Lagoon Creek Resources Pty Ltd
A subsidiary of Laramide Resources Limited

Titleholder: Rio Tinto Exploration Pty Ltd

Operator: Lagoon Creek Resources Pty Ltd

Titles/Tenements: EL 28722

2nd Annual Report

Tenement Manager/Agent: Rio Tinto Exploration Pty Ltd

Corporate Author: Lagoon Creek Resources Pty Ltd

Target Commodities: Uranium and Gold

Reporting Period: 7 December 2012 to 6 December 2013

Datum/Zone: GDA94/Zone53

1:250,000 Map sheet: Calvert Hills (SE 53-8)

1:100,000 Map sheet: Seigal (SE 6462)

Contact Details:

Lagoon Creek Resources
PO Box 103, Spring Hill, QLD, 4004
Telephone: 07 3831 3407

Contents

ACKNOWLEDGEMENT AND WARRANTY

1. Subject to point 2, the tenure operator acknowledges that this Report, including the material, information and data incorporated in it, has been made under the direction or control of the Northern Territory within the meaning of section 176 of the Copyright Act 1968 (Cwth).

2. To the extent that copyright in any material included in this Report is not owned by the Northern Territory, the tenure operator warrants that it has the full legal right and authority to grant, and does hereby grant, to the Northern Territory, subject to any confidentiality obligation undertaken by the Northern Territory, the right to do (including to authorise any other person to do) any act in the copyright, including to:
   - Use;
   - Reproduce;
   - Publish; and
   - Communicate in electronic form to the public, such material, including any data and information included in the material.

3. Without limiting the scope of 1 and 2 above, the tenure operator warrants that all relevant authorisations and consents have been obtained for all acts referred to in 1 and 2 above, to ensure that the doing of any of the acts is not unauthorised within the meaning of section 29(6) of the Copyright Act (Cwth).

SYNOPSIS

Lagoon Creek Resources Pty Ltd (LCR), a wholly owned subsidiary of Laramide Resources Ltd is currently exploring for sandstone hosted, unconformity related uranium in a number of Northern Territory tenements including EL 28722. In May 2011 LCR entered into an earn-in and joint venture agreement with Rio Tinto Exploration Pty Ltd (Rio Tinto); LCR would act as the operator.

Rio Tinto is the registered holder of Exploration Licenses 9319, 9414, 28721, 28722, 28723 and 28724, collectively known as the 'Murphy Project', in the Northern Territory. The exploration license for EL 28722 was originally applied for in August 1995 and subsequently granted in December 2011.

During the first year of tenure, 7th December 2011 to 6th December 2012, LCR completed a desk top study of the area using geological maps, explanatory notes, regional geophysical datasets and incorporated open-file data provided by the Northern Territory Geological Society (NTGS). In addition a search by the Aboriginal Areas Protection Authority (AAPA) for culturally significant areas was carried out as well as Land Access meetings with the Northern Land Council (NLC) and Traditional Owners.

During the second year of tenure, 7th December 2012 to 6th December 2013, LCR planned to a fly high resolution radiometric and magnetic airborne survey to facilitate targeting; however, exploration was delayed due to Laramide Resources ASX listing attracting limited investors. With this in mind, LCR completed a review of quotes for the airborne geophysics survey.

INTRODUCTION

Location and Access

The tenement is situated in the Northern Territory on Aboriginal Land held by the Waayni/Garawa Aboriginal Land Trust and is administered by the NLC. The centre of EL 28722 is located approximately 50km SE of Calvert Hills Station and approximately 73km NE of Benmara Station. Most exploration undertaken on EL 28722 will be based out of LCR's Camp Caroline (located within EL 29898), which is approximately 45km SE from the tenements centre. The Camp is already used by LCR to undertake exploration in both the Northern Territory and Queensland. The location of EL 28722 and the Camp is shown on **Appendix 1**.

Physiography Climate and Vegetation

EL 28722 is situated in the Gulf Falls and Uplands bioregion. The NTGS Calvert Hills (SE 53-8) Explanatory Notes indicates that the area comprises a combination of escarpments, low-lying hills and pediplains, which typically display grey and brown clays, lithosols and shallow earthy sands. Other areas can comprise strike ridges and intervening valleys, with the shallow cover being siliceous sands.

A flora and fauna 'snapshot' report was undertaken for EL 28722, acquired from the Northern Territory Natural Resource Management (NT NRM) InfoNet website. The report states that the vegetation is predominantly 'open woodland' with small areas of 'open forest' and 'woodland'.

The report also advises of the following introduced plants, which have been identified as problem weeds in one or more locations in northern Australia, however, there are no weeds of national significance:

> Starburr; Khaki Weed; Ulcardo Melon; Nutgrass; Awnless Barnyard Grass; Hyptis; Spiked Malvastrum; Bitter Broom; Spiny-head Sida; Flannel Weed; Townsville Lucerne; and Noogoora Burr.

TENURE

EL 28722 consists of 47 sub blocks and was acquired by Rio Tinto after applying for the exploration license in August 1995, which was subsequently granted in December 2011. Rio Tinto is the registered holder of Exploration License 28722 in the Northern Territory. In May 2011 LCR entered into an earn-in and joint venture agreement with Rio Tinto; LCR would act as the operator. The EL covers approximately 120.56km^2.

GEOLOGICAL SETTING

EL 28722 is located over 3 major Proterozoic geotectonic units. The Murphy Inlier is Early Proterozoic 'basement rock' consisting of the Murphy Metamorphics, the Cliffdale Volcanics and the Nicholson Granite Complex. The basement is partly overlain by the Middle Proterozoic McArthur Basin, the Lawn Hill Platform and South Nicholson Basin, all of which consist of gently folded unmetamorphosed sedimentary and subordinate volcanic rocks.

The Murphy Metamorphics are the oldest sequence in the Murphy Inlier and are suggested to be at least 1900Ma to 2100Ma old (Plumb and Derrick, 1975). The sequence consists of shale, siltstone, greywacke and volcanic deposits metamorphosed to greenschist facies quartz-albite-muscovite-biotite schist and gneiss. The Murphy Metamorphics are poorly exposed at the surface.

The Nicholson Granite Complex can be divided into 8 lithological units, however, it is possible to simplify these into two petrological and age related groups. Group A (Pgn_a), 1820±103Ma, comprises hornblende and/or biotite bearing adamellite and ganodiorite. Group B (Pgn_b), 1621±28Ma, comprises biotite and/or muscovite bearing granite and adamellite.

The Cliffdale Volcanics sequence is over 4000m thick and can be simplified in to two petrological and age related groups. Group A (Pcc_a), age not yet determined, comprises rhyolitic and alkali rhyolitic ignimbrite. Group B (Pcc_b), 1770±20Ma, comprises flow banded alkali rhyolite lava and minor tuff.

The Tawallah Group is the oldest (c.1800-1713Ma) group of the McArthur Basin sequence and overlies the Murphy Inlier with an angular unconformity; it comprises alternating intervals of detrital sediments, volcanics and carbonates (including the Westmoreland Conglomerate and Seigal Volcanics Formations). The Lawn Hill Platform Sequence (c.1595-1591Ma) comprises coarse sands and alternating bands of basalt and rhyolite, with sandstones, siltstones, conglomerates, and dolomitic material deposited above conformably. The South Nicholson Basin Sequence (c.1500-1400Ma) generally comprises alternating sandstone formations.

At the surface, EL 28722 is dominated by early Cretaceous shallow marine deposits called the Mullaman Beds, which consist of up to 70m thick sandstone and conglomerate with siltstone cover, which form dissected plateaus and isolated mesas capping older rocks.

The older rocks at the surface in the tenement are middle Proterozoic Sly Creek Sandstone of the Tawallah Group and early Cambrian Bukalara Sandstone. Small areas of the fine/medium, lithic and quartz Sly Creek Sandstone can be found in the centre and northwest corner of the tenement and the fine grained to very coarse feldspathic Bukalara sandstone is found in the north of the tenement. The rest of the tenement is covered by lateritic soils, sand and ferruginous detritus of Tertiary and Quaternary age. Refer to **Appendix 2**.

Structural Setting

The Murphy Inlier is the exposed part of the Murphy Tectonic Ridge with the north-western margin of the Ridge defined by the Tin Hole Hinge Line. The Tin Hole Hinge Line represents a thrust fault along which the Westmoreland Conglomerate moved south-ward. Along the hinge line the Westmoreland Conglomerate dips steeply at angles of 60° to 45° to the north.

Within the Murphy Inlier, the Murphy Metamorphics are isoclinally folded along east-west axes and dip sub-vertically to the north. The Cliffdale Volcanics are in some areas folded or tilted to the north with intense faulting and veining, and intruded by the Nicholson Granite Complex. The Tawallah Group generally has a regional dip of 10° to the northwest. The youngest sequence within the Lawn Hill Platform Sequence (the Fickling Group) dips regionally at approximately 5° to the south. The South Nicholson Group shows very little folding, however, minor faults and joints are present. (NTGS Calvert Hills (SE 53-8) Explanatory Notes)

One of the largest faults within close proximity of EL 28722 is the Calvert Fault which trends northwest and has a near vertical dip; it can be traced over a 200km distance.

HISTORIC EXPLORATION

In 1970, Geophysical Resources Development carried out an Airborne Radiometric Survey over AP 2299, which covered land that is now EL 28722. From the survey, 2 probable uranium sources were identified in the north of EL 28722. Several probable and possible uranium sources were identified in Agnes Creek to the east of EL 28722. Documented follow-up work could not be found.

In 1973, Noranda Australia Ltd carried out exploration within EL 12, the north-western corner of which covered land that is now EL 28722. Exploration within EL 121 concentrated on Red Rock and Crippled Horse anomalies, located to the south east of EL 28722. No exploration was documented to have been carried out over the land which now forms EL 28722.

In 1975 a stream sediment sampling program was undertaken by the Bureau of Mineral Resources (BMR) over an area which now includes EL 28722. The collected stream sediment samples were assayed for a range of elements. The same samples were then re-analysed by the Northern Territory Geological Survey (NTGS) in 1999, where possible for gold (Au), platinum (Pt) and palladium (Pd). Assay results were discouraging with the greatest values being U 3ppm, Au 2.20ppb, Pt 0.40ppb and Pd 0.80ppb.

Between 1984 and 1988 Stockdale Prospecting Ltd carried out an exploration program over EL 4474 (EL 28722 now forms the central part of EL 4474) with the primary target commodity being diamonds. Stockdale started a reconnaissance stream sampling program in 1984 and collected 20 samples from major rivers draining the area. In 1985 fill-in stream sampling, loam sampling and bulk sampling was carried on surrounding tenements outside the area which is now EL 28722. Due to substantial areas of EL 4474 being flat lying, the EL was determined to be not amenable to stream sampling. Because of this, the tenement was subject to an airborne magnetic survey but the data failed to identify any dipole anomalies. The results from the airborne survey resulted in large proportions of EL 4474, and the land that is now covered by EL 28722, being relinquished. In 1988 interpretation of the region was focused on areas outside of EL 4474. The downgrading of the tenement resulted in the area being relinquished.

To date, there have been no mineral occurrences found within EL 28722.

Open File Company Reports:

CR 1970/0062 Geophysical Resources Developments Airborne Radiometric Survey

CR 1973/0084 Noranda Australia Ltd, Report on Prospecting EL 121

CR 1986/0010 Stockdale Prospecting Ltd, Annual Report ELs 4466-4474

CR 1986/0177 Stockdale Prospecting Ltd, Annual Report ELs 4466-4474 & 4641

Exploration Year 1: December 2011 – December 2012

During 2011 and 2012 LCR geologists undertook a desktop study of the Murphy Project Area including EL 28722. In addition to the geological maps, explanatory notes and regional geophysical datasets, the study incorporated open-file data provided by the NTGS; this included historical stream sediment sample data, together with historical company reports.

A search by the Aboriginal Areas Protection Authority (AAPA) for culturally significant areas was carried out in March 2012.

LCR's proposed work program was sent to the NLC in March 2012. The initial meeting to discuss this program was scheduled for 13th September; however, this was postponed and rescheduled for 30th October. This meeting was postponed and rescheduled again for 13th November. With the work program for the tenement being approved by the NLC and Traditional Owners late in the field season, both airborne and on-ground exploration could not be undertaken.

The primary outcome of the meeting on 13th November 2012 was that the Traditional Owners approved LCR's work program as presented. A liaison committee meeting will be held before any ground work commences to discuss Cultural Monitors accompanying the LCR field team.

Exploration Year 2: December 2012 – December 2013

During 2012 and 2013 LCR planned to fly a high resolution radiometric and magnetic airborne survey to facilitate targeting over the tenement area. Quotes obtained by LCR were approximately $150,000 to survey the whole Murphy Project area.

LCR experienced exploration delays on EL 28722 as the proposed $8.5 million ASX listing only attracted $1.8 million due to poor investor appetite for uranium stocks. With this in mind LCR reviewed quotes for the airborne survey. Once this survey has been completed, LCR will then be able to assess and interrogate the data, develop an exploration plan, and due to the remoteness develop an access plan, over the wet season.

Target Selection

LCR will select initial target areas after all data is collected from the initial radiometric and magnetic airborne geophysical survey.

CONCLUSION

During Year 1, airborne or on-ground exploration on EL 28722 was postponed due to Land Access meetings with the NLC and Traditional Owners. However, in this time, the AAPA carried out a search for culturally significant areas within the tenement and LCR completed a thorough desktop study of the area.

During Year 2, exploration was delayed on EL 28722 due to Laramide Resources ASX listing attracting limited investors; however, LCR did complete a review of quotes for the airborne geophysics survey.

Proposed Work Program for Year 3: December 2013 – December 2014

It is anticipated that an initial radiometric and magnetic airborne geophysical survey be carried out using a fixed winged aircraft. This would likely comprise approximately 15,898 line kilometres at 100m spacing, and use a flight line to tie line ratio of 10:1, at an approximate flying height of 40m.

In light of the airborne survey, LCR will analyse the data collected and review preliminary targets and historical data from the desktop study carried out in Year 1 to aid initial targeting.

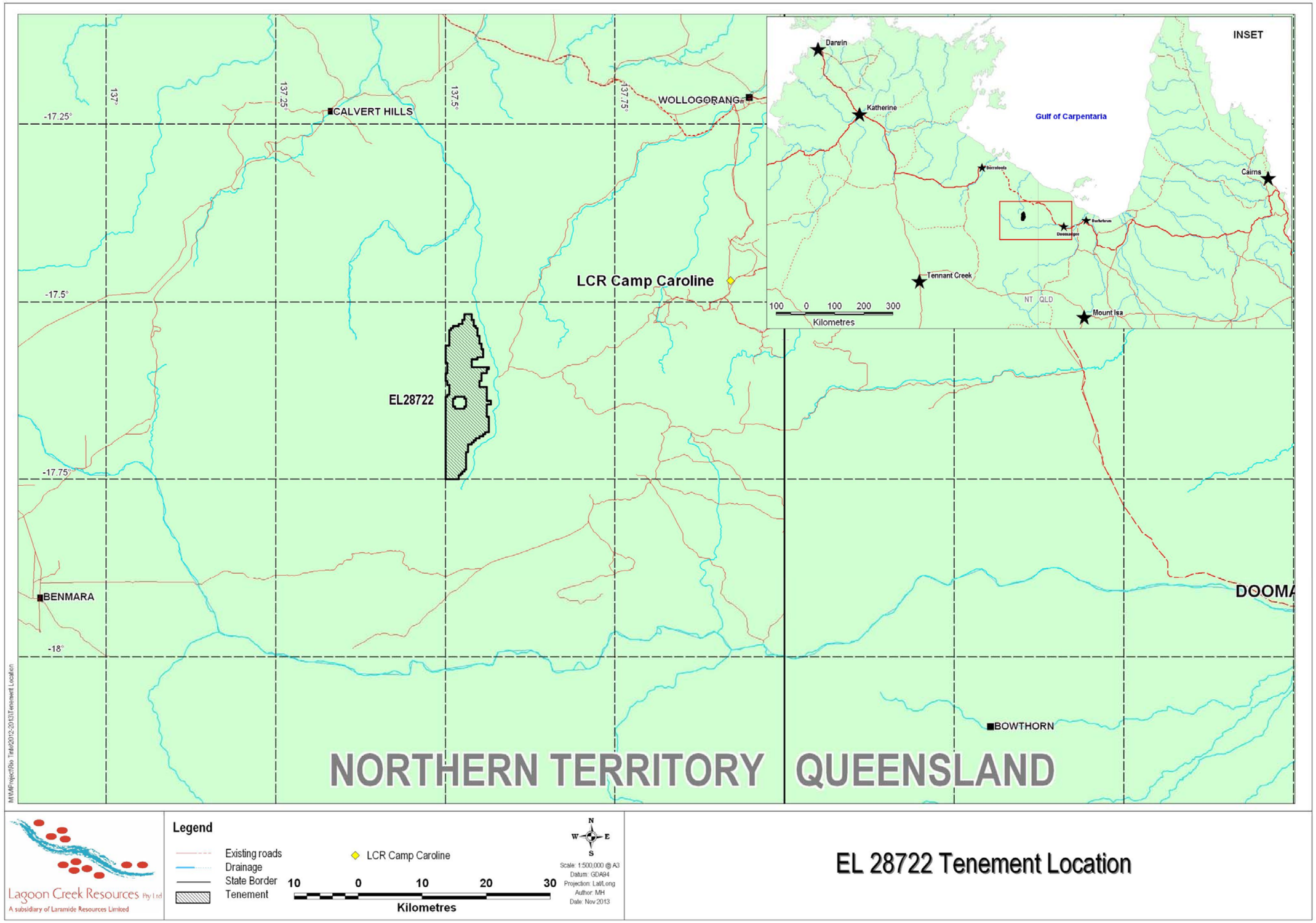
Ground work on initial target areas may comprise a combination of stream sediment sampling, soil sampling with spectrometer/scintillometer surveys, together with geological mapping and rock chip sampling.

If warranted, and time permits, a Versatile Time-Domain Electromagnetic (VTEM) survey may be undertaken.

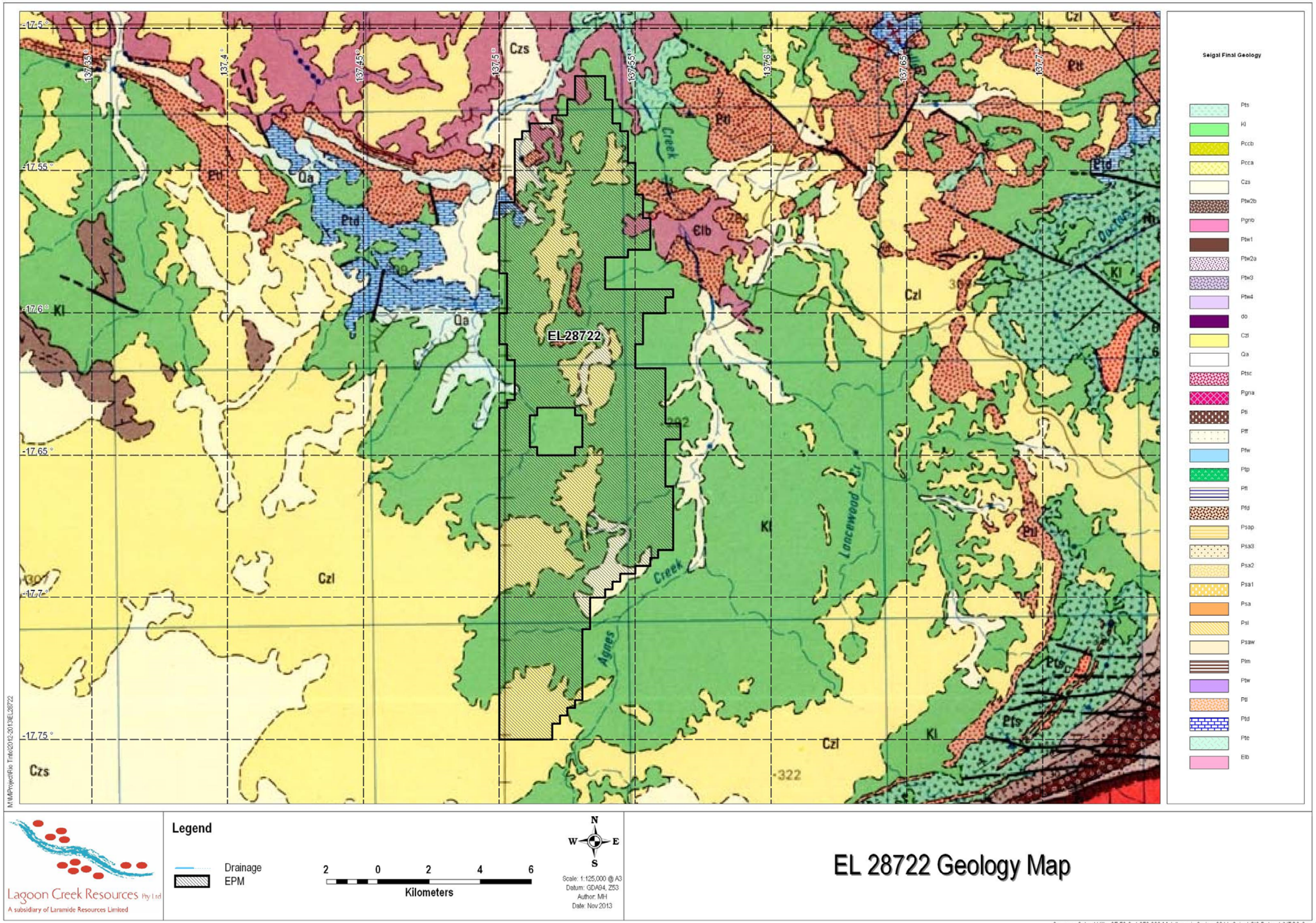
REFERENCES

- Ahmad, M and Wygralak, A S, 1989: Geological map: 1: 250,000 Sheet (SE53-08 Calvert Hills)
- Plumb, K.A., Derrick, G.M., 1975 – Geology of the Proterozoic Rocks of the Kimberly to Mt Isa region *in* Knight, C.L., (Editor) Economic Geology of Australia and Papua New Guinea. *Australian Institute of Mining and Metallurgy, Monograph Series,* 5, 217-252.
- 2011 NTGS Dataset: Seigal GIS Data Package incorporating “MODAT”, the Northern Territory’s Mineral Occurrence Database.
- Northern Territory Natural Resource Management (NRM) InfoCentre http://www.ntinfonet.org.au/reports/

APPENDIX 1


INSET
Darwin
Katherine
Gulf of Carpentaria
Cairns
Tennant Creek
Mount Isa
NT
QLD
100 0 100 200 300
Kilometres
137°
137.25°
137.5°
137.75°
-17.25°
-17.5°
-17.75°
-18°
CALVERT HILLS
WOLLOGORANG
LCR Camp Caroline
EL28722
BENMARA
BOWTHORN
DOOMA
NORTHERN TERRITORY
QUEENSLAND
M:\MProject\Rio Tinto\2012-2013\Tenement Location
Legend
Existing roads
Drainage
State Border
Tenement
LCR Camp Caroline
10 0 10 20 30
Kilometres
N
W
E
S
Scale: 1:500,000 @ A3
Datum: GDA94
Projection: Lat/Long
Author: MH
Date: Nov 2013
Lagoon Creek Resources Pty Ltd
A subsidiary of Laramide Resources Limited
EL 28722 Tenement Location

APPENDIX 2


EL28722
Czs
Czl
Kl
Ptl
Ptd
Qa
Elb
Ptt
Pts
Agnes Creek
Lancewood Cr.
Creek
-17.5°
-17.55°
-17.6°
-17.65°
-17.7°
-17.75°
137.35°
137.4°
137.45°
137.5°
137.55°
137.6°
137.65°
137.7°
-322
Seigal Final Geology
Pts
Kl
Pccb
Pcca
Czs
Ptw2b
Pgnb
Ptw1
Ptw2a
Ptw3
Ptw4
do
Czl
Qa
Ptsc
Pgna
Pti
Pff
Pfw
Ptp
Pfl
Pfd
Psap
Psa3
Psa2
Psa1
Psa
Psl
Psaw
Plm
Ptw
Ptl
Ptd
Pte
Elb
Lagoon Creek Resources Pty Ltd
A subsidiary of Laramide Resources Limited
Legend
Drainage
EPM
2 0 2 4 6
Kilometers
N
W
E
S
Scale: 1:125,000 @ A3
Datum: GDA94, Z53
Author: MH
Date: Nov 2013
EL 28722 Geology Map

Sources: Calvert Hills, SE 53-8, 1:250,000 Metallogenic Series; 2011, Seigal GIS Dataset (NTGS Openfile dat