

3 Kimberley Street, West Leederville, WA 6007
PO BOX 1573 West Perth WA 6872
Telephone 08 9381 7838 Facsimile 08 9381 5375
Email: info@emmersonresources.com.au
Website: www.emmersonresources.com.au
ABN 53 117 086 745

EL 22240 Morgan

FINAL REPORT

LICENSEE: SANTEXCO PTY LTD A.B.N.002 910 296

(A wholly owned subsidiary of Emmerson Resources Ltd)

24 July 2001 - 08 July 2011

AUTHOR: ADAM WALTERS OCTOBER 2011

DISTRIBUTION: Department of Resources Central Land Council Emmerson Resources Ltd	MAP SHEETS: TENNANT CREEK TENNANT CREEK	SE53-14 5758
		1:100 000

Table of Contents

\mathbf{F}	FIGURES	
	. SUMMARY	
2.	. INTRODUCTION	2
3.	LOCATION	2
4.	. TENURE	3
	GEOLOGY	
	5.1 REGIONAL GEOLOGY	3 4
	5. EXPLORATION	
	6.1 TARGETS AND CONCEPTS	4 5
7.	. REHABILITATION	16
8.	CONCLUSIONS	16

FIGURES

Figure 1. Location Map

Figure 2. EL 22240 vs. 2008 Magnetics

Figure 3. EL 22240 vs. 2008 Gravity

Figure 4. Magnetics

Figure 5. Magnetics with VRMI Applied

4

1. SUMMARY

This Final Report records exploration work done on EL 22240 between 24 July 2001 and 08 July 2011.

Under the newly granted SEL 28601 Emmerson will analyse, interpret and model the resultant data from the HeliTEM survey, the recently applied VRMI with the aim of identifying anomalous areas, particularly those that coincide with magnetic and/or gravity anomalies identified from the 2008 geophysical survey data with the aim of generating robust exploration models for drill targeting. Drill testing or 'Proof of Concept' drilling is currently under way in the Gecko Area and given positive results the area covered by EL 22240 will be assessed.

Emmerson considers the area covered by EL 22240 (hence part of SEL 28601) to remain prospective.

EL 22240 was automatically cancelled on 08 July 2011 upon granting of SEL 28601.

2. INTRODUCTION

Exploration Licence 22240 MORGAN, is located approximately 10km west of the Tennant Creek Township. The licence falls on the Tennant Creek 1:100 000 scale map sheet (5758).

Figure 1 below, shows the location of EL 22240 and surrounding tenure.

This Final Report records exploration work done on EL 22240 between 24 July 2001 and 08 July 2011.

3. LOCATION

Exploration Licence 22240 MORGAN, is located approximately 10km west of the Tennant Creek Township. The licence falls on the Tennant Creek 1:100 000 scale map sheet (5758).

Access to the Licence area is via the Chariot Mine Access Road, from here EL 22240 is reached via a series of north or west trending unsealed, 4x4 and fence line tracks for approximately 1km. During and immediately after rain the area is generally inaccessible.

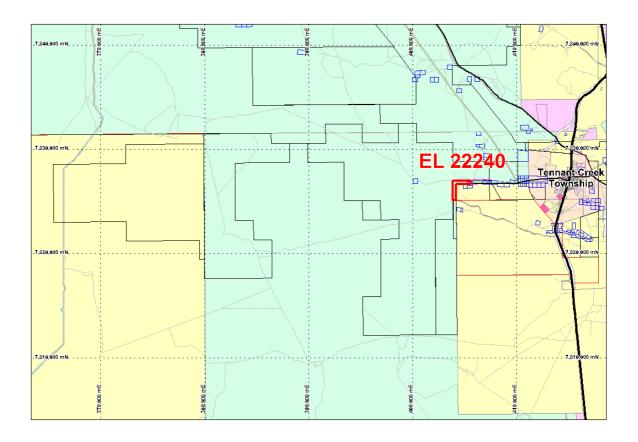


Figure 1: Location of EL 22240 and surrounding tenure.

EMMERSON RESOURCES LTD

4. TENURE

Exploration Licence 22240 Morgan, was granted to Normandy Tennant Creek Pty Ltd (NTC) on the 24th July 2001 for a period of six years, with a renewal for a further 2 year term during 2007 and another 2 year term granted during 2009. The Licence covers an area of 1 part graticular block (0.99km²). In January 2011 Emmerson was granted SEL 28601 which included EL 22240 and the eastern portion of EL 8883, the grant date was 08 July 2011.

In June 2001, Giants Reef Mining Limited purchased NTC and all its assets, including EL 22240. After the purchase, NTC was re-named Santexco Pty Ltd (Santexco). In August 2006 Emmerson Resources Ltd purchased Giants Reef Mining and all its assets, including EL 22240.

Until January 2003, EL 22240 formed part of the Central Joint Venture 2 (CJV2), which covered the Chariot gold deposit and a number of other tenements in the Tennant Creek goldfield. The Joint Venture was between Giants Reef, (managers, holding 57% equity), Sons of Gwalia (replacing PacMin; 33%) and Newmont NFM (formerly Normandy NFM; 10%). Giants Reef purchased Sons of Gwalia's Joint Venture assets (43%) and became the sole owner of the CJV2 project, including EL 22240. On the eastern margin on the EL lies part of the Chariot Mine Lease ML C176, which also came under the CJV2.

EL22240 lies within NT Portion 494, Perpetual Pastoral Lease 1142, Tennant Creek station.

EL22240 is subject to an Indigenous Land Use Agreement (ILUA) signed in September 2000 between the Native Title holders of the Tennant Creek region, represented by the Central Land Council (CLC), and Giants Reef.

EL 22240 was automatically cancelled on 08 July 2011 upon granting of SEL 28601.

5. GEOLOGY

5.1 Regional Geology

The reader is referred to AusIMM Monograph 14 (Geology of the Mineral Deposits of Australia and Papua New Guinea), Volume 1, pp. 829-861, to gain a good introduction to the regional geology and styles of gold-copper mineralisation of the area.

In 1995 the Northern Territory Geological Survey released a geological map and explanatory notes for the Flynn 1:100,000 sheet, which covers the area of the licenses.

The rocks of the Warramunga Formation host most of the orebodies in the region and underlie most of the Exploration Licenses.

5.2 Local Geology

There are no outcrops of Proterozoic basement rocks in EL 22240, which is blanketed by a layer of colluvium, outwash and aeolian sand up to seven metres thick.

The Palaeoproterozoic Warramunga Formation is assumed to underlie all of the Licence area. This formation is host to virtually all the magnetite-haematite (ironstone-hosted) gold-copper-bismuth mineralisation and ore bodies in the Tennant Creek goldfield. The Chariot and TC8 deposits are typical occurrences of this type in the area. The Chariot gold deposit is hosted by haematite > magnetite dominated ironstone and differ somewhat to the more magnetite dominated ironstones in the Tennant Creek goldfield.

In January 2004 Giants Reef announced the discovery of economic gold mineralisation within Malbec Mineral Claims C527-C528. Subsequent exploration and definition drilling delineated a shallow oxide gold resource containing 15-20,000 oz Au. Gold mineralisation occurs within a haematite dominant ironstone and proximal altered Warramunga Formation sediments, not dissimilar to the Chariot style of mineralisation. This orebody is referred to as the Malbec West deposit. Giants Reef commenced mining of the Malbec West gold mineralisation in September 2004 with completion in late December 2004. The deposit produced 38,890 tonnes at 18.1 g/t Au for 20,584 oz Au.

6. EXPLORATION

6.1 Targets and Concepts

Exploration for large base metal deposits possibly associated with a regional gravity anomaly, termed the Bluebush Anomaly, centred in the central and eastern parts of the licence and extends east into adjoining Licences, with additional targets including Tennant Creek-type ironstone hosted Au-Cu-Bi ore bodies.

Proterozoic Inliers world-wide, and particularly in Australia, are renowned for their iron-rich mineralisation and world class base metal deposits. For many years prominent geologists and researchers in the industry have pointed out the geological similarities that the broader Proterozoic Tennant Creek Inlier shares with the Gawler Craton, host to the Olympic dam deposit, and to the Eastern Succession of the Mt Isa Inlier that hosts the Ernest Henry and Selwyn deposits. These similarities, though recognised, had not been widely acted upon by the industry.

Exploration was aimed at discovering large deposits of base metals along with substantial gold and/or silver, probably accompanied or hosted by large volumes of iron oxide minerals.

Giants Reef's target model iron oxide-rich lithologies and are therefore likely to be associated with regional or district-scale gravity anomalies, and potentially coincident with a magnetic anomaly.

The discovery of the haematite-magnetite Chariot deposit in 1998 has shown the potential for variations on the classic magnetite ironstone hosted gold +/- copper deposits, where lower order magnetic anomalies, plus gravity methods can define new targets. Discoveries by Giants Reef of mineralisation such as at Malbec West, Marathon and Billy Boy further support this. Giants Reef considers the potential for the discovery of mineralisation in hematite dominant ironstones in the relinquished group is limited.

6.2 Exploration Undertaken – 24 July 2001 to 08 July 2011

Exploration Licence 22240 was originally applied for by NTC to fill a narrow gap between the Malbec Claims (MCs C527, C528 and C528) and nearby EL's to the west and to the north also held by NTC. The Malbec Claims are partially located within the EL on the north western margin. Additionally, ML C176, part of the Chariot Mine Leases, partially lies over the western margin of EL 22240.

Exploration conducted on the remaining area outside of the Malbec Claims and the Chariot Lease, in Exploration Licence 22240 is reported henceforth. Activities conducted within the Malbec Claims and the Chariot Leases will be reported in the relevant Annual Reports to the Department of Business, Industry and Resource Development.

Exploration work conducted during the first year of tenure included:

A desk-top data evaluation and brief geophysical review - The review found that no obvious magnetic targets exist within EL 22240, in contrast to the Malbec Claims, which enclose two very prominent magnetic anomalies. There appears to be little possibility of the Malbec ironstone masses, as presently defined by drilling and magnetics, extending north or south into EL 22240. A low possibility exists for the presence of non-magnetic (i.e., haematite-hosted) gold mineralisation within the EL. If so, extensions into EL 22240 of the interpreted north-south fault that separates the two Malbec ironstone bodies may be the controlling factor for mineralisation of this nature.

Santexco worked on a budget that included the provision for carrying out RC and diamond drilling at Malbec, within MCs C527, C528 and C528, to follow up several encouraging gold intersection in drillholes by Normandy several years ago. A number of collars were required to be drilled from outside these Claims, in EL 22240.

Exploration work conducted during the second year of tenure included:

A Literature Review - Exploration Licence 22240 is located less than 1km west of the non-magnetic haematite-rich Chariot gold mine. The EL and the Chariot mine are positioned on the magnetic structural ridge extending from the Extension mine (300t @ 19.5g/t Au) to TC8 mine (80,680t @ 18g/t Au and 1.2% Cu). Consequently the EL and surrounding tenure has been subject to much interest by Giants Reef for its potential to a host orebodies of a similar style of mineralisation as Chariot mine. The review found that no obvious magnetic targets exist within

the reporting area EL 22240, in contrast to the Malbec Claims, which enclose two very prominent magnetic anomalies. The review concluded that there appeared to be little possibility of the Malbec ironstone masses, as was defined by the current drilling and magnetics, of extending north or south into EL 22240. It was noted that a low possibility exists for the presence of non-magnetic (i.e., haematite-hosted) gold mineralisation within the EL. If so, extensions into EL 22240 of the interpreted north-south fault that separates the two Malbec ironstone bodies may be the controlling factor for mineralisation of this nature. This assessment also highlighted the fact that previous exploration over the tenure had focussed on the targeting of magnetic anomalies to identify magnetic ironstone bodies. Giants Reef noted that limited gravity data exists over the tenure and concluded that the potential for new non magnetic haematite-hosted discoveries within EL 22240 are likely.

- Tenement Review Ranking An internal review of the Giants Reef tenement portfolio and a classification of exploration opportunities in September 2002 assessed the future exploration potential of EL 22240 and the prospect areas within the Licence. EL 22240 was assessed together with MC C526-C528 (Malbec prospect). The review was based on the potential to discover high-grade gold mineralisation in both magnetic and haematite-dominant ironstones. The location of the Chariot gold mine west of EL 22240 made this tenement a highly prospective target area due to its structural significance. Additionally the highly developed understanding of the local geology as a consequence of the developing Chariot resource combined with the EL's location to existing mine infrastructure ranked this Licence area as a first class project. At the time of the review no target areas were identified within EL 22240, outside of the Malbec Claims. The large Malbec magnetic anomaly caused by the drilled ironstone within the Malbec Claims was viewed by Giants Reef as having the potential to host a large shallow gold deposit and the potential for a deposit the size of Chariot was considered very Although the reporting area of EL 22240 displays no magnetic targets, Giants Reef views the possibility for a non magnetic hematite deposit within the Licence area very probable. The prospect area was prioritised for immediate gravity based exploration to highlight new non-magnetic targets. Overall, the Malbec prospect (EL 22240, MC C526-528) was ranked by Giants Reef as a high priority exploration target with the potential for the discovery of medium to large Au The possibility of the discovery of a shallow gold-alone (+/-Cu) resources. resources within the area is considered very favourable.
- End of Joint Venture with Sons of Gwalia Until January 2003, EL 22240 formed part of the Central Joint Venture 2, which covered the Chariot gold deposit and a number of other tenements in the Tennant Creek goldfield. The Joint Venture was between Giants Reef, (managers, holding 57% equity), Sons of Gwalia (replacing PacMin; 33%) and Newmont NFM (formerly Normandy NFM; 10%). Giants Reef purchased Sons of Gwalia's Joint Venture assets (43%) and became the sole owner of the CJV2 project including EL 22240.

- Negotiations with the CLC Under the terms of Giants Reef's ILUA with the Native Title holders of the Tennant Creek region, it is necessary to obtain clearances from the Native Title holders before field parties can enter onto land covered under the ILUA. An application was submitted to the CLC which outlined a gravity survey Giants Reef proposed to undertake over EL 22240 (and adjoining tenements) and permits to enter were received by Giants Reef at the end of January 2003.
- Gravity Survey Daishsat Pty Ltd of Murray Bridge, South Australia were contracted to undertake a gravity orientation survey and broader regional gravity survey over the Chariot orebody and surrounding tenure, including EL 22240. One Scintrex CG-3 gravity meter was used for the gravity data acquisition. Each loop started and ended at the Tennant Creek airport gravity base station (Gravity base For horizontal and vertical GPS control, two Leica System 500 dual frequency GPS receivers were used. The gravity base (GPS base 099) was set up at the Chariot mine opposite a fence and gate, which was marked with a short star picket. Gravity observations were made on the regular grids set out by real-time Two observations were made for each station and each observation consisted of a 20-second or greater stacking time. Two observations were made at each station so that any seismic or instrumental noise could be immediately detected. The accepted tolerance between readings was 0.02 milligals to ensure At the survey station the Scintrex CG3 automatically recorded the station, time and readings, which were made digitally to allow for downloading into a computer. Raw data was processed daily to check for quality and integrity. This interim process produced a set of Bouguer Gravity values, which were contoured and imaged to provide a check for any anomalous reading that would require repeating. Geosoft GRAVRED software was used for the gravity reduction in the field. At the conclusion of the job, the data was reprocessed using the standard AGSO formulae. Giants Reef's consultant geophysicist Mr Frank Lindeman was on hand in Tennant Creek to supervise the survey on a day-by-day basis.
- Gravity Orientation Survey Daishsat Geodetic Surveyors commenced the close spaced ground based gravity orientation survey on the 30th January 2003 over the known Chariot mineralisation in EL 10199, which is covered by the Mineral Leases C176 and C177 and ML 23216. The gravity orientation survey was designed to provide: (a) detailed gravity information on the near-surface mineralised section of the Chariot orebody prior to mining and major ground disturbance, (b) suitable parameters for the larger regional gravity survey away from known mineralisation, (c) sterilisation of the proposed Chariot waste dump area. The survey accurately mapped the haematite-dominant ironstone in the open cut area and provided information enabling line and station spacing decisions to be made for the wider regional gravity survey.
- Regional Gravity Survey The regional gravity survey working east and west of the known mineralisation at Chariot, commenced immediately after the completion of the gravity orientation survey. The survey coverage included EL 22240 and the Malbec Claims. The regional survey was designed to provide: (a) information which could map iron-rich lithologies and assist in more focused planning of major

drilling campaigns, (b) target definition and refinement. Away from the pit area and based on the gravity orientation survey results, the regional gravity survey used 80m line with 20m station intervals. The regional gravity survey, in total, collected 1,400 stations over 43 north-south traverses. 52 stations were taken over 2 north-south traverses within the reporting area of EL 22240. Giants Reef's consultant geophysicist Mr Frank Lindeman, of Lindeman Geophysics Pty Ltd, Melbourne, was contracted to processes, analyse and geophysically model the gravity survey data. Initial results were encouraging with several new target areas identified.

- Geophysical Modelling Giants Reef's consultant geophysicist Mr Frank Lindeman assessed and geophysically modelled the collected data from the Chariot to Malbec gravity survey. This included the gravity data over EL 22240, which was referred to as the Malbec West prospect area by Giants Reef. Interpretation of the gravity data over the Malbec West prospect suggests the existence of a small body with a small density contrast within the reporting area of EL 22240, directly west of the Malbec prospect. There is no magnetic anomalism to support the gravity response. The modelled gravity response for the body (5) suggests a shallow depth to top (25m). The body however has a predicted density contrast of less than 0.2 gm/cc which possibly does not reflect buried haematite ironstone but rather sub-outcropping geology. Mr Lindeman proposed that this gravity anomaly may possibly be due to a weathering phenomenon.
- Mine Management Plan Giants Reef submitted a Mining Management Plan, detailing all aspects of Giants Reef's plans to drill test the gravity anomaly identified within EL 22240. The plan was subsequently approved by the Department of Business, Industry & Resource Development (DBIRD) under Authorisation 0148-01. Pursuant to condition 4 of the Authorisation, a security of \$6,000 was lodged with DBIRD. This security covered all the tenements included within the West TC8 Project Area, of which includes EL 22240. Release of the \$6,000 security is conditional upon Giants Reef's compliance with the activities and commitments contained in the accepted plan (Authorisation 0148-01).
- CLC Work Proposal and Clearance Under the terms of Giants Reef's ILUA Agreement with the Native Title holders of the Tennant Creek region, it was necessary to obtain clearances from the Native Title holders before the field party for the planned RC drilling could enter the area. A work program was submitted to the CLC which outlined the work Giants Reef proposed to undertake over EL 22240 (with EL 9935) in May 2003. A site clearance for the proposed drill holes within the West TC8 Project Area, including EL 22240 was conducted. This involved a day trip by 4x4 vehicles to the proposed drill sites and tracks. A CLC representative and a number of Traditional Owners were directed to the sites by Giants Reef's Senior Geologist for inspection. The CLC representing the Traditional Aboriginal Owners of the land approved the proposed drilling activities in June 2003. One proviso was that all mature trees of any species must be protected, and stands or groups of trees must be protected.

- Drill Site Preparation In order to access the Malbec West drill holes, the existing baseline from Malbec Prospect west to the Amadeus Basin to Darwin Gas Pipeline Tennant Creek Spur was re established and extended. A total of 1.6km was cleared, passing through EL 22240. The base line was marked every 40m with grid pegs. A gate was built within the north-south fence separating Aboriginal Freehold Land (EL 10199) and Tennant Creek Pastoral Land which enabled access into EL 22240. Grid lines were lightly cleared to allow access to the dill sites. A small loader was used in the line and the clearing preparation of the drill pads.
- Reverse Circulation Drilling This program included two 100m holes to test the shallow gravity anomaly (Body 5), west of the Malbec ironstone within the reporting area of EL 22240. Details of the RC holes at the Malbec West prospect, in EL 22240 area as follows:

HOLE	TARGET	EASTING	NORTHING	DIP	AZI	DEPTH
Α	Malbec West	403950	7826600	-60	180	100
В	Malbec West	403950	7826650	-60	180	100

Exploration work completed over remaining tenure years included:

- Mine Management Plan Giants Reef submitted a Mining Management Plan, detailing all aspects of Giants Reef's plans to drill test the gravity anomaly identified within EL 22240. The plan was subsequently approved by the Department of Business, Industry & Resource Development (DBIRD) under Authorisation 0179-01. Pursuant to condition 4 of the Authorisation, a security of \$6,000 was lodged with DBIRD. This security covered all the tenements included within the West TC8 Project Area, of which includes EL 22240. Release of the \$6,000 security is conditional upon Giants Reef's compliance with the activities and commitments contained in the accepted plan (Authorisation 0179-01).
- CLC Work Proposal and Clearance Under the terms of Giants Reef's ILUA Agreement with the Native Title holders of the Tennant Creek region, it was necessary to obtain clearances from the Native Title holders before the field party for the planned RC drilling could enter the area. A work program was submitted to the CLC which outlined the work Giants Reef proposed to undertake over EL 22240 in May 2003. A site clearance for the proposed drill holes within the West TC8 Project Area, including EL 22240 was conducted. This involved a day trip by 4x4 vehicles to the proposed drill sites and tracks. A CLC representative and a number of Traditional Owners were directed to the sites by Giants Reef's Senior Geologist for inspection. The CLC representing the Traditional Aboriginal Owners of the land approved the proposed drilling activities in June 2003. One proviso was that all mature trees of any species must be protected, and stands or groups of trees must be protected.

• Further evaluation of RC Drilling - TKRC003 – was drilled to 100m and intersected a sequence of monotonous sand and siltstone beds belonging to the Warramunga Formation. Small (1-3m) beds of graphitic shale and siltstone was noted at various depths. No ironstone was seen within the drill hole. No significant gold or base metal assays were returned from the this hole. Samples were analysed for Au (1ppb DL), Cu (0.01 ppm DL), Bi (20 ppm DL) and Fe (0.01% DL), by 50 gram fire assay and mixed acid digest. Northern Australia Laboratories, of Pine Creek completed the analytical test work.

TKRC004 – was drilled 50 metres to the North of TKRC003 and to a depth of 80m. As in the first hole the Warramunga Fm sediments were once again intersected. The graphitic beds identified in TKRC003 were not seen in this hole and no ironstone was intersected. No significant gold or base metal assays were returned from the this hole. The gravity anomaly is explained by:

- Transported gravel consisting of pisolitic maghaemite and quartz pebbles intersected in both holes from 0 to 5 metres. This material is quite dense and weakly magnetic.
- Haematite stained, blocky quartz veining intersected in both holes from 19 to 22m in TKRC003 and 6 to 16m in TKRC004. A density contrast (anomaly) would easily be produced when considering the contrast between powdery kaolinised sediments and more competent massive vein quartz.
 - Mine Management Plan Giants Reef submitted an Updated Mining Management Plan in July 2004, detailing all aspects of Giants Reef's plans to explore along the Chariot Mineralised Corridor including areas within EL 22240. The plan was subsequently approved by the Department of Business, Industry & Resource Development (DBIRD) and re-issued under Authorisation 0179-02. Pursuant to condition 4 of the Authorisation, an additional security of \$1,250 was lodged with DBIRD increasing the security payment to \$7,250. This security covered all the tenements included within the West TC8 Project Area MMP, of which includes EL 22240. Release of the \$7,250 security is conditional upon Giants Reef's compliance with the activities and commitments contained in the accepted plan (Authorisation 0179-02).
 - CLC Work Proposal and Clearance Under the terms of Giants Reef's ILUA Agreement with the Native Title holders of the Tennant Creek region, it was necessary to obtain clearances from the Native Title holders before the field party for the planned RAB drilling could enter the area. A work program was submitted to the CLC which outlined the work Giants Reef proposed to undertake over EL 22240 in October 2004. A site clearance for the proposed drill holes within the West TC8 Project Area, including EL 22240 was conducted in September 2004. This involved a day trip by 4x4 vehicles to the proposed drill sites and tracks. A CLC representative and a number of Traditional Owners were directed to the sites by Giants Reef's Senior Geologist for inspection. The CLC representing the Traditional Aboriginal Owners of the land approved the proposed drilling activities

ion 28 September 2004. One proviso was that all mature trees of any species must be protected, and stands or groups of trees must be protected.

• RAB Drilling - Six Rotary Air Blast (RAB) holes were drilled within EL 22240 targeting weak, low-order gravity anomalies (MARB069 – MARB072) for a total of 126m. The drill contractor was Bostech Drilling Services of Western Australia. Samples collected were placed directly from the drill rig cyclone in metre intervals onto the ground. 3-metre speared, composite samples were collected and sent to North Australian Laboratories (NAL), Tennant Creek for analysis. Samples were assayed for Au, Fe, Cu and Bi using FA50 and mixed-acid digest respectively. A low-grade standard was added at the end of each drill hole for analysis, to monitor quality control of laboratory results. No anomalous intervals (>0.1 ppm Au), were returned from this drilling. Geological logging was completed on site, using an IPaq palmtop computer and downloaded in the evenings. Downloaded geology data was then validated and printed out as separate log sheets and then loaded into a Micromine database, along with collar, survey and assay data. The drilling statistics for drilling completed within EL 22240 are as follows:

Hole	Easting	Northing	Dip	Azi	Depth	Date	Tenure
No	(GDA)	(GDA)	(deg)	(deg)	(m)	Drilled	
MARB067	404185.00	7826880.00	-60	178	21	9/11/2004	EL 22240
MARB068	404310.00	7826880.00	-60	178	21	12/09/2004	EL 22240
MARB069	404055.00	7826800.00	-60	178	21	12/09/2004	EL 22240
MARB070	404055.00	7826820.00	-60	178	21	12/09/2004	EL 22240
MARB071	404055.00	7826840.00	-60	178	21	12/09/2004	EL 22240
MARB072	404055.00	7826860.00	-60	178	21	12/09/2004	EL 22240
	•	•	126m		:		

Drilling intersected Warramunga Formation sediments, typically sandstone and siltstone. No alteration was seen and no ironstone was intersected. Results were considered disappointing.

During 2008 exploration drilling was conducted in EL 22240, at the Malbec West Deeps Prospect. 3 Reverse Circulation (RC) holes (MARC204 – 206) were drilled by Gomex Drilling, between 24 July 2008 and 31 July 2008, for a total of 669m, and are detailed in the table below, and displayed in figure 2.

Hole ID	Datum	Easting	Northing	RL	Total Depth	Date Drilled
MARC204	MGA94_53	404179.27	7826699.94	333.94	227	24/07/08
MARC205	MGA94_53	404194.52	7826699.48	333.93	221	24 - 29/07/08
MARC206	MGA94_53	404207.12	7826703.11	333.96	221	30 - 31/07/08

One Significant Intercepts was found, and is detailed in the table below.

Hole ID	From	То	Interval (m)	Au (g/t)	Cu (%)	Bi (ppm)	U (ppm)	Litho
MARC205	192	195	3	3.48	0.031	68.33		СМ

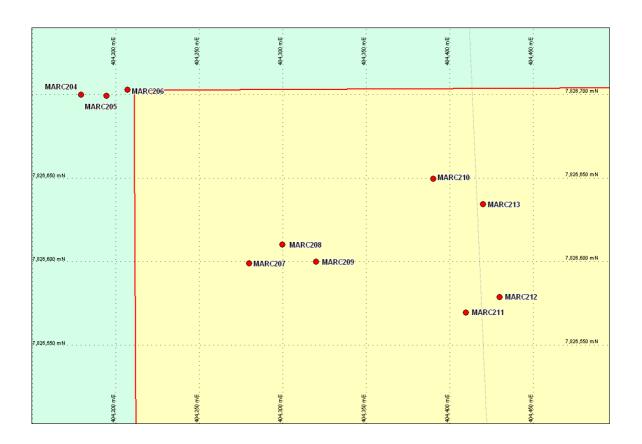


Figure 2: EL 22240 2008 drilling

Also during the 2008 field season Emmerson completed a Detailed Ground Gravity Survey, conducted by Fugro Geophysics. This ground gravity survey was conducted over Emmerson's Tennant Creek tenure package and included EL 22240. The survey was conducted by three teams, each team consisted of a quad bike and rider equipped with a station meter. The three teams were supported by a Toyota Landcruiser 4WD Ute. The readings were taken on a regional 500m station spacing's, on lines 500m apart oriented North – South. Readings in areas requiring more detail were taken on 50m station spacing's on 100m spaced lines oriented North - South. The survey was completed during October 2008. 2 station readings were taken in EL 22240 and consisted of 2 Regional readings.

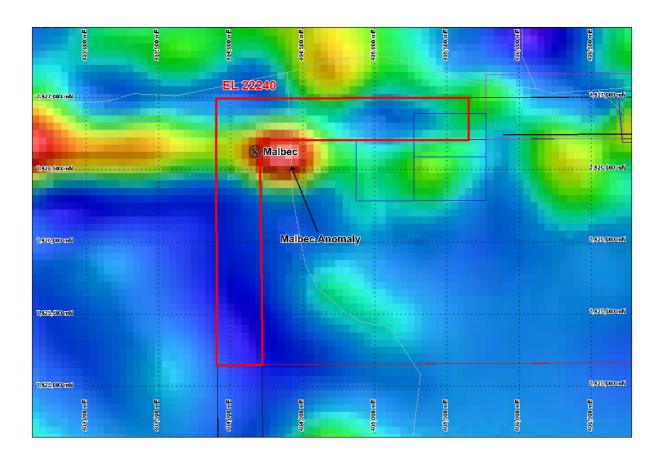


Figure 3: EL 22240 vs. 2008 Gravity

During 2010 Emmerson and contract geophysical consultants, Spinifex Geophysics, further developed a processing technology, Vector Residual Magnetic Intensity (VRMI) aimed at existing magnetics data from Emmerson's Tennant Creek tenure package, figures 4 (pre-VRMI) & 5 (VRMI) represent the success of the VRMI technology.

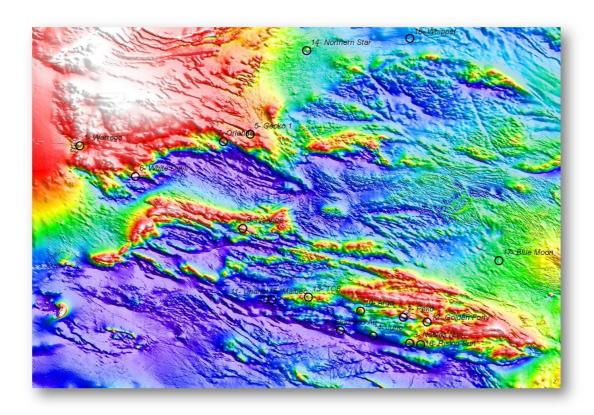


Figure 4: Regional Magnetic Image (pre-VRMI)

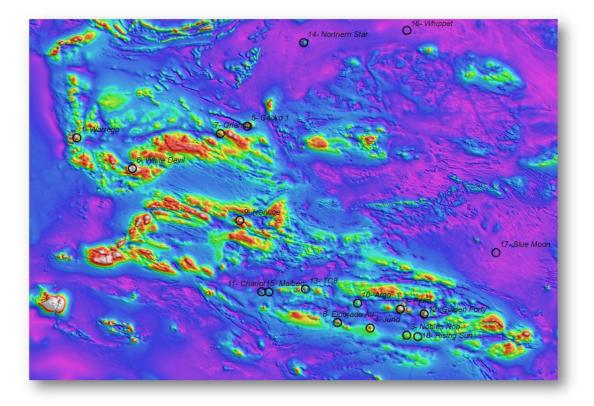


Figure 5: Regional Magnetic Image using VRMI EMMERSON RESOURCES LTD

Immediate identification of highly prospective VRMI targets reprioritised Emmerson's target matrix, the Red Bluff Area in Emmerson's Western Project Area became the No. 1 priority area for exploration activities. Drilling during 2010 at Red Bluff confirmed the VRMI technology with significant intercepts of thick ironstones, although assay results were mixed, the successful ironstone intercepts were evidence to support the development and use of VRMI technology.

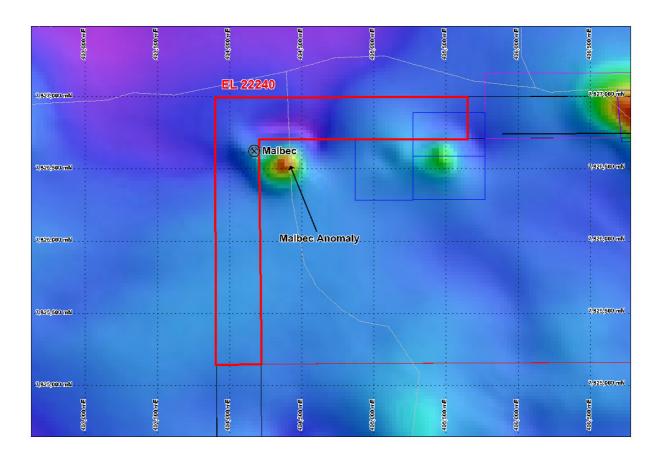


Figure 5: EL 22240 vs. VRMI.

Further to the VRMI technology Emmerson has completed a Heli-TEM survey over a number of areas early in 2011 to firstly orientate the survey over known deposits and secondly to fly over the highest priority VRMI target areas. Heli-TEM is a helicopter mounted system capable of measuring the conductivity of the rocks to significant depth and will utilise the world's most powerful airborne, time-domain electromagnetic system. A breakthrough during late 2010 and early 2011 has been the recognition that drill core from the mineralised portions of Tennant Creeks historic deposits is conductive up to 80times the background levels. Emmerson hopes that encouraging results from the Heli-TEM survey will further refine the exploration search workspace within recognised VRMI targets areas.

Emmerson flew the Heli-TEM survey over the Chariot Line and included EL 22240 and the Malbec area. Emmerson is currently conducting 'Proof of Concept' drilling at the Gecko

and Orlando Areas, should results be positive then the Chariot line will the prime candidate for further exploration drilling of HeliTEM and VRMI anomalies. Work will be conducted over the newly granted SEL 28601 to better define, model and target any positive results from this survey. Any targeting may result in the generation of drill targets.

7. REHABILITATION

Emmerson completed the rehabilitation of the three RC drill holes during the 2010 field season in accordance with the relevant Mining Management Plan (Authorisation 0475-03 Southern Project Area). These sites were visited by the Department of Resources – Mining Performance Division in July 2011 with the aim of assessing the rehabilitation and the regrowth since completion, the site and the rehabbed drilling was deemed excellent. Detailed reporting of the rehab is captured in the Southern Project Area MMP 2011.

8. CONCLUSIONS

Under the newly granted SEL 28601 Emmerson will analyse, interpret and model the resultant data from the HeliTEM survey, the recently applied VRMI with the aim of identifying anomalous areas, particularly those that coincide with magnetic and/or gravity anomalies identified from the 2008 geophysical survey data with the aim of generating robust exploration models for drill targeting. Drill testing or 'Proof of Concept' drilling is currently under way in the Gecko Area and given positive results the area covered by EL 22240 will be assessed.

9. EXPENDITURE

Expenditure for the term of the tenure for EL 22240 is as follows:

ITEM	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	TOTAL
Geology	\$133	\$1,673	\$1,027	\$5,704	\$1,122	\$836	\$13,750	\$15,173.50	\$1,587.60	\$9,596	
Geophysics	\$210	\$1,338	\$1,500	\$52	\$1,455.66		\$7,032.20	\$6,645.07	\$3,010.73	\$20,254.31	
Geochemistry				\$1,500							
Surveying											
Data Integration	\$55				\$1,676.35		\$2,880	\$2,570	\$1,800	\$235.46	
Drafting											
Analytical								\$5,779			
Drilling			\$4,944	\$4,945				\$55,000.04			
Tenure Admin		\$878	\$1,334	\$1,333	\$1,320.20	\$209	\$1,180	\$1,000	\$900	\$2,430	
Administration and Overheads	\$40	\$613	\$219	\$219	\$387.78	\$209					
Rehabilitation			\$171	\$171							
TOTAL	\$438	\$4,502	\$9,195	\$13,924	\$5,961.99	\$1,254	\$24,842.20	\$86,167.61	\$7,298.33	\$32,515.37	\$186,098.50

EMMERSON RESOURCES LTD

HARD COPY REPORT META DATA FORM

REPORT NAME: EL 22240 SMELTER FINAL REPORT 24 JULY 2001 TO 08 JULY 2011 PROSPECT NAMES(s): **GROUP PROSPECT NAME:** TENEMENT NUMBERS(s): EL 22240 **ANNIVERSARY DATE:** 24 JULY OWNER/JV PARTNERS: SANTEXCO PTY LTD AUTHOR(s): **ADAM WALTERS COMMODITIES:** GOLD, COPPER, LEAD, ZINC, SILVER, BISMUTH MAPS 1:250 000: **TENNANT CREEK SE53-14** MAPS 1:100 000: **TENNANT CREEK 5758** MAPS 1:50 000 TECTONIC UNIT(s): TENNANT CREEK INLIER, STRATIGRAPHIC NAME(s) WARRAMUNGA FORMATION, CAMBRIAN WISO BASIN AMF GENERAL TERMS: AMF TARGET MINERALS: GOLD, COPPER, LEAD, ZINC. AMF GEOPHYSICAL: AMF GEOCHEMICAL: AMF DRILL SAMPLING: **HISTORIC MINES: DEPOSITS:** PROSPECTS:

MORGAND, MALBEC, EL 22240, CHARIOT AREA, TROIKA AREA

KEYWORDS: