMI.

### Location

1:250K QUEENSTOWN SK55-5

1:100K FRANKLIN 8013

## 10 REFERENCES

- Corbett, K.D., and Jackson, J.C., 1987. Geology of the Tyndall Range Area. Mount Read Volcanics Project Map 5. Dept. of Mines. Tasmania.
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