



# CULLEN RESOURCES LIMITED

A.C.N. 006 045 790  
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## QUARTERLY REPORT FOR PERIOD ENDING 30 SEPTEMBER 2003

### HIGHLIGHTS

- **Discovery of nickel sulphides by WMC at the “AK47” prospect, Gunbarrel Nickel Project, Western Australia.**
- **Reconnaissance RAB/aircore drilling at the Gunbarrel Gold Project indicates three new anomalous areas for follow-up drilling.**
- **Wyloo JV partner Barrick reports that geochemical sampling has located significant anomalism in gold and Carlin-style pathfinder elements at Hardey Junction, Ashburton Gold Project, Western Australia. RAB/air core drilling is in progress.**
- **Consultant group Newexco is reviewing the nickel sulphide potential of Cullen’s Killaloe Project, Western Australia following the withdrawal of Sipa from the JV.**
- **Major initiative to explore for “Intrusion Related Gold Deposits” in New South Wales with seven exploration licence applications lodged over prospective areas.**
- **Positive response to Company’s Shareholder Share Purchase Plan with \$1.5M raised.**

# EXPLORATION ACTIVITIES – WESTERN AUSTRALIA

## Northeastern Goldfields

**GUNBARREL NICKEL JOINT VENTURE– (Eureka Group: E53/568, E53/535, E53/818, E53/837, Cullen 100%, WMC may earn a 75% interest in nickel and base metal rights).**

The Company’s Gunbarrel Nickel Project is a Joint Venture with WMC Resources Ltd (WMC) and is located about 130km east of Wiluna. WMC can earn a 75% interest in nickel and base metal rights in the above tenements with expenditure of \$1M. Cullen retains a 25% interest **free carried to a Decision to Mine**. Since inception in 2001, WMC has completed lag sampling, air core drilling, ground EM (electromagnetic) surveying and diamond drilling in the September Quarter. The Joint Venture covers approximately 35km of strike of the Mt Eureka Greenstone Belt (Figure 1).

**WMC, the Manager of the Joint Venture, has recently reported a narrow intersection of magmatic nickel sulphide in one of two diamond drillholes.**

The diamond drilling tested two EM conductors, each with a single hole. These conductors were given priority due to the coincidence of Ni-Cu-Pt-Pd anomalism identified in surface geochemical sampling. This is the first nickel sulphide exploration for some thirty years within the Gunbarrel Project and GBD2 is only the fifth diamond drillhole for nickel anywhere within in the large JV project area. As such, the intersection of magmatic nickel sulphides at a modest depth in GBD2 is regarded by Cullen as a significant breakthrough which enhances the prospectivity of the greenstone belt.

**Drillhole GBD2 intersected a 0.2m zone of massive, nickel bearing sulphide with associated minor, disseminated sulphides at the target depth (as defined by the EM data), in a zone of structural deformation. Importantly, elevated nickel results were also received from a zone of coarse, “blebby” sulphides further downhole. The other hole, GBD2, did not intersect any conductive material within the hole, or any anomalous geochemistry.**

**TABLE:1 DRILLHOLE GBD2 SUMMARY**

HOLE ID	Northing GDA94	Easting GDA94	ASSAYS	COMMENT
<b>GBD2</b>	7058830	354070	0.65m @ 0.90% Ni, 0.20% Cu 0.45 g/t Pt+Pd from 139.7m	Downhole EM required
	Including		<b>0.20m @ 1.93% Ni, 0.42% Cu</b> 0.70 g/t Pt+Pd, from 139.7m	
	And		<b>2.8m @ 0.39% Ni, 0.06% Cu</b> 0.13 g/t Pt+Pd, from 168.0m	

GBD1 – 230m to EOH; GBD2 – 250m to EOH

GBD1 & 2 – hole inclination 60° W

**WMC reported that “ ....the results of GDB2 are considered significant as it has confirmed the targeted plate (conductor) as magmatic nickel sulphide. This hole represents the first drillhole test of the AK47 surface conductor, which is interpreted to extend over 300m in strike.”**

WMC is now planning further work including downhole EM surveying (both GBD1 and 2) and further drilling of the defined conductors partially tested by GBD1 and 2. The programme will consist of 2 to 4 holes to be drilled in the December Quarter. Additional surface EM surveying is planned to test the along strike extensions of the AK47 trend.

**GUNBARREL GOLD PROJECT – (Eureka Group: E53/568, E53/535, E53/818, E53/837, MLA’s 53/868-870, Cullen 100%; Irwin Bore Group, E53/403, ELA’s 53/925 and 981, Cullen 90%, ELA 53/1040, Cullen 100%)**

Cullen retains 100% interest in the gold rights over the 664 km<sup>2</sup> Gunbarrel Gold Project which covers 50 strike km of the Mount Eureka Greenstone Belt. Cullen’s exploration in this belt to date has discovered significant gold mineralisation at the Southern Prospect which has been the focus of drilling over the last twelve months

### **SOUTHERN PROSPECT - RC DRILLING**

Southern consists of the Central and Galway zones of mineralisation. A programme of two RC holes (for 350m) of a planned five hole RC programme (to total ~1,000m) was completed at Southern. The programme which was interrupted by drilling problems is expected to be completed during the current quarter.

Results from the two completed holes (ASX announcement 9/9/03), drilled down dip of holes MERC 74 and 75 in the Central Zone, indicated down dip continuity of the defined lodes but at lower gold grades (Table 2).

**TABLE 2: SIGNIFICANT RC DRILL INTERSECTIONS >0.5g/t Au CENTRAL ZONE, SOUTHERN PROSPECT**

Hole Id	Northing GDA94	Easting GDA94	From (m)	To (m)	Intersection*
<b>MERC081</b>	7056492	354343	101	103	2m @ 2.03g/t Au
			120	123	3m @ 1.67g/t Au
			146	147	1m @ 2.82g/t Au
<b>MERC082</b>	7056488	354297	46	54	8m @ 0.87g/t Au

All assays are aqua regia digest with AAS finish. All holes drilled 60<sup>0</sup> towards 315<sup>0</sup>.

### **RECONNAISSANCE RAB/AIRCORE DRILLING**

Reconnaissance RAB/aircore drilling (112 holes, 6,110m) was completed to test 12 targets identified from data compilation and application of Cullen’s geological model for Southern. The targets, some of which have characteristics similar to Southern, are located over more than 10km of strike and as such, the programme was a preliminary test.

Three new zones of gold mineralization which require follow-up drilling were located by the drilling (Table 3 and Figure 2):

- Along the northeastern extension of the Eureka NW prospect trend where an intersection of 4m @ 1.12 g/t Au from 18m (MEAC 269) was located in quartz veined basalts at the end of a traverse;
- Around a group of gold anomalies stretching 200m across strike and associated with deeply weathered and sheared basalts close to a felsic contact in the NE part of the

Kilkenny Prospect area and ~ 1.4km north of the Southern Prospect – with 4m @ 0.57 g/t Au (MER 263); and,

- Near old prospect pits (Connemara Prospect) located ~ 1km SE of the old Little Greta Mine. MEAC 310 intersected, 20m @ 0.74 g/t Au from 8m along a felsic volcanoclastic/metasediment contact. Previous explorers' drilling, had indicated a 150m NE trending supergene zone of gold mineralization (15-20m depth, 0.5 – 1 g/t Au levels).

These results are similar to the original reconnaissance drilling results from known areas of significant mineralization such as **Eureka NW**, first indicated by 4m @ 1.4 g/t Au (YRB 151), and **Southern**, discovered around an intersection of 1m @ 0.9 g/t Au (YRB 88) from reconnaissance drilling by Pegasus Gold Australia Pty Ltd.

The drilling also indicated that some of the target areas, e.g south and southwest of Southern along major, interpreted shear zones, are generally covered by thick alluvium (up to 90m depth) and as such remain untested.

During the December Quarter, follow-up RAB and aircore drilling of these targets and first pass drilling of targets within the southern third of the project area will be undertaken (Figure 3).

**TABLE 3: ANOMALOUS INTERVALS, RAB/AIRCORE DRILLING, GUNBARREL PROJECT**

Prospect Area	Target Area	Hole ID	Northing GDA94	Easting GDA94	Depth (m)	Interval (m)	Grade (g/t Au)
<b>Eureka</b>	"5T2"	MER 238	7062528	353900	28-32	4	0.16
		MEAC 262	7062453	353440	34-38	4	0.22
					42-46	4	0.23
		MEAC 263	7061444	353454	33-37	4	0.18
					49-53	4	0.22
		MEAC 269	7062126	354200	18-22	4	1.12
	"5T4"	MEAC 295	7063600	353450	20-24	4	0.10
	"5T2"	MEAC 303	7061474	353421	32-26	4	0.14
<b>Donegal</b>	"5T1"	MEAC 276	7061410	354950	33-37	4	0.14
<b>Kilkenny</b>	"7T2"	MER 262	7057736	354200	40-44	4	0.45
					56-64	8	0.12
					72-76	4	0.12
					84-88	4	0.29
		MEAC 263	7057735	354300	46-50	4	0.57
					66-70	4	0.20
		MEAC 264	7057725	354400	62-66	4	0.21
		MEAC 265	7056930	353900	38-42	4	0.24
		MEAC 266	7056940	354000	50-54	4	0.33
	MEAC 304	7057744	353870	60-64	4	0.17	
				68-70*	2	0.17	
<b>Connemara</b>	-	MER 280	7061047	356150	17-21	4	0.34
		MEAC 309	7061100	356225	49-53	4	0.17
					77-81	4	0.20

**TABLE 3, continued**

<b>Prospect Area</b>	<b>Target Area</b>	<b>Hole ID</b>	<b>Northing GDA'94</b>	<b>Easting GDA'94</b>	<b>Depth (m)</b>	<b>Interval (m)</b>	<b>Grade (g/t Au)</b>
		MEAC309 continued			97-104*	7	0.16
		MEAC 310	7061100	356275	8-28	20	0.74
				(incl)	8-12	4	1.56
					28-32	4	0.12
					72-78	16	0.35

\* End of hole depth; All assays by aqua regia digest with AAS finish.

All samples are 4m composites except for MEAC304 68-70 (2m) and MEAC309 101-104 (3m).

### **IRWIN BORE JOINT VENTURE - (E53/403, ELA's 53/925 and 981, Cullen 90%)**

Compilation of exploration data continued during the quarter. A regolith map was received from interpretation of Landsat data and a geological interpretation of the Project area is underway.

Field investigations of gold targets, identified from aeromagnetics - ME 3, 4, 5, and 9 to 14 were completed. Preliminary conclusions are that these targets have been adequately tested for gold by previous drilling and/or surface geochemistry. However, targets ME 1 and 2, 6 to 8, and 15 are yet to be inspected in the field and any potential gold targets identified from this work will be further developed during the current quarter.

**In light of the discovery of nickel sulphides by WMC within the Gunbarrel Nickel JV, Cullen will review the nickel sulphide potential within the Irwin Bore Project, which adjoins the Gunbarrel JV tenements to the south. The area is known to contain prospective ultramafics.**

### **WONGANOO GOLD/NICKEL PROJECT – (E53/1046, ELA's 53/1030, 1069, and 1083 Cullen 100%, Cullen can earn 80% in E53/988)**

A programme of reconnaissance RAB/aircore drilling was completed within E 53/1046 to explore a broad target area where tightly folded stratigraphy of the Dingo Range anticline is disrupted by an interpreted 060<sup>0</sup> trending fault. Also, six holes were drilled to further test the "Tokyo" prospect, first discovered by Lionore in 1999.

The programme comprised 3 RAB holes (102m) and 29 aircore holes (1,951m). Drilling conditions were difficult and only the aircore technique was suitable. Consequently, only a portion of the broad target area (3 x 2km) was drill tested, generally at 400 x 200m spacing.

The reconnaissance drilling indicated the presence of 20-38m of alluvial cover over basalts and minor amounts of ultramafics with one area of significant quartz veining in the vicinity of hydrothermally altered basalts. The alteration included minor disseminated sulphides in moderately foliated basalt, however no anomalous gold values were returned.

The Tokyo Prospect includes a best intersection of 24m @ 1,27 g/t Au from 44m in quartz veined basalts from previous drilling. Cullen's recent drilling around this intersection penetrated to only 48m depth downhole due to drilling difficulties in quartz vein zones. No significant intervals of gold were returned from Cullen's drillholes. A traverse of three holes drilled 40m along strike of Lionore's intersection did not intersect any significant quartz veined zones.

Follow-up will comprise additional structural interpretation over the tenement area using aeromagnetic data, lag sampling and review of prospectivity for nickel sulphides within interpreted ultramafics.

## **Eastern Goldfields**

**KILLALOE NICKEL PROJECT - (E63/722\*, E63/765\*, P63/1131-1133, 1172-1174, Cullen 100%, \* 7.5% NPI to Xplore Pty Ltd applies to these tenements)**

Sipa has advised that it has elected to withdraw from the Joint Venture. Sipa spent approximately \$1.4 million on exploration for nickel and the generation of a substantial database. Cullen has commissioned the Newexco Consulting Group, specialists in nickel sulphide exploration, to review this database. Newexco's work may identify untested targets or target areas prospective for nickel sulphides.

**KILLALOE GOLD PROJECT - (E63/722\*, E63/765\*, P63/1131-1133, 1172-1174, Cullen 100%, \* 7.5% NPI to Xplore Pty Ltd applies to these tenements)**

No work was carried out during the quarter. A potential joint venture partner is currently reviewing the database.

## **Ashburton Gold Province**

**WYLOO JOINT VENTURE - De Courcy (E47/874, 875, 1004), De Courcy North/Horse Well (E47/903, ELA 47/1154) Hardey Junction (E08/1145, ELA's 08/1166, 1189, 1327), Catho Well 08/1330; and Mount Stuart (ELA 08/1292 )**

All Wyloo Joint Venture tenements were granted following successful completion of heritage agreements with Native Title claimants. Field activities completed by Barrick during the quarter included extensive surface geochemical sampling at Hardey Junction and Catho Well targeting Carlin (sediment-hosted) style gold mineralisation.

**Barrick reported that "...the geochemical sampling (stream sediment and rock chip) has located significant anomalism in gold and Carlin style pathfinder elements. Extensive anomalism is hosted within surface jasperoidal breccia zones proximal to structural corridors through the project area."**

Peak rock chip values returned 388ppb Au, 2,970ppm As and 30ppm Sb from jasperoidal breccia zones in the western part of Hardey Junction, while in the SE of the Hardey Junction, quartz veining associated with ferruginous sediments returned 151ppb Au, 10ppm Ag, 73ppm As, 75ppm Sb, and 2,470ppm Pb.

RAB/aircore drilling is in progress at Hardey Junction to test bedrock adjacent to surface anomalism where concealed under transported cover and to detail the geological sequence. It is anticipated that the RAB/aircore drilling results will be used in conjunction with surface geochemical anomalism to target deeper reconnaissance RC drilling programmes in 2004.

**YANKS BORE PROJECT – (Yanks Bore E08/1022, ELA 08/1384, Cullen 51% and Udu Resources Ltd 49%, contributing pro rata; Red Hill West, E08/1135 and Cardo Bore E08/1341, Cullen 100%)**

The Company and Udu Resources Ltd are seeking a Joint Venture partner for this project. Field reconnaissance was carried out at Cardo Bore with rock chip sampling results awaited.

**SLATE BORE – (M08/79, E08/1021, Cullen 100%)**

The Slate Bore Project is located 100 kms WNW of Paraburdoo. The project area covers a distinct satellite image anomaly which is interpreted to be hydrothermal alteration within rocks of the Ashburton Formation. A small lead prospect is present near the centre of the anomaly and previous work by Cullen and others has demonstrated anomalous base metals, gold and arsenic over 6 km of strike. Anomalous gold occurs in rock chip samples taken from narrow silicified sandstone units with pseudomorphing after sulphide.

During the quarter, a field programme was completed to follow-up numerous rock chip and stream sediment geochemical anomalies, mostly on the extension of the area previously explored and on a parallel zone to the north. These new target areas show similar geological characteristics to the main prospect area. Potential exists for gold and base metal mineralisation undercover to the east and west along the strike where soil and RAB drilling would be effective.

Results are awaited for 43 rock chip samples and 18 stream sediment samples collected during the quarter.

## **EXPLORATION ACTIVITIES – NEW SOUTH WALES**

### **Lachlan Fold Belt**

**CENTRAL LACHLAN INTRUSIVE-RELATED GOLD PROJECT - (ELA 2150-2153, 2156, 2174, 2175 Cullen 100%)**

The Company has applied for an extensive package of tenements in the Tin-Tungsten Belt of the Central Lachlan Fold Belt, considered by Cullen to be prospective for the intrusion-related class of gold deposits (“IRG deposits”). IRG deposits are found within or adjacent to granitic intrusions, often along tin-tungsten belts. They exhibit a range of mineralisation styles and are usually enriched in bismuth, tellurium and arsenic. The best examples are found in the Tintina Gold Province of the Alaska-Yukon region. The Tintina Province includes both large tonnage gold deposits, for example: Fort Knox (169Mt @ 0.93g/t Au, production - Kinross Gold Corp) and Donlin Creek (122Mt @ 2.91g/t Au, development - NovaGold Resources Inc./Placer Dome Inc.); and high grade vein deposits such as Pogo (9Mt @ 18.9g/t Au, development Teck Cominco Ltd/Sumitomo Metal Mining Co.Ltd). (Resource figures are taken from company websites).

Cullen’s applications consist of seven areas (ELAs 2150-2153, 2156, 2174, 2175) totalling 3,200 square kilometres (Figure 4). They were selected by applying the class model to regional data sets. The areas contain over fifty recorded gold prospects (mostly gold-bearing, quartz-sulphide veins) which are broadly related to granitic intrusions. The majority of previous exploration in the Tin-Tungsten Belt of the Central Lachlan Fold Belt has been for tin and tungsten rather than gold.

Cullen is identifying specific target areas for the application of modern geochemical exploration techniques. Some of the priority areas recognised to date are as follows:

- ELA 2153 “Ardlethan” – Includes the Golden Spray and Harry Smith historic gold mines within the metamorphic aureole of a granite intrusion. Old records indicate some 16-20,000 ounces of production during the 1890s and late 1930s. Mineralisation consists of steep-dipping, gold-bearing quartz stockworks/lodes hosted by sandstones along a 400m long trend. Open file data includes reported low grade percussion drill intersections such as 62m @ 0.91 g/t Au, 26m @ 0.76 g/t Au and narrower, high grade zones such as 2m @ 7.90 g/t Au. Compilation of previous drill data is in progress and preliminary evaluation indicates scope for further drilling in the prospect area. This prospect is part of an exploration target extending for 7-9 kilometres along strike.
- ELA 2175 “Minter” - Rock chips samples from altered granite and gossanous quartz exposed in old pits with assays ranging from 1 to 6 g/t Au (with a high of 23 g/t Au) together with highly anomalous As, Sb, Bi and Ba were reported by a previous explorer as part of a tungsten exploration campaign.
- ELA 2151 “Gibsonvale” - Contains a number of prospects with IRG potential adjacent to the Yalgogrin Granite, eg north of Tallimba where mineralisation occurs close to the granite margin in a structurally favourable setting with prospecting pits trending over some 200m.
- ELA 2156 “Bulgandry” - Outcropping narrow gold-bearing quartz veins hosted by the Goombargana Granite assaying up to 20 g/t Au, were first noted during tin exploration in the early 1980s. These anomalies do not appear to have been investigated using any modern gold exploration techniques.
- ELA 2152 “Mount Solitary” – Poorly explored area encompassing a well defined magnetic anomaly (interpreted intrusive body ) immediately south of the Mt Solitary gold prospect (held by Mt Conqueror Minerals NL and Central West Gold NL, published resource 0.26Mt @ 4 g/t Au) which consists of steep dipping multiple gold-bismuth-quartz veins hosted by Devonian sediments.

## **CORPORATE ACTIVITIES**

The Company initiated a Shareholder Share Purchase Plan on 25 July 2003. The Plan was very well supported by shareholders and a total of \$1,566,867 was raised.

The Company also launched a scheme to rationalise its share register and reduce the number of shareholders that have shareholdings of less than \$175 in value. The number of Cullen shareholders was reduced by 2,509 as a result of this scheme.

### **ATTRIBUTION**

*Information in this report which relates to mineralisation is based on information compiled by Grahame Hamilton, a full time employee of Cullen Resources Limited who is a Member of the Australian Institute of Geoscientists and has relevant experience as a Competent Person as defined in the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves in relation to mineralisation being reported on.*



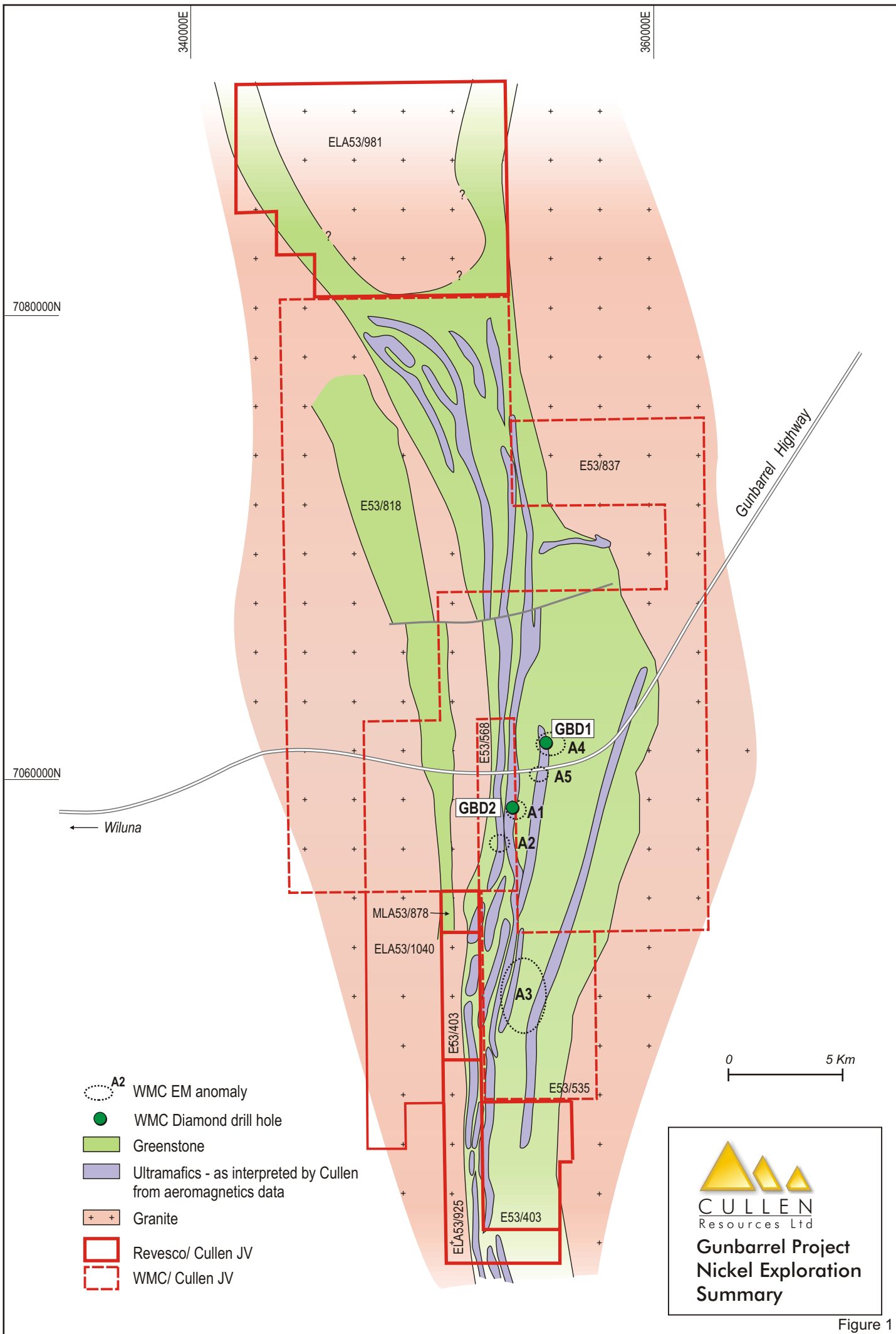


Figure 1

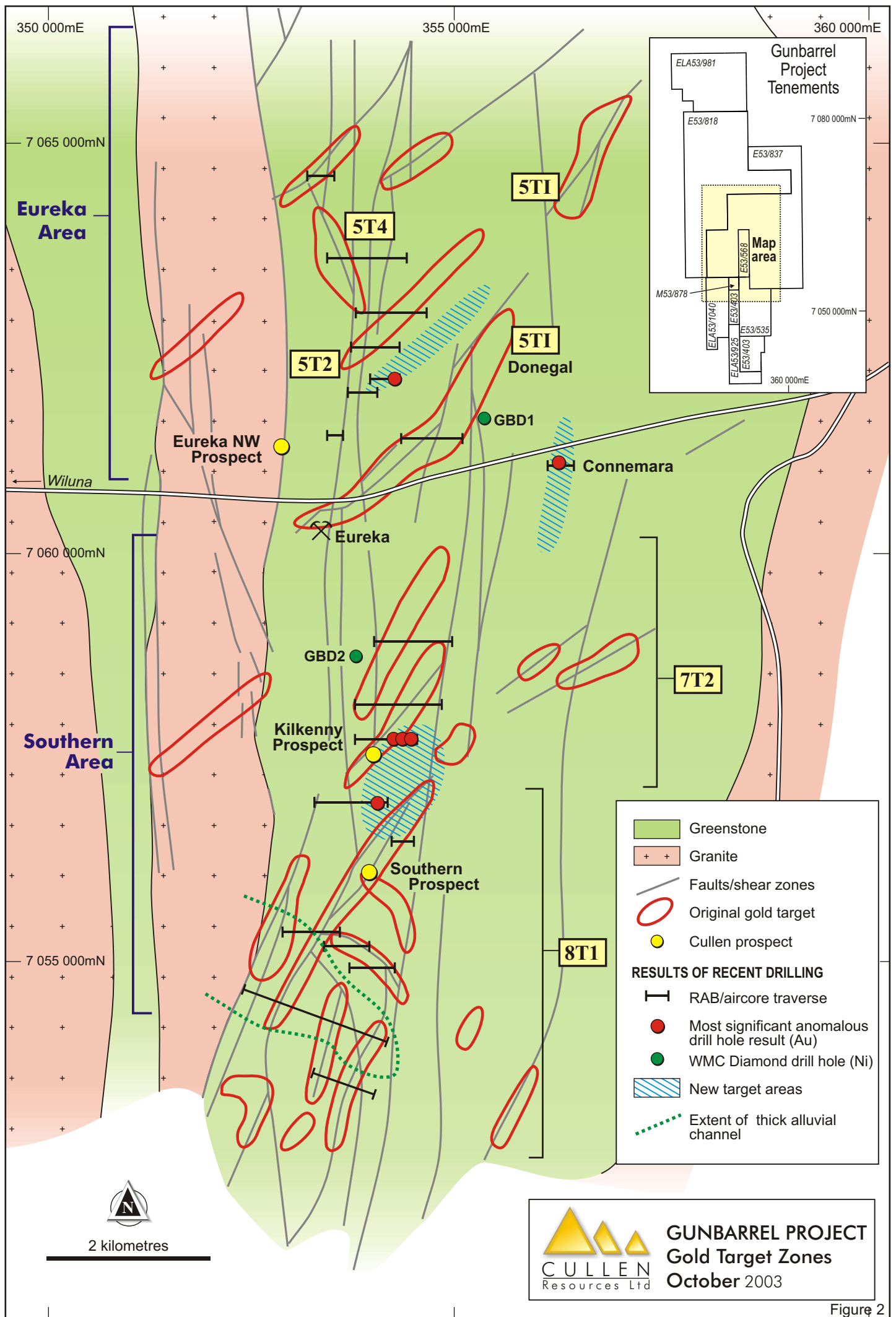


Figure 2

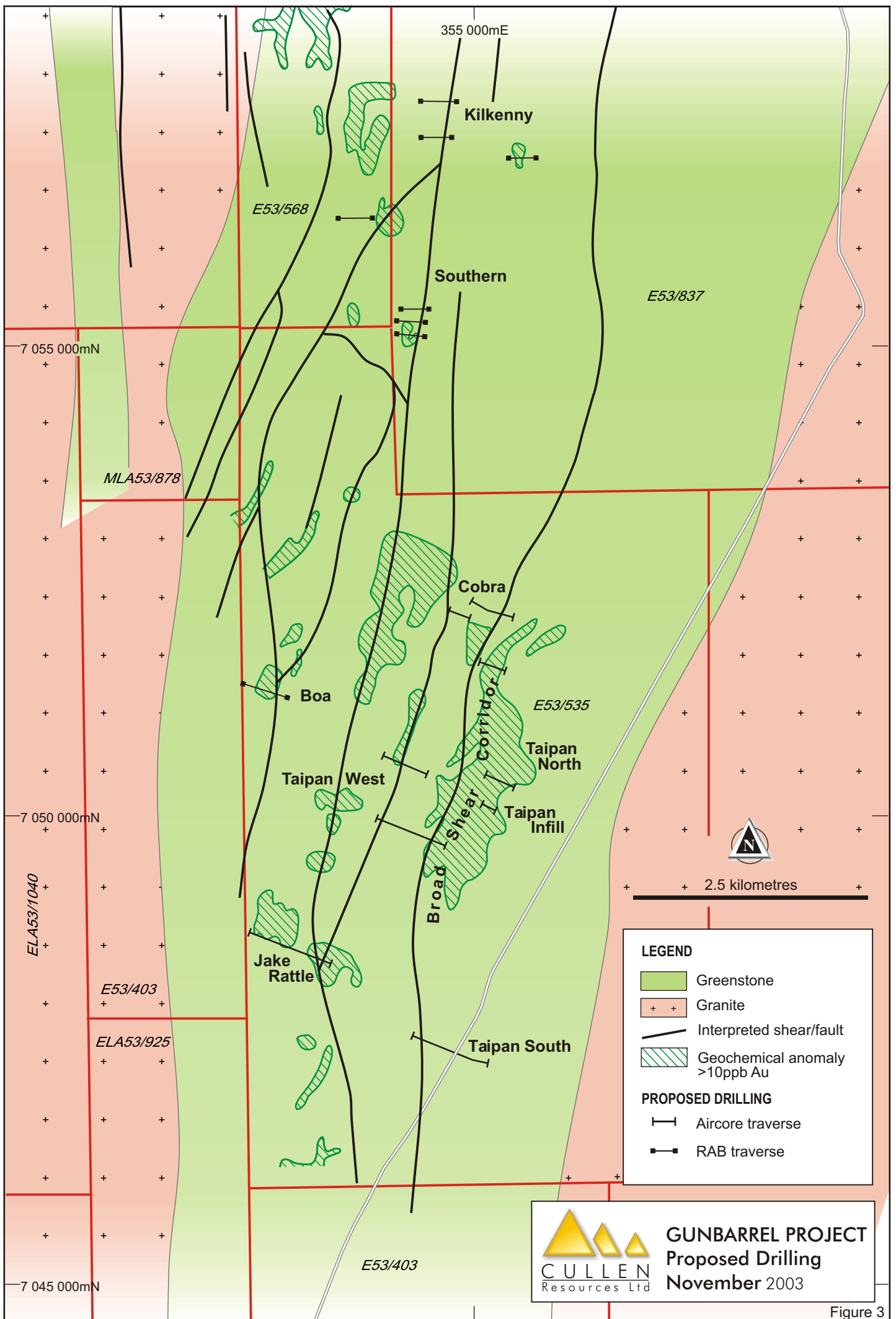
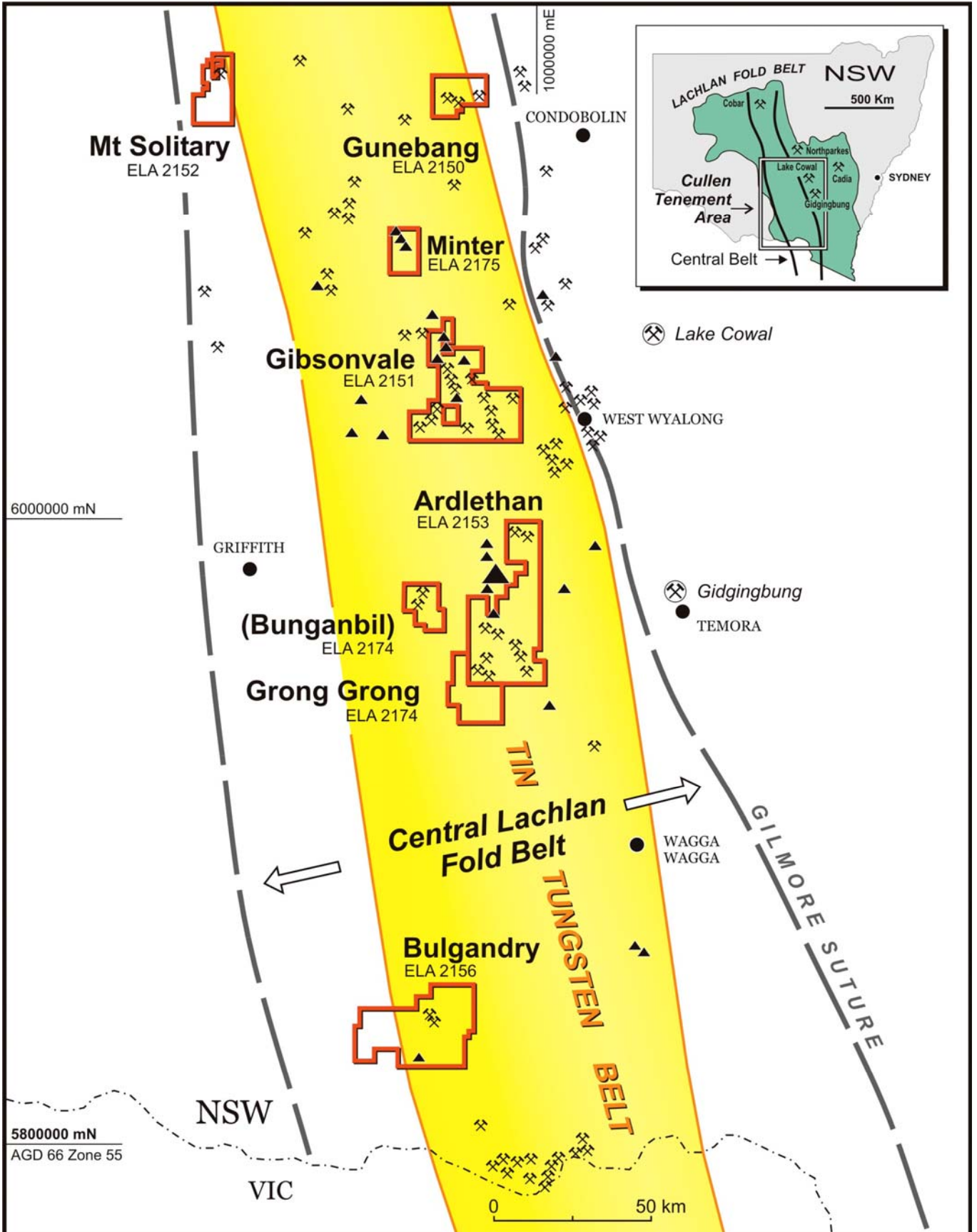


Figure 3



## Central Lachlan NSW Intrusion-related Gold Project