

TNG LIMITED

ENIGMA MINING LTD

EL28218 and EL28219 (East Arnhem Land)

LITERATURE REVIEW

Tenement/s	EL 28218, EL 28219	1:250 000 Sheet Name	Urapunga (SD5310)
Holder	Enigma Mining Ltd	1:100 000 Sheet Name	Moroak (5668)
Manager	N/A	Datum	GDA94-53
Operator	Enigma Mining Ltd		

Keywords Historical exploration, literature review, diamonds, base metals

Compiled By C. Wetherley

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Distribution TNG Limited

(1)

1. INTRODUCTION

Exploration Licences 28218 and EL 28219 (Table 1, Figure 1), were granted to Enigma Mining Limited (Enigma) on 28 March 2011. Enigma is a wholly owned subsidiary of TNG Ltd. Previous exploration across the area of tenure is outlined in the following report.

TITLE	PROJECT	AREA (blocks)	GRANT DATE	EXPIRY DATE
EL 28218	East Arnhem Land	6	28/03/2011	27/03/2017
EL 28219	East Arnhem Land	9	28/03/2011	27/03/2017

2. LOCATION AND ACCESS

The licence area is located approximately 150km ESE of Katherine via the Stuart and Roper Highways, and then on station tracks to the licence area (Figure 1). The licence falls in the south-western portion of the Urupunga (SD53-10) 1:250,000 mapsheet. It lies within the Goondooloo and Moroak Perpetual Pastoral Leases and is subject to native title.

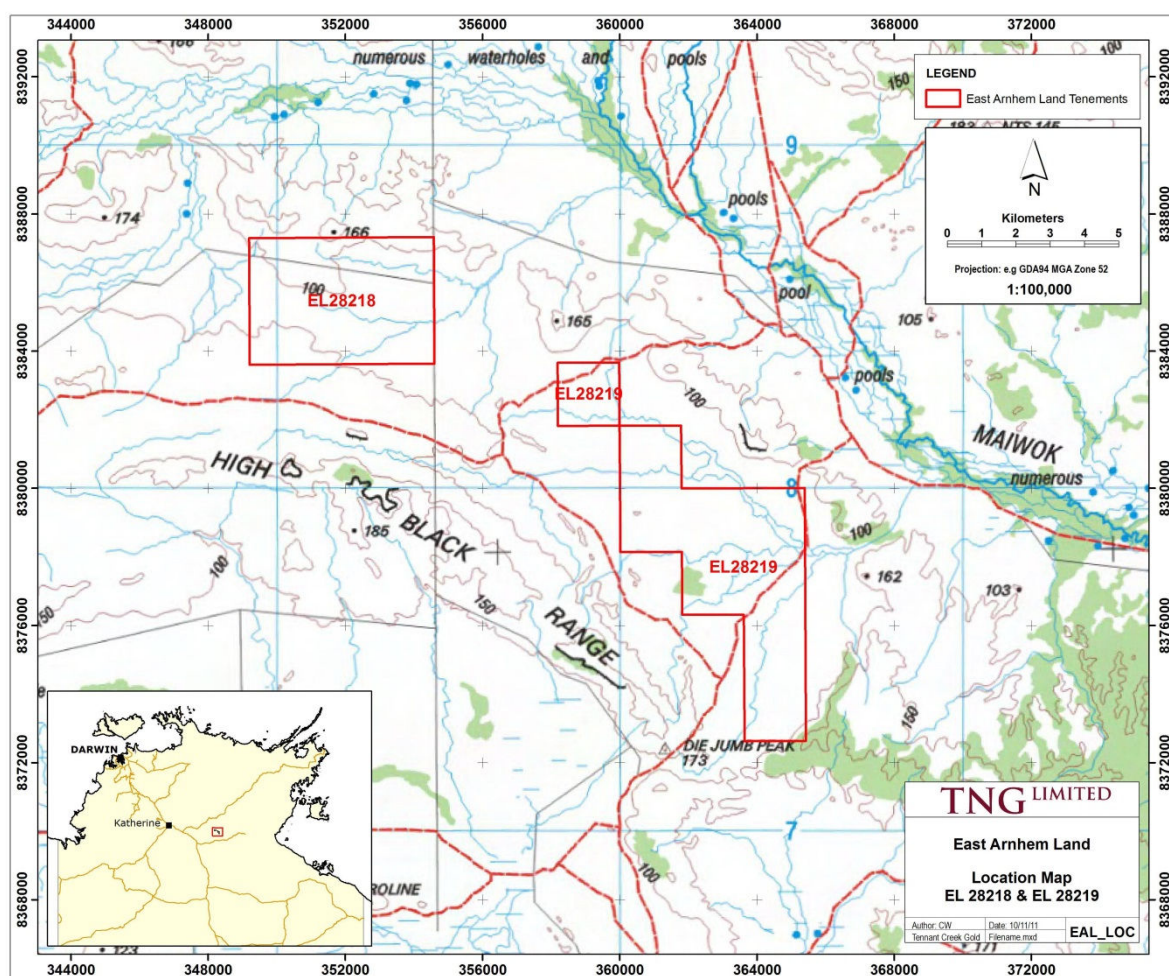


Figure 1: Location of EL28218 and 28219.

3. PREVIOUS EXPLORATION

3.1 Ashton Mining Limited

Ashton Mining Limited (Ashton) held EL 2907 from 1981 through to 1987. Reconnaissance and stream sediment sampling was undertaken in 1982 (Ashton Mining, 1982). A total of 87 samples were taken within the tenement, though none fell within the boundaries of EL 28218 but seven (URA095, 096, 158, 159, 160, 161 and 165) fell within the boundaries of EL 28219 (Figure 2). A single chromite was identified from the sampling programme and this was found to be non-kimberlitic. No further exploration was undertaken (Ashton Mining, 1983).

3.2 Stockdale Prospecting

Stockdale Prospecting held EL 6291, as part of the Roper River project area from 1988 to 1991. In 1989 regional reconnaissance and sampling was undertaken within the project area, including the eastern portion of EL 6291 (Figure 2; Podolsky, 1990).

185 stream sediment samples were taken within the eastern portion of EL 6291 in 1989. The remaining area (western) was sampled in 1990 when 58 stream sediment samples and two loam samples were collected (Podolsky, 1992). Of the 223 samples two fell within the boundaries of EL 28218 and eight within EL 28219 (Table 3). No positive kimberlitic indicators were returned in these samples.

Table 3: Diamond samples collected within EL 28218 and EL 28219.

Tenement	Sample Number
EL 28218	BD1229, BD1327
EL 28219	BC1018, BD0110, BD0107, BD0104, BD0105, BD3302, BD0599, BD0600

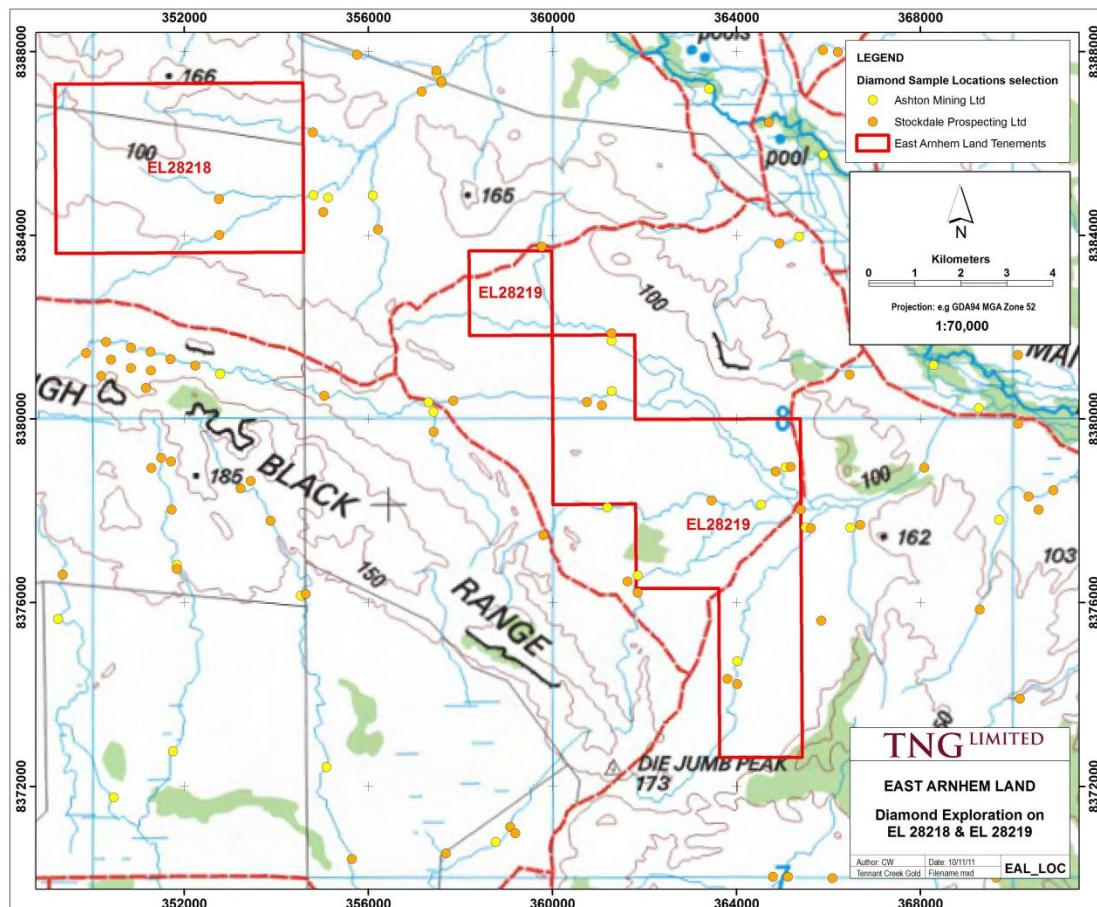


Figure 2: Diamond Exploration within EL 28218.

Exploration for base metals, targeting Cu, Pb, Zn and Au was carried out by Stockdale geochemical personnel in 1991. Samples collected during diamond exploration in 1989 and 1990 formed the basis for further geochemical exploration. Poseidon Exploration Ltd carried out fieldwork over EL 6291 under a JV agreement (Podolsky, 1992).

Several base metal (Pb/Zn) anomalies were delineated and fieldwork during 1991 was aimed at locating the source of the anomalies. One Cu/Pb/Zn anomaly (Anomaly V; Figure 3; Podolsky, 1991), and a single point free Au result (BD1327) occurring within EL 6291 were selected for follow-up fieldwork (Podolsky, 1992).

Anomaly V occurs in the area covered by EL 28218 and EL 28219.

BD1327 occurs within Quaternary alluvium. Purple-black shale is exposed at the sample site and a single fine gold grain equivalent to 33ppb Au was reported from laboratory work (Podolsky, 1991).

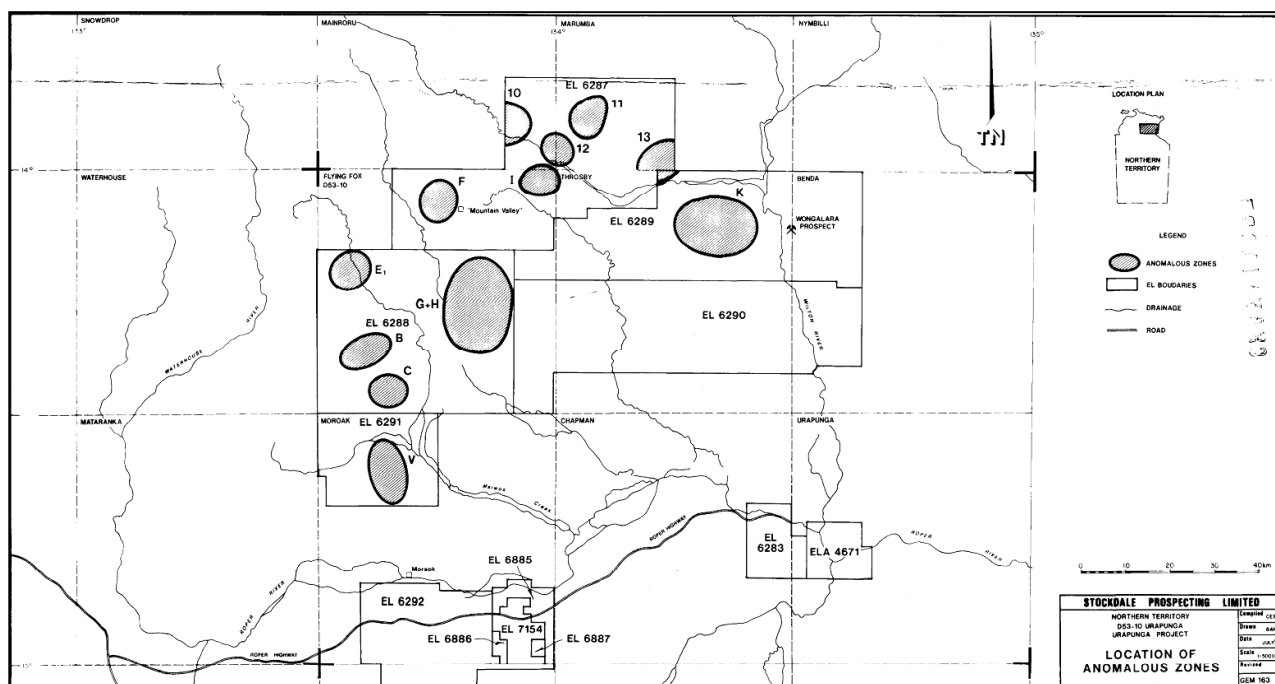


Figure 3: Location of anomalous zones within the Roper River Project Area (Podolsky, 1991).

Initially an additional 259 stream sediment samples were collected within EL 6291. Table 3 and Figure 4 outline the samples within EL28218. Appendices 1-5 show graphically the results of the main elements analysed.

Only four samples returned anomalous values and none of these fell within EL28218. Additional Phase 1 follow-up of Anomaly V (68 samples) showed a low background for Pb and Zn. Anomaly V was downgraded and EL 6291 was no longer considered prospective (Podolsky, 1992).

Table 3: Geochemical stream sediment samples collected within the boundaries of ELs 28218.

Tenement	Sample Number
EL 28218	GH1858, GH1859, GH1861, GH1863, GH1864, GH1870
EL 28219	GH1855, GH1876, GH1878, GH1909, GH1910

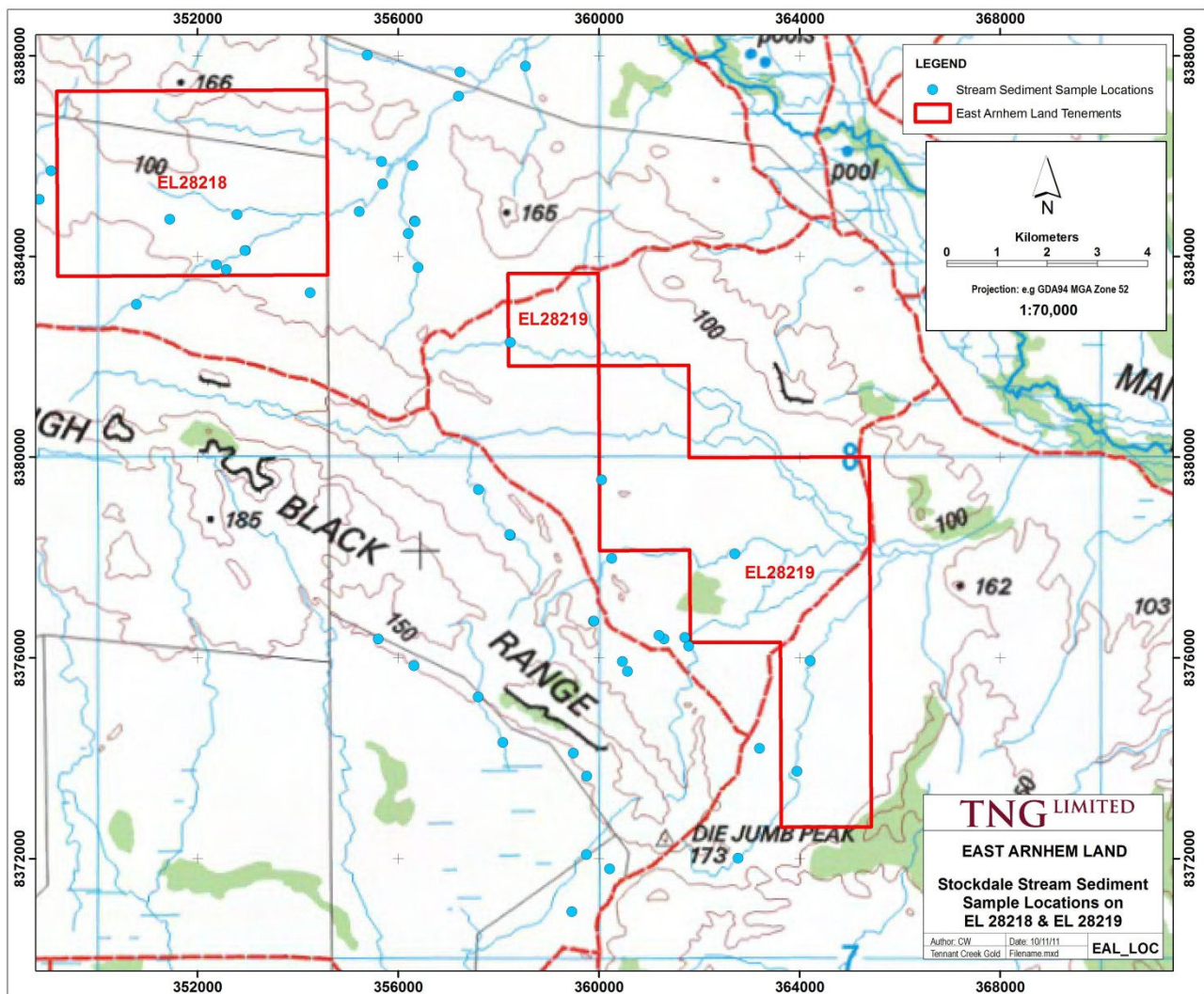


Figure 4: Stream sediment sample locations, Stockdale Prospecting, 1991.

6.3 CRA Exploration

CRA Exploration Pty Ltd held EL 8942 in 1995. Auger drilling, loam and soil sampling and geophysical review were done within the project area. No targets were identified or specific exploration carried out within the boundaries of TNG tenements.

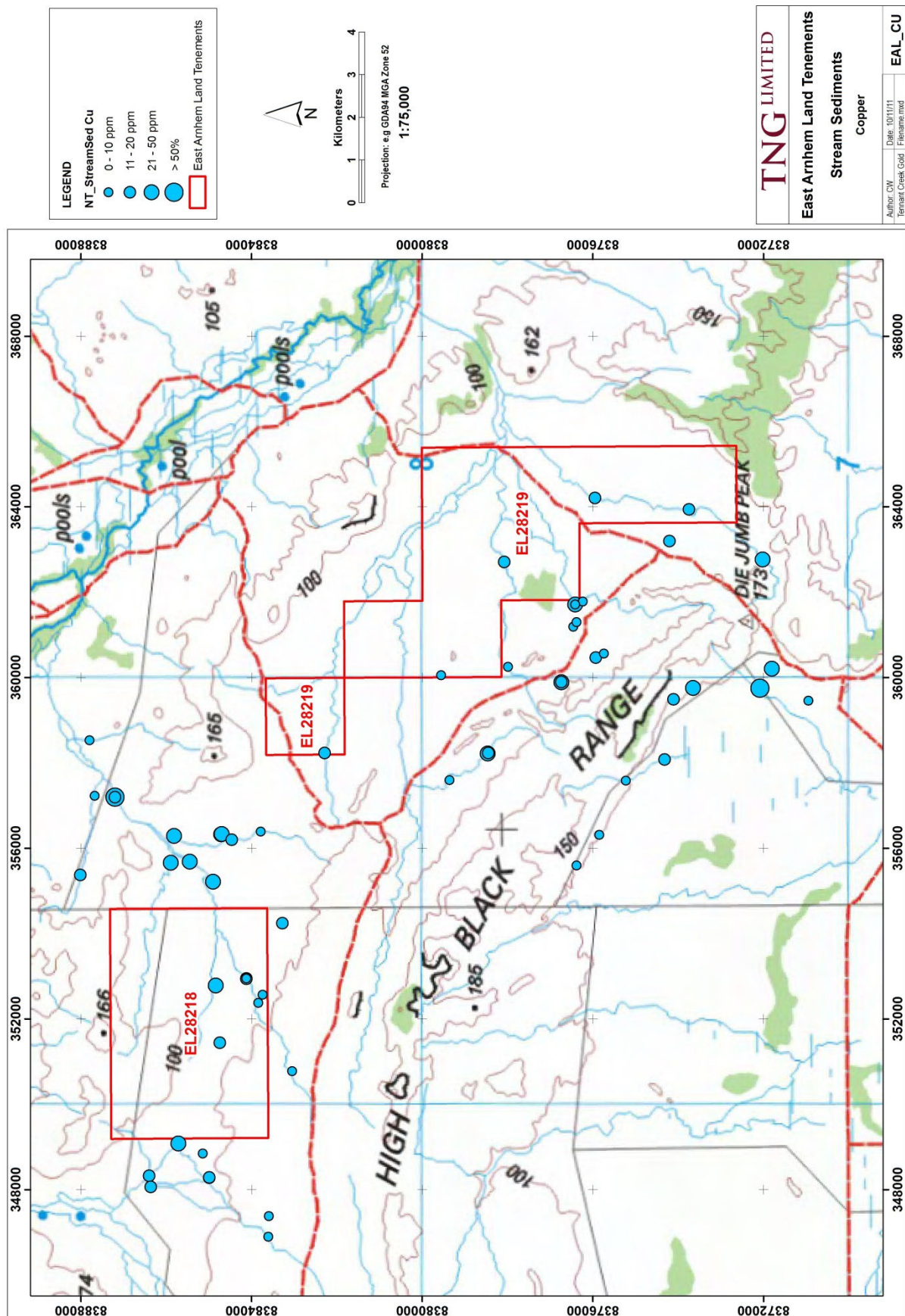
6.4 Tianda Resources

EL 25692 consisted of 30 graticular blocks, covering a total of 99.69 square kilometres and was granted to Tianda Resources on the 5th of September 2007 for a period of 6 years (Tianda Resources, 2009). The location of the tenement is shown in Figure 5. The relinquished areas form EL 28218 and EL 28219 granted to TNG in 2011.

During 2008 exploration of the tenement focussed on ground truthing radiometric anomalies in the north western and southern parts of the tenement. These were field checked and appear to be related to black soil areas forming in valleys between the sandstone outcrops and as such no further work was recommended (Tianda Resources, 2009). These areas were subsequently relinquished.

Appendix 1

Stockdale Prospecting, Stream Sediment Sampling, Copper results

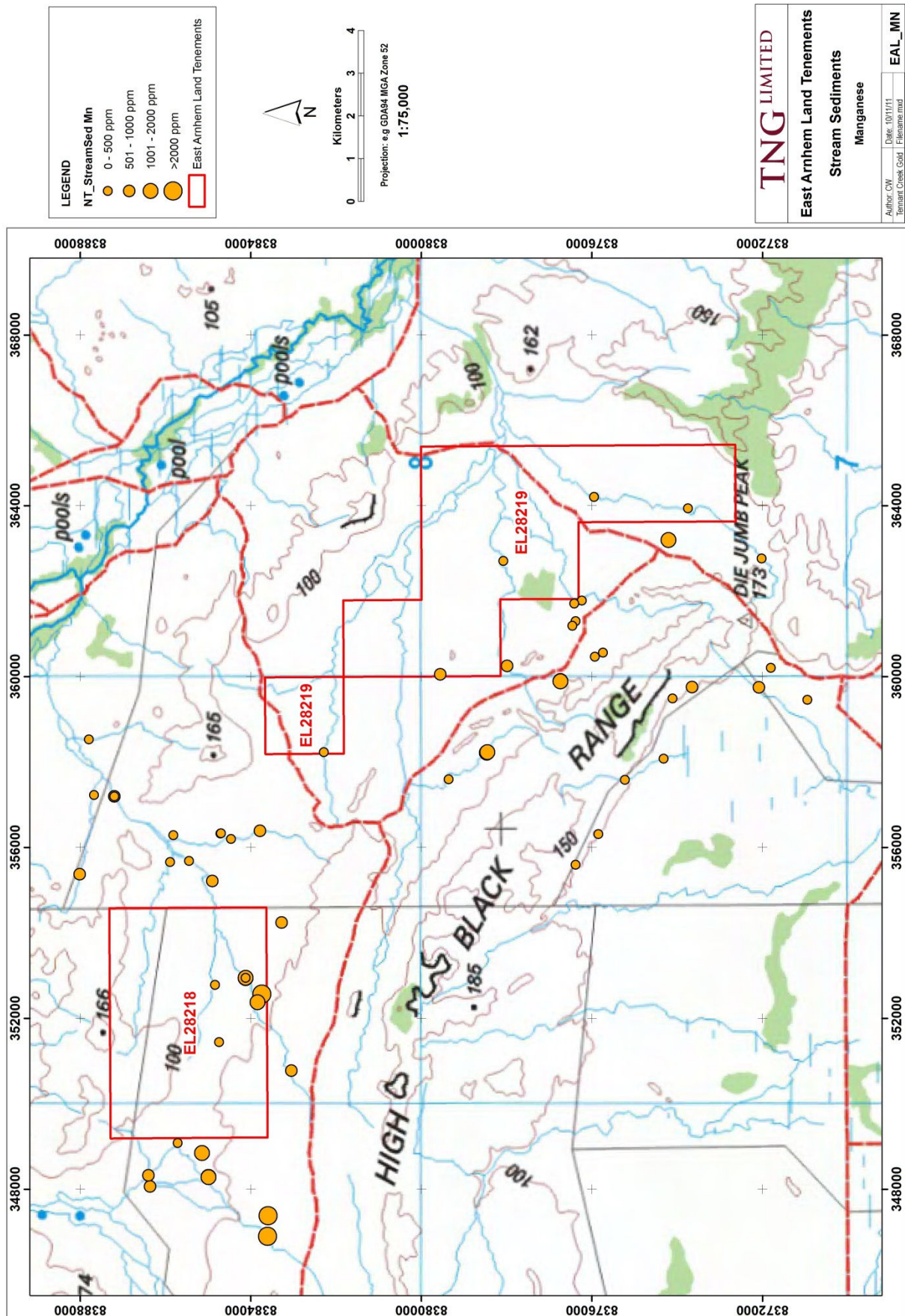


Stockdale Prospecting, Stream Sediment Sampling, Iron results



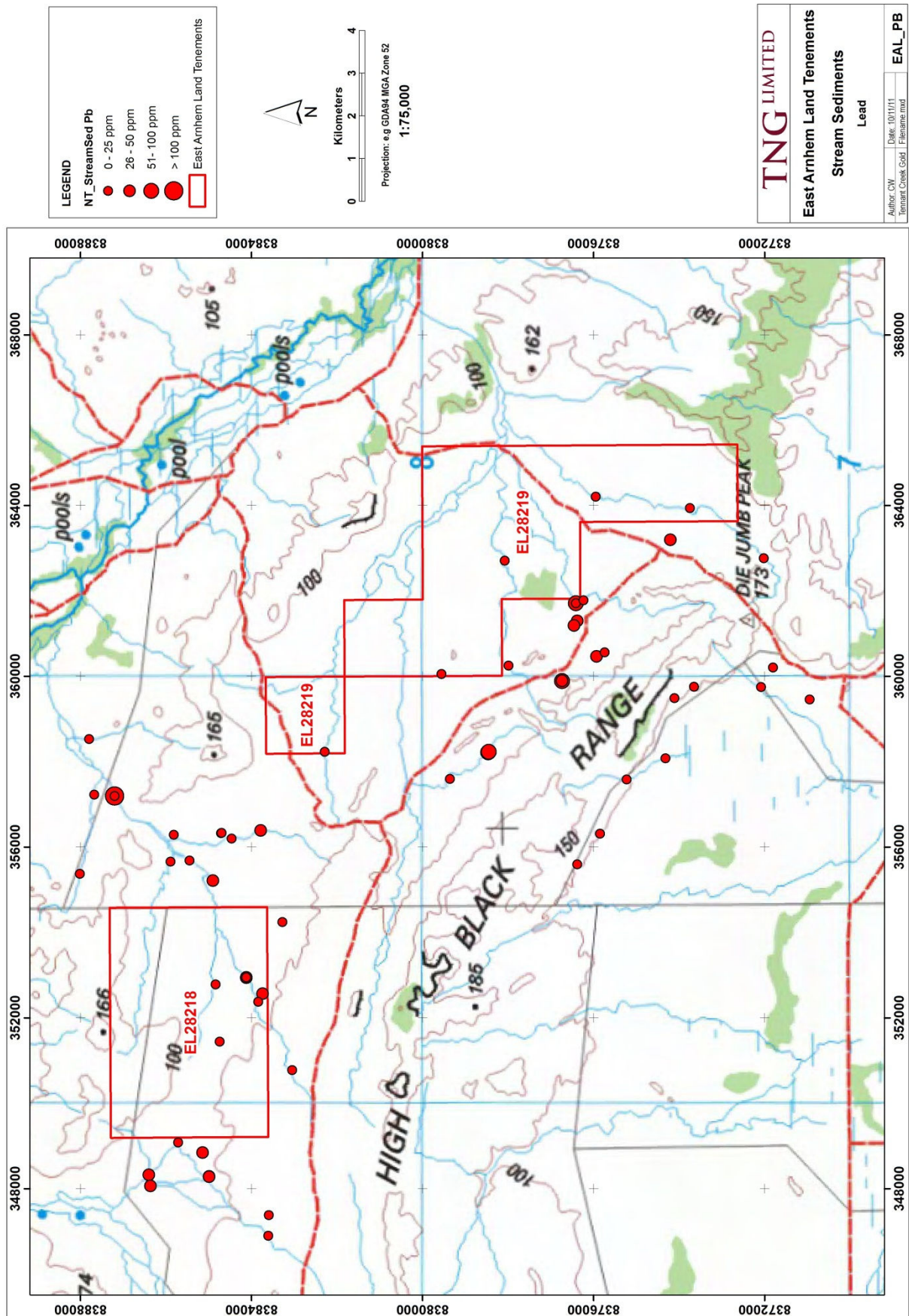
Appendix 3

Stockdale Prospecting, Stream Sediment Sampling, Manganese results



Appendix 4

Stockdale Prospecting, Stream Sediment Sampling, Lead results



Appendix 5

Stockdale Prospecting, Stream Sediment Sampling, Zinc results

