ANNUAL REPORT EL 23573 – Y/E 22/12/05
(LAGOON CREEK)

by

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for

ARAFURA RESOURCES NL

And

LARAMIDE RESOURCES LTD
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INTRODUCTION

BACKGROUND

Exploration Licence 23573 was applied for on behalf of Arafura Resources NL in 2002 to secure tenure over known gold and uranium prospects in that portion of the Westmoreland uranium province which extends into the Northern Territory. In 2005, Arafura entered an agreement with Toronto-based, Laramide Resources Ltd, whereby Laramide can earn a 60% interest in EL 23573 by the expenditure of A$5.5 million over 5 years. Laramide holds title to the Westmoreland uranium deposits on adjacent titles across the border in Queensland and have a right to earn an interest in EL 10335 immediately to the north of EL 23573.

In mid-2005 Laramide commissioned a low level detailed airborne geophysical survey over much of the area in which it holds an interest in both the NT and Queensland, and applied for Aboriginal sacred site clearances over the NT tenements. In addition they commissioned and ultimately lodged with Canadian regulatory authorities an independent geological report (“43-101 Report”, Jones, 2005) on their Westmoreland interests (copy included on the accompanying CD).

This present report outlines Laramide’s activities on EL 2357 in 2005.

LOCATION & ACCESS

Exploration Licence 23573 (Lagoon Creek) is located about 235 km southeast of Borroloola and about 1250 km SE of Darwin (Figures 1 and 2) and about 400 km NNW of Mt Isa. The eastern boundary of the EL runs along the state border with Queensland.

Access to EL 23573 from Borroloola, the nearest settlement of any size, is by the graded Carpentaria Highway from Borroloola to Burketown as far as Wollgorang Station, thence southward by 4WD bush tracks to the old mines at El Hussen and Cobar which lie on the northern boundary of the EL.
CLIMATE

The area lies in the tropical monsoon rain belt of northern Australia. Annual rainfall is about 900 millimetres. The bulk of this falls between December and March. Pre-monsoon tropical storms occur in October and November and can restrict activities temporarily. Virtually no rain falls between the start of May and the end of August. Temperatures range from 20-38°C in summer ("wet season") and 10-30°C in winter ("dry season").

TOPOGRAPHY AND VEGETATION

Topographically the area consists of strike ridges, plateaux and intervening valleys. Soil development is poor with lithosols and shallow siliceous sands present in the area. The creeks drain to the north and east.

Vegetation consists of scattered small trees, shrubs and spinifex. Larger trees occur along the water courses.
SUMMARY

In 2005 Arafura reached agreement with Laramide Resources Ltd whereby Laramide could take over exploration of EL 23573 and thereby earn equity in the licence.

In mid-2005, Laramide commissioned a low level, high resolution airborne geophysical survey over the licence as an adjunct to a wider survey over all of its exploration interests in the region. The survey was flown by UTS Geophysics August-September at 60 metres terrain clearance on lines spaced 100 metres apart.

Processing and interpretation of the data from the survey was still in progress at the end of the year under review but initial indications are that several new high-priority uranium anomalies have been detected within the area of EL 23573. An aggressive exploration program is planned for the next year of the licence to comprehensively test these anomalies.
TENURE

MINING/MINERAL RIGHTS

Arafura Resources N.L. was granted EL 23573 on 6th January 2004 for 6 years. The tenement contains 67 blocks with an area of 194 sq km (Figure 1). There are no pre-existing mineral claims or mining leases within the boundary of the EL.

In May, 2005, Arafura entered an agreement with Toronto-based uranium explorer, Laramide Resources Ltd, whereby Laramide can earn a 60% interest in EL 23573 by the expenditure of A$5.5 million over 5 years.

LAND TENURE

Background land tenure for EL 23573 is Pastoral Lease 1113 (NT Portion 674) operated as Wollogorang Station.

NATIVE TITLE

EL 23573 is affected by Native Title Claim DC02/11, Wollogorang South, made on behalf of the Gudidiwalia and Binanda Garawa People and accepted for registration by the National Native Title Tribunal on 19/07/2002.

The southern boundary of EL 23573 abuts Aboriginal Freehold Land (NT Portion 2006) administered by the Waanyi/Garawa Land Trust.

ABORIGINAL SACRED SITES

In December, 2005, Laramide was issued with AAPA Authority Certificate C2005/095 for the purpose of

“exploration works including ground traversing, stream, rock and soil sampling, track clearing and drill pad construction, drilling of test holes”

across the area of EL 23573.

The Certificate identifies Registered Sacred Site 6462-25 on the northern boundary of the licence area where “no ground disturbing works are to be carried out”. No other Registered or Recorded Sites were identified in the area of the EL.
GEOLOGICAL SETTING

REGIONAL GEOLOGY
(From Jones, 2005)

Laramide’s tenements are situated within the Calvert Hills, Mt Drummond (Northern Territory) and Westmoreland (Queensland) 1:250,000 geological sheets. The first geological observations in the area were reported by explorer Ludwig Leichhardt in 1847. However, little geological work was done until the late 1930s when the federal government funded the Aerial Geological and Geophysical Survey of Northern Australia (“AGGSNA”). This was followed in the mid-1950s by a joint federal Bureau of Mineral Resources (“BMR”) and Geological Survey of Queensland (“GSQ”) survey. The Westmoreland sheet was first mapped in 1955-57 (Carter et al., 1958) and the Calvert Hills sheet in 1957-61 (Yates et al., 1962). Mapping on 1:25,000 scale colour air photos of the Seigal and Hedley’s Creek 1:100,000 geological sheets was undertaken during 1972-73 (Sweet et al., 1981). Current maps covering the area include:

- 1:250,000 scale “Calvert Hills Metallogenic Sheet SE 53-8”, First Edition 1989, published by the NTGS.
- 1:100,000 scale “Seigal NT and Hedleys Creek Qld” First Edition 1980, published by the Bureau of Mineral Resources.

The Westmoreland region lies within the Palaeoproterozoic Murphy Tectonic Ridge, which separates the Palaeoproterozoic Mt Isa Inlier from the Mesoproterozoic McArthur Basin and the flanking Neoproterozoic South Nicholson Basin.

The oldest rocks exposed in the area are early Proterozoic sediments, volcanics and intrusives which were deformed and regionally metamorphosed prior to 1875 Ma. These Murphy Metamorphics (Yates et al., 1962) are represented mainly by phyllitic to schistose metasediments and quartzite. They are overlain by two Proterozoic cover sequences laid down after the early deformation and metamorphism of the basement, and before a period of major tectonism which began at about 1620 Ma. The oldest cover sequence is the Cliffdale Volcanics unit, which unconformably overlies the Murphy Metamorphics. The Cliffdale Volcanics contain over 4000 m thickness of volcanics of probably subaerial origin, more than half of which consist of crystal-rich ignimbrites with phenocrysts of quartz and feldspar. The remainder are rhyolite lavas, some of which are flow banded. The ignimbrites are more common in the lower part of the sequence, with the Billicumidjii Rhyolite Member occurring towards the top.

The Cliffdale Volcanics are comagmatic with the Nicholson Granite and together they comprise the Nicholson Suite. SHRIMP dating of both the Nicholson Granite and the Cliffdale Volcanics gave an age of 1850 Ma (Scott et al., 1997). The Nicholson Granite is predominantly I-type granodiorite in composition.
The Nicholson Suite shows little evidence of fractional crystallisation and on this basis the potential for forming large tonnage deposits is considered to be minor, although small tonnages of high grade are possible. In the vicinity of the granites there are no significant potential host rocks documented. Potential exists for small Sn and W deposits within the granite and for smaller Cu and Au deposits outside the granite (Budd et al., 2001).
Figure 4 - Generalised geology, Westmoreland area.
Compiled by D G Jones from published data; for legend see Fig.5 below.

Unconformably overlying the Nicholson Suite is the Tawallah Group (Yates et al., 1962). This is the oldest segment of the southern McArthur Basin. The base is a sequence of conglomerates and sandstones comprising the Westmoreland Conglomerate (Carter et al., 1958). The conglomerates thin out to the southeast and are in turn conformably overlain by the Seigal Volcanics (Grimes & Sweet, 1979), an andesitic to basic sequence containing interbedded agglomerates, tuffs and sandstones. Together these units comprise about two-thirds of the total thickness of the Tawallah Group. The volcanics are overlain in turn by the McDermott Formation, the Sly Creek Sandstone, the Aquarium Formation and the Settlement Creek Volcanics.

Uranium mineralisation has been recognised in the Westmoreland region in numerous structural and stratigraphic positions. These include:

1. associated with faults and fractures in Murphy Metamorphics;
2. in shear zones in the Cliffdale Volcanics near the Westmoreland Conglomerate unconformity;
3. at the reverse-faulted contact between Cliffdale Volcanics and Westmoreland Conglomerate;
4. within Westmoreland Conglomerate about 50m above its base;
5. in Westmoreland Conglomerate in close proximity to the overlying Seigal Volcanics;
6. in association with mafic dykes and sills; and
7. in shear zones within the Seigal Volcanics.

The most important uranium deposits occur on the northern dip slope of the Westmoreland Conglomerate in situation 5 above. The deposits represent thicker and higher grade concentrations of trace uranium mineralisation than is regionally common beneath the Seigal Volcanics-Westmoreland Conglomerate contact and along the flanks of the Redtree dyke zone. Mineralisation in other settings is only present in trace amounts (Rheinberger et al., 1998).

The deposits are associated with an altered basic dyke system intruded along faults. Mineralisation is present in both the sandstones and dyke rocks. To the north the Westmoreland Conglomerate is overlain by the Seigal Volcanics under Recent alluvium cover.

Figure 6 - Diagrammatic section looking west towards the Northern Territory border.

The Westmoreland Conglomerate is a flat-lying sequence dipping between 5° and 10° to the NNW. The dominant fault directions are WNW and NE. A prominent open joint system trending NE appears to have some control on the mineralisation.

Locally, the Westmoreland Conglomerate consists of a sequence of coarse to gritty feldspathic sandstone with local pebble and cobble lenses, overlaying a basal conglomerate bed containing abundant volcanic material.

Vesicular tholeiitic dykes have intruded along the fault zones in an en echelon pattern. The dykes weather more easily than the conglomerate and thus tend to be obscured at surface. Fresh dykes in core are brecciated and sheared, and extensively altered along the contact zones. The unaltered dyke is typically a dark green dolerite.
GEOLOGICAL HISTORY

Sands, muds and calcareous sediments were deposited prior to 1900 Ma over much or all of the regions shown in brown on Figure 3 above. The source area for the sediments was probably the Archaean granitic terrane to the west. Felsic and minor mafic volcanism related to accompanying intrusive activity affected some areas of the Murphy Tectonic Ridge.

During the Barramundi Orogeny (1860-1850 Ma) the basement rocks were tightly folded and regionally metamorphosed to greenschist facies, to form the Murphy Metamorphics. The tectonism resulted in uplift and erosion, and by 1875 Ma most of the region was probably a land area where large tracts of metamorphic rocks were exposed.

From 1840 to 1800 Ma, widespread felsic volcanic activity together with minor mafic volcanism and local clastic sedimentation took place to form the Cliffdale Volcanics. The abundance of ignimbrites indicates that the eruptions were predominantly subaerial. Comagmatic with the volcanics, granites of the Nicholson Granite Complex were emplaced. A suite of mafic dykes were intruded about the same time.

Some contact metamorphism and local folding, tilting and faulting accompanied the granite emplacement and volcanism, but no major region-wide deformation or regional metamorphism took place during this period. Most of the region was probably a land area subjected to erosion throughout this period. By 1800 Ma, parts of some granite plutons had become unroofed and metamorphic basement rocks were exposed.

Sudden regional subsidence in a linked array of basins controlled by segmented north-striking extensional faults resulted in rapid sedimentation re-commencing about 1790 Ma to form the Westmoreland Conglomerate, the basal unit of the Tawallah Group. The first sediments laid down were alluvial fan and braided stream deposits derived locally from the basement rocks. Rounded boulders of Nicholson Granite around 30 cm diameter are common in the basal conglomerates.

The fluvial sedimentation was followed by subaerial and possibly shallow-water felsic and mafic volcanism around 1680 Ma to form the Seigal Volcanics. After a short period of erosion, the volcanics were covered by near-shore marine and lagoonal dolomite, sandstone and siltstone of the McDermott Formation. The sea withdrew and there was a short hiatus in sedimentation; then sea level rose and sandstones and minor conglomerates of the Sly Creek Sandstone were laid down unconformably on the Seigal Volcanics and McDermott Formation. The Sly Creek Sandstone is overlain by poorly exposed sedimentary rocks of the Aquarium Formation and extrusives of the Settlement Creek Volcanics, which mark the top of the Tawallah Group in the Westmoreland area. The youngest internal SHRIMP zircon ages obtained for the Tawallah Group are 1713±7 Ma for the Tanumbirini Rhyolite and 1708±5 Ma for the Nyanantu Formation near the top of the group (Page and Sweet, 1998).

Major tectonism, involving thrusting, folding, faulting, mafic dyke emplacement and regional metamorphism affected the entire region between 1620 and 1550 Ma. Two main phases of deformation, D1 and D2, have been recognised. The first resulted in extensive thrusting and nappe formation, while the second was characterised by tight folding about northerly trending, steeply dipping to vertical axial planes. A later phase of deformation, D3, resulted in the formation of NNW and NNE-trending shear zones around 1480 Ma. Most of the mineral deposits in the region were probably formed during the deformation events in this period.
Some time after tectonism at 1450 Ma but before 1200 Ma, shallow-water sediments of the South Nicholson Group were deposited in the South Nicholson Basin. Some post-metamorphic NNE-trending mafic dykes were intruded around 1115 Ma. Vertical and lateral movements took place along the major faults of the region during the late Proterozoic, and gentle basin-and-dome folding affected the South Nicholson Group and underlying units.

![Figure 7 - Locations of Principal Uranium Deposits, Westmoreland Region.](image)

LOCAL GEOLOGY EL 23573 AREA
(From Fabray, 2005)

The oldest rocks exposed in the tenement are flow-banded rhyolitic lavas and tuffs of the Billicumidji Rhyolite Member of the Cliffdale Volcanics (Murphy Inlier). These Palaeoproterozoic volcanics outcrop in two NE trending anticlinal windows and they are intruded by acid dykes. The volcanics have been dated at 1770 Ga (Ahmad and Wygralak, 1989).

The Cliffdale Volcanics are overlain unconformably by the 1400-1800 metres thick Westmoreland Conglomerate of the Tawallah Group (McArthur Basin). This formation consists of pebbly sandstone, sandstone and conglomerate. It dips gently (5-10º) to the northwest, except close to some faults where buckling has occurred. The formation has been divided into four sedimentary units, each representing a fining-upwards sedimentation cycle.

The basal unit of the Westmoreland Conglomerate was deposited unconformably on the Cliffdale Volcanics and consists of breccias and conglomerates grading upwards into sandstones and quartzite. The
coarse units immediately above the unconformity are about 12 metres thick and contain large fragments and cobbles of volcanic rock.

The lower part of unit 2 consists of pebbly sandstones overlain by two cobble conglomerate beds, each about 40 metres thick, separated by sandstone. The sequence above the conglomerates consists of coarse sandstone. The overall thickness of unit 2 is about 500-800 metres.

Unit 3 is well exposed and in places forms a prominent scarp cliff e.g. El Hussen area. The basal part of this unit consists of cobble and boulder conglomerate interbedded with sandstone and pebbly sandstone. This sequence is followed by medium to coarse feldspathic sandstone which is overlain by the El Hussen Conglomerate (informal name). The latter consists of pebble, cobble and boulder conglomerates about 40-100 metres thick.

The uppermost unit of the Westmoreland Conglomerate, unit 4, is estimated to have a thickness of 200-250 metres and is the preferred sedimentary host for uranium mineralisation in the area. The unit consists of sandstones with some pebble beds and conglomerates. A distinctive conglomerate has been mapped in Queensland and the NT by Queensland Mines Ltd and Kratos Uranium N.L. and it occurs about 60 metres from the top of the unit. The Metre Conglomerate (informal name), it is about 1 metre thick, is a clast-supported cobble conglomerate with a distinctive white porcellaneous sandstone matrix. The rest of unit 4 consists of sandstone with some pebble beds. The uppermost 5 metres of the unit contains concretionary hematite nodules and is heavily hematised at the top. Anomalous radioactivity has been found in this hematitic zone.

The Seigal Volcanics conformably overlie the Westmoreland Conglomerate. In some areas the base of the volcanics is marked by a thin (1-2 metres) siltstone bed which may be radiometrically anomalous. The volcanics are about 1600 metres thick and consist of basic lavas with many thin bands of siltstone and fine sandstone. About halfway up the succession there is a marker sandstone (Carolina Sandstone Member) which is 20 metres thick. The lavas occur as flows which are generally less than 20 metres thick. The upper parts of the flows are amygdaloidal and the vesicles contain quartz, chalcedony, hematite and celadonite. The dolerite dykes which intrude the underlying rocks are thought to be feeders of the volcanics.

Flat-lying rocks of Mesozoic age occur as dissected plateaux and isolated mesa capping older rocks. These are the Mullaman Beds and they consist of basal conglomerate, sandstone and siltstone with a thickness of up to 70 metres.

**MINERALISATION EL 23573 AREA**
(From Fabray, 2005; refer Figure 7)

Uranium, uranium-gold and copper mineralisation occur in the area.

Uranium was mined at the Cobar 2 and Eva mines in the 1950’s; both these prospects are outside the current tenement. At the Eva (Pandanus Creek) Mine, pitchblende and secondary uranium minerals occurred in shears zones within strongly altered acid volcanics overlain unconformably by the Westmoreland Conglomerate (Sweet et al., 1981). Pitchblende was found in vertical shears and faults within the Seigal Volcanics close to their contact with underlying Westmoreland Conglomerate at the Cobar 2 mine.
Ahmad (1987) has classified the uranium occurrences in the tenement area into the following types:

**Type A**

These prospects lie at the volcanic (Seigal or Cliffdale) – Westmoreland Conglomerate contact. The volcanics and/or the conglomerate are mineralised. The contact can be a normal stratigraphic succession or a reverse fault as the conglomerate underlies the volcanics. Examples of this type include El Hussen, Duccios and Jim Beam.

**Type B**

In this type the uranium mineralisation occurs as sub-horizontal lenses in the Westmoreland Conglomerate, adjacent to basic dykes which can also be mineralised. This type contains the most important uranium deposits in the Westmoreland region. The dykes are up to 10 metres in width and occupy northeast trending fault zones. Three fault-associated dyke systems have been identified in the region. Two (Redtree and El Nashfa) are located in Queensland and are host to uranium deposits containing over 10,000 tonnes of $U_3O_8$ (Hills and Thakur, 1975). The Northeast Westmoreland dyke zone is situated within Arafura’s tenement and contains three prospects (Mageera, Intermediate and Oogoodoo).

**Type C**

Type C occurrences are found in the Cliffdale Volcanics and there are no prospects of this type within the EL 23573.

**Type D**

This type is associated with fractures in the basal part of the Seigal Volcanics. The contact with the underlying Westmoreland Conglomerate may be 100 to 200 metres below these occurrences. The Horsepocket prospect is an example of this type.

There are two styles of uranium mineralisation:

1. Open-space filling and replacement of wallrock in the volcanics and rarely in sandstone.
2. Replacement of the matrix in sandstone.

Pitchblende is the most abundant primary uranium mineral. Torbernite, carnotite and meta-torbernite are the commonest secondary minerals. Hematite is invariably associated with the uranium mineralisation. Other alteration minerals include quartz, sericite, muscovite and chlorite. Gold has been reported from a number of the uranium prospects.
PREVIOUS INVESTIGATIONS

WESTMORELAND REGION - DISCOVERY AND OWNERSHIP
(From Jones, 2005; refer Figure 7)

The Westmoreland region was probably first prospected in the 1890s, after the discovery in 1887 of silver-lead deposits at Lawn Hill, 100 km south. Copper was discovered in 1911 at Settlement Creek and at the nearby Redbank lode in the Northern Territory in 1916. In 1912 the Packsaddle and Bauhinia copper lodes were discovered near Wollogorang homestead. Pitchblende has been mined in the Peters Creek Volcanics, which overlie the Westmoreland Conglomerate, 20-30 km west of Redtree (Syvret, 1957).

Uranium exploration in Australia was initiated in 1948 by requests from the United States and British governments for uranium oxide. The federal government encouraged explorers by offering tax-free rewards up to $50 000 for uranium discoveries, and by offering a guaranteed price for any uranium produced. A local prospector found secondary uranium minerals on his leases at Rum Jungle in 1949, which initiated the first uranium exploration boom in the Northern Territory.

The BMR acquired regional airborne radiometric data and offered free geological advice to prospectors to further encourage exploration. Individual prospectors or newly formed companies undertook most exploration activities, which mainly involved ground-truthing BMR airborne radiometric anomalies using Geiger counters. Most of the smaller vein-type deposits were found at this time, including those in the Pandanus Creek area of the Northern Territory in 1955 by prospector R T Norris (Lord, 1955). The main deposit was discovered in 1958 by Eva Clarke, niece of Norris, who was found playing with yellow pebbles of autunite and torbernite (Morgan, 1965), and named the Eva prospect.

Mount Isa Mines Limited (“MIM”) were granted Authority to Prospect (“AP”) 46M on 1st August 1956. The AP covered 1,800 sq miles (4,662 sq km) from Westmoreland station to Lawn Hill station, adjacent to the Queensland-Northern Territory border. The principal targets were copper and uranium. In early November 1956 the Bureau of Mineral Resources (“BMR”) commenced an airborne scintillometer survey of the Westmoreland area. Anomalies located by the BMR were notified to the MIM field party as soon as they came to hand, together with a comment as to their relative value. While following up one of these anomalies during the second week of November 1956, a “promising occurrence of torbernite was found in the Westmoreland Conglomerate, in the vicinity of Lagoon Creek”, by prospector A Blackwell from the MIM field party (Battey, 1956). The deposit was given the name Redtree.

During 1958 MIM drilled 277m in 11 holes at Redtree using a wagon drill with a 6 cm bit. Target depth of the holes was 30m, which was rarely attained. All the holes returned visible torbernite. The best assay was 12m @ 0.25% U₃O₈. Two core holes were drilled the following year, one to 37m and one to 12m depth. The core assays confirmed the wagon drill results.

Up to 12 mineralised horizons were reported by MIM in the secondary mineralisation, which averaged 7.3m in thickness over an area 430m long by 90m wide. Grade ranged from 0.05% to 0.5%, averaging 0.15% U₃O₈ (Brooks, 1960).

Because of the low grade and the remote location of the deposit, MIM relinquished the AP but pegged three mining lease applications over Redtree and other known surface uranium mineralization. The leases
were granted in 1959 to a 50:50 MIM/Consolidated Zinc Pty Ltd joint venture. Consolidated Zinc later became CRA, which subsequently purchased a 100% interest in the leases.

Subsequent drilling (12,000m of core), pitting and shaft sinking by Queensland Mines Ltd (“QML”) at the Redtree prospect during 1967-69 indicated continuous primary uranium mineralization between minimum depths of 15m and maximum depths of 135m extending for at least 4800m along a major joint system. The average width of mineralization was stated to be 9.5m. Assays varied between 0.05% and 1%, averaging 0.2% U$_3$O$_8$. The Queensland Geological Survey reports that: “At this stage, the total resource was estimated to contain 16,000 tonnes of uranium oxide.” (Culpeper et al., 1999). The Huarabagoo deposit was discovered during this programme.

At the same time, BHP carried out an airborne radiometric survey of 1,224 line km cutting across the strike of the Westmoreland Conglomerate. Only minor anomalies were recorded.

Following the discovery of the Nabarlek deposit in 1971, QML ceased exploration at Westmoreland to concentrate their efforts in the Alligator Rivers area of the NT. In 1975 QML formed a joint venture with Urangesellschaft Australia Pty Ltd (“UAPL”), Anglo Australian Resources NL and CRA Ltd. UAPL discovered the Junganunna deposit in the period 1976 to 1983 when they were managing the joint venture. Omega Mines Ltd entered the joint venture in 1982 and completed a programme of drilling and re-assay of core for gold at Huarabagoo. Results confirmed some erratic high grades up to 86 g/t Au. In 1990 CRA took over management, and purchased 100% of the joint venture in 1996. Prior to this time, CRA had purchased a 100% interest in the old MIM mining leases at Redtree.

During the late 1960s uranium prices had begun to rise in expectation of increased demand for nuclear powered electricity generation. In Australia, the federal government relaxed the export policy for uranium to encourage exploration. During this period, large private companies, rather than prospectors, undertook all the exploration. From 1960 to 1980, more than 20 EPMs were explored in the Queensland section of area covered by Laramide’s Westmoreland tenements, generating over 90 open file reports. Apart from the work discussed above, this exploration included:

- **BHP (1967-73)** - airborne radiometrics followed up by percussion drilling (6,900m) and diamond drilling (2,400m) in 146 holes. Best intersection was 2m @ 0.92% U$_3$O$_8$ at the Amphitheatre prospect.

- **US Steel International (1968-70)** - stream sampling for base metals around the Gulf of Carpentaria, as part of a manganese-uranium search.

- **Westmoreland Minerals Limited (1970)** - field inspection of base metal anomalies in Hedley’s Creek.

- **Esso Mineral Enterprises Australia Ltd (1971-72)** - 3 vertical holes (664m total) to max 275m in alluvial plain of Lagoon Creek without reaching the Seigal Volcanics/Westmoreland Conglomerate contact, considered to be the prospective horizon.

- **Mt Arthur Molybdenum NL (1973-79)** - reconnaissance radiometrics, including 170km of Track Etch lines, plus 3000m of auger drilling in 2,565 holes.
• Savage Exploration Pty Ltd (1975-81) - soil geochemistry, airborne radiometrics, track etch, and diamond drilling 50 holes (2,500m).

• Mines Administration Pty Ltd (1977-79) - stream sediment geochemistry and ground radiometrics for uranium, tin and tungsten.

The surge in gold exploration from 1980-1990 was reflected in the increased tempo of exploration in the Westmoreland area. Close to 30 EPMs were granted in the area now covered by Laramide’s tenements in Queensland; more than 70 open file reports record the work done through this decade while 18 ELs were explored by 6 companies on the Northern Territory side. Some of the more significant exploration, apart from that already described above, was as follows:

• Kratos Uranium NL (1975-1988) - geochem sampling, radiometrics and drilling in the Pandanus Creek (NT) area.

• Triako Mines NL (1979-80) - drilled 47 RC holes in the Redbank area.

• Minatome Australia Pty Ltd (1980-82) - ground geophysics, trenching and 9 percussion drill holes into dolerite dykes targeted to 200m depth.

• Total Mining Australia Pty Ltd (1983-84) - ground geophysics (including Track Etch) for uranium in the Lagoon Creek area.

• Central Electricity Generating Board Exploration (Australia) Pty Ltd (1983-89) - BLEG sampling for gold and soil gas sampling for radon; RAB and percussion drilling (2,610m).

• International Mining Corporation NL (1984-85) - stream sediment sampling for gold, diamonds, uranium and base metals.

• CSR Ltd (1987) - BLEG and rock chip sampling for epithermal gold in the Cliffdale Volcanics.

• Golden Plateau NL (1988-89) - BLEG and rock chip sampling for gold.

• Uranerz Australia Pty Ltd (1982-89) - explored for uranium on both sides of the border; BLEG sampling for gold; ground geophysics; RAB drilling (16 holes, 601m); one percussion hole (44m); one core hole (169m).

Since 1990, the pace of exploration has declined, and through the past 15 years there have been only 11 EPMs turned over in the Queensland area covered by Laramide’s tenements. Only 15 open file reports have been lodged with the GSQ detailing the exploration completed during this era, all by CRA describing the work outlined above. On the Northern Territory side, exploration since 1990 has been dominated by major companies, including Mt Isa Mines, CRA, and Poseidon.

By 1990 CRA Ltd held a dominant interest in tenements in the region. An internal reorganisation saw CRA absorbed into the Rio Tinto group. Rio Tinto relinquished its tenements in 2000 and subsequently Tackle Resources Pty Ltd filed applications over the areas previously held by Rio Tinto.
PREVIOUS EXPLORATION EL 23573 REGION
(From Fabray, 2005)

The area has been subjected to three periods of intensive exploration (Ahmad and Wygralak, 1989):

1956-1960: An intensive phase of uranium exploration following the discovery of the Rum Jungle and the South Alligator River uranium deposits.
1968-1971: Exploration mainly for uranium but also for copper in the Redbank area.
1978-: Most exploration has been directed towards uranium, gold and diamonds.

The North Australian Uranium Corporation (NAUC) explored for uranium on AP 438 in the late 1950’s (CR 54/5) and undertook underground testing on a number of prospects including El Hussen. Some uranium ore was mined at the Cobar 2 mine.

BHP and Carpentaria Exploration Company (CEC) undertook exploration in the area in the late 1950’s and early 1960’s (CR 58/5 and 62/3). BHP tested the Eva mine which was subsequently mined by South Alligator Uranium N.L. CEC prospected the area between Pandanus Creek and the Qld border with little success.

United Uranium N.L (UUNL) explored in a joint venture with Peko-Wallsend Ltd, Electrolytic Zinc Company of Australia and Newmont on AP 1738 and 2212 between 1967 and 1971 (CR 68/59, 68/60 and 71/150). Most of the work was concentrated on the Eva and Cobar 2 mines. Some work was done at the El Hussen prospect. Two new uranium prospects were found but both lie outside the current tenement.

In 1971 Noranda and Utah Development Company joined the UUNL joint venture and Noranda became the operators. The tenements became ELs 121, 122, 124 and 125. The Red Rock and Crippled Horse anomalies were drill tested (CR 73/84 and 74/60), both are outside EL 23573. The 1970 UUNL airborne radiometric survey was reassessed and some further anomalies were followed-up with no success. The ground was relinquished in 1973/74.

Kratos Uranium N.L. was granted ELs 1016 and 1017 in 1974, and EL 1074 in 1979 (CR 79/111, 79/112 and 82/213). Reconnaissance work was undertaken along the Seigal Volcanics/Westmoreland Conglomerate contact between El Hussen and NE Westmoreland. This included soil sampling, surface radiometric surveys and track etch (radon) cups. Some showings of secondary uranium minerals were found in the uppermost unit of the conglomerate. Drilling was undertaken at El Hussen, NE Westmoreland, Southern Comfort, Jim Beam and Jacksons Pit (see below). The tenements were relinquished in 1982.

In the period 1978–80 CRA Exploration (CRAE) held ELs 1873, 1874, 1948 and 2135. Airborne radiometric and magnetic surveys were completed. Some anomalies were investigated with no success (CR 79/199, 80/201, 80/202 and 80/203).

Key Resources held EL 2829 from 1981 to 1983. Some ground reconnaissance was completed on the Calvert prospects before the ground was relinquished (CR 84/11).

Uranerz explored ELs 3269-3275 between 1982 and 1984. Most of the work was done outside of the current tenement. Some helicopter-borne and ground radiometric surveys were done over the El Hussen
and Duccios prospects. ROAC (radon cup) surveys were also done in the same areas (CR 84/69). No significant mineralisation was found.

Uranerz in joint venture with Central Electricity Generating Board of UK (CEGB) explored ELs 3450 and 4647 between 1984 and 1988. Some work was done at the El Hussen prospect including drilling. An airborne radiometric survey was flown with some heliborne rim-flying (CR 86/260). In 1986 Golden Plateau N.L. farmed-in to explore for gold and there was a considerable amount of BLEG stream sediment work done before the tenements were relinquished.

Kratos continuously held tenure in the area from 1982 to 1990 under ELs 3625-27, 6155-57 and 6250, and ERLs 81 and 82. In 1982-83 orientation geophysical surveys were completed over the Southern Comfort prospect. Between 1984 and 1986 CEGB farmed-in to the tenements and undertook a reinterpretation of all previous data and completed geophysical and geochemical surveys over the Northeast Westmoreland area (88/317). After 1986 all of the work was aimed at discovering gold deposits with little success. All of the titles were relinquished in 1990 (CR 90/384).

CRAE returned to the area in 1991 and explored for base metals, gold, uranium and diamonds under ELs 7187 and 9318. An airborne radiometric and magnetic survey was flown over the central and southern portions of EL 7187 in 1992. No encouragement was given by the results obtained and the ELs were relinquished (CR 92/129, 95/162, 95/520 and 96/874).

DETAILS OF URANIUM PROSPECTS EL 23573 REGION
(From Fabray, 2005, after Whitcher 1994; refer Figure 7)

1. Northeast Westmoreland

This prospect is located on a 3 km long structure known as the Northeast Westmoreland or J.N Fault, which continues across the border into Queensland where it is known as the Lagoon Creek Fault. The structure has the same orientation (NE-SW) as the mineralised Redtree and El Nashfa Fault systems in Queensland (Ahmad and Wygralak, 1989).

Seigal Volcanics crop out poorly on the surface and the main target for exploration was stratiform uranium mineralisation in the upper section of the Westmoreland Conglomerate at depth, similar to that found in Queensland (Hills and Thakur, 1975). A distinctive tuff or siltstone at the base of the volcanics was found to be anomalously radioactive but was not economically significant.

The western portion of the prospect was tested by United Uranium in the late 1950’s – early 1960’s, however the results of this work have not been found.

Kratos conducted extensive investigations over the area between 1976 and 1981, including gridding, mapping, soil geochemistry, radon surveys, ground radiometrics and drilling. About 130 drill holes were completed and there were some interesting albeit narrow intersections of uranium mineralisation:

<table>
<thead>
<tr>
<th>Hole</th>
<th>Intersection</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPD 3</td>
<td>1 m @ 2.3% U₃O₈</td>
</tr>
<tr>
<td>WPD 45</td>
<td>1 m @ 0.18% U₃O₈</td>
</tr>
<tr>
<td>WPD 60</td>
<td>1 m @ 2.4% U₃O₈</td>
</tr>
</tbody>
</table>
WPD 88  1 m @ 0.18% U₃O₈
WPD 99  1 m @ 0.2% U₃O₈

Most of the drill holes were vertical. All of the mineralisation was intersected at or slightly below the base of the volcanics. The fault system was not intersected in many of the holes and there were few intercepts of basic dyke.

2. El Hussen

This prospect was discovered in 1956 by NAUC. The uranium mineralisation is localised along a major NW trending structure (El Hussen Fault) separating Seigal Volcanics in the west from Westmoreland Conglomerate to the east. The southern portion of this mineralised zone is covered by EL 23573.

The initial exploration carried out by NAUC is poorly documented and included ground radiometrics, mapping, costeaning and some underground exploratory mining. Twenty-five drill holes were reportedly completed, however there are records for only four of these and the results were generally poor. The mineralisation occurred in a heavily altered shear zone in basalt at a contact with quartzite, secondary uranium minerals were found in the shear at several locations.

Kratos re-evaluated the prospect in 1977-78 and completed grid mapping, geophysical surveying, geochemistry and drilling. Eighteen holes were drilled and only weak uranium mineralisation was found at the volcanic/conglomerate contact.

3. Southern Comfort

This radioactive anomaly is located at the intersection of a number of structures (Southern Comfort Gutter Fault, Sandy Hollow Fault and Main Range Fault) and is situated in Westmoreland Conglomerate close to a faulted contact with Seigal Volcanics.

Kratos completed radiometric gridding in the area in 1980 and drilled eight holes in 1981. Minor uranium mineralisation was intersected in some of the holes but nothing of economic significance was found.

4. Jacques

This is a radiometric anomaly and it is located about 400 metres east of Southern Comfort on the Main Range Fault. The area was examined by Kratos but no drilling was done.

5. Jim Beam

This prospect lies about 1.3 km east of Southern Comfort and it is a small radiometric anomaly located in Clifffdale Volcanics just south of the Main Range Fault. The northern part of the prospect is underlain by quartz-feldspar porphyry (?dyke) which trends parallel to the Main Range Fault. The southern part of the anomaly occurs in dacite.

Kratos completed 5 drill holes in 1981. No significant uranium mineralisation was found, the highest value was 1m @ 220ppm U.
6. Jackson’s Pit

This prospect was discovered by United Uranium (UUNL) and is located about 400 metres east of Jim Beam.

The anomaly occurs on a minor splay fault off the Main Range Fault. It was costeamed by UUNL and Kratos drilled three percussion holes. Only minor uranium mineralisation was found in one hole in Westmoreland Conglomerate (2m @ 0.02% U₃O₈).

7. Horse Pocket

This prospect is located about 5 km south of El Hussen and was discovered in 1956 by NAUC. Limited costeanning was undertaken but no documentation now exists. The anomaly consists of weak secondary uranium mineralisation associated with shearing and alteration in Seigal Volcanics. No drilling has been done on this prospect.

8. Maniws

This prospect was discovered by Kratos in 1977 and it is located about 5 km south of the Northeast Westmoreland prospect. The anomaly is situated at the faulted contact between Clifffdale Volcanics and Westmoreland Conglomerate. The area was gridded by Kratos but no other details have been found.

9. Ducchio’s

This anomaly is located about 3.5 km west of Maniws and is located in Clifffdale Volcanics close to a major fault zone. No information on exploration in this area is available.

10. Calvert North

This prospect is located in the western extension of the tenement and is about 11 km southwest of El Hussen. The anomaly is situated in Westmoreland Conglomerate about 800 metres north of the major Calvert Fault.

Kratos drilled six shallow Airtrac holes in 1978 with little success. Key Resources investigated the area by mapping and sampling in 1983 and located two further anomalies. No follow-up work was done.
EXPLORATION COMPLETED 2005

AIRBORNE GEOPHYSICS

Laramide Resources Ltd completed a state of the art, low level, high resolution airborne magnetics and radiometrics survey over its Northern Australian project area including the entire area of EL 23573 in August-September, 2005.

The survey was conducted by UTS Geophysics of Perth with a crop duster airplane. The survey was flown at 60 metres flight height on 100 metres spaced lines for a total of 21,500 line kilometres.

The aerial survey conducted over Arafura’s EL 23573 (Figures 8 and 9) identified several strong uranium anomalies that include:

**Debbill Zone**
A 5 kilometres long zone in the southwest of the tenement occurring in either the Westmoreland Conglomerate or possibly in overlying Cretaceous sediments. Three high order radiometric anomalies in the zone require field checking and appear to be structurally controlled. No previous exploration results have been reported from this zone. The Debbill Zone anomaly will be a high priority target for the 2006 field season.

**Conglo**
An isolated high amplitude anomaly hosted by Westmoreland Conglomerate or possibly in Cretaceous sediments which overlie the Westmoreland Conglomerate in the middle of EL 23573.
No previous exploration results have been reported from this zone. This is a high priority target for the 2006 field season.

**Mageera Zone**
This zone has been previously explored and consists of a fault zone parallel to the Redtree dyke that hosts the main Westmoreland deposits across the border in Queensland. Previous exploration along the Westmoreland fault resulted in the following drill intercepts.

- **WPD 3** 1 metre  @ 2.3 % U₃O₈.
- **WPD 45** 11 metres  @ 0.08% U₃O₈ including 1 metre @ 0.18 % U₃O₈.
- **WPD59** 5 metres  @ 0.05% U₃O₈.
- **WPD60** 3 metres  @ 1.8% U₃O₈ including 1 metre @ 2.4 % U₃O₈ + 6.9 g/t Au.
- **WPD88** 20 metres  @ 0.08% U₃O₈.
- **WPD105** 1 metre  @ 1.05% U₃O₈.

(1% U₃O₈ is equivalent to 22.04 lb/T U₃O₈)

**El Hussen Trend**
This target extends across the boundary of EL 23573 to the north. Work by Laramide during the 2005 field season defined a 1400 metre long zone of mineralization in which twelve separate rock chip samples averaged 0.06% U₃O₈ over 3 meters widths. Highest sample was 3 meters @ 0.3 % U₃O₈.

The most significant aspects of the airborne survey are;
- the strongest anomalies at the Debbill Zone and Conglo are new discoveries,
- anomalism has been detected over a 5 kilometre strike length in the Debbill Zone in very favourable basement rocks and in association with structural trends and unconformity relationships; and
- the airborne survey clearly detected all previously known uranium occurrences in the field which adds confidence that the new anomalies are associated with uranium mineralisation.

**ABORIGINAL SACRED SITES SURVEY**
Laramide applied to the NT Aboriginal Areas Protection Authority for an Authority Certificate for purpose of exploration over the whole of the area of EL 23573. In December, Laramide was issued with AAPA Authority Certificate C2005/095 for the purpose of

“exploration works including ground traversing, stream, rock and soil sampling, track clearing and drill pad construction, drilling of test holes”

across the area of EL 23573.

The Certificate identifies Registered Sacred Site 6462-25 on the northern boundary of the licence area where “no ground disturbing works are to be carried out”. No other Registered or Recorded Sites were identified in the area of the EL.
EXPENDITURE STATEMENT, YEAR 2

Table 1: Expenditure Statement Year 2

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAPA Sacred Sites Clearance</td>
<td>10,300</td>
</tr>
<tr>
<td>Airborne Geophysical Survey - UTS</td>
<td>26,800</td>
</tr>
<tr>
<td>Processing of geophysical data - Laramide</td>
<td>4,700</td>
</tr>
<tr>
<td>Professional Costs – Laramide – Negotiate JV, Interpretation of data, plan exploration program, plan logistics, attend JV review/planning Meetings</td>
<td>45,000</td>
</tr>
<tr>
<td>Professional Costs – Arafura – Negotiate JV, monitor progress, attend JV meetings, statutory reporting, tenement maintenance</td>
<td>13,570</td>
</tr>
<tr>
<td>Airfares/Accommodation to attend JV negotiations and meetings - Arafura</td>
<td>2,080</td>
</tr>
<tr>
<td>Legal Costs associated with JV Negotiation/Agreements</td>
<td>3,800</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>106,250</strong></td>
</tr>
<tr>
<td>Administration Costs (15%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>122,190</strong></td>
</tr>
</tbody>
</table>

Expenditure Covenant for Year 2 of $30,000 has been reached.
PROPOSED EXPLORATION AND EXPENDITURE, YEAR 3

All 67 blocks have been retained for Year 3.

The radiometric anomalies in EL 23573 and others detected on adjacent areas will be the foci of Laramide’s exploration effort during the 2006 field season in Northern Australia.

The joint venture is planning a major exploration campaign for the coming dry season commencing in late April 2006. This will include the drill testing of a number of these anomalies within a larger drill program of at least 20,000 meters. The proposed program is outlined in Table 2.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
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<tbody>
<tr>
<td>Preliminary Reconnaissance and Native Title Meeting</td>
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</tr>
<tr>
<td>Ground recovery of radiometric anomalies</td>
<td>10,000</td>
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<tr>
<td>Stream/Soil/Rock Sampling to characterise radiometric anomalies</td>
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</tr>
<tr>
<td>Ground radiometric surveys</td>
<td>10,000</td>
</tr>
<tr>
<td>Access and drill pad construction</td>
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<tr>
<td>RC/Core Drilling and associated activities</td>
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<tr>
<td>Reporting</td>
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<tr>
<td>Sub-Total</td>
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<tr>
<td>ADMINISTRATION COSTS (15%)</td>
<td>22,500</td>
</tr>
<tr>
<td>TOTAL (Year 2)</td>
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</tr>
</tbody>
</table>

The proposed expenditure covenant for Year 3 is $150,000.

JOHN GOULEVITCH
BSc(Hons) MSc FAIG
6 February 2006
REFERENCES/SOURCES OF INFORMATION

(Mainly from Jones, 2005)


**NTGS OPEN FILE COMPANY REPORTS (EL 23573; From Fabray, 2005)**

CR 1954/5 North Australian Uranium Corporation, Progress reports 1/9/54 to 31/12/56.
CR 1962/3 Carpentaria Exploration Company, Exploration in East Portion, Carpentaria A to P
CR 1968/59 United Uranium N.L., Geology and uranium mineralisation, Eva mine, A to P 1738.
CR 1983/31  Uranerz, Annual report 7/1/83, ELs 3269-3275.
CR 1984/69  Uranerz, Final report 7/1/84, ELs 3269-3275.
CR 1985/175 Uranerz, Annual report 6/7/85, ELs 3326,3326,3450,4411,4442 and 4647.
CR 1986/260 Uranerz, Annual report 6/7/86, ELs 3326,3326,3450,4411,4442 and 4647.
CR 1996/874 CRA Exploration, First annual report, EL 9318.