ELEMENT 92 PTY LTD
(ABN 82 119 094 423)
(Wholly Owned Subsidiary of Thundelarra Exploration Ltd)

FINAL REPORT FOR

EL 28186 (MOONLIGHT)
NGALIA NORTH PROJECT, NORTHERN TERRITORY
FOR THE PERIOD
02 FEBRUARY 2011 TO 14 DECEMBER 2012

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Target: Uranium

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□ Element 92 Pty Ltd (Thundelarra Exploration Ltd)
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1.0 SUMMARY

EL 28186 was granted to Element 92 Pty Limited on 2 February 2011 for a period of 6 years. The licence comprises 257 blocks covering approximately 818 km². The tenement is located about 330 km NW of Alice Springs and 1200 km SW of Darwin. Element 92 Pty Ltd are exploring the region for uranium and other commodities, and this is the first annual report on the project area.

The project area is located north of the Ngalia Basin, in rocks of the Arunta Inlier. Geology of the project area is dominated by the Palaeoproterozoic Lander Rock Formation, Carrington Granitic Suite, Wabudali Granite and Southwark Granitic Suite, exposed in the northern part of the Mount Doreen (1:250,000) sheet. The Lander Rock Formation is mainly interbedded pelitic and psammitic metasedimentary rocks characterised by turbiditic sedimentation. They were metamorphosed (greenschist facies to granulite facies) and deformed during a number of tectonic events spanning from the Yuendumu Event to Alice Spring Orogeny. Locally, layers of basalt and dolerite sills are also present. The rocks have been intruded by granites and cut by aplitic, pegmatitic and quartz veins. The southern margin of a small Tertiary basin, the Yaloogarie Basin, may occur in the northeast corner of the title. Most of the title area is covered by unconsolidated Quaternary sand and silt, mudstone, gravel, calcrete and silcrete.

During the year under review, a desktop study of the project area was undertaken. This exercise involved obtaining previous geological, geochemical and geophysical data from the Northern Territory Geological Survey. Geological, geophysical and geochemical data were captured into GIS system and geophysical data were re-processed and interpreted. In the regional interpretation of EL 28681 three geophysical datasets were considered. These are regional radiometric (U, Th, K and U2/Th), regional magnetics (TMI, 1VD) and regional gravity (TDR).

An initial review of all these data indicated some potential for the presence of significant sediment accumulations in deep, narrow basement incision directly adjacent known source granites along the northern edge of the title.

However, due to the poor global market for uranium, and a Company-wide consolidation of holdings, the title was relinquished in December 2012.
2.0 INTRODUCTION

Exploration Licence (EL) 28186 is located about 1200 km SW of Darwin, Northern Territory (Map 1) where Element 92 Pty Ltd (wholly owned subsidiary of Thundelarra Exploration Ltd) is exploring the area for uranium and other commodities. It is the first annual report on the project area.

EL 28186 is located about 350 km NW of Alice Springs and 1200 km SW of Darwin within the northern part of the Mt Doreen (1:250 000) Sheet. The tenement can be approached by Stuart Highway, which turns into Tanami Road at about 110 km north of Alice Springs. Tanami Road is partly sealed and then on formed gravel tracks either via Newhaven or Yuendumu-Nyirrpi roads. Vehicle access within the tenements is on station tracks which are generally in good condition, although they may be impassable following heavy rain.

The area has an arid climate with long, hot summers and short, mild winter. Daytime summer temperatures can exceed 40°C. Average rainfall is less than 200 mm per year with the majority falling between October to April.

3.0 TENURE

The tenement was granted to Element 92 Pty Limited on 2 February 2011, for a period of 6 years and has 257 blocks (818 km²). The majority of the tenement is located within northern part of Mt Doreen (1:250 000) and Vaughan (1:100 000) sheets. Only a small north-eastern part is located inside Mt Theo (1:250 000) and Yaloogarrie (1:100 000) sheets. See Map 2.

The title was relinquished on 14 December 2012 along with the other titles in the Ngalia North Project.
4.0 GEOLOGY

4.1 Geological Setting

The project area is located within the Arunta Inlier which is dominated by an east-west trending Proterozoic rocks sequence that are overlain by a thick succession of Neoproterozoic shallow marine sediments to Devonian and Carboniferous fluvial sedimentary cover towards south. Following summary is based on work done by Young et al., 1995.

Towards the north, rocks of the Arunta Inlier are predominant which form east-west trending ridges dominated by the deformed and metamorphosed (Yuendumu Event at about 1880 Ma) rocks of the Lander Rock Formation, intruded by granites of the Carrington Granite suite and Wabudali Granite, which were emplaced between 1779 - 1567 Ma. Post-tectonic igneous rocks were emplaced approximately at 1635 Ma, including mafic to intermediate Andrew Young Igneous Complex. A further episode of tectonism is recorded at about 1567 Ma when extensive megacrystic granites of Southwark Granite Suite with high K, U and Th were emplaced. Meta-sedimentary sequence comprises sedimentary and volcanics, metamorphosed to greenschist – amphibolite facies during several deformation and metamorphic events throughout the Proterozoic to Palaeozoic.

The Lander Rock Formation is mainly comprised of interbedded pelitic and psammitic metasedimentary rocks that represent turbiditic sedimentation. It is wide spread in the Arunta Region and exposures have been found within Mt Doreen, Mt Theo, Mt Peaks etc (1:250 000 sheets). On the basis of metamorphic grades, it has been divided into six units which have been mapped in the region. These are greenschist facies, lower amphibolite facies, upper amphibolite facies, transitional granulite facies, granulite facies retrogressed to amphibolite or greenschist facies, and amphibolite facies retrogressed to greenschist facies. In the eastern part of the project area, the Lander Rock Formation mainly comprises greenschist to amphibolite facies quartz-muscovite-biotite pelitic schist and, in places, phyllite interlayered with quartz-muscovite psammite. Towards west, predominant lithologies are undivided high grade metasediments including amphibolite facies quartz-muscovite-and andalusite schist.

4.2 Local Geology

Map 3 shows the interpreted basement geology of the local area (after Goldberg et al., 2005) while Map 4 shows outcrop geology of the same area (after Young et al., 1996). Proterozoic basement outcrop is restricted to less than 10% of the title area, with the remainder consisting of more recent sheetwash sediments. The basement rocks are apparently dominated by the Lander Rock Formation and granites of the Carrington and Southwark Suites.

Of potentially most interest is the reported occurrence of a Tertiary basin to the north of the title (Senior et al., 1994), part of which extends into the northeastern corner (Map 4). The Yaloogarie Basin may contain similar sediment packages intersected in the Ngalia Basin area by Element 92. The interpreted outline of the basin is based on sparse drilling and palaeotopographic analyses which means that the actual extent of Tertiary materials into the title is unknown. The basin may
once have extended much further into the centre of the title, or conversely, may have terminated further north.
5.0 HISTORIC EXPLORATION SUMMARY

In the reporting period, the majority of work undertaken in EL 28186 consisted of historical research through open file exploration reports, and interpretation of regional magnetic, radiometric and gravity datasets. Element 92 Pty Ltd commenced historic research and open-file report for an area of approximately 4000 km² which encompasses ELs 28186, 28625, 28697 and ELA 28971. This work included -

- Identification of historic Exploration Licences within the ELs
- Procurement of open-file data from NTGS
- Digital capture of data
- Analysis of historic work and assessment of prospectivity

A total of 19 historic tenements were identified that intersected EL 28186. Table 1 shows a summary of these tenements, the relevant company reports and other pertinent details. Most exploration occurred in the southern portion of current EL28186 and focused on gold and copper mineralisation associated with Proterozoic Lander Rock beds/formation or Southwark Granitic Suite. Most explorers relied on geochemical sampling (lag and rock chips) and shallow drilling to identify anomalism in the regolith and saprolite. Although no significant mineralisation was discovered, the vast majority of the exploration effort was very shallow and there was no drill testing of deeper structures seen in regional geophysical data.

The most relevant historic work within this current tenement was done by Swiss Aluminium Company from 1976 to 1977. They explored for uranium in calcrete developed and although no economic mineralisation was found, it was demonstrated that

- Significant uranium sources exist within granite with pitchblende being identified in one granite samples
- Uranium is mobile and has been concentrated in calcrete adjacent to the source (up to 800 ppm)

There has been no exploration within EL28186 for channel-hosted mineralisation of the type sought by Element 92 Pty Ltd. This, and the results from Swiss Aluminium Company’s work, provided confidence in the prospectivity of the EL, if significant thickness of Tertiary sediments can be identified.
<table>
<thead>
<tr>
<th>TITLE</th>
<th>GRANT</th>
<th>CEASED</th>
<th>AREA sub-blks</th>
<th>OPERATOR</th>
<th>COMMODITY</th>
<th>MAJOR WORKS</th>
<th>MAJOR RESULTS</th>
<th>COMPANY REPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL1209</td>
<td>08/06/76</td>
<td>07/06/77</td>
<td>400 blocks</td>
<td>Swiss Aluminium Mining Australia PL</td>
<td>Uranium in calcrete</td>
<td>• Percussion drilling (116 holes for 1511m)</td>
<td>• Identified pitchblende in source granites</td>
<td>CR1977-0072</td>
</tr>
<tr>
<td>EL2710</td>
<td>16/07/81</td>
<td>15/07/87</td>
<td>795 blocks</td>
<td>Central Pacific Minerals NL</td>
<td>Uranium</td>
<td>• Continuing work on Bigrflyi Prospect</td>
<td>• Work closed-file</td>
<td>CR1986-0250</td>
</tr>
<tr>
<td>EL5899</td>
<td>20/06/88</td>
<td>20/06/90</td>
<td>280 blocks</td>
<td>Track Minerals</td>
<td>Au, base metals</td>
<td>• Stream sediment sampling (27)</td>
<td>• Minor Au anomaly in stream sediment (0.25ppb)</td>
<td>CR1989-0703</td>
</tr>
<tr>
<td>EL6144</td>
<td>07/09/88</td>
<td>07/01/91</td>
<td>68 blocks</td>
<td>John Robert Bruce &amp; John Hawkes Mules</td>
<td>Precious and base metals</td>
<td>• Ground magnetic profiles (9)</td>
<td>• 1 magnetic anomaly coincident with topographic low</td>
<td>CR1989-0710 CR1991-0265</td>
</tr>
<tr>
<td>EL7830</td>
<td>02/12/92</td>
<td>104 blocks</td>
<td>Yuendumu Mining Company NL/ Poseidon Gold Limited JV</td>
<td>Gold in Lander Rocks Beds</td>
<td>Small part of a much larger project area that includes 5 titles. Overall work programme included - • Airborne magnetic and radiometric survey • Soil sampling (1927 samples) • Lag (302) and rockchip (15) sampling • Vacuum drilling (584 holes) • Aircore drilling (25 holes for 140m)</td>
<td>• Generally very poor results</td>
<td>• Minor gold anomalism associated with elevated arsenic</td>
<td>CR1993-0275 CR1994-0074 CR1995-0246 CR1996-0012 CR1996-0177 CR1996-0625 CR1995-0586 CR1996-0012 CR1996-0625</td>
</tr>
<tr>
<td>EL8435</td>
<td>20/04/94</td>
<td>500 blocks</td>
<td>BHP Minerals Ltd.</td>
<td>Copper and gold associated with Southwark Granitic Suite</td>
<td>• Open-file review</td>
<td>• No significant anomalism detected and titles relinquished</td>
<td>CR1998-0297</td>
<td></td>
</tr>
<tr>
<td>EL10063</td>
<td>30/10/01</td>
<td>29/09/06</td>
<td>256 blocks</td>
<td>Tanami Exploration N.L.</td>
<td>Au – Tanami-style, Cu-Au – Tennant Creek-style</td>
<td>Part of much larger Mt Doreen Project which included –&lt;br&gt;• Lag (277) and rockchip (93) sampling&lt;br&gt;• Soil sampling (158)&lt;br&gt;• Vacuum drilling (320 holes for 1857m)&lt;br&gt;• RAB drilling (360 holes for 5,541m)</td>
<td>Generally very poor results&lt;br&gt;• Minor Au (max 22ppb) and Cu (max 450ppm) anomaly&lt;br&gt;• Cu and Ag apparently good pathfinders for Au in this area</td>
<td>CR2002-0346&lt;br&gt;CR2003-0497&lt;br&gt;CR2004-0101&lt;br&gt;CR2005-0501&lt;br&gt;CR2006-0559</td>
</tr>
<tr>
<td>EL10064</td>
<td>30/10/01</td>
<td>29/09/06</td>
<td>432 blocks</td>
<td>Tanami Exploration N.L.</td>
<td>Au – Tanami-style, Cu-Au – Tennant Creek-style</td>
<td>Part of much larger Mt Doreen Project which included –&lt;br&gt;• Lag (277) and rockchip (93) sampling&lt;br&gt;• Soil sampling (158)&lt;br&gt;• Vacuum drilling (320 holes for 1857m)&lt;br&gt;• RAB drilling (360 holes for 5,541m)</td>
<td>Generally very poor results&lt;br&gt;• Minor Au (max 22ppb) and Cu (max 450ppm) anomaly&lt;br&gt;• Cu and Ag apparently good pathfinders for Au in this area</td>
<td>CR2002-0346&lt;br&gt;CR2003-0497&lt;br&gt;CR2004-0101&lt;br&gt;CR2005-0501&lt;br&gt;CR2006-0559</td>
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<tr>
<td>EL10239</td>
<td>28/03/01</td>
<td>23/07/03</td>
<td>466 blocks</td>
<td>Gutnick Resources NL</td>
<td>Gold in sediments from hydrothermal activity</td>
<td>Stream sediment sampling (42 samples)&lt;br&gt;• Rockchip sampling (9 samples)&lt;br&gt;• Soil sampling (1 sample)</td>
<td>Part of much larger Rand Project which was exploring possibility that Witwatersrand-style mineralisation could occur in Ngalia or Amadeus Basins&lt;br&gt;• Unsure as to conclusions but seemed to be only minor Au anomaly</td>
<td>CR2003-0036&lt;br&gt;CR2004-0166</td>
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<tr>
<td>EL24930</td>
<td>21/08/06</td>
<td>27/07/09</td>
<td>99 blocks</td>
<td>Alara Resources Ltd.</td>
<td>Uranium</td>
<td>No field work undertaken</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL25382</td>
<td>05/02/07</td>
<td>18/09/09</td>
<td>77 blocks</td>
<td>United Orogen Ltd.</td>
<td>Gold</td>
<td>Soil sampling (30 samples)&lt;br&gt;• Rockchip sampling (4 samples)</td>
<td>Encouraging soil results but could not drill best targets due to access problems</td>
<td>CR2009-0655</td>
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<tr>
<td>EL25426</td>
<td>19/03/07</td>
<td>07/02/11</td>
<td>500 blocks</td>
<td>Yellow Rock Resources Ltd.</td>
<td>Uranium</td>
<td>No work beyond brief review of open-file geological reports</td>
<td></td>
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<tr>
<td>EL25698</td>
<td>15/10/07</td>
<td>03/08/11</td>
<td>27 blocks</td>
<td>Deep Yellow Ltd.</td>
<td>Uranium - calcrete-hosted, and in redox traps in basinal depocentres</td>
<td>No major works</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL25701</td>
<td>15/10/07</td>
<td>14/10/10</td>
<td>416 blocks</td>
<td>Deep Yellow Ltd.</td>
<td>Uranium - calcrete-hosted, and in redox traps in basinal depocentres</td>
<td>Aircore drilling (35 holes for 1,294m)&lt;br&gt;• Lab assay of composite samples for U and U3O8&lt;br&gt;• AEM &amp; MAG survey (1.5km spacing)</td>
<td>Palaeochannels identified from AEM data&lt;br&gt;• No major anomalism identified with few samples greater than 10 ppm U or U3O8</td>
<td>CR2009-0974&lt;br&gt;CR2010-0967</td>
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<tr>
<td>EL26064</td>
<td>18/01/08</td>
<td>17/11/08</td>
<td>89 blocks</td>
<td>Matilda Minerals Ltd.</td>
<td>Uranium</td>
<td>No field work undertaken</td>
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<td></td>
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<tr>
<td>EL26065</td>
<td>18/01/08</td>
<td>17/11/08</td>
<td>54 blocks</td>
<td>Matilda Minerals Ltd.</td>
<td>Uranium</td>
<td>No field work undertaken</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Summary of work undertaken in 19 historic titles that overlap or include EL28186.
6.0 EXPLORATION DURING PERIOD OF TENURE

During the period of tenure – from 02 February 2011 to 14 December 2012 - the majority of work undertaken was office-based desktop studies of the project area. This exercise involved examination of open-file reports, geological, geochemical and geophysical data from Northern Territory Geological Survey. Geological and geochemical data were captured into GIS system whereas geophysical data were re-processed and interpreted. In addition, a small number of field visits were conducted for reconnaissance purposes.

6.1 Analysis of Regional Geophysics

Three geophysical datasets (and their variants) were considered in the preliminary interpretation of EL28186. These are –

- Regional radiometrics (U, Th, K, U2/Th)
- Regional magnetics (TMI, 1VD)
- Regional gravity (TDR)

6.1.1 Radiometrics

The radiometrics images for the western Arunta area include NTGS and privately acquired data. Uranium, Thorium and Potassium data are shown in Figures 1, 2 and 3 respectively.

Significant observations from the radiometric images include:

- Uranium image indicates that outcropping/subcropping uraniferous granites of the Southwark Suite occur immediately south of the EL.
- Within the EL itself, the uranium response is uniformly elevated (in a regional sense), but indicates few interpretable features.
- As compared to the Ngalia Basin to the south of the granites, where modern dispersion mechanisms appear predominantly aeolian or as sheetwash, dispersion into EL28186 appears controlled by established fluvial systems. This is best seen on the Potassium image where dispersion of K mirrors modern drainage patterns. Thorium is also being actively dispersed in the modern drainages.

6.1.2 Magnetics

EL28186 is covered by airborne magnetic data collected by NTGS and by minerals explorers. Total Magnetic Intensity (TMI) image is shown in Figure 4, while First Vertical Derivative (1VD) data is shown in Figure 5. The TMI image indicates generally elevated responses across much of the area, with significant differences in magnetic texture across the EL. Both images indicate significant structural complexity occurring within a 15 to 20 km wide zone running ENE through the southern part of the EL. Some horizons are sub-parallel and continuous and are obviously due to bedding in the Proterozoic basement. Cross-cutting linear features are likely faults, some of which are indicated on NTGS geology maps. In several areas the magnetic texture changes to indicate larger, more magnetically homogeneous bodies. These are likely the granitic units. Around several of these
features, there are haloes of apparent demagnetisation where magnetite has been destroyed by heat and fluids.

Over the Ngalia Basin to the south, magnetic responses are very uniform and indistinct in the regional data and there is little texture evident except where lower basinal rocks approach surface at the basin margins. The generally subdued response is probably due to masking of bedrock responses by iron-rich Tertiary sediments. Importantly, similar responses are seen in the north-western and north-eastern corners of EL28186 which might indicate that these areas contain similar sediment packages seen to the south.

6.1.3 Gravity

EL28186 is also covered by semi-regional gravity data collected by NTGS as part of the West Arunta Project. In other Element 92 tenements to the south, drilling has indicated that narrow, linear to arcuate gravity lows generally correlate with deep incision of basement rocks by Tertiary-age palaeovalleys. With this model in mind, the gravity data within EL28186 were interpreted to extract possible locations of palaeovalleys which should be prospective for channel uranium deposits. Considering the very low density contrasts, plus the very shallow depth of interest (in gravity terms), the tilt derivative (TDR) of gravity was used. However, it should be noted that data were collected on a grid pattern with 4 km centres and that this resolution is very low in terms of identifying Tertiary palaeovalleys.

Figure 6 shows the gravity TDR data for EL28186. Two large gravity highs are seen in the southwest and east of the EL. In these locations, Palaeoproterozoic Lander Rock beds/formation is recorded on NTGS regional geology data, comprising greenschist to granulite facies pelitic schists, phyllite and psammite.

Several gravity lows can be seen at varying orientations across the EL. In the central part of the EL, the low appears to coincide with outcropping rocks of Mesoproterozoic Southwark Suite, which comprises megacrystic biotite granite. However, the relatively low resolution of the gravity data (gravity stations actually straddle the mapped outcrop) means that interpretation confidence is decreased. It could be expected that the granite would have a lower density than the metamorphic rocks they have intruded, however Lander Rock Formation is mapped at the western end of a significant low running east-west along the northeast boundary of the EL.

The gravity low feature seen in the northeast corner of the title is partially coincident with the possible location of the Yaloogarie Basin and this significantly elevated this anomaly.

6.2 Interpretation

From consideration of geophysical responses that indicate prospective terrain in the Ngalia Basin, two areas were identified in EL28186 that might indicate similar geological conditions. Designated Anomaly A and Anomaly B, they are characterised by -

- Proximity to uraniferous granite source rocks
- Linear to arcuate gravity lows
Laterally-extensive areas of subdued magnetic responses

Anomaly A is located on the northeast corner of the title, as shown in Figure 7. The feature extends well beyond the tenement boundary into neighbouring Element 92 title, EL28625. The anomaly is partially coincident with the possible location of a southern arm of the Yaloogarie Basin which significantly increases interest in this anomaly. Given the relatively imprecise definition of the basin outline, it is certainly possible that Tertiary sediments occur further into the title within deep, narrow incisions in Proterozoic basement rocks than is indicated by the published basin outline. For the same reason, Anomaly B is of interest because it conforms to the major geophysical characteristics of the conceptual model.

Historic exploration drilling data, compiled by NTGS, were used in an attempt to indirectly investigate the possibility that these anomalies represent basement incisions filled with Tertiary sediments. In the previous 4 decades, approximately 380 drillholes were completed within the area covered under the current title. About 90% of this drilling was shallow vacuum drilling to sample basement and cover for gold and base metals. The remainder of the holes were RAB and air-core. Only vacuum drill holes are recorded in the two anomalous areas with 58 vacuum holes within Anomaly A and 67 vacuum holes within Anomaly B. Most holes were drilled under the Poseidon/YMC JV along north-south transects with a handful completed by Tanami Exploration along a northwest-southeast transect within Anomaly A. Figure 8 shows the location of the drill holes, which have been thematically mapped according to the recorded depth to refusal.

It should be noted that previous explorers often used depth of refusal as a proxy for depth to bedrock. However, it is not always clear whether refusal was on Proterozoic basement proper, on cemented layers (including laterite, calcrete, silcrete etc.) which are common within the Tertiary sequence elsewhere in the region, or in partially consolidated sediments which proved impenetrable to the vacuum method (including mudstone etc.). This means that the results are almost certainly equivocal in terms of indirect investigation of the presence or otherwise of thick sediment accumulations coincident with the gravity lows. Despite this, an attempt was made to correlate depth of refusal and geological logs with the anomalous areas.

Within and around Anomaly A, depth to refusal varies from 1 to 27 metres, with an average of 6 metres. There appears to be little correlation between recorded depths to refusal and location of the anomaly. In a majority of cases, the geological logs record the holes ending in “palaeosols” within the upper 8 to 10 metres, or “bedrock” comprising sand, clay and gravel, with either scenario providing negligible information in terms of interpreting presence or otherwise of Proterozoic basement. Relatively few logs actually record the hole ending in “bedrock” comprising “schist” or “granite”, likely corresponding to Lander Rock Formation and Wabudali Granite respectively. This usually occurs in the deeper holes.

However, where the Yaloogarie Basin and Anomaly A overlap, there is moderate correlation, with depths between 12 and 28 metres achieved in 5 holes along a 1.7 km transect. Most of the holes in this transect are recorded as finishing in rocks presumably attributed to the Lander Rock Formation, although the brief descriptions of overlying materials do not immediately allow an interpretation that Tertiary basin sediments exist.
The correlation between depth to refusal and Anomaly B is much stronger than for Anomaly A. Depths range from 2 to 28 metres with an average of more than 12 metres. Many of the geological logs in this area record the holes ending in materials including sand, clay and occasionally calcrete, all of which are difficult to ascribe to either Lander Rock Formation or granitic units. The relative uniformity of the refusal depths in this area may indicate nothing more than a localised thickening of recent sediments. However, there is no evidence to directly preclude the existence of Tertiary sediments.

In summary, the shallow drilling completed by previous explorers within the current EL28186 provides little evidence as regards the presence or otherwise of Tertiary basinal sediments coincident with the two geophysical anomalies identified by Element 92. Although there are some indications that there is a localised thickening of cover materials, it is impossible, given the brief geological descriptions in historic logs, to determine whether or not materials represent the upper part of a thick Tertiary sequence that may host uranium accumulations. Another factor which adversely affects this analysis is the wide distance between drill holes which is in the order of 500 metres. It is quite conceivable that basement incisions are relatively narrow in which case correlation from hole to hole becomes meaningless. Certainly, in the Ngalia Basin, palaeochannel systems have been identified which lie between basement highs no more than 1000 metre apart.

Detailed gravity profiling across the interpreted features would be required to provide much higher resolution data, from which sediment-filled basement incisions might be more confidently interpreted. Follow-up drilling, probably using mud rotary method, would then be required to confirm the presence of these features. It is not impossible that there has been isolated deposition of significant thicknesses of sediments elsewhere in the tenement which might host uranium mineralisation, however most historic drilling in the southern part of the tenement encountered metamorphic or granitic basement at very shallow depths.
7.0 CONCLUSIONS and RECOMMENDATIONS

During the period of tenure for EL28186, a desktop study of the project area and its prospectivity was undertaken. This exercise involved obtaining previous geological, geochemical and geophysical data from the Northern Territory Geological Survey. Geological, geophysical and geochemical data were captured into GIS system and geophysical data were re-processed and interpreted. In the regional interpretation of EL 28681 three geophysical datasets were considered. These are regional radiometric (U, Th, K and U₂/Th), regional magnetics (TMI, 1VD) and regional gravity (TDR). An initial review of all these data indicated some potential for the presence of significant sediment accumulations in deep, narrow basement incision directly adjacent known source granites along the northern edge of the title.

However, due to the continuing poor global market for uranium, and a Company-wide consolidation of holdings, the title was relinquished in December 2012.
8.0 REFERENCES


APPENDIX 1

REGIONAL GEOPHYSICAL ANALYSIS FIGURE 1 to 7
Figure 1: EL28186 with Uranium channel image in background, major geology as coloured polygons and modern drainage as blue lines. The areas of highest response coincide with the red polygons which represent rocks of Southwark Granite (from NTGS mapping). The brown polygons represent Lander Rock Formation.
Figure 2: EL28186 with thorium channel image in background, major geology as coloured polygons and modern drainage as blue lines. The areas of highest response coincide with the red polygons which represent rocks of Southwark Granite (from NTGS mapping). The brown polygons represent Lander Rock beds. Note the dispersion patterns of thorium into modern drainages.
Figure 3: EL28186 with Potassium channel image in background, major geology as coloured polygons and modern drainage as blue lines. The red polygons represent uraniferous rocks of Southwark Granite while the brown polygons represent Lander Rock Formation. Note the dispersion patterns of potassium into modern drainages.
Figure 4: EL28186 with Total Magnetic Intensity (TMI) image in background, major geology as coloured polygons and modern drainage as blue lines. The red polygons represent uraniferous granites, while the brown polygons represent Lander Rock Formation. Note the presence of significant texture in a band running ENE across the EL, and the areas of more uniform responses along the northern boundary.
Figure 5: EL28186 with First Vertical Derivative (1VD) magnetics image in background, major geology as coloured polygons and modern drainage as blue lines. The red polygons represent uraniferous granites, while the brown polygons represent Lander Rock Formation. Note the presence of significant texture in a band running ENE across the EL, and the areas of hazy responses along the northern boundary.
Figure 6: EL28186 with Tilt Derivative (TDR) gravity image in background, major geology as coloured polygons and modern drainage as blue lines. The red polygons represent uraniferous granites, while the brown polygons represent Lander Rock beds. Gravity highs and lows are shown by dashed lines.
Figure 7: EL28186 with TDR gravity image draped on 1VD magnetics in background, major geology as coloured polygons and modern drainage as blue lines. The red polygons represent uraniferous granites, while the brown polygons represent Lander Rock Formation. The red-hatched polygons indicate 2 areas (labelled A and B) of interpreted enhanced prospectivity for channel-hosted uranium mineralisation.