ANNUAL REPORT
(INCLUDING A BRIDGING REPORT COMPONENT)
TO COVER EXPLORATION ACTIVITIES OVER MLC’s 120 - 123
01 JANUARY 2001 – 31 December 2011

MLC’s 120 - 123
Navigator 7 Group

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

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APRIL 2012

DISTRIBUTION:
Department of Resources
Central Land Council
Emmerson Resources Ltd

MAP SHEETS:
□ TENNANT CREEK
SE53-14
□ 1:250 000
□ SHORT RANGE
5659
□ 1:100 000
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1. SUMMARY

Mineral Leases 120 – 123, Navigator 7 Group, were 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 over MLC’s 120 – 123 which consisted of geophysical surveys, a detailed ground gravity survey in 2008 and a HeliTEM survey in early 2011. RC drilling was conducted during July 2011 resulting in 3 RC holes for 717m, 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 White Devil block, which includes MLC’s 120 – 123, with the aim of identifying targets for drill testing late in 2012 and early 2013.
2. INTRODUCTION

Mineral Leases 120 – 123, Navigator 7 Group, were 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 Leases 120 - 123 are tenure located within Exploration Licence (EL) 28603 (held by Emmerson) and EL 23846 (held by Prosperity Resources (Tennant Creek) Pty), west of the Stuart Highway, and 38km north west of the Tennant Creek Township.

Access to MLC 120 is gained west via Warrego Road then south via a series of 4WD tracks.

Figure 1 shows the location of the Navigator 7 Group tenure with respect to the White Devil historical Mine.

Figure 1: Location of Navigator 7 Group
4. TENURE

Tenure details for the Navigator 7 Group 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>MLC 120</td>
<td>Santexco Pty Ltd</td>
<td>16</td>
<td>31 December 2014</td>
<td></td>
</tr>
<tr>
<td>MLC 121</td>
<td>Santexco Pty Ltd</td>
<td>16</td>
<td>31 December 2011 (Renewal Pending)</td>
<td></td>
</tr>
<tr>
<td>MLC 122</td>
<td>Santexco Pty Ltd</td>
<td>16</td>
<td>31 December 2011 (Renewal Pending)</td>
<td></td>
</tr>
<tr>
<td>MLC 123</td>
<td>Santexco Pty Ltd</td>
<td>16</td>
<td>31 December 2011 (Renewal Pending)</td>
<td></td>
</tr>
</tbody>
</table>

MLC’s 120 - 123 lie 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 tenure covers an area of intermittent outcrops.
The cover is dominated by Quaternary sediments and these include dissected colluvial fan deposits, red soil plains and alluvial deposits in active channels and on floodplains. The Quaternary deposits are assumed by mapping to cover the Palaeoproterozoic Warramunga Formation meta-sediments that have been intruded by later quartz-feldspar porphyries. At the nearby White Devil mine this porphyry has been dated using Rb/Sr at 1856 ±4Ma.

The Mary Lane Shear, one of the most prominent tectonic structures in the Tennant Creek goldfield, runs in a northwest to southeast direction through the tenure area.

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

MLC’s 120 - 123

Navigator 7 382 036E  7 845 004N

Exploration pre-Emmerson (01 August 2006)

MLC’s 120 - 123 were renewed on the 1st December 1971 for a term expiring on the 31st December 2006.

MLC’s 120 - 123 was included within a package of tenements west of the major White Devil and Black Angel deposits, which Santexco Pty Ltd undertook a combined quantitative/qualitative ranking, based on geological, geochemical & geophysical characteristics and other parameters covering work status, target type, land status and economics. As part of this work geochemical data sets, including all historical drilling data, were integrated into Giants Reef Exploration Pty Ltd (Giants Reef) database and GIS for analysis.

The level of exploration on MLC’s 120 - 123 was to some extent limited during this term, due to Giants Reef’s higher priority commitments on the development and mining of the Chariot and Malbec Deposits and regional exploration on tenements elsewhere in the Tennant Creek Mineral Field.

The tenement was ranked as prospective due to being underlain by Warramunga Formation units, the presence of a number of Au anomalous ironstones and proximal to the White Devil and Black Angel deposits.
Exploration post-Emmerson (after 01 August 2006)

A Detailed Ground Gravity Survey, conducted by Fugro Ground Geophysics commenced 27 March 2008. This ground gravity survey was conducted over Emmerson’s Tennant Creek tenure package and included, MLC’s 120 - 123. 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 500m station spacing’s, on lines 500m apart oriented North – South. Readings in areas requiring more detail were taken on 50 station spacing’s on 100m spaced lines oriented North - South. The survey was completed during October 2008.

In April 2009 Emmerson entered into a $28M joint Venture Agreement with Ivanhoe Mines Australia.

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 immediate south of MLC’s 120 - 123. 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 MLC’s 120 - 123 and drilling success at Red Bluff reprioritised the identified VRMI target within MLC 121, which also coincided with the historical Navigator 7 target, refer to figure 4 below.
7. WORK DONE DURING THE REPORT PERIOD

Navigator 7 382 036E  7 845 004N

Emmerson conducted drilling of the Navigator 7 target in early 2011 consisting of 3 holes (NAV&RC014, 015 & 016) totalling 717m within MLC 120, refer to figure 4 below. The navigator target consists of high grade gold zones within the HW shear zone, down dip to the immediate SW and along strike to the NW of the Navigator 7 ironstone. The interpretation of previous drill testing indicates an ironstone of the dimensions 100m N-S, 70m E-W and 10-40m thickness, dipping shallowly (20 deg) to the SW and plunging 30-35 deg to the SE. The ironstone is open in ALL directions. Quartz porphyry overlies and effectively caps the ironstone alteration system.

Table 1: Drilling conducted at Navigator 7 Prospect during July 2011.

<table>
<thead>
<tr>
<th>Hole No</th>
<th>MGA_East</th>
<th>MGA_North</th>
<th>RL</th>
<th>Dip</th>
<th>Azi (mag)</th>
<th>RC (m)</th>
<th>Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAV7RC014</td>
<td>382040.05</td>
<td>7845093.00</td>
<td>326.97</td>
<td>-68</td>
<td>35.3</td>
<td>281</td>
<td>143289-389</td>
</tr>
<tr>
<td>NAV7RC015</td>
<td>382034.5</td>
<td>7845016.1</td>
<td>326.5</td>
<td>-55</td>
<td>37.5</td>
<td>311</td>
<td>143802-912</td>
</tr>
<tr>
<td>NAV7RC016</td>
<td>382045.5</td>
<td>7845099</td>
<td>326.5</td>
<td>-60</td>
<td>37.5</td>
<td>125</td>
<td>143913-53</td>
</tr>
</tbody>
</table>

Drilling did not proceed as planned with drill holes steepening rather than lifting as planned. Nav7RC014 was intended to test the first priority of three targets at Navigator 7. Extreme drill hole deviation from the plan resulted in it testing the deeper third priority target. The hole passed through the capping QFP from surface and passed into Warramunga metasediments at 91m. An abrupt transition into intense chlorite alteration at 172m corresponds with the predicted HW fault. The intense chlorite alteration zone continued down hole for 5m before intersecting massive Dolomite-Talc rock over the interval 177-215m. After passing through the Dol-Talc zone another zone of intense chlorite alteration was intersected 215-224m. The hole then continued to 281m in moderately chlorite altered Warramunga metasediments, with localised quartz-pyrite veins.

Nav7RC015 was redesigned to test the second priority of the three targets at Navigator 7. Drilling went largely as planned, although the hole lifted gently and deviated more with rotation than expected. The primary target zone was tested 15m above planned depth. The geology intersected is weathered, unaltered Warramunga siltstones and sandstone to 135m. Bedrock weakly altered Warramunga siltstones and sandstone were intersected to 195m, with localized thin shear zones with chlorite-magnetite (<2%) alteration. The predicted hanging wall shear chlorite-magnetite alteration zone was intersected over the interval 195-244m. Magnetite abundance is in the range 0.5-5% throughout the alteration.
zone. No sulphides were noted in the interval. At 244m the drill hole passed abruptly out of intense chlorite-magnetite alteration into Warramunga metasediments with localised chloritic alteration. The predicted FW shear, characterised by chlorite-magnetite alteration, was intersected in the interval 284-298m. Weakly chlorite altered Warramunga metasediments continued until end of hole at 311m.

Nav7RC016 was redesigned to test the first priority of the three targets at Navigator 7. Drilling went largely as planned, but the hole was parked at 125m due to demand for precollars at Gecko. The hole passed through the capping QFP from surface and passed into Warramunga metasediments at 77m. Weathered Warramunga metasediments continue to 125m.

The drilling extended to the FW shear zone to ensure effective testing for ironstone repetition or FW shear mineralisation and to test the Tier 2 Navigator 7 ironstone alteration system for high grade gold zones.

Results returned no significant intersections.

Figure 4: MLC’s 120 - 123 vs. VRMI
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 7 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 8 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’s 120 - 123.

Figure 7: Gecko Corridor vs. VRMI
The HeliTEM survey over the White Devil Deposit located immediately to the east south east included the area covered by MLC’s 120 – 123 and detailed interpretation, analysis and modelling of the data captured has yet to occur, given the priority to test the data and application at the Gecko Area. With the encouraging results from work in the Gekco Area the detailed interpretation, analysis and modelling of this area will occur during 2012, aimed at identifying target for drill testing.

8. REHABILITATION

Exploration within the Navigator Group 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 Western Project Area (WPA) Mining Management Plan (MMP) Authorisation 0461-02.
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 White Devil block, which includes MLC’s 120 – 123, with the aim of identifying targets for drill testing late in 2012 and early 2013.