ANNUAL REPORT
(INCLUDING A BRIDGING REPORT COMPONENT)
TO COVER EXPLORATION ACTIVITIES OVER MCC 315
01 JANUARY 2001 – 31 December 2011

MCC 315
Pigale

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

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MAY 2012
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1. SUMMARY

Mineral Claim 315, Pigale, was acquired by Santexco Pty Ltd (Santexco) to search for Tennant Creek style iron oxide copper-gold deposits.

This Annual (& bridging) report records the exploration work done on these group of tenure during the term 01 January 2001 to 31 December 2011.

Emmerson conducted exploration adjacent to MCC 315 which consisted of geophysical surveys, a HeliTEM survey in early 2011. RC drilling was conducted during July 2011 resulting in 2 RC holes (PGRC010 & 011) totalling 550m, with disappointing results.

Emmerson will continue to conduct exploration in the Gecko Area to further develop the application, understanding and execution of targeting HeliTEM and/or VRMI anomalies and during 2012 Emmerson will conduct a detailed interpretation, analysis and modelling of the HeliTEM data in the Gecko Area, which includes MCC 315, with the aim of identifying targets for drill testing late in 2012 and early 2013.
2. INTRODUCTION

Mineral Claim 315, Pigale, was acquired by Santexco Pty Ltd (Santexco) to search for Tennant Creek style iron oxide copper-gold deposits.

This Annual (& bridging) report records the exploration work done on these group of tenure during the term 01 January 2001 to 31 December 2011.

3. LOCATION

Mineral Claim 315 is tenure located within Exploration Licences 23073 & 23183, and is approximately 1.5km north west of the historical Orlando Mine workings and 1.5km north of Warrego Road approximately 33km from Tennant Creek heading towards Warrego. The tenement is approximately 29km north west of the Tennant Creek Township.

Access to the tenure area is gained north west via the Warrego Road then north via the Orlando Mine road, then northwest via series of 4WD drive tracks.

Figure 1 shows the location of the Pigale tenure with respect to the Tennant Creek Township.

Figure 1: Location of Pigale

EMMERSON RESOURCES LTD
4. **TENURE**

Tenure details for Pigale is as follows:

<table>
<thead>
<tr>
<th>Tenure</th>
<th>License Holder</th>
<th>Blocks &amp; part-blocks</th>
<th>Area (ha)</th>
<th>Date of Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCC 315</td>
<td>Santexco Pty Ltd</td>
<td></td>
<td>20</td>
<td>31st December 2011</td>
</tr>
</tbody>
</table>

MCC 315 lie’s within NT Portion 00408, Perpetual Pastoral Lease 946, Phillip Creek Station.

Figure 1 shows the tenure area as it was during the reporting term.

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 an 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 covers the area of the license.

The rocks of the Warramunga Formation host most of the ore bodies in the region and underlie the Exploration License.

5.2 **Local Geology**

The Pigale prospect is located 1.5km north west of the Orlando Mine, along the interpreted strike extension of the Orlando shear Zone. Small outcrops of ironstone trend SE through the centre of the prospect over a strike interval of approximately 150m. Individual outcrops probably marks the southern margin of the shear zone. This shear is one of a set of parallel shear zones that host the Gecko Mine and the former Olivewood/One-Oh-Two Mines.
In 1995 the Northern Territory Geological Survey released geological maps and explanatory notes for the Tennant Creek 1:250,000 sheet, and the Short Range (5659) 1:100 000 sheets, which covers the area of the tenure.

6. PREVIOUS EXPLORATION

MCC 315
Pigale 396 841E 7 850 811N

Exploration pre-Emmerson (01 August 2006)

Between 1984 and 1985, GeoPeko carried out several ground magnetic surveys over the area now covered by MCC 315. Between 1985 and 1987 GeoPeko drilled seven RC holes to test the Explorer 209/Pigale magnetic anomaly identified from the Austirex aeromagnetic survey completed in 1984.

North Flinders Exploration (NFE) explored MCC 315 between 1991 and 1994. Work completed by NFE included data review, vacuum drilling, RAB drilling, a ground magnetic survey and RC drilling.

The exploration conducted over Pigale during the period 1 September 1996 to 31 August 1997 involved mobile metal ion (MMI) soil geochemistry (eight samples indicating a low order gold anomaly trending north west across the tenement) and RC drilling. Two holes, for 390m were, drilled by Normandy. Best results includes 6m @ 0.25g/t Au and 1222ppm Cu from 54m.

Work completed by Normandy during 1998 included a helimagnetic survey, two RC holes and one diamond hole.

Normandy completed a regional helimagnetic survey between Warrego and Gecko in early 1998. The survey utilized Normandy’s in-house geophysical equipment and was flown on NS lines, 50m apart, at a sensor height of 30m. Modelling of the heli-magnetic survey data indicated an elliptical magnetic body of 55m strike, 20m thick, 120m down dip and dipping 60° south.

Two RC drill holes, for 449m, designed to test the presence of a magnetite ironstone body at Pigale, were completed. The first hole (PGRC-007) intersected 19m of magnetite/chlorite ironstone from 106m. There was abundant sulphides mineralisation present within the ironstone (chalcopyrite dominant). The second hole (PGRC-008) intersected 2m of talc/magnetite/chlorite ironstone underlying 10m of talc/chlorite/dolomite hangingwall alteration from 153m. The best intersection of 15m @ 0.74g/t Au, 1.64% Cu,
from 114m (inc 3m @ 2.45g/t Au) occurs within the ironstone and the footwall alteration zone in PGRC-007. The remaining gold assays were at or below detection limit (0.02ppm Au).

One diamond hole (PGDD-009, 252.8m depth) was drilled at Pigale in October 1998 with 52 3m composite samples from the pre collar dispatched to ALS and 105 half NQ2 samples (mostly of 1m intervals) dispatched to Amdel for analysis. PGDD-009 intersected banded chlorite-magnetite-quartz rock from 184.2 – 192m with 5% chalcopyrite, 3% pyrite and trace bismuth. Gold assays from this zone returned 7.7m @ 8.1g/t Au from 184.3m, including 1m @ 53.0g/t Au from 187m in chalcopyrite-pyrite-bismuthinite mineralised ironstone.

Exploration work conducted during the reporting period included RAB drilling conducted by Giants Reef Exploration, during January 2005.

Seven angled RAB holes were drilled for a total of 417 meters. These holes were drilled on the projected up dip component of a shear zone along strike from Orlando. Whilst some anomalous base metal zones have been intersected, no significant gold mineralisation has been intersected.

One of these holes (PGRB20) targeted the up-plunge component of the main ironstone body, and although the drillhole intersected ironstone, it was not gold anomalous.

7. WORK DONE DURING THE REPORT PERIOD

Exploration post-Emmerson (after 01 August 2006)

During 2010 Emmerson and contract geophysical consultants, Spinifex Geophysics, further developed a processing technology, Vector Residual Magnetic Intensity (VRMI) aimed at existing magnetic data from Emmerson’s Tennant Creek tenure package, figures 2 (pre-VRMI) & 3 (VRMI) represent the success of the VRMI technology. 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 and is located to the south of MCC 315. 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.

The VRMI assessment of MCC 315 and drilling success at Red Bluff reprioritised the identified VRMI target within MCC 315, refer to figure 4 below.
Figure 2: Conventional Magnetics

Figure 3: VRMI
The VRMI assessment prompted a detailed geological review of past exploration and re-interpretation with the new geophysical anomalism identified. Emmerson re-ranked Pigale as prospective and conducted RC drilling, 2 RC holes (PGRC010 & 011) totalling 550m, these fall outside of the MCC (within EL 23183) but were directed at the anomaly within the MCC, refer to figure 3. For details of the drilling refer to Northern Project Area Combined Report submitted to DoR on 15 September 2011.

The drilling conducted was aimed at forward magnetic models produced by Emmerson contract geophysicists and a historical intercept (PGDD009 - 7.7m @ 8.0g/t Au, 2.7% Cu &0.2% Bi & PGRC007 - 15m @ 0.64g/t Au & 1.6% Cu from 114m).

The historical diamond drill hole PGDD009 was relogged and the geology reinterpreted into the current Emmerson model. Recoded legacy logging of diamond drill hole PGDD009 mineralisation suggested that mineralisation at Pigale was associated with a magnetite/hematite altered dolomite however logging confirmed this interpretation to be incorrect. Mineralisation occurs immediately within and mostly below distinct ironstone. Remodelling of the Pigale magnetic data by 3D inversion failed to replicate the ironstone known from drilling therefore the magnetic modelling cannot be used to define the volumetric potential of the Pigale target. HeliTEM conductivities (explained further below) were significantly elevated immediately down dip of know mineralisation. A drill hole was designed to test immediately down dip of the known mineralisation and up dip of the HeliTEM version 1 anomaly.
During July 2011 drill testing was conducted with discouraging results. Two holes were drilled (PGRC010 and PGRC011) the first of which was abandoned due to deviation. PGRC011 tracked according to design and effectively tested the down dip extension of mineralisation encountered in legacy drill hole PGRC009. Whilst the logged geology of PGRC011 was consistent with PGRC010 the results were not.

The exploration focus shifted to 'proof of concept' drilling at Gecko (4km to the north east), the prospectivity for the Pigale project will be determined following this drilling and analysis.

Further to the application of VRMI Emmerson conducted a geophysical survey called HeliTEM - Heli-TEM is a helicopter mounted system capable of measuring the conductivity of the rocks to significant depth and utilises 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 80 times the background levels. Emmerson completed the first round of “Proof of Concept' drilling of identified HeliTEM targets in the Gecko and Orlando Areas and resulted in success with the several intersections of mineralisation, gold and copper rich. Further drilling will be conducted in this area to further define the economic potential and further develop and refine the application of HeliTEM.

The most significant factor in the application of HeliTEM has been the Goanna and Monitor discoveries (in the Gecko Area) as it occurs in subdued magnetic signatures, therefore confirming that magnetic anomalies are not the only potential hosts for economic mineralisation in the Tennant Creek Field. Figure 5 below shows the magnetic image (VRMI) of the Gecko Corridor, it can be seen that the drilling at both Monitor and Goanna has focused on the ‘blue’ area (magnetic low), compare this with the HeliTEM image in figure 6 and it can be seen that the drilling has focused on a HeliTEM anomaly not seen in the magnetics, this has vast implications for exploration in the rest of the field and particularly the prospective tenure, including MCC 315.
Figure 5: Gecko Corridor vs. VRMI

Figure 6: Gecko Corridor vs. HeliTEM (depth Slice at 350m below surface)
The HeliTEM survey over the Gecko and Orlando areas has included the ground covered by MCC 315, detailed interpretation, analysis and modelling of the data captured in this area has yet to occur, given the priority to test the data and application at the Gecko Area, but as can be seen from figure 7, a HeliTEM anomaly can be seen on the western edge of the tenement. With the encouraging results from work in the Gecko Area the detailed interpretation, analysis and modelling of this area will occur during 2012, aimed at identifying target for drill testing.

![Figure 7: MCC 315 vs. HeliTEM (depth Slice at 350m below surface)](image)

8. REHABILITATION

Exploration within the Pigale tenement consisted of non-invasive geophysical surveys and detailed desktop studies. Ground disturbing Reverse Circulation (RC) drilling was conducted as described above.

All rehabilitation has been completed as per the guidelines and commitments made under the Northern Project Area (NPA) Mining Management Plan (MMP) Authorisation 0467-03.
9. CONCLUSIONS

As detailed above Emmerson will continue to conduct exploration in the Gecko Area to further develop the application, understanding and execution of targeting HeliTEM and/or VRMI anomalies. During 2012 Emmerson will conduct a detailed interpretation, analysis and modelling of the HeliTEM data in the Gecko block, which includes MCC 315, with the aim of identifying targets for drill testing late in 2012 and early 2013.