Copper Mines of Tasmania Pty Ltd

Exploration Licence 52/1994 – Linda

Annual Report
for the period ending 13th January 2004

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Contents

List of Drawings

EXECUTIVE SUMMARY

At the start of the review period the EL was consolidated to include ground immediately south of the Mt Lyell Mine Lease ML1M/95, and which was formerly held under EL5/98 Queenstown.

Two geophysical traverses were carried out over the EL. One targeted the unresolved anomaly in Chamounix Zinc prospect and comprised 450 metre of IP data. The other investigated part of the area to the south of Glen Lyell and west of Copper Estates.

Future work will continue to focus on the Linda Valley.

INTRODUCTION

Exploration Licence EL52/94 was granted on 2nd February 1995 and is held 100% by Copper Mines of Tasmania Pty Ltd (CMT). Towards the end of 2002 EL52/1994 was consolidated with some of the area formerly held under EL5/98 Queenstown following relinquishment by CMT of that and other ELs. The consolidated EL52/1994 includes some of the area immediately south of the Mine Lease ML1M/95, which is currently held and operated by CMT.

This report summarises work carried out on the EL over the last year.

The work carried out on the EL was a continuation of a geophysics programme carried out over the Mine Lease ML1M/95. A report detailing that survey was written in May 2003 (*Morrison and Muir*, CMT ref no T2003-004). Data and diagrams have been extracted from that document for this report.

Two traverses were carried out in the EL. The first comprised 450 metres of IP work in the Chamounix Zinc prospect. The second comprised two CSAMT lines (lines 5500N and 5750N) that targeted the area south of the mine lease between Glenn Lyell and Copper Estates. The second of these lines (line 5750N) ran across the tenement boundary into the mine lease. Two other CSAMT lines were also extended east of the mine lease into the Gormanston area.

LAND TENURE

EL 52/94 Linda covers an area of 24km^2. The EL can be broadly described as wrapping around the east and southern parts of ML1M/95, containing ground that CMT considers prospective for copper, gold and base metals.

The western boundary of EL52/1994 is the eastern boundary of the Mt Lyell Mine Lease ML1M/95. Lake Burbury lies on the eastern boundary of the EL. The central part of the licence is covered by the Chamounix (Linda) Valley and to its north east by the Burbury Volcanics and part of the Comstock (Sedgewick) Valley. The southern part of the EL encompasses Mt Owen and, in the south western corner part of the town of Queenstown. The Lyell Highway runs through the bottom part of the EL and includes the town sites of Gormanston and Linda.

Exclusions from EL52/1994 include Crown Reserves, HEC land and a small mining lease.

A tenement location map is included as Figure 1.

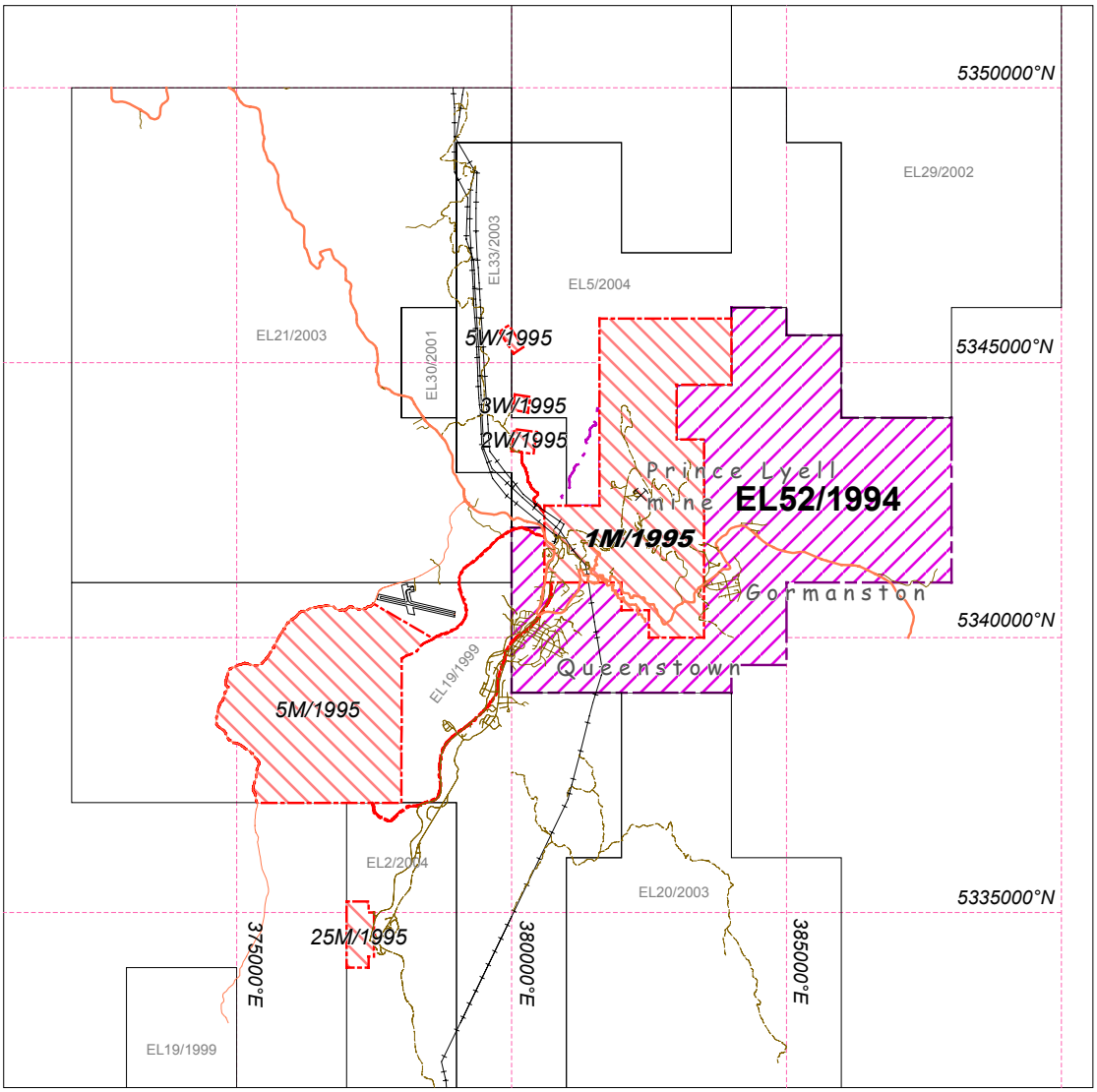


Figure 1

EL52/1994 –Tenement Location Map
(and showing other tenements held by CMT)

scale 1:125,000

REGIONAL GEOLOGY AND PREVIOUS EXPLORATION

(a) Regional Geology

Salient features of the regional geology can be summarised as follows:

- topography dominated by Owen Group conglomerates and sandstones (Mt Lyell and Mt Owen)
- glacial and fluvial sediments blanketing the geology of the northern and central parts of the EL
- minor Gordon Group limestones outcropping extensively in the west
- Mount Read Volcanics (MRV) present to the east (Burbury Volcanics) with prospective Tyndall Group rock types
- Central Volcanic Complex (CVC) rocks present in the south (strike extension to ML1M/95) showing distinctive hydrothermal alteration assemblages
- structure dominated by three regional faults:
    - ◊ the Linda disturbance
    - ◊ the North Lyell fault
    - ◊ the Great Lyell fault

(b) Pre CMT Exploration

Details of pre CMT exploration activities in the area covered by the EL are summarised in Table 1.

Table 1	**Summary of Pre – CMT Exploration**		
Year	**Company**	**Licence**	**Exploration Summary**
1966-67	Placer Exploration Ltd.	SPL-6	Linda Valley - gridding, SP survey, soil geochemistry.
1966-84	Mt Lyell Mining and Railway Co. Ltd.	ELs 9/66, 10/69 and Leases	Linda Valley - gridding, IP, SP and EM surveys. Drilling; King Lyell (Copper Clays), Gormanston (conceptual Great Lyell fault), Comstock Valley (IP anomaly, Gordon Limestone).
1984-87	Goldfields Exploration Pty. Ltd.	ATP Queenstown	Linda Valley - stream sediment survey and moss geochemistry. Drilling; Gormanston (conceptual Great Lyell fault) McDowells – old gold workings and North Lyell fault.
1985-88	CRA Exploration Pty. Ltd.	EL 5/85	Comstock Valley - stream sediment geochemistry.

1987-91	BHP Minerals Ltd.	EL 102/87	Comstock Valley – gridding and EM survey. Drilling; Comstock Valley (EM anomaly, Gordon Limestone). Relogging MLMRC Comstock and McDowells drill core. Comstock and Linda Valleys - stream sediment geochemistry.
1988-93	Aberfoyle Resources Ltd.	EL 5/85	Reconnaissance mapping – east Mt Lyell.

(c) CMT EL 52/94 Exploration Summary and Tenement History

Year 1 - 1995

- Helimagnetics survey flown by UTS.
- Literature review of previous exploration.
- Copper Clays study (CMT reference: Wills, 1995).
- Reconnaissance mapping and prospect confirmation at:
    - Chamounix Zinc
    - Burbury Volcanics
    - King Lyell Copper Clays
    - North Lyell Fault Zone

Year 2 - 1996

- Chamounix Zinc: Outcrop plus costean mapping and rock chip sampling. Two percussion drill holes gave best intersection down hole of 12 metres @ 2.1% Zn in the weathered zone.
- King Lyell: Outcrop mapping and sampling. Three percussion gave best intersection down hole of 8 metres @ 3.5% Cu.
- Burbury Volcanics: Stream sediment survey produced several gold and base metal anomalies. Weak copper, gold and lead mineralisation detected in outcrops of silica-hematite-pyrite altered Tyndall Group volcaniclastics.

Year 3 - 1997

- ERA Maptec study of major structures based on local and regional geology, magnetics and gravity.
- King Lyell resource estimate of 1.2 million tones @ 1.37% Cu. Preliminary metallurgy and economic investigations concluded the project was probably sub-economic and further exploration was postponed.
- Burbury Volcanics: Grid based magnetics and soil surveys completed. A broad gold in soil anomaly detected over the basal Tyndall Group stratigraphy.

Year 4 - 1998

- Chamounix Zinc

A CSAMT anomaly identified on a single regional survey line was drill tested with an RC percussion hole that was diamond tailed to depth of 120 metres. Surface geology was interpreted to be synformal Gordon Limestone overlain by glacial gravels. The drill hole returned base metal assays of 0.14% Zn and 0.012% Pb at a depth of 78-79 metres, as well as elevated background Ag throughout the interval sampled. Conductivity measurements did not show any significant variations. Lead isotopes yielded a typical Ordovician Gordon signature (Pb206/204 = 18.143, Pb208/204 = 38.469) with one interpretation being redeposition of Cambrian-aged lead by Ordovician fluids.

- Comstock Valley

Review of previous exploration identified weakly developed sulphide mineralisation at the base of dolomitised carbonaceous limestone identified by EM survey. Reassessment and interpretation indicated potential for the stratabound EM anomaly to extend to the SE under Eldon Group cover. The similar geological setting and geophysical responses to the Linda Valley enhances the prospectivity of the Comstock Valley.

- McDowells prospect

Previous work was reviewed and followed up by mapping, rock chip sampling, and relogging/resampling of drill hole G14/14A. The resampling exercise focused on gold with all results being below detection limit (<10 ppb). Reinterpretation concluded a substantial original carbonate content to the host rocks, and reverse movement on the North Lyell Fault. No further work was recommended on this prospect.

At the end of year 4 approximately 50% of the tenement was relinquished reducing the size of the EL from 37km^2 to 20km^2.

Years 5 to 8 – 1999 to 2002

No exploration carried out by CMT, - *Exemption From Conditions* granted to 31st March 2001.

Tenement consolidation with part of the relinquished EL5/1998 Queenstown, resulting in EL52/1994 increasing in size from 20km^2 to 24km^2.

Year 9 – 2003 (this report)

Geophysical survey as part of a broader CSAMT programme over ML1M/95 and which was extended into parts of EL52/1994

WORK DONE

1 Geophysics

Work done during the year comprised geophysical traverses that were carried out at the same time as a broader CSAMT programme which covered the Mt Lyell mining lease (ML1M/95) in January – February 2003. The location of the survey grid in relation to AMG coordinates is shown in Figure 2.

A report on that survey was compiled in May 2003 (*Morrison and Muir*, CMT reference no T2003-004). Data and diagrams have been extracted from that document for this annual report and are included on the accompanying CD. Two diagrams included on the CD have not been included in this report (that showing transmitter location and that showing an aerial photograph draped with the traverse lines). Data is presented as conductivity values in milli_siemens-per-metre (mS/m) (and where 1 mSm/m=resisitivity/1000). Derivation is from the smooth model inversion and is presented as conductivity-depth cross sections (figures prefixed A-) and as plan view depth-slice plots (figures prefixed B-). Data were static corrected but the static corrected data were not included in the report.

In the Linda EL 450metres of Induced Polarisation data were acquired over the Chamounix Prospect and two CSAMT lines (line 5500N and 5750N) were run over a western portion of the EL. The latter of these two lines (5750N) extended onto the southern part of the mine lease.

Chamounix Zinc Prospect – IP Survey

The IP data comprised 450 metres of dipole-dipole induced data straddling drillhole 98CZD0003 drilled in 1998. The IP data better resolves the anomaly identifed by the 1998 CSAMT survey and indicates that the test drillhole may not have been optimally positioned. Additional interpretation of that drillhole is called for, particularly in view of the apparent attitude of the anomaly as indicated by the IP interpretation.

Results are presented in the accompanying diagrams as figures A-34 to A-38 and B-25 to B-32, and are included in this report following Appendix 1.

CSAMT Lines 5500N and 5750N

These lines are located south of the Glen Lyell and west of Copper Estates, in a region characterised by intense hydrothermal alteration and strong disseminated sulphide (pyrite) mineralisation. Each line returned responses at surface and at depth of a weak conductor located towards the Copper Estates side of the traverse. The responses warrant further work.

Line 5750N was run as an extensions from the mine lease survey. Results are presented as figures A-10 to A-11 and are included in this report following Appendix 1.

Two other CSAMT lines were extended across the mine lease boundary into the Gormanston area (Lines 6400N and 6000N).

2 Regional Aerial Spectral Survey

CMT committed to support a regional aerial spectral survey carried out by CSIRO over the Mount Read Volcanics. The survey is intended to map alteration type minerals and to focus on areas where assemblages have a relationship to anomalous mineralisation. Ground truthing for the survey was carried out in January 2004 with interpretation and processing imminent.

The spectral dataset will be used to enhance exploration targets across the tenement.

3 Expenditure

Estimated annual costs expended on EL52/1994 amount to $69,000. This estimate excludes annual rental fees. Expenditure is summarised in the table below.

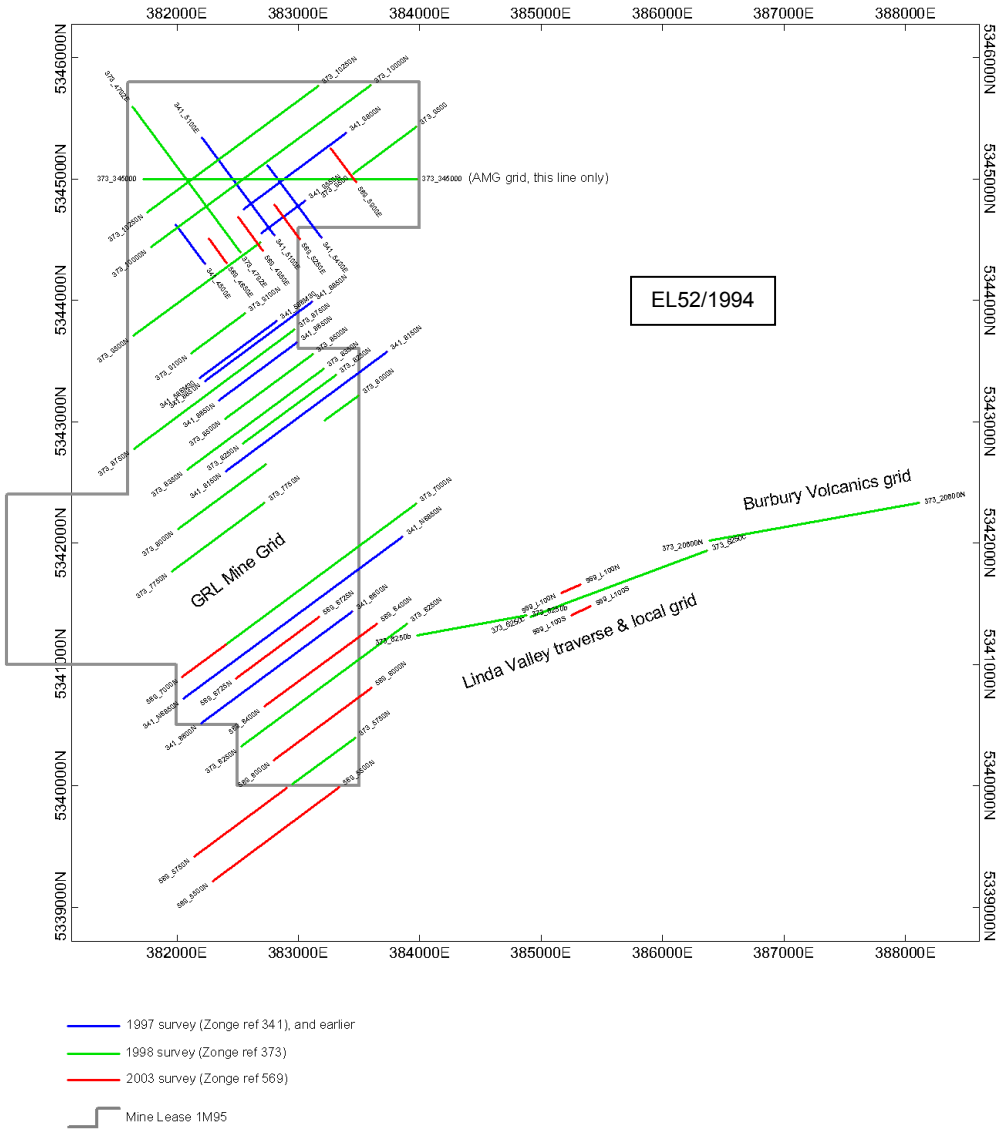
Table 2 Expenditure Summary

Item	Work Details	$
Surface Geophysics	▪ CSAMT and IP survey + data acquisition (Zonge Engineering & Research Org. Inc.) ▪ Contract geologist and contract geophysicist ▪ Track cutting	$64,000
Aerial Survey	▪ HyMap aerial spectral survey carried out by CSIRO	$5,000
Total estimated expenditure		***$69,000***

Notes:
- Costs are estimated
- Funds have been committed to CSIRO aerial survey, invoice not yet received

4 Other

Towards the end of the reporting period a PhD study into the Mount Lyell mineral field was started. The work is being supervised by CODES (University of Tasmania) with CMT providing funding in kind. The study will broadly focus on the mining lease ML1M/95. It is expected to have direct implications and possible flow on effects on the exploration strategy of the Linda EL, particularly over the southern part of the EL where the geology is contiguous with that of the mining lease.



Line Location
CSAMT Combined Surveys
(1997, 1998, 2003)

Figure 2

Figure 2

Geophysical Lines on EL52/1994 and ML1M/95
(Combined surveys 1997,1998 and 2003)

PROPOSED PROGRAMME

Future exploration in the EL will focus on prospective areas already identified. These have been very broadly ranked according to their prospectivity.

- Chamounix Zinc

The drill tested but still unexplained CSAMT anomaly in the Linda valley requires further exploration. The anomaly has been further refined by the recent IP survey. Additional interpretation on the testhole drilled in 1998 is necessary.

- Burbury Volcanics

In the Burbury Volcanics additional mapping and surface geochemistry, followed up with surface geophysics is needed to confirm drill targets in the area of existing outcrop, soil and stream sediment anomalies.

- Gormanston

Subsurface geology in the Gormanston area requires interpretation with emphasis on known alteration/mineralisation close to the boundary with ML1M/95. This will entail literature review, reconnaissance and mapping, with soil and rock chip sampling.

- Southern part of the EL

This encompasses the area south of the mining lease ML1M/95 and where subtle geochemical and geophysical responses from previous exploration work have not been fully explained. The geology has distinctive rock types, alteration assemblages, sulphide mineralisation and structural controls all of which make the area highly prospective for major resource discoveries.

REFERENCES

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Morrison, K.C., Wills, K.J.A., and Cordery, G.R., 1995; EL 52/94 Annual Report Year 1, 3 volumes CMT Pty Ltd (CMT ref no T1995-024)

Wilde, A.R. and Kerr, T.L., 1990; EL 102/87 Report for the Year ended 21 April 1990, unpubl. report, BHP Co Ltd (CMT ref no T1990-32)

APPENDIX 1 CD Contents

Folder / File Name	File Type	Description / Contents
EL_52-94-annual_report_2003	word document	This report
Linda_2003_CSAMT_south	zipped data files	Linda CSAMT data, line 100 South
Linda_2003_CSAMT_north	zipped data files	Linda CSAMT data, line 100 North
Linda_2003_IP	zipped data files	Linda induced potential data
Diagrams	png image files	Diagrams accompanying the report
5500N_CSAMT	zipped data files	CSAMT data, Line 5500N
5750N_CSAMT	zipped data files	CSAMT data, Line 5750N
5750N_1998-CSAMT	zipped data files	1998 CSAMT data, Line 5750N
Data \ Gorm	zipped data files	Data files – Gormanston area
Data \ IP	zipped data files	Data files – IP survey
Data \ Linda	zipped data files	Data files – Linda area