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EXPLORATION LICENCE 9/2016
QUEENSBURY, TAS

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EXECUTIVE SUMMARY

The Queensberry Exploration Licence (EL) 9/2016 is located 15km northeast of Queenstown, Tasmania.

The exploration strategy applied by Argent Minerals Limited at EL 9/2016 is primarily focused on the targeting of volcanic hosted massive sulphide (VHMS) mineral systems within the Mount Read Volcanics (MRV) belt of western Tasmania.

During the reporting period 17 January 2018 to 16 January 2019, Argent Minerals Limited conducted several exploration activities totaling \$30,783.38, which included:

- Council consultation
- Site preparation and reconnaissance
- Diamond drill core analysis via Hylogger spectral scanner

Soil and stream sampling due to scheduling conflicts and unfavourable weather conditions has been deferred until 2019.

Results have proven promising and the Company commits for the future 2019 reporting period:

- Detailed 1:10,000 geological and structural field mapping
- Commencement of deferred stream sampling campaign and analysis.
- Commencement of deferred soil sampling campaign and analysis.

1 BACKGROUND

1.1 Location and access

The Queensbury Project is located approximately 15km northeast of Queenstown, Western Tasmania and positioned within the Mt Dundas Regional Reserve which is open to exploration under the Mineral Resources Development Act 1995.

Main access on to the EL9/2016 tenement is via the Zeehan-Strahan link, Henty Road (B27), highlighted in figure 1. There is a 9km long gated track (Queensbury Mine Track) which finishes at the historic Queensbury Mine workings in the approximate centre of the tenement. The gate key is held by Parks and Wildlife Ulverstone Office and the track is characterised by a steep rise onto the Professor Plateau with deeply incised gutters, well-constructed gravel roads across the open button grass plains, and variable soft marshy to hard gravel sections through the temperate rainforest descents/ascents into Queensberry site.

Datum used in this report is GDA 94.

1.2 Regional geology

The geological history of Tasmania has had four major economic mineralisation episodes; Iron and magnesium during the Proterozoic ("Wichham" Orogeny); Basemetals/gold/PGE during the Cambrian (Tyennan Orogeny); Gold/base metal during the Devonian (Tabberabberan Orogeny) (McNeill, 2012) and; Triassic/Tertiary coal (Seymour, Green and Calver, 2006). The VHMS Cambrian and Devonian mineralisation episodes are the focus of Argent Minerals exploration activities and will be summarised in more detail in Section 1.3.

In brief, Western Tasmania's geological basement is made up of Precambrian low-grade (up to greenschist facies) meta-sediments and with minor high-grade (up to eclogite facies) of mafic meta-igneous metamorphic assemblages. These basement units are overlain by volcanic and sedimentary rocks of the early Cambrian Crimson creek formation and late Cambrian Mt Read Volcanics.

Structurally, the Cambrian period's Tyennan Orogeny is comprised of three dominate phases; an Early Cambrian syn-collision convergence; a Mid Cambrian MRV N-S compression, E-W extension and graben formation; and Late syn-collisional Cambrian E-W compression and basin inversion (McNeill 2012).

1.3 Local geology

Structurally, the Queenberry region and tenement is structurally dominated by the Firewood Siding Fault (FSF) system which is estimated to extend from Queenstown to Trial Harbour. The FSF typically trends E-W and is offset by several NW and NNE faults (McNeill 2002). In reference to the FSF, EL 9/2016 can be separated into three lithological domains; Devonian Bell Shale, an Ordovician sedimentary sequence correlated to the Denison Group and the Cambrian Tyndall Group (McNeill 2002).

South of the FSF: The Devonian Bell Shale shelf-facies shale unit consist of interbedded quartz sandstone and mudstones, with minor limestone (Seymour, Green and Calver, 2006).

North of the FSF: Ordovician fossils have been found within the marine sedimentary sequences of quartzose conglomerate-sandstone-siltstones and have been shown to have an age that correlates with the Denison Group (ASUD 2017, McNeill 2002).

East of the FSF: The Tyndall Group lithologies are composed of volcanoclastic breccia, conglomerates and sandstones with minor andesitic lavas and intrusions (White & McPhie, 1996). This dominantly submarine, volcano-sedimentary sequence occurs in the upper part of the Mt Read Volcanics (MRV) and is the most important metallogenic event in Tasmania (Seymour, Green and Calver, 2006) and as such highly prospective for VHMS deposits. The Tyndall Group is divided into two formations; the underlying Comstock Formation encompassing resedimented crystal-rich volcanoclastic sandstone and breccia, rhyolite lava dome complexes and related pyroclastics; and the covering Zig Zag Hill Formation containing polymict volcanoclastic conglomerates, graded-bedded sandstone and infrequent laminated mudstones (ASUD 2017). These MRV rocks are highly mineralised and host major polymetallic VHMS deposits such as Hellyer and Rosebery, and volcanogenic copper-gold deposits such as Mt Lyell, and the structurally controlled high-grade Henty gold mine.

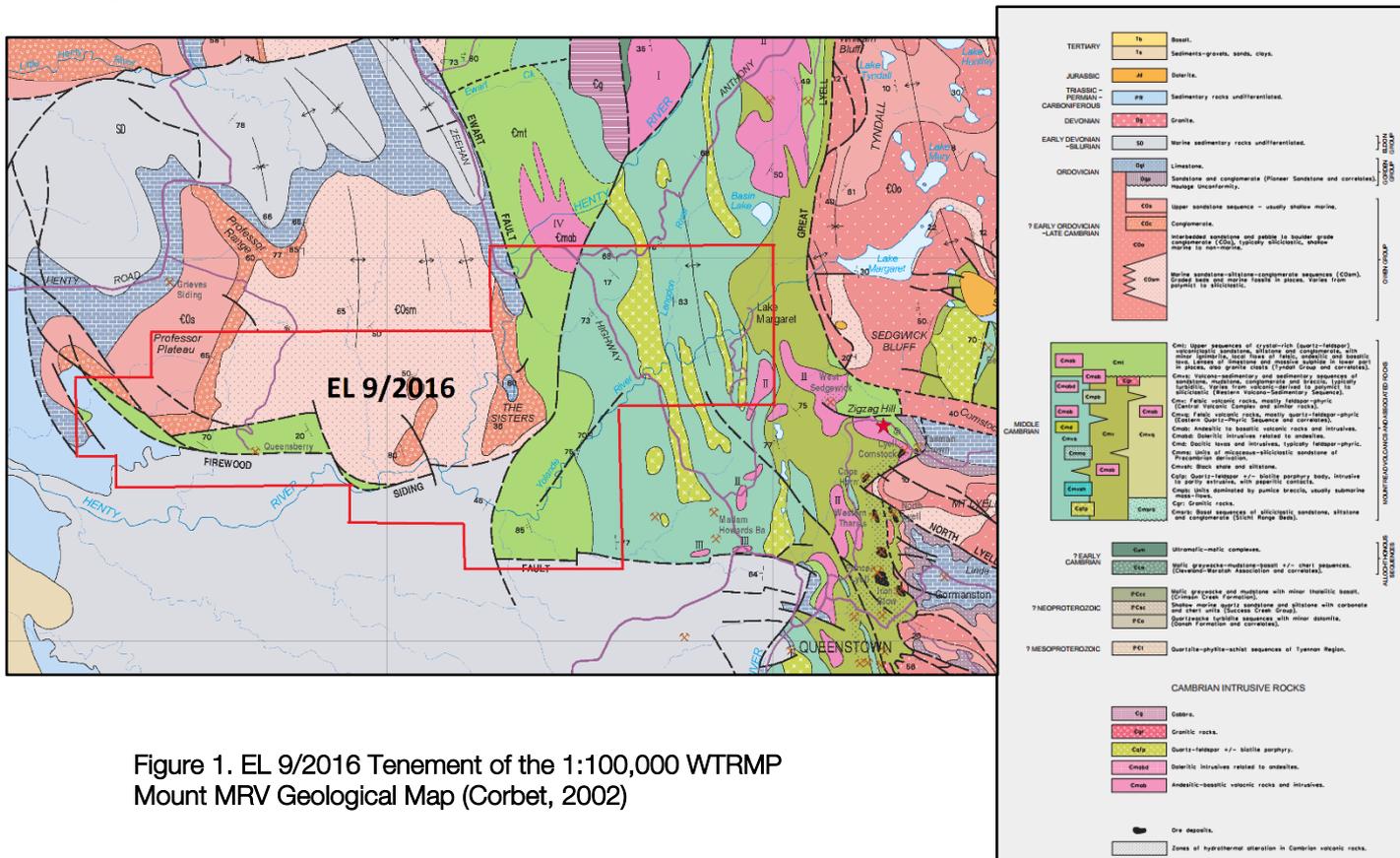


Figure 1. EL 9/2016 Tenement of the 1:100,000 WTRMP Mount MRV Geological Map (Corbet, 2002)

1.4 Authority history and previous exploration

EL9/2016 was granted to Argent Minerals on 16 January 2017, for a period of six years with a minimum expenditure of \$20,000 over the first two years.

The Queensbury Mine lodes were discovered during the early years of exploration of the Western Division, and extracted via shallow adits by R. McKimmie et al from 1891. The deposit consisted of 4 lodes with an additional lode located further east and all typically contained pyrite, arsenopyrite, sphalerite, chalcopyrite, galena, tetrahedrite and bournonite in a quartz-siderite gangue (McNeill 2002).

The authority history and previous exploration for EL9/2016 is summarised in Table 1.

Company	Licence No.	Period	Exploration activities completed
New Consolidated Gold Fields (a'sia) Pty. Ltd	ML 11/12M66	1968	Line cutting, mapping, rock-chip and soil + stream sediment sampling
New Consolidated Gold Fields (a'sia) Pty. Ltd	ML 11/12M66	1970	Trenching and side cutting, mapping, soil samples, drilling and met work
New Consolidated Gold Fields (a'sia) Pty. Ltd	ML 11/12M66	1981-82	Mapping, drilling, resource estimation
Amoco Minerals Australi	EL 4/78	1983-84	Stream sediment sampling and Aeromagnetic survey
Oceania Tasmania Pty. Ltd.	EL 10/85	1985-86	Mapping and track cutting
Amoco Minerals Australia Company, Electrolytic Zinc Company of Australasia Ltd	EL 4/78	1987-88	Data review and sampling
CRA Exploration Pty. Ltd & Allegiance Mining N.L	EL 34/88	1989-90	Gradient IP survey
Pasminco/Zinifex	EL 11/01	2001-05	Data review, Pb-Isotope analysis, gridding, mapping, soil and rock chip sampling
McDermott Mining Group	EL 4/07	2007-09	Soil and rock chip sampling
Australian Hualong Pty Ltd	EL 19/10	2010-13	aeromagnetic survey, drilling

Table 1. Summary of authority history and previous exploration

1.5 Exploration rationale

The MRV is host to several major VHMS deposits (>1 million tonnes) such as Mt Lyell (Cu-Au) and Rosebery (Zn-Pb-Cu) as well as more than thirty sub-million ton VHMS prospects (Large, 1992).

EL 9/2016 Queensbury has the potential to host both Devonian Pb-Zn vein and Zn-Pb-Cu-Au VHMS mineralisation within the MRV. Queensbury will be explored using the blind VHMS concept model based on Pb dating data obtained from McNeill and Skirka (2006) achieving a near Cambrian type signature. Based on prior knowledge of Zeehan mineral field's Oceana Pb-Zn-Ag mine's Pb dating, a concept of exhalative mineralisation or VHMS type mineralisation will be test the area.

Proposed exploration for both the 2017 and 2018 reporting periods are a selection of non-invasive geological activities:

1. Review of historical data and previous exploration
2. Preliminary field reconnaissance
3. Local geology mapping
4. Stream and soil sampling

1.6 Exploration philosophy and objectives

Argent Minerals Limited is an ASX listed Company focused on creating shareholder wealth through the discovery, extraction and marketing of precious and base metal products within the highly productive Eastern Australian Palaeozoic VHMS geologic terrane (Large et al, 1998).

Argent's strategy to achieve this goal comprises of three key elements; exploration, capital efficiency and production, with exploration featuring as the key immediate driver of growth. The exploration strategy of Argent Minerals at EL 9/2016 is primarily focused on the targeting of VHMS Ag-Pb-Zn-Cu and Au mineraliation similar to what has been previously discovered at the historic Queensbury Mine.

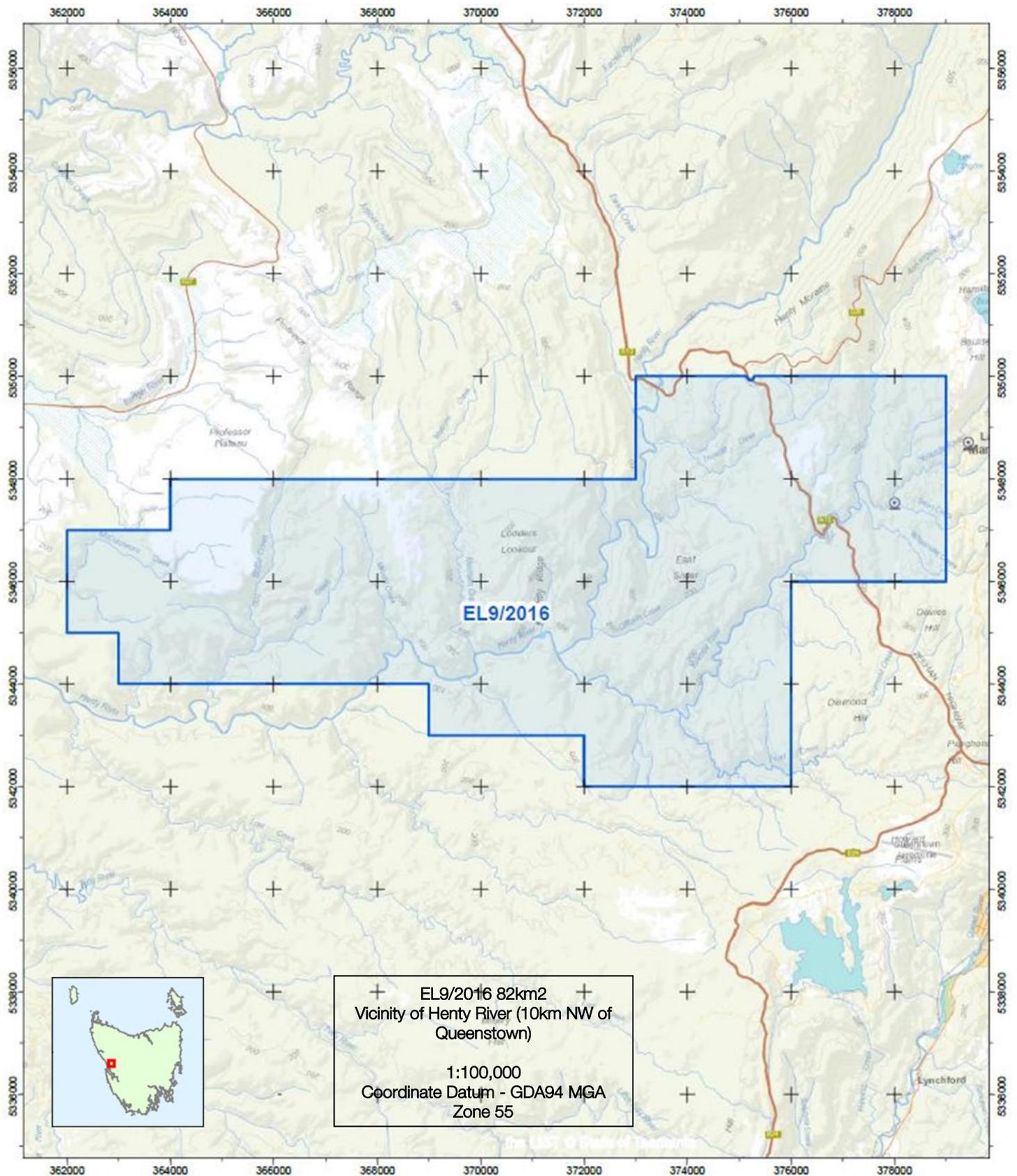


Figure 2. EL9/2016 tenement location / areas of activity on the NW coast of Tasmania

2 EXPLORATION COMPLETED IN REPORTING PERIOD

During the reporting period 17 January 2018 to 16 January 2019, Argent Minerals conducted the following exploration activities (figure 2):

1. Council consultation
2. Site preparation and reconnaissance
3. Diamond drill core analysis via Hylogger spectral scanner

Proposed exploration not yet completed:

4. Soil and stream sampling.

2.1 Council consultation

Parks and Wildlife Service Tasmania Ulverstone Office was consulted during the site inspection completed in February as well as phone discussions during October 2018 regarding area access and gate control.

2.2 Site preparation and reconnaissance

The Company completed a partial drive and walk-in site visit to assess the accessibility and condition of the tenement area. The main objectives of the reconnaissance was to scope the work required (bridge repairs, trail upgrades, clearing etc) in preparation for the upcoming stream and soil sampling and future drilling equipment mobilisation and pad preparation.

2.3 Diamond drill core analysis via Hylogger spectral scanning

Both of Australian Hualong Pty Ltd's non-assayed diamond drill holes were sent to Mineral Resource Tasmania (MRT) for analysis by Hylogger spectral scanning. Wavelengths analysed were VNIR, TIR and SWIR. Hylogger scans were completed on 13 and 15 December however results and invoice/payment of the core were only made available in the current reporting period.

2.4 Stream and soil sampling

Due to scheduling conflicts and unfavourable weather conditions, stream and soil sampling has been postponed until 2019.

2.5 Activities environmental impact

All activities undertaken by the Company are designed with minimal environmental disturbance in mind. All disturbances that do occur are rectified with a high standard of rehabilitation as quickly as possible.

2.6 Expenditure during the reporting period

In accordance with s.26 of the Mineral Resources Development Act 1995, the minimum expenditure for the first two years of the licence has been determined to be \$20,000.

For current expenditures and expenditure breakdown, please see the Annual Rental Return (Appendix 1).

3 RESULTS AND DISCUSSION

3.1 Council consultation

Parks and Wildlife Services Tasmania (Ulverstone Office) were consulted regarding area access and gate entry to the Queensbury Mine Track. The Company will remain in contact and continue to update Parks and Wildlife with anything of relevance.

The Access gate (figure 5) does not stop 4-wheel motorbikes or small 4WDs gaining access to the site and it is recommended that a trench and bund or pylon be constructed besides the gate to prevent future unauthorised access.

The access gate lock has been replaced and new keys issued to;

- NPWS (Strahan based)
- Argent Minerals Limited Sydney Office
- Kempfield, Trunkey Creek Field Office.

3.2 Site preparation reconnaissance

The Queensberry Mine Track is in poor condition, accessible by 4WD only (figure 3). During reconnaissance, 5 km along the trail it was determined to be unsafe to continue by 4WD due to poor weather condition impacting on the track. The first 1.5 km section of the Queensbury Mine Track's is characterised by a steep and rocky rise onto the Professor Plateau with deeply incised gutters. The hill climb onto the plateau will require a digger to fill in ruts and drains that have been long washed away. The plateau section of the trail is a well-constructed gravel road across the open button grass plains in fair condition with some drainage requiring only minor upgrades. Once off the plateau the undulating trail into the Queensberry Mine narrows with variably rough and boggy terrain that is difficult to pass in wet conditions irrelevant of the vehicles standard. The section of the track will require upgrading to an "all-weather" accessible level. Vegetation off trail was dense with minimal accessible outcropping rocks available. Vegetation clearing due to its density will be slow and at a high cost.

Queensbury Mine historic workings has had no rehabilitation and is now significantly overgrown with rainforest flora and/or reed grasses. The site contains derelict infrastructure such as a long-standing battery, mullock rock piles and other associated mine workings.

The digger will have better suited than a dozer and can repair any drainage required when tramping along the track. The going rate of a digger and operator can be around \$2500 - \$3500 on a 10-hour day rate. This does not include the mobilisation rate which can be up to \$3000 from the machinery's base to work program site. Road repairs are estimated to take 4 days. The report is available in appendix 2.

3.3 Diamond drill core analysis via Hylogger spectral scanner

Laboratory results of the non-assay Australian Hualong Pty Ltd core is summarised below with Hylogger reports of both LCD-01 and LCD-04 available in appendix 3.

3.3.1 LCD-01 Summary

The geology of drillhole LCD-01 alternates between shale, volcanoclastic both mafic in content. The alteration zone has gradational boundaries and is centred on a chlorite-rich zone. Mineralisation is minimal.

3.3.2 LCD-04 Summary

The geology drillhole of LCD-04 has a repeating sequence of alternating volcanoclastics and thinner bands of shale, interrupted by zones of breccia and structures downhole. The hole indicated by its chemistry suggest little to no alteration. Mineralisation is minimal.

3.4 Stream and soil sampling

Stream and soil sampling campaign is to commence in 2019 around the Queensberry tenement.

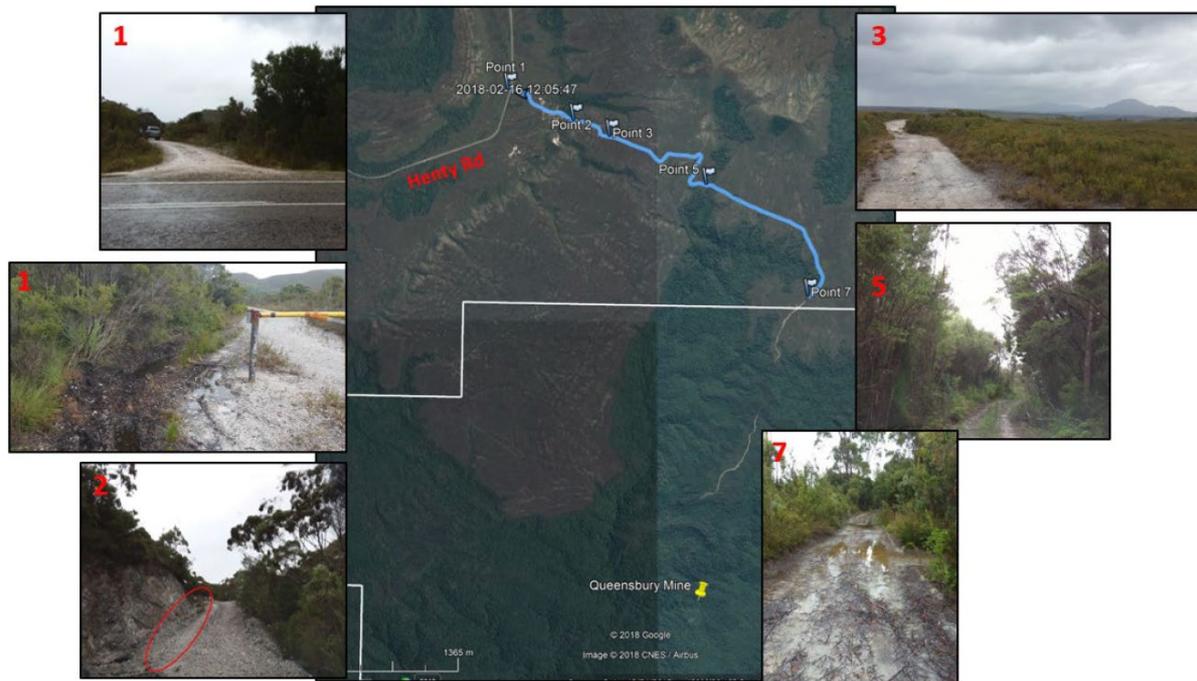
3.5 Activities environmental impact

All work undertaken during the reporting period by Argent Minerals was non-invasive and therefore little to no impact on the environment. However, it was noted during recent field work that remnant mining activities in the area have left an on-going environmental hazard of acid mine drainage and rubbish.

3.6 Expenditure during the reporting period

During the current reporting period of 17/01/2018 to 14/01/2019 (date of report generated) Argent Minerals had a total exploration expenditure of \$ \$30,783.38. This tenements spending has exceeded the 2-year minimum expenditure requirements of \$20,000.00, currently at \$49,992.04.

Figure 3. Exploration activities summary map undertaken during the current period.



4 RECOMMENDATIONS AND FUTURE EXPLORATION WORK

EL 9/2016 has known mineral deposits and limited exploration justifying further exploration by the Company in 2019. Planned exploration work will encompass:

- Detailed 1:10,000 geological and structural field mapping to confirm previous authors observations and improve our understanding of the region.
- Commencement of the deferred stream sampling campaign and analysis.
- Commencement of the deferred soil sampling campaign and analysis.

5 ENVIROMENTAL MANAGEMENT

All exploration activities completed during the reporting period were of low disturbance with no notable environmental impact and therefore subsequently did not require rehabilitation. None-the-less, Argent Minerals endeavours to leave any tenement in its possession in the same condition or better.

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