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Mining Limited

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EL13/2011 Annual Report

‘Henty River’

EL13/2011

Vol. 1 of 1

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DATE:	October 2012
MAP SHEETS:	1:25k Oceana (3635) 1:100k Sophia (8014)
GEOGRAPHIC COORDS (GDA94):	Min East: 374,000mE Max East: 379,000mE Min North: 5,350,500mN Max North: 5,358,000mN
COMMODITY(s):	Basemetals, Au

Summary

EL 13/2011 (Henty River) was granted to Unity Mining Ltd on the 4th of October 2011, for a period of five years.

UML has conducted a historic data review and proposed a field program for the 2012/2013 summer field season. This field program is subject to MRT approval.

Expenditure on the tenement since October 2011 has been \$2,700.

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Appendix 1: Historical Exploration

1 Introduction

This report details work completed by Unity Mining Limited (UML) on EL 13/2011 over the past year.

EL13/2011 is due for relinquishment on the 4th September 2016.

1.1 Tenure

EL13/2011, the Henty River exploration lease, was acquired in 2011 by Unity Mining Ltd after a successful tender. The license area is all crown land designated as part of the Mt Dundas Regional Reserve, HEC and State Forest, all of which are available for exploration under the Mineral Resources Act 1995. Any disturbances in Regional Reserve require notification and approval from the Mineral Exploration Working Group (MEWG). Further conditions of exploration are outlined in the Exploration Code of Practice (produced by Mineral Resources of Tasmania (MRT)).

The land vested in the HEC includes the Anthony, Howards and Bradshaws Road access.

1.2 Location and Access

Henty River (EL13/2011) occurs midway between Queenstown and Tullah on Tasmania's West Coast. The EL's eastern boundary abuts Unity Mining lease, EL28/2001 (Figure 1). Local access to the tenement is off the Howards and Anthony Roads and the Zeehan highway. Much of the tenement is difficult to access due to dense forestry and degradation of existing roads and bush tracks and the steep nature of the terrain.

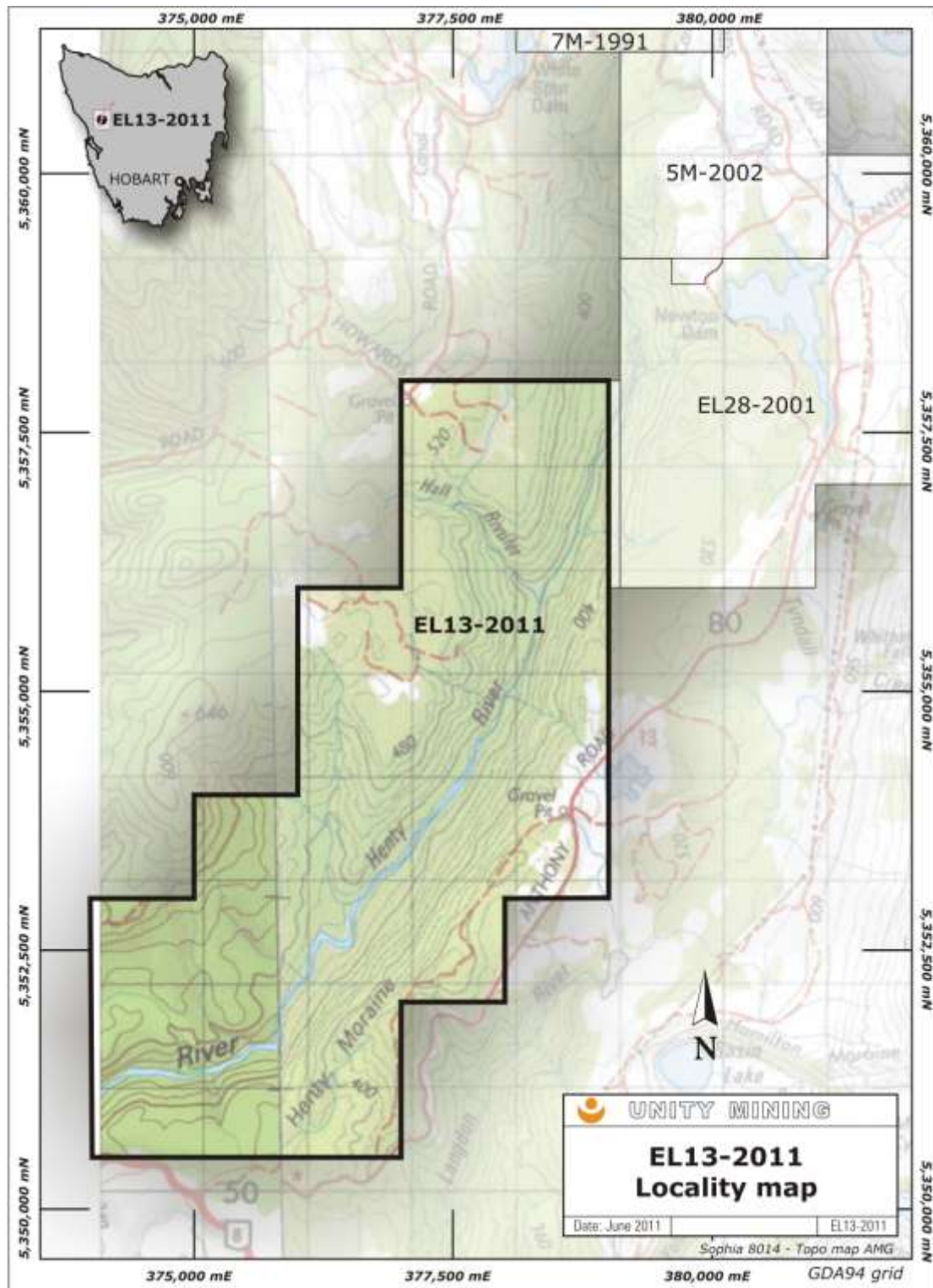


Figure 1: Location of EL13/2011 (map in GDA 94 projection).

1.3 Regional Geology

This section is taken from the Annual Report for neighbouring tenement for the period April 2008-April 2009 (Barrick 2009):

Basement rocks of western Tasmania comprise sediments multiply deformed during the Late Proterozoic Penguin Orogeny (700±50 Ma) (Berry, 1994). A rift phase followed, characterised by continental shelf sedimentation and tholeiitic volcanism (Crawford and Berry, 1992).

The first phase of the Cambrian Delamerian Orogeny (510-490 Ma) is characterised by extensional tectonism which resulted in the rapid deposition of sediments and calc-alkaline volcanics (Mount Read Volcanics), particularly along the eastern margin of the newly formed Dundas Trough (Berry, 1994).

The Mount Read Volcanics (MRV) interfinger with the Dundas Group to the west and are bound by Precambrian rocks of the Tyennan Region to the east.

On the south-eastern side of the Henty Fault, the MRV package can be divided into four main lithostratigraphic groups (Corbett, 1992). These are: the Western Volcano-Sedimentary Sequence (WVSS), the Central Volcanic Complex (CVC), the Eastern Quartz Phyric Sequence (EQPS) and the Tyndall Group (TG).

The WVSS comprises rocks of the Dundas Group and the Yolande River Sequence (Corbett, 1992) which interfinger with the lava rich zones of the CVC and the EQPS sequence. The WVSS was deposited in a marine setting and consists of tuffaceous mass flow deposits, volcano-sedimentary siltstones/mudstones, volcanoclastic turbidites and black graphitic shales (Corbett & Lees, 1987).

The CVC is the central belt of the MRV and interfingers with both the WVSS and EQPS. CVC lithologies are predominantly feldspar-porphyritic rhyolitic to andesitic volcanics and pumiceous volcanoclastics, with lesser intercalated minor sediments and mafic units (Corbett 1992). A useful geochemical subdivision is proposed by Crawford et al (1992) where the CVC is split into two distinct geochemical suites (Suite 1 and Suite 2, see Section 2.5: Local Geology).

The EQPS occurs along the eastern margin of the MRV belt and interfingers with the CVC to the west. The package comprises rhyo-dacitic lava-dominated volcanics with common quartz-feldspar phyric intrusives (Corbett, 1992).

The TG comprises a lower association consisting mainly of crystal-rich sandstones and polymictic breccias with minor rhyolitic and andesitic lavas, overlain by the volcanogenic conglomerate and sandstone units of the upper TG.

The last phase of the Cambrian Delamerian Orogeny (~490 Ma) caused the earlier faults to be reactivated as reverse faults and formed open north trending folds along with the uplift and erosion of the Tyennan Block which formed the Owen Group conglomerates (Berry, 1994). The Owen Group appears to conformably overly the TG in the Henty area (Corbett, 1992).

Deposition of the Owen Group ceased in the mid Devonian with the onset of the Tabberabberan Orogeny resulting in tightening of the north trending Cambrian Folds in the Dundas Trough with formation of a NNW striking cleavage (Berry, 1994).

1.4 Local Geology

1.4.1 Stratigraphy

The stratigraphy of the Henty River lease has been well documented by previous workers through regional and more detailed local mapping. The regional geology of the tenement area is shown in Figure 2; derived from MRT 1:25,000 series (Corbett, 1986).

The North and South Henty Faults delineate the geology into several distinct assemblages. A thin sliver of qtz/fspar phryic tuff and terrigenous sediments of the White Spur Formation, part of the Dundas Group, occurs in the NW of the tenement against the North Henty Fault. At Hercules and Rosebery mines, north of EL13/2011, the White Spur Formation is significant as it forms the hangingwall to the massive sulphide ore bodies.

The Henty Fault Wedge sequence outcrops in the central portion of the tenement, typically on the western flank of the Henty River. This wedge sequence is allocthonous to the sequences on either side. Terrigenous sediments including interbedded mud and siltstones, minor tuff and lithicwacke of the Halls Rivulet Track sequence occur in the north east portion. Further south is the region of the Henty Adits which have been the target of the bulk of the exploration in the Henty River. Andesitic to basaltic lava, minor ultramafics, volcanoclastic sediments and siltstones form the Henty Adits sequence; of which the sediments host the mineralisation (Poltock and Fitzgerald, 1991). In the most south western portion of the tenement (near the Zeehan Highway) the lithologies outcropping in the Henty River are gabbroic to ultramafic components of an ophiolite complex, interpreted as Cambrian in age (Poltock 1992). The western portion of the tenement is largely overlain by glacial till.

To the south east of the Henty Fault, on the eastern flank of the Henty River, lies lithologies of the Yolande River and Central Volcanic sequences. Andesitic and minor felsic pyroclastic rocks occur as part of the latter sequence. Quartz feldspar porphyry, lithic tuff, siltstone, shales, lithicwacke and minor quartz feldspar pyroclastics form part of the Yolande River sequence as mapped on the Henty River EL.

A slightly amended stratigraphic column is suggested for the Henty River area and has been summarised in Figure 3.

1.4.2 Structure

The two Henty Fault splays, North and South, are the major structural features of the Henty River EL. The South Henty Fault is a regionally significant structure that dips steeply to the west and runs for most of the length of the tenement down the centre of the Henty River. It forms the western boundary of the Yolande River Sequence, CVC and Tyndall Group rocks.

Lithologies generally trend NNW and have a well developed regional (Devonian) cleavage in the same orientation. Beds dip steep to moderately to the west. Subsidiary fault structures such as the Howards Tramway Fault as mapped by Poltock (1992) separates the Halls Rivulet Track sequence from the ultramafic suite to the west, as mapped in the south west corner of EL 13/2011.

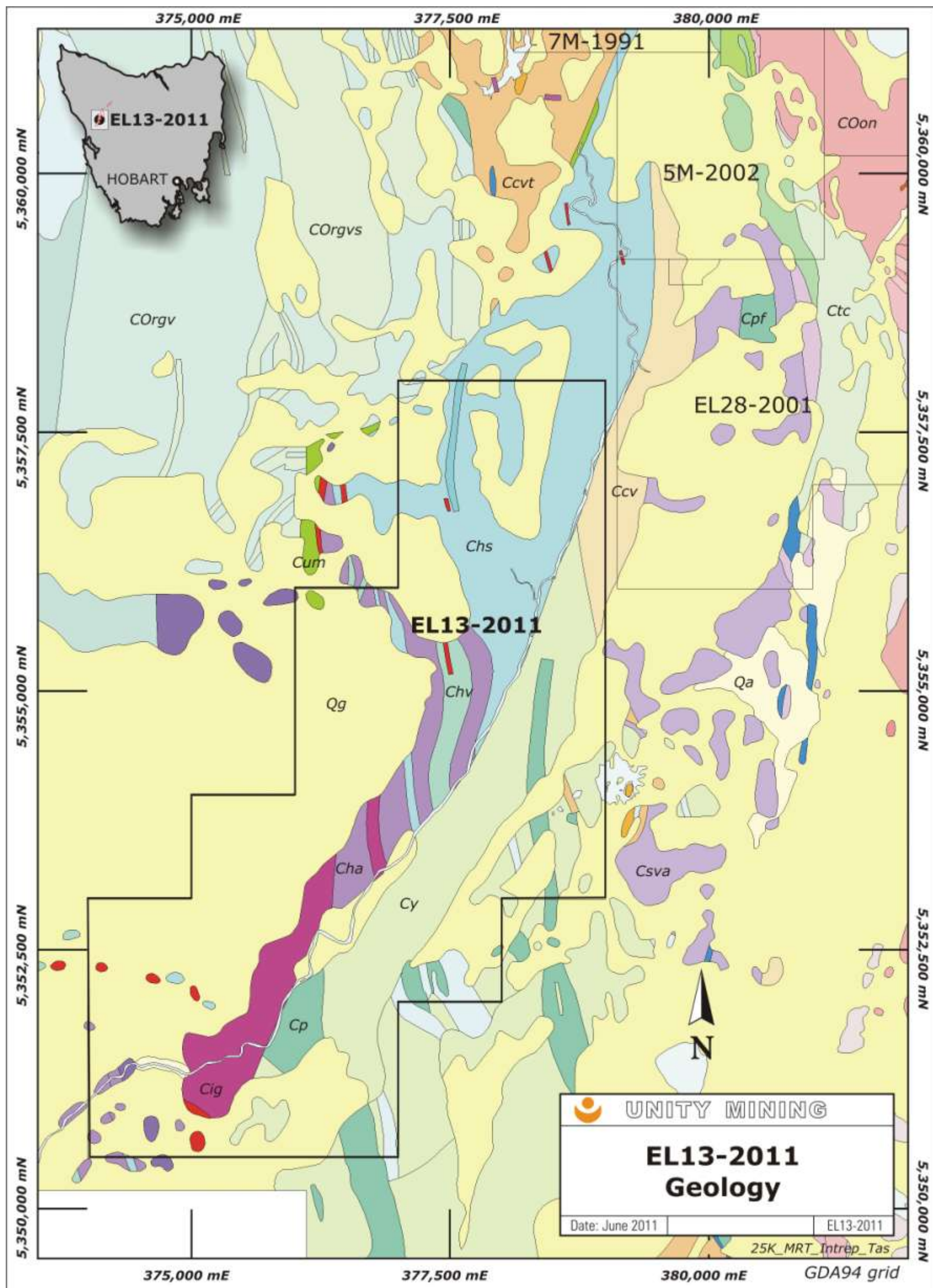


Figure 2: Geology of EL 13/2011 from the MRT 1:25,000 Map series.

LATE CAMBRIAN - QUATERNARY
EARLY ORDOVICIAN

LEGEND FOR GEOLOGICAL MAPS

CAMBRIAN

CAMBRIAN

Qa

Qg

Coo

Alluvial deposits

Glacial deposits

Siliciclastic Sandstone, gravel and conglomerate "Owen conglomerate"

WEST AND NORTH OF HENTY FAULT

Cd

Shale, siltstone, dolomite

Feldspar and quartz-phyric volcanics and volcanics. Siltstone and black mudstone "Dundas Group"

Ccv

Feldspar - phyric volcanics

Shale, siltstone

Basalt

EAST AND SOUTH OF HENTY FAULT

Cf

Ct

Black mudstone and sandstone "Farrell Slate"

Feldspar and quartz-phyric volcanoclastics, lavas and intrusives, andesitic volcanoclastics and breccia with jasper and carbonate "Tyndall Group"

Chf

Black mudstone, siltstone

Andesitic and Basaltic volcanics, Gabbro and ultramafics

"Henty River Sequence"

Ccv

Feldspar-phyric volcanics

Shale, siltstone

Andesitic lavas and breccias

"Central Volcanic Sequence"

INTRUSIVE ROCKS

Cb

Cgt

Basalt

Granite

Figure 3: Geological legend

1.5 Alteration and Mineralisation

The alteration in the licence area ranges from regional prehnite-pumpellyite to greenschist facies. Associated with the Pb/Zn mineralisation at the Henty Adits is sericite/calcite/pyrite ± fuchsite alteration hosted in basaltic-dacitic volcanics.

1.5.1 Henty Adits Prospect

Disseminated and vein galena-sphalerite mineralisation, hosted in andesitic-basaltic volcaniclastics, was mined in the Henty River at the turn of the 19th Century. More recent exploration activity has focused around this area. In the late 70's the Mt Lyell Mining and Railway Company hit mineralisation in several drill holes with the best intersection returning 6m @ 2.88% Pb, 1.61% Zn and 15 g/t Ag (Meares, 1978).

1.6 Previous Exploration

The area of the tenement has been explored intensively, mostly for VHMS-style and Henty Au-style mineralisation during the last forty years (summarised in Appendix 1). Most recently Zinifex drilled DDH HGW1 to test a Ag-As/Cu/Pb/Zn soil and ground EM anomalies (McNeill et al, 2007).

Rock chip, stream and soil sampling over the Henty Adits and the Halls Rivulet Track sequence has been the focus of exploration activities over the past thirty years. Down hole EM was proposed for holes HR1-5, was unsuccessful due to blockages (Poltock and Fitzgerald, 1991).

2 Work Completed during the Reporting Period 2011 to 2012

A data review of previous work was undertaken and several targets generated for future follow up in the 2012/2013 summer field season.

3 Conclusion

Work on this tenement during the reporting year has been held up do to combination of weather and contractor availability. However, a work proposal will be submitted to MRT in November. This will include and is not limited to establishing access from Bradshaws and Howards Roads' and rock chip sampling the south west portion of the tenement.

4 Expenditure 2011/12 Reporting Period

Total Expenditure for the 2011/12 Reporting Period is set out in the below tables.

Expenditure EL 13/2011 November 2011-October 2012	\$
Geology	1,800
Land Access	661
Administration	250
Subtotal (inc. GST)	2,711

Table 1: E13/2011 'Henty River Exploration Expenditure 2011/12.

5 References

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APPENDIX 1 Historical Exploration