PASMINCO EXPLORATION

BURNS PEAK EL 44/88

ANNUAL & FINAL RELINQUISHMENT REPORT FOR THE PERIOD 1st NOVEMBER 2000 - 31ST MAY 2001

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1. SUMMARY

EL 44/88 covers 6 km^2 of Cambrian Mount Read Volcanics and lies 6 km northwest of the Tullah Township and north of Lake Rosebery (Figure 1).

The principal target on the licence is volcanic hosted auriferous base metal massive sulphide deposits similar to mineralisation at Rosebery and Hercules. The EL includes old workings at the Pinnacles (including Browns Tunnel and Southern Trenches).

Pasminco and the Burns peak Joint Venture partners have undertaken a sustained campaign of exploration on EL 44/88 over the last 12 years, resulting in an expenditure of $4.53M.

Previous exploration has failed to locate any economically significant mineralisation and work carried out in the last reporting period, which consisted of a small partial leach soil sampling survey in the area of the Summit Prospect, also failed to locate any targets worthy of follow-up. It is for this reason that Pasminco has recommended the ground for relinquishment.

2. INTRODUCTION

EL 44/88 covers 6 km^2 of Cambrian Mount Read Volcanics and lies 6 km northwest of the Tullah Township and north of Lake Rosebery (Figure 1). The principal target on the licence is volcanic hosted auriferous base metal massive sulphide deposits similar to mineralisation at Rosebery and Hercules. The EL includes old workings at the Pinnacles (including Browns Tunnel and Southern Trenches).

The licence has been in force since 1988 and statutory reductions had been progressively reduced the area to 34 sq km's by the 10th year of tenure (1998). An 18 months extension over 12 sq km's was granted at the end of 1998 to the 9th June 2000. The area was then further reduced to 6 km^2 and the term extended to 9th June 2001.

On the 31st October 2000 Hercules Resources Pty Limited ("Hercules") was granted Mining Lease 20M/2000 (see Figure2) covering 138 hectares of EL 44/88 including the known base/precious metal resources at Browns Tunnel and Southern Trenches (see Figure 2).

Details of the work completed on the latest relinquished portion of the licence to November 1997 are contained in the Annual Reports on Burns Peak EL44/88, now on open file (Murphy and Denwer 1998).

This report documents work undertaken on EL44/88 Burns Peak in the period 31st October 2000 to 9th June 2001. The work was focussed in the Southern Trenches area and comprised MMI soil and rock-chip sampling. No significant targets worthy of follow-up were located.

3. LAND TENURE

EL 44/88 was initially granted for a renewable one year term on the 9th December 1988 to Noranda Pty Limited. Following the successful tender Noranda Pty Ltd and Pasminco Limited formed a Joint Venture involving EL44/88. Pioneer Minerals Australia Limited became a third member of the joint venture upon granting of the EL.

The Burns Peak Joint Venture was executed on the 6th March 1990, between the three companies, having been effectively in place since granting of the EL. The licence was reduced to 50% of the original area at the end of the 5th year of tenure. The 10th and final year of tenure ended on the 9th December 1998. An application for an 18 months extension over a 12 sq km area covering Browns Tunnel, Southern Trenches and the North Kershaw-Chester area was lodged in November 1998 and formally granted on the 22nd February 1999. The area was further reduced to 6 km^2 and the term extended to 9th June 2001.

Permission was given to Hercules Resources Pty Limited to peg a depth limited (to 150 metres) mining lease over part of the EL covering the Browns Tunnel and Southern Trenches resources. The ML was granted on the 31st October 2000 over 138 hectares and mining commenced at Southern Trenches in November 2000.

Until the 1st July 1990, Geopeko, the exploration division of North Broken Hill Peko Ltd managed the EL under contract to Pasminco. From that time until end June 1997 Pasminco Exploration has managed the project. From the 1st July 1997 Pasminco Rosebery Mine has managed the project.

Exploration expenditure was shared equally between the joint venture partners until June 1993, when Noranda elected not to contribute to the July -December 1993 programme. Pioneer Minerals Australia was renamed Plutonic Resources Limited and "Pasminco Australia limited" has been substituted on all licence documents in place of "Pasminco Limited".

At the end of August 1997 Plutonic signified their intention to withdraw from the joint venture and commenced negotiations with Pasminco on a suitable price and format for Pasminco to acquire Plutonic's share. Work on the EL was deferred whilst the negotiations were underway.

In December 1997 Homestake Australia launched a takeover bid for Plutonic Resources. The takeover was successfully concluded in April 1998 with the Plutonic name still being retained for pre-existing licences.

At the end of January 1998 Pasminco and Plutonic completed the purchase of Noranda's share of the joint venture with each remaining partner taking 50%, concluding approximately 2 years of negotiations. At that point interests in the joint venture were 50% Pasminco and 50% Plutonic.

Permission to commence work at Browns Tunnel - Southern Trenches was granted in May 1998 whilst Plutonic (Homestake) reviewed the Burns Peak data.

In July 1998 Plutonic indicated that they would not be contributing to past expenditure accrued from the 1st January 1998 or to any further expenditure until further notice. Interests in the joint venture as at the 9th June 2001 were Pasminco 56.9% and Plutonic 43.1%.

The EL is subject to a number of land classifications which were revised in May 1993. The current land tenure includes land vested in the Hydro-Electric Commission in the area immediately surrounding Lake Rosebery and the Transmission Lines, Multiple Use Forest Land and RFA CAR reserve. Most of the tenement is Unallocated Crown land designated as Multiple Use Forest.

4. GEOLOGY & STRUCTURE

The regional geology is as described in the 1998 annual report and will not be repeated here.

5. PREVIOUS EXPLORATION

The extensive history of exploration and mining in the area covered by the current Burns Peak EL 44/88 was summarised by Rosenhain and Mathison (1989) and this has been modified below.

EL 44/88 is currently at the end of the 12th year of tenure. Details of these activities are documented in the past thirteen reports (Rosenhain and Mathison, 1989; Lorrigan, 1990; Kirsner, Lorrigan and Rae 1991; Kirsner 1992; Poltock, Kirsner and Saxon 1993; Poltock and Saxon 1994; Saxon 1995, Quayle and Dibben 1996, Dibben 1997 and Webber, Dibben and Murphy 1997, Edwards, Murphy and Whitbread 1999, Edwards and Parfrey 1999 and Edwards and Denwer 2000) and in the 1998 Relinquishment Report (Murphy and Denwer 1998).

Table 1 History of Exploration on EL44/88

Year	Work Completed
1899	Discovery of alluvial gold in Marionoak River by Tom Strong. (Strong's Alluvial Workings)
1896	Discovery of Pinnacles Lodes by McGuiness Bros.
1899	Discovery of Chester by F Kershaw and H Sanderson (Kershaw's Iron Blow)
1899	Brown's Tunnel driven (Brown's Tunnel) est. production 300t @ 2%Zn, 2g/t Au, 44g/t Ag.
1899	Southern Trenches est. Production 55t @ +10%Zn, +8%Pb, 8g/t Au, 38g/t Ag.
1899	Thomas' Tunnel driven (Thomas' workings) est. production 50t @ 4%Zn, 7%Pb, 1g/t Au, 240g/t Ag.
1908	Mt Lyell Mining and Railway Co Ltd secured Chester Leases
1908-1913	Intensive exploration and mining development at Chester. Production 36 000t @ 37% S.
1918-1929	Minor production from Chester by Cuming Smith & Co. Production 700t @ +25% S.
1947-1959	Electrolytic Zinc Company created foot and vehicle access to the Pinnacles area. 14 small diameter diamond drill holes (PP31, 34, 36, 39, 40, 41, 42, 45, 46, 48, 50, 51, 52, 59) completed and workings and topography surveyed. Geophysical test surveys at the Pinnacles (SP, ground magnetics and resistivity)
1959-1960	Geochemical, geological and geophysical surveys over Pinnacles and Chester. Techniques included Sharp vertical loop EM, Turam, ground magnetics (vertical field), gravity. "The significant feature of this coverage is that Pinnacles Mine Mineralisation is non-conducting"

Year	Work Completed
1968-1972	Initial phase of gridding, geochemical sampling, geophysics (IP and EM), mapping and 3DDH at Chester (CH1-3) by Comstaff
1973-1976	Second phase of gridding, geochemical sampling, etc. 10 DDH drilled (plus CP2 redrilled) at Pinnacles and 13 DDH at Chester (CP1-23). (New metric grid, new soil sampling, new IP). Airborne EM
1976-1979	Preussag entered into Joint Venture with Comstaff. Detailed mapping and structural synthesis completed. C horizon soil geochemistry, 2 DDH, (PIM1 & 2) trial PEM and IP over Leo's Find
1980-1983	Exploration of East Chester area. New grid, grid extensions, C horizon soil geochemistry, ground magnetics. OP, DIGHEM. DDH (EAB1-4) drilled at East Chester
1984-1985	New grid at Pinnacles (EAF) mapped, C horizon soil sampling, ground magnetics and UTEM. 19 DDH (ESB1 & EAF 1-18) with the discovery of small lenses of massive sulphides and patchy gold mineralisation. New geological interpretation
1986-1988	BHP entered Joint Venture. Reinterpretation and compilation of exploration results. "Blanket" UTEM and downhole SIROTEM. New geological interpretation. Petrological studies. Wacker sampling
1988-1991	Pasminco-Noranda-Plutonic Joint Venture on new EL 44/88. Extensive geological mapping, re-appraisal of previous data, Wacker sampling, geochemistry, petrology, DHEM, CSAMT, DH-SIROTEM, Mise-a-la-Masse, aeromagnetic survey, regional and local gravity surveys, drilling of 12 DDH (BPD62-73). Rehabilitation of old tracks, costeans and workings
1991-1992	Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drilling BPD74, 75, 76 geological mapping and re-logging drill core at Holloway and Summit, gravity infill and interpretation, ore/pathfinder/whole rock geochemistry, down hole EM in BPD69,71,75 and compilation/computerisation of historic geochemical data
1992-1993	Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drilling holes BPD77-79 geological mapping and gridding at South Kershaw-Holloway, review and compilation of previous exploration, Dipole-dipole IP at South Kershaw-Holloway, soil geochemistry at South Kershaw and ore/pathfinder/whole rock geochemistry
1993-1994	Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drill holes BPD80, BPD81 and EAF2, gridding, soil/rock geochemistry, DHEM, Mise-a-la-masse, ground magnetics and mapping
1994-1995	Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included drill holes BPD82 to 86 and extension of CP7, DHEM, gridding and geological mapping in the Holloway area
1995-1996	Pasminco-Noranda-Plutonic JV, exploration was managed by Pasminco and included diamond drill holes BPD 87 at East Holloway, BT1-4 at Browns Tunnel and RC holes STRC1-7 at Southern Trenches (reported in 1997 report); DHEM, geological mapping, ground magnetics and IP in the Holloway area; gridding, ground magnetics, soil sampling and trenching in Browns Tunnel-Southern Trenches area.
1996-1997	Compilation of previous work and entry of data into GIS format as part of the Western Tasmania prospectivity review.

Year	Work Completed
1997-1998	MMI soil sampling and IP surveys at North Kershaw-Chester, resource definition drilling at Browns Tunnel and Southern Trenches followed by preliminary mining and metallurgical studies.
1998-1999	Mining and metallurgical studies on the known resources at Browns Tunnel and Southern Trenches.
1999-2000	MMI soil sampling, one exploration diamond drill hole and 5 resource infill holes (for 305.5m). Completion of BSc(Hons.) project on isotopic systematics of alteration at Southern Trenches.

6. WORK COMPLETED 2000-2001 REPORTING PERIOD

Work completed on the retained area of Burns Peak EL 44/88 from 31st October2000 to 9th June 2001 was focussed on the Summit Prospect area. It comprised

- Rehabilitation of 3.775 line km of grid,
- Collection of 163 B Horizon partial leach soil samples and 6 rock-chip samples.

6.1 Partial Leach Sampling

Sampling over the Summit prospect was completed as part of a much larger programme extending onto the adjacent EL 4/2000 Bulgobac (reported in Simpson and McNeill, 2001). Work involved the re-opening of 3.775 line km of the nominally 200m spaced, EAB grid (initially cut by BHP/Comstaff then re-cut in 1995 by Pasminco for an IP/EM survey [Quayle and Dibben, 1996]), the collection of 163 B horizon soil samples, including duplicates, surveying of the grid with differential GPS (DGPS) and rock-chip sampling.

The 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 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 300 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, Ni, Pb, Ni, Y, Zn, Zr 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 Appendix 1 and sample locations are shown on Plate 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.

No samples were obviously contaminated, however, 14 samples, 8.5% of the data set, have a pH<8.0. At these 'low' pH's the speciation of reagents in DL42 may change and the resulting assays may be unreliable. These 14 samples would therefore normally not be considered in the analysis of the data set, however recent work (Simpson and McNeill, 2001) has indicated that this problem can be avoided by re-assaying the samples using method IC8/43. To this end 10 samples were re-analysed, see Appendix 1 for results, and the 9 samples with post-digest pH's >8.0 have been incorporated into the data set for interpretation.

Grided images of the raw data are presented as Figures 3 to 9. It can be seen that there are no significant coherent multi-element anomalies on several lines. No further work is therefore warranted.

6.2 Rock-Chip Sampling

A total of 6 rock-chip samples were collected form the area sampled in the current programme. Results are included as Appendix 2 and sample locations are shown on Plate 1. Base metal results were generally low, although samples 337021 and 337022 both returned weakly anomalous Au (0.21 and 0.29 g/t respectively).

7. ENVIRONMENTAL DISTURBANCE AND REHABILITATION

Re-opening of 3.775 line km of old grid lines was carried out over a small area just to the east of the summit of Burns Peak. No other environmental disturbance or rehabilitation was carried out.

8. CONCLUSIONS & RECOMMENDATIONS

Pasminco and the Burns peak Joint Venture partners have undertaken a sustained campaign of exploration on EL 44/88 over the last 12 years, resulting in an expenditure of $4.53M. During the last reporting period a small partial leach soil sampling survey in the area of the Summit Prospect failed to locate any targets worthy of follow-up. Previous exploration, on the area of EL 44/88 to be relinquished, failed to locate any economically significant mineralisation and there are no outstanding targets.

9. EXPENDITURE

Total exploration expenditure by the BPJV from the 1st November 2000 to 31st May 2001 was $11,313.26 as shown below.

ITEM	BPJV
Computing	$143.93
Geochemistry	$2,718.00
Geoscience Consultants	$1,209.88
Land & Environment	$149.53
Depreciation, Office, Sundry	$363.59
Other Contractors	$729.24
Personnel	$4,913.97
Stores & Supplies	$3.58
Travel and Accommodation	$24.25
Vehicles, plant & equipment	$28.21
Administration	$1,028.48
TOTAL	**$11,313.26**

10. KEYWORDS & LOCALITY

Keywords

BURNS PEAK JOINT VENTURE, MOUNT READ VOLCANICS, BROWNS TUNNEL, SOUTHERN TRENCHES, LEAD ZINC.

Locality

1:250K Burnie SK 55-3, Queenstown SK55-5

1:100K Sophia 8014

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