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COMBINED ANNUAL REPORT FOR THE PEKO GROUP MCC 239 & 240 and MLC's 406 – 409 GR412

01 OCTOBER 2017 – 30 SEPTEMBER 2018

LICENSEE:
SANTEXCO PTY LTD
A.B.N.002 910 296
(A wholly owned subsidiary of Emmerson Resources Ltd)

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NOVEMBER 2018

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MAP SHEETS:

TENNANT CREEK	SE53-14
	1:250 000
TENNANT CREEK	5758
	1:100 000

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FIGURES

1.0 SUMMARY

The titles of the Peko Group were acquired by Santexco Pty Ltd (Santexco) to search for Tennant Creek style iron oxide copper-gold deposits (IOCG). Santexco is a wholly owned subsidiary of Emmerson Resources Ltd (Emmerson).

This combined report records the exploration work completed on these titles during the period from 01 October 2017 to the 30 September 2018.

Exploration activity was limited due to exploration focus elsewhere namely at Edna Beryl in Emmerson's Northern Project Area (NPA) and Mauretania in Emmerson's Eastern Project Area (EPA). Work proposed and yet to commence will be the continuation of assessment of the Kenex generated targets within the Peko Group area. These targets exhibited geological prospective rocks and structures but their overall ranking wasn't high enough for exploration to commence immediately. Following the recent exploration success at Mauretania in EL 28761 and Edna Beryl in MLC705 these targets will be reassessed and re ranked in 2018 & 2019 for future exploration.

2.0 INTRODUCTION

The titles of the Peko Group were acquired by Santexco to search for Tennant Creek style iron oxide copper-gold deposits (IOCG). Santexco is a wholly owned subsidiary of Emmerson.

This combined report records the exploration work completed on these titles during the period from 01 October 2017 to the 30 September 2018.

Figure 1 shows the location of the Peko Group with respect to the Tennant Creek Township and figure 2 details the tenure of the Peko Group.

3.0 LOCATION

The Peko Group is located approximately between 8km and 10.5km east of the Tennant Creek Township. The Licence falls on the Tennant Creek (5758) 1:100,000 scale map sheet.

The principal access to the group from Tennant Creek is east via the Peko Mine Road. Access to the other areas of the group is by various dirt roads and fence line tracks. However, much of the area is rocky, without tracks and difficult to reach, even in a 4x4 vehicle. The unsealed tracks become impassable during the wet season.

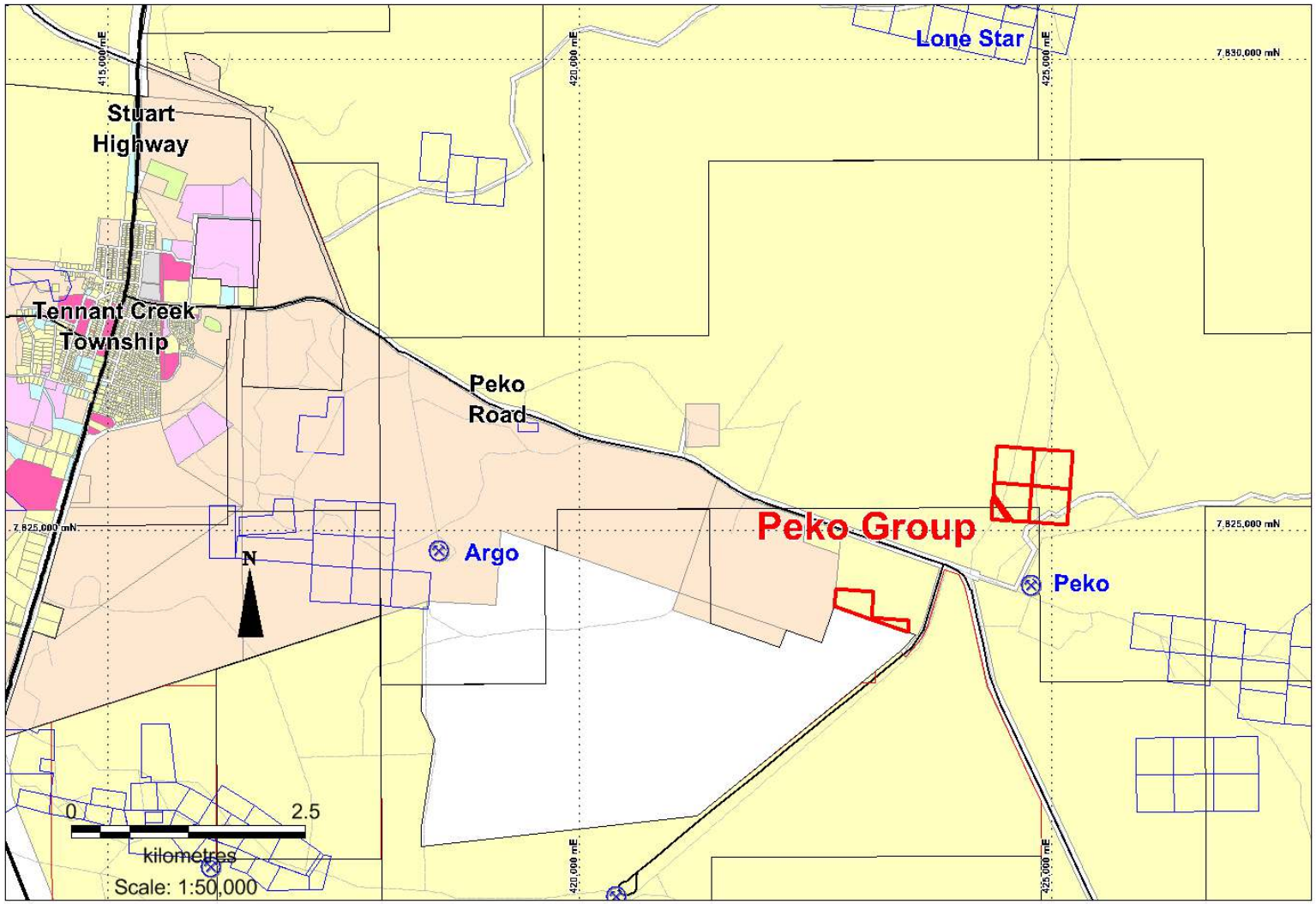

Figure 1: Location of the Peko Group with respect to the Tennant Creek Township

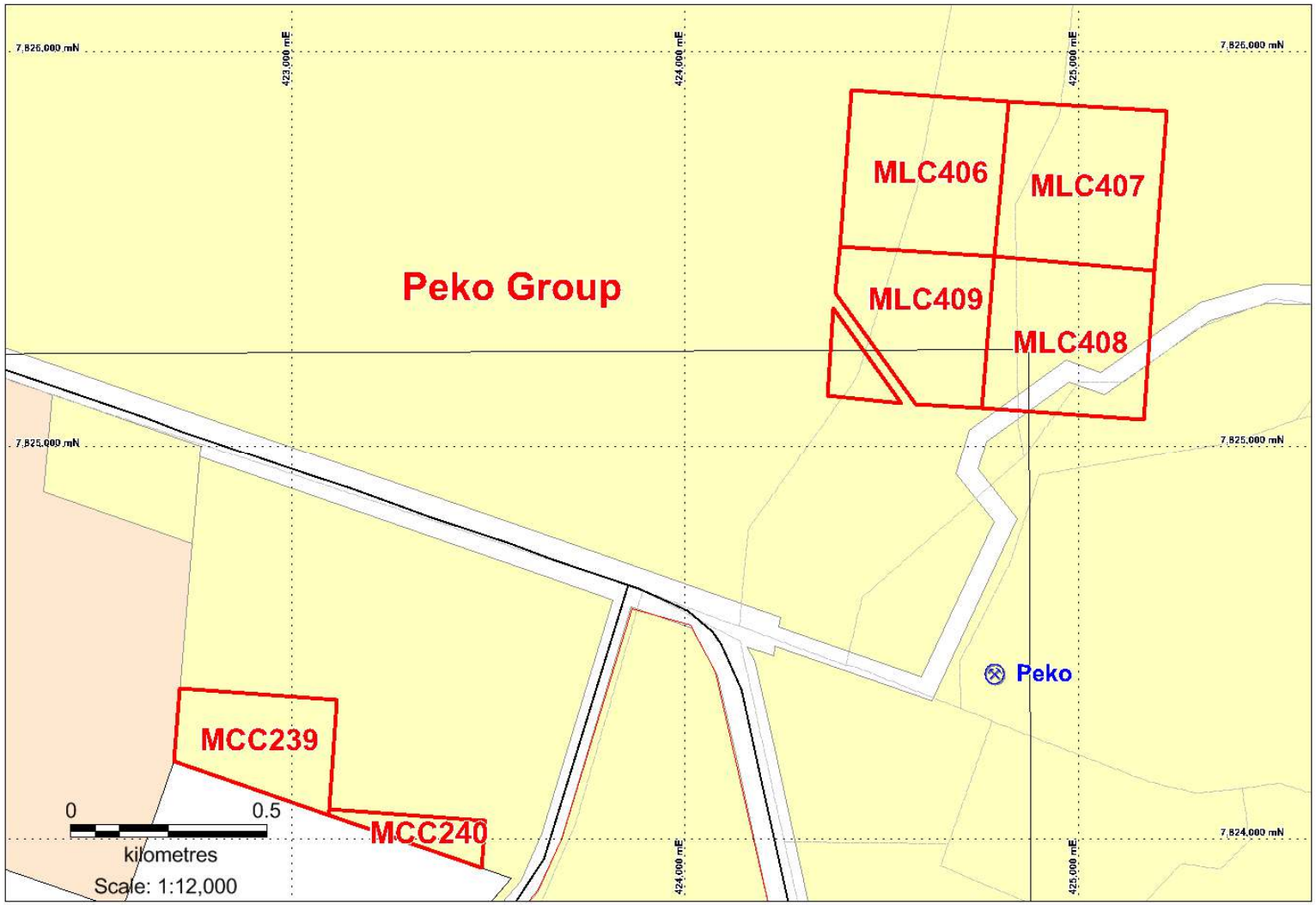

Figure 2: Tenure of the Peko Group

4.0 TENURE

The tenure details of the Peko Group are detailed in the following table;

Tenement ID	Tenement Name	Holder	Interest	Grant Date	Effective Date	Expiry Date	Area (Ha)
MCC239	West Peko	San	100	24/04/1987	24/04/2012	23/04/2027	8.3
MCC240	West Peko	San	100	24/04/1987	24/04/2012	23/04/2027	3
MLC406	Comet	San	100	21/02/1978	21/02/1978	31/12/2026	16
MLC407	Comet	San	100	21/02/1978	21/02/1978	31/12/2026	16
MLC408	Comet	San	100	21/02/1978	21/02/1978	31/12/2026	16
MLC409	Comet	San	100	21/02/1978	21/02/1978	31/12/2026	16

Table 1: Peko Group Tenure Details

The Peko Group comprises 2 granted Mineral Claims and 4 granted Mineral Leases, refer to figure 2 and table 1, covering an area of 75.3 hectares.

The Peko Group is located on –

- NT Parcel 03735, Aboriginal Freehold Land, held by the Warumungu Aboriginal Land Trust

The Peko Group has 1 AAPA and 1 CLC registered sites that affect the titles.

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 Tennant Creek 1:100,000 sheet, which cover 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 Peko Group

The rocks of the Peko Group consist of turbidite sediments of the Palaeoproterozoic Warramunga Formation (1865-1855 Ma), predominately greywacke and siltstones. 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 Warramunga Formation is characterised in a number of places by outcropping ridges which comprise scattered outcrops of weathered siltstone and greywacke with felsic volcanics or volcanically derived sedimentary rocks of the Flynn Sub-group/ Tomkinson Creek Sub-group (Ooradidgee Group), quartz-rich dissected colluvial fan deposits with minor, colluvium scree, felsic porphyry and alluvial deposits in active channels and on floodplains.

6.0 WORK DONE DURING THE REPORT PERIOD

Exploration activity was limited due to exploration focus elsewhere namely at Edna Beryl in the NPA and Mauretania in the EPA. Work proposed and yet to commence will be the continuation of assessment of the Kenex generated targets within the Peko Group area, refer to figure 3.

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-$D_{1\ major}$ faults	Faults of D1 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 Peko Group area exhibited geological prospective rocks and structures but their overall rankings of Pprb's between 0.0727358 and 0.336824 wasn't high enough for exploration to commence immediately.

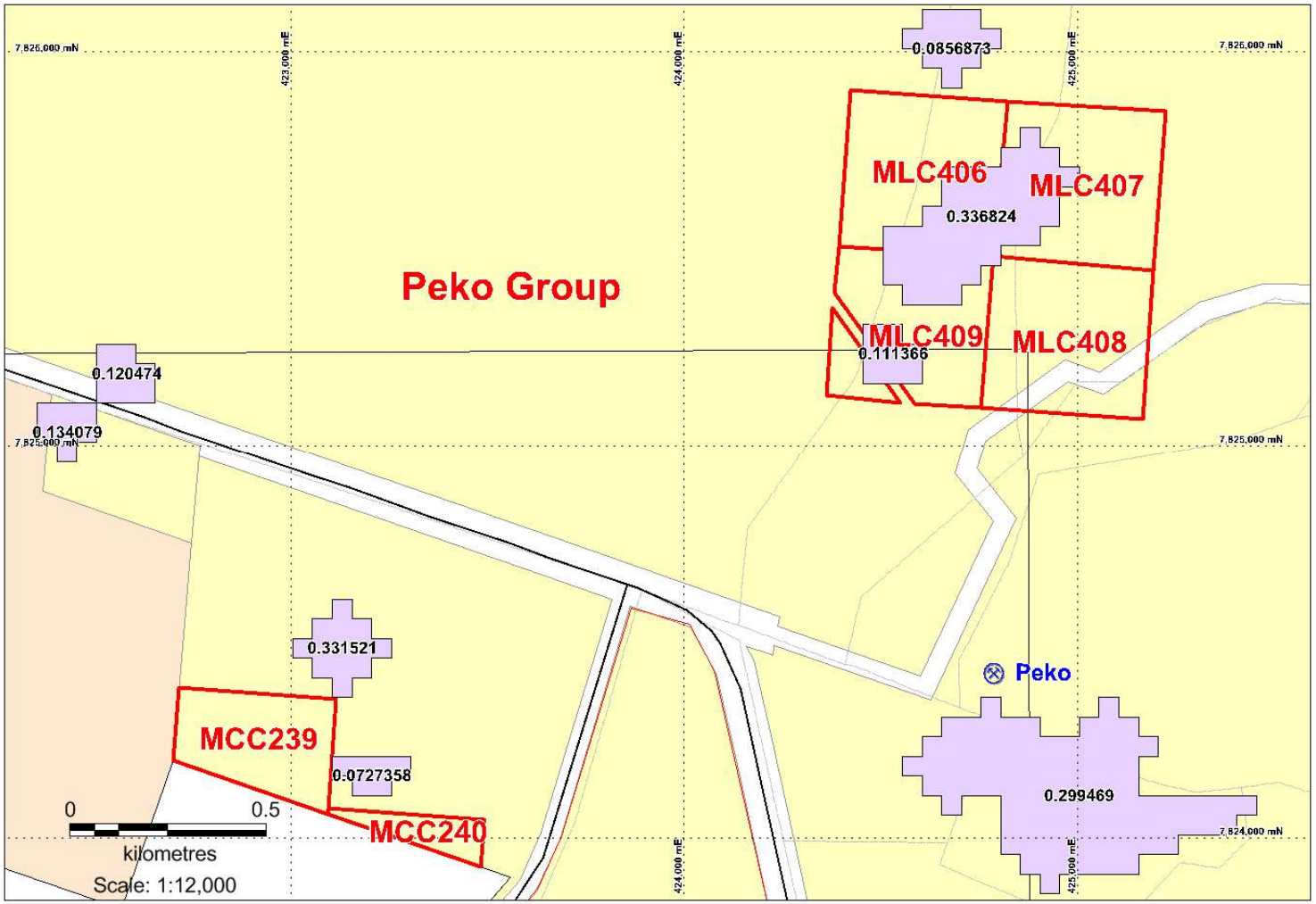

Figure 3: Peko Group vs. Kenex generated targets (magenta polygons)

7.0 REHABILITATION

Rehabilitation was not required as no ground disturbing activities were conducted. All future rehabilitation will be completed and performed as detailed in the EPA Mining Management Plan – Authorisation 0463-04 which includes the titles of the Peko Group.

8.0 CONCLUSIONS

Exploration activity was limited due to exploration focus elsewhere namely at Edna Beryl and Mauretania. Work proposed and yet to commence will be the continuation of assessment of the Kenex generated targets within the Peko Group area. These targets exhibited geological prospective rocks and structures but their overall ranking wasn't high enough for exploration to commence immediately. Following the recent exploration success at Mauretania in EL 28761 and Edna Beryl in MLC705 these targets will be reassessed and re ranked in 2018 & 2019 for future exploration.

9.0 COPYRIGHT STATEMENT