YEAR 2

ANNUAL REPORT

ARTHUR CREEK (EL27845)

Title Holder:	**NATURAL RESOURCES EXPLORATION PTY. LTD.**
Operator:	Natural Resources Exploration Pty. Ltd.
Tenement Manager:	Nicole Munro, Natural Resources Exploration Pty. Ltd.
Titles / Tenements:	EL(s): 27845
Project Names:	Arthur Creek
Report Title:	**Year 2 Annual Report – Arthur Creek (EL 27845)**
Type of Report:	Annual Report
Author(s):	Nicole Munro
Company Ref:	NRE_NT2012: ARTHUR CREEK Year 2 Annual Report
Target Commodity / Commodities:	Phosphate and base metal mineralisation
Date of Report:	10 October 2012
Contact Details:	

NATURAL RESOURCES EXPLORATION PTY. LTD.

PO Box 9235, Gold Coast Mail Centre, QLD 9726

Level 8 Corporate Centre, 2 Corporate Ct, Bundall QLD

Tel: (07) 5644 5500 **Fax:** (07) 5528 4558

Email: info@naturalresources.net.au

Contents

Figures

Tables

Summary

Section 94 of the ***Mineral Titles Act*** requires the submission of an Annual Report prepared by the titleholder for each exploration licence. The purpose of the following Annual Report for Exploration Licence (EL) 27845 is to provide a summary of the activities carried out over the licence area in the past 12 months, including any results produced by those activities.

NRE has carried out a detailed geological assessment of its Arthur Creek Project, during the second year of grant. NRE's exploration rationale and objectives for its Arthur Creek Project considered the evaluation of phosphate and base metal mineralisation.

The detailed desktop geological assessment of the Arthur Creek Project led to the following up of possible shallow phosphate and base metal mineralisation by a helicopter reconnaissance program. NRE's targeted areas for ground evaluation during this program were mainly directed towards discrete highs identified on imagery of previous geophysical surveys, in particular aeromagnetics and radiometrics. Sites were tested using a scintillometer with geological observations being recorded at each target site. A majority of this tenure is covered by Cainozoic clay, gravel and soil with minor claypan however there are a number of Cambro-Ordovician Tomahawk beds within the tenure.

NRE's exploration activities have included considerable investigation and research of the helicopter reconnaissance program in order to assess the prospectivity of the region and define the next steps of exploration.

NRE is looking forward to further desktop studies in the third term to determine the possible explanation for the discrete highs and highs identified in processed imagery (including ASTER) in relation to the lack of geological observations noted during NRE's reconnaissance program.

1. Introduction

Natural Resources Exploration ('NRE') has conducted extensive office-based studies and field work during the second term of its Arthur Creek Project, EL27845. The tenure is located in the Southern Georgina Basin north of the Plenty Highway.

NRE conducted an extensive review of all previous exploration across the tenement and completed a reconnaissance helicopter assisted field trip across the tenure. Sites were tested using a scintillometer with geological observations being recorded at each target site. NRE's activities also included considerable research of the helicopter reconnaissance program in order to assess the prospectivity of the region and define the next steps of exploration.

NRE's activities have encouraged further desktop studies to be undertaken in the third term in order to eliminate the potential for mineral occurrences within the tenure.

2. Tenure

NRE's exploration licence EL27845 is more commonly known to NRE as its Arthur Creek Project. The tenure consists of 50 sub-blocks across the Southern Georgina Basin making up an area of approximately 159 square kilometres. The tenure was granted on 11 August 2010 for a term of six (6) years. ***Table 1*** lists the pertinent tenement details.

Table 1. Tenement Details

Project Name	Tenement Name	Title No. (EL)	Sub-blocks	Sq. Km	Status	Grant Date	Term (Yrs)	Expiry Date
Southern Georgina	**Arthur Creek**	**27845**	50	159	Granted	**11 Aug 10**	6	10 Aug 16

Native Title

There are currently no Native Title Claims over the tenure.

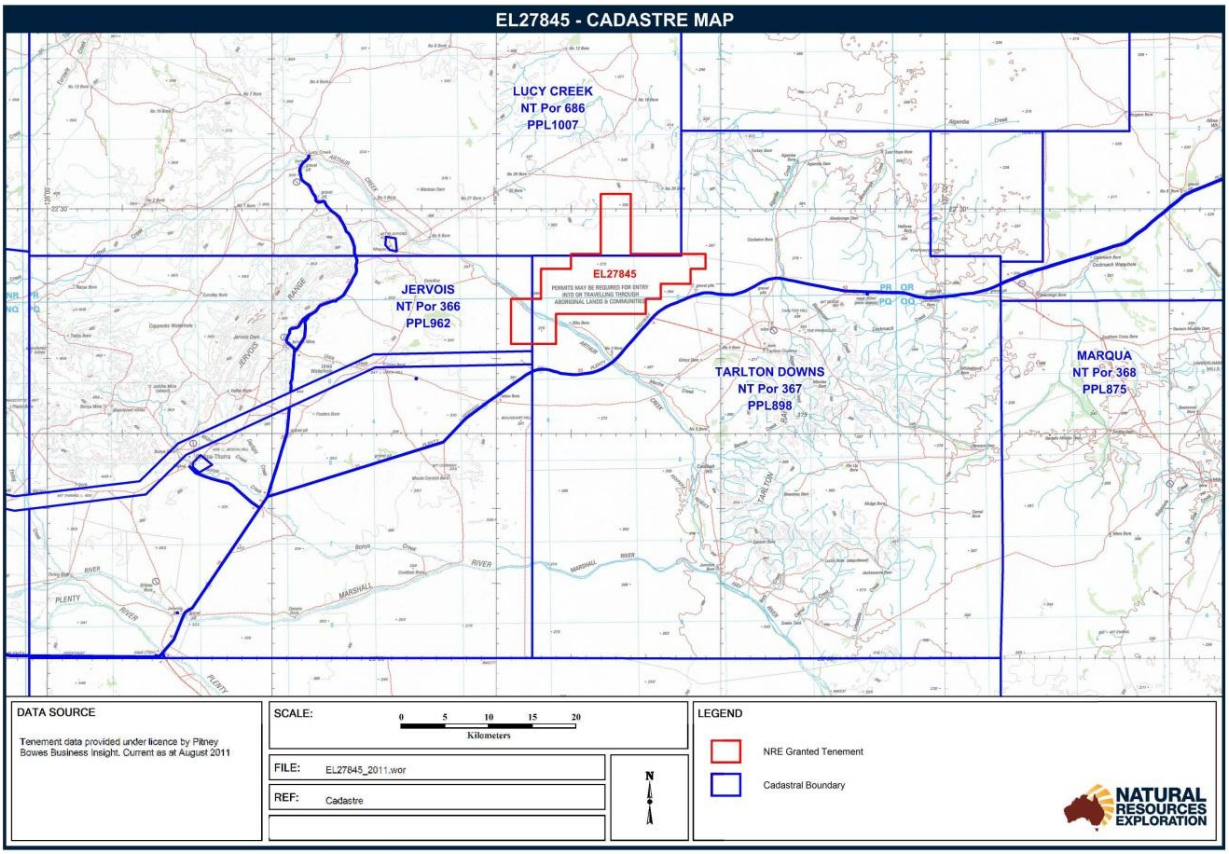
Recorded Sites

The Aboriginal Areas Protection Authority (AAPA) has identified no sacred sites within EL27845.

Pastoral Leases

NRE's Arthur Creek Project overlies three (3) Pastoral Leases, namely NT Por 686 PPL 1007 ("Lucy Creek Station"), NT Por 366 PPL 962 ("Jervois Station") and NT Por 367 PPL 898 ("Tarlton Downs"). ***Figure 1*** shows these leases in relation to the tenure.

Figure 1. Cadastral Map



2.1 Location and Access

Exploration Licence (EL) 27845 is located in the southern Georgina Basin approximately 3 kilometres north of the Plenty Highway. The location of the tenure is shown in ***Figure 2.***

The tenure can be easily accessed using station roads off the Plenty Highway. Existing rail infrastructure lies approximately 130km from the western margin of the project area. A series of unsealed tracks can be utilized to access tenure, but further clearing may be required to reach all target sites. Access to the tenure is identified in ***Figure 3***.

Figure 2. Location Map

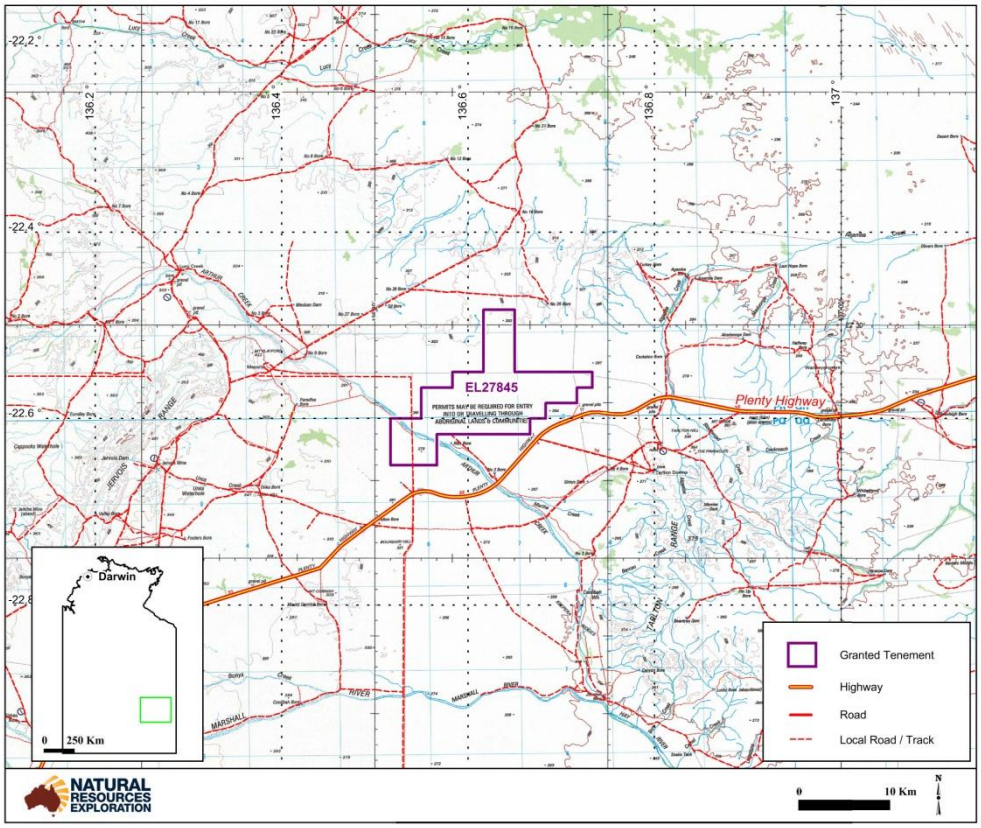
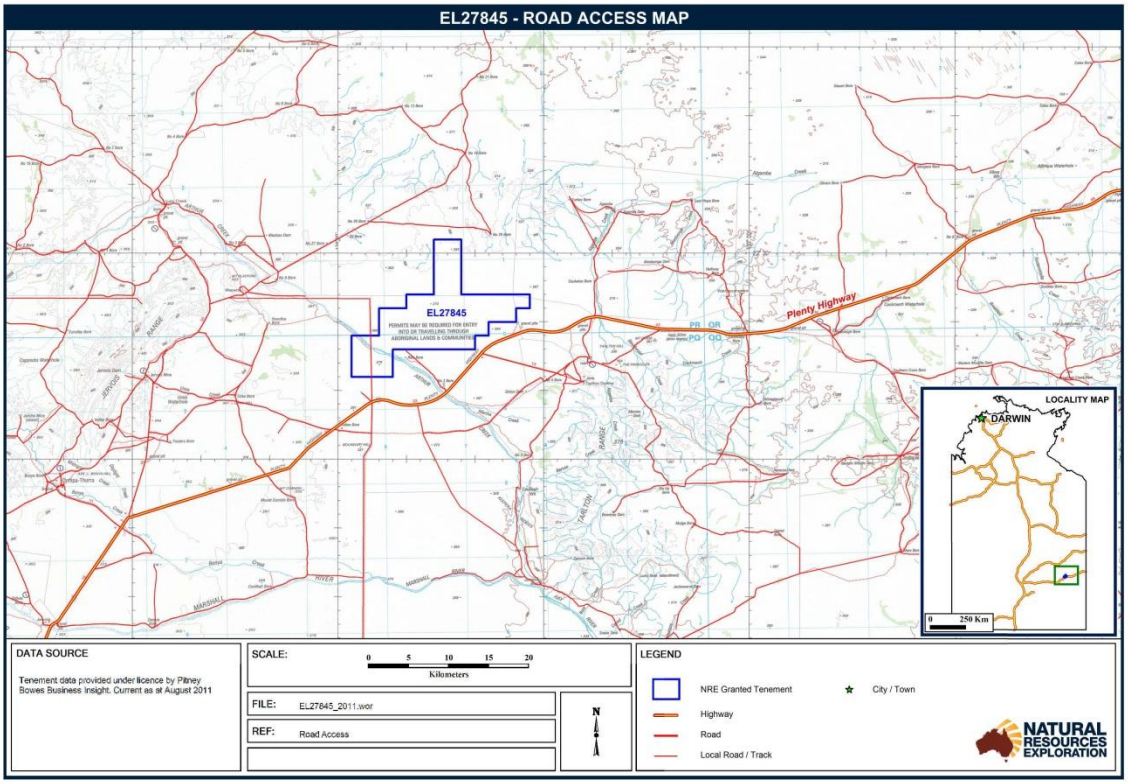


Figure 3. Access Map



3. Geology

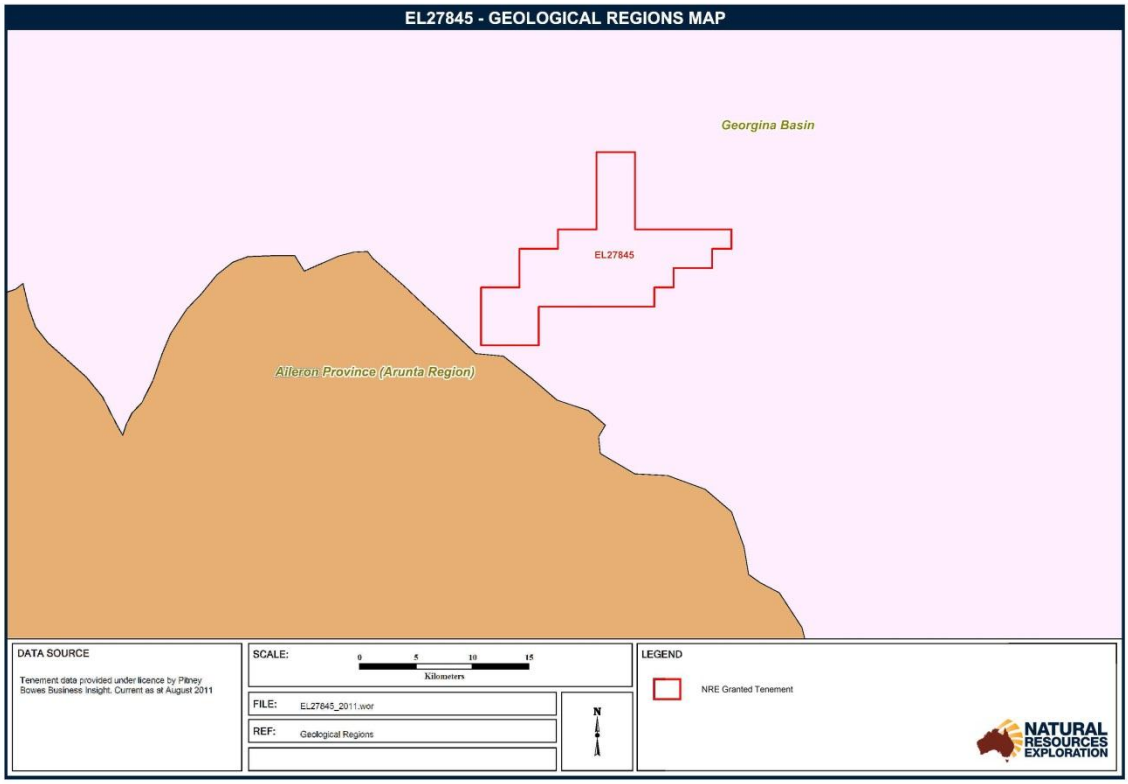
3.1 Regional Geology

The Arthur Creek Project is located in the Southern Georgina Basin. The Georgina Basin is a large intracratonic sedimentary basin in central and northern Australia, lying mostly within the Northern Territory and partly within Queensland. It is named after the Georgina River which drains part of the basin. Deposition of locally up to ca. 4 kilometres of marine and non-marine sedimentary rocks took place from the Neoproterozoic to the late Paleozoic.

Along with other nearby sedimentary basins of similar age such as the Amadeus Basin and Officer basin, the Georgina Basin is to believe to have once been part of the hypothetical Centralian Superbasin, that was fragmented during episodes of tectonic activity. The Georgina Basin overlies the Aileron Province, Tennant Region, Murphy Inlier, McArthur and South Nicholson Basins and Lawn Hill Platform. It is interpreted to be contiguous at depth with Wiso and Daly Basins and conformably overlies the Kalkarindji Province.

The regional geology is shown in ***Figure 4***. The general Lithostratigraphic Ledgend illustrating the rock relationships across part of the Tobermory 1:250,000 geological map is shown in ***Figure 5***.

Figure 4. Regional Geology Map



The Georgina Basin is a broad, northwest-southwest trending intracratonic depression which underlies an area of some 325,000 square kilometres of the Northern Territory and Queensland. Approximately 60 percent of the basin area lies within the Northern Territory.

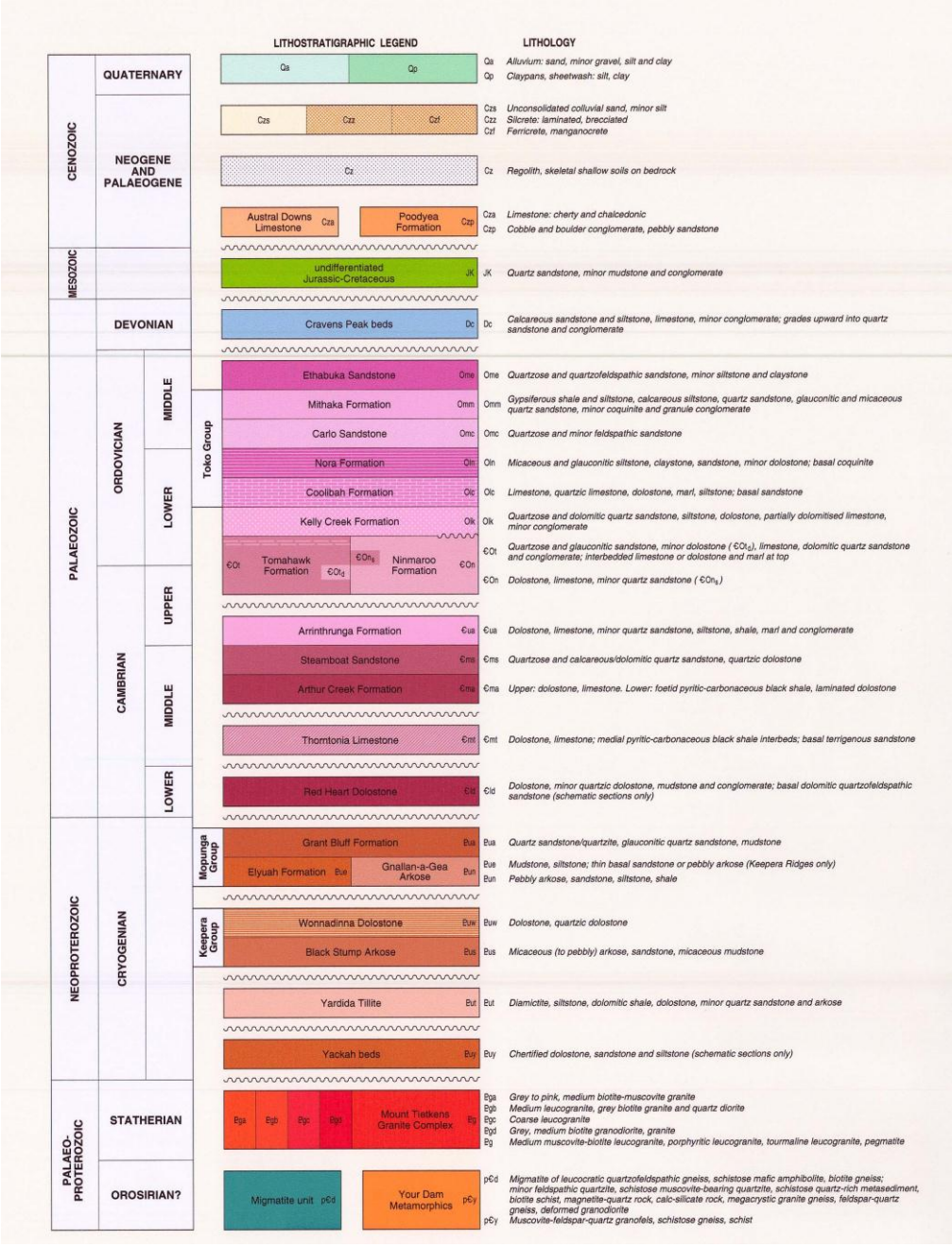
The Georgina Basin has a maximum sediment thickness in the south (Toko and Dulcie Synclines) including the area covered by NRE's Arthur Creek Prospect tenement, and east (Bruke River Belt), with a much thinner succession in the central and northern parts of the basin (Barkly and Undilla Sub-basins).

The Georgina Basin contains Cambrian and Ordovician, predominantly marine carbonate and clastic sediments, Devonian continental sediments and, in places, Neoproterozoic clastics. After an initial period of rift filling, sediments were deposited in a series of subtidal to supratidal environments over part of an extensive epicontinental shelf. The Palaeozoic sequence progressively thickens in a south-southeasterly direction, rarely exceeding 400 metres in the northern half of the basin, and reaching about 5000 metres in the southeast of the basin. The sedimentary sequence has been neither metamorphosed nor intruded by igneous rocks.

In the latest Cambrian, the Delamerian Orogeny caused a change to predominantly marine siliciclastic deposition in the southwest, with carbonate deposition continuing in the southeast. This pattern persisted until deposition ceased during the Middle Ordovician. In the Early to Late Devonian, the Arunta Block was uplifted during a phase of the Alice Springs Orogeny and fluvial siliciclastics deposited along the southern margin of the basin. Despite extensive potential source rocks in the early Middle Cambrian of the southern part of the basin, numerous oil shows and an uneconomic gas flow in Ethabuka 1, little exploration has been undertaken.

The basin has been deformed by minor to moderate folding and faulting, especially in the south and east, with moderate to severe folding and faulting and extensive overthrusting along the southern and southwestern margin. Most of the structural deformation occurred during the Late Devonian to Early Carboniferous Alice Springs Orogeny. The northern part of the Georgina Basin sequence is gently undulating with no pronounced folding recognised other than supratenuous (drape) folding.

Figure 5. Lithostratigraphic legend for rock units on Tobermory 1:250K sheet.



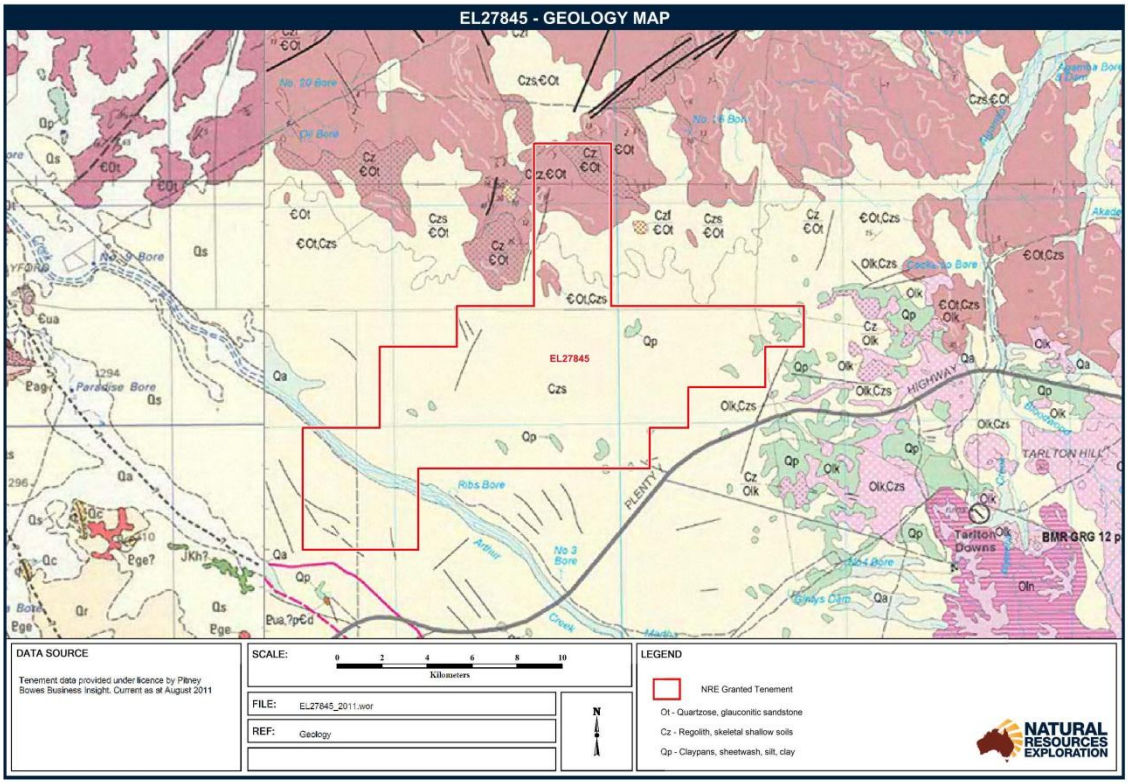
3.2 Permit Geology

The permit / local geology within the Arthur Creek prospect is generally poorly outcropping. The geology includes Cambrian units of the Georgina Basin with some remnant Cretaceous of the Dunmarra Basin and regolith (silcretes and calcretes) of Tertiary and Quaternary age. The southern region contains the thickest basinal successions, and demonstrates the strongest structuring related to distal effects of the 320Ma Alice Springs Orogeny. In contrast to the southern region, the central Georgina Basin, north of latitude 21°S, contains

a relatively thin stratigraphic succession, up to 450 m thick, deposited on a tectonically quiescent platform. Deposition in the central region commenced with a marine transgression in the early Middle Cambrian and may have extended into the Late Cambrian.

This central platform has been subdivided into an eastern Undilla Sub-basin and a western Barkly Sub-basin, separated by the Alexandria-Wonarah Basement High. The northern Georgina Basin is largely concealed beneath Mesozoic sedimentary rocks of the Dunmarra Basin (NTGS, 2010). Locally overlying the Palaeozoic rocks are thin deposits of flat lying late Palaeogene (c. 25Ma) limestone. Thin deposits of Cretaceous marine sediments also locally occur on the northern margin of the Barkly Tableland (Edgoose, 2003). Phosphatic marine sediment (phosphorite) occurs in the Middle Cambrian and Middle Ordovician rocks of the Georgina Basin. Australia's largest deposits of sedimentary phosphorite are situated in the Cambrian stratigraphy across this region (Freeman *etal*, 1990). A model outlining the interpreted phosphatic horizon extent has been developed, extending in to the the Dunmarra and Wiso Basins. The geology has been mapped and interpreted across the Tobermory 1:250,000 geological sheets by government geologists. The permit geology is illustrated in ***Figure 6*** below.

Figure 6. Permit Geology Map



Economic phosphate deposits in Middle Cambrian rocks are being mined at Phosphate Hill across the border in Queensland. Development and exploration is being carried out at a

series of further phosphate deposits and prospects across the basin within the Northern Territory.

A series of the deposits within the Georgina Basin that have had resources calculated to date are outlined in Table 2. Note that only those marked with an asterix (*) are considered JORC compliant, all others are documented historical occurrences reported with substantial bulk mineralisation estimates. Further drilling at these prospects is required to meet today's resource reporting standards.

Table 2. Currently documented phosphate resources in the Georgina Basin.

NAME	RESOURCE	COMPANY
Wonarah	969 Mt @ 19% P2O5*	Minemakers Ltd
Arruwurra	136 Mt @ 17% P2O5*	Minemakers Ltd
Alexandria	15 Mt @ 10% P2O5	Phosphate Australia Ltd
Highland Plains	56 Mt @ 16% P2O5*	Phosphate Australia Ltd
Alroy	5 Mt @ 20% P2O5	Phosphate Australia Ltd
Buchanan Dam	8 Mt @ 20% P2O5	Phosphate Australia Ltd
D-Tree* (Queensland)	250Mt @18.6% P2O5	Legend International Holdings

4. NRE's Exploration Activities during the Reporting Period

NRE's exploration program for the second term of the Arthur Creek Prospect consisted of an extensive regional assessment of the area for phosphate and base metal mineralisation. NRE also undertook a helicopter assisted reconnaissance field program over the area... The targets within the Arthur Creek Prospect areas were identified based on desk top research of regional geological and geophysical data, augmented with compilation and assessment of all previous exploration results. A majority of this tenure is covered by Cainozoic clay, gravel and soil with minor claypan however there are a number of Cambro-Ordovician Tomahawk beds within the tenure.

An array of material was assessed prior to field work to assist with optimal target generation and included:

- Data from all previous exploration as documented in open file reports retrieved from the Northern Territory Government, including:
    - Surface geological sampling,
    - Geochemical anomalism mapping,

- Geological mapping,
- Detailed geophysical survey data,
- Geophysical anomalism mapping,
- Drilling results, and
- Local and regional geological assessments and conclusions derived from exploration programs.

- Water bore data available for all bores drilled in the regions of interest. This data includes geological logging and water assaying.

- Geological maps provided by the Northern Territory Government.

- Aeromagnetics, aero-radiometrics and gravity surveys provided by the Northern Territory Government.

- Satellite imagery, ASTER and Google Earth imagery.

- Data supplied by landowners in relation to geological and topographic features of interest on their properties.

4.1 Exploration Studies

NRE is continually developing its geological knowledge database. During the second term, NRE conducted a further extensive review of historic exploration over its Arthur Creek Prospect. The Georgina Basin hosts Australia's most economic phosphate deposits in the Middle Cambrian rocks, such as Phosphate Hill across the border in Queensland and Wonarah in Southern Georgina Basin.

Exploration in the area covered by Arthur Creek is limited and of the exploration that has been conducted, majority of that exploration was for diamonds.

Phosphate mineralisation has been delineated in reasonably close proximity to NRE's tenure at the Marqua, Ammaroo and Arthur Creek Projects. Geological correlation indicates that NRE's prospect area has potential to host similar mineralisation. Phosphate exploration in each of these areas is in its early stages, with promising early intercepts at each prospect including the following:

> ***Marqua:*** 10m@14.5% P_2O_5 from 9m (including 3m@25.1% P_2O_5) and 8m@18.8% P_2O_5 from 11m (including 3m@27.1% P_2O_5).
> ***Ammaroo:*** 20m@16.7% P_2O_5 from 34m and 13m@14.2% P_2O_5 from23m.
> ***Arthur Creek:*** 10m@22.5% P_2O_5 and 40m @ 18.09% P_2O_5 (including 10m@31.95% P_2O_5)

Previous exploration has been summarised in ***Table 3*** and location of historic tenements is shown in ***Figure 7***.

Figure 7. Historic tenements over NRE's Arthur Creek Prospect.

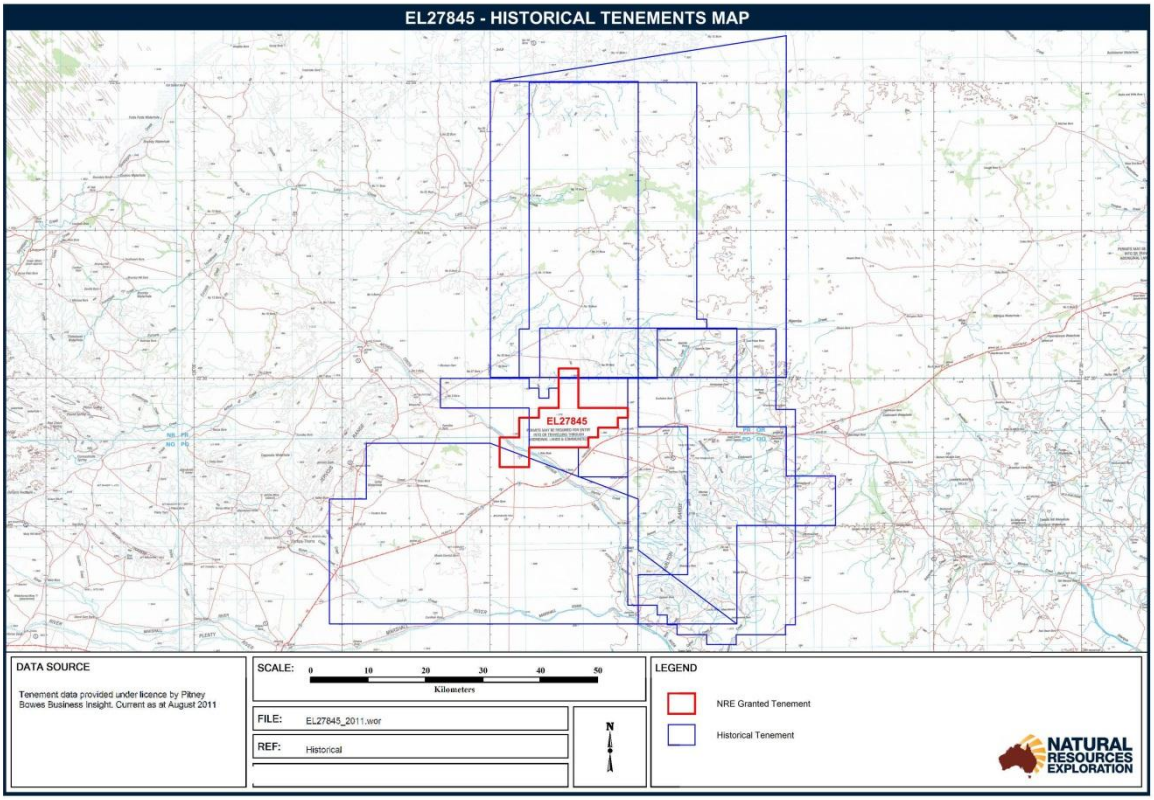


Table 3. Historic Tenures

Tenement	Granted	Company Reports	Company
EL23306	2002-2004	CR2004-0611	Elkedra Diamonds N.L
EL22529	2002-2004	CR2004-0609	Elkedra Diamonds N.L
EL22534	2001-2005	CR2002-0133,CR2005-0680	Elkedra Diamonds N.L
EL4621	1984-1990	CR1985-0272	CRA Exporation Pty Ltd
AP3161	1971-1972	CR1972-0016	Petrocarb Exploration N.L
AP3085	1971-1972	CR1971-0080	Arberlour Pty Ltd
EL1229	1976-1977	CR1977-0102	Carpentaria Exploration Company Pty Ltd

4.2 Helicopter Reconnaissance

During the second term, NRE completed a helicopter reconnaissance assisted field trip over the Arthur Creek Prospect. NRE introduced themselves to local landholders, assessed a number of field targets across the tenement and carried out geological mapping of the area.

The field trip proved successful in evaluating the tenement in the most effective and timely manner possible.

Field assessment of the prospects involved an initial low fly over before determining whether a landing was viable for each target site. In most cases, a landing was made. Assessment at each site involved a variety of the following tasks:

- Geological and structural note taking and measurements
- Radiometric measurements
- Observations of outcrop boundaries where relevant
- Botanical and physiographic appraisal
- Photography of the features of interest at each site.

Detailed geological characteristics were recorded at each site. In addition to planned target sites, all areas identified in the air as being characterised by features anomalous to that mapped or revealed in currently available data sets were assessed.

Geological ground truthing has produced new information regarding surface characteristics across the Arthur Creek prospect. Observations have been made at all target sites detailing the actual setting to ensure follow up work is carried out with optimal effectiveness.

An assessment has been made of each target visited during the program in order to assist in designing future exploration programmes for Arthur Creek. All field observations and assay data collected from the field trip were assimilated in order to optimally define prospectivity based on this work.

A majority of this tenure is covered by Cainozoic clay, gravel and soil with minor claypan however there are a number of Cambro-Ordovician Tomahawk beds within the tenure. Targets of the reconnaissance program were directed towards mainly discrete highs identified on imagery. Further desktop studies are required on this tenure to eliminate the potential for mineral occurrences within the tenure.

5. NRE's Exploration Activities for next 12 month period

There is currently phosphate potential in respect of Arthur Creek and it is expected that phosphate mineralisation will be quite shallow given that this tenure is located on the Southern Georgina Basin edge. Phosphate mineralisation in the tenure is further supported by the proximity of this tenure to the Marqua Phosphate Project (10m @ 14.5 P_2O_5 from 9m), Ammaroo Phosphate Project (20m@16.7% P_2O_5 from 34m) and the Arthur Creek Phosphate Project (10m@22.5% P_2O_5 from 40m). It would appear that eventually, a RAB/Aircore or Reverse Circulation percussion drilling would be required to test for phosphatic horizons within the tenure.

During the third term, NRE is looking forward to undertaking further desktop studies to determine the possible explanation for the discrete highs and highs identified in processed imagery (including ASTER) in relation to the lack of geological observations noted during NRE's reconnaissance program.

NRE will also be reviewing any additional open file reports retrieved from the Northern Territory Government which may assist in assessing the prospectivity of the tenure. Failing to delineate any further targets on this tenure, NRE will then conduct a final review prior to relinquishment.

6. Reports lodged during the reporting period

NRE believes that no other reports were required to be lodged during this reporting period.

7. Conclusions

Natural Resources Exploration's ('NRE') exploration activities during the second term of its Arthur Creek Project have been focused on delineating surface targets for phosphate and base metal mineralisation.

Detailed desktop geological assessment of the Arthur Creek Project led to the following up of possible shallow phosphate and base metal mineralisation by a helicopter reconnaissance program. NRE's targeted areas for ground evaluation during this program were mainly directed towards discrete highs identified on imagery of previous geophysical surveys, in particular aeromagnetics and radiometrics. Sites were tested using a scintillometer with geological observations being recorded at each target site. A majority of this tenure is covered by Cainozoic clay, gravel and soil with minor claypan however there are a number of Cambro-Ordovician Tomahawk beds within the tenure. NRE's exploration activities during the second term included considerable research and assessment of the helicopter reconnaissance program to assess the prospectivity of the region and define the next steps of exploration.

NRE's activities during the second term have encouraged further desktop studies to be undertaken in order to eliminate the potential for mineral occurrences within the tenure. NRE is looking forward to its exploration activities during the third term of the Arthur Creek Project.

8. Bibliography

Ambrose G, 2006. Northern Territory of Australia, onshore hydrocarbon potential, 2006. *Northern Territory Geological Survey, Record* 2006-003.

Dunster JN, Kruse PD, Duffett ML and Ambrose GJ. Geology and resource potential of the southern Georgina Basin. *Northern Territory Geological Survey, Digital Information Package* DIP 007.

Dunster J.N., Kruse, P.D., Duffett, M.L. and Ambrose, G.J., 2007. Geology and resource potential of the southern Georgina Basin: Northern Territory Geological Survey, Digital Information Package DIP 007.

Freeman, M.J., Shergold, J.H., Morris, D.G. and Walter, M.R., 1990. Late Proterozoic and Palaeozoic basins of Central and northern Australia – regional geology and mineralization.

Munson TJ and Ambrose GJ (editors), 2007. *'Proceedings of the Central Australian Basins Symposium (CABS), Alice Springs, Northern Territory, 16-18 August, 2005.' Northern Territory Geological Survey, Special Publication* 2

Questa, 1994. Georgina Basin. *Northern Territory Geological Survey Petroleum Basin Study*.

Smith, K.G., 1972, Stratigraphy of the Georgina Basin., Bureau of Mineral Resources, Australia. Bulletin, 111,

Shergold, J.H., Druce, E.C., 1980, Upper Proterozoic and Lower Palaeozoic rocks of the Georgina Basin. IN Henderson R.A. & Stephenson P.J.(Eds) - The geology and geophysics of northeastern Australia., Geological Society of Australia. Queensland Division, 1v, p149-174.

Note these (and many more) references are also located in the References section of the Tobermory 1:250,000 geological map series explanatory notes.