



Exploration Licence EL8/2014 at Pipeline Road Annual Report

30 July 2023
to
30 July 2024

13 June 2024

copies: (1) MRT
(1) Grange Savage River

Author: Roger A. Hill | Geology Manager
Grange Resources Tasmania
34a Alexander Street | Burnie | TAS | 7320
PO Box 659 | Burnie | TAS | 7320
Fax + 61 3 6432 3262 | Mobile +61 437 523 989
www.grangeresources.com.au Grange Resources Tasmania

INTRODUCTION.....	3
<i>Exploration Rationale</i>	3
<i>Licence Details</i>	3
<i>Location</i>	3
<i>Geology</i>	7
Summary of Recent exploration activities 2019-2021.....	9
Pipeline Rd EL8-2014 Work completed to July 2021	10
Pipeline Rd EL8-2014 Work completed to July 2024 –(Current reporting period).....	11
1.1.1 EL08/2014 Pipeline Track Geological Mapping.....	11
Pipeline Rd EL8-2014 Work completed from July 2023 to June 2024:	14
Work Plan for July 2024-July 2025 (Third extension of term of the license).....	16
FIGURE 1 SAVAGE RIVER LOCATION MAP	4
FIGURE 2 LAND TENURE AS AT JUNE 2024.....	5
FIGURE 3 LAND TENURE EL8-2014 (NOV 2020) FOLLOWING GRANT OF 4M-2019 (17 TH AUG 2020.).....	6
FIGURE 4 GEOLOGY	7
FIGURE 5 LOCAL MINE SCALE GEOLOGY	8
FIGURE 6 SUMMARY GEOLOGICAL MAP TRAVERSE 5411500MN	9
FIGURE 7 FIELD LOCATIONS INCLUDING THOSE MENTIONED IN TEXT OVER LIDAR TERRAIN MODEL.....	12
FIGURE 8 INTERPRETED 250K SCALE GEOLOGY WITH FIELD LOCATION GEOLOGY MATCHED TO MRT’S 1:25,000 SAVAGE GEOLOGICAL MAP SHEET WITH HISTORIC DRILL HOLES (GREEN DOTS) AND PROSPECTS. SHOWING FIELD LOCATIONS FROM TEXT. SEE FIGURE 3 IN ATTACHED REPORT FOR LEGEND.	13
FIGURE 9 MAGNETICS INTERP- MAFIC / GABBRO (LACW) MAGNETIC UNIT TRENDING TOWARDS LACO (MAIN HOST ASSEMBLAGE). INTERPRETED GEOLOGY POLYGON TRANSPARENCY OVER NW SUN ANGLE WTRMP (2001) 1VD AEROMAGNETICS.....	14
FIGURE 10 ESTIMATED COSTS WORKPLAN 2024-25 (MAPPING AND REPORT COMPLETED 2023 - ASSAYING COSTS ONLY IN '24-25)	16

TABLE 1 EL8-2014 QUARTERLY EXPENDITURE REPORT-JULY2022-JUNE 2023	14
--	----

INTRODUCTION

Exploration Rationale

Grange's interest is focussed on the entire catchment of streams and drainage flowing southwards from the northern divide (Figure 2 Land tenure as at Nov 2020:) onto the northern extent of the existing Savage River mine lease 2M-2001. Planning for potential life of mine extensions indicate that due to the possibility that water inundation north of planned waste rock dumps, the mine lease may need to expand beyond existing northern mine lease limits.

The following report summarises exploration activities completed at EL8/2014 at Pipeline Road during second extension of term 2021-2023 and the first year of the third extension of term (2023-25).

This document reports all activities using the GDA94 datum.

Licence Details

Exploration licence EL8/2014 at Pipeline Road

Located at Pipeline Road 3km north of Savage River Tasmania.

ID: 23550

Area: 9 sq km blocks

Status: Granted 8 August 2014

Term: The term of the licence expires 29 June 2025 (Third Extension of Term)

Reporting period: July30 -2023 to July 30 2024

Tenement Holder: Grange Resources (Tasmania) Pty Ltd

Product categories: Category 1 - Metallic minerals and atomic Substances,

Category 3 – Construction Materials; sand gravel and stone.

Location

The Exploration licence EL8-2014 at Pipeline Road is located approximately 10.7km north by road of the Savage River Mine and concentrator. Savage River is located approximately 100km south west by sealed road from Burnie (Figure 2). The lease is accessed by the all-weather gravel road between Savage River and Corinna, and then by a bush track of approximately 2km.

Local topography in the Broderick Creek catchment is rugged, with a broad elevated plain to the north of the licence area and incised valleys and steep hills extending southwards. The drainage flows southward onto the Savage mine lease via McAuliff and Broderick creeks.

Regional vegetation includes undisturbed rain forest, wet eucalypt, acacia and open heath land. The immediate area of the prospect has previously been logged extensively approximately 20 years ago, with almost no mature trees present in the working area. Climate is wet temperate with an average annual rainfall of 1,950mm and mean monthly temperatures ranging from 3-19°C.



Figure 1 Savage River Location Map

Tenure

Exploration Lease EL 8/2014 “Pipeline Road” was granted to Grange Resources Tasmania Pty Ltd on 8th August 2014, following an open tender process on Exploration Release Area 959 (ERA959). Part of EL8-2014 was converted to Mining Lease 4M-2019 , granted 17th August 2020. EL8/2014 now comprises an area of 9 km².

The licence encompasses the entirety of the Broderick Creek catchment and provides continuous leasehold connecting EL8/2014 and the Savage River Mine Lease 2M/2001 and Pipeline Road Mine Lease (4M-2019) as shown in figure 2 land tenure below.

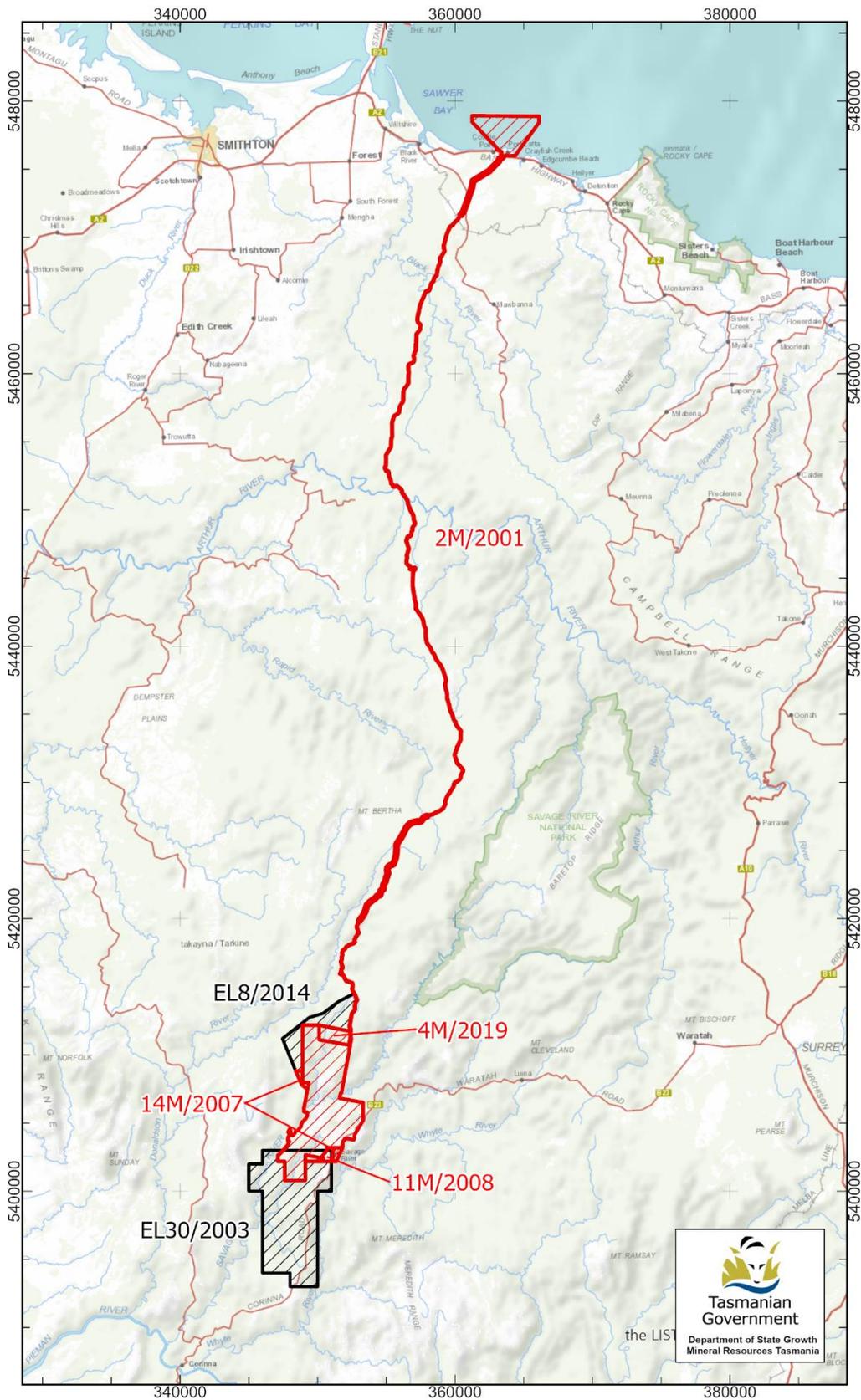


Figure 2 Land tenure as at June 2024

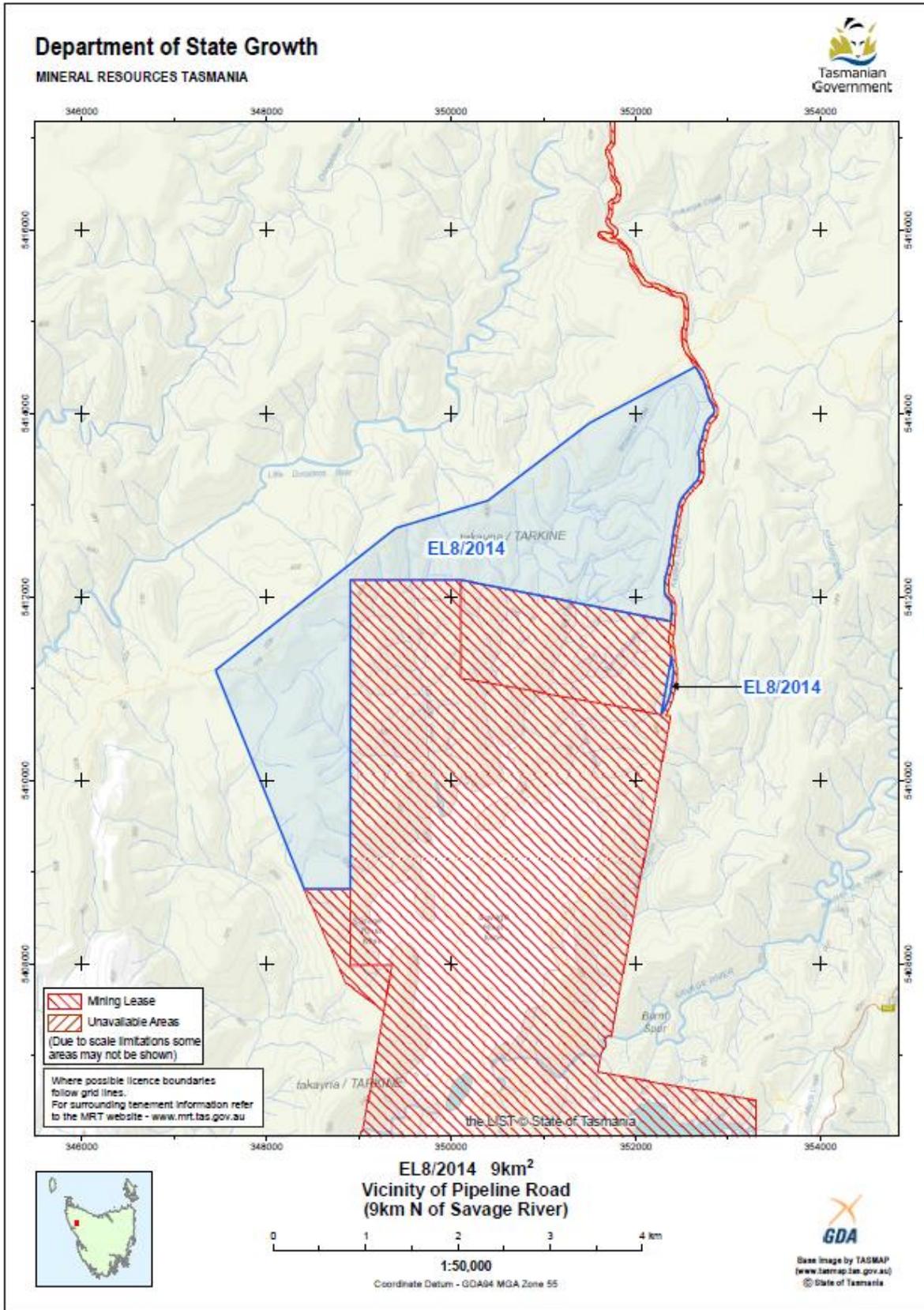


Figure 3 Land Tenure EL8-2014 (Nov 2020) following grant of 4M-2019 (17th Aug 2020.)

Geology

The project area covers that portion of the Arthur Metamorphic Complex (“AMC”) immediately to the north of the Savage River iron deposit. The complex is also known as the Arthur Lineament. It is an elongate zone that has been subject to multiphase metamorphism, tectonism, alteration, and veining. The central portion of the complex strikes north-northeast along the centre of the project area. Alteration was especially intense to the south of the tenement at Savage River, where iron deposits formed within the zone as the result of skarn replacement.

The original rock units within the complex were of Neoproterozoic age and have been interpreted to include basaltic volcanoclastics and/or lithic arenites, dolerite, and dolomite. Low grade regionally metamorphosed Neoproterozoic clastic, sediments, basalts, and dolomite are present, and strike parallel to the complex, both to its west and east. Cambrian mafic and ultramafic rocks are to the southeast of the project area and have been prospected and mined for platinum group elements and base metals.).

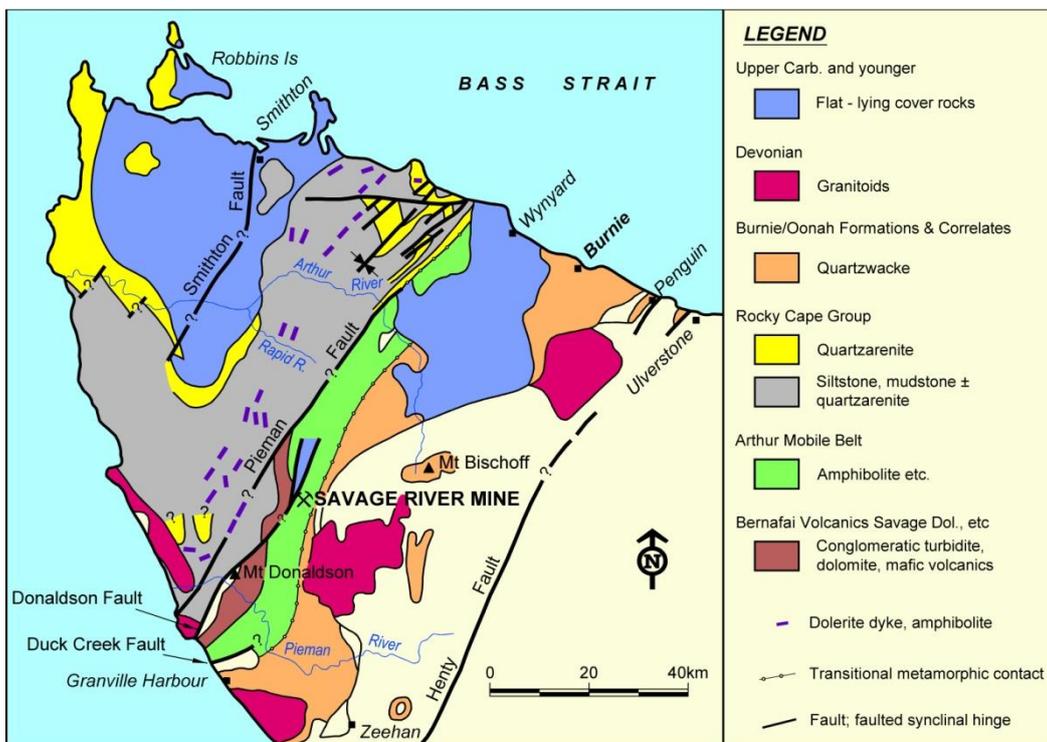


Figure 4 Geology

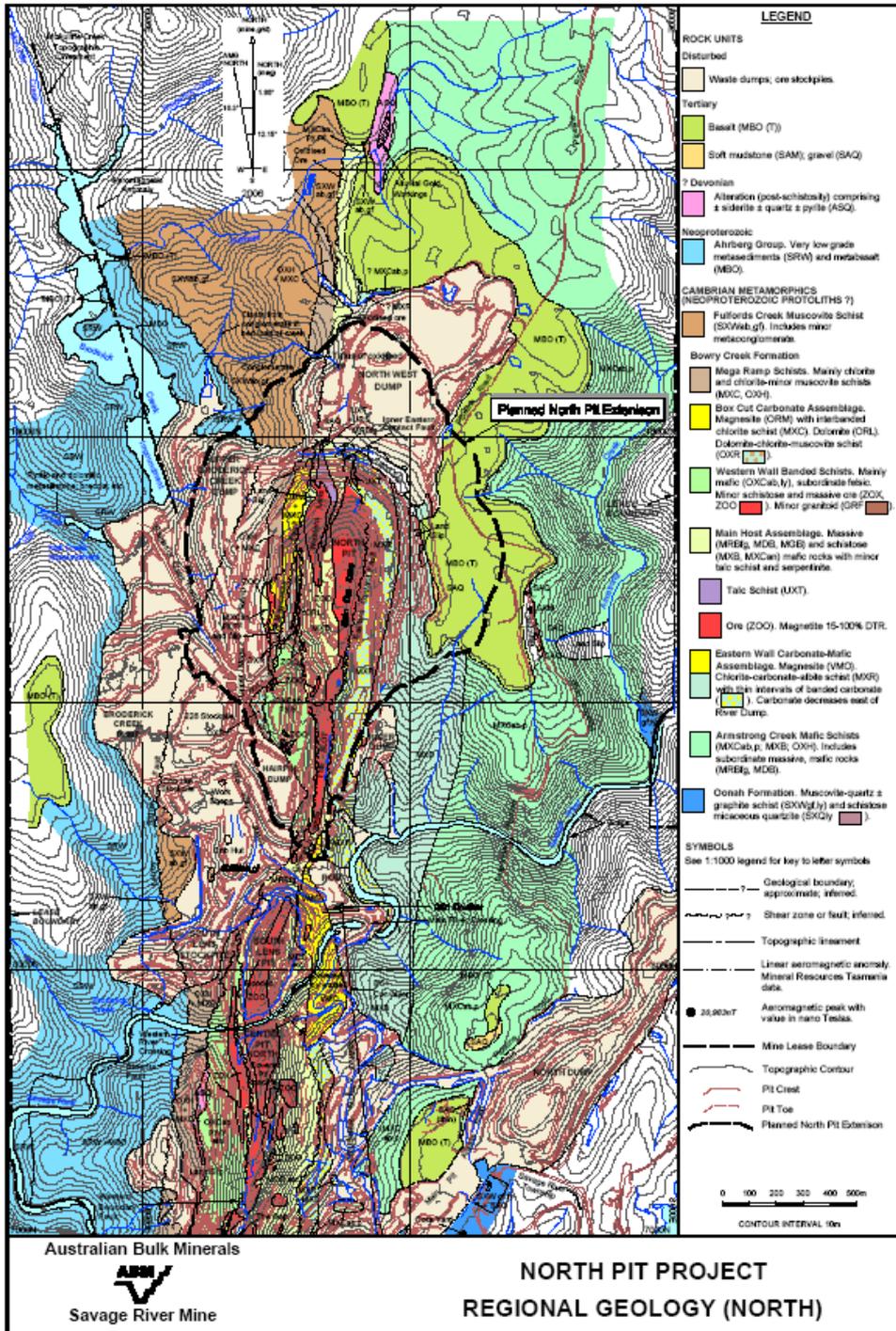


Figure 5 Local Mine Scale Geology

Summary of Recent exploration activities 2019-2021

Yr 6: 30/07/2019 to 29/07/2020

During the period 4.2 km of new grid line was cut on (GDA 94) 5411500mN and an additional 650m access track up McAuliffe creek to access this grid line.

Summary of line 5411500mN field mapping.

“The primary objective of field work was to increase geological knowledge within EL08/2014, extending mapping north of MRT’s recently produced Savage River 1:25,000 scale geological map sheet (Cumming et al., 2019). Data generated aimed to duplicate MRT’s geological mapping codes, allowing potential incorporation in MRT’s next Donaldson map sheet.

Mapping aimed to provide a broad overview and was undertaken over three days in February 2020. Priority was investigating a 4.2km long E-W grid line (5411500mN) and a traverse up McAuliffe Creek, with economic geology considered via investigation of an aeromagnetic anomaly in the EL’s east. Whilst not being a key focus, some magnetite potential was established. Further exploration considering IOCG models is warranted near this anomaly and the proximal Specimen Reef Au Mine. Limited rock chip samples were collected for reference and/or select later analysis as required. MRT rock codes were loosely assigned to field location notes.” Robert Reid March 2020

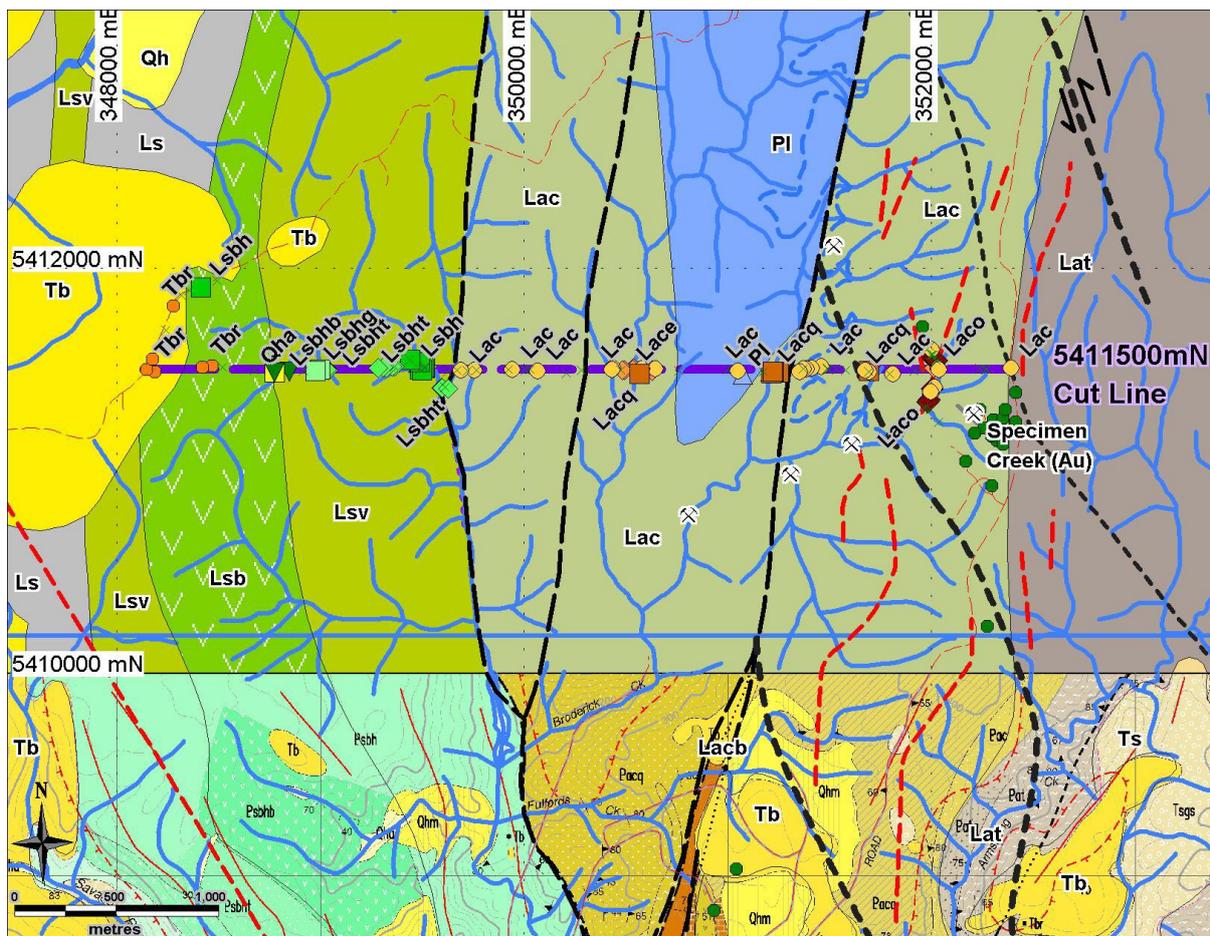


Figure 6 Summary Geological Map traverse 5411500mN

Field location geology codes matched to MRT’s 1:25,000 Savage geological map sheet (bottom), interpreted magnetic unit distribution (red dashed lines) and historic drill holes (green dots) over modified MRT 1:250,000 digital geology (2020). (Fig 2 in report attached).

Pipeline Rd EL8-2014 Work completed to July 2021

Eight samples of rock, from the 5411500mN Cut Line, near Specimen Ck, on EL08/2014 north of Savage River, were analysed by thin section petrology, and some by XRD and XRF, to determine their nature and likely position in the stratigraphy of the Arthur Metamorphic Complex.

The samples were all prepared, examined by stereomicroscopy, carefully subsampled representatively for thin sections and tested by pXRF. In addition, some were analysed by XRD (X-ray diffraction) & NDIR (Non-dispersive Infra-red C & S analysis). Other than the thin sections, all samples were prepared and tested in the Mineral Resources Tasmania (MRT) laboratories, Rosny Park and Mornington, Tasmania. Samples were described with reference to our petrology studies on the Savage River deposits (Bottrill & Taheri, 2008 and Bottrill et al., in prep).

Ref: LJN2020-128-Grange-R3 attached

Pipeline Rd EL8-2014 Work completed to July 2022

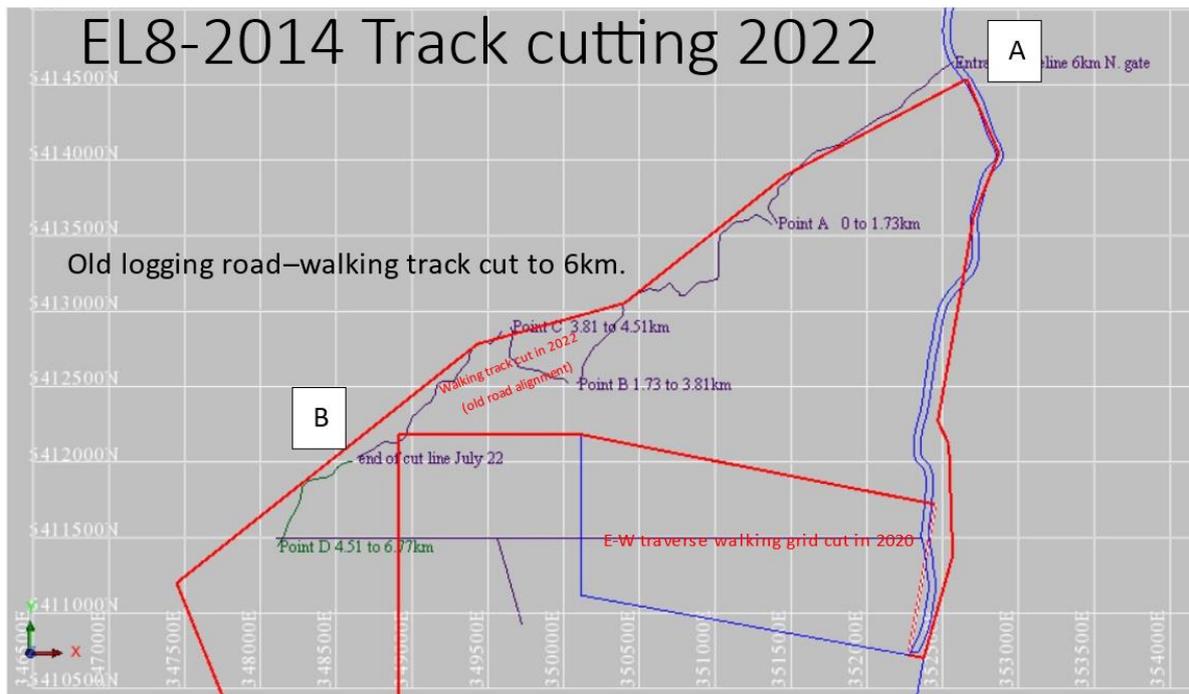


Figure 7 Map of cut grid/walking track (point A to B)

The cut walking track enabled planned field mapping in 23-25 extension of term.

Pipeline Rd EL8-2014 Work completed to July 2024 –(Current reporting period)

1.1.1 EL08/2014 Pipeline Track Geological Mapping

Summary:

Three days of field mapping in Nov of 2023 on the recently cut track was compiled with previous 2020 data, aiding re-interpretation and modification of 250k scale MRT digital geology.

See Figure 7 Map of cut grid/walking track (point A to B)

Improvements in geological understanding and boundary location were made with further mapping required to confidently link through to the 5411500mN line. More questions than answers are currently raised, but can be addressed with ongoing mapping in conjunction with LIDAR, magnetics and radiometrics interpretation.

The block of Permian sediments with a coarse conglomeratic basal unit was shown to consistently dip relatively shallowly to the east. The Permian block is apparently fault bounded on the eastern side and arguably partly unconformably onlapping and somewhat irregular to the west over the Proterozoic.

Little foliated possible intrusive mafic / gabbro(?) was identified coincident with an elevated aeromagnetic trend on the Logging Track. Similar fault bounded rock (/boudins?) on line 5411500mN lies on the same magnetic trend, with petrography from 2020 sampling demonstrating likely affinities to the West Wall Assemblage. Regardless of scant evidence for direct correlation with the West Wall Mine Sequence, the magnetic mafics occur within a sheared structural corridor forming a mappable unit extending north of the Savage River Mine.

An inferred NW trending faulted zone is identified crossing the Lac unit west of the newly defined magnetic mafics. This fault highlights the potential for further similar unrecognised faults. An example being an apparent dextral fault inferred to offset the magnetic mafics north of the tenement, which extends concealed beneath the Permian and emerges as a LIDAR lineament within the northeast of EL08/2014.

Silicification and sericitization were located enveloping a possible intrusive in upper Broderick Creek. Linkages cannot be directly drawn with Specimen Reef and the area of an epithermal textured petrographic sample.

A brief review of Specimen Reef (Au) suggests the related white mica and siderite/ankerite alteration may be reflected in Th radiometrics, which form NNW and NE striking trends. The intersection lineation between these inferred structures is a potential drill target for plunging Au ore shoots. Further assessment of economic potential in the eastern belt (Bowry Formation) is warranted to follow up potentially Au related Th radiometric anomalous zones such as near Davis Creek and the epithermal-like textures identified from petrography on 2020 mapping samples. Compilation of existing data is recommended prior to continued focused field work.

A few of the map images from the attached report are included below for emphasis. Please see the full report for their full description.

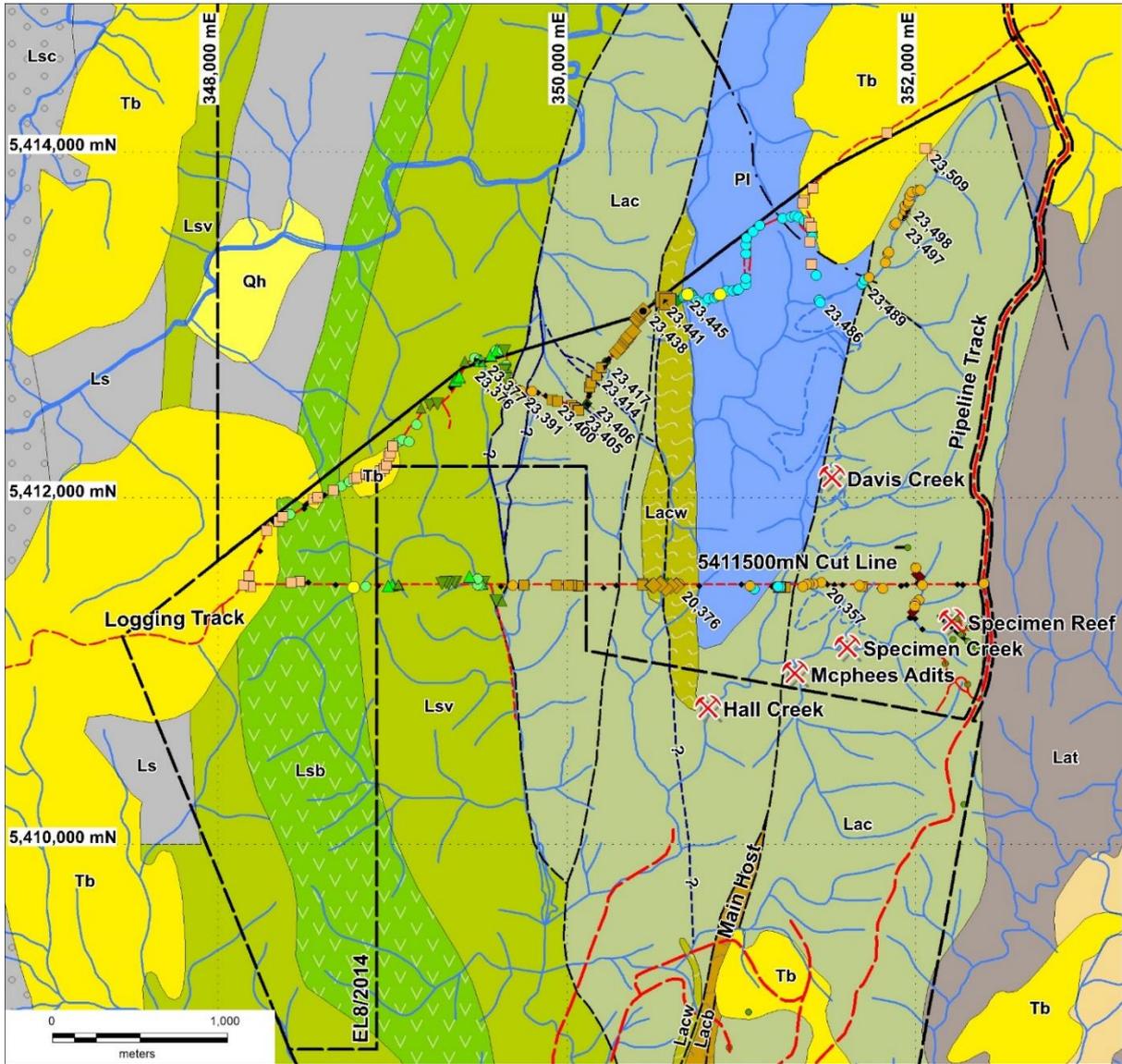


Figure 8 Interpreted 250k scale geology with field location geology matched to MRT's 1:25,000 Savage geological map sheet with historic drill holes (green dots) and prospects. Showing Field locations from text. See Figure 3 in attached report for Legend.

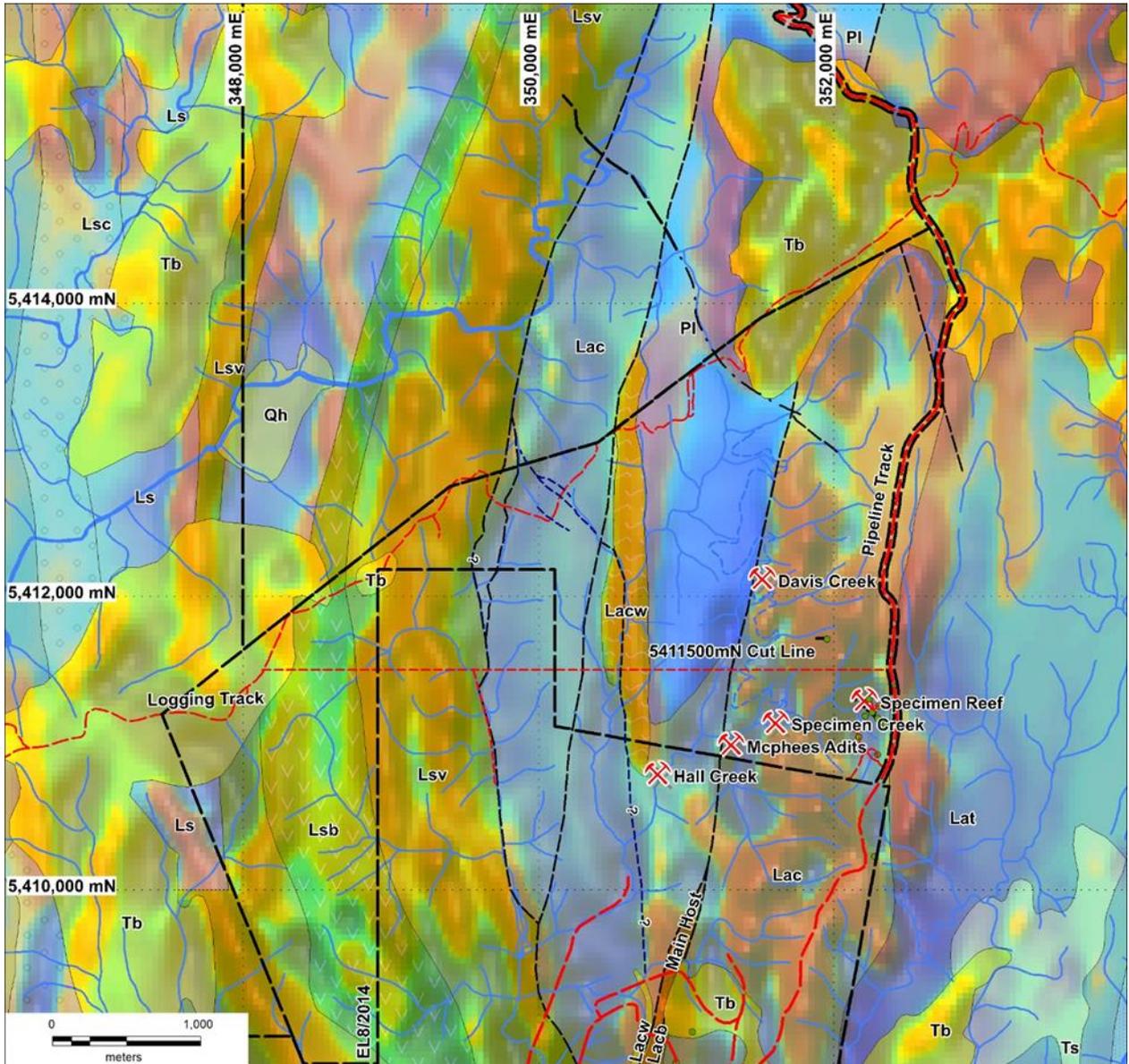


Figure 9 Magnetics Interp- mafic / gabbro (Lacw) magnetic unit trending towards Laco (Main Host Assemblage). Interpreted geology polygon transparency over NW sun angle WTRMP (2001) 1VD aeromagnetics.

Pipeline Rd EL8-2014 Work completed from July 2023 to June 2024:

Completed Activities

- Nov 2023, Follow-up detailed geological and structural mapping on recently opened walking 6.1km track complementing the reconnaissance geological mapping recently completed in 2020. The mapping and associated report is in Appendix 1 affixed to this report.
- Integrated these findings with the MRT's planned 1:25,000 scale geological mapping.
- Utilised the LiDar on the Donaldson mapping campaigns.

Table 1 EL8-2014 Quarterly Expenditure Report-July2022-June 2023

Exploration Quarterly Report (4 Quarters) from Q3 2023 to Q2 2024		EL8/2014 Pipeline Road		Actuals Q3 2023 Jul-Sep	Actuals Q4 2023 Oct-Dec	Actuals Q1 2024 Jan -Mar	Actuals Q2 2024 Apr-June
1. Geoscientific Costs	Geology			\$ -	\$ 11,670	\$ -	\$ -
	Geochemistry						
	Geophysics			\$ -	\$ -	\$ -	\$ -
	Remote Sensing			\$ -	\$ -	\$ -	\$ -
	Total			\$ -	\$ 11,670	\$ -	\$ -
2. Drilling & Gridding Costs	Gridding				\$ -	\$ -	\$ -
	Drilling Cost			\$ -	\$ -	\$ -	\$ -
	Drilling	Diamond	m	\$ -	\$ -	\$ -	\$ -
		Reverse Circulation	m	\$ -	\$ -	\$ -	\$ -
	Total		(s)	\$ -	\$ -	\$ -	\$ -
3. Land Access Costs				\$ -	\$ -	\$ -	\$ -
4. Rehabilitation Costs				\$ -	\$ -	\$ -	\$ -
5. Feasibility Study Costs	Flora and fauna study-North			\$ -	\$ -	\$ -	\$ -
6. Other Costs				\$ -	\$ -	\$ -	\$ -
8.)	Totals			\$ -	\$ 11,670	\$ -	\$ -
9. Cumulative Expenditure at time of last report				\$ 115,550		\$ 127,220	\$ 127,220
Total expenditure to date	(sum of 8 and 9)			\$ 115,550	\$ 127,220	\$ 127,220	\$ 127,220
Exploration Progress Report				1st Yr of third Extn of Term			
Q3 2023	No work done-						
Q4 2023	Mapping and geology Report of cut track						
Q1 2024	No work done-						
Q2 2024	No work done-						

Further work recommended :

Table 2 Samples collected in 2023 and recommended treatment.

Field ID	Field Number	East GDA	North GDA	Geology Description	Magsus (SI)	Sample Form	Sample ID	Sample Type2	Sampling Comments
23372	372	349364	5412679	pale gn. Very fine grained pelitic schist		float	320951	grab_rc	
23414	414	350170	5412710	gn ch(m) mu(w) fol(m/s) schist.		subcrop	320952	grab_rc	
23438	438	350440	5413081	wed(w) massive blocky. FeO(w). Medium grained fs(minor laths)-relict px gndmass. likely gabbro? MnO(w/m) on planar frags. little foliated	0.5	subcrop	320953	comp_rc	thinsection and XRF; 25k Lacw or Lsbhm?
23445	445	350669	5413171	very poorly sorted granule-cobble sandstone. light gn matrix, appears to have weak fol? likely Permian. mod well consolidated = not Tertiary		outcrop	320954	grab_rc	
23494	494	351846	5413420	pale green sr?(w) ch?(w) fs phytic to weakly fine grained fs equigranular text. fol(w) schist? possible intrusive?. common regularly 5cm spaced joints 310/68w. weakly indurated more float sub angular with sub rounded edges boulder cream selvages on pale green sil(w/m) relict sr(w/m) schist. lht	0.25	outcrop	320955	comp_rc	thinsection; lithology & alteration characterisation
23495	495	351876	5413578	bn/ora flecks after ch? in matrix with fine ch(w) veinlets on fol.	0.005	float	320956	grab_rc	thinsection; lithology & alteration characterisation

Work Plan for July 2024-July 2025 (Third extension of term of the license)

EL8/2014 Geological Mapping Project Budget							
Note:- Numbers / rates stated are estimates in some cases; grey boxes can be changed with those changes being reflected in the finally budget tally.							
Many totals are derived from background calculations in the tabbed sheets							
Project						E.L.	8/2014
Supervisor	R Reid					Date	20 June 23
Assay prices updated 20/June'23 RHill							
Description	geological mapping and rock chip sampling.					Total	\$15,347
From	To					Rate	Totals
Days							
Labour	Number					Rate	Totals
Geologist RR	1	3			mandays @	\$1,100	\$7,700.00
Field Assistant	1	4			mandays @	\$500	\$2,000.00
Contingency labour (20%)							\$1,940.00
Supplies & Purchases							
Other (sample bags, field gear, etc)	30					cost / 100	\$50
Assaying							
Elements	Type					Number	
Admin fee per batch	BAT-01	1			ALS quote 1030491 May 2022	\$42.90	\$42.90
Sample Prep- Waste levy	LEV-01	20			ALS quote 1030491 May 2023	\$1.20	\$24.00
Sample Prep- LOG-22	LOG-22	20			ALS quote 1030491 May 2023	\$1.58	\$31.60
Crushing -CRU-21	CRU-21	20			ALS quote 1030491 May 2023	\$2.66	\$53.20
Crushing -CRU-21 (per Kg)	CRU-21 (charge per Kg)	60			ALS quote 1030491 May 2023	\$0.86	\$51.60
Splitting-SPL-21	SPL-21	20			ALS quote 1030491 May 2023	\$2.48	\$49.60
Splitting-SPL-21(per Kg)	SPL-21 (charge per Kg)	60			ALS quote 1030491 May 2023	\$0.59	\$35.40
Pulverise PUL-23	PUL-23	20			ALS quote 1030491 May 2023	\$9.45	\$189.00
Fire Assay Au	AU-ICP-21	20			ALS quote 1030491 May 2023	\$22.90	\$458.00
4 Acid Digest / ICP-AES & ICP/MS	ME-MS61	20			ALS quote 1030491 May 2023	\$47.43	\$948.60
Rock Chips / day	5						
Miscellaneous							
Freight	1					box / palettes @	\$80
Consultants							
Petrology	5					samples @	\$220
Contingency Assaying(20%)							\$612.78
TOTAL BUDGET							\$15,346.68

Completed Q3 2023

Planned Q3 2024

Figure 10 Estimated costs workplan 2024-25 (Mapping and report completed 2023 - Assaying Costs only in '24-25)

Appendices:

Appendix 1: EL082014_202406_01_2023MappingReport.pdf Author: Robert Reid

Appendix 2: EL8-2014 Exploration Licence Annual Return.pdf

Path= M:\Geology\Exploration Drilling\Exploration\Annual Reports\Pipeline Road\2024

..\..\Tenements\Current Leases\el8-2014\2023-24 Workplan\EL082014_202406_01_2023MappingReport.pdf

Filename= 20240620_Annual Mineral Exploration return_EL8-2014.pdf