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ANNUAL REPORT FOR THE CHARIOT GROUP ML23216, MLC176 & 177

19 JULY 2015 – 18 JULY 2016

LICENCEE:

GIANTS REEF EXPLORATION PTY LTD
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1.0 SUMMARY

This annual report records any activities completed on the Chariot Group during the reporting period from 19 July 2015 and 18 July 2016.

Exploration activities conducted during the reporting period consisted of the continuing testing of extensions to the current JORC resource at the historical chariot mine. Emmerson drilled 1 RC hole (CHRC298) totalling 150m and 1DDH hole (CHDD287) totalling 83.7m (with the precollar drilled by RC for 280m, total hole depth was 363.7m).

Drilling data has been attached and detailed in its appropriate tenement and displayed in figure 3.

Results from the drilling was mixed with one hole returning disappointing results and one hole returning anomalous gold and copper, but minimal only and not of significance. As a result Emmerson has postponed future work until a technique can be found to assist in targeting at depth, i.e. if the trial of the Archimedes technology, as discussed below, which may provide a technique to reassess the possibility of further resources at depth under Chariot

Further drilling is required to continue to extend the identified in-situ resource where possible and the results feedback into the resource estimation and upgraded.

Further to this, the success of the application of the 'Archimedes' technology which has the aim of defining the existence of ironstones at depth, whether magnetite or hematite and a more accurate representation of the position of such an ironstone in 3D space, may have large implications for targeting techniques in the entire Tennant Creek Mineral Field, but more specifically the Chariot Group.

2.0 INTRODUCTION

This report details activities conducted over the Chariot Group ML 23216, MLC's 176 & 177. The title covers the historical Chariot Mine and remains prospective to search for Tennant Creek style iron oxide copper-gold deposits (IOCG). Giants Reef, the registered holder, is a wholly owned subsidiary of Emmerson.

This annual report records any activities completed on this title during the reporting period from 19 July 2015 to the 18 July 2016.

3.0 LOCATION

The titles cover an area of approximately 0.47km² west of the Tennant Creek Township.

The principal access to the group is west along the Chariot Haul Road which terminates in the group at the Chariot Mine site.

Figure 1 shows the location of the title with respect to the town of Tennant Creek.

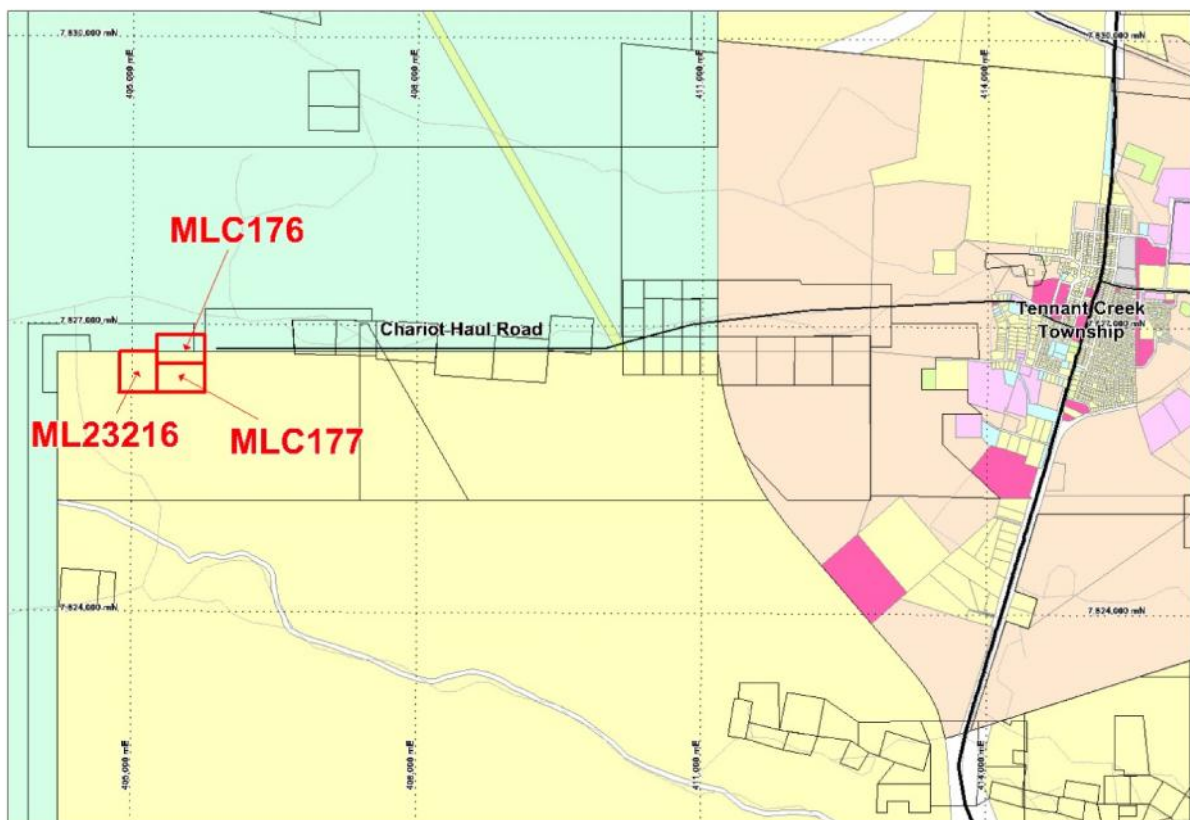


Figure 1: Chariot Group with respect to the Tennant Creek Township

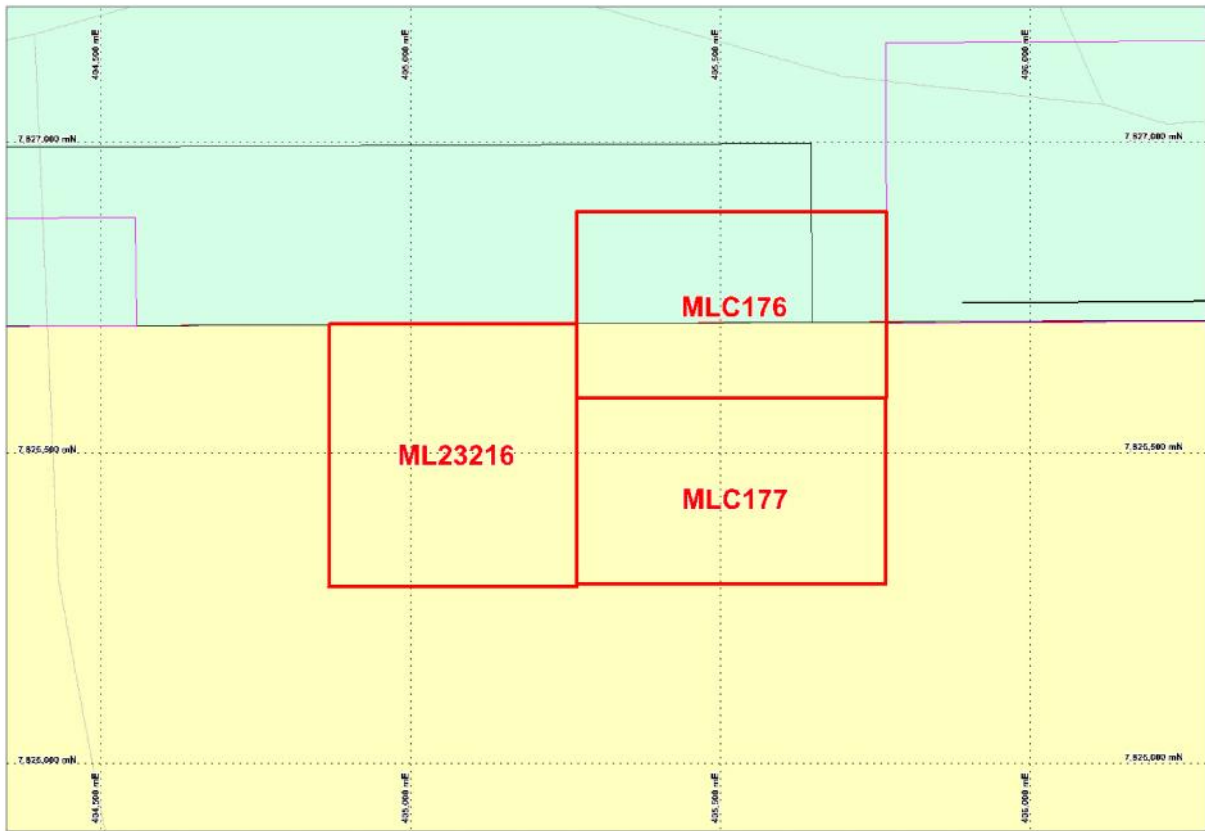


Figure 2: Chariot Group Tenure

4.0 TENURE

Tenure details for the title are as follows:

Exploration Licence	Licence Holder	Ha	Area (km ²)	Date of Expiry	Period of Grant/ <i>Renewal</i>
ML 23216 CHARIOT	GIANTS REEF EXPLORATION PTY LTD	17	0.17	18 July 2027	25 years
MLC 176 CHARIOT	GIANTS REEF EXPLORATION PTY LTD	15	0.15	18 July 2024	10 years
MLC 177 CHARIOT	GIANTS REEF EXPLORATION PTY LTD	15	0.15	18 July 2025	50 years

Table 1: Title Tenure details.

The title lies within NT Portion 04115, Aboriginal Freehold Land, held by the Warumungu Aboriginal Land Trust and NT Portion 00494, Perpetual Pastoral Lease 1142, Tennant Creek Station.

The title is subject to the 'Mineral Lease NO 23216 Agreement', signed in July 2002 between the Native Title holders of the Tennant Creek region, represented by the Central Land Council, and Giants Reef Exploration Pty Ltd and the 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, and Giants Reef Exploration Pty Ltd.

5.0 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 Licences.

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

5.2 Geology of the Chariot Group

The group geology is dominated by lack of outcrops of Proterozoic basement rocks and is blanketed by a layer of colluvium and aeolian sand up to seven metres thick.

The Palaeoproterozoic Warramunga Formation is assumed to underlie all of the group area. This formation is key host to all the magnetite-haematite (ironstone-hosted) gold-copper-bismuth mineralisation and ore bodies in the Tennant Creek goldfield. The Chariot gold deposit which is located within the title is hosted by haematite > magnetite dominated ironstone and differ somewhat to the more magnetite dominated ironstones in the Tennant Creek goldfield.

5.3 Mine Geology

The group contains the Chariot historical mine working as detailed in the table below;

Mine Name	Operating Period/s	Production	Grade	Produced Metal
Chariot	2003 – 05		10.9g/t	82,326oz Au

Table 2: Historical Mines of the Chariot Group

The Chariot deposit is an iron-oxide copper-gold deposit with high grade gold mineralisation preferentially hosted within magnetite-haematite-chlorite ironstones. The

ironstone that hosts the Chariot deposit, which is haematite-rich and copper and bismuth poor, has the form of an elongated teardrop in section, which is thickest at depth and is essentially lenticular in plan view. The Main Zone iron-oxide body averages 10 m wide, and around 60% of this material is mineralised, with gold being best developed in the upper section of the haematite body. The mineralised Northern Lode is on the north limb of an anticline, and the poorly mineralised Southern Lode is located in the axis of the anticline.

The mineralisation at Chariot is gold dominant, with minor to subordinate copper and bismuth hosted by magnetite-hematite-chlorite rock. The distribution of economic grades is interpreted to be structurally controlled. The mineralisation occurs in numerous lenses or shoots, including two or more lenses in the oxide zone, four lenses between the 2 and 8 Levels, and more than 20 lenses at depth. These lenses have dimensions of approximately 5 m to 50 m along strike and 10 m to 100 m down dip. The weathering profile over the Chariot mineralisation is extensive to depths of over 100 m.

6.0 WORK DONE DURING THE REPORT PERIOD

Exploration activities conducted during the reporting period consisted of the continuing testing of extensions to the current JORC resource at the historical chariot mine. Emmerson drilled 1 RC hole (CHRC298) totalling 150m and 1DDH hole (CHDD287) totalling 83.7m (with the precollar drilled by RC for 280m, total hole depth was 363.7m).

Drilling data has been attached and detailed in its appropriate tenement and displayed in figure 3.

Results from the drilling was mixed with one hole returning disappointing results and one hole returning anomalous gold and copper, but minimal only and not of significance. As a result Emmerson has postponed future work until a technique can be found to assist in targeting at depth, i.e. if the trial of the Archimedes technology, as discussed below, which may provide a technique to reassess the possibility of further resources at depth under Chariot.

Further work conducted were field visits to geologically assess a number of Kenex generated targets within the Chariot Group area, refer to figure 4 Kenex targets are generated from the Kenex Pty Ltd (Kenex) predictive modelling of the Tennant Creek Mineral Field, this product is a statistical predictive tool for predicting the possible prospective sites for Tennant Creek style mineralisation. The model produced many target areas which contain all or some of the essential criteria for possible economic mineralisation in the Tennant Creek Mineral Field. Emmerson is assessing the generated targets and ranking them in order of potential prospectivity. The highly ranked targets are selected for field visits and desktop data compilation and validation. All this data is compiled and some rock chipping may take place during site visits to compile a geological and geophysical assessment of the target which is then ranked for future exploration.

Emmerson provided Kenex with the Tennant Creek Datasets available, from these data sets Kenex generated 15 predictive maps of 15 key parameters, as listed in the table

below. Kenex run to models a Weights of Evidence (WOE) model, which used all 15 predictive maps, a Lineal Regression (LR) model which used 12 of the 15 predictive maps and they also generated a 3D model which used 11 of the predictive maps.

A selected area for target generation is gridded into cells and these predictive maps give a numerical weighting for each cell in terms of its adherence to the parameter being assessed. The values for each parameter are combined to give a number of resultant values predicting different statistical relationships. The aim of these resultant values is to generate a target area that has the essential parameters to host Tennant Creek Style Mineralisation. Of all the resultant values Emmerson uses the Post Probability (Pprb) value to identify and rank its targets, in a range of 0 – 1, with 1 being the highest potential value and values above 0.85 to be very significant, although all targets need to be considered in the context of “if the assessed cell has a low value” is it because the relevant data isn’t significant or has it not been recorded/captured.

	PARAMETER	Description
1	Warramunga Formation	Spatial relationship of stratigraphy to mineralisation
2	Distance to porphyry	Distance to porphyries that pre-date or are synchronous with mineralisation
3	Distance to mafics (Mafic Lithologies)	Spatial relationship of mafic lithologies older than cover to mineralisation
4	Radiometry - U	Anomalous U relation to mineralisation
5	Distance to D_0 - $D_{1 \text{ major}}$ faults	Faults of D_1 age relation to mineralisation
6	Distance to low order faults (Faults length < 1 km)	Fault length pre to syn mineralisation
7	Distance to F1 Anticlines	Spatial relationship of antiforms pre to syn mineralisation to mineralisation.
8	Distance to F1 Synclines	Spatial relationship of synforms pre to syn mineralisation to mineralisation.
9	Distance to Redox boundaries	Base of oxidation as the boundary between haematite/magnetite.
10	Distance to IOCG Haematite end-member	Relationship of iron alteration to mineralisation
11	Distance to mag and gravity slope highs coincident	Proximity to dense, magnetic highs
12	Distance to ironstones	Ironstones - All
13	Ironstones - high mag/gravity coincident	Ironstones - All - High gravity & mag
14	Distance to anomalous rock/DH geochem	Combined anomalous Au, Cu and Bi buffered ((Au >= 0.1ppm, Bi >= 10ppm, Cu >= 100ppm)
15	Distance to anomalous regolith Au geochem	Soil & Vacuum Au

Table 2: Kenex Predictive Modelling Parameters

The targets generated in the Chariot Group area exhibited geological prospective rocks and structures but their overall rankings of Pprb's between 0.385667 and 0.8986654712 wasn't high enough for exploration to commence immediately.

Emmerson is currently trialling the application of a new technology 'Archimedes' which is the application of a proprietary algorithm to geophysical data, this is done by the Archimedes group. The aim is to define the existence of ironstones at depth, whether magnetite or hematite and a more accurate representation of the position of such an ironstone in 3D space. Emmerson is trialling this at two separate areas, one in the Eastern Project Area (The Susan Block) and one in the Northern Project Area (Gecko Block). The success of this technology may have large implications for targeting techniques in the entire Tennant Creek Mineral Field, but more specifically the Chariot Group.

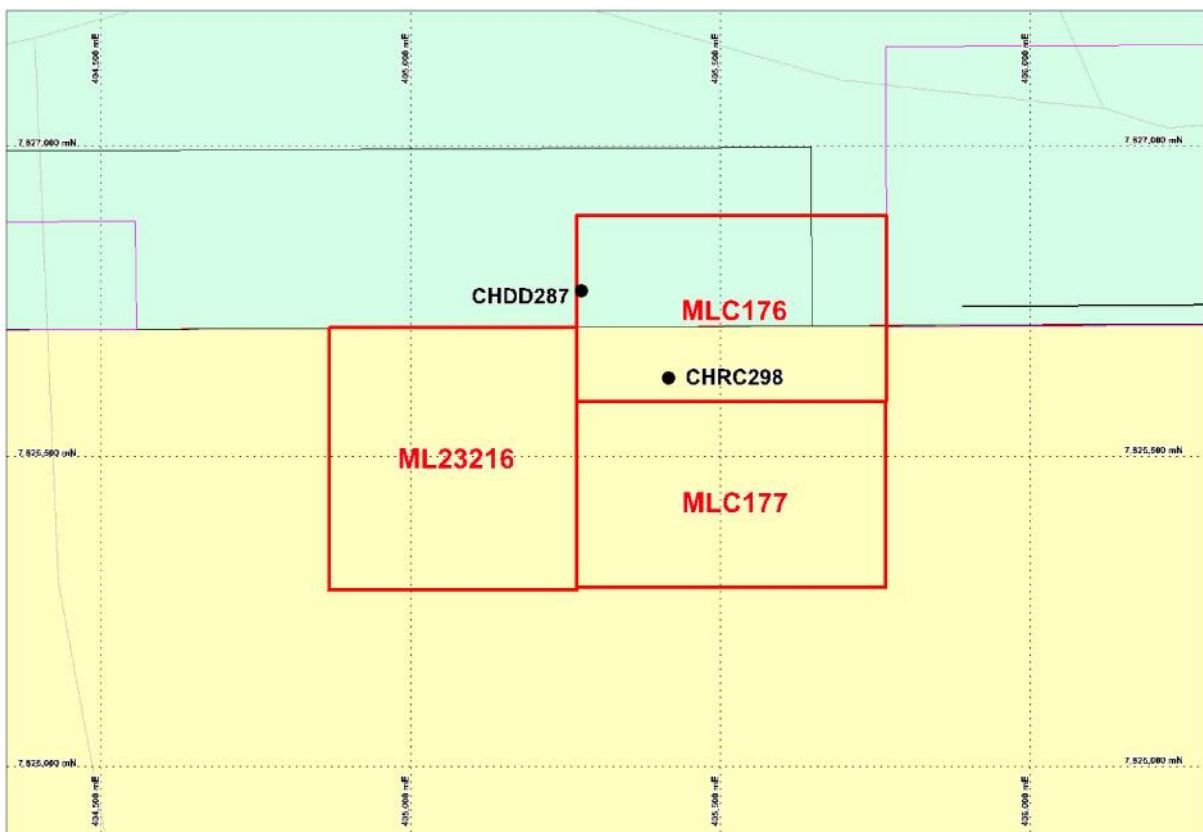


Figure 3: Chariot Group Drilling

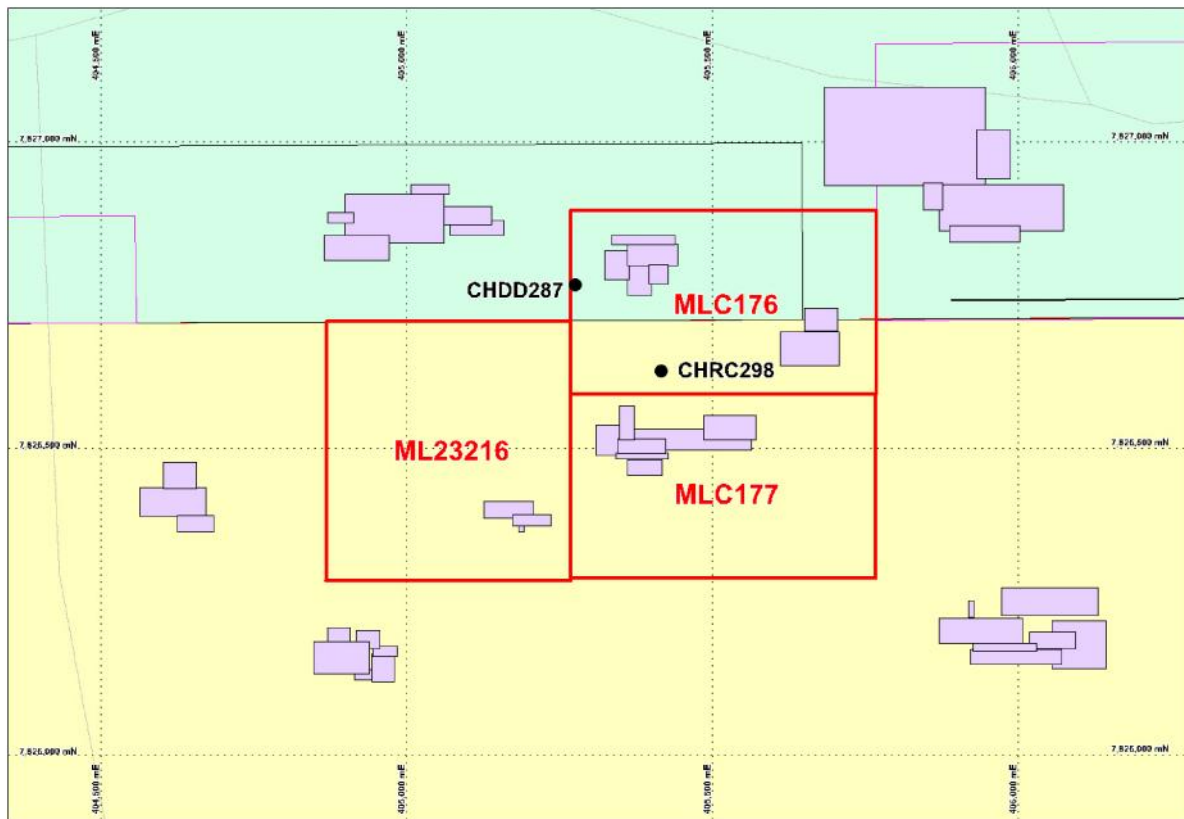


Figure 4: Chariot Group vs. Kenex generated targets (magenta polygons)

7.0 REHABILITATION

Rehabilitation was completed as detailed in the Southern Project Area (SPA) Mining Management Plan – Authorisation 0475-04.

8.0 CONCLUSIONS

Further drilling is required to continue to extend the identified in-situ resource where possible and the results feedback into the resource estimation and upgraded.

Further to this, the success of the application of the ‘Archimedes’ technology which has the aim of defining the existence of ironstones at depth, whether magnetite or hematite and a more accurate representation of the position of such an ironstone in 3D space, may have large implications for targeting techniques in the entire Tennant Creek Mineral Field, but more specifically the Chariot Group.

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