

**A CULTURAL HERITAGE ASSESSMENT  
OF THREE PRIORITY AREAS  
WITHIN THE PROPOSED DAUNIA MINE PROJECT,**

prepared by

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## 1. INTRODUCTION

This report contains an assessment of the cultural heritage values of the areas which will be initially impacted by a proposed new open cut mine on existing mine leases owned by BMA at Daunia, south of Coppabella township in the Isaac Shire, Central Queensland highlands (Figure 1).

This project is part of an expansion of coal mining operations by the proponent BM Alliance Coal Operations Pty Ltd (“BMA”) in the Moranbah section of the northern Bowen Basin, Queensland. This project is entitled *The BMA Bowen Basin Coal Growth Project*. BM Alliance Coal Operations Pty Ltd is manager and agent on behalf of the Central Queensland Coal Associates Joint Venture governed by an overarching strategic alliance between BHP Billiton and Mitsubishi Corporation known as BHP Billiton Mitsubishi Alliance (BMA).

The Bowen Basin Coal Growth Project will involve the following proposed developments:-

- production of an additional 20 million tonnes per annum (Mt/a) of coal products through the development of two new coal mining operations (Daunia and Caval Ridge Mines);
- an expansion of the existing Goonyella Riverside Mine;
- the development of associated mine infrastructure for each of these operations;
- the possible development of a new, larger capacity airport near Moranbah to accommodate increased travel to and from the area.

The Project will be situated mainly on existing mining leases apart from the Caval Ridge Mine and the Goonyella Riverside Mine Expansion. Coal will be exported via the existing Hay Point and/or Dalrymple Bay coal terminals, with potential to export via Abbot Point coal terminal following construction of the Northern Missing Link rail line.

The subject land lies within an area over which the Barada/Barna/Kabelbara/Yetimarala (BBKY) people hold a registered Native Title claim, BBKY#3 NNTT No. Q6011/01. This claim covers all claimable land within the given area.

The proposed Daunia mine and infrastructure are located on the 1:100 000 Topographic Mapsheet of Grosvenor Downs (Ed. 1) 8553.

Northern Archaeology Consultancies Pty Ltd was commissioned to undertake the cultural heritage assessment with representatives of BBKY#3 (project archaeologist Elizabeth Hatte). The cultural heritage fieldwork was undertaken over several fieldwork sessions between May and July 2008 by the project archaeologist and an average of four BBKY representatives (see Appendix 2 for list of field personnel).

This cultural heritage study was undertaken under the provisions of *The Aboriginal Cultural Heritage Act 2003* (for pre-contact Indigenous cultural heritage) and *The Queensland Cultural Heritage Act 1992* (for non-Indigenous and post-contact Indigenous cultural heritage).

## 1.1 Project Description

The Daunia Mine will be located on the eastern side of the existing Poitrel Mine, 40 km east to south-east of Moranbah, Queensland. It will include the following elements:-

- the development of a new open cut mining operation on the existing Daunia mining lease (ML1781) and Daunia East mining lease (ML70115);
- the mine will be an open cut operation using an excavator and truck fleet with in-pit waste rock dumping. There is the potential to introduce a dragline later in the life of the Mine;
- up to 4 Mtpa of coal products (a mix of Semi Hard Coking Coal and Pulverised Coal Injection) will be produced per annum for the export market over a projected 21 year life of the mine;
- a predicted construction workforce of approximately 350 people, with an estimated operating workforce of 200 people;
- development of associated infrastructure including a new 5Mtpa coal handling and preparation plant (CHPP) on the existing Red Mountain lease (ML70116), a new connection to the power grid, and a new water pipeline connection;

- additional mine infrastructure such as haulage roads and vehicle parking areas are likely to be located on the existing mining leases, Millennium East ML70312 and Poitrel ML4749;
- expected construction commencement in early 2009, and first coal production in 2010.

#### **1.1.1. Proposed Mining Sequence**

The mining sequence will generally entail the following:

- progressive clearing of vegetation on areas required for the operation;
- stockpiling of topsoil from disturbed areas for storage and use in future site rehabilitation;
- blasting for fragmentation of waste rock;
- removal of waste rock, using a combination of dozers, excavators and trucks;
- approximately 4 Mt/a coal production, using a combination of dozers, excavators, loaders and trucks;
- rehabilitation of the site by re-shaping the waste rock dumps, topsoiling and revegetation using native vegetation.
- transport of the product approximately 160 km to the Hay Point and/or Dalrymple Bay coal terminals for shipment to the international market, and/or following its construction, via the Northern Missing Link rail line to Abbot Point coal terminal.

Mining will occur seven days per week and excavate to depths ranging from 20 m to 120 m. Daunia (ML1781) and Daunia East (ML70115) cover an area of 2,230 and 360 hectares respectively (see Figure xxx). A total area of approximately 2,000 hectares will be disturbed over the life of the mine, including the mine area and out of pit waste dump footprints. These disturbed areas will be progressively rehabilitated. A further 10 hectares will be disturbed on Red Mountain (ML70116) for mine infrastructure, including the CHPP.

#### **1.1.2 Supporting Infrastructure**

In addition to coal mining activities, the Daunia Mine will include the following:

- a CHPP with a capacity of up to 1,000 tonnes per hour (t/hr),
- associated loading facilities for Run-Of-Mine (ROM) coal;
- a water supply, using a combination of site water reuse and a raw water supply via a pipeline from the existing Braeside pipeline;
- an all weather access road from the Peak Downs Highway,
- power supply from the existing power network;

- a mine water management system, including clean water diversion, disturbed area runoff collection and treatment, pit water management, water reuse and water disposal if there is surplus water at any time;
- sewage and wastewater treatment by a package sewage treatment plant (STP);
- site offices, workshop and stores area, which would include diesel storage, portable/temporary power
- generator, and storage for tyres and other material; and
- additional trackwork to the Red Mountain rail loop, with associated product coal loading facilities.

## 1.2 Cultural Heritage Terms of Reference

The Terms of Reference for this project call for a cultural heritage study that will describe indigenous and non-indigenous cultural heritage sites and places, and their values. The study must be conducted by an appropriately qualified cultural heritage practitioner and must include the following elements:

- liaison with relevant indigenous community/communities concerning: places of significance to that community (including archaeological sites, natural sites, story sites etc);
- appropriate community involvement in field surveys;
- any requirements by communities and /or informants relating to confidentiality of site data must be highlighted.

A systematic survey of the proposed development area will be undertaken to include the following

- location and recording of indigenous and non-indigenous cultural heritage places;
- significance assessment of any cultural heritage sites/places located;
- Assessment of the impact of the proposed development on cultural heritage values;
- a report of work done which includes background research, relevant environmental data and methodology, as well as results of field surveys, significance assessment and recommendations.

It is noted that a permit to survey is no longer required under *The Aboriginal Cultural Heritage Act 2003*. The requirement for a permit to survey operated under the provisions of the previous Act (*Landscapes Qld and Queensland Estate Act 1987*) but it has been replaced by agreement-based arrangements

including Cultural Heritage Management Plans (CHMPs) which may be formally reviewed by the State. Wherever an Environmental Impact Statement is undertaken, a cultural heritage management plan is mandatory. This means that high-impact developments can go ahead only when an effective CHMP has been agreed between the proponent and Native Title Party/ies, and the CHMP registered with the State Authority.

### **1.3 Consultative Framework**

The BBKY Traditional Owners have been involved in the Daunia Project from its inception. Consultation between BMA (Shaun Ferris Project Manager) and Woorra Consulting (Frank Budby [CEO], Stacey and Graham Budby cultural heritage Managers]) has been ongoing, throughout the project.

Several meetings have been held in 2008 regarding, among other things, the arrangements and dates for cultural heritage fieldwork. Woorra Consulting Pty Ltd has been the project manager for the Indigenous cultural heritage study. The cultural heritage field surveys have been undertaken in several sessions between late May and late July 2008 by a team comprising myself as project archaeologist and an average of four BBKY representatives (see Appendix 2: list of field survey personnel).

On site recommendations regarding appropriate protection of sites, features and values have been formulated in association with the Traditional Owner representatives, and management strategies for the retention or mitigation of cultural heritage have been formulated both during and since the field survey (see Section 10).

## 2. CULTURAL HERITAGE LEGISLATION

### 2.1 Burra Charter

Indigenous Cultural Heritage in Queensland is protected by *The Aboriginal Cultural Heritage Act (2003)*. Like all Australian states and territories, Queensland legislation derives its philosophical principles from *The ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter) 1977*. The following definitions are Central to the Charter:

- ‘Conservation’ means all the processes of looking after a place so as to retain its *cultural significance*’ (Article 1.4).
- Cultural significance is defined as meaning ‘*aesthetic, historic, scientific or social value for past, present or future generations*’ (Article 1.2).

The Burra Charter recognises that cultural significance can be based on one or more values: aesthetic, historic, scientific and social but it notes that other categories of cultural significance may be developed as understanding of a particular place increases (Article 2.6). Article 5 states that ‘*Conservation of a place should take into consideration all aspects of its cultural significance without unwarranted emphasis on any one aspect at the expense of others*’. The Burra Charter has not always been found appropriate for places of significance to Aboriginal people. For this reason the Charter has been adapted in the ‘*Guidelines for the Protection, Management and Use of Aboriginal and Torres Strait Islander Cultural Heritage Places*’ which has been drafted by the Australian Cultural Development Office. It includes seven guiding principles for Aboriginal Cultural Places:

- Aboriginal...people have the right to be involved in decisions affecting their cultural heritage, and in the on-going management of their sites and heritage places. (Their) involvement in management should be continuous.
- Decisions about cultural heritage places should be made as a result of a conscious and logical planning process which is guided by and maintains the cultural significance, taking into account all the management issues affecting the place and identifying the objectives for the management of the place.

- Identifying which Aboriginal...people have rights to speak for the place, and/or have interests in the place must be done at the beginning of the decision-making process.
- The concerns of all interest groups must be taken into account, and the interests of the relevant Aboriginal ...group are paramount.
- Decisions should be taken at the local level. Planning should be directed by the relevant Aboriginal...community and all main interest groups and organisations should be fully involved. This should be supported by competent technical planning and effective negotiation processes.
- Actions affecting places should be considered only after the cultural significance of the place has been established and agreed to by its relevant indigenous community or owners, and a Statement of Objectives has been agreed upon.
- Records of places, decisions made about them and about what is done at heritage places should be kept unless it is not culturally appropriate. Storage of and access to information must be determined by the decision-making group.

## 2.2 State Legislation

### 2.2.1 *The Aboriginal Cultural Heritage Act 2003 (Queensland)*

Under this Act 'Cultural Heritage' is defined as anything that is:-

- (a) a significant Aboriginal area in Queensland; or
- (b) a significant Aboriginal object; or,
- (c) evidence, of archaeological or historic significance, of Aboriginal occupation of an area of Queensland (Section 8).

Aboriginal Cultural Heritage includes:-

- archaeological sites (such as artefact scatters, hearths, stone tool knapping areas, scarred trees and stone arrangements);

- places that have traditional stories or traditional knowledge associated with them;
- historically important places (such as old stockmen's' camps or tracks); and,
- places that are important today (such as food or ochre-getting places or places used for recreational purposes).

The Queensland Department of Natural Resources and Water (DNR&W) is the administering and compliance authority of *The Aboriginal Cultural Heritage Act*. The following principles are fundamental to its operation:

- recognition, protection and conservation of Aboriginal cultural heritage should be based on respect for Aboriginal, cultural and traditional practices;
- Aboriginal people should be recognised as the primary guardians, keepers and knowledge holders of Aboriginal cultural heritage;
- it is important to respect, preserve and maintain knowledge, innovations and practices of Aboriginal communities and to promote understanding of Aboriginal cultural heritage;
- activities involved in recognition, protection and conservation of Aboriginal cultural heritage are important because they allow Aboriginal people to reaffirm their obligations to "law and country";
- there is a need to establish timely and efficient processes for the management of activities that may harm Aboriginal cultural heritage.

The accent of this legislation is on *the protection of areas of cultural significance whether or not they actually contain physical evidence of the past (Section 12(2)t*, rather than just significant objects or items.

Under The Act, a significant Aboriginal area or object must be significant to Aboriginal people because of either or both of the following:

- (a) Aboriginal tradition;
- (b) the history, including contemporary history, of any Aboriginal party for the area (Sections 9, 10).

Section 11 of the Act stipulates that *if a particular object or structure is evidence of Aboriginal occupation, the area immediately surrounding that object etc is also evidence of Aboriginal occupation...the object or structure cannot be separated from its context without*

*destroying or diminishing the object or structure's significance as evidence of Aboriginal occupation.*

Section 12 provides information about identifying significant Aboriginal areas. It is not necessary for an area to contain markings or other physical evidence indicating Aboriginal occupation or otherwise, eg. the area might be a ceremonial place, a birthing place, a burial place or the site of a massacre. If significant objects exist in the area and their significance is intrinsically linked to the location, then the objects themselves make the place significant and if appropriate both the area and objects become significant. In identifying a significant area, authoritative information may be had from anthropological, biogeographical, historical and archaeological sources.

#### *2.2.1.1 Extent of Protection*

The Act exerts blanket protection over all Indigenous cultural heritage in Queensland regardless of the Native Title status of that land. Cultural Heritage items and place of significance to Aboriginal people may exist in areas where Native Title has been extinguished, eg. freehold land.

#### *2.2.1.2 Duty of Care Guidelines*

The Act contains a general Duty of Care to take all reasonable and practical steps to be aware of, and to avoid harming, Aboriginal cultural heritage. Section 23(1) requires that a person must exercise due diligence and reasonable precaution before undertaking an activity that may harm Aboriginal heritage. Everyone has a responsibility to exercise Duty of Care. Duty of Care Guidelines attached to The Act set out key indicators of compliance which include, but are not limited to, the following:-

proof of consultation with the registered native title applicants,

cultural heritage studies undertaken in association with the registered native title applicants,

searches of cultural heritage information contained in the cultural heritage register and database held by the Cultural Heritage Coordination Unit within DNR&W,

a Cultural Heritage Management Plan (CHMP) or other agreement with the registered native title applicants.

### 2.2.1.3 Penalties

There are substantial penalties for failing to safeguard the Aboriginal cultural heritage values of Queensland. These penalties consist of:

*Monetary penalties:*

- \$75,000 for an individual
- \$750,000 for a corporation;

*Injunctions,* issued by the Land and Resources Tribunal;

*Stop orders,* issued by The Minister, for an activity that is harming or is likely to harm Aboriginal cultural heritage objects or values.

A cultural heritage study is mandatory in relation to high impact activities that require Environmental Impact Statements.

### 2.2.1.4 Cultural Heritage Management Plan

The previous state permitting system for cultural heritage studies has been replaced by agreement-based arrangements including Cultural Heritage Management Plans (CHMP) which may be formally reviewed by the State. The CHMP is now a key tool in the process of heritage management. Management plans describe the heritage significance of a place and the policies, agreed by all parties, required to retain these values.

Wherever an Environmental Impact Statement (EIS) is undertaken, a cultural heritage management plan is mandatory if the project requires some form of permit, approval or licence. This means that high-impact developments will be able to go ahead only when an effective CHMP (containing the results of a cultural heritage study) has been agreed between the proponent and Native Title Party/ies, and the CHMP is registered with the State Authority.

Where the legislation does not automatically require a mandatory cultural heritage management plan, the legislation allows for the development of voluntary CHMPs as a measure to encourage industry to adopt best practice. Any activity undertaken in accordance with a cultural heritage management plan approved under the legislation satisfies the Duty of Care requirement.

### *2.2.1.5 The Register and Site Database*

A register of Aboriginal Cultural Heritage is maintained within the Cultural Heritage Unit, Department of Natural Resources and Water (DNR&W). This register contains information that has been collated by the Environmental Protection Agency between the 1930s and the commencement of the Act in early 2004. This information is confidential and basic details will be provided to authorised persons on an 'as needs' basis. A database of Aboriginal Cultural Heritage consisting of information collected since the Aboriginal Cultural Heritage Act commenced is also being maintained within this Unit.

### *2.2.1.6 Indigenous Cultural Heritage (CH) Bodies*

An Aboriginal CH Body is a corporation that has been approved by the Minister of the DNR & W as an approved CH body for an area. The CH Body is the initial contact point for cultural heritage issues within a Native Title area and it represents the registered Native Title claimant group for that area.

The function of this body is to identify the Native Title Parties for an area. A CH body must have the written support of a significant proportion of the Native Title Applicants of an area. Woorra Consulting (based in Mackay and Nebo) is the CH body for land within the BBKY#4 registered Native Title claim area.

## **2.3 The Queensland Heritage Act 1992**

This Act provides for the conservation and protection of places and items of non-indigenous origin and of indigenous origin that derive from the post-European contact history of Queensland. Under this Act, places and items must be entered into a Queensland Heritage Register in order to be protected. Substantial penalties may apply for damage to a place or items that has been entered on the Register. From 2005 the Queensland Heritage Council has adopted the revised Burra Charter (Walker and Marquis-Kyle 2004) as a guideline for making decisions under the Queensland Heritage Act 1992.

In order for a place to be entered onto the Queensland Heritage Register (Section 23 [1]) it must satisfy at least one of the following significance criteria:

- important in demonstrating the evolution or pattern of Queensland's history;
- important in demonstrating rare, uncommon or endangered aspects of Queensland's heritage;
- has potential to yield information that will contribute to an understanding of Queensland's history;
- important in demonstrating the principal characteristics of a particular class of cultural places;
- important in exhibiting particular aesthetic characteristics valued by the community or a particular cultural group;
- important in demonstrating a high degree of creative or technical achievement at a particular period;
- has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- the place has a special association with the life or work of a particular person, group or community of importance in Queensland's history.

## 2.4 Federal Legislation

Three pieces of relevant Federal legislation on cultural heritage issues are *Environment Conservation and Biodiversity Conservation Act 1999 (EPBC Act)*, *The Australian Heritage Commission Act 1975-1990* and the *Aboriginal and Torres Strait Islander Heritage Protection Act 1986*.

### 2.4.1 *Environment Conservation and Biodiversity Conservation Act 1999 (EPBC Act)*

A new Federal heritage system came into effect on 1 January 2004 to protect Australia's national heritage places. Nationally important heritage values will have legal protection under *The Environment Conservation and Biodiversity Conservation Act 1999*.

Under the new system, national heritage joins six other matters of national environmental significance (NES matters) already specifically protected under the EPBC Act. By law, no one can take any action that has, will have, or is likely to have, a significant impact on any of these matters without approval from the Australian Government Minister for the Environment and Heritage. There are severe penalties for those who

do. An action includes a project, development, undertaking, an activity, or series of activities.

If the Minister decides that the action is likely to have a significant impact on a matter of national environmental significance, then the action requires approval under the EPBC Act. If the Minister decides that the action is not likely to have a significant impact on a matter of national environmental significance, then the action does not require approval under the Act. If the Minister's decision is that an action does not require approval, a person will not contravene the Act if the action is taken in accordance with that decision. If the Minister's decision is that an action requires approval, then an environmental assessment of the action must be carried out. The Minister decides whether to approve the action, and what conditions (if any) to impose, after considering the environmental assessment.

The main elements of the new heritage system include:-

- the creation of a new advisory body, the Australian Heritage Council;
- the creation of both a National Heritage List and a Commonwealth Heritage List;
- retention of the existing Register of the National Estate.

The National Heritage List records places with outstanding natural and cultural heritage values that contribute to Australia's national identity.

The Commonwealth Heritage List will comprise natural, indigenous and historic heritage places owned or managed by the Australian Government. These include places connected to defence, communications, customs and other government activities that also reflect Australia's development as a nation.

The new laws also established the Australian Heritage Council, which replaces the Australian Heritage Commission as the Australian Government's independent expert advisory panel on heritage matters. The Australian Heritage Council consists of a Chair and six members, including two indigenous people with appropriate heritage experience or expertise.

When a place that may have indigenous heritage values is nominated to the National or Commonwealth Heritage Lists, the Australian Heritage Council must seek the views of indigenous people with rights or interests in the place

as part of its assessment. The Council must present these indigenous views to the Minister so he/she can take these into account when making decisions as to the listing of the place.

Under the new laws there are penalties for anyone who takes an action that results, or will result in, a significant impact on the national heritage values, to the extent they are indigenous heritage values, of a place. The laws also enable indigenous people to seek Federal Court injunctions against any activities that have a significant impact on the national indigenous heritage values of a listed place. Indigenous people will be involved in developing management plans for places with indigenous heritage significance on the National or Commonwealth Heritage List. National heritage places on indigenous land will be managed through conservation agreements, which will operate in the same way as Indigenous Protected Areas.

#### **2.4.2 Australian Heritage Commission Act 1975-1990**

This Act is comprehensive in its approach, covering a wide range of culturally significant places. Classes of items which might be placed on the Register of the National Estate include those of the historic environment (including buildings and structures, modified landscapes and archaeological sites); the natural environment; and items from the Aboriginal environment (both archaeological sites and unmodified natural features such as story places and sacred sites). Section 30 provisions protect items on the Register from unnecessary destruction by actions of Federal Government Departments, agencies and instrumentalities. State Governments and private developers are not constrained by the provisions of this Act unless Federal funding is involved. However, the Register provides guidance to the value of places.

#### **2.4.3 Aboriginal and Torres Strait Islander (ATSI) Heritage Protection Act 1986**

The purpose of the Aboriginal and Torres Strait Islander (ATSI) Heritage Protection Act 1986 is to preserve and protect areas and objects of particular significance to Aboriginal Australians from injury or desecration. This legislation can provide particular protection for sacred sites. Any steps necessary for the protection of a threatened place are outlined in a gazetted Ministerial Declaration (Sections 9 and 10), and this can include the prevention of development. As well as providing protection to areas, it can also protect objects by Declaration, and in particular Aboriginal skeletal remains (Section 12). Heavy penalties may be levied in the case of contravention of provisions of a

Declaration (Section 22). Although this is a Federal Act, it can be invoked in a State if the State is unwilling or unable to provide protection for such sites or objects.

## 2.5 Cultural Significance Assessment

The assessment of significance forms an integral part of cultural heritage studies. According to Bowdler (1984:1) "...an assessment of the significance of a place or a site is necessary to decide what should be done with it, and if some form of conservation or protection is indicated, a clear statement of significance should indicate how that preservation should be carried out".

The Burra Charter defines 'significance' as 'aesthetic, historic, scientific or social value for past, present or future generations' (Guidelines to *The Burra Charter* Section 2.1). It is important to note that the concept of significance is multi-faceted, and any one cultural heritage site may have different kinds of significance at different times and to different interest groups.

In making an assessment of significance the following steps are necessary:-

- to understand the nature of the 'fabric' or all the physical material of the place (*Burra Charter 1999: Definitions, Article 1*);
- to make a close, systematic examination of the fabric to understand its significance; this examination should be supplemented by other information about the place;
- to understand that the focus of both research potential and representativeness change over time. As research interests, archaeological methods and techniques change through time, or as sites become rarer in an area that has been subject to major physical disturbance of one form or another, the criteria for assessing site significance must be re-evaluated. Consequently, as many sites as possible should be conserved to account for these changing values.

Indigenous people are the primary sources of information on the value of Indigenous heritage places and how they are best conserved. This principle underlies Queensland's *Aboriginal Cultural Heritage Act 2003*. This Act acknowledges that the Australian Aboriginal cultural record can generally be divided into two sections:

- physically identifiable objects (archaeological sites), and

- objects/places that are not physically identifiable (sites sacred or significant to Aboriginal people which can be unmodified features of the landscape).

### **2.5.1 Scientific (archaeological) Significance Assessment**

The scientific significance of a place is assessed according to its:-

- research potential, and
- representativeness.

'*Research potential*' refers to a site's ability to provide information on past human activities or on past environmental conditions that may not be available in other sources (Bickford and Sullivan 1984). Archaeological sites can provide unique information on human activities, particularly everyday life, which are most likely not available in documentary sources such as previous research or oral histories. Specifically, archaeological sites can supplement other information on local histories by identifying physical relics of human activities, past climates and vegetation patterns by analysis of pollen grains, and past diets and resources by the identification and analysis of plant, shell and bone remains. Such information may relate to questions of local culture history spanning tens or even thousands of years or to more general and theoretical questions relating to the evolution of cultures.

'Representativeness' refers to the ability of one site or a sample of sites to represent as accurately as possible the range and frequency of site types in a particular area. The notion of representativeness is also related to the maintenance of site diversity. The rarer a site, the greater its significance. In areas not well represented by physical, archaeological remains, all sites must be considered significant until proven otherwise. Older sites, those that contain particular attributes, or a mixture thereof, that are not found elsewhere, or those in which the archaeological material is unusually well preserved would potentially fall within the category of unique.

The scientific significance of a site generally increases as its potential to provide information increases. For any given place the significance will be greater where evidence of its association or the event that created it survives *in situ* than where it has been changed or evidence of context does not survive.

### **2.5.2 Sites/Places of Significance to Traditional Owners**

Sites/places of significance (so-called 'sacred sites') can be identified by features in the landscape (Mountford in Gorecki 2007:8). These features often involve no

alteration to the natural landscape. This view is reinforced in *The Aboriginal Cultural Heritage Act 2003* which notes:-

*For an area to be a significant Aboriginal area, it is not necessary for the area to contain markings or other physical evidence indicating Aboriginal occupation or otherwise denoting the area's significance (Section 12).*

As such they are archaeologically invisible and can be identified only by knowledgeable Aboriginal people and, if such sites are still remembered by local Aboriginal communities, they hold particular cultural significance to them. The criteria used by Aboriginal people to assess cultural significance are generally quite different from those used to make assessments of scientific significance. Significance assessments by Aboriginal people may be based on traditional, historical, contemporary and other cultural values. Criteria such as rarity, uniqueness and representativeness are often not relevant in this type of assessment. Such places may be significant because of a past event, because of association with a story or because of an inherent spiritual quality associated with the place. They are not restricted to the period prior to contact with Europeans. Often events related to the contact period and the more recent past may be so important to the local Aboriginal communities that they become significant and this is reinforced in Sections 9 and 10 of *The Aboriginal Cultural Heritage Act 2003* (see Section 2.2 above). If these events relate to a specific place in the landscape, then that place (i.e. the site) may become sacred or highly significant to the local Aboriginal communities.

Scientific significance assessment is not necessarily consistent with Aboriginal people's cultural evaluations, but the Aboriginal cultural values of a site or place may, under *The Aboriginal Cultural Heritage Act*, override other forms of significance assessment.

### 3. THE STUDY AREA

There is a close relationship between the environment and Aboriginal cultural heritage and observed patterns in the distribution of cultural sites in the archaeological record have been influenced by environmental factors such as topography, geology, soils and vegetation. The preservation of cultural heritage is both linked to, and dependent upon, the preservation of the landscape; thus cultural heritage studies always describe factors such as climate, rainfall, geomorphology, geology, and vegetation.

The region has a tropical to sub-tropical climate with variable annual rainfall, high summer temperatures and high rates of evaporation. The mean temperature range west of the coastal ranges in January is ca.25°C to 35°C and ca. 10°C to 25°C in July. Most rainfall tends to occur in the summer months from November to March. Moranbah records an annual mean of 580mm (Elders weather.com.au), of which over 50% falls in the summer months of December to February, but the region may experience dramatic fluctuations in annual rainfall from year to year. This current year has to date been one of the wettest on record.

The usual pattern of rainfall consists of thunderstorms of high intensity and often short duration from September to December followed by a general wet. The intensity of these summer storms is sometimes such that they may exceed the capacity of clay soils to absorb the water. The result is significant runoff which tends to encourage erosion and reduce the usefulness of the moisture for plant growth. Droughts are also common. In these periods moisture loss through evaporation significantly exceeds moisture gained through rainfall.

The project area lies on elevated flat to undulating land between the Peak downs Highway and the Isaac River, the main watercourse in the region. The Isaac is a major tributary of the Fitzroy River and it is fed by numerous ephemeral streams, creeks and drainage lines. Many of these watercourses are filled with deep sandy sediments, as is the Isaac River itself. All watercourses in the Daunia leases are small and ephemeral. Where there has been land clearing there is often extensive evidence of erosion of the creek banks, gullies and adjacent alluvial terraces.

The study area has been extensively cleared in the past thirty years for pastoral purposes and replanted with mainly exotic pastures, particularly Buffel grass whose

thick clumping cover constituted a major visibility constraint during the survey (see cover page and Plate 1).



Plate 1. Facing south over cleared land

This clearing extends to small creek and drainage systems which have been virtually obliterated. The result is significant degradation of the general landscape and deterioration of its integrity, with consequent destruction of the context of the cultural record (eg see Plates 2 and 3 below).



Plate 2. Facing north along cleared gully



Plate 3. Close view of a small gully in the study area



Plate 4. Former Gilgai among cleared brigalow



Plate 5. Watercourse with some integrity, southern end, area 2..

The study area lies in the Northern Bowen Basin province of the Brigalow Belt Bioregion. This province is '...predominantly undulating with *Acacia harpophylla* (brigalow) and *Euc. cambageana* (Dawson gum) dominant on clay soils, while *E. crebra* (narrow leaved ironbark) and *Euc. populnea* (Poplar box) dominate on the shallower, texture-contrast soils... (Sattler and Williams 1999:11/6; 11/78-79).



Plate 6. Grass cover on the remnant Coolibah and *Euc Populnea* country

Soils within the study area consists mainly of the basalt-derived black clay soils and the cracking brown clay soils associated with brigalow dominated communities, and hardsetting, sodic duplex soils. The clays have pronounced swelling and shrinking properties. The natural vegetation of the Brigalow Belt is described as 'a mosaic of open forest and woodland communities' characterised by *Acacia harpophylla* (brigalow), a species of silvery wattle (Department of Environment and Heritage 2004:1), with a canopy c. 10-15 in height. There are other dominant species such as Belah (*Casuarina cristata*), Gidgee and Lancewood (*Acacia shirleyi*). However, 'most forest land is grazing land which has been degraded by overgrazing, tree thickening and a general low level of management' (see Central Queensland Information Paper 2004:81).

The broad geology of the region has been described by Olgers (1983). A band along the Isaac River to the immediate south of the Daunia leases is situated on Quaternary deposits of undifferentiated sand and sandy soil. North of this band are the late Permian coal-bearing deposits of the Blackwater Group containing siltstone and quartz and lithic sandstone (the

economic seams are in two seams of the Rangal Coal Measures which are approximately 100m thick.

Olgers' geology indicates that the stone available within a maximum radius of 50 km of the study area is varied and includes intrusions of granodiorite and granite, green lithic sandstone, pebble conglomerate red and green mudstone and basalt east and north of the study area. South and southwest is the area associated with the Peak Range Volcanics, containing basalt, rhyolite and trachyte flows, domes and plugs, schist, slate, fine grained sandstone and quartz reefs, mudstone, crystal tuff and fossiliferous material (Malone 1969; Olgers 1983). All of this was potentially readily available to Aboriginal people for the manufacture of stone implements.

Vegetation is recorded as part of cultural heritage assessments as it is integral to the Aboriginal cultural landscape. Though it is emphasised that all trees and plants were probably used by Aboriginal people in the past, particular ones were targeted for medicines, food and a variety of tools and objects for everyday use (eg. certain types of bark and grass for making string for bags, body ornaments, shelters etc.). Others had particular significance for individual people for other symbolic reasons. Though virtually all of the native forests in the study area have been cleared, there is sufficient evidence to know that it consisted predominantly of *E. populnea* (Poplar Box) forest *A. harpophylla* (Brigalow) and *Eucalyptus crebra* (narrow leaved ironbark) with a variety of other species. Remnant examples (or regrowth) of many of these species which have documented or reported traditional uses were seen in the project area (see Table 1 below for uses of species in region)

Botanical name	Local name	Traditional use/s
<i>Acacia harpophylla</i>	Brigalow	Implements, fire, medicine
<i>Acacia rhodoxylon</i>	Rosewood	Implements, medicine
<i>Acacia salicina</i>	Black wattle	Food, implements
<i>Archidendropsis basaltica</i>	Dead finish	implements
<i>Alphitonia excelsa</i>	White myrtle, soap tree	soap
<i>Bauhinia spp.</i>	Bauhinia	implements
<i>Brachychiton populneus</i>	kurrajong	food, water, implements, string
<i>Capparis cansecens</i>	Wild orange	food
<i>Capparis lasiantha</i>	Split Jack, wait a while	food

<i>Carissa ovata</i>	Native currant bush or 'burrum'	food
<i>Cassia brewsteri</i>	Leichhardt bean	medicine
<i>Cymbidium canaliculatum</i>	Black orchid or wild arrowroot	food, medicine

<i>Eremocitrus glauca</i>	Native limebush	food, medicine
<i>Eremophila mitchellii</i>	False sandalwood	fuel, medicine, ceremonial
<i>Erythroxylum australe</i>	Native cherry	Food, medicine
<i>Erythrophleum</i> sp.	Ironwood	implements
<i>Eucalyptus populnea</i>	Poplar box	implements
<i>Corymbia</i> sp.	Bloodwood	Implements, medicine
<i>Geijera parviflora</i>	Wilga	implements
<i>Grewia retusifolia</i>	Emu berries, dog balls	food
<i>Owenia acidula</i>	Emu apple	food, implements
<i>Petalostigma pubescens</i>	Quinine	Medicine, implements
<i>Santalum lanceolatum</i> (true sandalwood)	True or commercial sandalwood	Medicine
<i>Terminalia oblongata</i>	Yellowwood	implements
Unknown	possumberry	food
<i>Enchylaena tomentosa</i>	Ruby saltbush	food
<i>Heteropogon</i> sp.	White spear grass	food

Table 1. List of vegetation species in the region with known traditional uses.

The local region also supported a range of native animals (mammals, birds, reptiles, amphibians and fish) that would have provided a significant proportion of the local traditional diet. Different species had (and still have) symbolic associations with Traditional Owners.

The more common animals are Eastern grey and Red kangaroos (*Macropus rufus* and *M. giganteus*), possums (*Trichosaurus* sp.), wallabies (*Petrogale* and *Macropus* spp.), emus (*dromaius* sp.), scrub turkeys (*Alectura* sp.), bustards or plains turkeys (*Ardeotis* sp.), flying foxes and bats (*Pteropodidae* sp.), bandicoots (*Isodon* sp.), goannas (*varanidae* family) and echidnas, porcupines (*Tachyglossidae* family), pythons (*Boidae* family) and other snakes, freshwater crayfish in the gilgai, turtles, blue tongue and other edible lizards, and brolgas, ducks, geese and black swans (*Anatidae* family), curlews, plovers, parrots, doves and pigeons. At certain times of the year certain species were not eaten (F. Budby and C. McLennan pers. comm.).

European animals were first introduced on a large scale into the area with the first Europeans in the early 1860s when they drove their mobs of sheep into the region; however, cattle grazing has been the predominant pastoral industry in the region for most of the twentieth century. Both sheep and cattle have had a detrimental effect on cultural site preservation in the region, more so cattle as their hooves trample sites and exacerbate erosion. Other introduced species such as rabbits and pigs have also had a negative effect on archaeological sites. The former excavate burrows through buried sites, in the process destroying the stratigraphy of the buried layers. Pigs are also destructive of buried cultural sites.

Though there was some sheep grazing in the very earliest days after the arrival of Europeans, cattle grazing has been the predominant industry in the region since the early 1860s. More recently (from the early 1970s when Peak Downs, Norwich and Goonyella open cut mines began operation) coal mining has become progressively more important to the economy of the region. The townships of Moranbah, Glenden and Dysart all owe their existence to coal mining.

### **Potential Impacts**

The Daunia mine when operational has the capacity to impact negatively on any cultural resources that might remain in the area. The likely impacts on cultural heritage from the Daunia mine arise from further disturbance to the ground, changes to existing landforms and further destruction of the drainage patterns.

## 4. CULTURAL HERITAGE BACKGROUND

### 4.1 Archaeological Background

#### 4.1.1 *Research and Carbon (<sup>14</sup>C) dates*

Some of the earliest research in Queensland was undertaken in the southern portion of the Queensland Central Highlands about 200km south of here where an extensive system of sandstone rock shelters and rock art has provided an important focus for research on the complex stenciled art and on the deposits in the floors of several large rockshelters (e.g. see Beaton 1977; Quinnell 1979; Morwood 1981; Morwood and Godwin 1982). In the early 1960s, excavations at Kenniff Cave on Mt. Moffatt Station revealed a stratified sequence of Aboriginal occupation extending back some 19,000 years (Mulvaney and Joyce 1965). Within the cultural sequence two broad phases of stone artefact use were identified. In the later phase, from 5000 years ago, a variety of new stone artefacts appeared, many of which would have been hafted e.g. backed blades, points, adzes and axes. Morwood (1981) identified similar artefacts and patterns in his excavations. Beaton (1977) identified large scale consumption of cycad nuts from around 5,000 years ago. The preparation of the nuts for consumption involved labour intensive activities and large scale ceremonial gatherings.

C<sup>14</sup> dates which provide a great time depth of Aboriginal occupation in central and north central Queensland still very few in number, so the main ones will be mentioned here. Dates from the Carnarvon Ranges region are the oldest so far known in the wider central highlands region. The closest dates to the northwest are from the Hughenden area (approximately 350-400 km from the study area), where excavations at Mickey Springs on the upper Flinders River have revealed a number of calibrated basal dates of around 10,000 years BP (with a maximum basal date 12,350±120 BP) for the Aboriginal occupation of the area, all dates derived from charcoal (Morwood 1990).

Research in the Whitsunday region on the coast about 200km north east of here (Barker 1989, 1991, 1992) has investigated prehistoric island use by Aboriginal people. Barker's research indicated a relatively uninterrupted occupation depth of some 8,500 years BP (before present, approximated to 1950), through to the recent past. The archaeological data provided evidence that this site was occupied well before the sea levels rose to

form the Whitsunday Islands. In spite of the flooding of the landscape, there is clear evidence for uninterrupted Aboriginal occupation here until the arrival of Europeans.

A programme of dating of Aboriginal hearths is also being undertaken in the local region (Hatte and Oliver in prep). While most are less than 1,000 years old, several hearths on Poitrel coal mine immediately west of here are far older. A date of 5240 $\pm$ 40 BP (Beta-225497) from fireplace charcoal at a depth of 7cm is the oldest date for an open site in Queensland, while two others from New Chum Creek, from 10cm below the surface (3cm below a broken stone artefact) are dated at 2860 $\pm$ 40BP (beta 244151) and 2110 $\pm$ 50 BP (Beta-225496). These are the second and third oldest dates for open sites in the inland region of Central Queensland. On the southern bank of Grosvenor Creek in Grosvenor Station, several fireplace features were found while monitoring the installation of a buried water pipeline. Two fireplaces were found to contain charcoal, one in sufficient quantities for standard radiometric analysis. The charcoal sample, from 8cm below the surface of the hearth provided a conventional date of 280 $\pm$ 60BP (Beta-223869).

On Goonyella Riverside coal mine two <sup>14</sup>C dates have been derived. One from the basal layer (depth 15.5cm) of an excavation in a high terrace above a tributary of the Isaac River provided a conventional radiocarbon age of 390 $\pm$  40BP (Beta—216546). The other (Beta-216547) from a depth of 5cm in one of the fireplaces returned a date of 520 $\pm$ 40 BP. The table below summarises all radiocarbon dates derived so far in the triangle between Moranbah, Poitrel Mine and Newlands near Glenden.

Site Name	Conventional Radiocarbon Age	Site Type
Poitrel P11 Fireplace	5240 $\pm$ 40BP	Open
Poitrel NCCD fireplace 9	2860 $\pm$ 40BP	Open
Poitrel NCCD Fireplace 6	2110 $\pm$ 50BP	Open
Poitrel NCCD Fireplace 4	1240 $\pm$ 40BP	Open
Suttor Creek fireplace 1	690 $\pm$ 40BP	Open
Suttor Creek fireplace 7	690 $\pm$ 40BP	Open
Goonyella/Riverside 2	520 $\pm$ 40BP	Open
Goonyella/Riverside 1	390 $\pm$ 40BP	Open
Suttor Creek fireplace 6	360 $\pm$ 80BP	Open
Grosvenor Creek	280 $\pm$ 60BP	Open
Suttor Creek Sth fireplace 1	210 $\pm$ 40BP	Open

Suttor Creek fireplace 2	125 $\pm$ 0.9pMC	Open
South Walker Creek 1	120 $\pm$ 40 BP	Open
Eastern Creek 2	1190 $\pm$ 40BP	Open
Eastern Creek 3	1440 $\pm$ 60BP	Open

Table 2. Radiocarbon dates in the Moranbah/Coppabella/Glenden region.

#### 4.1.2 Consultancy reports

Most of the cultural heritage information derived from the local region can be found in consultancy reports undertaken for EIS-related assessments for coal mines and mine-related infrastructure such as roads, transmission and power lines, dams and dragline transportation paths, water and gas pipeline and optic fibre cables. The greatest concentration of these is in the Isaac River catchment area, where most of the Bowen Basin coal mines are located.

Cultural Heritage (previously archaeological) reports extend back more than 30 years and provide a broad and valuable database for the Isaac catchment area (eg. Brayshaw 1976a, 1976b, Hill 1980, 1982). This work was continued by Alfredson in the 1990s (1990, 1991, 1992, 1994a, 1994b, 1995) followed more recently by Hatte and others (1994, 1995, 1996, 1997, 1998, 1999, 2000a and b, 2001, 2002, 2003a and b, 2004a and b, 2005a, b, c, 2006, 2007). These studies also tend to reflect the changes in legislation and changing archaeological approaches that have been adopted in dealing with cultural heritage in this period.

Cultural heritage consultancy reports are held under the provisions of the *Aboriginal Cultural Heritage Act 2003* within the Aboriginal Cultural Heritage Unit, Queensland Department of Natural Resources and Water. As a result of cultural heritage studies in the region a number of patterns have been identified and it is possible to make some relatively detailed statements about traditional Aboriginal settlement patterns and behaviour (eg. usage of natural resources, seasonal patterns of settlement) and well informed predictive statements on the archaeological potential of particular landscape types.

Artefact scatters or isolated stone artefacts are by far the most common site type encountered, but their dimensions and composition may differ quite considerably. Artefact scatters represent the remains of campsites or working areas and they range in size from several artefacts representing a short term 'dinner camp' to many thousands of artefacts extending up to several kilometres representing large scale and/or long term gatherings of people. This latter type is usually very complex and would be expected to contain evidence of discrete activity areas. Typically such sites are found on the banks of streams and eroding gullies, but are not limited to such areas. There is a consistent pattern of larger complex artefact scatters to occur in terraces closer to larger watercourses

and for smaller, less complex scatters to lie along minor gullies. The range of raw materials identified in artefact scatters is attributed to the availability of local stone. The most frequently occurring stone material in the archaeological record of the region is silcrete but other materials include petrified wood, chert, sandstone, basalt, jasper, mudstone, siltstone and ashstone, crystalline and milky quartz.

Less frequently occurring site types include scarred (culturally modified) trees, artefact scatters in association with quarries, source material, fireplaces or axe grinding grooves in the sandstone beds of creeks. Rare site types in the region are rock shelters with art or cultural deposits and ceremonial or dance grounds. These are usually confined to sandstone mesas where the sandstone cliff lines contain eroded shelters. Though ceremonial grounds are considered to be the rarest site type, several have been found on Poitrel and Millenium mine leases immediately west of Daunia. These grounds were originally situated in relatively rugged landscapes within dense scrub.

There are several possible explanations for patterns of site distribution identified in cultural heritage studies in this region. The patterns may reflect the actual distribution of cultural materials or they may result from taphonomic changes to the landscape and the sites over time, as the study area has been impacted by human activities as well as by natural weathering processes (eg. scarred trees in particular appear to have fallen victim to the widespread land clearing undertaken in the Central Highlands in the last few decades). On the other hand patterns may reflect trends in archaeological survey, the direction of which has mainly been determined in this area by the development of the coal industry. It is possible that site types in association with more rugged, less developed locations such as the ranges may be under recorded.

Various cultural heritage studies in the Isaac catchment area mention the negative effects of vegetation clearing, cattle grazing and infrastructure construction on cultural heritage. They also note features such as gully and sheet erosion and sedimentation which are signs of land degradation. Although ethno-historic records make note of wooden and fibre artefacts, stone tools, marked trees, wells, etc., it is unlikely that organic materials (fibre, wood, skin, fur and feathers) would survive after prolonged exposure in open situations. Untended native wells are unlikely to have survived the impact of floods and erosion. In view of the extent of pastoral activities in the area (including land clearing), it is likely that many stone artefacts have been broken and/or scattered by machinery or cattle.

Other material is likely to have been covered or moved as a result of various natural processes (floods, wind etc).

#### **4.1.3 Previous archaeological work in adjacent areas**

Several coal mines are adjacent to the Daunia project in particular Poitrel, Millennium and Carborough.

##### *4.1.3.1 Poitrel Mine*

Lying immediately west of Daunia, it stands in stark contrast to Daunia in the sheer quantity of cultural material recorded over several surveys between 1997 and the present, and in the salvage of more than 15,800 individual stone artefacts. Numerous Aboriginal fireplaces (see Also Section 4.1.1 Research and Carbon Dates), scarred trees, a ceremonial site on Red Mountain, an extensive silcrete extraction site suggest the significant character of the area round New Chum Creek and Red Mountain. The dating of the fireplaces provide evidence that the area was used, probably continuously, by people for more than 5,000 years. It is the oldest date for an open Aboriginal site in the Central Queensland region.

##### *4.1.3.2 Millennium Mine*

Immediately north of Poitrel it presents the same picture of intensive usage over a long period of time. Though cultural heritage studies were carried out at different times, Poitrel and Millennium are part of the same cultural landscape; each lease having a ceremonial site on the lower slopes of red Mountain and each being extremely rich in artefacts with heavier concentrations of complex sites along the creek terraces.

##### *4.1.3.3 Carborough Mine*

Cultural heritage surveys were conducted in 2004 by a team of traditional owner representatives and archaeologists in a 2,000 hectare section of the lease south and east of the Peak Downs Highway, in Moorvale, Tarkari and Mavis Downs stations. These surveys resulted in the identification of a rich assemblage of cultural sites and materials including:-

- stone artefacts of various types and raw materials;
- Two scarred trees;
- Burnt clay features which appear to represent the remains of hearths;

- Red ochre fragments with possible use wear.

The majority of the cultural materials identified during the surveys comprise stone artefacts manufactured from silcrete, chert, sandstone or petrified wood. The distribution, types and raw materials of stone artefacts follows patterns identified in previous studies undertaken in the wider Moranbah-Nebo area.

Some 500 individual artefacts were recorded in the study area. Most occur within low to medium density scatters along the banks of creeks and gullies or on adjacent terraces. Stone flakes are the most common type with many showing evidence of retouch. More than 100 were flakes classed as scrapers, implements which were used for wood working and possibly other activities. Tula adzes (small, retouched semi-circular shaped flakes which are usually hafted to wooden handles) are also common in the assemblage. Several hammerstones (used to remove flakes and sharpen tools such as tulas) were identified. Other stone artefacts in the assemblage include 60 cores (stones from which flakes have been removed) and two finely polished greenstone axes.

Several scatters include pieces of flaked debitage in association with cores and natural outcrops of silcrete, indicating that these are likely to have been stone extraction sites. One low density stone artefact scatter occurs in association with an extensive natural outcrop of ochre at the base of an escarpment.

More than 30 sandstone grindstones were located, mainly on the banks of creeks and gullies or on adjacent terraces. It is unfortunate that only one third of these are intact. Sandstone is coarse grained and prone to fracture with severe mechanical impact (from vehicles, land clearing equipment and cattle movements). The largest of the intact grindstones measures approximately 20 x 20 cm. Most are less than 15cm in length; four are less than 8cm in length. One retains ochre residue.

Eight circular, burnt clay features were located either on or near banks of the gully system immediately to the north of the power line easement. As in patterns detected elsewhere in Queensland (see Simmons 2002), the arrangements of burnt clay occur in association with other cultural materials such as stone artefacts. It is likely that these represent the remains of clay hearths and campsites used by Aboriginal people who once occupied the area.

Two scarred trees were located in the course of the field surveys, both scars on mature box trees (*Eucalyptus populnea*).

The overall distribution of cultural sites and materials suggests that Aboriginal occupation extended across most of the lease area. It was concluded that the Carborough Downs mining lease is an area retaining high cultural significance and part of the same cultural landscape as Poitrel and Millennium. Consultation with Traditional Owner representatives highlighted this point.

The variety and extent of Aboriginal cultural materials recorded during cultural surveys in all three mine leases reflect the patterns of Aboriginal settlement documented by European explorers and overlanders in the Upper Isaacs River area in the mid-nineteenth century, prior to the sustained impacts of pastoral settlement. The plains, ephemeral waterways and former forests of the study area were the homelands of Aboriginal people who managed the lands and values of brigalow country using a range of strategies. The concentration of materials along the banks and intervening terraces of the various drainage channels indicates the importance of these ephemeral water systems as a focus of Aboriginal cultural activities. It is a pattern that has been consistently confirmed and reiterated in previous cultural studies in the Moranbah-Nebo area.

#### **4.1.4 Previous cultural heritage work on Daunia**

In 1980 Major Hill undertook an archaeological study of the Daunia mine lease area on behalf of Utah Development Company over nine days. Though he does not state the actual area involved it appeared to include a far larger area than under study here. It extended to the riparian zone of the Isaac River and west to New Chum Creek and included

- a central downs (savannah) zone;
- A flat wooded zone with extensive areas of gilgai country;
- A steeply folded zone which consisted entirely of the access road to the Peak Downs Highway.
- 

At that stage, apart from some areas of cleared Brigalow most of the native vegetation was intact. The cleared areas were covered in thick regrowth.

He found a light but ubiquitous scatter of lithic artifacts and waste flakes throughout the brigalow area but only occasional flakes were found in the downs area.

Artefact types recorded included mainly scrapers of many kinds (core, pebble, convex, side, end, nosed, notched) points, blades, several bifacial axes, numerous cores and waste flakes. He noted that core scrapers were particularly abundant and were 'larger than usual'. He noted in particular single examples of a backed blade and a possible Pirri point which are comparatively artifact types in this region. One hundred and twenty nine artefacts appear to have been salvaged and were with the, then, Department of Aboriginal and Islander Affairs (Hill 1980:8-10). He noted that apart from the examples noted above '*the artefacts recovered from Daunia were of mediocre quality and indicate no unusual typologies* (Hill 1980:11). This statement illustrates a dated view of cultural heritage, one that appears to be oriented to 'museum quality' artefacts instead of looking to recreate something of the past. He found no evidence of fireplaces along the Isaac River or New Chum Creek at that stage (cf. section 4.1 research and Carbon Dates of this report).

## 4.2 Historical Background

Ethno-historic data for the wider Moranbah region can be found in a number of primary sources including the journals and diaries of early explorers and pastoralists (eg: Murray 1860 1863; De Satge 1901; Fetherstonhaugh 1917; Leichhardt 1847), in more recent local histories (eg. Maclean 1988; Mayes 1991; Wright 1981). Pioneering and more recent anthropological data for the region has been compiled by Curr (1887), Ling Roth (1908) and Tindale (1974).

Tindale's detailed interpretation of traditional tribal estates and boundaries in particular has long been used as an important information source. Since the introduction of Native Title legislation this information has been subject to a deal of scrutiny, criticism and re-interpretation but it still remains the primary source of information, and his description of traditional estates and boundaries is reproduced here purely for the ethno-historical record. Tindale recorded the area as being in the vicinity of the Barna (cf. Barada) boundaries. He described the Barna territories as the '*...headwaters of the Isaac River, west to the Denham Range; south to Cotherstone at Grosvenor Downs...*' (Tindale 1974:165).

Leichhardt's expedition was the first of several early exploratory parties to pass through this region in the middle of the 19<sup>th</sup> century. Departing from the Darling Downs in October 1844 in search of an overland route to Port Essington on the north coast of Australia. Leichhardt travelled north-west across the Dawson and Mackenzie River valleys and upstream along a river he named after one F. Isaacs of the Darling Downs. Leichhardt's journal (1847) provides a valuable record of the physical and cultural landscape along the course of this river for some 70 miles. Various entries from February 15 to early March 1845 describe the landforms, geology, soils, flora and fauna as well as numerous encounters with Aboriginal people and/or observations of their material culture. Some of his entries are relevant to the study area and are quoted here.

From the high peaks which he named the Coxen Range, Leichhardt surveyed the landscape of distant mountains, streams, forests and plains:

*Narrow bands of scrub approached the river from the westward, and separated tracts of fine open country, amongst which stretches of Poplar-gum forest were readily distinguished by the brightness of their verdure. A river seemed to come from the south-west; the Isaacs came from the north-west, and was joined by a large creek (which he named North Creek) from the northward. There was no smoke, no sign of water, no sign of the neighbourhood of the sea coast; - but all was one immense sea of forest and scrub (Leichhardt 1847:153).*

Leichhardt noted the sandstone geology and the nature of the soil which 'was easily distinguished by its vegetation: the Bastard-box, and Poplar gum grew on a stiff clay, the narrow leaved Ironbark, the Bloodwood, and the Moreton Bay ash on a lighter sandy soil' ...*Not a pebble, except of sandstone, was found in the numerous creeks and water courses. Pieces of silicified wood were frequent in the bed of the Isaacs (Leichhardt 1847:154).*

At one point on the Isaacs the party 'came in sight of three black women, two of whom were busily occupied in digging for roots, while the other, perched on the top of a high flooded-gum tree, was chopping out either an opossum or a bees' nest' (149). At another point the party 'saw numerous tracks of Blackfellows. *Of native dogs, of emus, and kangaroos, in its sandy bed; and, when within a short distance of the place where I had seen the black women, loud cries of cockatoos attracted our notice'* (Leichhardt 1847: 155). At latitude 22° 11' ( a few kilometres south of the study area)

the party found a water hole that: *'the natives had fenced ... round with branches to prevent the sand from filling it up, and had dug small wells near it, evidently to obtain a purer and cooler water, by filtration through the sand'* (Leichhardt 1847:155). In the vicinity of the study area Leichhardt (1847:161) *'came upon some fine water holes along the scrub'*. Native wells *'were generally observed where watercourses of creeks joined the river'* (Leichhardt 1847:156).

Leichhardt made a series of observations as he journeyed through an area located some eight miles (12.8 km) *'north-west from the junction of North Creek with the river'*. On February 22 Leichhardt noted:

*Large Bastard-Box flats lie between North Creek and the river, and ranges and isolated hills are visible, which are probably surrounded by plains. Wherever I had the opportunity of examining the rocks, I found sandstone; flint pebbles and fossil-wood are in the scrub and on the melon-hole flats* (Leichhardt 1847:160).

On Feb 24, further upstream near the junction of Cherwell Creek, the party heard the *'noisy jabbering of natives'* who *'were unwilling to approach us'*.

*Their camp was in the bed of the river amongst some small casuarinas. Their numerous tracks, however, soon led me to two wells, surrounded by high reeds, where we quenched our thirst...We found a shield, four calabashes, of which I took two, leaving a bright penny, for payment; there were also a small water-tight basket containing acacia-gum; some unravelled fibrous bark, used for straining honey; a fire-stick, neatly tied up in te-tree bark; a kangaroo net; and two tomahawks, one of stone, and a smaller one of iron made apparently from the head of a hammer: a proof that they had communication from the sea-coast.* (Leichhardt 1847:162-3)

Leichhardt (1847:166) described one group of Aborigines as *'fine, stout, well made people, and most of them young; but a few old women, with white circles painted on their faces...'*. Although the country was in the grip of drought, the arid stretches were relieved by the presence of water holes, to which the explorers were usually led by the cries of cockatoos or traces of Aboriginal occupation. Hatte (2003a) concluded that the evidence of native wells and catchments recorded by Leichhardt indicates the effectiveness of Aboriginal methods of managing the water supply even in times of drought.

On 27<sup>th</sup> February while Leichhardt was absent some members of the party were visited in their camp by the same Aboriginal people:-

*Feb 27<sup>th</sup>...the natives had, in my absence, visited my companions, and behaved very quietly, making them presents of emu feathers, boomerangs, and waddies. Mr Phillips gave them a medal of her majesty Queen Victoria, which they seemed to prize very highly. They were fine, stout, well made people and most of them were young; but a few old women with white circles painted on their faces, kept in the back ground. They were much struck by the white shin of my companions, and repeatedly patted them in admiration. Their replies to inquiries respecting water were not understood, but they seemed very anxious to induce us to go down the river...'* (Leichhardt 1847:166).

Charlie, one of the two Aboriginal members of the team was also approached, when he was alone, by:- *'...the natives, who made him several presents, among which were two fine calabashes which they had cleaned and used for carrying water; the larger one was pear shaped, about a foot in length, and nine inches in diameter in the broadest part and held about three pints. The natives patted his head, and hair, and clothing...'* (Leichhardt 1847:159).

Leichhardt undertook this trip in the middle of a severe drought and he often mentioned in his journal that the party sometimes suffered badly from thirst. It is recorded that one of the dogs died of thirst. It is therefore interesting to note that there were still deep pools of water in several creeks in the region and that the Aboriginal people had fenced waterholes and dug wells in the bed of the Isaac River. The Aboriginal people were obviously not suffering from the effects of drought at all.

Leichhardt's glowing reports of this area resulted in land being tendered for and runs first leased about 1854. Prior to the creation of Queensland as a state, the *New South Wales Land Act* allowed hundreds of square miles to be taken up on a single tender and left unoccupied and unstocked. The journal of Andrew Murray who came up in John McKay's party to seek out land near the coast made a comment on this practice:-

*This was one of the abuses under the N.S.W. system of applying for land. Those who never saw nor marked country could by Leichardt's or any other available map as information, apply for runs, and provided the marks were put on the trees prior to the crown lands commissioners inspection which might not be fore years after the application was put in, that land was shut up against those who actually went and marked it...*  
(Murray Wed June 19<sup>th</sup> 1860).

This Act operated in Queensland until April 1863 when the new Queensland Government made it compulsory for anyone

taking up land to stock and occupy it. In the intervening period several individual land speculators had taken up vast tracts of country in this region and had proceeded to sell them.

As was customary in newly settled districts, units of Native Mounted Police were installed in strategic locations to 'protect' white settlement by 'dispersing' (shooting) Aborigines who resisted the invasion. Native police troopers were brought into this area with George Elphinstone Dalrymple in June 1862 and by mid 1860's a police barracks had been established at Fort Cooper station north of Nebo as a protective force for Europeans. This barracks is recorded as being located on Cooper Creek to the north of the present township of Nebo (Evans 1971:26). It is recorded that in four months in mid-1865 there were nine separate clashes between Native Troopers and Aboriginal people and 'dispersals' of the latter.

Relatively biased versions of the conflict were documented by new settlers De Satge (1901) in the Clermont/Peak Downs/Moranbah region; Fetherstonhaugh (1907) in the Moranbah/Suttor River area; Andrew Murray (1860, 1863) in the Mt Coolon area. More recent studies of this frontier period have been documented by Evans (1971) and Wright (1981).

Aboriginal resistance in the general region peaked dramatically with massacres of white settlers at Hornet Bank (1957) and Cullin-la-Ringo (1861). These acts resulted in police and settlers undertaking massive retaliation against Aborigines. At the very least there was exclusion from the runs, at the worst Aboriginal people were shot in numbers and on sight. The attitude is well exemplified in the reminiscences of Oscar de Satge, the manager and owner of a number of properties in the Clermont/Peak Downs area from the early 1860's to the late 1880's:-

*'...I...vowed I would never have the blacks on any station I managed, and I kept to this rule for over ten years, until the Peak Downs blacks were absolutely civilised, so that during my fifteen years there I have never lost but one shepherd by them, and that by a neighbour's folly and not ours...'* (de Satge 1901:155).

The neighbour's 'folly' consisted of the letting in of Aboriginal people. According to de Satge, this resulted in the murder of a shepherd on Peak Downs Station, the shooting of an Aboriginal person by drovers on Peak Downs Station, the payback murder of two shepherds, on Cotherstone and Cheeseborough stations, and finally a large scale attack by native police, accompanied by de Satge, on a large Aboriginal encampment over half a

mile long, also possibly on Cheeseborough (de Satge 1901: 172-174). Cheeseborough was a southern neighbour of Grosvenor Downs, on the southern side of the Isaac River.

‘The police waited until sundown for their attack, which did not result in the expected slaughter, owing to the dense scrub and small attacking force’. At the ‘blacks camp’ De Satge found ‘a couple of big blacks shot in the act of running, and partly supported by the dense scrub, gave ghastly evidence of the disturbed feast’ (De Satge 1901:172).

In 1860 Andrew Murray was one of the aspiring squatters who journeyed from New South Wales in search of pastoral land. Near the Isaacs River his journey was hampered by thick brigalow and fear of Aboriginal attack. As with Leichhardt in the 1840s, Murray observed much evidence of Aboriginal subsistence activities around the creeks and streams (‘blacks fires still burning near the bank of the creek, harvested yams and lily tubers, kangaroo net, old camps with ‘numerous’ mussel shells). At one point Murray refs (2/6/1860) noted the land management practice of firing the grass: ‘The blacks set fire to the grass in different places in a line from the ridges. I think they may have been trying to burn patches for game, or they may have been trying to burn us out!’

Murray’s diary of his second journey to the area in 1863 in search of land to farm sheep indicates that fierce conflict between Aborigines and new settlers had not abated in the region. Native Mounted Police units had been installed by the mid-1860s at Fort Cooper; and at some stage there was a police camp at North Creek. Andrew Murray recorded that in retaliation for the murder of a cook on Conway station, Fred Murray (of the Native mounted Police) tracked down and ‘shot eight of them (Aborigines)’ (A. Murray 1863 11). When Andrew Murray’s camp was raided by Aborigines ‘Fred Murray (of the Native Mounted Police) came up and lessened their number quite a bit’. As a general comment Murray (1863:12) recalled that ‘a good few of them (Aborigines) were shot when seen’.

Sub-Inspector R A Johnstone of the Native mounted Police who wrote a memoir of his experiences in this region, noted the presence of two groups of Aboriginal people, the ‘North Creek tribe’ and ‘the Phillips Creek tribe’ (Johnstone 1903-5:173-4, quoted in Hatte 2003 mill). Like Leichhardt and Murray, Johnstone records the presence of Aboriginal people around local waterways: ‘*Followed the tracks which led us out to a small plain in which was a lily lagoon, and here the blacks were camped, and evidently not expecting any danger all were centred round the lagoon and the camp fires*’.

There were close connections in the 1860s between the Hornet Bank massacre and the first European land holders in this area. In 1860, Andrew Scott, the owner of Hornet Bank station when the Fraser family was massacred, took up 'Broadlee' station on the northern side of the present Peak Downs Highway (and almost due east of this project area. The eldest Fraser boy, William (Billy), accompanied Andrew Scott on the initial reconnaissance trip to this area. Their trip is recorded in the diary of Andrew Murray who was a member of the John McKay party.. They met Andrew Scott and Billy Fraser at Denison Creek near present day Nebo while waiting for a member of their party to recover from an illness, and were with them from 19<sup>th</sup> to 25<sup>th</sup> June 1860. Murray recorded *that*

*'Willie Frazer was one of a family that had been nearly all killed by the blacks at Hornet Bank. About 4 or 5 years before one of his brothers escaped by crawling under the bed. His mother and sister were killed and the place robbed of all stores the blacks could carry away. He told me he had shot 70 blacks up to date of travelling with us. He used a double barrel shot gun, cut down to carbine length and was a good shot (Thurs. 20<sup>th</sup> June 1860).*

William subsequently took up Picardy station on the Isaac River near present day Moranbah. Judith Wright's grandfather, Albert, (1984:140) indicates that Will (Billy) who had been absent at the time of the massacre spent some time in the Native Police in this area, with a virtual 'licence to kill' (McDonald 1995:187). She described both Billy and the younger son 'West' or 'Wessie' who had survived the massacre as '...a terror to all Aborigines...'

Elder indicates that Billy Fraser became a legendary character at the time and "...a symbol for all the misguided frontier animosity which whites felt towards Aboriginal people". The legend included the killing of at least one hundred, almost certainly innocent, Aboriginal men, women and children, making him probably '*...the largest mass murderer in Australian history...*'(1999:135). West Fraser is described by Wright as:-

*"...unpredictable even to his own kind, and had been known to pick up a gun and shoot unoffending old black women on his friends' own doorsteps. It was said by some that that blow from a waddy had left poor West 'short of a sheet of bark', but awestruck compassion always ensured him some sort of welcome and a job or a meal..."*

Cuthbert Fetherstonhaugh owner of Burton Downs in the early to mid 1860s (Fetherstonhaugh 1917). In 1863 while attempting to bring cattle to Burton Downs from Rockhampton, Fetherstonhaugh encountered flooded rivers and

in order to get home he rode up the Isaac River from near Logan Downs station to Burton Downs. On the way he rode along the sandy banks of the Isaac River as they were the only place where his horse could get a footing in the wet. His horse, Loadstone, 'caved in' and he had to lead it eight miles to Picardy station, where he stayed the night with the owner, 'Mr Frazer'(sic). Fetherstonhaugh stated that he did not touch on the massacre that evening but '*...it was currently believed that he never lost an opportunity of shooting a wild blackfellow as long as he lived*' (Fetherstonhaugh 1917:240).

Fetherstonhaugh described the Isaac River as being in the middle of '*...an immense brigalow scrub...and full of wild blacks.*' (Fetherstonhaugh 1917:226). While Fetherstonhaugh always saw threats from 'the wild blackfellows' within the Isaac scrubs, Leichhardt about 18 years earlier had no such trepidation as he reported on meetings they had with Aboriginal people.

The attrition rate in these years is not documented but some evidence was supplied by George Bridgeman, manager of Fort Cooper Station from the early 1860s. He reported to Curr (1887: Vol iii: 44) that during the first 10 years of white occupation in the greater Nebo area alone '*...about one half of the Aboriginal population was either shot down or perished from loathsome diseases...the black troopers, however, being the chief destroyers...*' (Evans 1971:27). Bridgeman is recorded as protecting Aboriginal people on Fort Cooper station in the 1860s. A report in the Mackay Mercury in 1869 stated that Bridgeman had allowed 90 Aborigines to shelter on Fort Cooper and had '*...engaged 40 males, mostly boys, to clear the scrub, ringbark and cut wood in return for an occasional sheep, a plug of tobacco or some other trifling article*' (Evans 1971:28). This arrangement had probably been in practice for some time before it was reported to the paper and it has been corroborated by Judith Wright in her history based on the diaries of her grandfather, Albert Wright (Wright 1981:152).

The policy of 'dispersal' was strongly opposed by social reformers, squatters who had cultivated and maintained good relations with Aboriginal groups, and those who preferred to employ Aboriginal people as shepherds. By 1867 several enquiries had been held to investigate the activities of the Native Police and as the frontier moved north the Native Police were relocated. Aboriginal people who remained in their traditional lands tended to be employed on the stations or occupied fringe camps on the outskirts of towns.

The *Aborigines Protection and Restriction of the Sales of Opium Act* of 1897 resulted in a policy of forcible removals of many Aboriginal people into Reserves and strict regulation of employment. Subsequent forcible removals continued more or less until the late 1960s and many people were removed to Taroom, Cherbourg, Woorabinda and Palm Island Aboriginal Reserves, causing a long and severe process of dislocation of people from their country. In this local area, however, a number of Aboriginal people remained working on properties within the traditional lands. There are examples also of people 'under the Act' returning from the Reserves to work in their traditional lands, thus retaining their ties with their traditional lands. Many Aboriginal people are recorded as having worked on the stations in this area including Olive Downs until very recently

This region has been devoted to pastoralism from the earliest days of European arrival, about 140 years. The continuing use of this area for cattle grazing indicates that any identified old European places which may have heritage significance would most likely be related to the pastoral industry. Apart from the more obvious old homestead and surrounds including the cattleyards, physical evidence which might be encountered in the study area might include old fences and huts, stock camps, stockyards and station tracks.

## 5. FIELD SURVEY METHODOLOGY

### 5.1 The Survey Areas

Three priority areas were the focus of these initial surveys. The areas will be the initial footprint of the mine and collectively they constitute more than half of the total footprint area.

- Area 1 consists of the northern section of ML 1781 and some of ML70116 (Red Mountain) on which the infrastructure will be built.
- Area 2 is ML70115 (Daunia East Mine lease) and a U shaped section of the southern end of ML1781. Both of these areas are proposed out of pit spoil dumps (see Figure 3);
- Area 3 is the northwestern portion of ML1781 and a thin line in the south east. Both of these areas are part of the proposed open cut pit.

### 5.2 Methodology

The cultural heritage field survey of the project area was undertaken over a period of fourteen days between May and August 2008. The field team consisted of an average of five members:- four Traditional Owner representatives and the project archaeologist (see Appendix 2).

The highly disturbed nature of the study area, together with very thick ground cover, and consequent minimal ground surface visibility, required that all spots with some ground visibility be inspected.

An initial vehicle reconnaissance of the project area was undertaken to enable the team to view the landscape and plan logistical aspects of the foot survey (eg. areas with some ground visibility, vehicle access points, distances between access points, length of transects etc.). Existing vehicle tracks, drill lines, gully and drainage lines and animal pads were targeted as having some potential to see the ground and thence assess cultural heritage potential. It has long been established that the availability of fresh water is a major determinant in the establishment of Aboriginal occupation in tropical or drought-prone regions. A particularly thorough inspection was thus undertaken in the vicinity of watercourses.

Cultural finds were recorded in conjunction with the Traditional Owner field officers. The location of the find was fixed with a Garmin 72 GPS receiver using Datum AGD84. Background data was recorded on the topography, vegetation and disturbance in the immediate vicinity of the find.

Stone artefacts were recorded under a number of criteria including type, dimensions, attributes, raw material, modification and use, special features such as usewear and breakage, existing and expected impacts. The recording of artefact scatters included total counts and tallies of artefact types. Formal tool types eg. axes, grindstones and mullers, hammerstones, anvil stones and blades were recorded separately. All cultural finds were numbered in order of discovery (see Appendix 1). A photographic record was compiled of all cultural items and features.

There were very few large mature trees remaining in the study areas. Generally more remained in the southern section and the downs than the northern end. All old trees were inspected for Aboriginal scarring.

### 5.3 Survey Constraints

The physical conditions of the landscape can have a significant effect on the effectiveness of a field survey. In this case the following were observed to have a possible effect:-

- Archaeological (ground surface) visibility;
- Surface disturbance.

Ground surface visibility refers to the extent to which the ground surface is able to be seen (and hence the degree to which past human activity can be seen from observable archaeological remains). It is most often expressed in terms of the percentage of clear ground which is visible in a given area. Lack of ground surface visibility is a major constraint to the identification of archaeological remains. In some previously cleared sections of Brigalow, thick Buffel grass:-

- Rendered access very difficult and reduced ground visibility to zero;
- prevented the team from identifying cultural heritage items;

- lowered the chances of making an adequate assessment of the cultural heritage potential of the ground surface.

In many cases the only ground visibility was on recently dozed tracks or drill lines where the surface disturbance reduced any chance to locating cultural material *in situ*.

## 6. CULTURAL HERITAGE RESULTS

### 6.1 Aboriginal Cultural Heritage

The cultural heritage field study resulted in the identification of forty seven stone artefacts of various types and raw materials in disturbed locations, as deflated low density concentrations and isolated finds (see Table 3).

The Cultural materials were identified in association with the following landforms and features:-

- gullies and drainage lines;
- the cleared *Acacia* and *Eucalypt* dominant forests, in highly disturbed locations, particularly in rills beside cleared tracks (eg see Plate below).



Plate 7. Recording artefact in disturbance beside track

A summary of the cultural heritage results is listed in Appendix 1 of this report and a fuller description of these results follows in this section. The locations of all sites/features, recorded in this and in previous studies in the project area are shown on the attached maps (see Figures 4-6). Raw materials of flakes and cores are predominantly silcrete (85%) with only occasional examples of other materials. Most grindstones are made from sandstone of varying degrees of coarseness and three were observed to be of basalt. Sixteen flaked artefacts, including 12 different types of scrapers, show evidence of use wear. An analysis of the usewear patterns and microscopic study of any surviving residue would establish the use to which these artefacts had been put.

	Silcrete	Pet. wood	Chert	Quartzite	S'stone	Mudstone	Total
1ry flake	9			1			10
2ry	12 3 (u/w)		1				13 3
3ry	2 1 (u/w)						2 1
Core	7	1				1	9
Scraper	12		1				13
Blade			1				1
Adze	1						1
Blade	1						1
G'stone/ muller					1		1
H'stone	3						3
<b>Total</b>	<b>41</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>48</b>

Table 3. Stone artefacts recorded in study area by material and type. (1ry=primary; 2ry=secondary; 3ry=tertiary, pet. wood=petrified wood; s'stone=sandstone; m'stone=mudstone; g'stone =grindstone; h'stone=hammerstone; u/w = usewear;).



Plate 8. Grinding pebble and point (ID. No. 1)



Plate 9. Pebble hammerstone with pitting (Id. No 11).

The finds made in this survey, though small in number and confined to limited areas in which the team could see the ground nevertheless represent a cross section of tool types and hence activities in which people engaged. The seven cores consist of both single and multi-platform tools which represent several types of technology.



Plate 10. Single platform silcrete core (Id. No. 23)



Plate 11. Petrified wood core with 3 platforms (Id. No. 13)

In spite of the lack of visibility and the disturbance across the area there is still a marked contrast between this area and the neighbouring Poitrel where in excess of 16,000 artefacts have now been salvaged from the area mainly west of New Chum Creek. This contrast is so dramatic that it is hard to justify by lack of visibility alone and it is suggested that New Chum Creek and its immediate environs were the focus of large numbers of people over a long period. By contrast Daunia to the east without a major waterway may have been the setting for more minor activities.

## 6.2 European cultural heritage

A broken marble headstone with sandstone base was found in the middle of a paddock at E.635263/N.7553175 (Datum AGD84) (see Plates below). This headstone was ornately inscribed and decorated, the letters are of inset copper and commemorated with the following words:-

“In memory of  
Christina Sutherland McKenzie  
Aged 30  
the dearly beloved wife of  
George Beresford.

She departed this life  
17th January 1882.  
*Cast me not away from thy presence  
and take not thy Holy Spirit from  
me (Psalm LI.II).”*



Plate 12. Contextual view of broken headstone

When re-assembled the gravestone stands approximately 150cm tall and it would have been an imposing sight in the landscape. In his 1980 report Hill reported that the then owner John Neilson was aware of the existence of the grave and stated that a descendent of the Beresfords, Graham Stuart, lived at Oxford Downs (Oxford Downs was sold several years ago and the Stuart family is no longer there). Contact with Mr Stuart revealed a female

descendant living at Yeppoon. The sergeant of police at Moranbah received advice from his superior that the grave should be exhumed prior to any mining disturbance and re-interred in the nearest cemetery.



Plate 13. Decorative detail of marble headstone.

The gravestone lies about 1km east of Olive Downs homestead and several hundred metres south of an old stock route that runs in a northeasterly/south westerly direction. Recently a collection of old metal objects (horse shoe nails, a spur and other pieces) was found between the gravestone and the stock route by the manager of Olive Downs. The immediate area of the collection was searched thoroughly during the survey but it could not be relocated in the long buffel grass. It is possible that this collection represents the remains of an old camp. It is not inconceivable that it may have been associated with the grave. It is suggested that additional work be undertaken to locate this collection of metal objects when the grass cover is no longer thick and prior to any ground disturbance in the area (see Recommendations).

As an historic artefact the grave is protected under the provisions of *The Queensland Heritage Act 1992*. As a grave it is protected under the provisions of *The Coroner's Act 2003*.



Plate 14. Various views of the headstone including close up views of inset metal lettering

## 7.5 Sites on State Database

As part of this study a search was conducted of the register and database in the Department of Natural Resources and Water (DNRW) for the study area (see Appendix 5). The search identified six locations of artefacts as detailed in the table below. These artefact scatters are thought to be those recorded in Hill's 1980 study. Their locations have been added to the maps of cultural heritage sites in this report (see map of Clearance Area 1). It is noted that while they appear to lie outside the boundaries of this study they may be inside the boundaries of the expanded mining operations. Efforts should be made to inspect these locations when the grass cover is less in an effort to relocate them. The coordinates of these sites are as follows:-

# ML	Site Id	Latitude	Longitude	Attribute	Aboriginal Party
1781	GG:A20	-22.05809	148.29005	ARTEFACT	01/13, Woorra Consulting
	GG:A21	-22.04916	148.27737	Isolated Find	01/13, Woorra Consulting
	GG:A22	-22.08518	148.29030	ARTEFACT	01/13, Woorra Consulting
	GH:M44	-22.04299	148.30081	ARTEFACT	01/13, Woorra Consulting
	GH:M44	-22.04325	148.30159	ARTEFACT	01/13, Woorra Consulting

70115	GG:A16	-22.04801	148.30837	ARTEFACT	Woorra Consulting
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## 9. SIGNIFICANCE ASSESSMENT

Comparison with cultural heritage attributes and values in neighbouring areas indicates that many of the cultural values that have existed here until the clearing and other disturbance of recent times have been degraded or destroyed. Remnant values exist in isolated pockets especially where remnant old vegetation still exists or where gully lines still retain some integrity and old vegetation.

Given the above it is likely that the very thick ground cover throughout most of the study area has disguised cultural features. While the survey attempted to be as comprehensive as possible, there is a high probability that additional unrecorded surface and subsurface cultural sites will be located in the study area and these areas need to be carefully monitored when ground disturbance is happening.

The recommendations made in the next section are consistent with the provisions of *The Aboriginal Cultural Heritage Act 2003* and its associated Duty of Care Guidelines. Under this legislation there is acknowledgement that natural areas may have cultural significance and also that the context of a cultural heritage item or site is integral to the significance of that item or site. Specifically, it should be noted that, unlike the previous legislation which protected 'items of the Queensland Estate', the accent of the present legislation is the protection of cultural areas whether or not they actually contain physical evidence of the past.

Section 11 notes:-

*If a particular object or structure is evidence of Aboriginal occupation, the area immediately surrounding that object or structure is also evidence of Aboriginal occupation to the extent the area cannot be separated from the object or structure without destroying or diminishing the object or structure's significance as evidence of Aboriginal occupation*

Section 12 notes:-

*For an area to be a significant Aboriginal area, it is not necessary for the area to contain markings or other physical evidence indicating Aboriginal occupation or otherwise denoting the area's significance.*

On the other hand, the grave of Christina Sutherland McKenzie is potentially significant, under the Qld Heritage Act 1992 under the following criteria for significance, and is thus eligible for inclusion in the register:-

- has potential to yield information that will contribute to an understanding of Queensland's history;
- important in demonstrating the principal characteristics of a particular class of cultural places;
- important in exhibiting particular aesthetic characteristics valued by the community or a particular cultural group;
- important in demonstrating a high degree of creative or technical achievement at a particular period;
- has a strong or special association with a particular community or cultural group for social, cultural or spiritual reasons.

The grave needs to be considered together with the collection of old metal nearby and the stock route in order to ascertain a fuller understanding of the fabric of the place.

## 10. RECOMMENDATIONS

### 10.1 Aboriginal Cultural Heritage

1. It is recommended that salvages be undertaken of all removable items of cultural heritage that remain within the boundaries of the proposed impact areas.

Due to the almost universal lack of ground surface visibility of the survey areas there is a possibility that previously unrecorded cultural material might be identified in the study area.

2. It is therefore recommended that Woorra representatives monitor all initial ground exposure and disturbance associated with the development.
3. In the event that unrecorded cultural heritage sites or materials are discovered in surface or sub-surface deposits during monitoring or other operations, all work in the immediate vicinity should cease to enable Woorra monitors to salvage any exposed material and to ascertain the likelihood of more cultural finds. Depending on the cultural heritage significance of the finds, further management/mitigation options may need to be considered and implemented. It is noted that all items of indigenous cultural heritage in Queensland are protected under the provisions of *The Aboriginal Cultural Heritage Act 2003 (pre-contact)* and *The Queensland Heritage Act 1992 (post-contact)*.
4. The necessity for, and scope of, any additional follow up cultural heritage work other than that referred to above should be agreed between the Woorra consulting for the BBKY traditional Owners and BMA Coal Pty Ltd.
5. It is recommended that all BMA personnel and contractors involved in construction and subsequent workings of the Daunia Mine undergo a cultural heritage awareness program conducted by Woorra Consulting on behalf of the BBKY Traditional Owners. They should be provided with locally relevant information on Aboriginal history and culture, the types of cultural heritage sites recorded along the development corridor, guidelines for the identification and protection of these sites and penalties for damage to cultural material. They should also be fully

appraised of the terms and conditions of the Cultural Heritage Management Plan for this project.

6. In the highly unlikely event that skeletal material is discovered during the construction process it is recommended that all operations within 100 metres of the skeletal material cease immediately upon its discovery. The Cultural Heritage Unit, DNR&W and senior BBKY personnel should be contacted immediately. The Queensland Police, DNR&W and BBKY Traditional Owners have established policy and procedures to ensure that confirmed indigenous burials are treated in a manner consistent with Aboriginal traditions/practices. Minimal disturbance to the remains should be a priority at all times. Advice and guidance should be sought from BBKY Elders.

## **10.2. European Cultural Heritage**

7. At present the grave appears to lie on the edge of the proposed overburden and the mine pit. It is recommended that the grave with headstone, the stock route and the collection of metals objects be revisited and mapped when grass cover has been reduced to a suitable level of thickness. Obviously the preferred option for all of these objects is total avoidance by mine related impacts but first it needs to be ascertained where exactly they lie in relation to each other and to the mine.

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ID No.	Wpt. No.	Date	E. (AGD84)	N.	Site_Type	Description	Comments/ photo no.
Key: primary=1ry; secondary= 2ry; tertiary=3ry; petrified wood= pet. wood; silc. = silcrete; SES= steep edge scraper; IF= isolated find;							
LDAS= low density artefact scatter; u/w=usewear; s/f=step fracturing; h/b=horizontal break; v/b=vertical break							
	220	23.5.08	633135	7560150	2IF	brown silcrete 1ry 10x5x2.5;	beside cleared gully in thick buffel grass 1348, 1349
						Brown silcrete grinding pebble, possible hammerstone 6x6x2.5	
	222	23.5.08	634148	7560203	IF	brown silc. 2ry, v/b 3x2x0.5	between track and fence 1355, 1356
	223	23.5.08	634137	7560170	LDAS	2 brown silc. 1ry 5.5x4x2; 7x5x1;	Between track and fence. 1357, 1358, 1359, 1360, 1361
						grey silc scraper u/w 1 s/f, heavy patination 7x6x1	
						grey silcrete 2ry u/w 1 2 5x3.5x1.5;	
						grey silcrete core, broken 3.5x2x1.5	
						brown silcrete core, 2-3 platforms, 3/4 rotated, 11x9x6	
	224	23.5.08	634078	7560085	IF	silcrete pebble hammerstone, pitting 1 end, flattened sides 9.5x6x3.5;	1362
						grey silc. 1ry 3.5x2.5x1	
	225	23.5.08	634171	7560118	LDAS	grey chert 2ry u/w/1 s/f 3.5x3.5x1.5;	
						brown silc. 2ry h/b 4x4x1.5;	
						brown/grey silc. 2ry 2x3x0.5;	
						brown silc. core 1 platform 7x4x6.	
	226	23.5.08	634150	7560188	2IF	brown silc ses u/w 3 5x4x2 chert (burnt) SES 4.5x3x2	found on track, relocated to fenceline. Ph 1363/5

	227	23.5.08	634149	7560199	IF	grey quartzite (?) broken piece with curved polish 1 side 2x1.5x1	
	228	23.5.08	634001	7560753	IF	brown silc 1ry with some cuts on top 4x3x0.5	
	248	4.6.08	632606	7559146	LDAS	1 brown core 1 platform, 6x5x4;	In brigalow beside gully nth of dam. Area used as cattle camp, minor erosion. Area c. 13x5m, mainly silcrete, maybe washed into this concentration, Ph. 0004.
						brown silc ses (red patination) 5x4x2 u/w 1	
						grey silc 3ry 3.5x3x0.5;	
						red patinated brown silc 2ry 3.5x2.5x0.5;	
						grey silc 2ry h/b (bulb section) 2x3x1;	
						brown silc 1ry 6x3x1;	
						grey silc 1ry (red patination) 3x4x1;	
						deep grey silc 3ry u/w 1 3x2.5x1;	
						brown silc core 1 plat 9x8x7, 1/2 relation;	
						brown/grey silc broken ses u/w 1, sf 4x2.5x1.5	
	249	5.6.08	634197	7560053	IF	brown silc 2ry 4.5x3x0.5	on track; put on side away from fence Ph. 0005
	251	7.6.08	634415	7559203	IF	brown silc pebble hammer stone broken one end, minor pitting on other, 6x5x4	beside track & south of gates; Ph 0010
	252	7.6.08	634918	7559891	IF	grey silc 2ry sf at bulb <3	in shallow gully - brown clay and buffel. No photo. Circa 6m below cleared line
	253	7.6.08	674886	7559835	IF	p.w. core 3 platforms 4.5x6x5	in gully; Ph 0011. 8m from pushed line.
	254	7.6.08	634870	7559764	IF	grey silc 1ry 3x2.5x0.5	in gully
	255	7.6.08	634873	7559645	IF	brown chert blade 5x2x1	beside track on nth side of fence - E/W from gates; Ph. 0012/16

	263	9.6.08	634424	7554060	IF	brown silc SES u/w 3 6.5x6x3.5	east of feeder gully
	264	9.6.08	634425	7554059	IF	brown silc SES u/w 1 6x5x3 (1/2 pebble)	
	265	9.6.08	634518	7553920	IF	brown silc 2ry 5x3x1.5	in bed of gully
	266	9.6.08	634530	7553931	2IF	grey/brown silc 2ry u/w 1 4x4.5x1	in bed of gully
						brown silc 2ry 6x4x1	Photo 1124 (TB)
	267	9.6.08	634542	7553695	IF	red patinated silc 2ry 6x5x1.5	near large old coolabah
	268	9.6.08	634606	7553694	IF	brown silc triangular scraper u/w 1 12x7x4	on animal pad east of gully
	269	9.6.08	634413	7553485	IF	s's g'g frag polish 2 sides, 1 dished, 1 shallow grooved 10x6x5	near coolabah trees near cleared gully
	270	9.6.08	634459	7553388	2IF	brown silc core 1 platform 100% rotated 10x7x6.5	
						brown silc 2ry 5x4x1	
	271	21.7.08	635263	7553175	Historic site	Marble gravestone, broken, with s'stone base, in black soil paddock ca. 500m east of stock route among Brigalow and Box forest. Stone stood ca 150cm. Letters of inset metal. Inscription reads: <i>In memory of Christina Sutherland McLenzie aged 30 The Dearly Beloved Wife of George Beresford who departed this life 17th Jan 1882. Cast me not away from thy presence: and take not thy holy spirit from me. PSLM L.I.II.</i>	photos
	272	21.7.08	633114	7557163	IF	brown silc 3ry 4.5x3x1	on track south of fence in black soil

	387	30.7.08	632644	7556780	IF	brown silc SES 7x5.5x5, u/w 4 grooves	in grass near gully
	388	30.7.08	632713	7556654	IF	brown silc SES/adze 8.5x4x3, u/w 1indented groove	in grass near gully
	389	30.7.08	632736	7556540	2IF	brown patinated mudstone core 13x11x6.5 pink chert 2ry 4.5x4x2	
	398	4.8.08	632936	7557290	LDAS	brown silc triangular scraper 6x7x1.5 2 brown silc 2ry 3.5x3x1; 4x3x1 grey silc SES u/w 1, 6x4x1.5	west of cleared gully, southern end of paddock
	651	4.8.08	633125	7557645	LDAS	brown silc core 1 platform 7x7x7 brown silc SES u/w 60%, 7x6.5x4 brown silc 1ry 5x3x1.5	
	652	4.8.08	633077	7557663	IF	brown silc SES u/w 1, 7x5.5x3	
	653	4.8.08	633101	7557854	IF	brown silc 2ry 4x3x1	
	654	4.8.08	633111	7557831	IF	brown silc core 2 platforms 8x8x6	photo 197

## **APPENDIX 2.**

### **LIST OF FIELD SURVEY PERSONNEL**

Tanya Budby  
Les Budby  
Lewis Brown (Snr)  
Lewis Brown (Jnr)  
Veronica Brown  
Damian Dallachy  
Steven Budby  
Elizabeth Hatte (archaeologist).

## APPENDIX 3

### GLOSSARY OF ARCHAEOLOGICAL TERMS

(Adapted from Burke and Smith 2004; McCarthy 1976; Mulvaney and Kamminga 1999).

*Aboriginal Site*: a place of importance where persons of Aboriginal descent have left any object, natural or artificial, made, used for or adapted for use.

'*Adze*': a type of artefact that has the morphological characteristics of a stone chisel (McCarthy 1976).

'*Axe blank*': the unfinished form of a stone axe, prior to final sharpening or grinding of the cutting edge (Mulvaney and Kamminga 1999).

'*Blade*': a type of flake with the morphological characteristics of a blade or knife. It is at least twice as long as it is broad, with regular margins approximately parallel or ending in a point (after McCarthy 1976).

*Bulb of percussion*: the rounded or conchoidal prominence on the cleavage or inner face of a knapped artefact which swells and radiates from the point of percussion (McCarthy 1976).

*Bulbar-scar (flaking scar)*: The scar left by the removal of a scale on the bulb of percussion of a knapped artefact: commonly called the *erailure*.

*Classification*: the process of depicting similarity of a number of objects. It is expressed in terms of membership of groups or classes (Hiscock 2004).

*Conchoidal flake*: the most common form of flake produced by tool-making. The fracture surface of a well-formed conchoidal flake has a swelling ('bulb of force' or 'bulb of percussion') similar in shape to the surface of a bivalve shell.

*Core*: the piece of stone, often a cobble or pebble but also quarried stone, from which flakes have been struck. A core must always have the negative attributes of the knapping process, ie., flake scars (after Burke and Smith 2004).

*Cortex*: Natural weathered surface of rock, not the result of human activity.

*Distal end*: also called terminal end, the 'bottom' of the artefact, the end opposite the platform.

*Dorsal facet:* the 'outside' of an artefact, ie., the side which was the outside face of the core (after Burke and Smith 2004).

*Flake:* the piece of stone which is struck off a core. To be labelled as an artefact a flake should possess the following:- a ring crack [point of force application {PFA}] at the point of impact, a bulb of percussion on the ventral face, a bulbar scar on the bulb. A flake must always have the positive attributes of the knapping process, ie., a bulb of percussion (after Burke and Smith 2004).

*Isolated find:* a single archaeological object, usually a stone artefact.

*Knapping:* the process of making flaked stone artefacts by hitting one stone (a core) with another (a hammerstone)(Burke and Smith 2004).

*Knapping floor:* a discrete cluster of artefacts which have remained in the approximate position in which they were flaked.

*Pebble:* stone worn and rounded by water or other natural forces.

*Primary flake:* the flake first removed from a core; the entire dorsal surface is covered in cortex.

*Proximal end:* also called platform end, the 'top' of the artefact or the part the knapper hit to remove it from the core.

*Rejuvenation flake:* A flake removed from the edge of a stone axe in the process of resharpening or restoring the implement.

*Scraper:* a flaked stone tool with a straight, concave or convex working edge shaped or resharpened by retouch.

*Salvage:* The rescue, by collection, of artefacts and other cultural materials to protect from imminent impacts.

*Secondary flake:* this type of flake was not the first but was struck off early in the knapping process. It has some cortex, either on part of the dorsal surface or on the striking platform.

*A Site:* A focal point of concentration of cultural materials or of evidence of human activity. The evidence for Aboriginal sites may be physical or verbal (eg. a myth or tradition relating to a particular feature). They fall generally into three groups:-

- occupation sites (where people have lived for varying periods of time);

- industrial or activity sites (quarries or extraction sites, fish traps, scarred trees);
- art sites (paintings, engravings and stencils) and ceremonial/mythological sites.

*Stone artefact:* a stone object, usually portable, made or shaped by human hand (Mulvaney and Kamminga 1999). Such an artefact should display morphological features indicating that it has been knapped, ground or abraded into shape (Hiscock Pers. Comm 2/10/2004).

*Tertiary flake:* a flake with no cortex. This type of flake has come from the interior of the core and is one of the last removed in the knapping process.

*Tula:* A flaked artefact with a steep edge and thick at the bulb in cross section, often described as a wood working tool (but proven from residue analysis to have multiple uses).

*Ventral surface:* the 'front' of the artefact, ie., the side that was the interior of the core (after Burke and Smith 2004).

**APPENDIX 4.**  
**HUMAN REMAINS DRAFT BURIAL POLICY**  
**(Cultural Heritage coordination Unit,**  
**Dept of Natural Resources and Water)**

**GENERAL INFORMATION SHEET**

**ABORIGINAL BURIALS**

- **Aboriginal burials can be found throughout Queensland**
- **They are often found in eroded coastal dunes, dunes associated with inland rivers or lakes, desert dunes and clay lunettes**
- **They may be exposed by natural processes or may inadvertently be exposed in most locations where land modification activities are occurring**
- **The location of any human remains should first be reported to the Police to exclude the possibility that they are the remains of a crime scene**

**Background**

Death in all human societies is a highly emotional event. It occurs on a regular but unpredictable basis, removing an individual from an accustomed place in society, thus causing a break in the unity and cohesion of the society. Since it affects the family, close relations and society at large, death is often associated with complex ritual. This was and continues to be the case among Aboriginal people where complex rituals associated with death reflect attempts to adjust to changed circumstances. Of vital concern for example is the 'spirit' and what might become of it. Death is not seen as an end point but as a transition to another level of human existence. Burial is therefore an important ritual and any disturbance to such burials is of major concern to Aboriginal people.

Indigenous people have been in Australia for at least 40,000 years. During this time they buried hundreds of thousands of their dead in diverse ways. Burial practices varied across Australia and through time. In some cases burials involved a single procedure such as cremation, or the deposition of remains in the ground, or in caves and trees. Often however two or more stages were involved which took place at different times ranging from several weeks to years. In these cases a corpse may for example have been exposed or desiccated in the sun or over a fire. After one, or several further steps, which usually involved specific individuals carrying the skin or bones of the deceased around with them, the remains were finally laid to rest as cremations, burials, or were placed in caves or hollow logs.

Indigenous burials may be located due to exposure by erosion or by clearance associated with land development. Numbers located vary from one or two individuals, to groups of over hundred. Burials have been found in all types of environments across Queensland and in both rock shelters and open areas. They can be found with stone markers, covered with logs and were often associated with carved or scarred trees, stone arrangements, stone artefacts and food refuse.

## **Types of Burials**

The following types of burials may be found in Queensland:

*Cremations.* Cremations some times occurred as a single event, at other times as part of a complex cycle of events that included the burning of a variety of grave goods. It might be thought that no evidence would remain of such practices but at times only partial burning occurred and both small and large charred fragments of bone survived.

*Desiccation:* In some places the internal organs of an individual were removed through a small incision. The body was then packed with grass and allowed to dry in the sun or over a fire. It may then have been painted with ochre and finally placed on a tree platform or in a cave or hollow tree. At other times the individual was buried or cremated.

*Bark or Cylinder.* An individual's bones were sometimes wrapped in bark, natural fibre, human hair or wallaby skins with a range of grave goods and deposited in a cave or rocky overhang. They are fragile and being movable objects may be sought by collectors.

*Tree Burials.* On occasions a platform of logs was built in a tree and a corpse laid on it. However, usually after drying, the bones were removed and buried in the ground. Such platforms are unlikely to have survived over time. On other occasions bones were placed in hollowed out logs or trees and these survived in some situations.

*Ground Burials.* As in most societies, ground burials appear to have been the commonest form of internment, although in the case of Aboriginal Australians it was frequently only the final stage in the process. Corpses were sometimes buried horizontally and oriented in a particular direction, at other times they were buried in a sitting position and sometimes bound. Grave goods were sometimes included with the burial and its location marked by designs carved on surrounding trees.

## **Location of Burials**

Owing to the complexity and variety of Aboriginal burial practices it may sometimes be difficult to distinguish them from early European burials and from more recent European skeletal remains resulting from accidents and criminal activities. However location provides some clues. For example, burials commonly occur in coastal sand dunes and dunes associated with inland rivers or lakes, desert dunes and clay lunettes. Such sites are easily eroded by wind and water, and skeletal material is frequently exposed by such means. Other common locations were rockshelters, rocky overhangs and hollow trees. Evidence of association also provides some clues. For example, the close proximity of scarred or carved trees and stone arrangements, and the remains of fireplaces, stone artefacts and food refuse is usually suggestive of an Aboriginal burial.

## **Threats and potential threats to Burials**

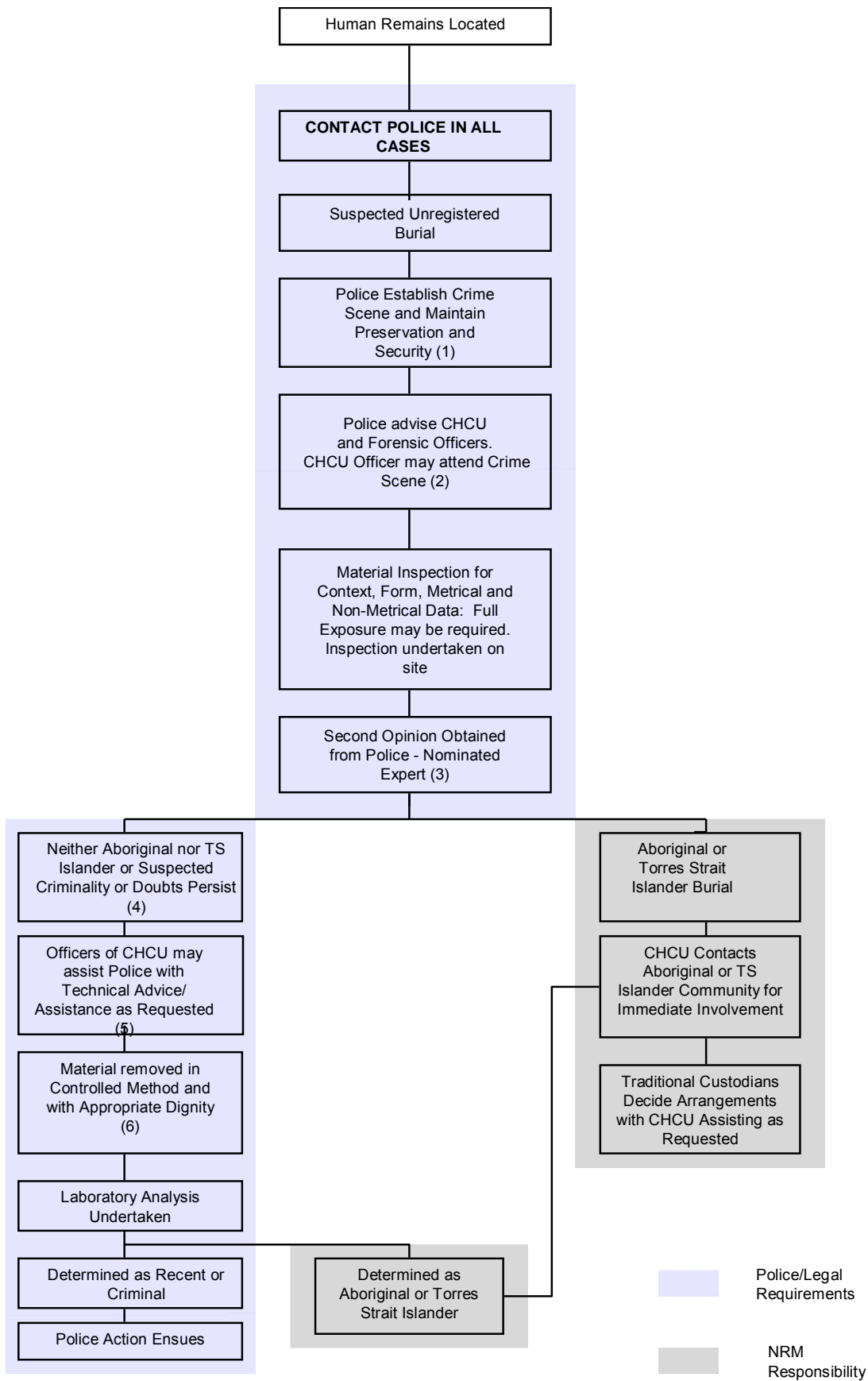
Natural threats to burials include wind and water erosion.

Human threats result from interference and large-scale development

## **Legislative protection**

All burials in Queensland are protected under provisions of the *Criminal Code Act 1899* (Section 236), the *Coroners Act 2003*, and the *Aboriginal Cultural Heritage Act 2003* (Part 2) and *Torres Strait Islander Cultural Heritage Act 2003*.

If you locate human remains it is ***essential that you do not disturb the remains. You must also report the findings to the Police Department.*** The Police must secure the location of the remains as a potential crime scene. Once it is established that the remains are not a crime scene and that the remains are Aboriginal the Coroner can release the remains to the Cultural Heritage Coordination Unit of the Department of Natural Resources Mines and Energy. The Cultural Heritage Coordination Unit will then implement the policy *The Discovery, Handling and Management of Human Remains under the Provisions of the Aboriginal Cultural Heritage Act 2003 and Torres Strait Islander Cultural Heritage Act 2003.*



## **APPENDIX 5.**

**Results of Search of Inventory of Recorded Sites,  
Department of Natural Resources and Water**

I wish to advise that the search has been performed on the inventory of recorded Aboriginal sites as per your description. Attached is a list which highlights the identified Aboriginal cultural heritage sites, as recorded for the search area. However, it is not possible to conclusively guarantee the accuracy of these recordings (in particular, the longitude and latitude location description for each site) and extra diligence is required when operating in these locations.

# ML	Site Id	Latitude	Longitude	Attribute	Aboriginal Party
1781	GG:A20	-22.05809	148.29005	ARTEFACT	01/13, Woorra Consulting
	GG:A21	-22.04916	148.27737	Isolated Find	01/13, Woorra Consulting
	GG:A22	-22.08518	148.29030	ARTEFACT	01/13, Woorra Consulting
	GH:M44	-22.04299	148.30081	ARTEFACT	01/13, Woorra Consulting
	GH:M44	-22.04325	148.30159	ARTEFACT	01/13, Woorra Consulting
70115	GG:A16	-22.04801	148.30837	ARTEFACT	Woorra Consulting

All significant Aboriginal cultural heritage in Queensland is protected under the *Aboriginal Cultural Heritage Act 2003*, and penalty provisions apply for any unauthorized harm. Under the legislation a person carrying out an activity must take all reasonable and practical measures to ensure the activity does not harm Aboriginal Cultural Heritage. This applies whether or not such places are recorded in an official register and whether or not they are located in, on or under private land.

Aboriginal cultural heritage, which may occur on the subject property, is protected under the terms of the *Aboriginal Cultural Heritage Act 2003* even if Natural Resources & Water has no records relating to it.

Please refer to our website [www.nrw.qld.gov.au/cultural\\_heritage/index.html](http://www.nrw.qld.gov.au/cultural_heritage/index.html) for a copy of the gazetted Cultural Heritage duty of care guidelines, which set out reasonable and practical measures for meeting the duty of care. In order to meet your duty of care, any land use activity within the vicinity of the recorded cultural heritage, should not proceed without the agreement of the Aboriginal Party for the area or a Cultural Heritage Management Plan undertaken pursuant to Part 7 of the *Aboriginal Cultural Heritage Act 2003*.

The Aboriginal party(s) for the area is:

QC01/13 - QUD6011/01  
**Barada Barna Kabalbara & Yetimarla People #3**  
 Jeffrey Dillon  
 Dillon Lawyers  
 62 Blackwood Street  
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**Woorra Consulting Pty Ltd**  
 Mr Frank Budby  
 Lot 1 Powell's Road  
 Farleigh  
 QLD 4741  
 (07) 4959 8822 Ph  
 (07) 4959 8387 Fax

Should you have any further queries, please do not hesitate to contact me on (07) 3406 2366.

Kind regards

**Vanessa Boulton**

Cultural Heritage Coordination Unit  
Department of Natural Resources and Water

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