PROSPECTIVITY ASSESSMENT AND VALUATION

on the

Regional Tenement holdings

in

Queensland and the Northern Territory

for

AUSTRALIS RESOURCES LIMITED AND MOJO MINING LIMITED

30 June 2010

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PROSPECTIVITY ASSESSMENT AND VALUATION

Prepared by RAVENSGATE on behalf of:

Australis Resources Ltd and Mojo Mining Ltd

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Date: 30 June 2010

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Don Maclean
For and on behalf of:
RAVENSGATE

Contents

1. EXECUTIVE SUMMARY

Ravensgate has been commissioned by Australis Resources Limited (Australis) to provide a review of their phosphate, uranium and base metal projects in Queensland and the Northern Territory, assess their prospectivity, analyse previous work, and make recommendations on tenement holding strategies and future exploration programs and budgets. In addition Australis have requested an Independent Technical Valuation of the company's leases for internal use.

Australis Resources Limited and Mojo Mining Limited have acquired a very large holding of exploration licenses and license applications comprising some 70 tenements covering 45,149 km^2 of Queensland and the Northern Territory. Of this 31 tenements (25,124 $km^{2)}$ are granted with the remainder applications in Queensland that are at varying stages of the title application process.

Australis's and Mojo's licenses are centred on the Georgina Basin, an extensive sedimentary basin infilled with predominantly Cambrian age marine carbonate rocks. Elsewhere in the basin these Mid-Cambrian carbonates host large sedimentary phosphate deposits including Phosphate Hill, D Tree, Wonarah and Highland Plains. Forming the basement to the Georgina Basin is a sequence of Proterozoic rocks including interpreted extensions of the highly mineralised Mount Isa Inlier which hosts several world class Zn-Pb-Ag and Cu deposits including Mt Isa, Hilton and Century.

This large tenement holding has been grouped into ten geographic project areas. Five project areas lie in the eastern Northern Territory (Mittiebah, Desert Creek, Ranken, Tablelands, Tobermorey) and five lie in northwest Queensland (Mojo, Camooweal, West Isa, Glenormiston, Boulia)

Ravensgate has completed an extensive review of the geology, previous exploration and prospectivity of these project areas and collated and identified exploration targets focussing on phosphate, base metal and uranium. The projects generally have had little in the way of modern exploration. The identified targets and have been categorized as 'grass roots' or conceptual nature, with most having been generated from regional geophysical data-sets. These targets have been rated and ranked using various geological and economic parameters to aid in assessing prospectivity, developing exploration programs and associated high-level exploration operational budgets.

Of note is that a review of the scant amounts of historic government sponsored drilling and drilling by previous explorers has not identified any phosphate assays of potentially economic grades (however most drillholes were not assayed for phosphate). In addition most of all of the identified base metal targets lie below substantial cover (>200m) which means direct detection of mineralisation is difficult with exploration relying on conceptual geological and geophysical targeting along with relatively expensive deep drilling to assess targets.

Australis's and Mojo's large landholding has very substantial annual financial commitments particularly on the Queensland holdings (in excess of $12M pa if all tenements are granted). This vast tenement package also presents challenges to exploring in a cost effective and systematic manner and indeed in raising this amount of funding to meet expenditure requirements.
Australis is aware there is need to rationalise the tenement holdings and develop a strategy for extracting the best value from the properties. Following extensive review of the geology, geophysics and previous work Ravensgate suggests the following approach:

<u>Phosphate Prospectivity:</u>

- The best phosphate targets lie in the Camooweal Project area in close proximity to the Sherrin Creek and Lily Creek Deposits. Ravensgate recommends accepting grant of the majority of the tenements in that project area (those which lie on the Georgina Basin margin)
- Hold the Mittiebah, Ranken, and Desert Creek projects in the NT. These are in close proximity to other known deposits such as Alroy, Wonarah and Alexandria. The holding

costs of these tenements are less onerous than in Queensland and they have good potential and are strategic benefit.
- Complete an exploration program which would entail data compilation, field verification, sampling and mapping, followed by a scout drilling program in year one. Year two would be focussed on follow up drilling and testing lower order targets.
- Drop the Tablelands Project tenements (no targets)

Base metal Prospectivity:
- The best targets for identifying a Mount Isa style Pb-Zn or Cu deposit lies within the Mojo project area under deep cover (>300m), where the same stratigraphic sequence that hosts Mount Isa style mineralization may be likely to be at depth. Ravensgate recommends holding these tenements and carrying out a detailed geophysics and selected deep drilling on priority targets. As these targets are primarily geophysical, Ravensgate recommends a geophysist be intimately involved in all stages of program design and targeting. Of note is that these tenements have over $5Million in expenditure commitments to 2011. A reduction in land holding may be advantageous to reduce this commitment. In this case Ravensgate recommends dropping the western portion on the project area which in Ravensgates opinion appears to be less prospective (ie over the interpreted Syabella Granite) and/or dropping areas where cover is deep (ie >500m). It may also be worthwhile looking at joint venture options for this package.
- Base metal targets have been identified within Boulia, West Isa, and Glenormiston Project areas. All of these targets are under deep cover (>200m) and lie within an inferred Proterozoic basement areas. To explore will require detailed geophysics and deep drilling to evaluate target areas (ie expensive exploration). These tenements are all applications. Australis need to decide whether they accept grant of the tenements with the view to completing deep exploration, or alternately withdraw applications. Alternately reducing application areas to cover the immediate target areas may be an option or looking at joint venturing some or all of these projects.
- Ravensgate suggests applying for a Queensland Government Collaborative Drilling Initiative Grant (the next round opens on the 1st of July, 2010) to test some of these targets, particularly those in the Mojo area. Of note is that Mojo Mining previously had applied for one of these grants and was successful, but the grant expired before any drilling could be completed.

Uranium Prospectivity:
- Surficial uranium targets have been identified within the Tobermorey Project in the NT which is a granted tenement. These require ground 'truthing' and sampling. Should these targets be of merit then Ravensgate recommends a systematic exploration program involving surface sampling, mapping followed up by drilling.
- Surficial uranium targets have also been identified within the West Isa and Glenormiston project area in Queensland. The Glenormiston and Tobermorey targets represent a continuation of the same paleochannel from QLD to NT. These licences are all tenements in application. Queensland currently does not allow uranium mining which means any exploration completed would be with a view to this legislation possibly being changed in the near to medium term future. Australis has two options, either to complete exploration of this area further or to reject the grant of tenements. Ravensgate notes that the QLD tenements covered by these surficial uranium targets have no other prospective mineral targets (e.g. base metal or phosphate) and would need to be warranted necessary for tenement holdings solely on exploration targets for uranium.
- Surficial / Sandstone targets have been historically identified within the Longsight Sandstone and equivalents. These targets occur within the Boulia, Glenormiston and Mojo Projects. Current geological and geophysical information suggests a fairly low prospectivity however it is suggested that any exploration work carried out for deep-cover base metal targets also considers more shallow-surface overlying uranium mineralisation e.g. examination of drill core targeting base metals

A summary of the Australis and Mojo project valuations in 100% terms is provided in Table A for granted tenements and Table B for tenements in application. The applicable valuation date is 30 June 2010 and is derived from the Comparable Transaction valuation method after review of the Valuation Methods. The value of a 100% equity interest in the Australis NT and QLD Projects is considered to lie in a range from $9M to $47.8M (in total and assuming all relevant tenements in application are granted to Australis), within which range Ravensgate has selected a preferred value of $16.5M. The preferred value reflects the project's potential which remains to be fully tested and the accompanying opportunity to find economic mineralisation. In Ravensgate's opinion the provisional value also reflects the uncertain nature of early-stage, greenfields exploration for large tenement holdings. The valuation has been derived for 30 June 2010 and is only applicable at this point in time. The technical valuation is for internal purposes only and not for reporting on the ASX.

Table A Australis and MOJO Projects - Technical Valuation Summary for Granted Tenements Only. Minor rounding errors may occur.

Project	Asset	Equity Interest	Valuation		
			Low Aus$M	High Aus$M	Preferred Aus$M
Mittiebah Area, NT.	Phosphate	100% Australis	1.5	8.7	2.5
Mittiebah Area, NT.	Base Metal, Uranium, Iron	100% Australis	0.05	0.05	0.05
Desert Creek Area, NT.	Phosphate	100% Australis	0.85	4.9	1.5
Ranken Area, NT.	Phosphate	100% Australis	1.0	5.7	1.2
Tablelands Area, NT.	Base Metal, Uranium, Phosphate	100% Australis	0	0	0
Tobermorey Area, NT.	Uranium	100% Australis	0.5	1.2	1.0
Mojo Area, QLD.	Base Metal	100% MOJO	0.9	6.7	2.8
Mojo Area, QLD.	Uranium	100% MOJO	0.4	0.9	0.5
Camooweal Area, QLD.	Phosphate	100% Australis	0.1	0.8	0.4
Total			5.3	29	10.0

Table B Australis and MOJO Projects - Technical Valuation Summary for Tenements in Application Only. Minor rounding errors may occur.

Project	Asset	Equity Interest	Valuation		
			Low Aus$M	High Aus$M	Preferred Aus$M
Camooweal Area, QLD.	Phosphate	100% Australis	0.6	3.7	2.0
Boulia Area, QLD.	Base Metal	100% Australis	0.5	3.8	1.0

Boulia Area, QLD.	Uranium	100% Australis	0.05	0.05	0.05
West Isa Area, QLD.	Base Metal	100% Australis	0.3	2.3	0.4
West Isa Area, QLD.	Uranium	100% Australis	0.4	3.2	0.9
Glenormiston Area, QLD.	Base Metal	100% Australis	0.5	3.9	0.7
Glenormiston Area, QLD.	Uranium – Moderate Prospectivity	100% Australis	0.8	1.8	1.4
Glenormiston Area, QLD.	Uranium – Low Prospectivity	100% Australis	0.05	0.05	0.05
Total			3.7	18.8	6.5

2. TERMS OF REFERENCE

2.1 Introduction and Scope of Work

Ravensgate has been commissioned by Australis Resources Limited (Australis) to provide a review of the phosphate, uranium and base metal prospectivity of their Queensland and Northern Territory exploration leases and to provide an Independent Technical Valuation of these leases (for the company's internal use). Ravensgate understands the exploration tenements are held by Australis Resources Ltd and by Mojo Mining Ltd (Mojo). Ravensgate makes no other assertion as to the legal title of tenements and is not qualified to do so.

The scope of works outlined by Australis was to:

- Review previous work that has been completed within the tenement areas
- Systematically assess exploration targets that have been identified by other workers and identify additional targets
- Review and rank targets and identify targets for follow up
- Make recommendations or suggestions on where further work required and provide an estimate of high level year 1 and 2 exploration budgets required to advance the projects
- Make recommendations on tenement holdings and ground for relinquishment or refusal of grant (for tenements in application)
- Provide a valuation for internal purposes to aid in Australis's decision making process

2.2 Terms of Reference

The objective of this report is; (1) to provide a fair assessment of the geological prospectivity of the project areas; and, (2) to provide a project valuation and technical assessment of the mineralisation within the various NT and QLD Exploration Projects. The project valuation is not considered a strictly compliant Valmin valuation and is for internal purposes only. This reflects the inclusion of tenements under application where tenure or permits have not been granted to the relevant company and the company does not therefore own the tenements or any exploration value within the tenements. The project valuation has been split between granted tenements and tenements-in-application to provide an understanding of overall value increase if further relevant tenements are granted. Ravensgate considers that in other respects the valuation methodology is consistent irrespective of tenement status and fit for the purposes of internal reviews and studies. In conclusion the valuation is intended for Australis's and Mojo's internal use only, and that the valuations included in this document for granted tenements comply with the Valmin Code (2005) but those provided for tenement applications do not comply with the Valmin Code (2005).

The work has been commissioned by Australis and Mojo. Australis and Mojo will rely upon and use the report to assist separately forming an opinion about the value of the mineral rights in relation to an internal review of the project tenements granted and in application. This report does not provide a valuation of Australis or Mojo as a whole, nor does it make any comment on the fairness and reasonableness of any aspect of any proposed transactions.

The conclusions expressed are valid as at the Valuation Date (30 June 2010). The valuation is therefore only valid for this date and may change with time in response to changes in economic, market, legal or political factors, in addition to ongoing exploration results. All monetary values included in this report are expressed in Australian dollars (AUD) unless otherwise stated. The report has been compiled based on information available up to and including the date of this report. Consent has been given for the internal distribution of this report in the form and context in which it appears.

2.3 Disclaimer

Australis Resources Limited and Mojo Mining Limited are understood to be the beneficial owner of the tenements in Table 1. Ravensgate is not qualified to make any statement or comments whatsoever regarding the legal tenure of the mining properties.

Of note is that as this report is intended for Australis's internal use the valuation includes both granted tenements and tenement applications. The valuations provided for granted tenements have been prepared in accordance with the Valmin Code (2005). However the valuation provided for tenement applications do not comply with the Valmin Code.

All work conducted during this study is based on information provided by the understood title holders of the project, along with technical reports by other consultants, associated contractors, previous tenement holders, and other relevant published and unpublished data specified for the project areas concerned.

2.4 Principal Sources of Information

The principal sources of information used to compile this report comprise technical reports and data variously compiled by Australis or Mojo and their consultants, publically available information such as ASX releases, and discussions with Australis technical and corporate management. A listing of the principal sources of information is included in the references.

No site visits were undertaken to the exploration projects as they are generally at an early stage of development. Ravensgate is of the opinion that no significant additional benefit would have been gained through site visits.

All reasonable enquiries have been made to confirm the authenticity and completeness of the technical data upon which this report is based. A final draft of this report was also provided to Australis or Mojo, along with a request to identify any material errors or omissions prior to final submission.

2.4.1 Qualifications and Technical Experience of Author

Author : Don Maclean - Principal Consultant - Geology
MSc Geology, MAIG, MSEG

Don is a geologist with over fifteen years experience in exploration geology, mine geology, resource modelling and project management throughout Australasia and Europe. He has worked in a variety of commodities, including gold, precious and base metals. Prior to joining Ravensgate, Don was the Chief Geologist for Ironbark Zinc where he was responsible for managing exploration and resource development work at the Citronen Fjord Zinc project in Greenland. Prior to this, Don worked for Newmont and Normandy throughout Australasia in a variety of senior exploration and mine based roles. Don was instrumental in the discovery and development of the 1.5 Million ounce Westside Gold Deposit at Nimary-Jundee in Western Australia. Don has a broad skill base, having worked in regional and near mine exploration, resource development, open pit and underground geology as well as senior company management roles. He has extensive experience in planning and managing large exploration projects, working on feasibility teams, technical audits, resource generation, and exploration target generation. He has worked in a variety of geological terranes ranging from the high Arctic to the arid desserts of Australia. Mr. Maclean holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia.

Co Author: Craig Allison, Principal Consultant.

BAppSci (Hons) Geology, Member of Australasian Institute of Mining and Metallurgy.

Craig Allison is employed by Ravensgate Consulting as a Principal Consultant where he carries out work for Mineral Resource estimations, Independent Technical Valuations, Independent Geologist Report's and Formal Technical Project reviews. He has over 15 years mining industry experience in operational project exploration, grade control and resource estimation. Craig has worked for both junior and larger ASX listed companies, encompassing open-cut/underground base and precious metal operations and uranium resource evaluation. Competent Person sign-off was undertaken for BHP Billiton's Mt Keith nickel resource and other projects surrounding the mine in 2007. A Post Graduate course in Geostatistics was completed in 2006. Craig Allison holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia. He is a Qualified Person under the rules of the CIMM and NI43-101.

Co Author: H. Kate Holdsworth, Senior GIS Geologist

BSc (Hons) Geology, MAusIMM

H. Kate Holdsworth is a senior GIS geologist with over 17 years GIS experience who joined the Ravensgate team in September 2006. During her tenure at Ravensgate, she has contributed to the compilation of numerous Independent Geologists Reports, Valuation Reports, GIS projects as well as having assisted clients with their exploration reporting requirements and QA/QC investigations into client's data quality.

Prior to joining Ravensgate, she worked for Giscoe Pty Ltd, a GIS company in Johannesburg, for ten years, where she was involved in diverse GIS projects, including database creation, database population and data validation. Kate has four years experience in GIS with the Geological Survey of South Africa, where she was a member of their GIS database design team.

Reviewer: Stephen Hyland, Principal Consultant, Ravensgate.

Bachelor Of Science (Geol). MAusIMM , CIM & GAA.

Stephen Hyland has had extensive experience of over 20 years in exploration geology and resource modelling and has worked extensively within Australia as well as offshore in Africa, Eastern and Western Europe, Central and South East Asia modelling base metals, Phosphate, precious metals and industrial minerals. Stephen's extensive resource modelling experience commenced whilst working with Eagle Mining Corporation NL in the diverse and complex Yandal Phosphate Province where for three and half years he was their Principal Resource Geologist.

The majority of his time there was spent developing the historically successful Nimary Mine. He also, however assisted the regional exploration group with preliminary resource assessment of Eagle's numerous exploration and mining leases. Since 1997, Stephen has been a full time consultant with the minerals consulting firm Ravensgate where he is responsible for all geological modelling and reviews, mineral deposit evaluation, computational modelling, resource estimation, resource reporting for ASX / JORC and other regulatory compliance areas. Primarily, Stephen specialises in Geological and Resource Block Modelling generally with the widely used Medsystem / Minesight 3-D mine-evaluation and design software. Stephen Hyland holds the relevant qualifications and professional associations required by the ASX, JORC and ValMin Codes in Australia. He is a Qualified Person under the rules for NI43-101 reporting and compliance requirements.

Reviewer: Richard Hyde, Associate Consultant.

Bachelor of Science, Geology and Geophysics, Member of Australasian Institute of Mining and Metallurgy.

Mr Richard Hyde, is a geologist with more than 14 years experience in the minerals industry including over five years experience operating in exclusively West Africa. Richard has worked in a number of different geological environments in Australia, Africa and Eastern Europe. He has managed large exploration projects and worked extensively within the minerals industry as a consulting geologist. He is an Associate Consultant of Ravensgate and a Member of the AusIMM, and has the appropriate qualifications, experience and independence to satisfy the requirements as an "Expert" as defined under the Valmin code.

3. BACKGROUND

3.1 Project Area Overview

Australis Resources Limited and Mojo Mining Limited have acquired a very large holding of exploration licenses and license applications throughout northwest Queensland and the eastern Northern Territory (Figure 1). The licenses are centred on the marine carbonates of the Georgina Basin and the basement Proterozoic rocks of the Mount Isa group and correlates. The tenement package is primarily prospective for phosphate, base metal and uranium mineralisation.

This large tenement holding has been grouped into nine geographic project areas to aid in description and evaluation (Figure 1):

- Mittiebah Project (NT)
- Desert Creek Project (NT)
- Ranken Project (NT)
- Tablelands Project (NT)
- Tobermorey Project (NT)
- Mojo Project (QLD)
- Camooweal Project (QLD)
- West Isa Project (QLD)
- Glenormiston Project (QLD)
- Boulia Project (QLD)

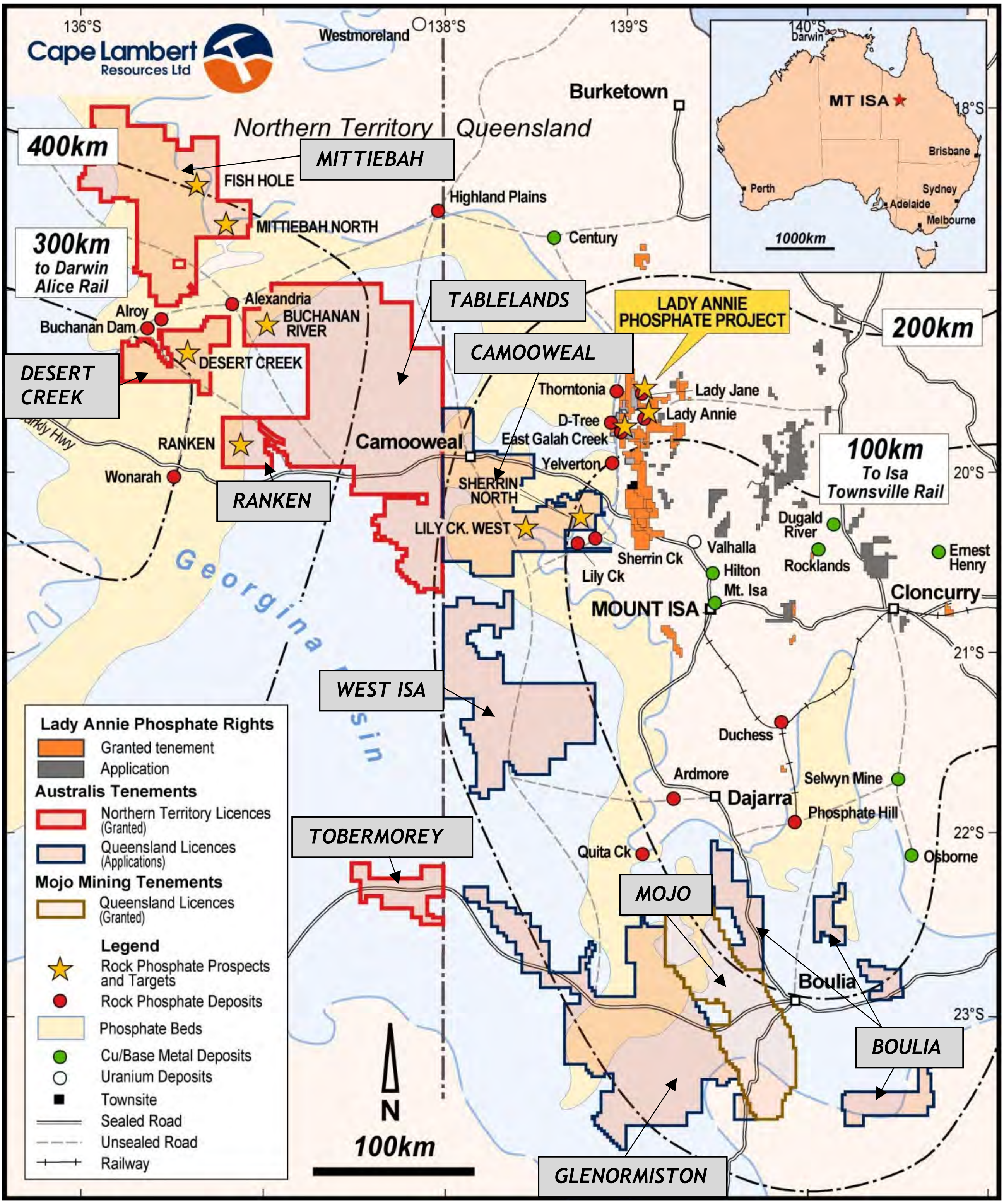

Figure 1: Australis Resources Limited and Mojo Mining Limited tenement holdings and project areas. Note Georgina Basin (pale blue) covers much if the exploration license areas.

Boulia	EPMA17783	QLD	BOULIA 3	400.10	Application

3.3 Sources of information and methodology

Australis Resources provided Ravensgate an extensive array of data on the projects which included:

- Geophysics (Magnetics, Radiometrics, Gravity)
- Government Geological Mapping
- Historical Reports
- Various internal company reports

Of note is that Australis commissioned M Cooper of Resource Potentials to undertake compilation and geophysical target identification of their geophysical data sets and provided these reports to Ravensgate. This work of excellent standard and Ravensgate has drawn on the targets identified in this work and attempted to put them into geological context. In addition there has also been good prospectivity work done on the Mojo Project area by Groves (2008) and Mclean et al (2008) which Ravensgate has also used and acknowledges.

Ravensgate methodology was to systematically review the geological and geophysical data sets for each project area and review previous work. Extensive searches of historic tenement reports were carried out as the set of reports provided by Australis was incomplete. In addition historic drilling information for mineral exploration and waterbores was obtained from the relevant Northern Territory and Queensland authorities. Unfortunately none of these drilling data sets appear to have any sampling for phosphate, base metals or uranium within the project areas.

Targets were reviewed and ranked using a set of subjective geological and economic criteria. Using these ratings and rankings the prospectivity of each project area was evaluated, and on this basis recommendations for tenement holding strategy and future exploration work are based. This information, along with relevant comparable transactions was used to estimate valuations for the projects.

4. REGIONAL GEOLOGICAL SETTING

The regional geologic setting of Australis's and Mojo's tenement holdings are dominated by a sequence of extensive marine carbonates and sediments of the Paleozoic Georgina Basin (Figure 1). These are underlain by Proterozoic sediments, volcanics and granitoids of the Mount Isa Inlier and South Nicholson Basin.

The Mount Isa Inlier outcrops over some 50,000 km^2 of North Queensland (Blake etc el, 1990) and consists of Early and Middle Proterozoic rocks which can be grouped into three broad tectonic belts; the Western Fold Belt, the Kalkadoon-Ewen Province and Eastern Fold Belt (Figure 2).

The Western Fold belt is further subdivided into three main units the Lawn Hill subprovince, the Mt Gordon Fault Zone and the Leichardt River subprovince. The Eastern fold belt is subdivided into the Mary Kathleen, Quamby-Malbon and Cloncurry-Selwyn zones (Blake et al, 1990).

The oldest Proterozoic basement metamorphic rocks are dated around 1890-1870 Ma (Blake et al, 1990). Three Proterozoic cover rock sequences of shallow marine and sub aerial volcanics have been identified with ages ranging from 1870 to 1670 Ma. Regional deformation, compression and metamorphism up to amphibolite facies occurred around 1620 to 1550 Ma. Granitoids and mafic intrusions have been emplaced at various times before 1100 Ma with those older than 1550 variably deformed and metamorphosed (Blake et al, 1990). Of note is the Syabella Granite, which is interpreted to underlie parts of the Mojo project area, which has been dated at 1670 Ma.

The Western Fold belt outcrops in the eastern part of the Camooweal project area and is interpreted to form the basement to the Mojo and Boulia project areas. The belt is comprised of a sequence of felsic volcanics and coarse conglomerates (Bottle Tree Formation) overlain by the sandstones/siltstones/quartzites, mafic volcanic (Eastern Creek Volcanics) and carbonates of the Haslingden Group. These units are overlain by felsic/silicic volcanics and the shales and siltstones of the Mount Isa and McNamara Group rocks.

The Mount Isa Inlier is a highly mineralized province with four major styles of mineralization recognized (Queensland Minerals ref):

- Sediment hosted Zn-Pb-Ag; these are found within metamorphosed pyritic and dolomitic shales of the sedimentary successions of the Western Fold Belt. Notable deposits including Mount Isa Pb-Zn, Century, George Fisher, Hilton, Dugald River and Lady Loretta
- Brecciated Sediment Hosted Cu; brecciated sediment hosted Cu deposits occur within the brecciated sediments proximal to fault zones within the Western Folds Belt. Notable examples are the Mount Isa, Esparanza/Mammoth and Lady Annie.
- Iron-oxide Cu-Au; these styles occur within high metamorphic grade rocks of the Eastern Fold belt with examples including Ernest Henry, Selwyn and Osbourne. Mineralisation is typically chalcopyrite-pyrite-magnetite.
- Broken Hill Type Ag-Pb-Zn; this style of mineralization occurs within high metamorphic grade rocks of the Eastern Fold Belt with the Cannington being the only major example.

Unconformably overlying the Western Fold belt are Proterozoic age rocks of the South Nicholson Basin. These are comprised of sandstones, siltstones and shales of the South Nicholson Group. These rocks outcrop in the northeast of the Mittiebah project area and are interpreted to form basement to much of Australis's Northern Territory and western Queensland project areas. Of note is that little mineralization of economic significance (aside from sedimentary ironstone deposits) has been identified within these rocks to date.

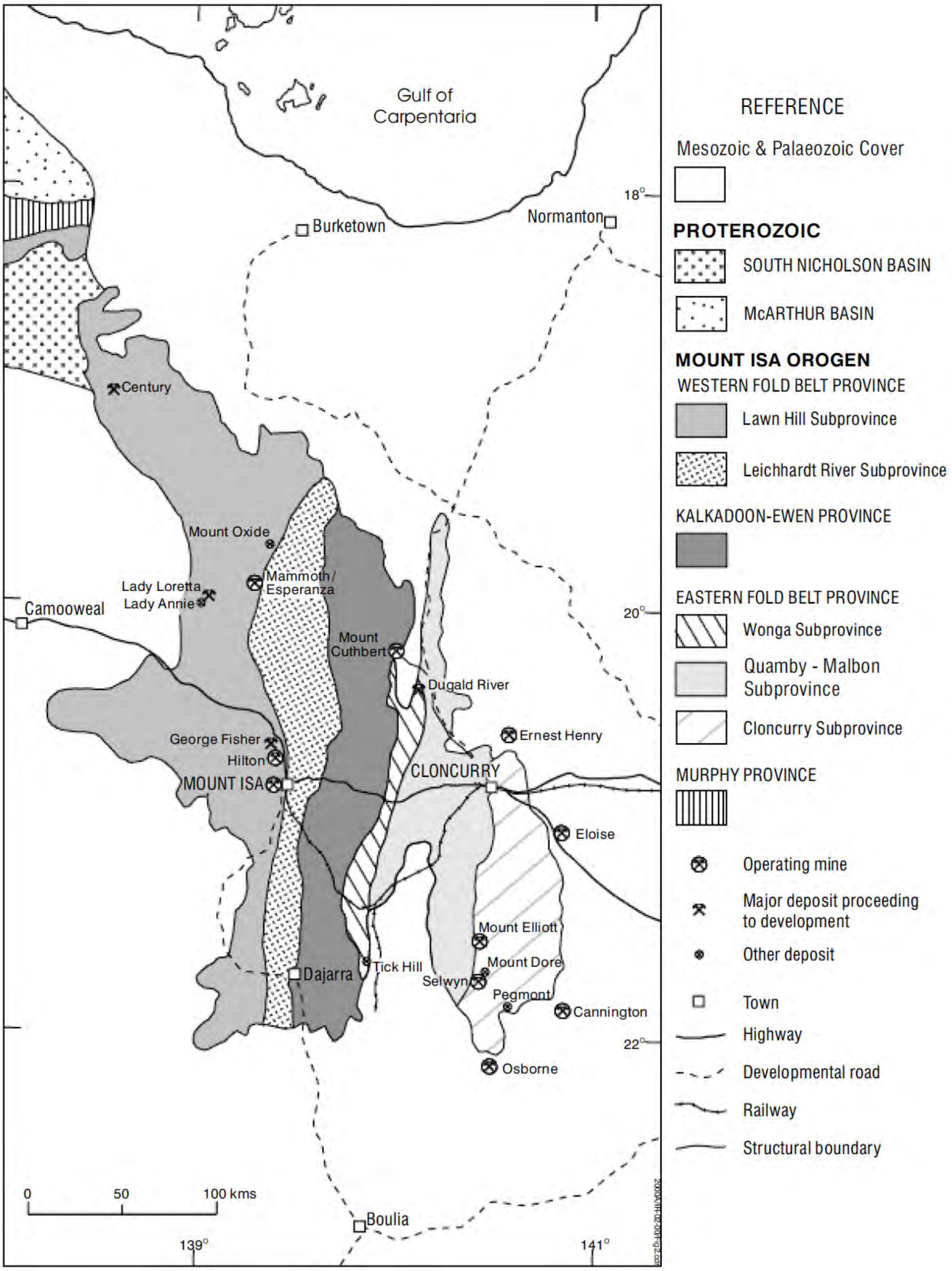

Figure 2: Geological Setting of North Queensland Proterozoic Basement and major deposits (after Queensland Geological Survey)

The majority of Australis's and Mojo's tenement holdings are held within the Georgina basin which is Cyrogenian (Neoproterozoic) to Devonian in age. This extensive basin has an area of over 325,000km^2 (Khan, 2007). Basin thickness ranges from tens of metres on basin margins and highs to up to two km in the deepest parts. The basin fill is dominated by Cambrian marine carbonate platform sediments.

The Basin has been subdivided into several smaller sub-basins (Figure 3) which reflect the thickness of fill (Khan, 2007). Australis's projects are generally on the margins of the Barkly and Undilla sub-basins.

The stratigraphic sequence within the basin consists of a basal sequence of terrigenous sediments overlain by Early Cambrian flood basalts (Helen Creek Volcanics and equivalents). These are overlain by marine arenacous rocks that grade upwards into marine carbonates as the basin deepened (Thortonia Limestone) and siltstone-shale-chert sequences (Gum Ridge Formation). At this time the sedimentary lateral facies trends of arenites, lutites, clastic and chemical carbonates and chert was established and deposition of phosphate began (Howard, 1986).

A marine regression and transgression followed in the Mid Cambrian and in the Undillan sub-basin the major deposition of phosphorite within the silt-shale-chert-carbonate facies of the Beetle Creek, Border Waterhole, Wonarah and Burton beds began (Howard, 1986). These are overlain and interdigitated with marine carbonates (Camoweal Dolomite). In deeper parts of the basin these grade upwards into deeper marine siltstones and sandstones (Ninmaroo Formation)..

A number of major phosphate deposits are hosted within the mid Cambrian carbonates of the Georgina Basin which Howard (1986) groups into three distinctive depositional regimes:

- open marine shelf - deposition of phosphorites on the marine shelf on the seaward flank of the margins of the basin (eg Duchess)
- shallow marine epicontinental basin – deposition of phosphorites in hypersaline carbonate banks on the margins of channels within lagoons and estuaries (eg D-Tree, Lady Annie)
- epicontinental basin high – deposition of phosphates on the crest and margin of a submarine ridge within an area dominated by red beds (eg Wonarah, Alroy)

Overlying the Georgina Basin Cambrian-Ordovician rocks are a sequence of Jurrasic Cretaceous shales, siltstones and sandstones and carbonates related to the Carpenteria Basin, formed in an extensive shallow marine basin (Longsight Sandstone, Poland Waterhole Shale).

In the Tertiary uplift and erosion resulted in formation of ferriginous duricrust and weathered leached kaolonitised rocks throughout many areas. In the Miocene transgression resulted in the formation of extensive lacustrine or shallow marine carbonates (Austral Downs Limestone, Brunette Limestone). Uplift and erosion from the Pliocene to present has resulted in the development of nodular ferricrete, residual soils, colluvium and alluvial material related to the development of drainages systems.

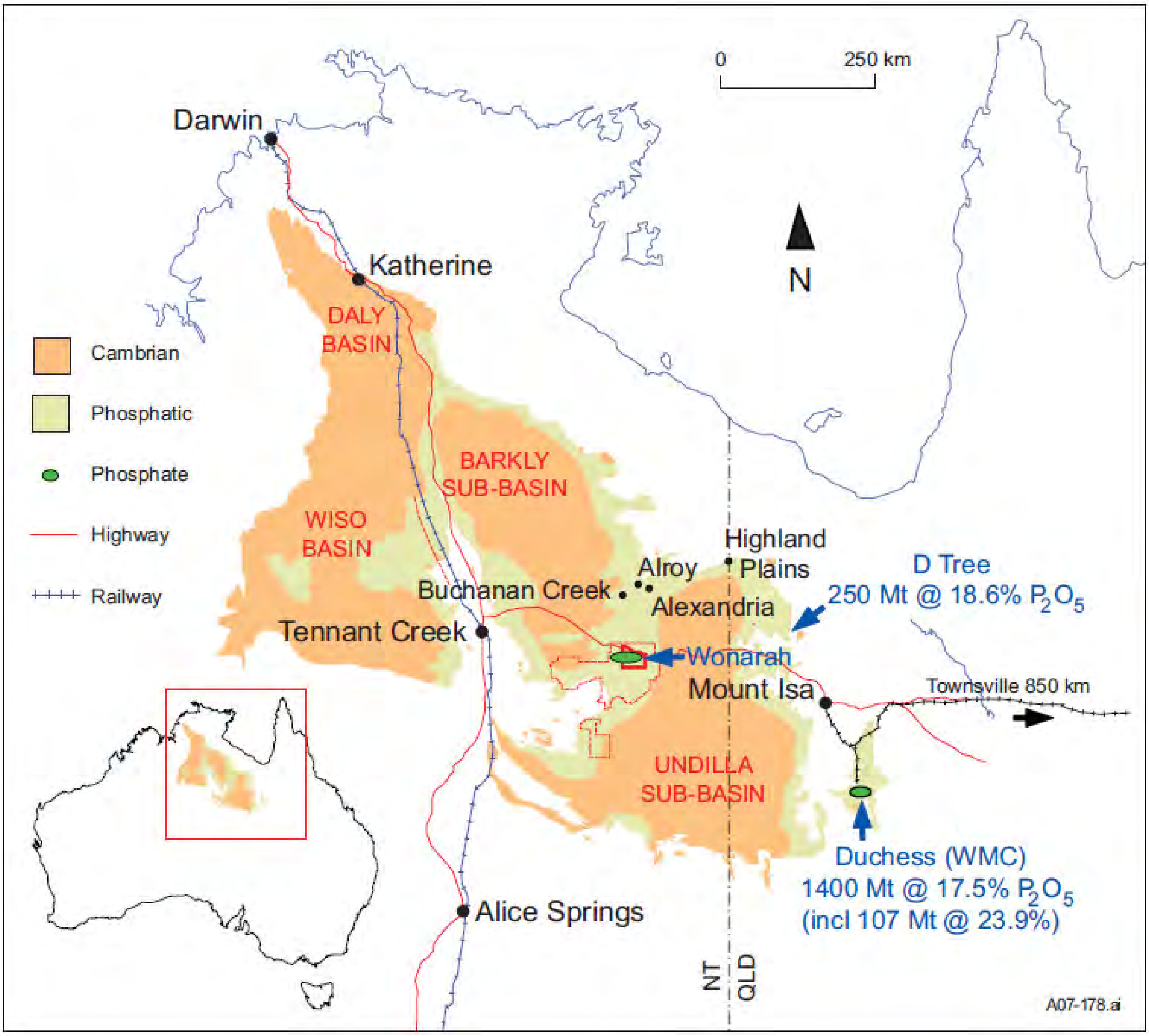

Figure 3: Georgina Basin and major phosphate deposits. Note deposits lie on the margins of the basin or on a major basin high (the Wonarah-Alexandria basement high) (after Khan, 2007)

5. TARGET MINERALISATION STYLES AND EXPLORATION CRITERIA

5.1 PHOSPHATE

5.1.1 GEOLOGY

Phosphate deposits can be classified into three types. The most economically significant are marine sedimentary deposits, termed phosphorites, which are typically argillaceous to sandy sediments containing stratified concentrations of calcium phosphate, mainly as apatite. Phosphate mineralisation within the Georgina Basin is typical of this type of deposit. Other deposit types are, apatite-rich igneous rocks, and modern and ancient guano accumulations.

The generally accepted genetic model for marine phosphate deposits relates to upwelling deep ocean currents feeding phosphate onto shallow marine platforms. The P_2O_5 concentration of marine waters is at a maximum at between 30 and 500m. Above this depth dissolved phosphorous is consumed by phytoplankton. Below 500m saturation of the water with respect to apatite is prevented by the increasing fugacity of CO_2 with depth. Precipitation of solid phosphate can thus occur between these extremes typically at a depth of 50 to 200m. Phosphorites generally form beds a few centimetres to tens of metres thick that are composed of grains of cryptocrystalline carbonate fluorapatite, which is often referred to as collophane, along with other detritus. Collophane grains were often carbonate grains, oolites or nodules that were phosphatised during diagenesis.

Many phosphorite deposits strongly resemble limestones and in fact contain bioclasts and ooliths in all stages of replacement by phosphate species. This is evidence that phosphate metasomatism is certainly an active process. This, however, does not constitute proof that the entire rock is a replacement product (Blatt et. al., 1980).

Ancient phosphate deposits are nearly all of shallow marine origin. This can be seen from the presence of shelf dwelling organisms, reef building algae and shallow water sedimentary structures. The phosphatic component occurs in the phosphorites as a cement, oolitic and pelletiferous grains, bioclastic fragments and intraclastic debris (Blatt, 1980). Paleobathymetry is thought to play an important role on the deposition and distribution of phosphorite facies sediments.

Phosphate nodules vary in size, up to several centimetres in diameter as well as in composition. Some nodules are composed mainly of collophane while some nodules are partially silt and clay i.e. terrigenous material in a collophane matrix. Nodules are also layered with some being concentrically banded. Many nodules are composed of smaller fragments and have a brecciated or conglomeritic texture. Nodular phosphorites are most common with platform style deposits, they are also a relict feature of many disconformity and unconformity surfaces.

5.1.2 ECONOMIC CRITERIA

Phosphate content of phosphate rock is generally quoted at %P2O5 or as %BPL (bone phosphate of lime) which equates to 2.1853x%P2O5. Sedimentary phosphate rock mined at present usually grades between 20 – 30% P_2O_5). Treatment is required to remove contaminants and to increase the grade of P_2O_5 to 30 – 40%. Figure 4 illustrates the grades of processed concentrates from various global phosphate producers (after Van Kauwenbergh, 2002). Treatment takes the form of either flotation or calcination. The beneficiated phosphate is treated with sulphuric acid to produce phosphoric acid, which is the feedstock for ammonium fertilizer. Superphosphate and triple superphosphate are the feedstock for higher-grade fertilizers.

Australia's largest phosphate deposits are found in Middle Cambrian phosphorites of the Georgina Basin in Queensland, and include the Phosphate Hill deposit which is being mined by open-cut methods by Incitec Pivot Limited. Phosphate rock at Phosphate Hill is converted into high-quality ammonium phosphate fertiliser for domestic and export markets in a vertically integrated operation that includes the mine, a phosphoric acid facility and ammonia and granulation plants at Phosphate Hill, a sulphuric acid plant at Mount Isa, and storage and port facilities at

Townsville. Approximately 2.1 Mt of phosphate rock is mined annually and used to manufacture di-ammonium phosphate fertiliser, mono-ammonium phosphate (MAP) and sulphur-impregnated MAP (MAP-S) products. The operation is Queensland's most significant industrial mineral in terms of production value and in 2006–07 the company reported production of 961,000 tonnes of ammonium phosphate fertiliser.

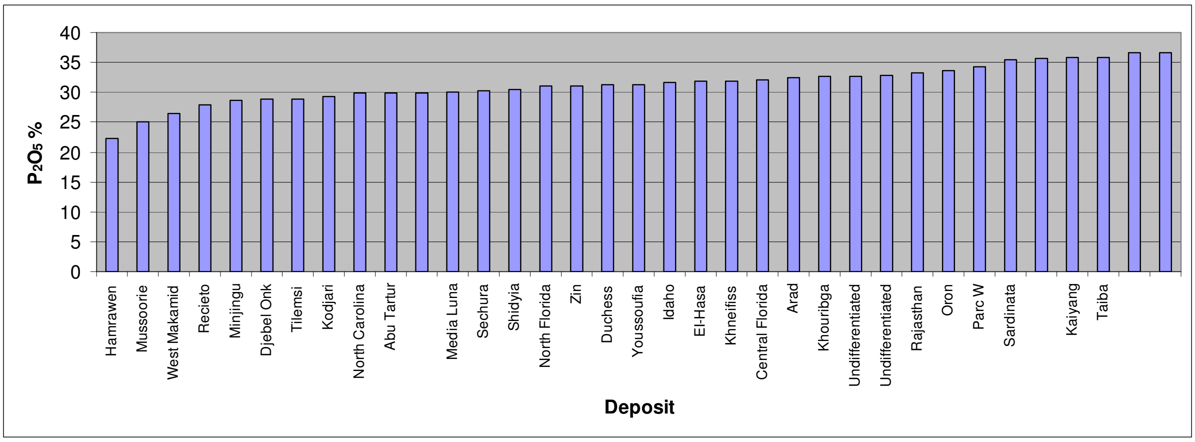

Figure 4 Phosphate grades of processed concentrates of sedimentary phosphate deposits (*After Van Kauwenbergh (2002))*.

5.1.3 EXPLORATION CRITERIA

Phosphate deposits within the Georgina Basin area exhibit a number of key geological features. All deposits are shallow marine and are either within 20 kilometres of the margins of the basin or lie on a major structural high within the basin (Figure 3). The depth at which phosphate precipitates out of solution is generally accepted to be in the range of 30 to 200 metres below surface, with most Georgina Basin deposits likely to be at the shallower end of this range.

The depositional environment bathymetry and sedimentary facies distribution play major roles in phosphate deposition and concentration. In particular embayments in the basin margin (ie lagoonal or estuarine environments) appear to often have been important sites for phosphate deposition. Understanding the depositional environment is very important to identify areas that have potential for accumulation of phosphate at economic grades at thicknesses.

In addition all known major deposits in the basin are of Middle Cambrian age and occur within the Beetle Creek and Wonarah Formations or equivalents. It appears that at this time the paleoclimatic and oceanic chemical conditions were the most favourable for deposition of phosphate.

Geophysical datasets are useful in aiding in the identification of outcropping phosphate occurrences as apatite within the phosphate beds may have a radioactive signature (Cooper, 2010). This appears to be the case with other Queensland phosphate deposits however Cooper (2010) notes Northern Territory deposits such as Wonarah have no or minimal radioactive signatures. Cooper (2010) reviewed the geophysical characteristics of Georgina Basin phosphate deposits and concludes that they have no spectral signature (ie Landsat, Aster, Hymap), have no discrete magnetic or gravity signature, but that gravity and magnetic are useful in identifying basement highs or margin embayments that have potential for phosphate deposition.

5.2 Uranium Mineralisation Styles

Different styles of uranium mineralisation occur throughout the world, and those which relevant to projects discussed in this report are noted here. Information regarding various deposit styles has largely been compiled from McKay & Miezitis, 2001. Uranium deposition has been proven to occur in a variety of environments of many different origins, and as many diverse ore types. Economic uranium deposits occur in a variety of geological environments which include :

- Vein-related eg Jachymov (Czech Republic) and Shinkolobwe (Zaire).
- Primary magmatic intrusion eg Rossing-alaskite (Namibia), Olympic Dam (Australia) and skarns.
- Ancient placers eg Elliot Lake (Canada), Witwatersrand (South Africa).
- Unconformity-related eg Athabaska (Canada) , Alligator River (Australia).
- Sandstone-hosted 'roll front' eg Grants Mineral Field (New Mexico, USA).
- Calcrete drainage and playa lake eg Yeelirrie (Australia).

Unconformity-related deposits - Unconformity deposits are typically Proterozoic in age and are developed in association with major structural dislocation and thrusting on the margins of basement ridges. Reactive metasedimentary rocks such as marble, calc silicate, graphitic schists, within and proximal to thrust zones, are preferred host lithologies especially where overlain unconformably by sheet sandstone sequences. The uranium is considered to be eroded initially from the high background basement and deposited in the overlying porous sandstone sequence. Subsequent fluid flow dissolves the uranium and transports it to suitable chemical and physical trap sites at the unconformable base of the sandstone and within underlying basement structures. Accompanying the uranium mineralisation is chlorite and hematite alteration which destroys magnetite and associated magnetic response. Unconformity deposits can be of relatively high grade and of significant tonnage. Examples of unconformity related deposits are Ranger, Nabarlec, Koongara and Rum Jungle in the Pine Creek Geosyncline of Australia and Cigar Lake, Gaertner and Midwest Lake in the Athabasca region of Canada.

Sandstone deposits - Sandstone uranium deposits occur in medium to coarse-grained sandstones deposited in a continental fluvial or marginal marine sedimentary environment. Impermeable shale/mudstone units are interbedded in the sedimentary sequence and often occur immediately above and below the mineralised sandstone. Uranium is precipitated under reducing conditions caused by a variety of reducing agents within the sandstone including: carbonaceous material (detrital plant debris, amorphous humate, marine algae), sulphides (pyrite, H_2S), hydrocarbons (petroleum), and interbedded basic volcanics with abundant ferromagnesian minerals (e.g. chlorite).

There are three main types of sandstone deposits:

- Rollfront deposits, which are arcuate bodies of mineralisation that crosscut sandstone bedding;
- Tabular deposits are irregular, elongate lenticular bodies parallel to the depositional trend which commonly occur in palaeochannels incised into underlying basement rocks; and
- Tectonic/lithologic deposits which occur in sandstones adjacent to a permeable fault zone.

Sandstone deposits constitute about 18% of world uranium resources. Ore bodies of this type are commonly low to medium grade (0.05 - 0.4% U_3O_8) and individual ore bodies are small to medium in size (ranging up to a maximum of 50 000 tonnes U_3O_8). The main primary uranium minerals are uraninite and coffinite. Conventional mining/milling operations of sandstone deposits have been progressively undercut by cheaper in situ leach mining methods. Some of the largest known uranium deposits are of a sedimentary origin, and in particular from roll front deposition. The roll front deposition mechanism depends upon the geochemical cycle of uranium. At low temperature and pressures, uranium in rocks and minerals undergoing weathering and leaching is oxidised from U^{+4} to U^{+6}. This is then soluble in ground waters as the $(UO_2)^{+2}$ ion. As long as the ground water remains oxidizing, the uranium ions remain mobile; when the water percolates through a reducing environment the uranyl ions are reduced and uranium is re-precipitated as crystalline uraninite, as coliform bands or pitchblende, or in some cases as the silicate coffinite. The uranium may also bond with vanadium to produce uranium /vanadium minerals.

Roll front deposits form in porous sandstone units confined between impervious clay layers in arid continental environments. They are Tertiary to Recent in age and typically occur in clusters. This style of uranium deposit was the major source of uranium for the USA from 1950 to the 1970's. Other examples of roll front deposits are the Beverley Mine in South Australia the Manyingee deposit, Western Australia and the Kayelekera deposit in Malawi. They generally require easily weathered tuffs or other uranium-rich source rocks in outcrop which are actively undergoing oxidation and leaching. Uranium is released into the groundwater and transported down the hydrological gradient within the sandstone aquifer. When the migrating tongue of oxidized fluid meets reduced waters at depth the chemical interface is known as the redox boundary. The ground waters become reduced and the uranium and associated elements drop out of solution and form a roll front deposit. Such deposits may develop into tabular ore bodies or develop lobates around the progressive roll front as it migrates forward with the ground water flow

Surficial deposits - Surficial uranium deposits are broadly defined as young (Tertiary to Recent) near-surface uranium concentrations in sediments or soils. These deposits usually have secondary cementing minerals including calcite, gypsum, dolomite, ferric oxide, and halite. Uranium deposits in calcrete are the largest of the surficial deposits. Uranium mineralisation is in fine-grained surficial sand and clay, cemented by calcium and magnesium carbonates. Surficial deposits comprise about 4% of world uranium resources. They are formed where uranium-rich granites were deeply weathered in a semi-arid to arid climate. The Yeelirrie deposit in WA is by far the world's largest surficial deposit. Other significant deposits in WA include Lake Way, Centipede, Thatcher Soak, and Lake Maitland. In Western Australia, the calcrete uranium deposits occur in valley-fill sediments along Tertiary drainage channels, and in playa lake sediments. These deposits overlie Archaean granite and greenstone basement of the northern portion of the Yilgarn Craton. The uranium mineralisation is often comprised of carnotite (hydrated potassium uranium vanadium oxide).

Intrusive deposits - included in this type are those associated with intrusive rocks including alaskite, granite, pegmatite, and monzonites. Major world deposits include Rossing (Namibia), Ilimaussaq (Greenland) and Palaborwa (South Africa). In Australia, the main locations are Radium Hill (South Australia) which was mined from 1954-62 (mineralisation was mostly davidite) and the larger ore bodies of low grade mineralisation known are at locations such as Crocker Well and Mount Victoria in the Olary Province, South Australia.

Phosphorite deposits – Cambrian phosphorates at the Duchess deposit in north-west Queensland feature an average grade of 0.0126% U3O8 (126ppm) in phosphate ore. Uranium concentrations are generally noted as 0.01 to 0.0015% U3O8 within secondary phosphorates which may contain low concentrations of uranium in fine-grained apatite.

5.3 BASE METALS

5.3.1 Geology

There are many different styles of base metals mineralisation however only those types that are relevant to the project area are discussed here.

Mount Isa style Sediment hosted Zn-Pb-Ag; these are found within metamorphosed pyritic and dolomitic shales of the sedimentary successions of the Western Fold Belt. Mineralisation typically occurs as tabular bedding parallel massive sulphide beds ranging from several mm up to 1m in thickness. The major sulphide minerals galena, sphalerite, pyrite and pyrrhotite. There is some debate as whether the deposits are synsedimentary (sedimentary exhalative (SEDEX)) or epigenetic in origin, with current consensus favoring the later. Notable deposits including Mount Isa Pb-Zn, Century, George Fisher, Hilton, Dugald River and Lady Loretta.

Brecciated Sediment Hosted Cu; brecciated sediment hosted Cu deposits occur within the brecciated 'silica-dolomite' host sediments proximal to fault zones within the Western Folds Belt. Sulphides are typically chalcopyrite and pyrite. Deposits show a strong structural control and are often intimately associated with sediment hosted Pb-Zn mineralisation. Notable examples are the Mount Isa, Esparanza/Mammoth and Lady Annie.

Iron-oxide Cu-Au; these styles occur within high metamorphic grade rocks of the Eastern Fold belt with examples including Ernest Henry, Selwyn and Osbourne. This style of deposit typically occurs at the margins of large igneous bodies that intrude into sedimentary strata and typically occurs as pipes and breccias. Mineralisation is typically chalcopyrite-pyrite-magnetite.

Broken Hill Type Ag-Pb-Zn; this style of mineralization occurs within high metamorphic grade rocks of the Eastern Fold Belt with the Cannington being the only major example. Broken Hill type orebodies are generally accepted as being SEDEX style deposits that have been extensively reworked and modified by metamorphism and shearing.

Mississippi Valley Type Pb-Zn (MVT); this style of mineralization occurs in carbonate rocks where low temperature metal rich diagenetic fluids migrate into and are trapped in stratigraphic highs (typically folds, faults on sedimentary basin margins and graben structures). Mineralisation often occurs as massive sulphides with galena and sphalerite the main sulphide minerals and often forms pipe like bodies. Several explorers have explored for MVT deposits within the Georgina Basin carbonate rocks in the past, but to date no mineralization of this style has been identified.

7. DESSERT CREEK AREA, NORTHERN TERRITORY PROJECT

7.1 INTRODUCTION

The Dessert Creek Project consists of 2 granted tenements (EL26310 and EL26309), covering 3,242km^2 of the central eastern Northern Territory, close to the border with Queensland. The project is located approximately 230km east of Tenant Creek, 50 km east of the Tablelands Highway and 50km north of the Barkly Highway. The northern boundary of the project area lies within 15 km of Phosphate Australia's Buchanan Dam, Alroy, and Alexandria phosphate prospects and 60 km from the Highland Plains and Wonarah phosphate deposits.

7.2 Geology

The geology of the Dessert Creek project area is dominated the basin fill sediments of the Cambrian to Mid Ordovician Georgina Basin. The Cambrian and Early Ordovician rocks are predominantly marine carbonate rocks with minor sandstone and siltstone, and the Middle Cambrian rocks are mostly siltstone and sandstone. In the northern of the project areas lies a basin high known as the Alexandria-Wonarah Basement high, a shallow marine platform during the Mid Cambrian, on which all the known phosphate deposits in the region are located. Much of the project area is overlain by recent cover rocks and alluvial material.

7.3 Previous Exploration

The Desert Creek Project area has been explored by previous workers. The details of this and the work that was completed are presented in Table 6.

Table 6 Dessert Creek Project: Previous Exploration

	Company	Findings
1968-1971	IMC Development	IMC Development completed an extensive phosphate exploration program covering the majority of the project area. Work completed included air photo interpretation, geological mapping, and interpretation of radiometric and magnetic geophysics surveys. They completed and extensive drilling program which led to the discovery of the Wonarah and Alexandria phosphate deposits (outside of project area to the south). They note that phosphate mineralisation occurs within clastic sediments on the margins of Precambrian basement highs and these sediments (the Wonarah Beds, Burton Beds and Anthony Lagoon Beds) are likely to be Mid-Cambrian correlates of the Beetle Creek-Inca Creek Formations in Queensland that host the D-Tree phosphate deposit. They also note that the most favourable environment appears to be have been in silt-chert facies in the shallows of a Middle Cambrian phosphogenic sea. A total of 20 widely spaced drill hole s were completed within the project area (approximately 700 metres). Drill cuttings were tested with ammonium molybdate to assess whether phosphate was present and select intervals for assaying. Five holes intercepted narrow/moderate widths of phosphatic beds returning 6.9m at 0.3% P_2O_5, 6.2m at 0.3% P_2O_5, 6.1m at 0.3% P_2O_5, 6.1m at 0.1% P_2O_5 and 28.2 metres at 0.8% P_2O_5. The tenements were relinquished as they were not thought prospective for phosphate mineralisation and to focus on the neighbouring Wonarah and Alexandria deposits.
1981-1982	BHP Minerals	Pegged tenement in central part of project area targeting Mississippi Valley lead-zinc type deposits. Completed literature review and photo-geological studies and decided to relinquish tenement.
1983-1989	Aberfoyle Resources/Ashton Mining/ AOG Minerals JV	Completed a gravel and loam sampling survey throughout the west of the project area. No microdiamonds or kimberlite indicator minerals where identified and the license was surrendered.
1985-1991	Ashton/Design and Construction JV	Completed diamond exploration programs throughout the central part project area. Work completed included thematic mapping and stream and bulk sampling of alluvial material. Several microdiamonds were found in bulk samples, but it was concluded that potential for diamondiferous kimberlite pipes in the area was remote and the tenement was relinquished.
1989-1990	CRA Exploration	Completed an extensive diamond exploration program over the eastern part of the project area. Helicopter and ground magnetic was carried out identifying many magnetic targets, of which 15 were drill tested. One microdiamond was recovered from the sampling program and no further work was completed. The MVT potential of the areas was also reviewed but was not considered prospective for this style of mineralisation due to the lack of indicator minerals in loam samples and the low fluorine levels in groundwater.
2002-2003	De Beers	Completed a review of diamond potential over much of the project area. The tenements were relinquished before the anniversary date.

7.4 Tenement Exploration Potential and Targets

7.4.1 Phosphate

The Dessert Creek project area is considered to be prospective for phosphate deposits due to the following:

- The western part of the project area lies along strike on the same interpreted basin high as the Wonarah deposit to the south.
- Mid Cambrian shallow marine carbonate facies assemblages are mapped and outcrop in the eastern part of the project (most notably the Wonarah Formation)
- The northern margin of the project area lies within 15 km of Phosphate Australia's Buchanan Dam, Alroy, and Alexandria phosphate prospects (where historical drilling has intercepted potentially economic grades of phosphate).
- The Georgina basin margin has a complex geometry (embayments within the basin margin occur close to some know Queensland rock phosphate deposits).
- Mid Cambrian shallow marine clastic carbonate facies assemblages are mapped and outcrop in the eastern part of the project (most notably the Wonarah Formation)
- Phosphatic beds have been intercepted by wide spaced historic drilling, although of low tenor and width.
- Gravity and magnetic suggest areas suggest that there may be some basement highs within parts of the Georgina Basin that may have been favourable for phosphate deposition.
- Drilling by previous workers targeting phosphate was very widely spaced and there is space and target areas for substantial deposit to remain un-discovered (ie the Wonarah deposit covers an area of 25 km by 4 km and the Alexandria deposit covers and area of 25km by 1 km)

A number of prospective target zone for phosphate mineralisation throughout the project area. As summary of these targets and their characteristics is shown in Table 7 and Figure 8.

7.4.2 Base Metals

The potential for base metal deposits within the project area is considered to be low. There are no outcropping Proterozoic age rocks within the project area. Proterozoic aged rocks are interpreted to form the basement below the Palaeozoic to recent cover, however are mostly at depths that make effective exploration difficult (ie >100m of cover). In addition aeromagnetics and gravity images suggest the basement is rather featureless and there are no obvious prospective structurally favourable sites for mineralisation.

7.4.3 Uranium

Projects tenements are ranked with a low prospectivity for significant, near surface uranium mineralisation. The ranking of low prospectivity reflects geophysical review for anomalous uranium areas over surfical rocks, lack of historical exploration success and examination of geological stratigraphy and understanding.

7.4.4 Diamonds

The project area has been extensively explored for diamonds in the 1980's as part of larger regional programs carried out by several companies. A number of micro-diamonds recovered from bulk sampling programs however no significant kimberlite pipes or prospective diatreme targets appear to have been identified. It may be worthwhile re-examining the potential of the area, however of note is that De Beers held tenements covering most of the project area in 2002-2003, carried out a review and decided to relinquish their tenements.

7.5 Recommended Exploration Program and Budget

A number of targets have been identified from desktop geological and geophysical studies. Ravensgate recommends that all tenements within this project are retained. A work program as follows is recommended which focuses on the phosphate potential of the project area:

<u>Year One</u>

- Compilation of historic drilling data from previous explorers (in particular from IMC Development phosphate drilling programs) and government agencies. Sedimentological characterisation and study of the data may be useful in refining geological targeting if geological logging is adequate.
- Compilation of all other appropriate geological and geophysical data to aid in target refining
- Ground truthing of anomalies identified (ie to identify regolith regimes, assess outcrop and sample any prospective horizons)
- Mapping and appropriate surface geochemistry programs
- Drilling - wide spaced scout drilling of highest priority targets

<u>Year Two</u>

- Drilling – systematic follow up of year one targets. Infill drilling where appropriate.

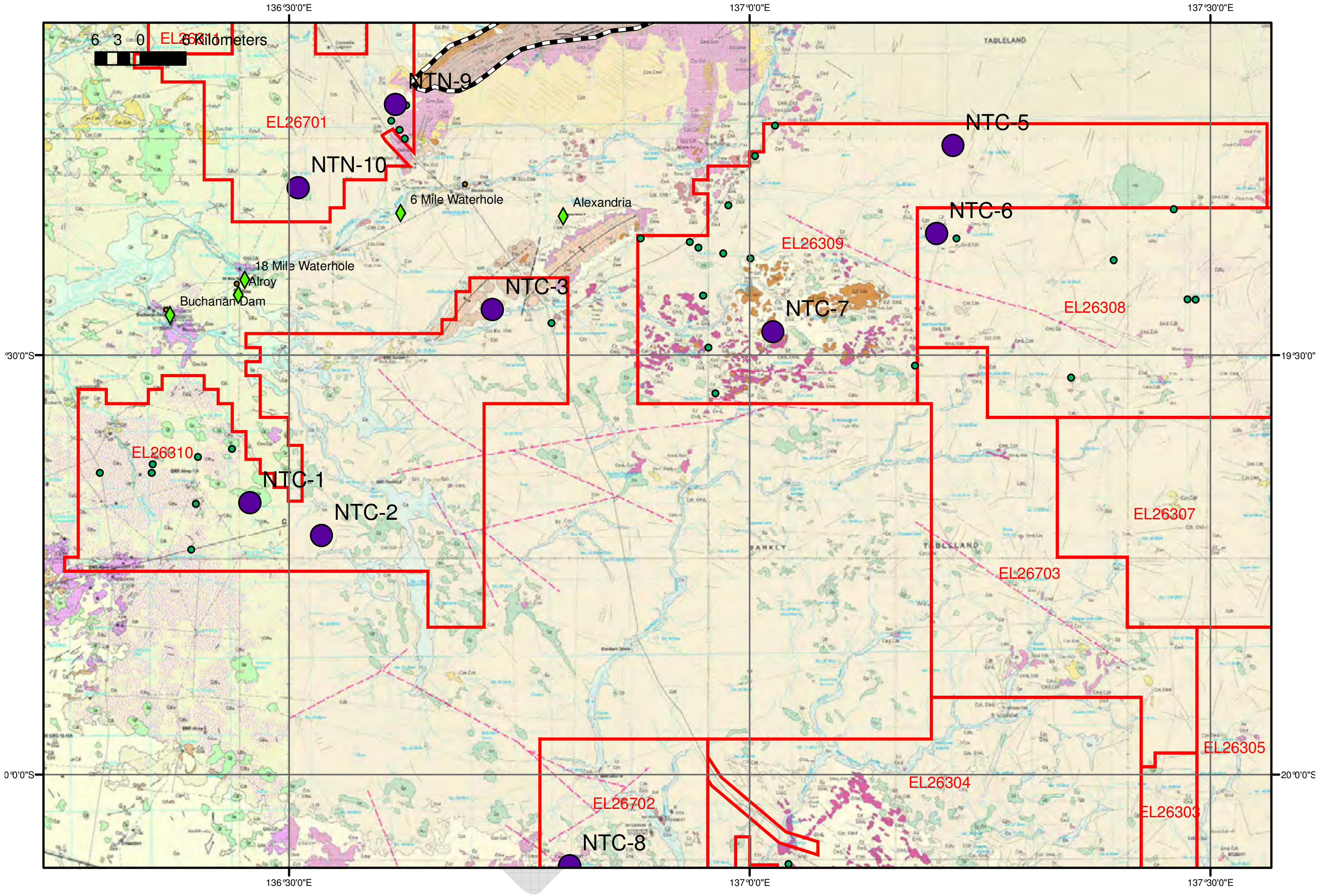

Figure 8: Desert Creek Project Area Geology. Georgina Basin outline shown by black and white line. Phosphate targets shown as purple dots. Green dots are historic IMC Development corporation drill holes.

Table 8 Desert Creek Phosphate Targets

Anomaly Name	Reference	Target	MGA_East	MGA_North	Description	Prospective Host Rocks (0-5)	Known Phosphate Occurences (0-5)	Proximity to basin margin/basin high (0-5)	Geophysical respones (radiometrics) (0-3)	Basin Margin Embayment (0-2)	**GEOLOGICAL PROSPECTIVITY SCORE (/20)**		Potentially Economic Phosphate Grades (0-7)	Proximity to known deposits/prospects (0-3)	Proximity to infrastructure (road/rail) (0-5)	Potential Depth of mineralisation (0-5)	**ECONOMIC MODIFYING FACTORS SCORE (/20)**		**TOTAL SCORE**	**TARGET RANKING (HIGH, MOD, LOW PRIORITY)**	
C-1	Cooper, 2010	Phosphate	652800	7850300	Elevated Uranium response	3	3	3	1	1	**11**		3	2	0	1	**6**		17	M	
C-2	Cooper, 2010	Phosphate	661700	7845900	Elevated Uranium response	3	3	3	1	1	**11**		3	2	0	1	**6**		17	M	
C-3	Cooper, 2010	Phosphate	683400	7875500	Elevated Uranium response associated to Woronah Formation	4	3	5	1	2	**15**		3	2	0	4	**9**		24	M	
C-4	Cooper, 2010	Phosphate	711300	789200	Elevated Uranium response associated to Woronah Formation																
C-5	Cooper, 2010	Phosphate	741400	7896500	Elevated Uranium response	3	3	3	1	0	**10**		3	1	0	3	**7**		17	M	
C-6	Cooper, 2010	Phosphate	739200	7884900	Elevated Uranium response	3	1	3	1	1	**9**		3	1	0	3	**7**		16	M	
C-7	Cooper, 2010	Phosphate	718500	7872200	Elevated Uranium response associated to Woronah Formation	5	5	3	2	1	**16**		3	1	0	5	**9**		25	M	

Table 9 Desert Creek Uranium Targets

Anomaly Name	Reference	Target	MGA_East	MGA_North	Description	Prospective Host Rocks (0-5)	Known Uranium Occurences (0-5)	Proximity to Known Occurrence (0-5)	Geophysical respones (radiometrics) (0-3)	Uranium Mineralogy (0-2)	**GEOLOGICAL PROSPECTIVITY SCORE (/20)**		Potentially Economic Uranium Grades (0-7)	Proximity to known deposits/prospects (0-3)	Proximity to infrastructure (road/rail) (0-5)	Potential Depth of mineralisation (0-5)	**ECONOMIC MODIFYING FACTORS SCORE (/20)**		**TOTAL SCORE**	**TARGET RANKING (HIGH, MOD, LOW PRIORITY)**	
None	Cooper, 2010	Uranium									**0**						**0**		0	L	No significant, near-surface targets.

16. VALUATION

16.1 Introduction

There are a number of recognised methods used in valuing “mineral assets”. The most appropriate application of these various methods depends on several factors, including the level of maturity of the mineral asset, and the quantity and type of information available in relation to the asset.

The Valmin Code, which is binding upon “Experts” and “Specialists” involved in the valuation of mineral assets and mineral securities, classifies mineral assets in the following categories:

- Exploration Areas refer to properties where mineralisation may or may not have been identified, but where specifically a JORC compliant mineral resource has not been identified.
- Advanced Exploration Areas and Pre-Development Projects are those where Mineral Resources have been identified and their extent estimated, but where a positive development decision has not been made.
- Development Projects refers to properties which have been committed to production, but which have not been commissioned or are not operating at design levels.
- Operating Mines are those mineral properties, which have been fully commissioned and are in production.

Various recognised valuation methods are designed to provide the most accurate estimate of the asset value in each of these categories of project maturity. In some instances, a particular mineral property or project may include assets that comprise one or more of these categories.

When valuing Exploration Areas, and therefore by default where the potential is inherently more speculative than more advanced projects, the valuation is largely dependent on the informed, professional opinion of the valuer. There are a number of methods available to the valuer when appraising Exploration Areas.

The Multiple of Exploration Expenditure (“MEE”) method can be used to derive project value, when recent exploration expenditure is known or can be reasonably estimated. This method involves applying a premium or discount to the exploration expenditure or Expenditure Base (“EB”) through application of a Prospectivity Enhancement Multiplier (“PEM”). This factor directly relates to the success or failure of exploration completed to date, and to an assessment of the future potential of the asset. The method is based on the premise that a “grass roots” project commences with a nominal value that increases with positive exploration results from increasing exploration expenditure. Conversely, where exploration results are consistently negative, exploration expenditure will decrease along with the value.

Where transactions including sales and joint ventures relating to mineral assets that are comparable in terms of location, timing, mineralisation style and commodity, and where the terms of the sale are suitably “arms length” in accordance with the Valmin Code, such transactions may be used as a guide to, or a means of, valuation. This method is considered highly appropriate in the current volatile financial environment where other “cost based” methods may tend to overstate value.

The Joint Venture Terms valuation method may be used to determine value where a Joint Venture Agreement has been negotiated at “arms length” between two parties. When calculating the value of an agreement that includes future expenditure, cash and/or shares payments, it is considered appropriate to discount expenditure or future payments by applying a discount rate to the mid-point of the term of the earn-in phase. Discount factors are also applied to each earn-in stage to reflect the degree of confidence that the full expenditure specified to completion of any stage will occur. The value assigned to the second and any subsequent earn-in stages always involves increased risk that each subsequent stage of the agreement will not be completed, from technical, economic and market factors. Therefore, when deriving at technical value using the Joint Venture Terms method, Ravensgate considers it appropriate to only value the first stage of an earn-in Joint Venture Agreement.

The total project value of the initial earn-in period can be estimated by assigning a 100% value, based on the deemed equity of the farm-in or, as follows:

$$V_{100} = \frac{100}{D}\left[CP + \left(CE * \frac{1}{(1+I)^{\frac{t}{2}}} \right) + \left(EE * \frac{1}{(1+I)^{\frac{t}{2}}} * P \right) \right]$$

where:

V_{100}	=	Value of 100% equity in the project ($)
D	=	Deemed equity of the farm-in or (%)
CP	=	Cash equivalent of initial payments of cash and/or stock ($)
CE	=	Cash equivalent of committed, but future, exploration expenditure and payments of cash and/or stock ($)
EE	=	Uncommitted, notional exploration expenditure proposed in the agreement and/or uncommitted future cash payments ($)
I	=	Discount rate (% per annum)
t	=	Term of the Stage (years)
P	=	Probability factor between 0 and 1, assigned by the valuer, and reflecting the likelihood that the Stage will proceed to completion.

Where mineral resources remain in the Inferred category, reflecting a lower level of technical confidence, the application of mining parameters is inappropriate and their economic value can therefore not be demonstrated using the more conventional DCF/NPV approach. In these instances it is considered appropriate to use the ‘in-situ’ Resource method of valuation for these assets. This technique involves application of a heavily discounted valuation of the total in-situ metal or commodity contained within the resource. The level of discount applied will vary based on a range of factors including physiography and proximity to infrastructure or processing facilities.

In the case of Pre-development, Development and Mining Projects, where Measured and Indicated Resources have been estimated and mining and processing considerations are known or can be reasonably determined, valuations can be derived with a reasonable degree of confidence by compiling a discounted cash flow (DCF) and determining the net present value (NPV).

The Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC code, 2004) sets out minimum standards, recommendations and guidelines. A Mineral Resource defines a mineral deposit with reasonable prospects of economic extraction. Mineral Resources are sub-divided into Inferred, Indicated and Measured to represent increasing geological confidence from known, estimated or interpreted specific geological evidence and knowledge. An Ore Reserve is the economically minable part of a Measured or Indicated Resource after appropriate studies. An Inferred Resource reflecting insufficient geological knowledge, cannot translate into an Ore Reserve. Measured Resources may become Proved (highest confidence) or Probable Reserves. Indicated Resources may only become Probable Reserves.

16.2 Previous Valuations and Material Agreements

Ravensgate is not aware, nor have we been made aware, of any other valuations over the Australis and MOJO Projects. The date of this valuation is 30 June 2010 and the provisional project valuations reflect a 100% interest in the project assets. Ravensgate understands the tenement project list includes tenements granted and in application at this point in time. A schedule of tenements and expenditure commitments is listed in Appendix A. Tenements in application may normally be excluded from the valuation as the client company does not own tenement rights, either directly held or in joint venture. However for the purposes of this internal report and at client request the project valuation includes tenement rights under application and reflect a 100% interest. We are not aware, nor have we been made aware, of any other agreements that have a material influence on the provisional valuations of the Australis and MOJO mineral assets, and on this basis have made no adjustments on this account. Ravensgate is not qualified to comment on Queensland state government policy which allows exploration for uranium exploration but prohibits mining of uranium and accordingly has not done so.

16.3 Comparable Transactions

Ravensgate has completed an intensive search for publicly available market transactions involving exploration projects in Australia. Ravensgate notes an Ore Reserve or Mineral Resource estimation reported in accordance with the guidelines defined in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code - 2004 Edition) has not been carried out for the reported project tenements. The transactions identified relating to Australian projects have been specifically selected to reflect sizeable tenement holdings in geological provinces that are considered prospective for mineralised deposits, and that are of similar prospectivity to the Australis and MOJO portfolio of uranium, phosphate and base-metal mineral assets. Australis and Mojo prospects are generally at reconnaissance level. The transactions identified along with the implied cash-equivalent values are summarised in the tables below. Analysis of these market transactions indicates that particularly early-stage uranium exploration projects throughout Australia have a range of implied values between $150/km^2$ and $1,200/km^2$ while very early-stage base metal projects throughout Australia have a range of implied values between $250/km^2$ and $1,850/km^2$ and early-stage phosphate projects throughout Australia have a range of implied values between $260/km^2$ and $1,500/km^2$. Ravensgate notes that current Queensland state government policy prohibits uranium mining but does allow uranium exploration.

Table 31 Market Transactions Involving Australian Uranium Exploration Projects. Note the WA development ban on uranium deposits was overturned in November 2008. QLD Government policy prohibits uranium mining but does allow uranium exploration.

Project	Transaction Details	Area (km^2)	Purchase Price 100% Basis (A$)	Implied Value/km^2 (A$)
Lake Blanche, SA.	27/11/2008: Uranium Equities Ltd entered into agreements to acquire 51% of the Lake Blanche Project located in SA, totaling 6,253km^2. The implied cash equivalent on a 100% equity basis, provided the terms of the agreement were met, was $6.86M.	6,253	$6.86M	$1,100
Georgina Basin, QLD.	11/04/2008: Newland Resources Ltd completed negotiations with Summit Resources Ltd to purchase 100% of the Georgina Basin Project for a mixture of shares, cash and previous exploration. The tenement area totals 11,800km^2 for prospective sedimentary and breccia hosted uranium mineralization. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $1.769M.	11,800	$1.769M	$150
Bushy Park JV, NT.	5/02/2008: Western Desert Resources Ltd entered into agreements to acquire 51% of the Bushy Park JV located in NT, totaling 1848.7km^2. The implied cash equivalent on a 100% equity basis, provided the terms of the agreement were met, was $1.96M.	1,849	$1.96M	$1,100
Cocata Projects, SA.	21/02/2007: Uranium Equities Ltd entered into agreements to acquire 51% of the Cocata Projects located in SA, totaling 1,210km^2. The implied cash equivalent on a 100% equity basis, provided the terms of the agreement were met, was $1.47M.	1,210	$1.47M	$1,200
Coulta Projects, SA.	13/02/2007: WCP Uranium Ltd entered into agreements to acquire 51% of the Coulta Projects located in SA, totaling 1,957km^2. The implied cash equivalent on a 100% equity basis, provided the terms of the agreement were met, was $1.47M.	1,957	$1.47M	$750
Watson Projects, SA.	4/01/2007: Uranium Equities Ltd entered into agreements to acquire 51% of the Watson Project located in SA, totaling 2,391km^2. The implied cash equivalent on a 100% equity basis, provided the terms of the agreement were met, was $0.98M.	2,391	$0.98M	$400

Table 32 Market Transactions Involving Australian Base Metal Exploration Projects.				
Project	**Transaction Details**	**Area (km^2)**	**Purchase Price 100% Basis (A$)**	**Implied Value/km^2 (A$)**
Douglas Creek, Nth SA.	24/11/2008: Minotaur Exploration Ltd entered into an option agreement with Rio Tinto Exploration for an initial Right To Explore by carrying out a $0.25M exploration spend. The tenement area totals 406km^2 for prospective base and precious metal mineralisation (possible Mt Isa / Olympic Dam style). Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $0.25M.	406	$0.25M	$620
Blackadder, NT.	29/10/2008: Mithril Resources Ltd entered into a farm-in/JV agreement with Sammy Resources Pty Ltd to earn 80% with a $2.0M exploration spend over 5 years. The tenement area totals 1,358km^2 for prospective nickel and copper mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $2.5M.	1,358	$2.5M	$1,850
Windy Knob, WA.	10/07/2008: Windy Knob Resources Ltd entered into a binding agreement to purchase 100% of EL51/1198 in consideration for 500,000 shares. The tenement area totals 162km^2 for prospective base metal (VMS) mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $0.04M.	162	$0.04	$250
Georgina Basin, NT.	6/06/2008: JOGMEC entered into a farm-in/JV agreement with Mincor Resources Ltd to earn 25% with an initial $2.5M exploration spend over 2 years. The tenement area totals 9,000km^2 for prospective zinc-lead mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $8M.	9,000	$8.0M	$900
Reward (McArthur River), NT.	9/01/2008: Rox Resources Ltd entered into an acquisition option agreement (100%) with North Mining Ltd for an initial exploration spend over 2 years and option payment. The tenement area totals 379km^2 for prospective base metal (SEDEX) mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $0.3M.	379	$0.4M	$800
Avalon, Lennard Shelf WA.	11/09/2007: Rox Resources Ltd entered into a farm-in/JV agreement with Avalon Minerals Ltd to earn 60% with issued shares ($0.3M) and an exploration spend of $2.0M over 4 years. The tenement area totals 2,594km^2 for prospective zinc-lead mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $3.8M.	2,594	$3.8M	$1,500

Table 33 Market Transactions Involving Australian Phosphate Exploration Projects.				
Project	**Transaction Details**	**Area (km^2)**	**Purchase Price 100% Basis (A$)**	**Implied Value/km^2 (A$)**
Mt Isa, QLD	10/11/2009: Resource Kings Pte Ltd entered into a farm-in/JV agreement with GBM Resources Ltd to earn 90% for $0.635M in shares. The tenement area totals 513.6km^2 for prospective phosphate mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $0.706M.	513.6	$0.706M	$1,375
Barr Creek, NT.	6/03/2009: Uramet Mineral Ltd announced the completed sale of Barr Creek tenements to Legend International Holdings for $0.75M. The tenement area totals 512km^2 for prospective phosphate mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $0.75M.	512	$0.75M	$1,500
West Isa, QLD.	20/10/2008: Dragon Energy Ltd entered into a farm-in/JV agreement with MM Mining Pty Ltd & Summit Resources Ltd to earn 100% with an initial $1.5M spend of exploration and cash. The agreement covers phosphate rights only. The tenement area totals 3,396km^2 for prospective phosphate mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $1.5M.	3,396	$1.5M	$440
Murphy Project, NT.	11/08/2008: WCP Resources Ltd entered into a farm-in/JV agreement with Bondi Mining Ltd to earn 70% with a $1.5M exploration spend. The tenement area totals 2,650km^2 for prospective phosphate plus uranium mineralisation. WCP can earn their interest in all phosphorous minerals apart from any phosphorous minerals directly associated with a uranium deposit. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $2.14M.	2,650	$2.14M	$800
Kurundi, NT.	17/06/2008: Northern Uranium Ltd entered into a farm-in/JV agreement with Washington Resources Ltd to earn 60% with an initial $0.25M exploration spend. The tenement area totals 1,597km^2 for prospective Georgina Basin phosphate mineralisation. Assuming the terms of the agreement were met the implied cash equivalent on a 100% equity basis is $0.42M.	1,597	$0.42M	$260

siltstone to ironstones within outcropping South Nicholson Playford Sandstone on EL26311 as a possible iron target for further investigation.

16.4.2 Desert Creek Area, Northern Territory Project

16.4.2.1. Project Analysis - Selection of Valuation Method

The Dessert Creek Project consists of 2 granted nearby tenements (EL26310 and EL26309), covering 3,242km^2 of the central eastern Northern Territory, close to the border with Queensland. The project is located approximately 230km east of Tenant Creek, 50 km east of the Tablelands Highway and 50km north of the Barkly Highway. The Desert Creek Project can be classified as an 'Exploration Area' mineral asset. Ravensgate has elected to apply the Comparable Transaction Method (phosphate) to value the Desert Creek project after consideration of the various valuation methods outlined in Section 16.1. To date a Mineral Resource reportable under the guidelines of the JORC Code (JORC, 2004) has not been identified nor has recently significant on-ground exploration expenditure been carried out. Projects within the Australis group were acquired as part of the purchase of CopperCo Ltd assets in June 2009.

16.4.2.2. Project Analysis – Valuation

Phosphate

Ravensgate's analysis of the phosphate-related market transactions indicates that the implied value of strategically located, greenfield exploration projects with potential for phosphate mineralisation generally lies in the intra-range \$260/km^2 to \$1,500/km^2, which relates to approximately \$0.85M to \$4.9M for the 2 granted tenements covering the Wonarah Rise phosphate targets (3,242km^2). From this range a preferred value of \$1.5M has been selected which recognises the good prospectivity for shallow phosphate mineralisation over 7 potential targets. While Ravensgate considers the phosphate exploration targets sufficiently prospective to warrant further exploration, we have elected to assign a preferred value towards the lower end of this range, reflecting the early stage of the exploration project over a large tenement holding and confirmatory on-ground work required to outline phosphate mineralisation.

Base Metals, Uranium

Ravensgate has not defined a valuation for these commodities within the project as no specific exploration targets have been outlined on desktop reviews of historical exploration, geology and geophysics.

16.4.3 Ranken Area, Northern Territory Project

16.4.3.1. Project Analysis - Selection of Valuation Method

The Ranken Project consists of 3 granted nearby tenements (EL26302, EL26304 and EL26702), covering 3,815.7km^2 of the central eastern Northern Territory, close to the border with Queensland. The project is located approximately 230km east of Tenant Creek and 10km north of the Barkly Highway. Note tenement EL26302 (previously in Tablelands Project by Hogan, 2010a) has been included in the Ranken Project of phosphate exploration targets for convienence. The Ranken Project can be classified as an 'Exploration Area' mineral asset. Ravensgate has elected to apply the Comparable Transaction Method (phosphate) to value the Ranken project after consideration of the various valuation methods outlined in Section 16.1. To date a Mineral Resource reportable under the guidelines of the JORC Code (JORC, 2004) has not been identified nor has recently significant on-ground exploration expenditure been carried out. Projects within the Australis group were acquired as part of the purchase of CopperCo Ltd assets in June 2009.

16.4.3.2. Project Analysis - Valuation

Phosphate

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20. GLOSSARY

alluvial	Sand, clay and silt deposit – water transported.
anomalous	A departure from the expected norm, generally geochemical or geophysical values higher or lower than the norm.
anticline	An area of rocks that have been arched upwards in the form of a fold.
auger	A corkscrew-shaped sampling tool.
Archaean	A geologic eon before 2.5 billion years ago.
assay	A procedure where the element composition of a rock soil or mineral sample is determined.
BLEG	Bulk Leach Extractible Gold, a geochemical analysis tool used in the exploration for gold.
Brownfields	Mineral exploration is termed Greenfields or Brownfields depending on the quantity and quality of previous exploration. Brownfields exploration is generally taken to refer to exploration close to existing mineralised deposits.
clastic	Pertaining to sedimentary rocks composed primarily from fragments of pre-existing rocks or fossils.
conformable	Description of rock strata where the layers are uninterrupted through time.
conglomerate	A sedimentary rock consisting of rounded rock fragments greater than 2mm in size cemented together.
costean	Exploration trench.
deltaic deposits	A deposit of sediments formed at the mouth of a river where it enters a lake or the sea.
diamond drilling	A method of obtaining a cylindrical core of rock by drilling with a diamond impregnated bit.
fault	A fracture in rocks whereby rocks on one side have been moved relative to the rocks on the other.
fluvial deposits	Applied to sand and gravel deposits laid down by streams or rivers.
g/t	Grams per tonne.
granite	A common type of intrusive, felsic, igneous rock.
Greenfields	Mineral exploration is termed Greenfields or Brownfields depending on the quantity and quality of previous exploration. Greenfields exploration is generally taken to refer to exploration further away from known mineralisation and is more conceptual in nature compared to Brownfields exploration.
hydrothermal	A term applied to hot aqueous solution having temperatures up to 400º C which may transport metals and minerals in solution.
JORC	Joint Ore Reserves Committee (of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia)
lithology	A term pertaining to the general characteristics of rocks.
lode	A vein or other tabular mineral deposit with distinct boundaries.
mafic	A dark igneous rock composed dominantly of iron and magnesium minerals (such as basalt).
metamorphic	A rock type which has been subjected to heat and pressure.

metasediment	Metamorphosed sedimentary rock.
mineralisation	A geological concentration minerals or elements of prospective economic interest.
ore	A volume of rock containing components or minerals in a mode of occurrence which renders it valuable for mining.
orogen	The physical manifestation of orogenesis (the process of orogeny).
orogeny	A period of mountain building.
Palaeozoic	The era of geologic time that includes the Cambrian, Ordovician, Silurian, Devonian, Carboniferous, and Permian periods.
pluton	A large body of intrusive igneous rock.
pyrite	An iron sulphide mineral.
quartz	Mineral species composed of crystalline silica (SiO_2).
RAB drilling	A relatively inexpensive and less accurate drilling technique (compared to RC drilling) involving the collection of sample returned by compressed air from outside the drill rods.
radiometric	Geophysical technique measuring emission from radioactive isotopes.
RC drilling	Reverse Circulation drilling, whereby rock chips are recovered by airflow returning inside the drill rods, rather than outside, thereby returning more reliable samples.
schist	Medium grade metamorphic rock which contains more than 50% platy and elongated minerals.
sedimentary	Rocks formed by the deposition of particles carried by air, water or ice.
sedimentation	The accumulation of sediment.
shale	Fine grained sedimentary rock with well defined bedding planes.
tectonic	Forces or movements resulting in the formation of geologic structural features.
ultramafic	Dark to very dark coloured igneous rocks composed mainly of mafic minerals.
unconformity	Description of rock strata where the layers are interrupted, discontinuous.

APPENDIX B: PHOSPHATE TARGET RANKING CRITERIA

RANKING CRITERIA		
	SCORE	DESCRIPTION
Prospective Host Rocks (0-5)	5	Outcropping prospective Mid Cambrian formations (Wonarah. Beetle Creek)
	4	Outcropping less prospective Mid Cambrian formations
	3	Interpreted Mid Cambrian formations below shallow cover (<10m)
	2	Interpreted Mid Cambrian formations below moderate cover (<30m)
	1	Interpreted Mid Cambrian formations below deep cover (<100m)
	0	No Mid Cambrian rocks
Known Phosphate Occurences (0-5)	5	Phosphate beds mapped/sampled
	3	Phosphate beds interpreted
	1	Unknown
	0	Not present
Proximity to basin margin/basin high (0-5)	5	Within 5km of the basin margin or on known basin high
	3	Within 30km of basin margin or on interpreted basin high
	0	>20km from basin margin or not on basin high
Geophysical response (radiometrics) (0-3)	3	High radiometric response
	2	Moderate radiometric response
	1	Low radiometric response
	0	No response
Basin Margin Embayment (0-2)	2	Proximity to marked embayment in Basin boundary
	1	Proximity to mod embayment in Basin boundary
	0	not present
GEOLOGICAL PROSPECTIVITY SCORE		
(total score out of 20)		
Potentially Economic Phosphate Grades (0-7)	7	> 20% P_2O_5 from sampling at mineable widths
	5	> 10% P_2O_5 from sampling
	3	Unknown
	0	no economic grades from sampling
Proximity to known deposits/prospects (0-3)	3	within 10km of competitor projects
	2	Within 50km of competitor projects
	1	within 100km of competitor projects
	0	>100 km from competitor projects
Proximity to infrastructure (road/rail) (0-5)	5	Within 50 km of road/rail
	3	Within 50 - 100 km of road/rail
	1	Within 100 - 200 km of road/rail
	0	greater than 200km from road rail
Potential Depth of mineralisation (0-5)	5	outcropping/near surface
	3	generally >30 mbs
	1	generally >50 mbs
	0	greater than 100 mbs
ECONOMIC MODIFYING FACTORS SCORE		
(total score out of 20)		

APPENDIX C: BASE METAL TARGET RANKING CRITERIA

RANKING CRITERIA		
	SCORE	DESCRIPTION
Prospective Host Rocks (0-5)	5	Highly prospective rocks (Mt Is Inlier)
	4	High prospectivity Proterozoic rocks
	3	Moderately prospective rocks
	0	No prospective rocks
Structural Complexity	5	Highly complex
	3	moderately complex
	0	no complexity
Magnetic Signature	2	Strong magnetic signature
	1	mod magnetic signature
	0	no mag signature
Gravity Signature	3	Strong gravity signature
	2	Mod gravity signature
	1	subtle gravity signature
	0	No response
Geochemical Signature	5	Highly anomalous geochem
	3	Moderately anomalos geochem
	2	unknown/under cover
	0	not present
GEOLOGICAL PROSPECTIVITY SCORE		
(total score out of 20)		
Potentially Economic Grades (0-7)	7	Potentially ore grade intercpets
	3	sub ore grades
	3	Unknown
	0	no economic grades from sampling
Proximity to known deposits/prospects (0-3)	3	within 10km of competitor projects
	2	Within 50km of competitor projects
	1	within 100km of competitor projects
	0	>100 km from competitor projects
Proximity to infrastructure (road/rail) (0-5)	5	Within 50 km of road/rail
	3	Within 50 - 100 km of road/rail
	1	Within 100 - 200 km of road/rail
	0	greater than 200km from road rail
Potential Depth of mineralisation (0-5)	5	outcropping/near surface
	3	generally <200mbs
	1	generally <500 mbs
	0	greater than 500 mbs
ECONOMIC MODIFYING FACTORS SCORE		
(total score out of 20)		