Australia Pacific LNG Project

Volume 5: Attachments

Attachment 8: Preliminary Site Investigation - Land Contamination Report - Gas Fields

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Executive summary

A Preliminary Site Investigation (PSI) was conducted within the Australia Pacific LNG Pty Limited (Australia Pacific LNG) project's gas fields to assess the possible occurrence of pre-existing contamination from hazardous contaminants. The PSI consisted of a desktop study and field studies, which included an assessment of the current environmental setting and historical land uses. A preliminary risk assessment was undertaken based on the limited information provided by the desktop study. Potential impacts and mitigation measures have also been identified on the basis that the proposed construction phase may disturb pre-existing contamination identified by the desktop study.

The desktop study identified a number of cattle yards and possible cattle dips and spray races that may exist (or have existed) within the gas fields. None of the lots associated with these cattle yards have been identified previously as contaminated and have not been listed in accordance with the provisions of the *Environmental Protection Act 1994* on the Queensland State government Contaminated Land Register or the Environmental Management Register. Other potential sources of contamination that could be present within the gas fields, although not identified during the PSI, could include:

- Unauthorised landfills and inert construction and demolition wastes (e.g. concrete rubble, scrap metal, brick, plastic, glass, asbestos sheeting) which could be buried on farmland
- Unlawful disposal of waste products (oils, solvents, lubricants, batteries, chemical containers)
- Establishment of scrap yards for abandoned vehicles, machinery and equipment.

Cattle dips and spray races were identified as the primary source of potential hazardous contaminants that could occur within the gas fields. Most of the cattle yards were located away from proposed infrastructure sites. There are two proposed water treatment facilities and one brine pond that have been proposed in areas where cattle yards currently exist. The three identified locations represent areas where construction activities may disturb pre-existing potential contamination. Depending on the pre-existing uses of these areas, there may be the potential for arsenic and pesticide contamination to be present, but it is likely that this would be localised due to the nature of these cattle tick treatment methods. The actual potential for this to occur would need to be investigated further by conducting targeted soil investigations within these areas in accordance with Department of Environment and Resource Management (DERM) guidelines, prior to construction and depending on site selection.

Overall the likelihood of disturbing pre-existing contamination is regarded as low, based on the current available information. Any identified hazardous contaminants would need to be assessed and possibly remediated or managed in accordance with DERM guidelines. Recommendations for the identification of potential contaminated land and legislative requirements under *Environmental Protection Act 1999* (EP Act) have been provided in this report.

An assessment of potential impact to surface waters indicated that none of the three identified areas of potential contamination were located near surface water bodies. The underlying groundwater was also not likely to be impacted, however further investigations would be required to assess the local groundwater concentrations. Soil would likely be impacted by arsenic and/or organochlorine pesticides contaminants but this would be limited to the area of the cattle yards, and therefore a localised contaminant issue. The risk to existing groundwater bores was not investigated during the desktop study but would be investigated during any subsequent Stage 2 investigations.

It was considered likely that if contaminants from cattle dips or spray races be present within the areas identified by the desktop study, then these contaminant concentrations could be in excess of the

DERM health-based guidelines for commercial/industrial settings. This implied that health and safety considerations be addressed for all construction personal that could be exposed to these contaminants, if they are suspected and identified at site.

Mitigation measures for the potential contamination that has been identified are described in the EP Act and include: (1) the management of the contaminated area via a DERM-approved Site Management Plan (SMP); or (2) remediation of the area and subsequent validation sampling. Depending on the site conditions and the nature and extent of contamination, a DERM accepted mitigation measure can also include a combined SMP and remediation approach.

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1. Introduction

The Australia Pacific LNG Pty Limited (the Project) comprises the further development of Australia Pacific LNG's Coal Seam Gas (CSG) fields in southern and central Queensland, the establishment of major gas transmission pipelines and a Liquefied Natural Gas (LNG) plant with ancillary marine and on-shore facilities within the Gladstone State Development Area, Gladstone (refer Figure 1).

Australia Pacific LNG commissioned WorleyParsons to complete a Preliminary Site Investigation (PSI) of its proposed CSG fields in southern and central Queensland to assess the possible occurrence of existing land contamination.

The construction, operation and decommissioning of facilities may pose a risk of impacting surrounding land, groundwater and surface water. Assessing these impacts in terms of contaminated land risks and developing mitigating measures was outside the scope of this technical report but has been addressed in Volume 2, Chapter 5 of the Project's Environmental Impact Statement (EIS) and in the Environmental Management Plan (EM Plan).

1.1 Gas fields

The proposed CSG fields (i.e. tenements) covers approximately 572,000 hectares (ha), which extends from Wallumbilla to Millmerran on the Darling Downs (refer Figure 1). The study area for the PSI is located within the proposed CSG fields. The study area comprised 60 lots where the development of major facilities has been proposed. The rationale for selecting these lots as the study area for this PSI is described in the methodology Section 2.

The region, including the study area (i.e. 60 lots), consists mostly of flat (i.e. <2% slope) pastoral land that has been used primarily for livestock grazing since first settled in the mid to late 1800s. In more recent times, agriculture has replaced cattle farming where soil is suitable for cropping. Crop types comprise mostly wheat, oats, barley, sorghum and cotton. The area of the CSG fields span more than 1,000 privately-owned lots.

1.2 Purpose of the PSI

The purpose of the PSI was to:

- Assess the potential occurrence of soil contamination resulting from hazardous contaminants that may be present within the study area.
- Determine the nature of probable contaminants.
- Determine the location of possible contamination.
- Assess impacts and mitigation measures associated with the existing environment.
- Recommend measures to prevent land contamination and the management for land contamination arising out of gas field activities.

Due to the size and sensitivity of undertaking soil sampling within grazing and farming properties and uncertainty about the specific location of all proposed gas field facilities the PSI was based upon a desktop study although limited field reconnaissance was undertaken (refer Section 2.2.2).

It was determined that, at the commencement of this PSI, should the desktop study identify areas of potential contamination within areas of proposed major development, then subsequent Stage 2 investigations would be undertaken, as applicable. These investigations would occur prior to the

construction phase to determine background concentrations and the nature and extent of any identified contamination. Based on these investigations, remedial options and management of contamination can then be assessed to determine the most appropriate mitigation measures. This staged approach is in accordance with former Department of Environment (DoE) *Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland* (DoE draft guidelines) dated May 1998. This approach to undertaking the PSI including subsequent investigations was accepted by Department of Environment and Resource Management (DERM).

1.3 Scope of work

The scope of work was aimed at addressing the required tasks of a PSI, as detailed in the Project's Terms of Reference (ToR) dated December 2009. The scope of work included the following:

- Identifying land used for a Notifiable Activity as listed in Schedule 3 of the EP Act and land which is listed within the Queensland Environmental Management Register (EMR) or the Queensland Contaminated Land Register (CLR) [refer to Section 1.4.1 for a description of the EMR/CLR].
- Identifying potentially contaminated land not listed within the EMR/CLR which may need remediation.
- Conducting a PSI consistent with the DoE draft guidelines dated May 1998 and other applicable guidelines and standards.

Tasks not undertaken for this PSI included the following:

- Determining past land uses based on information provided by current landholders as landholder interviews were not able to be undertaken by WorleyParsons. It is envisaged that landholder interviews will be conducted, where possible, for those properties identified by the PSI as a potential concern.
- Historical land title reviews as there were no notifiable activities confirmed by EMR/CLR searches. Historical land title reviews may be conducted at a later stage for those properties identified by the PSI as a potential concern and therefore require subsequent Stage 2 investigations and potentially listing on the EMR or CLR.
- Site inspections and background contaminant sampling as land access was not available.
- Carrying out Stage 2 investigations, where applicable, as contaminant sampling was not able to be undertaken. Investigations should be undertaken to determine background contaminant concentrations as well as the nature and extent of soil contamination in accordance with the stages outlined in Appendix 5 of the DoE draft guidelines
- Describing a remediation and validation sampling plan where contamination has been identified and not remediated. As above (refer Section 1.2), this will be undertaken as required as part of subsequent Stage 2 investigations.

The above tasks will be undertaken following formal site selection of gas field infrastructure and after front-end engineering and design (FEED) have been completed. These tasks will be completed for those areas identified by the PSI as a potential concern, and therefore require further investigation.

1.4 Legislation

Environmental Protection Act 1994

The PSI report is a supporting document for the Australia Pacific LNG EIS. The PSI process is regulated by the *Environmental Protection Act 1994* (EP Act). The primary objective of the EP Act is to protect environmental values and human health while allowing for developments that improve the total quality of life, both now and in the future, in a way that maintains ecological processes

These objectives are achieved through the implementation of an integrated management program administered by DERM, formerly the Environmental Protection Agency (EPA). The program incorporates policies and guidelines that have been refined for the last 15 years. This approach ensures that proposed future developments are ecologically sustainable.

1.4.1 Guidelines and standards

The DoE draft guidelines has been developed as a land use planning tool which describes the environmental actions required to determine the suitability of land for a proposed change in land use. Accordingly, the DoE draft guidelines is relevant to the change in land use that has been proposed by the Project. The DoE draft guidelines also provides soil investigation levels, data presentation styles for contamination investigations and guidance for the reporting structure.

To assist with the management of contaminated sites, DERM maintains databases of confirmed contaminated and potentially contaminated sites in Queensland. Potentially contaminated sites for these purposes are those that have had one or more notifiable activity carried-out on the land. Notifiable activities are listed in Schedule 3 of the EP Act. Land presently or formerly used for a notifiable activity or land that is confirmed contaminated is recorded on the EMR. Land that is proven contaminated and has the potential to cause serious environmental harm is recorded on the CLR.

A broader more technical guideline used by environmental practitioners is the National Environment Protection (*Assessment of Site Contamination*) Measure 1999 (NEPM) published by the National Environment Protection Council (NEPC). NEPM consists of a series of technical modules that apply to site investigations. The purpose of this guideline is to establish a nationally consistent approach to assessing contamination, and applies to the general environmental community that includes regulators, environmental practitioners, land owners, developers and industry. The Contaminated Land Section of DERM supports the modules of NEPM and is therefore an additional guideline that environmental practitioners should follow when undertaking site contamination investigations in Queensland.

NEPM also references Australian/New Zealand Standards (AS/NZS). These standards provide more technical detail for the stages of site investigations, the approach to determining sampling locations, sampling techniques, data quality objectives and quality control/quality assurance methods. AS/NZS that apply to site contamination investigations include:

- AS4482.1-2005 *Guideline to the investigation and sampling of site with potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds*.
- AS4482.2.2-1999 *Guideline to the investigation and sampling of site with potentially contaminated soil Part 1: Volatile substances*.
- AS/NZS 5667.1:1998 *Water quality – Sampling Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples*.

- AS/NZS 5667.11:1998 *Water quality – Sampling Part 11: Guidance on the sampling of groundwaters*.

The methodology of this PSI, which generally followed the above guidelines and standards, is provided in Section 2.

2. Methodology

The methodology of the PSI was derived from the guidelines specified in:

- AS4482.1-2005 *Guideline to the investigation and sampling of site with potentially contaminated soil Part 1: Non-volatile and semi-volatile compounds*.
- DoE draft guidelines, dated May 1998.
- NEPM (1999) *Schedule B(2) Guideline on Data Collection, Sample Design and Reporting*, dated 1999.

PSIs are generally based upon desktop information and are often supported by limited sampling and analysis. The process is staged to avoid significant costs within the initial approval phases of the Project, particularly when site history indicates a low risk of contamination being present. The potential for existing widespread and significant contamination within the study area was considered a low risk, based upon site history and, as a result, preliminary sampling was not required. Localised areas of potential contamination may exist within the gas fields area and, on this basis, recommendations are provided to investigate these locations as part of subsequent stages of the Project. Investigations are also recommended, should unexpected areas of contamination be encountered in subsequent stages of the investigation or during the gas fields' construction stage.

Given the size of the gas fields and complexity of undertaking field studies for more than 1,000 privately-owned lots, the approach to conducting the PSI required modification from the aforementioned guidelines and standard. A draft methodology was forwarded to DERM's Contaminated Land Division of Queensland for review and their concurrence was subsequently obtained. A summary of the methodology is described below.

2.1 Site history

A risk-based approach was undertaken to review site history within the area covered by the gas fields. The focus was to target land parcels (registered lots) where major land disturbances from construction activities were proposed. It was believed these areas represent a potential risk to the environment if disturbed. The major land disturbances would include the construction of brine ponds, water treatment facilities, water pump stations and gas production facilities. The approximate size for each structure is as follows:

- Brine ponds – 140-210ha
- Water treatment facilities (including feed ponds) – 9-24ha
- Water pump stations – 6ha
- Gas production facilities – 50ha

From the 1,000+ lots located within the gas fields study area, 60 lots are likely to be affected by the proposed infrastructure. These 60 lots and the proposed locations of these facilities are identified on Figures 2, 3 and 4.

The individual gas wells and compressor stations were not considered a major risk to the environment due to the relatively small land disturbance during construction. The risk of disturbing pre-existing contamination could be managed at the construction stage via ground surveillance before construction begins. Lots containing only gas wells and compressor stations were therefore excluded from the PSI assessment. This approach was agreed to by DERM.

In addition, the disturbance caused by the proposed gas pipelines within the gas fields was also excluded from the PSI assessment as these locations could be relocated to avoid potentially contaminated areas, based upon ground surveillance prior to construction activities.

2.1.1 Interviews with landholders

Australia Pacific LNG staff conducted interviews with available landholders to discuss contaminated land matters. The interviews were required for obtaining landholder permission for access to sites for other EIS field studies. Information about land use, and in particular, details about notifiable activities such as fuel storage and use of cattle dips and spray races, was sought.

The information obtained from the interviews was cross-referenced against the lots affected by major infrastructure to determine the impacts of notifiable activities.

2.1.2 EMR/CLR

EMR/CLR searches were conducted on the 60 lots likely to be affected by major infrastructure (gas plants, water treatment facilities, water pump stations and brine ponds) and other lots that were identified as potential risks to the Project. This search would identify whether notifiable activities had been recorded for these lots. The results also would provide the rationale for undertaking further investigations in accordance with the referenced guidelines and standards.

2.1.3 Historical aerial photographs

A review of historical aerial photographs was conducted for the 60 lots. The photographs were obtained from DERM. The dates of the aerial photographs were from 1944 to 2007 and generally included intervals of every 10 to 15 years. The review was used to identify notifiable activities listed in the EMR/CLR and other potential notifiable activities that were not recorded on the EMR/CLR.

2.1.4 Historical land titles

A historical land title review was not conducted for any property as there were no notifiable activities confirmed by EMR/CLR searches. This approach was in agreement with methodology approved by DERM. Historical land title reviews may be conducted for those properties identified by the PSI as a potential concern and therefore require subsequent Stage 2 investigations.

2.1.5 Other information sources

Local councils and historians were contacted to obtain information on how the surrounding land use had changed over time, as well as any other information relating to notifiable activities and areas of potential concern.

2.1.6 Department of Employment Economic Development and Innovation (DEEDI)

DEEDI was contacted to identify cattle tick-free and non-free zones located within the gas fields and obtain information about historical cattle dips, sprays races and pesticide use within the study area.

2.2 Existing environment

2.2.1 Topography, geology, hydrogeology and groundwater quality

Information on topography, geology, hydrogeology and groundwater quality has been summarised from WorleyParsons' technical studies completed for the EIS. Groundwater quality and aquifer characteristics have also been referenced from the Queensland Department of Mines Groundwater Resource map (Map 4 dated 1987, 1:250,000 series).

2.2.2 Site inspections

Site inspections of the 60 lots were not able to be conducted as land access was not obtained. Technical studies completed for the EIS which did complete field visits which included flora and fauna, noise and aquatic ecology were reviewed for potential indicators of contamination.

These field studies covered the majority of the gas fields but may not have included the inspection of the 60 lots identified by the land contamination study due to land access restrictions or the lack of site-specific features that did not warrant detailed inspection for their particular technical study.

Low level aerial photography and/or satellite imagery was reviewed for those areas of potential concern to investigate the possible occurrence of contaminated land or notifiable activities. The aerial photographs were used in the absence of site visits.

2.2.3 Current aerial photography and satellite imagery

A combination of 2009 aerial photography and 2007-2008 satellite imagery (provided by Google Earth) were used to investigate the potential occurrence of contamination from hazardous contaminants and notifiable activities for areas identified during site inspections and during the review of historical aerial photography.

In addition, these photographs (where available) were compared to historical aerial photographs to assess changes to site features that were identified during the site history review. Also, these photographs were reviewed where there were no historical aerial photographs available which primarily occurred in the northern most portion of the study area.

2.3 Environmental Impact Assessment

An assessment was undertaken in relation to the potential environmental impacts of potential pre-existing contamination. The approach involved identification of the key impact mechanisms and possible impacts associated with each mechanism, followed by a qualitative risk assessment. Risk has been calculated in accordance with AS/NZS ISO 31000-2009 *Risk management - Principles and guidelines*.

The project risk matrix and criteria for likelihood and consequence were used in the calculation of risk and are contained in Volume 1, Chapter 4 of the EIS.

The identification of impacts, risks and mitigation measures will be relevant to the gas fields on the basis that construction activities could disturb pre-existing contamination that may result in a potential risk to human health and/or exacerbate impacts to the surrounding environment.

2.4 Project Impacts and Mitigation Measures

The methodology undertaken to assess impacts and mitigation measures associated with the existing environment, construction of facilities, commission stage, operation of facilities and decommissioning stage involved:

- Reviewing the findings of the desktop study
- Determining the receiving environment (receptors) which could be impacted by the activities
- Reviewing available information in relation to the construction, commissioning and operational processes and using experience and judgement to identify where potential environmental risk occurs.

3. Results - Existing Environment

3.1 Land use

The study area consists of pastoral land that has primarily been used for livestock grazing since the area was settled in the mid to late 1800s. In more recent times, agriculture farming has replaced cattle farming and this included the harvesting of oats and grains, sorghum and cotton. Other industries and rural activities that were common during the early 1900s to approximately the 1980s were timber mills, dairy farming, butter factories and wool processing (i.e. sheep farms). Many of these activities have suffered significant decline in recent decades including dairying and sheep farming due mainly to declining economic circumstances or climatic conditions.

3.2 Cattle tick zones

Measures used for controlling cattle tick are a significant source of contaminated land in the region. DEEDI has created a map showing areas of cattle tick-free zones, controlled zones and infested zones for Queensland. This map indicates that the gas fields are located in a cattle tick-free zone which occurs just north of the Wandoan-Miles-Chinchilla-Dalby area and extends to the NSW border. The map is provided in Attachment A. The map is also reproduced on Figures 4, 5 and 6.

DEEDI was contacted to obtain additional information about the possible existence of disused cattle dips, spray races and general pesticide use within the gas fields. The following information was obtained from livestock inspectors:

- Disused cattle dips and former spray races would probably be located within the Wandoan region and possibly along the northern boundary of the gas fields. Tick treatment was required in this area because it bordered a tick-infested area, as shown on the map provided in Attachment A. Tick treatment was increasingly less common through the southern region of the gas fields. Circular cattle yards with a structure located at the centre were likely to be spray races for sheep. These were not commonly used but were known to exist in the northern portion of the gas fields where tick treatment was more common.
- The oldest cattle dips would have been built and used in the early 1900s and arsenic would have been the primary insecticide used on stock. Both cattle and sheep dips would have existed during this period. It is likely that some landowners may be unaware of disused cattle dips being present on their property because these were probably buried or dismantled over time.
- By the 1950s and 1960s, cattle dips and spray races were common. Some farmers chose to hand spray insecticides on stock rather than use the conventional method. Organochlorine (OC) pesticides replaced arsenic during this period. OC pesticides were phased out of use by the 1970s and 1980s because of their toxic and persistent nature. OC pesticides were replaced by Organophosphate (OP) pesticides which later were replaced by carbamates, amidine compounds and synthetic pyrethrins.
- Insecticides also would have been widely used as timber treatment for termites and would likely be present at stockyards and on any wooden structures present on the property, including residences.

3.3 Topography

Observations of topography and landform were made during the geology, topography, geomorphology and soils fieldwork assessment undertaken from 24-31 August 2009 (WorleyParsons, 2009a). The results for topography and landform and are summarised here.

Terrain assessments were made at 58 locations observed within the gas fields and encompassed the study area. The result indicated that the majority of the study area was flat and generally <2% slope.

3.4 Regional geology

Regional geology has been summarised from WorleyParsons' geology, topography, geomorphology and soils assessment report (WorleyParsons, 2009a). The regional geology mapped within the study area predominately comprises Early Cretaceous mudrocks, Jurassic arenites and mudrocks and Tertiary sedimentary rocks.

Quaternary alluvium and associate soils occur in lower lying areas and adjacent to waterways throughout the study area and generally overlie the older Cretaceous and Jurassic materials and Tertiary sediments.

3.5 Hydrogeology

Hydrogeology has been summarised from WorleyParsons' groundwater assessment report (WorleyParsons, 2009b). The hydrogeologic summary is as follows.

- The Surat Basin is an elongated basin containing a sequence of alternating terrestrial and marginal marine sequences, which reach a maximum thickness of approximately 2,500m. The terrestrial units tend to be sandstone-dominated and form regional aquifers, whereas as the marine sequences are siltstone and mudstone dominated and form regional, and most likely leaky, aquitards. Although the Surat Basin is geologically bound by the Kumbarilla Ridge to the east and the Nebine Ridge to the west, it is hydrogeologically connected to the Clarence-Moreton and Eromanga basins (to the east and west respectively) and is one of the major constituent basins of the Great Artesian Basin (GAB).
- The hydrostratigraphic units (aquifers and aquitards) are broadly flat lying, however uplift and erosion along the eastern and northern margin of the Surat Basin has resulted in a south-westerly tilt of the units and exposure of most of the units along the northern boundary of the basin. It is these subcropping and outcropping areas that are the intake beds for recharge to the aquifers.
- Recharge comes predominantly by way of summer rainfall, either via direct infiltration into the outcrop, or indirectly via leakage from streams and/or from overlying aquifers. Water levels in the Cainozoic unit, in particular, respond directly to rainfall recharge. Heavy use of groundwater in this unit, combined with extended periods of below average rainfall, has resulted in declining groundwater levels.
- The direction of the regional groundwater flow is to the south-west and generally a subdued reflection of topography. Locally, groundwater flow may be towards surface water features, where these intersect outcrop and for the Cainozoic Unit, may follow the valley of the Condamine River.

3.6 Regional aquifer data

Reference to the Queensland Department of Mines Groundwater Resource map (Map 4 dated 1987, 1:250,000 series) indicated the following aquifer characteristics could be encountered within the area of the subject site:

- Bore yield - <5L per second
- Salinity – 500 to 1,500mg/L
- Suitability – Suitable for most purposes. Marginal for human consumption and low salt tolerant crops.
- Depth to groundwater within the region was expected to range from near-surface to approximately 100m.

The aquifer yield information and salinity illustrated in Map 4 was in general agreement with the local groundwater quality, which is described in Section 3.7 (this is to be confirmed when the groundwater study provide groundwater quality data).

3.7 Groundwater quality

Groundwater quality has been summarised from the groundwater assessment report (WorleyParsons, 2009b). The key findings of the hydrochemistry for the region were as follows:

- Over 11,000 chemistry records, belonging to seven hydrostratigraphic units of the Surat Basin, have been assessed for the purposes of characterising the groundwater regime within the gas fields. The information has also been used to assess relevant environmental values. The groundwater salinity statistics, expressed as Total Dissolved Solids (TDS), and dominant hydrochemical facies of each hydrostratigraphic unit are summarised in Table 3.1.

Table 3.1 Groundwater salinity and hydrochemical facies summary

Hydrostratigraphic unit	Salinity (total dissolved solids mg/L)						Dominant hydrochemical facies
	Count	20th percentile	80th percentile	Median	Mean	Standard deviation	
Cainozoic Units	1489	469	1810	891	1509	2332	Na, Mg, Ca-Cl,HCO_3 and Na-Cl,HCO_3
BMO Formation	228	745	2588	1153	1970	2285	Na-HCO_3,Cl
Gubberamunda Sandstone	100	590	1646	980	1673	1974	Na-HCO_3,Cl
Springbok Sandstone	8	533	1615	575	948	598	Na-HCO_3,Cl
Walloon Coal Measures	162	591	3564	1463	2547	3044	Na-Cl,HCO_3, Na-HCO_3,Cl and Na-Cl
Hutton Sandstone	234	568	2357	1033	1596	1598	Na-HCO_3,Cl and Na-Cl,HCO_3

Hydrostratigraphic unit	Salinity (total dissolved solids mg/L)						Dominant hydrochemical facies
	Count	20th percentile	80th percentile	Median	Mean	Standard deviation	
Precipice Sandstone	23	127	1652	171	769	1096	Na-HCO_3 and Na-Cl,HCO_3

- Most aquifer units in the study area contain groundwater of meteoric origin and are marginally alkaline. Median salinity values are generally less than 1500mg/L TDS.
- Groundwater chemistry within the shallower aquifer systems (comprising the Cainozoic Units and the Mooga Sandstone) is largely heterogeneous, and possibly a consequence of hydrogeologic processes such as recharge, local mixing, atmospheric contributions of marine aerosols via rainfall, evapo-transpiration, rock-water interactions and irrigation induced salinity.
- Groundwater salinity values in the Gubberamunda Sandstone, Springbok Sandstone, Hutton Sandstone and Precipice Sandstone aquifers are typically very low in proximity to recharge sources (that is, intake beds) in and around Injune and Taroom.
- Groundwater quality in the deeper confined aquifers generally deteriorates across the study area (between Roma and Toowoomba). It may be possible that poorer quality groundwater from overlying aquifers is infiltrating as a consequence of the inferred thinning or absence of major confining aquitards (that is, Rolling Downs Group, Westbourne, Eurombah and Evergreen Formations). Alternatively, structural controls (that is, fault or fold zones) may be partly responsible where vertical dislocations facilitate conduits for groundwater movement. Other processes that may be contributing to the deteriorating groundwater quality in this region include: ion diffusion from overlying or underlying aquitards with marginal marine depositional histories, ion-exchange, leaching of soluble ions, mixing of different water types, and/or water-rock interactions along flow paths.
- In most hydrostratigraphic units, the dominant water type is Na-HCO_3,Cl (or a close variant). The dominance of bicarbonate in the groundwater (and its common derivative from soil zone CO_2 as a result of plant respiration and oxidation of organic matter) may be a consequence of the proximity of recharge zones to the north and north-west of Australia Pacific LNG's development areas. Bicarbonate concentrations may also be elevated as a consequence of the dissolution of carbonates by oxygenated recharge waters, mixing of different water types and/or precipitation/dissolution of minerals. The dominance of sodium (Na) is likely to be related to the weathering of Na-bearing silicate minerals, cation exchange and/or conversion of Na-smectite to Kaolinite followed by the release of Na ions to solution. The geochemical signature may, however, be overprinted to some extent by the diffusion of chloride (and other soluble ions) from overlying or underlying aquitards with marginal marine depositional histories.

4. Results - Site History

A summary of the site history is provided below.

4.1 Local councils and historians

The Western Downs Regional Council (WDRC), Toowoomba Regional Council (TRC) and local historians from Millmerran, Dalby, Chinchilla, Miles and Wandoan were contacted to obtain information about how the surrounding land use had changed over time, as well as any other information relating to possible notifiable activities and areas of potential concern. The information obtained from WDRC and historians was anecdotal in nature. The sources of this information are provided in Table 4.1. Note that the historians from Chinchilla Museum and Dalby Family History Society Inc. requested to remain confidential.

Table 4.1 Local councils and historians interviewed

Location	Name	Date
Chinchilla	Chinchilla Museum	8 October 2009
Dalby	Dalby Family History Society Inc.	31 September 2009
Miles	Merlene Freeman (WDRC)	31 September 2009
Millmeran	Jenny Commens (TRC)	2 October 2009
Wandoan	Joyce Baker (historian)	5 November 2009

The following provides a summary of information gathered from those discussions.

4.1.1 Millmerran

The early history of Millmerran is linked with the pastoral industry and began with the establishment of pastoral stations at Canning Creek, Cecil Plains, Dunmore, Stonehenge, Tummaville, Western Creek, Wondul and Yandilla. The primary pastoral land use included sheep and cattle grazing. Other industries included fish farming, piggeries and egg farms.

The area is situated within the Condamine and Macintyre River catchments, which is regarded as a rich agricultural area. Agricultural activities in the past have included olives, cereal grains and cotton.

The most significant current major industries are a coal mine that produces 3.4 million tonne per annum and an associated 840MW power station. These are located 12km south of Millmerran.

4.1.2 Dalby

The original land use, dating back to the early 1900s, was dairy farming which supported several butter factories in the Dalby area. The last butter factory was built in 1927.

Sheep farming for wool was first introduced in the 1930s and lasted until the 1980s. Cattle farms were also present throughout the 1900s which gained more popularity as the dairy and wool industries weakened. More recently, wheat, oats and cotton crops have become established in the area.

Cattle dips and some sheep dips were thought to exist within the Dalby area. The primary chemical used in the early dips was arsenic.

4.1.3 Chinchilla

The Chinchilla area was settled in the 1860s and was supported by pastoral industry (i.e. cattle and sheep). This continued until the early 1900s when an outbreak of prickly pear devastated the industry. There was little land clearing during this period resulting in the spread of prickly pear. The prickly pear was eradicated by 1932 which sparked an increase in cattle and dairy interests. The Chinchilla area was regarded as a tick-free zone and cattle dips were not expected to be prevalent. Small dairies were able to survive until approximately the 1970s.

Timber became the new industry for the region during the early 1900s and continued until the 1970s. Timber mills were located in Dalby, Chinchilla, Miles and Kogan. After World War II, farming became popular with crops such as wheat, barley, oats and sorghum and more recently watermelons, grapes and cotton. In the 1990s, coal mining and gas extraction were identified as a major resource in the region, which was followed by exploration and mining.

4.1.4 Miles

The Miles area was settled in the 1840s and was primarily supported by cattle and sheep farms. These farms were located on large properties. As Miles developed and the railroad was introduced, these large properties were split into smaller grazing lots. Cattle farms are present today, however the number of sheep farms diminished by the 1980s with the decrease in wool exports. Dairy farms began supplying cream to a local butter factory from about 1913. Dairies operated until approximately the 1960s. Poor soil conditions have meant Miles has historically been a difficult area for agricultural farms. Clearing for cropping began in the 1950s. The primary products were wheat, barley and cotton, which are still being farmed today.

Cattle dips for sheep and cattle were known to have existed in the 1940s. The primary chemicals used in the dips included caustic soda and arsenic.

4.1.5 Wandoan

The Wandoan area was settled in approximately 1850s. The primary land use was cattle and sheep farming. In the early 1900s, large land holdings were subdivided to into smaller parcels and sold to farmers for dairy farming. In the late 1920s and 1930s, prickly pear infestation made it impractical to farm until the weed was eradicated in the 1940s. This brought cattle farming and dairies back to the area.

In the 1950s and 1960s, large areas were farmed for wheat but this was subsequently replaced by cattle farming as climatic and economic conditions made crop production difficult. Cattle dips were known to have been used in the region west of Wandoan as this was once a tick-infested area. Cattle dips were believed to be less prevalent east of Wandoan. The tick-infested line zone is now north of this area, near Taroom. It was noted that the older dips were probably filled in or are no longer used. Known cattle dips were located within a large stockyard positioned adjacent to the former Wandoan rail line, which is near the town of Wandoan. Cattle were dipped before being dispatched from the yard via train. The other former dip was located approximately 30km east of Wandoan.

4.1.6 Potentially contaminating uses

The rural setting and pastoral land use suggested that cattle dips and spray races had the potential to be present within the gas fields. The primary concern with cattle dips and spray races relates to the use of persistent toxic chemicals that have the potential to contaminate surrounding areas of soil and

possibly groundwater and sediment of nearby waterways. These treatment methods have the potential to cause serious environmental harm.

It is likely that arsenic would be the common toxic chemical of concern for the earlier treatment facilities (i.e. pre-1950s). Cattle and sheep owners operating treatment facilities after the 1950s would have systematically replaced arsenic with other pesticides, which would be of an environmental concern to sensitive receptors.

Table 4.2 is a summary of the expected pesticides that could be present within disused or existing cattle dips and spray races. Some of these pesticides could also be present within cattle yards, where their use may have been for the treatment of termites.

Other potentially contaminating uses commensurate with remote rural areas include scrap yards or unauthorised landfills for various wastes and solid and liquid waste disposal. The desk-top study did not identify these, however there is a possibility that these potential sources of contamination could be present in remote areas where construction activities may occur. These wastes could result in the release of hazardous contaminants if disturbed and this may pose a potential impact on construction works. Examples of the types of wastes that could be present our buried include:

- Construction and Demolition (C&D) wastes such as concrete, brick, timber, scrap metal, glass, plastic and asbestos sheeting
- Car bodies, disused machinery, batteries, drums and chemical containers
- Liquid wastes such as oils, solvents, lubricants and pesticides.

The impacts and mitigation measures that address the identified potential sources of contamination are discussed in Section 5.

Table 4.2 Summary of possible pesticides used in study area

Insecticide group	Common chemicals	Approximate period of use
Arsenic	• Sodium arsenite • Arsenic trioxide	1900s-1950s (Environmentally persistent and likely to be currently present)
Organochlorine pesticides	• DDT • Chlordane • Aldrin and dieldrin	1950s-1970s (Environmentally persistent and likely to be currently present)
Organophosphate pesticides	• Chlorpyrifos • Diazinon • Phosmet • Fenthion • Cythioate • Tetrachlorvinphos	1960s-1970s Some currently in use (Less environmentally persistent than organochlorine pesticides but not likely to be currently present)
Carbamates	• Carbaryl	Possibly being phased out of use (Not likely to be environmentally persistent)
Amidine based compounds	• Amitraz	Currently used (Not likely to be environmentally persistent)

Insecticide group	Common chemicals	Approximate period of use
Pyrethrins	• Bifenthrin • Cyfluthrin • Cypermethrin • Decamethrin • Permethrin • Pyrethrin	Currently used (Not likely to be environmentally persistent)

4.2 Aerial photograph interpretation

Historical aerial photographs dating from 1944 to 2007 were obtained from DERM. The aerial photographs covered most of the area of the 60 lots targeted during the PSI. These aerials showed that the land was predominantly undeveloped and mainly used for cattle and sheep grazing until the land was cleared and prepared for cropping, as per the anecdotal information provided in Section 4.1.

The limitations of the aerial photograph review included the following:

- The scale of the aerial photographs generally made it difficult to distinguish specific ground features such as aboveground tanks, waste disposal areas and cattle yard/cattle dips.
- Some older aerial photographs (i.e. pre-1960s) were of poor quality, often making it difficult to assess site features.

Given these limitations, it was not possible to clearly identify the presence or absence of cattle dips or other potentially contaminating activities (i.e. notifiable activities) of similar scale. There were some cattle yards identified in the older aerial photographs which raises the concern that these areas may have contained arsenic or OC pesticide residues, stemming from wood treatment to control termites. Use of these products poses a low risk of causing serious environmental harm given the aboveground, localised nature and minor volume of arsenic and pesticides that would have been used.

In addition to the search for cattle yards and dips/spray races during the aerial photograph review, consideration was also given to the identification of other notifiable activities commensurate with the rural setting such as waste dumps, mines, railway yards and scrap yards. In addition, likely locations of notifiable activities were also considered which included commercial/industrial areas, workshops, timber yards and areas of disturbed ground. None of these notifiable activities or locations that could potentially house notifiable activities was observed within the 60 lots that were targeted during the PSI.

Given the numerous cattle yards that were present within the study area, a number of criteria were developed to review aerial photographs for the identification of cattle yards that had a greater potential to contain dips and spray races. These criteria related to common features associated with treatment facilities, which included:

- Cattle yards located adjacent to residential dwellings were omitted from further assessment as it was unlikely these treatment methods would have been located near residences.
- Cattle yards containing rectangular-roofed areas were highlighted as possible cattle dips or spray races as the treatment facilities were often rectangular in shape. Square-shaped structures were likely shade areas. DEEDI indicated that circular cattle yards containing a structure in the centre were possibly sheep spray races.

- Cattle yards located near streams and water bodies were highlighted because a water source was needed for dip and spray race treatment methods.

The aerial photographic review identified several cattle yards that contained roofed structures. These roofed structures may have been dips or spray races but were more likely used for shade or other purposes. Site history indicates cattle dips and spray races were not expected to be widespread across the gas fields but concentrated in the northern portion.

Seven lots were identified as potentially containing cattle dips or spray races based on the abovementioned criteria and were located within or in proximity to the footprint of a proposed facility. These lots are described in Table 4.3 and discussed in Section 4.3.

Table 4.3 Cattle Yards Containing Possible Dips or Spray Races

Plate No.	Property description	Referenced figure no.
1, 2	Lot 113 BWR754	Figure 2
3	Lot 27 BWR195	Figure 2
4	Lot 5 BWR748	Figure 2
5	Lot 8 AB138	Figure 2
6	Lot 36 WV634	Figure 2
7	Lot 28 FT972	Figure 2
8, 9	Lot 17 SP187050	Figure 4

Note that during the review of aerial photography of the 60 identified lots, other cattle yards were also observed on four neighbouring lots which were not proposed locations of major infrastructure. The cattle yards have been identified because the yards are located within the gas tenements, which form the gas fields and may contain cattle dips or spray races based upon the abovementioned criteria. These cattle yards are described in Table 4.4.

Table 4.4 Cattle Yards Containing Possible Dips or Spray Races

Plate No.	Property Description	Referenced Figure No.
8, 9	Lot 1 SP187050	Figure 4
10, 11	Lot 10 BWR718	Figure 2
12, 13	Lot 37 BWR1	Figure 3
14, 15	Lot 2 DY831	Figure 4

Further assessment of these four lots included a review of any available Australia Pacific LNG interview notes that were recorded during the process of obtaining land owner permission to access land and EMR/CLR searches (refer Sections 4.6and 4.7). Note that there are likely to be several cattle yards present within other areas within the gas tenements in addition to those listed above, as this desktop assessment targeted the study area containing proposed major facilities (i.e. 60 lots) and not the entire gas fields that include gas wells and the network of gas pipelines.

A review of the aerial photographs identified two cattle yards that may directly overlie proposed major facilities. These included the following:

- Lot 36 WV634 [water treatment facility] (refer Figure 2).
- Lot 28 FT972 [brine pond] (refer Figure 2).

Note that the results of the site inspections also identified a second cattle yard on Lot 17 SP187050 which may directly overlie a water treatment facility. This is discussed in Section 4.4.

4.3 Outcomes of aerial photograph interpretation

The following provides an assessment of the cattle yards, dips and spray races identified as part of the aerial photograph interpretation. In addition to the search for cattle yards and dips/spray races during the aerial photograph interpretation, consideration was also given to the identification of other notifiable activities commensurate with the rural setting such as waste dumps, mines, railway yards and scrap yards. In addition, likely locations of notifiable activities were also considered which included commercial/industrial areas, workshops, timber yards and areas of disturbed ground. None of these notifiable activities or locations that could potentially house notifiable activities was observed within the 60 lots that were targeted during the PSI or the additional lots described in Section 4.2.

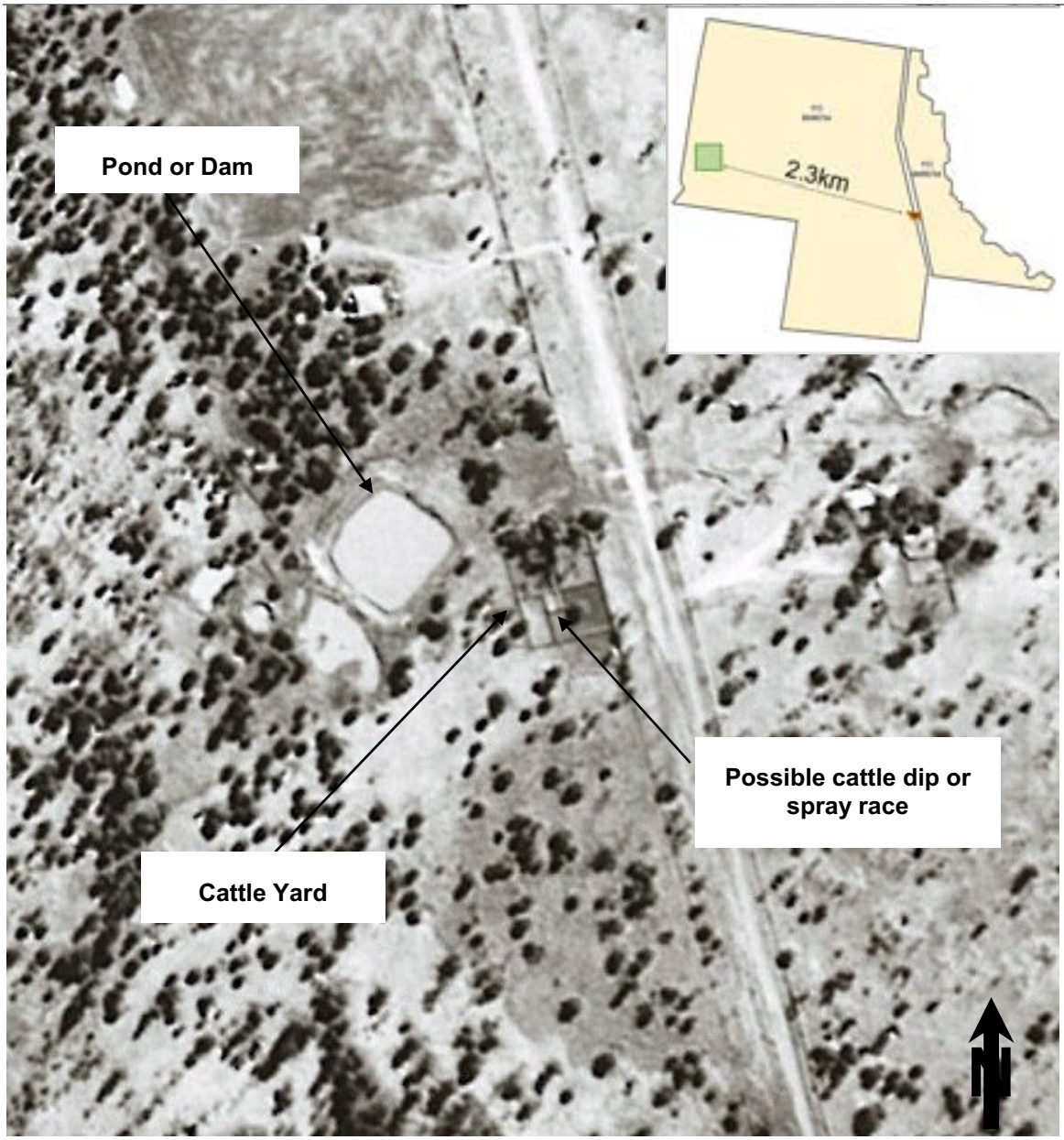

Plate 4.1 Cattle yard located on Lot 113 BWR754 (1956)

The cattle yard contains a rectangular roofed structure which could be a cattle dip or spray race. The yard is also isolated from residences and a water source is nearby (refer Figure 2).

Plate 4.2 Cattle yards located on Lot 113 BWR754 (2007-2008)

The configuration of the cattle yard has slightly changed from the 1956 photograph and the roofed structure is no longer present. A cattle crush is present for directing cattle in and out of the yard. This cattle yard is located approximately 2.3km east-south-east of a proposed gas production facility (refer Figure 2). The cattle yard is not likely to pose a contaminated land concern for the construction of the proposed facility. Further investigation of the cattle yard for potential contamination is not considered necessary.

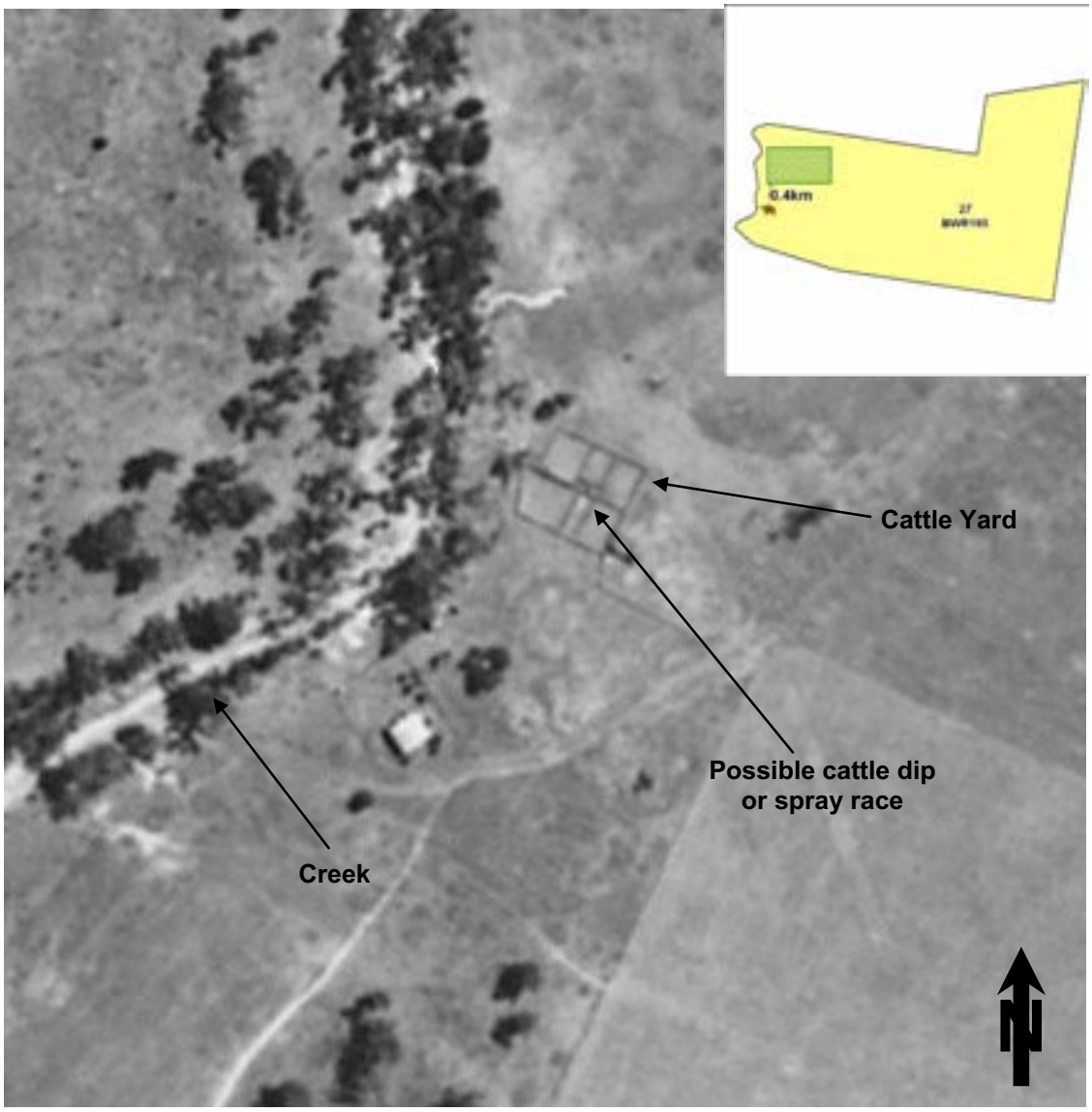

Plate 4.3 Cattle yard located on Lot 27 BWR195 (1962)

The cattle yard is isolated and near a creek and there is a rectangular structure present which could be cattle dips or spray races. The cattle yard is located approximately 0.4km south of a proposed gas production facility (refer Figure 2). The cattle yard is not likely to pose a contaminated land concern for the construction of the proposed facility. Further investigation of the cattle yard for potential contamination is not considered necessary. Note that there were no 2007-2009 satellite images available for review for this area.

Plate 4.4 Cattle yard located on Lot 5 BWR748 (2007-2008)

The cattle yard appears aged and is isolated from residence. There is a roofed structure present which could be for shading. The cattle yard is located approximately 1.6km southeast from a proposed water transfer network (refer Figure 2). The cattle yard is not likely to pose a contaminated land concern for the construction of the proposed facility. Further investigation of the cattle yard for potential contamination is not considered necessary.

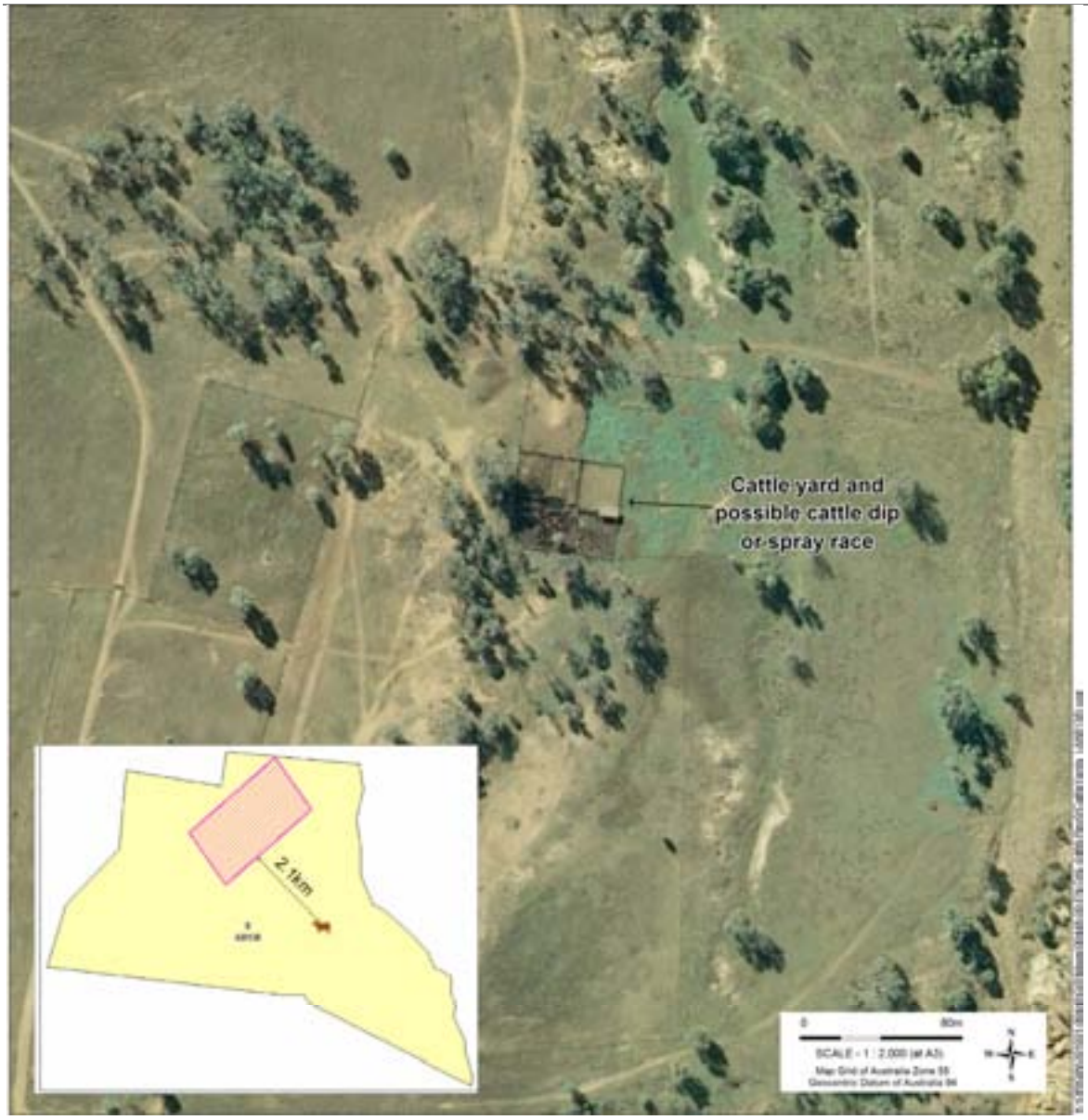

Plate 4.5 Cattle yard located on Lot 8 AB138 (2009)

The cattle yard appears to be aged and is isolated from residences. There are cattle present and a roofed structure visible but this could be used for shading. The location is within the northern boundary of the gas fields and therefore there is a greater risk that a dip or spray race is or was present. The cattle yard is located approximately 2.1km southeast from a proposed water treatment facility (refer Figure 2). The cattle yard is not likely to pose a contaminated land concern for the construction of the proposed facility. Further investigation of the cattle yard for potential contamination is not considered necessary.

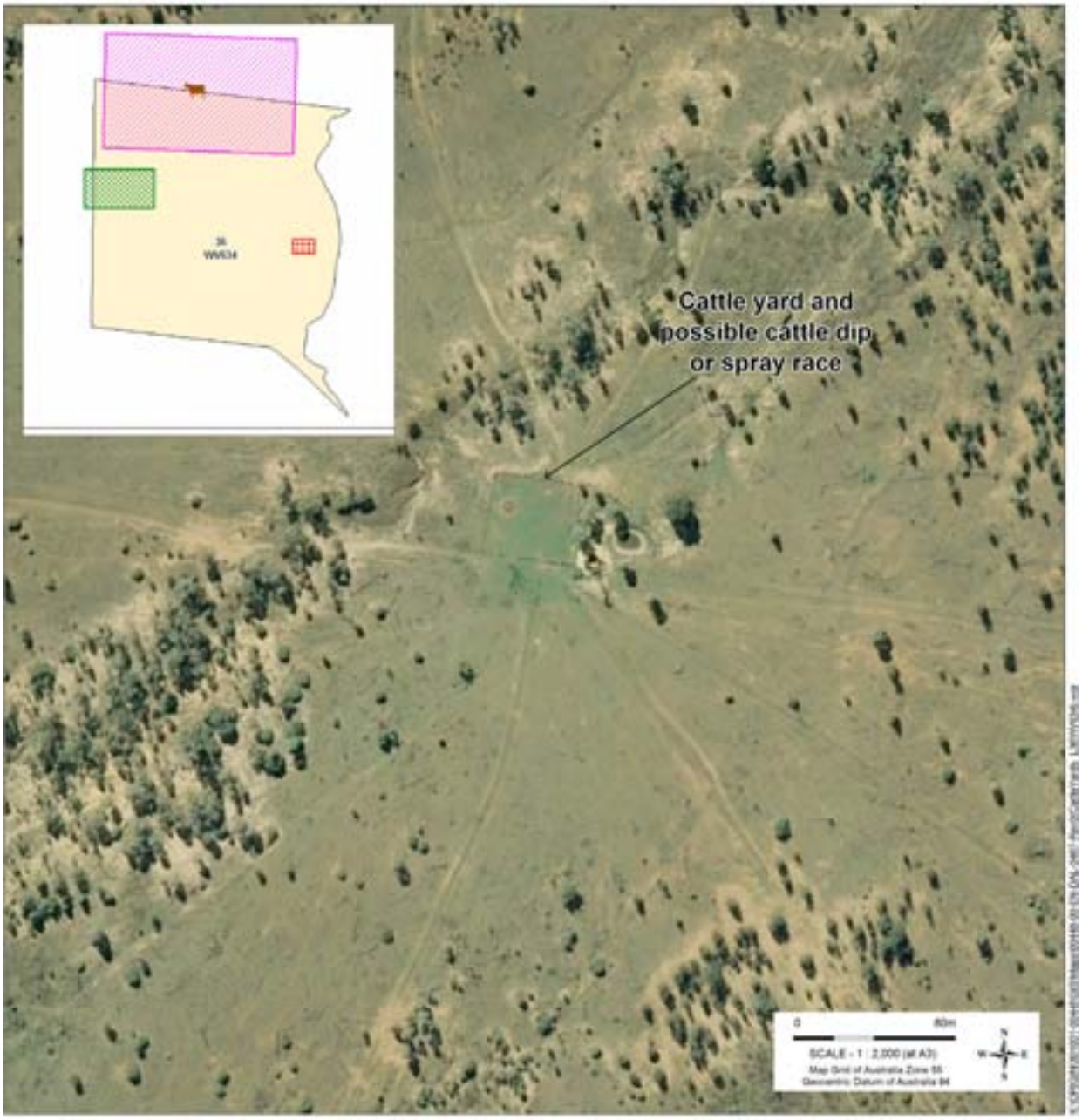

Plate 4.6 Cattle yard located on Lot 36 WV634 (2007-2008)

This cattle yard is isolated and appears aged. There is one roofed structure present; however it does not resemble a cattle dip or spray race. The circular feature towards the left side of the yard is also difficult to distinguish. The location of this yard is within the foot print of a proposed water treatment facility (refer Figure 2). This yard represents an area where construction activities may have the potential to disturb pre-existing contamination. This area should be further investigated in accordance with the guidelines referenced in Section 1.4.1.

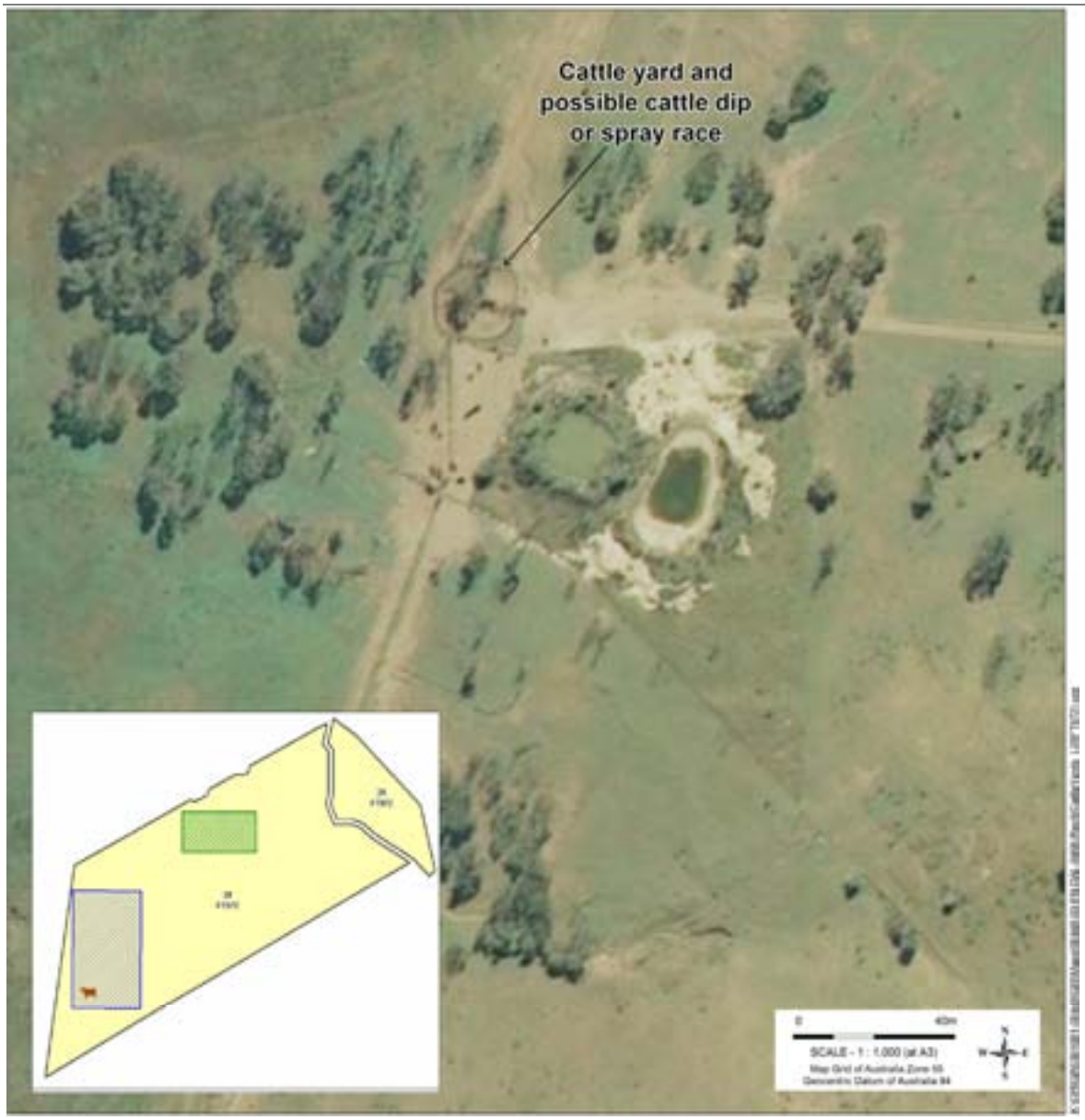

Plate 4.7 Cattle yard located on Lot 28 FT972 (2007-2008)

This cattle yard is circular and appears aged and could contain a structure which may be a cattle dip or spray race but from the photograph it is unclear to define. The yard is isolated from residences and located near two dams which could be water sources and is also located within the foot print of a proposed brine pond (refer Figure 2). This yard represents an area where construction activities may have the potential to disturb pre-existing contamination. This area should be further investigated in accordance with the guidelines referenced in Section 1.4.1.

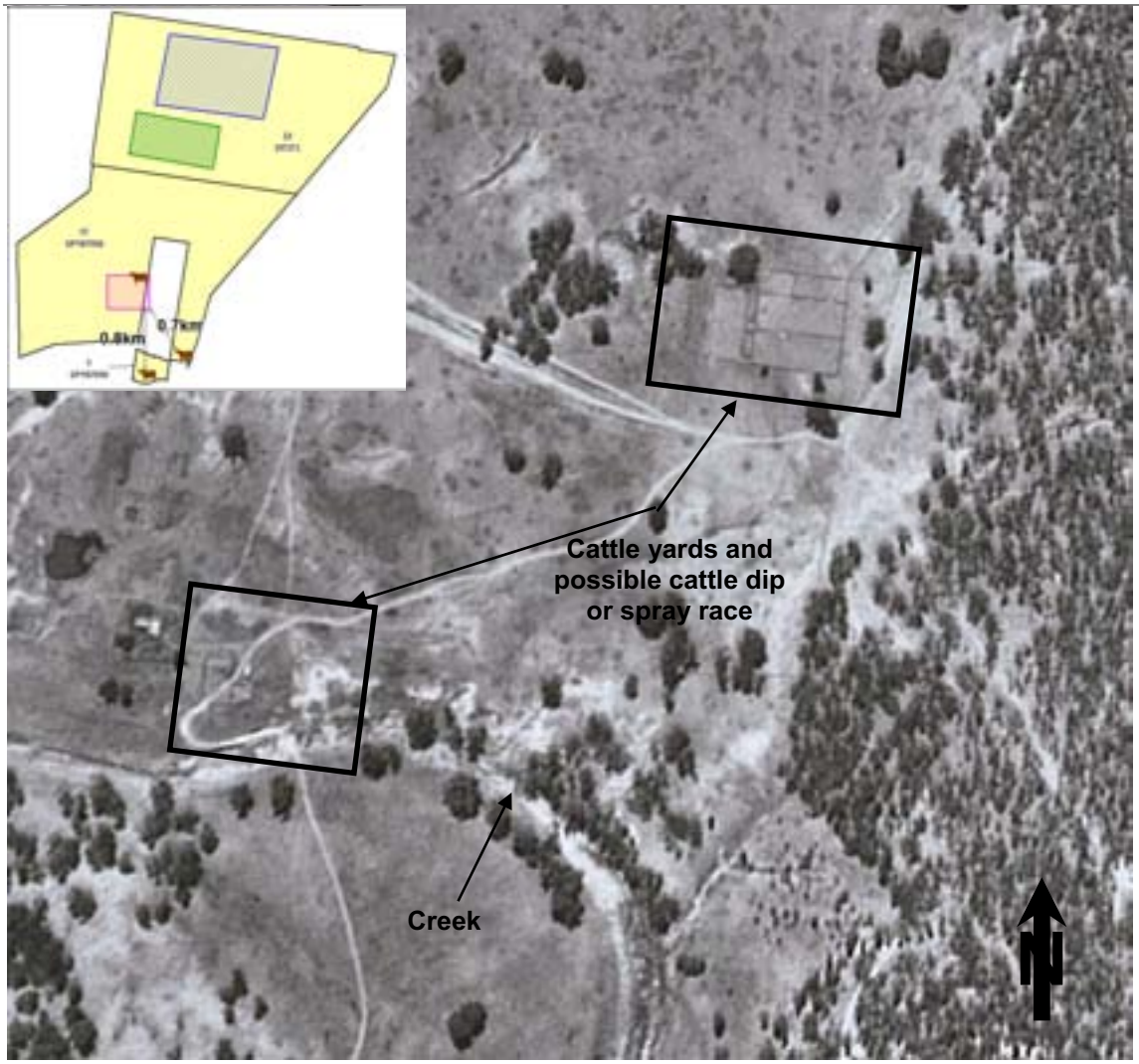

Plate 4.8 Cattle yard located on Lot 1 and 17 SP187050 (1959)

These two cattle yards are isolated near a creek and there are rectangular structures present which could be cattle dips or spray races. They are located approximately 0.7km and 0.8km from a proposed water treatment facility (refer Figure 4).

A third cattle yard was identified on Lot 17 SP187050 during the site inspection which is positioned within the footprint of the proposed water treatment facility. This is discussed in Section 4.4.

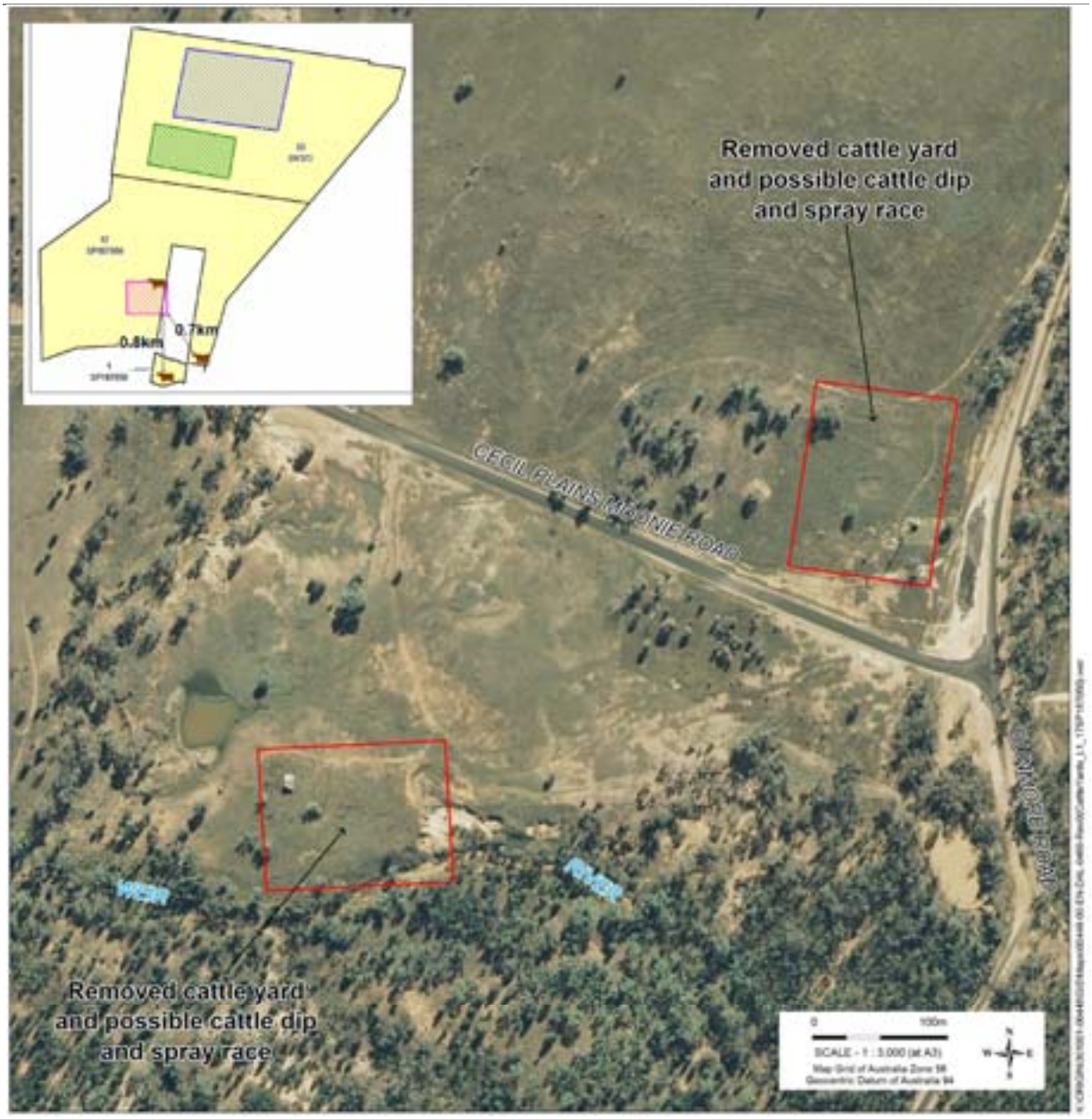

Plate 4.9 Cattle yard located on Lot 1 and 17 SP187050 (2007-2008)

Both cattle yards have been removed. The cattle yards are not likely to pose a contaminated land concern for the construction of the proposed facility water treatment facility given their proximity of 0.7km and 0.8km. Further investigation of the cattle yards for potential contamination is not considered necessary.

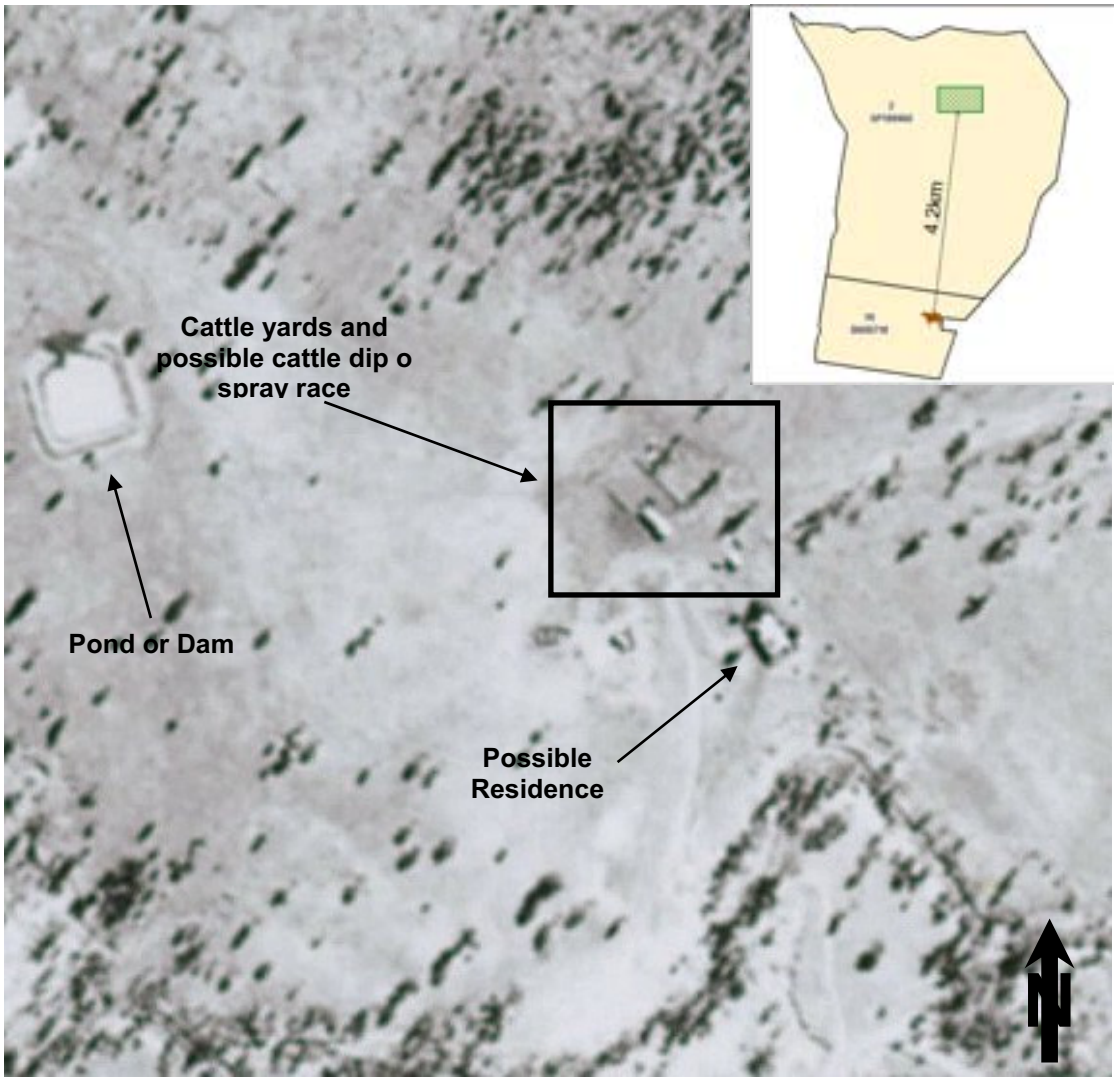

Plate 4.10 Cattle yard located on Lot 10 BWR718 (1956)

Scattered structures are present within the cattle yards which could be cattle dips or spray races. The cattle yards are located approximately 4.2km south of a proposed gas plant facility (refer Figure 2). This was not one of the original 60 lots that were targeted during the PSI because this location is not within a lot containing a proposed major facility.

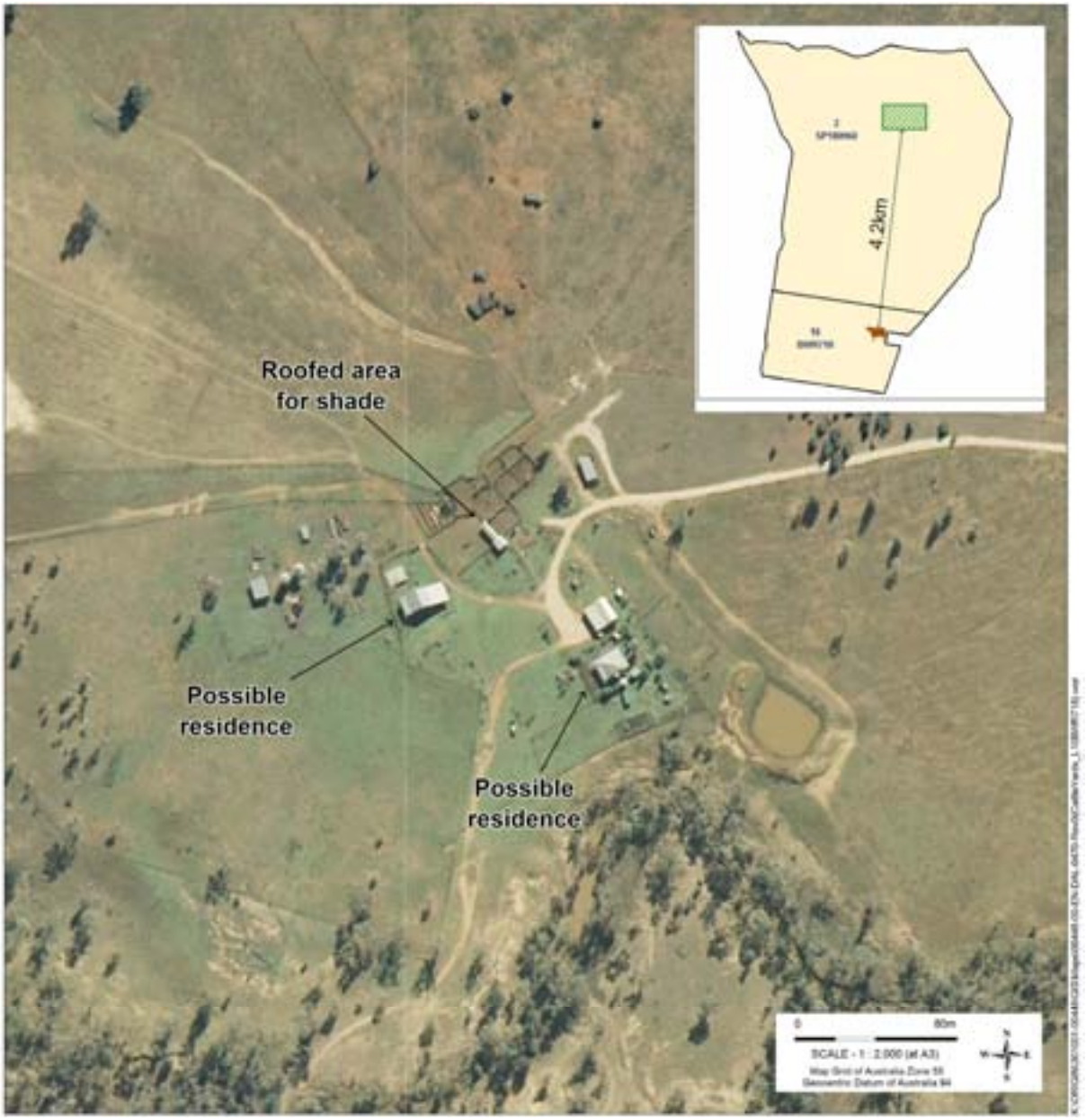

Plate 4.11 Cattle yards located on Lot 10 BWR718 (2007-2008)

The cattle yard has been expanded and a roofed structure is present, which is likely to be for shading. Possible residences are also visible. It is unlikely this site would contain a cattle dip or spray race at present and poses a low risk to the proposed gas processing facility. Further investigation of the cattle yard for potential contamination is not considered necessary.

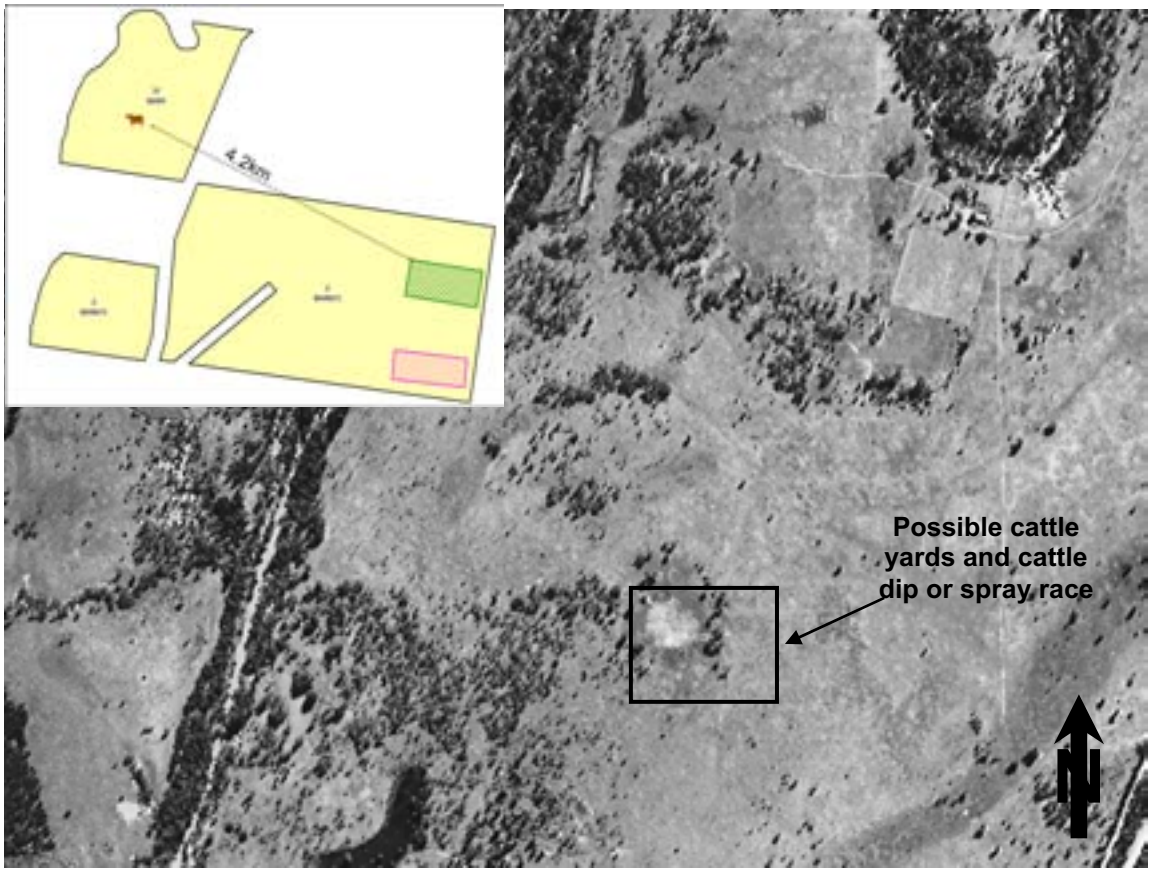

Plate 4.12 Cattle yard locate on Lot 37 BWR1 (1956)

The cattle yard is not clearly visible in this photograph. The cattle yard is approximately 4.2km north-west of a proposed gas production facility located on Lot 2 on BWR573 (refer Figure 3). This was not one of the original 60 lots that were targeted during the PSI because this location is not within a lot containing a proposed major facility.

Plate 4.13 Cattle yard located on Lot 37 BWR1 (2007-2008)

The cattle yard is circular which DEEDI indicated could be a spray race for sheep, however there is no structure at the centre of the yard. The roofed structure present could be for shading. The cattle yard is not likely to pose a contaminated land concern for the construction of the proposed gas production facility given the distance of 4.2km. Further investigation of the cattle yard for potential contamination is not considered necessary.

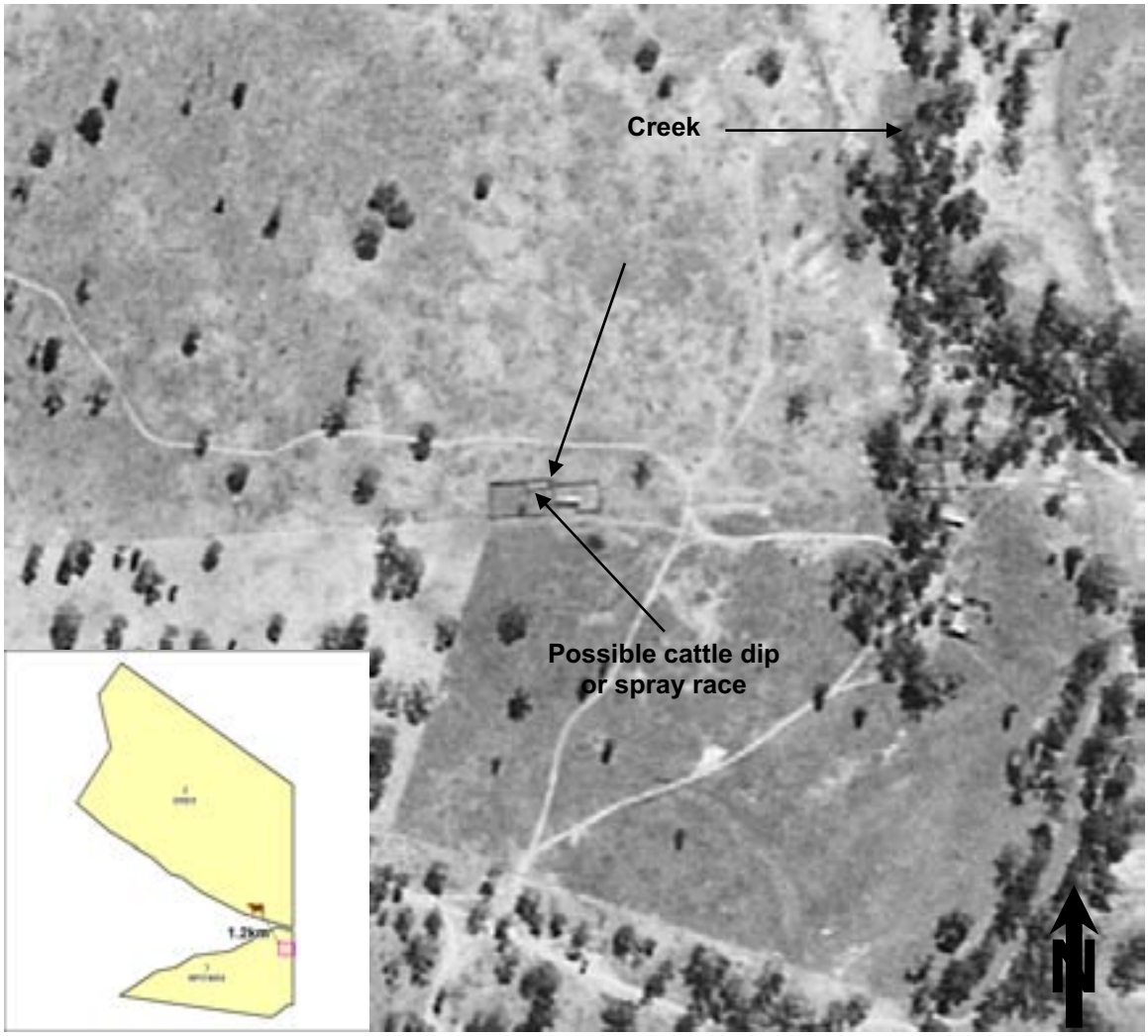

Plate 4.14 Cattle yard located on Lot 2 DY831 (1959)

The cattle yard contains two rectangular-roofed structures which could be a cattle dip or spray race. The yard is also isolated from residences and a creek is nearby which could provide a source of water for a possible dip or spray race. The creek is not adjacent to the cattle yard and therefore not likely to be impacted by possible contaminants that may be present should a cattle dip or spray race be present. The cattle yard is located approximately 1.2km northwest of a proposed water treatment facility located on Lot 3 on RP174414 (refer Figure 4). This was not one of the original 60 lots that were targeted during the PSI because this location is not within a lot containing a proposed major facility.

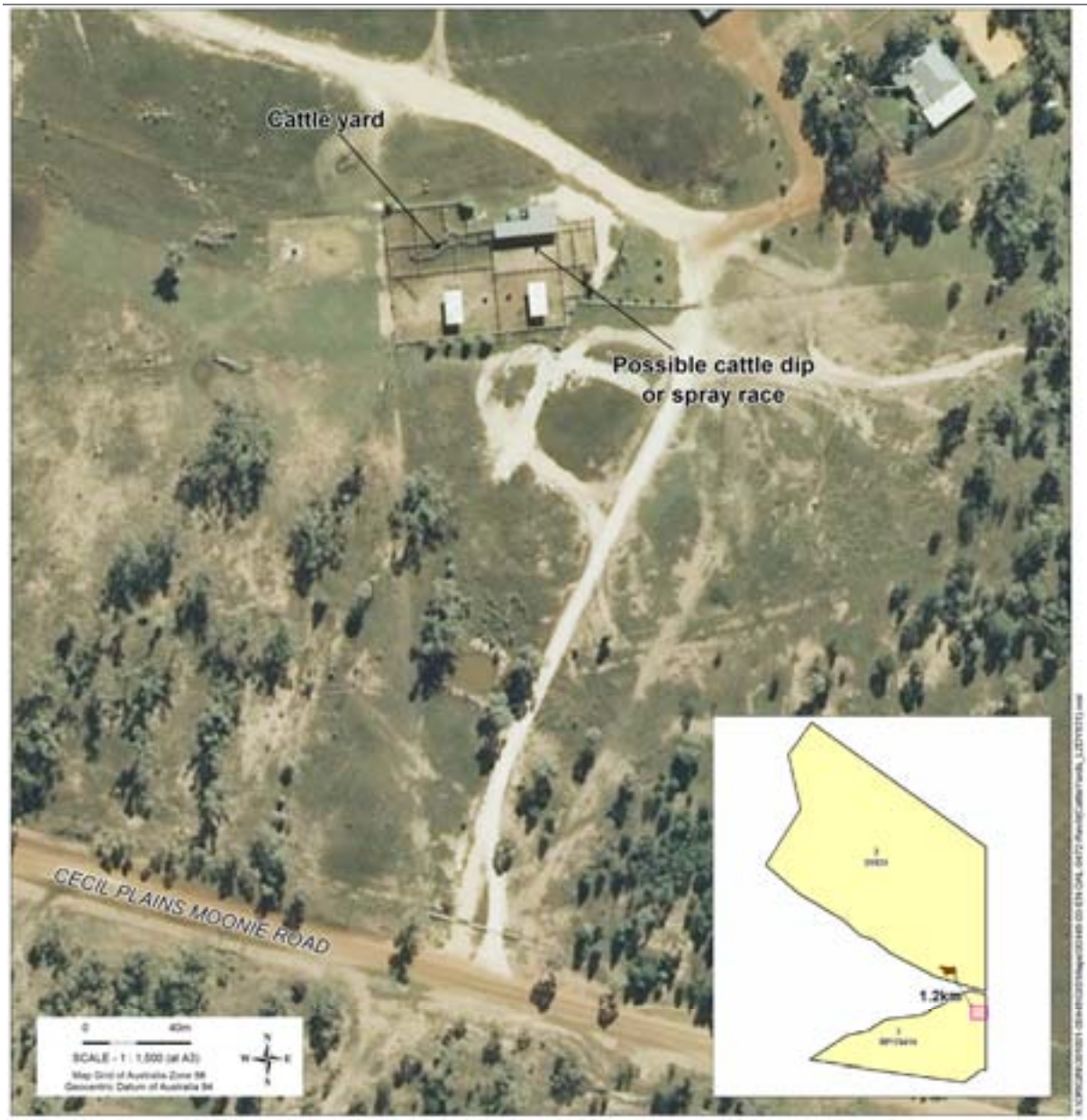

Plate 4.15 Cattle yard located on Lot 2 DY831 (2007-2008)

The cattle yard has been expanded and a residence established nearby. A roofed structure is present along with two new roofed structures which were probably used for shade. A tank is located adjacent to the rectangular structure which could provide water to a dip or spray race. The crushes at either end of the rectangular structure were common features of cattle dips. The cattle yard is not likely to pose a contaminated land concern for the construction of the proposed water treatment facility given the distance of 1.2km. Further investigation of the cattle yard for potential contamination is not considered necessary.

4.4 Site inspections

There were no significant areas of potential contaminated land observed by field teams conducting other studies for the Project's EIS (refer Section 2.2.2). The site inspections confirmed the presence of one feedlot and several cattle yards. These structures were not specifically inspected for cattle dips or spray races but rather noted for further investigation. Upon further investigation via a review of

aerial photographs, two cattle yards were suspected of containing either a cattle dip or spray race, and these lots were subsequently searched for a possible listing on the EMR/CLR. One cattle yard was located on Lot 17 SP187050 which was one of the original 60 lots that were targeted, and the other was located on Lot 2 BRW573 which was in addition to the 60 lots targeted.

The feedlot was also further investigated via discussions with DEEDI to determine the potential for contamination to be present. DEEDI indicated that cattle dips and spray races were not likely to be present, and as a result, this lot was not searched on the EMR/CLR.

The feedlot and two cattle yards were not identified during the aerial photograph review discussed in Section 4.3. As a result, low level satellite imagery was used to assess the site structures for the presence of cattle dips and spray races. The satellite images and discussions of the findings are presented in Plate 4.16 to Plate 4.18 provided below.

Plate 4.16 Feed lot located on Lot 16 RG16 (2007-2008)

The cattle feedlot is owned by MDH Pty Ltd. It is located within Lot 16 RG16 (refer Figure 3). This lot is not proposed to contain a major facility. The closest major facility is a proposed water treatment facility located approximately 4.9km north-west, on Lot 2 on BRW573. Advice from DEEDI indicated that plunge dips and spray races were not expected to be present within feedlots, and as a result, no further investigations are required.

Plate 4.17 Cattle yard located on Lot 2 BRW573 (2007-2008)

This cattle yard is located on Lot 2 BRW573 (refer Figure 3) which is not one of the original 60 lots that were targeted. It contains a series of holding pens and a rectangular structure, possibly a cattle dip or spray race, which is located in the lower right corner as shown. Lot 2 is not near the tick-infested zone and according to DEEDI would not likely be in a cattle dip or spray race area. The closest major facility is a proposed gas processing facility located approximately 2.6km east of the yard, and on this basis, further investigation of the cattle yard for potential contamination is not considered necessary.

Plate 4.18 Cattle yard located Lot 17 SP187050 (2007-2008)

This cattle yard is located on Lot 17 SP187050. Lot 17 is not near the tick-infested zone and according to DEEDI would not likely be in a cattle dip or spray race area, however the cattle yard is within the footprint of a proposed water treatment facility located on this lot (refer Figure 4). This yard represents an area where construction activities may have the potential to disturb pre-existing contamination, and therefore further investigations are required. There are also two other cattle yards located 0.7km and 0.8km from the proposed location of the water treatment facility. These yards were identified during the aerial photograph review, as discussed in Section 4.3 (i.e. Plate 4.8) and would not require further investigation.

4.5 Summary of aerial photograph review and site inspections

Based on the interpretations of aerial photographs in Sections 4.3 and 4.4, three cattle yards were identified within proposed locations of major facilities which were:

- Lot 28 FT972
- Lot 36 WV634
- Lot 17 SP187050.

The implication is that pre-existing soil contamination may be present in these areas. The possible sources of the soil contamination are a result of:

- The potential use of pesticides as a wood treatment within these yards, or
- The use of arsenic and/or pesticides in cattle dips and spray races.

These three cattle yards represent areas where construction activities may have the potential to disturb pre-existing contamination, and therefore soil investigations are required to assess the possible occurrence of hazardous contaminants. The investigations would need to be comprehensive and follow the guidelines and standards listed in Section 1.4.1.

4.6 Land owner interviews

Landholder interviews conducted by Australia Pacific LNG included 52 of the 60 land owners that were targeted during the PSI. The interviews did not identify any notifiable activities present on their properties. Origin Energy was one of the landholders not interviewed. Origin Energy owned three lots which contained the following major infrastructure:

- Brine pond (Lot 3 on RG247)
- Waste Water Treatment Plant (Lot 10 on ROG3411)
- Water Pump Station (Lot 440 on BUL3415)

Available site information obtained from Origin Energy for the period prior before and after the purchase of these lots was not available at the time that this PSI was completed, but will be detailed in a Supplementary EIS for the Project.

The aerial photograph review and site inspections identified five lots in addition to the 60 lots that were targeted which may have had notifiable activities (i.e. dip or spray race) carried out in the past based on the presence of cattle yards. These lots included:

- Lot 1 SP187050
- Lot 10 BWR718
- Lot 37 BWR1
- Lot 2 DY831
- Lot 2 BRW573.

Australia Pacific LNG did not interview these five landholders with the exception of Lot 37 BWR1 which indicated that there contaminated land issues associated with this property. Interviews with the other four landholders will likely be undertaken during the Supplementary EIS.

The lot and plan descriptions of landholders that were and were not interviewed are provided in Appendix B.

4.7 EMR/CLR search results

A search of the EMR and CLR indicated that none of the 60 lots targeted during the PSI were listed for a notifiable activity. This result does not necessarily mean notifiable activities are or have not been carried out but rather that none have been reported to DERM.

EMR/CLR searches were conducted on the five additional lots listed in Section 4.6 and these results indicated that none of these lots were not listed for a notifiable activity and therefore were not on the EMR or CLR. The search results are provided in Appendix C.

4.8 Site history and interview summary

The site history derived from discussions with historians and councils was anecdotal in nature and may not be fully accurate. In terms of potential environmental impacts from the potential disturbance of existing contaminated land, the most significant information provided indicated that the primary notifiable activity that could be present within the study area was cattle dips and spray races which may have existed since the early 1900s. Therefore, localised areas of potential contamination may be present.

During the landholder interview process, feedback indicated that they were not aware of cattle dips or spray races on their properties. A search of the EMR or CLR indicated that none of the lots targeted during this PSI were listed on either register.

Other sources of potential contamination identified by historians and local council were former dairies, timber mills, coal mining, butter factories and rail lines. These activities have the potential to cause localised areas of contamination; however the historical aerial photograph review did not identify these former industries within the study area.

5. Potential Risks, Potential Impacts and Mitigation Measures

5.1 Potential sources of contamination

The desktop study identified three cattle yards which are located within the proposed location of major facilities. These cattle yards have the potential to contain or have contained dips or spray races. The soil within and surrounding the dips or spray races (typically <50m) could be contaminated by arsenic and pesticides (refer Table 4.2). The desktop study was unable to determine with certainty if cattle dips or spray races were present. Additional Stage 2 investigations have been recommended that would confirm the presence or absence of arsenic and/or pesticide contamination or other contaminants that may be present within these areas (refer Section 6.2).

Other sources of contamination that could potentially be present which are consistent with rural land use (although not specifically identified during the PSI) included:

- Unauthorised landfills and construction and demolition wastes (e.g. concrete rubble, scrap metal, brick, plastic, glass, asbestos sheeting) which could be buried within properties and likely to be away from residential dwellings and therefore potentially within proposed locations of major facilities. The volume of such wastes was considered likely to be minor
- Unlawful disposal of waste products (oils, solvents, lubricants, batteries and pesticides)
- Scrap yards containing car bodies, disused machinery, drums and chemical containers.

5.2 Potential human health risks

The DoE draft guidelines make reference to a health-risk based approach when conducting assessments of contaminated land. The assessment of health risks is based on DERM Health-based Investigation Levels (HILs) for the contaminants of concern. HILs are provided for a range of contaminants and for various exposure settings. The exposure setting that would be relevant to the Project would be commercial/industrial.

As no soil sampling was conducted during this PSI, no comparison of contaminant concentrations against HILs for commercial/industrial can be assessed. Where practicable, however, the construction works will avoid contaminated sites and therefore minimising the risk of exposure to potential contamination. Where this is not possible, Australia Pacific LNG and its representatives will develop site-specific health, safety and environment plans and procedures to maintain a safe environment and workplace for its employees and contractors, which is in accordance with *Workplace Health and Safety Act 1995*.

5.3 Environmental impact assessment

Pre-existing contamination from the potential sources of contamination listed in Section 5.1 has the potential to impact the environment and be exacerbated by construction activities within the gas fields. Recommendations provided in Section 6.2 describe preventative actions that should be undertaken prior to construction of the proposed facilities to minimise disturbance of contaminated soil.

Mitigation measures are generally determined after the nature and extent of contamination has been determined from detailed investigations which have not been carried out during this PSI. However,

there are generally two courses of action that can be undertaken which are in accordance with the EP Act. These include:

- Management of a contaminated area. This is achieved by providing a protective barrier (i.e. cap) over the managed area to minimise surface infiltration or exposure to contaminants. This can also be achieved by encapsulation of the contaminants within a purpose built cell and use of cut-off walls to contain contaminated groundwater. Capping materials often include:
  - Concrete
  - Asphalt
  - Soil
  - Other impermeable material approved by DERM.

  Management of a contaminated area is often undertaken in accordance with a DERM-approved Site Management Plan (SMP). A DERM-approved SMP is a legally binding document that provides land owners or land managers with conditions that stipulate how the contaminated area will be managed over time. The SMP option results in a legacy of contamination that may also require on-going groundwater monitoring should there be a potential risk to groundwater or possibly surface waters.
- Remediation of a contaminated area in accordance with a DERM-accepted method. Remediation is often undertaken in accordance with a DERM-approved Remediation Action Plan (RAP). To prepare a RAP, the DoE draft guideline requires a site to be fully assessed and the nature and extent of contamination fully characterised. Remediation methods include but are not limited to:
  - Excavate and dispose to lined or unlined landfills which is typically undertaken for inorganic contaminants (i.e. heavy metals and metalloids such as arsenic). Stabilisation of the contaminants using a binding material (e.g. ash or cement) is sometimes required to ensure the material meets landfill acceptance criteria. An application for an off-site disposal permit must be made to DERM in accordance with Section 424 of the EP Act. The off-site soil disposal permit can only be obtained if the land has been listed on the EMR or CLR, unless agreed by DERM
  - Landfarming which is generally applied to volatile contaminants and/or contaminants that readily degrade under natural conditions such as volatile hydrocarbons and pesticides other than persistent compounds such as organochlorine pesticides
  - Biological treatment for contaminants that are readily biodegradable such as volatile and some semi-volatile hydrocarbons and pesticides other than organochlorine pesticides
  - Thermal desorption which generally applies to contaminants that are not able to be landfarmed, not readily biodegradable and cannot be disposed to lined landfill.

A summary of the impacts and mitigation measures relating to potential contamination identified by the PSI is provided in Table 5.1. The possible sources of contamination that were identified and assessed have been categorised as follows:

- Cattle dips and spray races
- Unauthorised use of landfills
- Unlawful disposal of wastes
- Scrap yards.

The risk ranking shown in Table 5.1 was in accordance with the project risk matrix and criteria for likelihood and consequence.

Table 5.1 Environmental Risk Assessment

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
Arsenic and organochlorine pesticide contamination of soil from existing dips or spray races and degradation of vegetation	Leaking dip structures Splashing and spraying of pesticides during use Dripping cattle or sheep Spilt pesticides based on past practices	Notification of DERM required where land is not listed on the EMR or CLR for the notifiable activity of livestock dip or spray race operations	Low	Complete removal of the dip and spray race structure. Assessment of the area of impact and remediation and validation of the impacted area as per DoE draft guidelines. Remediation via an appropriate DERM accepted method Management of contaminated areas through the placement of a suitable capping material as per an approved DERM SMP DERM Suitability Statement is obtained in accordance with EP Act.	Negligible
		Construction activities could disturb impacted area resulting in a greater area being impacted by contaminants	Medium		Negligible
Arsenic and organochlorine pesticide contamination of underlying groundwater from dips or spray races (note: no detailed	Leaking dip structures Splashing and spraying of pesticides during use Dripping cattle or sheep Spilt pesticides based on past practices	Notification of DERM required where land is not listed on the EMR or CLR for the notifiable activity of livestock dip or spray race operations Migration of contaminated groundwater off site could result in abatement order issued by DERM and placement of the land on the	Low	Containment of impacted groundwater based on extraction techniques and/or cut-off walls (or other DERM accepted method) but this should only be necessary where contaminant concentrations are significant and there is an imminent risk to a sensitive receptor (i.e. groundwater bores or surface water	Negligible

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
groundwater investigations conducted during PSI)		CLR Impact to private groundwater bores (note: no assessment of private bores conducted during the PSI but this has been recommended during site specific Stage 2 investigation)		bodies), or migration of impacted groundwater off site (i.e. across an adjacent property boundary)	
		Low to moderate contaminant concentrations with no off-site impacts	Negligible	Where remedial measures are not necessary due to low contaminant concentrations, on-going monitoring of the impacted groundwater may be required through a network of strategically placed groundwater monitoring bores to monitor concentrations and assess the effects of natural attenuation	Not required
Arsenic and organochlorine pesticide contamination of surface waters from dips or spray races	Leaking dip structures Splashing and spraying of pesticides during use Dripping cattle or sheep Spilt pesticides based on past practices	No surface water bodies were identified near suspected dips or spray races	Negligible	Not applicable	Not applicable
Unauthorised landfills, unlawful disposal waste and creation of scrap	Disposal of private household wastes, construction and demolition wastes, disused equipment, machinery and vehicle.	Possible presence of asbestos products, minor volumes of fuels, oils, paints, solvents, abrasive blasting material and fill material,	Low	Assessment of the area of impact and remediation and validation of the impacted area as per DoE draft guidelines	Negligible

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
yards		Notification of DERM required where land is not listed on the EMR or CLR for the notifiable activities of landfilling, engine reconditioning, scrap yards, waste storage		DERM Suitability Statement is obtained in accordance with EP Act. Management of contaminated areas through the placement of a suitable capping material as per an approved DERM SMP	
		Construction activities could disturb impacted area resulting in a greater area being impacted by contaminants	Medium		Negligible

5.4 Impacts and Mitigation Measures

Overall there are potential environmental effects on land contamination due to gas field activities that include construction, commissioning, operations and decommissioning; however these should be readily managed with the implementation of sound and standard construction practices and adherence with DERM guidelines.

5.4.1 Potential construction impacts

- Unidentified contaminated soils may be encountered during earthworks which could lead to contamination being spread across the site, impacting environmental receptors or unlawfully being removed from site.
- Fires involving chemicals and fuels as well as other engineered materials and liquids, could result in significant land contamination.
- Saline groundwater from extraction or from dewatering during pipeline construction may affect soil and groundwater chemistry. Extracted groundwater should meet surface water discharge criteria prior to release. Impacts from saline groundwater are discussed in detail in WorelyParsons' hydrogeology assessment report (WorelyParsons, 2009b)
- Spills of fuel and hydraulic oil etc. during refuelling and maintenance of construction plant. Such spills could impact soils locally, surface water and groundwater resources.
- Uncontrolled releases from storage of chemicals, fuels, oils, lubricants and other substances used in construction. This may impact soils, surface water and groundwater resources.
- Generation of waste resulting from construction (i.e. High Density Polyethylene [HDPE], steel off-cuts, packaging, concrete / rubble, timber and general waste).
- Generation of wastes from drilling of gas wells. This includes saline drilling fines brought to the surface which are placed into a sump for drying. These are mixed with subsoils, buried and the ground surface rehabilitated.

5.4.2 Commissioning, operations and decommissioning

- Leachate from waste storage has the potential to cause contamination of site soils and groundwater.
- Fuel and chemical spills and fire have the potential to cause contamination of site soils and groundwater.
- During commissioning, hydrotest water is required to test the integrity of the pipelines and LNG tanks. Hydrotest water contains additives such as biocides which may cause changes to the chemistry of soil and groundwater. Hydrotest water should meet surface water discharge criteria prior to release. Impacts from hydrotest water are discussed in detail in WorelyParsons' groundwater assessment report (WorelyParsons, 2009b)
- Generation of general waste during infrastructure operation including scrap metal, waste oils, batteries, filters and putrescible waste. In particular, the operation of the facilities will generate a wide range of wastes including waste oils, coolant, sump fluids, contaminated material, general maintenance waste, paper and cardboard.

- Leakage or irrigation of contaminated water from hydrostatic testing process on pipelines. This water may contain heavy metals, raised dissolved salt concentrations and (possibly) hydrocarbons. Impacts from hydrotest water are discussed in detail in WorelyParsons' groundwater assessment report (WorelyParsons, 2009b)
- Leaking of waste water from ponds and pipelines. These impacts are discussed in detail in WorelyParsons' groundwater assessment report (WorelyParsons, 2009b).
- Inappropriate handling, storage and disposal of solid and liquid wastes.

Given the proposed waste management controls to be established for the Project, the risk of significant land contamination occurring is low and potential impacts are therefore low.

5.5 Mitigation measures

Mitigation measures to reduce the risk of land contamination during construction, commissioning, operation and decommissioning activities and requirements for remediation are provided in Table 5.2.

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Table 5.2 Mitigation Measures

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
Contamination of soil and groundwater	Encountering pre-existing contamination not previously identified	During site construction works, contamination is spread to sensitive areas causing serious environmental harm Notification of DERM required where land is not listed on the EMR or CLR	Medium	Identify contaminated area prior to construction Assessment of the affected area in accordance with DoE draft guidelines Management or remediation to be undertaken via an appropriate DERM accepted method	Low
Contamination of soil and groundwater	Well Installation	Release of contaminated drill fluids and saline waters	Medium	Contain and dispose of drilling fluids Contain and dispose of groundwater via evaporation or truck and dispose at the nearest waste water treatment plant	Low
Contamination of soil and groundwater	Waste storage	Putrescible waste and leachate could cause soil and groundwater contamination.	Medium	Prepare and adhere to a Waste Management developed for the gas fields No waste dumps on site. Composting and recycling implemented to minimise waste. Use of containers or temporarily lined storages Leachate collection and off-site disposal Run-off should be diverted around waste areas	Low

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
				Contaminated areas investigated, remediated by the most appropriate method and validated in accordance with the stages detailed in Appendix 5 of DoE draft guidelines.	
Contamination of soil and groundwater	Chemical and fuel storage	Chemical and fuel spills can cause soil and groundwater contamination	Medium	Implement chemical, fuel and waste handling procedures. Chemical and fuel stores will be established in accordance with relevant Australian Standards, including AS 1940:2004. Construction, commissioning and operation inductions will include spill kit awareness information. If chemical and fuel stores are removed, investigate area for residual contamination. Where appropriate remediate or manage contamination in accordance with relevant legislation and guidelines. This work must be performed under the supervision of a suitably qualified person as per Section 381 of the EP Act and be in accordance with DoE draft guidelines. During dangerous goods storage decommission works will be carefully considered to minimise the risk of fuel and chemical spills. Fuel storage tanks will be above ground and installed in accordance with relevant standards (including bunding).	Low

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
				Conduct maintenance inspections of plant, equipment and vehicles. Implement controls measures to collect spills during construction, commissioning, operations and decommissioning. Implement integrity monitoring for spill control measures.	
Contamination soil	Fire	Hazardous chemicals and substances released to ground	Medium	Affected areas investigated in accordance with the stages detailed in Appendix 5 of DoE draft guidelines. Remediation (or management) where required by regulatory requirements.	Low
Contamination of soil and groundwater	Fuel leaks in maintenance department, plant storage areas and car parks	Hazardous chemicals and substances released to ground	Medium	Maintenance of plant done on concrete pads, plastic sheets or other low permeability surface to prevent oil, fuel, hydraulic fluid or other liquids infiltrating the ground. Plant used at site should have maintenance records and complete a site walk through noting potential signs of contamination. Affected areas investigated in accordance with the stages detailed in Appendix 5 of DoE draft guidelines. Remediation (or management) where required by regulatory requirements.	Low
Contamination of soil and	Disposal Saline Groundwater	Saline groundwater can affect soil and	Medium	Water should be assessed for contaminants to meet surface water criteria prior to release.	Low

Potential impact	Possible causes	Potential consequences	Potential Risk	Control measures	Potential Residual risks
groundwater		groundwater chemistry		Detailed mitigation measures is addressed in WorleyParsons' groundwater assessment report (WorleyParsons, 2009b)	
Contamination of soil and groundwater	Hydrotest water	Hydrotest water can affect soil and groundwater chemistry	Medium	Hydrotest water should be assessed for surface water discharge criteria prior to release contamination'. Detailed mitigation measures addressed in WorleyParsons' groundwater assessment report (WorleyParsons, 2009b)	Low

6. PSI conclusions and recommendations

6.1 Conclusions

Based on the results of the PSI and impact assessment, the following is concluded:

- The study area where major facilities are proposed (i.e. brine ponds, water treatment facilities, water pump stations and gas production facilities) consists of pastoral land that has primarily been used for livestock grazing and cropping.
- There is a low potential for significant widespread pre-existing contamination to be present within the area proposed for the development of major facilities. This is primarily because the historical land use has been pastoral and agricultural and these are not likely to pose a serious risk of causing environmental harm. Historical land use was assessed through the review of historical aerial photographs and discussions with local historians.
- Possible notifiable activities resulting in localised contaminated land, which potentially may be present in remote areas within the gas fields, are likely to include:
  - Disused cattle dips and spray races containing arsenic and organochlorine pesticides. This could be present within former or existing cattle yards. Some of the dips are likely to have been filled in or buried.
  - Unauthorised landfills and C&D wastes (e.g. concrete rubble, scrap metal, brick, plastic, glass, asbestos sheeting) which could be buried within properties and likely to be away from residential dwellings and therefore potentially within proposed locations of major facilities. The volume of such wastes was considered likely to be minor.
  - Unlawful disposal of waste products (oils, solvents, lubricants, batteries, chemical containers) and the establishment of scrap yards for abandoned vehicles, machinery and equipment. The presence of such activities and waste was not confirmed by the desktop study. The probability of waste products being located within the proposed development areas was considered low.
- The likelihood of encountering cattle dips and spray races exists but diminishes south of the tick-infested zone, as established by DEEDI. The tick-free zone covers the entire gas fields area. Accordingly, the risk of encountering cattle dips and spray races increases along the northern boundary of the gas fields. Anecdotal information from a Wandoan historian indicated the tick-infested zone once extended west of Wandoan. Therefore it is likely that cattle dips exist within this portion of the gas fields. DEEDI was unable to confirm the extent of historical tick-free or tick-infested zones but did confirm that there was an increased risk of encountering disused cattle dips and spray races within the northern most portion of the gas fields.
- Former dairies, timber mills, coal mines and butter factories were reported by local historians to be present with the gas fields. The site history review did not reveal these facilities within the footprint of the major structures, therefore the probability of encountering these industries was considered low.
- Two water treatment facilities and one brine pond are proposed to be constructed in areas that currently contain cattle yards. The lots where these cattle yards are located are: Lot 36 WV634, Lot 28 FT972, and Lot 17 SP187050. The implication is that pre-existing soil contamination may

be present within these cattle yards as a result of past (or current) arsenic and pesticide use associated with cattle dips and spray races.

- Lot 36 WV634, Lot 28 FT972, and Lot 17 SP187050 represent areas where construction activities may have the potential to disturb pre-existing contamination, and therefore Stage 2 investigations are required to assess the possible occurrence of hazardous contaminants. The investigations would need to be comprehensive and follow the requirements of the guidelines and standards listed in Section 1.4.1.
- The historical data was not sufficient to conclude with certainty whether or not cattle dips or spray races were present within Lot 36 WV634, Lot 28 FT972, and Lot 17 SP187050; however it is considered possible that these treatment methods have occurred at these sites.

6.2 Recommendations

There is sufficient site history to recommend that prior to construction of facilities and infrastructure:

- As this was only a PSI, further investigations should be conducted within the three cattle yards listed above to confirm if contaminating activities occurred. These investigations would include a detailed site inspection and discussions with the land owner and previous land owners. If there is any evidence of dips or spray races, then Stage 2 investigations should be conducted within these areas to delineate the extent and nature of potential contamination. Draft DoE guidelines indicate that sufficient data regarding the nature and extent of contamination must be known prior to developing remediation or site management measures.
- Environmental investigation protocols should be established to identify notifiable activities and potential contaminated areas, such as those listed in Section 5.1, once construction sites for the major facilities have been confirmed and prior to construction activities and land disturbance. These protocols should include pre-construction surveys to assist in identifying notifiable activities. By identifying these areas, site works could avoid disturbing an area of potential contamination and therefore avoid environmental harm by not spreading contamination to other parts of the gas fields. Contractors should be provided awareness training for how to identify notifiable activities, as well as the proper health and safety procedures to be followed when encountering notifiable activities. This could be included in the EM Plan for the construction phase of the gas fields.
- This PSI report should be used as a pre-construction planning tool to assist in identifying potentially contaminated areas that may be disturbed by the construction of minor facilities.
- DERM must be informed of any notifiable activities or contamination from hazardous contaminants that are identified on land managed by Australia Pacific LNG, in accordance with Section 371 of EP Act.
- Where construction activities are proposed to occur within a DERM-approved distance from potential or confirmed contamination or a notifiable activity (typically 30m), an investigation must be undertaken by a person that is suitably qualified under Section 381 of EP Act. The investigation will determine the nature and extent of the contamination. Management and/or remedial strategies are to be developed if construction activities are likely to disturb the impacted area. DERM can provide advice regarding the approved distance for construction work to be undertaken from a contamination source.
- Where excavation works uncover unexpected contamination, all work must cease. An investigation must be undertaken to determine the nature and extent of the impact. The investigation and any subsequent management and/or remedial strategies must be undertaken by a person that is suitably qualified under Section 381 of EP Act.

References

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DoE, 1998: *Draft Guidelines for the Assessment and Management of Contaminated Land in Queensland*, dated May 1998.

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WorleyParsons 2009a: *Australia Pacific LNG Project Geology Topography Geomorphology and Soils Assessment, Pipeline*, Volume 5 of Environmental Impact Statement, dated January 2010

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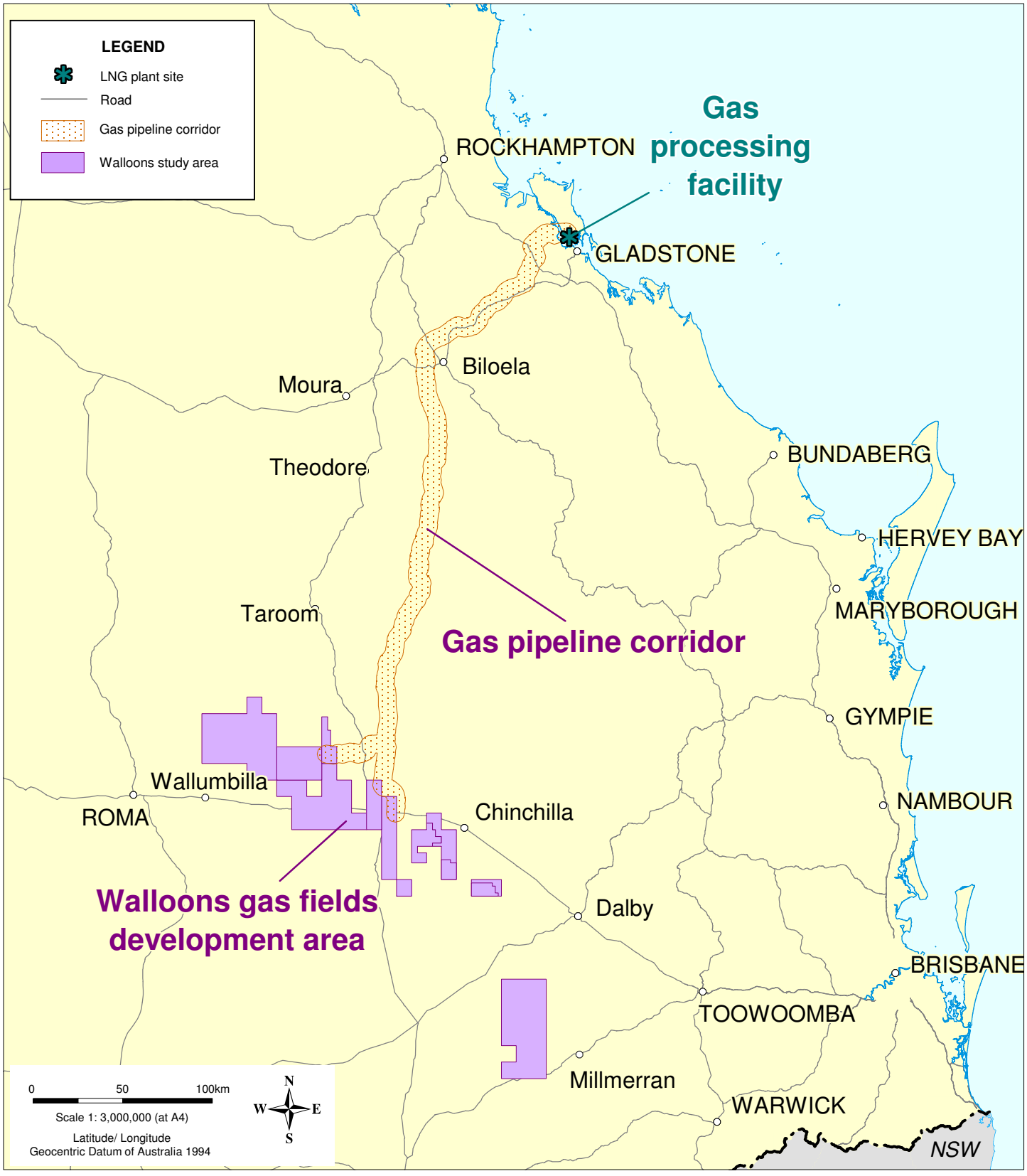
Figures



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Gas Pipeline Corridor 5km Buffer of Preferred Alignment provided by Origin Energy 03/11/2009

Rev	Date	Revision Description	ORIG	CHK	ENG	APPD
0	26/11/2009	Issued for use	DH	NA		

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Figure 1: Study Area

Project No: 301001-00448	Figure: 00448-00-EN-DAL-0323	Rev: 0

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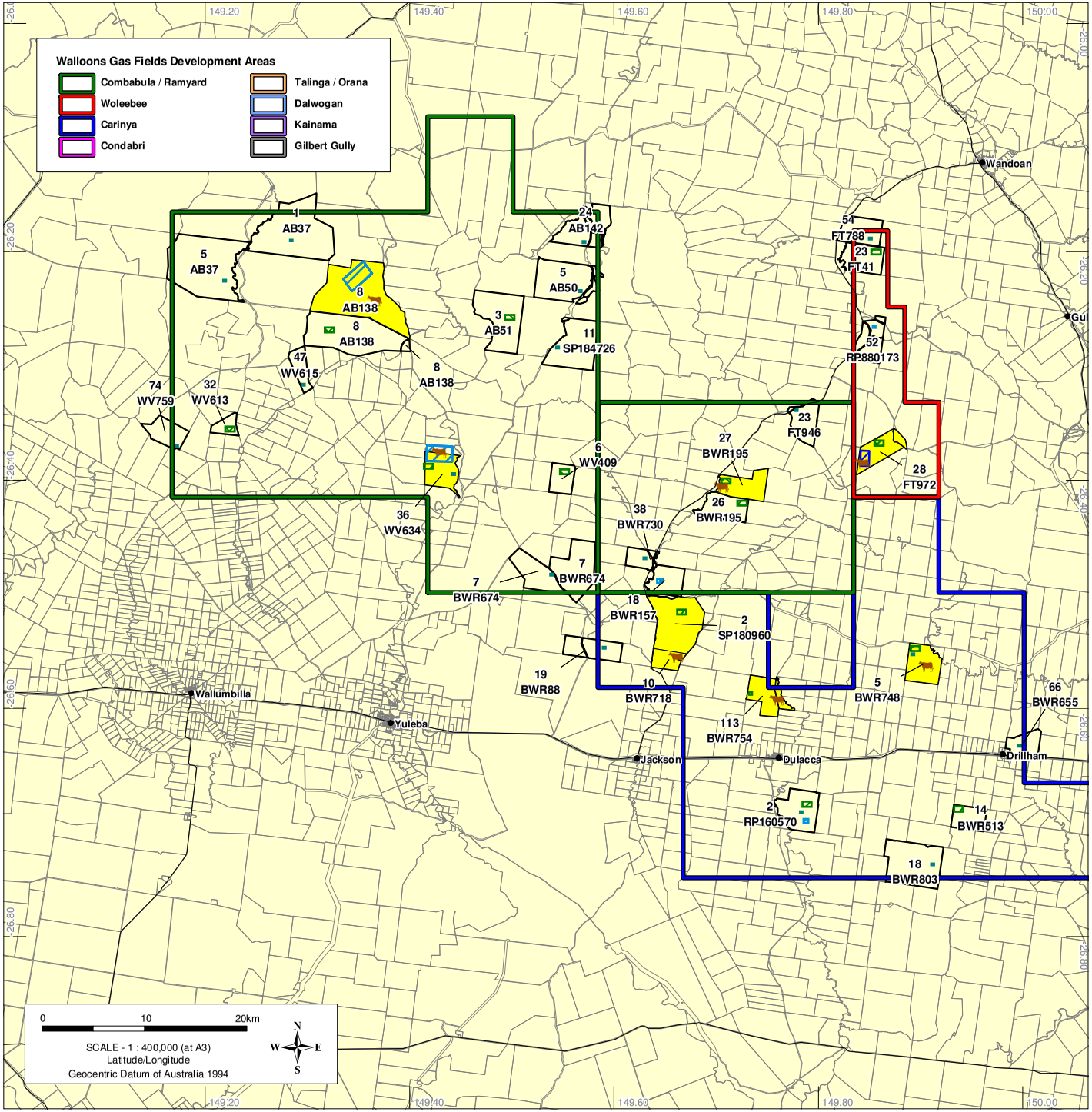

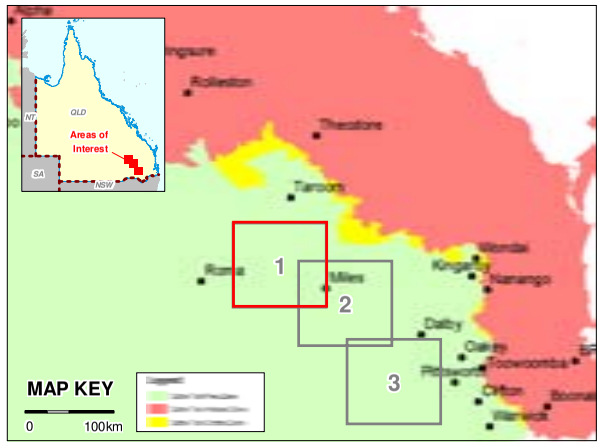

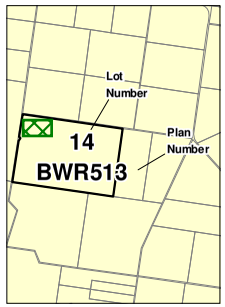

LEGEND

- Property boundary
- Brine pond (BP)
- Gas processing facility (GPF)
- Water transfer station (WTS)
- Water treatment facility (WTF)
- Cattle yard and possible cattle dip or spray race

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A	16/11/2009	Issued for squad check	JM	DH		

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Figure 2 - Contaminated Land Investigated Areas (Map 1 of 3)

Project No: 301001-00448	Figure: 00448-00-EN-DAL-0273	Rev: A

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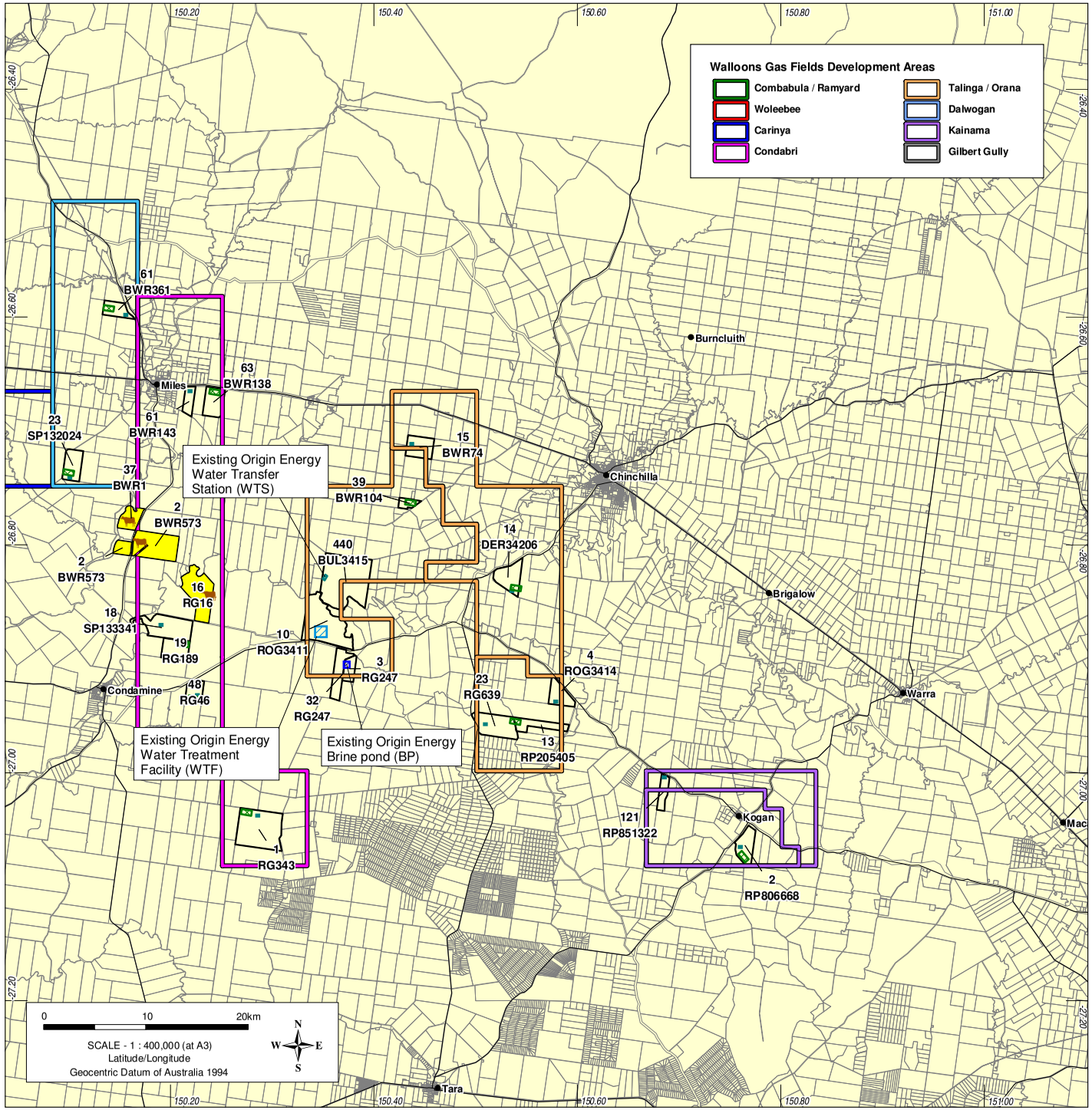

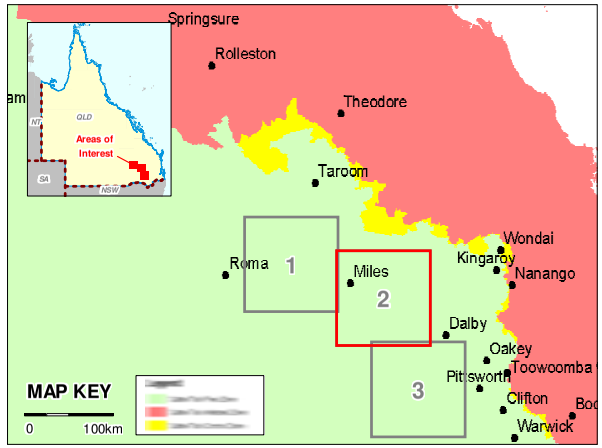

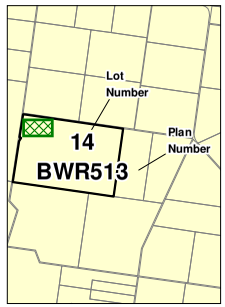

LEGEND

- Property boundary
- Brine pond (BP)
- Gas processing facility (GPF)
- Water transfer station (WTS)
- Water treatment facility (WTF)
- Cattle yard and possible cattle dip or spray race

This map incorporates data which is:
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Rev	Date	Revision Description	ORIG	CHK	ENG	APPD
0	02/11/2009	Issued for use	JM	DH		

WorleyParsons resources & energy

AUSTRALIA PACIFIC LNG

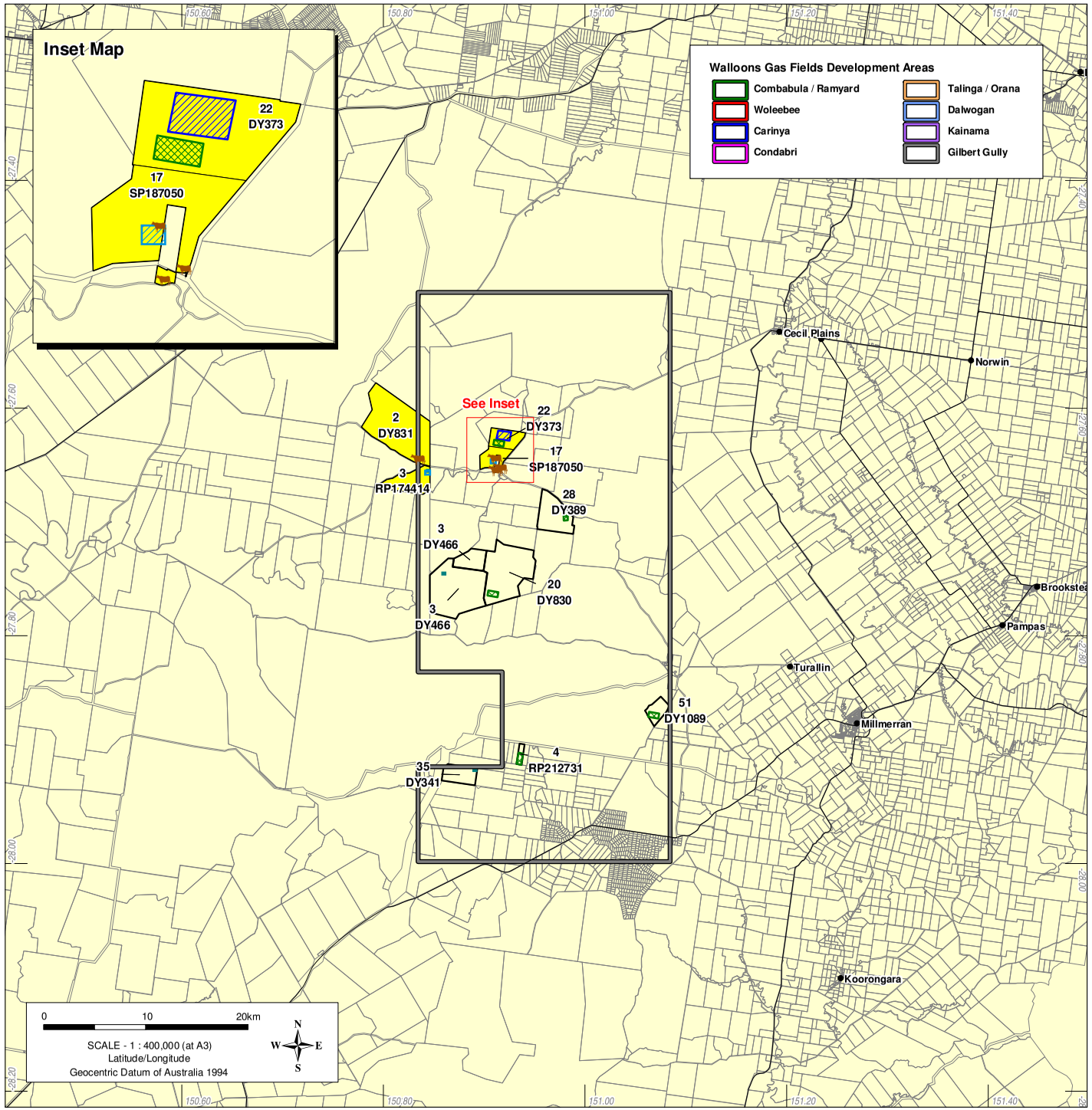
AUSTRALIA PACIFIC LNG PTY LIMITED

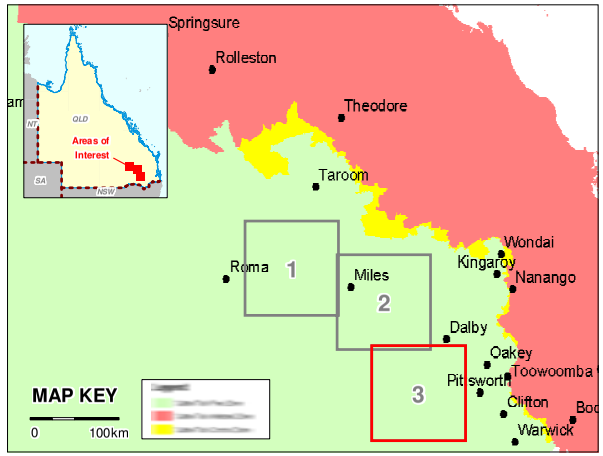
AUSTRALIA PACIFIC LNG PROJECT EIS
Figure 3 - Contaminated Land Investigated Areas (Map 2 of 3)

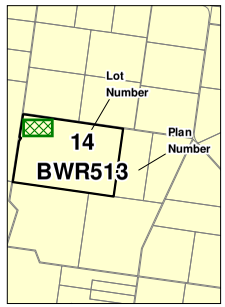
Project No: 301001-00448	Figure: 00448-00-EN-DAL-0274	Rev: 0

Compiled by BRISBANE INFRASTRUCTURE GIS SECTION

K:\ORIGIN\301001-00448\GIS\Maps\00448-00-EN-DAL-0274-Rev0(ContamLand_Investigated_Areas_2of3).wor







LEGEND

- Property boundary
- Brine pond (BP)
- Gas processing facility (GPF)
- Water transfer station (WTS)
- Water treatment facility (WTF)
- Cattle yard and possible cattle dip or spray race

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Rev	Date	Revision Description	ORIG	CHK	ENG	APPD
0	02/11/2009	Issued for use	JM	DH		

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AUSTRALIA PACIFIC LNG

AUSTRALIA PACIFIC LNG PTY LIMITED

AUSTRALIA PACIFIC LNG PROJECT EIS
Figure 4 - Contaminated Land Investigated Areas (Map 3 of 3)

Project No: 301001-00448	Figure: 00448-00-EN-DAL-0275	Rev: 0

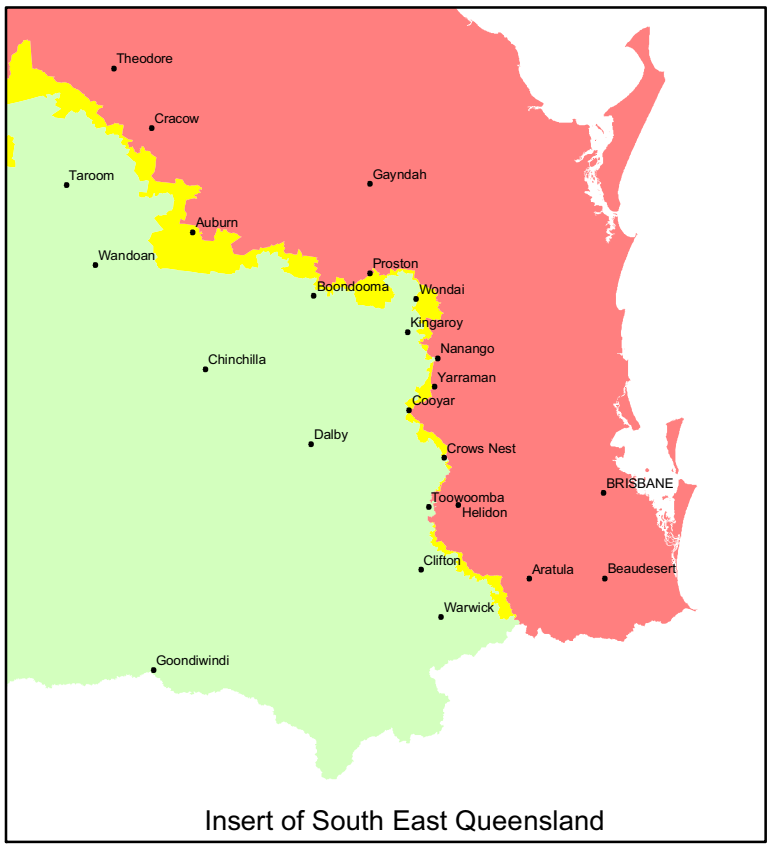
Compiled by BRISBANE INFRASTRUCTURE GIS SECTION

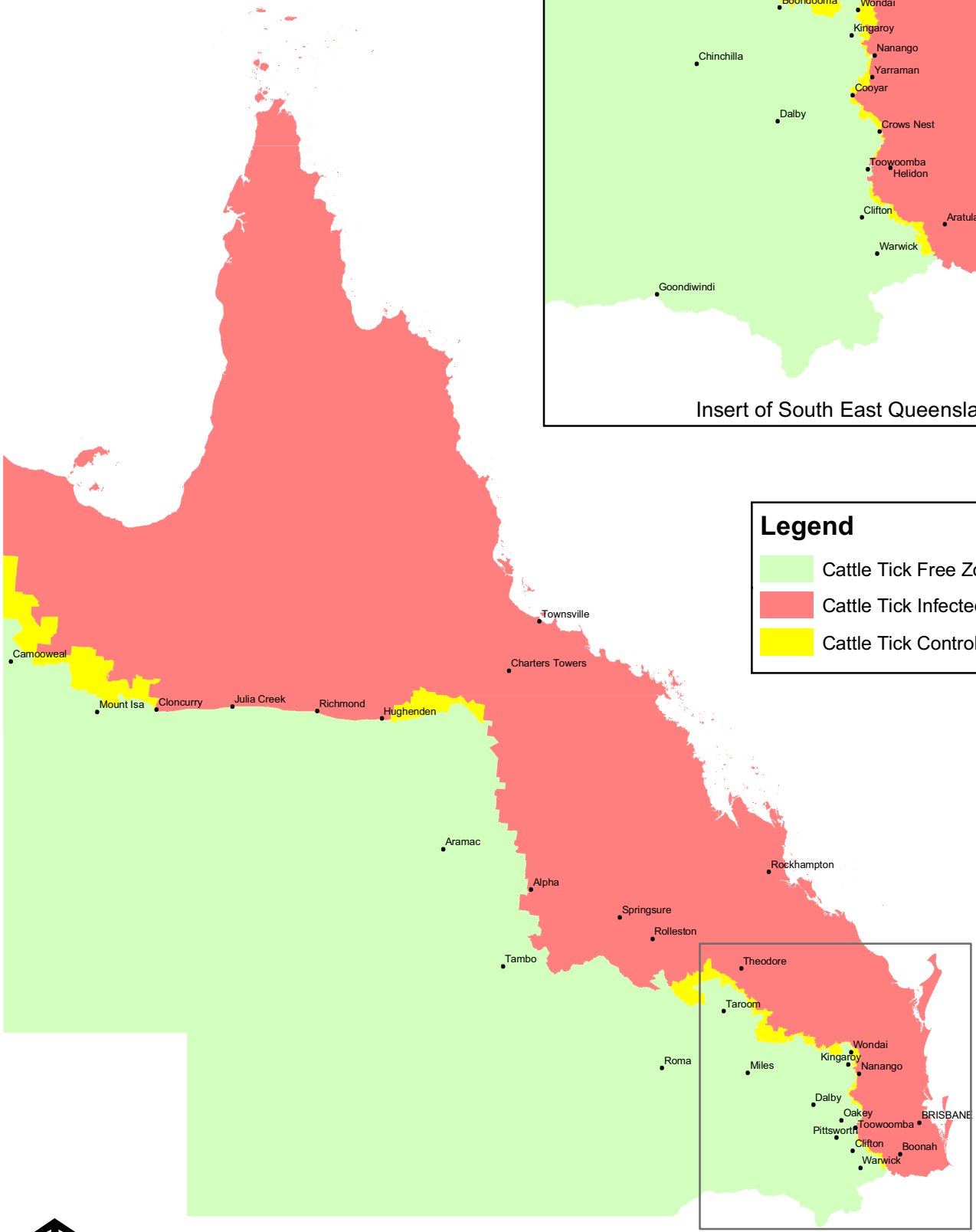
K:\ORIGIN\301001-00448\GIS\Maps\00448-00-EN-DAL-0275-Rev0(ContamLand_Investigated_Areas_3of3).wor

Appendix A Tick-free zones

QUEENSLAND CATTLE TICK ZONES

As at 7 December 2005





Legend

- Cattle Tick Free Zone
- Cattle Tick Infected Zone
- Cattle Tick Control Zone

N

Queensland Government
Department of Primary Industries and Fisheries
Biosecurity

Appendix B Lot and Plan Descriptions

Lot and Plan Descriptions

Lot	Plan	CLR	EMR	Interviewed by APLNG
8	AB138	No	No	Yes
24	AB142	No	No	Yes
1	AB37	No	No	Yes
5	AB37	No	No	Yes
5	AB50	No	No	Yes
3	AB51	No	No	Yes
440	BUL3415	No	No	No
39	BWR104	No	No	No
63	BWR138	No	No	No
61	BWR143	No	No	No
18	BWR157	No	No	No
26	BWR195	No	No	Yes
27	BWR195	No	No	Yes
61	BWR361	No	No	Yes
14	BWR513	No	No	Yes
2	BWR573	No	No	Yes
66	BWR655	No	No	Yes
7	BWR674	No	No	Yes
38	BWR730	No	No	No
15	BWR74	No	No	Yes
5	BWR748	No	No	Yes
113	BWR754	No	No	Yes
18	BWR803	No	No	Yes
19	BWR88	No	No	Yes
14	DER34206	No	No	Yes
51	DY1089	No	No	Yes
35	DY341	No	No	Yes
22	DY373	No	No	Yes
28	DY389	No	No	Yes
3	DY466	No	No	Yes
20	DY830	No	No	Yes
23	FT41	No	No	Yes
54	FT788	No	No	Yes
23	FT946	No	No	Yes
28	FT972	No	No	Yes
19	RG189	No	No	Yes
1	RG343	No	No	Yes
48	RG46	No	No	Yes
23	RG639	No	No	Yes
4	ROG3414	No	No	Yes
17*	RP147608	No	No	Yes
2	RP160570	No	No	Yes
3	RP174414	No	No	Yes
13	RP205405	No	No	No
4	RP212731	No	No	Yes
2	RP806668	No	No	Yes
121	RP851322	No	No	Yes
52	RP880173	No	No	Yes
23	SP132024	No	No	Yes
18	SP133341	No	No	Yes
2	SP180960	No	No	Yes
11	SP184726	No	No	Yes
6	WV409	No	No	Yes
32	WV613	No	No	Yes
47	WV615	No	No	Yes
36	WV634	No	No	Yes
74	WV759	No	No	No
17*	SP187050	No	No	Yes
10	ROG3411	No	No	No
32	RG247	No	No	No
3	RG247	No	No	No

* Lot 17 RP147608 reconfigured as Lot 17 SP180505

Additional Lots Identified from the Preliminary Site Investigation

1	SP187050	No	No	No
10	BWR718	No	No	No
37	BWR1	No	No	Yes
2	DY831	No	No	No
2	BRW573	No	No	No

Appendix C EMR and CLR Search Results

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145659 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 440 Plan: BUL3415

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145509 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 121 Plan: RP851322

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145675 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 113 Plan: BWR754

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145670 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 66 Plan: BWR655

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145661 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 63 Plan: BWR138

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145667 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 61 Plan: BWR361

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145662 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 61 Plan: BWR143

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145660 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 39 Plan: BWR104

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145672 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 38 Plan: BWR730

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1166658 EMR Site Id: 22 September 2009
This response relates to a search request received for the site:
Lot: 32 Plan: RG247

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145665 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 27 Plan: BWR195

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145664 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 26 Plan: BWR195

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145652 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 24 Plan: AB142

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145680 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 19 Plan: BWR88

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145678 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 18 Plan: BWR803

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145663 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 18 Plan: BWR157

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145499 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 17 Plan: RP147608

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145673 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 15 Plan: BWR74

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145682 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 14 Plan: DER34206

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145668 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 14 Plan: BWR513

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145504 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 13 Plan: RP205405

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

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Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145517 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 11 Plan: SP184726

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1166662 EMR Site Id: 22 September 2009
This response relates to a search request received for the site:
Lot: 10 Plan: ROG3411

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145644 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 8 Plan: AB138

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145671 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 7 Plan: BWR674

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145674 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 5 Plan: BWR748

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145656 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 5 Plan: AB50

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145654 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 5 Plan: AB37

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1166661 EMR Site Id: 22 September 2009
This response relates to a search request received for the site:
Lot: 3 Plan: RG247

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145658 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 3 Plan: AB51

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145669 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 2 Plan: BWR573

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145653 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 1 Plan: AB37

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145509 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 121 Plan: RP851322

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145509 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 121 Plan: RP851322

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145528 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 74 Plan: WV759

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145488 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 54 Plan: FT788

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145511 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 52 Plan: RP880173

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145481 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 51 Plan: DY1089

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145496 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 48 Plan: RG46

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145522 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 47 Plan: WV615

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1177355 EMR Site Id: 30 October 2009
This response relates to a search request received for the site:
Lot: 37 Plan: BWR1

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145525 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 36 Plan: WV634

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145482 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 35 Plan: DY341

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145521 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 32 Plan: WV613

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145491 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 28 Plan: FT972

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145484 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 28 Plan: DY389

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145512 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 23 Plan: SP132024

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145497 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 23 Plan: RG639

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145489 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 23 Plan: FT946

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145487 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 23 Plan: FT41

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145483 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 22 Plan: DY373

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145486 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 20 Plan: DY830

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145493 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 19 Plan: RG189

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145514 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 18 Plan: SP133341

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1177351 EMR Site Id: 30 October 2009
This response relates to a search request received for the site:
Lot: 10 Plan: BWR718

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145518 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 6 Plan: WV409

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145507 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 4 Plan: RP212731

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145498 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 4 Plan: ROG3414

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145485 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 3 Plan: DY466

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145515 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 2 Plan: SP180960

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145508 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 2 Plan: RP806668

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145500 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 2 Plan: RP160570

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1177361 EMR Site Id: 30 October 2009
This response relates to a search request received for the site:
Lot: 2 Plan: DY831

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145501 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 1 Plan: SP226468

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1177357 EMR Site Id: 30 October 2009
This response relates to a search request received for the site:
Lot: 1 Plan: SP187050

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit

QLD ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL MANAGEMENT REGISTER (EMR)
CONTAMINATED LAND REGISTER (CLR)

Transaction ID: 1145495 EMR Site Id: 30 June 2009
This response relates to a search request received for the site:
Lot: 1 Plan: RG343

EMR RESULT

The above site is NOT included on the Environmental Management Register.

CLR RESULT

The above site is NOT included on the Contaminated Land Register.

ADDITIONAL ADVICE

EMR/CLR Searches may be conducted online through the State Government Website www.smartservice.qld.gov.au or Citec Confirm www.confirm.com.au.

If you have any queries in relation to this search please phone (07) 3227 7370.

Lindi Bowen
Registrar, Contaminated Land Unit