



RELINQUISHMENT REPORT

Woolwonga Exploration Report EL23270

9 November 2009 to 31 December 2014

**Pine Creek 1:250,000 SD5208
McKinlay River 1:100,000 5271**

Distribution:-

1. DME Darwin, NT
2. Crocodile Gold Australia, Humpty Doo
3. Rockland Resources, Brisbane

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TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	3
2	COPYRIGHT	4
3	INTRODUCTION.....	5
4	LOCATION AND ACCESS.....	6
5	TENEMENT DETAILS	7
6	GEOLOGICAL SETTING.....	8
6.1	Regional Geology	8
6.2	Local Geology	9
7	EXPLORATION ACTIVITIES Pre-2009.....	11
7.1	EXPLORATION ACTIVITIES 1 JANUARY 2010- 31 DECEMBER 2014.....	14
8	REFERENCES.....	16

LIST OF FIGURES

FIGURE 1	LOCATION OF EL23270.....	6
FIGURE 2	REGIONAL GEOLOGY FOR THE BURNSIDE PROJECT	9
FIGURE 3	LOCAL GEOLOGY SHOWING EL23270	10
FIGURE 4	VTEM SURVEY COVERING PART OF EL23270	14
FIGURE 5	PROSPECTIVITY ANALYSIS FOR BURNSIDE PROJECT	15

LIST OF TABLES

TABLE 1:	EXPENDITURE REPORTED FOR EL23270	7
TABLE 2	ROCK CHIP RESULTS FROM EXPLORATION ON EL5119 (WITHIN EL23270)	12
TABLE 3	ROCK CHIP RESULTS FROM EXPLORATION ON EL5325 (WITHIN EL23270)	12

1 EXECUTIVE SUMMARY

EL 23270 is located 140km SE of Darwin, NT and 18km NE of Brocks Creek Siding. It was granted to Buffalo Creek Mines Pty Ltd (50%) and Territory Gold Fields Pty Ltd which were wholly owned subsidiaries of GBS Gold Australia. GBS Gold Australia went into voluntary administration on 15 September 2008 and all assets including EL 23270 were placed under care and maintenance. In 2009, Crocodile Gold Australia purchased all assets held by GBS Gold Australia (liquidated), and after meeting all statutory and regulatory requirements, EL 23270 along other assets were transferred to new owner.

The tenement comprises a suite of Palaeoproterozoic meta-sedimentary rocks, intruded by late orogenic granites, and form part of the Pine Creek Orogen sequence. It lies just north- east of the Woolwonga gold open pit and the four blocks are contiguous with the Woolwonga tenement group.

Crocodile Gold has made the decision to relinquish all titles surrounding the Woolwonga deposit to allow another party to conduct exploration activities in and around this deposit. This title along with the Mineral Titles MCN3705-3707 and MLN1103 and several sub-blocks of EL25748 have been included in this relinquishment process.

2 COPYRIGHT

This document and its content are the copyright of Crocodile Gold Australian Operations (CGAO). The document has been written by Mark Edwards for submission to the Northern Territory Department of Mines and Energy as part of the tenement reporting requirements as per Regulation 87 of the Minerals Titles Act.

Any information included in the report that originates from historical reports or other sources is listed in the “References” section at the end of the document.

This report may be released to open file as per Regulation 125(3)(a).

3 INTRODUCTION

EL23270 was applied for on the 20th of July 2001 by Northern Gold and was granted on the 20th of February 2003. EL23270 was originally applied for as it was vacant land that surrounded the previously mined Woolwonga deposit.

The tenement comprises a suite of Palaeoproterozoic meta-sedimentary rocks, intruded by late orogenic granites, and form part of the Pine Creek Orogen sequence.

Limited on ground work has been completed on EL23270 since being granted in 2003. Since 2009 Crocodile Gold has conducted around 2 line kilometres of VTEM geophysical surveys, purchase GeoEYE satellite imagery and conducted detailed document reviews and site visits. Generally this work has been remote with little on ground work completed by Crocodile Gold since 2009.

4 LOCATION AND ACCESS

EL 23270 is situated 140km SE of Darwin NT and 18km ESE of Brocks Creek siding on the Darwin-Alice Springs railway. Access to the tenement is via the Stuart Highway, then north via the Fountain Head/Ban Ban Springs sealed road that comprised the haul road for Woolwonga in the mid-1990s. The access deteriorates beyond Woolwonga but reasonable dry season access can be gained using bush tracks that service the Ban Ban Springs pastoral area. The Margaret River and tributaries meander northward through the tenement.

The tenement falls on the Pine Creek 1:250,000 sheet and on the Ban Ban 1:50,000 sheet. The tenement also is within the Ban Ban Springs pastoral lease. Outcrops are relatively sparse through much of the tenement due to the influence of the Margaret River alluvial deposits. Due to steep incised banks, river crossings of the Margaret River are difficult except at prepared locations.

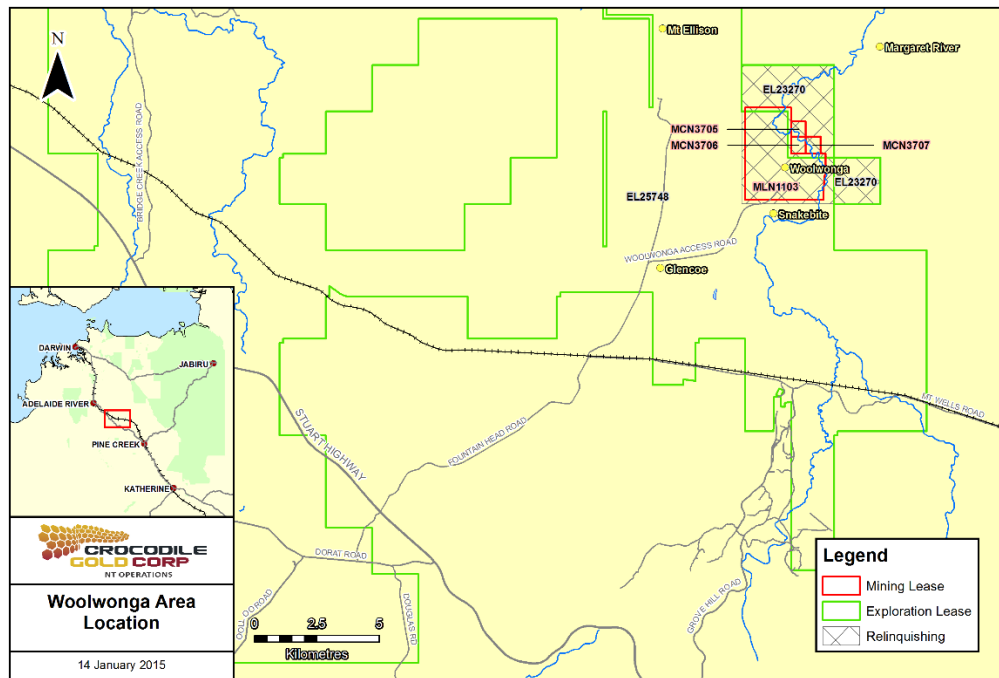


Figure 1 Location of EL23270

5 TENEMENT DETAILS

EL23270 was originally applied for by Northern Gold NL on the 20th of July 2001 and was subsequently granted on the 19th of February 2003 for a period of 6 years. The tenement remained at 4 sub-blocks for the period since it was originally granted in 2003

Further renewals were requested and accepted in 2009, 2011, 2012 and then finally in 2014.

Expenditure details for the title are shown in Table 1.

Year	Convenant	Actual
2004	\$8,500	\$500
2005	\$800	\$925
2006	\$950	\$1,431
2007	\$5,000	\$6,835
2008	\$6,000	\$9,297
2009	\$10,000	\$7,766
2010	\$10,500	\$8,340
2011	\$9,000	\$0
2012	\$12,000	\$4,315
2013	\$19,000	\$4,322
2014	\$18,000	\$1,258

Table 1: Expenditure reported for EL23270

6 GEOLOGICAL SETTING

6.1 REGIONAL GEOLOGY

Regional geology of the area has been described by several workers notably Ahmad et al (1993) and Stuart-Smith et al (1987). EL23270 is situated within the Pine Creek Orogen, a tightly folded sequence of Palaeoproterozoic rocks, 10km to 14km in thickness, laid down on a rifted granitic Archaean basement during the interval ~2.2-1.87Ga. The sequence is dominated by pelitic and psammitic (continental shelf shallow marine) sediments with locally significant inter-layered cherty tuff units. Pre-orogenic mafic sills of the Zamu Dolerite event (~1.87Ga) intruded the lower formations of the South Alligator Group.

During the Top End Orogeny (Nimbuwah Event ~1.87-1.85Ga) the sequence was tightly folded, faulted and pervasively altered with metamorphic grade averaging greenschist facies with phyllite in sheared zones

The Cullen intrusive event introduced a suite of fractionated calc-alkaline granitic batholiths into the sequence in the period ~1.80-1.78Ga. These high temperature I-type intrusives induced strong contact metamorphic aureoles ranging up to (garnet) amphibolite facies, and created regionally extensive biotite and andalusite hornfels facies.

Less deformed Middle and Late Proterozoic clastic rocks and volcanics have an unconformable relationship to the older sequences. Flat lying Palaeozoic and Mesozoic strata along with Cainozoic sediments and proto-laterite cementation overlie parts of the Pine Creek Orogen lithologies. Recent scree deposits sometimes with proto-laterite cement occupy the lower hill slopes while fluvial sands, gravels and black soil deposits mask the river/creek flats areas.

There is a tendency for gold mineralisation to be focused in the contact aureoles present within anticlinal structures (D3) of the South Alligator Group and lower parts of the Finnis River Group. This sequence evolved from initial low energy shallow basinal sedimentation to higher energy deeper water flysch facies. Some of gold mineralisation appears to be related to the I-type members of Cullen Batholith, formed during the evolution of hydrothermal fluids as a result of fractionation and differentiation processes (Bajwah, 1994).

Figure 2 illustrates the regional geology of the Burnside Area.

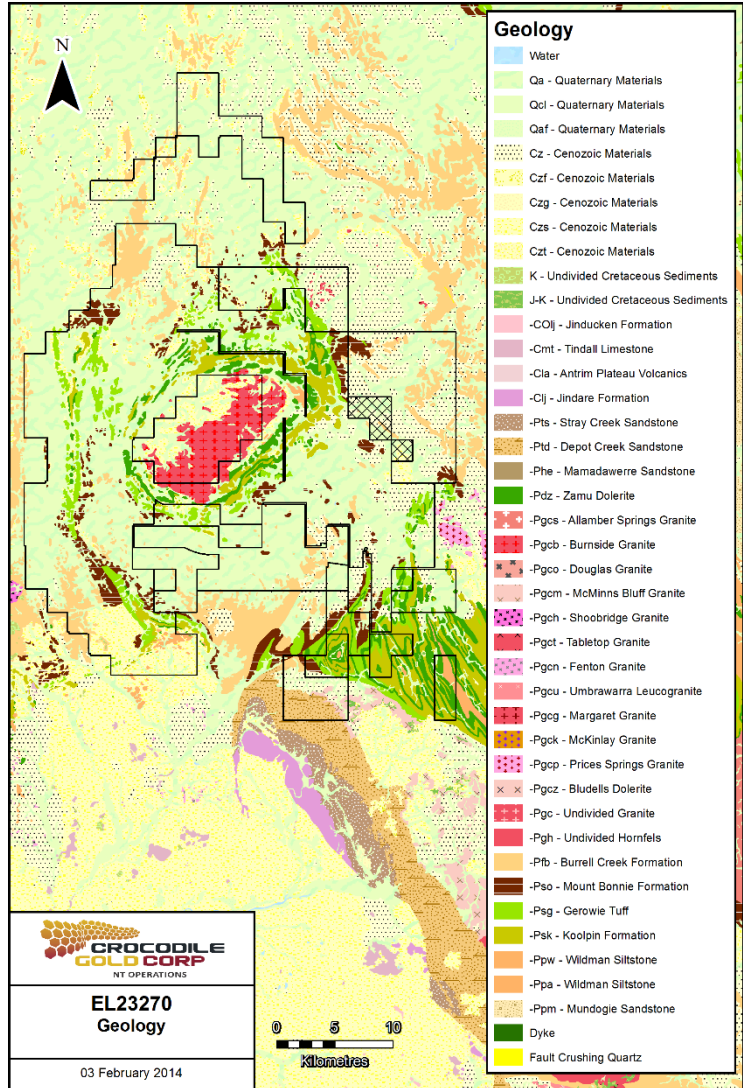


Figure 2 Regional Geology for the Burnside Project

6.2 LOCAL GEOLOGY

EL23270 is situated within the Pine Creek Geosyncline, a tightly folded sequence of fine to coarse grained clastic basinal sediments of Lower Proterozoic age.

In the report area the sequence has been regionally metamorphosed to greenschist facies and has been intruded by late syn-orogenic to post orogenic granitoid intrusions. These intrusions imparted thermal contact metamorphic and metasomatic effects and contributed to the deposition of a range of economic minerals in structurally permissive sites.

There is a tendency for gold mineralisation to be focused in anticlines within strata of the South Alligator Group and lower parts of the Finnis River Group. This sequence evolved from initial low energy shallow euxinic basinal sedimentation to higher energy deeper water flysch facies. A water-lain tuffaceous component is present and the prospective sequence has been intruded by concordant pre orogenic mafic sills.

Less deformed Middle Proterozoic sedimentary and volcanic sequences unconformably overlie the Lower Proterozoic. Adjacent to the Daly River Basin, Cambro-Ordovician lavas and sediments onlap the older sequences. Cretaceous arenaceous strata are locally preserved as hill cappings.

Cainozoic to Recent erosion of the cratonised basement has resulted in the formation of hills and ridges alternating with talus and clay-sand alluvial deposits occupying river flats and flood plains.

The tenement encloses a sequence of South Alligator Group clastic sediments that are folded and faulted on North West strike trends.

Within the tenement the Group is represented by sparse low outcrops of Burrell Creek Formation which is typically a greywacke-dominated assemblage with subordinate dark siltstone (Figure 3).

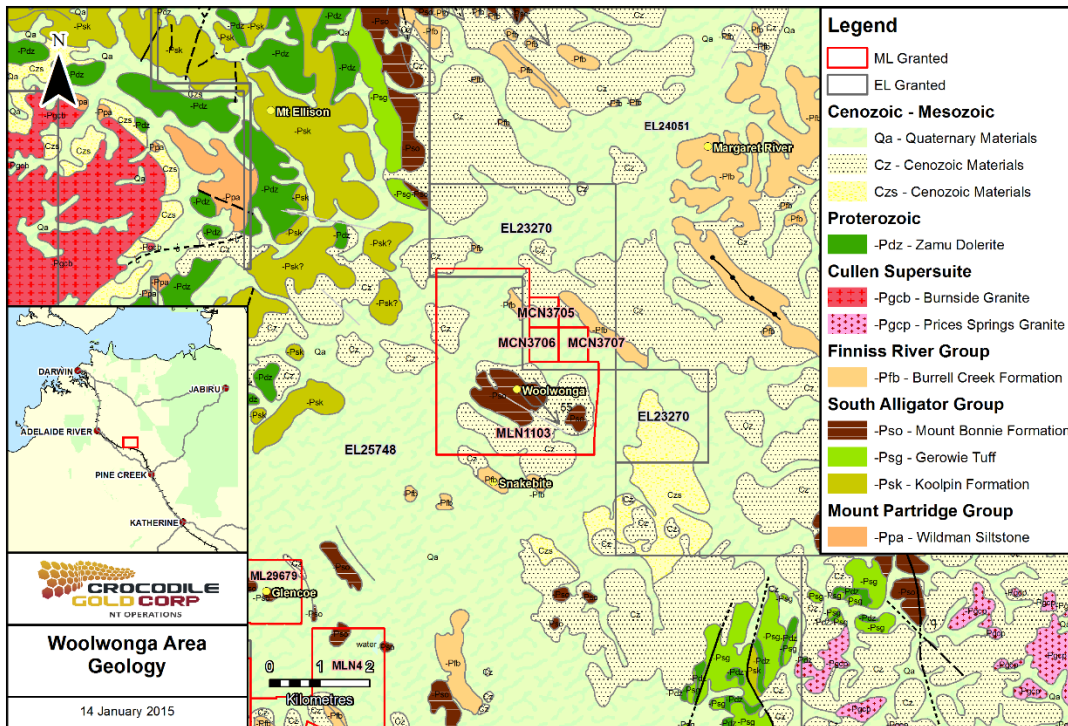


Figure 3 Local Geology showing EL23270

7 EXPLORATION ACTIVITIES PRE-2009

For the years prior to 2009 EL23270 was held by other companies, however a summary of the work they completed is outlined below;

EL615 – AOG minerals held a large tenement in the area in the mid-1970's and concentrated most of their work on the Mount Bonnie and Iron Blow prospects. **EL1137** – CRA explored for base metal mineralisation in the late 1970's by regional mapping and sampling of gossanous outcrops. **EL1137** was one of a number of tenements in the area explored by CRA (Wills, 1977).

AAR Limited explored **EL2103** from August 1979 for base metals and uranium. **EL2103** covered the top 2 blocks of EL23270, and extended further north. During the tenure, around 80 rock chip samples were collected. In addition, 1:25,000 geological mapping and radiometric readings along a grid were also carried out. The locations of the rock chip samples were not easily constrained from the supplied maps, but appear to concentrate in the area north of EL23270.

EL3107 covered the southern part of EL23270 from 1981 to 1988, but the work consisted of 'chip sampling (locations and assays not supplied), and dollying. The target appeared to be the slopes and flats below the Woolwonga workings. Exploration was reportedly unsuccessful. The 2 northern blocks of EL23270 were part of **EL3562**, held by Euralba Mining Ltd from 1982 to 1988. Euralba targeted alluvial gold (and to a lesser degree tin) as the area drained the Woolwonga goldfield. Rock chip samples were taken 'from a number of massive quartz outcrops or small conical ridges and from quartz reefs in the Mt Bonnie and Gerowie Formations.' Only one sample (EV8; 774680E / 8520470N MGA94 Zone 52) was within EL23270. Assaying of EV8 was done by Comlabs for Pb (AAS1), Ag (AAS3) and Au (Fire Assay). Results were <4ppm Pb, <1ppm Ag and 0.1ppm Au. The recommendation for further exploration using auger drilling was not carried out. Dominion Mining explored the 2 southernmost blocks of EL23270 as part of their lease **EL4441**. **EL4441** was originally granted to Peko in 1983, and Dominion replaced Anaconda as JV managers in 1985. Exploration during 1984 and 1985 failed to locate quartz veining or alteration to the east of Margaret River, and the EL was reduced. Work done by Dominion during 1987 was restricted to one block, which is now covered by MLN1103.

Territory Resources NL acquired **EL5119** (which covered the 2 northern blocks of EL 23270) in 1987. Two samples were taken within EL23270;

Sample No.	Easting	Northing	Description	Au
TR2855	774570	8519450	Blue-gy quartz, very common arsenopyrite, scorodite staining. Sample over 25m from 1-3m wide vein	0.09
TR2851	775410	8519780	White quartz float, minor chlorite	0.01

Table 2 Rock chip results from exploration on EL5119 (within EL23270)

Exploration on **EL5117** targeted hard rock gold mineralisation, but this was hampered by Cenozoic laterite, colluvium and alluvium overlying bedrock in most of the tenement. The dominant structural orientation was noted as NW-SE. Although anomalous (>0.05ppm Au) rock chip samples were noted, the results from the reconnaissance rock chip sampling programme was considered 'disappointing'. However, only 15 samples were taken within the tenement, and only 2 within EL23270, so the result could not be called definitive.

EL5325 covered the 'middle' block of EL 23270 in 1987-89. Dominion acquired the tenement from Territory Resources NL in 1988, and conducted a surface mapping, scree sampling and a RAB drilling programme. The surface mapping outlined two zones of residual soil/outcrop in the area, with scree sampling returning 1.18ppm Au. Three mineral claims (MCN3705-3707) were pegged at this time on **EL 5325** and were held by GBS Gold through Buffalo Creek Mines / Territory Goldfields joint ownership.

Assays for 25 rock chips are reported, but the locations of only 4 samples are shown. Table 2 shows the approximate MGA coordinates for these rock chip samples, and their assays. Rock chips were assayed for Au by Analabs using ?Aqua Regia / AAS with a detection limit of 0.012ppm Au (job number 76.0.21.03629; on 12/07/1989).

Sample No	Easting	Northing	Assay Au_ppm
282395	776380	8519170	<0.012
282396	776450	8519150	<0.012
282397	776480	8519100	<0.012
282398	776400	8519110	1.248 / 1.116 (reassay)

Table 3 Rock chip results from exploration on EL5325 (within EL23270)

The RAB drilling was shown on a 1:10,000 scale map as a line of drilling, with drillholes approximately 12.5m apart and averaging 20m depth. Assays were not provided, and the summary showed 'nil mineralisation' for all holes except WRB1589, which had 2m @ 0.24g/t Au from surface. Detection limits, sample depths, and other assay data were not

shown. It is interesting to note that while the structure is noted to be trending NW-SE, all the holes were angled at 60° to the east, so it may not have been an effective programme. All drilling was contained in one line of drilling, which is also not an adequate test of mineralisation. Work done by North Limited on **EL8047** in the first year of tenure was just south of EL 23270 (on 8514050N AMG). Platsearch NL purchased EL 8047 from North Exploration in 1995, and entered into an agreement with Solomon Pacific Resources where Solpac had the right to earn 65% interest in the tenement. Acacia assumed Solomon Pacific's assets, and earned the right to 65% of the tenement by sole-funding exploration. Extensive work was done to the east and south of EL 23270, but no geochemical data was collected within EL 23270.

During 2006-07 reporting period, Bajwah (2007) undertook in-depth technical review of the project area. With the help of previous exploration results, geological setting and geophysical data, he identified targets for further exploration.

Little or no work was reported on EL23270 between 2007 and 2009 when Crocodile Gold took over ownership of the title.

7.1 EXPLORATION ACTIVITIES 1 JANUARY 2010- 31 DECEMBER 2014

No exploration activities were reported in **2010** as Crocodile Gold took over the titles from the receivers of GBS Gold.

In **2011** Crocodile Gold conducted a detailed VTEM geophysical survey over many areas within the Burnside project including EL23270. This included around 2 line kilometres of survey over this title. No significant or anomalous results were noted on this title as the line kilometres were at the end of several lines looking over the Woolwonga deposit to the west.

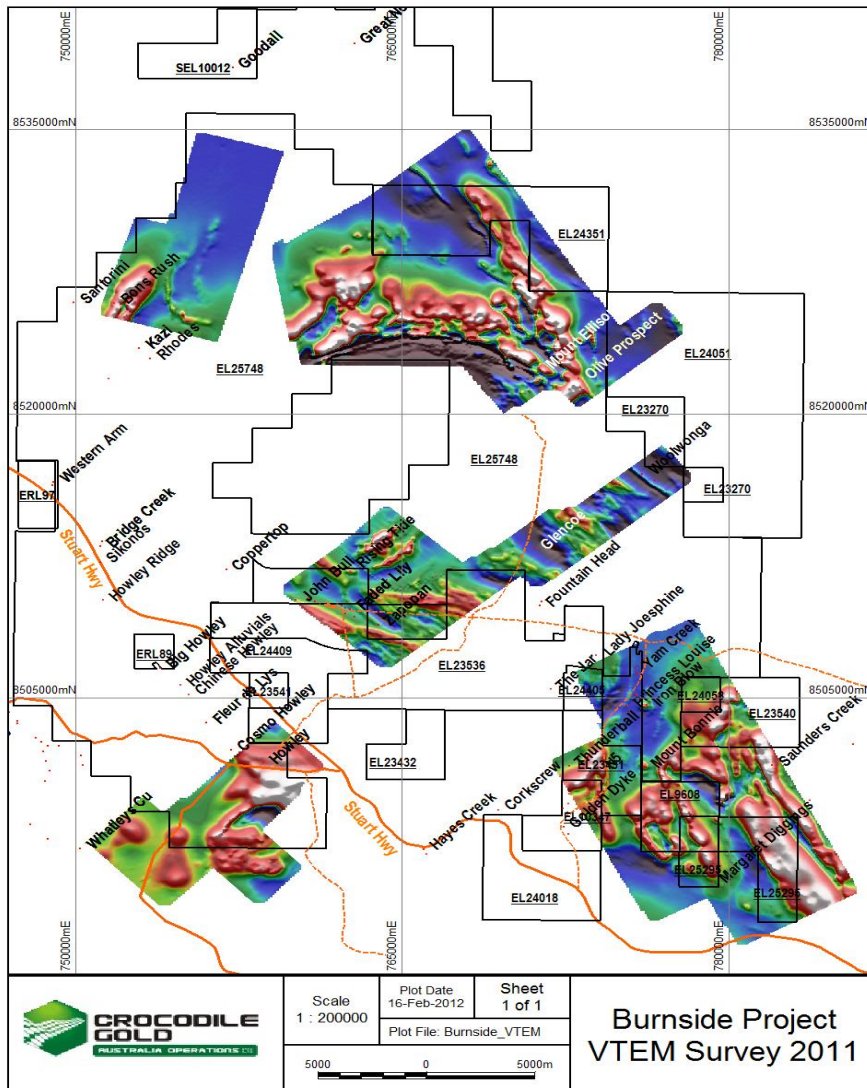


Figure 4 VTEM survey covering part of EL23270

In **2012** Crocodile Gold purchased GeoEYE satellite imagery which covered this title and around the Woolwonga Mine, plus reviewed the historic geochemical sampling and geophysical work completed on the title in conjunction with the detailed review of the 2011 VTEM survey including target generation. The document review database continued during the year with a planned completion date in **2013**. Also during the year Crocodile Gold conducted prospectivity mapping and analysis (see [Figure 5](#)).

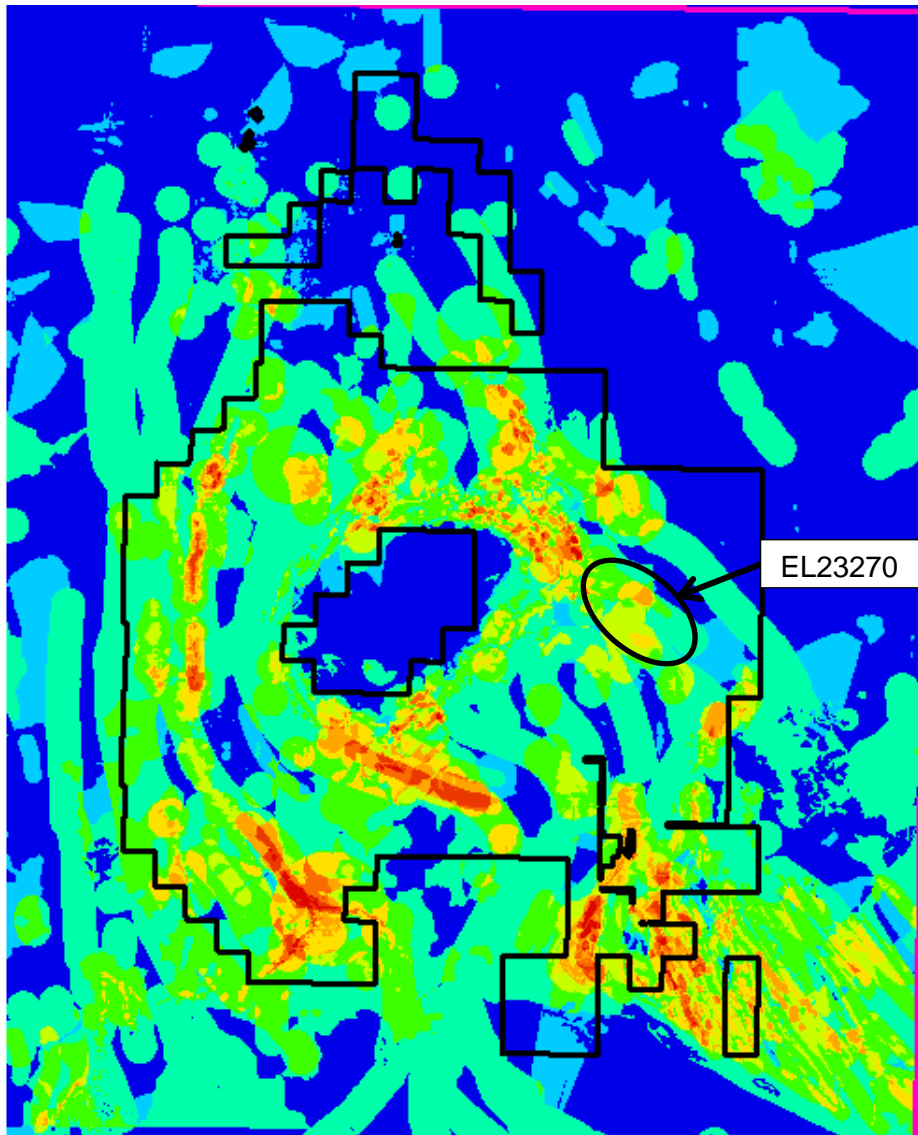


Figure 5 Prospectivity analysis for Burnside Project

No work was completed on this title in **2014** outside reporting and the continued review and ranking of projects such as the Woolwonga deposit to the west of EL23270.

8 REFERENCES

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