



ANNUAL REPORT

TULLAH

EL3/2001

JUNE2001-JUNE2002

Vol 1

HELD BY: Auriongold

MANAGER & OPERATOR: Auriongold Exploration

AUTHOR(s): Tim Callaghan

27 June 2002

PROSPECTS: Sterling Valley, Red Hills, Lakeside, Lorrigan's Luck, Mt Farrell, Murchison Mine.

MAP SHEETS:	1:250,000:	1:100,000: Sophia
GEOGRAPHIC COORDS:	Min East: 379000	Max East: 389000
	Max North: 5368000	Max North: 5388000

COMMODITY(s): GOLD

KEY WORDS:

Distribution:

- AurionGold Exploration Information Centre
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-

Summary

Limited work on the southern part of EL 3/01 Tullah was completed during the past year. Work consisted of grid based 1:5000 mapping, 2 lines of C-Horizon soil sampling, relogging of historical drill core and compilation and imaging of previous Pasminco IP and MMI surveys.

One of Auriongold's primary areas for investigation in this region was the Red Hills alteration zone/Henty Fault Zone contact. Mapping and soil sampling indicates that the Upper Tyndall Group Moxon rhyolite extends northward along the eastern margin of the Henty Fault Zone and is not significantly altered or mineralised seriously downgrading the prospectivity of this area.

Mapping, data compilation and drill core relogging should be completed early in the next year of tenure. Emphasis should be placed on evaluating the Lakeside, Lorrigan's Luck and Murchison Mines as supplementary feed sources for the Henty Gold Mine. Other potential targets on the EL include the Murchison Volcanics/Farrell Slate contact other Devonian As-Au veins and granite related Cu-Au deposits.

CONTENTS

1. Introduction
2. Previous Work
3. Geology
 - 3.1.1 Regional Geology
 - 3.1.2 Regional Structure
 - 3.1.3 Tectonic History
 - 3.2 Local Geology
 - 3.2.1 Local Stratigraphy
 - 3.2.2 Structure
 - 3.2.3 Mineralisation
4. Work Completed
 - 4.1 Geophysics
 - 4.2 Geochemistry
 - 4.3 Mapping
5. Discussion and Recommendations

References

LIST OF FIGURES

- Figure 1. Location of ETA 528 Tullah.
- Figure 2. Regional Geology
- Figure 3. Western Tasmania Gravity Image
- Figure 4. RTP Helimagnetic Image and Prospect Locations.
- Figure 5. Soil MMI Au Image, Prospect and Drillhole Locations.
- Figure 6. Potential Targets in the Stitt River-Moxon Saddle Area.

LIST OF TABLES

- Table 1. Previous Exploration.
- Table 2. Significant Resources.

ENCLOSURES

Enclosure 1 IP Stacked Section, Stitt River Valley.

Enclosure 2 C-Horizon Soil, Sample Images, Moxon-Tullah EL's.

Enclosure 3 Geology interpretation, 1:5000

APPENDIX

C-Horizon Soil Sample Locations and Analysis.

Exploration Potential of the Tullah ETA 528

1 Introduction

EL 3/001 was acquired by Auriongold after successfully tendering for ETA 528. The EL was formerly EL 22/90 held by Pasminco Australia Ltd. The EL covers an area of 71km² located in western Tasmania, immediately east of Rosebery (Figure 1). Most of the EL is underlain by Middle to Late Cambrian felsic to mafic rocks of the Mt Read Volcanics, host of world class volcanogenic deposits such as the Hellyer, Que River and Rosebery polymetallic VHMS deposits, Mt Lyell Cu-Au deposits and the high grade Henty Gold Mine.

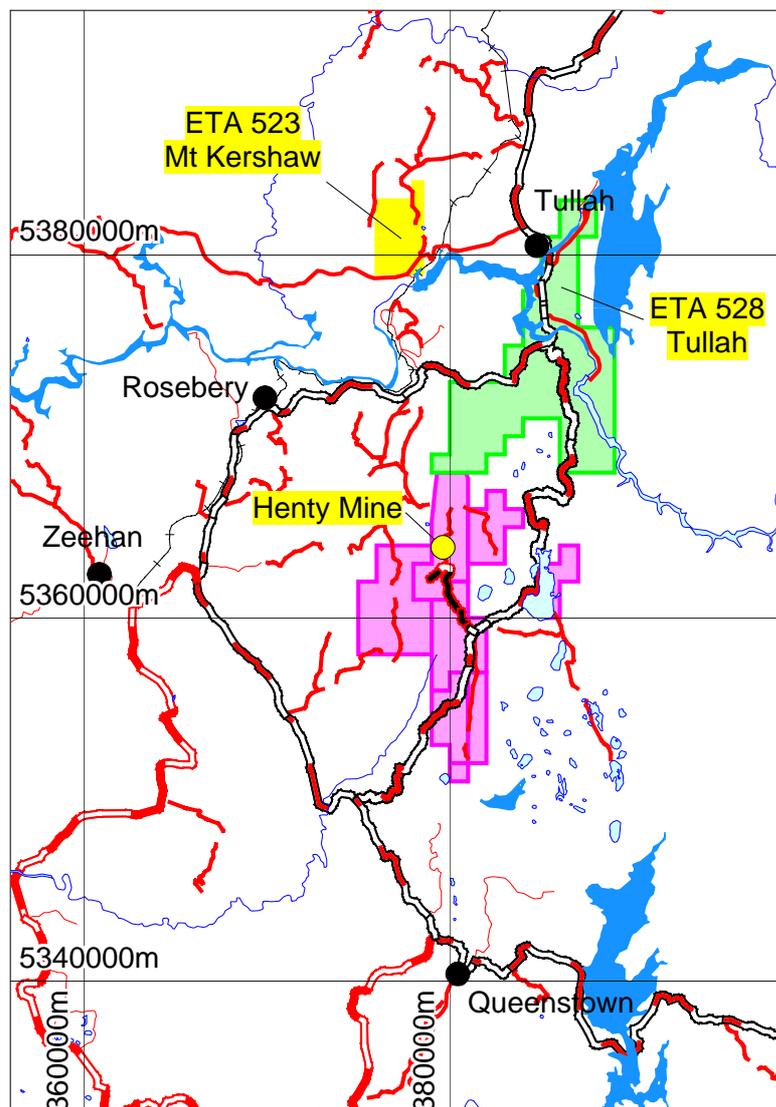


Figure 1. Location of EL3/01 Tullah. Purple areas indicate Auriongold operated tenements.

2 Previous Work

Mining and mineral exploration activity within the Tullah district dates back to the late 1800's. The most significant historical workings on EL 3/01 belong to the Mt Farrell mining field, producing Pb-Zn-Ag sulphide ore from 1899 to 1973. Modern exploration commenced in the 1950's and the ground has been continuously and extensively explored as a number of EL's up to the present day. Table 1 presents a summary of previous exploration on the ground covered by EL 3/01.

Table 1. Previous Exploration (Modified after McNeill and Simpson, 2000)

Year	Company	EL	Work Conducted
1950's	-	-	Dominantly geophysics-IP, ground mag & fixed loop EM
1973/74	Asarco Pty Ltd	4/73	Stream sediment survey – identified Sn & basemetal anomalies
1973-78	Asarco-Cominco JV	4/73	Bedrock Auger sampling, mag, EM, IP & 3 DDH
1979	EZ	1/62	Review of past work
1979/80	EZ	1/62	Murchison River area, ground mag, IP and drilling
1979/80	EZ	4/73	Henty fault Zone – mapping, soil geochem., ground mag, stream sed.
1980/81	EZ	1/62	Stream sed., soil geochem., grid mapping, ground mag, drilling.
1981	EZ	4/73	DDH to test ground mag & IP anomalies. Minor sulphides and Sn intersected.
1981	EZ	1/62	Drilling, data review and lineament analysis.
1982	EZ	4/73	Soil geochem over Mt Black volcanics along Henty Fault. Anomalous Sn resulted in costeaning and rock chip sampling with high Au. Mineralisation style considered unattractive and work discontinued. 1 DDH drilled under costean in 1985 with minor sulphides.
1983	EZ	4/73	Data review, costean sample analysis.
1983/84	EZ	1/62	DIGHEM survey, gridding, ground mag, mapping, rock chip geochem, EM, costeaning.
1984	EZ	1/62	Gold study, core sampling
1984	EZ	4/73	High As intersections resulted in shift from Sn to As. Informal resource calculated, 4 lenses in 4 holes est. 480 000t @ 5% As (“Arsenic Resource”). Open Nth, Sth and down dip. Au analysed by aqua regia/AAS with Au masked by sulphides.
1984/85	EZ	4/73	DIGHEM, grid mapping, core from Arsenic Resource re assayed for Au (fire assay):- 12 samples > 1g/t Au. Au resource calculated for As zones with resource est. of 480 000t @ 5.02% As, 0.84 g/t Au.
1985/86	EZ	4/73	DDH to test geophysical targets, Henty fault Zone and cross structures.
1986	EZ	4/73	Review
1986/87	EZ	1/62	Henty Fault Zone core sampling, UTEM, compilation of Farrell Mines data.
1986/87	EZ	4/73	Metallurgical testing of As zones, re-assay of core (fire assay), rock chip sampling.
1987/88	EZ	1/62	Drilling, down-hole IP & resistivity (Lakeside), BCL survey, drillcore re-assays, gravity, EM, ground mag, mapping, rock chip sampling, drillcore re-assay (Farrell-Mackintosh, drillcore re-assay, IP, rock chip and BCL sampling (Murchison Mine)
1989	EZ	1/62	Indicated resources for Lakeside. 750 000t @ 20 g/t Ag, 2.1 g/t Au, 4% As, 0.2% Sn, 0.2% Cu.
1990-93	Pasminco	22/90	Helimag and radiometric survey, gravity, DDH (MM1a) and evaluation of Murchison Mine. Relogging of 12 UG/DDH Farrell Mines. Mapping and rockchip sampling of Sterling valley, Murchison Gorge, Farrell range Henty Fault. EM survey, DHEM.
1993/94	Pasminco	22/90	DDH & DHEM (Mackintosh dam and Tullah Flat), MALM & IP (Mackintosh Dam), interp of 91-93 gravity and aeromag, mapping and rock chip sampling (Mackintosh Dam & Sth Stitt), resurvey of DDH collars for all surface DDH.
1994/95	Pasminco	22/90	4 DDH & DHEM, relogging and sampling of old core, mapping of alteration zone along Farrell Slates-Murchison Volcanics contact. Ground mag, mapping of Sterling Valley volcs. Evaluation of Farrell Mines. Rod Allen's mapping and core relog for Sterling Valley Transect.
1995/96	Pasminco	22/90	12 DDH (Mt Farrell and Sterling Valley), rock chip sampling (Murchison Gorge alteration), mapping and rockchip sampling (Sterling Valley), geophysics review and exploration review (Lakeside and Lorrigan's Luck).
1996/97	Pasminco	22/90	Au exploration associated with Henty Fault, exploration review, soil orientation, mapping and rockchip sampling in Sterling Valley area including Lakeside, Lorrigan's Luck and Sth Stitt. Geophysics review. 7RC holes and 3 DDH intersecting significant low grade Au at Lakeside.
1997/98	Pasminco	22/90	Review and reinterp of existing IP data. Gridding, mapping soil and rock chip sampling and IP surveys.
1998/99	Pasminco	22/90	Partial leach soil sampling, mapping and drilling of Bruce Creek Prospect. Mapping and airborne EM over Nth Murchison, mapping and soil geochem over East Stitt.

3 Geology

3.1 Regional Geology

EL 3/01, Tullah overlies rocks of the Cambrian Mt. Read Volcanics and the Cambro-Ordovician siliciclastic Owen Conglomerate. The Mt Read volcanics are an arcuate belt of acid to intermediate volcanics occupying the eastern margin of the Dundas Trough. They are bounded to the east by Precambrian basement rocks of the Tyennan Region and younger Cambro-Ordovician siliciclastics. The Mt Read Volcanics interfinger with fossiliferous volcanosedimentary rocks of the Dundas Group and Western Sedimentary Sequence to the west.

A major north south striking structure, the Henty Fault divides the Mt Read Volcanics into two parts, north and west of the Henty Fault and south and east of the Henty Fault. Within the Henty Fault are rocks of the Henty Fault Sequence to the south of Mt Murchison. The Mt. Read Volcanics north and west of the Henty Fault (Figure 2) host the Pb-Zn rich polymetallic volcanogenic massive sulphide (VHMS) deposits of Rosebery, Hercules, Que River and Hellyer while the volcanics south and east host the Henty Gold Mine, Mt Julia Prospect and copper gold deposits of the Mt. Lyell Field.

The Mt. Read Volcanics south and east of the Henty fault are divided into four lithological groups (Corbett, 1992),

- 1) Central Volcanic Complex (CVC) consisting of mainly rhyolitic to andesitic volcanics with minor sediments and mafic units.
- 2) Eastern Quartz Phyric Sequence of quartz porphyritic lavas and volcanoclastics.
- 3) Tyndall Group comprising mainly quartz-phyric felsic and intermediate extrusives and volcanoclastics with interbedded epiclastics.
- 3) Western Sequence of volcanosedimentary siltstones, shales, quartzose and volcanoclastic turbidites and felsic porphyry intrusives.

The oldest rocks belong to the CVC and Western sequence. The Tyndall Group overlies the CVC both conformably and unconformably.

Northwest of the Henty Fault the Mt Read Volcanics are divided into three lithological groups (Corbett, 1992).

- 1) Central Volcanic Complex (CVC) consisting of mainly rhyolitic to basaltic lavas and volcanoclastics.
- 2) Dundas Group consisting of tuffaceous volcanoclastics, polymictic conglomerates, graywacke, siltstone and shale.
- 3) Mt Charter Group consisting of basaltic to felsic lavas and volcanoclastics, siliciclastic wackes and black shales.

The oldest rocks belong to the CVC. The Mt Charter Group and Dundas Group both overlie the CVC and are probably stratigraphically equivalent (Corbett, 1992).

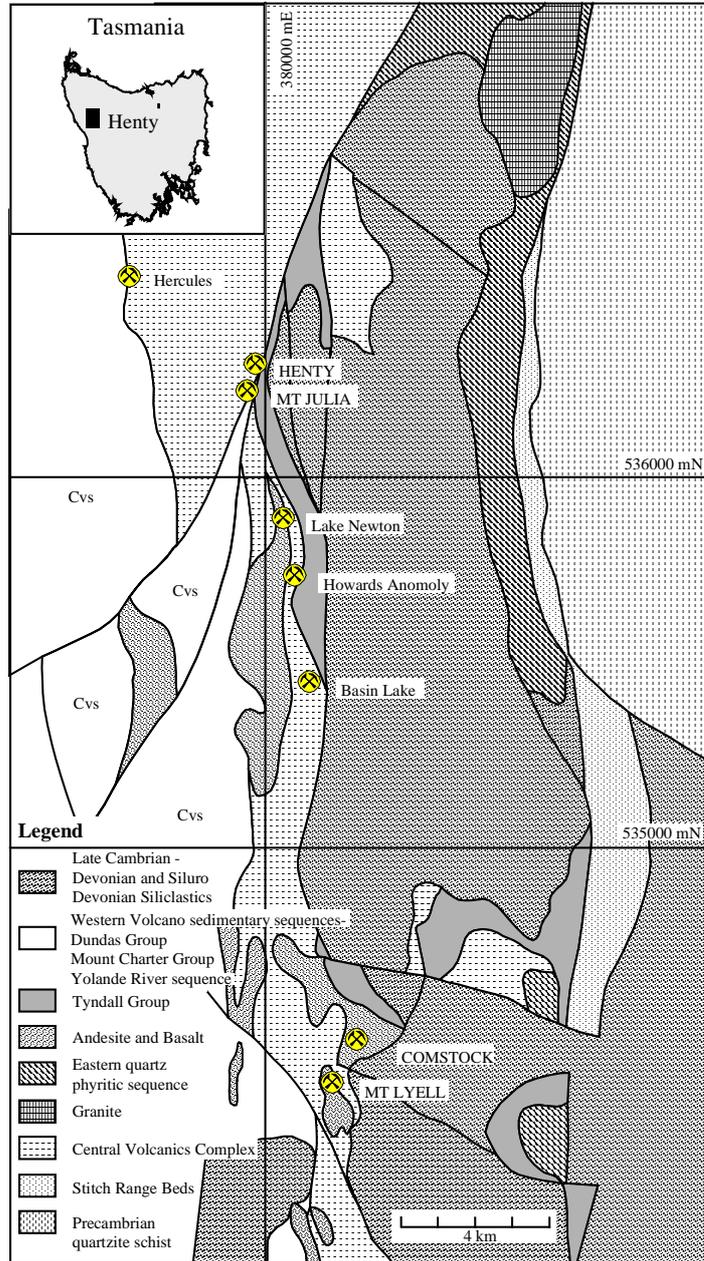


Figure 2. Regional Geology (Modified after Corbett, 1992)

Overlying the Mt Read Volcanics are the Cambro Ordovician siliciclastics of the Owen Conglomerate (Denison Group) which have an unconformable to interdigitating relationship.

3.1.2 Regional Structure

The NNE trending, 70° west dipping Henty Fault dominates the Mt Read Volcanic Belt for at least 60km. The Henty Fault divides into the North and South Henty Faults near Mt. Read. The Great Lyell Fault splays off the Henty Fault somewhere in the vicinity of Mt. Murchison and trends in a southerly direction to the south of Mt Lyell. Both of these structures bound the western margin of thick sequences of Owen Conglomerate.

The Cambrian and younger (to early Middle Devonian) rocks in western Tasmania have been effected by widespread Devonian folding of the Tabberabberan Orogeny. The Tabberabberan Orogeny was a multiphase deformation event, with an early phase of NNW folding (D_1) and a later NW to WNW (D_2) trend recognised in the region (Williams, 1989). This has produced open upright folding in competent siliciclastic units but tight folding in phyllosilicate rich volcanics. Reverse faulting is common and the rocks have developed a pervasive regional foliation. Metamorphism was of prehnite-pumpellyite to lower greenschist facies.

3.1.3 Tectonic History

Basement rocks of western and central Tasmania comprise Late Proterozoic sediments multiply deformed in the Late Proterozoic Penguin Orogeny. A following rift phase deposited continental shelf sequences followed by extensive tholeiitic volcanism (Crawford & Berry, 1992). Eastern Australia's passive margin collided with an oceanic arc thrusting slices of ultramafic to mafic forearc sequences over most of western Tasmania (Crawford & Berry, 1992).

Middle Middle Cambrian extensional tectonism associated with the Delamerian Orogeny resulted in rapid deposition of sediments and calc-alkaline volcanics (Mt. Read Volcanics), particularly along the eastern margin of the newly formed Dundas Trough (Berry, 1994). Late reactivation of extensional faults as reverse faults formed open north trending folds and the uplift and erosion of the Tyennan Block forming the Owen Conglomerate (Berry, 1994).

Continued sag phase sedimentation continued to the Middle Devonian with the exception of a hiatus in deposition during the Silurian (Berry, 1994).

Deposition ceased in the middle Devonian with the onset of the Tabberabberan Orogeny. In western Tasmania north trending Cambrian folds were tightened with a NNW striking cleavage. Locally developed WNW trending folding and cleavage is associated with NNE trending compression. Late to post orogenic granitoids intruded the West Coast region with associated Sn-W and Pb-Zn-Ag mineralisation (eg Renison Bell).

3.2 Local Geology

The Mt Read Volcanics within the Tullah ETA contain four main NNE trending stratigraphic units, the Mt Black Volcanics, Sterling Valley Volcanics, Farrell Slate and the Murchison Volcanics (Allen, 1995). The Cambrian Murchison granite is located in the SE of the ETA (McNeill and Corbett, 1992). Overlying the volcanics in the east of the ETA are the siliciclastics of the Owen Conglomerate. The geology of the local region is strongly controlled by two prominent steeply west dipping, NNE trending Faults, the Henty Fault and the Farrell Fault (McNeill and Corbett, 1989). The Henty Fault appears to be the major fault, dividing the geology into northwest and southeast domains (Purvis, 1995, Allen, 1995). Where available stratigraphic and structural vergence data suggest rock units dip steeply west and stratigraphically young west (Allen, 1995). Relogging historic drill core by AurionGold Staff supports this observation.

A westerly trending spine of Devonian granite is interpreted from gravity and magnetic survey to underlie the centre of the ETA (Leaman and Richardson, 1989, Archer, 1989).

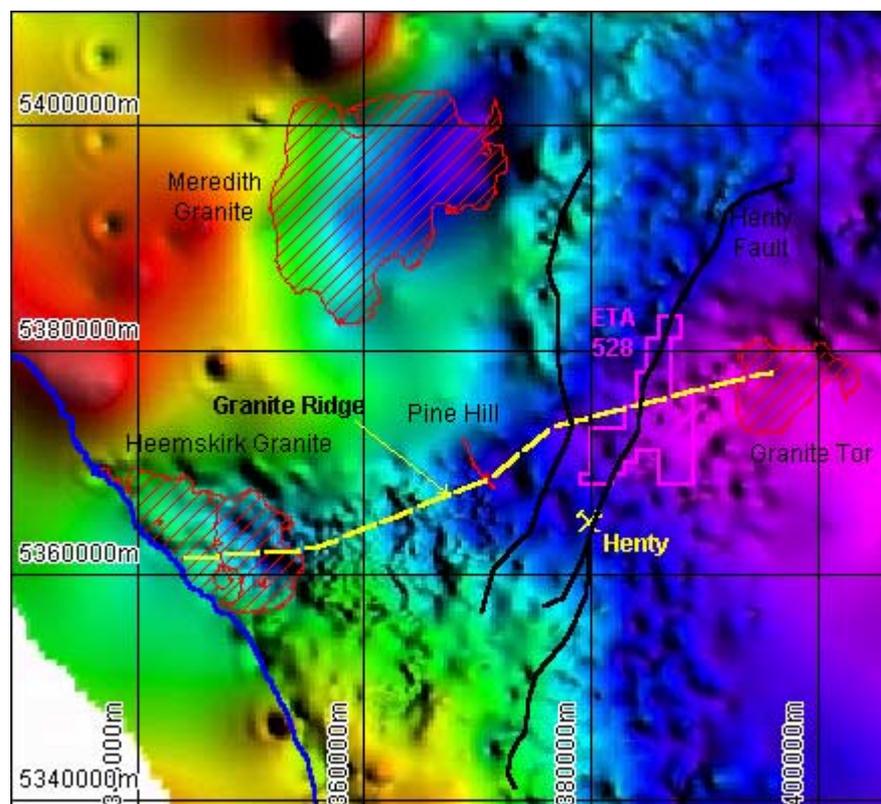


Figure 3. West Tasmania gravity image.

3.2.1 Local Stratigraphy

Murchison Volcanics

The Murchison volcanics are dominantly quartz-phyric rhyolitic volcanics. Allen, (1995) describes the top 200-400m of the succession (western most) as a thick complex of feldspar-quartz-biotite-hornblende-magnetite porphyritic sills intruded into a rhyolitic succession. Allen, (1995) suggests the sills are genetically and

temporally related to the feldspar-quartz-biotite-hornblende Murchison Granite. The host rhyolitic succession is described as being a sequence of rhyolitic graded, pumiceous volcanoclastics with sandy tops and poorly sorted crystal-lithic rich bases and vitric siltstones intruded by chemically similar feldspar-quartz-minor biotite rhyolite lava domes (Allen, 1995). The lava domes are texturally complex from coherent to clastic breccia textures. Allen (1995) interprets the host succession as a subaqueous dome-tuff package.

In the south east of the ETA is a polymict epiclastic conglomerate containing abundant quartzite pebbles, altered volcanic clasts, chert and volcanic quartz crystals considered to be upper Murchison Volcanics rather than the base of the Owen Conglomerate (Parfery and McNeill, 2000). Previously this unit has been referred to as the Jukes Breccia (McNeill and Corbett, 1992) a correlate of the Zig Zag Hill Formation. The contact between the Owen Conglomerate and Murchison Volcanics is clearly unconformable on the Murchison Dam road (Parfery and McNeill, 2000).

Murchison Granite

The Murchison Volcanics are intruded along their eastern margin by the Murchison Granite, a Cambrian syn-volcanic sill (McNeill and Corbett, 1992). The Murchison granite is quartz-feldspar-biotite-hornblende-phyric and has been interpreted to be shallow level I-type, magnetite series granite (Davidson, 1998). $^{40}\text{Ar}/^{39}\text{Ar}$ dating of the granite gives an age of 501 ± 5.7 Ma (Perkins and Walshe, 1993). Zones of strong to intense silica, k-feldspar, chlorite \pm magnetite and pyrite alteration are present within the Granite and surrounding Murchison Volcanics. The margins of the granite and host volcanics are often strongly chlorite-pyrite altered.

Farrell Slates

Allen (1995) suggests that although tightly folded and faulted, the Farrell Slate is less disrupted than previously thought, youngs mainly from east to west and that the stratigraphic succession can be reconstructed. The stratigraphy trends from thick rhyolitic pumiceous to crystal rich massflows at the base, through thin to thick bedded feldspar-quartz-mica turbidites and black and grey shale at the top (Allen, 1995). Allen (1995) suggests the Farrell Slate overlies the Murchison volcanics and represents the end of the eruptive stage of volcanism for this area of the Mt Read Volcanics. McNeill and Corbett (1989) describe a thin feldspar porphyritic lava with geochemical similarities to the CVC just north of Tullah.

Sterling Valley Volcanics

The Sterling Valley Volcanics form the lowermost unit of the northwestern CVC's (Allen, 1995) and were previously described as being dominantly andesitic (McNeill, 1987). However through geochemical, volcanological and petrographic studies Allen, (1995) describes the formation as mainly basaltic with minor dacitic volcanics. The succession is dominated by basaltic graded massflows, minor siltstones and numerous basaltic to dacitic sills and represents a series of eruptive and erosional events of a major mafic volcano (Allen, 1995). Facing criteria suggest the sequence youngs to the west.

Mt Black Volcanics

The Mt Black Volcanics stratigraphically overlie the Sterling River Volcanics (Gifkins, 1997). Allen (1995) suggests the Sterling Valley Volcanics and Mt Black Volcanics are genetically related, forming from an evolving magma source.

The base of the Mt Black Volcanics is a thick sequence of feldspar-hornblende porphyritic domes and sills (Gifkins, 1997). Overlying these is a sequence of bedded, pumiceous to crystal-lithic volcanoclastics and minor vitric siltstones with abundant related felsic lava domes and intrusives (Gifkins, 1997). Both the Mt Black Volcanics and Sterling River Volcanics have been intruded by late mafic dykes of the Henty Dyke Swarm. Differentiating The Henty Dyke swarm from the Sterling Valley volcanics can be difficult in areas of poor outcrop.

Owen Conglomerate

Unconformably overlying the Volcanics on the southeastern side of the Henty Fault is the Cambro-Odrovician Owen Conglomerate. The Owen conglomerate is a massive package of Precambrian derived siliciclastic conglomerate, sandstone and shale.

3.2.2 Structure

As previously described, the geology of EL3/01 is strongly controlled by the regionally important Henty Fault. The Henty Fault is a NNE trending, steeply west dipping zone of intensely broken, brittle-ductile sheared, quartz veined rock between 3-15m thick. The fault is slightly oblique to bedding, with a regional reverse-dextral sense of movement.

The Farrell Fault varies from 3-13m thickness, dips steeply west and trends NNE. It varies from an intense, mylonitic ductile zone to a zone of strong brittle-ductile shearing (Allen, 1995). Allen, (1995) considers the Farrell Slates and upper Murchison Volcanics to be a straight stratigraphic succession due to similarities of composition, depositional environment and facies characteristics. He therefore considers the Farrell Fault to be a localised fault formed in the footwall of the Henty Fault on local competency contrasts and not a major regional fault. Numerous other brittle faults occur in the immediate footwall to the Henty Fault. Bedding within the Farrell slates has been folded into angular, tight to isoclinal folds and kink bands in close proximity to the Henty and Farrell Faults (McNeill and Corbett, 1989).

Cleavage strikes northerly and dips very steeply west, swinging into parallel close to the Henty Fault.

The Sterling River Volcanics form the core of a broad anticline on the northwestern side of the Henty Fault and represent the oldest unit of the northern CVC's (Allen, 1995).

3.2.3 Mineralisation

EL 3/01 is highly prospective for both Devonian granite related and Cambrian volcanogenic mineralisation.

Mineralisation within ETA 528 is located principally along the Henty Fault Zone and is represented by a number of different deposit styles including Devonian, fissure related Pb-Zn-Ag sulphides such as the Mt Farrell Mines and Devonian polymetallic-Au-Sn vein mineralisation. Significant resources within the ETA are listed in Table 2. Local geology, prospect and drillhole locations are displayed in Enclosure 1.

Table 2. Significant resources within EL 3/01 (December, 2000).

Deposit	Resource
New Nth Mt Farrell	Mined 299 000t @ 14.9% Pb, 2% Zn, 506g/t Ag U/G Resource 71 000t @ 12.3% Pb, 4.8% Zn, 378g/t Ag Surface Res. 100 000t @ 6.3% Pb, 1.6% Zn, 201g/t Ag.
North Mt Farrell	Mined 432 000t @ 11.4% Pb, 2% Zn, 370g/t Ag
Lakeside Deposit	750 000t @ 20g/t Ag, 2.1g/t Au, 4% As, 0.2% Sn, 0.2% Cu
Lorrigan's Luck	480 000t @ 15g/t Ag, 1 g/t Au, 5% As, 0.3% Cu.
Murchison Mine	30 000t ⁺ @ 10% Pb, 15% Zn, 350 g/t Ag, 2g/t Au

Cambrian mineralisation and alteration

The Murchison Volcanics are strongly altered throughout, with alteration intensity increasing towards the Murchison Volcanics/Farrell Slate contact (Allen, 1995). This style of alteration is evident around the Sterling Valley Mine in drillholes SR3, SV4 and STP96. Alteration within the Murchison Gorge is implied to have similar characteristics to proximal VHMS alteration zones (Polya, 1981). Pasminco exploration focussed on the Murchison Volcanics/Farrell Slate contact in the vicinity of the Murchison Mine-Sterling Valley mine area for VHMS style mineralisation (Parfery and McNeill, 2000).

While the sequence is dominantly chlorite, sericite, and silica altered it appears to be overprinted by later K-feldspar, chlorite, quartz and magnetite ± pyrite alteration and minor anomalous Cu-Au mineralisation associated with shallow level intrusion of the Murchison Granite (Parfery and McNeill, 2000). Good examples of this alteration is evident in drill holes TBD1 and TBD2. Although alteration is strong throughout the volcanics, systematic rock chip sampling by Pasminco in the Murchison Gorge (Purvis, 1994) and on the Anthony Road (Parfery and Murphy, 1998), have failed to identify significant zones of elevated base metal anomalism. Despite the numerous mineral occurrences occurring throughout the area, the most significant remains the Murchison Mine deposit at >30,000t @ 15% Zn, 10%Pb, 350g/t Ag & 2g/t Au (Parfery and McNeill, 2000).

Devonian mineralisation

Pb-Zn-Ag dominated deposits are hosted in the Farrell Slates in the Tullah area. The deposits consist of several structurally controlled, sub-parallel lenticular veins in north trending, sub-vertically dipping shears (Purvis, 1995). Mineral assemblages include galena-sphalerite \pm chalcopyrite \pm tetrahedrite \pm siderite (Taheri and Green, 1990).

Polymetallic Sn-Au mineralisation is hosted in close proximity to and on both sides of the Henty Fault in the Sterling River Volcanics and the Farrell Slates. Two of the larger mineralised bodies (the Lakeside gold deposit with 750,000 @ 2.1g/t Au and the Lorrigans Luck deposit with 480,000t @ 5% As & 0.8g/t Au), are not exposed at surface and were found by drilling in the 1980s (Weber *et al.*, 1997). The Lakeside deposit is hosted in the Farrell slates while the Lorrigan's Luck deposit is hosted in the Sterling River Volcanics.

Best intersections/assay results for these deposit include: 6.65m @ 5 g/t Au (RED87-3) from the Lakeside deposit (Weber *et al.*, 1997) and a costean sample grading 27 g/t Au for the Lorrigan's Luck Prospect (McNeill and Corbett, 1989).

Mineralisation is localised in fissure veins above an interpreted Devonian granite spine (Leaman and Richardson, 1989, Archer 1989). Common minerals include pyrite, arsenopyrite, stannite, chalcopyrite, pyrrhotite, cassiterite, tourmaline, carbonates and fluorite (Taheri and Green, 1990).

Lead isotopes (Taheri and Green, 1990, Gulson and Porritt, 1987) deformation relationships, and the presence of Sn, As and tourmaline suggest much of the mineralisation on the ETA is Devonian in origin. Purvis (1992) suggests the Au as well as some of the base metals and silver, may have a Cambrian volcanogenic origin. These metals are thought to have been remobilised during Devonian deformation, largely due to the thermal influence of granite intrusion, with inputs of Sn, As, further base metals and silver at that time (Purvis, 1992). Gold is a notable absentee from the Devonian age Pb-Zn-Ag Farrell orebodies at Tullah.

4 WORK COMPLETED

Work completed during the first year of tenure concentrated on the southern portion of the EL only. Work consisted of 1:5000 mapping, relogging historical drill core, compilation of drill hole data, compilation of previous geophysics and geochemical data. Work was postponed in the latter half of the year with other tenements taking priority.

4.1 GEOPHYSICS

Numerous regional and prospect scale geophysical surveys have been completed on various parts of EL 3/01 since the 1950's. Pasminco exploration completed a review of geophysical surveys (principally IP) in 1998 (Parfery and Murphy, 1998) as part of a prospectivity analysis. IP was found to be an effective tool for mapping the Farrell

Slates under glacial and transported cover. Previous IP data for the Stitt River Valley has been acquired and imaged by Auriongold staff. A stacked section of IP profiles is located in Enclosure 1. A prominent high is located on the northern most lines, just south of the Sterling Valley Mine. This survey may be seeing intense silica-sericite-pyrite alteration of Murchison volcanics in the footwall of the mine. This zone has been intersected in a few drillholes (SV4, SR3 and STP96) further north and does not contain significant mineralisation. Alternatively the chargeability high may equally be attributed to graphitic black shale horizons in the Farrell Slates.

The EL is covered by MRT open file helimagnetic data. Imaging of the data (Figure 4) indicates strong lineaments coincident with the Henty Fault and various stratigraphic units including the Murchison Granite, Murchison Volcanics, Farrell Slates and the Mt Black Volcanics.

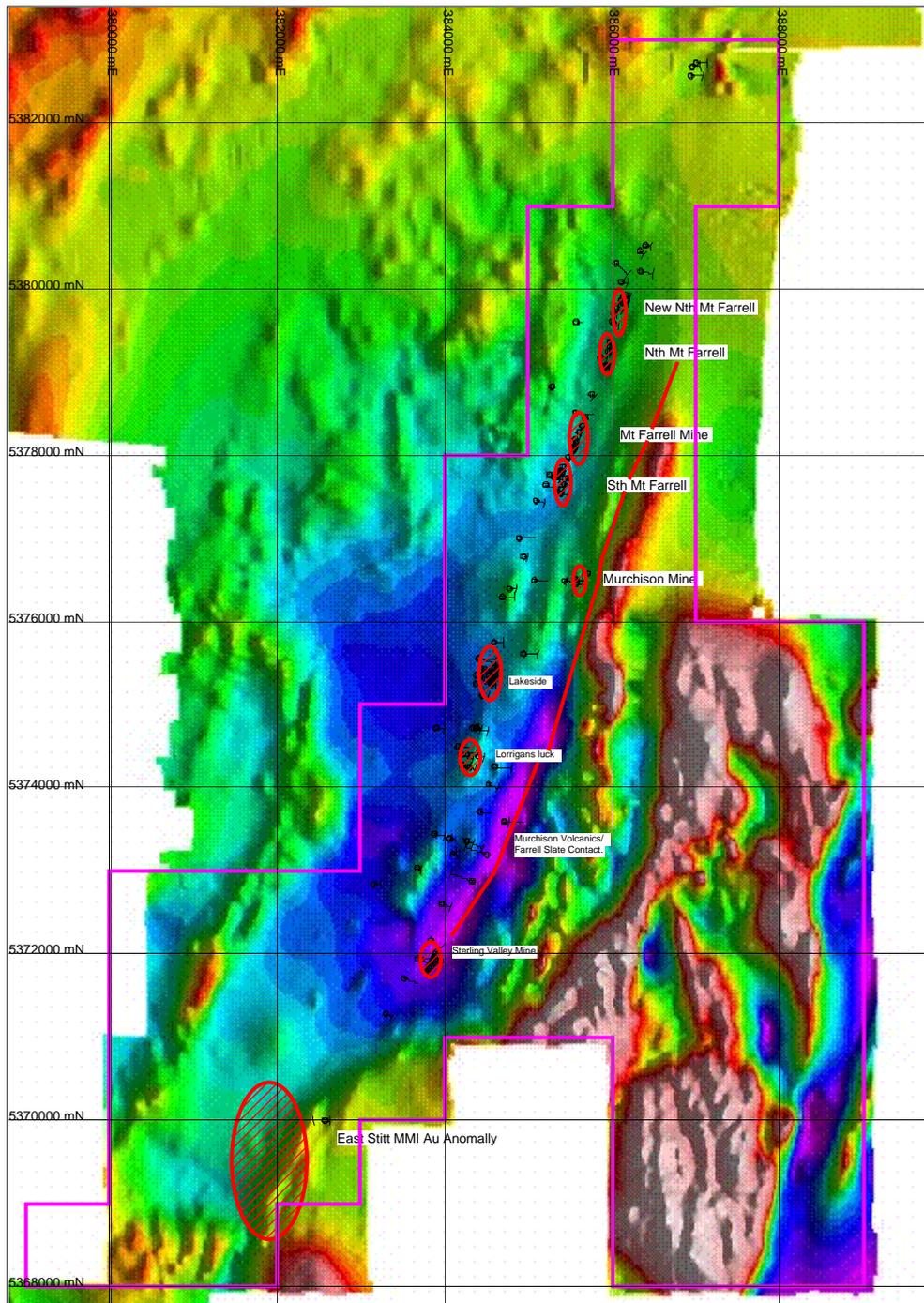


Figure 4. RTP helimagnetics and prospect locations.

4.2 GEOCHEMISTRY

Numerous soil, rockchip and stream sediment geochemical surveys have been completed on EL 3/01. Pasmaenco completed a comprehensive review and reinterpretation of existing data as part of a prospectivity analysis in 1997-98 (Parfery and Murphy, 1998). A series of images were produced displaying gridding, sample locations and prominent anomalies. Most soil and rockchip Cu, Pb and Zn anomalies were coincident with known mineralisation with the exception of a large low level Cu-Zn anomaly over the Bruce Creek area. Areas of poor sample density over

prospective areas were highlighted, particularly the east Stitt River in the southwestern corner of the EL.

Subsequent work by Pasminco focussed mainly on the Bruce Creek and East Stitt Areas. Orientation MMI sampling was undertaken by Pasminco on known prospects and was considered suitable for use over glacial cover on the Bruce Creek and East Stitt areas (Parfery and Murphy, 1998). Pb-Zn anomalies on the Bruce Creek grid were subsequently drilled (Parfery and McNeill, 2000) and found to be related to small Devonian related basemetal-carbonate veining and cultural contamination along the Murchison Highway. A Au-As MMI anomaly located south of the Sterling Valley Mine was not drill tested although recommended for followup drilling (Parfery and Murphy, 1998). The Au-As anomaly is located within the Sterling Valley basalts and is probably Devonian vein mineralisation similar to the Lorrigan's Luck and Lakeside deposits. This anomaly may require follow up work if a review of the above two deposits is favourable.

Pasminco did not investigate the large Au MMI anomaly identified in the far southwest of the grid as Au is not a priority target of Pasminco Exploration (Parfery and McNeill, 2000). This anomaly is located over a ridge of glacial sediments. No significant deep anomalies are evident in the IP survey for this area.

Goldfields extended the Red Hills-Moxon Saddle C-Horizon soil geochemistry onto EL 3/01. Only the two southernmost lines were sampled as the survey was designed to test the prospective units east of the Henty Fault. Extensive scree covers the volcanics on the eastern side of the fault, north of 5368300N making C-Horizon soil sampling ineffective in this area. Most samples on the eastern side of the fault were below detection or of a low magnitude. Minor low order anomalies were present in the Mt Black volcanics, none of which show significant gold prospectivity. The results are located in Appendix 1 and Enclosure 2.

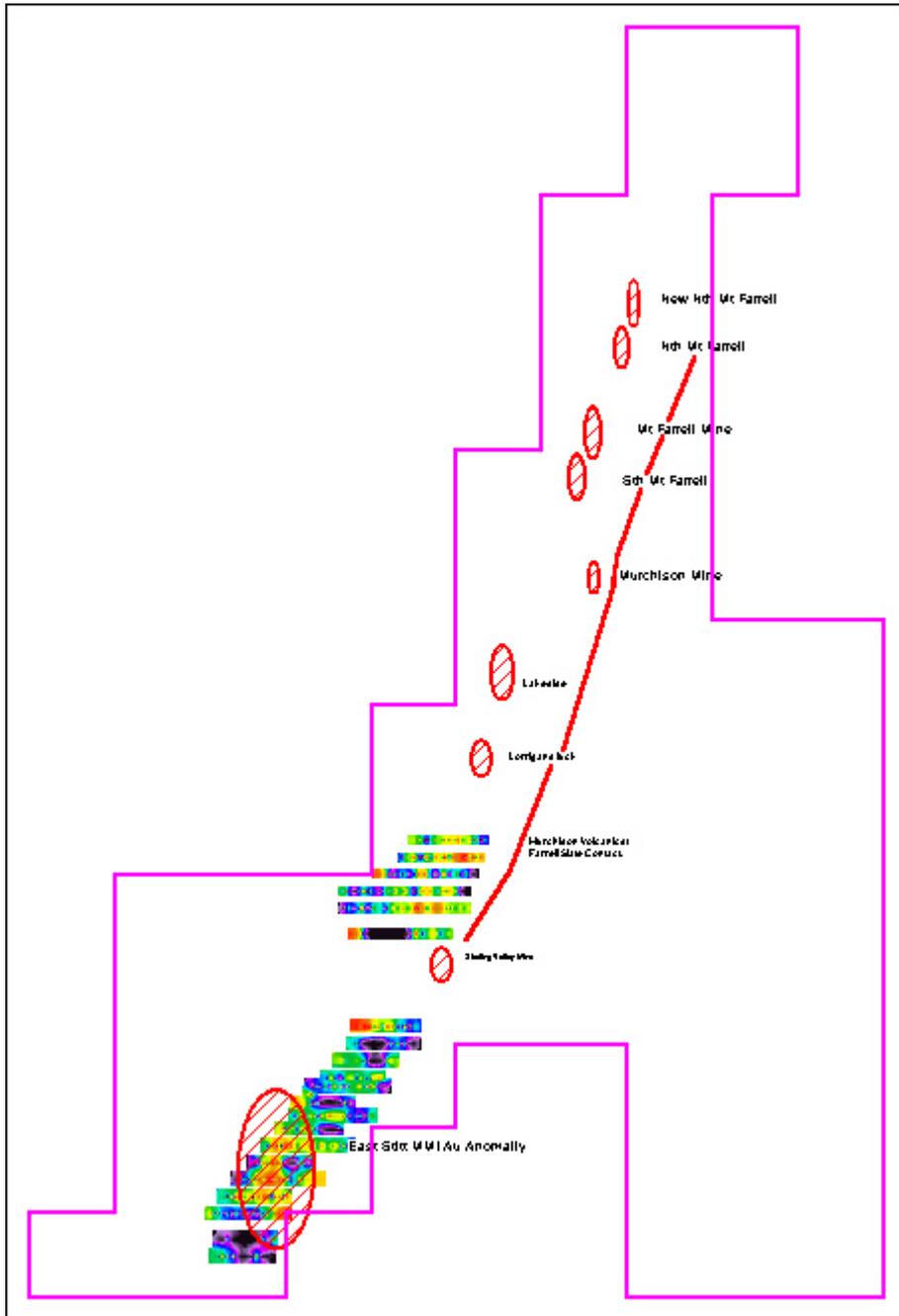


Figure 5. Soil MMI Au image from Pasma data and prospect locations.

4.3 MAPPING

Grid based mapping of the southern EL was completed during the year. A 1:5000 interpretive geological map is included in Enclosures 3. Mapping suggests the Upper Tyndall Group Moxon rhyolite extends northward along the Henty Fault and may be continuous with the Murchison Volcanics to the north. This supported by the presence of quartz-phyric rhyolite in drill hole SS1. This suggests that the Red Hills alteration zone hosted in the CVC does not extend through to the Henty Fault as previously thought. This new interpretation seriously downgrades the near surface prospectivity of this area. Mapping and core logging confirms the interpretation of the geology described by Allen (1995) and Gifkins (1997) outlined in section 3.2.

5 DISCUSSION AND RECOMMENDATIONS

Only preliminary data compilation and mapping was completed on the EL during the past year. Target generation and testing should proceed in the next financial year after data compilation is complete. As a result the targets identified from the ETA application have changed little over the past year with the exception of the Red Hills alteration/HFZ contact which has been seriously downgraded.

Devonian As-Au-Sn deposits

Lakeside. Since the Lakeside resource was calculated in 1988 (750 000t @ 2.1 g/t) additional drillholes have been completed including a shallow RC program and three DDH testing the northern extension of the mineralisation. No Resource update was completed with the new information. The prospect should be reviewed with the aim of identifying potential high-grade zones or bulk minable shallow resources that could supplement production at the Henty Gold Mine. The prospect should be interpreted at 1:1000 scale with an emphasis on defining minable quantities of mineralisation and identifying potential target areas for follow up work.

Lorrigan's Luck. Similarly the Lorrigan's Luck resource should be relogged and reviewed at 1:1000 scale. The current resource is based on several lenses in only 4 drillholes (McGunnigle, 1996). A review of existing IP data is required for this prospect and its surrounds. The prospect is still open to the south. Like the Lakeside prospect, a review is required to identify potential high-grade zones or bulk minable shallow resources that could supplement production at the Henty Gold Mine.

Other HFZ/granite spine potential? The Au-Sn deposits associated with the Henty Fault zone appear to be located above an interpreted Devonian granite 'ridge' (Leaman and Richardson, 1989, Archer, 1989). Control on the granite position appears to be good from the gravity interpretations of Leaman and Richardson (1989) and Archer (1989) restricting prospectivity for this style of mineralisation to the 6km of strike length between the Murchison Mine and Sterling Valley Mine. One untested coincident As-Au MMI anomaly is evident in the Pasminco geochemical data. The anomaly is hosted in the Sterling River volcanics and is likely to be similar Au-As mineralisation to the Lakeside and Lorrigan's Luck deposits. If the reviews of these other two deposits are favourable, this anomaly should be drill tested. IP has demonstrated to be a useful prospect and regional scale tool for mapping out the Farrell Slates and disturbances in the Henty Fault. Detailed IP interpretation of existing data is required.

Cambrian volcanogenic Au-basemetal deposits.

It was previously thought that the Tullah EL had similar structural/stratigraphic controls as those hosting the Henty Goldmine to the south and as such was highly prospective for this style of mineralisation. Two areas were principally considered to be prospective, the Farrell Slate-Murchison Volcanics contact and the Red Hills alteration/HFZ contact. However mapping of the South Stitt grid suggests the younger Moxon saddle rhyolite (Upper Tyndall group) extends northward along the

Henty Fault and may be continuous with the Murchison Volcanics. This has two important implications:

- The Red Hills alteration zone does not intersect the HFZ eliminating this structural stratigraphic model target.
- If the Murchison Volcanics are a continuation of the Moxon saddle rhyolite they postdate the Henty mineralising event and are therefore not a stratigraphic correlate of the Henty Horizon. However alteration within the Murchison volcanics suggests these are prospective in their own right. The presence of foliated sericite-pyrite-silica alteration in the vicinity of the Sterling River basemetal mine suggests synvolcanic hydrothermal activity at the Murchison Volcanics-Farrell Slate contact. This horizon has the potential to host Henty Style, sub-seafloor volcanogenic gold deposits as well as Rosebery style VHMS deposits. Despite extensive alteration, gridding, and geochemical sampling no significant mineralisation has been identified along this horizon.

The large East Stitt MMI Au anomaly remains unexplained. The anomaly is located over a broad ridge of glacial sediments. The IP survey did not detect any significant chargeability high associated with this area but may not be seeing through the glacial deposit. Drill testing of this target would be expensive and poorly constrained.

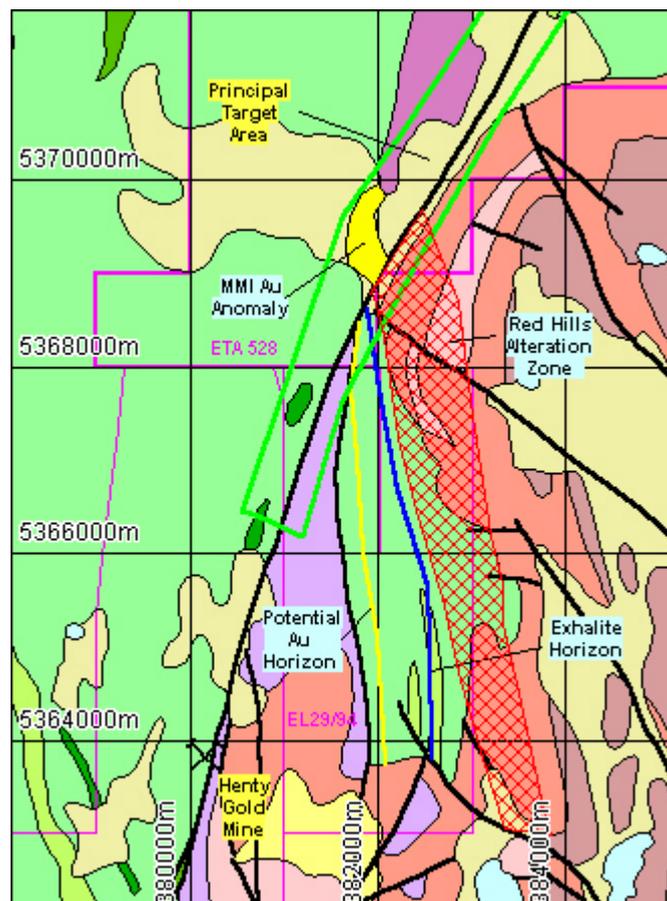


Figure 6. Potential targets in the Stitt River – Moxon Saddle area. The Red Hills alteration zone/HFZ contact is no longer a valid target with the Moxon saddle rhyolite extending northwards along the Henty fault.

Cambrian granite related Cu-Au mineralisation.

The Murchison granite and surrounding rocks have the potential to host low grade Cu-Au mineralisation similar to the Jukes Pty Ltd deposit on Mt Jukes. This is a lower priority target for Auriongold on this EL.

It is recommended that compilation of previous geochemical, geophysical and drilling data and 1:5000 scale mapping be completed. Detailed reviews of the Lakeside and Lorrigan's Luck resources should be completed early in the next year of tenure with a view to extend the resources and locate high grade zones.

All existing IP data should be acquired and processed to aid target identification under recent cover.

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APPENDIX

C-Horizon Soil Sample Locations and Analysis.

Sample	Northing	Easting	Au	Au(R)	Cu	Pb	Zn	Ag	As
1083106	5368100	380725	-0.01		8	21	51	-1	3
1083107	5368100	380750	-0.01		14	20	12	-1	5
1083108	5368100	380775	-0.01		14	20	33	-1	3
1083109	5368100	380800	-0.01	-0.01	10	62	9	-1	-1
1083110	5368100	380825	-0.01		4	21	17	-1	-1
1083111	5368100	380850	-0.01	-0.01	6	12	9	-1	-1
1083112	5368100	380875	-0.01		7	10	25	-1	10
1083113	5368100	380900	-0.01		10	29	102	-1	12
1083114	5368100	380925	-0.01		21	18	36	-1	2
1083115	5368100	380950	-0.01		8	11	120	-1	2
1083116	5368100	380975	-0.01		51	54	194	-1	9
1083117	5368100	381000	-0.01		8	12	50	-1	2
1083118	5368100	381025	-0.01		85	20	228	-1	18
1083119	5368100	381050	-0.01		17	6	45	-1	9
1083120			0.59		1165	5400	428	7	10
1083121	5368100	381075	-0.01		4	5	73	-1	2
1083122	5368100	381100	-0.01		3	7	17	-1	11
1083123	5368100	381125	-0.01		8	8	63	-1	4
1083124	5368100	381150	-0.01		12	7	75	-1	-1
1083125	5368100	381175	-0.01		11	12	84	-1	6
1083126	5368100	381200	-0.01		6	8	83	-1	8
1083127	5368100	381225	-0.01	-0.01	8	8	50	-1	2
1083128	5368100	381250	-0.01		48	6	37	-1	9
1083129	5368100	381275	-0.01		10	6	15	-1	-1
1083130	5368100	381300	-0.01		3	7	15	-1	2
1083131	5368100	381325	-0.01		3	11	11	-1	-1
1083132	5368100	381350	0.04		2	6	6	-1	2
1083133	5368100	381375	-0.01		4	6	9	-1	-1
1083134	5368100	381400	-0.01	-0.01	2	5	33	-1	2
1083135	5368100	381425	-0.01		6	23	23	-1	4
1083136	5368100	381450	-0.01		2	9	11	-1	2
1083137	5368100	381475	-0.01		3	11	16	-1	2
1083138	5368100	381500	-0.01		-2	11	13	-1	8
1083139	5368100	381525	-0.01		3	16	14	-1	3
1083140			0.57		1140	5300	432	8	10
1083141	5368100	381550	-0.01		3	13	37	-1	6
1083142	5368100	381575	-0.01		2	15	19	-1	1
1083143	5368100	381600	-0.01		3	10	12	-1	2
1083144	5368100	381625	-0.01		4	11	20	-1	2
1083145	5368100	381650	-0.01		2	7	12	-1	-1
1083146	5368100	381675	-0.01		3	9	16	-1	1
1083147	5368300	380700	-0.01		9	14	25	-1	3
1083148	5368300	380725	-0.01		4	20	45	-1	6
1083149	5368300	380750	-0.01		9	16	82	-1	2
1083150	5368300	380775	-0.01		57	12	187	-1	5
1083151	5368300	380800	-0.01		56	20	140	-1	1
1083152	5368300	380825	-0.01		11	232	461	-1	3
1083153	5368300	380850	-0.01		2	61	57	-1	6
1083154	5368300	380875	-0.01		3	43	222	-1	2
1083155	5368300	380900	-0.01		6	105	137	-1	2
1083156	5368300	380925	-0.01		3	33	72	-1	3

1083157	5368300	380950	-0.01		10	56	95	-1	10
1083158	5368300	380975	-0.01	-0.01	8	27	68	-1	-1
1083159	5368300	381000	-0.01	-0.01	4	14	37	-1	4
1083160			0.62		1000	5000	376	7	12
1083161	5368300	381025	-0.01		5	7	53	-1	4
1083162	5368300	381050	0.02		9	6	39	-1	2
1083163	5368300	381075	-0.01		11	6	49	-1	-1
1083164	5368300	381100	-0.01		161	87	222	-1	3
1083165	5368300	381125	-0.01		62	22	135	-1	7
1083166	5368300	381150	-0.01		21	7	211	-1	-1
1083167	5368300	381175	-0.01		7	5	38	-1	2
1083168	5368300	381200	-0.01		10	6	105	-1	4
1083169	5368300	381225	-0.01		13	12	89	-1	5
1083170	5368300	381250	-0.01		16	35	81	-1	-1
1083171	5368300	381275	-0.01		22	34	45	-1	2
1083172	5368300	381300	-0.01		7	8	50	-1	4
1083173	5368300	381325	-0.01		21	12	73	-1	-1
1083174	5368300	381350	-0.01	-0.01	17	4	50	-1	-1
1083175	5368300	381375	-0.01		18	11	65	-1	2
1083176	5368300	381400	-0.01		4	-3	23	-1	-1
1083177	5368300	381425	-0.01		15	4	44	-1	-1
1083178	5368300	381450	-0.01		5	5	15	-1	-1
1083179	5368300	381475	-0.01		8	30	33	-1	2
1083180			0.59		1085	5300	392	7	10
1083181	5368300	381500	-0.01		6	14	31	-1	-1
1083182	5368300	381525	-0.01		41	17	14	-1	-1
1083183	5368300	381550	-0.01		4	20	14	-1	1
1083184	5368300	381575	-0.01	-0.01	6	36	24	-1	3
1083185	5368300	381600	-0.01		6	31	28	-1	-1
1083186	5368300	381625	-0.01		10	15	24	-1	2
1083187	5368300	381650	-0.01		4	-3	20	-1	7
1083188	5368300	381675	-0.01		5	36	24	-1	3
1083189	5368300	381700	-0.01	-0.01	7	28	22	-1	-1
1083190	5368300	381725	-0.01		5	34	25	-1	8
1083191	5368300	381750	-0.01		5	23	23	-1	2