

**Cresswells Transport Pty Ltd**

**EL 1/2011 – Eddy Creek**

**Year 1 Annual Report**

**Ken Morrison  
August 2012**

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## Summary

**The exploration aim on EL 1/2011 is to define a resource of dolomite-bearing carbonate rock suitable for developing an agricultural dolomite quarry site on the valley slope east of Eddy Creek. During licence year 1 a target area of prospective geology was outlined by mapping and rock chip sampling and a drilling access track was established through the middle of the prospect. \$22,777 was spent on exploration during the year. Proposed exploration for licence year 2 aims to complete a program of resource drilling and, if successful, apply for a mining lease over the resource.**

### **Introduction and Tenement Information**

EL 1/2011 is a 3 km<sup>2</sup> Category 3 and 5 tenement in the Weld Valley, southern Tasmania (Figure 1).

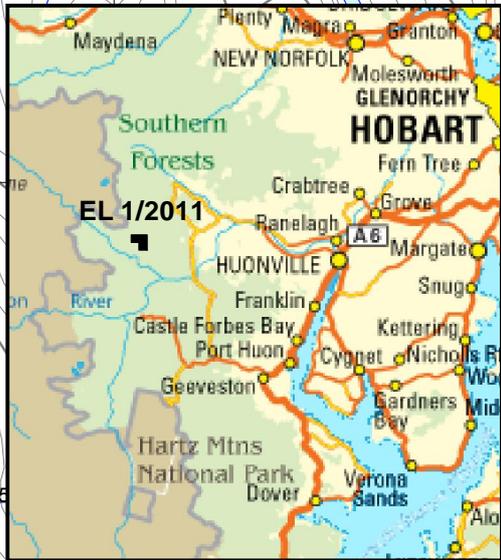
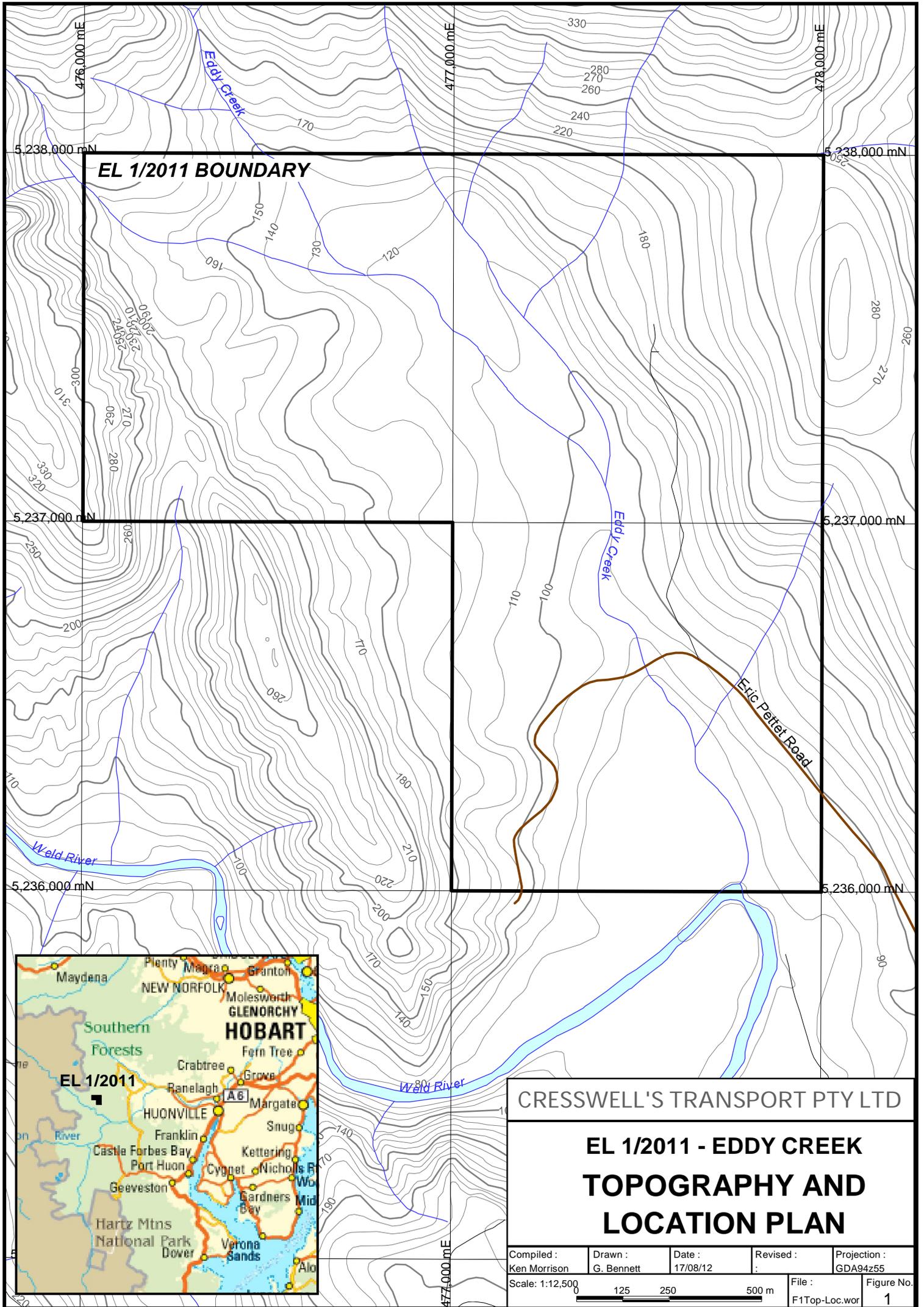
Land tenure is entirely State Forest and vehicle access to the area is via the all weather gravel logging road, Eric Pettet Road, which heads north from Eddy Road and enters the southeastern part of EL 1/2011 from the east (Figures 1 & 2). Parts of some recently active logging coupes occur within the EL but the area of active exploration is covered by a relatively low density forest type with a regrowth eucalypts and tall dogwood overstory.

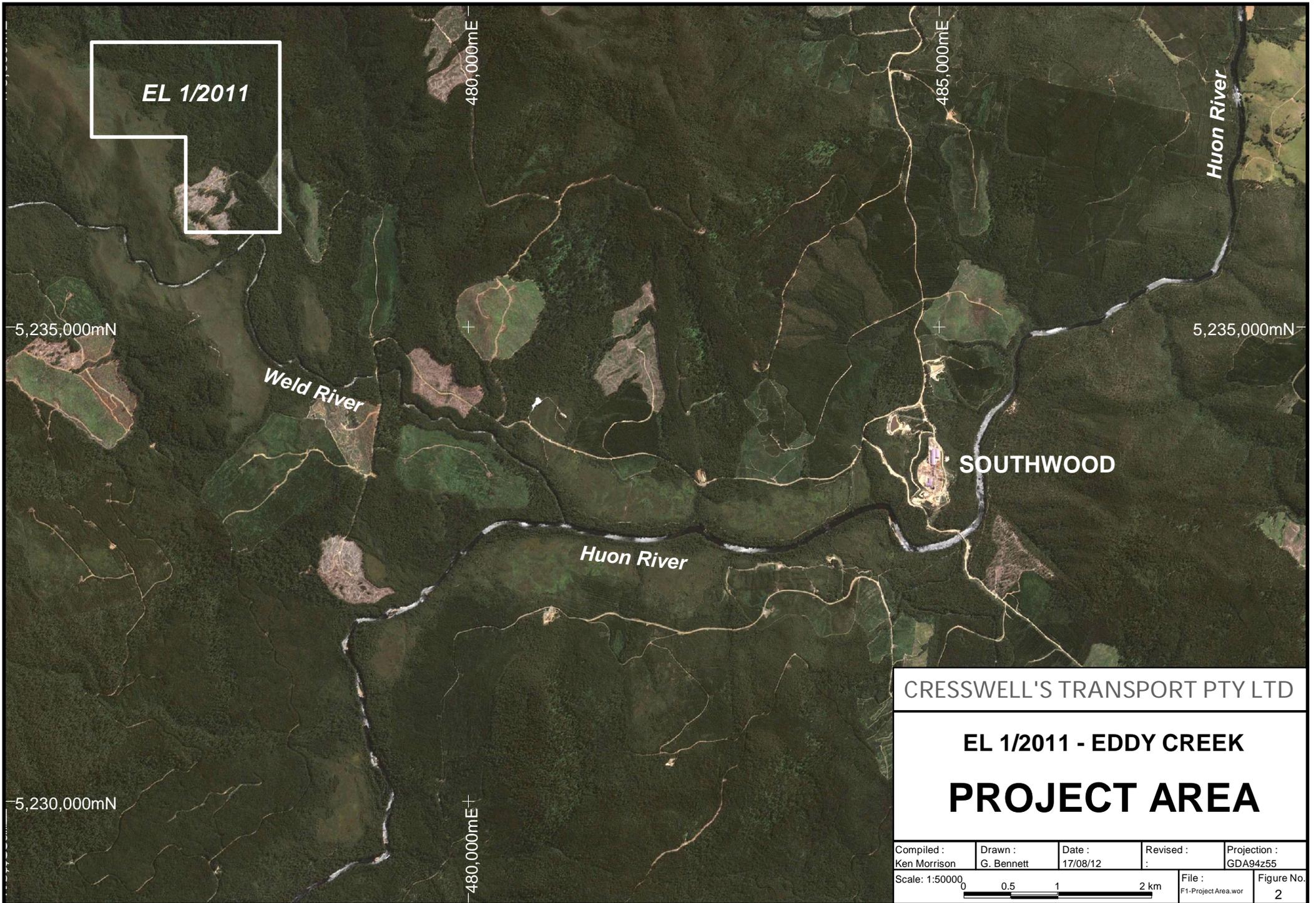
EL 1/2011 coincides with a portion of the State Forest currently classed as Informal Reserve and subject to the Intergovernmental Agreement relating to Tasmanian forests and forestry industries. Some uncertainty about the status of tenure and a delay in commencing field exploration has resulted.

This report covers Year 1 exploration activities. To date a program of reconnaissance mapping and rock chip sampling has defined a prospective zone of carbonate rock and a drill access track has been established.

### **Regional Geology Setting**

Figure 3 shows the regional scale geology within the EL, extracted from the Mineral Resources Tasmania 1:25,000 series Weld Sheet. The target rocks are Proterozoic Weld River Group, steeply ENE dipping, dolostone and skarn altered dolostone, which are exposed in the valley of Eddy Creek, due to a window through the surrounding Jurassic dolerite and derived Quaternary dolerite talus. The main prospect is on the eastern side of the Eddy Creek valley, in the area where unaltered dolostone grades to calc silicate skarn.





EL 1/2011

480,000mE

485,000mE

Huon River

5,235,000mN

5,235,000mN

Weld River

SOUTHWOOD

Huon River

5,230,000mN

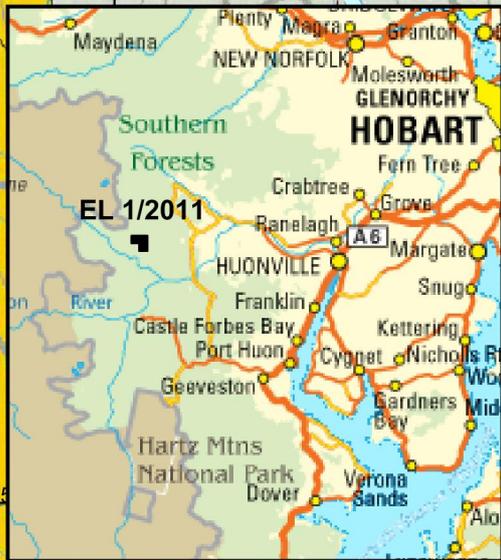
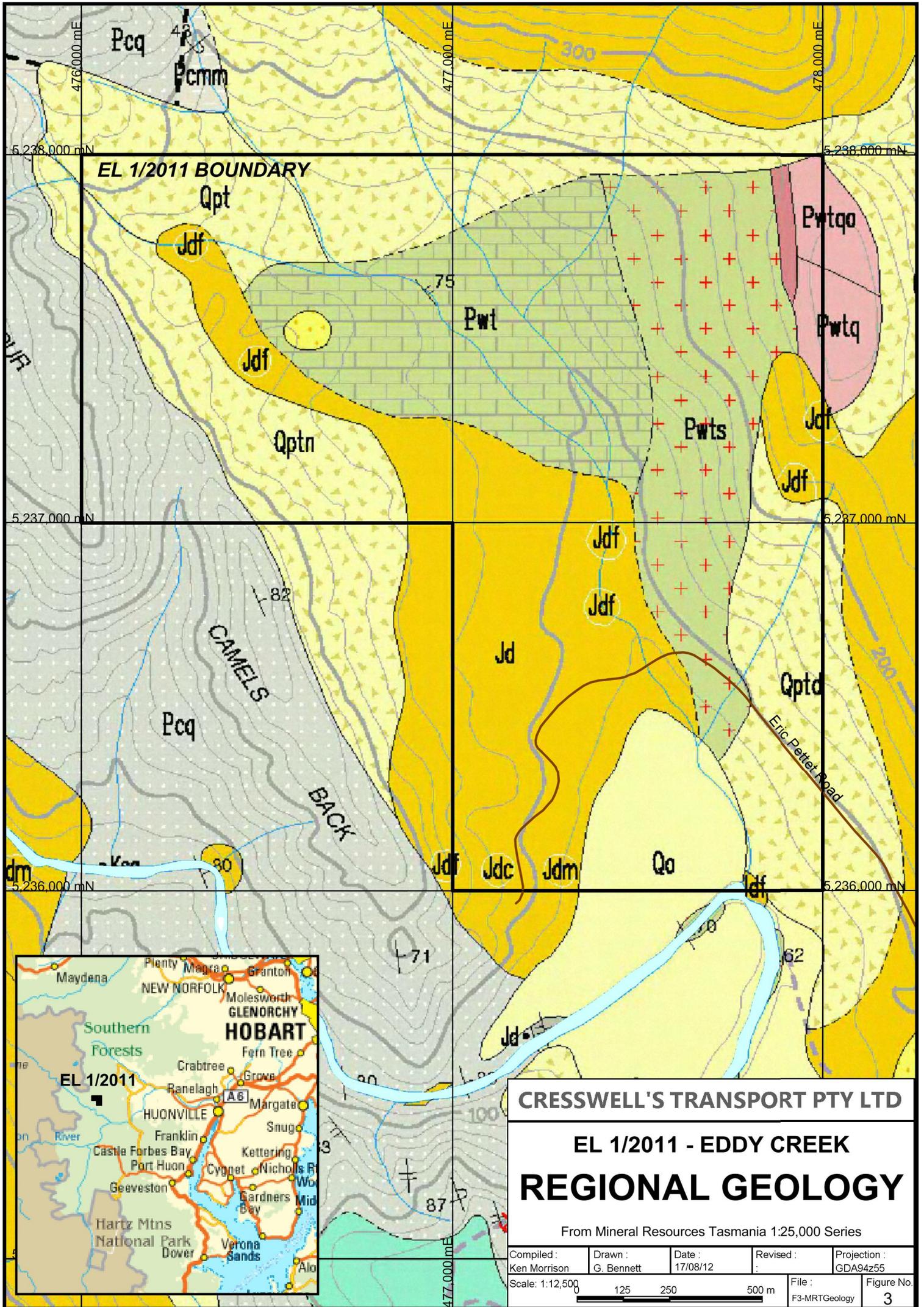
480,000mE

CRESSWELL'S TRANSPORT PTY LTD

EL 1/2011 - EDDY CREEK

**PROJECT AREA**

Compiled : Ken Morrison	Drawn : G. Bennett	Date : 17/08/12	Revised : :	Projection : GDA94z55
Scale: 1:50000				File : F1-Project Area.wor Figure No. 2



## **Exploration Philosophy and Aims**

Cresswells Transport Pty Ltd is a Deloraine based family company operating several gravel and rock quarries and trucking bulk commodities around Tasmania, including crushed limestone and dolomite for use as an agricultural soil conditioner and slow release pH moderator. At present all crushed carbonate rock and manufactured lime is sourced from the north and northwest of the State and transport cost to the south of the State is a serious impediment to fully utilizing the benefits of these products in the rapidly increasing high value cropping and horticulture industries.

In 2010 a search commenced for a potential quarry site in southern Tasmania, on combined geological, logistical and environmental criteria. The occurrence of Proterozoic dolostone centered on Eddy Creek in the Weld Valley in an area of logging coupes administered by Forestry Tasmania from Geeveston was prioritised. Exploration Licence 1/2011 was applied for in January 2011 and granted in August 2011. Reconnaissance mapping and outcrop sampling has generated a target outline for an exploration drilling program which the company believes has potential to demonstrate a viable resource of dolomitic carbonate rock, to the specifications required by the market.

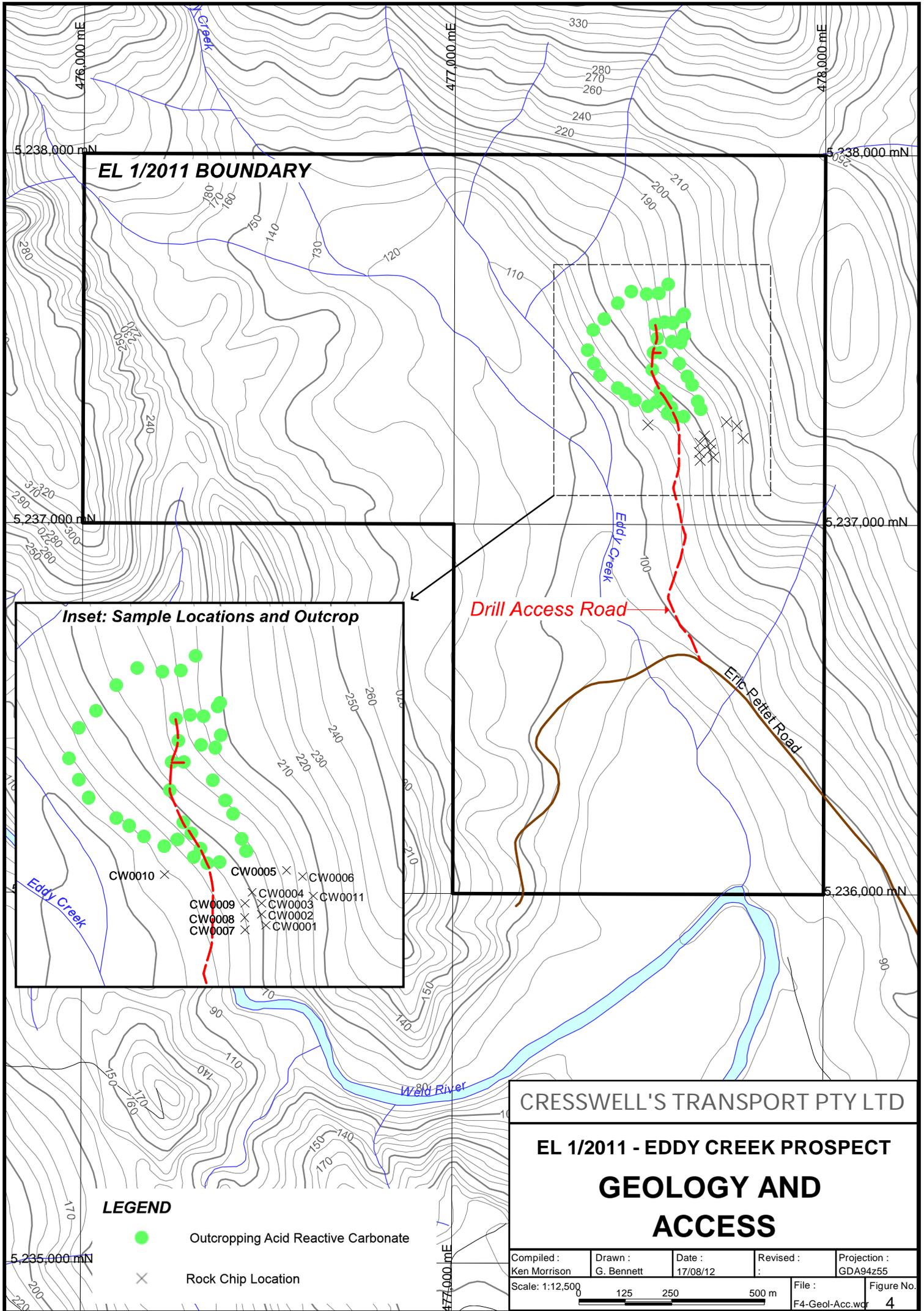
## **Summary of Previous Exploration Results**

No record of exploration specifically for dolomite, dolostone or limestone in the area covered by EL 1/2011 has been found. Skarn facies of the dolostone, altered to calc silicate and chalcedonic/jaspoidal silica rocks in the far northeast corner of the EL (Figure 3), attracted some geochemical sampling as part of a gold exploration program centred on the Forster prospect, south of the Weld River. The Forster prospect was explored between 1984 and 2010, by Metals Exploration Ltd, Pegasus Gold Australia Ltd and Sedimentary Holdings NL and their results are documented in EL annual reports held in the Mineral Resources Tasmania Open File library.

## **Year 1 Exploration Results**

A prospective area of acid reactive (15% by volume HCl), partly altered carbonate rock, in a location and topographic setting favourable for quarrying, was identified by an initial round of mapping and rock chip sampling. The prospect is shown on Figure 4 and sample assays and mineralogy results are attached in Appendix A. Assay results indicate a range in grade, with the lower grade samples corresponding to sites where the rocks visually appeared to be weathered, and the higher grade samples having high loss on ignition values, indicating that the Ca and Mg occurs in carbonates rather than silicates. The dilute acid reactive nature of the rock and the consistent excess of CaO>MgO suggest that the lithology could be classed as a dolomitic limestone.

Overall the calcium + magnesium carbonate grades are competitive with currently available product from the Smithton Basin but there is an obvious need to drill the prospect before any conclusions about the depth extent of relatively unaltered carbonates and the resource potential can be made.



**EL 1/2011 BOUNDARY**

**Inset: Sample Locations and Outcrop**

**Drill Access Road**

CW0010 × CW0005 × CW0006  
 CW0009 × CW0004 × CW0011  
 CW0008 × CW0003 × CW0002  
 CW0007 × CW0001

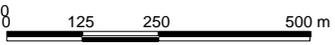
**LEGEND**

- Outcropping Acid Reactive Carbonate
- × Rock Chip Location

**CRESSWELL'S TRANSPORT PTY LTD**

**EL 1/2011 - EDDY CREEK PROSPECT  
 GEOLOGY AND  
 ACCESS**

Compiled : Ken Morrison	Drawn : G. Bennett	Date : 17/08/12	Revised : :	Projection : GDA94z55
Scale: 1:12,500			File : F4-Geol-Acc.wg	Figure No. 4



In April 2012 a vehicle track suitable for a small track mounted drill rig was constructed for a distance of approximately 1000 metres from Eric Pettet Road to the prospect. Track construction was approved by Mineral Resources Tasmania in February 2012, after a botanical and fauna habitat survey of the proposed route was completed by Philip Milner Landscape Consultant Pty Ltd, in December 2011 (Appendix B).

Stopford Drilling have been engaged by Cresswells to drill a fence of vertical percussion holes through the prospect, along the track shown on Figure 4, using a track mounted 18 tonne Atlas Copco ROC F7 blast hole rig. The drilling is planned for the 2012 Spring, when the ground conditions are sufficiently dry.

### **Environmental Issues**

Construction of the drilling access track (Figure 4) was the only activity during the year which involved environmental impact considerations. Following recommendations by Philip Milner, who conducted the botanical and fauna habitat survey along the proposed route (Appendix B), minor realignment of the track was applied to avoid large logs on the ground which were potential stag beetle habitats, and specimens of the delisted threatened shrub, *Pimelea cinerea* which were identified and flagged during the survey.

It is intended to close off the track at its junction with Eric Pettet Road, once the drilling program is finished and the hole collars have been rehabilitated.

### **Expenditure**

Exploration expenditure in the period 13 August 2011 to 13 August 2012 was \$22,777, in the following categories:

Geology	\$11,049
Feasibility investigations	\$2,100
Assays	\$1,132
Environmental survey	\$1,796
Track construction	\$5,200
Tenement and office costs	\$1,500

### **Year 2 Exploration Program**

The current priority is to complete sufficient drilling to estimate a resource at a confidence level which will enable the project to advance to the mining lease application stage by the end of 2012.

A budget of approximately \$50,000 is estimated for licence Year 2, to cover; drilling, sample assays, geology, interpretation and reporting and ML application.

**APPENDIX A**  
**Rock Chip Assays and Mineralogy**

## EL 1/2011 Eddy Creek-

## Rock Chip Sampling-September 2011

*AGD 66 datum					ME-XRF			
Sample	Easting*	Northing*	GDA_Easting	GDA_Northing	Description	CaO %	MgO %	CaO+MgO %
CW0001	477587	5236999	477698.58	5237182.99	white, pale grey marbled dolomite	39.9	17.95	57.85
CW0002	477579	5237018	477690.58	5237201.99	white, pale grey marbled dolomite	38.4	13	51.4
CW0003	477579	5237037	477690.58	5237220.99	white, pale grey marbled dolomite	45.7	8.55	54.25
CW0004	477563	5237056	477674.58	5237239.99	white, pale grey marbled dolomite	19	13.9	32.9
CW0005	477622	5237094	477733.58	5237277.99	white, pale grey marbled dolomite	37	21.2	58.2
CW0006	477650	5237084	477761.58	5237267.99	white, pale grey marbled dolomite	36.9	21.5	58.4
CW0007	477551	5236991	477662.58	5237174.99	white, pale grey marbled dolomite	19.85	12.2	32.05
CW0008	477550	5237012	477661.58	5237195.99	white, pale grey marbled dolomite	21.4	10.75	32.15
CW0009	477551	5237037	477662.58	5237220.99	white, pale grey marbled dolomite	14.25	10.2	24.45
CW0010	477411	5237086	477522.58	5237269.99	white, pale grey marbled dolomite	30.2	20.6	50.8
CW0011	477668	5237050	477779.58	5237233.99	white, pale grey marbled dolomite	37.2	21.2	58.4
CW0012					ROM crushed Smithton dolomite	26.5	18.7	45.2
CW0013					ROM crushed Smithton dolomite	27.3	18.9	46.2

BR11150066 - Finalized

CLIENT : "BURRE - Burnie Research Laboratory"

# of SAMPLES : 13

DATE RECEIVED : 2011-08-04 DATE FINALIZED : 2011-08-18

PROJECT : "Cresswells CW-0001"

CERTIFICATE COMMENTS : "Please Note: The XRF12s overlimit result for CaO is reported under met

PO NUMBER : "TA 51334"

	ME-XRF12								
SAMPLE	Al2O3	BaO	CaO	Cr2O3	Fe2O3	K2O	MgO	MnO	
DESCRIPT	%	%	%	%	%	%	%	%	%
1	0.03	0.02	39.9	0.01	0.16	0.01	17.95	<0.01	
2	0.02	0.01	38.4	0.01	0.12	<0.01	13	<0.01	
3	<0.01	0.01	>40	<0.01	0.09	<0.01	8.55	<0.01	
4	0.08	0.01	19	0.01	0.3	<0.01	13.9	0.04	
5	<0.01	0.01	37	<0.01	0.08	<0.01	21.2	<0.01	
6	<0.01	0.01	36.9	0.01	0.05	<0.01	21.5	<0.01	
7	0.06	0.02	19.85	<0.01	0.3	<0.01	12.2	0.02	
8	0.06	0.02	21.4	<0.01	0.55	<0.01	10.75	0.04	
9	0.12	0.01	14.25	<0.01	0.39	0.01	10.2	0.04	
10	<0.01	<0.01	30.2	<0.01	0.05	<0.01	20.6	<0.01	
11	<0.01	<0.01	37.2	0.01	0.13	<0.01	21.2	<0.01	
12	1.76	<0.01	26.5	<0.01	1.5	0.15	18.7	0.02	
13	1.14	<0.01	27.3	<0.01	1.04	0.11	18.9	0.01	

thod code ME-CON02. "

ME-XRF12	ME-XRF12	ME-XRF12	ME-XRF12	ME-XRF12	ME-XRF12	ME-GRA05	ME-CON02
Na2O	P2O5	SiO2	SrO	TiO2	Total	LOI	CaO
%	%	%	%	%	%	%	%
<0.01	<0.01		0.66	0.01	<0.01	99.99	40.98
<0.01	<0.01		15.1	<0.01	<0.01	99.99	33.27
<0.01	<0.01		5.33	0.01	<0.01	99.96	40.23
	0.01	<0.01	65.5	<0.01	<0.01	100.05	1.13
<0.01	<0.01		0.75	0.01	<0.01	100.1	40.99
<0.01	<0.01		1.44	0.01	<0.01	100	40.08
<0.01	<0.01		66.1	<0.01	<0.01	100	1.4
	0.08	<0.01	65.3	<0.01	<0.01	99.98	1.73
	0.03	<0.01	73.4	<0.01	0.01	100.05	1.55
<0.01	<0.01		7.19	<0.01	<0.01	100.05	41.99
<0.01	<0.01		0.93	0.01	<0.01	99.97	40.48
	0.2	0.04	11.8	<0.01	0.15	99.97	38.58
	0.07	0.03	8.79	<0.01	0.1	100.05	41.94

45.7

Department of Infrastructure, Energy and Resources

MINERAL RESOURCES TASMANIA

Enquiries: Ralph Bottrill

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Email: ralph.bottrill@dier.tas.gov.au Web www.mrt.tas.gov.au

Our Ref: 10RSB007:DS 69236

MINERAL RESOURCES TASMANIA

*A Division of*

DEPARTMENT *of* INFRASTRUCTURE,  
ENERGY *and* RESOURCES

K.C. Morrison Pty Ltd  
4 Westringa Road  
Fern Tree Tas 7054

Attention: Ken Morrison

Dear Ken

**Job M09130: Mineralogy, Weld River**

One rock sample from the above location was submitted by yourself for mineralogical analysis. It was examined by XRD (X-ray diffraction) and the report is enclosed.

Yours sincerely

R.S. Bottrill  
Mineralogist-Petrologist

Ecl.

**Mineral Resources Tasmania**

Department of Infrastructure, Energy and Resources



# **Mineralogical analyses, Weld River**

**MRT Mineralogical/Petrology Laboratory  
Job No. M10130**

**An unpublished Mineral Resources Tasmania report  
for Ken Morrison**

**R S Bottrill**

**20 December 2010**

# Mineral Resources Tasmania

Department of Infrastructure, Energy and Resources



## Mineralogical analysis: Weld River

MinPet Job No. M10130

An unpublished Mineral Resources Tasmania report  
for Ken Morrison

28/08/12

### Introduction

One sample of rock from the Weld River, southern Tasmania, was submitted for mineralogical analysis, particularly in regards to carbonate mineral content. The mineralogical report is enclosed.

The sample details are:

MRT No.	ID No.	Location
G404086	G10143	Weld R

### Mineralogical examination

A representative sample of the aggregate was analysed by X-ray Diffraction (XRD) in the MRT laboratories, Rosny Park.

### Results

The rock is composed of mostly dolomite, with minor diopside and calcite and trace serpentine. It is typical of the dolostones in the Forster Prospect, which have been altered by Jurassic dolerite intrusions, and formed similar magnesian skarns to varying degrees. These rocks vary from pure dolomite to almost pure diopside and to calcite-serpentine rocks, plus variants with abundant brucite, wollastonite and other minerals (Bottrill et al., 1999).

### References

Bottrill, R.S., Taheri, J., and Calver, C. R.; 1999, The nature and origin of Gold Mineralisation at Forsters Prospect, in the Glovers Bluff/Weld River area. *Mineral Resources Tasmania., Record* 1999/06

R. Bottrill  
Mineralogist/Petrologist

R. Woolley  
Technical Officer

# Mineral Resources Tasmania

Department of Infrastructure, Energy and Resources



## Appendix 1: XRD results

**Client:** K. Morrison  
**Sample Location:** Weld R  
**MRT Job Number:** M10/130  
**Analysis:** Approximate Mineralogy  
**Method:** X-Ray Diffraction  
**Date:** 15/12/2010  
**Sample:** G10403 (MRT G404086)  
**Analyst:** Richie Woolley

### Results

<b>Mineral</b>	<b>~Wt.%</b>
<i>Dolomite</i>	65-80
<i>Calcite</i>	10-15
<i>Diopside</i>	10-15
<i>Serpentine</i>	2-5%

*Peak overlap may interfere with identifications and quantitative calculations  
Amorphous material and minerals present in trace amounts may not be detected*

### **.Disclaimers**

*While every care has been taken in the preparation of this report, no warranty is given as to the correctness of the information and no liability is accepted for any statement or opinion or for any error or omission. No reader should act or fail to act on the basis of any material contained herein. Readers should consult professional advisers. As a result the Crown in Right of the State of Tasmania and its employees, contractors and agents expressly disclaim all and any liability (including all liability from or attributable to any negligent or wrongful act or omission) to any persons whatsoever in respect of anything done or omitted to be done by any such person in reliance whether in whole or in part upon any of the material in this report.*

*This and other data collected in MRT laboratories may enter the MRT databases but every attempt will be made to ensure it remains closed file and not be available externally, unless at your request.*

**APPENDIX B**  
**Botany and Fauna Habitat Survey Report**

**BOTANICAL AND FAUNA HABITAT SURVEY**

**EDDY CREEK, WELD VALLEY, EL 1/2011**

**SUMMARY REPORT**

**FOR CRESWELLS TRANSPORT PTY LTD**

**6<sup>th</sup> December 2011**

**PHILIP MILNER LANDSCAPE CONSULTANT PTY LTD**

144 Allisons Road, LOWER BARRINGTON  
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TASMANIA

Mobile: 0417 052 605  
Home Phone: (03) 6492 3201  
Email: [philip.milner@bigpond.com](mailto:philip.milner@bigpond.com)

**A.B.N.No. 32 068 906 258**

**Introduction:**

Creswells Transport Pty Ltd is proposing an exploratory drilling program in licence area EL 1/2011 near the Weld Valley west of Huonville which will initially involve the formation of a vehicular track which will extend from an existing Forestry Tasmania road for a distance of approximately 1,000 metres in order to access the dolomite outcrop target area. The purpose of this survey is to assess the possible impacts of the formation of the vehicular access track on the natural values of the location.

**Objectives:**

The objectives of this survey were to;

- Undertake a desktop survey to confirm the records of threatened species of flora known to occur in the exploration target areas and in the vicinity.
- Undertake a field survey of the target area, focusing on the proposed route of the vehicular track.
- Determine the possible impacts of the track formation on the natural values present and how those impacts may be minimised.

**Location of Study Area:**

The area to be surveyed is located adjacent to Eddy Creek in the Weld River valley about 30km west of Huonville.

MAP REF: Tasmap 1:25,000, Map Sheet No. 4623, WELD

BIOREGION: Southern Ranges

- Reference point for this survey: GRID REF: 477000E – 5237000N  
(All Grid References MGA Zone 55 GDA94)

**Desktop Survey of Natural Values:**

The DPIPWE database “The Natural Values Atlas” was accessed for the recorded locations of the threatened species of flora, fauna and vegetation communities which are known to occur in the locality.

**Desktop Survey Results:**

**VEGETATION COMMUNITIES:**

The predominant vegetation community within 1,000 of the reference point is comprised *Eucalyptus obliqua* Wet Forest with a few pockets of *Nothofagus- Phyllocladus* Short Rainforest and *Eucalyptus nitida* Wet Forest. None of these communities are listed as threatened vegetation communities under the Tasmanian *Nature Conservation Act 2002*. REF: TasVeg vegetation mapping program.

**THREATENED SPECIES:**

No species of threatened flora or fauna listed under the Tasmanian *Threatened Species Protection Act 1995* and /or the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* is recorded on the Natural Values Atlas database as occurring within 2,500 metres of the study area reference point. There is a single 2004 record of the Mt Mangana Stag Beetle *Lissotes menalcas*, about 3,000 metres east of the reference point. The species is listed as being vulnerable under the Tasmanian Act. The species requires mature wet forest with fallen rotten logs as habitat.

**Field Survey:**

Methodology: The field survey followed the route of the proposed vehicular track as detailed on the attached map.

The field survey was conducted on the 2<sup>nd</sup> December 2011.

**Field Survey Results:**

The vegetation community observed within the survey area was typical *Eucalyptus obliqua* Wet Forest which is in accordance with the TasVeg mapping of the location. The forest comprised post-fire regrowth Eucalypts approximately 30 years old and with occasional remnant and emergent old-growth trees of *Eucalyptus obliqua*. There were more old-growth and mature trees present along the first 500 metres of the survey, on the lower slopes on the dolerite substrate compared to the mid-slopes on the dolomite substrate.

The old-growth trees located adjacent to the proposed track route were plotted during the survey. The understorey vegetation was also typical of wet Eucalypt forest although there was variation in species composition and density between the dolerite and dolomite substrates. The predominant species present were *Pomaderris apetala*, *Cyathodes glauca*, *Nematolepis squameum* and *Beyeria viscosa*. The ground layer comprised mainly of *Gahnia grandis* and *Lepidosperma elatius* and both were more common on the dolerite than the dolomite. The understorey on the dolomite was predominantly *Beyeria viscosa* and the ground layer was quite open with just the occasional species of ground fern.

No threatened species of plant was observed during the survey, although the shrub *Pimelea cinerea* which has been delisted from the threatened species list, was present along the route of the proposed track.

A number of the old-growth trees observed during the survey possessed hollows which would be potential fauna habitat however the track alignment will be varied in order to avoid standing trees. No potential den sites for Tasmanian Devils were observed along the route of the proposed track. There were numerous fallen logs which were in varying stages of decay along the proposed route which would be potential habitat for the larvae of the stag beetle. Careful relocation of any logs will ensure that such habitats are retained.

EASTING	NORTHING	DESCRIPTION
477574	5236807	Old-growth <i>Eucalyptus obliqua</i>
477623	5237022	Old-growth <i>E. obliqua</i>
477619	5237066	Old-growth <i>E. obliqua</i>
477592	5237081	Old-growth <i>E. obliqua</i>
477602	5237284	Old-growth <i>E. obliqua</i>
477551	5237410	Old-growth <i>E. obliqua</i>
477554	5237486	Old-growth <i>E. obliqua</i>
477555	5237489	Dead standing tree with hollows
477535	5237550	Dead standing tree with hollows
477623	5236727	Old-growth <i>E. obliqua</i>
477634	5236698	Mature <i>E. obliqua</i>
477641	5236690	Old-growth <i>E. obliqua</i>
477646	5236678	Mature <i>E. obliqua</i>

**TABLE 1: Mature and old-growth trees plotted along proposed route.**

**Survey Conclusions:**

The formation of the proposed access track will not impact on any threatened species of flora or fauna or threatened vegetation community.

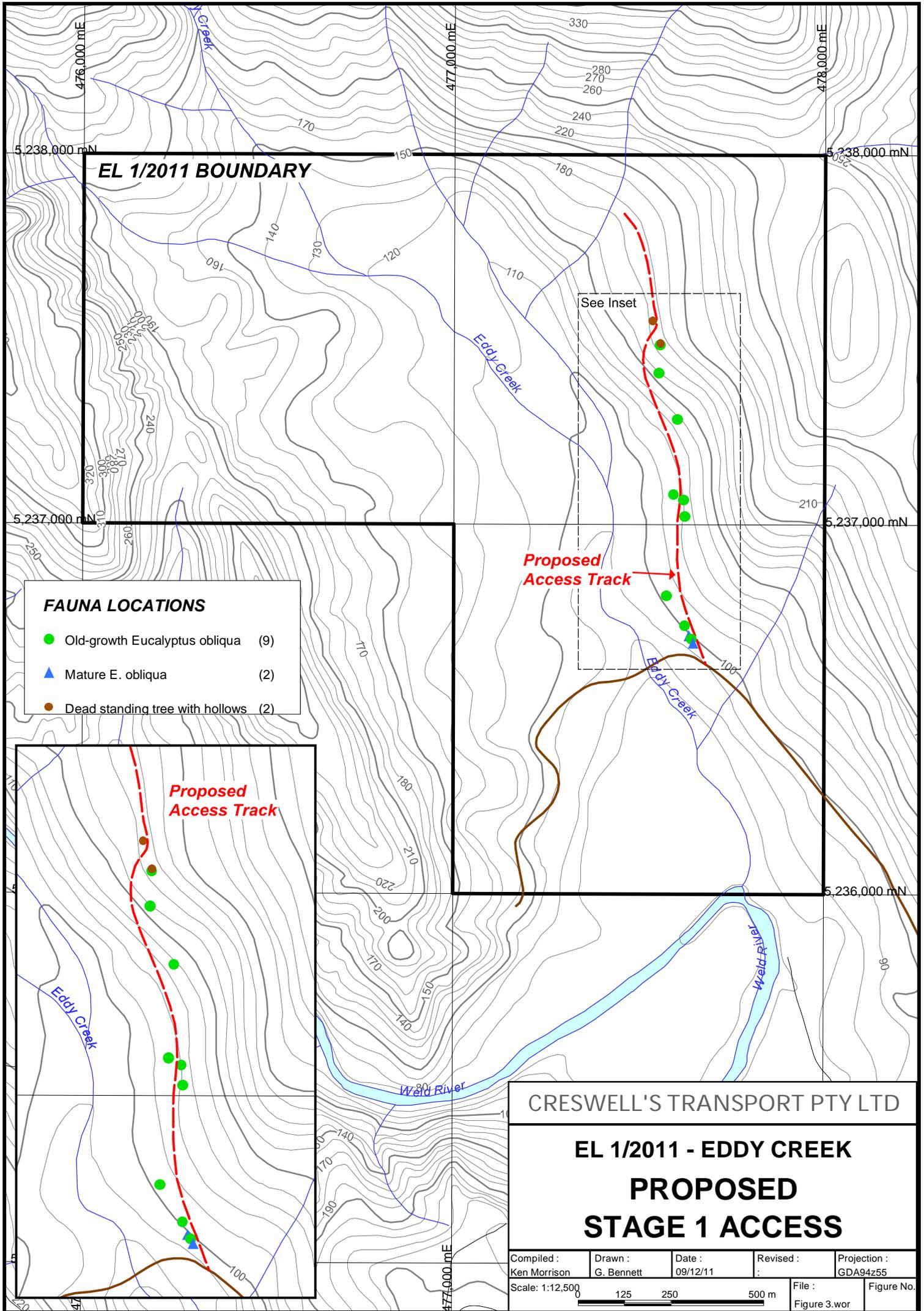
Potential fauna habitat is present in the old-growth Eucalypts which occur adjacent to the proposed route, although the track alignment will be varied to ensure that all such trees are avoided. Rotten logs were frequent along the route but can be carefully nudged aside and kept intact.

**Recommendations:**

- Adjust the alignment of the proposed vehicular track where necessary in order to avoid the mature and old-growth Eucalypts.
- Any old fallen logs along the route should be gently pushed aside and be kept intact as much as possible, as they are potential habitat for Stag Beetle larvae.
- Undertake the track formation during the summer period in order to minimise ground disturbance.

Philip Milner

Vegetation Consultant



**EL 1/2011 BOUNDARY**

See Inset

**Proposed Access Track**

**FAUNA LOCATIONS**

- Old-growth *Eucalyptus obliqua* (9)
- ▲ Mature *E. obliqua* (2)
- Dead standing tree with hollows (2)

**Proposed Access Track**

CRESWELL'S TRANSPORT PTY LTD

**EL 1/2011 - EDDY CREEK  
PROPOSED  
STAGE 1 ACCESS**

Compiled : Ken Morrison	Drawn : G. Bennett	Date : 09/12/11	Revised : :	Projection : GDA94z55
Scale: 1:12,500			File : Figure 3.wor	Figure No.

