Adamus Resources Limited

ACN 094 543 389

Exploration Licence 29/2002
Selina
NW Tasmania

2003 Annual Report on Exploration Activities within EL29/2002 to Mineral Resources Tasmania

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1 Summary

Exploration Licence 29/2002 located in western Tasmania and held by Adamus Resources Ltd, covers prospective units of the Mt Read Volcanics. These units are host to a number of large VHMS deposits in the nearby area, including Rosebery Pb-Zn, Hellyer Zn-Pb-Ag-Au and the large copper deposits of the Mount Lyell field. The licence area has been the site of historical copper mining in the 1890's to early 1900's. Concerted modern exploration for base metal VHMS deposits has continued since the 1950's.

A number of anomalies and prospective targets have been identified in the licence area, including the Eastern and western Pyrite Zones at Mount Selina, the Lake Dora Cu-Zn anomalism and low grade zinc mineralization at East Beatrice.

Work in the area has been targeted primarily for base metals with little attention given to gold mineralization. After extensive work previous licence holders have concluded that the area was unlikely to host economic VHMS base metal deposits. As a result of this exploration strategy a number of high grade Au-Ag rock chips and potential zones of Au mineralization have not been adequately or conclusively followed up.

2 Introduction

The Selina Exploration Licence 29/2002, a 24 km long by 5 km wide belt, is located in western Tasmania, between Queenstown in the South and Rosebery in the North. EL 29/2002 is found on the Sophia (8014) and Franklin (8013) 1:100,000 map sheets, and currently covers an area of 109km^2. Topography is rugged and varied, comprising steep timbered slopes with deeply incised valleys and gentler button grass marshland on elevated plateau's and broad plains. Numerous lakes and closed catchment basins are found throughout the area. The Sticht and Tyndall Ranges bound the licence area to the East and West, whilst the slopes of Mount Murchison and the Comstock Valley define the northern and southern boundaries, respectively. The sealed Anthony Road bisects the Northwest corner of the tenement, whilst access to the central and southern areas is limited to a few gravel tracks controlled by the HEC, Parks & Wildlife Service and Copper Mines of Tasmania. Further access around the licence area is limited to foot or helicopter. The Tyndall Range regional Reserve and the Lake Beatrice Conservation Area cover the greater part of the licence area. Other land use includes HEC water catchments, and some Crown Land in the Northwest and southern corners.

During the 1890's to early 1900's the licence area hosted a number of small-scale copper mining operations. Most were centred along the Northwest trending Selina-Dora-Spicer fault zone, in the central eastern part of the licence. The other main area was at Red Hills, just outside the Northwest corner of the current licence area. The Mount Read Volcanic Belt is the host for a number of large VHMS polymetalic deposits, including Rosebery Pb-Zn, Hellyer Zn-Pb-Ag-Au, Henty Au-Ag-Pb-Cu and the large copper deposits of the Mount Lyell Field. Application for EL29/2002 was made principally to explore for these Au-Cu and VHMS Pb-Zn-Ag-Au styles of mineralisation. EL29/2002 is held 100% by Adamus Resources Ltd.

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5344000 mN
McNeill_2001a__01_4606__App2a by Au_ppm
3 to 10,000 (1)
1 to 3 (2)
0.1 to 0.5 (16)
-99 to 0.1 (35)
Mt Selina 1982 Soils
Walford-Dora Prospect Zone
Adamus Resources Limited
Adamus Resources
Selina Project
EL 29/2002
Date:5/3/2004
Author: A.Rust
Office: Perth
Drawing: figure 3
Scale: 1:100000
Projection: AMG Zone 55 (AGD 66)
0
1.25
2.5
5
kilometres

3 Geology

The Selina exploration licence 29/2002 covers a belt of Mid Cambrian volcaniclastics and sediments of the Mt Read Volcanics unconformably overlying quartzites and phyllites of the Precambrian Tyennan basement. In the central and western parts of the licence, the volcaniclastic units are overlain by the Late Cambrian – Ordovician sediments of the Owen Group. Quaternary (Pleistocene) glacial deposits and Holocene alluvium covers much of the central and northern licence area.

The lower Units of the Mount Read Volcanics outcrop along the eastern margin of the licence area. Comprising volcaniclastics and sediments of the Sticht Range Beds, the Eastern Quartz-Phyric Sequence, the Central Volcanic Complex and the Tyndall Group, these units host the known mineralisation in the licence area. The Sticht Range Beds comprise siltstones, black shales, pebble – cobble conglomerates and volcaniclastic sandstones. The Eastern Quartz – Phyric Sequence overlies these sediments and is composed mainly of felsic volcanicalstics, intrusives and porphyries, with minor cherty mudstones and shales. These units host the historical copper workings at Lake Dora and Mount Selina. A number of units of the Central Volcanic Complex outcrop in the northwestern and southern parts of the licence area. These comprise felsic lavas, rhyolite, dacite and volcaniclastic tuffs associated with shales and sandstones. These units host the Cu-Pb-Zn-Au-Ag mineralisation at Red Hills, located less than a kilometre to the West of the licence area. The upper unit of the Tyndall Group outcrops to the North of Mount Selina and as a long belt from Lake Dora through to the South of the licence area. This volcaniclastic conglomerate and sandstone contacts the basal volcaniclastic unit of the Eastern Quartz – Phyric Sequence and hosts the anomalous zinc mineralisation at the Anthony and East Selina prospects. To the west of the licence area basal felsic lavas of the Tyndall Group occur in the Henty Fault zone. The Cambrian Murchison Granite intrudes and underlies the Mount Read Volcanics in the Northeast corner and eastern portion of the licence area. A number of small outcrops, of this granite, are identified between Mount Selina and Lake Rolleston. Marine sediments of the Cambro – Ordovician Owen Group unconformably overly the Mount Read Volcanics. These units are composed of volcanoclastic conglomerates, breccias, pebble conglomerates, sandstone, limestone, silts and shales. They are relatively unaltered and only weakly mineralised in the basal volcaniclastic conglomerate (Funnell 1988).

4 Previous Mining and Exploration

Modern exploration efforts, covering the Selina EL29/2002 licence area, commenced in the late 1950's. Prior to that work consisted of small to moderate scale prospecting and limited mining ventures. Historical work in the region commenced in 1891 with the discovery of The Red Hills and Lake Dora Mineral Fields. Primarily searching for copper, a number of leases, between 15 to 80 acres, were taken up in these areas (App. 1). At Lake Dora trenches and a number of prospecting shafts and tunnels were excavated, with only moderate success. Smith, (1898) in a visit to the field notes two samples of moderate mineralisation. 3oz 18dwts 8grains per ton Ag, 1% Cu with traces of gold from a 25ft long trench sample and a 5 to 6 ft face sample grading 6.2% Cu, 1% Zn, 6dwts 12 grains per ton Ag and trace Au. Minor cobalt mineralisation is noted by the presence of erythrite in outcropping chloritic volcaniclastics (Smith 1898). The Lake Dora Field was abandoned in 1908 due poor copper grades.

MLM&RC took over the operation of the Red Hills field in 1905, but ceased mining in 1908. Little exploration work is recorded in the following years. In 1938, 22 rock chip samples were collected from the Lake Dora workings. The highest value recorded was 1.8% Cu with the average grade 0.24% Cu (Newnham, et al 1970).

Relevant previous licences, explorers and exploration activities include:

EL 4/59 was a very large licence held by Rio Tinto Australian Exploration Pty Ltd from 1957 to 1962. The licence was granted in 1959 after two years of preliminary field investigation, covering a large tract of western Tasmania. Work focussed on finding large scale Cu-Zn-Pb-Sn mineralisation by geophysical surveys, airborne magnetics, geological mapping and stream sediment sampling. Work carried out in the area now covered by EL29/2002 investigated the potential of the Lake Selina, Lake Dora, Lake Spicer, West Sedgewick, Comstock Valley and Red Hills areas. Four diamond drill holes were completed at Red Hills, following a Turam aeromagnetic survey. No results are mentioned. (Campana & King 1960, McNeill 1989, Noonan 1990)

EL 9/66 and 10/69 held by the Mt. Lyell Mining & Railway Company Ltd (MLM&RC) and Goldfields Exploration P/L (both part of Renison Goldfields Consolidated Ltd.) until compulsorily relinquished in 1987. The original licence, EL9/66, covered the northern half and extended West beyond the current EL29/2002, i.e. the prospective Eastern Quartz-Phyric Sequence, Central Volcanic Complex and the Tyndall Group lithologies of the Mount Read Volcanics. In 1978 the Mines Department of Tasmania granted group-reporting status to this and other licences held by MLM&RC, including EL10/69 which covered the southern part of the present EL29/2002. All were amalgamated into the expanded EL9/66. Work by MLM&RC was initially targeted at identifying economic Mt. Lyell style copper mineralisation. Later work expanded to include VHMS base metals, then more recently economic gold deposits.

Principal activities included:

- 1966 – 1969. Stream sediment sampling, soils, rock chips for base metals over the East and West Tyndall areas. Induced Polarisation (IP) surveys over a number of previously identified aeromagnetic anomalies. Cutting of access tracks to Rolleston, the Howard Anomaly and Red Hills. (Newnham 1968, 1969)

- 1969 – 1970. Mapping, soil and rock chip sampling (Pb, Zn, Cu), IP, resistivity and ground magnetic surveys at Rolleston and Lake Dora. Drilling LS1 (217m) at Rolleston intersected minor Cu-Pb-Zn mineralization (App 2). (Newnham et al 1970)

- 1970 – 1971. Drilling LS2 (237m) and LS3 (281m) at Rolleston. Mapping, soil sampling, IP, resistivity, ground magnetic surveys at Selina. Drilling LS4 (326m) (Western Pyrite Zone) at Selina. Ground magnetic survey and mapping at Anthony Prospect. Mapping Lake Dora-Lake Spicer-Comstock belt. (McKibben 1971)

- 1971 – 1974. Drilling the WPZ at Selina. LS5 (274m), LS6 (305m) and LS7 (408m) (App 2). Trace element and Ni:Co studies on drill core. (McKibben 1972 & 1973, Wells 1973 & 1974)

- 1975 – 1979. Work focussed on the Red Hills Cu-Pb-Zn-Au-Ag and West Beatrice Pb-Zn-Ag prospects, outside the current licence area. Drilling, ground based geophysics, mapping, soil and rock chip sampling.

- 1979 – 1980. Mapping and 14 rock chip samples at Selina, Lake Dora and Rolleston for Cu, Pb, Zn, Ag ±Au, Co. Highest at Selina 0.4% Pb, 4 g/t Ag. Re-assaying sections of Diamond Drill core LS4, LS5 & LS6 for Sn, As, Mo, Ag ±Au. A number of significant Ag intersections noted (App 2). At Beatrice East prospect detailed –80# stream sediment (205 samples) and soil sampling (1065 samples) program for Cu, Pb and Zn identifies two low order Pb-Zn anomalies. (Hutton et al 1980)

- 1980 – 1981. Discovery of the Eastern Pyrite Zone (EPZ), by IP methods, at the Selina prospect. Detailed soil (973 samples) and rock chip sampling (21 samples), for Cu, Pb, Zn, Ag, Mn, and Co, at Mount Selina. Identified a 900x760m Pb-Zn-Ag soil anomaly, south of the EPZ. Maximum soil values recorded 0.4% Pb, 0.14% Zn, 8 g/t Ag. At Rolleston 235 soil samples were collected and assayed for Cu, Pb, Zn, Ag, Mn, Co. Further assaying of Diamond Drill core LS1 to LS7 for Cu, Pb, Zn and Ag, returned a number of intervals >10 g/t Ag and maximum values of 0.82% Cu and 0.67% Pb (App 2). Work at Lake Dora - Spicer identified three geophysical anomalies. A program of 467 soil samples, 16 rock chips and dump sampling for Cu, Pb, Zn, Ag, Mn and Co, returned a rock chip grading 0.2% Cu, 4% Pb, 5.7% Zn and 160 g/t Ag. Six rock chip samples were collected at Walford Peak near Lake Dora. (Hutton, et al 1981)

- 1981 – 1982. Detailed mapping and geophysics extends the EPZ, 1.7 km North, to a total length of 3.3 km. A total of 777 soil samples for Cu, Pb, Zn, Ag, Mn, Co and 65 rock chips for Cu, Pb, Zn, Ag, Mn, Co ±Au were taken from this area, both as grid infill and extension to the North. This program confirmed the Selina Pb-Zn-Ag anomaly but failed to identify any new targets. Drilling LS8 (355m) into the EPZ at Selina intersected low grade zinc with pyrite mineralisation. Ground based EM surveys in the Dora-Spicer area failed to locate any buried massive sulphide targets. Limited rock chip samples (7) analysed for Au, Ag and base metals returned no significant results. (Hutton et al 1982)

- 1982 – 1986. Work focussed on Selina Prospect, included re-assaying of Diamond Drill hole LS8, mapping, limited rock chip sampling, UTEM geophysical surveys and Drilling LS9, LS10, LS11, LS12 and LS13 into the EPZ and WPZ. A broad zone of low grade Cu-Zn-Ag mineralization was intersected in LS10. LS13 returned 1m@ 4.8% Zn, 0.3% Pb & 16g/t Ag. (Fitzgerald et al 1983, Roberts & Cartwright 1984, Fitzgerald & Cartwright 1986)

EL 5/85 held by CRA Exploration and joint venture partner Aberfoyle Resources Ltd between 1985 to 1995. The licence covered all of the present EL29/2002 licence, extending a further three kilometres to the West, over the Red Hills. Work in the current licence area, concentrated on base metal exploration in the North Selina and Lake Dora areas. East Beatrice, in the South of the licence, was explored for base metals ± gold, due to the structural and lithological similarities with the Red Hills Pb-Zn-Au deposit.

Principal activities included:

- Mapping, rock chip and stream sediment sampling for base metals and gold at North Selina. Locates two areas with minor Pb-Zn mineralisation. Rock chip results, from one of these sites, returned 0.43g/t Au. (Noonan 1990)

- Mapping, rock chip and stream sediment sampling for base metals and gold in the Lake Dora – Lake Rolleson area, gave moderately elevated results. With peak values of 0.15g/t Au, 0.91% Pb and 0.36% Zn from rock sampling of old workings. (Funnell 1987, Lewis 1994)

- Geophysical investigation, by UTEM ground magnetics, at Lake Dora, failed to locate any massive sulphide conductors. . (Funnell 1987)

- Stream sediment, limited soil and rock chip sampling in conjunction with ground based geophysics undertaken at East Beatrice. Confirmed small Pb-Zn anomaly, previously identified by MLM&RC, but failed to expand its potential.

- Drilling DD88MS1 into a magnetic anomaly on the north eastern side of Mount Sedgewick. Intersected 600m of Owen Group sediments, with a number of rhyolitic dykes, towards the end of hole. No significant results were recorded, although disseminated pyrite and elevated copper was noted in parts. A down hole EM survey failed to locate any off-hole conductors within 100m. (Funnell 1988, Richardson 1991)

EL 103/87 held by Aberfoyle Resources Ltd until 1998. The licence covered 10km^2 over the Mount Selina, WPZ and part of the EPZ prospect areas. Work during this period targeted VHMS deposits at depths of greater than 200m. The main commodities of interest appear to have been Lead and Zinc. Gold mineralisation was tested for in all sampling programs, but appears to have been of lesser importance.

Principal activities included:

- Ground magnetic CSAMT and UTEM-37 surveys locate a potential southern extension to the EPZ, associated with an IP anomaly, previously discovered by Goldfields Exploration. (Creagh & Hungerford 1989)

- Mapping and 67 rock chip samples over the EPZ, return maximum assays of 0.19g/t Au, 10g/t Ag, 0.1% Cu and 0.15% Pb. (Creagh & Hungerford 1990)

- Extension of diamond drill hole LS10, by a further 86m, intersected strongly altered volcanics associated with disseminated pyrite. Results of core grind sampling returned 7.9m @ 0.4% Cu associated with a pyrite stringer zone. Pb, Zn and Au values were poor. (Richardson 1992)

- Drilling of LS14 (349.5m) to target an EM conductor, 50m up dip of LS 10. Intersects 65m of disseminated and vein, pyrite, chalcopyrite mineralisation, near the eastern boundary of the EPZ. Best intersection 7.2m @ 0.23% Cu. Assay results for Pb, Zn and Au were poor. (Richardson 1993)

EL 7/91 Sticht Range was held by Aberfoyle Resources Ltd., to cover a conductive source located, in the Sticht Range Beds, during work on the adjacent EL 5/85. Work comprised a 2.8 line km UTEM survey. The conductor was identified as a graphitic phyllite. The ground was relinquished in late 1992. (Sharpe 1992)

EL 3/96, Covering 6km^2 in the Beatrice- Mount Sedgewick area, was held by Copper Mines of Tasmania P/L between 1996 to 1997. The licence area was selected due to similarities with the Red Hills Rhyolite dome and the presence of a previously identified, heamatite, magnetite, and quartz stockwork vein system. A comprehensive work program aimed to identify VHMS base metal - gold or disseminated sulphide deposits. (Morrison 1997)

Principal activities included:

- Stream sediment sampling program, covering the southern drainages. Fifty-one pan concentrate and –80# mesh samples were collected and analysed for Cu, Pb, Zn, Ag and Au. Results were sporadic, identifying a number of Au, Zn, Cu and Pb point anomalies. Most of these are found on Quaternary gravels, which diminished their significance.

- Rock chip sampling of the alteration and stock work zone, at the centre of the Beatrice Dome, returned poor results. Maximum gold value was 94 ppb, from 20 samples collected. (Morrison 1997)

EL 24/96 held by Pasminco Exploration Ltd. until November 2001, covered all units of the Mount Read Volcanics, in the current licence, EL 29/2002. With the exception of the 5km^2 Selina Project, retained in EL 103/87 (Aberfoyle Resources). Work concentrated on identifying Rosebery / Hellyer style VHMS Pb-Zn-Cu-Au-Ag deposits, large tonnage, intrusive related Cu-Au systems and Au in “Leyshon” style vent breccias, based on re-interpretation of the Selina and Dora Conglomerates.

Principal activities included:

- Sporadic re-assaying of diamond drill holes LS4 to LS13 from the Selina area. Results were disappointing, with 5.2m@ 0.2g/t Au in LS4. 1m@ 0.21g/t Au in LS10and 2m@ 0.15g/t Au in LS11. (Weber. et al 1997)

- Geological mapping and rock chip sampling (65) of old workings in the Lake Dora field. Returned significant Au, Cu, Pb, Zn, Ag and Co results from narrow veins, on the Southeast slopes of Walford Peak. One Sample returning 48.8g/t Au, 250g/t Ag, 3.85% Cu, 0.1% Zn, 0.46% Pb, 6.2% As and 2.25% Co. (McNeill 2001a)

- Lead isotope studies on two samples from the Dora – Spicer area, indicates Cambrian granitoid or Elliot Bay style mineralisation. (McNeill 2001a)

- Limited rock chip sampling of heamatitic alteration in the Selina Conglomerate gave poor results for base metals, gold and silver. These results severely downgraded the "Leyshon" vent breccia model. (Denwer 1998)

- Concluded that there was low probability of Rosebery / Hellyer VHMS or large tonnage Cu-Au Mt Lyell style present at Lake Selina or Lake Dora - Spicer. (McNeill 2001a)

EL 19/98 held by Goldfields Exploration. This licence, in two parts, covered the Mount Selina and Anthony Road prospect areas, previously held as EL103/87, by Aberfoyle Resources Ltd. Work, during the period of tenure, concentrated exclusively on the Anthony Road Prospect. Due to increasing expense commitments, in the fourth year of tenure, it was decided to relinquish the 5 km^2 Mount Selina area. No groundwork was undertaken in this area. (Vicary 2001)

EL 20/98, covering 10.5 km^2 at Lake Beatrice, was held by Pasminco Exploration Ltd. from 1998 to 2001. It covered the continuation of the Mount Read Volcanics through the southern boundary of, Pasminco licence, EL24/96. Initial work undertaken on this lease, involved a literature review and a helicopter supported reconnaissance trip. Proposed soil sampling was delayed for two years, during which time a data review concluded that the area held low probability of hosting a Rosebery or Hellyer style VHMS deposit. The licence was relinquished in late 2001. (McNeill 2001b)

EL 13/99 held by Pasminco Exploration Ltd., covered the southern 4 km^2 of the current licence EL29/2002. This area was taken up to test the possible extension of a zinc soil anomaly, located in the Southeast corner of Pasminco licence EL6/98. 100 soil samples were collected and assayed, by partial leach, for Ag, As, Au, Ba, Bi, Cd, Cu, Co, Mo, Ni, Zn, Zr and rare earth elements. Results did not increase the size of the zinc anomaly. A number of anomalous Ag results, between 6 to 37g/t, were recorded. The licence was relinquished in late 2001. (McNeill & Simpson 2001)

The results of the above exploration efforts are summarised below:

Exploration efforts, during the past 40 years, have focused on Rosebery / Hellyer style VHMS deposits and Mount Lyell style copper deposits. Primary commodity interest was given to base metals (Cu, Pb, Zn), with later sporadic and incomplete exploration for Au. As a result of this target philosophy, licences have entirely covered or held specific prospective zones of the Mount Read Volcanics.

Work by all licence holders has involved reappraisal and or collection of primary geophysical data, to locate or define buried magnetic anomalies and VHMS conductors. This work has involved airborne magnetic surveys, ground based magnetics, down hole EM, gravity, dipole dipole IP and resitivity surveys. The bulk of this work was carried out by MLM&RC / Goldfields (EL9/66) and CRA / Aberfoyle Resources (EL5/85) as the longest holders of the current licence area. The principle targets identified by this work are the Eastern Pyrite Zone (EPZ) at East Selina - Anthony and the Western Pyrite Zone (WPZ) in the West Selina - Lake Rolleston area. Work over the remainder of the area located a number of geophysical targets, including Lake Dora, Lake Spicer and the Beatrice Dome. Follow up ground based magnetics, IP and geochemical surveys led to the conclusion that these areas had a low probability for hosting VHMS base metal deposits. (Funnell 1987, Hutton et al 1982, McNeill 2001 (a & b), Morrison 1997)

4.1 Selina

Extensive soil geochemistry, stream sediment sampling and a number of rock chip sampling programs have identified moderately anomalous zones of Pb-Zn-Ag mineralization in the Mount Selina and Anthony prospect areas. In the early 1980's a total of 1750 soil samples were collected and analysed for Cu, Pb, Zn, Ag, Mn, Co. Results defined a 900m x 760m Pb-Zn-Ag soil anomaly to the South of the EPZ. Peak soil values of 0.4% Pb, 0.14% Zn and 8g/t Ag were recorded. Rock chip sampling between 1979 and 1983 returned maximum assays of 1.4% Zn, 0.5% Pb, 24g/t Ag and 0.5% Cu from about 80 samples. No significant gold results were returned. In 1990 a further 67 rock chip samples were collected from outcrops in the EPZ. These returned maximum assays of 0.19g/t Au and 10g/t Ag. To the North of the Selina area stream sediment and rock chip sampling, in 1990, identified two moderate Pb-Zn stream anomalies, with an associated rock chip returning 0.43g/t Au. (Hutton et al 1980, 1981 & 1982, Noonan 1990, Fitzgerald et al 1983)

4.1.1 Western Pyrite Zone

A 4km long by 100 – 300m wide zone of disseminated and stringer pyrite associated with chlorite, silica altered volcanics, to the East of a major Northwest Fault. Originally located by magnetics, a total of nine diamond drill holes, LS1 to LS7, LS9 and LS12, for a total of 2707.7m, were completed between 1969 to 1993. Drilling intersected Cu, Pb, Zn and Ag mineralisation. Later re-assaying for gold and silver returned the following significant results. (Hutton et al 1980 & 1981, McKibben 1971 & 1972, Webber 1997)

LS2: 1.5m @ 10g/t Ag

LS3: 9m @ 0.28% Cu, 4m @ 1.18% Pb and 1.5m @ 11g/t Ag

LS4: 5.2m @ 3.4g/t Ag and 0.2g/t Au

LS5: 9m @ 0.35% Cu, 4.6m @ 0.42% Cu, 9.1m @ 14.6g/t Ag, 3m @ 17.5g/t Ag

LS6: 3m @ 0.82% Cu, 4.6m @ 54.5g/t Ag and 1.5m @ 0.67% Pb, 0.38% Zn and 20g/t Ag

4.1.2 Eastern Pyrite Zone

A 3.5km long by 50 – 150m thick zone of pyrite alteration in chlorite altered, felsic volcaniclastics. A total of five diamond drill holes LS8, LS10, LS11, LS13 and LS14, for a total of 2220.6m, were completed between 1981 and 1992. Broad, low grade Cu-Zn mineralisation and zones of narrow, higher grade Zn-Pb-Ag mineralisation were intersected. Significant results are as follows. (Hutton et al 1982, Fitzgerald & Cartwright 1986, Richardson 1992 & 1993, Roberts & Cartwright 1984, Webber et al 1997)

LS8: 5.6m @ 0.3% Zn

LS10: 7.9m @ 0.4% Cu, 1m @ 0.21g/t Au and 23m @ 0.1% Cu, 0.3% Zn. Inc 6m @ 0.4% Cu, 0.2% Zn, 3.5g/t Ag

LS11: 2m @ 0.15g/t Au

LS13: 1m @ 4.8% Zn, 0.3% Pb and 16g/t Ag

LS14: 7.2m @ 0.23% Cu

4.2 Lake Dora – Rolleston

Covering the historical Lake Dora Copper field, from the Southwest corner of Lake Dora to the Northeast corner of Lake Rolleston. This area has been the focus of many phases of exploration. MLM&RC undertook a soil sampling survey for Pb, Zn, Cu in 1970, with follow up program of 235 samples, for Pb, Zn, Cu, Ag, Mn, Co, in 1981. During this period a number of anomalous rock chips were sampled from outcrop and old workings. Best results were 6.2% Cu, 2.3% Pb, 5.5% Zn, 152g/t Ag and 2g/t Au. Stream sediment sampling, for Cu, Pb, Zn, Ag and Au, in 1987 gave disappointing Au peaks of 150 ppb and 1800 ppt. Rock chip sampling in 2001 returned significant results from Walford Peak. One Sample 48.4g/t Au, 250g/t Ag, 3.85% Cu, 0.1% Zn, 0.46% Pb, and 2.25% Co. (Fitzgerald et al 1983, Funnell 1987, McNeill 2001a)

4.3 Lake Dora – Spicer

Very little work has been done in this area. Most work has concentrated on mapping with a program of 467 soil samples undertaken, to the South of Lake Dora, in 1980. These samples were analysed for Cu, Pb, Zn, Ag, Mn, and Co. Results defined a Cu, Zn anomaly associated with mapped alteration zones in the felsic volcaniclastics. No geochemical analysis has been undertaken between Lake Spicer and the previous soil program. A number of geophysical anomalies lie in the south of this belt. A number of rock chips (23) have been collected, one dump sample returned 0.2% Cu, 4% Pb, 5.7% Zn, 160g/t Ag. (Hutton et al 1980, 1981, 1982)

4.4 East Beatrice

Similarities to the Red Hills Pb-Zn-Cu-Ag-Au deposit have driven the exploration focus in the southern part of the licence. A number of stream sediment and soil sampling programs for Cu, Pb, Zn, Ag ± Au have been conducted over the rhyolitic Beatrice Dome and the Comstock River valley. A number of low order Pb-Zn anomalies have been identified, in the central eastern area and to the Northwest, outside the current licence area. A rock chip program in 1981 returned a peak value of 0.44% Zn. A number of Au, Zn stream anomalies were located in 1997. Follow up rock chip sampling returned a peak gold value of 94 ppb. Anomalous silver values of 6 to 37g/t, from soil sampling in 2000, are noted in the Comstock Valley. These later stream and soil results are difficult to qualify as the area is covered by Quaternary alluvium and glacial deposits. (Hutton et al 1980, Morrison 1997, McNeill & Simpson 2001)

5 Reporting Period Work and Discussion

Work during the first year reporting period consisted of a literature review and database compilation. Results of previous exploration efforts are summarised above (section 4).

The Volcaniclastic conglomerates, lavas and felsic porphyries of the Cambrian Mount Read Volcanics in the licence area host a number of identified anomalously mineralised zones, including zones of Cu-Zn at Lake Dora and Pb-Zn-Ag and pyrite zones near Mount Selina (the WPZ and EPZ). These areas have been examined in the Past for base metal VHMS style mineralization. Past explorers have concluded that the licence area is unlikely to host large economic VHMS base metal deposits**.**

Throughout this historical exploration, sporadic attention has been given to gold mineralization. Most work consisting of limited rock chip sampling of out crop and old workings. The sporadic and variable nature of Au sample results probably reflects more on the base metal driven nature and sampling methodology of earlier programs rather than on a lack of viable Au mineralization. High grade gold mineralization is present in the licence area, up to 48.8gt Au, as well as elevated background values of 0.15 to 0.4g/t Au from samples in the Mount Selina area.

Significant gold mineralization is present in the near vicinity of the licence area. Of particular interest are the small tonnage (<500,000t) high grade gold deposits (10 to 30g/t) of the Henty-Mount Julia area. Located approximately 4 km to the West of the licence, these steeply dipping lenses are hosted in a package of quartz-sericite altered Mt Read Volcanics. The Alteration zone is over 3km in length and between 10 to 100 m in thickness. Large halos of low grade mineralization extend along and down the alteration zone. The high grade core of this mineralization consists of Au-Ag + Cu-Pb-Bi in a zone of intensely leached massive quartz and quartz-sericite alteration. Surrounding this is a zone of pyrite dominated quartz-sericite-pyrite-chlorite alteration associated with Cu-Pb-Bi mineralization. Zinc mineralization forms a surrounding distal halo. The highest Au grades are associated with abundant pyrite, chalcopyrite, carbonate and quartz veining. Low grade mineralization (<1g/t Au) in massive quartz is common at Mount Julia (Callaghan 2001)

Hosted by submarine volcaniclastics and the rhyolitic-dacitic lithologies of the Central Volcanic complex and Tyndall Group, these deposits were originally thought to be of similar origin to the

Rosebery / Hellyer VHMS deposits, but more recent work has pointed to a magmatic source for metal supply, associated with a submarine Cambrian hydrothermal event. The ore body lies in the Northeast trending Henty Fault zone on the steeply, West, dipping overturned limb of a shallow plunging regional syncline. The alteration zone is predominantly strata and fault bound, although it does cross stratigraphy towards its' southern end. (Callaghan 2001)

The EPZ and WPZ at Mount Selina show a number of similarities to the Henty-Mt Julia system. The most obvious is the presence of long zones of alteration (>3km) over widths of 100-300m. These alteration zones are typified by pyrite associated with minor chalcopyrite, galena mineralization and quartz-sericite-chlorite alteration. Results, from soil programs, identify a broad halo of low grade Zn-Pb-Ag mineralization covering an area of 900m by 700m. Diamond drilling points to the presence of spatially extensive zones of low grade Cu-Zn mineralization. Ranging from 3-23m in thickness and grading from 0.1% to 0.8% Cu and 0.3% Zn. Zones of higher grade Pb-Zn-Ag are also intersected, whilst Au results are in the range of 0.2g/t. These drill holes are spread between 200m to 1km along strike, so potentially narrow zones of high grade Au mineralization may remain un-detected. The EPZ and WPZ are hosted by pyritic vitreous tuffs and rhyolitic to dacitic lavas associated with felsic porphyries and volcaniclastic sediments, that formed in a sub-aerial to submarine trough as part of a volcanic arc. The alteration zones are proximal to a Northwest trending fault zone, which truncates the WPZ at its southern end.

Although a number of soil and rock chip sampling programs have been conducted over the area no systematic sampling has been undertaken for gold.

In the Lake Dora area, work to date has identified a 1.2km long zone of Cu-Zn mineralization, up to 150m wide. This soil anomaly is associated with a previously identified IP anomaly, mapped areas of alteration and minor sulphide mineralization. A significant rock chip from this area returned 0.2% Cu, 4% Pb, 5.7% Zn & 160g/t Ag. (Hutton et al 1980). Other significant rock chip results, on the slopes of Mt Walford, returned 48.4g/t Au, 250g/t Ag, 3.85% Cu, 0.1% Zn, 0.46% Pb, and 2.25% Co. This sampling identifies the area as a potential target area for gold and silver mineralization. The high grade nature of these dump samples may point to narrow highly mineralized shoots hosted in sheared and altered volcaniclastics and felsic porphyries. The presence of strong alteration, historical workings, highly anomalous rock chip samples and lack of comprehensive geochemical sampling for gold, makes this area a prospective target.

6 Conclusions and Recommendations

Aim of exploration program for 2004 is to locate anomalous Au mineralization in the licence area and identify targets for diamond drilling. This will be accomplished by field mapping, prospecting and soil sampling.

Recommendations for the 2004 field season are:

1) Mapping and prospecting associated with a C-horizon soil sampling program over the EPZ and WPZ at Mount Selina. Approximate cover of 2 km strike by 1.5 km width, over LS 4 5 6 10 13 and 14 (containing moderate Pb-Zn-Cu-Au-Ag mineralization). The aim to locate anomalous zones of Au for drill targeting. Analysis for Au, Ag and Bi

2) Mapping and prospecting associated with C-horizon soil sampling program over the Mount Read Volcanics and historical workings at Lake Dora, with view to locating high grade Au deposits. The area is approximately 3km in length (NW) by 1 km wide. Sampling should commence over most prospective areas first. Depending on results the program could be extended South towards Lake Spicer.

3) Follow-up 0.43g/t Au rock chip result associated with Pb-Zn stream anomaly in the Red Hills Creek tributary, below Anthony road. This area comprises outcropping rhyolites and felsic intrusive porphyries associated with a Northwest trending fault zone.

4) Reconnaissance sampling of Central Volcanic Complex units outcropping to east of Red Hills. These units host the Red Hills Cu-Pb-Zn-Au-Ag mineralization, less than a kilometre to the West. A number of historical workings are found in the licence area. Depending on results a follow up soil sampling program 600m x 300m should be conducted.

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