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Exploration Licence EL8/2014 at Pipeline Road
Annual Report

30 July 2020
to
30 July 2021

21 July 2021

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

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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 May 2016:) 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.

This exploration licence EL8-2014 and the work conducted are aimed at conversion of this EL into a mine lease in the near future.

The following report summarises exploration activities completed at EL8/2014 at Pipeline Road during first five years of tenure (2015 to 2019) and the two year of the first extension of term (2020-21).

The report also serves to provide the basis of a further Application for Extension of Term for 2021-23

This document reports all activities using the GDA94 datum.

Licence Details

Exploration licence EL8/2014 at Pipeline Road
Located at Pipeline Road 3km nouth of Savage River Tasmania.
ID: 23550
Area: 11 sq km blocks
Status: Granted 8 August 2014
Term: The term of the licence expires 29 June 2021 (First Extension of Term)
Reporting period: July30 -2020 to July 30 2021
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 3-19ºC.

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 km^2.
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-2109) as shown in figure 2 land tenure below.

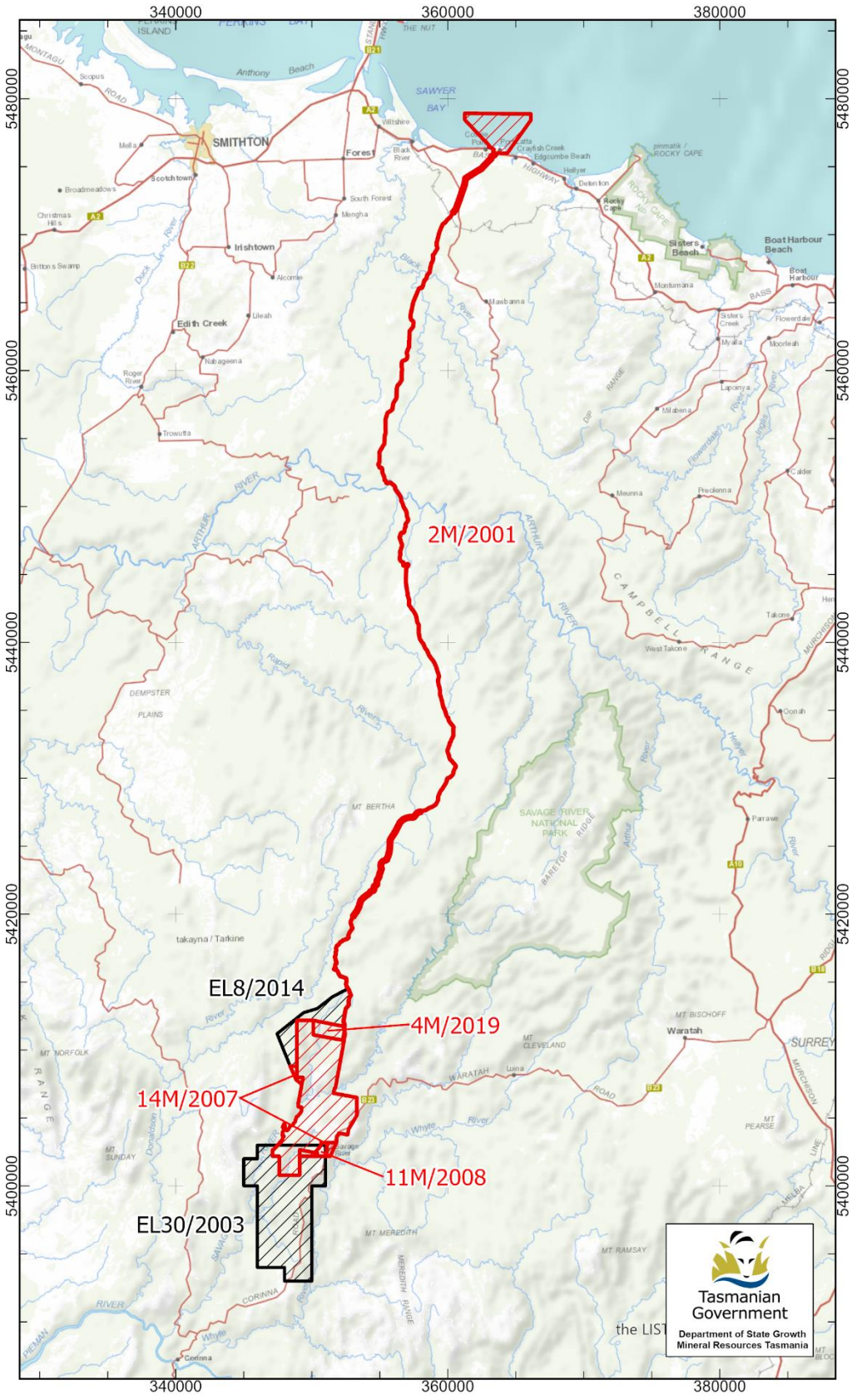

Figure 2 Land tenure as at November 2020

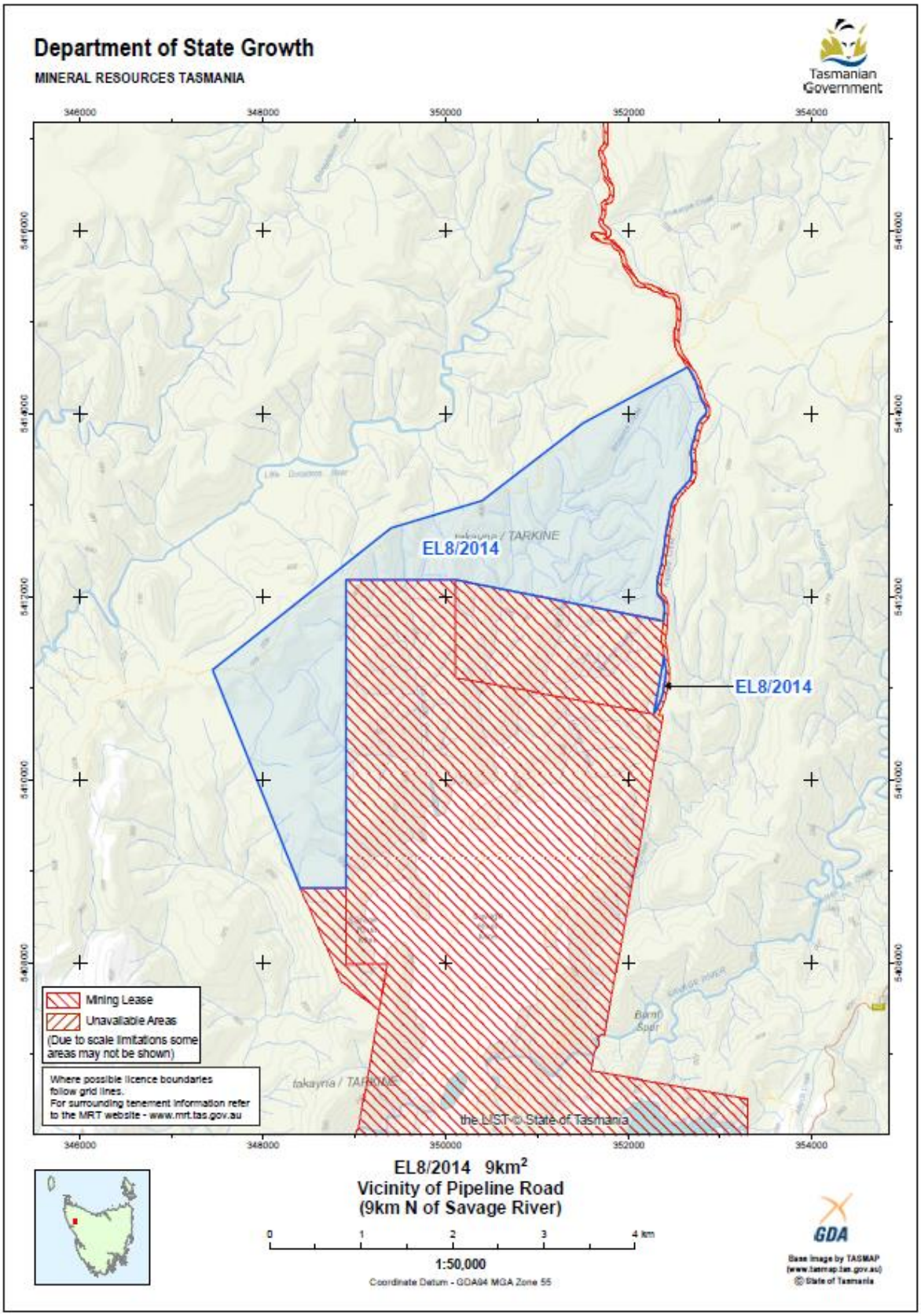

Figure 3 Land Tenure EL8-2014 (Nov 2020) following grant of 4M-2019 (17th Aug 2020.)

Mine Lease Granted:

On 17th Aug 2020 Grange Resources Tasmania Pty Ltd was granted a mining lease consisting of 235 Ha wholly within previous Exploration license EL8-2014. (fig4)

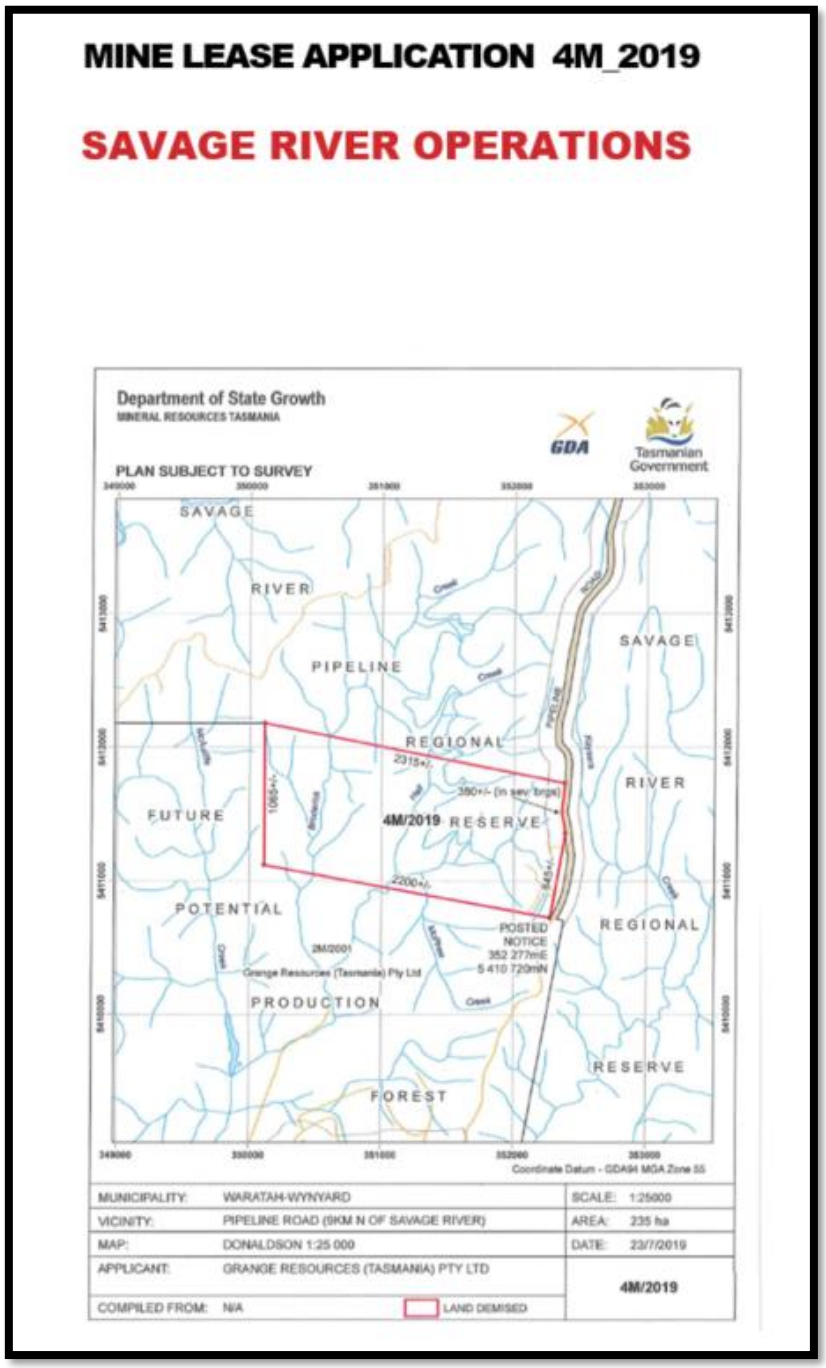

Figure 4 MLA 4M-2019 (granted)

The purpose of the ML is to allow possible water impoundment within the drainages which may occur as a result of approved mining and waste dump activity on neighbouring ML 2M-2001.

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.).

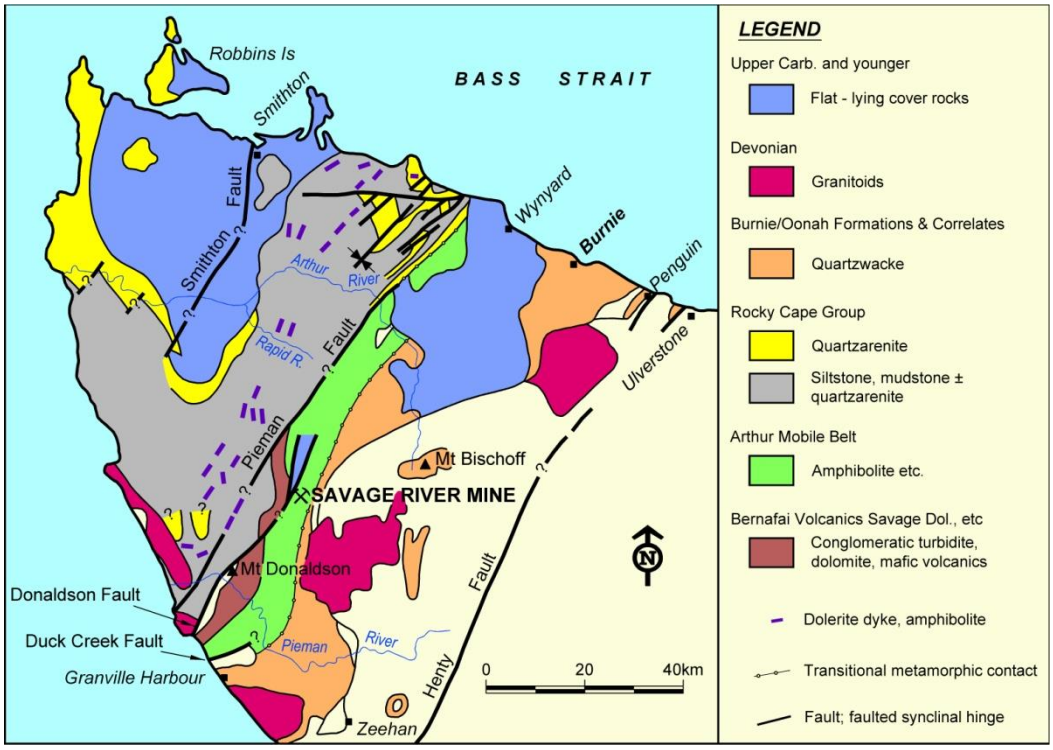

Figure 5 Geology

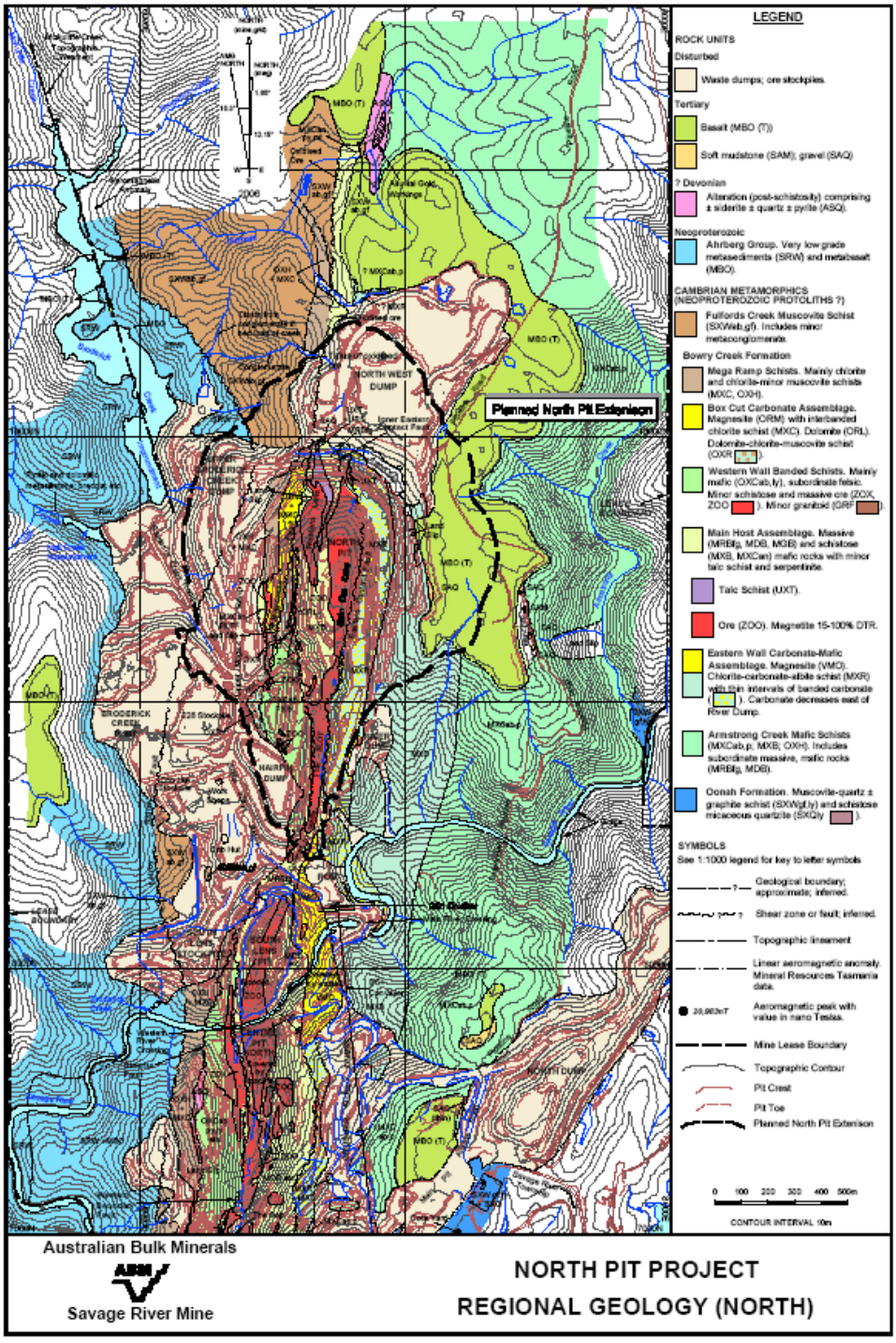

Figure 6 Local Mine Scale Geology

Review of previous work
Prior to Current Tenement- Literature search summary 2015
Specimen Reef Field was discovered by Thomas Greenway and Joseph Thunder in late 1882 and was visited by Government Geologist G. Thureau in 1884.
A thorough discussion of the field at that time is given in the following references;

- Thureau, 1884, pp3-4.
- Report of the Secretary of Mines for 1896-97, p.xlvii.

A century later, Industrial Mining and Investigations reported on the Specimen Reef Field as well as other local prospects then held under tenement EL4/61.
During the late 1960's to 1982 Industrial Mining and Investigations (then Savage Resources) completed geological, geochemical and geophysical surveys Geochemical surveys including stream sediment surveys at Davis and Specimen Creeks in 1981-2 with discouraging results.
In 1982, 15 diamond drill holes were drilled over a 600m strike length at Specimen Reef.
Only one significant result was DDH SPC1, as a narrow but high grade gold intersection; 0.2m @ 910g/t Au.
Savage Resources attempted to deepen several holes in 1989 after discovering the reef dipped steeper than originally targeted, with limited success, such that only 3 holes penetrated the reef.
Savage concluded in 1988 (prior to deepening the holes) that most gold occurances were like Specimen Reef; as narrow flat-lying carbonate-magnetite-gold zones with very little quartz. They further concluded that there was little scope for a bulk mineable gold target, existing as two narrow gold zones.
In 1997, GoldStream Mining NL / Titan Resources NL completed two diamond drill holes, intersecting 2m @ 0.56g/t Au in one hole and only 0.05g/t Au from the reef position in the second hole.
The aero-magnetic interpretation indicates that Specimen Reef is within a northeast trending structure which may extend for upt to 2km in either direction.
No potentially economic magnetite was encountered an any of the holes drilled.
In June 2007 Regency Resources filed a final report on EL11/2005 and stated that ;"Within EL11/2005, magnetite having the resource potential as defined at Savage River is unlikely". The identified magnetite targets do not suggest a high probability for development to sustain a stand-alone operation, but smaller lenses may occur. Regency recommended geologically controlled airborne magnetic and gravity modelling focussing on a 2-3km stretch under the Comstock/Pineapple Creek area that has a prominent but low intensity magnetic signature. (This may be influenced by capping Tertary basalts.)
This work was never done.
ref: EL11-2005 Specimen Reef 2010SavageRiverAnnual1; John Dopel 2009

1999 MRT ; An archaeological survey of the historic Specimen Reef Goldfield. Parry Kostoglou. Specimen Creek

Exploration Completed during the initial 5yr term of the EL on the current tenement comprised;

Work completed in 2014-15 consisted of:

- **a)** a LiDAR survey of the tenement area to aid in long term planning and exploration planning and
- **b)** a desktop geological study of previous work in the area.
- **c)** Two reconnaissance geology surveys were conducted in early March 2015.
- **d)** A prospectivity analysis (2014-15)
  Details of this work may be found in the annual report for 2014-2015

The work completed in 2015-2016 consisted of a large botanical and flora/Fauna survey of the majority of the area of EL8-2014. Details of this work may be found in the 2016 annual report.
Expenditure on the license was $65,903 at 2015 and at this level is sufficient to keep the license in good standing until the end of the 5yr term in June of 2019.
Since 2015 there has been no field work expended on the license as the objective was to convert a portion of this EL into a mine lease in the near future.

The retained portion of the license is 9 km2 and is in an area where new government sponsored 1:25k scale geological mapping is nearly ready for publication.

Exploration Completed during the Reporting Period 2017-2019;

*No work was completed in 201**7**-201**9** .*

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 May 2016:) onto the northern extent of the existing Savage River mine lease 2M-2001. Planning for potential life of mine extensions indicate the possibility that water inundation ,north of planned waste rock dumps may need to expand beyond existing mine lease limits.

*Regional Exploration Activities; N*one

Expenditure 2019-2021:

Table 1 EL8-2014 Quarterly Expenditure Report-July2019-June 2021

M:\Geology\Exploration Drilling\Exploration\Quarterly_Costs\2021\Q2-2021\[MRT_costs_June30_21.xlsx]EL8_2014					
Exploration Quarterly Report	***EL8/2014 near Pipeline Road (Specimen Creek)***				
2nd Quarter 2021	**2nd Quarter 2021**				
1.Geoscientific Costs	Geology		$	3,250	
	Geochemistry		$	1,870	
	Geophysics		$	-	
	Remote Sensing				
	Total		$	5,120	
3. Land Access Costs					
4. Rehabilitation Costs					
5. Feasibility Study Costs			$	-	
6. Other Costs					
		Sub Total	$	5,120	
9. Cumulative Expenditure at time of last report		Q1 2021	$	85,430	Q1 2021
Total expenditure to date	(sum of 8 and 9)	Q2 2021	$	90,550	Q2 2021
Exploration Progress Report					
Q1 Rob Reid compilation map					
Q2 No work done in the term					
M:\Geology\Exploration Drilling\Exploration\Quarterly_Costs\2021\Q2-2021\[MRT_costs_June30_21.xlsx]EL8_2014					

Summary of exploration activities 2014-2019 (The full initial five year term):

The following is a summary of exploration activities completed at EL8/2014 at Pipeline Road during first five years of tenure (2015 to 2019).

Planned expenditure on the exploration licence was $15,000 in each of the first two years, namely:
Yr 1 30/07/2014 to 29/07/2015
Reconnaissance mapping ($10,000) , literature review and analysis of existing database ($5,000) totalling $15,000 (2014-2015) and;
Yr 2 30/07/2015 to 29/07/2016
Follow-up field work to investigate areas od\f interest identified in Yr1 ($15,000) (2015-2016)

Actual expenditure in Yr 1 included $10,000 on geologists for the literature review, reconnaissance visits and field surveying as well as $32,660 for remote sensing consisting of the LiDAR survey.
In year 2 (2015-2016) , a botanical survey and a flora and fauna survey were completed for $19,910, bringing the total spent in the first two years of the license to $62,570. (vs planned $30,000)
Thus, the total spend in yrs 1 and 2 exceeds the proposed spend for the first two years by over $32,000. (licence application document).
Yr 3: 30/07/2016 to 29/07/2017
No work was conducted in year 3 , 2017 due to personnel issues in geology and consequently the Manager of Geology had considerable time off work, resulting in this work in particular being postponed.
Yr 4: 30/07/2017 to 29/07/2018
No work was conducted in year 4 , 2018 as LiDar ,Heritage and geology expenditure in the first 2 years totalled $65,903 and was sufficient to cover expenditure commitments to end of term on EL8-2014.

Yr 5: 30/07/2018 to 29/07/2019

No work was conducted in year 5 , 2019 as LiDar ,Heritage and geology expenditure in the first 2 years totalled $65,903 and was sufficient to cover expenditure commitments to end of term on EL8-2014.

During this period all available resources were deployed on the mine lease to service a series of major drill campaigns that commenced in April of 2018 and drilling continued until March of 2019 with a peak of 7 drill rigs on site. As a consequence of this no work was conducted on EL8-2014.

Drilling Summary Q3 2018 to Q2 2019							
hole_id	Locality	# holes	hole_type	hole_purpose	Total_depth	start_drill_date	end_drill_date
CP Pre-Feas	Centre Pit	17	HQ3	CP Pre-Feas	3,534	15/05/2018	13/03/2019
NP-In-pit	North Pit	9	HQ3	NP Open-Cut	2,220	12/04/2018	8/01/2019
NPUG	North Pit	19	HQ3	NP Underground	18,181	25/07/2018	6/04/2019
WWM Series Sonic	North Pit	6	Sonic	Waste dump Hydrology	565	10/09/2018	8/11/2018
					24,500		

Summary of exploration activities 2019-2021
(The first year of the first -two year extension of term):
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

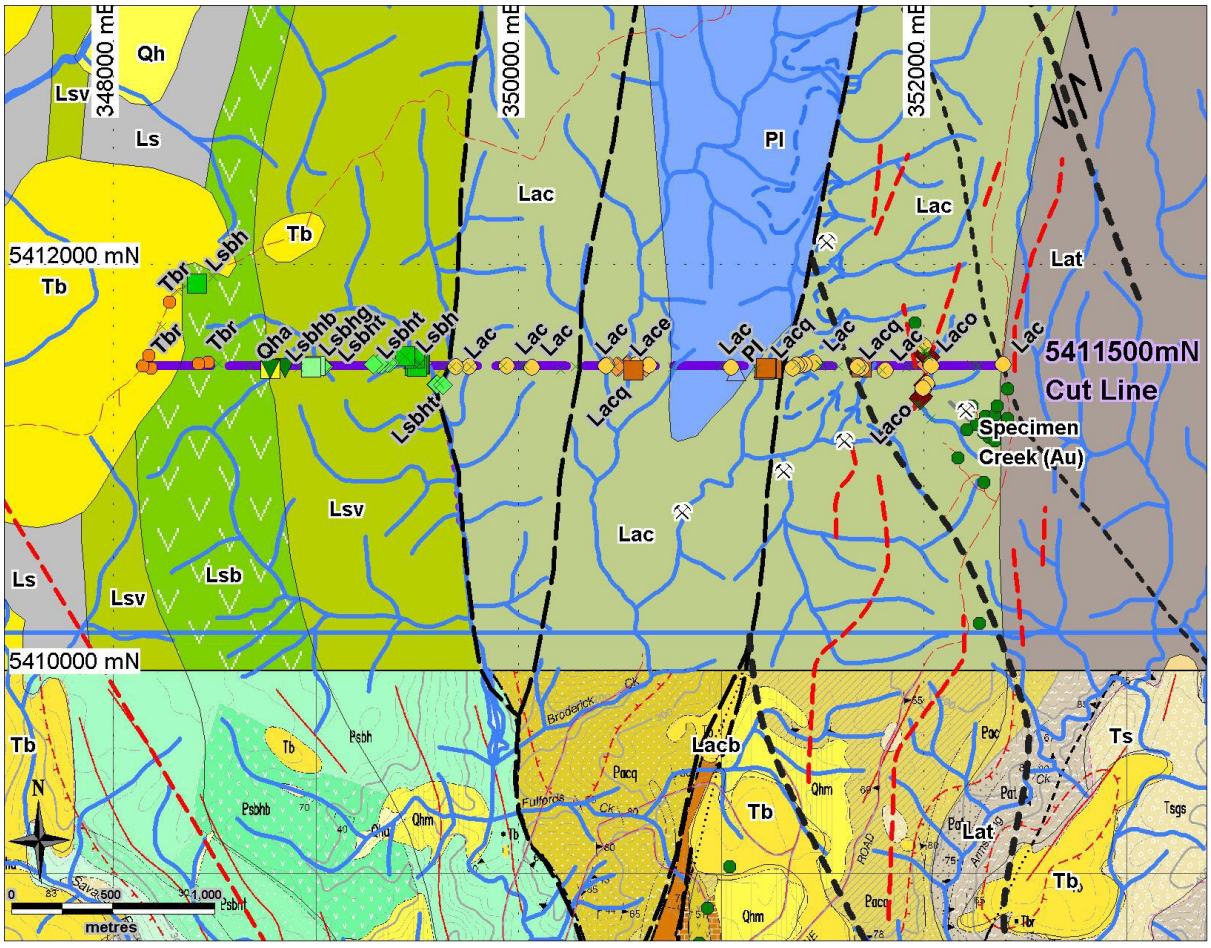

Figure 7 Summary Geological Map traverse 5411500mN
Field location geology codes matched to MRT's 1:25,000 Savage geological map sheet (bottom), interpreted magnetic unit distribution (red dashed lines) and historic drill holes (green dots) over modified MRT 1:250,000 digital geology (2020). (Fig 2 in report attached).

MRT Petrology Pipeline Rd EL8-2014 Work done in 2021
Exploration work plan for EL8-2014 for 2021 to meet exploration expenditure and work commitments for current license term. petrological studies of samples collected in 2020 reconnissance traverse.

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

Work Plan for July 2021-July 2023 (Second extension of term of the license)
Current spend of $25,000 in thesecond year of the second two year term satisfies the agreed spending commitment.
Planned activities

- Follow-up detailed geological ans structural mapping complementing the reconnaissance geological mapping recently completed in 2020.
- Integrate these findings with the MRT's planned 1:25,000 scale geological mapping.
- Utilise the planned LiDar on the Donaldson mapping campaigns.

Appendicies:
Appendix 1: EL8 2014_202107_01_Report.pdf
Path= M:\Geology\Exploration Drilling\Exploration\Annual Reports\Pipeline Road\2021
Filename= EL082014_202107_01_Report.pdf

Appendix 2: EL8-2014 Exploration Licence Annual Return.pdf
Path= M:\Geology\Exploration Drilling\Exploration\Annual Reports\Pipeline Road\2021
Filename= EL8-2014 Exploration Licence Annual Return.pdf

Appendix 3: 20200117_MLA_4M-2019_Mine Lease Application-revised.pdf
Path= M:\Geology\Exploration Drilling\Exploration\Tenements\Tenement Applications\EL8-2014\Mine Lease Application 4M_2019\17Jan2020_MLA_4M2019
Filename= 20200117_MLA_4M-2019_Mine Lease Application-revised.pdf

Appendix 4: Ref: LJN2020-128-Grange-R3
Petrology of sepected hand specimens line 5411500mN Pipeline Rd.