

Gaspersic Contracting Pty Ltd

EL 12/2021 Linda Creek

Year 1 Annual Report

EL122021_2023_05_25_AnnualReport_01

(Coordinate System MGA Zone 55, Datum GDA94)



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1.0 Summary

EL 12/2021 Linda Creek is a 1km² Category 3 and 5 Exploration Licence abutting the Eastern edge of the Mt Lyell Mine Lease, near Gormanston in western Tasmania. It was acquired by Gaspersic Contracting Pty Ltd in April 2022 for the purpose of exploring for a new deposit of silicified quartz pebble conglomerate and sandstone with equivalent abrasion and friction properties to the existing North Lyell quarry, which is currently not operating.

The North Lyell quarry is developed on a southeast-plunging anticlinal spur (Whaleback Spur) composed of silicified, hematitic conglomerate and sandstone, predominantly within the Late Cambrian-?Early Ordovician Upper Owen Conglomerate. The Linda, Pioneer and Gormanston Spurs within EL 12/2021, are also southeast-plunging tight anticlines, parallel to Whaleback Spur and stratigraphically and structurally all four spurs are part of the same tectonic geological domain.

Year 1 work consisted of reconnaissance geology on Gormanston, Pioneer and Linda Spurs, which identified a western portion of Gormanston Spur as a first target for sampling, due to a combination on the rock type and site access and geography suited to quarry development. Four sites were sampled along the western section of Gormanston Spur, in part using an excavator mounted rock breaker. Approximately 70 kg of “fist sized” fragments was collected from each site and crushed to a nominal 40mm product at Gaspersic’s Lynchford plant. With the loss of fines this resulted in lab samples of approximately 50kg each.

The samples were tested for Los Angeles Abrasion rating at the Rare Earth lab in Ulverstone and all produced more fines than the required standard. Evaluation of the results and the sampling and crushing procedure suggests that a larger and deeper sample size, discarding possible surface weathering, in combination with better control on the moisture content and fines removal at the primary crushing stage, is required to ensure reliable lab results. The Year 2 program will begin with either core drilling or a small drill and blast sampling campaign over the same outcrop sampled in Year 1.

Year 1 exploration expenditure was \$18,522.

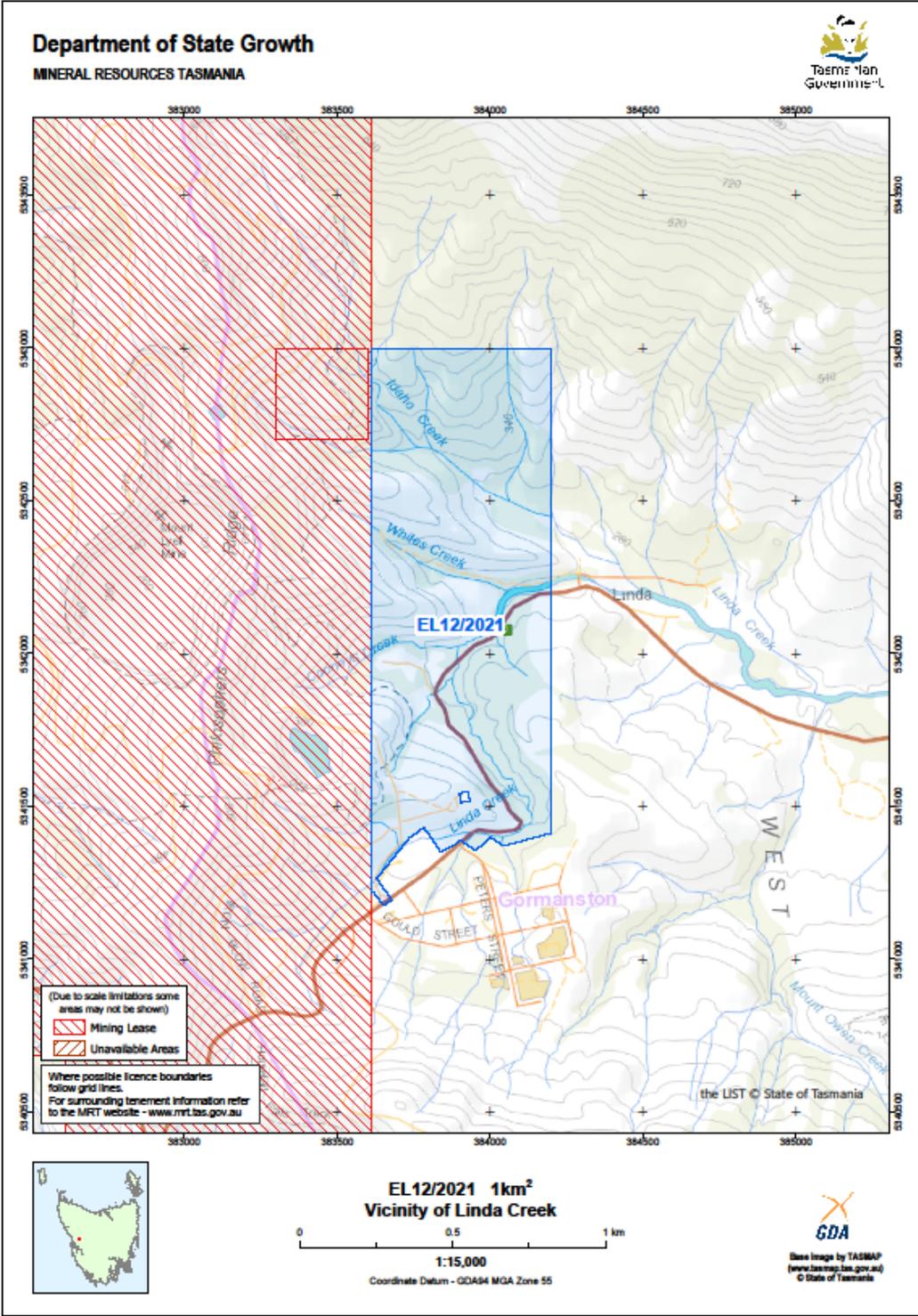


Figure 1. EL12/2021 Location Map

2.0 Introduction

2.1 Exploration Rationale

Gaspersic Contracting operate a construction stone quarry on a Copper Mines of Tasmania ML, inside the main Mt Lyell mine lease and abutting the NW corner of EL 12/2021 (Figure 1). The quarry has for many years produced premium quality, in terms of Los Angeles Abrasion and Polished Aggregate Friction values, crushed aggregate for top dressing bitumen roads. At present the quarry is not working, due to concerns that the access road through the CMT mine lease is at risk of collapse from rock instability related to on-going wall rock slippage in the abandoned West Lyell open cut mine.

To secure long term tenure and resource on equivalent rock material in the Queenstown area, Gaspersic Contracting have acquired and commenced exploring EL 12/2021. The exploration rationale is based on structural, stratigraphic and rock type similarities between the proven North Lyell quarry geology, situated on Whaleback Spur, and the three parallel spurs (Linda, Pioneer and Gormanston Spurs) further south and inside the new EL. The prospective geology is described below in Section 2.3.

2.2 Tenure and Ownership

EL 12/2021 is owned 100% by Gaspersic Contracting Pty Ltd, a company now owned and operated by Ian Harrington Group.

EL land tenure is shown on Figure 2. Most the EL is Crown Land, as it was designed to avoid as much as possible; Public Reserves and Private Land and road reserves within the township boundaries of Gormanston and Linda. The eastern EL boundary cuts through an unoccupied northwestern portion of Linda, including part of a Public Reserve. A small plot of unoccupied Private Land exists in the central southern part of the EL.

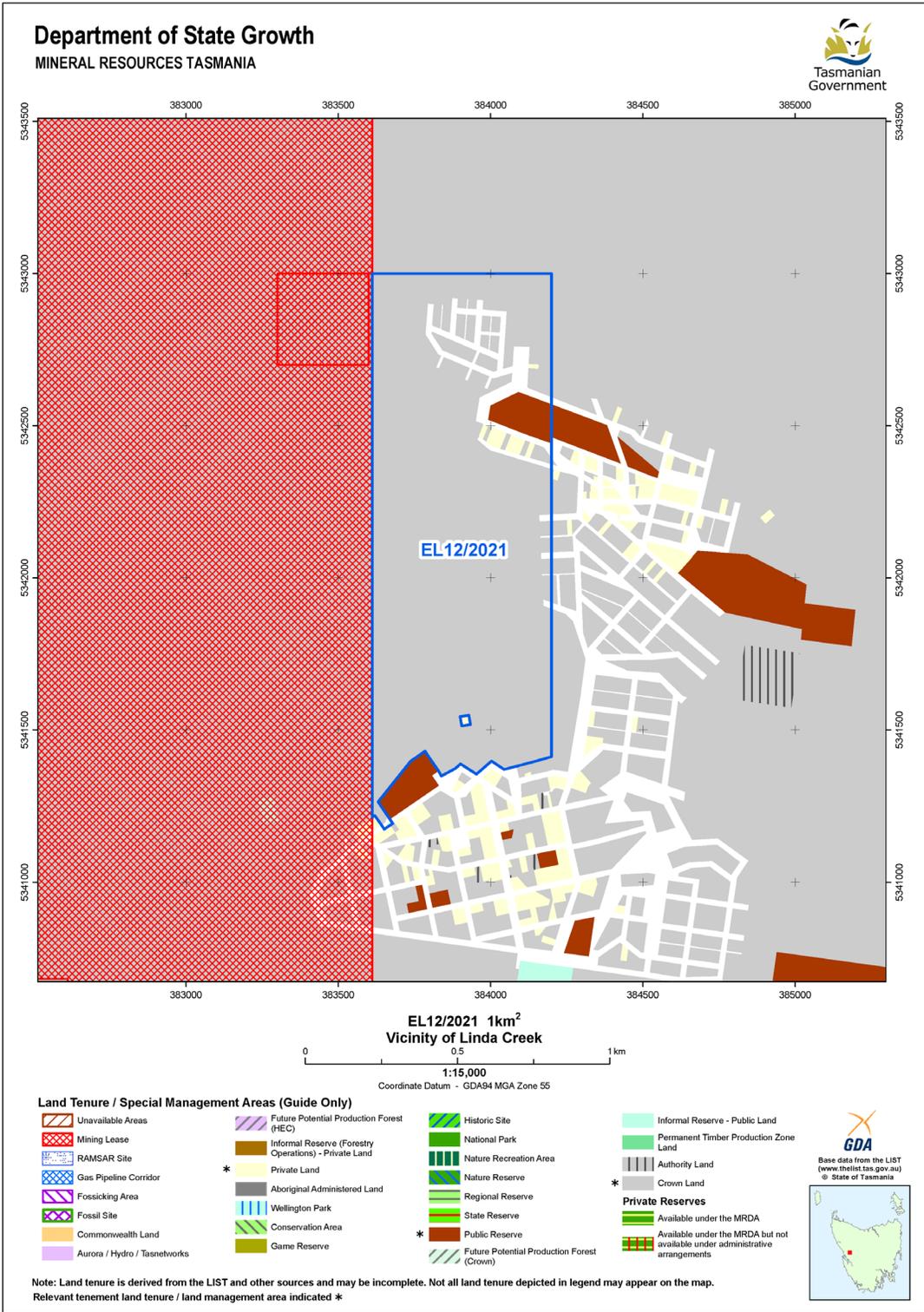


Figure 2 12/2021 Land Tenure Map

2.3 Geology Review

The geology, geography, magnetics and radiometrics coverage of the EL is shown on Figures 3-7.

The EL was designed as a minimum area needed to cover the Owen Conglomerate and Pioneer Sandstone spurs with potential to host deposits of aggregate material equivalent to the product at the North Lyell quarry. Apart from minor occurrences of Gordon Limestone, the formation stratigraphically overlying Pioneer Sandstone at Mt Lyell, the hard rock geology in the EL consists entirely of tightly folded and fault disrupted plunging spurs of Upper Owen Conglomerate interbedded conglomerate and sandstone, and Pioneer Sandstone interbedded sandstone and conglomerate (Figure 3). The deformation-controlled spur landforms are well expressed on Lidar image Figure 4.

The contact between Owen Conglomerate and Pioneer Sandstone is the Haulage Unconformity, an angular unconformity demonstrating a hiatus of some 20 million years. The type exposure of the Haulage Unconformity outcrops on the abandoned haulage route of the Iron Blow Mine, northeast of the abandoned open cut and southwest of the abandoned King Lyell copper clays workings on the western border of the EL. The Haulage Unconformity is also a spectacular feature of geological heritage quality exposed in the North Lyell quarry, which can be seen on Figures 4 and 5, just west of the northern most limit of EL 12/2021.

It is not clear whether the North Lyell quarry rock quality is enhanced due to its' closeness to the Great Lyell Fault and associated heat input from a post ore body phase of a long life Mt Lyell hydrothermal system. Another possibility is the tight folding formed during Devonian orogenic compression, which may have metamorphosed the high quartz rocks. Observations at the North Lyell quarry indicate the best quality rocks are silicified, hematitic quartz pebble conglomerates and fine sandstones +/- quartz pebbles, in Upper Owen stratigraphy. The most detailed mapping and interpretation of the geological evolution of the entire Mt Lyell mineral field geology, including the area covered by EL 12/2021, is in Corbett, 2001 and 2014.

The eastern half of the EL is covered with a surficial blanket of Quaternary glacial sediment and very minor probable Tertiary sediments exposed in abandoned alluvial gold diggings in Whites Creek gully between Pioneer and Linda Spurs (Figure 1). The main Iron Blow waste rock dump extends over the western EL boundary in the Gormanston Spur area. A probable Tertiary age lateritic/ferricrete style ironstone alteration of decomposed Gordon Limestone hosts the two Copper Clays deposits (King Lyell and Lyell Consols) which subcrop within the EL. Copper Clays are an unusual style of metastable native copper and copper oxide mineralisation which appears to have precipitated from acidic, copper bearing drainage leached from the primary copper sulphide mineralisation upslope. The Copper Clays mineralisation also appears to be synchronous

with the host ironstone and the faulted synformal drainage gullies separating the plunging anticlinal spurs have acted as a structural trap for the process.

Images produced from MRT 200 metre line spacing aeromagnetics and radiometrics (Figures 6 and 7) have not added to understanding the EL geology

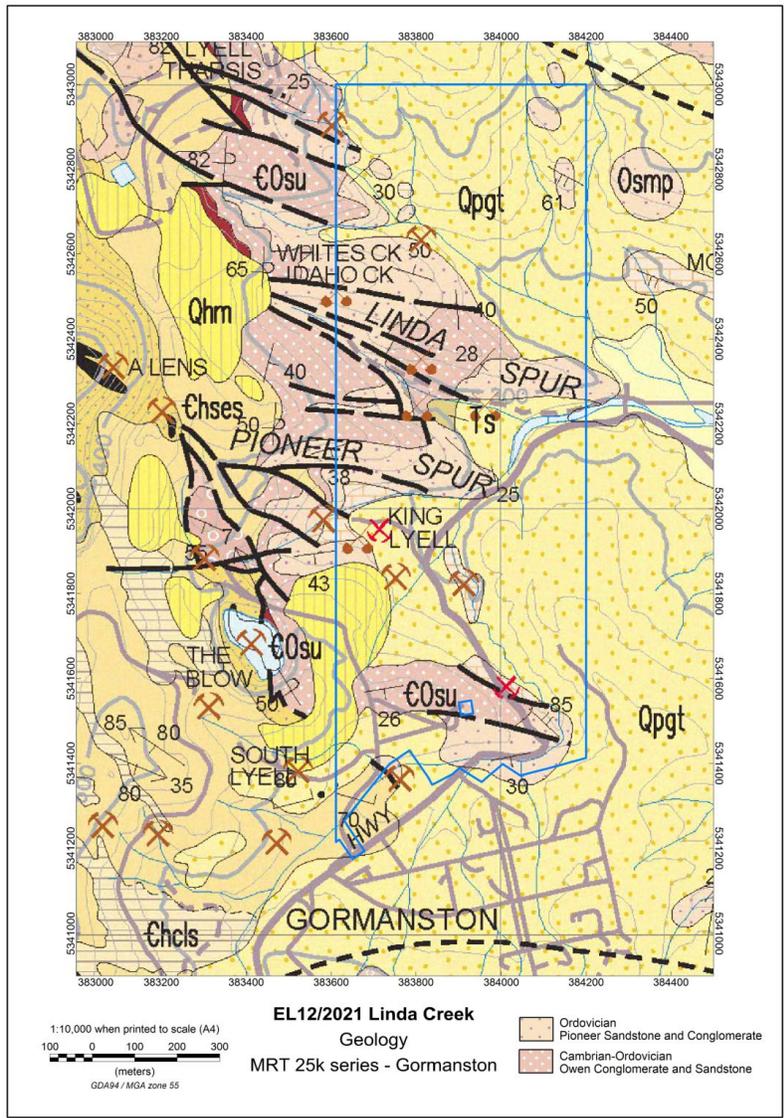


Figure 3. EL 12/2021 Regional Geology Map

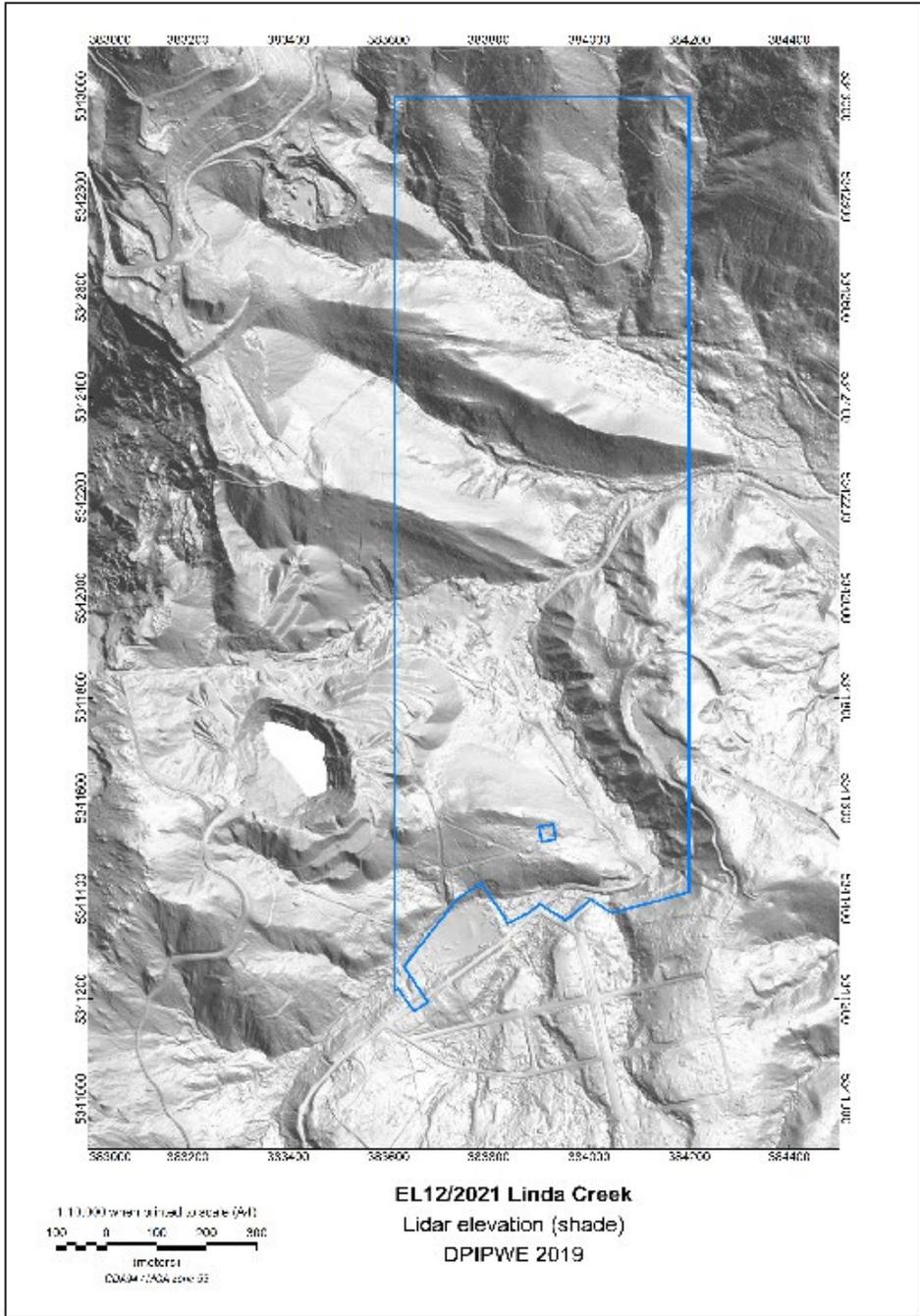


Figure 4 EL 12/2021 Lidar Image

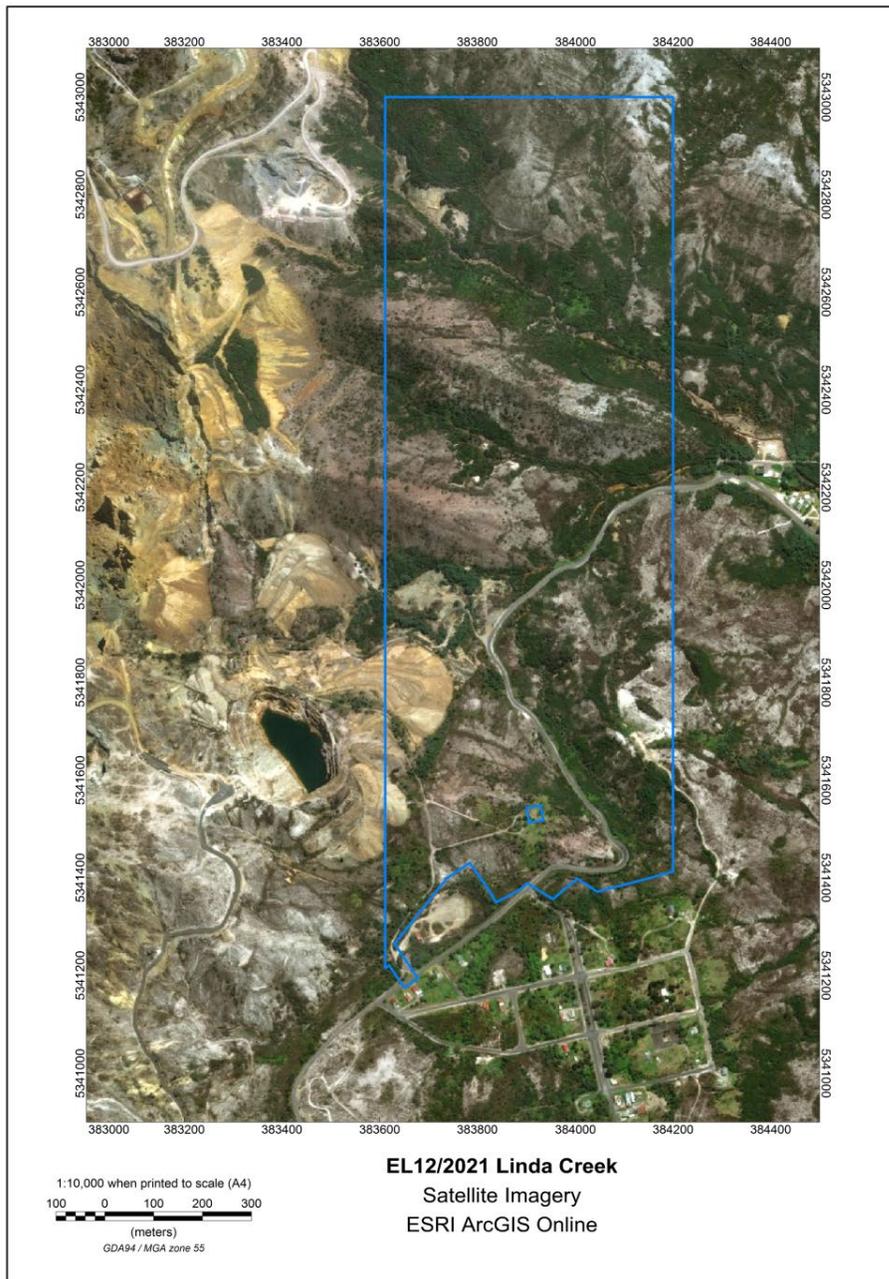


Figure 5. EL 12/2021 Satellite Image

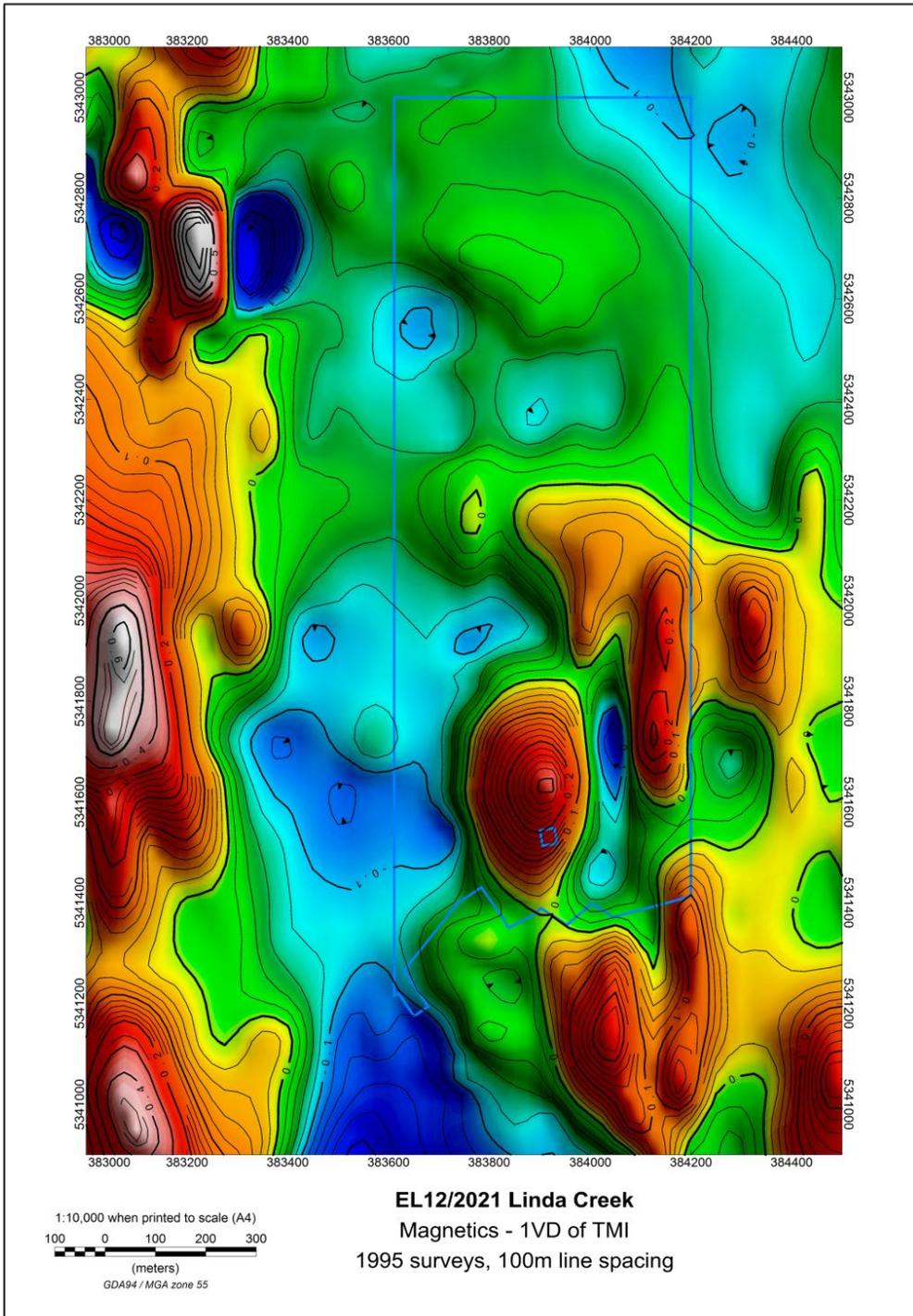


Figure 6. EL 12/2021 Magnetics Image

2.4 List of Digital Files

EL122021_2023_05_25_Filelisting_04

Exploration Work Type	Filename	File format
Report	EL222020_2022_07_30_Annual/Final Report_01	pdf-in zip file
Surface sample Gormanston Spur LA Sampling	EL122021_2023_05_25_SL_02	xlsx-in zip file
Surface sample LA laboratory certificates	EL122021_2023_05_25_SG_03	pdf-in zip file
File Verification Listing (this file)	EL122021_2023_05_25_Filelisting_04	xlsx-in zip file

3.0 Review of Previous Work

The only evidence found of previous construction stone exploration or mining is an apparent small scale quarry excavation on the southern side of Gormanston Spur, where the outcropping plunging fold is well exposed at a sharp bend in the Lyell Highway between Linda and Gormanston (Figures 4 and 8). This classic exposure of an anticline is a common stop site for geology students on excursion and the apparent good construction stone quality of the rock is one reason for exploring Gormanston Spur further to the west. The exposure beside the Lyell Highway is of high natural heritage value and should be preserved.

The area between the Iron Blow and Linda Valley was subject to a minor gold rush in the 1880s and remnants of ground sluicing remain in the banks of Cooneys, Whites and Linda Creeks. It is likely prospecting for alluvial gold recovered some native copper, leading to the discovery of the Copper Clays deposits (Wills, 1995). The King Lyell deposit has been subject to the only modern exploration, including three phases of drilling by Copper Mines on Tasmania between 2008 and 2012, within the area covered by EL 12/2021. A small, stratiform sub economic resource of native copper and cuprite, increasing in depth down plunge to the southeast, is estimated (Morrison and Knight, 1997, McGee, 2013).



Figure 8. Photo of the abandoned small quarry exposing silicified, hematitic, interbedded conglomerate and sandstone near the axis of the Gormanston Spur plunging anticline.

4.0 Exploration Completed During the Reporting Period

Reconnaissance prospecting on Gormanston, Pioneer and Linda Spurs resulted in targeting the western half of Gormanston Spur (local name Snake Spur) as a potential quarry site, based on a combination of access, geology and environmental issues (see photo on cover page).

Four composite samples of approximately 70kg each were taken on Gormanston Spur (Figure 9). LSRB-1 was sampled manually from remnants of the abandoned small quarry next the Lyell Highway and LSRB-2, -3 and -4 were taken on Snake Spur from small pits excavated with the rock breaker (Figure 10). The samples were crushed to nominal 40mm at Gaspersic's Lynchford plant which rejected most of the fines, resulting in samples of approximately 50kg each for laboratory testing.

Los Angeles Abrasion values were determined at Rare Earth construction materials test laboratory, Ulverstone. The method (AS 1141.23) involves ball milling a prepared 5kg fraction of

the submitted sample for a standard time interval and weighing the fines produced. Specifications for top grade aggregate products usually require LA values of <25, ie <25% by weight is fines, passing through a 1.7mm sieve after the standard testing period. LSRB-3 scored an LA value of 26 and the other three samples scored between 30 and 36 (Table 1 and Appendix 1.) The implications of these results and further exploration are discussed below in Section 5.0.

Table 1.

Gormanston Spur Los Angeles Abrasion Sampling-November 20-21, 2022					
EL122021_2023_05_25_SL_02					
Sample ID	GDA East	North	Rock Type	Comment	LA Test Result
LSRB 1A	384080	5341465	Conglom/ Sst	hand picked lump rock from abandoned quarry remnants	combined 1A+1B -- 30
LSRB 1B	384078	5341456	Conglom/ Sst	hand picked lump rock from abandoned quarry remnants	
LSRB 2A	383812	5341577	Conglomerate	hand picked lump rock from shallow rock breaker pits	combined 2A+2B -- 36
LSRB 2B	383812	5341577	Conglomerate	hand picked lump rock from shallow rock breaker pits	
LSRB 3A	383836	5341571	Conglomerate	hand picked lump rock from shallow rock breaker pits	combined 3A+3B -- 26
LSRB 3B	383836	5341571	Conglomerate	hand picked lump rock from shallow rock breaker pits	
LSRB 4A	383945	5341477	Conglomerate	hand picked lump rock from shallow rock breaker pits	combined 4A 4B --33
LSRB 4B	383945	5341477	Conglomerate	hand picked lump rock from shallow rock breaker pits	

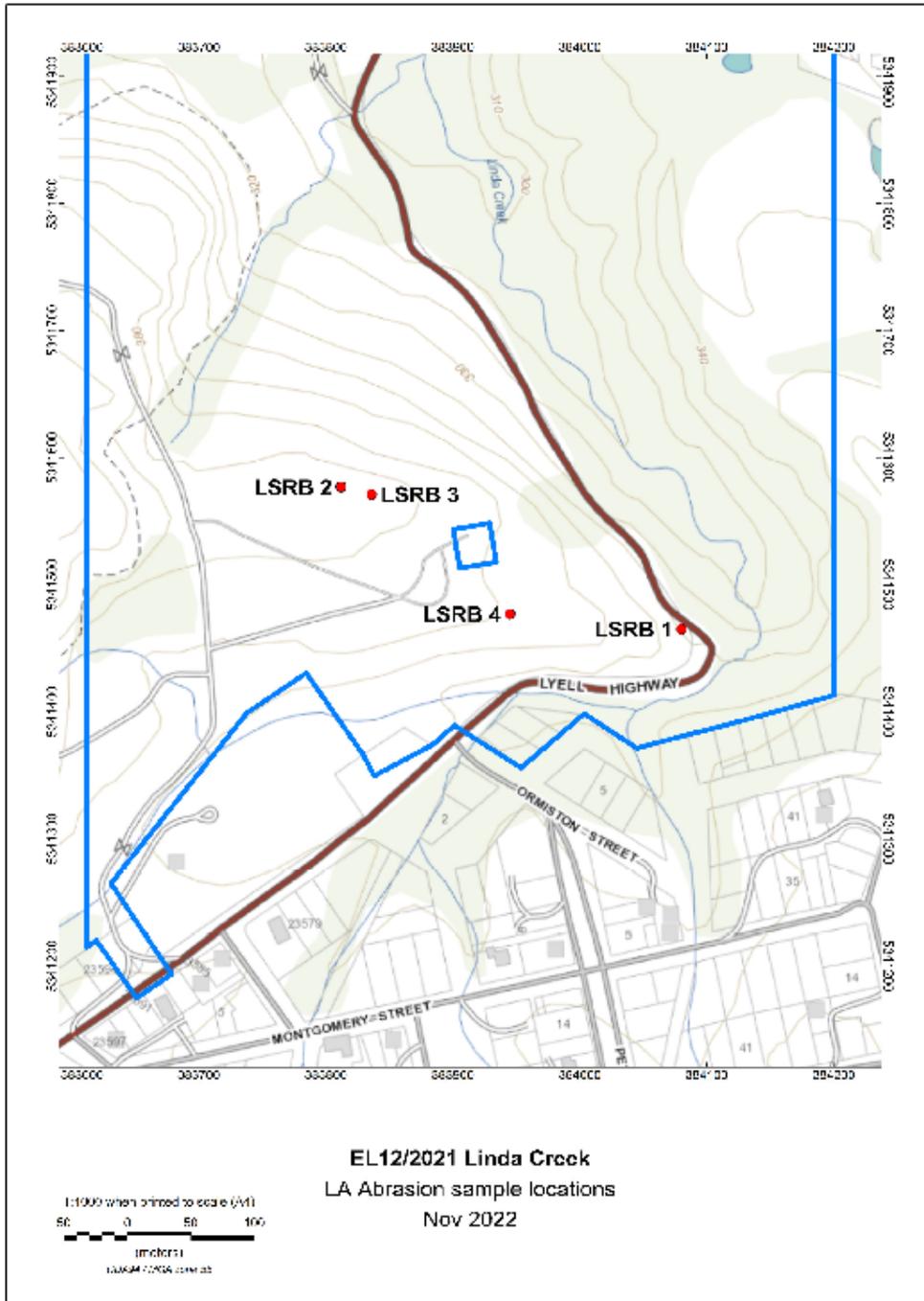


Figure 9. Year 1 Gormanston Spur Sample Location Map



Figure 10. Photo of rock breaker sampling on Snake Ridge

5.0 Conclusions and Future Exploration

It is not clear if the sub standard Los Angeles Abrasion values are due to the inherent rock quality or if the near surface samples are slightly weathered. There is also concern that the samples may have been too small and that the fines produced by the primary crusher may not have been adequately screened out, especially so given that it was raining when the initial crushing occurred and fines did not fully separate. To reduce the variables related to sampling, the Year 2 program will consist either of core drilling or a small drill and blast program on the same western part of Linda Spur previously sampled with the rock breaker. It is intended to produce a larger and unweathered composite sample along Snake Spur and apply more quality control on the crushing at Lynchford. If the initial sub standard results are repeated, mapping and surface sampling of potential quarry sites on Pioneer Spur will be conducted.

Estimated Year 2 expenditure for geological mapping and the proposed drill and blast sampling is \$40,000 including administration costs.

6.0 Environmental Management

The rock breaker sampling was entirely on bare outcrop devoid of vegetation and the machine and support vehicles were clean on arrival at the site. No significant dust or noise resulted and the site is screened from view by road users and Gormanston residents. No rehabilitation of sample sites was necessary and no litter, fluid leakage or sample bags were left on site.

7.0 Expenditure

Sampling and Prospecting Geology	\$6,840
Rock Breaker Sampling and Crushing	\$8,117
LA Abrasion Tests (Rare Earth Lab)	\$1,925
Reporting and Administration Costs	\$1,670
(rounded to nearest \$1)	
TOTAL	\$18,552

8.0 References

Corbett, K. D., 2001, New Mapping and Interpretation of the Mount Lyell Mining District, Tasmania: A Large Hybrid Cu-Au System with an Exhalative Pb-Zn Top: *Economic Geology*, v. 96, p. 1089-1122.

Corbett, K. D., 2014, Late Cambrian to Early Ordovician Siliceous Sequences: in Geological Evolution of Tasmania, *Geological Society of Australia Special Publication 24*, p. 211-240.

McGee, B., 2013. King Lyell Copper Clays Resource Evaluation, RL 3/2006. Unpublished Copper Mines of Tasmania Pty Ltd Report.

Morrison, K. and Knight, J., 2008. King Lyell Copper Clays Resource Assessment. Report to Copper Mines of Tasmania Pty Ltd.

Wills, K. J. A., 1995. Open-Cut Potential of the Copper Clays Area, Mt Lyell. Report to Copper Mines of Tasmania Pty Ltd.

APPENDIX 1

Laboratory LA Value Certificates

EL122021_2023_05_25_Rare Earth Laboratory Reports_03