



**DUNDAS (WILLIAMSFORD) EL 11/2002**

**TECHNICAL REPORT  
FOR THE PERIOD ENDING 31<sup>ST</sup> JULY 2006**

**Author:** A. W. McNeill and M. Skirka

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## 1. SUMMARY

This report details exploration work undertaken on EL 11/2002 Dundas (Williamsford) during the period 31<sup>st</sup> July 2005 to 31<sup>st</sup> July 2006, the fourth year of the tenement. Work completed during the reporting period comprised:

- Cutting of 2.7 line km of grid lines.
- Collection and analysis of 119 B horizon partial leach soil samples (including duplicates and standards) from the White Spur prospect area.
- Surface fixed-loop EM survey at the western part of the White Spur prospect area.

Further work planned for the fifth year of the tenement includes following up the White Spur EM anomaly, further drill testing of the Chamberlain anomaly and follow-up of the West Hercules soil anomaly.

## **2. INTRODUCTION**

This report details exploration work undertaken on Dundas (Williamsford) EL 11/2002 during the period 31 July 2005 to 31 July 2006, the fourth year of this tenement.

Zinifex's main targets on EL 11/2002 are Cambrian Rosebery or Hellyer type, Zn-Pb-Cu-Au-rich VHMS mineralisation hosted by the Mount Read Volcanics (MRV) and Devonian Pb-Zn vein style mineralisation of the type found at for example, the South Comet Mine.

Zinifex plan to systematically explore the EL using a combination of reviewing previous exploration data, geological mapping and partial leach soil geochemistry, followed-up by ground time-domain EM, then drilling of areas of interest.

The Dundas licence covers a mountainous and heavily forested area extending from the north slopes of Mount Dundas (1143m ASL) to near the township of Rosebery (155m ASL); Figure 1. Access to the area is via the sealed Zeehan and Murchison highways to the north and west, and the Williamsford Road and 4WD tracks extending along White Spur, south of the Hercules Mine, to the east. The central part of the tenement has poor access – largely from the old NE Dundas tramway formation with old pack tracks and some rough 4WD tracks heading to the north and south.

### **2.1 Attribution**

The following personnel were responsible for the work carried out by Zinifex Rosebery Mine on the EL 11/2002 Dundas (Williamsford) licence area during the reporting period:

Senior Geologist:	Andrew McNeill – Zinifex Rosebery Mine
Senior Exploration Geologist	Mick Skirka – Zinifex Australia Ltd.
Contract Geophysicist	Jovan Silic – Jovan Silic and Associates

### 3. LAND TENURE

EL 11/2002 Dundas (35 sq km) was granted to Pasminco on 23 August 2002 for a period of 5 years as a result of a competitive tender for ETA 562. The location of the tenement is shown on Figure 1. EL 11/2002 covers ground that fell vacant on the relinquishment of EL 21/96 (Pasminco) in October 2001. On 5<sup>th</sup> April 2004, a refloat of some assets, including the Rosebery Mine and Exploration Licences, of the failed Pasminco was completed and the assets are now owned by Zinifex Australia Limited.

EL 11/2002 excludes approximately 600 ha of Mining Leases including 19M/1994, 21M/1994, 16M/2000 and 12M/2001 and parts of 25M/2000 and 28M/1993 (the Rosebery Mine Lease).

Other land tenures within the tenement area include State/Multiple Use Forest, Un-allocated Crown Land, part of the Mount Dundas Regional Reserve and some private property all of which are available for exploration under the Mineral Resources Development Act 1995.

### 4. GEOLOGY

The geology of EL 11/2002 is summarised on Figure 2 and below, taken, with modifications, from Crossing & Halley (1990):

Oonah Formation:

- Proterozoic.
- Poorly sorted, carbonate-rich, matrix supported conglomerate, overlain by micaceous quartzite, grey to black graphitic siltstones & shales, often intensely sheared (≡ Concert Schist).

Crimson Creek Formation:

- Cambrian.
- Turbiditic volcanoclastic lithicwackes, derived from the erosion of mafic volcanoclastics, massive siltstones, mudstones and basaltic lava flows. Numerous gabbros intrude this sequence near Renison Bell and occasional impure dolomite horizons have been recorded.

Dundas Group:

- Cambrian.
- Mixed epiclastic and minor volcanoclastic sediments including the White Spur Formation (WSF) in the east of the tenement and the Curtin Davis Volcanics in the centre of the tenement. The group is dominantly comprised of turbiditic to shallow water sediments with immature conglomerates, monotonous siltstones and shales containing some sandstone and grit interbeds. Towards the top of the sequence felsic to intermediate tuffs, related volcanoclastic sediments and minor lava flows (or intrusions) occur. These volcanic units generally show marked variations in facies and thickness over short distances and often appear to interfinger with one another making correlations very difficult.

Ultramafic Complexes:

- Cambrian.

- These outcrop at a number of locations throughout the licence area and have been intersected by drilling at depth. They typically show strong serpentinite alteration and exhibit a high degree of internal deformation. The only exception to this is in the Serpentinite Hill area where pockets of un-serpentinised dunite and pyroxenite have been intruded by gabbro dykes.

#### Pine Hill Granite:

- Devonian.
- The south eastern 'tail' of this intrusion occurs on the mid-western side of the Dundas licence. The intrusion is described as a porphyritic adamellite and is thought to consist of a series of intrusions. Locally it exhibits early silica and sericite alteration of the both the granite and country rocks, followed by later boron metasomatism.

#### Glacial

- Quaternary
- Glacial gravels occupy a N-S zone in the NE quadrant of the EL.

The Dundas licence area is one of structural complexity, making the determination of age relationships between the various stratigraphic units difficult, with most of the geological units appearing to be faulted against each other. Shearing and faulting is often preferentially taken up by the more mafic and shale dominated units, thereby complicating stratigraphic relationships. The main folds generated during the Devonian include the Huskisson Syncline north west of the Dundas licence. The Renison Anticline lies to the west of the Dundas licence, and the Dundas Anticline is located to the northwest of Mount Dundas where it folds the Oonah Formation.

Faulting appears to be closely associated with most of the mineralised systems. Generally there are two prominent groups of faults, a NNW trending steeply dipping set with limited dip slip to oblique slip movement and a steeply dipping NE trending set with more significant displacement. A true estimate of the amount of displacement along these NE trending structures is difficult to quantify mainly due to a lack of recognisable marker beds. The NE faults often occur along margins of the mafic-ultramafic complexes, whereas the NNW faults are more generally confined. These faults and the Cambrian thrusts (including the Rosebery Fault) also acted as zones of structural weakness during the Devonian, which resulted in a secondary period of mineralisation and partial remobilisation of Cambrian ore.

## 5. PREVIOUS EXPLORATION

The area of EL 11/2002 has a prolonged exploration history for base metals, tin and more recently gold. It is estimated that well over 100 surface drill holes have been collared on the EL at a variety of geological, geochemical and/or geophysical targets. Modern exploration commenced in the 1930s and Ellis (1983), Crossing and Halley (1990) and Weber & Murphy (1997) provide comprehensive summaries of previous exploration on the tenement area. Table 1 gives an overview of work until 1996, Table 2 details work conducted between 1996 and 2001 and Table 3 outlines work completed during the life of the current tenement.

There are numerous historical workings dating back to the turn of last century, and many more prospects developed since, in the Dundas mineral field. Mineralisation styles range from Devonian Pb-Zn-Ag veins (Comet, Kosminsky), Devonian Sn-Cu-As veins (Greens, Frazer), Late Devonian replacement zones of Sn-Cu-As-W (Clifton, Colebrook Hill Skarn) to Quaternary placer Au-Sn (Laffer's Workings, Cornish Workings).

The principal mineralising event in the Dundas area was associated with the hydrothermal fluids that accompanied the Devonian granite intrusions. Mineralisation in the Dundas field is patchy and low grade. The occasional ore shoots are erratically distributed within the controlling structural features, are small and alternate with low grade or barren sections. Despite intensive exploration since the 1930s, only small resources have been located. The largest of these were the Kosminsky – South Comet mines which contained up to 60,000t @ 8.4% Pb, 7.4% Zn and 248 g/t Ag. The mineralisation at South Comet comprises a series of lenses within a well-defined shear zone, with true widths ranging from 0.75 – 2.5m thickness.

**TABLE 1: Previous work on the area of EL 11/2002 Dundas (after Crossing & Halley 1990)**

COMPANY	PERIOD	PROSPECT/ COMMODITY	METHODS	RESULTS
BHP	1959/60	Razorback Grand Prize (Sn)	Turam, SP and Magnetics	Inconclusive except over known mineralisation.
PLACER	1964/66	Razorback Grand Prize (Sn)	Underground Drilling & Mining	No new orebodies found. The prospects are not connected.
NCGF	1966/71	N Dundas (Montezuma) (Sn)	Magnetics, VHEM, Mapping, Geochem	Coincident Magnetic and Tin-in-Soil anomaly on Montezuma Fault. Not considered worth drilling
GEOPHOTO	1968/74	Dundas (Pb Zn Ag)	IP, REM, SP, Mag, Mapping, Geochem & 79 Drill Holes	Intensive drilling located Pb Zn Ag in several thin fissure veins separated by barren host rocks. Didn't meet corporate objectives.
COMSTAFF	1970/85	E Renison Godkin (Sn)	IP, Input, Mag, Mapping & 58 Drill Holes	Intensive drilling defined: Fenton's Sn Vein; 0.43Mt @ 1% Sn, 0.2% Cu; Salmon Vein; 0.83Mt @ 3% Pb, 2% Zn; Godkin; 0.3Mt @ 0.9% Sn

**TABLE 1: Previous work on the area of EL 11/2002 Dundas cont...**

COMPANY	PERIOD	PROSPECT/ COMMODITY	METHODS	RESULTS
EZ/GETTY EZ/CSR	1978/86	Colebrook Hill Ring River Mt Dundas Montezuma (Sn Cu)	Input, Dighem, Turam, IP, Mapping, Geochem & 28 Drill holes	Several encouraging Sn and/or Cu intersections as Colebrook Hill (23 holes). Only minor Sn, Pb intersections on Montezuma Fault (5 holes). Deep hole proposed - not completed.
MINOPS P/L	1979/84	Godkin Prospect (Sn)	Gridding, soil geochem, geophysics, drilling	Comstaff and Paringa JV into Godkin area outlined inferred resource 300,000t @ 0.9% Sn.
RENISON LTD	1971/87	Grand Prize (Fault), North Dundas Grid, Commonwealth Hill, Razorback Grid, Kapi, Carbine Hill, Serpentine Hill, (Sn Cu Asbestos, PGM)	Gridding, mapping, Airborne EM, drilling. Soil/rock geochem. IP, Dighem.	Extremely deep diamond drilling on the Kapi Fault returned in S 652, 313.4-313.9m 0.5m @ 2.14% Cu. Grand Prize Fault: S 947A @ 534.8m tourmaline alteration zone. S 969: 406.8-409.8 - 3m @ 5.21% Sn, 0.23% Cu, 13 g/t Ag 408.4-409.8 - 1.4m @ 10.93% Sn
ROGER POLTOCK GEOLOGIC AL P/L	1986/88	Colebrook Hill (Au Cu W)	Stream Sediments	Concluded Colebrook Hill was a thin skarn alteration system.
RGC EXPL. P/L	1987/95 1988/95 (Dundas & Moores Pimple)	Montezuma Grid Ring River Wallace Prospect Greens Prospect (Sn Au)	Gridding, prospect mapping, rock chip sampling, IP	MZ 004 182.1-183.7 1.6m @ 19.25% As, 725ppm Sb and 0.54 g/t Au.

**TABLE 2: Previous Exploration by Pasmenco on the area of EL 11/2002 Dundas**

PERIOD	METHODS	RESULTS
1996-1997 Weber and Murphy (1997)	Reconnaissance mapping and a review with subsequent compilation of historical data (GIS format).	
1997-1998 Murphy (1998)	Reconnaissance work and mapping by Dave Selley (PhD thesis).	Work identified that the nature of the boundaries with the Precambrian need to be considered for their potential as growth faults and potential mineralising structures. This geometry impacts on modelling fluid flow regimes associated with mineralisation.
1998-1999 Parfrey and Simpson (1999)	Identification of priority prospect areas through the completion of an airborne EM Survey.	A suite of anomalous conductive responses were delineated in the EM data, however most of these were interpreted as being directly related to shallow glacial cover. Several more discrete anomalous responses were also identified - these are worthy of further investigation.

**TABLE 2: Previous Exploration by Pasminco on the area of EL 11/2002 Dundas cont..**

<b>PERIOD</b>	<b>METHODS</b>	<b>RESULTS</b>
1999-2000 McNeill and Simpson (2000)	Drill testing the Chamberlain EM Anomaly DDH CP348.  Interpretation of the 1999 Airborne EM survey.	DDH CP348 (506.2m) intersected White Spur Fmn shale-siltstone-greywacke successions. The current interpretation is that the anomaly is very deep, and may be a lithological conductor rather than mineralisation.
2000-2001 Briggs and McNeill (2001)	Soil sampling at White Spur and C1 anomaly.  Detailed interpretation of 1999 Airborne EM survey	Sampling confirmed location of C1 anomaly and indicates a Cambrian Pb Isotopic signature. No significant anomalies at White Spur. Five anomalies warranted further follow-up. However, there was no indication of a Pasminco sized (10 mt @20% Pb+Zn) deposit in Dundas area. Tenement can be relinquished.

**TABLE 3: Previous Exploration on EL 11/2002 Dundas.**

<b>PERIOD</b>	<b>METHODS</b>	<b>RESULTS</b>
2002-2003 McNeill (2003)	Compilation of previous exploration data  Soil sampling at White Spur and D13 AEM anomaly.  Gridding commenced at D11 AEM anomaly.	Results from D13 indicated that the AEM anomaly is related to the Oonah Formation-Dundas Group contact and no further follow-up is required. At White Spur, sampling located a coherent multi-element (Cu, Pb and Zn) anomaly that may be worthy of follow-up. Gridding of the D11 anomaly was in progress.
2003-2005 McNeill (2005)	Diamond drilling (CP353; 905.5m) at the Chamberlain Prospect.  Collection and analysis of 830 B horizon partial leach soil samples from the D11, D15, C1 and White Spur prospect areas.  Geological mapping at the White Spur and D15 anomalies and rock chip sampling at the D13 and D15 anomalies  A four loop, 15.4 line km ground EM survey at the White Spur prospect  Continued acquisition and review of previous exploration data	The hole did not intersect the interpreted EM conductor, but DHEM surveys in CP353 and CP348 have defined a target worthy of follow-up by additional drilling.  Three anomalies identified at the D11 area, two anomalies identified at the White Spur area and three anomalous zones identified in the C1 area.  No significant anomalies or alteration identified.  EM anomaly identified on the western margin of lines 3000N – 3400N.  Soil data from the Godkin and RGC Carbine grids and drillhole data from the Ainslie prospect.

## 6. WORK COMPLETED 2005-2006 REPORTING PERIOD

### 6.1 Partial leach soil sampling

An additional 2.7 line km of new grid was established at the western end of the White Spur Prospect area to cover an EM anomaly identified the previous year. The entire grid was surveyed with GPS and soil sampled for partial leach geochemistry in order to test for geochemical anomalism over the identified EM anomaly.

Randomised sample numbers were used in partial leach sampling to reduce the effect of analytical variations. The partial leach soil samples were generally 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 then 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 200 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, Y, Zn, 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 Appendices 1 and 2 and sample locations are shown on Figure 3.

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 and was then assigned to one of six colour groups.

The 119 samples (including duplicates and standards) collected were analysed as part of a single batch (SDS 4558). Sample locations are shown on Plan 1.

No samples are obviously contaminated, however, 1 sample had a low (pH<8.0) post-digest pH. At these 'low' pHs the speciation of reagents in DL42 may change and the resulting assays may be unreliable. Many of the low-pH samples had high Pb and Zn results that could be important in the interpretation of the dataset. This sample would previously not have been considered in the analysis of the data set. However, test work at Amdel indicated that decreasing the sample:liquid from 10:1 (method DL42) to 5:1 (method DL43) could buffer the solution to a higher, acceptable, final pH (for samples with a post-digest pH of >7.2) and not significantly affect the precision of the analysis. Accordingly this sample, with low post-digest pH, was re-assayed with the new protocol however the post-digest pH was still <8.0 and the sample has been discarded from the interpretation.

Images of the gridded raw data, from all sampling (542 samples) on the White Spur Prospect of EL 11/2002, are presented as Plan 2. There are no new significant anomalies from the current sampling program.

## **6.2 Geophysics**

Following the identification of a bedrock EM anomaly located off the western ends of lines 3000-3400N during a FLEM survey in the 2004/05 period, a single loop fixed loop ground EM program was completed by Zonge Engineering in January 2006. Four lines of data were collected for a total of 2.7 line km. A logistics report and data profiles from this survey are included in Appendix 3.

The anomaly identified the previous year was confirmed however the extra data collected has not completely closed off the anomaly to enable the definition of a drill target. Further surveying to the west (west of the EL boundary) is required to completely close off the EM anomaly.

## **6.3 Rock Chip sampling**

Assay results were received for 34 rockchip samples from the D15 Anomaly (Kosminsky Hill) Grid collected and reported in the 2005 Annual Report. Minor elevated base metal values were returned from most of the samples (generally <1% Zn and Pb) with some high-grade dump samples returning up to 25% Pb.

Results are tabled in Appendix 4.

## **7. CONCLUSIONS & RECOMMENDATIONS**

During the fourth year of tenure work was confined to the White Spur prospect area and comprised:

- Cutting of 2.7 line km of grid lines.
- Collection and analysis of 119 (including duplicates and standards) B horizon partial leach soil samples.
- A single loop, 2.7 line km ground EM survey at the White Spur prospect, with one anomaly identified for further follow-up.

As a result of this work and previous work on the license area, the following have been recommended for the fifth year of the tenement:

- The Northern Partial leach soil anomalies at White Spur (the West Hercules area) be followed-up and interpretation of the area completed in conjunction with work on the adjacent ML 28M/93.
- The white Spur EM anomaly be followed up by extending existing lines to the east and collection of additional data from EM Loop 3.
- The Chamberlain EM anomaly is tested with a further +800m DDH and DHEM survey.

## 8. EXPENDITURE

Expenditure by Zinifex Australia Ltd on EL 11/2002 during the 12 month period ending 31<sup>st</sup> July 2006 was **\$93,745.10**. A detailed breakdown of this expenditure is presented below.

Personnel	\$ 11,955.82
Travel & Accommodation	\$ 657.50
Consultants & Contractors	\$ 8,782.50
Geological Consultants	\$ 3,420.00
Geochemical Consultants & Assays	\$
Geophysical Surveys & Contractors	\$ 50,620.98
Drilling	\$
Stores & Supplies	\$ 1,539.62
Vehicles Plant & Equipment	\$ 5,731.29
Land	\$ 1,263.61
Computing	\$ 450.50
Office	\$ 801.00
Administration Fee	\$ 8,522.28
<b>Total Tenement Expenditure</b>	<b>\$ 93,745.10</b>

## 9. KEYWORDS & LOCALITY

### Keywords

Geology, geochemistry–soil, geochemistry–Partial leach, previous exploration, Dundas, White Spur, Carbine Hill, geophysics–EM, geophysics – DHEM, track cutting, Montezuma Grid, Kosminsky Hill, diamond drilling, geological mapping.

### Locality

1:250,000 QUEENSTOWN SK 55-5

1:100,000 PIEMAN 7914, SOPHIA 8014

1:25,000 DUNDAS 3636, ROSEBERY 3637

## 10. REFERENCES

- Anon, 1973. Dundas Mapping, Tasmania, Field surveys and mapping. Unpub. Australian Aerial Mapping Pty Ltd. Report (**TCR73-0954**).
- Blissett, A.H., 1962. Geological Survey Explanatory Report. Geological Atlas 1 mile Series. K'55-5-50. Zeehan. Department of Mines Tasmania.
- Blissett, A.H., and Guilline, A.B., 1962. Geological Atlas 1 mile Series. Zone 7, sheet 50. Zeehan. Department of Mines Tasmania.
- Briggs, T.J., and McNeill, A.W., 2001. Dundas EL 21/96 final report for the period 9/10/00 to 8/10/01. Unpub. Pasminco Exploration report D19 (**TCR01-4607**).
- Brown, A.V., 1986. Geology of the Dundas-Mt Lindsay Mt Youngbuck Region. Geology Survey Tasmania Bull. 6.
- Cartwright, A.J. 1986. EL 42/71 (south), Grand Prize Area, Final Report 1985/86. Unpub. RGC Report (**TCR86-2563**).
- Cartwright, A.J., 1989. EL101/87 Dundas and EL 13/88 Moores Pimple, Annual report 1988/89. Unpub. RGC Exploration report. (**TCR89-2994**).
- Clarke, R.C., 1972. SPL No. 99, North Dundas, Tasmania. Technical report on exploration November 1971-January 1972. Unpub. Longreach Metals NL report (**TCR72-0866**).
- Corbett, K.D., 1986. Geology of the Henty River – Mt read area. Mount Read Volcanics Project Map 3. Mineral Resources Tasmania, Hobart.
- Corbett, K.D., 2002. Updating the geology of the Mount Read Volcanics Belt; WTRMP Mt. Read Volcanics Compilation. Tasmania Geological Survey Record 2002/19, Mineral Resources Tasmania, Hobart.
- Corbett, K.D. and McNeill, A.W., 1988. Geological compilation map of the Mount Read Volcanics and associated rocks. Hellyer to South Darwin Peak. Mount Read Volcanics Project Map 6. Tasmania Department Mines.
- Crossing, D.J.F., 1991. EL 101/87 Dundas and EL 13/88 Moores Pimple, Annual report 1990/91. Unpub. RGC Exploration report T/91/12 (**TCR 91-3285**).
- Crossing, D.J.F. and Halley, S., 1990. EL 101/87 Dundas and EL 13/88 Moores Pimple Annual Report 1989/90. Unpub. RGC Exploration report (**TCR 90-3172**).
- Discala, L., 1974. Summary review of exploration in the Dundas area of EL 7/68, west Tasmania, August 1968 – December 1973. Unpub. Geophoto mineral consultants Report GMR 1974/4 (**TCR74-0996**).

Edwards, P.W., Graves, C., and McNeill, A.W., 2000. Rosebery Mine Lease 28M/93, Annual Report for the period ending 30<sup>th</sup> June 2000. Unpub. Pasminco Exploration Report.

Edwards, P.W., Graves, C., McNeill, A.W., and Briggs, T.J., 2001. Rosebery Mine Lease 28M/93, Annual Report for the period ending 30<sup>th</sup> June 2001. Unpub. Pasminco Rosebery Mine Report.

Elders, J., 1967. SPL No. 20 Report. Unpub. Renison Ltd Report (**TCR67-0473**).

Ellis, P.D., 1983. Past exploration within the area of Exploration Licence 15/76, Dundas. Unpub. CSR report EMR 188/82(**TCR02-4820**).

Ellis, P.D., 1984. Renewal report – 1984, Exploration Licence 15/76, Dundas, Tasmania. Unpub. CSR report EMR 52/84(**TCR84-2161**).

Ellis, P.D., 1985. Renewal report – 1985, Exploration Licence 15/76, Dundas, Tasmania. Unpub. CSR report EMR 72/85(**TCR85-2455**).

Ellis, P.D., 1986. Renewal report – 1986, Exploration Licence 15/76, Dundas, Tasmania. Unpub. CSR report EMR 108/86 (**TCR86-2584**).

Ellis, P.D. and Macnamara P., 1983. Annual Report – 1982, EL 15/76 Dundas, Tasmania. Unpub. CSR Ltd. Report EM 21/84 (**TCR83-1928**).

Forsyth, D.L., 1968. Progress report on the North Dundas Project (SPL No. 20) Tasmania for 1967-1968 field season. Unpub. New Consolidated Goldfields Report 15/1968 (**TCR69-0554**).

Forsythe, D.L., 1969. North Dundas Project, Tasmania (SPL No. 20). Unpub. New Consolidated Goldfields Report 3/1969 (**TCR68-0526**).

Herrmann, W, and White, M., 1989. A reconnaissance of old workings in the central and north Dundas mineral fields, Tasmania. Unpub. Report to RGC Exploration (**TCR89-2994B**).

Howland-Rose, A.W., 1973. Report on Turair Airborne electromagnetic-magnetic surveys in the Zeehan Area, NW Tasmania, on behalf of Geophoto Resources Consultants. Unpub. Geophoto Minerals Report T-1032 (**TCR73-0949**).

Johnson, A., 1971. Carbine Hill preliminary report, EL 7/68, western Tasmania. Unpub. Geophoto mineral consultants Report GMR 1971/23 (**TCR71-0735D**).

Juilland, J.D., 1971. Rationale for 1971 diamond drilling programme in EL 7/68, west Tasmania. Appendix 7 in Discala, L., 1974, Summary review of exploration in the Dundas area of EL 7/68, west Tasmania, August 1968-December 1973. Unpub. Geophoto Minerals Report 1974/4 (**TCR74-0996**).

Komyshan, P. 1985. EL 42/71 (south), Grand Prize Area, Annual Report 1984/1985. Unpub. RGC Report (**TCR85-2449**).

- Komyshan, P. and Roberts, P., 1983. Grand Prize Area, EL 42/71, Annual Report 1982-1983. Unpub. RGC Report (**TCR83-2063**).
- Komyshan, P. and Roberts, P., 1984. EL 42/71 (south), Grand Prize Area, Annual Report 1983/1984. Unpub. RGC Report (**TCR84-2183**).
- Layden, C.E., 1974. Special Prospecting Licence 120, North Dundas, Tasmania. Report on exploration activities for period 15<sup>th</sup> December 1972 to 15<sup>th</sup> June 1974. Unpub. Minops Pty Ltd report (**TCR75-1106**).
- Leaman, D.E., and Richardson, R.G., 1989. Tasmania Department of Mines. Geological Survey Bulletin 66. The granites of west and north-west Tasmania- a geophysical interpretation.
- McNamara, P.M., 1979a. Drainage sampling 1977-1978, EL 15/76 NE Dundas, West Tasmania. Unpub. CSR Minerals report PMR 5/79 (**TCR79-1335**).
- McNamara, P.M., 1979b. Frazer grid Exploration 1977-1978. Exploration Licence No. 15/76 NE Dundas, West Tasmania. Unpub. CSR Minerals report EMR 82/79 (**TCR79-1404**).
- McNamara, P.M., and Ellis P.D., 1983. Annual Report 1982, exploration licence 15/76, Dundas, Tasmania. . Unpub. CSR Minerals report EMR 2/83 (**TCR83-1928D**).
- Macnamara, P., 1984. Drainage sampling 1982-1983, Dundas EL 15/76, western Tasmania. Unpub. CSR Ltd. Report EM 21/84 (**TCR84-2157**).
- McNeill, A.W., 2003. Dundas (Williamsford) EL 11/2002 Annual Report for the period ending 23<sup>rd</sup> July 2003. Unpub. Pasminco Rosebery Mine report D36.
- McNeill, A.W., 2005. Dundas (Williamsford) EL 11/2002 Annual Report for the period ending 31<sup>st</sup> July 2005. Unpub. Pasminco Rosebery Mine report D37.
- McNeill, A.W., and Simpson, K.L., 2000. Dundas EL 21/96 Annual Report for the Period Ending October 2000. Unpub. Pasminco Exploration report VC329 (**TCR00-4505**).
- Murphy, F.C. 1998. Dundas EL 21/96 Annual Report for the Period Ending October 1998. Unpub. Pasminco Exploration report VC214 (**TCR98-4227**).
- Orr, D.B., and Thynne, D.S., 1980. Interim report on progress to 30<sup>th</sup> June 1980, Mineral Lease 62M/75, Godkin, Tasmania. Unpub. Comstaff Pty Ltd Report (**TCR80-1467**).
- Parfrey, O.C., and Simpson, K.L., 1999. Dundas EL 21/96 Annual report for the period November 1998 to November 1999. Unpub. Pasminco Exploration report VC284 (**TCR00-4413**).

- Penney, S.R., Quayle, P.M., and Smith, R.S., 1991. Rosebery Mine Lease and Mine Lease Extension Joint Venture Annual Report for the year ending 30 June 1991. Unpub. Pasminco Exploration Report T91-8.
- Pigott, G.F., 1983. Quarterly report to Department of Mines Tasmanian for the period 1<sup>st</sup> October to 31<sup>st</sup> December 1982. Unpub. Comstaff Ltd. Report (**TCR83-1927**).
- Rattigan, J.H., and Paterson, R.G., 1969. Exploration progress and proposals on the Comet-Kosminsky line, Dundas EL 7/68, year ending October 31<sup>st</sup> 1969. Unpub. Geophoto Minerals Report (**TCR69-0583**).
- Reid, A.M., 1925. The Dundas Mineral Field, Geological Survey Bulletin 36, Tasmania Department of Mines, Hobart, 98p.
- Richardson, L.A., 1971. Very low frequency electromagnetic survey, Dundas area EL 7/1968, western Tasmania. Unpub. Geophoto Resources Consultants Report (**TCR71-0760**).
- Russell, D.W., 1976. The biogeochemistry of the West Hercules Area, Rosebery, Western Tasmania. Unpub. BSc (Hons.) thesis, University of Tasmania, Hobart, 192p.
- Sainty, R.A., 1983a. Part EL 15/76 Montezuma – Progress report on exploration activities 22/2/82 – 20/11/82. Unpub. EZ Co. Australasia Report 160MD (**TCR83-1928**).
- Sainty, R.A., 1983b. Part EL 15/76 Montezuma – Progress report on exploration activities 21/11/82 – 5/5/83. Unpub. EZ Co. Australasia Report 166MD (**TCR83-2003A**).
- Sainty, R.A., 1983c. Part EL 15/76 Montezuma – Progress report on exploration activities 4/5/83 – 4/11/83. Unpub. EZ Co. Australasia Report 172MD (**TCR84-2163**).
- Sainty, R.A., 1984a. Part EL 15/76 Montezuma – Progress report on exploration activities 5/11/83 – 29/5/84. Unpub. EZ Co. Australasia Report T180MD (**TCR84-2163A**).
- Sainty, R.A., 1984b. Part EL 15/76 Montezuma – Progress report on exploration activities 30/5/84 – 13/11/84. Unpub. EZ Co. Australasia Report 197 (**TCR85-2456**).
- Thigpen, J.B., 1972. Summary report of diamond drilling in EL 7/68 Dundas. Unpub. Geophoto mineral consultants Report GMR 1972/9 (**TCR72-0896**).
- Thynne, D.S., and Shaw, R.W.L., 1983. A review of the Godkin Prospect ML 62M/75. Unpub. Comstaff Pty Ltd Report.
- Turner, W., 1971. Geology and mineralisation of the Ainslie Grid in EL 7/68, Dundas, NW Tasmania. Unpub. Geophoto Minerals Report 1971/25 (**TCR71-0804**).
- Weber, G.B., and Murphy, F.C., 1997. Dundas EL 21/96. Annual report for the period ending October 1997. Unpub. Pasminco Exploration report VC184 (**TCR97-4086**).

Wilding, I., Yardley, S. and Crimeen, J., 1981. Quarterly report to Department of Mines Tasmanian for the period 1<sup>st</sup> October to 31<sup>st</sup> December 1981. Unpub. Comstaff Ltd. Report (**TCR81-1692**).

Yardley, S. and Crimeen, J., 1982. Quarterly report to Department of Mines Tasmanian for the period 1<sup>st</sup> January to 31<sup>st</sup> March 1982. Unpub. Comstaff Ltd. Report (**TCR82-1733**).