CENTRAL AUSTRALIAN PHOSPHATE LTD
ABN: 91 120 787 859

Wallaces Spring

EL29380

FIRST ANNUAL & FINAL REPORT
FOR PERIOD ENDING
9 OCTOBER 2013

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Maps
1:250,000 Alice Springs SF53-14
1:100,000 Laughlen 5751

Distribution
Department of Resources
Central Australian Phosphate Ltd Sydney Office

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SUMMARY

EL29830 was taken up to explore for rare earth mineralization thought to be potentially hosted by the Mordor Alkaline Igneous Complex. This area does not appear to have been previously explored for rare earths. Results of a short reconnaissance visit, which included traverse mapping, rock chip and stream sediment sampling, failed to indicate signs of rare earth mineralization, and the decision was made to surrender the license.

INTRODUCTION

EL29830 was granted on 8/10/12 to NuPower Resources Ltd. In January 2013 the name of the company was changed to Central Australian Phosphate Ltd. Rare earth mineralization, potentially associated with the Mordor Alkaline Igneous Complex, was targeted. Of particular interest was a stream sediment lanthanum anomaly (Rio Tinto samples), coincident with an airborne radiometric thorium anomaly around the southern edge of the syenitic part of the complex.

LOCATION AND ACCESS

The license was located 60km ENE of Alice Springs (Figure 1). It can be approached from Alice Springs either via the Stuart Highway and the Arltunga Tourist Drive (faster) or via the Ross Highway and Arltunga Tourist Drive. A station track leads southward to the area from the Arltunga Tourist Drive some 4km to the east of The Gardens homestead. This runs through the centre of the license.

TOPOGRAPHY AND DRAINAGE

The license was within the Mordor Pound – which is an area enclosed on three sides by steep ridges of Heavitree Quartzite which reach to more than 1,000m. The license area itself has rolling topography with some steep eroded spines of granitic rocks. Drainage runs southwestward to the Trephina Creek.

TENURE

EL29830, 8 sub blocks (Figure 2), was granted on 8/10/12 for a period of 6 years to NuPower Resources Ltd.

The EL is within NT Portion 662, part of The Gardens station.

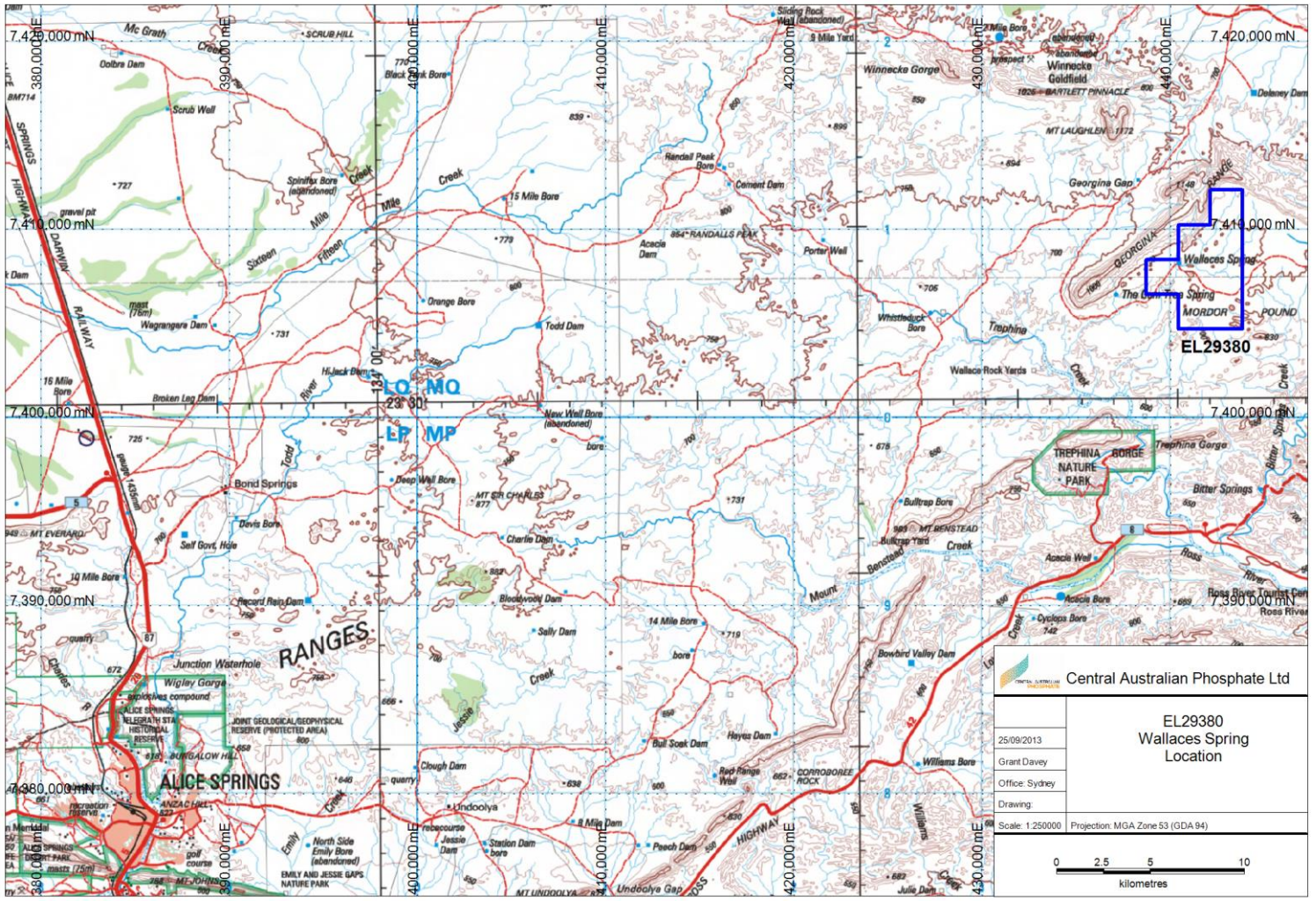

Figure 1. EL29380, Wallaces Spring, Location

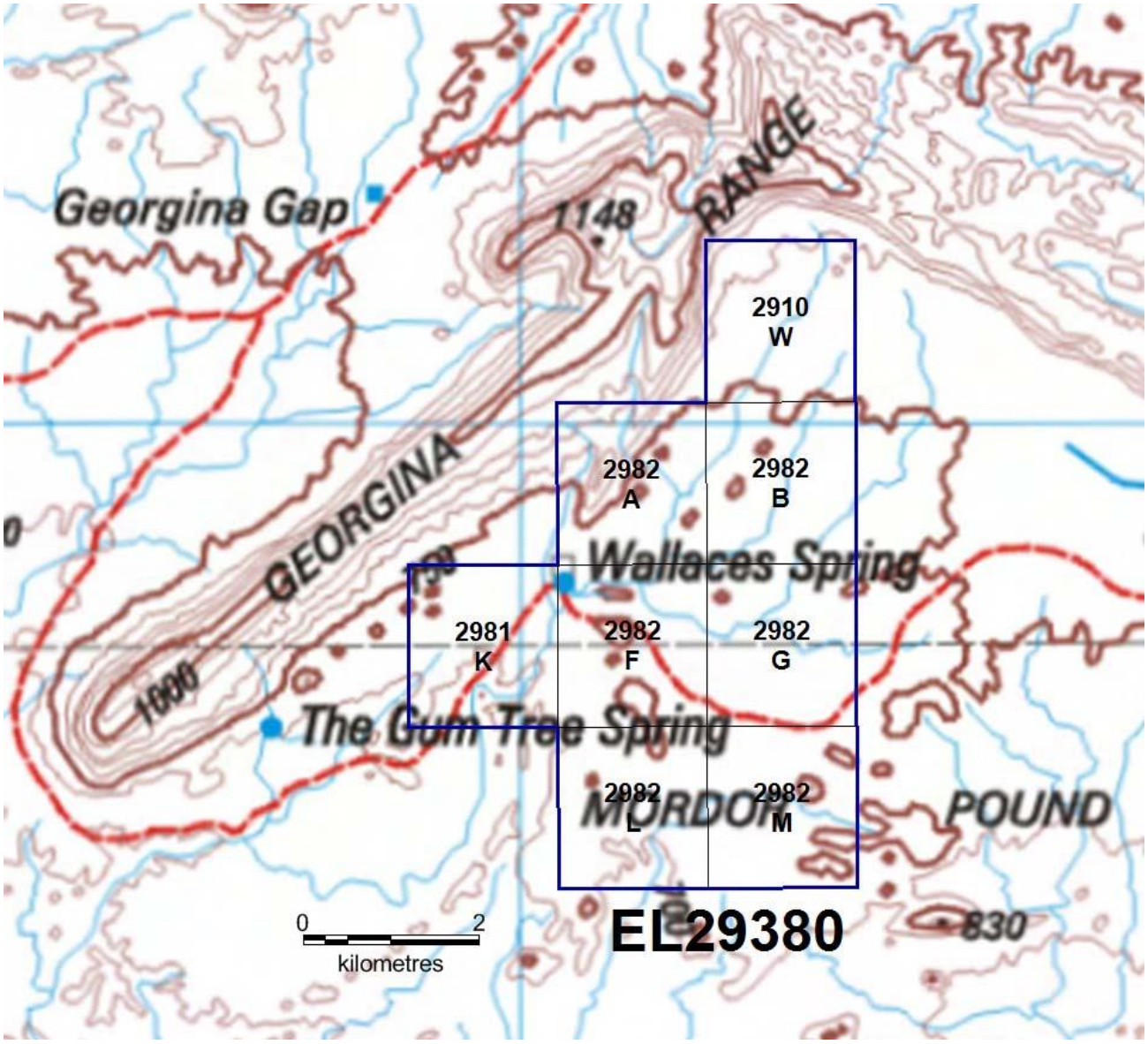

Figure 2. Wallaces Spring tenement

NATIVE TITLE

No Exploration Agreement with the Central Land Council has been entered into for this tenement.

REGIONAL GEOLOGY AND MINERALISATION

Basement to the region is rocks of the early to Mesoproterozoic meta-igneous and meta-sedimentary Arunta Block (Figure 3). Here these rocks consist of aluminous and siliceous meta-sediments and felsic meta-intrusives. Within the license area basement is dominantly represented by the Jennings Granitic Gneiss (Pgn) which has three distinct lithologies – heterogeneous coarse-grained granitic gneiss (gg1), porphyroblastic orthogneiss (p) and fine grained granitic gneiss (gg1).

Intruding the Jennings Gneiss in the project area are rocks of the Mordor Alkaline Igneous Complex (MAIC), dated at 1132 Ma. This is an E-W elongate body, some 7 x 5km in dimension, and consisting of two distinct lithological types. The eastern part of the MAIC consists of shonkinite (sh) with minor ultramafic rocks, and the western part (within EL 29380) consists of syenite (sy). The MAIC is located adjacent to the Woolanga Lineament, which is a deep-seated NW-SE feature which may also be associated with emplacement of the Mud Tank carbonatite, 50km to the northwest. The Mud Tank carbonatite is also of interest for rare earth mineralization.

The Arunta Block and MAIC rocks are unconformably overlain by Adelaidean sediments of the Amadeus Basin. Here these consist of the Heavitree Quartzite (Puh).

The MAIC has a strong magnetic signature (Figure 4) with the eastern mafic part of it being particularly apparent on magnetic images. An arcuate radiometric thorium anomaly overlaps the southern edge of the syenitic part of the complex and extends for some distance into the rocks of the surrounding Jennings Gneiss (Figure 5).

There are no mapped mineral occurrences within the license area. Several occurrences of Cu, Ni, U and Ba do occur in the eastern part of the MAIC. This area has also been explored for platinum group elements. However Hussey (2003) described the MAIC as being highly prospective for rare earth mineralization and mentions several international analogues.

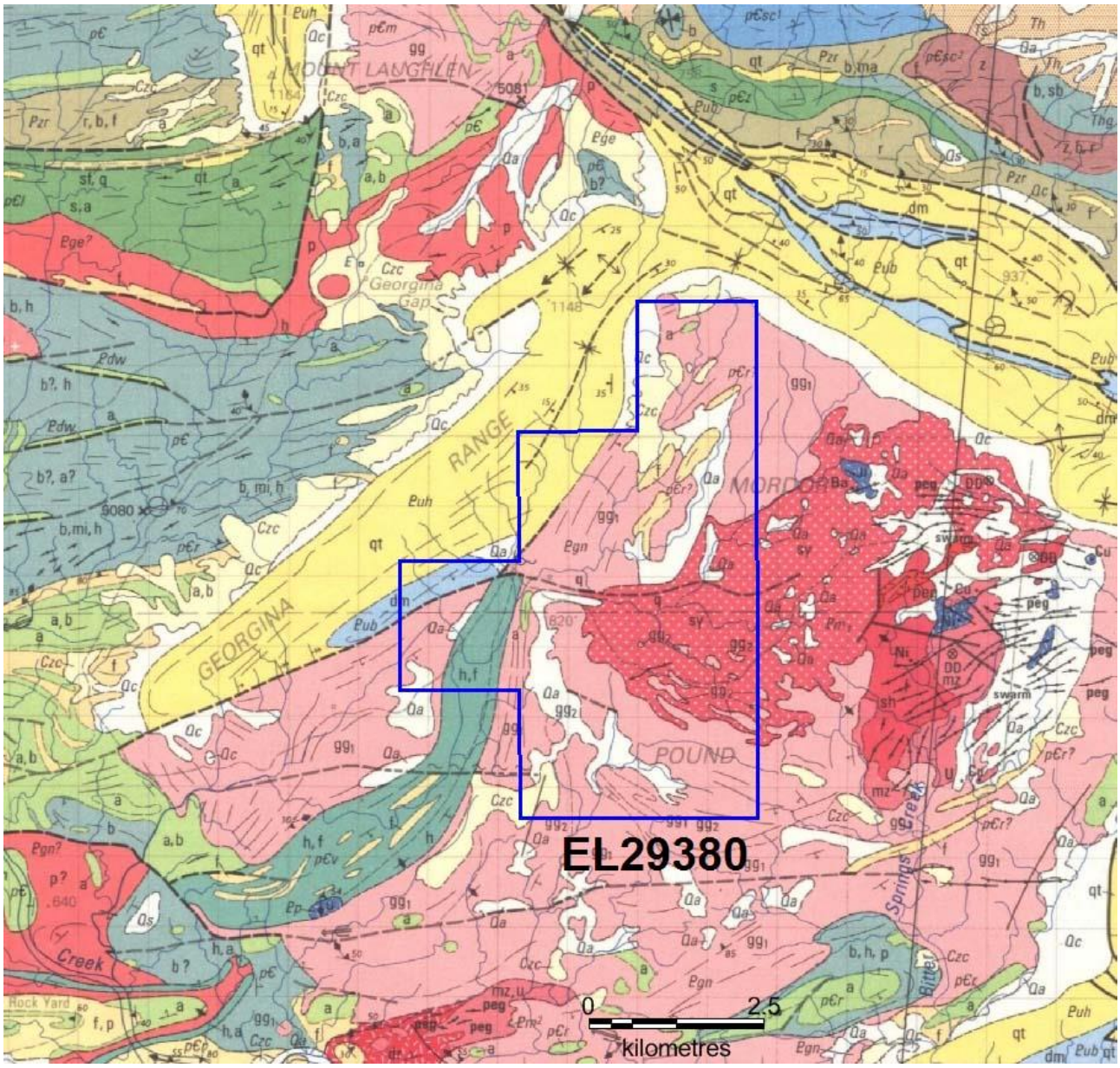

Figure 3. Wallaces Spring, Regional Geology

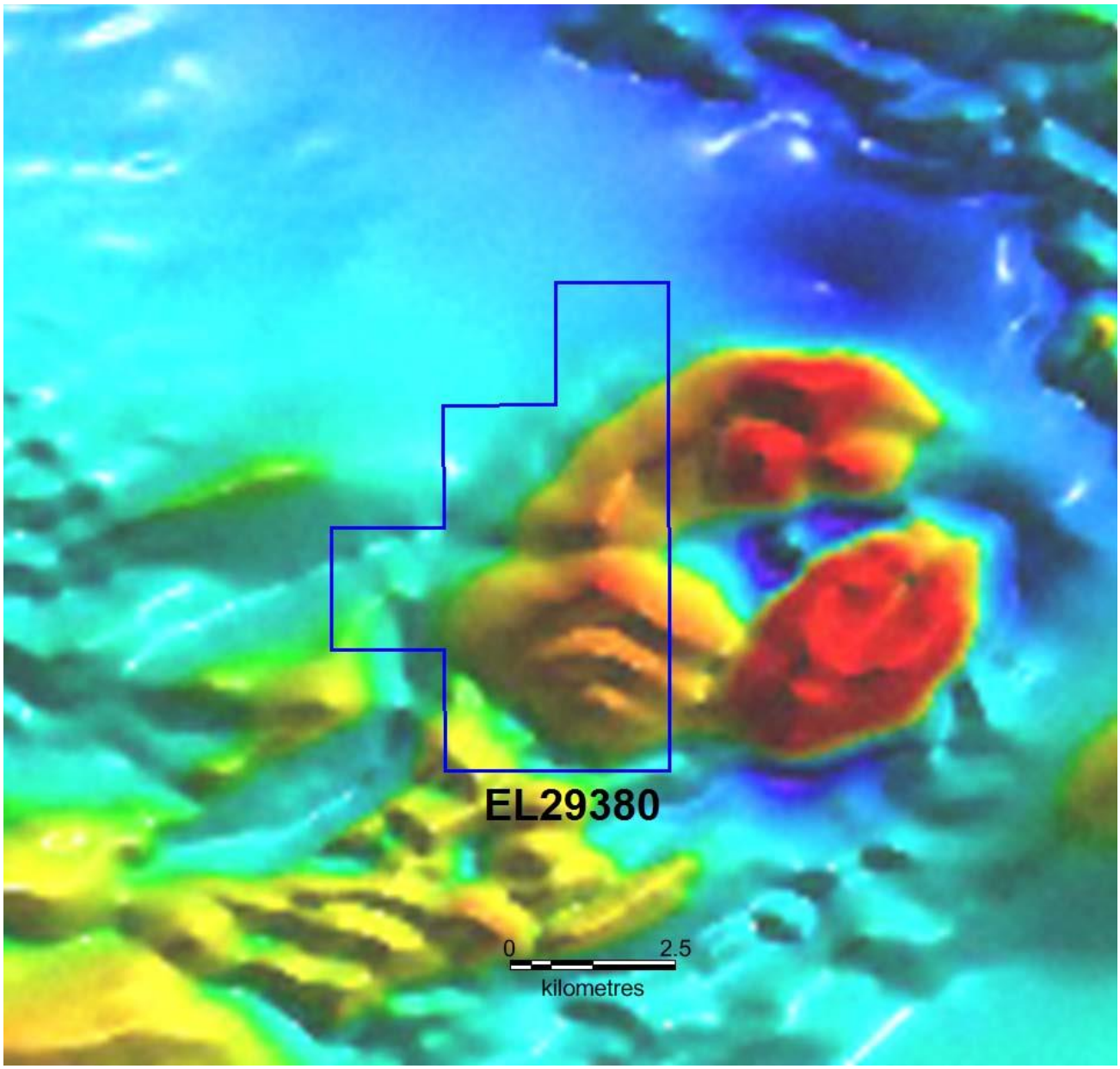

Figure 4. Wallaces Spring RTP Airborne magnetics

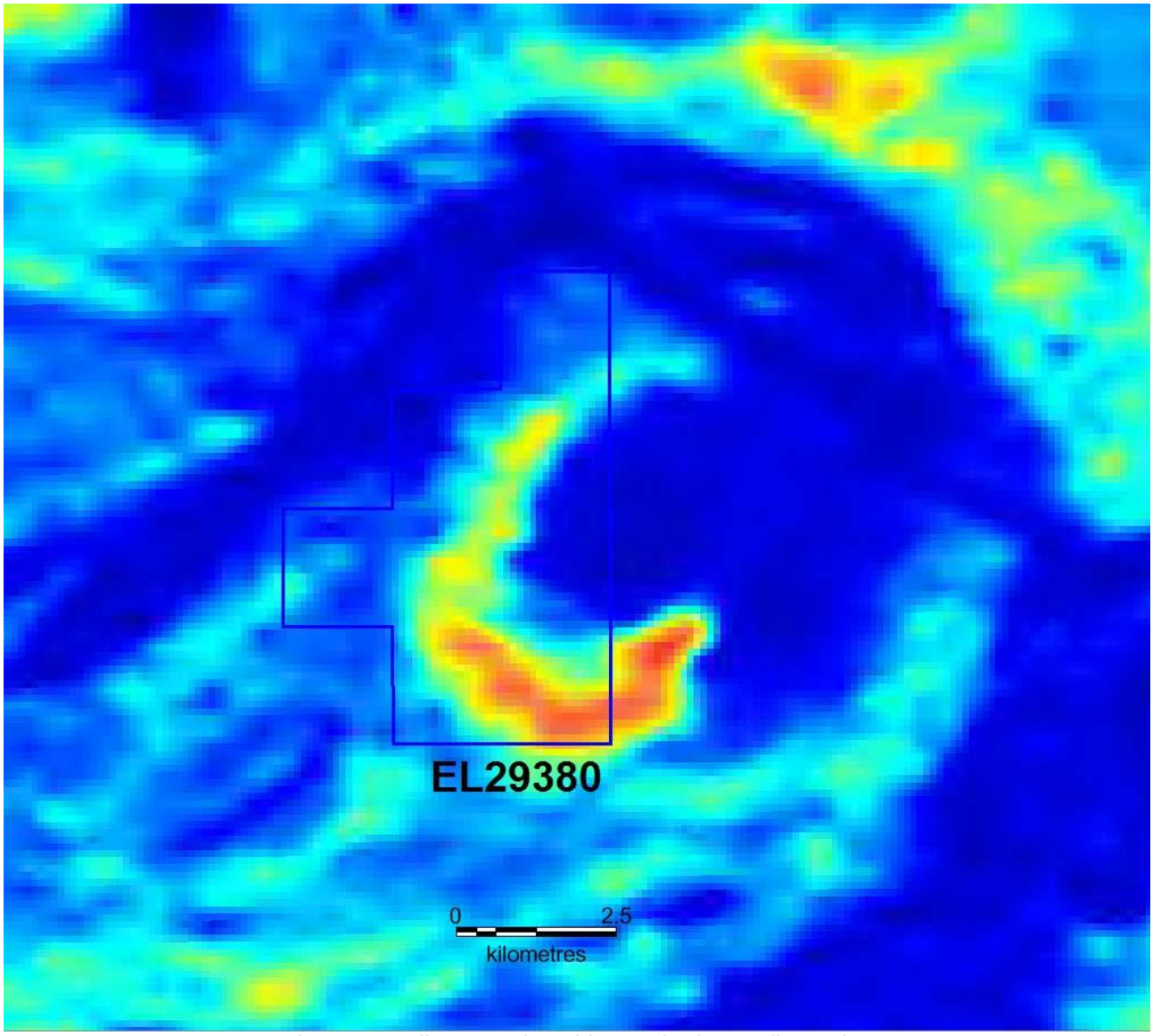

Figure 5. Wallaces Spring airborne thorium radiometrics

PREVIOUS WORK

The license area has seen little previous exploration, and none specifically for rare earths. Listed below is a summary of this work:

EL5486, 1987 – 1989, CR1988-0461, Ramsgate Resources

This company targeted base metals, Ti, W and Cr. Work included mapping, soil and rock sampling and diamond drilling – with an emphasis on the eastern part of the Mordor Complex, outside the area of EL29380. However 54 rock samples were from within the current EL. Analytes were not of significance for rare earth mineralization.

EL9371, 1995-1997, CR1997-0054, CR1998-0135, Rio Tinto Exploration

Rio Tinto was targeting base metals and diamonds in this area. Work included stream sediment, soil and rock chip sampling with RC and diamond drilling to test IP anomalies. The drilling was done to the east of EL29380. Thirty three stream sediment samples were taken from within the area of EL29380, with elevated La assays being of relevance to rare earth exploration.

EL 10404, 2002 – 2011, CR2004-0389, Tanami Exploration

Exploration was for gold, this included mapping, rock sampling and soil sampling. This does not seem to have been relevant to rare earth exploration.

EL 25101, 2006 – 2011, CR2008-0900, CR2009-1062, CR2010-1022, Deep Yellow, Rum Jungle Uranium

This EL was held for uranium and basemetal exploration. Work included radiometric prospecting, a ground gravity survey, mapping and rock sampling.

CENTRAL AUSTRALIAN PHOSPHATE WORK COMPLETED, 2012 - 2013

2.5 days of fieldwork were done with the aim of familiarizing with the geology of the area and taking some geochemical samples. Several traverses were made through the EL area with 4 stream sediment and 16 rock samples taken.

The EL covers the western syenitic half of the Mordor Complex. Worldwide, rare earth mineralization is commonly associated with syenite in alkali intrusive complexes such as Mordor. A strong stream sediment lanthanum anomaly (from previous exploration) is spatially associated with the syenite and especially its southern margin. Stream sediment lanthanum results here are comparable to the highest from within the Strangways area (southwest of Mud Tank) – where streams drain rare earth-anomalous pegmatite dykes. The Wallaces Spring lanthanum anomaly also correlates with an airborne radiometric thorium anomaly.

The published 1:100,000 geological map shows the syenite to have intruded Middle Proterozoic Jennings Gneiss. Three varieties of gneiss are mapped – heterogeneous coarse grained granitic gneiss, porphyroblastic orthogneiss and fine grained granitic gneiss. The syenite body is shown to include many rafts of gneiss.

Results

Traverses of the gneiss showed the mapped descriptions to be quite accurate. Three main rock types were observed:

- Coarse grained crowded granite/granodiorite porphyry
- Fine grained granite/granodiorite
- Porphyritic / porphyroblastic granite/granodiorite.

These lithologies are generally unaltered and show no signs of brecciation or veining which could host rare earth mineralization. In several locations however there is some alteration which is similar to the “red rock” alteration of the eastern succession of the Isa Inlier. This consists of red feldspar alteration, similar to the hematite dusted albite alteration of the Isa area. Associated with this is epidote alteration, joint coatings and veinlets and some actinolite. Such alteration is generally very localised, often occurring in areas of just a few square metres. In some places the red/pink feldspar could result in the rock being miss-identified as syenite. In one location this alteration showed above background radiation. There are some quartz veined fault zones in the area, but these do not appear to be mineralized.

There appears to be significantly less syenite outcrop in the area than has previously been mapped – although petrological work and more detailed mapping would be required to be sure of this. Most of the traversed area is underlain by granite gneiss as described above. Only a few outcrops of a more massive intrusive that could be easily identifiable as syenite were found. The feldspar in these rocks is grey, not the pink orthoclase of some syenites. No breccias, veins, alteration or other possible indications of rare earth mineralization were found in these rocks.

Highest scintillometer readings (>500cps) were obtained within the area of the airborne radiometric anomaly in association with coarse grained meta-granite (Figure 6). Readings within the previously mapped syenite were generally in the range of 300 – 400cps.

Assay Results

Assays for selected elements are given below; sample locations are on Figure 7.

Sample	Type	Description	Ce	La	Nd	Th	U
20724	Rock	Granite/grandior dyke, 3m wide	228	137	70	47.5	4.9
20725	Rock	Felsic gns	166	82	54	57.8	4.2
20726	Rock	cgr wthd syen/grt, qtz-flds-bi	510	283	197.5	33.9	2.4
20727	Rock	Cgr felsic intrusive	239	142	81.4	53.8	3.4
20728	Rock	Cgr porph grt/gd	1080	645	393	124	3.2
20729	Rock	cgr syen?	173	108	64.2	37.7	1.7
20730	Rock	Syenite? Flds to 2cm, bi, some ep	287	152	121.5	7.3	0.8
20731	Rock	Porph syen/flds alt grt	149	83	52.6	62.3	6.2
20732	Rock	Porph syen? Qtz vns	144	71	52.3	47	3
20733	Rock	Dolerite? Px-flds rk, wk fol	24	12	12.5	1.1	0.6
20734	Rock	Gns, ksp/alb alt, ep vns & jnt coatings	242	126	94.8	60.6	2.4
20735	Rock	Porph grt, ksp/alb-ep alt, qtz vns	98	51	39.4	23.7	2.3
20736	Rock	Wk fol porph grt, minor ep-ksp/alb on jnts	162	89	61.4	39.2	1.7
20737	Rock	Wk fol porph grt, ksp/alb-act alt	1265	743	583	158	5
20738	Stream sediment	Stm sed sample	225	104	73	19	1

Sample	Type	Description	Ce	La	Nd	Th	U
20739	Stream sediment	Stm sed sample	243	113	85.2	21.8	1.5
20740	Rock	Crowded porph grt, ksp/alb alt	854	508	421	9.2	1
20741	Rock	Fgr mssv grt or syen? Pk flds altn?	150	89	53.6	32.6	1.4
20742	Stream sediment	Stm sed sample	111	59	52	5.2	0.6
20743	Stream sediment	Stm sed sample	267	137	104.5	19.3	1

Assay results for all rocks and stream sediments were disappointing, only two cerium assays were above 1,000ppm with all lanthanum values <750ppm. Results for other rare earth elements were all low. Elevated thorium values are correlate with the radiometric thorium anomaly and elevated lanthanum values could probably account for the stream sediment lanthanum anomaly. While elevated, the cerium and lanthanum assays do not appear to indicate significant rare earth mineralization.

CONCLUSIONS AND RECOMMENDATIONS

Results of the initial reconnaissance visit were not promising. No indications of rare earth mineralization were found. A further work programme involving more mapping, stream, lag and rock chip sampling was considered, but this was not carried out due to budget constraints. The decision was made to surrender the exploration license.

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December 6, 2013

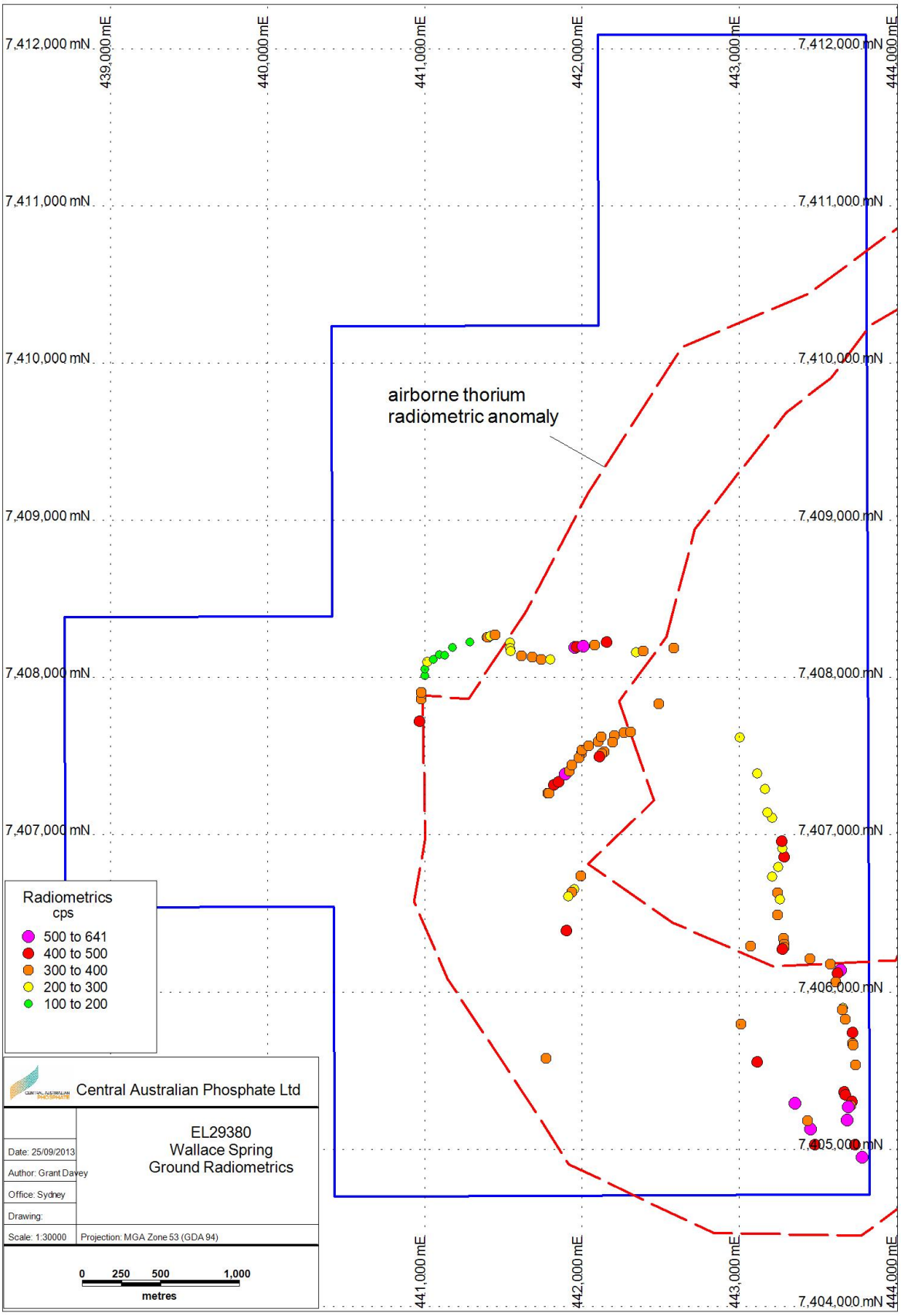

Figure 6. EL29380, spot ground radiometrics

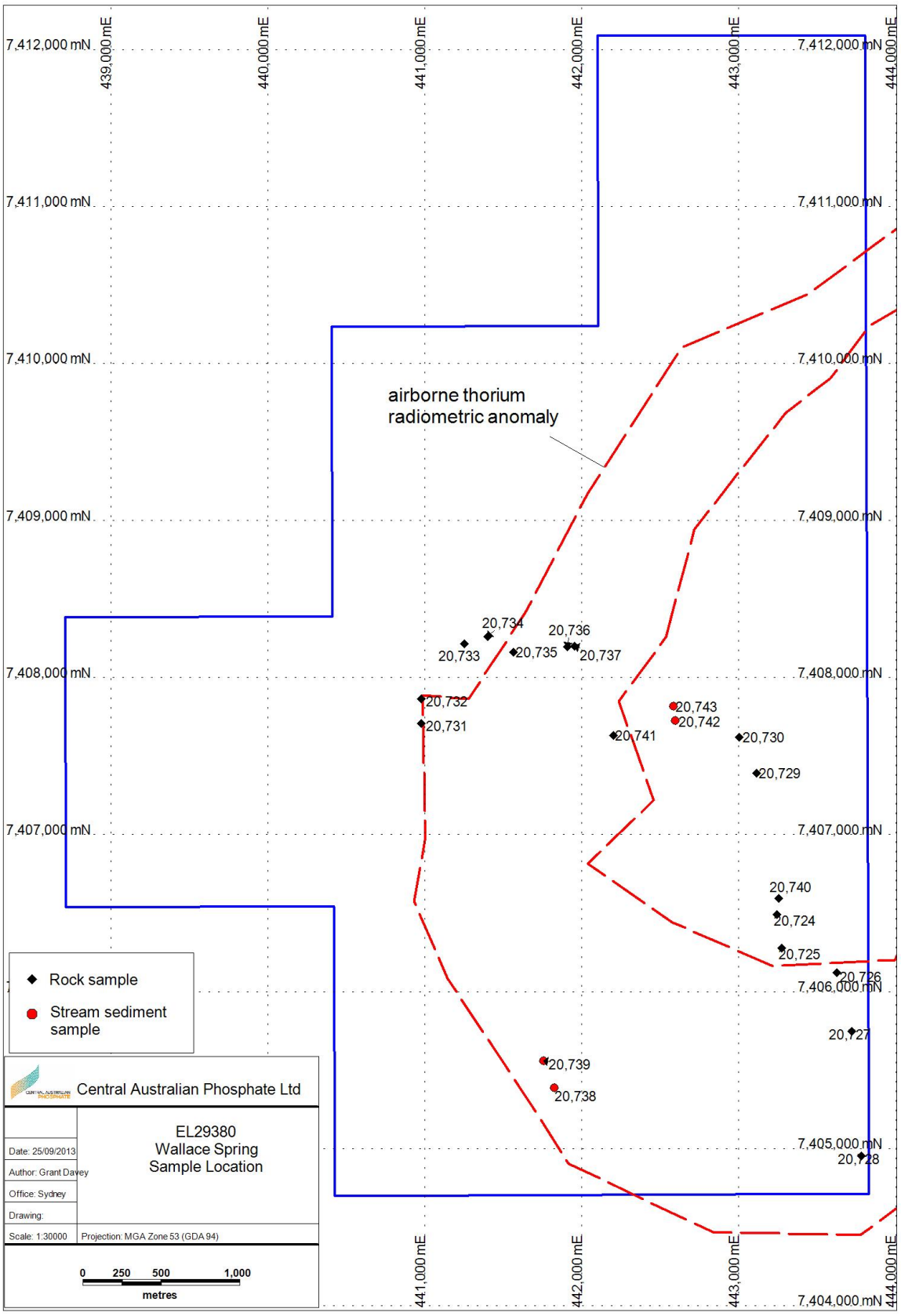

Figure 7. Sample Location

REFERENCES

Hussey, K.J., 2003. Rare earth element mineralisation in the eastern Arunta Region. Northern Territory Geological Survey Record 2003-004.