PARTIAL RELINQUISHMENT REPORT

EXPLORATION LICENCE 22957

SPRING HILL

FOR THE PERIOD 13/1/2003 to 12/1/2011

by

A.P. Bennett

BSc(Hons) mAUSIMM

Contact: andy.bennett@wdrl.com.au

Target commodities: Gold, base metals, uranium

GDA 94 – Zone 52

1:250000 Pine Creek

1:100000 Pine Creek

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WESTERN DESERT RESOURCES LTD ABN 48 122 301 848
LEVEL 1/26 GREENHILL ROAD WAYVILLE SA 5034
PO BOX 83 GOODWOOD SA 5034
T (08) 8177 8800 **F** (08) 8272 2838
info@westerndesertresources.com.au www.westerndesertresources.com.au

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Office Studies		
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Airborne Geophysics		
Airborne EM	EL22957_2011_P_04_LogisticsReport	pdf
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Surface Sampling	EL22957_2011_P_02_StreamSeds	txt
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SUMMARY

The Exploration Licence EL22957 was held by Tennant Creek Gold (NT) Pty Ltd until it was acquired by WDR Gold Pty Ltd (a wholly owned subsidiary of Western Desert Resources Ltd) in July 2007. The tenement surrounds the historic Spring Hill gold mining centre.

The exploration licence is underlain by sediments of the South Alligator Group and the Finniss Group of Palaeoproterozoic age. These rocks have been folded along NW trending axes and the folds are tight to isoclinal. A major anticline, the Spring Hill Anticline, occurs in the project area and plunges to the south. The Pine Creek Shear, a regional NW trending structure, trends through the eastern part of the tenement.

Gold and tin mineralisation occurs within the project area.

Gold was discovered in the area in the 1870's. Mining activities at Spring Hill took place between 1880 and 1905, and then intermittently until 1966. Total recorded production was about 22,000 ounces of gold which was mainly derived before 1900. Mining mainly took place on the Main and Middle lodes with the oxidised ore being worked to depths in excess of 100m.

Old Tin workings can be found at the Horseshoe, Jimmys Knob, Teacup and Mundic prospects north of Spring Hill. Tin was discovered at the Jimmys Knob mine in the late 1880's. A considerable amount of underground development was undertaken until 1909. It appears that several tons of tin concentrate were probably produced, however no records exist for the period. The mine was reopened in 1964-68 and in 1977 with production of about 1.4t of tin concentrate.

Previous exploration in the area has been for gold. Although systematic modern exploration has been carried out in the tenement area, no significant discoveries have been made.

On the relinquished portion of EL22957, TNG carried out no field work between 2003-2007. Since taking over the tenement in 2007, Western Desert Resources Ltd has collected 10 stream sediment samples, purchased satellite imagery and carried out an airborne EM survey of approximately 135 line kilometres. Interpretation of the airborne EM data showed that there were nothing of significance in terms of conductive host units in the SE corner of the EL, and consequently this area has been relinquished.

INTRODUCTION

BACKGROUND

The Exploration Licence was held by Tennant Creek Gold (NT) Pty Ltd until it was acquired by Western Desert Resources Ltd in July 2007. The tenement surrounds the historic Spring Hill gold mining centre.

LOCATION AND ACCESS

The tenement is located about 200km south east of Darwin in the Top End of the Northern Territory (Figure 1).

Access is by the sealed Stuart Highway south from Darwin, and thence by the unsealed Spring Hill road. Access within the project area is by 4WD tracks. Portions of the tenement are inaccessible to vehicles due to the rough terrain.

CLIMATE

The climate is semi-arid, tropical with warm dry winters and hot wet summers. The average annual rainfall is 1200mm with most falls in the wet season.

TOPOGRAPHY AND VEGETATION

The project area is located within the Uplands physiographic division. The Uplands represent low steep-sided hills separated by narrow valleys. The area is within the Mary River system which drains to the north.

The Spring Hill project is located within the Bonnie Ranges, which rise about 180 metres above the surrounding country. The country is typically highly dissected tropical savannah. Soils are skeletal and poorly developed. Part of the tenement lies within the floodplain of the McKinlay River.

The area can be classified as Low Woodland with *Eucalyptus tintinnans* (Salmon Gum) being the dominant tree species with a *Soghum* grassland understorey.

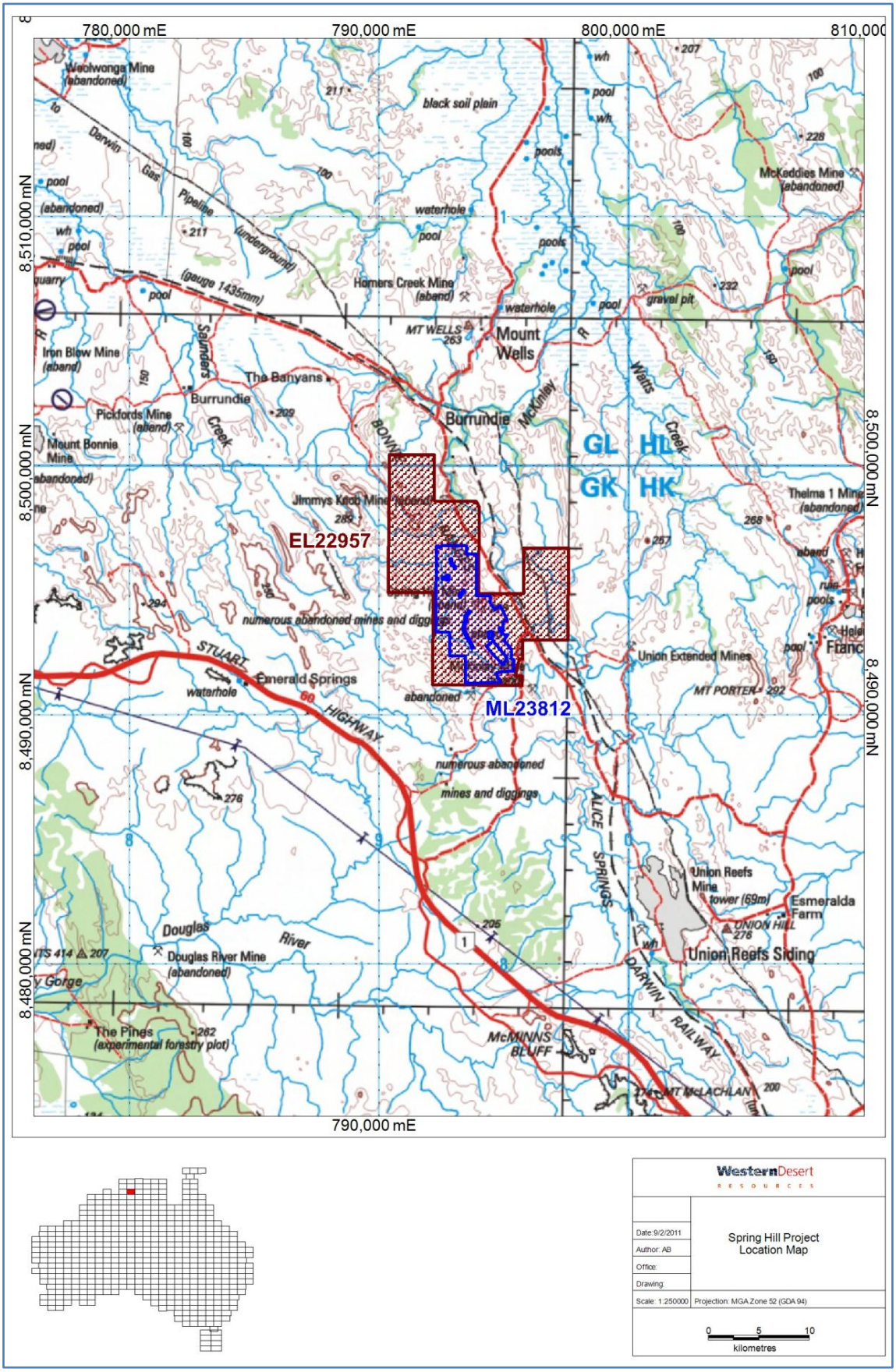

Figure 1: Location Spring Hill EL 22957

TENURE

MINING/MINERAL RIGHTS

EL22957 was granted to Tennant Creek Gold (NT) Pty Ltd on 13th January 2003.

The tenement was purchased by WDR Gold Pty Ltd, a wholly owned subsidiary of Western Desert Resources Ltd, on July 20th 2007.

The tenement contains within it a number of pre-existing granted mining leases and claims, which are not owned by Western Desert Resources.

The relinquished portion of EL22957 comprises six of the original eleven blocks. The relinquished area is shown in Figure 2. Blocks relinquished are:

SD521437 Blocks C, E, H, J, K and O

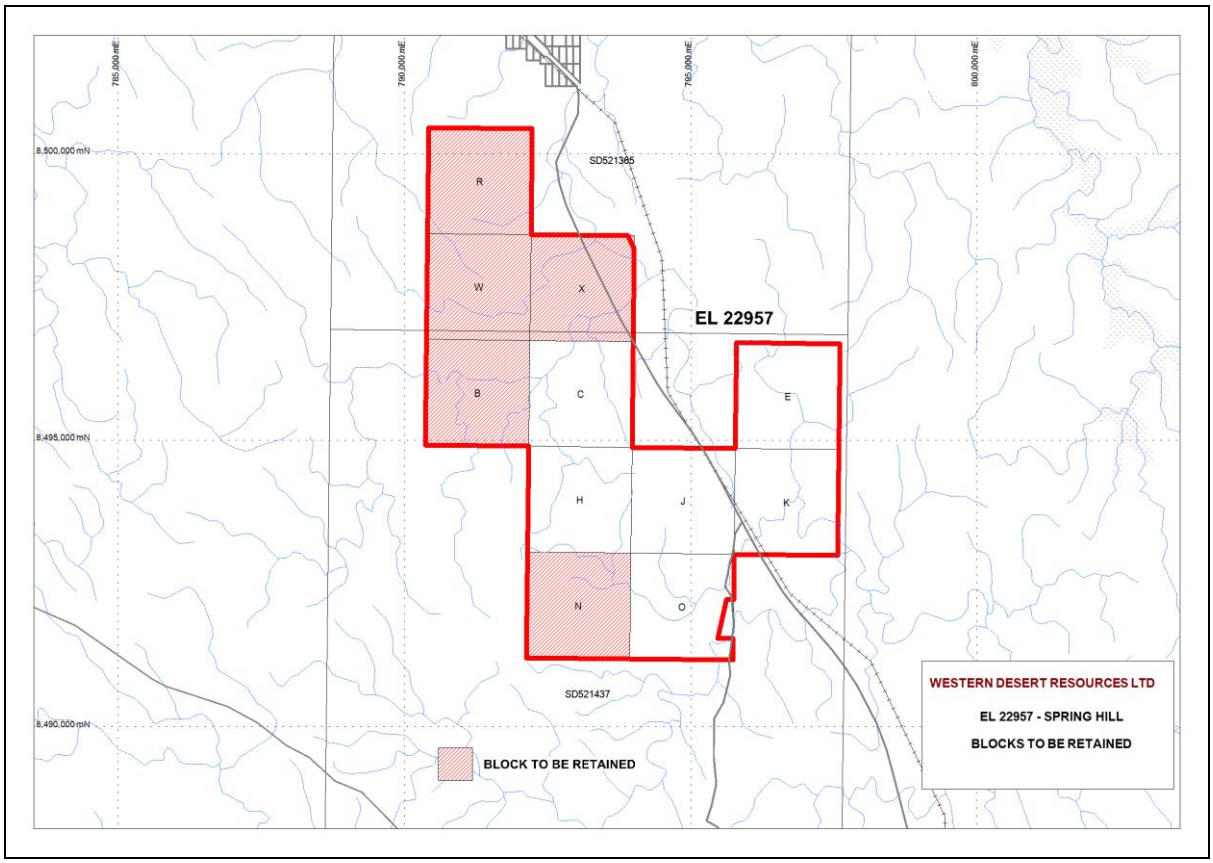

Figure 2: Relinquished and retained areas of EL22957

LAND TENURE

The tenement is located within the boundaries of Perpetual Pastoral Leases 815 (Mary River West).

NATIVE TITLE

The Spring Hill project falls within the area of a registered Native Title Claim DC 01/6 Mary River West.

ABORIGINAL SACRED SITES

There are no known sacred sites within the project area.

GEOLOGY

REGIONAL GEOLOGY

The project area is located within the Palaeoproterozoic Pine Creek Orogen, which is aged between 2470-1870Ma. The Pine Creek Orogen consists of a sequence of psammitic and pelitic sediments, tuffs and minor volcanics. The sediments have been intruded by granitoids of the Cullen Batholith of Palaeoproterozoic age. The regional geology is shown on Figure 3.

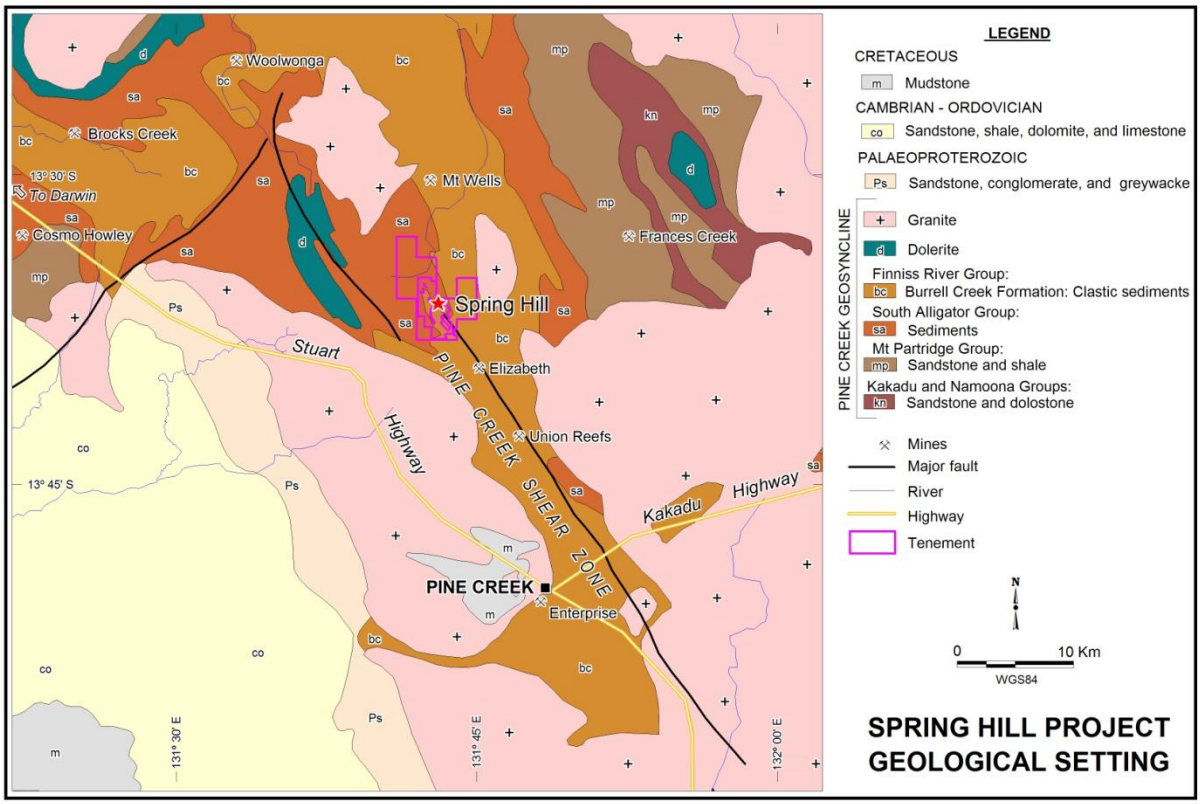

Figure 3: Regional Geology – Spring Hill area

LOCAL GEOLOGY

The tenement is underlain by sediments of the South Alligator Group and the Finniss Group of Palaeoproterozoic age, see Figure 4. These rocks have been folded along NW trending axes and the folds are tight to isoclinal. A major anticline, the Spring Hill Anticline, occurs in the project area and plunges to the south. The Pine Creek Shear, a regional NW trending structure, trends through the eastern part of the tenement.

The oldest rocks present in the area occur in the core of the Spring Hill Anticline in the north west of the tenement. Here carbonaceous siltstones/mudstones, ironstones and chert of the Koolpin Formation have been intruded by Zamu Dolerite. These rocks are overlain by the Gerowie Tuff, a sequence of siltstones, cherts and tuffaceous sediments. The Mt Bonnie Formation overlies the Gerowie Tuff and is host to the gold mineralisation at Spring Hill. This formation consists of interbedded shales, siltstones and greywacke with minor chert and BIF bands. The youngest formation present in the area is the Burrell Creek Formation which is a monotonous sequence of shales, siltstones and greywacke.

The gold mineralisation in the Spring Hill goldfield occurs in two separate zones –the Hong Kong zone and the historic mining centre of the Main, Middle and East lodes.

The Hong Kong zone contains a sheeted vein system which dips steeply to the south east (70°). The bedding in this area dips steeply to the west. The quartz veins vary in width from several millimetres to 0.5m, and contain pyrite when unweathered. The zone has a strike length of about 1000m and a width of about 100m.

The historic mining centre contains three main leader veins, which are lodes between 0.4 and 1.5m in width containing quartz with pyrite, galena and arsenopyrite. These were mainly mined in the oxidised zone where the grade averaged 30g/t Au. Bedding parallel veins and saddle reefs also occur within the mined area.

Tin mineralisation occurs in the area. At the Jimmys Knob mine, tin mineralisation (cassiterite) occurs in quartz-filled fractures in Mt Bonnie Formation carbonaceous sediments close to or at a contact with a quartz-syenite intrusive (Ahmad et al 1993).

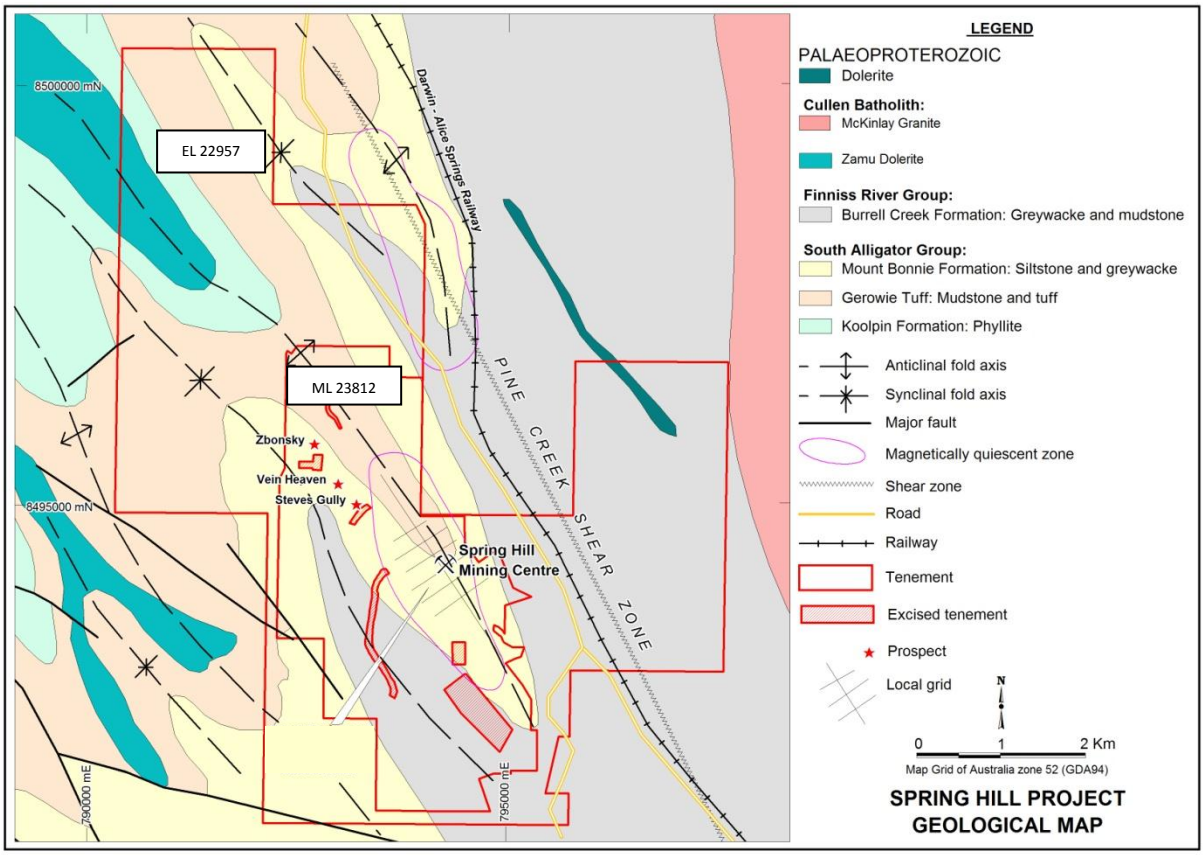

Figure 4: Local Geology – Spring Hill EL 22957 & ML 23812

PREVIOUS EXPLORATION

MINING HISTORY

The tenement surrounds the Spring Hill goldfield. Gold was discovered in the area in the 1870's. Mining activities took place between 1880 and 1905, and then intermittently until 1966. Total recorded production was about 22,000 oz of gold which was mainly derived before 1900. Mining mainly took place on the Main and Middle lodes with the oxidised ore being worked to depths in excess of 100m.

In the 1930's an adit was driven from the eastern side of Spring Hill to test the previously mined lodes at a depth of about 120m. Further work on the Main Adit and excavation of the South Adit were carried out in the 1940's with recorded production of 650oz of gold.

Treatment of alluvial deposits in creeks draining from the western side of Spring Hill has occurred in recent years.

Tin mineralisation also occurs in the area. Old workings can be found at the Horseshoe, Jimmys Knob, Teacup and Mundic prospects north of Spring Hill.

Tin was discovered at the Jimmys Knob mine in the late 1880's. A considerable amount of underground development was undertaken until 1909. It appears that several tons of tin

concentrate were probably produced, however no records exist for the period. The mine was reopened in 1964-68 and in 1977 with production of about 1.4t of tin concentrate (Ahmad et al 1993).

Little historical production was recorded from the other tin workings in the area.

EXPLORATION BY PREVIOUS COMPANIES

Geopeko/CSR Ltd : EL3138 (1981-87)

This EL covered the north western portion of the existing tenement. It was initially explored by Geopeko who undertook stream sediment and soil surveys together with some rock chipping. An area around the old Horseshoe tin mine was found to be anomalous for Sn, Pb, As, Cu and Au. The anomalies were found to be associated with siliceous mudstone, BIF and gossan close to a contact with Zamu dolerite.

CSR Ltd undertook an airborne magnetic survey and a BLEG stream sediment survey over the EL. Soil sampling was carried out over the Horseshoe area and anomalous copper and arsenic results were found. Rock chip sampling failed to discover any gold mineralisation.

Carbon Minerals : EL4839 (1986-88)

This EL covered the current block immediately north of ML23812. Carbon Minerals N.L. undertook a programme of rock chipping of outcropping quartz veining. The results for gold were disappointing. Further work in the second year of the EL included BLEG and conventional stream sediment sampling. The results were not encouraging.

Billiton Australia : EL4793 and EL4839 (1988-90)

These two ELs covered the Spring Hill goldfield and the area to the west. Billiton undertook extensive exploration for gold over these tenements. Activities included an airborne magnetic survey, BLEG and conventional stream sediment surveys, reconnaissance mapping, soil sampling and rock chipping. The areas currently covered by EL22957 were not found to be prospective for gold.

Zapopan N.L./Billiton Australia : EL5439 (1988-90)

This EL was located east of the railway and covered the two eastern blocks of the current tenement. Zapopan carried out some rock chipping of veining and old workings for gold with no success in the first year. Billiton carried out a comprehensive programme and located some anomalous gold values in alluvium from the McKinlay River.

King and Perry : EL5968 (1989-90)

This EL covered the north western part of the current tenement. Some rock chip sampling was carried out with negative results.

McCleary : EL8474 (1994-97)

Norm McCleary held this licence which covered the western and southern part of the current tenement. A BLEG stream sediment survey was carried out as well as some rock chipping. One strongly anomalous result of 56g/t Au for a rock chip collected close to the W corner of ML23812

was reported. No follow-up work was done on this area. Some BLEG soil sampling was carried out over the SW corner block with negative results.

EXPLORATION ON RELINQUISHED PORTION OF EL22957

Tennant Creek Gold : EL22957 (2003-2007)

Tennant Creek Gold held the current exploration licence during this period. No ground exploration was completed.

Western Desert Resources (2008-2011)

Desktop studies and compilation of previous exploration results was carried out during 2007 following purchase of the tenement from Tennant Creek Gold.

Satellite imagery (Quickbird VHR) was purchased in June 2007 through Geoimage Pty Ltd, which covered the whole tenement. A digital report accompanies this document.

A 283 total line km airborne EM survey was flown by GeoForce using their SkyTEM system over the tenement during September 2008. Of this, approximately 135 line km occur on the relinquished portion of EL22957. The nominal terrain clearance was 30m and the line spacing was 150m in E-W lines. Flight lines are shown in Figure 5.

The survey failed to detect any bedrock conductors in the relinquished portion of the tenement. The only features recognised were cultural features, for example, the Adelaide-Darwin railway line (Figure 6). Digital data accompanies this report.

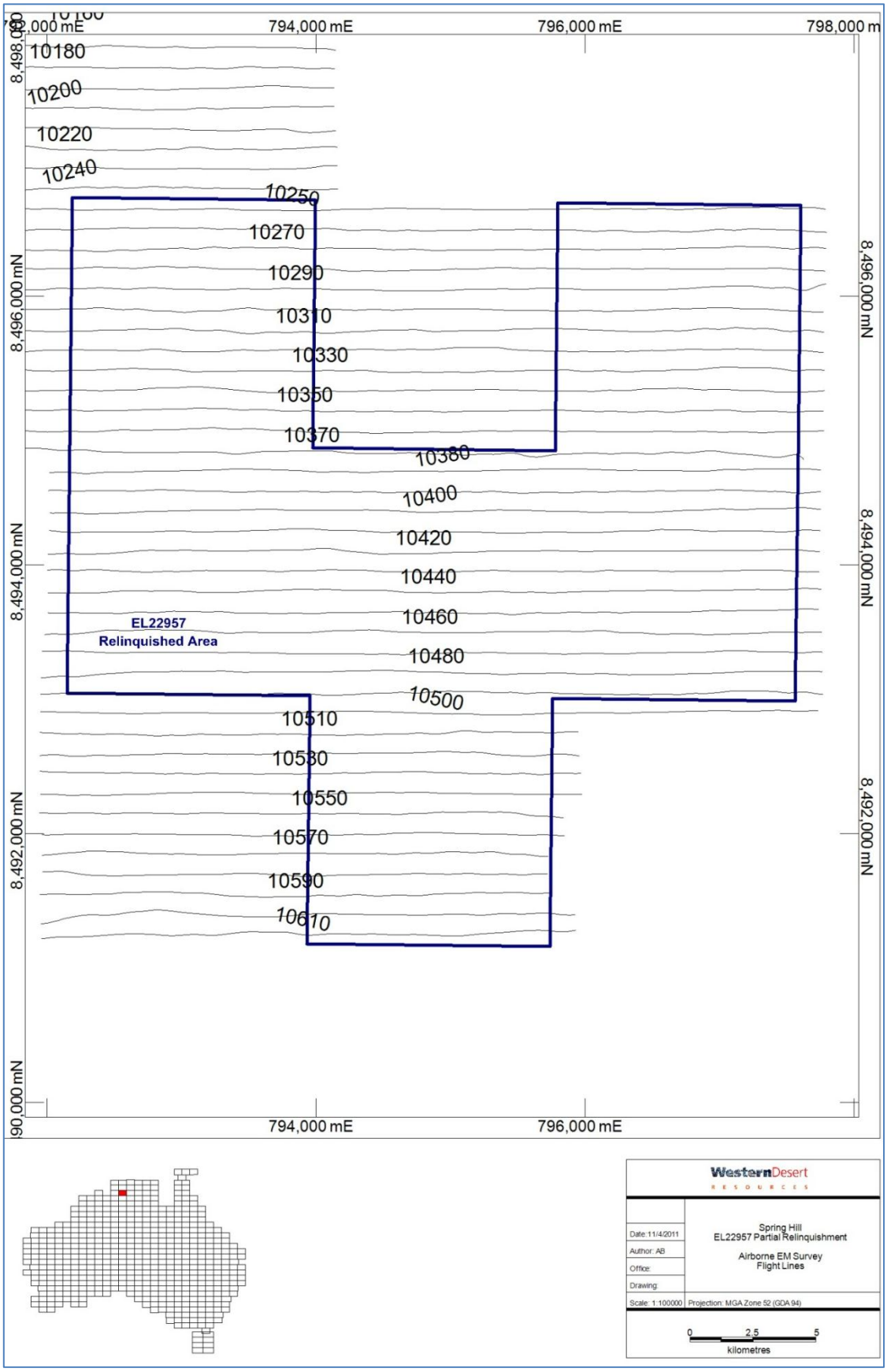

Figure 5: Airborne EM flight lines over the relinquished portion of EL22957

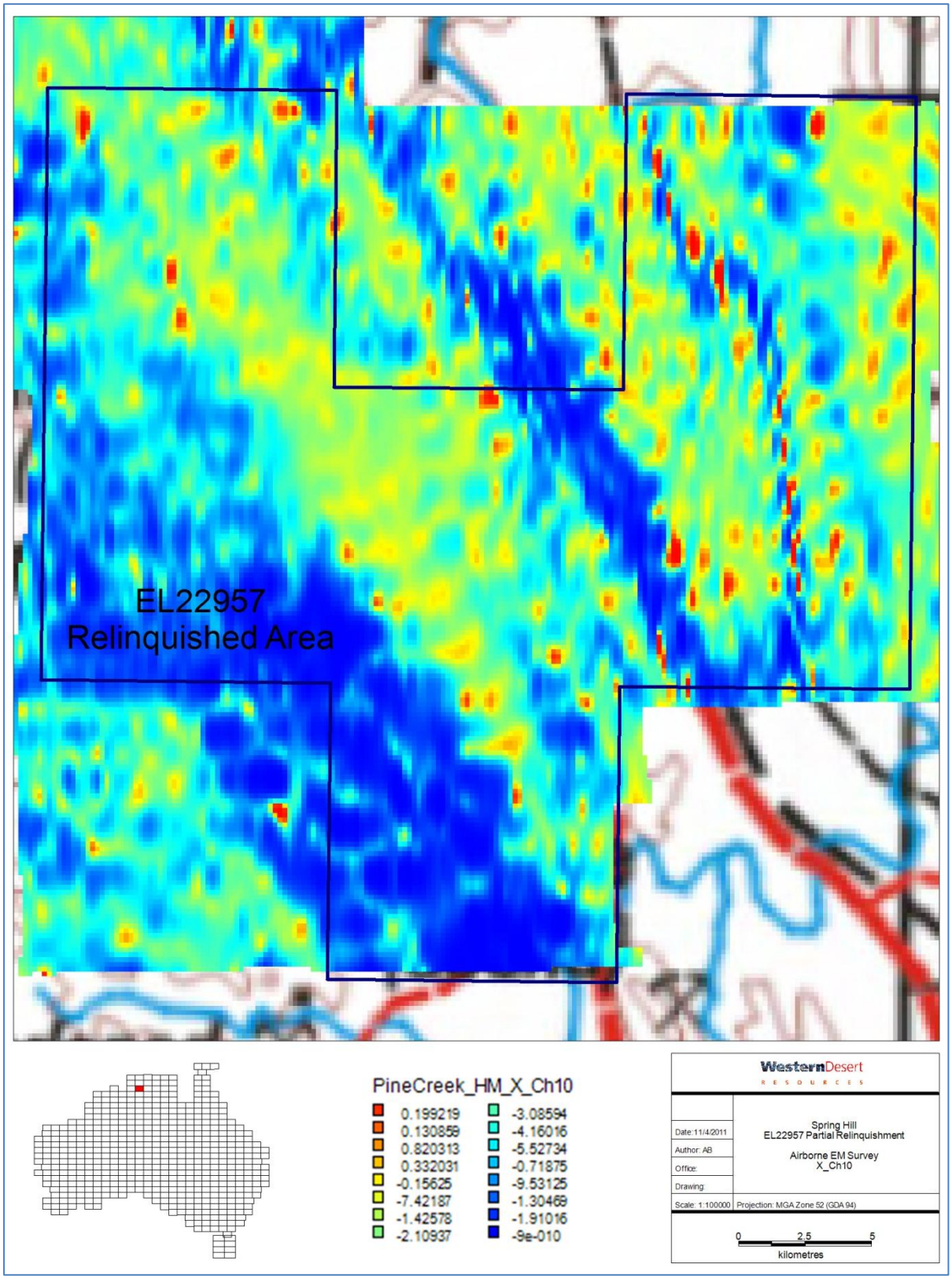

Figure 6: Image of gridded airborne EM data

In 2010, 10 stream sediment samples were collected from the relinquished portion of EL22957 as part of field visit primarily to assess the uranium potential of the area. Creek traversing was the primary means of access, however wet conditions, considerable ground cover and undergrowth impeded the expedition. The 10 soil samples were collected from varying horizons of intersecting tributaries and from above junctions of the main creek. Locations of the samples are illustrated in Figure 7. No records of the scintillometer readings were kept.

While it was recognised at the time that the samples were collected opportunistically rather than systematically, it was hoped that they may reveal information regarding the mobility of ions in the area. The samples were collected in Kraft "Mini-Sam" 23x13cm bags and sent to ALS Chemex laboratory in Perth. A neutral digestion process ("IONIC Leach ME-MS23") was chosen over aqua regia to achieve a lower detection limit. A complete assay suite was selected comprising 63 elements, including pH. Details of the assay results accompany this report in digital form.

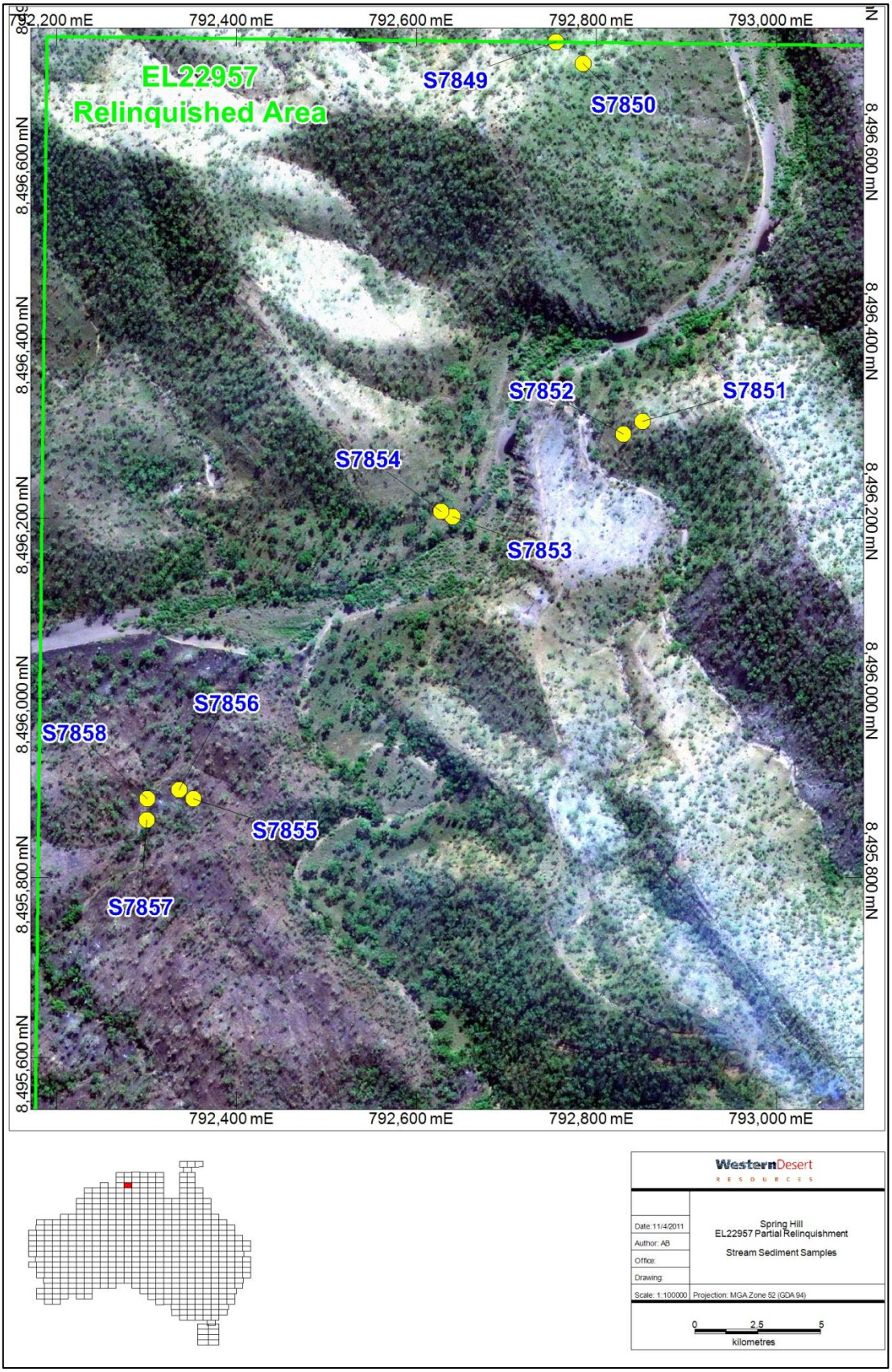

Figure 7: Soil sample locations EL22957

CONCLUSION

Neither the results of the EM Survey nor the results of the soil geochemistry provided any direct indications of mineralisation and so the area has been relinquished.