

Final Report  
for EL35/2007 Southern Cross  
for the Period 19 December 2007 to 18 December 2013

Author: C Baxter

Date: December 2013

## **ABSTRACT**

EL35/2007 Southern Cross is located 65km north-east of Launceston in north-east Tasmania. It lies some 20km north-east of the town of Scottsdale. The tenement covers some 20 strike kilometres of Mathinna Group meta-sediments. The company's main focus is gold mineralisation.

Work completed during the life of the licence included drainage sampling, rock chip sampling and soil sampling. The licence expired on 18 December 2013.

## **KEYWORDS**

Geology/Mineralisation

Mathinna Group

Minerals

Gold

Deposits/Occurrences

None

## **COORDINATES**

All lat/long co-ordinates in this report refer to the AGD66 Datum

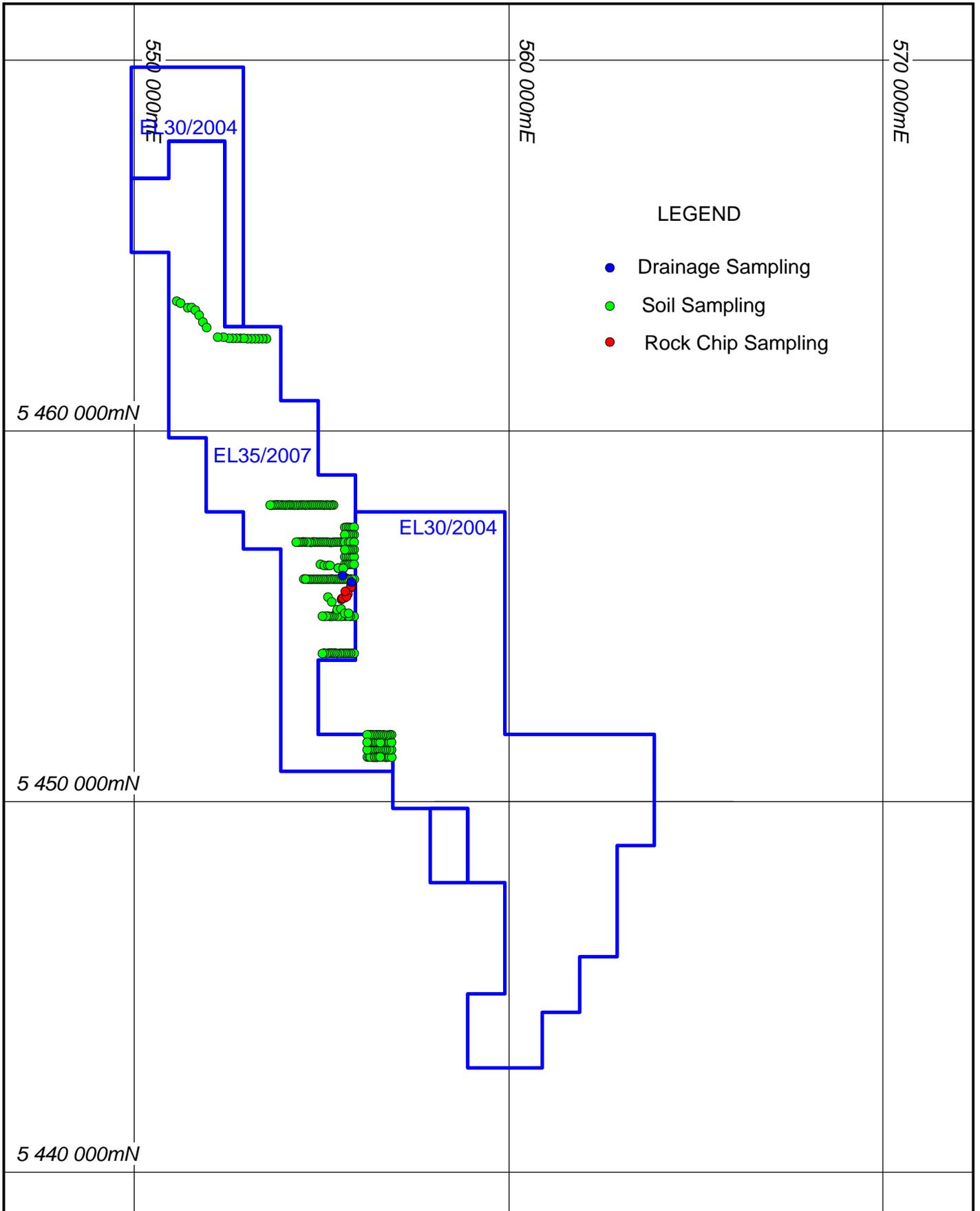
All AMG co-ordinates in this report refer to the AGD66 Datum - Zone55

## FILE SUMMARY LIST

File Name	Format	Contents
el352007_201312_01_report.pdf	pdf	report
el352007_201312_02_geochem.txt	txt	data
el352007_201312_03_geochem.txt	txt	data
el352007_201312_04_geochem.txt	txt	data
el352007_201312_05_geochem.txt	txt	data
el352007_201312_06_geochem.txt	txt	data

### **SUMMARY OF ACTIVITIES FOR EL35/2007 SOUTHERN CROSS FOR THE PERIOD 19 DECEMBER 2007 TO 18 DECEMBER 2013**

- Drainage Sampling
- Soil Sampling
- Rock Chip Sampling



AGD66-ZONE55



N



GREATLAND PTY LTD  
 EL35/2007 SOUTHERN CROSS  
 Exploration Index Map

## CONTENTS

	page
1.0 Introduction	1
2.0 Tenement Details	1
3.0 Location and Access	1
4.0 Geology and Mineralisation	2
5.0 Previous Exploration	3
6.0 Work Carried Out During the Period	4
7.0 Conclusions	7
References	7

## FIGURES

Figure 1	Project Location Map	in text
Figure 2	Regional Geology	in text
Figure 3	Project Geology	in text
Figure 4	Drainage Samples	in text
Figure 5	Soil Samples 2008	in text
Figure 6	Soil Samples 2009a	in text
Figure 7	Soil Samples 2009b	in text
Figure 8	Soil Samples 2011	in text
Figure 9	Rock Chip Samples 2011	in text

## CONTENTS

page

### TABLES

Table 1	Tenement Details	1
---------	------------------	---

### APPENDICES

Appendix I Drainage Sample Data

Appendix II Soil Sample Data

Appendix III Rock Chip Sample Data

## 1.0 Introduction

This report details the exploration activities completed within EL35/2007 during the period 19 December 2007 to 18 December 2013. The lease is located 20km north-east of Scottsdale in north-east Tasmania. The tenement covers some 20 strike kilometres of Mathinna Group meta-sediments. The company's main focus is gold mineralisation.

Work completed during the life of the licence included drainage sampling, soil sampling and rock chip sampling. The licence expired on 18 December 2013.

## 2.0 Tenement Details

EL35/2007 Southern Cross was applied for by Greatland Pty Ltd during May 2007 and was granted during December 2007. A voluntary reduction was approved in January 2010 reducing the tenement area to 42sq km. The Licence expired on 18 December 2013. Tenement details are shown in Table 1.

Table 1 – Tenement Details

Tenement	Holder	Date Granted	Date Expired	Size
EL35/2007 Southern Cross	Greatland Pty Ltd 100%	19 Dec 2007	18 Dec 2013	42km <sup>2</sup>

## 3.0 Location and Access

EL35/2007 Southern Cross is located 65km north-east of Launceston in north-east Tasmania (Figure 1). It lies some 20km north-east of the town of Scottsdale and 20km east of the town of Bridport. The tenement forms the north-western parts of the Company's Warrentinna project (Figure 2). Land

within the southern parts of the tenement is state forest or private land under forestry plantation, while the northern parts cover private farming land.

The tenement lies within the Tasmania NE (SK55-21) 1:250,000 map sheet. It straddles the two 1:100,000 map sheets of Forester (8415) and Cape Portland (8416).

From Launceston, access to the project area is by sealed road to either Bridport or Scottsdale then east via sealed or formed gravel roads which traverse the tenement. Formed gravel roads and logging tracks provide adequate 4WD access throughout the tenement.

#### **4.0 Geology and Mineralisation**

The licence area covers some 20 strike kilometres of Mathinna Group rocks (Figure 3) which comprise metamorphosed sandstones, siltstones and mudstones of late Cambrian to Early Devonian age. The Mathinna Group metasediments, together with intrusive Devonian granites, cover much of the north-eastern parts of Tasmania and are considered to be equivalent to rocks of the Melbourne Trough which host the bulk of Victoria's gold mineralisation. Goldfields in north-eastern Tasmania hosted by the Mathinna group or adjacent rocks of the same age include Beaconsfield, Lefroy, Mangana, Mathinna, Alberton, Warrentinna, Forester, Waterhouse, Scamander and Portland (Figure 2).

Metamorphism of the Mathinna Group is attributed to granite intrusion and Silurian regional (orogenic) deformation events. Regional deformation resulted in pervasive low grade metamorphism of the sediments, and large scale (5km) folding. Contact metamorphic effects are present in the sediments, as a result of granite intrusion, up to 5km from contacts.

Gold mineralisation in north-eastern Tasmania generally occurs as quartz veins hosted by the Mathinna Group rocks, and also in local placer deposits

derived from their erosion. However, there is recorded gold mineralisation in quartz veining in granitoid rocks, for example, at Golconda and Scamander. North-eastern Tasmania is also recognised as being well endowed with granite related tin mineralisation.

The historic Southern Cross goldfield lies in the north of the project area (Figure 3). Here, gold and associated sulphide mineralisation is found in quartz veins hosted by metasediments of the Mathinna Group. Exposed lodes, prospecting pits and shallow shafts have been mapped over a strike of 600m (Blake, 1934).

## **5.0 Previous Exploration**

Historical maps show the Southern Cross goldfield to contain several strike parallel gold reefs over a strike length of some 600m (Blake, 1934). The original prospecting claim was taken up in 1878, and the reefs worked sporadically between 1880 and 1911. Details on development, production figures etc are unavailable but it appears minimal work was carried out (Summons, 1983).

Modern exploration commenced with Union Corporation (Winnall, 1981), CSR Limited (Ellis, 1995) and Shell/Billiton (Randell, 1991) completing regional drainage surveys between 1980 and 1989. Goldfields Exploration completed a review of gold mineralisation in the district during the early 1980s (McOnie, 1983). Soil sampling and rock chip sampling over the Southern Cross goldfield was carried out by Placeco between 1989 and 1990 (Hofto and Morrison, 1990).

Between 1994 and 1995 Herald resources completed a detailed regional drainage sampling program collecting approximately 100 samples throughout the 53sq km tenement. Herald also completed soil sampling, trenching and four RC drill holes at the Southern Cross goldfield (Turner, 1996).

Private operator Bardenhagen investigated the Southern Cross goldfield between 2003 and 2005 (MacDonald, 2004 and MacDonald, 2005). Work completed included rock chip sampling, trenching and three diamond drill holes.

Relevant aeromagnetic and radiometric surveys over the tenement have been flown by Placeco in 1987 (Davidson and Hofto, 1988) and the Tasmanian Geological Survey in 2007. Line spacings were 125m and 200m respectively. Interpretation of the data sets was completed by Leaman (1994) and Godbear (2008).

A review of all drainage sampling data shows maximum values of 124ppb Au, 46ppm As, 8ppm Ag, 95ppm Cu, 46ppm Pb and 457ppm Zn. Rock chip samples were collected from the Southern Cross goldfield by various operators. Maximum results of 13.7ppm Au, 17.4% As, 179ppm Cu, 4104ppm Pb and 1430ppm Zn were returned from work by Herald (Turner, 1996). Over 150g/t gold was reported from rock chips by Placeco (Hofto and Morrison, 1990). Results of 2m composite trench samples by Herald were uniformly low.

Results from four RC holes by Herald and three diamond holes by Bardenhagen at the Southern Cross goldfield were uninspiring. Highest result from RC drilling was 1m at 0.671ppm Au and 5ppm As from 15m in SCRC004. Highest result from diamond drilling were 0.275m at 1.27g/t Au and 4.0% As from 10.2m in LH2, and 0.25m at 2.38g/t Au and 0.54% As from 15.3m in LH3.

## **6.0 Work Carried Out During the Period**

Work completed during the term of the licence included drainage sampling, soil sampling and rock chip sampling.

### *Drainage Sampling*

Two drainage samples were collected. Both samples were sent to Genalysis Laboratories in Perth for analysis of Au, Ag, As, Bi, Pb, Sb, Sn and W to detection limits of 0.1, 0.05, 1, 0.01, 1, 0.02, 0.05 and 0.05 respectively. Gold analysis was by Aqua Regia digest with an enhanced sensitivity AAS read (lab code B/EETA) while all other elements were by Aqua Regia digest with a mass spectrometry read (lab code B/MS).

Highest results were 0.09ppb Au, 4ppm As, 0.12ppm Bi, 3ppm Pb, 0.33ppm Sb, 0.36ppm Sn and 0.1ppm W. All sample results are presented in Appendix I and locations are shown in Figure 4.

### *Soil Sampling*

Three Phases of soil sampling were completed during the life of the licence.

Phase 1 was carried out in 2008 with 32 soil samples collected along three reconnaissance traverses. Samples were collected every 50m along the traverse and composited to 100m centers. Material was taken from a depth of around 150mm and 250g of -80# material retained for analysis. Sample numbers were 89127-89137 (11) and 89140-89160 (21).

All samples were sent to Genalysis Laboratories in Perth for analysis of Au, Ag, As, Bi, Pb, Sb, Sn and W to detection limits of 0.1, 0.05, 1, 0.01, 1, 0.02, 0.05 and 0.05 respectively. Gold analysis was by Aqua Regia digest with an enhanced sensitivity AAS read (lab code B/EETA) while all other elements were by Aqua Regia digest with a mass spectrometry read (lab code B/MS).

Maximum results were 3.5ppb Au, 0.06ppm Ag, 41ppm As, 10ppm Pb, 0.76ppm Bi, 0.26ppm Sb, 0.15ppm W and 1.42ppm Sn. All sample results are presented in Appendix II and locations are shown in Figure 5.

Phase 2 was carried out in 2009 with 92 soil samples collected along ten traverses. Samples were collected every 50m along each traverse. Material was taken from a depth of around 150mm, and coarse screened to -10mm; approximately 2kg of -10mm material was collected at each site.

All samples were sent to Genalysis Laboratories in Adelaide/Perth for screening to -180micron (-80mesh) then analysis of Au, Ag, As, Bi, Co, Cu, Pb, Sb, W and Zn to detection limits of 0.0001, 0.05, 1, 0.01, 0.1, 1, 1, 0.02, 0.05 and 1ppm respectively. Gold analysis was by Aqua Regia digest with an enhanced sensitivity AAS read (lab code B/EETA). Cu and Zn were by Aqua Regia digest with an AAS read (lab code B/AAS) while all other elements were by Aqua Regia digest with a mass spectrometry read (lab code B/MS).

Maximum results were 2.1ppb Au, 0.16ppm Ag, 16ppm As, 0.58ppm Bi, 6.9ppm Co, 13ppm Cu, 21ppm Pb, 0.48ppm Sb, 0.57ppm W and 40ppm Zn. All sample results are presented in Appendix II and locations are shown in Figures 6 and 7.

Phase 3 was carried out in late 2011 with 126 samples collected along five east-west lines 1km apart. Sample spacing along lines was 50m. Samples were collected from depth of approximately 300mm and coarse sieved to <20mm. Approximately 1kg of sieved material was taken for analysis.

All samples were sent to Genalysis Adelaide for processing and pulps forwarded to Genalysis Perth for analysis. All samples were sieved to -80# at the laboratory and analysed for a suite of 31 elements including gold and base metals by Aqua Regia/AAS/OES. Details of analysis and all results are presented in Appendix II. Sample locations are shown on Figure 8.

Selected highest results were 5ppb Au, 26ppm As, 22ppm Cu, 12ppm Pb, 37ppm Zn.

### *Rock Chip Sampling*

A total of twenty rock chip samples were taken during the life of the licence. Approximately 1kg of material was collected at each sample site.

All samples were sent to Genalysis Adelaide for processing and pulps forwarded to Genalysis Perth for analysis. All samples were analysed for a suite of 31 elements including gold and base metals by Aqua Regia/AAS/OES. Details of analysis and all results are presented in Appendix III. Sample locations are shown on Figure 9.

Selected highest results were 13ppb Au, 172ppm As, 42ppm Cu, 14ppm Pb, 68ppm Zn.

## **7.0 Conclusions**

EL35/2007 Southern Cross is located 65km north-east of Launceston in north-east Tasmania. It lies some 20km north-east of the town of Scottsdale. The tenement covers some 20 strike kilometres of Mathinna Group meta-sediments. The company's main focus is gold mineralisation.

Work completed during the life of the licence included drainage sampling, rock chip sampling and soil sampling. The licence expired on 18 December 2013.

## **References**

Blake F, 1934. Maps of the Waterhouse goldfield. Lyndhurst area – north and Lyndhurst area – south. Southern Cross, 1:2000. Department of Mines Tasmania, pp3.

Davidson, J.K. and Hofto, V., 1988. Exploration Licence 27/86 Lyndhurst, annual Report Year 1. Placeco (Australia) Proprietary Limited, p1-3. TCR88-2783

- Ellis, P.D., 1995. Assorted Stream Sediment Geochemistry-Tasmania Wide. CSR Limited, p1-5. TCR95-3711
- Godbear, K., 2008. Northeastern Tasmania TasExplore Airborne Radiometric and Magnetic Survey Geophysical Interpretation Report. Mitre Geophysics, pp14. GPCR2008-03
- Hofto, V. and Morrison, K.C., 1990. Exploration Licence 27/86 - Lyndhurst. Annual Report : Year 3 (1 April, 1989 - 31 March, 1990). Placeco (Australia) Proprietary Limited, p1-6. TCR90-3109
- Leaman, D.E., 1994. Regional Review Geophysical Data North East Tasmania EL23-24-25-45/94. Herald Resources Ltd, pp20. TCR96-3820
- McOnie, A., 1983. A Review of the Gold Potential of North Eastern Tasmania. Goldfields Exploration Ltd, pp75. TCR90-3140
- MacDonald, G., 2004. Annual Report for EL22/2003 Lyndhurst. Bardenhagen, pp9. TCR04-5059
- MacDonald, G., 2005. Relinquishment Report for EL22/2003 Lyndhurst. Bardenhagen, pp9. TCR04-5174
- Randell, J.P., 1991, Reconnaissance Gold Exploration NE Tasmania. Billiton Australia, pp15. TCR92-3337
- Summons, T.G., 1983. EL57/80 Final Report. H.J. Stackpoole, p1-17. TCR83-1951
- Turner, N.J., 1996. Exploration Licence 24/94 Boobyalla Tasmania, Annual Report 1994-1995. Herald Resources Ltd, p1-10. TCR96-3858

Winnall, N.J., 1981. EL20/2180 Preliminary Report. Union Corporation  
(Australia) Proprietary Limited, p1-5. TCR81-1582

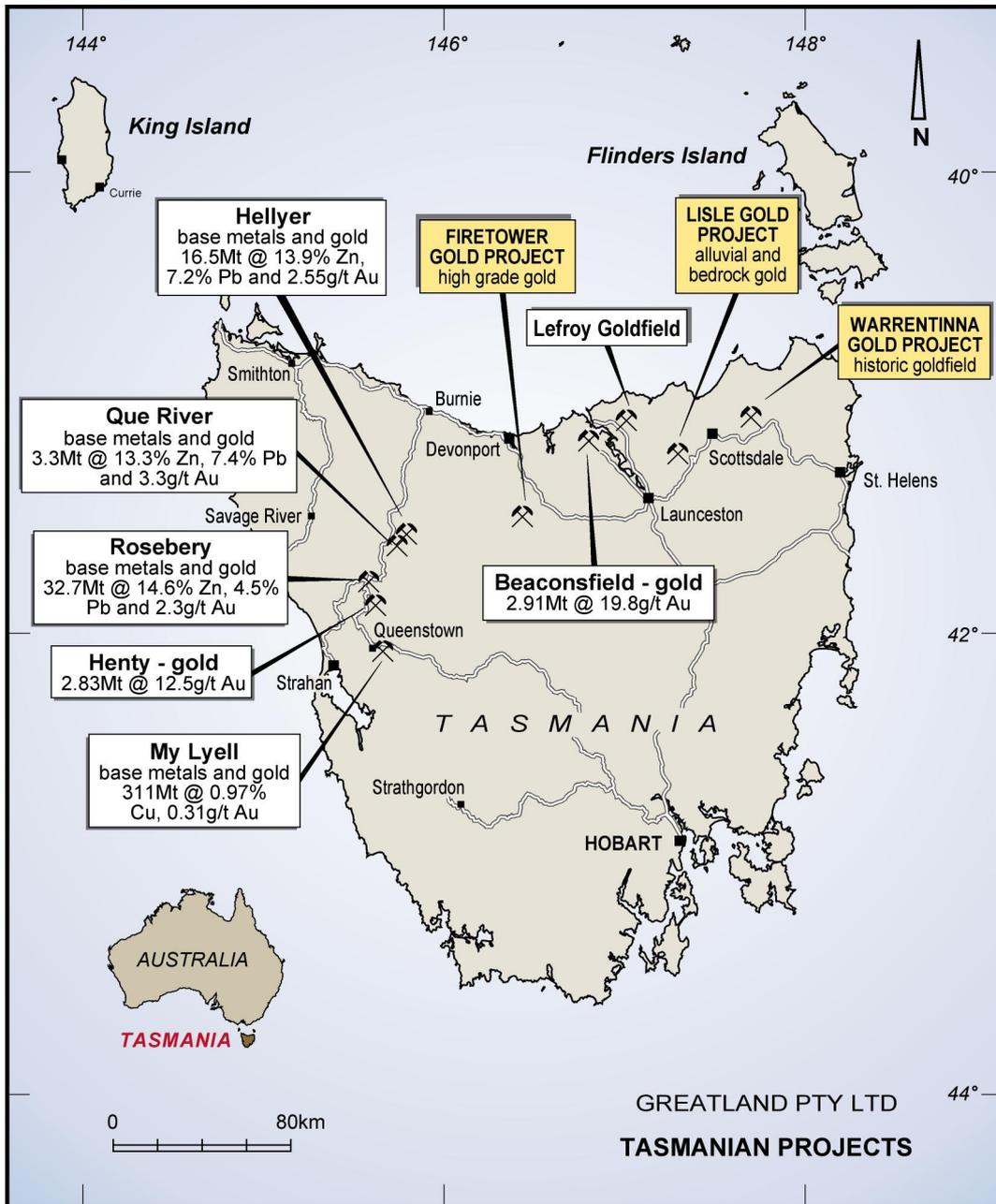


Figure 1 – Project Location Map

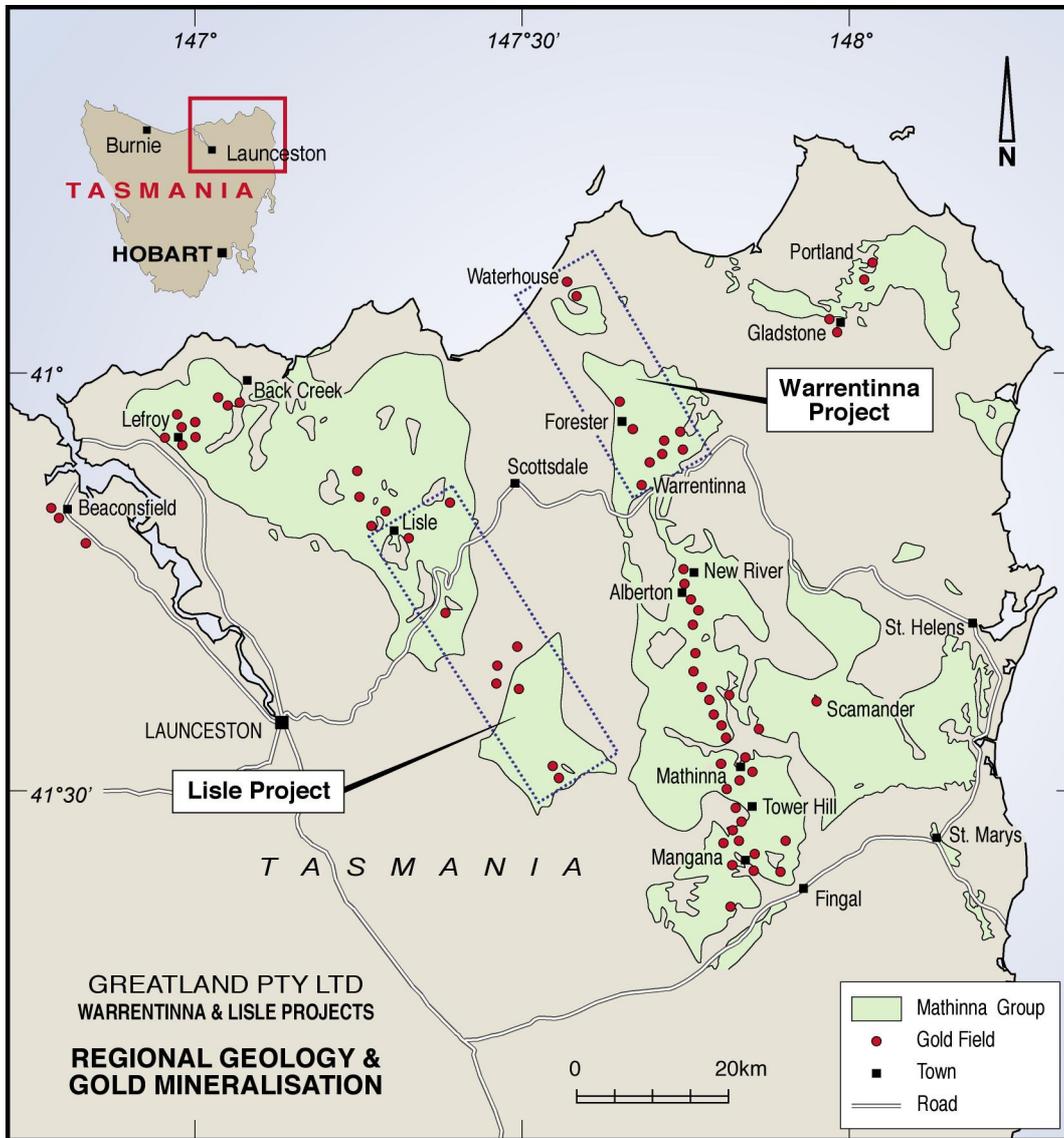


Figure 2 – Regional Geology

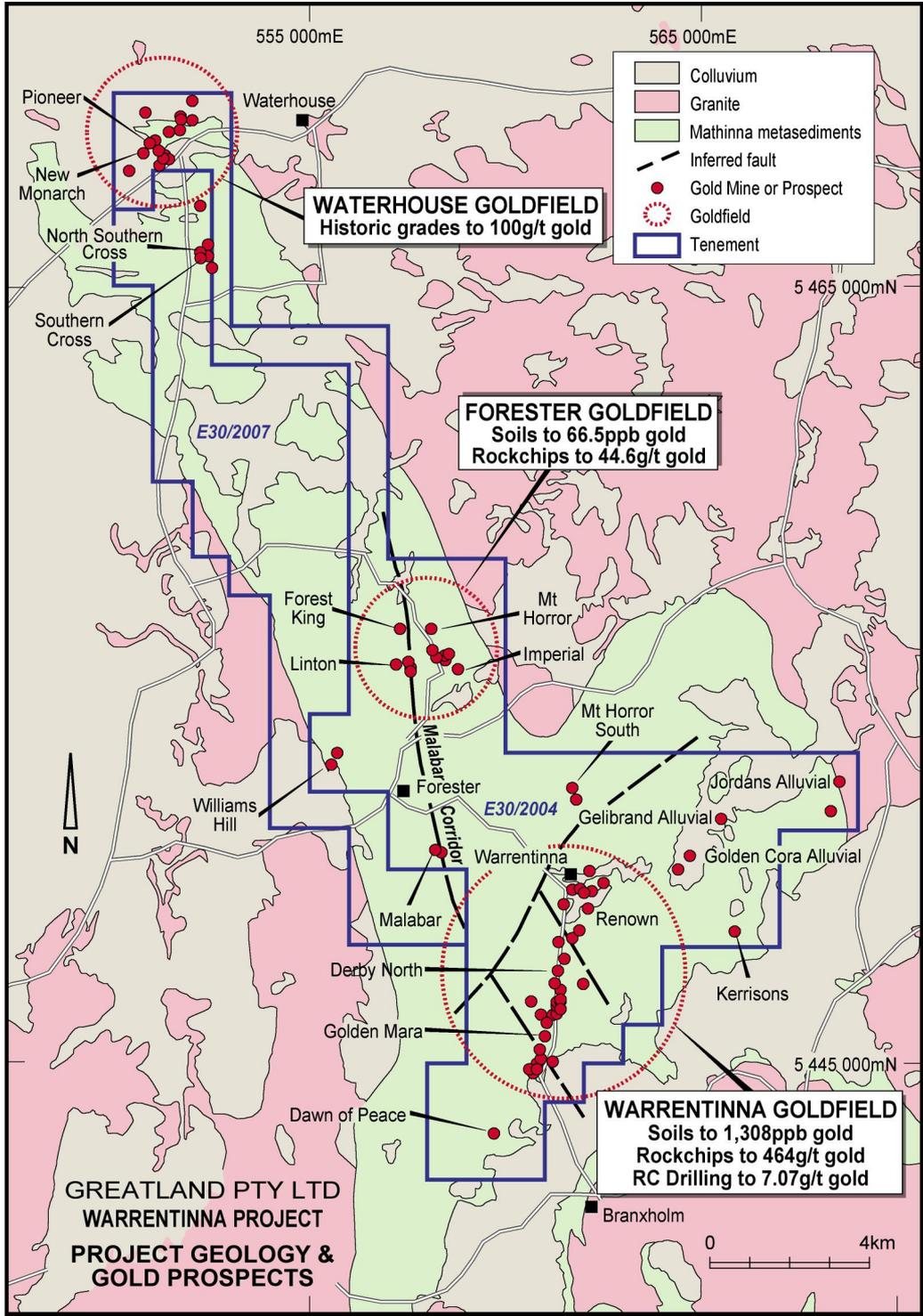
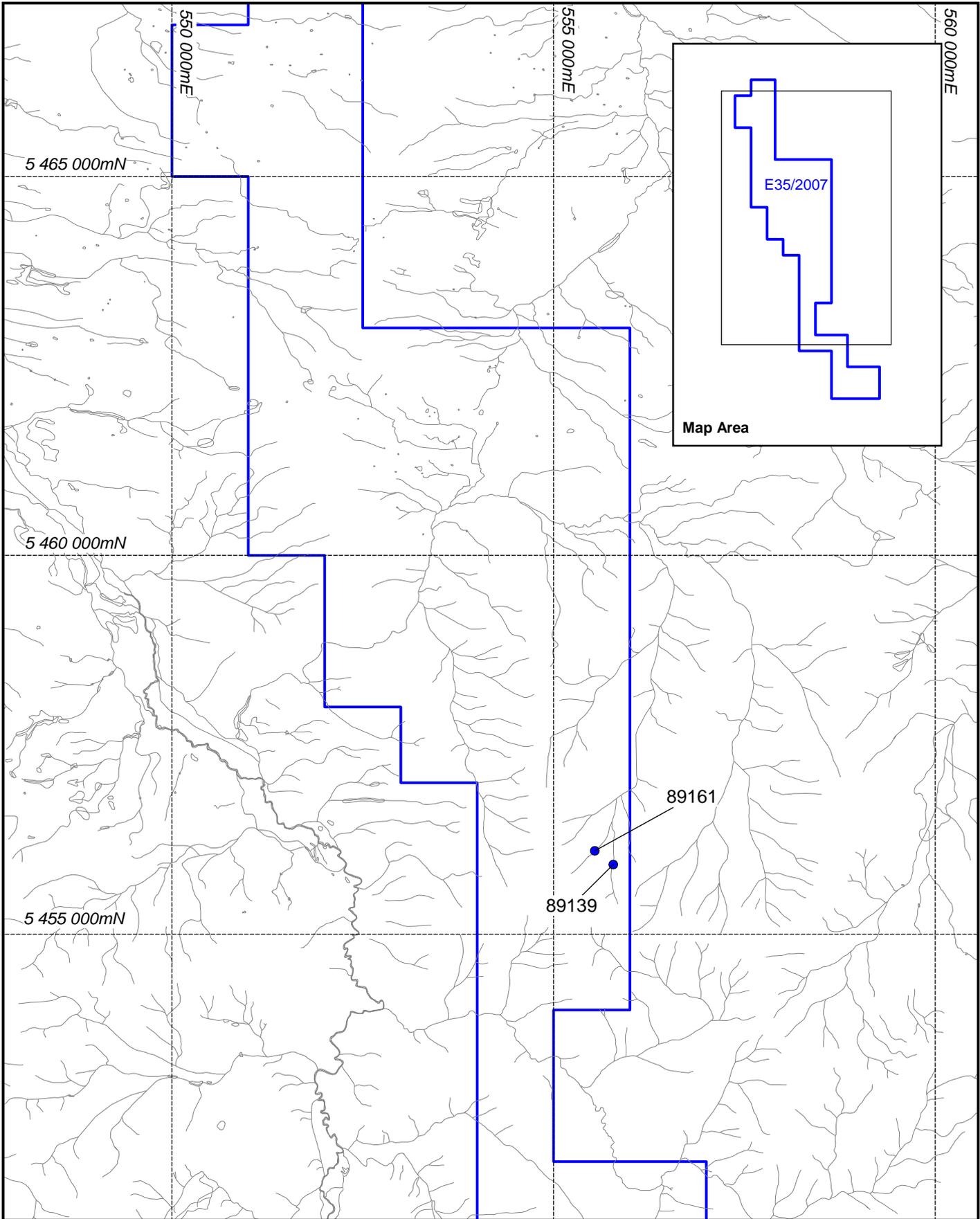


Figure 3 – Project Geology

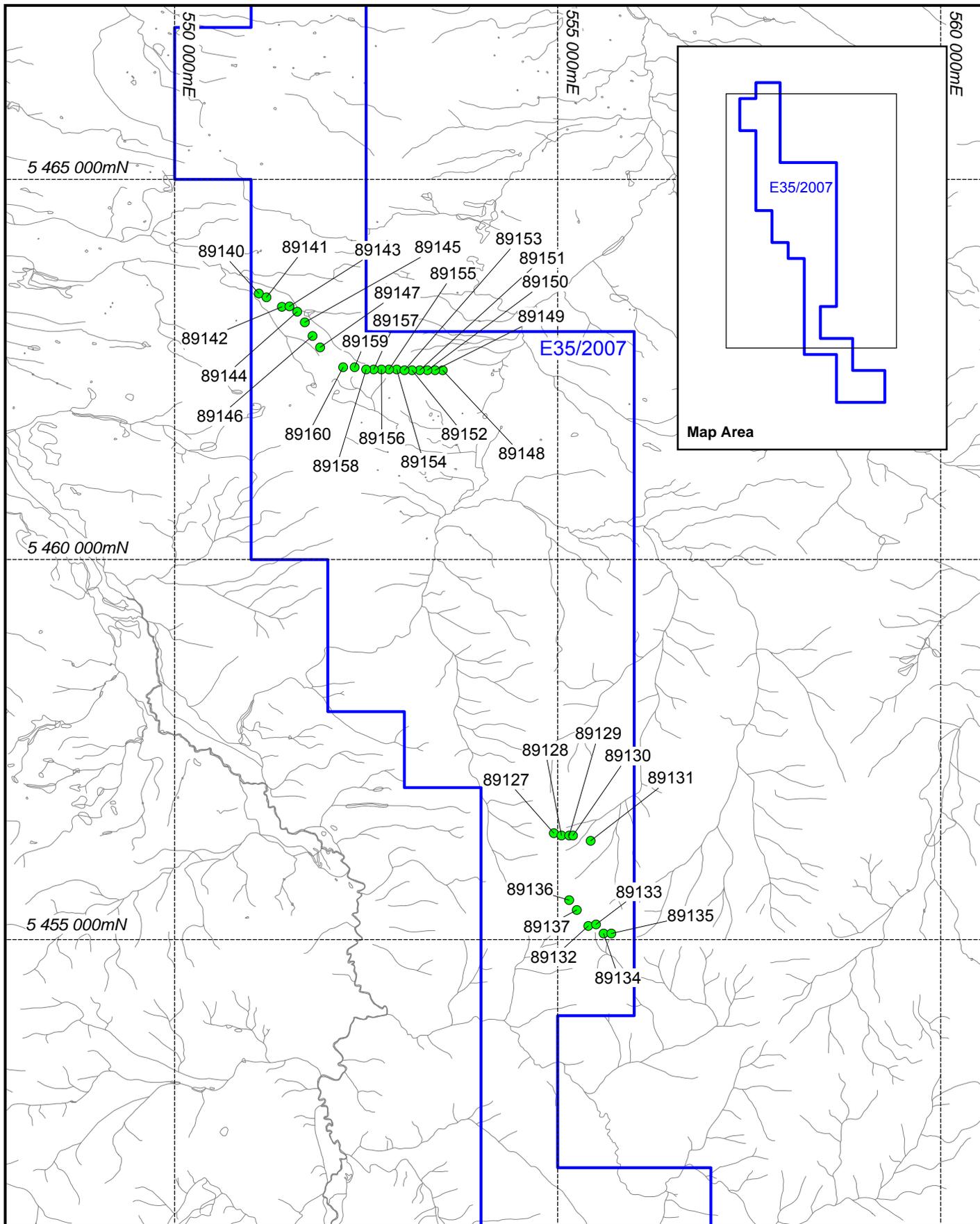


AGD66-ZONE55



GREATLAND PTY LTD  
EL35/2007 SOUTHERN CROSS  
Drainage Samples

Figure 4



AGD66-ZONE55



N

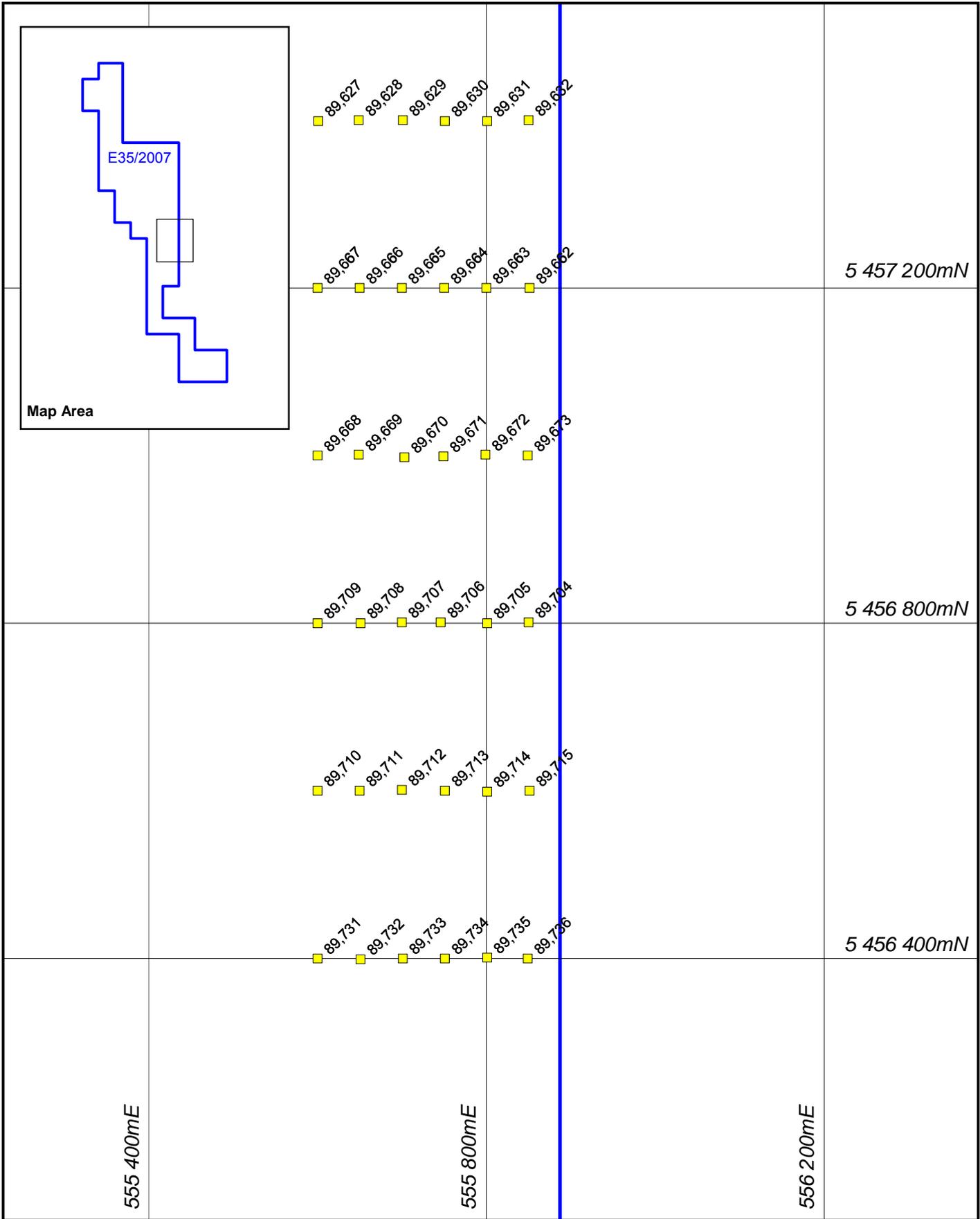


GREATLAND PTY LTD

EL35/2007 SOUTHERN CROSS

Soil Samples 2008

Figure 5

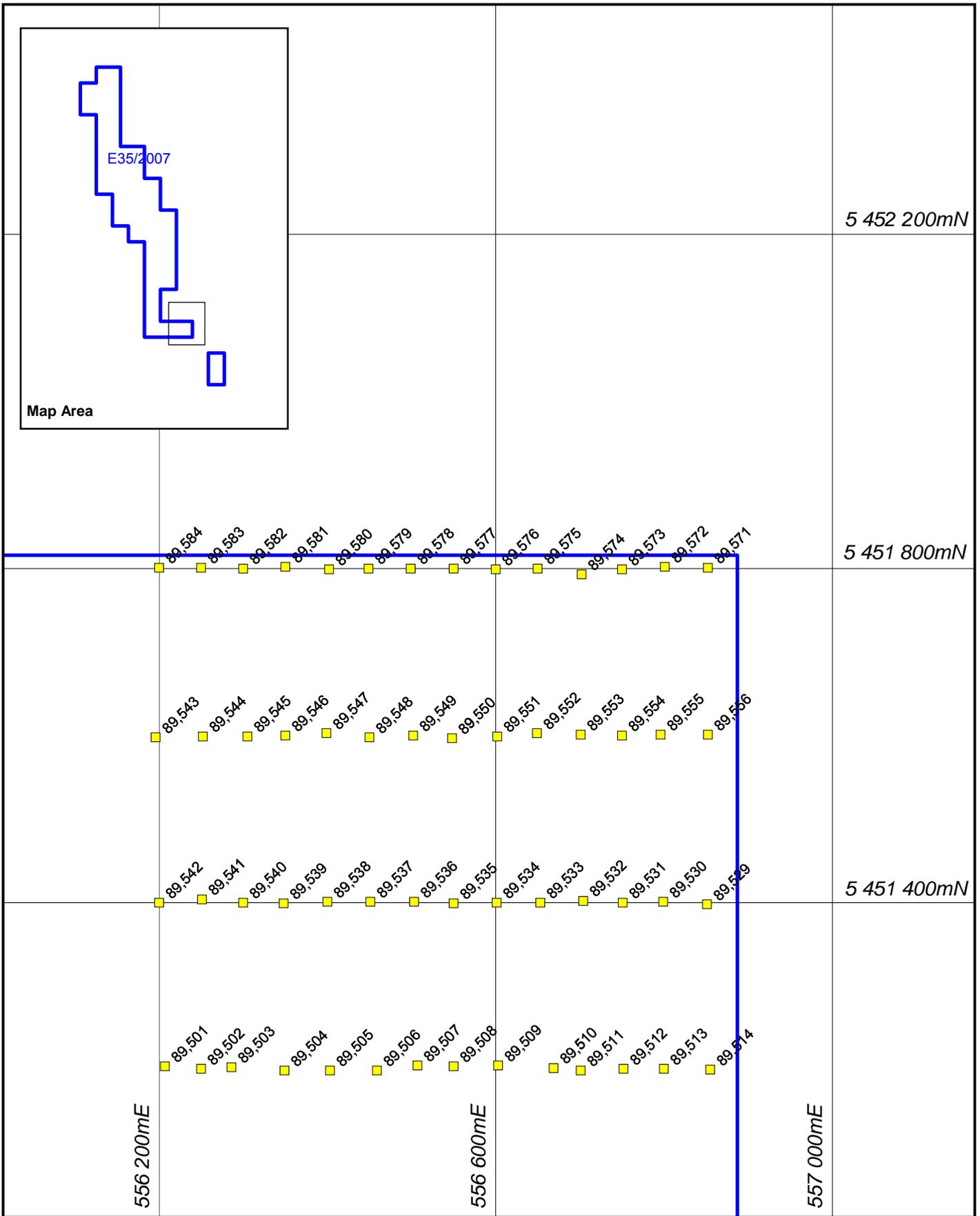


AGD66-ZONE55



GREATLAND PTY LTD  
 EL35/2007 SOUTHERN CROSS  
 Soil Samples 2009a

Figure 6



AGD66-ZONE55

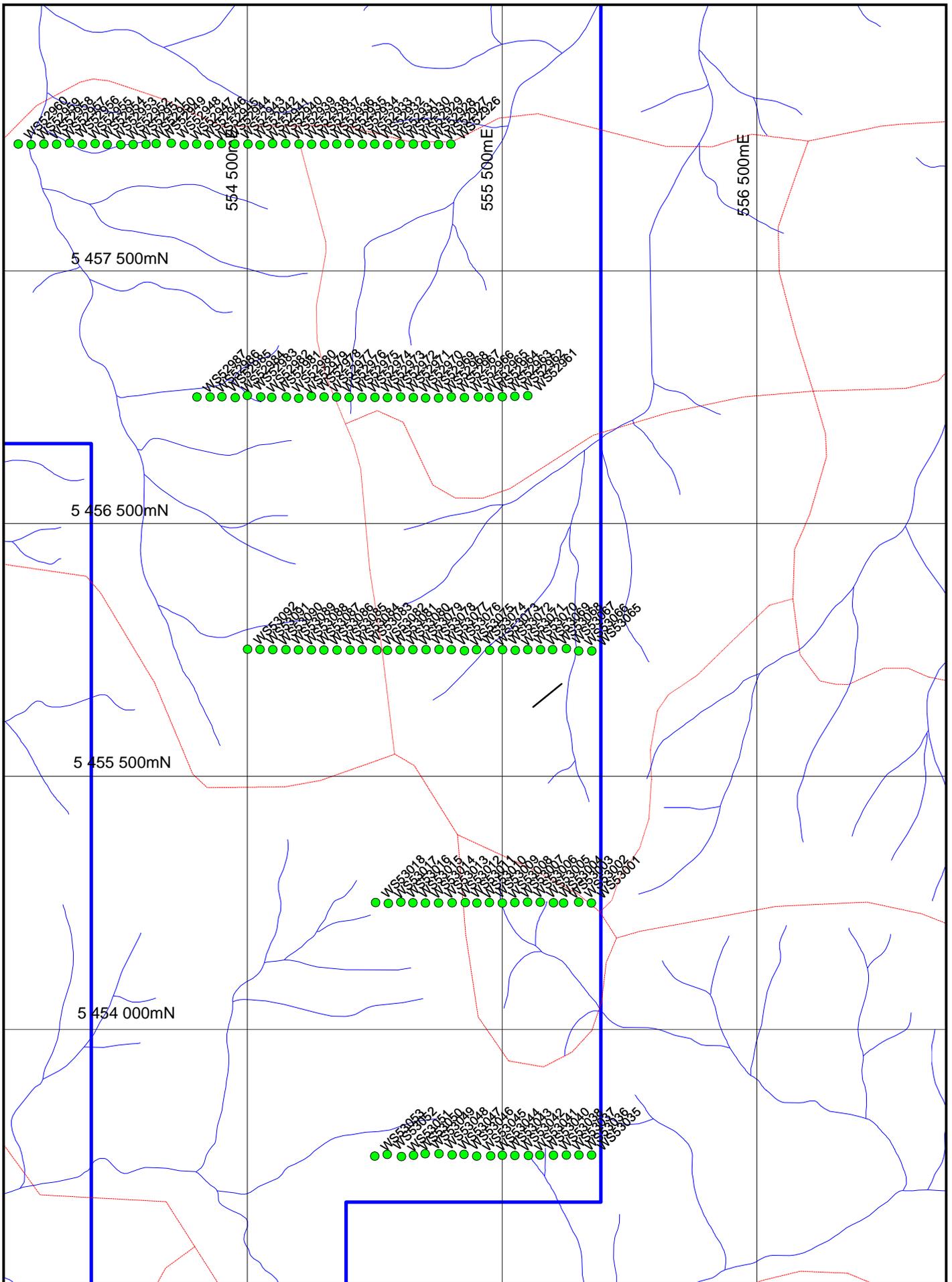


N



GREATLAND PTY LTD  
 EL35/2007 SOUTHERN CROSS  
 Soil Samples 2009b

Figure 7



Co ordinates - AGD66 Zone55

Legend

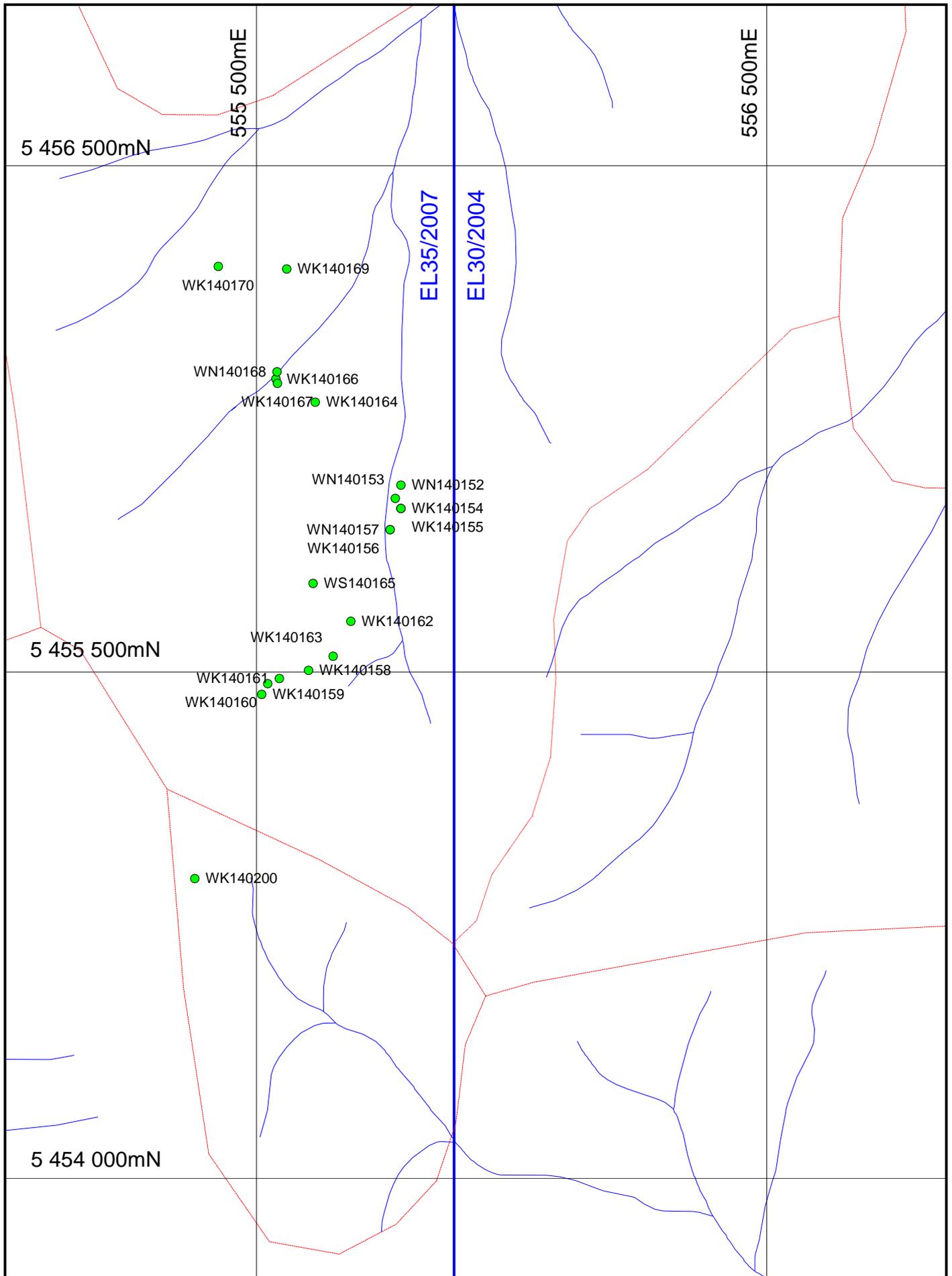
- Soil Sample Site

GREATLAND PTY LTD

Soil Samples 2011



Figure 8



AGD66 Zone55

Legend

● Sample Site Dec 2011

GREATLAND PTY LTD

Rock Chip Samples 2011

Scale - 1:10,000

Figure 9

## APPENDIX I

### Drainage Sample Data

H0100 Tenement EL35/2007  
 H0101 Tenement Greatland Pty Ltd  
 H0102 Tenement Greatland Pty Ltd  
 H0103 Project Name Southern Cross  
 H0104 250K Map : SK55-21  
 H0105 100K Map : 8415 8416  
 H0200 Start Date : Dec-07  
 H0201 End Date of : Nov-08  
 H0202 Data Form: SG2  
 H0203 Number of 2  
 H0204 Date of Me : Dec-13  
 H0500 Feature Location Sample Point  
 H0501 Geodetic Datum AGD66  
 H0502 Vertical Datum N/A  
 H0503 Projection AMG  
 H0504 Projection 55  
 H0505 Surveying Instrument Handheld GPS  
 H0506 Surveying Company Greatland Pty Ltd  
 H0600 Sample Core Drainage  
 H0601 Sample Type Drainage  
 H0602 Sample Diameter 180micron  
 H0700 Sample Pressure SSMG  
 H0701 Sample Pressure 75micron  
 H0702 Job No 807799  
 H0800 Assay Code B/EETA B/MS  
 H0801 Assay Company Genalysis Laboratories  
 H0802 Assay Description Aqua Regia digest - AAS/MS read  
 H0900 Remarks below detection -1 no data -999  
 H1000 Sample No AMG East AMG North Datum Zone Au Ag As Bi Pb Sb Sn W  
 H1001 metres metres AAS MS MS MS MS MS MS MS  
 H1002 1 1 0.1 0.05 1 0.01 1 0.02 0.05 0.05  
 D 89139 555780 5455920 AGD66 55 0.8 -0.05 4 0.08 3 0.33 0.21 0.1  
 D 89161 555540 5456100 AGD66 55 0.9 -0.05 -1 0.12 3 0.04 0.36 -0.05  
 EOF

## APPENDIX II

### Soil Sample Data

H0100 Tenement EL35/2007  
 H0101 Tenement Greatland Pty Ltd  
 H0102 Tenement Greatland Pty Ltd  
 H0103 Project Nar Southern Cross  
 H0104 250K Map :SK55-21  
 H0105 100K Map : 8415 8416  
 H0200 Start Date : Dec-07  
 H0201 End Date o Nov-08  
 H0202 Data Form:SG2  
 H0203 Number of 32  
 H0204 Date of Me Dec-13  
 H0500 Feature Lo:Sample Point  
 H0501 Geodetic D AGD66  
 H0502 Vertical Da N/A  
 H0503 Projection AMG  
 H0504 Projection 55  
 H0505 Surveying I Handheld GPS  
 H0506 Surveying ( Greatland Pty Ltd  
 H0600 Sample Co:Soil  
 H0601 Sample Ty:Soil  
 H0602 Sample De:180micron  
 H0700 Sample Pre:SSMG  
 H0701 Sample Pre 75micron  
 H0702 Job No 807799  
 H0800 Assay Code B/EETA B/MS  
 H0801 Assay Com Genalysis Laboratories  
 H0802 Assay Desc Aqua Regia digest - AAS/MS read  
 H0900 Remarks below detection -1 no data -999

H1000	Sample No	AMG East	AMG North	Datum	Zone	Au	Ag	As	Bi	Pb	Sb	Sn	W
H1001	metres	metres				ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
H1002						AAS	MS	MS	MS	MS	MS	MS	MS
H1003		1	1				0.1	0.05	1	0.01	1	0.02	0.05
D	89127	554950	5456400	AGD66	55	1	-0.05	-1	0.11	4	-1	0.32	-1
D	89128	555050	5456370	AGD66	55	3.5	-0.05	22	0.76	10	0.06	1.03	0.07
D	89129	555150	5456370	AGD66	55	1	-0.05	6	0.21	7	0.03	0.63	0.08
D	89130	555200	5456370	AGD66	55	1.4	-0.05	41	0.17	4	0.06	1.1	0.15
D	89131	555430	5456300	AGD66	55	1	-0.05	14	0.2	8	0.05	0.82	0.09
D	89132	555400	5455180	AGD66	55	1	-0.05	18	0.32	10	0.14	1.32	0.08
D	89133	555500	5455200	AGD66	55	0.6	-0.05	7	0.12	5	0.26	0.57	-1
D	89134	555600	5455080	AGD66	55	0.3	-0.05	2	0.11	4	0.12	0.49	-1
D	89135	555700	5455080	AGD66	55	0.5	-0.05	4	0.17	5	0.09	0.44	-1
D	89136	555150	5455520	AGD66	55	0.7	-0.05	3	0.16	6	0.07	0.64	0.07
D	89137	555250	5455390	AGD66	55	0.8	0.06	16	0.35	10	0.24	1.42	0.14
D	89140	551100	5463500	AGD66	55	0.4	-0.05	-1	0.02	-1	-1	0.13	-1
D	89141	551200	5463450	AGD66	55	0.4	-0.05	-1	0.04	2	-1	0.16	-1
D	89142	551400	5463325	AGD66	55	0.2	-0.05	-1	0.04	2	0.03	0.13	-1
D	89143	551500	5463330	AGD66	55	0.4	-0.05	-1	0.03	2	-1	0.14	-1
D	89144	551600	5463260	AGD66	55	0.4	-0.05	-1	0.1	4	0.05	0.33	-1
D	89145	551700	5463120	AGD66	55	0.4	-0.05	-1	0.04	1	-1	0.21	-1
D	89146	551800	5462940	AGD66	55	2.1	-0.05	18	0.22	9	0.16	0.83	-1
D	89147	551900	5462790	AGD66	55	0.6	-0.05	-1	0.02	-1	-1	0.15	-1
D	89148	553500	5462490	AGD66	55	0.3	-0.05	-1	0.05	2	-1	0.3	-1
D	89149	553400	5462490	AGD66	55	0.2	-0.05	-1	0.06	4	-1	0.32	-1
D	89150	553300	5462490	AGD66	55	0.3	-0.05	-1	0.05	3	-1	0.16	-1
D	89151	553200	5462490	AGD66	55	0.4	-0.05	-1	0.03	1	0.02	0.18	-1
D	89152	553100	5462490	AGD66	55	0.1	-0.05	-1	0.06	2	-1	0.22	-1
D	89153	553000	5462490	AGD66	55	0.5	-0.05	-1	0.11	3	0.06	0.24	-1
D	89154	552900	5462500	AGD66	55	0.8	-0.05	-1	0.11	4	0.05	0.42	-1
D	89155	552800	5462500	AGD66	55	0.4	-0.05	-1	0.1	3	0.03	0.36	-1
D	89156	552700	5462500	AGD66	55	2	-0.05	-1	0.12	3	0.04	0.4	-1
D	89157	552600	5462500	AGD66	55	0.5	-0.05	-1	0.03	-1	-1	0.2	-1
D	89158	552500	5462500	AGD66	55	0.3	-0.05	-1	0.07	3	0.02	0.42	-1
D	89159	552350	5462530	AGD66	55	0.4	-0.05	2	0.12	5	0.04	0.25	-1
D	89160	552200	5462530	AGD66	55	2.8	-0.05	3	0.18	3	0.23	0.85	-1

EOF

H0100 Tenement EL35/2007  
 H0101 Tenement Greatland Pty Ltd  
 H0102 Tenement Greatland Pty Ltd  
 H0103 Project Nai Southern Cross  
 H0104 250K Map :SK55-21  
 H0105 100K Map : 8415 8416  
 H0200 Start Date : Dec-08  
 H0201 End Date o Nov-09  
 H0202 Data Form:SG2  
 H0203 Number of 92  
 H0204 Date of Me Dec-13  
 H0500 Feature Lo Sample Point  
 H0501 Geodetic D AGD66  
 H0502 Vertical Da N/A  
 H0503 Projection AMG  
 H0504 Projection 55  
 H0505 Surveying I Handheld GPS  
 H0506 Surveying I Greatland Pty Ltd  
 H0600 Sample Co Soil  
 H0601 Sample Ty Soil  
 H0602 Sample De 180micron  
 H0700 Sample Pre SSMG  
 H0701 Sample Pre 75micron  
 H0702 Job No 904386 904387  
 H0800 Assay Code B/EETA B/AAS B/MS  
 H0801 Assay Com Genalysis Laboratories  
 H0802 Assay Desc Aqua Regia digest - AAS/MS read  
 H0900 Remarks below detection -1 no data -999

H1000	Sample No	AMG East	AMG North	Datum	Zone	Au	Ag	As	Bi	Co	Cu	Pb	Sb	W	Zn	
H1001	metres	metres				ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
H1002						EETA	MS	MS	MS	MS	AAS	MS	MS	MS	AAS	
H1003	1	1					0.05		1	0.01	0.1	1	1	0.02	0.05	1
D	89501	556207	5451204	AGD66		55	1.2	-1	-1	0.06	0.9	2	4	0.08	-1	10
D	89502	556250	5451201	AGD66		55	0.5	-1	-1	0.07	3.9	10	4	0.1	-1	11
D	89503	556286	5451203	AGD66		55	2.1	0.06	1	0.21	1.1	7	14	0.11	-1	12
D	89504	556349	5451199	AGD66		55	1.6	0.06	3	0.16	4	13	9	0.26	-1	14
D	89505	556403	5451199	AGD66		55	1	-1	1	0.11	3	7	8	0.17	-1	12
D	89506	556459	5451199	AGD66		55	0.5	-1	2	0.14	1	2	6	0.25	0.05	12
D	89507	556507	5451205	AGD66		55	2.1	-1	1	0.11	3.6	11	5	0.2	0.07	14
D	89508	556550	5451204	AGD66		55	1.3	-1	3	0.14	1.1	6	7	0.31	0.08	18
D	89509	556603	5451205	AGD66		55	0.9	-1	-1	0.06	2.8	9	6	0.13	-1	12
D	89510	556669	5451202	AGD66		55	1.1	-1	2	0.17	0.7	4	10	0.11	0.1	11
D	89511	556701	5451199	AGD66		55	0.4	-1	3	0.18	0.7	6	8	0.12	-1	10
D	89512	556752	5451201	AGD66		55	0.7	-1	3	0.18	0.7	9	10	0.15	0.06	10
D	89513	556800	5451201	AGD66		55	0.7	-1	1	0.15	2.2	10	7	0.13	-1	11
D	89514	556855	5451200	AGD66		55	1.6	-1	2	0.14	0.9	5	9	0.18	-1	16
D	89529	556851	5451398	AGD66		55	0.8	-1	-1	0.1	1.7	6	6	0.08	-1	14
D	89530	556799	5451401	AGD66		55	0.6	-1	8	0.34	1.4	7	15	0.27	-1	15
D	89531	556751	5451400	AGD66		55	0.3	-1	3	0.2	1.5	5	8	0.21	0.05	12
D	89532	556704	5451402	AGD66		55	0.9	-1	5	0.22	0.8	6	10	0.24	0.08	12
D	89533	556653	5451400	AGD66		55	1.2	-1	3	0.41	1.5	7	8	0.23	-1	12
D	89534	556601	5451400	AGD66		55	1.8	0.07	6	0.28	1.5	6	12	0.24	0.06	19
D	89535	556550	5451399	AGD66		55	0.7	-1	1	0.14	1.1	5	6	0.16	-1	11
D	89536	556503	5451401	AGD66		55	0.4	-1	1	0.12	0.6	4	5	0.17	-1	15
D	89537	556451	5451401	AGD66		55	0.7	-1	3	0.11	1.2	5	8	0.25	-1	21
D	89538	556400	5451401	AGD66		55	0.5	-1	8	0.17	1.2	2	7	0.45	-1	18
D	89539	556348	5451399	AGD66		55	0.4	-1	1	0.09	0.5	2	5	0.15	-1	10
D	89540	556300	5451400	AGD66		55	0.9	-1	-1	0.03	0.4	1	2	-1	-1	9
D	89541	556251	5451404	AGD66		55	0.8	-1	1	0.08	0.9	2	5	0.11	-1	11
D	89542	556200	5451400	AGD66		55	0.4	-1	-1	0.08	1.1	2	4	0.07	-1	12
D	89543	556196	5451598	AGD66		55	0.6	0.07	4	0.17	2.1	5	9	0.13	0.06	16
D	89544	556252	5451599	AGD66		55	0.5	0.06	7	0.2	2.4	6	11	0.48	0.08	17
D	89545	556305	5451599	AGD66		55	1.5	-1	2	0.11	1.5	3	6	0.13	-1	16
D	89546	556350	5451600	AGD66		55	1	-1	8	0.16	2.2	9	9	0.48	-1	17
D	89547	556399	5451603	AGD66		55	0.5	0.16	10	0.24	1.3	6	9	0.36	-1	10
D	89548	556450	5451598	AGD66		55	0.6	-1	1	0.13	0.6	5	6	0.12	0.07	10
D	89549	556502	5451600	AGD66		55	-1	-1	1	0.09	1	4	4	0.07	-1	7
D	89550	556548	5451597	AGD66		55	0.3	-1	2	0.12	0.7	8	6	0.1	-1	14
D	89551	556602	5451599	AGD66		55	1.6	-1	1	0.12	1.2	5	8	0.11	-1	12
D	89552	556649	5451603	AGD66		55	1.2	-1	2	0.19	1.1	4	11	0.14	-1	14
D	89553	556701	5451601	AGD66		55	1.6	-1	1	0.16	1.5	4	8	0.1	-1	16
D	89554	556750	5451600	AGD66		55	0.4	-1	2	0.15	0.6	2	7	0.09	0.07	11
D	89555	556796	5451601	AGD66		55	0.5	-1	3	0.19	1.5	4	9	0.15	0.07	13
D	89556	556852	5451601	AGD66		55	0.6	0.06	-1	0.15	1.1	2	6	0.07	0.09	12
D	89571	556852	5451801	AGD66		55	1.2	-1	2	0.17	1.4	6	9	0.15	0.06	11
D	89572	556801	5451802	AGD66		55	1.8	-1	2	0.15	2.3	8	8	0.11	0.07	24
D	89573	556750	5451799	AGD66		55	1.3	-1	1	0.14	1.3	5	7	0.1	-1	24
D	89574	556702	5451793	AGD66		55	0.8	-1	1	0.11	1.4	7	9	0.15	-1	37
D	89575	556650	5451800	AGD66		55	0.6	-1	2	0.14	1.3	7	6	0.08	-1	9
D	89576	556600	5451799	AGD66		55	0.6	-1	3	0.14	1.5	6	8	0.16	0.05	12
D	89577	556550	5451800	AGD66		55	0.5	-1	3	0.25	2.2	8	12	0.16	-1	15
D	89578	556499	5451800	AGD66		55	0.5	-1	3	0.18	1.9	10	15	0.16	0.06	11
D	89579	556449	5451800	AGD66		55	1.1	0.06	6	0.23	2.8	6	11	0.28	0.57	22
D	89580	556402	5451799	AGD66		55	1.1	0.12	4	0.16	6.9	9	10	0.2	0.36	40
D	89581	556350	5451802	AGD66		55	0.5	-1	5	0.15	0.8	2	9	0.38	-1	14
D	89582	556300	5451800	AGD66		55	0.7	-1	4	0.14	1.1	5	7	0.34	-1	11
D	89583	556250	5451801	AGD66		55	0.4	-1	3	0.15	1.3	6	7	0.12	-1	14
D	89584	556200	5451801	AGD66		55	0.7	-1	1	0.1	0.6	4	6	0.12	-1	10
D	89627	556601	5457399	AGD66		55	1	-1	-1	0.12	1.1	4	4	0.06	-1	5
D	89628	556649	5457400	AGD66		55	0.8	-1	-1	0.1	0.4	-1	4	0.05	-1	5
D	89629	555701	5457400	AGD66		55	0.7	-1	-1	0.13	1	3	4	0.11	-1	7
D	89630	555751	5457399	AGD66		55	0.8	-1	-1	0.12	0.5	2	5	0.1	-1	16
D	89631	555801	5457399	AGD66		55	1.8	0.1	5	0.26	1.7	7	10	0.15	-1	21
D	89632	555850	5457400	AGD66		55	0.9	-1	-1	0.1	0.4	4	4	0.09	-1	19
D	89662	555851	5457200	AGD66		55	0.7	-1	-1	0.13	0.3	1	2	0.08	-1	7
D	89663	555800	5457200	AGD66		55	0.8	-1	2	0.14	0.6	2	2	0.11	-1	4
D	89664	555750	5457200	AGD66		55	0.6	-1	-1	0.24	0.7	2	7	0.22	-1	8
D	89665	555700	5457200	AGD66		55	0.8	-1	-1	0.12	0.9	2	3	0.06	-1	3
D	89666	555650	5457200	AGD66		55	0.8	-1	-1	0.07	0.4	1	4	0.03	-1	2
D	89667	555600	5457200	AGD66		55	0.9	-1	-1	0.03	0.6	2	1	-1	-1	3
D	89668	555600	5457000	AGD66		55	0.7	-1	-1	0.1	0.4	-1	5	0.06	-1	3
D	89669	555649	5457001	AGD66		55	0.6	-1	-1	0.13	1.1	2	6	0.09	-1	3
D	89670	555703	5456999	AGD66		55	0.5	-1	-1	0.15	0.6	1	5	0.07	-1	5
D	89671	555749	5456999	AGD66		55	0.3	-1	-1	0.12	1.2	2	6	0.06	-1	5
D	89672	555799	5457001	AGD66		55	0.7	-1	-1	0.11	0.6	2	6	0.08	-1	3
D	89673	555849	5457000	AGD66		55	0.9	-1	2	0.2	0.9	4	12			



## APPENDIX III

### Rock Chip Sample Data

H0100		Temement E330/2004																																				
H0101		Temement Greatland Pty Ltd																																				
H0102		Temement Greatland Pty Ltd																																				
H0103		Project Nar Warrontenna																																				
H0104		250K Map 5455/21																																				
H0105		500K Map 8415 8416																																				
H0200		Start Date Dec-11																																				
H0201		End Date 0 Oct-12																																				
H0302		Data Form 562																																				
H0303		Number of 20																																				
H0204		Date of Ma Dec-13																																				
H0500		Feature Lo Sample Point																																				
H0501		Geometric DAGD66																																				
H0502		Vertical Da N/A																																				
H0503		Projection AMG																																				
H0504		Projection 55																																				
H0505		Surveying I Handheld GPS																																				
H0506		Surveying Greatland Pty Ltd																																				
H0600		Sample Corroctkip																																				
H0601		Sample Tyrockchip																																				
H0602		Sample De rockchip																																				
H0700		Sample Pressing																																				
H0701		Sample Pw 75mccom																																				
H0702		Job No 1201627																																				
H0800		Assay Code AR10/GF AR10/DE																																				
H0801		Assay Com Genalysis Laboratories																																				
H0802		Assay Desc Aqua Regia AAS OES																																				
H0900		Remarks below detection = x																																				
H1000	Sample No	East	North	Datum	Zone	Au	Ag	Al	As	Ba	Bi	Ca	Cd	Ce	Co	Cr	Cu	Fe	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Sc	Sr	Te	Ti	Tl	V	W	Zn		
H1001	1	015	20			ppb	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm													
H1002	1	1																																				
D	WN140132	555781	S45389	ADG066	55	1 X																																
D	WN140133	555772	S45389	ADG066	55	1 X																																
D	WN140134	555783	S453823	ADG066	55	X	X																															
D	WN140135	555781	S453823	ADG066	55	X	X																															
D	WN140136	555782	S453781	ADG066	55	1 X																																
D	WN140137	555782	S453781	ADG066	55	1 X																																
D	WN140138	555802	S453203	ADG066	55	13 X																																
D	WN140139	555511	S453486	ADG066	55	1 X																																
D	WN140140	555322	S453477	ADG066	55	1 X																																
D	WN140141	555445	S453487	ADG066	55	1 X																																
D	WN140142	555485	S453560	ADG066	55	X	X																															
D	WN140143	555693	S453531	ADG066	55	3 X																																
D	WN140144	555615	S453033	ADG066	55	1 X																																
D	WN140145	555611	S453675	ADG066	55	X	X																															
D	WN140146	555538	S453079	ADG066	55	1 X																																
D	WN140147	555641	S453070	ADG066	55	X	X																															
D	WN140148	555540	S453093	ADG066	55	X	X																															
D	WN140149	555559	S453096	ADG066	55	1 X																																
D	WN140170	555425	S453631	ADG066	55	5 X																																
D	WN140200	555379	S455002	ADG066	55	X	X																															

EOF