



**Talison Lithium Limited**  
Rehabilitation of Historical Mining Areas  
Preliminary Contaminated Sites Assessment,  
Greenbushes, Western Australia

December 2018

# Executive summary

Talison Lithium Australia Pty Ltd has commissioned GHD Pty Ltd to undertake a Preliminary Contaminated Sites Assessment on 27 former mining areas, currently under rehabilitation, located within TLA's mining tenure (the Site) in the Shire of Bridgetown-Greenbushes, Western Australia. The assessment is required to support TLA in the relinquishment process for the 27 rehabilitation areas for management by Department of Biodiversity Conservation and Attractions (DBCA – formerly DPaW) as State Forest.

The Greenbushes region in the Shire of Bridgetown-Greenbushes is recognised as the longest continuously operated mining area in WA, with mining of tin, tantalum and lithium have all occurred throughout the history since the discovery of tin in 1888. Due to the extensive history of mining in the area, there are numerous areas of old mine workings and disturbed areas throughout the region that have undertaken rehabilitation work (within mining tenure held by TLA and previous tenement holders). TLA has embarked on a systematic land relinquishment process involving handing back rehabilitated historical mining areas to the DBCA for inclusion in the surrounding State Forest 20 (Greenbushes State Forest). 27 historical areas of interest ('rehabilitation areas') within TLA's tenure have been earmarked for relinquishment the DBCA, including:

- |                         |                           |
|-------------------------|---------------------------|
| • Salt Water Gully      | • Swimming Pool West      |
| • Carters Farm          | • Gibney Gully            |
| • Carters Farm North    | • Swenkies                |
| • New Zealand Gully     | • Swenkies Dam            |
| • Dumpling Gully        | • Cowan Brook             |
| • Charnley              | • Southampton West        |
| • Charnley East (North) | • Margaret Lease          |
| • Charnley West         | • Teddy Boy               |
| • Bishops               | • White Well              |
| • Boronia Gully         | • Swimming Pool           |
| • Spring Gully          | • Scandanavian Gully      |
| • Norilup Brook         | • Cornwall Alluvial North |
| • Norilup Brook North   | • Cornwall 3              |
| • Mount Jones           |                           |

The DBCA required an appropriately scoped contaminated sites assessment to be undertaken on the 27 areas, primarily due to the lack of information and uncertainty with regards to the potential for contamination risk at each site as well as the active mine site area being classified under the *Contaminated Sites Act 2003* as "*Contaminated - Restricted Use*". It is understood that the report will be reviewed by the Contaminated Sites Branch at the Department of Water and Environmental Regulation (DWER).

## Objective

The objective of the preliminary contaminated sites assessment was to gather sufficient information and evidence (desktop sources and from onsite) to be able to provide a qualitative assessment of contamination risk at each site. The outcome from this assessment will be used by TLA and DBCA to ascertain the suitability of the individual sites for relinquishment back to the State Forrest Reserve.

## Scope of Works

GHD was engaged by TLA to prepare an appropriately scoped contaminated site assessment strategy in 2017. The strategy was outlined in a document entitled: *Talison Historical Rehabilitation Areas; Contaminated Site Assessment Strategy*, GHD 26 April 2017 and was reviewed and endorsed (in principle) by the DWER for implementation. The scope of works in the strategy largely adhered to the *Department of Environment Regulation (now DWER) Assessment and management of contaminated sites, Contaminated Sites Guidelines (DER, 2014)*.

The contaminated sites assessment included the following main tasks (undertaken on all 27 sites where applicable):

- Detailed historical and current desktop review.
- Site interviews (where possible) and collection of anecdotal information.
- Site inspection (across three separate events) and limited surface water sampling (comprising sampling and analysis at 23 water bodies).
- Development of a preliminary Conceptual Site Model (CSM).
- Qualitative risk assessment, overall conclusion and recommendation for each site.

## Summary of Key Findings

As a result of the comprehensive preliminary site investigation on the 27 historical mining sites in the Greenbushes area, GHD provides the following summary of the key findings.

### Mining overview

- Mining of tin, tantalum and lithium have all occurred throughout the history of mining activity in the area. Early tin and tantalum mining is understood to have occurred from the late 1800s to early 1900s. It is also understood, anecdotally noted and observed through a review of the historical aerial photographs, that certain sites (mainly to the east and north-east of the current mine site) were reworked in the 1970/80s with more advanced technologies and machinery. Open cut mining of tantalum and lithium at the current Greenbushes Operation commenced in 1983.
- The early mining methods employed used were largely, open cut, dredging and sluicing, some limited shaft mining with some evidence of explosives used on some of the sites but mining methods generally involved manual digging and horse operated dredging. Sluicing and hydraulic separation for processing ores was also a very common occurrence.

### Geological setting and ore processing

- The orebody which was mined comprised tin and tantalum primarily as alluvial deposits within paleochannels/ former drainage lines. These mineral residates were accumulated/deposited within the drainage channels likely due to gravity separation. During mining gravity separation was also used to concentrate minerals. Chemicals were not reported as being used during the processing of recovered ores.
- Mining within the paleochannels (sluicing, dredging and excavators) appears to have intercepted the groundwater table, and residual excavations within the historic mining areas

resulting in remnant surface water bodies which are considered to primarily to reflect the groundwater table elevation, although some surface water run-off is also intercepted.

- The geological setting precluded any association with sulphides (not noted in the current ore body), and any trace sulphides which may have been derived from the primary ore body is likely to have weathered (oxidised) during transportation/deposition within the palaeochannels. As a consequence, acidic drainage derived from tailings and overburden is considered unlikely.

### Potential contamination concerns

- The information from the investigation indicates that the main sources of potential contamination from historical mining activities are limited to residual metals and metalloids (not actively mined but may be present within the tailings/geological setting of the area), in addition to hydrocarbons and explosives (residue) as a consequence of mining machinery/storage and handling of fuels and oils – particularly during the more recent re-mining efforts (i.e. within the last 40 yrs).
- The investigation revealed (primarily through the site inspection and aerial photography review), that the historical mining practices undertaken across the former mined areas has resulted in significant disturbances to these sites including the following observed broad impacts:
  - Change in surface soils composition/texture in mined and processed areas with sandy, gravelly tailings observed and clay deposits (suspected to be fines accumulation from processing or overburden).
  - Surface hydrology changes comprising open depressions from mining excavation, widening of channels and dammed areas for water storage purposes.
  - Impacts to the vegetation comprising initial clearing and subsequent regrowth hampered by changes in soil composition.

Notwithstanding the above, there has been little evidence found during the investigation to suggest that these activities are necessarily attributable to significant contamination concern. Further to this, rehabilitation efforts are noticeable on majority of the sites and appear largely effective.

- There is considered a risk of impacted waters derived from the active mine site, (groundwater, surface water dams and dam seepage), to present an ongoing potential contamination source to a small number of rehabilitation areas which are located down-gradient of the active mine site. The risk is anticipated to emulated within the surface water expressions on the former mined areas down-gradient of the active mine site. Some visual impacts to surface water environments (and possibly groundwater) are evident as iron staining at the foot of the Swenkies Dam (Spring Gully impacted) and Cowan Brook Dam (Cowan Brook impacted). These impacts are derived from the current mining activities, considered as a consequence dam seepage and dissolution of iron derived from the lateritic material, common to the area.
- Other sources of potential contamination concern include illegal dumping of rubbish and offsite broad acre usage of fertilisers and pesticides on adjacent farmland within the catchments of the brooks.

### Surface water assessment

- There is sufficient evidence to suggest that majority of the surface water features observed on the former mine areas are hydraulically connected to the shallow aquifer. In addition to this, the water bodies will also receive direct rainfall and overland runoff from the soil surface during high rainfall events. The surface water is therefore consider the most likely receptor and indicator of impacts from historical mining and active mine activities.
- Surface water is considered the most viable pathway for contamination exposure on and offsite; particularly for the aquatic ecology. However, ecotoxicology work undertaken on surface water



areas in the past five years (considered at the highest risk of being impacted from the active minesite) has indicated that there is not a current significant risk to this receptor. From a human health exposure perspective there was evidence of surface water at numerous sites being abstracted for irrigation, townsite water supply and being used recreationally for swimming, camping and fishing activities.

- The laboratory analytical results obtained from the limited surface water sampling program undertaken during this investigation indicates that, excluding one location (one water body in NZ Gully), dissolved metals, hydrocarbons and nutrients concentrations were not detected or were detected at concentrations which reflect the background and geological setting of the area and potential runoff from adjacent farming areas. One of the seven water bodies in NZ Gully shows evidence of elevated nutrients (ammonia), metals, and low pH, the reasons for which are unclear and requires follow-up assessment.

## Conclusions

Through the detailed desktop review, historical review, site interviews, site inspections and limited water sampling and analysis program, GHD presents the following conclusions:

- The information obtained throughout this investigation indicates that there is limited evidence to support that the former historically mined areas present a current or ongoing source of potential contamination. The information supports that historic mining methods precluded the requirements/ use of chemicals in mineral processing (gravity-hydraulic separation). In addition, the geological setting limits the likelihood of metals mobilisation under acidic conditions from the tailings or overburden (minimal sulphide risk). Excluding one location (NZ gully), the surface water sampling/laboratory analysis (considered to reflect the groundwater) supports that impacts attributed to historic mining are not evident.
- The risk of impacted waters derived from the active mine site is considered an ongoing potential contamination source to those small number of rehabilitation areas which are located down-gradient of the active mine site. Currently, TLA controls water releases from the mine site to those rehabilitation areas which are located down gradient of the mine site and surface water discharges do not occur. Seepage through the base of the two dams, however, is uncontrolled and relatively localised iron staining is recognised within the surface water at the dam seepage face.
- GHD considers that the contamination risk, qualitatively assessed for the 27 parcels of interest, ranges from very low to moderate-high as outlined below.

Qualitative risk assessment outcomes			
Very low risk	Low risk		Moderate - High risk
Bishops	Charnley	Norilup Brook North	Cowan Brook
Boronia Gully	Charnley East (North)	Scandanavian Gully	Salt Water Gully
Carters Farm	Charnley West	Southampton West	Spring Gully
Carters Farm North	Cornwall 3	Swenkies	Swenkies Dam
Cornwall Alluvial North	Dumpling Gully	Swimming Pool	New Zealand Gully
Gibney Gully	Margaret Lease	Swimming Pool West	

	Mount Jones	Teddy Boy	
	Norilup Brook	White Well	

### ***Rehabilitation sites considered suitable for relinquish***

The investigation indicates that 22 out of the 27 sites have an qualitatively assessed potential contamination risk as being low to very low and GHD considers that these sites are suitable for relinquish to DBCA for inclusion in the State Forest Reserve –as outlined below.

Sites considered suitable for relinquishment			
Bishops	Charnley East (North)	Scandanavian Gully	Swenkies
Boronia Gully	Charnley West	Southhampton West	Swimming Pool West
Carters Farm	Cornwall 3	Norilup Brook	Teddy Boy
Carters Farm North	Cornwall Alluvial North	Norilup Brook North	White Well
Dumpling Gully	Margaret Lease	Charnley	
Gibney Gully	Mount Jones	Swimming Pool	

### ***Sites that require further action prior to a determination on suitability for relinquish***

Five sites are considered to have been qualitatively assessed as presenting a moderate-high risk of contamination based on the findings from the investigation. These sites require further investigation undertaken to more accurately understand the source-pathway-receptor linkages. It is also recommended that the sites with sufficient evidence to suspect contamination are reported to the DWER as suspected contaminated sites under the *Contaminated Sites Act 2003* (Form 1).

Sites considered not-suitable for relinquishment at this stage of investigation			
Cowan Brook	Salt Water Gully	Spring Gully	Swenkies Dam
New Zealand Gully			

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# 1. Introduction

Talison Lithium Australia Pty Ltd (TLA) has commissioned GHD Pty Ltd to undertake a Preliminary Contaminated Sites Assessment on 27 former mining areas, currently under rehabilitation, located within TLA's mining tenure (the Site) in the Shire of Bridgetown-Greenbushes, Western Australia. The assessment is required to support TLA in the relinquishment process for the 27 rehabilitation areas for management by Department of Biodiversity Conservation and Attractions (DBCA – formerly DPaW) as State Forest.

## 1.1 Background

The Greenbushes region in the Shire of Bridgetown-Greenbushes is recognised as the longest continuously operated mining area in WA, having been mined since the discovery of tin in 1888 (TLA 2011 – see Appendix B). Mining of tin, tantalum and lithium have all occurred throughout the history of mining activity in the area. "Hard rock" open cut mining occurred in 1980's. Open cut mining commenced much earlier but comprised alluvial or weathered material. Lithium mining started as part of hard rock mining in which lithium was leached from weathered material. Open cut mining and processing at the Greenbushes Operation is undertaken by TLA and produces spodumene ore concentrate for export and further refinement to produce lithium.

Due to the extensive history of mining in the Greenbushes area, there are numerous areas of old mine workings and disturbed areas throughout the region that have undertaken rehabilitation work (within mining tenure held by TLA and previous tenement holders). TLA has embarked on a systematic land relinquishment process involving handing back rehabilitated historical mining areas to the DBCA for inclusion in the surrounding State Forest 20 (Greenbushes State Forest). Twenty-seven historical areas of interest ('rehabilitation areas') within TLA's tenure have been earmarked for relinquishment the DBCA, including:

- Salt Water Gully
- Carters Farm
- Carters Farm North
- New Zealand Gully
- Dumpling Gully
- Charnley
- Charnley East (North)
- Charnley West
- Bishops
- Boronia Gully
- Spring Gully
- Norilup Brook
- Norilup Brook North
- Mount Jones
- Swimming Pool West
- Gibney Gully
- Swenkies
- Swenkies Dam
- Cowan Brook
- Southampton West
- Margaret Lease
- Teddy Boy
- White Well
- Swimming Pool
- Scandanavian Gully
- Cornwall Alluvial North
- Cornwall 3

As part of the most recent formal discussions regarding the handing back of the sites, in a meeting between TLA and DBCA representatives in early 2017, the DBCA raised concern over the contamination status of the sites. The concern was raised primarily due to the lack of information and uncertainty with regards to the potential for contamination risk at each site. Further to this, the active mine site area is classified under the *Contaminated Sites Act 2003* as “*Contaminated - Restricted Use*”. Out of the meeting, the DBCA requested that an appropriately scoped contaminated sites assessment is undertaken suitable for review by the Contaminated Sites Branch at Department of Water and Environmental Regulation (DWER).

As a result of this, GHD was engaged by TLA to prepare an appropriately scoped contaminated site assessment strategy in 2017. The strategy was outlined in a document entitled: *Talison Historical Rehabilitation Areas; Contaminated Site Assessment Strategy, GHD 26 April 2017* and was reviewed and endorsed (in principle) by the DWER for implementation.

The GHD strategy outlines a staged approach in line with the DWER *Contaminated sites guidelines*, comprising:

- **Stage 1:** Qualitative Risk Assessment.
- **Stage 2:** Targeted Site Investigation and Further Risk Assessment.

This report presents the findings of from Stage 1 of the assessment, which ended up including some limited targeted sampling of surface waters.

## 1.2 Objective

The objective of the assessment is to gather sufficient information (desktop sources and from onsite) to be able to provide a qualitative assessment of contamination risk at each site to inform the rehabilitation. At the conclusion of Stage 1, GHD will advise potential areas of contamination risk for each site and any recommendations for further quantitative investigation (if required) that will help define the nature and extent of any potential risks.

## 1.3 Overview of Scope of Works

The scope of works for the Stage 1 assessment, undertaken on all 27 sites, comprised the following:

- Detailed current and historical desktop review.
- Site inspection and limited surface water sampling.
- Development of Conceptual Site Model (CSM).
- Qualitative risk assessment conclusion for each site.

The detailed scope of works/ methodology overview is provided in Section 2.

## 1.4 Limitations

*This report has been prepared by GHD Pty Ltd (GHD) for Talison Lithium Australia Pty Ltd (TLA) and may only be used and relied on by TLA for the purpose agreed between GHD and the TLA as set out in the as set out in Section 1 of this report.*

*GHD otherwise disclaims responsibility to any person other than TLA arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.*

*The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.*

*The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation*

*to update this report to account for events or changes occurring subsequent to the date that the report was prepared.*

*The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD (refer Section 8 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.*

*GHD has prepared this report on the basis of information provided by TLA and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.*

*The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.*



## 2. Detailed Scope of works

This assessment is undertaken in reference to the following guidelines:

- *Contaminated Sites Act 2003 and Contaminated Sites Regulations 2006.*
- *Department of Environment Regulation (now DWER - 2014) Assessment and management of contaminated sites, Contaminated Sites Guidelines (DER, 2014).*
- *National Environmental Protection (Assessment of Site Contamination) Measure 1999 (as amended May 2013) - NEPM (2013).*
- *Department of Environment Regulation (now DWER - 2014) Identification and Investigation of Acid Sulfate Soils and Acidic Landscapes (DER 2015).*

The following scope of work has been undertaken to achieve the objectives of the assessment defined in Section 1.2.

### 2.1 Desktop review

A review of all historical and currently available information to gain an understanding of the historical background/activities undertaken, current environmental setting, current site condition and surrounding areas/receptors. This task comprised a review of available information from the following sources:

- Review of current and historical Certificates of Title to determine past owners of the sites and the likely associated site uses and comparing these uses against Appendix B of DWER (2014) Potentially contaminating industries, activities, land uses.
- Review of available historical aerial photography encompassing the Site to determine a historical land use and development since 1969.
- Submission of a Freedom of Information (Fol) request to the following Departments and review of information provided.
  - DWER for any historical records related to the Site associated with land use, pollution complaints or contamination.
  - Department of Mines, Industry Regulation and Safety (DMIRS) for information relating to current or historical dangerous goods storage and/ or licensing for the site.
  - Shire of Bridgetown-Greenbushes for information relating to current or historical activities within the Site associated with land use, pollution complaints or contamination.
- Review of surrounding land uses to assess potentially sensitive environmental and human health receptors to any possible contamination and then assess land uses that have the potential to affect the site.
- Review of the environmental setting of the region encompassing the Site including topography, surface water bodies, geology and hydrogeological characteristics using publicly available information and information from TLA.
- Review the Australian Soil Resource Information System (ASRIS) Acid Sulfate Soil (ASS) classification for the area encompassing the Site.
- Review of the DWER (DoW) registered bore database information and information provided by TLA in relation to groundwater use and groundwater quality in the vicinity of the Site.

- Review DWER NatureMap database and site-specific reports (Onshore Environmental 2012, Biologic 2011), for flora and fauna species previously recorded within a 1 km buffer of the Site.
- Review the Department of the Environment and Energy Protected Matters database.
- Review the DWER Contaminated Sites Database (online) for the sites in question and surrounding area (including the active mine site) to determine if any sites are listed as a contaminated site, or if there are any other land parcels listed on the database that may pose a potential source for migratory contamination.
- A search of relevant databases including the Department of Aboriginal Affairs (DAA), Aboriginal Heritage Inquiry System and the State Register of Heritage Places.
- Review of any online (digital) and physical library records (including two separate visits to the State Library), reports, documents, to assist in understanding the Site's history.
- Review of any previous environmental investigations or other pertinent company records relating to the site (made available by TLA) including interviews, previous reports, meeting minutes, emails and historical information.
- Previous environmental reports that were reviewed and used as part of the assessment included:
  - PB, 2007: *Preliminary Site Investigation, Greenbushes Mine Site, Greenbushes, WA for Sons of Gwalia* (May 2007).
  - Significant Environmental Services, 2017; *Water Monitoring Review 2016/17; Greenbushes Mine – TSF & Process Dam Areas* (August 2017).
  - CENRM. 2013. *Ecotoxicology of lithium. Prepared for Talison Lithium Australia Pty Ltd by Centre of Excellence in Natural Resource Management, The University of Western Australia, Albany 6330, August 2013.*
  - CENRM. 2014. *Surveys of aquatic flora and fauna along the Norilup Brook to determine the presence and health thereof and any evidence of bioaccumulation of heavy metals from the Talison Lithium Mine, Greenbushes, Western Australia. Prepared for Talison Lithium Australia Pty Ltd by Centre of Excellence in Natural Resource Management, The University of Western Australia, Albany 6330, February 2014.*
  - GHD, 2018a. *Assessment of acid and metalliferous drainage, Greenbushes Lithium Mine Expansion – 2018 Mining Proposal*, prepared for Talison Lithium Australia Pty. Ltd., July 2018.
  - GHD, 2018b, *Compliance monitoring report, Surface water and groundwater monitoring for the period 2017/2018.*
  - GHD, 2018c, *Talison Lithium Australia Pty. Ltd. – Environmental Referral Supporting Document, October 2018.*

## 2.2 Site inspections and surface water sampling

An experienced Principal Environmental Scientist undertook a detailed inspection of each site, over the following three separate trips:

- 20 March 2018.
- 8 May 2018.
- 5 July 2018.

The site inspections aimed to assess the site conditions, confirm the desktop review findings, confirm surrounding land uses/ potential offsite receptors and collect photographs for the final report. The areas included in the site inspections have been identified in Figure 1.

During the site inspections, surface water physio-chemical properties were assessed using a hand-held water quality meter in addition to collecting grab samples at select sites (total of 23 samples were collected with three quality control samples also taken).

### 2.3 Development of a Conceptual Site Model

Using the information gathered and collated through the desktop review, site visits, interviews and water sampling findings, GHD developed a Conceptual Site Model (CSM) to conceptualise the potential sources of contamination, primary and secondary release mechanisms and pathways to environmental and human health receptors.

### 2.4 Qualitative risk assessment

A qualitative risk assessment was undertaken for each site using the respective CSM. Where applicable, surface water sampling results were used to inform the risk assessment. Risk ratings were assigned based on the perceived risk posed to onsite and offsite human receptors, ecological receptors/environmental values. The risk ratings were assigned based on the criteria outlined in the Risk Matrix provided in Appendix A. The Risk Matrix is an adaption from the Standards Australia/Standards New Zealand Standard Committee, AS/NZS ISO 31000:2009, *Risk Management-Principles and Guidelines*, November 2009.

## 3. Site description

### 3.1 Legal identification

The Greenbushes Mining Operation is located within the Shire of Bridgetown-Greenbushes, approximately 250 km south of Perth, Western Australia. The mining tenure held by TLA at Greenbushes is the subject Site for this investigation and is bound by the coordinates below:

- NE: 116.109903, -33.801293.
- NW: 116.001879, -33.801298.
- SE: 116.109922, -33.891432.
- SW: 116.002425, -33.89074.

There are 27 rehabilitated historical disturbance areas (referred to as 'rehabilitated areas') within the Site which are within the scope of this investigation. The 27 areas and the broader site area are presented in Figure 1. There are eight leases held by TLA within the rehabilitated areas, which are summarised in Table 3-1.

Table 3-1 Summary of land use

Lease number	Lease type
M01/02 - M01/05, M01/07-M01/10	Mining

GHD notes that an additional two mining leases, M70/765 and M01/06, are positioned within the Greenbushes Lithium Mine Site boundary, however the selected rehabilitated areas lie outside of these boundaries. Subsequently, these mining leases have been excluded from this investigation. The centroid co-ordinates and legal descriptions for each of the 27 areas, which are the subject of this investigation, within the wider site, are summarised in, with associated leases and licences presented in Table 3-2 and Appendix B.

Table 3-2 Rehabilitation area site details

Rehabilitation Area	Area (ha)	Mining tenements	Lot number	Registered Proprietor	Zoning (recreational, public open space, industrial, commercial)	Land Use	Contaminated Sites Act 2003 Memorial	Co-ordinates of Site Boundary
Salt Water Gully	11.84	M01/07, M01/08, M01/10	F20 and Lot 9815 on Deposited Plan 153640	Vaisey, M.J. & Schuts, G.	State Forest	State Forest	Not registered	Eastings: 415834 Northings: 6253350
Carters Farm	4.53	M01/08	F20 and part of Lot 500 on Deposited Plan 76411	Shire of Bridgetown-Greenbushes	State Forest	State Forest	Not registered	Eastings: 414505 Northings: 6254690
Carters Farm North	7.28	M01/09	Part Lot 500 on Deposited Plan 76411	Shire of Bridgetown-Greenbushes	Recreation	Reserve 8631	Not registered	Eastings: 413913 Northings: 6255060
New Zealand Gully	77.64	M01/04, M01/09	F20 and Lots 161, 163, 165, 1002, 13734, 13735, and 13786.	Shire of Bridgetown-Greenbushes	State Forest	State Forest	Not registered	Eastings: 412713 Northings: 6255880
Dumpling Gully	9.72	M01/09	F20 and Lot 377 on Deposited Plan 254574	Shire of Bridgetown-Greenbushes	Recreation	Class A Reserve	Not registered	Eastings: 411571 Northings: 6255480
Charnley	5.27	M01/09	Lot 13525 on Deposited Plan 220028	Perrin, B.J. & Lindsay, F.E.	State Forest	State Forest	Not registered	Eastings: 412071 Northings: 6254960



Rehabilitation Area	Area (ha)	Mining tenements	Lot number	Registered Proprietor	Zoning (recreational, public open space, industrial, commercial)	Land Use	Contaminated Sites Act 2003 Memorial	Co-ordinates of Site Boundary
Charnley East (North)	7.57	M01/09	Lot 13524 on Deposited Plan 220028	Smith, N.F & J.	State Forest	State Forest	Not registered	Eastings: 412127 Northings: 6255220
Charnley West	11.78	M01/04, M01/09	Lot 13746 on Deposited Plan 253074	State of WA	Rural	State Forest	Not registered	Eastings: 411506 Northings: 6254980
Bishops	3.85	M01/04	Lot 13747 on Deposited Plan 253074	State of WA	Rural	State Forest	Not registered	Eastings: 411426 Northings: 6254800
Boronia Gully	8.60	M01/05	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 409199 Northings: 6256060
Spring Gully	13.43	M01/02, M01/03	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 409304 Northings: 6254300
Norilup Brook	7.49	M01/02	F20 and Lot 10155 on Deposited Plan 153709	Conversation Commission of WA, care of DEC	State Forest	State Forest	Not registered	Eastings: 408625 Northings: 6253220
Norilup Brook North	6.42	M01/02, M01/05	F20 and Lot 10155 on Deposited Plan 153709	Conversation Commission of WA, care of DEC	State Forest	State Forest	Not registered	Eastings: 409065 Northings: 6254170

Rehabilitation Area	Area (ha)	Mining tenements	Lot number	Registered Proprietor	Zoning (recreational, public open space, industrial, commercial)	Land Use	Contaminated Sites Act 2003 Memorial	Co-ordinates of Site Boundary
Mount Jones	20.67	M01/05	F20 and Lot 10155 / 10154 on Deposited Plan 153709	Conversation Commission of WA, care of DEC	State Forest	State Forest	Not registered	Eastings: 408597 Northings: 6254300
Swimming Pool West	13.5	M01/03, M01/04	F20 and Lot 13746	State of WA	Rural	State Forest	Not registered	Eastings: 411141 Northings: 6254390
Gibney Gully	17.51	M01/04	Lot 13746	State of WA	Rural	State Forest	Not registered	Eastings: 410912 Northings: 6254730
Swenkies	14.48	M01/03	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 411408 Northings: 6253990
Swenkies Dam	0.46	M01/03	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 410662 Northings: 6253820
Cowan Brook Dam	7.8	M01/02, M01/03	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 409287 Northings: 6252270
Southampton West	7.46	M01/03	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 410934 Northings: 6253390
Margaret lease	1.15	M01/03	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 409652 Northings: 6253550

Rehabilitation Area	Area (ha)	Mining tenements	Lot number	Registered Proprietor	Zoning (recreational, public open space, industrial, commercial)	Land Use	Contaminated Sites Act 2003 Memorial	Co-ordinates of Site Boundary
Teddy boy	0.25	M01/07	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 414344 Northings: 6250150
White Well	5.06	M01/07	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 414223 Northings: 6249650
Swimming Pool	35.05	M01/03, M01/06, M01/09	Lot 11339 on Deposited Plan 144249	Shire of Bridgetown- Greenbushes	Recreation	Swimming Pool	Not registered	Eastings: 411605 Northings: 6254180
Scandanavian Gully	6.6	M01/07, M01/08	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 413848 Northings: 6254450
Cornwall Alluvial North	0.01	M01/07	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 413848 Northings: 6254450
Cornwall 3	3.11	M01/06	F20	State of WA	State Forest	State Forest	Not registered	Eastings: 413399 Northings: 6254100

### 3.2 Site description and layout

The broader project area encompasses 27 rehabilitated historical mining areas that are intended to be handed back to the DBCA as State Forest (refer to Section 1.1). The current Greenbushes mining operation is located within the project area, which is concentrated to the east of Maranup Ford Road, west of South West Highway and south of the town of Greenbushes.

The total project area is approximately 10,000 ha, of which approximately 308.5 ha includes the rehabilitation areas of interest. The rehabilitation areas range in shape and size (0.01 – 77.64 ha).

The majority of rehabilitated areas are located to the north and north-west of the Greenbushes mining operation, surrounding the Greenbushes town site (Figure 1). Fewer areas occur to the west (e.g. Cowan Brook Dam), east (e.g. Salt Water Gully) and south (e.g. Teddy Boy) of the Greenbushes mining operation. All rehabilitation areas occur within or adjacent to the Greenbushes State Forest.

### 3.3 Surrounding land use and zoning

The land use surrounding the rehabilitation areas is predominantly State Forest. The surrounding area also includes open cut mining and processing of lithium, tantalum and historically tin ores, agriculture, forestry and urban environment (Greenbushes town site) (TLA, 2011 – see Appendix B). A timber mill (Auswest Timbers) is located to the north of the Greenbushes town site, approximately 250 m north of the New Zealand Gully rehabilitation area.

## 4. Background and Site Setting

### 4.1 General mining overview – Greenbushes area

Mining in the Greenbushes locality has been undertaken since the discovery of tin in 1886.

In general these areas were mined in open cut by hydraulic sluicing methods and the distinguished rock being elevated from the open cut as a pulp by gravel pump and passed over sluice boxes in which tin-oxide was recovered.

Since then, mining and processing operations have developed to include the production of spodumene ( $\text{Li}_2\text{O}$ ) and tantalum concentrates ( $\text{Ta}_2\text{O}_5$ ). Tantalum has also been mined onsite since the 1940's (TLA, 2018 - see Appendix B). In the 1970s it is understood that some of the historically mined areas to the north and north-east of the Greenbushes area were re-mined using more advanced technologies and machinery to remove the ores (Former Talison Employee Survey 2017, pers. comm).

Hard rock open cut mining of the Greenbushes Tantalum and Lithium Deposits commenced in the 1980's. The first lithium processing plant commissioned in 1985 (TLA, 2011 – see Appendix B).

### 4.2 Climate

The Greenbushes area has a Mediterranean type climate characterised by warm dry summers and cool wet winters. The closest meteorological monitoring station is Greenbushes WA (Station number: 009552) located approximately 1 km from the Greenbushes Mine Site. The station only monitors rainfall. The nearest meteorological monitoring station which also measures temperature is Bridgetown WA (Station number: 009617) located approximately 9 km southeast of the Greenbushes Mine Site. A summary of the climate data statistics from these stations is provided in Table 4-1.

Table 4-1 Climate Data Summary

Station	Mean Annual Minimum Temperature Range (°C)	Mean Annual Maximum Temperature Range (°C)	Mean Monthly Rainfall (mm)
Greenbushes WA (009552)	NA	NA	15.6 mm in February – 167 mm in July
Bridgetown WA (009617)	4.5°C in July -13.5°C in February	15.7°C in July – 30°C in January	12.9 mm in February – 128.4 mm in July

### 4.3 Topography, site drainage and hydrology

The topography contours (sourced from Landgate, 2017) and surface water features for the project area are presented in Figure 1. The regional elevation ranges between ~340 m AHD to 200 m AHD (Landgate, 2018). The Site is located within the Middle Blackwood Surface Water Area, within the Norilup Brook Sub-area and the upper reaches of the Hester Brook sub-area. Both brooks are tributaries of the Blackwood River. These rivers and areas are not proclaimed under the RIWI Act.

The Greenbushes Mine Site is located at a high point of the Darling Plateau with the open pits located along a ridgeline (topographic divide) from the Greenbushes town site (~310 m AHD) towards the south-east (~270 m AHD). The rehabilitation areas are located both on top of the



ridge and on either side of the divide, in the lower lying areas along drainage lines such as Spring Creek and Dumpling Gully.

Surface and groundwater flows are directed to the east and west from the divide. To the east of the ridge surface water flows generally drain to the Saltwater Gully, a tributary of the Hester Brook. To the west of the ridge, surface water flows generally drain into the Norilup Brook via Spring Gully and Cowan Brook (GHD, 2017).

Surface water flows from the ridge and upland areas are collected in constructed reservoirs/dams within the Site. Two main dams supply water to the mining operation; Austin's and Southampton Dams. A number of rehabilitation areas are associated with smaller reservoirs that are connected to these dams. Reservoirs that have rehabilitation areas associated with them include:

- Cowan Brook Dam – if Austin's Dam reaches capacity it overflows into Cowan Dam via a spillway. Cowan Brook dam overflows via Cowan Brook to the Norilup Dam during winter due to rainfall. The Norilup Dam is therefore connected to the Mine Water Circuit. Water supply is also pumped from Cowan Dam to Southampton Dam if water supply from Austin's Dam is insufficient.
- Norilup Dam – not part of the mine water supply or storage infrastructure however the Dam can potentially receive mine-impacted water via overflow of the Cowan Brook Dam.
- Swenkies Dam – not part of the mine water supply or storage infrastructure however the Dam can potentially receive mine impacted water as a result of overflow to the Southampton Dam. Overflows from Southampton Dam are generally restricted to protect water quality in the downstream Swenkies Dam.
- Mt Jones Dam – located downstream of Swenkies and could potentially receive mine impacted water from Swenkies (albeit likely to of minimal impact due to distance from source).
- Dumpling Gully – located north of the Greenbushes town site and is not currently at risk of receiving mine impacted water.
- New Zealand Gully Dams - located north of the Greenbushes town site and is not currently at risk of receiving mine impacted surface water.

#### 4.3.1 Surface water quality

A recent study undertaken by Significant Environmental Services on behalf of TLA in August 2017 entitled *Greenbushes Mine – TSF & Process Dam Areas; Water Monitoring Review 2016/17* (SES, 2017), provided the following findings with regards to the quality of the mine impacted waters generated onsite and the management measures in place to actively reduce concentrations of contaminants into the future:

- Water quality of the Austins-Southampton dams is affected by the Mine Water Circuit for water supply, including receiving returned process water from the tailings storage facility decant pond via an open drain (Austins Return Drain);
- Cowan Brook Dam receives some overflow from the spillway at Austins Dam, in addition to overflow from the TSF2 seepage collection sump. This is minimised by TLA however through maximising pumping of the seepage back into the processing circuit. The TSF2 infrastructure is being upgraded to avoid majority of overflows to Cowan Brook into the future;
- Water quality within the reservoirs fluctuates seasonally due to dilution in winter and increased evaporation in summer;

- 2016/2017 monitoring revealed pH levels between 7.47 and 8.9, electrical conductivity concentrations between 788 µs/cm and 1,794 µs/cm in the main reservoirs;
- Concentrations of the primary contaminants of concern being emitted from the minesite processing areas (including sulfate, arsenic and lithium) through recent monitoring has suggested stabilisation of a longer term increasing trend. This has been achieved through the implementation of more efficient processes and active management systems to treated impacted waters prior to discharge;
- Sulfate concentrations in the main dams/ reservoirs onsite measured during 2016/17 monitoring, recorded a range between 152 and 180 mg/L. The concentrations of sulfate have always remained below the Australian Drinking Water Guideline (ADWG) value of 500 mg/L and are showing a stabilising – decreasing trend;
- With the exception of arsenic and to a lesser extent iron, concentrations of trace metals and major-ions recorded in the Austin Dam and Southampton Dam are low and below the respective ADWG. Arsenic concentrations onsite measured during 2016/17 monitoring, recorded a range between 0.046 to 0.5 mg/L (Southampton Dam) and 0.067 to 0.18 mg/L (Austin's Dam). These current values are above the ADWG value of 0.01 mg/L whilst the levels observed in Cowan Brook (0.005 mg/L) are considered below the ADWG levels. The arsenic levels in the Mine Circuit Water are increasing however suspected of being due to the increased volumes of spodumene ore being mined and processed.
- Lithium concentrations in the Austin Dam and Southampton Dam onsite measured during 2016/17 monitoring, recorded a range between 9.8 - 11.9 mg/L and 9.7 - 12.9 mg/L respectively. These current values, whilst down on historical values, are considered in exceedance of the ANZECC *South West Australia Low Land River* guidelines (2000) of 2.5 mg/L and more importantly exceeding the allowable limit for discharge 2015/2017 as listed in the DWER licence with a site specific trigger value for lithium of 7 mg/L (target for downstream areas). The lithium trigger levels for the Site (as derived by the Centre of Excellence in Natural Resource Management (CENRM) are discussed in detail in Section 8.

#### 4.4 Geology

The geology of the Greenbushes area is recorded as being mafic and ultramafic volcanics of Archaean age, i.e. granofelsic and amphibolitic greenstones. The Greenbushes ore body lies within the Balingup Metamorphic Belt (BMB), which forms the southern portion of the Western Gneiss Province, one of four divisions of the Archaean Yilgarn Craton. The Greenbushes deposit intrudes rocks of the BMB and lies within a 15-20 km wide, north to north-west trending lineament called the Donnybrook-Bridgetown Shear Zone (GHD, 2013).

The ore body is made up of a series of pegmatite dykes trending north-west over a length between 3 - 7 km, which is cross-cut with later dolerite and pegmatite dykes. The rocks are locally faulted and sheared. West of the ore body the Archaean basement rocks comprise generally amphibolitic greenstones and are either extensively lateritised or overlain by the Alluvial Greenbushes Formation. This alluvial deposit contains tin and has been extensively disturbed by historic mining operations (GHD, 2013). A more detailed discussion on the orebody in relation to potential contamination concerns as a result of the mining and processing is provided in Section 9.1.

##### 4.4.1 Soils

The soil types present within the project area include (GHD, 2018c):

- Greenbushes alluvium formation.

- Colluvium deposit.
- Laterite – weathered zone.
- Laterite – iron rich zone.
- Laterite – pallid clay, saprolitic zone.

The project area contains many alluvial workings, tailings disposal areas and dredge pits as a result of historical mining activity. Soils have been impacted by these historical mining practices, in particular in the area to the west of the open pits where the Greenbushes Formation is present.

A 1999 study by IT Environmental of the metal attenuation capacity of soils around the Greenbushes mine site found that the soils in the area have a high capacity to attenuate Arsenic and Uranium in groundwater under oxidising/aerobic conditions (GHD, 2018c). The soils can act as a sink, however, arsenic and uranium attenuated by soil may be released in reducing or acidic conditions.

#### 4.4.2 Acid Sulphate Soils

The Greenbushes Mine Site is outside the extent of DWER published Acid Sulphate Soils (ASS) risk mapping. A review of the CSIRO Australian Soil Resource Information System (ASRIS) was instead undertaken which indicates that there is 'Extremely low probability of occurrence' of acid sulphate soils (ASS) within all the rehabilitation areas (ASRIS, 2018).

One area within the Greenbushes Mine Site tailings storage facility is classified as 'High Probability of Occurrence' (ASRIS, 2018). The closest rehabilitation area to the tailings storage facility is 'Teddy Boy', which is located approximately 600 m to the south-east. There are no other potentially contaminated areas within 10 km of the Site (ASRIS, 2018).

### 4.5 Hydrogeology

#### 4.5.1 Groundwater

The project area is located in the Karri subarea of the Karri Groundwater Area (TLA, 2015 – see Appendix B). The Karri area is not a proclaimed groundwater area. The groundwater flow system in the area is classified as 'local flow systems in Precambrian rocks' (BoM, 2017b).

The Archaean host rocks of the region, which underlie the project area are generally considered as relatively low yielding groundwater sources. Localised faults and fractures can provide increased yields and isolated aquifers but there is no evidence of large-scale water movement in fractured rocks at Greenbushes. The dominant basement groundwater flows usually occur within the weathered host rock material, which can develop lateritic weathering profiles 20 to 50 metres thick. These comprise leached clays and lateritic caprock near the current ground surface, and grade into oxidised (clays) and fresh bedrock at depth.

More recent sedimentary sequences have been deposited in the former water sources, which are generally incised into the Archaean basement material. These shallow alluvial deposits can form local aquifers that may be either permanent or seasonal depending on extent, thickness and connectivity. These alluvial deposits may or may not be in hydraulic connection with the underlying Archaean rocks but, where perched, can reflect the hydraulic separation and origin with differing water quality (GHD, 2017).

An inferred shallow aquifer has been defined within the south west portion of the Greenbushes Mine Site. The aquifer is coincident with a former watercourse and historic mining dredge channel. The aquifer is inferred as hydraulically connected to surface water features in the west

of the active mine such as swamps/dams and Austins Dam. A perched aquifer system tends to occur within 5 m of surface during the winter period and disappears in summer.

Regular groundwater monitoring has been undertaken since 1997 and water levels have remained relatively stable since. The results show seasonal fluctuations whereby water levels reach a maximum at the end of winter in October, then decline to the lowest point at the end of summer in April. The recorded groundwater levels indicate that groundwater flows are directed to the east and west from the previously described ridgeline (drainage divide). Swampy areas between Maranup Ford Road and Austin's Dam indicating the area is also potentially a groundwater discharge area.

Groundwater from eastern margin of the ridge flows in an easterly direction. A spring originates at the toe of Floyds Waste Rock Landform, which discharges groundwater to Hester Brook via Floyds Gully and Salt Water Gully.

It is understood that where water abstraction/pumping of surface water bodies occurs frequently for water supply and irrigation purposes, e.g. NZ Gully, Dumping Gully, Carters Farm North and Mt Jones Dam, the water levels replenish during and after pumping which suggests groundwater recharge and hydraulic connection.

#### 4.5.2 Groundwater quality

A recent study undertaken by Significant Environmental Services on behalf of TLA in August 2017 entitled Greenbushes Mine – TSF & Process Dam Areas; Water Monitoring Review 2016/17, provided the following findings with regards to the quality of the groundwater immediately down hydraulic gradient (west, south and further east) of TSF 1 & 2:

- 2016/2017 monitoring revealed pH levels between 5.10 and 7.77 with the bores on the western perimeter of the TSF generally displaying the lower pH values between 5 – 6.
- 2016/2017 monitoring revealed electrical conductivity concentrations between 606  $\mu\text{S}/\text{cm}$  and 8,230  $\mu\text{S}/\text{cm}$  for the main perimeter bores and up to 14,240  $\mu\text{S}/\text{cm}$  in the bores further west (likely due to increased seepage in shallow sands).
- A review of salinity and sulfate:chloride ratios in groundwater indicates that seepage is occurring in a southerly direction from the TSF ponds and Austins Return Drain;
- In general the deeper aquifer onsite report negligible concentrations of lithium in ( $<0.05$  mg/L) and some of the bores (two of note) with consistent elevated readings of lithium are anticipated to have construction issues allowing impacted surface water to ingress.
- 2016/2017 monitoring revealed low levels of trace metals and major ions with the exception of some ANZECC irrigation and ADWG exceedances of arsenic, manganese, iron, cadmium, nickel, cobalt and phosphorus. Concentrations of copper, zinc and lead were typically non-detectable. Concentrations of radioactive elements thorium and uranium remained below the detection limits whilst radium concentrations were detected in the bores located near the TSF seepage collection points. All concentrations were below the ANZECC radionuclide irrigation trigger levels.

#### 4.5.3 Water Information Reporting search

The Water Information Reporting Database (DWER, 2018) reported 15 groundwater bores that exist within the Site boundary. An additional 13 surface water sampling locations were also documented around this project area. This information has been summarised in Table 4-2.

Table 4-2 DWER WIR database information for bores reported onsite

WIN Bore ID	Rehabilitation Area	Date Drilled	Depth Drilled (m bgl)	Historic and Current Purpose
60911435	New Zealand Gully (North Greenbushes)	1900	23.77	Installed by unknown company for an unknown purpose.
60911436	West of Scandenavian Gully	1900	35.36	Installed by unknown company – to improve domestic water supply to the area.
60911443	Caters Farm	1900	12.19	Installed by a private owner, used for collecting groundwater chem. data
60911448	South of Salt Water Gully	1900	2	Installed by a private owner – supplied approximately 1000 gal/day of water. The purpose is not stated but assumed to be for domestic use.
60911480	South of Southhampton	1900	2.5	Installed by private owner – chem. data has been collected from this bore.
60911482	East of Teddy Boy	1988	5.7	Installed by unknown company for an unknown purpose.
60911485	West of White Well	1900	9.9	Privately installed well – unknown purpose.
60913949	North of Carters Farm	1900	0.2	Bore installed by a private owner for unknown purposes but noted as not operating.
60913952	Carters Farm	1975	3.05	Private owner installed the bore for an unknown purpose. Noted as not operating.
60913953	North East of Carters Farm	1900	0.1	Private owner installed for an unknown purpose.
60913955	East of Salt Water Gully	1900	3.05	Bore installed by private owner and was not operational – noted as being gravity fed to a holding tank.
60913956	East of Salt Water Gully	1900	3.66	Bore installed by private owner, operating for garden watering purposes during summer.
60913958	Norilup Dam	1900	0	Installed by a private owner. Not operational but has historically

WIN Bore ID	Rehabilitation Area	Date Drilled	Depth Drilled (m bgl)	Historic and Current Purpose
				been used as part of the Greenbushes town supply.
60914161	New Zealand Gully	1900	0	Privately owned - Surface water retrieved from a dam, which has been dug into white clay.
60914165	South of Salt Water Gully	1900	4.6	Privately owned bore. Currently not operating and used historically for unknown purposes.
6090357	Mount Jones	1991	-	Surface water sampling within stream/river
6090649	South of Salt Water Gully	1991	-	Surface water sampling within stream/river
6090692	West of White Well	1991	-	Surface water sampling within stream/river
6090777	Boronia Gully	1991	-	Surface water sampling within stream/river
6090867	Dumpling Gully	1991	-	Surface water sampling within stream/river
60901021	Boronia Gully	1981	-	Surface water sampling within stream/river
60901022	Boronia Gully	1981	-	Surface water sampling within stream/river
60901047	Dumpling Gully	1981	-	Surface water sampling within stream/river
60901048	Norilup Brook	1981	-	Surface water sampling within stream/river
60901049	Norilup Brook	1981	-	Surface water sampling within stream/river
60901055	Dumpling Gully	1985	-	Surface water sampling within stream/river
609132	Dumpling Gully	1959	-	Stream gauging.
60913310	North east of Carters Farm	1900	-	Groundwater soak sampled by private owner. Bore not operating – samples taken from a tank not sampled from the bottom of bore.

## 4.6 Flora and Fauna

The project area is located within the Southern Jarrah Forest (JF2) sub-region of the Jarrah Forest biogeographic region as defined in the Interim Biogeographical Regionalisation for Australia (IBRA). The bioregion consists of the duricrusted plateau of Yilgarn Craton characterised by Jarrah-Marri forest on laterite gravels and, in the eastern part, by Wandoo-Marri woodlands on clayey soils. Eluvial and alluvial deposits support Agonis shrublands. In areas of Mesozoic sediments, Jarrah forests occur in a mosaic with a variety of species-rich shrublands (Hearn et al, 2002).

The vegetation of the Southern Jarrah Forest sub-region is described as Jarrah Marri Forests in the west with a gradual shift to Marri and Wandoo Woodlands in the east. Large areas of swamp dominated by Paperbarks and Swamp Yate are present within this sub-region, especially in the south-east (Hearn et al, 2002). The majority of vegetation within the rehabilitated areas is native vegetation (State Forest). The vegetation condition ranges between very good and good in upland areas and between very good and degraded along drainage lines and on drainage flats (Onshore Environmental, 2012).

The rehabilitation areas are linked to extensive forested areas, which provides habitat for fauna. The area is known to provide habitat for a biologically diverse range of fauna including the conservation significant black cockatoo's (Forest Red-tailed, Baudin's and Carnaby's Black Cockatoo) and Southern Brush-tailed Phascogale (Biologic, 2011).



## 5. Detailed site history review

### 5.1 State Library Research and Personal Communications

A detailed search of the archives within the State Library of WA, undertaken by GHD in February-March 2018, uncovered the following general information relating to mining in Greenbushes (with site specific information presented in Table 5-1):

- Department of Mines, file 43, 1943, Greenbushes tinfield information from private sources, namely, a letter to Mr Birchley from Sgt W. Jamieson dated March 17th 1941. This letter detailed:
  - 72 bores were drilled with a total combined depth of 772 feet.
  - Yield values were low and determined to not be valuable to dredge as boring present little yield to be worthwhile of investment.
  - The areas bored on Kelly's Flat was over an area of 105 000 cubic yards and total bored was 21 pounds or 100 tons of tin. The 24 acre lease at Kelly's flat was known at the Victory and leased by the man W. George.
  - Mentions that a dam site will be required lower down on the leased area and boring began on March 17th 1941.
  - Jamieson was the manager of Vulcan minerals and author of correspondence.
- Inspection of Greenbushes District, volume 1, file 39, 1933. This document provided a brief history of tin mining in Greenbushes which is summarised as follows:
  - Greenbushes tin field is on the railway and main road 159 miles south-east of Perth.
  - Tin was discovered in 1888 and principal mining activity being 1899 to 1919 with production 240 to 794 tons of tin concentrate per year. Since then production was 10 to 60 tons per year.
  - Reported production is 11,295 tons of tin concentrate but this is estimated to be low.
  - Main source of tin was cassiterite, the tin bearing mineral, have been alluvial deposits and deep leads. Initial mining operations were underground methods and later leads were hydraulic.
  - Deep leads were extending down from Scandinavian gully southward to Bunbury cut and there westward towards Moulton brook.
  - Principal lode mining was on the Dixie, Cornwall and South Cornwall leases.
  - Hydraulic mining used from approximately 1903 onwards as opposed to underground mining.
  - Dredging was present at the Vulcan mine in 1939. Bores were drilled with log to detect any tin bearing minerals and as of 9th April 1936, 2000 feet of boring at the Site was completed over 16 bores.
  - The following bores were also noted onsite; Battler's hope line had installed six bores (Battler's hope is a local name, formally known as Moulton Brook). Old 3C's Dam line had installed three bores. Poverty Flat Line had three bores. West end Elliot's lead line installed four bore sites.

Deep leads were found in battlers hope and west end Elliot's. Information has also been collected from the Talison Former Employee Survey, which was provided to GHD in 2017 (referenced in text as 'Talison Former Employee Survey, 2017'). However, GHD note that the date that this survey was conducted is unknown. A historical summary based on the information derived from the WA state library and the information from personal communications, with respect to each of the Sites is presented in Table 5-1.



Table 5-1 Summary of State Library Research and Personnel Communication

Historical site	Summary of information
Salt Water Gully	<p>Located to the east of the Greenbushes town site mining comprised predominantly tin concentrates and tantalite. Sluicing operations historically occurred in the Vicinity of Keyers Cut, which ran in a north easterly direction of a laterite knoll. Tourmaline bearing sands, small quartz veins and laterite gravels were present in the open cut alluvium conglomerate mine.</p> <p>(SR document: Department of mines: geological survey of western Australia, file 29, 1954, Box 35: report on DC 102 and DC111 for tin and tantalite, greenbushes mineral field. Letter Dated 1<sup>st</sup> December 1953, AJ Noldart, geologist)</p> <p>Don Perks, former long-term Talison employee recollected that Ted Jones used to own a small plant onsite “many years ago” (Talison Former Employee Survey 2017, pers comm.)</p> <p>Rehabilitation onsite commenced in 1979. Based on a checklist for completion criteria required for historical upland and valley rehabilitation sites conducted in 2009, the area is stable and covered with healthy vegetation with no recent erosion or signs of slumping or gullying (Talison, 2009a). There was high species richness identified along the drainage line with eastern states eucalypts noted to be prevalent above a dense understory of acacias and native shrubs. There has also been onsite spraying of blackberry infestations noted in February 2002 (Talison, 2009a).</p>
Carters Farm	<p>Carters Farm is located to the north-north east of the active Talison mine site. There was limited historical mining information regarding historical mining uses for this Site. However, the Shire of Greenbushes-Bridgetown identified that the area is currently leased to the Greenbushes Golf Club and note that it would be unlikely that mining activities have taken place here (see Section 5.4.3).</p> <p>This information is supported by a site assessment conducted in 2009, the area is noted to be stable with no signs of recent erosion. Historical drainage channels (with the exception of channels agreed to be retained by DWER) have been vegetated and were considered stable. It was also noted that the site is covered with healthy vegetation and no evidence of erosion, slumping or gullying (Talison, 2009b).</p> <p>Carters Farm was also mentioned in a 2013 DER Ore Processing Licence granted to Talison Lithium Australia Pty. Ltd (Licence Number L4247/1991/13), which identified the site as a potential emission point for contaminated stormwater from disturbed mine work areas, including mine waste dumps. However, previous environmental assessments of the Site (CALM, 2003 and Talison, 2009b) have identified that there are no contamination or safety concerns within this area.</p>
Carters Farm North	<p>Carters Farm North is a section of land located slightly north west of the Carters Farm location. There was limited historical mining information regarding historical mining uses for this Site. However, the Shire of Greenbushes-Bridgetown identified that the area is currently leased to the Greenbushes Golf Club and note that it would be unlikely that mining activities have taken place here (see Section 5.4.3).</p>

Historical site	Summary of information
	<p>This information is supported by a site assessment conducted in 2009, whereby the area is noted to be stable with no signs of recent erosion. Historical drainage channels (with the exception of channels agreed to be retained by DWER) have been vegetated and were considered stable. There is also a small water body located in the north east corner of the block used for water storage of the Greenbushes Golf Club (Talison, 2009c). It was also noted that the site is covered with healthy vegetation with no evidence of erosion, slumping or gullyng (Talison, 2009c).</p>
New Zealand Gully	<p>Located between Greenbushes and North Greenbushes. Mining of tin started in 1886 and continued until the early 1900's. Ore was dug in summer and then water dredged in winter by hand and horse. Large botryoidal cassiterite nodules in the first pit – area has reverted to frog habitat. (<a href="http://www.mindat.org">www.mindat.org</a>). This site has been identified as an area of value due to the European heritage significance associated with the mining history and the presence of rock cairns onsite (Inherit place number: 03209). Some of the historical mining licences that cover this area include ML287, ML394, ML272 and ML295 (Pether, 1907).</p> <p>This site has been flagged by two long term former Talison employees Bob Perenzin and Ian Seton, who identified potential contamination occurring at the workshop at New Zealand Gully (Talison Former Employee Survey, 2017). According to this survey, no chemicals were used onsite –sluicing plant, trommels, jig conveyers were documented here. Sandy tailings have been identified amongst the rehab, which is consistent with the plant identified at this location.</p>
Dumpling Gully	<p>The Dumpling Gully mine site is located adjacent to the New Zealand Gully Mine site. Constructed post 1890, it runs in a north-to-south direction and has produced over 400 tonnes of tin ore within an area of two acres. The mine was fairly shallow with the deepest section reaching 20 ft of depth (noted in 1899). Heavy water was also prevalent within this site, which led to the abandonment of sinking and driving methodology for tin mining (Western Mail, 1899). The upper part of the gully comprises of a wide alluvial slope, which travels down into a steep valley, with granite deposits surrounding this gully.</p> <p>This Site has been used by the water corporation from the 1960's to 2017 as a potable water supply for the town of Greenbushes.</p>
Charnley	<p>Charnley is situated north west of the main Greenbushes site and consists of approximately 5 ha of land. This area is a privately owned parcel of land zoned as State forest under the town planning Scheme No. 4. Information regarding historical mining activities onsite was limited.</p> <p>Charnley is noted to have had rehabilitation activities occurring in 1989 and again in 1994 with Blackberry spraying noted to occur in February 2003 (CALM, 2003). A site assessment conducted in 2009, noted the area to be stable with no signs of recent erosion. Historical drainage channels (with the exception of channels agreed to be retained by DWER) have been vegetated and were considered stable. There is also a small water body located in the north east corner of the block used for water storage of the Greenbushes Golf Club (Talison, 2009d). It was also noted that the site is covered with healthy vegetation with no evidence of erosion, slumping or gullyng (Talison, 2009d).</p>

Historical site	Summary of information
Charnley East (North)	<p>Charnley East is also situated north west of the main Greenbushes site and is a privately owned parcel of land zoned as State forest under the town planning Scheme No. 4. The dam present on this lot was likely used historically as a water supply dam for mining activities.</p> <p>A site assessment conducted in 2009, noted the area to be stable with no signs of recent erosion. Historical drainage channels (with the exception of channels agreed to be retained by DWER) have been vegetated and were considered stable. It was also noted that the site is covered with healthy vegetation with no evidence of erosion, slumping or gullyng (Talison, 2009e).</p>
Charnley West	<p>Charnley West is situated north west of the active Talison mine site and is currently zoned as Crown land. Information regarding historical mining activities at Charnley West were limited. This area was rehabilitated in 1989 and has been noted as stable with no signs of recent erosion in the 2009 Talison Environmental Assessment study (Talison, 2009f).</p>
Bishops	<p>Bishops is located to the north west of the current Talison mine site, and is zoned as Crown land. There is limited information available regarding the historical use of Bishops for mining. However based on the name of this location, it is likely that this site is related to Bishop Gibney who had partnered with Greenbushes Development Co. in the early 1900s to pursue tin mining in the region (ADB, 1981). A site assessment conducted in 2009, noted the area to be stable with no signs of recent erosion. A drainage channel was identified as a monitoring point at this location to ensure no future erosion is occurring onsite. It was also noted that the site is covered with healthy vegetation (Talison, 2009g).</p>
Boronia Gully	<p>The Boronia Gully, previously leased under ML.361, is situated apart from the other mines north west of the main Greenbushes facility. By the end of 1906 it was documented to have produced 5.05 tonnes of tin ore (Pether, 1907). Don Perks noted hauled ore activities had occurred onsite (Talison Former Employee Survey, 2017). Sandy areas can also be identified would suggest the presence of a historic plant. Rehabilitation of this Site commenced in 1984 (Talison Former Employee Survey, 2017).</p>
Spring Gully	<p>Spring Gully is located approximately three kilometres west of the main Greenbushes mine site, south of Boronia Gully. Sinking and driving methodology was predominantly used for mining tin ore within this Gully. During the rainy season, two large dams onsite would be utilised for sluicing the sides of the gully.</p> <p>The average mining depth here was documented at a depth of 3-5 ft (Western Mail, 1899). This site was one of the principle areas for tin ore mining however, as the tin ore was oxidised to iron gravel it generally required battery treatment before use.</p>

Historical site	Summary of information
Norilup Brook	Norilup Brook is located to the west of the main Greenbushes facility and runs through the middle section of Spring Gully. This Site was under mining lease ML 01/694 for Greenbushes Ltd. between 1861-1891 (ArcGIS, 2018). This brook feeds into the Norilup Dam, which has historically been used in conjunction with tin mining practices onsite (DWER Prescribed Premise Licence L4247/1991/13).
Norilup Brook North	There was limited information available regarding Norilup Brook North, however, it is predicted that the historical uses would have been similar to those of Norilup Brook.
Mount Jones	Historically, this site housed plant that belonged to Vultan minerals, however Don Perks (previous Talison employee) had limited recollection of this time. The ore was generally hauled back to the IP plant on the active mine site. The previous site inspection identified sandy patches onsite that looked like tailings, which would confirm that there was likely a processing plant within this area at some point (Talison Former Employee Survey, 2017). Rehabilitation commenced onsite in 1990.
Swimming Pool West	Swimming Pool West is comprised of three smaller land portions which consist of Gibney Gully South, Boulder City West and Boulder City". Gibney Gully South is located south west of Dumpling Gully and comprises of an alluvium passage surrounded by granite deposits (Pether, 1907). Boulder City West and Boulder City are zoned State Forest.  An expired gold and tin mining licence (ML.244) exists for the land immediately north of this area, which operated between 1901-1907.
Gibney Gully	Gibney Gully was named after Bishop Gibney who had partnered with Greenbushes Development Co. in the early 1900s to pursue tin mining in the region (ADB, 1981). Gibney Gully is located south west of Dumpling Gully and is a tributary of Dumpling Gully, which comprises of a narrow alluvium passage that is also surrounded by granite deposits (Pether, 1907).
Swenkies	Extracts from a 1991 report provided by Talison indicate that major earthworks were required to contour this site prior to revegetation – with remediation completed in 1996/1997. The north west portion of the site comprised of large rocks, which were used to build water control banks at the Swimming Pool West location (Talison, 2012). There are no waterways in the Swenkies block with the water body appearing on aerial images comprising of the "Swenkies Dam" site. This area has formerly been used as an alluvial mining and tailings area (Talison, 2012). This is reiterated in historical documentation, which identified that tailings ran down the hill and were part of the Schwenkes and Schwenkes Dam blocks (Pether, 1907).
Swenkies Dam	Swenkies Dam is an earth wall dam located to the north west of the current Talison mining area. This dam has historically been used to supplement mining activities occurring at Swenkies. The banks leading down to the Swenkies dam waterline were battered during the 1991 earthworks with edges of the surrounding natural bushland contoured and blended to the Site as a precursor to the 1995/1996 remediation activities occurring onsite.

Historical site	Summary of information
	<p>A 2009 Assessment of the Swenkies Dam remediation recorded that the area is stable with no recent erosion noted. The site was also considered to have healthy vegetation onsite with no sign of recent slumping or gullyng (Talison, 2009h). Onsite infrastructure was noted to consist of old sluices on the west side of the large dam, however, based on the inaccessibility of this area to users of the Site it was not deemed necessary to remove this (Talison, 2009h).</p>
Cowan Brook Dam	<p>This dam was frequently used by Greenbushes Tin N.L and Vultan Minerals Limited for conserving water throughout the rainy season for mining uses. The water used in the treatment process was then fed into slime dams immediately outside the plant where the water was allowed to stand to enable the waste to settle. The “clean” water is then sent via pipes back to the Cowan Brook Dam where it can be reused. The settled waste material was then collected from the slime dams to be carted to appropriate dumping sites (Hiddlestone, 1989).</p> <p>Cowan Brook Dam was also included in a 2013 DER Ore Processing Licence granted to Talison Lithium Australia Pty. Ltd (Licence Number L4247/1991/13) as a potential contaminated surface water point (with named potential contaminants including stormwater, TSF2 seepage and process water).</p>
Southampton West	<p>Southampton West is an area located to the West of Southampton Dam. Limited historical mining information was available for Southampton West. However, Southampton dam was included in a 2013 DER Ore Processing Licence granted to Talison Lithium Australia Pty. Ltd (Licence Number L4247/1991/13) for the purpose of “processing water from Austin Dam”.</p>
Margaret lease	<p>Margaret Lease is positioned between Southampton west and Norilup Brook, located to the north west of the active minesite. Limited historical mining information was available for Margaret Lease, however the Site does appear more sparsely vegetated than surrounding bushland in the recent site aerials, which likely indicates that this area has historically been used for mining purposes. Rehabilitation within the Margaret lease area is noted to have occurred in 2004 (Talison, 2010).</p>
Teddy boy	<p>Teddy Boy is located to the south of the central pegmatite zone and Westralian gully dam. There was no information available regarding historical uses of the Teddy boy area.</p>
White Well	<p>White Well is located to the south of the central pegmatite zone, Teddy Boy and Westralian gully dam. There was no information available regarding historical uses of the White Well area.</p>
Swimming Pool (now titled Greenbushes Pool)	<p>Swimming Pool covers a section of Reserve 22315 and is commonly referred to as Norm Lindsay Reserve.</p> <p>The workshop at the Swimming Pool plant has historically been identified by Bob Perenzin, Ian Seton and Don Haynes as potentially contaminated. A front end loader has also been documented onsite by Don Haynes. There were also documented sand plant identified for sluicing plant with trommels, jigs, conveyors etc. however no chemicals were used for the dredging. Rehabilitation commenced within this area between 1987-1988.</p>

Historical site	Summary of information
	<p>The Greenbushes Pool/Swimming pool was previously dredged for tin and used as a water source for the Spring Gully mining area. It has been open for use by the community of Greenbushes (for recreational purposes) between 1945-1970s. and is still open to the public for leisure purposes (e.g. swimming spot, camping and picnic area) (Pearson, 2000).</p> <p>GHD notes that the water in this pool is not treated for swimming.</p>
Scandanavian Gully	<p>Scandinavian Gully connects to Salt water Gully from the west but is located more proximally to Cornwall 3 and the main Greenbushes facility. This site previously existed under a now expired lease ML 116 and has been used for mining tin ore between the late 1800s –early 1900s (Pether, 1907).</p>
Cornwall Alluvial North	<p>Geological survey notice: Vulcan Tin mines inspection by H A Ellis, file 12, 1938</p> <p>Vulcan planned on boring in the Cornwall and Cornwall south leases noted in letter to the under sectary for mines 5th march 1940.</p> <p>Greenbushes dredge capacity was 80,000 cubic yards weekly, tin bearing and pegmatite present as of 25th May 1939, mentions hydraulic sluicing in refining.(Location in the new Caledonian lease, situated on the flatly undulating spur between Bunbury gully and Westralia gully on the south side of the main Greenbushes- Bridgetown road approx. 2 miles south east by the south of the Greenbushes town site)]</p> <p>Area of mining fell between 760 feet and 920 feet of geological contours, no natural outcrops of bedrock. Methodology: tin oxide was being obtained from soft, highly decomposed schistose and massive kaolinised rock of granite composition mined in open cut by hydraulic sluicing methods and the distinguished rock being elevated from the open cut as a pulp by gravel pump and passed over sluice boxes in which tin-oxide was recovered. This method of mining started in 1899.</p> <ul style="list-style-type: none"> <li>• Dam noted to be completed as of 30th may 1940, provision of by passing surplus water from Bunbury Gully had been made to use for the new dam site.</li> <li>• Current water was sourced from Westralia Gully but this proved to have low water levels. The new dam was built just below the present dam in Westralia gully and has a considerable area of swampy flat land upstream of it.</li> </ul>
Cornwall 3	<p>Department of mines, superintendent of batteries Greenbushes tin plant, vol 2, 4493, 1900= vol 1, 1323, 03 = vol 3</p> <p>Request is asking for the sinking of the shaft to a depth of 100 feet, with the present depth at 60 ft. Issues of water supply to drill site was an issue. Water storage went from 12500 gallons to 4000 gallons per day of 24 hrs (Jan 2<sup>nd</sup> 1903). Noted in a letter October 31<sup>st</sup> 1903, that is it appropriate to dispose of slurry to the creek. A letter from the minister for mines says that the manager of the mine should arrange to deposit slurry in the creek or other place as long as it does not interfere with the working of the claim. It is inferred that there was a dam, Westralia Gully Dam, in the creek located in Cornwall, not slurry disposed of directly to the environment.</p>

## 5.2 Land ownership

The project area is predominantly classified as State forest or Unallocated Crown Land, with the area covered under mining tenure, held by TLA. A historical title search for the Site was carried out by GHD in February 2018. It is important to note that a few of the locations selected for rehabilitation did not have Certificates of Title (CoT) available (White well and Teddy Boy) due to the location within the State forest. However, a summary of the land tenure is detailed below, along with copies of the CoTs presented in Appendix C.



Table 5-2 Summary of Certificates of Title

Current Certificates of Title					
Volume/folio	Owner	Date	Lease/Registered Proprietor	Previous Title	Closest Associated Rehabilitation Area
2050/507	Michael John Vaisey of 26 Casilda Road Duncraig  Gerrard Schuts of 9A Mast Place, Ocean Reef	08/09/1995	<ul style="list-style-type: none"> <li>Mortgage to Westpac Banking corporation Registered 8/9/1995.</li> </ul>	1078/69	North east of Carters Farm
2217/995	Noel Francis Smith and Jozefa Smith both of 1791 Mandurah Road, Karnup	02/10/2013	<ul style="list-style-type: none"> <li>Mortgage to Brooksbury Pty. Ltd. Registered 09/08/2017.</li> </ul>	LR3111/619	Charnley
2217/996	Bryan James Perrin and Fiona Elizabeth Lindsay of PO Box 97, Greenbushes	16/03/2005	-	LR3111/620	Charnley
LR3003/197	Reserve under management order to the Shire of Bridgetown-Greenbushes of PO Box 271, Bridgetown	-	<ul style="list-style-type: none"> <li>Reserve under management order – Part of Class A Reserve 2687 for recreational use.</li> </ul>	-	Dumpling Gully
LR3003/810	Vested under statute to the conservation Commission of WA of care of Departments of Parks and Wildlife, Locked Bag 104 Bentley	22/10/2008	<ul style="list-style-type: none"> <li>State Forest No. 20 vested pursuant to Section 7(1) of The Conservation of Land and Management Act 1984</li> </ul>	-	Noorilup Brook, Spring Gully, Mt Jones
LR3024/650	Reserve under management order to the Shire of Bridgetown-Greenbushes of PO Box 271, Bridgetown	03/04/2014	<ul style="list-style-type: none"> <li>Reserve 8361 for the purpose of recreation – management order to be observed with the power to lease for any term &lt; 21 years, subject to consent from the Minister of lands.</li> </ul>	-	Carters Farm North



Current Certificates of Title					
Volume/folio	Owner	Date	Lease/Registered Proprietor	Previous Title	Closest Associated Rehabilitation Area
LR3026/1	Vested under statute by the conservation commission of WA of care of Department of Parks and Wildlife, Locked Bag 104 Bentley	01/12/2015	<ul style="list-style-type: none"> <li>State forest No. 20 – Vested pursuant to Section 7(1) of The Conservation and Land Management Act 1984.</li> </ul>	-	Carters Farm North/New Zealand Gully
LR3125/35	State of Western Australia	06/12/2005	<ul style="list-style-type: none"> <li>Road Reserve</li> </ul>	-	New Zealand Gully
LR3125/37	State of Western Australia	-	<ul style="list-style-type: none"> <li>Unallocated Crown Land</li> </ul>	LR3136/496	New Zealand Gully
LR3125/39	State of Western Australia	-	<ul style="list-style-type: none"> <li>Unallocated Crown Land</li> </ul>	LR3136/498	New Zealand Gully
LR3125/41	State of Western Australia	06/12/2005	<ul style="list-style-type: none"> <li>Road Reserve</li> </ul>	-	New Zealand Gully
LR3125/42	State of Western Australia	-	<ul style="list-style-type: none"> <li>Unallocated Crown Land</li> </ul>	-	New Zealand Gully
LR3125/75	State of Western Australia	-	<ul style="list-style-type: none"> <li>State Forest No. 20</li> </ul>	1273/516	Gibneys Gully
LR3125/76	State of Western Australia	-	<ul style="list-style-type: none"> <li>State Forest No. 20</li> </ul>	1273/517	Charnley West
LR3127/603	State of Western Australia	06/12/2005	<ul style="list-style-type: none"> <li>Road Reserve</li> </ul>	-	New Zealand Gully
LR3148/894	Shire of Bridgetown Greenbushes	-	<ul style="list-style-type: none"> <li>Reserve under management order – Class A reserve for the purpose of a recreational swimming pool.</li> </ul>	-	Swimming Pool

Historical Certificates of Title					
Volume/folio	Owner	Date	Lease/Registered Proprietor	Previous Title	Closest Associated Rehabilitation Area
1078/69	Wellington Nelson Selfe of Greenbushes	09/06/1949	<ul style="list-style-type: none"> <li>Wellington became the registered proprietor of this land with permission granted to mine to a depth of 40 feet below ground level.</li> </ul>	3454/53, 11551/42, 18936/46	North east of Carters Farm
1273/516	Rose Lindsay of Greenbushes	08/05/1963	<ul style="list-style-type: none"> <li>Rose Lindsay was the registered proprietor of the land.</li> </ul>	56/147	Gibneys Gully
1273/517	Rose Lindsay of Greenbushes	08/05/1963	<ul style="list-style-type: none"> <li>Rose Lindsay was the registered proprietor of the land.</li> </ul>	56/145	Charnley West
56/14	William Howard of Southern Farms	02/04/1925	<ul style="list-style-type: none"> <li>William Howard was the sole proprietor of the land.</li> </ul>	-	
56/145	Matthew Gibney of Perth – Roman Catholic Bishop	04/12/1905	<ul style="list-style-type: none"> <li>Matthew Gibney was the sole proprietor of the land.</li> </ul>	-	Gibneys Gully
56/147	Matthew Gibney of Perth-Roman Catholic Bishop	11/11/1908	<ul style="list-style-type: none"> <li>Mathew Gibney was the sole proprietor of the land.</li> </ul>	-	Gibneys Gully
LR3003/809	Vested to the Conservation Commission of Western Australia of care of the Department of Environment and Conservation, Locked Bag 104	22/10/2008	<ul style="list-style-type: none"> <li>Vested under statute to the Conservation Commission of WA – State Forest No. 20.</li> <li>Vested pursuant Section 7(1) of the <i>Conservation and Land Management Act 1984</i></li> </ul>	LR3003/809	Norilup Brook, Spring Gully, Mt Jones

Historical Certificates of Title					
Volume/folio	Owner	Date	Lease/Registered Proprietor	Previous Title	Associated Rehabilitation Area
LR3003/810	Vested to the Conservation Commission of Western Australia of care of the Department of Environment and Conservation, Locked Bag 104	22/10/2008	<ul style="list-style-type: none"> <li>State Forest No. 20 – Vested under statute pursuant to Section 7(1) of the <i>Conservation of Land Management Act 1984</i></li> </ul>	LR3003/810	Norilup Brook, Spring Gully, Mt Jones
LR3136/496	State of Western Australia	06/12/2005	<ul style="list-style-type: none"> <li>Unallocated Crown Land</li> </ul>	LR3136/496	New Zealand Gully
LR3136/498	State of Western Australia	06/12/2005	<ul style="list-style-type: none"> <li>Unallocated Crown Land</li> </ul>	LR3136/498	New Zealand Gully

### 5.3 Historical aerial photography

Aerial photographs of the Site were compiled in order to determine the development history and land use practises that may have led to any contamination at the Site. Historical aerial photographs from the years 1969, 1977 and 1987 have been sourced from the Landgate archives. More recent aerals, from years 1971, 1994, 1998, 1999, 2002 and 2004 were also sourced from the Parsons Brinckerhoff Preliminary Site Investigation (PB PSI) Report, however these have limited coverage and only include the rehabilitation areas located proximally to the active mine site. These aerals have been reviewed and summaries of these observations are provided below in Table 5-3. The aerial photographs for this Site are provided in Appendix D.

Table 5-3 Summary of historical aerial photographs

Photograph	Observations
1969  (Landgate Archives)  Comprised of Figures D.1 – D.3	<p><b>Site observations</b></p> <p><b>Figure D.1:</b> Carters Farm and Carters Farm North appear have widespread disturbance and sparse vegetation when compared to the surrounding bushland to the north east of the site. Scandanavaian Gully, Cornwall Alluvial North and Cornwall 3 also appear to be situated within an area of sparse vegetation (likely resulting from historical mining practices). Salt Water Gully does not appear to show signs of historical mining practices in this aerial, with the exception of the dirt trails which lead from historical mining areas to the northern section of the gully (including Scanadanvian gully and Cornwall Alluvial North). There are obvious signs of historical mining activities at all rehabilitation areas in this aerial, between Southhampton West, Margarets Lease and Dumpling Gully with large areas of land cleared and manmade striations present throughout the bushland. These striations are likely to indicate mining exploration works conducted throughout this area.</p> <p><b>Figure D.2:</b> This aerial shows some evidence of land clearing at Mount Jones and Boronia Gully. Norilup Brook North, Cowan Brook and Norilup Brook do not show any obvious signs of historical mining practices.</p> <p><b>Figure D.3:</b> Teddy Boy and White Well do not appear to show any obvious signs of historical mining practices in this aerial.</p> <p><b>Site surrounds observations</b></p> <p>The modern day active mine site is about a third of its current size in these aerals with only a small area of cleared land apparent approximately 2 km to the east of Cowan Brook (Figure D.1). The land surrounding the selected rehabilitation area locations appears to comprise predominantly of native bushland with small dirt roads prevalent across the site, as shown in this aerial (Figures D.1-Figure D.3). A section of residential housing appears to also be present to the north of the Figure D.1 (immediately east of Charnley North). There is also agricultural land apparent at the north, south and east section of Figure D.1, to the west of Figure D.2 and south and east of Figure D.3.</p>

Photograph	Observations
1971 (PB PSI) Figure D.4	<p><b>Site observations</b></p> <p>There is evidence of mining activities occurring northwest of the active mine site, in the form of striations of cleared land present throughout this area. It appears these activities occur between Swenkies Dam in the south and Dumpling Gully in the north. Another section of mining activity is apparent at Margaret lease, Southhampton West and Spring Gully to the south of this area. These striations are also prevalent to the north east of the modern day active mine site at Cornwall 3 and Cornwall Alluvial North. Based on this aerial, Scandanavian Gully does not show obvious signs of historical mining practices.</p> <p>GHD are unable to comment on historical land use of New Zealand Gully, Carters Farm North, Carters Farm, Salt Water Gully, Cowan Brook Dam, Norilup Brook, Norilup Brook North, Mount Jones, Boronia Gully, Teddy Boy or White Well during this timeframe, as they are not included in this aerial.</p> <p><b>Site surrounds observations</b></p> <p>The modern day active mine site is located in the centre of this aerial (to the southeast of all sites located between Swenkies Dam and Dumpling Gully and southwest of Cornwall 3, Cornwall Alluvial North and Scandanavian Gully) and appears to have expanded to the north. The land surrounding these locations appears to be native bushland with small dirt roads prevalent across the site, as shown in this aerial. A section of residential housing appears to also be present to the north of the aerial (immediately east of Charnley North).</p>
1977 (Landgate Archives) Figure D.5, Figure D.6	<p><b>Site observations</b></p> <p><b>Figure D.5:</b> There still appears to be a lot of mining activity occurring at all identified areas between Southhampton west and Dumpling Gully. There are obvious striations apparent in the vegetation surrounding Swimming Pool West. Mount Jones still shows a section of cleared land, which is likely caused by mining activities. There are also obvious dirt trails from Mount Jones to Norilup Brook North, which are likely indicative of the use of this brook to assist in the mining processes occurring at Mount Jones. There is also evidence of clearing to the north of Boronia Gully, which could indicate that mining practices in this area to the north utilised Boronia Gully. New Zealand Gully also appears to be cleared quite significantly (located in the north east section of this figure). There does not appear to be any infrastructure or machinery apparent across any of these rehabilitation areas.</p> <p><b>Figure D.6:</b> Carters Farm and Carters Farm North are apparent in this figure, and have not changed since the 1969 aerial. Scandanavian Gully appears to have some darker soil (possibly staining or a water body) present to the east of the site. Cornwall 3 and Cornwall Alluvial North have not changed since the 1969</p>

Photograph	Observations
	<p>aerial. There is still no evidence of infrastructure or machinery onsite.</p> <p><b>Site surrounds observations</b></p> <p>The site surrounds to not appear to have changed significantly since the pervious aerial, with the exception of the mine site, which appears to have increased slightly in size.</p>
<p>1987</p> <p>(Landgate Archives)</p> <p>Figure D.7 – Figure D.10</p>	<p><b>Site observations</b></p> <p><b>Figure D.7:</b> As this aerial is at a higher resolution than previous aerials it is now evident that vegetation clearing around Salt Water Gully has occurred particularly around the mid and north sections of the gully. However, it is uncertain as to whether this clearing relates to the surrounding agricultural land uses or historical mining practices. There is no apparent mining infrastructure or plant set up within the Salt Water Gully area. The cleared land at Cornwall 3, Scandanavian Gully and Cornwall Alluvial North also does not appear to house any infrastructure or plant.</p> <p><b>Figure D.8:</b> There were no changes apparent between Southhampton West and West Charley since the previous aerial. The vegetation clearing at Norilup Brook North is also more apparent with possible evidence of wet sand or staining to the north of the brook. Norilup Brook appears to be predominantly dry for this aerials, and shows clear evidence of vegetation clearing. Spring Gully, Cowan Brook, and Mount Jones do not appear to have changed since the previous aerial although Cowan Brook does appear to be dry (which was not easily observed previously).</p> <p><b>Figure D.9:</b> New Zealand Gully is apparent at the east boundary of this aerial and shows more clearly the obvious clearing occurring onsite as a result of historical mining practices. There is no obvious infrastructure or plant observed in New Zealand Gully in this aerial.</p> <p><b>Figure D.10:</b> New Zealand Gully and Carters Farm North are apparent in the south west portion of this aerial and do not appear to have changed since the 1969 aerial.</p> <p><b>Site surrounds observations</b></p> <p>There have been no notable changes to site surrounds since the previous aerial.</p>
<p>1994</p> <p>(PB PSI)</p> <p>Figure D.11</p>	<p><b>Site observations</b></p> <p>This aerial shows a similar view to the 1971 aerial provided in the PB PSI. The striations between Southhampton West and Swenkies (and all rehabilitated areas in between) are still present, albeit less apparent due to denser vegetation in this area. Cornwall 3 appears to comprise of a cleared section of sandy land and is located immediately east of the residential area. Scandanavian Gully and Cornwall Alluvial North also appear to be</p>

Photograph	Observations
	<p>heavily cleared since the 1971 aerial. A section of the northern part of Salt Water Gully is also apparent at the eastern boarder of this aerial, however does not show obvious evidence of historical mining practices.</p> <p>GHD are unable to comment on historical land use of New Zealand Gully, Carters Farm North, Carters Farm, Cowan Brook Dam, Norilup Brook, Norilup Brook North, Mount Jones, Boronia Gully, Teddy Boy or White Well during this timeframe, as they are not included in this aerial.</p> <p><b>Site surrounds observations</b></p> <p>The site surrounds to not appear to have changed since the previous aerial, with the exception of the residential area to the north of the active modern day mine site, which appears to have expanded slightly to the north. The mine site also appears to have expanded slightly since the earlier aerials, in terms of onsite infrastructure.</p>
<p>1998</p> <p>(PB PSI)</p> <p>Figure D.12</p>	<p><b>Site observations</b></p> <p>The striations historically present at Southampton west are not obvious in this aerial. The sites to the north of Southampton West still show the signs of historical mining practices as identified in the previous aerial (1994). Cornwall 3 appears to have been revegetated since the previous aerial, which is also apparent to a lesser extent at Scandanavian Gully and Cornwall Alluvial North. White Well and Teddy Boy are also included in the sourthern section of this aerial and appear to show evidence of clearing likely caused by historical mining practices.</p> <p>GHD are unable to comment on historical land use of New Zealand Gully, Carters Farm North, Carters Farm, Cowan Brook Dam, Norilup Brook, Norilup Brook North, Mount Jones or Boronia Gully during this timeframe, as they are not included in this aerial.</p> <p><b>Site surrounds observations</b></p> <p>The site surrounds do not appear to have changed since the previous aerial, with the exception of the mine site that appears to have a new landfill and processing facility, which was not obvious in previous aerials.</p>
<p>1999</p> <p>(PB PSI)</p> <p>Figure D.13</p>	<p><b>Site observations</b></p> <p>This aerial includes a wider view of surrounding environment than the previous 1998 aerial. Mount Jones, Norilup Brook North, Norilup Brook and Cowan Brook Dam are apparent to the west of the aerial. These areas appear to comprise predominantly of dense bushland. There are slight striations still apparent above Swenkies Dam; however, the vegetation in the area seems to be thicker than that observed in previous years.</p>

Photograph	Observations
	<p><b>Site surrounds observations</b></p> <p>Apart from seasonal variations, there are no obvious changes to the site surrounds since the 1999 aerial.</p>
<p>2002 (PB PSI) Figure D.14</p>	<p><b>Site observations</b></p> <p>There are no obvious changes between the 2002 aerial and the 1999 aerial, with the exception of the most recent aerial encompassing more of the rehabilitated aerals than the previous image. New Zealand Gully, Carters Farm North and Carters Farm are now included in this view. These sites appear to comprise of dense bushland, with the exception of Carters Farm, which has sparse vegetation covering approximately 50% of this site, likely a result of historical mining practices onsite. This view also covers the Teddy Boy and White Well locations, which appear to have increased in vegetation since 1999.</p> <p><b>Site surrounds observations</b></p> <p>There have been no obvious changes in site surrounds since 1999.</p>
<p>2004 (PB PSI) Figure D.15</p>	<p><b>Site observations</b></p> <p>There are no obvious changes between the 2002 and 2004 aerals.</p> <p><b>Site surrounds observations</b></p> <p>There have been no obvious changes in site surrounds since the 2002 aerial.</p>

## 5.4 Freedom of information searches

### 5.4.1 Department of Mines, Industry Regulation and Safety

GHD lodged a freedom of information request to the DMIRS requesting any documents relating to dangerous goods storage or underground/aboveground storage tanks at the Site. However, based on the specificity of this search targeting historical mining activities (prior to the 1990's), the information provided involved the historical mining tenure but no additional details of processes occurring onsite. The notice of decision provided by DMIRS has been included in Appendix E.

### 5.4.2 Department of Water and Environmental Regulation

GHD deemed it unnecessary on this occasion to lodge a freedom of information request to DWER, due to the specificity of the timeframe that is covered in this report. As we are looking to pre 1980's disturbance onsite, not current mining disturbance, it is unlikely DWER would be able to provide relevant documents for this timeframe. Additionally, due to the long mining history of this Site, any documentation found would have had to be provided to the department of mines and therefore any contamination onsite would have been identified in the DMIRS FOI search. This search was also excluded from the previous Parsons Brinckerhoff PSI, which would imply that the dangerous goods search is adequate in defining the potential contamination risk for this Site for this particular purpose.



#### 5.4.3 Local government – Shire of Bridgetown-Greenbushes

GHD lodged a freedom of information request to the Shire of Bridgetown Greenbushes requesting any documents relating to historical land uses or environmental issues. The Shire was only able to provide basic information regarding historic mining activities onsite. This information consisted of the following:

- Carters Farm/Carters Farm North: Possibly within Reserve 8361. This land is currently leased to the Greenbushes Golf Club; it is unlikely that mining activities took place here.
- New Zealand Gully: The dam in the south-eastern corner of the site was constructed to supply water to early mining tenements now located on the southern side of the South Western highway. Extensive sluicing is also evident throughout the gully.
- Dumpling Gully: This gully covers a section of the Greenbushes Sportsground (Reserve 2687). Mining activities on this area are unlikely.
- Charnley and Charnley East: Privately owned parcels classed as State Forest (Local Planning Scheme No. 4). The dam at Charnley East (North) is likely to have supplied water for nearby mining activities.
- Charnley West and Bishops: Exist on Crown Land.
- Norilup Brook: Owned by Forestry Department of WA.
- Swimming Pool: Covers a section of Reserve 22315 – more commonly referred to as Norm Lindsay Reserve.

Supporting documents for Dumpling Gully, New Zealand Gully and Greenbushes Pool were provided by the Shire in the form of Local Heritage Listings. These documents can be found in Appendix E.

### 5.5 Heritage

#### 5.5.1 European heritage

A search of the EPBC Protected Matters Search Tool did not identify any Commonwealth listed heritage sites within 10 km of the Site. A search of the Western Australian State Heritage Office Inherit database did not identify any heritage places within or adjacent to any of the rehabilitated areas.

The closest State Heritage Listed site is 'Golden Valley' (Place ID 707) which is located approximately 3.4 km north of the nearest rehabilitation area; Boronia Gully. 'Golden Valley Tree Park' (Place ID 5003) is also associated with this area. 'Golden Valley Tree Park' is listed on the Shire of Donnybrook-Balingup Municipal Inventory (Category 1).

The closest 'Other Heritage Listing' is the 'South Cornwall Pit' (Place ID 6639), which is part of the Greenbushes Mine Site. It is listed on the Shire's municipal inventory (Category 2) due to the continuous history of mining activity at this location. The 'South Cornwall Pit' is located approximately 500 m south-west of the 'Cornwall 3' rehabilitation area.

Another 'Other Heritage Listing' within the vicinity of the rehabilitation areas is the 'Three Stone Culverts' (Place ID 3038) which are stone culverts located between 3 km north and 8 km south of Balingup on the Donnybrook-Bridgetown railway line. The 'Three Stone Culverts' is listed on the Shire of Donnybrook-Balingup Municipal Inventory (Category 2). The locations of the three stone culverts are nearby three rehabilitation areas:

- 2.1 km north-east of Salt Water Gully.
- 1.5 km north-west of New Zealand Gully.

- 0.82 km north-west of Boronia Gully.

There are a number of other heritage listed places associated with the town of Balingup, which are all more than 1 km from the rehabilitation areas.

#### 5.5.2 Aboriginal heritage

The Site occurs at the boundary of the South West Boojarah #2 People Indigenous Land Use Agreement (ILUA) area, and the Wagyl Kaip Southern Noongar People ILUA area. A search of the Aboriginal Heritage Inquiry System identified one 'Registered' Site of Aboriginal heritage significance, the Blackwood River (ID 20434), and no Sites lodged as 'Other Heritage Places' in proximity to the rehabilitation areas (DPLH 2017). The Blackwood River is a site of mythological significance in association with *Waugal* beliefs (Brad Goode & Associates 2016). The Blackwood River site occurs within the following rehabilitation areas of interest: Boronia Gully, Norilup Brook North and Norilup Brook.

### 5.6 DWER contaminated sites database

The DWER *Contaminated Sites Database* presents information on known contaminated sites that have been classified by the DWER as one of the following:

- *Contaminated – remediation required.*
- *Contaminated – restricted use.*
- *Remediated for restricted use.*

The DWER *Contaminated Sites Database* does not provide details of the Sites that are listed as '*Possibly contaminated – investigation required*' (PC-IR).

A review of the *DWER Contaminated Sites Database* (DWER, 2017) was undertaken surrounding the Site, which identified one contaminated site within a 2 km radius of the rehabilitation areas; the active Greenbushes Mine Site area. The Greenbushes Mine Site incorporates sections of Mining Tenements M01/3, M01/6, M01/7 and part of State Forest 20 (Greenbushes State Forest). The nature and extent of contamination is described as:

- Hydrocarbons and metals present in soils in isolated locations at the Site.
- Elevated concentrations of metals are present in groundwater beneath the Site.
- Elevated concentrations of metals (lithium and arsenic) are present in surface water at the Site (DWER, 2018).

The land use of the Site is restricted to commercial/industrial use. The Site is suitable for continued use as an active mine site, and is managed under licences L4247/1991/13 and L8501/2010/2, with ongoing monitoring and management of surface waters and groundwater at the Site (DWER, 2018).

The nearest rehabilitation areas to the south of this listed contaminated Site is Teddy Boy (~0.14 km), to the north is Cornwall 3 (<0.1 km), to the east is the Salt Water Gully (~0.3 km) and to the west is Southhampton west (~0.1 km). GHD notes that Cornwall 3 appears to have a shared boundary with this contaminated site (to the south of the Cornwall 3 rehabilitation area), however as this contaminated area is part of the existing active mine site, therefore it is unlikely that this shared boundary will impact the findings of this project.

None of the 27 rehabilitation areas are classified by the DWER *Contaminated Sites Act 2003* at the time of reporting (January 2018). The 27 areas have not been reported to DWER as suspected contaminated sites given that there has not been significant justification to warrant reporting at this point in time.

## 5.7 Preliminary Site Investigation Report; PB 2007

The PSI was commissioned by Sons of Gwalia to ascertain the potential contamination risks on the existing mining leases in the area. Whilst the study did not cover the former mining areas adjacent to the active minesite, it did provide some general information that is considered important to the current investigation including:

- Site history including site development information and historical aerial photographs.
- Review of potential areas of contamination concern from surrounding areas.
- Acknowledged potential areas of concern within the mining lease, including;
  - The Cooks, Brandrill, underground and old mining workshop areas.
  - Bioremediation pad and operational waste disposal areas.
  - Secondary processing plant, the former solvent extraction plant and associated tailings dam.
  - Floyds waste stockpile.
  - Other areas of concern included; Kapanga landfill and the IP landfill.

## 5.8 Centre of Excellence in Natural Resource Management (CENRM) Ecotoxicology Work on Mine Impacted Waters

In 2013, CENRM was engaged by TLA to undertake an ecotoxicology study on the mine water discharge impacts. The aim of this study was to test the toxicity of lithium contained in waste water from the mine under site-specific conditions using local species etc. In summary, the lower range of sensitivity was found at water with 42 mg/L of lithium and therefore with a 100 x safety factor added to this value; an interim site specific trigger level for lithium was established at 0.42 mg/L.

In recognition of the limited nature (and inherent conservatism) factored into this trigger value, and the fact that there was observed fish and cray fish swimming freely in the Austins Dam (where lithium is around<sup>1</sup> 12 mg/L) a broader and more encompassing study was decided to be undertaken by CENRM in 2014 involving ecotoxicology and bioaccumulation impacts. The aim of this work was to settle on an agreed site specific trigger level for lithium. In summary, the study suggested that lithium limits should be set on a reducing scale over time for the Norilup Brook Dam (located below the Cowan Brook Dam) from 7 mg/L in 2016/2017 to 2 mg/L in 2025/2026. This was adopted / endorsed by the DWER as a reporting standard for the Greenbushes Mine site.

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## 6. Site Inspection Overview

### 6.1 Site inspections

A Principal level environmental scientist from GHD undertook three site inspection events across the 20 March 2018, 8 May 2018 and 5 July 2018. These detailed site inspections aimed to understand the following key components:

- To verify the accuracy of the desktop information obtained including any significant historical findings or observations.
- To verify the environmental setting of each rehabilitated area and surrounding land.
- To assess each site for any visual or olfactory indications of potential contaminants of concern from historical mining and/or more recent uses.
- To identify any onsite or offsite receptors.
- To collect photographs to document current site conditions onsite.

The main observations obtained from the detailed site inspections have been presented in Section 7.

### 6.2 Surface Water Sampling Methodology

The inspections conducted on the 8 May and 5 July 2018 also involved sampling of select surface water bodies within the identified rehabilitation areas onsite to provide some preliminary information on the water quality of these bodies.

Samples were collected from the following rehabilitation sites:

- 8 May 2018: New Zealand Gully, Dumpling Gully, Charnley West, Norilup Brook, Mount Jones, Norilup Brook North, Cowan Brook, Carters Farm North, Salt Water Gully, Scandinavian Gully and Spring Gully.
- 5 July 2018: Norilup Brook North, Swenkies Dam and Charnley.

Field parameters were collected by slowly lowering a water quality meter into the surface water until fully submerged. The field parameters measured included temperature, EC, pH, REDOX and dissolved oxygen, which were recorded on a field sheet once all of the values had stabilised. Once these values were obtained, the water samples were then collected from each location using a sampling pole and bottle attachment. The water samples were collected into laboratory prepared bottles, which were immediately placed on ice and esky. Samples were couriered to a NATA accredited analytical laboratory (ALS Environmental) in Perth to ensure compliance with the specified holding times.

The samples were analysed for suite of contaminants of potential concern (CoPC) based on the perceived historical and current contamination sources. The analytical suite included: Total Recoverable Hydrocarbons (TRH), Total Petroleum Hydrocarbons (TPH), Benzene, Toluene, Ethylbenzene, Xylene, Naphthalene (BTEXN), total metals (antimony, arsenic, bismuth, cadmium, chromium, copper, caesium, nickel, lead, zinc, lithium, mercury), dissolved metals (antimony, arsenic, bismuth, cadmium, chromium, copper, caesium, nickel, lead, zinc, lithium, mercury), and nutrients (Total Kjeldahl Nitrogen, Ammonia as N, Nitrite as N, Nitrate as N, Nitrate plus Nitrite as N, Total Nitrogen as N, Total Phosphorus as P).

Prior to and following the collection of each sample, all non-disposable sampling equipment was decontaminated. The equipment was washed with a phosphate-free detergent and rinsed with clean tap water.

### 6.2.1 Surface water sampling quality control overview

A series of quality control and assurance procedures were implemented during the limited surface water sampling program including:

- Collection and review of quality control samples (blind duplicates) in the field.
- Following appropriate standards and guidance documents and using standardised field sampling forms.
- Using and documenting calibrated field instruments.
- Correct sampling techniques with decontamination procedures used in between separate sample points to avoid cross-contamination.
- Chain of custody (CoC) documentation used to accompany field samples to the laboratory.
- Nominated laboratory is NATA accredited for all required analysis.

#### *Fieldwork Quality Control*

Quality control samples (QA01, QA02 and QA03) were collected from sample locations NZ03, NBN12 and NBN22 respectively. These were submitted to a NATA accredited laboratory as blind duplicate samples.

A quantitative measure of the accuracy between the primary and duplicate samples laboratory results was made using the calculated Relative Percentage Difference (RPD) values. No calculated RPDs were above the recommended 50% RPD criteria (AS 4482.1), with the exception of phosphorus (total) detected at QA01 and ammonia (as N) and nitrate (as N) detected at QA03. Based on the low concentrations of these analytes (all below or equal to 0.5 mg/L) and the concentration of Nitrate (as N) in NBN22 and Phosphorus (total) in NZ03 detected below laboratory limits of reporting (LOR), it is considered that the RPDs are exaggerated. The paired results are of very similar concentration and within the same order of magnitude.

The calibration certificates for the water quality meter used during the sampling is provided as Appendix F and the CoC documentation is presented with the Laboratory Certificates of Analysis in Appendix G.

#### *Laboratory Quality Control*

The details of the laboratory's quality control assurance assessment is presented within the laboratory Certificates of Analysis (Appendix G) with the main observations summarised below:

- **Holding-time, method blanks and laboratory control standard recoveries:** All results were considered acceptable for these quality control measures.
- **Laboratory duplicate recovery:** All laboratory duplicate recoveries, reported as RPDs, were within the laboratory's acceptance criteria, with the exception of Total Kjeldahl Nitrogen (as N) and Total Nitrogen (as N) which exceeded RPD value limits (30%) with a RPD value of 36% (report number: 606548). Copper also exceeded the RPD value (30%) with a value of 38% (report number 606548), however was deemed by Eurofins to be acceptable (QA15).
- **Matrix spike recovery:** All matrix spike recoveries were within acceptable criteria, with the exception of Ammonia as N (laboratory report number: EP1805773), in which the matrix spike recovery could not be determined as the background level was greater than or equal to 4 x spike level.

## 7. Site Inspection and Interviews

The site interviews and inspections form an integral part of the overall investigation process. The details of both the site interviews and site inspections programs are outlined in the following sections.

### 7.1 Site interviews

Due to the nature of this investigation, focusing on historical mining activities (late 1800s - early 1900s) which occurred within the nominated rehabilitated areas it is essential to obtain interview information from sources relevant to this historical mining era of these Sites. In an attempt to obtain this relevant information GHD have been in contact with the Greenbushes Discovery Centre, in February 2018 and again in June 2018, as this organisation appears to have a firm understanding of the historical mining activities occurring within the Greenbushes Site. However, GHD were still awaiting a response at the time of reporting and therefore no additional historical information for this study could be obtained from this source.

Ms Lydia Perenzin, a representative from Talison provided GHD with information obtained in interviews conducted by some of the mines former employees who had been working onsite in the 1900's. These interviews identified areas of potential concern, with the workshop located at the Swimming Pool area and the New Zealand Gully, repeatedly mentioned by multiple former employees, as areas that were heavily involved in mining activities. GHD notes that these interviews clarified that no chemicals were used during these mining activities, with sluicing plant activities with trammel and jig conveyors identified as the main processes occurring at both locations (Talison Former Employee Survey, 2017).

### 7.2 Site inspection observations





A Principal GHD Environmental Scientist (Mr Paul Hamer) undertook three site inspections over the 20 March 2018, the 8 May 2018 and the 5 July 2018. The findings of these Site inspections are provided in Table 7-1 to Table 7-27 (presented in alphabetical order). The proforma used to provide the site observations is adapted from the checklist as presented in Appendix A of DWER guidelines (DER 2014).

The site observations, provided in Table 7-1 to Table 7-27, are presented with reference to the site inspection findings in addition to observations made from a review of the current aerial photography for each site given that not all of the site was able to be traversed during the site inspections.



7.3 Bishops










Table 7-1 Bishops Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>This area is located approximately 800 m south of the South Western Highway. It can be accessed from dirt 4WD tracks, which are located off Spring Gully road. This site does not appear to be frequently accessed</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>Bishops has a predominantly flat topography situated at an elevation of around 270 m AHD.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There are no waterbodies observed onsite, but shallow excavation trenches (1.5 m deep x 30 m long) likely store accumulated rainfall</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There have been minor recreational uses (bikes and 4x4s) noted around the outskirts of the site, however these trails do not appear to be frequently used.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination noted onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Apart from shallow excavation trenches there do not appear to be any obvious signs of historical mining activities onsite.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There were no visible signs of vegetation stress onsite.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There was no infrastructure identified onsite. The roads leading to the site were unsealed 4WD tracks.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of bushland, the clearing comprises predominantly of grassland.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no apparent local use of ground or surface water extraction at this site.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no groundwater bores identified during the site inspection.</li><li>There were no surface water sources identified during the site inspection.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>The land surrounding the site is State Forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>There is a surface water body present in Charnley West (to the north of the site), apart from this there does not appear to be any other receptors within 500 m of the site boundary.</li></ul>		
		Photo 1: Bishops	Photo 2: Bishops
			
		Photo 3: Bishops	Photo 4: Bishops



## 7.4 Boronia Gully




Table 7-2 Boronia Gully Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Site accessible by foot, with four wheel drive tracks and walking trails present throughout some areas of the site. The nearest dirt 4WD track to access the site connects to Spring Gully Road. The south western highway is located approximately 1.5 km north of the site.</li><li>Thick shrub land and native bushland comprising of most of the site. The gully area was dry at the time of inspection as presented in Photo 8, but is noted by the site contact to have a seasonal waterbody present</li><li>This site does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The area is relatively flat, with a narrow gully present throughout the centre of the site and dense shrubbery surrounding the banks. The site is predominantly comprised of established bushland.</li><li>The sandy gravel flanks were identified at the southern section of the gully.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>None observed. Flooding into neighbouring properties was considered unlikely.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Walking trails</li><li>This area is also classified as an Aboriginal Heritage Site based on mythological purposes.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Evidence relating to past mining activities comprises depositional evidence of workings within base of gully (see Photo 5)</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress. Some patches of cleared land present onsite throughout the gully area.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No drums, waste or fill material identified onsite, with the exception of exposed workings (Photo 5). No visual or olfactory evidence of impacts within workings.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. There are unsealed tracks present – with larger 4WD tracks providing access to the southern section of the site and walking trails present throughout.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of bushland, the clearing comprises predominantly of grassland.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There were no groundwater bores identified during the site inspection. However, based on a thorough search of the WIR database there are two bores located within the gully (see Section 4.5.3 for more information).</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>No waterbodies present during inspection.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest, agricultural land.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The rehabilitated area is positioned within 300 m south of an agricultural area. State forest is located at all other margins. There are no other sensitive receptors identified within 500 m of the site boundary.</li></ul>		







7.5 Carters Farm

Table 7-3 - Carters Farm Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Criteria	Site Photos	
Site Access (i.e. tracks, fencing) Evidence of access? Frequency?	<ul style="list-style-type: none"><li>Carters Farm is located to the north of the South Western Highway and is accessible via a dirt 4WD track positioned off this main highway.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site slopes slightly to the north east but is predominantly flat.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There are no water bodies located on the site, based on the slope of the site it is likely that water will drain to the south east.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There are no current site activities noted for this site</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contaminated noted onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Disturbed/reworked and exposed ground clays soils supports ground disturbance, deemed to reflect historical mining activities onsite.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>Sparse vegetation in parts but there does not appear to be any vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials noted onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or infrastructure present onsite.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface – mostly scrubland consisting mostly of natural sand and gravels with sparse to no vegetation. .</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal occupation or dumping identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There were no groundwater or surface water abstraction points identified onsite. Two groundwater abstraction bores onsite, three located north to north east of the site – see Section 4.5.3.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no surface water bodies or groundwater bores identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>Golf Course, agricultural land, state forest.</li></ul>	Photo 11: Carters Farm	
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The golf course is located approximately 200 m north of this location with some agricultural land also present on the eastern site boundary.</li></ul>		

7.6 Carters Farm North



Table 7-4 Carters Farm North Site Inspection Notes

Site Inspection Date: 8 May 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): CFN14	
Criteria	Criteria	Site Photos	
Site Access (i.e. tracks, fencing)	<ul style="list-style-type: none"><li>Site accessible by foot.</li></ul>		
Evidence of access?	<ul style="list-style-type: none"><li>Thick shrub land surrounding the man-made banks of the water body.</li></ul>		
Frequency?	<ul style="list-style-type: none"><li>Likely that this site is occasionally accessed by the Golf Club, which use this water body as a water source for irrigation of the course. The site does not appear to be frequently accessed.</li><li>The southwest freeway is located to the south of this area.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The area is relatively flat with a slight increase in elevation apparent on the northern side of the water body onsite.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>One man-made waterbody/dam was apparent onsite during the inspection.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Waterbody onsite is used to irrigate Greenbushes Golf course.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination.</li></ul>	Photo 12: Carters Farm North	Photo 13: Carters Farm North
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>The water bodies reflect mining excavations which are now are water bodies likely indicating groundwater levels and/or surface water accumulation.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No signs of drums, waste or fill material.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>One pump house has been identified onsite which is used by Greenbushes Golf course. This building is in good condition and was not identified as being constructed from hazardous building materials.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface – mostly bushland with leaf litter covering the floor with the area immediately surrounding the waterbody consisting mostly of natural sand with sparse to no vegetation. .</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>Groundwater extracted by Greenbushes Golf Course.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>One waterbody onsite, which appears to be in good condition (water was clear and no apparent discolorations or sheens)</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>Golf Course, state forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The golf course is located approximately 200 m north of this rehabilitated area.</li></ul>		



7.7 Charnley





Table 7-5 Charnley Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): CH21	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)	<ul style="list-style-type: none"><li>Accessed via unsealed 4WD tracks located off of Charnley Road.</li></ul>		
Evidence of access? Frequency?	<ul style="list-style-type: none"><li>The site does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is generally flat, situated at an elevation of approximately 270 m AHD, with a slight slope towards the north east (where the water bodies are located).</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>Two small waterbodies exist onsite which probably reflect groundwater levels (water levels 2 meters below ground level)</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There are no current site activities noted for this site apart from a section of the Greenbushes Loop walking trail which has historically been noted as occurring in this area. Residences occupy the western boundary, and one of the water bodies appears accessed/pumped for water supply (irrigation?)</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Some areas of sparse vegetation noted.</li><li>The water bodies reflect mining excavations which are now are water bodies likely indicating groundwater levels and/or surface water accumulation.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There are some weeds noted to the west of the site. No other visible signs of vegetation stress noted.</li></ul>	Photo 16: Charnley	Photo 17: Charnley
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill material identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, infrastructure or roads identified onsite. The road leading to the site is an unsealed 4WD track.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface – mostly bushland with leaf litter covering the floor, which consists mostly of natural sand with sparse to no vegetation.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no evidence of illegal occupation or dumping noted onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no groundwater bores identified onsite. There was one groundwater source identified during the site inspection but this appears to be shallow and seasonal and therefore unlikely to be extracted.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There was one shallow surface water body identified onsite but this only appears to be present as a consequence of recent rainfall events (seasonal waterbody). It appeared to be in good condition.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State Forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>State forest. There are recreational facilities also located to the east of Dumpling Gully (~500 m north east of Charnley) this site comprises of an oval and some tennis courts.</li><li>Residences occupy the western boundary, and one of the water bodies appears accessed/pumped for water supply (irrigation?)</li></ul>		



7.8 Charnley East (North)





Table 7-6 Charnley East (North) Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)	<ul style="list-style-type: none"><li>Accessed via unsealed 4WD tracks located south off the South Western Highway.</li></ul>		
Evidence of access?	<ul style="list-style-type: none"><li>The site does not appear to be very frequently accessed, however is located proximally to residential housing.</li></ul>		
Frequency?			
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat situated at an elevation of approximately 270 m AHD and slopes slightly to the north west. Common site undulations/shallow excavations are likely derived from mining/rehabilitation actives (e.g.: Photo 21)</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There were no water bodies onsite during the inspection.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Site activities include some recreational use by community members particular uses, include walking trails and 4x4 or motorbike trails.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Areas of sparse vegetation and disturbed surface soils were noted.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No visible signs of vegetation stress noted apart from small patches which show evidence of fire/burnt bushland.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill material identified onsite.</li></ul>	Photo 18: Charnley East (North)	Photo 19: Charnley East (North)
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, infrastructure or roads identified onsite. The road leading to the site is an unsealed 4WD track.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface – mostly bushland with leaf litter covering the floor, which consists mostly of natural sand with sparse to no vegetation.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no evidence of illegal occupation or dumping noted onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no evidence of water abstraction occurring onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There does not appear to be any waterbodies or groundwater bores onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State Forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>State forest. There are recreational facilities also located at the northern boundary to the site. There is also residential houses within 500 m to the east of the site.</li></ul>	Photo 20: Charnley East (North)	Photo 21: Charnley East (North)



7.9 Charnley West





Table 7-7 Charnley West Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): CW09	
Criteria	Criteria	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Site accessible by foot, with four wheel drive tracks and walking trails present throughout some areas of the site.</li><li>Thick shrub land and native bushland comprising of most of the site and bound the bank of the waterbody onsite.</li><li>This site does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The area is relatively flat with relatively steep banks separating the water body and the surrounding vegetation (between ~0.5-2 m difference in elevation between the water level and the vegetation).</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There was one waterbody apparent onsite during the inspection.</li><li>Flooding into neighbouring properties was considered unlikely onsite.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Waterbody identified onsite and dirt trails likely used for hiking and motorbike activities.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>The water bodies reflect mining excavations which are now water bodies likely indicating groundwater levels and/or surface water accumulation.</li></ul>	Photo 22: Charnley West	Photo 23: Charnley West
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress. Some patches of cleared land present onsite though.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No signs of drums, waste or fill material.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. There are unsealed tracks present – likely for 4WD, walking or motorbike activities.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of bushland surrounding the waterbody.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>	Photo 24: Charnley West	Photo 25: Charnley West
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no evidence of water abstraction occurring onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>One main waterbody noted onsite, which appears to be in good condition.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The rehabilitated area bounds the swimming pool rehabilitated area and State Forest. Residential housing is located approximately 800 m east of the area.</li></ul>		



7.10 Cornwall 3





Table 7-8 Cornwall 3 Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>There are a few unsealed walking trails present throughout the site. The site access is via an unsealed 4WD track, south of the South Western Highway.</li><li>The site does not appear to be frequently accessed but is positioned between the active mine site (to the south) and the residential developments (to the north).</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is situated on a predominantly flat section of land, which is at an elevation of approximately 320 m AHD. The site appears to slope downwards to the north slightly.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There were no surface water bodies onsite during the site inspection.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There appear to be a few walking trails present throughout the site, however there were no other obvious site uses.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Disturbed/ reworked clayey soils caused by historical mining practices (Photo 27),</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There was no visible signs of vegetation stress, apart from the minor felled tree and the sparsity of the vegetation onsite.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings or roads onsite. Overhead power infrastructure crosses the southern site boundary (Photo 26)</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues (other than the cemented soil mentioned above) present onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter and grasses covering the floor of the predominantly gravelly soil.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials onsite (with the exception of the cemented roots identified above).</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal occupation or dumping prevalent onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no abstraction points or groundwater or surface water use identified onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no waterbodies or groundwater bores identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest, residential land (west), the active mine site (south).</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>Residential properties are approximately 500 m to the west of the site. State forest surrounds the site to the north and east.</li></ul>		



7.11 Cornwall Alluvial North









Table 7-9 Cornwall Alluvial North Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Accessible via 4WD track located of Stanifer Street, south of the South Western Highway. This site is not fenced off and appears to have small dirt tracks present throughout. However, this area does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site slopes to the south-west and is located at an elevation of between 280 – 300 m AHD, with drainage towards the north.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There are no surface water bodies present onsite.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There were no current site activities identified for this site.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Reworked clayey soils related to historical mining activities (Photo 31 and Photo 34). There was no other evidence of historical mining activities onsite.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There were no visible signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials present onsite.</li></ul>	Photo 30: Cornwall Alluvial North	
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or infrastructure present onsite. The road to access the site is an unsealed 4WD track.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy, gravelly soils with leaf litter covering the site surface.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was one dumped car identified to the north of the site.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no abstraction points or groundwater or surface water use identified onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no waterbodies or groundwater bores identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest immediately surrounds the site. There are also residential buildings located to the west of the site. The South Western Highway is located within 500 m to the north of the site. The active mine site is positioned within 500 m to the south of the site. State forest immediately surrounds the site to the east, south and west</li></ul>	Photo 32: Cornwall Alluvial North	
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>Residential properties are located approximately 500 m to the west of the site. The South Western Highway is located within 500 m to the north of the site. The active mine site is positioned within 500 m to the south of the site. State forest immediately surrounds the site to the east, south and west.</li></ul>	Photo 33: Cornwall Alluvial North	



7.12 Cowan Brook

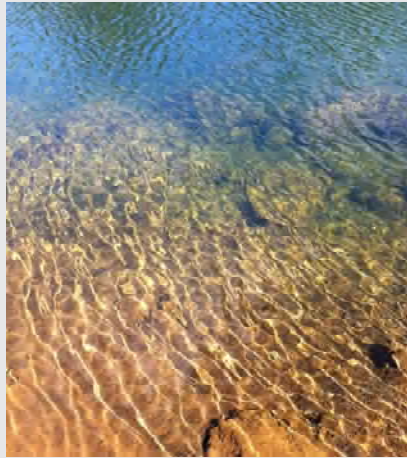






Table 7-10 Cowan Brook Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): CB13		
Criteria	Comments			
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Site access via Ashcroft Road, which is located to the south of the brook. This is an unsealed 4WD trail, the dam itself is accessed via foot.</li><li>Thick shrub land and native bushland comprising of most of the site and bound the bank of the waterbody onsite.</li><li>The site does not appear to be frequently accessed.</li></ul>			
Topography and other site features	<ul style="list-style-type: none"><li>The site is situated within a gully and appears to have predominantly flat topography.</li></ul>			
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>It is unlikely that this site will flood due to the topography of the site (situated within a gully area) and based on the interconnectivity of this brook to both Norilup Brook to the north east</li></ul>			
Current site activities	<ul style="list-style-type: none"><li>There were no current site activities identified throughout the site inspection – this site does not appear to be frequently accessed.</li></ul>			
Visible signs of contamination	<ul style="list-style-type: none"><li>There is evidence of iron staining within the surface water, at the south east section of the site.</li><li>There were no other signs of contamination onsite.</li></ul>	Photo 34: Cowan Brook		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Increases the depth and width of the brook channel. Iron staining was also observed within the surface water towards the southern end.</li></ul>	Photo 35: Cowan Brook		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There was no visible signs of vegetation stress.</li></ul>			
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill material identified onsite.</li></ul>			
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings or infrastructure identified onsite. The road to access the site is an unsealed 4WD track.</li></ul>	Photo 36: Cowan Brook		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no odours or aesthetic issues identified onsite.</li></ul>			
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of bushland surrounding the waterbody.</li></ul>			
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>	Photo 37: Cowan Brook		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>			
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No groundwater abstraction or surface water uses have been noted onsite.</li></ul>			
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>The water body onsite appeared to be in good condition with the exception of the iron staining identified at the southern section of the site.</li></ul>	Photo 38: Cowan Brook		
Surrounding land uses	<ul style="list-style-type: none"><li>The surrounding land use comprises of native bushland with some agricultural land identified to the south west and west of the site.</li></ul>			
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>Agricultural land bounds the west section of this site, which may house sensitive receptors depending on the agricultural purpose of this area.</li></ul>			



## 7.13 Dumpling Gully



















Table 7-11 Dumpling Gully Site Inspection Notes

Site Inspection Date: 7 May 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): DG08	
Criteria	Criteria	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"> <li>Site accessible by foot, with 4WD tracks present throughout some areas of the site.</li> <li>Thick shrub land and native bushland comprising of most of the site. There is a boarder of cleared land surrounding the waterbody onsite (ranging between ~ 2 -10 m wide).</li> <li>Some Water Authority Catchment fencing installed around the water body onsite. The Site does not appear to be frequently accessed.</li> <li>The southwest freeway is located to the north of this area.</li> </ul>		
Topography and other site features	<ul style="list-style-type: none"> <li>The area is flat with little variation in topography between the water level and the surrounding vegetation elevation.</li> </ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"> <li>There was one waterbody apparent onsite during the inspection.</li> <li>Flooding was considered unlikely onsite, as dam overflow likely to control water levels.</li> </ul>		
Current site activities	<ul style="list-style-type: none"> <li>Waterbody onsite possibly used as a drinking water catchment area by Water Authority.</li> </ul>	Photo 39: Dumpling Gully	Photo 40: Dumpling Gully
Visible signs of contamination	<ul style="list-style-type: none"> <li>No visible signs of contamination.</li> </ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"> <li>The changes to the water bodies and sparseness of adjacent vegetation reflect mining disturbance</li> </ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"> <li>No signs of vegetation stress although a lot of cleared land surrounding the waterbody.</li> </ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"> <li>No signs of drums, waste or fill material.</li> </ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"> <li>No buildings present onsite. There are four wheel drive trails and dirt tracks onsite but no sealed roads.</li> </ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"> <li>No signs of any aesthetic issues.</li> </ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"> <li>Unsealed surface – mostly dense bushland with leaf litter covering underlying sand.</li> </ul>	Photo 41:: Dumpling Gully	Photo 42: Dumpling Gully
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"> <li>No stockpiled materials present.</li> </ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"> <li>No signs of illegal occupation or dumping.</li> </ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"> <li>Groundwater abstraction occurs onsite (as noted above in 'current site activities' section of table). There are also three bores noted by a search of the WIR database that occur onsite (refer to Section 4.5.3).</li> </ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"> <li>One waterbody noted onsite, which appears to be in good condition.</li> </ul>		
Surrounding land uses	<ul style="list-style-type: none"> <li>State Forest, recreational oval and tennis courts.</li> </ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"> <li>The rehabilitated area bounds the recreational oval with tennis courts located within 20 m of the area. There are residential properties located within 1 km to the south east of the rehabilitation area.</li> </ul>		




7.14 Gibney Gully

Table 7-12 Gibney Gully Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing) Evidence of access? Frequency?	<ul style="list-style-type: none"><li>The site is accessible via a dirt 4WD track located south of the South Western Highway. There is no evidence of access and the site does not appear to be frequently accessed. However, there is also no fencing around the site and there appear to be walking tracks onsite consistent with those in the State Forest.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The topography of this site appears to have a gradual slope to the south east of the site. The elevation of the site ranges between 230 m AHD and 270 m AHD.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There was an obvious drainage channel present within the gully, which would likely flow down slope (south east). This surface water body was dry during this site inspection</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There were no current site activities identified onsite.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Areas of sparse vegetation and disturbed surface soils were noted.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There were no visible signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials present onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or site infrastructure onsite. The road to access the site is an unsealed 4WD track.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface comprised mostly of leaf litter and shrubs covering underlying sand.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal occupation or dumping identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No groundwater abstraction has been noted onsite, there appears to be seasonal surface water present within the gully (obvious water channels present onsite), however, this was dry for this site inspection.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There is evidence of a possibly seasonal surface water present onsite within the gully; however, this was dry during this site inspection. There were no groundwater bores known/ identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>State forest. Swimming pool is located approximately 500 m east of this site and may be a sensitive receptor for this site based on its use as a public recreational area.</li></ul>		

7.15    Margarets Lease







Table 7-13 Margarets Lease Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -
Criteria	Comments	Site Photos
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>This site bounds the unsealed Spring Gully Road to the south of the rehabilitation area.</li><li>This site is quite easy to access, however does not appear to be frequently accessed. This space consists predominantly of fairly recently planted (&lt;10 years) sparse bushland and shrubbery.</li></ul>	 <div>Photo 48: Margarets Lease</div>
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat with a slight slope increasing to the west.</li></ul>	
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There are no water bodies onsite, therefore it is likely that the site will drain to the east (as there is a slight slope across the area). The soils also appear quite sandy which could indicate quick infiltration to underlying groundwater beneath the site.</li></ul>	
Current site activities	<ul style="list-style-type: none"><li>The site does not appear to be frequently used.</li></ul>	
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination onsite.</li></ul>	
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Apart from the newly planted vegetation, there does not appear to be visible signs onsite of historical mining activity.</li></ul>	
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>The vegetation onsite appears to be quite young, with evidence of historical burning present onsite. Apart from this there does not appear to be any visible signs of vegetation stress onsite.</li></ul>	
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There was no evidence of drums, waste or fill materials onsite.</li></ul>	
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings onsite. The road positioned to the north of the site is an unsealed dirt road, which appeared to be in good condition.</li></ul>	
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>	
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface consisting predominantly of sandy soils.</li></ul>	
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials were identified onsite.</li></ul>	
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No illegal occupation or illegal dumping was identified onsite.</li></ul>	
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No groundwater abstraction or surface water use is known to occur onsite.</li></ul>	
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>No water bodies or groundwater bores onsite.</li></ul>	
Surrounding land uses	<ul style="list-style-type: none"><li>State forest.</li></ul>	
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>This rehabilitated area is surrounded by state forest; there are no other receptors (including sensitive receptors) within 500 m of the site.</li></ul>	



7.16 Mount Jones







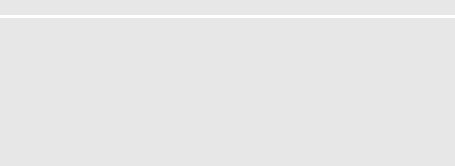
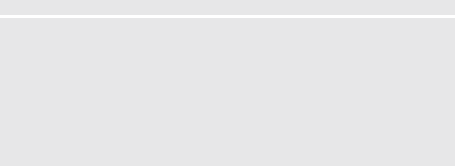
Table 7-14 Mount Jones Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): MJ11	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Restricted site access due to remoteness and overgrown tracks.</li><li>4WD access via Spring Gully Road.</li><li>The site does not appear to be frequently accessed, with the exception of the Water Authority group.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site increases in height to the north west. There is one main waterbody situated in the mid-south section of the site. There are some cleared areas prevalent in the eastern section of the site.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There was one main waterbody identified onsite, this dam is surrounded by steep embankments which vary in height from ~0.2 to 2 m above the level of the surface water. Based on these steep banks, it is unlikely that this area will pose a risk to neighbouring properties.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Used by water authority to supplement Greenbushes water supply.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination onsite.</li></ul>	Photo 49: Mount Jones	Photo 50: Mount Jones
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Areas with sparse vegetation (Photo 55), evidence of sandy gravels on soils surface (Photo 53), water bodies (Photo 50 and Photo 51) are likely the result of historical mining activities</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No visible signs of vegetation stress, however there are sections to the east of the site, which are sparse to bare of vegetation and lacking established vegetation or bushland.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No drums or fill material identified onsite, one dumped tyre noted within the water body.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. Unsealed 4WD tracks provide access to the eastern section of the site.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>	Photo 51: Mount Jones	Photo 52: Mount Jones
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter and sticks covering the floor of the bushland. The banks of the gully are predominantly sandy with little to no vegetation cover.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>Surface water abstraction has been historically noted at Mount Jones Dam for use by the Water Authority to supplement the Greenbushes town water supply. There was also one groundwater bore listed in the WIR database as occurring onsite (refer to Section 4.5.3).</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There was one waterbody identified during the site inspection. This waterbody appeared to be in good condition.</li></ul>	Photo 53: Mount Jones	Photo 54: Mount Jones
Surrounding land uses	<ul style="list-style-type: none"><li>State forest, agricultural land, Norilup Brook North.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The rehabilitated area is surrounded by state forest with some agricultural land located off the west boundary of the site. State forest surrounds the area at all other boundaries. Norilup Brook North is located ~150 m south east of this area. There were no other sensitive receptors identified within 500 m of the area.</li></ul>		



7.17 New Zealand Gully












Table 7-15 New Zealand Gully Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): NZ01, NZ02, NZ03, NZ04, NZ05, NZ06, NZ07	
Criteria	Criteria	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Site accessible by foot, with small 4WD tracks present throughout some areas of the site.</li><li>Thick shrub land and native bushland surrounding waterbodies onsite. This site appears to be frequently accessed for recreational use.</li><li>The southwest highway is located to the south of this area.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The area is relatively flat, with the exception of the gully areas onsite, which are generally situated between 1-5 m lower than surrounding bushland.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>Seven waterbodies were apparent onsite during the inspection.</li><li>This rehabilitation area consists of native bushland and seven waterbodies, which are situated within former mined/excavated areas. Based on the presence of all these gully areas within the site flooding into neighbouring properties is unlikely.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Waterbody onsite possibly used as a drinking water catchment area, and for irrigation to Greenbushes golf course and sports oval.</li><li>Recreational activities: fishing, swimming, hiking, some old motorbike trails apparent.</li></ul>	Photo 55: New Zealand Gully	Photo 56: New Zealand Gully
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Historical mining activities comprise excavations and water bodies (Photo 56, Photo 57, Photo 59 and Photo 61), and stockpiles of overburden and clays (Photo 58 and Photo 60)</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No signs of drums, waste or fill material.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. There are four wheel drive trails and dirt tracks onsite but no sealed roads.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface – mostly bushland with leaf litter covering the floor.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>Appears to be wood stockpiled in one section of the site.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping, with the exception of the stockpiled wood.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>Groundwater abstraction occurs onsite (as noted above in ‘current site activities’ section of table). There were two groundwater monitoring bores also identified by WIR that occur in this area (refer to Section 4.5.3).</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>Seven waterbodies onsite, which appear to be in good condition.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>Golf Course, state forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The golf course is located approximately 200 m east of this rehabilitated area.</li></ul>		






## 7.18 Norilup Brook

Table 7-16 Norilup Brook Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): NB10	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing) - Evidence of access? Frequency?	<ul style="list-style-type: none"><li>Restricted site access due its proximity to Mt Jones Dam (which is used by the Water Authority as a source for Greenbushes town water supply).</li><li>4WD access to the north section of the site is via Spring Gully road and Ashcroft Road.</li><li>The site does not appear to be frequently accessed, with the exception of the walking path and occasional access by the Water Authority for this area.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat and connects to Norilup Brook North (to the north) and Cowan Brook (to the south).</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There was one main waterbody identified onsite (Norilup Dam). This area is quite flat with evidence of rising water levels present due to the generation of reeds and water plants on the banks surrounding the brook (particularly at the northern end of the brook).</li><li>Norilup Brook is also connected to Cowan Brook and Norilup Brook North with smaller tributaries identified to the east and west of the main brook. These areas have the potential to be impacted by water runoff from the site, particularly during extreme rain events.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Walking trails pass through the site.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>Evidence of disturbances to soils surface (Photo 65 and Photo 66) and disturbance to current water bodies (Photo 62 and Photo 66) are likely the result of historical mining activities</li></ul>		
Historical mining activity	<ul style="list-style-type: none"><li>No signs of historical mining activities.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No drums, waste or fill material identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. There are unsealed tracks present – with larger 4WD tracks present off Spring Gully road. There are also two walking trails, which traverse the site.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of the bushland. The banks of the gully are predominantly sandy with some aquatic plants present.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No groundwater abstraction was identified onsite during the site inspection, groundwater abstraction is noted to occur at neighbouring Mt Jones Dam. There is also one groundwater bore listed on the WIR database as occurring onsite (refer to Section 4.5.3).</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There was one waterbody identified during the site inspection. This waterbody appeared to be in good condition.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest, agricultural land, Mt Jones Dam.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The rehabilitated area is surrounded by state forest with the Mt Jones Dam located ~300 m north of this area. There is some agricultural land identified to the south of the site (~150 m south) and the land to the west is bounded by agricultural land. The brook also feeds into other waterbodies within the area (as mentioned above). There were no other sensitive receptors identified within 500 m of the area.</li></ul>		

7.19 Norilup Brook North







Table 7-17 Norilup Brook North Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): NBN12, NBN22	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Restricted site access due to its proximity to Mt Jones Dam (which has historically been used by the Water Authority as a source for Greenbushes town water supply).</li><li>4WD access to the north section of the site is via Spring Gully road.</li><li>The site does not appear to be frequently accessed, with the exception of the walking path.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>This site connects to Norilup Brook in the south and receives water derived from spring gully and drainage from Mount Jones.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There are walking trails, which occur onsite.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Evidence of cleared areas and artificial disturbance to current water bodies/channels (Photo 68 and Photo 69) are likely the result of historical mining activities</li></ul>	Photo 66: Norilup Brook North – Mount Jones Dam Feed Input	Photo 67: Norilup Brook North – Mount Jones Dam Upstream End
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No visible signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No drums, waste or fill material identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. There are unsealed tracks present – with larger 4WD tracks present off Spring Gully road. There are also two walking trails, which traverse the site.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of the bushland. The banks of the gully are predominantly sandy.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>	Photo 68: Norilup Brook North – Mount Jones Dam Upper Reaches	
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No groundwater abstraction was identified onsite, groundwater abstraction is noted to occur at neighbouring Mt Jones Dam.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There was one waterbody identified during the site inspection. No evidence of impacts were observed in the water body</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest, agricultural land, Mt Jones Dam.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The rehabilitated area is surrounded by state forest with the Mt Jones Dam located ~150 m north west of this area. There is some agricultural land identified to the to the west of this area (~500 m away). The brook also feeds into Norilup Brook. There were no other sensitive receptors identified within 500 m of the area.</li></ul>		



7.20 Salt Water Gully






Table 7-18 - Salt Water Gully Site Inspection Notes

Site Inspection Date: 8 May 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): SWG15, SWG16, SWG17, SWG18, SWG19	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access? - Frequency?	<ul style="list-style-type: none"><li>Site accessible by foot.</li><li>Thick shrub land surrounding the water body and established bushland is apparent within this area.</li><li>Does not appear to be frequently accessed as there are no obvious trails or paths through the area.</li><li>Boundary fencing around nearby property apparent at the southern section of the gully.</li><li>The southwest freeway is located to the east of this area.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>Gradual decline to the water bodies which are located in the southern and northern sections of the site.</li><li>The area is relatively flat.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>Numerous waterbodies were apparent onsite during the inspection, which occupied the length of the gully.</li><li>The rehabilitation area lies within a gully and therefore is unlikely to cause large scale flooding into neighbouring properties.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>According to site contact this area has been used for camping and is a known local marron spot.</li></ul>	Photo 69: Salt Water Gully	Photo 70: Salt Water Gully
Visible signs of contamination	<ul style="list-style-type: none"><li>No visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Evidence of sparse vegetation and artificial disturbance to current water bodies/channels (Photo 70 and Photo 75) are likely the result of historical mining activities</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No signs of drums, waste or fill material.</li></ul>	Photo 71: Salt Water Gully	Photo 72: Salt Water Gully
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No onsite buildings</li><li>Access to the site is via Catterick road, which is located off the South Western Highway.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface – mostly bushland with leaf litter covering over the floor.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No signs of groundwater use or abstraction onsite. The surface water supports the ecology of the gully/creek</li></ul>	Photo 73: Salt Water Gully	Photo 74: Salt Water Gully
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>The numerous water bodies did not have any evidence of impacts, visual or olfactory.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>Agricultural, state forest and mining.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>Possibly residents of farmland to the east of the site, although the buildings on this lot are not located within 500 m of the site boundary.</li></ul>		



7.21 Scandanavian Gully







Table 7-19 Scandanavian Gully Site Inspection Notes

Site Inspection Date: 8 May 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): SG19	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>This site is accessible by foot from an unsealed 4WD track, which extends from Stanifer Street. The southwest highway is located within 200 m north of the site.</li><li>This site does not appear to be frequently accessed, however has been noted to be positioned at a junction between the mine site and the town power supply.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The topography of this site is predominantly flat and slopes slightly to the north east. There is one small surface water body present onsite.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>The site slopes slightly to the north east, therefore surface water drainage would like to flow in that direction. However, the surface water body present onsite appears to have quite steep embankments present (elevated approximately 2 m above surface water level). Therefore flooding from this waterbody into neighbouring properties is considered unlikely.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There were no current site activities identified for this site.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Some signs of historical mining practices occurring onsite, particularly evidence of historical groundwork activities (e.g. excavations).</li></ul>	Photo 75: Scandanavian Gully	Photo 76: Scandanavian Gully
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No visible signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No identified drums, waste or fill material identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings or site infrastructure identified onsite. The access road to the site is an unsealed dirt road which appears to be in good condition.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No aesthetic issues apart from some evidence of historical groundworks onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site surface is unsealed and predominantly consisting of sandy soils.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was some illegal dumping of car parts identified to the south east of the site.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no evidence of local use of groundwater or surface water onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There was one water body identified onsite, no evidence of impacts were noted (visual/olfactory).</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>With the exception of the State forest, there were no receptors identified within 500 m of the site boundary.</li></ul>	Photo 79: Scandanavian Gully	






## 7.22 Southampton West

### Table 7-20 Southhampton West Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Southhampton West is accessible to the south of Spring Gully Road, which is an unsealed road, which runs along the north of the site.</li></ul>	<div></div> <div></div>	
Topography and other site features	<ul style="list-style-type: none"><li>The site slopes slightly to the north east and is situated at an elevation of between 260-270 m AHD.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>Based on the topography of the site it is likely that surface drainage will flow to the north east of the site likely into the dam located in this location.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There were no current site activities identified during the site inspection.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination identified during the inspection.</li></ul>	<div></div> <div></div>	
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Areas of sparse vegetation (Photo 81, Photo 82, Photo 83 and Photo 84) and disturbed surface soils were noted (Photo 81 and Photo 82)</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There were no visible signs of vegetation stress during the site inspection.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill material identified during the site inspection.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or infrastructure identified onsite during the site inspection.</li></ul>	<div></div>	
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite during the site inspection.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site surface is unsealed and predominantly consisting of sandy soils.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was some illegal dumping of car parts identified to the south east of the site.</li></ul>	<div></div>	
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no evidence of local use of groundwater or surface water onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no waterbodies identified onsite during the inspection.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest to the south and west of the site, one dam located to the east of the rehabilitated area and one more approximately 250 m to the north.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>With the exception of the State Forest and the two dams located within 500 m of the site, there were no receptors identified within 500 m of the site boundary.</li></ul>		

7.23 Spring Gully



Table 7-21 Spring Gully Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): SP20	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>This site is accessible via foot with the nearest 4WD track connected to Spring Gully road providing access to the south east portion of the site.</li><li>The site does not appear to be frequently accessed (with the exception of Greenbushes walking trail) due to the dense shrubbery identified throughout most of the site during the inspection (which restricted access).</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>This site appears to be relatively flat with the exception of the southern portion of the site, which appears to increase by up to approximately 10 m in elevation. This portion of the site extends out of Spring Gully. The elevation of the banks increases between approximately 0.5 - 2 m out of the gully area.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>Drainage onsite would likely flow into the gully region and nearby shallow water bodies. It is unlikely that flooding into neighbouring areas would occur.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Greenbushes loop walking trail crosses through a portion of this site.</li><li>Old access roads to the site have been closed off.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>Iron staining was identified at the foot of Swenkies Dam (eastern areas of the Site). This area was not able to be accessed during the site inspection (see Photo 88).</li></ul>	Photo 85: Spring Gully	Photo 86: Spring Gully
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Some ground disturbance was noted on the banks of the gully (sandy material/probably tailings)</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>No signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>No drums, waste or fill material identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>No buildings present onsite. There are unsealed tracks present – with larger 4WD tracks providing access to the southern section of the site and walking trails present throughout.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>No signs of any aesthetic issues other than the iron staining within the surface water at the foot of Swenkies Dam (eastern areas of the Site)</li></ul>	Photo 87: Spring Gully	
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>Unsealed surface –sandy soils with leaf litter covering the floor of bushland.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>No stockpiled materials present.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No signs of illegal occupation or dumping.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No groundwater abstraction was identified onsite.</li></ul>		
Presence and condition of water bodies/gw bores	<ul style="list-style-type: none"><li>There was one waterbody identified during the site inspection which exhibited iron staining.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State Forest, Swenkies dam is positioned on the eastern boundary of this site.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The rehabilitated area is surrounded by state forest, with the Swenkies dam located to the east of the area. There are no other sensitive receptors positioned within 500 m of this site. Spring Gully discharges into the Norilup Brook and downstream receiving dams.</li></ul>		











7.24 Swenkies

Table 7-22 Swenkies Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Swenkies is accessed via unsealed Spring Gully road, which is located to the south of the site.</li><li>This site does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat with a slight decrease in elevation noted to the south of the site.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>It is believed that surface water runoff would be in a south westerly direction. The dam is the nearest surface water location to the site approximately 300 m west of the rehabilitation area.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>The Greenbushes loop (walking trail) passes through this area.</li><li>There were no other current site activities identified onsite.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination; however, this area has historically used to house gravel and tailings stockpiles.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Evidence of cleared land and baron soils (coarse sands or gravels, which are the remnant of mineral processing activities onsite) are signs of historical mining activities within this area (Photo 90 and Photo 91).</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>Evidence of clearing was prevalent with sparse vegetation coverage noted onsite.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste of fill materials identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings or infrastructure identified onsite.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no odours or additional aesthetic issues identified onsite (apart from the cleared land detailed above).</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site comprises of an unsealed surface, which is comprised of coarse sand and gravels.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiles of materials identified during the site inspection, however tailings and gravels have historically been stockpiled onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal dumping or occupation identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no groundwater use identified onsite and no surface water bodies were present during the site inspection.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no waterbodies or groundwater bores identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>The surrounding land use is predominantly that of native bushland, however a dam is located to the west of the site and Swimming Pool rehabilitation area is located along the northeastern boundary of this site. Swimming Pool west is located to the north west of the property.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>Apart from the Swimming Pool location which is used by the general public for recreational purposes, and the dam located to the south east, there are no sensitive receptors identified within 500 m of the site.</li></ul>		
		Photo 88: Swenkies	Photo 89: Swenkies

7.25 Swenkies Dam




Table 7-23 Swenkies Dam Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): SD23	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Swenkies is accessed via unsealed Spring Gully road, which is located to the east and south of the site.</li><li>This site is a publically accessible show case rehabilitated wetland, but does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat at an elevation of approximately 250 m AHD. The dam onsite is situated between two earth walls, the dam wall has been buttressed with hardrock.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>The dam present onsite is likely to receive surrounding surface water run off from the north and south of the site based on the surrounding topography. The dam water levels are controlled via a pill way to limit the flooding potential.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>The Greenbushes loop walking trail passes through this area. It is also known for recreational activities including fishing, motor biking, boating and camping.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There was signs of iron staining within the surface water drainage.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Some cleared vegetation and iron staining to the east of the site. The sand onsite is very coarse with gravels , which is indicative of historical mining practices. There were no other visible signs of historical mining activities onsite.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>Apart from the cleared area onsite, there were no visible signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or site infrastructure present onsite.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site comprises of an unsealed surface, which is comprised of coarse sand and gravels. The portion of the site covered in bushland also has leaf litter covering the floor.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal occupation or dumping identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>The surface water is used recreational activities as identified in the “current site activities” section. It has also been identified that this site forms part of the catchment for Mt Jones Dam which is used by the Water Authority to supplement the Greenbushes town water supply. There were no groundwater bores identified onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>The water body onsite appears to be in good condition. There were no groundwater bores identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>State forest, the dam onsite is used to supplement the Greenbushes town water supply.</li></ul>		





7.26 Swimming Pool-

Table 7-24 Swimming Pool Site Inspection Notes

Site Inspection Date: 20 March 2018	Waterbody onsite? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No	Sample ID (if applicable): SW09	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>Site access via 4WD track located off Maranup Ford Road or Spring Gully Road.</li><li>This site appears to be accessed by the public quite frequently for swimming, fishing, camping, motorbike activities and boating.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site slopes to the south and is situated at an elevation of approximately 270 m AHD. This site appears to have a central gully and possibly seasonal shallow water bodies, noted by Talison to be contoured and stable.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>The site is likely to drain down slope to the south, and discharge into Greenbushes Pool (recreational use).</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>Recreational uses, including swimming, camping, fishing, boating, motorbike activities.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination noted onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>Evidence of very old mine workings/excavations onsite, with shallow rocks and a water source believed to be used for mining purposes in the early 1900s.</li><li>According to the information signage onsite, this area was used as a tin dredge, which operated in the creeks and waterways along Spring Gully. This pool was the centre of the Greenbushes tin mining operation from the late 1800s to the early 1900s.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>There were no visible signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill material identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings identified onsite. The road to the site is an unsealed dirt road, which is in good condition.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site surface is comprised predominantly of unsealed sandy soil.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal occupation or illegal dumping occurring onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There is no evidence of local use of the groundwater or surface water.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>According to the site contact, seasonal waterways occur onsite – however, these were not present at the time of inspection.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest bounds this site to the north, west and south. There are residential properties located within 150 m to the east of the rehabilitation area.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>Residential receptors are located to the east of the area. The nearest properties to this area are located on Spring Gully road and Diorite Street.</li></ul>		
		Photo 96: Swimming Pool	Photo 97: Swimming Pool
			
		Photo 98: Swimming Pool	

7.27 Swimming Pool West




Table 7-25 Swimming Pool West Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>This site is accessible via unsealed 4WD track located north from Spring Gully Road. There is no fencing onsite and it does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat at an elevation of around 270 m AHD.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>The site would likely drain into Swenkies dam which is located within 250 m south of the site. The topography to the south of the site slopes slightly to around 250 m AHD at the dam. There are no surface water bodies onsite.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>This area is known as a recreational area with the old Greenbushes Swimming pool noted by Talison to be present at the south-eastern corner of this block. This has been used for swimming, fishing, camping and boating. However, there were no waterbodies present during the site inspection.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>There are sections of sparse potentially cleared vegetation, apart from this there were no obvious signs of historical mining activities.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>Apart from the areas with reduced vegetation, there were no signs of vegetation stress present onsite.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials identified onsite.</li></ul>		
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or site infrastructure identified onsite.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site surface is comprised predominantly of unsealed sandy soil with leaf litter and moss covering most of the site floor.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal dumping or illegal occupation identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There was no surface water or groundwater abstraction bores identified onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no water bodies or groundwater bores identified onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>The site is surrounded by State Forest (west and east), Gibney Gully (north), Swenkies (southeast), and Swenkies dam (south).</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The dam is located within 250 m south of the site. The state forest also boards the site to the east and west.</li></ul>		
		Photo 99: Swimming Pool West	Photo 100: Swimming Pool West



7.28 Teddy Boy







Table 7-26 Teddy Boy Site Inspection Notes

Site Inspection Date: 5 July 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>The site is accessible via dirt 4WD tracks located off Forest Park Avenue and Perry Road, west of the South Western Highway.</li><li>The site does not appear to be frequently accessed and no fencing was observed during the site inspection.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site slopes slightly to the north but is predominantly flat.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>The surface drainage offsite would likely be down slope to the north.</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There were no current site activities identified for this site.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There were no visible signs of contamination present onsite.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>The site appears to be sparsely vegetated with coarse politic soils,gravels and clays which are inferred be indicative of historical mining practices onsite.</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>The vegetation onsite is sparse in areas, however there was no other obvious signs of vegetation stress.</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There were no drums, waste or fill materials identified onsite.</li></ul>	Photo 101: Teddy Boy	Photo 102: Teddy Boy
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings, roads or site infrastructure identified onsite.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>There were no aesthetic issues identified onsite.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site surface is comprised predominantly of unsealed sandy soil with leaf litter or shrubs covering sections of the site floor.</li></ul>		
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials identified onsite.</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>There was no illegal occupation or dumping identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>There were no water bores present onsite. There was a large puddle identified (as shown in the photolog), however this is likely resulting from the recent rainfall and does not appear to be frequently present onsite. Based on these observations there was no local use of groundwater or surface water onsite.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>The puddle appeared turbid, likely due to underlying fine soils dissolving into the water. There were no obvious concerns about this surface water observed onsite. There was no other water bodies or groundwater abstraction bores identified onsite.</li></ul>	Photo 103: Teddy Boy	
Surrounding land uses	<ul style="list-style-type: none"><li>State Forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>State Forest.</li></ul>		



7.29 White Well

Table 7-27 White Well Site Inspection Notes

Site Inspection Date: 8 May 2018	Waterbody onsite? <input type="checkbox"/> Yes / <input checked="" type="checkbox"/> No	Sample ID (if applicable): -	
Criteria	Comments	Site Photos	
Site Access (i.e. tracks, fencing)  - Evidence of access?  Frequency?	<ul style="list-style-type: none"><li>This site is accessible via unsealed 4WD tracks, which are located off Forest Park Ave or Perry Road. The site does not appear to be frequently accessed.</li></ul>		
Topography and other site features	<ul style="list-style-type: none"><li>The site is predominantly flat.</li></ul>		
Flood potential, surface drainage, water bodies	<ul style="list-style-type: none"><li>There were no surface water bodies identified onsite..</li></ul>		
Current site activities	<ul style="list-style-type: none"><li>There are no known current site activities for White Well.</li></ul>		
Visible signs of contamination	<ul style="list-style-type: none"><li>There are no visible signs of contamination.</li></ul>		
Historical mining activity and visible signs of historical mining activities	<ul style="list-style-type: none"><li>There is evidence of reworked sandy, clays soils which appear as rehabilitated onsite with (Photo 109).</li></ul>		
Visible signs of vegetation stress	<ul style="list-style-type: none"><li>The area consists predominantly of very established bushland, with the exception of the sparse areas of disturbed soil (located off the main access road to site)</li></ul>		
Presence of drums, waste and/or fill material	<ul style="list-style-type: none"><li>There is no evidence of drums or waste, soils appear to comprise reworked/rehabilitated fill material (believed to originate onsite)</li></ul>	Photo 104: White Well	Photo 105: White Well
Presence, type and conditions of buildings, road or site infrastructure	<ul style="list-style-type: none"><li>There were no buildings present onsite. The access road to the site is an unsealed dirt road, which appears to be in good condition.</li></ul>		
Aesthetic Issues (e.g. presence/intensity of odours)	<ul style="list-style-type: none"><li>The only aesthetic issue onsite is the sparse area of pisolitic soils identified to the side of the access road, which remains void of vegetation, which appears rehabilitated.</li></ul>		
Nature of site surface (sealed, unsealed, integrity of the seal)	<ul style="list-style-type: none"><li>The site surface is unsealed, comprising predominantly of sandy clay soils.</li></ul>	Photo 106: White Well	Photo 107: White Well
Presence, location and types of stockpiles materials	<ul style="list-style-type: none"><li>There were no stockpiled materials present onsite, with the</li></ul>		
Illegal occupation and illegal dumping potential	<ul style="list-style-type: none"><li>No illegal occupation or illegal dumping activities were identified onsite.</li></ul>		
Local use of ground/surface waters and evidence of groundwater bores/surface water abstraction	<ul style="list-style-type: none"><li>No use of groundwater or surface water was identified onsite. There was no evidence of groundwater abstractions bores within this area.</li></ul>		
Presence and condition of water bodies/groundwater bores	<ul style="list-style-type: none"><li>There were no waterbodies or groundwater abstraction bores present onsite.</li></ul>		
Surrounding land uses	<ul style="list-style-type: none"><li>State forest.</li></ul>		
Location of receptors on and within 500 m of site boundary including sensitive receptors	<ul style="list-style-type: none"><li>The site is surrounded by state forest, there are no other receptors (sensitive or otherwise) within 500 m of the site boundary.</li></ul>	Photo 108: White Well	Photo 109: White Well

## 8. Surface Water Sampling Results

The results obtained from the limited surface water sampling program undertaken throughout the site inspection program are presented in the following sections along with a preliminary risk assessment in comparison to appropriate assessment guideline levels.

As indicated within the hydrogeology background Section 4.5.1, there is sufficient evidence to suggest that majority of the large surface water features observed on the former rehabilitated mine areas are hydraulically connected to the shallow aquifer. In addition to this, the water bodies will also receive direct rainfall and overland runoff from the soil surface during high rainfall events.

Given the above, it is expected that sampling the surface water (if present on site) which also reflects the discharging groundwater conditions (in most instances), is considered an appropriate means of characterising potential sources and pathways related to both the surface water and groundwater.

It should be noted that the sampling event is limited in terms of its sample density (i.e. one sample per surface water body) and was undertaken across one event only (early - mid winter) therefore the interpretation and reliance on the results needs to be cognitive of these limitations.

### 8.1 Field results

The field water quality results obtained during the site inspections and sampling event are summarised in Table 8-1.

Table 8-1 Field Results

Historical Site	Temperature (°C)	DO (%)	TDS (mg/L)	pH	ORP (mV)
<b>New Zealand Gully</b>					
NZ01	15.3	71	398	5.72	190
NZ02	15.7	78	440	6.22	125
NZ03	15.3	74	110	6.38	166
NZ04	19.1	75	566	6.77	114
NZ05	16.4	87	543	7.27	139
NZ06	15.0	81	415	3.80	348
NZ07	17.3	82	280	6.03	230
<b>Dumpling Gully</b>					
DG08	21.2	110	318	7.38	196
<b>Charnley West</b>					
CW09	17.5	87	74	7.82	159
<b>Norilup Brook</b>					
NB10	17.3	93	892	7.36	174
<b>Mount Jones</b>					

Historical Site	Temperature (°C)	DO (%)	TDS (mg/L)	pH	ORP (mV)
MJ11	18.2	93	195	7.54	150
Norilup Brook North					
NBN12	18.1	94	385	7.49	155
Cowan Brook					
CB13	14.9	79	1161	7.13	70
Carters Farm North					
CFN14	17.4	98	214	7.79	112
Salt Water Gully					
SWG16	12.0	73	870	7.47	69
SWG17	11.9	68	842	7.46	86
SWG18	12.2	78	910	7.21	102
Scandinavian Gully					
SG19	14.4	69	180	7.51	95
Spring Gully					
SP20	17.1	81	633	7.09	37

## 8.2 Analytical results

The surface water sample analytical results have been provided in Appendix H, and summarised in Table 8-2 below.

Table 8-2 Analytical results summary table

Historical Site/Sample ID	TRH (µg/L) (C10-C36 Sum of Total)	Cu (total) (mg/L)	As (mg/L) filtered	Cd (mg/L) filtered	Cs (µg/L) filtered	Li (mg/L) filtered	Ni (mg/L) filtered	Zn (mg/L) filtered	Nitrogen (total) (mg/L)	Ammonia as N (mg/L)	Other metals (Sb, Bi, Cr, Pb, Hg, Mo, Se, Ag, Sn)
New Zealand Gully											
NZ01	<50	<0.001	0.002	<0.0001	<1	0.043	<0.001	0.056	0.3	0.02	<LOR
NZ02	<50	<0.001	0.002	<0.0001	<1	0.023	<0.001	0.087	0.7	0.18	<LOR
NZ03	<50	<0.001	<0.001	<0.0001	<1	0.001	<0.001	0.068	0.4	0.03	<LOR
NZ04	<50	<0.001	0.003	<0.0001	<1	0.001	<0.001	0.072	1.8	0.43	<LOR
NZ05	<50	<0.001	0.002	<0.0001	<1	0.043	<0.001	0.043	0.4	0.02	<LOR
NZ06	<50	<0.001	<0.001	0.0001	1	0.038	0.016	0.076	9.6	9.86	<LOR
NZ07	<50	<0.001	<0.001	<0.0001	<1	0.025	<0.001	0.050	0.04	0.05	<LOR
Dumpling Gully											
DG08	<50	<0.001	<0.001	<0.0001	<1	0.011	<0.001	0.050	0.4	0.02	<LOR
Charnley West											
CW09	<50	0.004	<0.001	<0.0001	<1	<0.001	<0.001	0.047	0.4	0.01	<LOR
Norilup Brook											
NB10	<100	<0.001	<0.001	<0.0001	2	0.299	<0.001	0.048	0.6	0.03	<LOR
Mount Jones											
MJ11	<100	<0.001	<0.001	<0.0001	<1	0.002	<0.001	0.104	1.4	0.48	<LOR
Norilup Brook North											

Historical Site/Sample ID	TRH (µg/L) (C10-C36 Sum of Total)	Cu (total) (mg/L)	As (mg/L) filtered	Cd (mg/L) filtered	Cs (µg/L) filtered	Li (mg/L) filtered	Ni (mg/L) filtered	Zn (mg/L) filtered	Nitrogen (total) (mg/L)	Ammonia as N (mg/L)	Other metals (Sb, Bi, Cr, Pb, Hg, Mo, Se, Ag, Sn)
NBN12	550*	<0.001	0.001	0.0004	<1	0.083	<0.001	0.020	0.6	0.02	<LOR
NBN22	<100	0.001	<0.001	<0.0002	-	0.046	<0.001	<0.005	0.3	0.04	<LOR
Cowan Brook											
CB13	<50	<0.001	0.001	0.0006	<1	1.07	<0.001	0.065	0.1	0.02	<LOR
Carters Farm North											
CFN14	<50	<0.001	<0.001	<0.0001	<1	0.003	<0.001	0.041	0.7	0.02	<LOR
Salt Water Gully											
SWG15	<50	0.001	<0.001	<0.0001	<1	0.003	<0.001	0.027	0.7	0.02	<LOR
SWG16	<50	<0.001	<0.001	<0.0001	<1	0.004	<0.001	0.037	0.7	0.06	<LOR
SWG17	<50	<0.001	0.002	<0.0001	11	0.954	0.010	0.085	1.2	0.40	<LOR
SWG18	<50	<0.001	0.002	<0.0001	16	0.911	0.004	0.037	1.7	0.69	<LOR
Scandinavian Gully											
SG19	<50	<0.001	<0.001	<0.0001	<1	0.022	<0.001	0.094	0.7	0.08	<LOR
Spring Gully											
SP20	<50	0.001	0.001	0.0002	1	0.131	0.001	0.047	0.9	0.08	<LOR
Charnley											
CH21	<100	0.002	0.001	<0.0002	-	<0.005	<0.001	<0.005	0.3	0.12	<LOR
Swenkies Dam											

Historical Site/Sample ID	TRH (µg/L) (C10-C36 Sum of Total)	Cu (total) (mg/L)	As (mg/L) filtered	Cd (mg/L) filtered	Cs (µg/L) filtered	Li (mg/L) filtered	Ni (mg/L) filtered	Zn (mg/L) filtered	Nitrogen (total) (mg/L)	Ammonia as N (mg/L)	Other metals (Sb, Bi, Cr, Pb, Hg, Mo, Se, Ag, Sn)
SD23	<100	<0.001	<0.001	<0.0002	-	0.94	0.001	<0.005	0.3	0.15	<LOR

Notes:

\*slight detection of TRH above LOR was noted in this sampling round but was resampled in a subsequent monitoring event and found to be below LOR. Considered to be an anomalous result due to the lack of other evidence to support TRH source/ presence.

### 8.3 Exceedances of Adopted Assessment Criteria

To provide a preliminary understanding of risk from the concentrations observed in the surface water sampling, GHD have compared the results to the following adopted assessment criteria:

- DER 2014 *Drinking Water Health Guideline*.
- DER 2014 *Fresh Water (95% species protection) Guideline*.
- DER 2014 *Domestic Non-potable Guideline*.
- CENRM (2014) *Site Specific Lithium Trigger Levels (2025/2026 levels)*.
- ANZECC 2000 *South West Australia Low Land River Guideline*.

A summary of the locations, which exceeded the adopted assessment criteria for the selected analytes has been provided in Table 8-3. The interpretation of the results within Table 8-3 are discussed on a site-specific basis within Section 10.



Table 8-3 Surface Water Exceedances of Adopted Criteria

Analyte	DER 2014 Drinking Water Health	DER 2014 Fresh Waters	DER 2014 Non-Potable Groundwater Use	CENRM Site Specific Lithium Trigger Levels (2025/2026 levels)	ANZECC 2000 South West Australia Low Land Rivers
Ammonia as N	-	-	MJ11, NZ04, NZ06, SWG17, SWG18	-	MJ11, NZ02, NZ04, NZ06, SWG17, SWG18, CH21, SD23
Nitrate as N	-	-	-	-	SWG17
Nitrogen (Total Oxidised as N)					SWG17
Nitrogen (total)	-	NZ06	-	-	SWG18, MJ11, NZ04, NZ06
Cadmium	-	CB13, NBN12	-	-	-
Cadmium (filtered)	-	CB13, NBN12	-	-	-
Copper	-	CW09	-	-	-
Nickel	-	NZ06	-	-	-
Nickel (filtered)	-	NZ06	-	-	-
Zinc	-	NZ01, NZ06	-	-	-
Zinc (filtered)	-	CB13, CFN14, CW09, DG08, MJ11, NB10, NBN12, NZ01, NZ02, NZ03, NZ04, NZ05, NZ06, NZ07, SWG16, SWG17, SWG18, SWG19, SWG20	-	-	-



## 9. Conceptual Site Model

The Conceptual Site Model (CSM) is a qualitative analysis tool which identifies the contamination sources, transport mechanisms, exposure pathways and receptors. A CSM was developed based on the findings from the investigation in order to identify potentially significant source-pathway-receptor linkages in respect of risks to the environment and human health based on the current landuse.

The CSM source, pathway and receptors have been described below and presented in generic schematically format in Figure I.1 and Figure I.2, Appendix I.

### 9.1 Potential sources derived through mining activities

#### *Orebody overview*

The following overview is based on the information contained within Section 5.2 together with discussion with the mine geologist (Daryl Baker) and a site walkover/observations undertaken by GHD 2018.

The ore body primarily occurs as secondary deposition in palaeo drainage and recent drainage lines within channels incised in the basement material, that are observed to typically range from 5 to 20 meters deep. Mineral deposition occurred as consequence of increased specific gravity of the minerals, the resistance to weathering, and the alluvial geomorphological setting. However, some primary lode mining also is noted (See notes on Cornwall Alluvial North in Table 5-1 and Section 5.2), which occurs within clay/weathered basement rocks (kaolinite).

The source of the alluvial style mineral deposits is inferred as derived from progressive weathering of the adjacent pegmatite orebody, which is currently exploited for lithium (and has notable concentrations of tantalum and tin minerals - not currently economic).

The alluvial deposition style precludes the occurrence of sulphides as mineralogical alteration. In addition, sulphides do not occur in the pegmatite orebody above trace amounts (GHD 2018a), and given the high weathering rate of sulphides, the persistence of sulphides within the alluvial setting is considered unlikely.

Primary lode mining is unlikely to have intersected sulphides, given the reports that clays were mined (see notes on Cornwall Alluvial North in Table 5-1) and that any sulphides are unlikely to have persisted in the weathered profile (if present in trace amounts).

#### *Historical Mining Methods Overview*

The historical information review has revealed site specific information for each of the 27 historical sites of interest.

Information gathered by PB (2007) suggests that mineral processing, exploitation and associated works are likely to be the only land use at the Site following the discovery of tin in 1886. The very first mining activities on the 27 sites of interest in this investigation where majority of the disturbance is expected to have occurred, are understood to have involved very labour intensive and involved manual ore recovery and processing methods with limited technological advancements at that time. The mining methods employed used were largely shaft mining, open cut, dredging and sluicing with some evidence of explosives used on some of the sites but generally involved manual digging and horse operated dredging. Methods of recovery historically documented at Greenbushes includes puddling and sluicing, ground sluicing, hydraulic sluicing, shaft sluicing and bucket dredging (Hiddlestone, 1989). It is widely

acknowledged that chemicals were not used, and not required during the historical mining practices (Talison Former Employee Survey, 2017)

Further mining (potentially for tin and tantalum minerals) is understood to have occurred in New Zealand Gully, Carters Farm and potentially other sites from around the 1970s to 1980s, using heavy machinery (Former Talison employee 2017, pers. comm.). The information relating to mining and mineral processing methods on these sites is not well understood. However, it is expected that fuel operated machinery and plant equipment was based on the Site. Therefore, the introduction of hydrocarbon based products into the geological profile through spills and storage and handling, cannot be excluded. Notwithstanding this, hydrocarbon-based product contamination is likely to have attenuated quite quickly in surface soils and surface water areas and is unlikely (if residual) to present a significant ecological or human health risk.

### Active Talison Mine Site Area

The current Greenbushes mining comprises open-pit mining using drill and blast methods, and load and haul to remove the hard rock, which is then subsequently crushed and processed. Extracted ore is processed through either a technical grade or chemical grade plant to produce a spodumene concentrate via predominantly gravity processing methods. Tailings from the mineral processing on the current minesite are discharged/stored into an above ground TSF.

The current mining operations have the potential to impact the those rehabilitated historical mining areas, which are considered to be located hydraulically down gradient of the mine site (See Section 9.5)

The contaminants of concern noted from the mine site (GHD 2018b); comprise dissolved lithium, arsenic, and nutrients and sulphate. These potential contaminants are within the water circuit of the wider site which comprises waters and seepage collected and distributed between the TSFs, waste rock dumps and storage holding dams (e.g. Cowan Dam and Southhampton/Austins dam), as presented in Figure 1. Impacts may occur where seepage from the water circuit (e.g, storage holding dams) discharges into the rehabilitated areas.

## 9.2 Rationalised sources of potential contamination

On the basis of information presented in the investigation, all of the rehabilitation sites present similar potential sources of contamination given the common use for historical mining of either tin, lithium, tantalum with similar ore recovery and processing. The main difference between the sites is to the extent mining that was undertaken and the level of infrastructure and machinery used at that particular site.

Based on the information presented in Section 9.1, the following Table 9-1 presents the potential sources of contamination at the rehabilitated areas.

Table 9-1 Rationalised Contamination Issues of Concern and Justification

Potential Sources of Contamination	Rationalised Primary Contaminants of Concern	Rationale for CoPCs
Mining/ processing machinery and infrastructure – emissions	Hydrocarbon and petroleum based products (primarily diesel), greases, explosive residuals (generally nitrogen	During historical mining activities, gravity (hydraulic) separation was generally employed to concentrate minerals. Chemicals were not reported as being used. Hydrocarbon impacts associated with machinery and vehicles (particularly relating to the more recent mining efforts in 70s/80s) although not observed

	based aromatic compounds)	through site observations and water sampling results – cannot be excluded at this stage.  Evidence of explosive use was identified in select historical sites where deeper excavations (open cut) and shaft mining was undertaken. Residual chemicals/ by-products may exist on some of the sites.
Residual tailings, slime dams, mined areas (open cut, shafts, river beds) and processed tailings	Metals/metalloids – primarily Li, As, metal oxides	Residual metals (i.e. not selectively mined) are considered a potential source associated with the ground disturbance and the mineralised setting of the area.  The geological setting precludes any association with sulphides and as a consequence, acidic drainage derived from tailings, overburden or exposed mine areas is considered unlikely.
Seepage derived from current mining activities (sites considered down-gradient of mine impacts)	Metals – primarily Li and As, nutrients and sulphate.	A small number of areas in hydraulic connection with the active mine site are at risk of receiving impacted groundwater seepage and surface water from the dams Cowan Brook, Southampton, and Floyds waste rock dump where the CoCs have been detected in these source waters.

Given the high accessibility of majority of the sites and their proximity to the townsite, main highway, adjacent farmland and demonstrated recreational use, there is a potential for contamination to be introduced through illegal dumping of rubbish. However, the information obtained through the investigation did not substantiate this concern.

### 9.3 Contamination Migration Pathways

The main contamination pathways are considered to include:

#### Surface water

- Onsite: it is understood that large quantities of water were used during the mining and processing techniques employed on these sites historically. As a result of this coupled with being a high rainfall area it is expected that contaminants that were potentially spilt, discharged or liberated through the mining processes onsite are likely to migrate overland (runoff) into adjacent water bodies/voids and watercourses.
- Offsite: Contamination may enter the sites through up-gradient impacted surface water flows and/or seepage through dam walls.

#### Groundwater

- Onsite: Infiltration, seepage and leaching of contaminants from the soil surfaces and sediments in water bodies into the underlying soil profile and potentially the shallow unconfined groundwater.
- Offsite: Contamination may enter the sites through up-gradient and/or migration of impacted groundwater flow onto the site. Groundwater is understood to be in hydraulic connection with majority of the surface water expressions on the sites.

## 9.4 Potential Receptors and Exposure Pathways

Based on a review of the surrounding land uses and current activities at the Site, potential human and environmental receptors that may be affected by onsite contamination within the vicinity of the sites includes the following:

### *Ecological Receptors*

- Fresh water receptors (rivers, creeks, tributaries etc.) and exposure to aquatic ecology in those water bodies.
- Groundwater discharging to the freshwater environment.
- Terrestrial ecology (flora and fauna) through direct uptake and direct contact/ ingestion.

### *Human Receptors*

- General public and users of these areas for recreational purposes e.g. bush walking, camping, swimming etc. Exposure through direct contact and ingestion of potentially contaminated soils and surface waters.
- Workers from DBCA and Talison (who monitor the rehabilitation of the sites) and workers from the local golf course and water corporation (certain sites where water is abstracted) and the Shire (where managed campsites exist). Exposure through direct contact and ingestion of potentially contaminated soils and surface waters.
- Users of registered (and unregistered) groundwater bores within the area (including workers and visitors who may come into contact with abstracted groundwater).
- Ingestion of aquatic macro fauna through fishing (with potentially accumulated levels of metals) from fresh water bodies throughout the site.

## 9.5 CSM Linkages – Generic Model

The source, pathway, receptors and potential linkages have been presented in generic schematically format in the CSM as Figure I.1 and Figure I.2, in Appendix I, with the CSMs depicting two scenarios:

- Figure I.1: represents the sites that are considered up-gradient of the active Talison minesite and are not considered hydraulically connected (groundwater or surface water) and are therefore outside the influence of the current mining activities,
- Figure I.2: represents the sites that are considered down-gradient of the active Talison minesite and therefore are considered hydraulically connected (groundwater and/or surface water). As a result these sites may be potentially impacted by the current mine site activities. Based on the catchment boundaries, Figure 2 presents those sites, which may be potentially affected by the current mine site activities, and those sites, which are considered outside the influence of the current mining activities.

Table 9-2 shows, that based on the dividing line developed/estimated through topographical contours and groundwater flow directions, presented on Figure 2, the majority of the Sites to the north of the current mine site, should not be affected by any mining impacts derived from surface water or groundwater migration. Those areas, which are in direct hydraulic connection to the mine Site and which are situated to the south of the dividing line, are as follows:

Note: two rehabilitated areas, Margaret Lease and Southampton West located to the south of the dividing line, should not receive mine impacts, derived from groundwater or surface water given that the areas are topographically elevated.

Table 9-2 Rehabilitation areas and relationship to mine site catchment

Rehab. areas located up-gradient and outside of minesite catchment	Rehab. Areas within minesite catchment
Bishops	Cornwall 3
Boronia Gully	Cowan Brook
Carters Farm	Norilup Brook
Carters Farm North	Norilup Brook North
Charnley	Salt Water Gully
Charnley East (North)	Spring Gully
Charnley West	Swenkies Dam
Cornwall Alluvial North	Teddy Boy
Dumpling Gully	White Well
Gibney Gully	
Margaret Lease	
Mount Jones	
New Zealand Gully	
Scandanavian Gully	
Southhampton West	
Swenkies	
Swimming Pool	
Swimming Pool West	

## 10. Qualitative risk assessment

GHD has prepared an overall qualitative risk assessment based on the information obtained in this investigation. The risk assessment for each site has been derived from the establishment of the actual perceived CSM scenario (based on the findings from the investigation) and then assigning risk ratings based on the perceived contamination risk (likelihood and consequence). The assessment relates to risks posed to onsite and offsite human receptors, ecological receptors/environmental values.

The risk ratings have been assigned based on the criteria outlined in the Risk Matrix provided in Appendix A. The Risk Matrix is an adaption from the Standards Australia/Standards New Zealand Standard Committee, AS/NZS ISO 31000:2009, *Risk Management-Principles and Guidelines*, November 2009. Multiple lines of evidence collected throughout the investigation in conjunction with the application of a degree of professional judgement will be used to ascertain the correctly applied criteria in the Risk Matrix.

For a potential risk to exist and exposure to occur, all three components of the CSM, i.e. source, pathway and receptor must exist. Where there is insufficient information to confirm or deny a source, pathway and/or receptor; it may be difficult to assign a risk rating and therefore it may be proposed that targeted investigations should be undertaken to reduce/ remove the uncertainty.

The outcome from the qualitative risk assessment for each site is presented in Table 10-1 and Table 10-2.

Table 10-1 Qualitative risk assessment of sites considered up-gradient of the current Talison mine site process impacts

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
<b>Bishops (3.85 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"><li>Limited information on historical mining activities. Likely to be related to Bishop Gibney who partnered Greenbushes Development Co. in the early 1900s for Tin mining</li><li>Historical aerals show a largely vegetated site in 1969 with partial clearing/ disturbance evident in 1977 and almost full clearing /disturbance in the 1987 photograph.</li><li>Potential for re-mining to have occurred within the 1970s/1980s due to the increased disturbance observed on the aerial photographs</li></ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"><li>Located north-west of the current minesite. Adjoins Charnley West (to the north)</li><li>Surface soils are stable with no signs of recent erosion, vegetation appears healthy</li><li>Drainage channels evident on northern boundary– suspected old mine workings. Disturbed area of grey soils in the centre of site – also appears to be the result of former mining activities.</li><li>No surface water bodies observed onsite</li><li>No visible signs of contamination onsite</li><li>No evidence of illegal occupation or rubbish dumping</li><li>No evidence of groundwater or surface water use onsite</li></ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed desktop review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p>Some evidence of infrequent access by bikes and 4x4 users</p> <p>Bushwalkers entering the site</p> <p>Workers undertaking rehabilitation efforts/ monitoring (Talison and DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water body on Charnley West (north of the site)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source or significant receptors identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that the risk of significant contamination being present on the Bishops rehabilitation site is considered to be very low</p>	<p><b>Likelihood:</b> Possible</p> <p><b>Consequence:</b> Negligible</p> <p><b>Risk Rating:</b> <i>Very Low</i></p>
<b>Boronia Gully (8.60 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"><li>Information indicates this area was mined for Tin in the early 1900s with evidence that suggests onsite sluicing plant may have existed</li><li>Historical aerals show a largely vegetated site in the 1977 photograph with some minor disturbance in the north-western corner</li></ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"><li>Located a long way north-west of the current minesite</li><li>Area is generally flat with a narrow gully extending through the centre. Seasonle water body appears to be present (evident in aerial photograph but not during site inspection)</li><li>Banks of gully are stable and vegetated with no signs of recent erosion</li></ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed desktop review and onsite inspection.</p> <p>Remnant evidence of historical mentioned plant was not observed onsite through the site inspection. It is considered likely that majority of the site activity historically occurred in the north-western corner of the site where rehabilitation efforts are evident.</p>	<p>Some evidence of infrequent access by bikes and 4x4 users</p> <p>Bushwalkers entering the site (walk trails present)</p> <p>Aboriginal heritage significance</p> <p>Workers undertaking rehabilitation efforts/ monitoring (Talison and DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (down-stream)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water after rainfall events</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source or significant receptors identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that the risk of significant contamination being present on the Boronia Gully rehabilitation site is considered to be very low</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Negligible</p> <p><b>Risk Rating:</b> <i>Very Low</i></p>



Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>Thick shrub and native bushland present in healthy condition</li> <li>Disturbed area comprising a depression and clay materials - suspected to be related to old mine workings</li> <li>No visible signs of contamination onsite</li> <li>No evidence of illegal occupation or rubbish dumping</li> <li>No evidence of groundwater or surface water use onsite however three monitoring stations were identified through the desktop search (denoted for surface water monitoring purposes – no associated data was retrieved)</li> </ul>	Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities (if occurred)								
<b>Carters Farm (4.53 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>Limited information on historical mining activities found through the desktop review. However, anecdotal information (observed ground disturbance) suggests its likely that historical mining activities have been undertaken on the site.</li> <li>Historical aerials show a largely vegetated site in 1969 with partial clearing/ disturbance evident in 1977 and further clearing /disturbance in the 1987 photograph (only partial photo available). A highly disturbed (cleared area) to the south-east of the site was evident during the aerial photograph review.</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north of the current minesite. Golf course and agricultural land adjoin the area</li> <li>Surface soils are stable with no erosion observed. The site is relatively flat</li> <li>Vegetation is sparse but appears healthy</li> <li>No surface water bodies observed onsite</li> <li>No visible signs of contamination onsite</li> <li>No evidence of illegal occupation or rubbish dumping</li> <li>No evidence of groundwater or surface water use onsite</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p><u>Onsite:</u></p> <p>Some evidence of infrequent access by bikes and 4x4 users</p> <p>Bushwalkers entering the site (walk trails present)</p> <p>Workers accessing the site (Talison, DBCA, golf club)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (down-stream)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water after rainfall events</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no source or significant receptors identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that the risk of significant contamination being present on the Carters Farm site is considered to be very low</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Negligible</p> <p><b>Risk Rating:</b> <i>Very Low</i></p>
<b>Carters Farm North (7.28 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>Limited information on historical mining activities found through the desktop review. However, anecdotal information (observed ground disturbance) suggests its likely that historical mining activities have been undertaken on the site.</li> <li>Historical aerials show a largely vegetated site in 1969 with partial clearing/ disturbance in the north-western corner. Major clearing occurs in the 1977 photograph potentially</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining</p>	<p><u>Onsite:</u></p> <p>Some evidence of infrequent access by bikes and 4x4 users</p> <p>Bushwalkers entering the site (walk trails present)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in dam</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that the risk of significant</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Negligible</p> <p><b>Risk Rating:</b> <i>Very Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>indicating re-mining or possibly the dam construction (evident on site currently). The 1987 photograph is not clear</p> <ul style="list-style-type: none"> <li>Wide tracks/ roads entering the site from the north in the historical aerials and current aerials</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north/north-east of the current minesite. The local golf course is to the north-east of the site</li> <li>Surface soils are stable with no erosion observed. The site is relatively flat</li> <li>Vegetation is dense and appears very healthy</li> <li>A large man made dam with embankments and inflow channel was observed onsite holding water. It is understood to be used to irrigate the adjacent golf course. A pump house was observed. Visually the water quality looked good.</li> <li>A surface water sample collected from the dam indicated: pH of 7.79 and TDS of 214mg/L with CoPC concentrations marginally above or below the reporting limits with the exception of dissolved zinc which exceeded the fresh water guidelines (DER 2014).</li> <li>No visible signs of contamination onsite</li> <li>No evidence of illegal occupation or rubbish dumping</li> </ul>	activities and potential for hydrocarbon impacts as a result of more recent re-mining activities	<p>Workers accessing the site (Talison, DBCA, golf club)</p> <p><u>Offsite:</u></p> <p>Golf club workers and general public (surface water pumped and used for irrigation)</p>	Golf course – flora and fauna (surface water used for irrigation)		Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in dam			contamination being present on the Carters Farm North site is considered to be very low	
<b>Charnley (5.27 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>Limited information on historical mining activities found through the desktop review. However, anecdotal information (observed ground disturbance) suggests its likely that historical mining activities have been undertaken on the site.</li> <li>Historical aerials show the western portion of the site cleared in 1969 with complete clearing evident by 1977 potentially indicating re-mining of the site. Partial regrowth evident in the 1987 photograph.</li> <li>Wide tracks/ roads entering the site from the north and east in the historical aerials and current aerials (gravel road on northern boundary of site)</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north-west of the current minesite on the outskirts of Greenbushes townsite.</li> <li>Surface soils are stable with no erosion. The site is relatively flat</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p><u>Onsite:</u></p> <p>Given the site’s proximity to the townsite and evidence of buildings/ near the eastern boundary, access for the general public is considered unrestricted (even though signage indicates that no access allowed – private property).</p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Access by the owners of the land</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Golf course – flora and fauna (irrigated surface water)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in water body</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile and infiltration from the surface water body</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in water body</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely however given the proximity of the townsite and the land ownership model; the consequences are considered minor. This presents an overall assessed risk of low for the Charnley site.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> Low</p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"><li>- Vegetation is dense and appears relatively healthy other than a weed infestation noted in the north-western corner</li><li>- A surface water body is present in the north-eastern concern of the land parcel within the disturbed area in the eastern half of the land parcel</li><li>- A surface water sample collected from the dam indicated CoPC concentrations at or below the reporting limits and adopted assessment criteria</li><li>- No visible signs of contamination onsite</li><li>- No evidence of illegal occupation or rubbish dumping</li></ul>		Workers accessing the site for rehab efforts (Talison, DBCA)  Evidence suggest the golf club uses the onsite water body for water storage. Uncertain of actual water use							
<b>Charnley East (North)</b> <b>(7.57 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"><li>- Limited information on historical mining activities found through the desktop review.</li><li>- Historical aerals show the site vegetated in 1969 with no evidence of the current water body to the east. The 1977 photograph shows the site almost completely cleared and the water body is present to the east - potentially indicating re-mining of the site. Large excavations/ disturbances to the north of site evident</li><li>- The 1987 photograph shows a partially vegetated site with significant disturbance including what appears to be minor excavations in the south</li></ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"><li>- Located north-west of the current minesite on the outskirts of Greenbushes townsite immediately adjacent to the south-western highway</li><li>- Highly accessible site with tennis courts/ facilities to the north-west (offsite), proximity to highway and a building located on the south-eastern boundary</li><li>- Surface soils are stable with no erosion. The site is relatively flat and slopes to the north-west</li><li>- Vegetation is sparse but appears in healthy condition other than areas impacted by fire activity</li><li>- A surface water body is present immediately offsite to the east and is understood to have been built and used as a water supply for the historical mining activities. Water quality appeared visually ok.</li><li>- No visible signs of contamination onsite</li></ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p><u>Onsite:</u></p> <p>Given the site's proximity to the townsite and evidence of buildings/ near the eastern boundary, access for the general public is considered unrestricted (even though its understood to be private property).</p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Access by the owners of the land</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water body to the east of the site</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile and infiltration from the surface water body</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely given the nature of the mining expected to have been undertaken and give the expected infrequent access to the site; the consequences are considered minor. This presents an overall assessed risk of low for the Charnley Nth site.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	- No evidence of illegal occupation or rubbish dumping									
<b>Charnley West (11.78 ha)</b>	<u>Historical (desktop and anecdotal information)</u> <ul style="list-style-type: none"> <li>Limited information on historical mining activities found through the desktop review.</li> <li>Historical aerals show the site partially vegetated in 1969 with what appears to be depressions in the landscape. Progressive clearing is shown from the 1977 photograph to the 1987 photograph where the site almost completely cleared - potentially indicating more recent re-mining of the site</li> <li>The 1987 photograph shows a large open area to the north of the site which is present onsite today and appears to hold water during rainfall events</li> </ul> <u>Recent (site inspection, sampling and current aerial)</u> <ul style="list-style-type: none"> <li>Located north-west of the current minesite and adjoins Bishop rehabilitation site (to the north)</li> <li>Large areas of disturbance currently onsite - unvegetated. The areas appear to hold water and are considered excavated depressions. A large water body exists in the south-west corner of the site in addition to large open area to the north (offsite) which also holds water</li> <li>Surface soils are stable with no significant erosion observed. The site is relatively flat with depressions on the soils surface from disturbance activities</li> <li>Vegetation is relatively thick in most areas except for the heavy disturbance areas and water bodies.</li> <li>A surface water sample collected from the dam indicated: pH of 7.82 and TDS of 74mg/L with CoPC concentrations marginally above or below the reporting limits with the exception of dissolved zinc and copper which exceeded the fresh water guidelines (DER 2014).</li> <li>No visible signs of contamination onsite</li> <li>No evidence of illegal occupation or rubbish dumping</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<u>Onsite:</u>  Expected infrequent access by bike users, 4x4 users and bushwalkers  Workers accessing the site for rehab efforts (Talison, DBCA)	<u>Onsite:</u>  Onsite flora and fauna (terrestrial and aquatic)  Groundwater beneath the site  <u>Offsite:</u>  Water features to the north	<u>Onsite:</u>  Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in water body	Impacted stormwater runoff entering the nearby fresh water environment  Vertical migration of contaminants through the soil profile and infiltration from the surface water body  Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in water body	X	X	Unconfirmed source – pathway – receptor linkages (no significant source identified)  Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely however given the proximity of the townsite and the land ownership model; the consequences are considered minor. This presents an overall assessed risk of low for the Charnley west site.	<b>Likelihood:</b> Unlikely <b>Consequence:</b> Minor <b>Risk Rating:</b> <i>Low</i>
<b>Cornwall Alluvial North (0.01 ha)</b>	<u>Historical (desktop and anecdotal information)</u> <ul style="list-style-type: none"> <li>Historical information available on the site indicates it was owned by Vulcan Tin Mines and site activities involved tin mining using hydraulic sluicing refining activities.</li> <li>Historical aerals show a largely vegetated site in 1969 with partial clearing/ disturbance evident in 1977 (track on western side) and further clearing in 1987 (central area remains</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic,</p>	<u>Onsite:</u>  Expected infrequent access by bike users, 4x4 users and bushwalkers (does not appear to be frequently visited)	<u>Onsite:</u>  Onsite flora and fauna  Groundwater beneath the site  <u>Offsite:</u>	<u>Onsite:</u>  Exposure through dermal contact and/or ingestion of impacted soil/dust, standing	Impacted stormwater runoff entering the nearby fresh water environment  Vertical migration of contaminants	X	X	Unconfirmed source – pathway – receptor linkages (no significant source identified)  Multiple lines of evidence obtained through this investigation indicates	<b>Likelihood:</b> Unlikely <b>Consequence:</b> Negligible <b>Risk Rating:</b> <i>Very Low</i>



Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>undisturbed) - potentially indicating more recent re-mining of the site.</p> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located north of the current minesite and adjoins the south side of Scandinavian Gully</li> <li>- Site is relatively flat with a slope towards the south-west (where it appears to drain)</li> <li>- Surface soils are stable with no significant erosion observed other than obvious drainage channels</li> <li>- No visible signs of historical mining onsite other than some cemented gravel blocks observed</li> <li>- The vegetation is relatively thick and appears healthy</li> <li>- No water bodies were observed onsite</li> <li>- An above ground power line traverse the site (west side)</li> <li>- No visible signs of contamination onsite</li> <li>- No evidence of illegal occupation or rubbish dumping</li> </ul>	lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities	Workers accessing the site for rehab efforts (Talison, DBCA)	Surface water bodies offsite	water (following rainfall)	<p>through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>			that a significant contamination risk is considered unlikely and the consequences are considered negliible. This presents an overall assessed risk of very low for the Cornwall Alluvial North site.	
<b>Dumpling Gully</b> <b>(9.72 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- The former tin mine site was accessed from the 1890s and runs in a north-south direction. The mine was shallow across an approximate 2ha area with the deepest section around 20ft. Historical evidence of sinking and driving mining methods used on used (but abandoned)</li> <li>- Historical aerals show the site almost completely vegetated in the 1969 and 1977 photographs with partial clearing on the western and northern boundary evident in the 1987 photograph where the current water body lies</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located north-west of the current minesite</li> <li>- A large water body exists encompassing majority of the site by area. Water Corporation fencing was observed surrounding the water body suggesting that it may be a public drinking source or irrigation source.</li> <li>- A sports oval and complex was observed to the west of the site and may be the recipient of the water from Dumpling Gully</li> <li>- Surface soils are stable with no significant erosion observed. The site is relatively flat with depressions on the soils surface from disturbance activities</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities.</p> <p>There may also be a potential source of contaminants from explosive material residual used during suspected 'sink and drive' methods employed during historical mining onsite in the late 1890s</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users, bushwalkers and potentially kayakers and swimmers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA, water corp)</p> <p><u>Offsite:</u></p> <p>Evidence of water collection, protection and abstraction</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in water body</p> <p><u>Offsite:</u></p> <p>Use of surface water and/or groundwater for irrigation or drinking</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile and infiltration from the surface water body</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and standing water in water body</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor. This presents an overall assessed risk of low for the Dumpling Gully site.</p> <p>The use of the water source onsite should determine whether further and more extensive investigations are warranted</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>- In the areas outside of the water body the vegetation is relatively thick and appears healthy</li> <li>- A surface water sample collected from the dam indicated: pH of 7.38 and TDS of 318mg/L with CoPC concentrations marginally above or below the reporting limits with the exception of dissolved zinc which exceeded the fresh water guidelines (DER 2014). Water quality visually looked good.</li> <li>- No visible signs of contamination onsite</li> <li>- No evidence of illegal occupation or rubbish dumping</li> </ul>									
<b>Gibney Gully (17.51 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- Historically mined by Bishop Gibney who partnered Greenbushes Development Co. in early 1900s for Tin mining. Site comprises a long, this alluvium gully deposit</li> <li>- Historical aerals show a largely vegetated site in 1969 with partial clearing/ disturbance evident in 1977 and 1987 (eastern end only) - potentially associated with some more recent re-mining of the site.</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located north-west of the current minesite and adjoins the south side of Bishops</li> <li>- Site appears to drain towards the south-east as indicated by onsite drainage channels.</li> <li>- Surface soils are stable with no significant erosion observed other than obvious drainage channels</li> <li>- No obvious visible signs of historical mining and onsite and vegetation regrowth is evident across the site</li> <li>- The vegetation is relatively thick and appears healthy</li> <li>- No water bodies observed onsite</li> <li>- No visible signs of contamination onsite</li> <li>- No evidence of illegal occupation or rubbish dumping</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p>Some evidence of infrequent access by bikes and 4x4 users</p> <p>Bushwalkers entering the site</p> <p>Workers undertaking rehabilitation efforts/ monitoring (Talison and DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>	X	X	Unconfirmed source – pathway – receptor linkages (no significant source or significant receptors identified)	<p><b>Likelihood:</b> Possible</p> <p><b>Consequence:</b> Negligible</p> <p><b>Risk Rating:</b> <i>Very Low</i></p>
<b>Margaret Lease (1.15 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- Limited information is available on the actual historical mining activities that have occurred on this site</li> <li>- Historical aerals show the site almost completely cleared of vegetation in 1977 with some regrowth evident in the 1987 photograph but still void of vegetation in the centre of the site</li> <li>- It is understood that rehabilitation commenced in 2004</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p>	X	X	Unconfirmed source – pathway – receptor linkages (possible source up-gradient Southampton Dam)	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>- Located west of the current minesite and down-gradient of Southhampton West (albeit topographically elevated from the site)</li> <li>- No water bodies observed onsite and soils surface appears stable with no significant erosion observed.</li> <li>- The site is relatively flat with a slope towards the west</li> <li>- Vegetation is relatively sparse in most areas however appears to be healthy. The vegetation is patchy in areas that appear to have high disturbance through mining activities and soils appear sandy in nature</li> <li>- No visible signs of contamination onsite</li> </ul> <p>No evidence of illegal occupation or rubbish dumping</p>	activities and potential for hydrocarbon impacts as a result of more recent re-mining activities		Surface water bodies offsite (aquatic ecology)		Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water			and the consequences are considered minor. This presents an overall assessed risk of moderate for the Margaret Lease site.	
<b>Mount Jones (20.67 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- The site is understood to have housed plant that was owned by Vultan minerals. The ore was hauled back to the plant for processing. It is understood to be evidence of tailings onsite and may comprise the patchy areas of vegetation observed within the eastern portion of the site. There is limited information on the type of processing that occurred</li> <li>- Historical aerals show the site large vegetated in 1969 and then cleared in 1977 with partial revegetation on the eastern side of the site in the 1987 photograph</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located furthest west of the current minesite out of all the rehabilitation sites. Agricultural areas located to the west and the Norilup Brook located to the east</li> <li>- Site appears to drain towards the south-east with the steepest areas in the north-west corner</li> <li>- Surface soils are stable with no significant erosion observed</li> <li>- Visible signs of historical mining onsite through an excavated area in the south-west corner which currently holds water and the adjacent land near it to the wast which is sparsely vegetated and appears sandy</li> <li>- The vegetation is relatively thick and appears healthy with the exception of some areas in the east which are more sparsely vegetated (adjacent to the current water body)</li> <li>- A surface water sample collected from the dam indicated: pH of 7.54 and TDS of 195mg/L with CoPC concentrations marginally above or below the reporting limits with the exception of dissolved zinc which exceeded the fresh water</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p> <p>The agricultural land to the west/north-west may also provide a source of local nutrients (nitrogen etc)</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA, water corp)</p> <p><u>Offsite:</u></p> <p>Evidence of potential water abstraction for offsite use</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p> <p><u>Offsite:</u></p> <p>Potential offsite water use (i.e. ingestion, contact)</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor. This presents an overall assessed risk of low for the Mount Jones site.</p> <p>The use of the water source onsite should determine whether further and more extensive investigations are warranted</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>guidelines (DER 2014), ammonia which exceeded the NPUG and S-W FWG (ANZECC 2000) and total nitrogen which exceeded the S-W FWG (ANZECC 2000)</p> <ul style="list-style-type: none"><li>- No visible signs of contamination onsite</li><li>- No evidence of illegal occupation or rubbish dumping</li></ul>									
<b>New Zealand Gully (77.64 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"><li>- Mining of tin is understood to have occurred onsite in the late 1800s and early 1900s. Ore was dug in summer then dredged in winter by hand and horse. Resulted pits are evident across the site from the mining efforts which now hold water</li><li>- No chemicals were understood to have been used in the mining onsite but there is understood to be some plant used including sluicing plant, trommels and jig conveyors. There is also evidence of a former workshop identified through the historical research.</li><li>- Historical aerals show the site partially cleared in 1969 (predominately in the south, north and west in patches) and then cleared further in those areas in 1977 with almost complete clearing in the 1987 photograph. The depressions/ water bodies are evident in the photographs from 1977 onwards. The more recent disturbances observed are supported by anecdotal information that suggests the site was heavily re-mined in the 1970s/1980s.</li></ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"><li>- Located furthest north of the current minesite out of all the rehabilitation sites and is the largest by area</li><li>- Site is generally flat with excavations that extent approximately 1-5m lower than the surrounding land level. In total there are approximately 10 separated water bodies across the site (as per the recent aerial photograph. These features appear to be related to the historical mining activities</li><li>- Surface soils are stable with no significant erosion observed however extensive disturbance is evident</li><li>- The vegetation is relatively thick and appears healthy with the exception of some areas in the east which are more sparsely vegetated (adjacent to the current water body)</li><li>- Surface water samples were collected from seven of the water bodies onsite. The pH measurements ranged from 3.80 (NZ06 in the centre of the site) to 7.27 and were generally on</li></ul>	<p>Evidence of significant mining/ disturbance at the site historically and more recent (inside the past 40 years). As a result there is the potential for residual metals/metalloids (arsenic, lithium, metal oxides) and hydrocarbon impacts to be present within soils, sediment, surface water and groundwater</p> <p>Water sampling across the site (up to 10 water bodies observed) indicated slightly acidic to acidic conditions in some of water bodies and correspondingly metal detections were observed above limits of reporting. Ammonia( nitrogen) was also elevated in the water samples across the site – source unknown</p>	<p><u>Onsite:</u></p> <p>Given the size of the site, it is highly accessible however there was not a lot of evidence that suggested it was frequented</p> <p>Expected infrequent access by bike users, 4x4 users, bushwalkers and potentially kayakers and swimmers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA, water corp)</p> <p><u>Offsite:</u></p> <p>Evidence of potential water abstraction for offsite use</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site. Anecdotaly it is understood that the surface water bodies are hydraulically connected to groundwater (recharged by groundwater once pumped)</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p> <p>Groundwater offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p> <p><u>Offsite:</u></p> <p>Offsite water use (i.e. ingestion, contact)</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>	✓	✓	<p>Likely source – pathway – receptor linkages (human health and ecological linkage plausible)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered possible (low pH and some exceedances of CoPC noted in water bodies) and given the potential beneficial uses of the water onsite and the large accessible nature of the site; the consequences are considered moderate. This presents an overall assessed risk of moderate-high for the NZ Gully site.</p>	<p><b>Likelihood:</b> Likely</p> <p><b>Consequence:</b> Moderate</p> <p><b>Risk Rating:</b> Moderate-High</p>



Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>the slightly acidic side. TDS ranged from 110 mg/L to 566 mg/L.</p> <ul style="list-style-type: none"><li>- Concentrations of arsenic, lithium, nickel, zinc and ammonia were detected above the reporting limits in some or all of the water bodies sampled. The zinc and nickel (one recorded concentration) exceeded the fresh water guidelines (DER 2014) and ammonia concentrations exceeded the NPUG and fresh water guidelines (DER 2014 &amp; ANZECC 2000)</li><li>- No evidence of illegal occupation or rubbish dumping</li><li>- No evidence of the former workshop/ plant noted during site inspection</li></ul>									
<b>Scandinavian Gully (6.6 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"><li>- Mining of tin is understood to have occurred onsite in the late 1800s and early 1900s. Limited information on methods and volumes was available through the desktop review</li><li>- Historical aerals show the site vegetated in 1969, partially cleared in 1977 (predominately in the west and north in patches) and then cleared further in those areas by 1987 - potentially associated with some more recent re-mining of the site.</li></ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"><li>- Located north of the current minesite and adjoins Cornwall Alluvial North</li><li>- The site is generally flat with a slight slope to the north-east towards the only water body observed onsite. The surface water body was observed to have steep embankments which may indicate historical mining efforts on that area</li><li>- Surface soils are stable with no significant erosion observed</li><li>- The vegetation is relatively thick (slightly sparse in the north corner) and appears healthy</li><li>- A surface water sample collected from the water body and indicated: pH of 7.51 and TDS of 180mg/L with CoPC concentrations below the reporting limits with the exception of dissolved zinc and lithium.</li><li>- No evidence of illegal occupation was observed but there was some illegal dumping of car parts in the south of the site</li></ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers (does not appear to be frequently visited)</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor. This presents an overall assessed risk of low for the Scandinavian Gully site.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>
<b>Southampton West (7.46 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"><li>- Limited information on actual historical mining activities available</li></ul>	<p>Possible inferred sources of potential contamination concern evident through the</p>	<p><u>Onsite:</u></p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (possible source up-gradient Southampton Dam)</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>Historical aerals show the site vegetated in 1969 and then completely cleared of vegetation in the 1977 photograph. Some regrowth is evident in the 1987 photograph but still contains distinct tracks and areas of disturbance, particularly at the western and eastern ends of the land parcel</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located west of the current minesite and down-gradient of Southhampton Dam (eastern end of land parcel adjoins the edge of the dam) albeit topographically elevated</li> <li>No water bodies observed onsite and soils surface appears stable with no significant erosion observed</li> <li>The site is relatively flat with a slope towards the north-east</li> <li>Vegetation is relatively dense in the western half of the site whilst more sparse in the eastern end towards the Southhampton Dam. It appears to be in good health</li> <li>No visible signs of contamination onsite</li> </ul> <p>No evidence of illegal occupation or rubbish dumping</p>	<p>detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities.</p>	<p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (aquatic ecology)</p>	<p>of impacted soil/dust, standing water</p>	<p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>			Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered possible however the consequences are considered minor due to the lack of receptors. This presents an overall assessed risk of low for the Southhampton West site.	<b>Risk Rating:</b> <i>Low</i>
<b>Swenkies (14.48 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>From the limited amount of information available, it is understood that this area has been used for alluvial mining and a tailings storage area</li> <li>Historical aerals show the site is predominantly cleared in the 1969 – 1987 photographs with significant disturbance evident towards the south-eastern corner including what appears to be excavations and stockpiles.</li> <li>Significant earthworks are understood to have been undertaken prior to revegetation in 1996/97</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north-west of the current minesite and adjoins Swenkies Dam</li> <li>The site is generally flat with a slight slope towards the south (Swenkies Dam)</li> <li>No surface water bodies were observed on the site</li> <li>Surface soils are stable with no significant erosion observed</li> <li>The vegetation is relatively well established in most areas except for the south-eastern corner where the soils appear of poor quality and likely to represent tailings materials (sands and gravels). The vegetation in the majority of the site appears very healthy</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining and earthworks/rehabilitation activities</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p> <p><u>Offsite:</u></p> <p>The site adjoins a recreational area (swimming pool)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely (no indications that the tailings material observed is contaminated) and the consequences are considered minor. This presents an overall assessed risk of low for the Swenkies site.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>No evidence of illegal occupation or rubbish dumping was noted</li> </ul>									
<b>Swimming Pool (35.05 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>Site referred to as Norm Lindsay Reserve (Greenbushes Pool)</li> <li>From the historical information available, it is understood that this area is understood to have been used for tin dredging and contained sluicing plant. Potentially a former workshop (with machinery) was also present on the site</li> <li>Historical aerials show the site is predominantly cleared in the 1969 – 1987 photographs with significant disturbance evident towards the south-eastern corner - potentially associated with some more recent re-mining of the site.</li> <li>The current water body to the south is present in the historical aerial photographs</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north-west of the current minesite and adjoins Swenkies (south) and Charnley West (to the north-west)</li> <li>The site is generally flat with a slight slope towards the south and is likely to have seasonal water bodies (central gully). No significant water bodies were observed onsite during the inspection</li> <li>Historical mine workings were observed on the site. Former infrastructure was not observed and is understood to have been located near the current Greenbushes Pool offsite to the south</li> <li>No surface water bodies were observed on the site.</li> <li>Surface soils are stable with no significant erosion observed</li> <li>The vegetation is relatively well established in most areas and appears very healthy</li> <li>No evidence of illegal occupation or rubbish dumping was noted however camping appears prevalent so general domestic rubbish is expected to be present onsite from time to time</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities</p>	<p><u>Onsite:</u></p> <p>The site is a designated recreational area therefore it is expected that camping, bike users, walkers will frequent the area.</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p> <p><u>Offsite:</u></p> <p>Residential properties are located approximately 150m to the east</p> <p>A large water body exists to the south of the site and appears to have pumping/storage infrastructure and possibly used recreationally</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p> <p><u>Offsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely and given the potential high recreational use of the site; the consequences are the considered minor. This presents an overall assessed risk of low for the Swimming Pool site.</p> <p>The level of use on this site, whilst considered highly infrequent, should be the determining factor on whether additional investigation effort should be exerted in regards to the absolute contamination risk.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>
<b>Swimming Pool West (13.5 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>Site comprises three small parcels of land; Gibney Gully South, Boulder City West and Boulder City</li> <li>From the limited amount of information available, it is understood that this area was licensed in the early 1900s for</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p>	<p><u>Onsite:</u></p> <p>It is expected that camping, bike users, walkers (potentially</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source identified)</p> <p>Multiple lines of evidence obtained</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>tin and gold mining. It is unclear as to what it was actually mined for.</p> <ul style="list-style-type: none"> <li>The historical aerial for 1969 shows that the site is predominantly cleared on the western side extending from Gibney Gully through to the southern end of the site. In the 1977 – 1987 photographs, the three land parcels appear to be completely void of vegetation with no significant features noted -potentially associated with some more recent re-mining of the site.</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north-west of the current minesite and adjoins Swenkies (south) and Chamley West (to the north-west)</li> <li>The site is generally flat and is expected to drain towards the south slight slope towards the south. No water bodies were observed onsite during the inspection</li> <li>Historical mine workings were not observed on the site other than some patches of sandy material</li> <li>No surface water bodies were observed on the site.</li> <li>Surface soils are stable with no significant erosion observed</li> <li>The vegetation is relatively well established in most areas and appears very healthy</li> <li>No evidence of illegal occupation or rubbish dumping was noted</li> </ul>	Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities	campers) will frequent the area.  Workers accessing the site for rehab efforts (Talison, DBCA)	<u>Offsite:</u>  Surface water bodies offsite (south)	soil/dust, standing water  <u>Offsite:</u>  Exposure through dermal contact and/or ingestion of impacted water (south)	through the soil profile  Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events			through this investigation indicates that a significant contamination risk is considered unlikely and the consequences are the considered minor. This presents an overall assessed risk of moderate for the Swimming Pool West site.	

Table 10-2 Qualitative risk assessment of sites considered down-gradient of the current Talison mine site process impacts

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
<b>Cornwall 3 (3.11 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>The historical review revealed correspondence with a request to the former Dept of Mines to sink a deep mine shaft on this site. Further to this, correspondence from the Dept indicated that mine slurry should be disposed of appropriately to the creek. It is</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant</p>	<p><u>Onsite:</u></p> <p>Very open site and close to the townsite therefore it is expected that access by bike users, 4x4 users</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (no significant source and pathways identified)</p> <p>Multiple lines of evidence obtained through this</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> Low</p>



Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>not known whether any of these requests/approvals were actually undertaken.</p> <ul style="list-style-type: none"> <li>Historical aerials show the site is predominantly vegetated in the 1969 photograph with significant disturbance evident in the 1977 -1987 photographs towards the south-eastern corner - potentially associated with some more recent re-mining of the site.</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located north of the current minesite (quite close) and is very close to the current townsite</li> <li>The site is generally flat with a slight slope towards the north</li> <li>No surface water bodies were observed on the site.</li> <li>Surface soils are stable with no significant erosion observed. Some disturbed areas comprising clumps of clays and areas of sandy gravel were identified and are considered relics of the former mining activities onsite</li> <li>None of the former mineshaft or associated infrastructure was observed during the site inspection</li> <li>The vegetation is relatively well established in most areas except for certain patchy areas where the soils appear of poor quality and likely to represent tailings materials (sands and gravels). The vegetation in the majority of the site appears very healthy</li> <li>No evidence of illegal occupation or rubbish dumping was noted</li> </ul>	from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities	<p>and bushwalkers would be relatively frequent</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p> <p><u>Offsite:</u></p> <p>Greenbushes townsite</p>	Surface water bodies offsite	water (after rainfall events)	<p>through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water after rainfall events</p>			investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor. This presents an overall assessed risk of low for the Cornwall 3 site.	
<b>Cowan Brook (7.8 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>There is limited amount information available on the brook itself but lots of historical and current information on Cowan Brook Dam (situated to the east – up gradient). The Dam was frequently used during the mining periods to access clean water reserves to use through the mine processing systems. Decanted water from the 'slime dams' was recycled back through Cowan Brook Dam and reused.</li> <li>Historical aerials show the site is predominantly well vegetated in the 1969 – 1987 photographs with some disturbance evident in the lower reaches (west) in the 1987 photograph towards the farm land</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located west (south-west) of the current minesite immediately below the Cowan Brook Dam. The site essentially comprises a gully that slopes towards the south-west</li> </ul>	<p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities</p> <p>Given the immediate down gradient location of the site to the Cowan Brook Dam and the active minesite, there is a potential for groundwater and surface water impacts to emanate from these sources. Elevated lithium concentrations observed in surface water may potentially indicate the connection to those sources</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p> <p><u>Offsite:</u></p> <p>Appears to be a dam/reservoir in the farmland down gradient of the site leading into Norilup Brook</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	✓	<p>Potential source – pathway – receptor linkages (possible source up-gradient confirmed and linkages for onsite and offsite aquatic ecosystem plausible)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered likely (seepage from Cowan Brook Dam) and the consequences (particularly to the ecological receptors) are considered moderate. This presents an overall assessed risk of</p>	<p><b>Likelihood:</b> Likely</p> <p><b>Consequence:</b> Moderate</p> <p><b>Risk Rating:</b> <i>Moderate-High</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>- It is understood that the Cowan Brook Dam (up gradient of the Brook) receives some overflow from the spillway at Austins Dam, in addition to overflow from the TSF2 seepage collection sump. This is minimised by TLA however through maximising pumping of the seepage back into the processing circuit. The TSF2 infrastructure is being upgraded to avoid majority of overflows to Cowan Brook into the future</li> <li>- The site appears to have had the main gully dredged and sluiced during historical mining operations and has recovered since that time. Surface water was evident during the site inspection within the main gully/ channel through the site. Iron staining was observed in some areas</li> <li>- A surface water sample collected from the water body during the current inspections indicated: pH of 7.13 and TDS of 1161 mg/L with CoPC concentrations below the reporting limits with the exception of dissolved arsenic (at LOR), cadmium (0.0006mg/L), lithium (1.07 mg/L), zinc (0.065mg/L) ammonia (0.02mg/L). The concentration of zinc was found to exceed the fresh water guidelines (DER 2014)</li> <li>- The site appeared to be infrequently accessed</li> <li>- Surface soils are stable with no significant erosion observed other than through the main gully/channel walls</li> <li>- The vegetation is relatively well established in most areas and appeared very healthy</li> <li>- No evidence of illegal occupation or rubbish dumping was noted</li> </ul>								moderate- high for the Cowan Brook site.	
<b>Norilup Brook North (6.42 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- Limited available information on actual historical mining activities onsite but it is believed to have been similar in nature to Spring Gully which was mined for tin historically by sluicing the sides of the gully in the rainy season</li> <li>- Historical aerals show the site almost completely vegetated in 1969 with some partially clearing evident in 1977 (north and south ends and intersection with Spring Gully mine site) and almost complete clearing evident in the 1987 photograph – potentially indicating some re-mining activities in the 1970s/80s</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located west of the current minesite and adjoins the Spring Gully site. It is expected that any impacted stormwater runoff generated from the Spring Gully site may migrate onto the Norilup Brook site</li> </ul>	<p>Evidence to suggest historical mining activity has occurred onsite particularly in the centre of the site and towards the southern end. Mining process is likely to have involved alluvial dredge/sluicing</p> <p>Whilst no chemicals are known to have been used during these forms of mining or processing, the former mined areas and any resulted tailings may present a potential source risk of metals, metalloids and hydrocarbons</p> <p>Given the down gradient location of the site from the Swenkies and Southampton</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p> <p><u>Offsite:</u></p> <p>Use of the Norilup Brook</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (aquatic ecology)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (possible source up-gradient Southampton Dam and groundwater discharge from active minesite)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered possible and the consequences are considered minor. This presents an overall assessed risk of moderate for the Norilup Brook Nth site.</p>	<p><b>Likelihood:</b> Possible</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>- The site drains towards the south towards the Norilup Brook</li> <li>- A major water body is present onsite towards the southern end and joins into the Norilup Brook itself. Connection to Mt Jones Dam appears to be restricted by a man-made created earth bund</li> <li>- A surface water sample was collected from the main water body observed onsite in the southern portion during the May inspection. The sampling indicated: pH of 7.49 and TDS of 385 mg/L. CoPC concentrations were marginally above or below the reporting limits with the exception of dissolved cadmium, lithium, zinc, nitrogen/ammonia and a detection of TRH (sum of 550 µg/L). A resample was undertaken during the July inspection program (to better understand the reliability of the TRH detection) and the results indicate less than reporting limits for TRH and zinc but similar results for remaining CoPCs in the water body located in the southern end of the site.</li> <li>- The concentration of cadmium in the May sampling round was found to exceed the fresh water guidelines (DER 2014)</li> <li>- Vegetation is relatively thick and appears healthy in areas outside of the water body and the main track/ road extending through the site in the North.</li> <li>- No visible signs of contamination onsite</li> <li>- No evidence of illegal occupation or rubbish dumping</li> </ul>	<p>Dams and the active minesite, there is a potential (albeit low) for groundwater (discharge) and surface water impacts to emanate from these sources.</p> <p>The agricultural land to the north-west and south may also provide a source of local nutrients (nitrogen etc)</p>								
<b>Norilup Brook (7.49 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- Limited information on actual historical mining activities onsite but it is believed to have been similar in nature to Spring Gully and Norilup Brook North sites which was mined for tin historically by sluicing the sides of the gully in the rainy season</li> <li>- Historical aerals show the site almost completely vegetated in 1969 through to 1977 with some partially clearing evident in 1987 (southern end and within the centre of the site) – potentially indicating some re-mining activities in the 1970s/80s</li> <li>- The farming/ grazing land to the south starts to become more prominent/ cleared from the 1977 photograph onwards</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located west of the current minesite and connects to the Norilup Brook (to the north) and the Cowan Brook (to the south)</li> <li>- There is currently a vehicle track that runs east-west through the centre of the site and appears to be at the highest point of the</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities.</p> <p>Given the down-hydraulic gradient location of the site from the active minesite, there is a potential for groundwater discharge into surface water bodies onsite and surface water (albeit low) drainage (from</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p> <p><u>Offsite:</u></p> <p>Use of the Norilup Brook, Cowan Brook and other dams to the south of the site</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (aquatic ecology)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (possible source from groundwater discharge from active minesite)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor. This presents an overall assessed risk of moderate for the Norilup Brook site.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>area where the stormwater flow would drain away from in either direction i.e north and south</p> <ul style="list-style-type: none"> <li>- A surface water sample was collected from the main water body observed onsite (southern end) and indicated: pH ranging from 7.36 and TDS ranging from 892 mg/L. CoPC concentrations were marginally above or below the reporting limits with the exception of dissolved caesium, lithium, zinc and nitrogen/ammonia primarily in the water bodies in the southern end of the site.</li> <li>- The concentration of zinc was found to exceed the fresh water guidelines (DER 2014)</li> </ul>	Cowan Brook Dam) to emanate from these sources.								
<b>Salt Water Gully (11.84 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- Historically an alluvium conglomerate mine site operation for tourmaline bearing sands, quartz veins and lateritic gravel using mainly sluicing methods targeting tin concentrates and tantalite</li> <li>- Historical aerials show the site almost completely vegetated in the 1969 photograph with water bodies present at the northern end and southern end (large reservoir). Some disturbance noted in the 1977 photograph with surface water evident across almost the entire southern half. The 1987 photograph is very clear and shows a continuous water course through the gully with larger pools throughout the site (and offsite to the south through farming land) potentially relating to old mining excavations.</li> <li>- It is understood that rehabilitation commenced in 1979</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located east of the current minesite</li> <li>- The soil surface appears stable with no significant erosion observed</li> <li>- The site is relatively flat with a slope towards the central gully that extends through the site. Water bodies are present throughout the site and appear likely to connect into a watercourse during heavy rainfall. Four distinct pools were noted (and sampled) during the site inspection. These pools may be the resultant depressions from the former mining activities onsite</li> <li>- The site is relatively well vegetated and appear to be in good health</li> <li>- A surface water sample was collected from the four main water bodies observed onsite (north, central and south) and indicated: pH ranging from 7.21 to 7.47 7.13 and TDS ranging from 842 to 910 mg/L. CoPC concentrations were marginally above or below the reporting limits with the exception of dissolved caesium,</li> </ul>	<p>Evidence of historical tin and tantalite mining activity onsite particularly in the central gully/channel on the site. Mining process is likely to have involved alluvial dredge/sluicing</p> <p>Whilst no chemicals are known to have been used during these forms of mining or processing, the former mined areas and any resulted tailings may present a potential source risk of residual metals, metalloids (arsenic, lithium, metal oxides) and hydrocarbon impacts</p> <p>The surrounding agricultural land to the east, north and south may provide a potential source of nutrients (nitrogen etc)</p> <p>Given the down hydraulic gradient location of the site to the active minesite, there is a potential for groundwater discharge into the surface water bodies onsite</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers. Suggestion of camping and marron fishing in the water bodies too</p> <p>Workers accessing the site for rehab efforts (Talisson, DBCA)</p> <p><u>Offsite:</u></p> <p>Adjacent farmland use including surface water bodies and dams hydraulically connected to the site</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (down gradient) and associated flora and fauna</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p> <p>Ingestion of marron (with elevated metal accumulation)</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	✓	<p>Unconfirmed source – pathway – receptor linkages (likely source from mine site groundwater discharge into surface water bodies with linkages for onsite and offsite aquatic ecosystem plausible)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered likely and the consequences (particularly to the ecological receptors) are considered moderate. This presents an overall assessed risk of moderate-high for the Salt Water Gully site.</p>	<p><b>Likelihood:</b> Likely</p> <p><b>Consequence:</b> Moderate</p> <p><b>Risk Rating:</b> <i>Moderate -High</i></p>



Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>lithium, nickel and nitrogen/ammonia primarily in the water bodies in the southern end of the site.</p> <ul style="list-style-type: none"> <li>The concentration of zinc was found to exceed the fresh water guidelines (DER 2014)</li> <li>A groundwater spring originates at the toe of Floyds Waste Rock Landform (part of active minesite), which discharges groundwater to Hester Brook via Floyds Gully and Salt Water Gully</li> <li>No visible signs of contamination onsite</li> <li>No evidence of illegal occupation or rubbish dumping</li> </ul>									
<b>Spring Gully (13.43 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>It is understood that the gully was mined for tin historically using sinking and driving techniques and sluicing the side of the gully in the rainy season</li> <li>Historical aerals show a distinct disturbance area though the centre of the site extending east-west. The western end of the land parcel appears to have the greatest level of disturbance where it intercepts Norilup Brook North.</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located west of the current minesite immediately below the Swenkies Dam. The site essentially comprises a long gully that slopes towards the Norilup Brook (Nth)</li> <li>It is understood that Swenkies Dam is not connected to the Southampton and Austins Dams but may receive some seepage and surface water overflow at different times of the year</li> <li>The site appears to have had the main gully dredged and sluiced during historical mining operations and has recovered since that time. Surface water was evident during the site inspection within the main gully/ channel through the site and a sample collected from the western end. Iron staining was observed in some sections of the standing water (towards the eastern end) at the foot of Swenkies Dam</li> <li>A surface water sample collected during the current inspections indicated: pH of 7.09 and TDS of 633 mg/L with CoPC concentrations marginally above and/or below the reporting limits with the exception of slightly elevated concentrations of lithium, zinc and nitrogen (ammonia). All CoPC concentrations were below the adopted assessment criteria</li> <li>The site appeared to be infrequently accessed</li> </ul>	<p>Evidence of historical tin mining activity onsite particularly in the central gully/channel on the site. Mining process is likely to have involved alluvial dredge/sluicing</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities.</p> <p>Given the down-gradient location of the site to the Swenkies Dam and the active minesite, there is a potential for groundwater (discharge) and surface water impacts (seepage and overland flow) to emanate from these sources. Iron staining was evident at the foot of the Swenkies Dam (eastern end of site)</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (Norilup Brook)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	?	<p>Unconfirmed source – pathway – receptor linkages (possible source up-gradient confirmed and linkages for onsite and offsite aquatic ecosystem plausible)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered possible and the consequences (particularly to the ecological receptors) are considered moderate. This presents an overall assessed risk of moderate – high for the Spring Gully site.</p>	<p><b>Likelihood:</b> Possible</p> <p><b>Consequence:</b> Moderate</p> <p><b>Risk Rating:</b> <i>Moderate-High</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>Surface soils are stable with no significant erosion observed other than through the main gully/channel walls and an excavated section into the eastern end</li> <li>The vegetation is relatively well established in most areas except appears very healthy</li> <li>No evidence of illegal occupation or rubbish dumping was noted</li> </ul>									
<b>Swenkies Dam (19.6 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>It is understood that the area was created as an earth bunded dam to supplement the mining activities that occurred in the Swenkies areas. There is little information available with regards to active mining that occurred on this land parcel</li> <li>Historical aerals show significant disturbance across the site in the 1969 photograph with large excavations evident at the eastern end of the site adjoining the Swenkies land parcel. In the 1977 photograph, the site is further cleared and the excavations in the eastern part of the site appear to be larger in area. Surface water is present in the dammed areas to the west. In the 1987 photograph, the excavations in the eastern portion of the site are not as distinctive and appear to have some limited regrowth and/or some bulk earthworks undertaken</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>Located west of the current minesite immediately below the Southampton Dam. The site essentially comprises heavily disturbed area with man-made earth bunded dams. The site adjoins Spring Gully on the western end</li> <li>It is understood that Swenkies Dam is not connected to the Southampton and Austins Dams but may receive some seepage and surface water overflow at different times of the year</li> <li>The eastern end that adjoins Swenkies appears to have been heavily excavated for either mining purposes and/or excavation for dam storage and to borrow materials for earth bund construction throughout the site</li> <li>Surface water was evident during the site inspection within the main dammed area towards the western end and some smaller water bodies present at the eastern end with excavated channels linking the water bodies (along the southern side of the site). Iron staining was observed in some sections of the standing water (towards the eastern end that adjoins the Southampton Dam wall)</li> </ul>	<p>Evidence of historical mining activity and more recent earthworks (within 40 years) onsite particularly in the eastern portion of the site.</p> <p>Whilst no chemicals are known to have been used during the historical mining and processing, the former mined areas and any resulted tailings may present a potential source risk of metals, metalloids and acid through oxidation processes.</p> <p>Given the immediate down gradient location of the site to the Southampton Dam and the active minesite, there is a strong potential for groundwater (discharge) and surface water impacts (seepage and overland flow) to emanate from these sources.</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna (terrestrial and aquatic)</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite (Norilup Brook)</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	✓	<p>Likely source – pathway – receptor linkages (likely source up-gradient confirmed and linkages for onsite and offsite aquatic ecosystem plausible)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered likely (seepage from Southampton Dam) and the consequences (particularly to the ecological receptors) are considered moderate. This presents an overall assessed risk of moderate -high for the Swenkies Dam site.</p>	<p><b>Likelihood:</b> Likely</p> <p><b>Consequence:</b> Moderate</p> <p><b>Risk Rating:</b> <i>Moderate -High</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<ul style="list-style-type: none"> <li>- A surface water sample collected during the current inspections indicated CoPC concentrations marginally above and/or below the reporting limits with the exception of lithium (0.94 mg/L) and total nitrogen (0.3 mg/L). Observed ammonia concentrations exceeded the ANZECC (2000) S-W Rivers assessment criteria. No samples were collected from the standing water at the eastern end of the site</li> <li>- The site appeared to be infrequently accessed and is considered difficult to access. It does not appear to have appeal for bushwalkers and campers as per other sites</li> <li>- Surface soils are stable with no significant erosion observed</li> <li>- The vegetation is very sparse on the site</li> <li>- No evidence of illegal occupation or rubbish dumping was noted</li> </ul>									
<b>Teddy Boy (0.25 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- There is limited information available with regards to active mining that occurred on this land parcel</li> <li>- Historical aerals show no discernible changes between the vegetation state from 1969 through to the 1987 photograph. The current aerial photograph shows significant disturbance in the north-west corner of the site and in general very sparse and stressed vegetation. The vegetation density and health appears to be consistent with the broader forest surrounding the site with the exception of the obvious disturbance areas in the north-west corner (mining evidence)</li> </ul> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located to the south-east of the current minesite</li> <li>- The site is relatively flat and ponding water was noted onsite in the area of disturbance. The disturbed area appears to have had significant soil disturbance indicating historical mining activities</li> <li>- Vegetation is very sparse across the broader site and is not present at all over the disturbed area in the north-west corner</li> <li>- Surface soils are stable with no significant erosion observed</li> <li>- No evidence of illegal occupation or rubbish dumping was noted</li> </ul>	<p>Limited inferred sources of potential contamination concern evident through the detailed review and onsite inspection.</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities.</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p> <p>Workers accessing the site for rehab efforts (Talison, DBCA)</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p> <p><u>Offsite:</u></p> <p>Surface water bodies offsite</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust, standing water</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants through the soil profile</p> <p>Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (unconfirmed source and receptors)</p> <p>Multiple lines of evidence obtained through this investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor (some vegetation stress observed but appears more regional than specific to that very small area). This presents an overall assessed risk of low for the Teddy Boy site.</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>
<b>White Well (5.06 ha)</b>	<p><u>Historical (desktop and anecdotal information)</u></p> <ul style="list-style-type: none"> <li>- There is little information available with regards to active mining that occurred on this land parcel</li> <li>- Historical aerals show no discernible changes between the vegetation state from 1969 through to the 1987 photograph. The</li> </ul>	<p>Evidence of historical mining activity onsite particularly in the north-western portion of the site</p> <p>Potential for residual metals/metalloids (arsenic, lithium, metal oxides) resultant</p>	<p><u>Onsite:</u></p> <p>Expected infrequent access by bike users, 4x4 users and bushwalkers</p>	<p><u>Onsite:</u></p> <p>Onsite flora and fauna</p> <p>Groundwater beneath the site</p>	<p><u>Onsite:</u></p> <p>Exposure through dermal contact and/or ingestion of impacted</p>	<p>Impacted stormwater runoff entering the nearby fresh water environment</p> <p>Vertical migration of contaminants</p>	X	X	<p>Unconfirmed source – pathway – receptor linkages (unconfirmed source and receptors)</p> <p>Multiple lines of evidence obtained through this</p>	<p><b>Likelihood:</b> Unlikely</p> <p><b>Consequence:</b> Minor</p> <p><b>Risk Rating:</b> <i>Low</i></p>

Site (and size (ha))	Overview and Key Findings	Inferred Sources of Potential Contamination Concern	Potential Receptors		Potential Exposure Pathways		CSM Linkage		Comments	Overall Risk Assessment
			Human Health	Ecological	Human Health	Ecological	Human Health	Ecological		
	<p>current aerial photograph shows some disturbance in the north-west corner of the site and in general very sparse vegetation. The vegetation density and health appears to be consistent with the broader forest surrounding the site with the exception of the obvious disturbance areas in the north-west corner (mining evidence)</p> <p><u>Recent (site inspection, sampling and current aerial)</u></p> <ul style="list-style-type: none"> <li>- Located to the south-east of the current minesite and slightly south of Teddy Boy</li> <li>- Evidence of historical mining activities present on site through highly disturbed and unvegetated areas, areas with high sand and gravel content on the surface and clay residual built up on the base of trees</li> <li>- Vegetation is very sparse across the broader site and is not present at all over the disturbed area in the north-west corner and some other central areas where disturbance was evident</li> <li>- Surface soils are stable with some erosion observed in areas of high disturbance</li> <li>- No evidence of illegal occupation or rubbish dumping was noted</li> </ul>	from historical mining activities and potential for hydrocarbon impacts as a result of more recent re-mining activities.	Workers accessing the site for rehab efforts (Talison, DBCA)	<u>Offsite:</u> Surface water bodies offsite	soil/dust, standing water	through the soil profile  Exposure through dermal contact and/or ingestion of impacted soil/dust and any standing water			investigation indicates that a significant contamination risk is considered unlikely and the consequences are considered minor. This presents an overall assessed risk of low for the White Well site.	



# 11. Summary and Conclusions

As a result of the detailed preliminary site investigation on the 27 historical mining sites in the Greenbushes area, GHD provides the following summary of the key findings.

## *Mining overview*

- Mining of tin, tantalum and lithium have all occurred throughout the history of mining activity in the area. Early tin and tantalum mining is understood to have occurred from the late 1800s to early 1900s. It is also understood, anecdotally noted and observed through a review of the historical aerial photographs, that certain sites (mainly to the east and north-east of the current mine site) were reworked in the 1970/80s with more advanced technologies and machinery. Open cut mining of tantalum and lithium at the current Greenbushes Operation commenced in 1983.
- The early mining methods employed used were largely, open cut, dredging and sluicing, some limited shaft mining with some evidence of explosives used on some of the sites but mining methods generally involved manual digging and horse operated dredging. Sluicing and hydraulic separation for processing ores was also a very common occurrence.

## *Geological setting and ore processing*

- The orebody which was mined, comprised tin and tantalum primarily as alluvial deposits within paleochannels/ former drainage lines. These mineral resistates were accumulated/deposited within the drainage channels likely due to gravity separation. During mining gravity separation was also used to concentrate minerals. Chemicals were not reported as being used during the processing of recovered ores.
- Mining within the paleochannels (sluicing, dredging and excavators) appears to have intercepted the groundwater table, and residual excavations within the historic mining areas result in remnant surface water bodies which are considered to primarily to reflect the groundwater table elevation, although some surface water run-off is also intercepted.
- The geological setting precluded any association with sulphides (not noted in the current ore body), and any trace sulphides which may have been derived from the primary ore body is likely to have weathered (oxidised) during transportation/deposition within the palaeochannels. As a consequence, acidic drainage derived from tailings and overburden is considered unlikely.

## *Potential contamination concerns*

- The information from the investigation indicates that the main sources of potential contamination from historical mining activities are limited to residual metals and metalloids (not actively mined but may be present within the tailings/geological setting of the area), in addition to hydrocarbons and explosives (residue) as a consequence of mining machinery/storage and handling of fuels and oils – particularly during the more recent re-mining efforts (i.e. within the last 40 years).
- The investigation revealed (primarily through the site inspection and aerial photography review), that the historical mining practices undertaken across the former mined areas has resulted in significant disturbances to these sites including the following observed broad impacts:
  - Change in surface soils composition/texture in mined and processed areas with sandy, gravelly tailings observed and clay deposits (suspected to be fines accumulation from processing or overburden).

- Surface hydrology changes comprising open depressions from mining excavation, widening of channels and dammed areas for water storage purposes.
- Impacts to the vegetation comprising initial clearing and subsequent regrowth hampered by changes in soil composition.

Notwithstanding the above, there has been little evidence found during the investigation to suggest that these activities are necessarily attributable to significant contamination concern. Further to this, rehabilitation efforts are noticeable on majority of the sites and appear largely effective.

- There is considered a risk of impacted waters derived from the active mine site, (groundwater, surface water dams and dam seepage), to present an ongoing potential contamination source to a small number of rehabilitation areas which are located down-gradient of the active mine site. The risk is anticipated to be emulated within the surface water expressions on the former mined areas down-gradient of the active mine site. Some visual impacts to surface water environments (and possibly groundwater) are evident as iron staining at the foot of the Swenkies Dam (Spring Gully impacted) and Cowan Brook Dam (Cowan Brook impacted). These impacts are derived from the current mining activities, considered as a consequence dam seepage and dissolution of iron derived from the lateritic material, common to the area.
- Other sources of potential contamination concern include illegal dumping of rubbish and offsite broad acre usage of fertilisers and pesticides on adjacent farm land within the catchments of the brooks.

#### **Surface water assessment**

- There is sufficient evidence to suggest that majority of the surface water features observed on the former mine areas are hydraulically connected to the shallow aquifer. In addition to this, the water bodies will also receive direct rainfall and overland runoff from the soil surface during high rainfall events. The surface water is therefore considered the most likely receptor and indicator of impacts from historical mining and active mine activities.
- Surface water is considered the most viable pathway for contamination exposure on and offsite; particularly for the aquatic ecology. However, ecotoxicology work undertaken on surface water areas in the past five years (considered at the highest risk of being impacted from the active minesite) has indicated that there is not a current significant risk to this receptor. From a human health exposure perspective there was evidence of surface water at numerous sites being abstracted for irrigation, townsite water supply and being used recreationally for swimming, camping and fishing activities.
- The laboratory analytical results obtained from the limited surface water sampling program undertaken during this investigation indicates that, excluding one location (one water body in NZ Gully), dissolved metals, hydrocarbons and nutrients concentrations were not detected or were detected at concentrations which reflect the background and geological setting of the area and potential runoff from adjacent farming areas. One of the seven water bodies in NZ Gully shows evidence of elevated nutrients (ammonia), metals, and low pH, the reasons for which are unclear and requires follow-up assessment.

## **11.1 Conclusions**

Through the detailed desktop review, historical review, site interviews, site inspections and limited water sampling and analysis program, GHD presents the following conclusions:

- The information obtained throughout this investigation indicates that there is limited evidence to support that the former historically mined areas present a current or ongoing

source of potential contamination. The information supports that historic mining methods precluded the requirements/ use of chemicals in mineral processing (gravity-hydraulic separation). In addition, the geological setting limits the likelihood of metals mobilisation under acidic conditions from the tailings or overburden (minimal sulphide risk). Excluding one location (NZ gully), the surface water sampling/laboratory analysis (considered to reflect the groundwater) supports that impacts attributed to historic mining are not evident.

- The risk of impacted waters derived from the active mine site is considered an ongoing potential contamination source to those small number of rehabilitation areas which are located down-gradient of the active mine site. Currently, Talison controls water releases from the mine site to those rehabilitation areas which are located down gradient of the mine site and surface water discharges do not occur. Seepage through the base of the two dams, however, is uncontrolled and relatively localised ion staining is recognised within the surface water at the dam seepage face.
- GHD considers that the contamination risk, qualitatively assessed, for the 27 parcels of interest ranges from very low to moderate-high as outlined in Table 11-1.

Table 11-1 Summary of risk assessment outcomes

Very low risk	Low risk		Moderate - High risk
Bishops	Charnley	Norilup Brook North	Cowan Brook
Boronia Gully	Charnley East (North)	Scandanavian Gully	Salt Water Gully
Carters Farm	Charnley West	Southampton West	Spring Gully
Carters Farm North	Cornwall 3	Swenkies	Swenkies Dam
Cornwall Alluvial North	Dumpling Gully	Swimming Pool	New Zealand Gully
Gibney Gully	Margaret Lease	Swimming Pool West	
	Mount Jones	Teddy Boy	
	Norilup Brook	White Well	

The investigation indicates that 22 out of the 27 sites have an assessed potential contamination risk as being low to very low and GHD considers that these sites are suitable for relinquish to DBCA for inclusion in the State Forest Reserve. However, five sites are considered to have been assessed as presenting a moderate-high risk of contamination. The five sites that have been rated as moderate - high risk should have some further investigation work undertaken to more accurately understand the source-pathway-receptor linkages.

## 12. Recommendations

GHD has presented the recommendations from the investigation for the 27 sites as follows:

- Sites considered suitable for relinquish to DBCA - Table 12-1; and
- Sites considered to require further action prior to a determination on suitability for relinquish - Table 12-2.

Table 12-1 Rehabilitation sites considered suitable for relinquish

Sites considered suitable for relinquish to DBCA			
Bishops	Charnley East (North)	Scandanavian Gully	Swenkies
Boronia Gully	Charnley West	Southampton West	Swimming Pool West
Carters Farm	Cornwall 3	Norilup Brook	Teddy Boy
Carters Farm North	Cornwall Alluvial North	Norilup Brook North	White Well
Dumpling Gully	Margaret Lease	Charnley	
Gibney Gully	Mount Jones	Swimming Pool	

The actions outlined within Table 12-2 (below) include further investigations and clarifications with regards to potential sources, pathways or receptors of contamination (Stage 2 investigation – as per the GHD 2017 strategy) and for the sites to be considered for reporting to the DWER as suspected contaminated sites under the *Contaminated Sites Act 2003* (Form 1).

Table 12-2 Sites that require further action prior to a determination on suitability for relinquish

Site	Risk Assessed	Report site to DWER?	Follow up investigation
Cowan Brook	Moderate-High	No	Insufficient evidence at this stage to suspect a contaminated site. However further investigation is warranted given the potential issues of concern identified through the investigation on these sites. Further investigations may include; sampling of soils, surface water quality, sediments and groundwater.
Salt Water Gully	Moderate-High	No	
Spring Gully	Moderate-High	No	
Swenkies Dam	Moderate-High	Yes	Sufficient evidence at this stage to <i>suspect</i> a potentially contaminated site. However, further investigation is warranted to confirm this potentially comprising sampling of soils, surface water quality, sediments and groundwater.
New Zealand Gully	Moderate-High	Yes	



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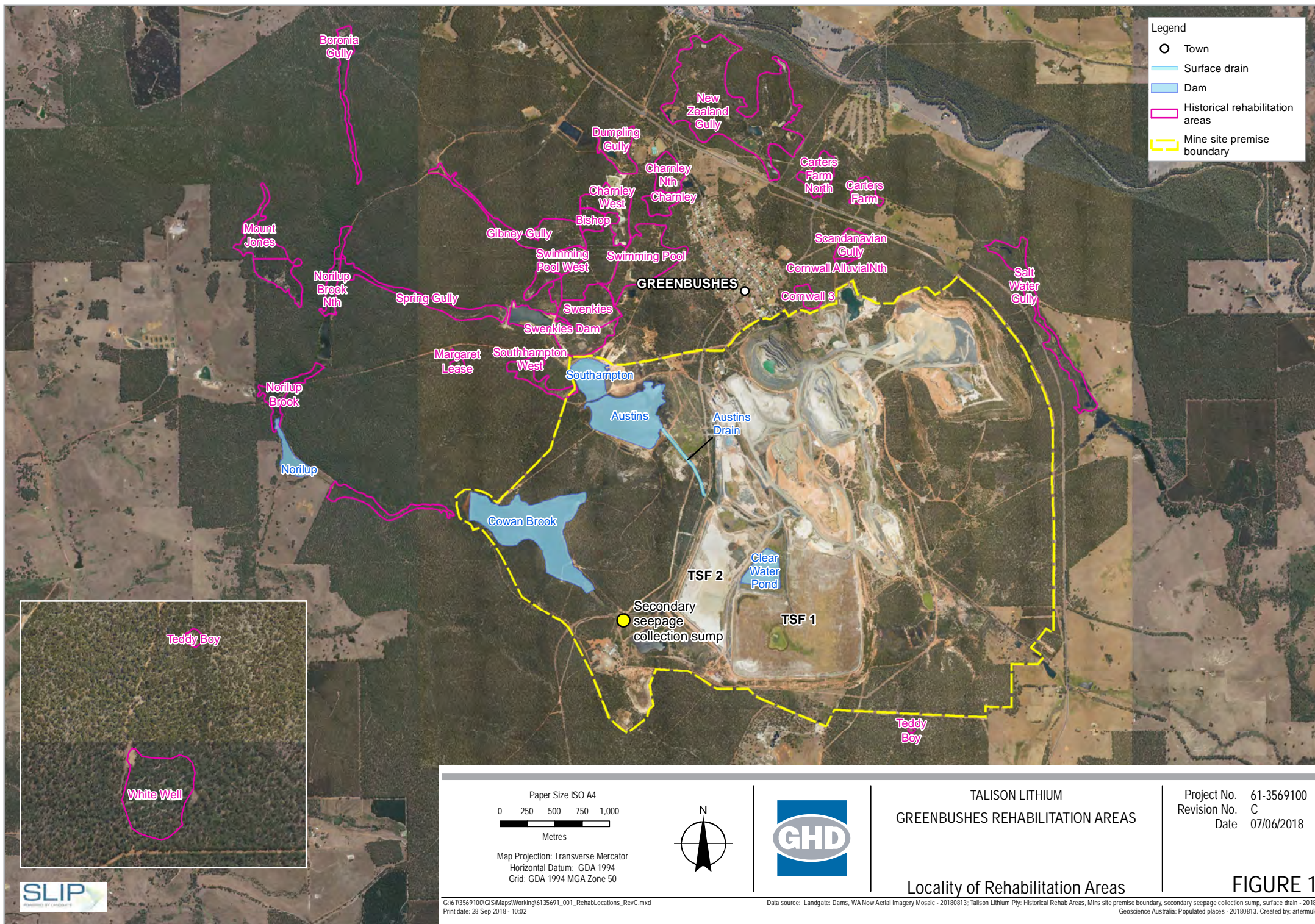
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Talison Lithium (date unknown) (Talison Former Employee Survey, 2017). *Talison Former Employees Survey* [provided to GHD in 2017]

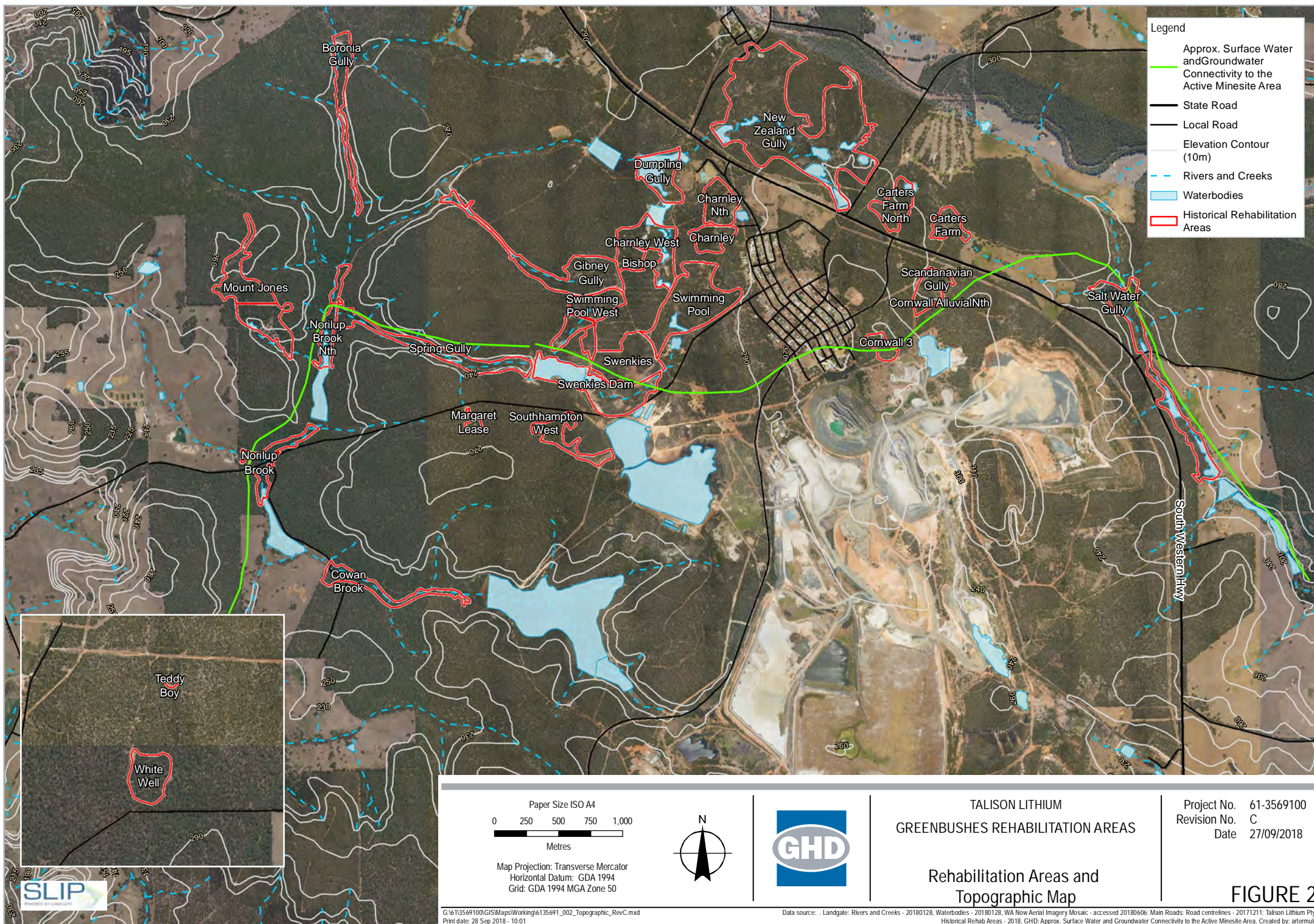
Talison Lithium (TL, 2018) *Greenbushes Lithium Operations* Accessed in May 2018 from:  
<http://www.talisonlithium.com/projects>

Western Mail, Perth (1899), *Greenbushes Tinfields – By a Mining Engineer*. Accessed in March 2018 from: <https://trove.nla.gov.au/newspaper/article/33166452#>

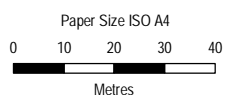




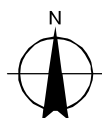








Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Bishop  
(3.85 Ha)

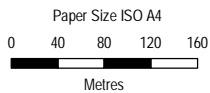
Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

FIGURE 3 - 01

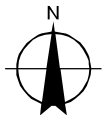


Legend

Historical Rehabilitation



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Boronia Gully  
(8.6 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

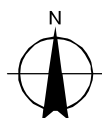
FIGURE 3 - 02





Paper Size ISO A4  
0 10 20 30 40  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Carters Farm  
(4.53 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

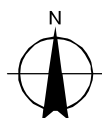
FIGURE 3 - 03





Paper Size ISO A4  
0 10 20 30 40  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Carters Farm North  
(7.28 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

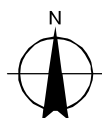
FIGURE 3 - 04





Paper Size ISO A4  
0 10 20 30 40  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Charnley  
(5.27 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

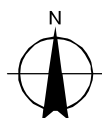
FIGURE 3 - 05





Paper Size ISO A4  
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Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



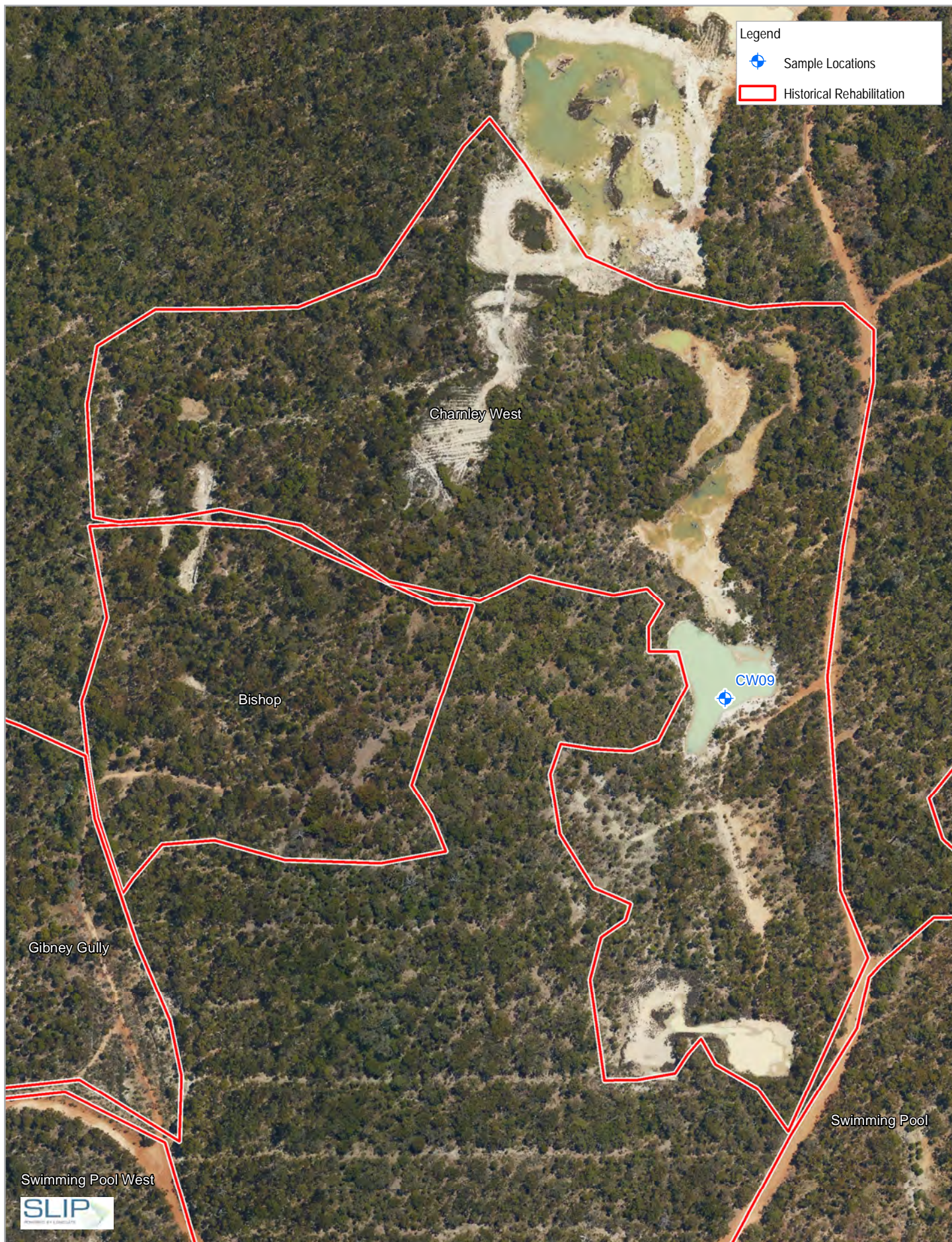
TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Charnley North  
(7.57 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

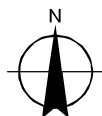
FIGURE 3 - 06





Paper Size ISO A4  
0 20 40 60 80  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Charnley West  
(12.12 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

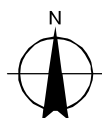
FIGURE 3 - 07





Paper Size ISO A4  
0 10 20 30 40  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Cornwall 3  
(3.11 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

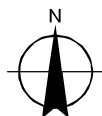
FIGURE 3 - 08





Paper Size ISO A4  
0 9 18 27 36  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



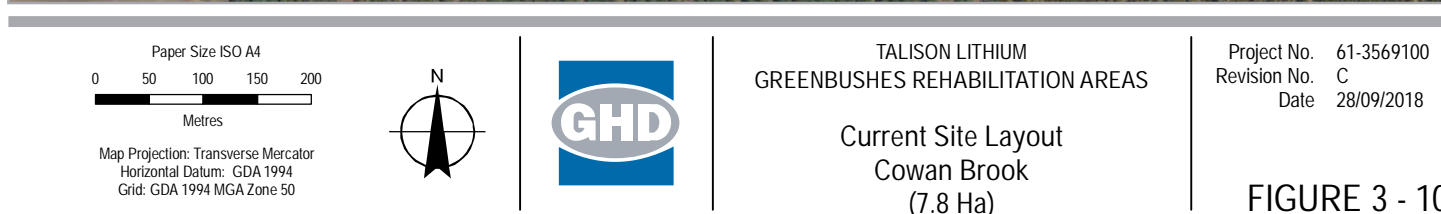
TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Cornwall Alluvial No  
(0.98 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

FIGURE 3 - 09



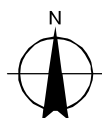






Paper Size ISO A4  
0 10 20 30 40  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Dumpling Gully  
(9.72 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

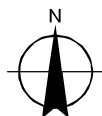
**FIGURE 3 - 11**





Paper Size ISO A4  
 0 50 100 150 200  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
 GREENBUSHES REHABILITATION AREAS

Current Site Layout  
 Gibney Gully  
 (17.51 Ha)

Project No. 61-3569100  
 Revision No. C  
 Date 28/09/2018

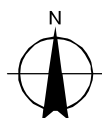
FIGURE 3 - 12





Paper Size ISO A4  
0 9 18 27 36  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Margaret Lease  
(1.15 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

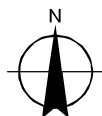
FIGURE 3 - 13





Paper Size ISO A4  
0 30 60 90 120  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Mount Jones  
(20.67 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

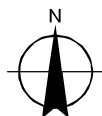
FIGURE 3 - 14





Paper Size ISO A4  
0 50 100 150 200  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
New Zealand Gully  
(77.64 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

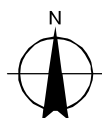
FIGURE 3 - 15





Paper Size ISO A4  
0 25 50 75 100  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



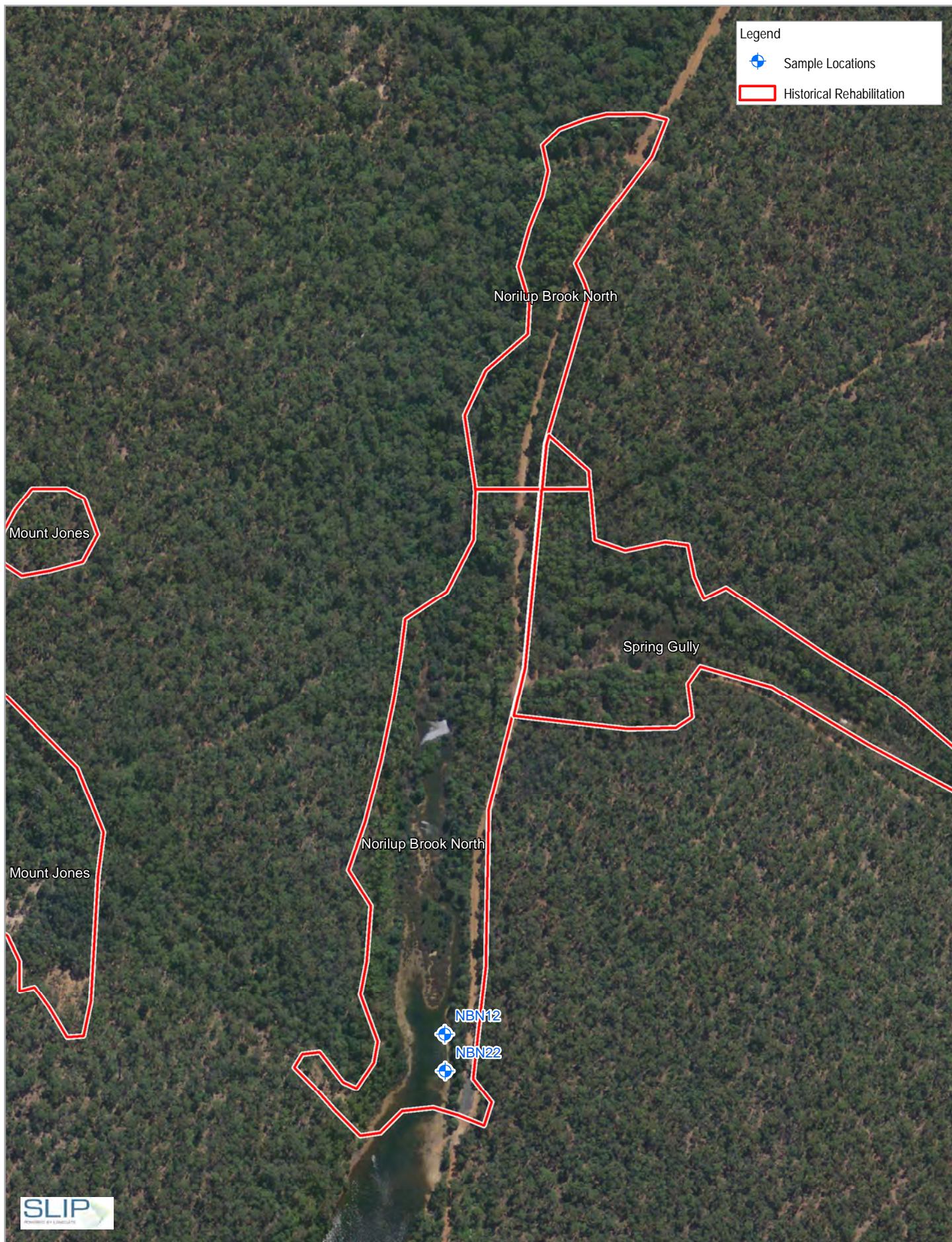
TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Norilup Brook  
(7.49 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

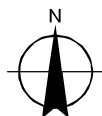
FIGURE 3 - 16





Paper Size ISO A4  
0 25 50 75 100  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Norilup Brook North  
(6.42 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

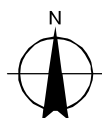
FIGURE 3 - 17





Paper Size ISO A4  
0 50 100 150 200  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Salt Water Gully  
(19.12 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

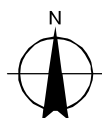
FIGURE 3 - 18





Paper Size ISO A4  
0 10 20 30 40  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Scandanavian Gully  
(5.64 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

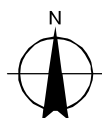
FIGURE 3 - 19





Paper Size ISO A4  
 0 25 50 75 100  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
 GREENBUSHES REHABILITATION AREAS

Current Site Layout  
 Southhampton West  
 (7.46 Ha)

Project No. 61-3569100  
 Revision No. C  
 Date 28/09/2018

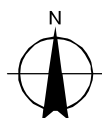
FIGURE 3 - 20





Paper Size ISO A4  
 0 60 120 180 240  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
 GREENBUSHES REHABILITATION AREAS

Current Site Layout  
 Spring Gully  
 (13.44 Ha)

Project No. 61-3569100  
 Revision No. C  
 Date 28/09/2018

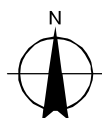
FIGURE 3 - 21





Paper Size ISO A4  
0 25 50 75 100  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Swenkies  
(14.94 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

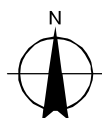
FIGURE 3 - 22





Paper Size ISO A4  
 0 40 80 120 160  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
 GREENBUSHES REHABILITATION AREAS

Current Site Layout  
 Swenkies Dam  
 (19.6 Ha)

Project No. 61-3569100  
 Revision No. C  
 Date 28/09/2018

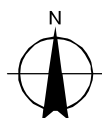
FIGURE 3 - 23





Paper Size ISO A4  
 0 30 60 90 120  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
 GREENBUSHES REHABILITATION AREAS

Current Site Layout  
 Swimming Pool  
 (23.8 Ha)

Project No. 61-3569100  
 Revision No. C  
 Date 28/09/2018

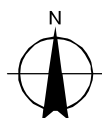
FIGURE 3 - 24





Paper Size ISO A4  
 0 25 50 75 100  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
 GREENBUSHES REHABILITATION AREAS

Current Site Layout  
 Swimming Pool West  
 (13.5 Ha)

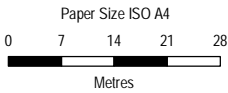
Project No. 61-3569100  
 Revision No. C  
 Date 28/09/2018

FIGURE 3 - 25

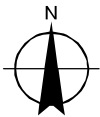


Legend

Historical Rehabilitation



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
Teddy Boy  
(0.25 Ha)

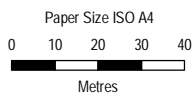
Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

FIGURE 3 - 26

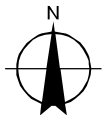


Legend

Historical Rehabilitation



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



TALISON LITHIUM  
GREENBUSHES REHABILITATION AREAS

Current Site Layout  
White Well  
(5.06 Ha)

Project No. 61-3569100  
Revision No. C  
Date 28/09/2018

FIGURE 3 - 27

# Appendices



## Appendix A – Risk Matrix



## Consequence Descriptors

Potential Consequence <sup>i</sup>	
Classification	Description
<b>Catastrophic</b>	<p>Human Health: Acute irreversible damage to human health for large population.</p> <p>Environment: Potentially lethal to regional ecosystem or threatened species, widespread lethal on-site and off-site local impacts.</p> <p>Property: Irreparable damage to property such as buildings or infrastructure/ permanent loss of use.</p>
<b>Major</b>	<p>Human Health: Chronic, irreversible damage to human health and/or acute non-permanent health effects upon human health for small population</p> <p>Environment: Potentially lethal to local ecosystem, widespread harmful on site and off site impacts.</p> <p>Property: Damage to property such as buildings or infrastructure resulting in heavily disrupted use or loss of use in medium term and requiring extensive and intensive repairs.</p>
<b>Moderate</b>	<p>Human Health: Non-permanent or easily preventable effects upon human health (for large population) and/or potentially chronic effects to human health (for small population).</p> <p>Environment: Potentially harmful to regional ecosystem with local harmful impacts primarily contained on site.</p> <p>Property: Damage to property such as buildings or infrastructure, possible short term disruption to use and locally intensive repairs.</p>
<b>Minor</b>	<p>Human Health: Non-permanent or easily preventable effects upon human health (for small population).</p> <p>Environment: Potentially harmful to local ecosystem with local harmful impacts contained on site.</p> <p>Property: Easily repairable defects/non-structural damage/cosmetic impact only to property such as buildings or infrastructure.</p>
<b>Negligible</b>	No discernable impact, or inconsequential in nature.

## Probability Descriptors

Probability <sup>i</sup>	
Classification	Description
<b>Almost Certain</b>	Is expected to occur with a probability of multiple occurrences within a year.
<b>Likely</b>	Will probably occur within a 5-10 year period.
<b>Possible</b>	Might occur or should be expected to occur within a 5-10 year period.
<b>Unlikely</b>	Could occur within 20 years, or in unusual circumstances.
<b>Rare</b>	May occur only in exceptional circumstances (e.g. once in 100 years).





## Risk Classification Matrix

Risk Classification <sup>i</sup>						
		Consequence				
		Negligible	Minor	Moderate	Major	Catastrophic
Probability	Rare	Very Low	Very Low	Low	High	High
	Unlikely	Very Low	Low	Moderate	High	Very High
	Possible	Very Low	Low	Moderate	High	Very High
	Likely	Low	Moderate	High	Very High	Very High
	Almost Certain	Low	Moderate	High	Very High	Very High

## Description of Risks and Likely Action Required<sup>i</sup>

<b>Very High Risk</b>	The probability of harm to a relevant receptor is at least likely and consequences would be moderate or worse. Urgent action is likely to be required.
<b>High Risk</b>	The probability of harm to a relevant receptor is at least likely with moderate consequences. At worst, the probability of catastrophic consequences is rare. Urgent action may be required in the short term and action is likely to be required in the long term.
<b>Moderate Risk</b>	The probability of harm to a relevant receptor is at least likely with minor consequences. At worst, the probability of major consequences is rare. Action may be required in the short term or long term.
<b>Low Risk</b>	The probability of harm to a relevant receptor is at least likely although consequences would be negligible and at worst, the probability of moderate consequences is rare. Action unlikely to be required or will be limited in nature/extent/duration.
<b>Very Low Risk</b>	There is a low probability only that harm could occur to a relevant receptor with negligible consequences and at worst, the probability of a minor consequence is rare. No action required.

**Action:** Further assessment (e.g. site investigation, detailed quantitative risk assessment), or intervention, (e.g. remediation, mitigating measures).

<sup>i</sup> Based on guidance presented in:

1. Department of Environment and Conservation (2006) *The Use of Risk Assessment in Contaminated Site Assessment and Management*.
2. Standards Australia/Standards New Zealand Standard Committee, *AS/NZS ISO 31000:2009, Risk Management-Principles and Guidelines*, November 2009.
3. International Electrotechnical Commission, *International Standard, ISO/ IEC 31010:2009, First Edition*, 2009.
4. Department of Health WA (2011) *Guidelines for the Non-potable Uses of Recycled Water in Western Australia*.

## Appendix B – Site Leases and Licences





# MINING TENEMENT REGISTER SEARCH

## GENERAL PURPOSE LEASE 01/1

Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:47:31 15/02/2018**

### Tenement Summary

**Identifier :** G 01/1

**District :** GREENBUSHES M.F.

**Current Area :** 9.99550 HA

**Status :** Live

**Mark Out :** 20/06/1986 15:38:00

**Received :** 23/06/1986 09:00:00

**Term Granted :** Linked - Refer to  
Relationships

**Lodging Office :** PERTH

**Commence :** 17/11/1986

**Expiry :** 05/06/2028

**Purpose :** Concentrating Lithium Ore

**Death :**

### Rent Status

**Due for Year End 16/11/2018 :**

**Previous Amount Outstanding :** \$0.00

**Current Due :** \$0.00

**Rent for Year End 16/11/2019 :** \$156.00

### Expenditure Status

**Expended Year End :** NO EXPENDITURE REQUIRED

**Current Year () Commitment :** NO EXPENDITURE REQUIRED

### OWNERSHIP DETAILS

#### Current Holders

##### **Name and Address**

TALISON LITHIUM AUSTRALIA PTY LTD  
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

##### **Shares**

100

**Total Shares:**

100

#### Holder Changes

**Dealing**

**Status Date**

**From (Shares)**

**To (Shares)**

Transfer 2145H/878	Registered 23/10/1987 00:00:00	GREENBUSHES LTD (100)	LITHIUM AUSTRALIA LTD (100)
Transfer 274320	Registered 21/09/2007 15:30:00	LITHIUM AUSTRALIA LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341669	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** DP SIT ON EASTERN BDY OF MARANUP FORD RD:2011M-156D21M11S FR NW CNR OF M 01/6

**Boundary :** THENCE:

510 metres bearing 355 degrees 39 minutes along Maranup Ford Road eastern boundary

138 metres bearing 85 degrees 38 minutes

311 metres bearing 160 degrees 20 minutes 45 seconds

210 metres bearing 175 degrees 38 minutes

220 metres bearing 265 degrees 38 minutes

BACK TO DATUM

THESE BOUNDARIES BEING CONTAINED WITHIN THE BOUNDARIES OF MINING LEASE 01/6

Area :	Type	Dealing No	Start Date	Area
	Surveyed		23/03/2005	9.99550 HA
	Granted		17/11/1986	10.00000 HA
	Applied For		20/06/1986	10.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Conditional Partial Surrender	Partial Surrender - Conditional 159849	Finalised	M 01/6	Live
Linked			M 01/16	Live



## SURVEY DETAILS

Survey

Surveyed Area	Surveyed Date	Surveyor's Name	Field Book	Instruction Date	Project
9.99550 HA	23/03/2005	LOWTH, SJ	25	31/01/2005	12040
<b>Standard Plan</b>		<b>Diagram</b>			
TENGRAPH		31175 (2751)			

## GENERAL DETAILS

General

Objection Closing Date : 23/07/1986

Application Fee : \$100.00

File Reference : 6512/86

Survey Fee :

Receipt Number : 1

Special Indicator

Special Indicator	Start	End
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## SHIRE DETAILS

Shire

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	20/06/1986		9.99550 HA

## NATIVE TITLE DETAILS

Native Title Referrals

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

Recommendation

Recommended for : Grant 30/07/1986

Grant

Granted : 14/11/1986      Holder Notified : 17/11/1986      Licence/Lease issued :

Term

Term : Linked - Refer to Relationships      From : 17/11/1986      To : 05/06/2028

## ENDORSEMENTS/CONDITIONS DETAILS

Endorsements and Conditions

#	ENDORSEMENTS	Start Date	End Date
	This Lease shall remain in force until the surrender, forfeiture or expiry of Mining Lease 01/16 in respect of which it was granted and shall then expire.	17/11/1986	

#	ENDORSEMENTS	Start Date	End Date
1	The Lessee's attention is drawn to the Minister's requirement that the holder of this Lease lodge security in the form of an Unconditional Performance Bond for due compliance with environmental conditions in the sum of: <ul style="list-style-type: none"> <li>\$119,000.</li> </ul>	12/07/2011	16/07/2013
#	CONDITIONS	Start Date	End Date
1	Survey	17/11/1986	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	17/11/1986	
3	Compliance with the provisions of the: <ul style="list-style-type: none"> <li>Water Authority Act, Regulations and By-Laws</li> <li>Forests Act and Regulations</li> <li>Bush Fires Act and Regulations</li> </ul>	17/11/1986	
4	The lessee giving the Executive Director, Department of Conservation and Land Management six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Department of Conservation and Land Management reserves the right to remove any marketable timber from such area in advance of mining operations.	17/11/1986	
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the Lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and the Executive Director.	17/11/1986	
6	<del>The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of:</del> <ul style="list-style-type: none"> <li><del>\$15,000</del></li> </ul>	27/07/2001	16/07/2013
	The Lessee shall within ninety (90) days of the granting of the lease lodge a security of \$10,000 (to be reviewed periodically) in the prescribed form (form 32) with the Department of Mines.	17/11/1986	26/07/2001
7	At the completion of mining operations and wherein the opinions of the Mining Engineer/District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	17/11/1986	
8	The Lessee shall pay royalty at current rates to the Executive Director Department of Conservation and Land Management for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the lease.	17/11/1986	
9	The Lessee shall pay to the Executive Director Department of Conservation and Land Management compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Mineral Field will be determined annually by the Minister for Minerals and Energy and the Minister for Conservation and Land Management. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Limited Map Number FD 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	17/11/1986	
10	Rehabilitation proposals and the conceptual plan as submitted for the pre-existing mining lease apply. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Executive Director, Department of Conservation and Land Management.	17/11/1986	
11	Ten (10) year mining proposals as submitted under the pre-existing mining lease shall apply and shall be reviewed at five (5) yearly intervals.	17/11/1986	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Executive Director, Department of Conservation and Land Management its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Executive in the preparation of these programmes.	17/11/1986	
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Executive Director Department of Conservation and Land Management. Such reports shall be submitted by September 30 of each year. Reports will cover the twelve months period ending the 30 June.	23/12/2013	
	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Executive Director Department of Conservation and Land	17/11/1986	22/12/2013



#	CONDITIONS	Start Date	End Date
	Management. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.		
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	17/11/1986	
15	The Lessee at his own expense shall carry out all necessary measures to prevent the spread of jarrah dieback disease on the areas of the lease and shall liaise with the District Manager before commencing exploratory work outside areas being mined.	17/11/1986	
16	The Lessee shall take all such necessary precautions as may be indicated by the Executive Director, Department of Conservation and Land Management to prevent the occurrence or spread of any fire within or adjacent to the leased area.	17/11/1986	
17	The grant of the lease being confined to the natural surface of the land and thereunder to a depth of 15 metres.	17/11/1986	
18	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the document titled:</p> <ul style="list-style-type: none"> <li>"Talison Lithium Australia Pty Ltd Greenbushes Mine Site Project 640 2011 Lithium Processing Plant Upgrade Tenement G01/1" signed by Steve Green, Manager Mining and Environmental, Talison Lithium Australia Pty Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>"Latest Cover" Email dated 24 June 2011 (and attachment) signed by Lydia Perenzin, Environmental Co-ordinator, Talison Lithium Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> <p>Where a difference exists between the above document and the following conditions, then the following conditions shall prevail.</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the document titled:</p> <ul style="list-style-type: none"> <li>"Talison Lithium Australia Pty Ltd Greenbushes Mine Site Project 640 2011 Lithium Processing Plant Upgrade Tenement G01/1" signed by Steve Green, Manager Mining and Environmental, Talison Lithium Australia Pty Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>"Latest Cover" Email dated 24 June 2011 (and attachment) signed by Lydia Perenzin, Environmental Co-ordinator, Talison Lithium Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul> <p>Where a difference exists between the above document and the following conditions, then the following conditions shall prevail.</p>	24/03/2017	
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the document titled:</p> <ul style="list-style-type: none"> <li>"Talison Lithium Australia Pty Ltd Greenbushes Mine Site Project 640 2011 Lithium Processing Plant Upgrade Tenement G01/1" signed by Steve Green, Manager Mining and Environmental, Talison Lithium Australia Pty Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>"Latest Cover" Email dated 24 June 2011 (and attachment) signed by Lydia Perenzin, Environmental Co-ordinator, Talison Lithium Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul> <p>Where a difference exists between the above document and the following conditions, then the following conditions shall prevail.</p>	02/05/2014	23/03/2017
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the document titled:</p> <ul style="list-style-type: none"> <li>"Talison Lithium Australia Pty Ltd Greenbushes Mine Site Project 640 2011 Lithium Processing Plant Upgrade Tenement G01/1" signed by Steve Green, Manager Mining and Environmental, Talison Lithium Australia Pty Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>"Latest Cover" Email dated 24 June 2011 (and attachment) signed by Lydia Perenzin, Environmental Co-ordinator, Talison Lithium Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul> <p>Where a difference exists between the above document and the following conditions, then the following conditions shall prevail.</p>	11/03/2014	01/05/2014
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the document titled:</p>	12/07/2011	10/03/2014

#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>"Talison Lithium Australia Pty Ltd Greenbushes Mine Site Project 640-2011 Lithium Processing Plant Upgrade Tenement G01/1" signed by Steve Green, Manager Mining and Environmental, Talison Lithium Australia Pty Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733;</li> <li>"Latest Cover" Email dated 24 June 2011 (and attachment) signed by Lydia Perenzin, Environmental Co-ordinator, Talison Lithium Ltd and retained on Department of Mines and Petroleum file No. EARS-MP-30733.</li> </ul> <p>Where a difference exists between the above document and the following conditions, then the following conditions shall prevail:</p>		
19	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the Director, Environment, DMP for his assessment and until his written approval to proceed has been obtained.	12/07/2011	
20	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform, to the satisfaction of an Environmental Officer, DMP.	12/07/2011	
21	All topsoil and vegetation being removed ahead of all mining operations and being stockpiled appropriately for later respreading or immediately respread as rehabilitation progresses.	12/07/2011	
22	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of an Environmental Officer, DMP.	12/07/2011	
23	All rubbish and scrap is to be progressively disposed of in a suitable manner, to the satisfaction of an Environmental Officer, DMP.	12/07/2011	
24	The Lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities, to the satisfaction of an Environmental Officer, DMP.	12/07/2011	
25	On the completion of operations or progressively where possible, stockpiles or other mining / processing related landforms / structures must be removed / rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self-sustaining, functional ecosystems comprising suitable, local provenance species or an alternative agreed outcome to the satisfaction of an Environmental Officer, DMP.	12/07/2011	
26	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	07/06/2013	10/03/2014
27	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>September</li> </ul>	23/12/2013	
	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>November.</li> </ul>	07/06/2013	22/12/2013



## DEALINGS DETAILS

**Dealings****Caveat 1023H/912****Encumbrances**

Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD  
 RECORDED 3:05 PM 28 Jan 1992  
 Re Mortgage 31H/912 - 14 days notice sent 19 Feb 1992.  
 Caveat to remain in full force and effect by Order of Warden, P.G.Thobaven 28 Feb 1992  
 Re Agreement 1H/945 - 14 days notice sent 20 Mar 1995.  
 Order under Section 121(1)(c) that caveat remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden 28 Mar 1995  
 Re Mortgage 41H/945 - 14 days notice sent 24 Apr 1995.  
 Order under Section 121(1)(c) that caveat remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden 01 May 1995  
 Re Mortgage 24H/967, 26H/967, 28H/967 & 30H/967 - 14 days notice sent 16 Jan 1997.  
 Order under Section 122(1)(c) that caveat remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden 24 Jan 1997

WITHDRAWN 9:30:00 AM 30 Nov 2000

**Mortgage 31H/912**

Lodged 11:20:00 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD  
 REGISTERED 10:00 AM 28 Feb 1992  
 Mortgage 168H/989 Registered 11:50 15 July 1998  
 Transfer:  
 New Mortgagee: CITISECURITIES LTD  
 Discharged by Withdrawal 61H/989 lodged 10:40:00 AM on 03 Sep 1998

**Application to Amend 312H/923**

Lodged 2:40:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005"  
 REGISTERED 2:40 PM 19 Mar 1993

**Agreement 1H/945SL**

Agreement (Sub-Lease) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD and ITOCHU AUSTRALIA LTD Lodged 11:00:00 AM on 14 Feb 1995  
 REGISTERED 10:00 AM 28 Mar 1995  
 WITHDRAWN 10:00:00 AM 16 Aug 2006

**Mortgage 41H/945**

Lodged 9:30:00 AM on 13 Apr 1995 in favour of ITOCHU AUSTRALIA LTD  
 REGISTERED 10:00 AM 01 May 1995  
 Discharged by Withdrawal 494H/978 lodged 2:00:00 PM on 26 May 1998

**Mortgage 26H/967**

Lodged 3:10:00 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD in respect to Agreement 1H/945  
 REGISTERED 10:00 AM 24 Jan 1997  
 Mortgage 168H/989 Registered 11:50 15 July 1998  
 Transfer:  
 New Mortgagee: CITISECURITIES LTD  
 Discharged by Withdrawal 67H/989 lodged 10:40:00 AM on 03 Sep 1998

**Mortgage 24H/967**

Lodged 3:10:00 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD  
 REGISTERED 10:00 AM 24 Jan 1997  
 Mortgage 168H/989 Registered 11:50 15 July 1998  
 Transfer:  
 New Mortgagee: CITISECURITIES LTD  
 Discharged by Withdrawal 68H/989 lodged 10:40:00 AM on 03 Sep 1998

<b>Mortgage 28H/967</b>	Lodged 3:10:00 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 63H/989 lodged 10:40:00 AM on 03 Sep 1998
<b>Mortgage 30H/967</b>	Lodged 3:10:00 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD in respect to Agreement 1H/945 REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 65H/989 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED: 10:00 24 January 1997
<b>Mortgage - Discharge 494H/978</b>	In respect to Mortgage 41H/945 lodged 2:00:00 PM on 26 May 1998 REGISTERED 2:00 PM 26 May 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 31H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 24H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 26H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 28H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 30H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Discharge 61H/989</b>	In respect to Mortgage 31H/912 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 68H/989</b>	In respect to Mortgage 24H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 67H/989</b>	In respect to Mortgage 26H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 63H/989</b>	In respect to Mortgage 28H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 65H/989</b>	In respect to Mortgage 30H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1023H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Bond Requirement 308465</b>	Requirement Date: 27/07/2001 Amount: \$15,000.00 RECORDED: 08:34:03 27 July 2001 FINALISED: 14:40:31 12 July 2011
<b>Bond PE6660</b>	Lodged on 22 Aug 2001 For \$15,000.00 RECORDED 22 Aug 2001 RETIRED 16 Oct 2007
<b>Withdrawal of Dealing 23H/067</b>	Lodged 10:00:00 AM on 16 Aug 2006 withdrawing Agreement 1H/945SL RECORDED 10:00 AM 16 Aug 2006
<b>Bond 275382</b>	Lodged on 21 Sep 2007 For \$15,000.00 (Unconditional Performance Bond) RECORDED 21 Sep 2007 RETIRED: 23 March 2010



<b>Mortgage 274385</b>		Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 3:30 PM 21 Sep 2007 REGISTERED 3:30 PM 21 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>		Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>		Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Bond 341689</b>		Lodged: 15:00 25 February 2010 Bond Type: Unconditional Performance Bond Bond Amount: \$15,000.00 RECORDED: 25 February 2010 RETIRED: 16 February 2011
<b>Application to Amend 353570</b>		Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000 To: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850 RECORDED: 10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged: 10:36 22 December 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: COMMONWEALTH BANK OF AUSTRALIA REGISTERED: 10:36 22 December 2010 DISCHARGED: 15:00 07 November 2013 Full Discharge: 434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged: 11:13 24 December 2010 In respect to: Mortgage 341684 REGISTERED: 11:13 24 December 2010
<b>Bond 365752</b>		Lodged: 15:25 15 February 2011 Bond Type: Unconditional Performance Bond Bond Amount: \$15,000.00 RECORDED: 15 February 2011 RETIRED - MRF: 16 October 2014
<b>Bond 375571</b>		Lodged: 14:40 04 July 2011 Bond Type: Unconditional Performance Bond Bond Amount: \$104,000.00 RECORDED: 12 July 2011 RETIRED - MRF: 16 October 2014
<b>Bond Requirement 376157</b>		Requirement Date: 12/07/2011

		Amount:	\$119,000.00
		RECORDED:	10:56:05 12 July 2011
		FINALISED:	07:46:18 16 October 2014
<b>Caveat 400189</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Caveat 419441</b>		Lodged:	15:50 21 March 2013
		Caveat Type:	Subject to Claim Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	15:50 21 March 2013
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472081</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	10:01 13 August 2015

### BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
375571	COMMONWEALTH BANK OF AUSTRALIA	\$104,000.00	04/07/2011	Retired - MRF	16/10/2014
365752	COMMONWEALTH BANK OF AUSTRALIA	\$15,000.00	15/02/2011	Retired - MRF	16/10/2014
341689	WESTPAC BANKING CORPORATION	\$15,000.00	25/02/2010	Retired	16/02/2011
275382	WESTPAC BANKING CORPORATION	\$15,000.00	21/09/2007	Retired	23/03/2010
PE6660	BANK OF WESTERN AUSTRALIA LTD	\$15,000.00	22/08/2001	Retired	16/10/2007



## RENT DETAILS

**Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	08/11/2017	4463069007	TALISON LITHIUM TALISON LITHIUM	OL	\$156.00	9.99550 HA	23/03/2005	\$156.00	\$0.00
Payment	2017	15/11/2016	MT-210010809073-	EF	OL	\$151.00	9.99550 HA	23/03/2005	\$151.00	\$0.00
Payment	2016	16/11/2015	MT-210010419562-	EF	OL	\$146.00	9.99550 HA	23/03/2005	\$146.00	\$0.00
Payment	2015	01/12/2014	MT-210010218725-	EF	OL	\$142.50	9.99550 HA	23/03/2005	\$142.50	\$0.00
Payment	2014	12/11/2013		06-130403	PE	\$139.00	9.99550 HA	23/03/2005	\$139.00	\$0.00
Payment	2013	25/10/2012		06-116627	PE	\$136.50	9.99550 HA	23/03/2005	\$136.50	\$0.00
Payment	2012	08/11/2011		102292	PE	\$133.00	9.99550 HA	23/03/2005	\$133.00	\$0.00
Payment	2011	02/12/2010		87412	PE	\$141.90	9.99550 HA	23/03/2005	\$141.90	\$0.00
Payment	2010	30/11/2009		72897	PE	\$138.60	9.99550 HA	23/03/2005	\$138.60	\$0.00
Payment	2009	14/11/2008		58555	PE	\$133.10	9.99550 HA	23/03/2005	\$133.10	\$0.00
Payment	2008	30/11/2007		45340	PE	\$5.50	9.99550 HA	23/03/2005	\$128.70	\$0.00
Payment	2008	04/05/2007		37139	PE	\$123.20				
Payment	2007	12/12/2006		32192	PE	\$123.20	9.99550 HA	23/03/2005	\$123.20	\$0.00
Payment	2006	09/12/2005		18877	PE	\$118.80	9.99550 HA	23/03/2005	\$118.80	\$0.00
Payment	2005	07/12/2004		5746	PE	\$115.50	9.99550 HA	23/03/2005	\$115.50	\$0.00
Payment	2004	01/12/2003		66837	PE	\$112.20	9.99550 HA	23/03/2005	\$112.20	\$0.00
Payment	2003	02/12/2002		55286	PE	\$108.90	9.99550 HA	23/03/2005	\$108.90	\$0.00
Payment	2002	13/11/2001		42796	PE	\$105.60	9.99550 HA	23/03/2005	\$105.60	\$0.00
Payment	2001	12/12/2000		31151	PE	\$105.60	9.99550 HA	23/03/2005	\$105.60	\$0.00
Payment	2000	28/07/2000		25767	PE	\$3.65	9.99550 HA	23/03/2005	\$99.65	\$0.00
Payment	2000	19/11/1999		17578	PE	\$96.00				
Payment	1999	03/12/1998		5341	PE	\$96.00	9.99550 HA	23/03/2005	\$96.00	\$0.00
Payment	1998	29/01/1998		173719	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1997	21/11/1996		153085	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1996	14/12/1995		136340	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1995	18/11/1994		117766	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1994	18/11/1993		99401	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1993	19/11/1992		82529	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1992	22/11/1991		66986	PE	\$93.00	9.99550 HA	23/03/2005	\$93.00	\$0.00
Payment	1991	07/12/1990		51203	PE	\$87.00	9.99550 HA	23/03/2005	\$87.00	\$0.00
Payment	1990	19/10/1989		1	PE	\$81.00	9.99550 HA	23/03/2005	\$81.00	\$0.00
Payment	1989	25/10/1988		1	PE	\$81.00	9.99550 HA	23/03/2005	\$81.00	\$0.00
Payment	1988	28/10/1987		1	PE	\$77.00	9.99550 HA	23/03/2005	\$77.00	\$0.00
Payment	1987	23/06/1986		1	PE	\$60.00	9.99550 HA	23/03/2005	\$60.00	\$0.00

## EXPENDITURE/EXEMPTION DETAILS

Expenditure is not required for this Legislation Type

## COMBINED REPORTING DETAILS

**C Number :**  
**Project :**

**Reporting Date :**  
**Affecting**  
**Period :**

End of Search





## MINING TENEMENT REGISTER SEARCH

### GENERAL PURPOSE LEASE 01/2



Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:47:39 15/02/2018**

### Tenement Summary

<b>Identifier :</b> G 01/2	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 9.99000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 20/06/1986 15:40:00	<b>Received :</b> 23/06/1986 09:00:00
<b>Term Granted :</b> Linked - Refer to Relationships	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 17/11/1986	<b>Expiry :</b> 05/06/2028
<b>Purpose :</b> Depositing of Lithium Ore Tailings	<b>Death :</b>

### Rent Status

**Due for Year End 16/11/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 16/11/2019 :** \$156.00

### Expenditure Status

**Expended Year End :** NO EXPENDITURE REQUIRED  
**Current Year () Commitment :** NO EXPENDITURE REQUIRED

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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Transfer 2146H/878	Registered 23/10/1987 00:00:00	GREENBUSHES LTD (100)	LITHIUM AUSTRALIA LTD (100)
Transfer 274321	Registered 21/09/2007 15:30:00	LITHIUM AUSTRALIA LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341670	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** DP SIT EASTERN BDY OF MARANUP FORD RD: 2011M-156D21M11S FR NW CNR OF M 01/6

**Boundary :** THENCE:

220 metres bearing 85 degrees 38 minutes

454.5 metres bearing 175 degrees 38 minutes

220 metres bearing 265 degrees 38 minutes

454.5 metres bearing 355 degrees 38 minutes

BACK TO DATUM

THESE BOUNDARIES BEING CONTAINED WITHIN THE BOUNDARIES OF MINING LEASE 01/6

Area :	Type	Dealing No	Start Date	Area
	Surveyed		23/03/2005	9.99000 HA
	Granted		17/11/1986	10.00000 HA
	Applied For		20/06/1986	10.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Conditional Partial Surrender	Partial Surrender - Conditional 159848	Finalised	M 01/6	Live
Linked			M 01/16	Live



## SURVEY DETAILS

Survey

Surveyed Area	Surveyed Date	Surveyor's Name	Field Book	Instruction Date	Project
9.99000 HA	23/03/2005	LOWTH, SJ	25	31/01/2005	12040
<b>Standard Plan</b>		<b>Diagram</b>			
TENGRAPH		31175 (2751)			

## GENERAL DETAILS

General

Objection Closing Date : 23/07/1986

Application Fee : \$100.00

File Reference : 6513/86

Survey Fee :

Receipt Number : 1

Special Indicator

Special Indicator	Start	End
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## SHIRE DETAILS

Shire

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	20/06/1986		9.99000 HA

## NATIVE TITLE DETAILS

Native Title Referrals

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

Recommendation

Recommended for : Grant 30/07/1986

Grant

Granted : 14/11/1986      Holder Notified : 17/11/1986      Licence/Lease issued :

Term

Term : Linked - Refer to Relationships      From : 17/11/1986      To : 05/06/2028

## ENDORSEMENTS/CONDITIONS DETAILS

Endorsements and Conditions

#	ENDORSEMENTS	Start Date	End Date
	This Lease shall remain in force until the surrender, forfeiture or expiry of Mining Lease 01/16 in respect of which it was granted and shall then expire.	17/11/1986	

#	CONDITIONS	Start Date	End Date
1	Survey	17/11/1986	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	17/11/1986	
3	Compliance with the provisions of the: <ul style="list-style-type: none"> <li>• Water Authority Act, Regulations and By-Laws</li> <li>• Forests Act and Regulations</li> <li>• Bush Fires Act and Regulations</li> </ul>	17/11/1986	
4	The lessee giving the Executive Director, Department of Conservation and Land Management six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Department of Conservation and Land management reserves the right to remove any marketable timber from such area in advance of mining operations.	17/11/1986	
5	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting form the Lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and the Executive Director.	17/11/1986	
6	The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>• \$112,000</li> </ul>	06/02/2006	16/07/2013
	The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>• \$100,000</li> </ul>	27/07/2001	05/02/2006
	The Lessee shall within ninety (90) days of the granting of the lease lodge a security of \$10,000 (to be reviewed periodically) in the prescribed form (form 32) with the Department of Mines: <ul style="list-style-type: none"> <li>• \$100,000</li> </ul>	17/11/1986	26/07/2001
7	At the completion of mining operations and wherein the opinions of the Mining Engineer/District Inspecotr of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	17/11/1986	
8	The Lessee shall pay royalty at current rates to the Executive Director Department of Conservation and Land Management for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the lease.	17/11/1986	
9	The Lessee shall pay to the Executive Director Department of Conservation and Land Management compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Mineral Field will be determined annually by the Minister for Minerals and Energy and the Minister for Conservation and Land Management. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Limited Map Number FD 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	17/11/1986	
10	Rehabilitation proposals and the conceptual plan as submitted for the pre-existing mining lease apply. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Executive Director, Department of Conservation and Land Management.	17/11/1986	
11	Ten (10) year mining proposals as submitted under the pre-existing mining lease shall apply and shall be reviewed at five (5) yearly intervals.	17/11/1986	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Executive Director, Department of Conservation and Land Management its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Executive in the preparation of these programmes.	17/11/1986	
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Executive Director Department of Conservation and Land Management. Such reports shall be submitted by September 30 of each year. Reports will cover the twelve months period ending the 30 June.	23/12/2013	
	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Executive Director Department of Conservation and Land	17/11/1986	22/12/2013



#	CONDITIONS	Start Date	End Date
	Management. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.		
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	17/11/1986	
15	The Lessee at his own expense shall carry out all necessary measures to prevent the spread of jarrah dieback disease on the areas of the lease and shall liaise with the District Manager before commencing exploratory work outside areas being mined.	17/11/1986	
16	The Lessee shall take all such necessary precautions as may be indicated by the Executive Director, Department of Conservation and Land Management to prevent the occurrence or spread of any fire within or adjacent to the leased area.	17/11/1986	
17	The grant of the lease being confined to the natural surface of the land and thereunder to a depth of 15 metres.	17/11/1986	
18	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No..</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699;</li> <li>(MP Reg ID 63657) "Greenbushes Mine Site - CG Plant #2 - 2016 Processing Plant Upgrade" dated 12 January 2017 signed by Patrick Scallan General Manager and retained on Department of Mines and Petroleum File No. EARS-MP-63657 as Doc ID 4754456</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No..</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No..</li> </ul>	03/05/2017	
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No..</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No..</li> </ul>	24/03/2017	02/05/2017
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No..</li> </ul>	03/02/2016	23/03/2017

#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>"Letter titled "Tailings Management New Cell – Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan – General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(Reg ID 45471) "Talisson Lithium Australia Pty Ltd – Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal – Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542.</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>		
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No.:</li> <li>"Letter titled "Tailings Management New Cell – Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan – General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(Reg ID 45471) "Talisson Lithium Australia Pty Ltd – Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal – Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	02/05/2014	02/02/2016
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No.:</li> <li>"Letter titled "Tailings Management New Cell – Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan – General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(Reg ID 45471) "Talisson Lithium Australia Pty Ltd – Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal – Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	11/03/2014	01/05/2014
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:-</p> <ul style="list-style-type: none"> <li>"Greenbushs Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No.:</li> <li>"Letter titled "Tailings Management New Cell – Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan – General Manager Greenbushes Mine and retained on Department of Industry and Resources File No.</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(Reg ID 45471) "Talisson Lithium Australia Pty Ltd – Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	06/02/2006	10/03/2014
19	<p>The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.</p>	06/02/2006	



#	CONDITIONS	Start Date	End Date
20	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	06/02/2006	
21	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the Environmental Officer, Department of Industry and Resources.	06/02/2006	
22	All rubbish and scrap is to be progressively disposed of in a suitable manner.	06/02/2006	
23	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the Environmental Officer, Department of Industry and Resources.	06/02/2006	
24	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the Environmental Officer, Department of Industry and Resources for his assessment and until his written approval to proceed has been obtained.	06/02/2006	
25	The construction of the tailings storage embankment shall be supervised by an engineering/geotechnical specialist.	06/02/2006	
26	The as-built details of any tailings storage embankment shall be documented by an engineering or geotechnical specialist and confirm that the construction satisfies the design intent. The construction document shall include the records of all construction quality control testing, the basis of any method specification adopted, and any significant modifications to the original design together with the reasons why the modifications were necessary. The construction document shall also present as-built drawings for the embankment earthworks and pipework. A copy of the construction document shall be submitted to Department of Industry and Resources for its records.	06/02/2006	
27	The tailings storage facility shall be checked on a routine daily basis by site personnel during periods of deposition to ensure that the facility is functioning as per the design intent.	06/02/2006	
28	An engineering or geotechnical specialist shall review the active tailings storage facility on an annual basis. The specialist shall review past performance, validate the design, examine tailings management and review the results of monitoring. Any deficiencies not in the review report shall be submitted to DoIR and should be accompanied by a recent survey pick-up of the facility and an updated tailings storage data sheet.	06/02/2006	
29	At the time of the first annual review, SOG is to provide stability analyses of all TSF embankments, using as-built properties of embankment and foundation materials (after at least 6 month of consolidation).	06/02/2006	
30	Prior to any rock waste dumping on the old lithium tailings, the DoIR requires a detailed geotechnical assessment of the stability of foundation materials and potential influences on any embankment downstream of the waste dump.	06/02/2006	
31	At the time of decommissioning of the tailings storage facility and prior to rehabilitation, a further review report by a geotechnical or engineering specialist shall be submitted to DoIR. This report should review the status of the structure and its contained tailings, examine and address the implications of the physical and chemical characteristics of the materials, and present and review the results of all environmental monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements should also be addressed.	06/02/2006	
32	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul> A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul> A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	24/03/2017	
		11/03/2014	23/03/2017
		07/06/2013	10/03/2014
33	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation	23/12/2013	

#	CONDITIONS	Start Date	End Date
	work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>September</li> </ul>		
	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>November.</li> </ul>	07/06/2013	22/12/2013
34	The tailings storage facility shall be appropriately monitored to ensure any significant changes to the phreatic surface can be detected, and appropriate management actions implemented, to ensure the stability of the facility is maintained.	03/02/2016	
35	Prior to each lift of the tailings storage facility, the stability of the perimeter embankment shall be assessed by a suitably qualified engineer, taking into account the results of monitoring of the phreatic surface and the performance of seepage management measures.	03/02/2016	
36	The Lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.	03/05/2017	
37	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.	03/05/2017	
38	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability, to the satisfaction of the Executive Director, Environment Division, DMP.	03/05/2017	
39	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.	03/05/2017	
40	All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, DMP.	03/05/2017	

## DEALINGS DETAILS

### Dealings

#### Caveat 1024H/912

#### Encumbrances

Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD  
RECORDED 3:05 PM 28 Jan 1992  
Re Mortgage 31H/912 - 14 days notice sent 19 Feb 1992.  
Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992  
Re Mortgage 24H/967 & 28H/967 14 days notice sent 16 Jan 1997.  
Order under Section 122(1)(c) that caveat remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden on 24 Jan 1997

WITHDRAWN 9:30:00 AM 30 Nov 2000

#### Mortgage 31H/912

Lodged 11:20:00 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD  
REGISTERED 10:00 AM 28 Feb 1992  
Mortgage 168H/989 Registered 11:50 15 July 1998  
Transfer:  
New Mortgagee: CITISECURITIES LTD  
Discharged by Withdrawal 61H/989 lodged 10:40:00 AM on 03 Sep 1998

#### Application to Amend 312H/923

Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005"  
REGISTERED 2:46 PM 19 Mar 1993



<b>Mortgage 24H/967</b>	Lodged 3:10:00 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 68H/989 lodged 10:40:00 AM on 03 Sep 1998
<b>Mortgage 28H/967</b>	Lodged 3:10:00 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 63H/989 lodged 10:40:00 AM on 03 Sep 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 31H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 24H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 28H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Discharge 61H/989</b>	In respect to Mortgage 31H/912 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 68H/989</b>	In respect to Mortgage 24H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 63H/989</b>	In respect to Mortgage 28H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1024H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Bond PE6659</b>	Lodged on 22 Aug 2001 For \$100,000.00 RECORDED 22 Aug 2001 RETIRED 16 Oct 2007
<b>Bond 224522</b>	Lodged on 28 Sep 2005 For \$12,000.00 RECORDED 28 Sep 2005 RETIRED 16 Oct 2007
<b>Bond Requirement 308466</b>	Requirement Date: 06/02/2006 Amount: \$112,000.00 RECORDED: 08:37:04 06 February 2006 FINALISED: 07:48:15 16 October 2014
<b>Bond 275383</b>	Lodged on 21 Sep 2007 For \$112,000.00 (Unconditional Performance Bond) RECORDED 21 Sep 2007 RETIRED: 23 March 2010
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 3:30 PM 21 Sep 2007 REGISTERED 3:30 PM 21 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

	Mortgagee:	WESTPAC BANKING CORPORATION
	REGISTERED:	14:50 25 February 2010
	DISCHARGED:	11:13 24 December 2010
	Full Discharge:	362313 Registered 11:13 24 December 2010
<b>Bond 341690</b>	Lodged:	15:00 25 February 2010
	Bond Type:	Unconditional Performance Bond
	Bond Amount:	\$112,000.00
	RECORDED:	25 February 2010
	RETIRED:	16 February 2011
<b>Application to Amend 353570</b>	Lodged:	10:00 17 August 2010
	Amending:	Address
	From:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
	To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
	RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>	Lodged:	10:36 22 December 2010
	Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
	REGISTERED:	10:36 22 December 2010
	DISCHARGED:	15:00 07 November 2013
	Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>	Lodged:	11:13 24 December 2010
	In respect to:	Mortgage 341684
	REGISTERED:	11:13 24 December 2010
<b>Bond 365753</b>	Lodged:	15:25 15 February 2011
	Bond Type:	Unconditional Performance Bond
	Bond Amount:	\$112,000.00
	RECORDED:	15 February 2011
	RETIRED - MRF:	16 October 2014
<b>Caveat 400190</b>	Lodged:	12:10 22 June 2012
	Caveat Type:	Absolute Caveat
	Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	12:10 22 June 2012
	Affected Dealing:	Mortgage 472080
	14 day notice sent:	11 August 2015
	Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>	Lodged:	15:00 07 November 2013
	In respect to:	Mortgage 364473
	REGISTERED:	15:00 07 November 2013
<b>Mortgage 472080</b>	Lodged:	10:15 30 July 2015
	Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED



<b>Caveat 472082</b>	REGISTERED:	10:00 13 August 2015
	Lodged:	10:15 30 July 2015
	Caveat Type:	Consent Caveat
	Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	10:01 13 August 2015

**BOND DETAILS**

Bond	Surety	Amount	Bond date	Bond status	Bond status date
365753	COMMONWEALTH BANK OF AUSTRALIA	\$112,000.00	15/02/2011	Retired - MRF	16/10/2014
341690	WESTPAC BANKING CORPORATION	\$112,000.00	25/02/2010	Retired	16/02/2011
275383	WESTPAC BANKING CORPORATION	\$112,000.00	21/09/2007	Retired	23/03/2010
224522	AUSTRALIA AND NEW ZEALAND BANKING GROUP LTD	\$12,000.00	28/09/2005	Retired	16/10/2007
PE6659	BANK OF WESTERN AUSTRALIA LTD	\$100,000.00	22/08/2001	Retired	16/10/2007

**RENT DETAILS****Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	08/11/2017	2204757609	TALISON LITHIUM TALISON LITHIUM	OL	\$156.00	9.99000 HA	23/03/2005	\$156.00	\$0.00
Payment	2017	15/11/2016		MT-210010809073-EF	OL	\$151.00	9.99000 HA	23/03/2005	\$151.00	\$0.00
Payment	2016	16/11/2015		MT-210010419562-EF	OL	\$146.00	9.99000 HA	23/03/2005	\$146.00	\$0.00
Payment	2015	01/12/2014		MT-210010218725-EF	OL	\$142.50	9.99000 HA	23/03/2005	\$142.50	\$0.00
Payment	2014	12/11/2013		06-130403	PE	\$139.00	9.99000 HA	23/03/2005	\$139.00	\$0.00
Payment	2013	25/10/2012		06-116627	PE	\$136.50	9.99000 HA	23/03/2005	\$136.50	\$0.00
Payment	2012	30/11/2011		103291	PE	\$133.00	9.99000 HA	23/03/2005	\$133.00	\$0.00
Payment	2011	02/12/2010		87412	PE	\$141.90	9.99000 HA	23/03/2005	\$141.90	\$0.00
Payment	2010	30/11/2009		72897	PE	\$138.60	9.99000 HA	23/03/2005	\$138.60	\$0.00
Payment	2009	14/11/2008		58555	PE	\$133.10	9.99000 HA	23/03/2005	\$133.10	\$0.00
Payment	2008	30/11/2007		45340	PE	\$5.50	9.99000 HA	23/03/2005	\$128.70	\$0.00
Payment	2008	04/05/2007		37139	PE	\$123.20				
Payment	2007	12/12/2006		32192	PE	\$123.20	9.99000 HA	23/03/2005	\$123.20	\$0.00
Payment	2006	09/12/2005		18877	PE	\$118.80	9.99000 HA	23/03/2005	\$118.80	\$0.00
Payment	2005	07/12/2004		5746	PE	\$115.50	9.99000 HA	23/03/2005	\$115.50	\$0.00
Payment	2004	01/12/2003		66837	PE	\$112.20	9.99000 HA	23/03/2005	\$112.20	\$0.00
Payment	2003	02/12/2002		55286	PE	\$108.90	9.99000 HA	23/03/2005	\$108.90	\$0.00
Payment	2002	13/11/2001		42796	PE	\$105.60	9.99000 HA	23/03/2005	\$105.60	\$0.00
Payment	2001	12/12/2000		31151	PE	\$105.60	9.99000 HA	23/03/2005	\$105.60	\$0.00
Payment	2000	28/07/2000		25767	PE	\$3.65	9.99000 HA	23/03/2005	\$99.65	\$0.00
Payment	2000	19/11/1999		17578	PE	\$96.00				
Payment	1999	03/12/1998		5341	PE	\$96.00	9.99000 HA	23/03/2005	\$96.00	\$0.00

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	1998	29/01/1998		173719	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1997	21/11/1996		153085	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1996	14/12/1995		136340	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1995	18/11/1994		117766	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1994	18/11/1993		99401	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1993	19/11/1992		82529	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1992	22/11/1991		66986	PE	\$93.00	9.99000 HA	23/03/2005	\$93.00	\$0.00
Payment	1991	07/12/1990		51203	PE	\$87.00	9.99000 HA	23/03/2005	\$87.00	\$0.00
Payment	1990	19/10/1989		1	PE	\$81.00	9.99000 HA	23/03/2005	\$81.00	\$0.00
Payment	1989	25/10/1988		1	PE	\$81.00	9.99000 HA	23/03/2005	\$81.00	\$0.00
Payment	1988	28/10/1987		1	PE	\$77.00	9.99000 HA	23/03/2005	\$77.00	\$0.00
Payment	1987	23/06/1986		1	PE	\$60.00	9.99000 HA	23/03/2005	\$60.00	\$0.00

### EXPENDITURE/EXEMPTION DETAILS

Expenditure is not required for this Legislation Type

### COMBINED REPORTING DETAILS

**C Number :**

**Project :**

**Reporting Date :**

**Affecting  
Period :**

End of Search



# MINING TENEMENT REGISTER SEARCH

## MISCELLANEOUS LICENCE 01/1



This Register Search issued pursuant to Section 103F(4) of the Mining Act, 1978 at: **10:47:42 15/02/2018**

Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

### Tenement Summary

<b>Identifier :</b> L 01/1	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 9.30780 HA	<b>Status :</b> Live
<b>Mark Out :</b> 27/09/1985 13:15:00	<b>Received :</b> 27/09/1985 13:40:00
<b>Term Granted :</b> Linked - Refer to Relationships	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 19/03/1986	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b> For Water	<b>Death :</b>

### Rent Status

**Due for Year End 18/03/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 18/03/2019 :** \$156.00

### Expenditure Status

**Expended Year End :** NO EXPENDITURE REQUIRED  
**Current Year () Commitment :** NO EXPENDITURE REQUIRED

### OWNERSHIP DETAILS

#### Current Holders

<b>Name and Address</b>	<b>Shares</b>
TALISON LITHIUM AUSTRALIA PTY LTD	100
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

<b>Dealing</b>	<b>Status Date</b>	<b>From (Shares)</b>	<b>To (Shares)</b>
----------------	--------------------	----------------------	--------------------

A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274319	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341668	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
91 KENSINGTON ST, EAST PERTH, WA, 6000

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** DP SIT 186.845M BRG 89D52M FROM NW CNR LOC 8756

**Boundary :** From Datum 314.285m bearing 89 degrees 52 minutes

Thence 244.017m bearing 179 degrees 52 seconds to the boundary of loc 8756  
Thence 106.739m bearing 179 degrees 52 seconds along boundary of loc 8756  
Thence 181.252m bearing 269 degrees 52 seconds along boundary of loc 8756  
Thence 156.911m bearing 301 degrees 52 seconds along boundary of loc 8756  
Thence 267.553m bearing 359 degrees 52 seconds along boundary of loc 8756  
Back to Datum Peg.  
Area pegged identical with water right 01/301

Area :	Type	Dealing No	Start Date	Area
	Granted		19/03/1986	9.30780 HA
	Applied For		27/09/1985	9.30780 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Linked			M 01/2	Live

## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
Standard Plan		Diagram			



## GENERAL DETAILS

**General**

Objection Closing Date : 28/10/1985

File Reference : 7534/85

Receipt Number : 1

Application Fee : \$100.00

Survey Fee :

**Special Indicator**

Special Indicator	Start	End

## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	27/09/1985		9.30780 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for :

**Grant**

Granted : 19/03/1986

Holder Notified :

Licence/Lease  
issued :**Term**

Term : Linked - Refer to Relationships

From : 19/03/1986

To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
	This Licence shall remain in force until the surrender, forfeiture or expiry of Mining Lease 01/2 in respect of which it was granted and shall then expire.	19/03/1986	
#	CONDITIONS	Start Date	End Date
1	Subject to rights in Water and Irrigation Act	19/03/1986	
2	The Licensee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>September</li> </ul> The Licensee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental	23/12/2013	
		07/06/2013	22/12/2013

#	CONDITIONS	Start Date	End Date
	management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>November:</li> </ul>		
3	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	07/06/2013	

## DEALINGS DETAILS

### Dealings

<b>Copy Document 111H/889</b>	<b>Encumbrances</b> Lodged 9:50:00 AM on 26 Oct 1988 in lieu of lost licence instrument REJECTED 9:50 AM 26 Oct 1988
<b>Mortgage 78H/878</b>	Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES REJECTED 11:00 AM 01 Jul 1988 RELODGED 9:35 AM 20 Jan 1989 REGISTERED 9:35 AM 20 Jan 1989 Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992
<b>Copy Document 168H/889</b>	Lodged 9:35:00 AM on 20 Jan 1989 in lieu of lost licence instrument REGISTERED 9:35 AM 20 Jan 1989
<b>Caveat 1025H/912</b>	Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992 Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992 Re Mortgage 25H/967 & 29H/967 - 14 day notice sent on 16 Jan 1997. Order under Section 122(1)(c) that caveat remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden on 24 Jan 1997 WITHDRAWN 9:30:00 AM 30 Nov 2000
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to R & I Bank of Western Australia in Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to the State Bank of New South Wales in Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Application to Amend 313H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD



	REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1025H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Copy Document 86H/001</b>	Lodged on 12 Mar 2001 in lieu of lost of licence document REGISTERED 12 Mar 2001
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Extension / Renewal of Term 49H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 RECORDED 4:15 PM 15 Dec 2005 LAPSED 15 Dec 2005
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL

		To:	36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000 Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Caveat 400191</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472083</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	10:01 13 August 2015

## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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## RENT DETAILS

**Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	07/03/2017		MT-210010956328- EF	OL	\$151.00	9.30780 HA	19/03/1986	\$151.00	\$0.00
Payment	2017	08/04/2016		MT-210010564464- EF	OL	\$146.00	9.30780 HA	19/03/1986	\$146.00	\$0.00
Payment	2016	14/04/2015		MT-210010244112- EF	OL	\$142.50	9.30780 HA	19/03/1986	\$142.50	\$0.00
Payment	2015	08/04/2014		MT-210010169883- EF	OL	\$139.00	9.30780 HA	19/03/1986	\$139.00	\$0.00
Payment	2014	12/02/2013		06-120469	PE	\$136.50	9.30780 HA	19/03/1986	\$136.50	\$0.00
Payment	2013	22/03/2012		06-107550	PE	\$133.00	9.30780 HA	19/03/1986	\$133.00	\$0.00
Payment	2012	17/03/2011		91243	PE	\$141.90	9.30780 HA	19/03/1986	\$141.90	\$0.00
Payment	2011	15/03/2010		76678	PE	\$138.60	9.30780 HA	19/03/1986	\$138.60	\$0.00
Payment	2010	12/03/2009		62434	PE	\$133.10	9.30780 HA	19/03/1986	\$133.10	\$0.00
Payment	2009	25/03/2008		49429	PE	\$128.70	9.30780 HA	19/03/1986	\$128.70	\$0.00
Payment	2008	09/03/2007		35128	PE	\$123.20	9.30780 HA	19/03/1986	\$123.20	\$0.00
Payment	2007	09/03/2006		21921	PE	\$118.80	9.30780 HA	19/03/1986	\$118.80	\$0.00
Payment	2006	24/03/2005		9226	PE	\$115.50	9.30780 HA	19/03/1986	\$115.50	\$0.00
Payment	2005	01/04/2004		70581	PE	\$112.20	9.30780 HA	19/03/1986	\$112.20	\$0.00
Payment	2004	31/03/2003		58836	PE	\$108.90	9.30780 HA	19/03/1986	\$108.90	\$0.00
Payment	2003	12/04/2002		47559	PE	\$105.60	9.30780 HA	19/03/1986	\$105.60	\$0.00
Payment	2002	27/03/2001		34934	PE	\$105.60	9.30780 HA	19/03/1986	\$105.60	\$0.00
Payment	2001	18/04/2000		22272	PE	\$102.85	9.30780 HA	19/03/1986	\$102.86	-\$0.01
Payment	2000	09/04/1999		10034	PE	\$96.00	9.30780 HA	19/03/1986	\$96.00	\$0.00
Payment	1999	25/03/1998		176165	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1998	02/04/1997		159630	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1997	15/03/1996		140670	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1996	07/04/1995		124278	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1995	09/03/1994		06-104490	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1994	17/03/1993		87229	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1993	18/03/1992		71861	PE	\$93.00	9.30780 HA	19/03/1986	\$93.00	\$0.00
Payment	1992	16/04/1991		56714	PE	\$87.00	9.30780 HA	19/03/1986	\$87.00	\$0.00
Payment	1991	22/06/1990		42321	PE	\$81.00	9.30780 HA	19/03/1986	\$81.00	\$0.00
Payment	1990	16/03/1989		1	PE	\$81.00	9.30780 HA	19/03/1986	\$81.00	\$0.00
Payment	1989	17/03/1988		1	PE	\$77.00	9.30780 HA	19/03/1986	\$77.00	\$0.00
Payment	1988	20/05/1987		1	PE	\$70.00	9.30780 HA	19/03/1986	\$70.00	\$0.00
Payment	1987	27/09/1985		1	PE	\$60.00	9.30780 HA	19/03/1986	\$60.00	\$0.00

## EXPENDITURE/EXEMPTION DETAILS

Expenditure is not required for this Legislation Type

## COMBINED REPORTING DETAILS

C Number :

Reporting Date :

Project :

Affecting  
Period :

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/2



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:47:44 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/2	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 968.90000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 11:30:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,054.40

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$96,900.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274306	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341671	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SIT 1697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOC 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees along part of the south boundary of the Greenbushes Mineral Field

5000 metres bearing 360 degrees along part of the west boundary of the Greenbushes Mineral Field

2000 metres bearing 90 degrees

BACK TO DATUM

Area :	Type	Dealing No	Start Date	Area
	Surveyed		11/06/2011	968.90000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Linked			L 01/1	Live

## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
968.90000 HA	11/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram  
65961

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984  
 File Reference : 15593/83  
 Receipt Number : 25561

Application Fee : \$15.00  
 Survey Fee : \$1,730.00

**Special Indicator**

Special Indicator                      Start                      End

## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		955.78000 HA
DONNYBROOK-BALINGUP SHIRE	2870	08/12/1983		13.12000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant                      25/01/1984

**Grant**

Granted : 28/12/1984                      Holder Notified : 28/12/1984                      Licence/Lease issued :

**Term**

Term : 21 Years (Renewed)                      From : 28/12/1984                      To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	14/11/1994	
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	



#	CONDITIONS	Start Date	End Date
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes	28/12/1984	

#	CONDITIONS	Start Date	End Date
	which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.		
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	Mining on any road or road reserve being confined to below a depth of 15 metres from the natural surface.	28/12/1984	
19	Mining on Miner's Homestead Lease 01/1 and 01/8 being confined to below a depth of 15 metres from the natural surface of the land.	28/12/1984	
20	The complete excision of any portion encroaching on Water Right 01/301.	28/12/1984	
21	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
22	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
23	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
24	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
25	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
26	The Lessee by September 30 of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this	23/12/2013	



#	CONDITIONS	Start Date	End Date
	review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.		
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
27	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
28	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	24/03/2017	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	23/03/2017
29	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

#### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease  
REGISTERED 9:00 AM 28 Dec 1984  
Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

#### Mortgage 15H/856

Lodged 12:40 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES  
REGISTERED 11:30 AM 11 Nov 1985

	Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd. REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd. REGISTERED 10:20 AM 29 Apr 1992
<b>Agreement 118H/856</b>	Agreement (Deed of Charge) THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES Lodged 4:00:00 PM on 23 Oct 1985 REGISTERED 4:00 PM 23 Oct 1985 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Mortgage 78H/878</b>	Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES REGISTERED 11:00 AM 01 Jul 1988 Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992
<b>Caveat 1028H/912</b>	Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 day notice sent 19 Feb 1992 Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992 Re Mortgage 25H/967 - 14 day notice sent 16 Jan 1997. Order under Section 122(1)(c), caveat to remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden on 24 Jan 1997 WITHDRAWN 9:30:00 AM 30 Nov 2000
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to the State Bank of New South Wales in Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001



<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1028H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Extension / Renewal of Term 39H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Extension of Time 343576</b>	Lodged: 15:13 25 March 2010 Type: Stat Dec RECORDED: 15:13 25 March 2010 Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition APPROVED: 13:10:44 26 March 2010
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM

		To:	AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000 Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Extension of Time 367988</b>		Lodged:	09:59 22 March 2011
		Type:	Stat Dec
		RECORDED:	09:59 22 March 2011
			Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition
		APPROVED:	13:35:37 22 March 2011
<b>Caveat 400176</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
			Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Extension of Time 464482</b>		Lodged:	15:18 24 March 2015
		Type:	Stat Dec
		RECORDED:	15:18 24 March 2015
		APPROVED:	15:29:31 25 March 2015
			Time extended to 17 April 2015
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472084</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	10:01 13 August 2015



## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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## RENT DETAILS

Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	6101572433	TALISON LITHIUM TALISON LITHIUM	OL	\$17,054.40	968.90000 HA	11/06/2011	\$17,054.40	\$0.00
Payment	2017	28/12/2016		MT-210010864421- EF	OL	\$16,521.45	968.90000 HA	11/06/2011	\$16,521.45	\$0.00
Payment	2016	27/01/2016		MT-210010481233- EF	OL	\$15,988.50	968.90000 HA	11/06/2011	\$15,988.50	\$0.00
Payment	2015	27/01/2015		MT-210010226403- EF	OL	\$15,600.90	968.90000 HA	11/06/2011	\$15,600.90	\$0.00
Payment	2014	21/01/2014		MT-210010156188- EF	OL	\$15,213.30	968.90000 HA	11/06/2011	\$15,213.30	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$14,922.60	968.90000 HA	11/06/2011	\$14,922.60	\$0.00
Refund	2012	10/05/2013		(REFUND) 06-105241	PE	\$9,446.84	968.90000 HA	11/06/2011	\$14,535.00	-\$8,981.84
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00				
Payment	2011	27/01/2011		89308	PE	\$15,950.00	968.90000 HA	11/06/2011	\$15,455.55	\$494.45
Payment	2010	15/01/2010		74451	PE	\$15,620.00	968.90000 HA	11/06/2011	\$15,135.78	\$484.22
Payment	2009	23/01/2009		60707	PE	\$14,960.00	968.90000 HA	11/06/2011	\$14,496.24	\$463.76
Payment	2008	18/01/2008		47128	PE	\$14,520.00	968.90000 HA	11/06/2011	\$14,069.88	\$450.12
Payment	2007	24/01/2007		33490	PE	\$13,860.00	968.90000 HA	11/06/2011	\$13,430.34	\$429.66
Payment	2006	16/12/2005		19118	PE	\$13,420.00	968.90000 HA	11/06/2011	\$13,003.98	\$416.02
Payment	2005	17/12/2004		6103	PE	\$13,090.00	968.90000 HA	11/06/2011	\$12,684.21	\$405.79
Payment	2004	19/12/2003		67510	PE	\$12,760.00	968.90000 HA	11/06/2011	\$12,364.44	\$395.56
Payment	2003	23/12/2002		55944	PE	\$12,320.00	968.90000 HA	11/06/2011	\$11,938.08	\$381.92
Payment	2002	29/01/2002		44977	PE	\$12,000.00	968.90000 HA	11/06/2011	\$11,628.00	\$372.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	968.90000 HA	11/06/2011	\$10,978.77	\$351.23
Payment	2000	28/07/2000		25767	PE	\$506.56	968.90000 HA	11/06/2011	\$10,471.55	\$335.01
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	968.90000 HA	11/06/2011	\$9,980.70	\$319.30
Payment	1998	29/01/1998		173719	PE	\$10,000.00	968.90000 HA	11/06/2011	\$9,690.00	\$310.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	968.90000 HA	11/06/2011	\$9,690.00	\$310.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	968.90000 HA	11/06/2011	\$9,690.00	\$310.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	968.90000 HA	11/06/2011	\$9,011.70	\$288.30
Payment	1994	01/02/1994		102570	PE	\$9,300.00	968.90000 HA	11/06/2011	\$9,011.70	\$288.30
Payment	1993	26/01/1993		84964	PE	\$9,300.00	968.90000 HA	11/06/2011	\$9,011.70	\$288.30
Payment	1992	28/01/1992		69332	PE	\$9,300.00	968.90000 HA	11/06/2011	\$9,011.70	\$288.30
Payment	1991	01/02/1991		1	PE	\$8,700.00	968.90000 HA	11/06/2011	\$8,430.30	\$269.70
Payment	1990	20/12/1989		1	PE	\$8,100.00	968.90000 HA	11/06/2011	\$7,848.90	\$251.10
Payment	1989	16/12/1988		1	PE	\$8,100.00	968.90000 HA	11/06/2011	\$7,848.90	\$251.10
Payment	1988	21/12/1987		1	PE	\$7,700.00	968.90000 HA	11/06/2011	\$7,461.30	\$238.70
Payment	1987	16/12/1986		1	PE	\$7,000.00	968.90000 HA	11/06/2011	\$6,783.00	\$217.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	968.90000 HA	11/06/2011	\$5,814.00	\$186.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	968.90000 HA	11/06/2011	\$5,814.00	\$186.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$96,900.00							
2017	\$96,900.00							
2016	\$96,900.00	24/02/2017	\$29,793.00	\$96,900.00	23/02/2017	501614	Granted	05/04/2017
2015	\$96,900.00	25/02/2016	\$23,576.00	\$96,900.00	25/02/2016	482273	Granted	17/06/2016
2014	\$96,900.00	24/02/2015	\$22,692.00	\$96,900.00	24/02/2015	462978	Granted	07/05/2015
2013	\$96,900.00	25/02/2014	\$24,171.00	\$96,900.00	20/02/2014	440728	Granted	25/07/2014
2012	\$96,900.00	21/02/2013	\$23,246.00	\$96,900.00	14/02/2013	417023	Granted	07/08/2013
2011	\$98,450.00	23/02/2012	\$20,981.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$20,557.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$19,790.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$18,976.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,698.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$36,364.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$34,012.00	\$100,000.00	05/02/2004	255H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$18,221.00	\$100,000.00	23/01/2003	199H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$10,820.00	\$89,180.00	25/02/2002	199H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$10,769.00	\$89,231.00	26/02/2001	206H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1999	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$0.00	\$100,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$40,975.00	\$59,025.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$43,885.00	\$56,115.00	20/02/1995	265H/945	Granted	16/05/1995
1993	\$100,000.00	24/02/1994	\$43,885.00	\$56,115.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$13,000.00	\$87,000.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$20,141.00	\$79,859.00	17/03/1992	147H/912	Granted	29/04/1992
1990	\$100,000.00	07/03/1991	\$33,363.00	\$66,637.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$33,471.00					
1988	\$100,000.00	07/03/1989	\$247,793.00					
1987	\$100,000.00	08/02/1988	\$3,574,610.00					
1986	\$100,000.00	17/02/1987	\$931,480.00					
1985	\$100,000.00	06/03/1986	\$150,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$1,660.00	\$0.00	\$0.00	\$24,247.00	\$3,886.00	\$0.00	\$29,793.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$23,576.00	\$0.00	\$0.00	\$23,576.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$22,692.00	\$0.00	\$0.00	\$22,692.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$21,018.00	\$3,153.00	\$0.00	\$24,171.00
2012	21/02/2013	\$0.00	\$0.00	\$0.00	\$20,214.00	\$3,032.00	\$0.00	\$23,246.00
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$18,244.00	\$2,737.00	\$0.00	\$20,981.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$17,539.00	\$3,018.00	\$0.00	\$20,557.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$17,209.00	\$2,581.00	\$0.00	\$19,790.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$16,501.00	\$2,475.00	\$0.00	\$18,976.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,178.00	\$0.00	\$16,698.00
2006	23/02/2007	\$0.00	\$0.00	\$0.00	\$14,555.00	\$2,183.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$6,297.00	\$12,726.00	\$0.00	\$13,705.00	\$3,636.00	\$0.00	\$36,364.00



Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2003	22/01/2004	\$0.00	\$19,425.00	\$0.00	\$12,968.00	\$1,619.00	\$0.00	\$34,012.00
2002	23/01/2003	\$0.00	\$2,714.00	\$0.00	\$12,470.00	\$3,037.00	\$0.00	\$18,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,820.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,769.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,975.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,000.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,141.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33,363.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33,471.00
1988	07/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$247,793.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,574,610.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$931,480.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$150,000.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

**Active Tenements:**

M 01/2 (18/07/1994)	M 01/3 (18/07/1994)	M 01/4 (18/07/1994)
M 01/5 (18/07/1994)	M 01/6 (18/07/1994)	M 01/7 (18/07/1994)
M 01/8 (18/07/1994)	M 01/9 (18/07/1994)	M 01/10 (18/07/1994)
M 01/11 (18/07/1994)	M 01/16 (14/07/1995)	M 01/18 (14/07/1995)
M 70/765 (14/07/1995)		

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/3



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:47:48 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/3	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 999.60000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 11:30:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,600.00

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$100,000.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274307	Registered 30/10/2007 10:00:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341672	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 1697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

2000 metres bearing 90 degrees

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees along part of the south boundary to the Greenbushes Mineral Field

5000 metres bearing 360 degrees

BACK TO DATUM

Area :	Type	Dealing No	Start Date	Area
	Surveyed		23/03/2005	999.60000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
999.60000 HA	23/03/2005	LOWTH, SJ	24	31/01/2005	12040

Standard Plan

Diagram

TENGRAPH

31175 (2751)

**GENERAL DETAILS****General**

Objection Closing Date : 11/01/1984

Application Fee : \$15.00

File Reference : 15594/83

Survey Fee : \$1,730.00

Receipt Number : 25561

**Special Indicator**

Special Indicator	Start	End
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**SHIRE DETAILS****Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		999.60000 HA

**NATIVE TITLE DETAILS****Native Title Referrals****DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation**

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

**GRANT DETAILS****Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984	Holder Notified : 28/12/1984	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed) From : 28/12/1984 To : 27/12/2026

**ENDORSEMENTS/CONDITIONS DETAILS****Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	14/11/1994	
2	The land the subject of this lease affects a Rare Flora Site (including Rare Flora site 10605) declared under the Wildlife Conservation Act 1950. The lessee is advised to contact the Department of Conservation and Land Management for detailed information on the management of Declared Rare Flora present within the tenement area.	27/06/2001	25/11/2012
3	The land the subject of this lease affects a Rare Flora Site (including Rare Flora site 91235) declared under the Wildlife Conservation Act 1950. The lessee is advised to contact	26/11/2012	



#	ENDORSEMENTS	Start Date	End Date
	the Department of Conservation and Land Management for detailed information on the management of Declared Rare Flora present within the tenement area		
	The land the subject of this lease affects a Rare Flora Site (including Rare Flora site 17365) declared under the Wildlife Conservation Act 1950. The lessee is advised to contact the Department of Conservation and Land Management for detailed information on the management of Declared Rare Flora present within the tenement area	21/12/2001	25/11/2012
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year	28/12/1984	13/11/1994

#	CONDITIONS	Start Date	End Date
	and payments by way of any necessary adjustment shall be made in the month of January next following.		
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	28/12/1984	
13	<del>The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.</del>	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	<del>The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.</del>	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	<del>The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.</del>	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	Mining on any road or road reserve being confined to below a depth of 15 metres from the natural surface.	28/12/1984	
19	Mining on Miner's Homestead Lease 01/1 and 01/8 being confined to below a depth of 15 metres from the natural surface of the land.	28/12/1984	
20	No mining on Recreation and Swimming Pool Reserve 22315 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	
21	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
22	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	<del>All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.</del>	14/11/1994	11/08/2005
23	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
24	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being	12/08/2005	



#	CONDITIONS	Start Date	End Date
	removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.		
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
25	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
26	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
27	The lessee arranging lodgement of a Bond in favour of the Minister for State Development for due copliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$9,000</li> </ul>	27/07/2001	29/07/2013
28	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
29	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</p>	24/03/2017	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul>	02/05/2014	23/03/2017

#	CONDITIONS	Start Date	End Date
	<p>The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled:</p> <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	01/05/2014
30	<p>The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in:</p> <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

##### Encumbrances

Lodged 3:30:00 PM on 02 Jun 1982 in favour of the Commissioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA

By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease

REGISTERED 9:00 AM 28 Dec 1984

Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

#### Mortgage 15H/856

Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES

REGISTERED 11:30 AM 11 Nov 1985

Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd. REGISTERED 10:20 AM 29 Apr 1992

Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd. REGISTERED 10:20 AM 29 Apr 1992

#### Agreement 118H/856

Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985

REGISTERED 4:00 PM 23 Oct 1985

WITHDRAWN 9:30:00 AM 18 Aug 2006

#### Mortgage 78H/878

Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES

REGISTERED 11:00 AM 01 Jul 1988

Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales

REGISTERED 10:20 AM 29 Apr 1992

Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia

REGISTERED 10:20 AM 29 Apr 1992

#### Caveat 1029H/912

Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD

RECORDED 3:05 PM 28 Jan 1992

Re Mortgage 29H/912 - 14 day notice sent 19 Feb 1992

Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992

Re Mortgages 25H/967 & 29H/967 - 14 day notice sent 16 Jan 1997. Order under Section 122(1)(c) caveat to remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden, 24 Jan 1997

Re Mortgage 3H/989 - 14 day notice sent 28 Jul 1998



	LAPSED 12:00 Midnight 11 Aug 1998
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 29 Apr 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Caveat 1710H/978</b>	Lodged 3:45:00 PM on 30 Apr 1998 by CABOT CORPORATION in respect to 100/100ths shares in the name of GREENBUSHES LTD RECORDED 3:45 PM 30 Apr 1998 Re Mortgage 3H/989 - 14 day notice sent 28 Jul 1998 Order under Section 122(1)(c) that caveat shall not cease to have effect upon expiration of 14 days, G.Calder, Warden, 07 Aug 1998 Re Agreements 74H/989 & 75H/989 - 14 day notice sent 16 Dec 1998 Caveat to remain in full force and effect upon registration of the Agreements, signed by Warden 10:00 AM on 30 Dec 1998 WITHDRAWN 10:00 AM 13 Feb 2006
<b>Mortgage 3H/989</b>	Lodged 4:10:00 PM on 06 Jul 1998 in favour of CABOT CORPORATION in respect to 100/100ths shares in the name of GREENBUSHES LTD Discharged by Withdrawal 120H/056 lodged 10:00:00 AM on 13 Feb 2006
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD

	REGISTERED 11:50 AM 15 Jul 1998
<b>Agreement 74H/989</b>	Agreement (Deed of Charge) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD, GWALIA MINERALS NL, GWALIA TANTALUM PTY LTD, BANK OF WESTERN AUSTRALIA LTD, GWALIA CONSOLIDATED LTD and GREENBUSHES LTD Lodged 11:45 AM on 02 Dec 1998 REGISTERED 10:00 AM 30 Dec 1998 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Agreement 75H/989</b>	Agreement (Deed of Assignment) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD, GWALIA TANTALUM PTY LTD, BANK OF WESTERN AUSTRALIA LTD, CITISECURITIES LTD, GWALIA CONSOLIDATED LTD, DRESDNER KLIENWORT BENSON AUSTRALIA LTD and GREENBUSHES LTD Lodged 11:45:00 AM on 02 Dec 1998 REGISTERED 10:00 AM 30 Dec 1998 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1029H/912 REJECTED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Bond Requirement 312354</b>	Requirement Date: 27/07/2001 Amount: \$9,000.00 RECORDED: 09:04:41 27 July 2001 FINALISED: 07:49:05 16 October 2014
<b>Bond PE6656</b>	Lodged on 22 Aug 2001 For \$9,000.00 (Security) RECORDED 22 Aug 2001 RETIRED 16 Nov 2007
<b>Extension / Renewal of Term 40H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Mortgage - Discharge 120H/056</b>	In respect to Mortgage 3H/989 lodged 10:00:00 AM on 13 Feb 2006 REGISTERED 10:00 AM 13 Feb 2006
<b>Withdrawal of Dealing 119H/056</b>	Lodged 10:00:00 AM on 13 Feb 2006 withdrawing Caveat 1710H/978 RECORDED 10:00 AM 13 Feb 2006
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Withdrawal of Dealing 246235</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 74H/989 RECORDED 9:30 AM 18 Aug 2006
<b>Withdrawal of Dealing 26H/067</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 75H/989 RECORDED 9:30 AM 18 Aug 2006
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 10:00 AM 30 Oct 2007 REGISTERED 10:00 PM 30 Oct 2007 DISCHARGED: 14:50 25 February 2010
<b>Bond 277191</b>	Lodged on 01 Nov 2007 For \$16,500.00 (Unconditional Performance Bond) RECORDED 01 Nov 2007 RETIRED: 23 March 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010



		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	WESTPAC BANKING CORPORATION
		REGISTERED:	14:50 25 February 2010
		DISCHARGED:	11:13 24 December 2010
		Full Discharge:	362313 Registered 11:13 24 December 2010
<b>Bond 341692</b>		Lodged:	15:00 25 February 2010
		Bond Type:	Unconditional Performance Bond
		Bond Amount:	\$16,500.00
		RECORDED:	25 February 2010
		RETIRED:	16 February 2011
<b>Application to Amend 353570</b>		Lodged:	10:00 17 August 2010
		Amending:	Address
		From:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
		To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Bond 365754</b>		Lodged:	15:25 15 February 2011
		Bond Type:	Unconditional Performance Bond
		Bond Amount:	\$16,500.00
		RECORDED:	15 February 2011
		RETIRED - MRF:	16 October 2014
<b>Caveat 400177</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Caveat 419440</b>		Lodged:	15:50 21 March 2013
		Caveat Type:	Subject to Claim Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

<b>Mortgage - Discharge 434701</b>	RECORDED:	15:50 21 March 2013
	Lodged:	15:00 07 November 2013
	In respect to:	Mortgage 364473
	REGISTERED:	15:00 07 November 2013
<b>Forfeiture 440668</b>	Initiated:	21/02/2014 for non-compliance with royalty provisions
	RECORDED:	11:04:41 19 February 2014
	Notice Issued:	Regulation 50 Notice sent 21/02/2014 for non-compliance with royalty provisions pursuant to Sec 82(1)(a).
	Compliance Date:	25/03/2014
	FINALISED:	Order by Minister on 07 April 2014 that M 01/3 be No Penalty Imposed
<b>Mortgage 472080</b>	Lodged:	10:15 30 July 2015
	Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
	REGISTERED:	10:00 13 August 2015
<b>Caveat 472085</b>	Lodged:	10:15 30 July 2015
	Caveat Type:	Consent Caveat
	Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	10:01 13 August 2015

## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
365754	COMMONWEALTH BANK OF AUSTRALIA	\$16,500.00	15/02/2011	Retired - MRF	16/10/2014
341692	WESTPAC BANKING CORPORATION	\$16,500.00	25/02/2010	Retired	16/02/2011
277191	WESTPAC BANKING CORPORATION	\$16,500.00	01/11/2007	Retired	23/03/2010

## RENT DETAILS

Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	6549000229	TALISON LITHIUM TALISON LITHIUM	OL	\$17,600.00	999.60000 HA	23/03/2005	\$17,600.00	\$0.00
Payment	2017	28/12/2016		MT-210010864421-EF	OL	\$17,050.00	999.60000 HA	23/03/2005	\$17,050.00	\$0.00
Payment	2016	27/01/2016		MT-210010481233-EF	OL	\$16,500.00	999.60000 HA	23/03/2005	\$16,500.00	\$0.00
Payment	2015	27/01/2015		MT-210010226403-EF	OL	\$16,100.00	999.60000 HA	23/03/2005	\$16,100.00	\$0.00
Payment	2014	21/01/2014		MT-210010156188-EF	OL	\$15,700.00	999.60000 HA	23/03/2005	\$15,700.00	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,400.00	999.60000 HA	23/03/2005	\$15,400.00	\$0.00
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00	999.60000 HA	23/03/2005	\$15,000.00	\$0.00



Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2011	27/01/2011		89308	PE	\$15,950.00	999.60000 HA	23/03/2005	\$15,950.00	\$0.00
Payment	2010	15/01/2010		74451	PE	\$15,620.00	999.60000 HA	23/03/2005	\$15,620.00	\$0.00
Payment	2009	23/01/2009		60707	PE	\$14,960.00	999.60000 HA	23/03/2005	\$14,960.00	\$0.00
Payment	2008	18/01/2008		47128	PE	\$14,520.00	999.60000 HA	23/03/2005	\$14,520.00	\$0.00
Payment	2007	24/01/2007		33490	PE	\$13,860.00	999.60000 HA	23/03/2005	\$13,860.00	\$0.00
Payment	2006	16/12/2005		19118	PE	\$13,420.00	999.60000 HA	23/03/2005	\$13,420.00	\$0.00
Payment	2005	17/12/2004		6103	PE	\$13,090.00	999.60000 HA	23/03/2005	\$13,090.00	\$0.00
Payment	2004	19/12/2003		67510	PE	\$12,760.00	999.60000 HA	23/03/2005	\$12,760.00	\$0.00
Payment	2003	23/12/2002		55944	PE	\$12,320.00	999.60000 HA	23/03/2005	\$12,320.00	\$0.00
Payment	2002	29/01/2002		44977	PE	\$12,000.00	999.60000 HA	23/03/2005	\$12,000.00	\$0.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	999.60000 HA	23/03/2005	\$11,330.00	\$0.00
Payment	2000	28/07/2000		25767	PE	\$506.56	999.60000 HA	23/03/2005	\$10,806.56	\$0.00
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	999.60000 HA	23/03/2005	\$10,300.00	\$0.00
Payment	1998	29/01/1998		173719	PE	\$10,000.00	999.60000 HA	23/03/2005	\$10,000.00	\$0.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	999.60000 HA	23/03/2005	\$10,000.00	\$0.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	999.60000 HA	23/03/2005	\$10,000.00	\$0.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1994	01/02/1994		102570	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1993	26/01/1993		84964	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1992	28/01/1992		69332	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1991	01/02/1991		1	PE	\$8,700.00	999.60000 HA	23/03/2005	\$8,700.00	\$0.00
Payment	1990	20/12/1989		1	PE	\$8,100.00	999.60000 HA	23/03/2005	\$8,100.00	\$0.00
Payment	1989	16/12/1988		1	PE	\$8,100.00	999.60000 HA	23/03/2005	\$8,100.00	\$0.00
Payment	1988	21/12/1987		1	PE	\$7,700.00	999.60000 HA	23/03/2005	\$7,700.00	\$0.00
Payment	1987	16/12/1986		1	PE	\$7,000.00	999.60000 HA	23/03/2005	\$7,000.00	\$0.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	999.60000 HA	23/03/2005	\$6,000.00	\$0.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	999.60000 HA	23/03/2005	\$6,000.00	\$0.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$100,000.00							
2017	\$100,000.00							
2016	\$100,000.00	24/02/2017	\$8,884,116.00					
2015	\$100,000.00	25/02/2016	\$1,257,169.00					
2014	\$100,000.00	24/02/2015	\$1,216,804.00					
	\$100,000.00	24/02/2015	\$22,326.00					
2013	\$100,000.00	25/02/2014	\$499,623.00					
2012	\$100,000.00	21/02/2013	\$6,139,423.00					
2011	\$100,000.00	23/02/2012	\$4,974,902.00					
2010	\$100,000.00	22/02/2011	\$895,203.00					
2009	\$100,000.00	25/02/2010	\$1,154,939.00					
2008	\$100,000.00	24/02/2009	\$5,398,419.00					
2007	\$100,000.00	22/02/2008	\$7,439,137.00					
2006	\$100,000.00	23/02/2007	\$10,332,808.00					
2005	\$100,000.00	21/02/2006	\$6,681,573.00					
2004	\$100,000.00	16/02/2005	\$7,905,090.00					
2003	\$100,000.00	22/01/2004	\$7,132,855.00					
2002	\$100,000.00	23/01/2003	\$16,436,823.00					
2001	\$100,000.00	26/02/2002	\$10,307,341.00					
2000	\$100,000.00	26/02/2001	\$5,189,371.00					

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
1999	\$100,000.00	25/02/2000	\$4,260,492.00					
1998	\$100,000.00	25/02/1999	\$4,234,987.00					
1997	\$100,000.00	24/02/1998	\$3,894,885.00					
1996	\$100,000.00	24/02/1997	\$5,594,901.00					
1995	\$100,000.00	23/02/1996	\$4,014,713.00					
1994	\$100,000.00	20/02/1995	\$1,921,405.00					
1993	\$100,000.00	24/02/1994	\$3,030,194.00					
1992	\$100,000.00	12/02/1993	\$3,823,105.00					
1991	\$100,000.00	17/03/1992	\$1,557,394.00					
1990	\$100,000.00	07/08/1991	\$3,043,419.00					
1989	\$100,000.00	26/02/1990	\$5,418,746.00					
1988	\$100,000.00	17/03/1989	\$4,823,236.00					
1987	\$100,000.00	08/02/1988	\$3,574,610.00					
1986	\$100,000.00	17/02/1987	\$2,007,430.00					
1985	\$100,000.00	06/03/1986	\$4,207,000.00					

## Expenditure Details

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$0.00	\$7,701,495.00	\$0.00	\$23,824.00	\$1,158,797.00	\$0.00	\$8,884,116.00
2015	25/02/2016	\$0.00	\$1,070,000.00	\$0.00	\$23,191.00	\$163,978.00	\$0.00	\$1,257,169.00
2014	24/02/2015	\$0.00	\$1,035,765.00	\$0.00	\$22,326.00	\$158,713.00	\$0.00	\$1,216,804.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$22,326.00	\$0.00	\$0.00	\$22,326.00
2013	25/02/2014	\$0.00	\$413,803.00	\$0.00	\$20,652.00	\$65,168.00	\$0.00	\$499,623.00
2012	21/02/2013	\$0.00	\$5,561,545.00	\$0.00	\$19,749.00	\$558,129.00	\$0.00	\$6,139,423.00
2011	23/02/2012	\$0.00	\$4,367,089.00	\$0.00	\$18,289.00	\$589,524.00	\$0.00	\$4,974,902.00
2010	22/02/2011	\$0.00	\$761,723.00	\$0.00	\$16,715.00	\$116,765.00	\$0.00	\$895,203.00
2009	25/02/2010	\$0.00	\$990,047.00	\$0.00	\$16,385.00	\$148,507.00	\$0.00	\$1,154,939.00
2008	24/02/2009	\$0.00	\$5,006,073.00	\$0.00	\$15,712.00	\$376,634.00	\$0.00	\$5,398,419.00
2007	22/02/2008	\$0.00	\$7,071,064.00	\$0.00	\$14,520.00	\$353,553.00	\$0.00	\$7,439,137.00
2006	23/02/2007	\$0.00	\$9,826,908.00	\$0.00	\$14,555.00	\$491,345.00	\$0.00	\$10,332,808.00
2005	21/02/2006	\$0.00	\$6,349,960.00	\$0.00	\$14,115.00	\$317,498.00	\$0.00	\$6,681,573.00
2004	16/02/2005	\$5,482.00	\$7,507,643.00	\$0.00	\$13,705.00	\$378,260.00	\$0.00	\$7,905,090.00
2003	22/01/2004	\$0.00	\$6,780,228.00	\$0.00	\$12,968.00	\$339,659.00	\$0.00	\$7,132,855.00
2002	23/01/2003	\$16,102,062.00	\$0.00	\$0.00	\$12,470.00	\$322,291.00	\$0.00	\$16,436,823.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,307,341.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,189,371.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,260,492.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,234,987.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,894,885.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,594,901.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,014,713.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,921,405.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,030,194.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,823,105.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,557,394.00
1990	07/08/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,043,419.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,418,746.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,823,236.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,574,610.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,007,430.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,207,000.00



**COMBINED REPORTING DETAILS**

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

**Active Tenements:**

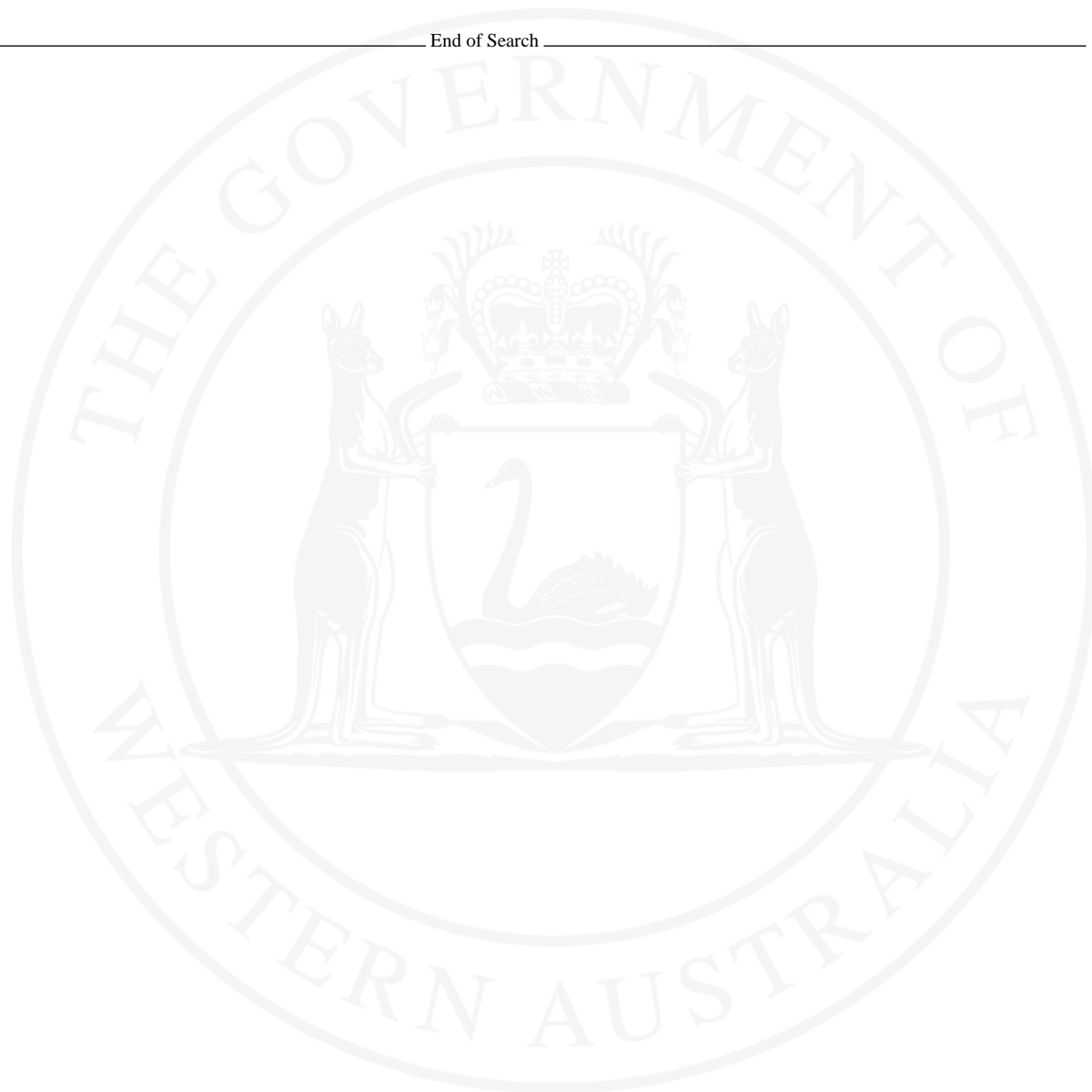
M 01/2 (18/07/1994)  
M 01/5 (18/07/1994)  
M 01/8 (18/07/1994)  
M 01/11 (18/07/1994)  
M 70/765 (14/07/1995)

M 01/3 (18/07/1994)  
M 01/6 (18/07/1994)  
M 01/9 (18/07/1994)  
M 01/16 (14/07/1995)

M 01/4 (18/07/1994)  
M 01/7 (18/07/1994)  
M 01/10 (18/07/1994)  
M 01/18 (14/07/1995)

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End of Search



# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/4



This Register Search issued pursuant to Section 103F(4) of the Mining Act, 1978 at: **10:47:53 15/02/2018**

Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

### Tenement Summary

<b>Identifier :</b> M 01/4	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 998.90000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 11:30:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,582.40

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$99,900.00

### OWNERSHIP DETAILS

#### Current Holders

<b>Name and Address</b>	<b>Shares</b>
TALISON LITHIUM AUSTRALIA PTY LTD	100
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

<b>Dealing</b>	<b>Status Date</b>	<b>From (Shares)</b>	<b>To (Shares)</b>
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274308	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341673	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 1697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

5000 metres bearing 360 degrees

2000 metres west with a bearing of 90 degrees along part of the north boundary of the Greenbushes Mineral Field

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees

BACK TO DATUM

AND EXCLUDING THE AREA CONTAINED IN PARTS OF MCS 01/271 AND 01/272 IF STILL IN FORCE

Area :	Type	Dealing No	Start Date	Area
	Surveyed		10/06/2011	998.90000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
998.90000 HA	10/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram

65961

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984

File Reference : 15595/83

Receipt Number : 25561

Application Fee : \$15.00

Survey Fee : \$1,730.00

**Special Indicator**

Special Indicator

Start

End

## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		972.90000 HA
DONNYBROOK-BALINGUP SHIRE	2870	08/12/1983		26.00000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984

Holder Notified : 28/12/1984

Licence/Lease  
issued :**Term**

Term : 21 Years (Renewed)

From : 28/12/1984

To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	28/12/1984	
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	



#	CONDITIONS	Start Date	End Date
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes	28/12/1984	

#	CONDITIONS	Start Date	End Date
	which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.		
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	28/12/1984	
19	No mining on a strip of land 60 metres wide with the Bunbury-Northcliffe Railway Line as the centre-line and no materials being deposited or machinery or buildings being erected on such strip of land.	28/12/1984	
20	Blasting operations being controlled so that no damage or injury can be caused by fly rock, concussion, vibration or other means.	28/12/1984	
21	No mining being commenced until the lessee has constructed to the satisfaction of the Public Works Department, such dams, banks, culverts and other works as are required to prevent any impairment by the mining operation of the physical, chemical or biological condition of the waters in the Dumpling Creek Dam. The lessee maintaining and keeping in repair these works for the duration of the mining operation.	28/12/1984	
22	The lessee being responsible for all costs incurred by the Public Works Department in treating the water or developing a new source, should the failure of these works or the mining operation result in impairment of the physical, chemical or biological quality of the water in Dumpling Creek Dam to the extent that it no longer conforms with the Desirable Current Criteria for Drinking Water of the National Health and Medical Research Council.	28/12/1984	
23	The lessee being responsible for the cost and expense to construct, operate and maintain such dams, pump stations, pipelines and works as are necessary to augment the Dumpling Creek Dam storage so that the demand of the Greenbushes Townsite is met at all times.	28/12/1984	
24	The lessee arranging for the water delivered to Dumpling Creek Dam to be sampled monthly and analysed for physical and chemical characteristics by a recognised laboratory to ensure that the quality of the water being delivered by the lessee to Dumpling Creek Dam conforms with the Desirable Current Criteria for Drinking Water in Australia of the National Health and Research Council of Australia, and the results of the tests being forwarded to the Public Works Department within on week of the sampling date.	28/12/1984	
25	The lessee within two weeks of receiving any test results referred to in condition 24 above that shows the water being delivered by the lessee to Dumpling Creek Dam is not meeting the Current Desirable Criteria for Drinking Water, shall arrange for treatment of the water or for supply to be drawn from another source or take such other action as may be necessary to ensure that the quality of the water to the dam is maintained.	28/12/1984	
26	The lessee, within three months of completing mining, unless granted an extension of this approval by December 31, 1986, rehabilitating to the satisfaction of the Public Works Department all mining pits, tailings dumps and other works on the catchment to the extent necessary to ensure that the flow of water to Dumpling Creek Dam is not impaired in quantity or quality.	28/12/1984	
27	No mining on North Greenbushes Townsite, Gravel Reserves 6890 and 29038, Water Reserve 38419 without the prior written consent of the Minister for Minerals and Energy.	17/03/1997	



#	CONDITIONS	Start Date	End Date
		17/03/1987	16/03/1997
	No mining on North Greenbushes Townsite, Gravel Reserves 6890 and 29038, Water Reserve 38419 and Camping Reserve 7005 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	16/03/1987
28	No mining on Cemetery Reserve No. 6889 and mining within a distance of 140 metres laterally from the Reserve being confined to below a depth of 50 metres from the lowest part of the surface of the land with rights of ingress to and egress from the said Reserve being at all times preserved to the public.	28/12/1984	
29	Mining on Miner's Homestead Lease 01/4 and 01/6 being confined to below a depth of 15 metres from the natural surface of the land.	28/12/1984	
30	The complete excision of any portion encroaching on Garden Area 01/19 and mining thereunder being restricted to below a depth of 15 metres from the natural surface.	28/12/1984	
	<b>By approval of the Minister for Minerals and Energy on 17 March 1987 consent to mine on Camping Reserve 7005 was granted</b>	28/12/1984	
31	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
		01/11/1994	13/11/1994
	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled "Notice of Intent to Mine Clay on Greenbushes Tin Leases at Greenbushes" dated July 1991 and retained on Mines Department File No: 1306/91. Where a difference exists between the above document and the following conditions, then the following conditions shall prevail.	15/07/1992	31/10/1994
32	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
		01/11/1994	13/11/1994
	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.	15/07/1992	31/10/1994
33	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
		01/11/1994	13/11/1994
	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads, and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	15/07/1992	31/10/1994
34	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
		01/11/1994	13/11/1994
	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer in agreement with the Executive Director, Conservation and Land Management (CALM).	15/07/1992	31/10/1994
35	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	

#	CONDITIONS	Start Date	End Date
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
		01/11/1994	13/11/1994
	All rubbish and scrap being progressively disposed of in a suitable manner to the satisfaction of the Executive Director CALM.	15/07/1992	31/10/1994
36	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
		01/11/1994	13/11/1994
	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer, in agreement with the Executive Director CALM.	15/07/1992	31/10/1994
37	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the State Mining Engineer for his assessment and until his written approval to proceed has been obtained upon concurrence with the Executive Director, CALM.	15/07/1992	31/10/1994
38	The lessee providing a Bond in favour of the Minister for Mines in the sum of \$5000 for due compliance with the conditions of the lease.	15/07/1992	31/10/1994
39	The lessee submitting to the State Mining Engineer and the Executive Director of the Department of Conservation and Land Management in November of each year, a brief annual report outlining the operations and rehabilitation work undertaken in the previous 12 months and the proposed operations and rehabilitation programmes for the next 12 months for approval.	15/07/1992	31/10/1994
40	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
41	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	24/03/2017	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	23/03/2017



#	CONDITIONS	Start Date	End Date
42	<p>The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in:</p> <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

<b>Mortgage 1H/82</b>	<p><b>Encumbrances</b></p> <p>Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease REGISTERED 9:00 AM 28 Dec 1984 Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R &amp; I Bank of Western Australia Ltd</p>
<b>Mortgage 15H/856</b>	<p>Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES REGISTERED 11:30 AM 11 Nov 1985 Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd. REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R &amp; I Bank of Western Australia Ltd. REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Agreement 118H/856</b>	<p>Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985 REGISTERED 4:00 PM 23 Oct 1985 WITHDRAWN 9:30:00 AM 18 Aug 2006</p>
<b>Mortgage 78H/878</b>	<p>Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES REGISTERED 11:00 AM 01 Jul 1988 Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R &amp; I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Caveat 1030H/912</b>	<p>Lodged 3:05:00 PM on 28 Jan 1992 by R &amp; I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992, caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992 Re Mortgage 25H/967 &amp; 29H/967 - 14 day notice sent on 16 Jan 1997. Order under Section 122(1)(c) caveat to remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden 24 Jan 1997 WITHDRAWN 9:30:00 AM 30 Nov 2000</p>
<b>Mortgage 29H/912</b>	<p>Lodged 11:20 AM on 30 Jan 1992 in favour of R &amp; I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer:</p>

	New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Bond PE0744</b>	Lodged on 04 Jun 1992 For \$5,000.00 (Personal Surety) RECORDED 04 Jun 1992 RETIRED 31 Oct 1994
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1030H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Extension / Renewal of Term 41H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION



REJECTED 12:45 PM 03 Sep 2007  
 RELODGED 2:30 PM 14 Sep 2007  
 REGISTERED 2:30 PM 14 Sep 2007  
 DISCHARGED: 14:50 25 February 2010

**Mortgage - Discharge 341667**

Lodged: 14:50 25 February 2010  
 In respect to: Mortgage 274385  
 REGISTERED: 14:50 25 February 2010

**Mortgage 341684**

Lodged: 14:50 25 February 2010  
 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 Mortgagee: WESTPAC BANKING CORPORATION  
 REGISTERED: 14:50 25 February 2010  
 DISCHARGED: 11:13 24 December 2010  
 Full Discharge: 362313 Registered 11:13 24 December 2010

**Extension of Time 343576**

Lodged: 15:13 25 March 2010  
 Type: Stat Dec  
 RECORDED: 15:13 25 March 2010  
 Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition  
 APPROVED: 13:10:44 26 March 2010

**Application to Amend 353570**

Lodged: 10:00 17 August 2010  
 Amending: Address  
 From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000  
 To: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

RECORDED: 10:00 17 August 2010

**Mortgage 364473**

Lodged: 10:36 22 December 2010  
 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 Mortgagee: COMMONWEALTH BANK OF AUSTRALIA  
 REGISTERED: 10:36 22 December 2010  
 DISCHARGED: 15:00 07 November 2013  
 Full Discharge: 434701 Registered 15:00 07 November 2013

**Mortgage - Discharge 362313**

Lodged: 11:13 24 December 2010  
 In respect to: Mortgage 341684  
 REGISTERED: 11:13 24 December 2010

**Extension of Time 367988**

Lodged: 09:59 22 March 2011  
 Type: Stat Dec  
 RECORDED: 09:59 22 March 2011  
 Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition  
 APPROVED: 13:35:37 22 March 2011

**Caveat 400178**

Lodged: 12:10 22 June 2012  
 Caveat Type: Absolute Caveat  
 Caveator: GLOBAL ADVANCED METALS GREENBUSHES PTY LTD  
 Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 RECORDED: 12:10 22 June 2012

Affected Dealing: Mortgage 472080  
 14 day notice sent: 11 August 2015  
 Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.

**Mortgage - Discharge 434701**

Lodged: 15:00 07 November 2013  
 In respect to: Mortgage 364473  
 REGISTERED: 15:00 07 November 2013

**Extension of Time 464482**

Lodged: 15:18 24 March 2015  
 Type: Stat Dec  
 RECORDED: 15:18 24 March 2015  
 APPROVED: 15:29:31 25 March 2015  
 Time extended to 17 April 2015

**Mortgage 472080**

Lodged: 10:15 30 July 2015  
 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 Mortgagee: THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED  
 REGISTERED: 10:00 13 August 2015

**Caveat 472086**

Lodged: 10:15 30 July 2015  
 Caveat Type: Consent Caveat  
 Caveator: THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED  
 Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 RECORDED: 10:01 13 August 2015

**BOND DETAILS**

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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**RENT DETAILS****Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	2911774061	TALISON LITHIUM TALISON LITHIUM	OL	\$17,582.40	998.90000 HA	10/06/2011	\$17,582.40	\$0.00
Payment	2017	28/12/2016	MT-210010864421-EF		OL	\$17,032.95	998.90000 HA	10/06/2011	\$17,032.95	\$0.00
Payment	2016	27/01/2016	MT-210010481233-EF		OL	\$16,483.50	998.90000 HA	10/06/2011	\$16,483.50	\$0.00
Payment	2015	27/01/2015	MT-210010226403-EF		OL	\$16,083.90	998.90000 HA	10/06/2011	\$16,083.90	\$0.00
Payment	2014	21/01/2014	MT-210010156188-EF		OL	\$15,684.30	998.90000 HA	10/06/2011	\$15,684.30	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,384.60	998.90000 HA	10/06/2011	\$15,384.60	\$0.00
Refund	2012	10/05/2013		(REFUND) 06-105241	PE	\$304.74	998.90000 HA	10/06/2011	\$14,985.00	-\$289.74
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00				
Payment	2011	27/01/2011		89308	PE	\$15,950.00	998.90000 HA	10/06/2011	\$15,934.05	\$15.95
Payment	2010	15/01/2010		74451	PE	\$15,620.00	998.90000 HA	10/06/2011	\$15,604.38	\$15.62
Payment	2009	23/01/2009		60707	PE	\$14,960.00	998.90000 HA	10/06/2011	\$14,945.04	\$14.96
Payment	2008	18/01/2008		47128	PE	\$14,520.00	998.90000 HA	10/06/2011	\$14,505.48	\$14.52
Payment	2007	24/01/2007		33490	PE	\$13,860.00	998.90000 HA	10/06/2011	\$13,846.14	\$13.86



Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2006	16/12/2005		19118	PE	\$13,420.00	998.90000 HA	10/06/2011	\$13,406.58	\$13.42
Payment	2005	17/12/2004		6103	PE	\$13,090.00	998.90000 HA	10/06/2011	\$13,076.91	\$13.09
Payment	2004	19/12/2003		67510	PE	\$12,760.00	998.90000 HA	10/06/2011	\$12,747.24	\$12.76
Payment	2003	23/12/2002		55944	PE	\$12,320.00	998.90000 HA	10/06/2011	\$12,307.68	\$12.32
Payment	2002	29/01/2002		44977	PE	\$12,000.00	998.90000 HA	10/06/2011	\$11,988.00	\$12.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	998.90000 HA	10/06/2011	\$11,318.67	\$11.33
Payment	2000	28/07/2000		25767	PE	\$506.56	998.90000 HA	10/06/2011	\$10,795.75	\$10.81
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	998.90000 HA	10/06/2011	\$10,289.70	\$10.30
Payment	1998	29/01/1998		173719	PE	\$10,000.00	998.90000 HA	10/06/2011	\$9,990.00	\$10.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	998.90000 HA	10/06/2011	\$9,990.00	\$10.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	998.90000 HA	10/06/2011	\$9,990.00	\$10.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	998.90000 HA	10/06/2011	\$9,290.70	\$9.30
Payment	1994	01/02/1994		102570	PE	\$9,300.00	998.90000 HA	10/06/2011	\$9,290.70	\$9.30
Payment	1993	26/01/1993		84964	PE	\$9,300.00	998.90000 HA	10/06/2011	\$9,290.70	\$9.30
Payment	1992	28/01/1992		69332	PE	\$9,300.00	998.90000 HA	10/06/2011	\$9,290.70	\$9.30
Payment	1991	01/12/1991		1	PE	\$8,700.00	998.90000 HA	10/06/2011	\$8,691.30	\$8.70
Payment	1990	20/12/1989		1	PE	\$8,100.00	998.90000 HA	10/06/2011	\$8,091.90	\$8.10
Payment	1989	16/12/1988		1	PE	\$8,100.00	998.90000 HA	10/06/2011	\$8,091.90	\$8.10
Payment	1988	21/12/1987		1	PE	\$7,700.00	998.90000 HA	10/06/2011	\$7,692.30	\$7.70
Payment	1987	16/12/1986		1	PE	\$7,000.00	998.90000 HA	10/06/2011	\$6,993.00	\$7.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	998.90000 HA	10/06/2011	\$5,994.00	\$6.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	998.90000 HA	10/06/2011	\$5,994.00	\$6.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$99,900.00							
2017	\$99,900.00							
2016	\$99,900.00	24/02/2017	\$31,545.00	\$99,900.00	23/02/2017	501614	Granted	05/04/2017
2015	\$99,900.00	25/02/2016	\$27,809.00	\$99,900.00	25/02/2016	482273	Granted	17/06/2016
2014	\$99,900.00	24/02/2015	\$23,277.00	\$99,900.00	24/02/2015	462978	Granted	07/05/2015
2013	\$99,900.00	25/02/2014	\$23,583.00	\$99,900.00	20/02/2014	440728	Granted	25/07/2014
2012	\$99,900.00	21/02/2013	\$23,720.00	\$99,900.00	14/02/2013	417023	Granted	07/08/2013
2011	\$99,950.00	23/02/2012	\$20,390.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$20,169.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$19,790.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$18,069.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,698.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$33,211.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$34,012.00	\$100,000.00	05/02/2004	256H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$18,221.00	\$100,000.00	23/01/2003	200H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$10,820.00	\$89,180.00	25/02/2002	200H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$10,769.00	\$89,231.00	26/02/2001	207H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1999	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$0.00	\$100,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$40,975.00	\$59,025.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$68,885.00	\$31,115.00	20/02/1995	265H/945	Granted	16/05/1995

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
1993	\$100,000.00	24/02/1994	\$77,250.00	\$22,750.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$5,500.00	\$94,500.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$5,274.00	\$94,726.00	17/03/1992	147H/912	Granted	29/04/1992
1990	\$100,000.00	07/03/1991	\$26,961.00	\$73,039.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$25,969.00					
1988	\$100,000.00	17/03/1989	\$164,102.00					
1987	\$100,000.00	08/02/1988	\$838,281.00					
1986	\$100,000.00	17/02/1987	\$232,130.00					
1985	\$100,000.00	06/03/1986	\$190,000.00					

## Expenditure Details

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$2,560.00	\$0.00	\$0.00	\$24,871.00	\$4,114.00	\$0.00	\$31,545.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$24,182.00	\$3,627.00	\$0.00	\$27,809.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$23,277.00	\$0.00	\$0.00	\$23,277.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$20,507.00	\$3,076.00	\$0.00	\$23,583.00
2012	21/02/2013	\$0.00	\$0.00	\$0.00	\$20,626.00	\$3,094.00	\$0.00	\$23,720.00
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$17,731.00	\$2,659.00	\$0.00	\$20,390.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$17,539.00	\$2,630.00	\$0.00	\$20,169.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$17,209.00	\$2,581.00	\$0.00	\$19,790.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$15,712.00	\$2,357.00	\$0.00	\$18,069.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,178.00	\$0.00	\$16,698.00
2006	23/02/2007	\$0.00	\$0.00	\$0.00	\$14,555.00	\$2,183.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$3,555.00	\$12,726.00	\$0.00	\$13,705.00	\$3,225.00	\$0.00	\$33,211.00
2003	22/01/2004	\$0.00	\$19,425.00	\$0.00	\$12,968.00	\$1,619.00	\$0.00	\$34,012.00
2002	23/01/2003	\$0.00	\$2,714.00	\$0.00	\$12,470.00	\$3,037.00	\$0.00	\$18,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,820.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,769.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,975.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$68,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$77,250.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,500.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,274.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26,961.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25,969.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$164,102.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$838,281.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$232,130.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$190,000.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994

**Reporting Date :** 28/02

**Project :** Greenbushes

**Affecting Period :** 01/01 - 31/12

### Active Tenements:

M 01/2 (18/07/1994)

M 01/3 (18/07/1994)

M 01/4 (18/07/1994)

M 01/5 (18/07/1994)

M 01/6 (18/07/1994)

M 01/7 (18/07/1994)

M 01/8 (18/07/1994)

M 01/9 (18/07/1994)

M 01/10 (18/07/1994)



**Active Tenements:**

M 01/11 (18/07/1994)

M 01/16 (14/07/1995)

M 01/18 (14/07/1995)

M 70/765 (14/07/1995)

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End of Search

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# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/5



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:47:57 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/5	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 999.40000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 11:30:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,600.00

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$100,000.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274309	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341674	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 1697.64 METRES AT 90 DEGREES FROM SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

2000 metres bearing 270 degrees

5000 metres bearing 360 degrees along part of the west boundary of the Greenbushes Mineral Field

2000 metres bearing 90 degrees along part of the north boundary of the Greenbushes Mineral Field

5000 metres bearing 180 degrees

BACK TO DATUM

Area :	Type	Dealing No	Start Date	Area
	Surveyed		10/06/2011	999.40000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
999.40000 HA	10/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram

65961

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984

File Reference : 15596/83

Receipt Number : 25561

Application Fee : \$15.00

Survey Fee : \$1,730.00

**Special Indicator**

Special Indicator	Start	End

## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		959.40000 HA
DONNYBROOK-BALINGUP SHIRE	2870	08/12/1983		40.00000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984

Holder Notified : 28/12/1984

Licence/Lease  
issued :**Term**

Term : 21 Years (Renewed)

From : 28/12/1984

To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	14/11/1994	
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	

#	CONDITIONS	Start Date	End Date
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval	28/12/1984	



#	CONDITIONS	Start Date	End Date
	by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.		
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	28/12/1984	
19	No mining on a strip of land 60 metres wide with the Bunbury-Northcliffe Railway Line as the centre-line and no materials being deposited or machinery or buildings being erected on such strip of land.	28/12/1984	
20	Blasting operations being controlled so that no damage or injury can be caused by fly rock, concussion, vibration or other means.	28/12/1984	
21	No mining on Water Supply Reserve 30597 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	
22	Mining on Miner's Homestead Lease 01/6 and 01/7 being confined to below a depth of 15 metres from the natural surface of the land.	28/12/1984	
23	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
24	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
25	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
26	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
27	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	

#	CONDITIONS	Start Date	End Date
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
28	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
29	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
30	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talisson Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	24/03/2017	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talisson Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	23/03/2017
31	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

#### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commissioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease  
REGISTERD 9:00 AM 28 Dec 1984  
Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

<b>Mortgage 15H/856</b>	<p>Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES</p> <p>REGISTERED 11:30 AM 11 Nov 1985</p> <p>Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p> <p>Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R &amp; I Bank of Western Australia Ltd.</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Agreement 118H/856</b>	<p>Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985</p> <p>REGISTERED 4:00 PM 23 Oct 1985</p> <p>WITHDRAWN 9:30:00 AM 18 Aug 2006</p>
<b>Mortgage 78H/878</b>	<p>Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES</p> <p>REGISTERED 11:00 AM 01 Jul 1988</p> <p>Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p> <p>Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R &amp; I Bank of Western Australia</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Caveat 1031H/912</b>	<p>Lodged 3:05:00 PM on 28 Jan 1992 by R &amp; I BANK OF WESTERN AUSTRALIA LTD</p> <p>RECORDED 3:05 PM 28 Jan 1992</p> <p>Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992, caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992</p> <p>Re Mortgages 25H/967 &amp; 29H/967 - 14 day notice sent on 16 Jan 1997. Order under Section 122(1)(c), caveat to remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden 24 Jan 1997</p> <p>WITHDRAWN 9:30:00 AM 30 Nov 2000</p>
<b>Mortgage 29H/912</b>	<p>Lodged 11:20 AM on 30 Jan 1992 in favour of R &amp; I BANK OF WESTERN AUSTRALIA LTD</p> <p>REGISTERED 10:00 AM 28 Feb 1992</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001</p>
<b>Mortgage - Discharge 857H/912</b>	<p>In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 858H/912</b>	<p>In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:45 AM 13 Apr 1992</p>
<b>Mortgage - Discharge 859H/912</b>	<p>In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 914H/912</b>	<p>In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 915H/912</b>	<p>In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Application to Amend 310H/923</b>	<p>Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005"</p> <p>REGISTERED 2:46 PM 19 Mar 1993</p>
<b>Mortgage 25H/967</b>	<p>Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD</p> <p>REGISTERED 10:00 AM 24 Jan 1997</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p>



	New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1031H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Extension / Renewal of Term 42H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Extension of Time 343576</b>	Lodged: 15:13 25 March 2010 Type: Stat Dec RECORDED: 15:13 25 March 2010 Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition APPROVED: 13:10:44 26 March 2010
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address

		From:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
		To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Extension of Time 367988</b>		Lodged:	09:59 22 March 2011
		Type:	Stat Dec
		RECORDED:	09:59 22 March 2011
		Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition	
		APPROVED:	13:35:37 22 March 2011
<b>Caveat 400179</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Extension of Time 464482</b>		Lodged:	15:18 24 March 2015
		Type:	Stat Dec
		RECORDED:	15:18 24 March 2015
		APPROVED:	15:29:31 25 March 2015
		Time extended to 17 April 2015	
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472087</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED

Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA  
PTY LTD

RECORDED: 10:01 13 August 2015

### BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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### RENT DETAILS

### Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	1635774928	TALISON LITHIUM TALISON LITHIUM	OL	\$17,600.00	999.40000 HA	10/06/2011	\$17,600.00	\$0.00
Payment	2017	28/12/2016		MT-210010864421- EF	OL	\$17,050.00	999.40000 HA	10/06/2011	\$17,050.00	\$0.00
Payment	2016	27/01/2016		MT-210010481233- EF	OL	\$16,500.00	999.40000 HA	10/06/2011	\$16,500.00	\$0.00
Payment	2015	27/01/2015		MT-210010226403- EF	OL	\$16,100.00	999.40000 HA	10/06/2011	\$16,100.00	\$0.00
Payment	2014	21/01/2014		MT-210010156188- EF	OL	\$15,700.00	999.40000 HA	10/06/2011	\$15,700.00	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,400.00	999.40000 HA	10/06/2011	\$15,400.00	\$0.00
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00	999.40000 HA	10/06/2011	\$15,000.00	\$0.00
Payment	2011	27/01/2011		89308	PE	\$15,950.00	999.40000 HA	10/06/2011	\$15,950.00	\$0.00
Payment	2010	15/01/2010		74451	PE	\$15,620.00	999.40000 HA	10/06/2011	\$15,620.00	\$0.00
Payment	2009	23/01/2009		60707	PE	\$14,960.00	999.40000 HA	10/06/2011	\$14,960.00	\$0.00
Payment	2008	18/01/2008		47128	PE	\$14,520.00	999.40000 HA	10/06/2011	\$14,520.00	\$0.00
Payment	2007	24/01/2007		33490	PE	\$13,860.00	999.40000 HA	10/06/2011	\$13,860.00	\$0.00
Payment	2006	16/12/2005		19118	PE	\$13,420.00	999.40000 HA	10/06/2011	\$13,420.00	\$0.00
Payment	2005	17/12/2004		6103	PE	\$13,090.00	999.40000 HA	10/06/2011	\$13,090.00	\$0.00
Payment	2004	19/12/2003		67510	PE	\$12,760.00	999.40000 HA	10/06/2011	\$12,760.00	\$0.00
Payment	2003	23/12/2002		55944	PE	\$12,320.00	999.40000 HA	10/06/2011	\$12,320.00	\$0.00
Payment	2002	29/01/2002		44977	PE	\$12,000.00	999.40000 HA	10/06/2011	\$12,000.00	\$0.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	999.40000 HA	10/06/2011	\$11,330.00	\$0.00
Payment	2000	28/07/2000		25767	PE	\$506.56	999.40000 HA	10/06/2011	\$10,806.56	\$0.00
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	999.40000 HA	10/06/2011	\$10,300.00	\$0.00
Payment	1998	29/01/1998		173719	PE	\$10,000.00	999.40000 HA	10/06/2011	\$10,000.00	\$0.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	999.40000 HA	10/06/2011	\$10,000.00	\$0.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	999.40000 HA	10/06/2011	\$10,000.00	\$0.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	999.40000 HA	10/06/2011	\$9,300.00	\$0.00
Payment	1994	01/02/1994		102570	PE	\$9,300.00	999.40000 HA	10/06/2011	\$9,300.00	\$0.00
Payment	1993	26/01/1993		84964	PE	\$9,300.00	999.40000 HA	10/06/2011	\$9,300.00	\$0.00
Payment	1992	28/01/1992		69332	PE	\$9,300.00	999.40000 HA	10/06/2011	\$9,300.00	\$0.00
Payment	1991	01/02/1991		1	PE	\$8,700.00	999.40000 HA	10/06/2011	\$8,700.00	\$0.00
Payment	1990	20/12/1989		1	PE	\$8,100.00	999.40000 HA	10/06/2011	\$8,100.00	\$0.00
Payment	1989	16/12/1988		1	PE	\$8,100.00	999.40000 HA	10/06/2011	\$8,100.00	\$0.00
Payment	1988	21/12/1987		1	PE	\$7,700.00	999.40000 HA	10/06/2011	\$7,700.00	\$0.00
Payment	1987	16/12/1986		1	PE	\$7,000.00	999.40000 HA	10/06/2011	\$7,000.00	\$0.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	999.40000 HA	10/06/2011	\$6,000.00	\$0.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	999.40000 HA	10/06/2011	\$6,000.00	\$0.00



## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$100,000.00							
2017	\$100,000.00							
2016	\$100,000.00	24/02/2017	\$33,123.00	\$100,000.00	23/02/2017	501614	Granted	05/04/2017
2015	\$100,000.00	25/02/2016	\$27,732.00	\$100,000.00	25/02/2016	482273	Granted	17/06/2016
2014	\$100,000.00	24/02/2015	\$23,215.00	\$100,000.00	24/02/2015	462978	Granted	07/05/2015
2013	\$100,000.00	25/02/2014	\$24,755.00	\$100,000.00	20/02/2014	440728	Granted	25/07/2014
2012	\$100,000.00	25/02/2013	\$23,668.00	\$100,000.00	14/02/2013	417023	Granted	07/08/2013
2011	\$100,000.00	23/02/2012	\$20,884.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$20,171.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$19,791.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$167,488.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,698.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$33,398.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$34,012.00	\$100,000.00	05/02/2004	257H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$18,221.00	\$100,000.00	23/01/2003	201H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$10,820.00	\$89,180.00	25/02/2002	201H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$10,769.00	\$89,231.00	26/02/2001	208H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1999	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$3,000.00	\$97,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$48,956.00	\$51,044.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$43,885.00	\$56,115.00	20/02/1995	265H/945	Granted	16/05/1995
1993	\$100,000.00	24/02/1994	\$43,885.00	\$56,115.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$57,000.00	\$43,000.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$5,274.00	\$94,726.00	17/03/1992	147H/912	Granted	29/04/1992
1990	\$100,000.00	07/03/1991	\$11,279.00	\$88,721.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$18,941.00					
1988	\$100,000.00	17/03/1989	\$148,690.00					
1987	\$100,000.00	08/02/1988	\$156,681.00					
1986	\$100,000.00	17/02/1987	\$240,010.00					
1985	\$100,000.00	06/03/1986	\$130,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$4,000.00	\$0.00	\$0.00	\$24,803.00	\$4,320.00	\$0.00	\$33,123.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$24,115.00	\$3,617.00	\$0.00	\$27,732.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$23,215.00	\$0.00	\$0.00	\$23,215.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$21,526.00	\$3,229.00	\$0.00	\$24,755.00
2012	25/02/2013	\$0.00	\$0.00	\$0.00	\$20,581.00	\$3,087.00	\$0.00	\$23,668.00
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$18,160.00	\$2,724.00	\$0.00	\$20,884.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$17,540.00	\$2,631.00	\$0.00	\$20,171.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$17,210.00	\$2,581.00	\$0.00	\$19,791.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$165,013.00	\$2,475.00	\$0.00	\$167,488.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,178.00	\$0.00	\$16,698.00
2006	23/02/2007	\$0.00	\$0.00	\$0.00	\$14,555.00	\$2,183.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$3,718.00	\$12,726.00	\$0.00	\$13,705.00	\$3,249.00	\$0.00	\$33,398.00

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2003	22/01/2004	\$0.00	\$19,425.00	\$0.00	\$12,968.00	\$1,619.00	\$0.00	\$34,012.00
2002	23/01/2003	\$0.00	\$2,714.00	\$0.00	\$12,470.00	\$3,037.00	\$0.00	\$18,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,820.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,769.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,000.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$48,956.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$57,000.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,274.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,279.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18,941.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$148,690.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$156,681.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$240,010.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$130,000.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

**Active Tenements:**

M 01/2 (18/07/1994)	M 01/3 (18/07/1994)	M 01/4 (18/07/1994)
M 01/5 (18/07/1994)	M 01/6 (18/07/1994)	M 01/7 (18/07/1994)
M 01/8 (18/07/1994)	M 01/9 (18/07/1994)	M 01/10 (18/07/1994)
M 01/11 (18/07/1994)	M 01/16 (14/07/1995)	M 01/18 (14/07/1995)
M 70/765 (14/07/1995)		

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/6



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:48:04 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/6	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 984.10000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 14:00:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,336.00

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$98,500.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274310	Registered 21/09/2007 15:30:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341675	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 5697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees along a part of the south boundary of the Greenbushes Mineral Field

5000 metres bearing 360 degrees

2000 metres bearing 90 degrees

BACK TO DATUM AND EXCLUDING THAT AREA CONTAINED IN PART OF MINING LEASE M01/1

Area :	Type	Dealing No	Start Date	Area
	Surveyed		23/03/2005	984.10000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Conditional Partial Surrender	Partial Surrender - Conditional 159848	Finalised	G 01/2	Live
Conditional Partial Surrender	Partial Surrender - Conditional 159849	Finalised	G 01/1	Live

## SURVEY DETAILS

Survey

Surveyed Area	Surveyed Date	Surveyor's Name	Field Book	Instruction Date	Project
984.10000 HA	23/03/2005	LOWTH, SJ	24	31/01/2005	12040
<b>Standard Plan</b>		<b>Diagram</b>			
TENGRAPH		31175 (2751)			

## GENERAL DETAILS

General

Objection Closing Date : 11/01/1984

File Reference : 15597/83

Receipt Number : 25561

Application Fee : \$15.00

Survey Fee : \$1,730.00

Special Indicator

Special Indicator	Start	End
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## SHIRE DETAILS

Shire

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		984.10000 HA

## NATIVE TITLE DETAILS

Native Title Referrals

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

Recommendation

Recommended for : Grant 25/01/1984

Grant

Granted : 28/12/1984      Holder Notified : 28/12/1984      Licence/Lease issued :

Term

Term : 21 Years (Renewed)      From : 28/12/1984      To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

Endorsements and Conditions

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> </ul>	14/11/1994	

#	ENDORSEMENTS	Start Date	End Date
	<ul style="list-style-type: none"> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>		
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$2,593,000</li> </ul>	06/02/2006	29/07/2013
	The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$1,813,000.</li> </ul>	27/07/2001	05/02/2006
	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	26/07/2001
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and	28/12/1984	13/11/1994



#	CONDITIONS	Start Date	End Date
	payments by way of any necessary adjustment shall be made in the month of January next following.		
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	28/12/1984	
13	<del>The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.</del>	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	<del>The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.</del>	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	<del>The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.</del>	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	28/12/1984	
19	No mining on Greenbushes Townsite, Rubbish Tip Reserve 22224 and Recreation Reserve and Swimming Pool Reserve 22315 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	
20	The complete excision of any portion encroaching on Mining Lease 01/1.	28/12/1984	
	<b>Consent to Mine on the 900 metre square of the Southern Portion of the Greenbushes Townsite granted by the Minister for Mines subject to:</b>	28/12/1984	
21	The Sound Bund wall not being mined or removed without the prior written approval of the State Mining Engineer.	14/11/1994	
22	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
23	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005

#	CONDITIONS	Start Date	End Date
24	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
25	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
26	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
27	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
28	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> <li>"Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402.</li> </ul>	03/01/2018	

#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>(Reg ID 60857) "Talisson Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699;</li> <li>(MP Reg ID 63657) "Greenbushes Mine Site - CG Plant #2 - 2016 Processing Plant Upgrade" dated 12 January 2017 signed by Patrick Scallan General Manager and retained on Department of Mines and Petroleum File No. EARS-MP-63657 as Doc ID 4754456;</li> <li>(MP Reg ID 70390) "Talisson Lithium Australia Pty Ltd - Greenbushes Mine Site - 2017 Mining Proposal - Second TLA Crusher, Clear Water Dam (CWP2) and Water Treatment Plant" dated 18 December 2017 signed by Steve Green and retained on Department of Mines, Industry Regulation and Safety File No. EARS-MP-70390 as Doc ID 5449517</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</p>		
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> <li>"Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402.</li> <li>Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> </ul>	03/05/2017	02/01/2018



#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>• (MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>• (Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699;</li> <li>• (MP Reg ID 63657) "Greenbushes Mine Site - CG Plant #2 - 2016 Processing Plant Upgrade" dated 12 January 2017 signed by Patrick Scallan General Manager and retained on Department of Mines and Petroleum File No. EARS-MP-63657 as Doc ID 4754456</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>• "Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>• "Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>• "Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>• "Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>• 'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>• Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>• "Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>• "Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> <li>• "Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>• "Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>• "Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402.</li> <li>• Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>• (MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>• (MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>• (Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p>		
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>• "Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>• "Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>• "Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>• "Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>• 'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>• Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>• "Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>• "Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> <li>• "Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>• "Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>• "Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402.</li> <li>• Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>• (MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>• (MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542;</li> <li>• (Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p>	24/03/2017	02/05/2017
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p>	03/02/2016	23/03/2017

#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> <li>"Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402.</li> <li>Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(MP Reg ID 56542) "Tailings Storage Expansion 2015 Revision 2" dated 21 December 2015 signed by Patrick Scallan and retained on Department of Mines and Petroleum file no. EARS-MP-56542.</li> </ul>		
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#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99; and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>"Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>		
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94;</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99; and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>"Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402;</li> <li>Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402;</li> </ul>	11/03/2014	01/05/2014



#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> <li>"Greenbushes Operation Tailings Management New Cell Notice of Intent" dated October 2004 and retained on Department of Industry and Resources File No. E0183/200501</li> <li>"Letter titled "Tailings Management New Cell - Notice of Intent" dated 1 March 2005 signed by Mr Pat Scallan - General Manager Greenbushes Mine and retained on Department of Industry and Resources File No. E0183/200501; and</li> <li>"Greenbushes Operations Tailings Management New Cell Additional Information for DoIR" dated April 2005 (NOI 4870) and retained on Department of Industry and Resources File No. E0046/200402.</li> <li>Letter titled "Letter of Intent: Greenbushes Tailings Rehabilitation Trial" (NOI 5221) dated 13 January 2006 signed by Pat Scallan - General Manager Greenbushes Mine, and retained on Department of Industry and Resources File No. E0046/200402</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p> <p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> </ul>	11/07/2006	10/03/2014
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> <li>'Letter of Intent - Extension to Tantalum Pit Sound Wall' dated 20 February 1997: signed by V Beniuk (Mine Manager) Gwalia Consolidated Pty Ltd - Greenbushes Mine and retained on Department of Minerals and Energy File No. 2066/97;</li> <li>Letter of Intent - New Workshop on IP Waste Dump, dated 19 February 1997 and retained on Department of Minerals and Energy File No. 2066/97.</li> <li>"Proposal to vary the existing Notice of Intent for the continuation of hard rock mining to include underground mining" (NOI 3384) dated April 2000 and retained on Department of Minerals and Energy File No. 2673/99: and</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> </ul>	06/02/2006	10/07/2006

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#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> <li>"Letter of Intent - Expansion to IP Waste Dump" dated 5 December 1996 and retained on Department of Minerals and Energy File No. 2056/94.</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>		
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	14/11/1994	21/05/1997
29	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.	14/11/1994	
30	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads, and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	14/11/1994	
31	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer.	14/11/1994	
32	All rubbish and scrap being progressively disposed of in a suitable manner.	14/11/1994	
33	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the Director, Environment, DoIR for his assessment and until his written approval to proceed has been obtained.	12/08/2005	
	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the State Mining Engineer for his assessment and until his written approval to proceed has been obtained.	14/11/1994	11/08/2005
34	The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$100,000.</li> </ul>	12/05/2006	06/08/2007
35	The construction of the tailings storage embankment shall be supervised by an engineering or geotechnical specialist.	06/02/2006	
36	The as-built details of any tailings storage embankment shall be documented by an engineering or geotechnical specialist and confirm that the construction satisfies the design intent. The construction document shall include the records of all construction quality control testing, the basis of any method specification adopted, and any significant modifications to the original design together with the reasons why the modifications were necessary. The construction document shall also present as-built drawings for the embankment earthworks and pipework. A copy of the construction document shall be submitted to Department of Industry and Resources for its records.	06/02/2006	
37	The tailings storage facility shall be checked on a routine daily basis by site personnel during periods of deposition to ensure that the facility is functioning as per the design intent.	06/02/2006	
38	An engineering or geotechnical specialist shall review the active tailings storage facility on an annual basis. The specialist shall review past performance, validate the design, examine tailings management and review the results of monitoring. Any deficiencies noted in the audit and review report shall be submitted to DoIR and should be accompanied by a recent survey pick-up of the facility and an updated tailings storage data sheet.	06/02/2006	
39	At the time of the first annual review, SOG is to provide stability analyses of all TSF embankments, using as-built properties of embankment and foundation materials (after at least 6 months of consolidation).	06/02/2006	
40	Prior to any rock waste dumping on the old lithium tailings, the DoIR requires a detailed geotechnical assessment of the stability of foundation materials and potential influences on any embankment downstream of the waste dump.	06/02/2006	



#	CONDITIONS	Start Date	End Date
41	At the time of decommissioning of the tailings storage facility and prior to rehabilitation, a further review report by a geotechnical or engineering specialist shall be submitted to DoIR. This report should review the status of the structure and its contained tailings, examine and address the implications of the physical and chemical characteristics of the materials, and present and review the results of all environmental monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements should also be addressed.	06/02/2006	
42	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul> A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul> A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	24/03/2017	
		11/03/2014	23/03/2017
		14/06/2013	10/03/2014
43	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	
44	The tailings storage facility shall be appropriately monitored to ensure any significant changes to the phreatic surface can be detected, and appropriate management actions implemented, to ensure the stability of the facility is maintained.	03/02/2016	
45	Prior to each lift of the tailings storage facility, the stability of the perimeter embankment shall be assessed by a suitably qualified engineer, taking into account the results of monitoring of the phreatic surface and the performance of seepage management measures.	03/02/2016	
46	The Lessee taking all reasonable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.	03/05/2017	
47	Where saline water is used for dust suppression, all reasonable measures being taken to avoid any detrimental effects to surrounding vegetation and topsoil stockpiles.	03/05/2017	
48	Placement of waste material must be such that the final footprint after rehabilitation will not be impacted upon by pit wall subsidence or be within the zone of pit instability, to the satisfaction of the Executive Director, Environment Division, DMP.	03/05/2017	
49	On the completion of operations or progressively when possible, all waste dumps, tailings storage facilities, stockpiles or other mining related landforms must be rehabilitated to form safe, stable, non-polluting structures which are integrated with the surrounding landscape and support self sustaining, functional ecosystems comprising suitable, local provenance species or alternative agreed outcome to the satisfaction of the Executive Director, Environment Division, DMP.	03/05/2017	
50	All activities being carried out in such a manner so as to not have a detrimental effect on the natural water flow through the lease and surrounding areas to the satisfaction of the Environmental Officer, DMP.	03/05/2017	
51	The construction of any embankment shall be supervised by an engineering or geotechnical specialist.	03/01/2018	
52	The construction details of any CWD2 embankment shall be documented by an engineering or geotechnical specialist and confirm that the construction satisfies the design intent. The construction document shall include the records of all construction quality control testing, the basis of any method specification adopted, and any significant modifications to the original design together with the reasons why the modifications were necessary. The construction document shall also present as-built drawings for the embankment earthworks and pipework. A copy of the construction document shall be submitted to DMIRS for its records.	03/01/2018	
53	The CWD2 shall be checked on a routine daily basis by site personnel during periods of deposition to ensure that the facility is functioning as per the design intent.	03/01/2018	

#	CONDITIONS	Start Date	End Date
54	An engineering or geotechnical specialist shall audit and review the active water storage facility on an annual basis. The specialist shall review past performance, validate the design, examine water management and review the results of monitoring. Any deficiencies noted in the audit and review report shall be suitably addressed and improved. The audit and review report shall be submitted to DMIRS.	03/01/2018	
55	At the time of decommissioning of the CWD2 and prior to rehabilitation, a further review report by a geotechnical or engineering specialist will be submitted to DMIRS. This report should review the status of the structure and its contained solids and water, examine and address the implications of the physical and chemical characteristics of the materials, and present and review the results of all environmental monitoring. The rehabilitation stabilisation works proposed and any on-going remedial requirements should also be addressed.	03/01/2018	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

##### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commissioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease  
REGISTERED 9:00 AM 28 Dec 1984  
Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

#### Mortgage 15H/856

Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES  
REGISTERED 11:30 AM 11 Nov 1985  
Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.  
REGISTERED 10:20 AM 29 Apr 1992  
Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd.  
REGISTERED 10:20 AM 29 Apr 1992

#### Agreement 118H/856

Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985  
REGISTERED 4:00 PM 23 Oct 1985  
WITHDRAWN 9:30:00 AM 18 Aug 2006

#### Partial Surrender - Conditional 159848

Lodged 9:00:00 AM on 23 Jun 1986 in favour of application for General Purpose Lease 01/2 for that portion coloured "green" on the sketch attached to the Conditional Partial Surrender document  
RECORDED 9:00 AM 23 Jun 1986  
MADE ABSOLUTE 17 Nov 1986 being commencement of term of G01/2

#### Partial Surrender - Conditional 159849

Lodged 9:00:00 AM on 23 Jun 1986 in favour of application for General Purpose Lease 01/1 for that portion coloured "green" on sketch attached to the Conditional Partial Surrender document  
RECORDED 9:00 AM 23 Jun 1986  
MADE ABSOLUTE 17 Nov 1986 being commencement of term of G01/1

#### Partial Surrender - Voluntary 781H/856

Lodged 1:00:00 PM on 25 Jun 1986 for that portion outlined red and limited to a depth of 15 metres from the natural surface as shown on the plan attached to the document of partial surrender at page 44 of Mines File 15597/83  
REGISTERED 1:00 PM 25 Jun 1986

#### Mortgage 78H/878

Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES  
REGISTERED 11:00 AM 01 Jul 1988

	Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992
<b>Caveat 1032H/912</b>	Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992 Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992 Re Mortgages 25H/967 & 29H/967 - 14 day notice sent 16 Jan 1997. Order under Section 122(1)(c), caveat to remain in full force and effect on expiry of 14 day notice, signed Paul Heaney, Warden on 24 Jan 1997 Re Mortgage 3H/989 - 14 day notice sent 28 Jul 1998 LAPSED 12:00 Midnight 11 Aug 1998
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Bond PE1379</b>	Lodged on 08 Oct 1993 For \$100,000.00 RECORDED 08 Oct 1993 RETIRED 16 Oct 2007
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Caveat 1711H/978</b>	Lodged 3:45:00 PM on 30 Apr 1998 by CABOT CORPORATION in respect to 100/100ths shares in the name of GREENBUSHES LTD RECORDED 3:45 PM 30 Apr 1998



	Re Mortgage 3H/989 - 14 day notice sent 28 Jul 1998 Order under Section 122(1)(c) that caveat shall not cease to have effect upon expiration of 14 days. G.Calder, Warden, 07 Aug 1998 Re Agreements 74H/989 & 75H/989 - 14 day notice sent 16 Dec 1998 Re Caveat to remain in full force and effect upon registration of Agreement, signed by Warden 10:00 AM on 30 Dec 1998 WITHDRAWN 10:00 AM 13 Feb 2006
<b>Mortgage 3H/989</b>	Lodged 4:10:00 PM on 06 Jul 1998 in favour of CABOT CORPORATION in respect to 100/100ths shares in the name of GREENBUSHES LTD Discharged by Withdrawal 120H/056 lodged 10:00:00 AM on 13 Feb 2006
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Agreement 74H/989</b>	Agreement (Deed of Charge) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD, GWALIA MINERALS NL, GWALIA TANTALUM PTY LTD, BANK OF WESTERN AUSTRALIA LTD, GWALIA CONSOLIDATED LTD and GREENBUSHES LTD Lodged 11:45 AM on 02 Dec 1998 REGISTERED 10:00 AM 30 Dec 1998 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Agreement 75H/989</b>	Agreement (Deed of Assignment) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD, GWALIA TANTALUM PTY LTD, BANK OF WESTERN AUSTRALIA LTD, CITISECURITIES LTD, GWALIA CONSOLIDATED LTD, DRESDNER KLIENWORT BENSON AUSTRALIA LTD, GREENBUSHES LTD and GWALIA MINERALS NL Lodged 11:45:00 AM on 02 Dec 1998 REGISTERED 10:00 AM 30 Dec 1998 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1032H/912 REJECTED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Bond PE6662</b>	Lodged on 22 Aug 2001 For \$1,713,000.00 RECORDED 22 Aug 2001 RETIRED 16 Oct 2007
<b>Bond 224521</b>	Lodged on 28 Sep 2005 For \$780,000.00 RECORDED 28 Sep 2005 RETIRED 16 Oct 2007
<b>Extension / Renewal of Term 43H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Mortgage - Discharge 120H/056</b>	In respect to Mortgage 3H/989 lodged 10:00:00 AM on 13 Feb 2006 REGISTERED 10:00 AM 13 Feb 2006
<b>Withdrawal of Dealing 119H/056</b>	Lodged 10:00:00 AM on 13 Feb 2006 withdrawing Caveat 1711H/978 RECORDED 10:00 AM 13 Feb 2006
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Withdrawal of Dealing 246235</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 74H/989 RECORDED 9:30 AM 18 Aug 2006

<b>Withdrawal of Dealing 26H/067</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 75H/989 RECORDED 9:30 AM 18 Aug 2006
<b>Bond 275384</b>	Lodged on 21 Sep 2007 For \$2,593,000.00 (Unconditional Performance Bond) RECORDED 21 Sep 2007 RETIRED: 18 March 2010
<b>Mortgage 274385</b>	Lodged 12:45:00 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 3:30 PM 21 Sep 2007 REGISTERED 3:30 PM 21 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Bond Requirement 314089</b>	Requirement Date: 06/02/2006 Amount: \$2,593,000.00 RECORDED: 15:18:11 06 February 2006 FINALISED: 07:50:06 16 October 2014
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Bond 342857</b>	Lodged: 14:15 17 March 2010 Bond Type: Unconditional Performance Bond Bond Amount: \$2,593,000.00 RECORDED: 17 March 2010 RETIRED: 16 February 2011
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000 To: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850 RECORDED: 10:00 17 August 2010
<b>Mortgage 364473</b>	Lodged: 10:36 22 December 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: COMMONWEALTH BANK OF AUSTRALIA REGISTERED: 10:36 22 December 2010 DISCHARGED: 15:00 07 November 2013 Full Discharge: 434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>	Lodged: 11:13 24 December 2010 In respect to: Mortgage 341684 REGISTERED: 11:13 24 December 2010
<b>Bond 365755</b>	Lodged: 15:25 15 February 2011 Bond Type: Unconditional Performance Bond

		Bond Amount:	\$2,593,000.00
		RECORDED:	15 February 2011
		RETIRED - MRF:	16 October 2014
<b>Caveat 400180</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Caveat 419438</b>		Lodged:	15:50 21 March 2013
		Caveat Type:	Subject to Claim Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	15:50 21 March 2013
<b>Caveat 419439</b>		Lodged:	15:50 21 March 2013
		Caveat Type:	Subject to Claim Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	15:50 21 March 2013
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Forfeiture 440668</b>		Initiated:	21/02/2014 for non-compliance with royalty provisions
		RECORDED:	11:04:41 19 February 2014
		Notice Issued:	Regulation 50 Notice sent 21/02/2014 for non-compliance with royalty provisions pursuant to Sec 82(1)(a).
		Compliance Date:	25/03/2014
		FINALISED:	Order by Minister on 07 April 2014 that M 01/6 be No Penalty Imposed
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472088</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	10:01 13 August 2015



## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
365755	COMMONWEALTH BANK OF AUSTRALIA	\$2,593,000.00	15/02/2011	Retired - MRF	16/10/2014
342857	WESTPAC BANKING CORPORATION	\$2,593,000.00	17/03/2010	Retired	16/02/2011
275384	WESTPAC BANKING CORPORATION	\$2,593,000.00	21/09/2007	Retired	18/03/2010
224521	AUSTRALIA AND NEW ZEALAND BANKING GROUP LTD	\$780,000.00	28/09/2005	Retired	16/10/2007
PE6662	BANK OF WESTERN AUSTRALIA LTD	\$1,713,000.00	22/08/2001	Retired	16/10/2007
PE1379	THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA	\$100,000.00	08/10/1993	Retired	16/10/2007

## RENT DETAILS

## Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	1038413454	TALISON LITHIUM TALISON LITHIUM	OL	\$17,336.00	984.10000 HA	23/03/2005	\$17,336.00	\$0.00
Payment	2017	28/12/2016		MT-210010864421-EF	OL	\$16,794.25	984.10000 HA	23/03/2005	\$16,794.25	\$0.00
Payment	2016	27/01/2016		MT-210010481233-EF	OL	\$16,252.50	984.10000 HA	23/03/2005	\$16,252.50	\$0.00
Payment	2015	27/01/2015		MT-210010226403-EF	OL	\$15,858.50	984.10000 HA	23/03/2005	\$15,858.50	\$0.00
Payment	2014	21/01/2014		MT-210010156188-EF	OL	\$15,464.50	984.10000 HA	23/03/2005	\$15,464.50	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,169.00	984.10000 HA	23/03/2005	\$15,169.00	\$0.00
Payment	2012	25/01/2012		06-105241	PE	\$14,775.00	984.10000 HA	23/03/2005	\$14,775.00	\$0.00
Payment	2011	27/01/2011		89308	PE	\$15,710.75	984.10000 HA	23/03/2005	\$15,710.75	\$0.00
Payment	2010	15/01/2010		74451	PE	\$15,385.70	984.10000 HA	23/03/2005	\$15,385.70	\$0.00
Payment	2009	23/01/2009		60707	PE	\$14,735.60	984.10000 HA	23/03/2005	\$14,735.60	\$0.00
Payment	2008	18/01/2008		47128	PE	\$14,302.20	984.10000 HA	23/03/2005	\$14,302.20	\$0.00
Payment	2007	24/01/2007		33490	PE	\$13,652.10	984.10000 HA	23/03/2005	\$13,652.10	\$0.00
Payment	2006	16/12/2005		19118	PE	\$13,218.70	984.10000 HA	23/03/2005	\$13,218.70	\$0.00
Refund	2005	24/11/2006		(REFUND) 6103	PE	\$3,021.10	984.10000 HA	23/03/2005	\$12,893.65	-\$2,824.75
Payment	2005	17/12/2004		6103	PE	\$13,090.00				
Payment	2004	19/12/2003		67510	PE	\$12,760.00	984.10000 HA	23/03/2005	\$12,568.60	\$191.40
Payment	2003	23/12/2002		55944	PE	\$12,320.00	984.10000 HA	23/03/2005	\$12,135.20	\$184.80
Payment	2002	29/01/2002		44977	PE	\$12,000.00	984.10000 HA	23/03/2005	\$11,820.00	\$180.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	984.10000 HA	23/03/2005	\$11,160.05	\$169.95
Payment	2000	28/07/2000		25767	PE	\$506.56	984.10000 HA	23/03/2005	\$10,644.46	\$162.10
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	984.10000 HA	23/03/2005	\$10,145.50	\$154.50
Payment	1998	29/01/1998		173719	PE	\$10,000.00	984.10000 HA	23/03/2005	\$9,850.00	\$150.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	984.10000 HA	23/03/2005	\$9,850.00	\$150.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	984.10000 HA	23/03/2005	\$9,850.00	\$150.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	984.10000 HA	23/03/2005	\$9,160.50	\$139.50
Payment	1994	01/02/1994		102570	PE	\$9,300.00	984.10000 HA	23/03/2005	\$9,160.50	\$139.50
Payment	1993	26/01/1993		84964	PE	\$9,300.00	984.10000 HA	23/03/2005	\$9,160.50	\$139.50

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	1992	28/01/1992		69332	PE	\$9,300.00	984.10000 HA	23/03/2005	\$9,160.50	\$139.50
Payment	1991	01/02/1991		1	PE	\$8,700.00	984.10000 HA	23/03/2005	\$8,569.50	\$130.50
Payment	1990	20/12/1989		1	PE	\$8,100.00	984.10000 HA	23/03/2005	\$7,978.50	\$121.50
Payment	1989	16/12/1988		1	PE	\$8,100.00	984.10000 HA	23/03/2005	\$7,978.50	\$121.50
Payment	1988	21/12/1987		1	PE	\$7,700.00	984.10000 HA	23/03/2005	\$7,584.50	\$115.50
Payment	1987	16/12/1986		1	PE	\$7,000.00	984.10000 HA	23/03/2005	\$6,895.00	\$105.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	984.10000 HA	23/03/2005	\$5,910.00	\$90.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	984.10000 HA	23/03/2005	\$5,910.00	\$90.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$98,500.00							
2017	\$98,500.00							
2016	\$98,500.00	24/02/2017	\$20,141,514.00					
2015	\$98,500.00	25/02/2016	\$38,809,791.00					
2014	\$98,500.00	24/02/2015	\$37,167,048.00					
2013	\$98,500.00	25/02/2014	\$23,777,626.00					
2012	\$98,500.00	25/02/2013	\$28,980,853.00					
2011	\$98,500.00	23/02/2012	\$19,560,780.00					
2010	\$98,500.00	22/02/2011	\$19,346,031.00					
2009	\$98,500.00	25/02/2010	\$15,247,973.00					
2008	\$98,500.00	24/02/2009	\$16,895,620.00					
2007	\$98,500.00	22/02/2008	\$22,230,835.00					
2006	\$98,500.00	23/02/2007	\$9,188,876.00					
2005	\$98,875.00	21/02/2006	\$26,162,499.00					
2004	\$100,000.00	16/02/2005	\$32,217,265.00					
2003	\$100,000.00	22/01/2004	\$29,957,582.00					
2002	\$100,000.00	23/01/2003	\$50,638,627.00					
2001	\$100,000.00	26/02/2002	\$52,060,322.00					
2000	\$100,000.00	26/02/2001	\$45,472,648.00					
1999	\$100,000.00	25/02/2000	\$40,105,009.00					
1998	\$100,000.00	25/02/1999	\$39,554,731.00					
1997	\$100,000.00	24/02/1998	\$46,753,339.00					
1996	\$100,000.00	24/02/1997	\$34,887,698.00					
1995	\$100,000.00	23/02/1996	\$15,816,342.00					
1994	\$100,000.00	20/02/1995	\$15,975,286.00					
1993	\$100,000.00	24/02/1994	\$14,973,799.00					
1992	\$100,000.00	12/02/1993	\$33,591,934.00					
1991	\$100,000.00	17/03/1992	\$14,192,919.00					
1990	\$100,000.00	07/03/1991	\$5,885,761.00					
1989	\$100,000.00	26/02/1990	\$11,906,515.00					
1988	\$100,000.00	17/03/1989	\$8,445,524.00					
1987	\$100,000.00	08/02/1988	\$5,170,579.00					
1986	\$100,000.00	17/02/1987	\$6,979,630.00					
1985	\$100,000.00	06/03/1986	\$12,656,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$344,727.00	\$17,146,163.00	\$0.00	\$23,470.00	\$2,627,154.00	\$0.00	\$20,141,514.00
2015	25/02/2016	\$261,945.00	\$33,500,000.00	\$0.00	\$22,846.00	\$5,025,000.00	\$0.00	\$38,809,791.00

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2014	24/02/2015	\$120,099.00	\$32,192,744.00	\$0.00	\$21,995.00	\$4,832,210.00	\$0.00	\$37,167,048.00
2013	25/02/2014	\$0.00	\$20,655,852.00	\$0.00	\$20,345.00	\$3,101,429.00	\$0.00	\$23,777,626.00
2012	25/02/2013	\$1,067,584.00	\$25,259,191.00	\$0.00	\$19,455.00	\$2,634,623.00	\$0.00	\$28,980,853.00
2011	23/02/2012	\$0.00	\$16,993,708.00	\$0.00	\$18,016.00	\$2,549,056.00	\$0.00	\$19,560,780.00
2010	22/02/2011	\$0.00	\$16,806,160.00	\$0.00	\$16,476.00	\$2,523,395.00	\$0.00	\$19,346,031.00
2009	25/02/2010	\$0.00	\$13,245,064.00	\$0.00	\$16,150.00	\$1,986,759.00	\$0.00	\$15,247,973.00
2008	24/02/2009	\$254,154.00	\$15,447,215.00	\$0.00	\$15,487.00	\$1,178,764.00	\$0.00	\$16,895,620.00
2007	22/02/2008	\$146,569.00	\$21,142,954.00	\$0.00	\$14,302.00	\$927,010.00	\$0.00	\$22,230,835.00
2006	23/02/2007	\$88,879.00	\$8,653,000.00	\$0.00	\$14,347.00	\$432,650.00	\$0.00	\$9,188,876.00
2005	21/02/2006	\$0.00	\$24,903,500.00	\$0.00	\$13,824.00	\$1,245,175.00	\$0.00	\$26,162,499.00
2004	16/02/2005	\$58,798.00	\$30,603,702.00	\$0.00	\$13,705.00	\$1,541,060.00	\$0.00	\$32,217,265.00
2003	22/01/2004	\$0.00	\$28,518,063.00	\$0.00	\$12,968.00	\$1,426,551.00	\$0.00	\$29,957,582.00
2002	23/01/2003	\$300,000.00	\$47,914,794.00	\$0.00	\$12,470.00	\$2,411,363.00	\$0.00	\$50,638,627.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$52,060,322.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45,472,648.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,105,009.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39,554,731.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46,753,339.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34,887,698.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,816,342.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15,975,286.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,973,799.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33,591,934.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14,192,919.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,885,761.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,906,515.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,445,524.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,170,579.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,979,630.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,656,000.00

## COMBINED REPORTING DETAILS

C Number : 296/1994

Reporting Date : 28/02

Project : Greenbushes

Affecting Period : 01/01 - 31/12

## Active Tenements:

M 01/2 (18/07/1994)

M 01/3 (18/07/1994)

M 01/4 (18/07/1994)

M 01/5 (18/07/1994)

M 01/6 (18/07/1994)

M 01/7 (18/07/1994)

M 01/8 (18/07/1994)

M 01/9 (18/07/1994)

M 01/10 (18/07/1994)

M 01/11 (18/07/1994)

M 01/16 (14/07/1995)

M 01/18 (14/07/1995)

M 70/765 (14/07/1995)

End of Search



**MINING TENEMENT REGISTER SEARCH****MINING LEASE 01/7**

This Register Search issued pursuant to Section 103F(4) of the Mining Act, 1978 at: **10:48:10 15/02/2018**

Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

**Tenement Summary**

**Identifier :** M 01/7

**District :** GREENBUSHES M.F.

**Current Area :** 997.10000 HA

**Status :** Live

**Mark Out :** 08/12/1983 14:00:00

**Received :** 12/12/1983 10:50:00

**Term Granted :** 21 Years (Renewed)

**Lodging Office :** PERTH

**Commence :** 28/12/1984

**Expiry :** 27/12/2026

**Purpose :**

**Death :**

**Rent Status**

**Due for Year End 27/12/2018 :**

**Previous Amount Outstanding :** \$0.00

**Current Due :** \$0.00

**Rent for Year End 27/12/2019 :** \$17,564.80

**Expenditure Status**

**Expended Year End 27/12/2017 :** No Expenditure Lodged

**Current Year (27/12/2018) Commitment :** \$99,800.00

**OWNERSHIP DETAILS****Current Holders****Name and Address**

TALISON LITHIUM AUSTRALIA PTY LTD  
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

**Shares**

100

**Total Shares:**

100

**Holder Changes**

**Dealing**

**Status Date**

**From (Shares)**

**To (Shares)**

A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274311	Registered 30/10/2007 10:00:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341676	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 5697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOC 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

2000 metres bearing 90 degrees

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees along a part of the south boundary of the Greenbushes Mineral Field

5000 metres bearing 360 degrees

BACK TO DATUM AND EXCLUDING THAT AREA CONTAINED IN PART OF MINING LEASE M01/1

Area :	Type	Dealing No	Start Date	Area
	Surveyed		23/03/2005	997.10000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
997.10000 HA	23/03/2005	LOWTH, SJ	24	31/01/2005	12040

### Standard Plan

### Diagram

TENGRAPH

31175 (2751)

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984

Application Fee : \$15.00

File Reference : 15598/83

Survey Fee : \$1,730.00

Receipt Number : 25561

**Special Indicator**

Special Indicator	Start	End
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## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		997.10000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984	Holder Notified : 28/12/1984	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed) From : 28/12/1984 To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	14/11/1994	
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	



#	CONDITIONS	Start Date	End Date
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	28/12/1984	

#	CONDITIONS	Start Date	End Date
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	28/12/1984	
19	No mining on Cemetery Reserve No. 10819 mining within a distance of 140 metres laterally from the Reserve being confined to below a depth of 50 metres from the lowest part of the surface of the land with rights of ingress to and egress from the said Reserve being at all times preserved to the public..	28/12/1984	
20	No mining on Water Reserves 1381 and 1382 and Residence and Business Reserve 8048 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	22/02/1987
21	The complete excision of any portion encroaching on Mining Lease 01/1.	28/12/1984	
22	Where a difference exists between the above document and the following conditions, then the following conditions shall prevail. All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
	Where a difference exists between the above document and the following conditions, then the following conditions shall prevail:	01/11/1994	13/11/1994
	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled "Notice of Intent to Mine Clay on Greenbushes Tin Leases at Greenbushes" dated July 1991 and retained on Mines Department File No: 1306/91. Where a difference exists between the above document and the following conditions, then the following conditions shall prevail.	15/07/1992	31/10/1994
23	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
		01/11/1994	13/11/1994
	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.	15/07/1992	31/10/1994
24	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
		01/11/1994	13/11/1994
	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads, and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	15/07/1992	31/10/1994
25	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface	12/08/2005	

#	CONDITIONS	Start Date	End Date
	disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.		
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
		01/11/1994	13/11/1994
	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer in agreement with the Executive Director, Conservation and Land Management (CALM).	15/07/1992	31/10/1994
26	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained.	14/11/1994	11/08/2005
		01/11/1994	13/11/1994
	All rubbish and scrap being progressively disposed of in a suitable manner to the satisfaction of the Executive Director CALM.	15/07/1992	31/10/1994
27	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
		01/11/1994	13/11/1994
	At the completion of operations, or progressively where possible, all access roads and other disturbed areas being covered with topsoil, deep ripped and revegetated with local native grasses, shrubs and trees to the satisfaction of the State Mining Engineer, in agreement with the Executive Director CALM.	15/07/1992	31/10/1994
28	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90.</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No. 2122/92.</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94.</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699;</li> <li>(Reg ID 68758) "Programme of Work Application, Talison Lithium Australia Pty Limited - Dieback Hygiene Procedure Final" dated 26 June 2017 and retained on Department of Mines, Industry Regulation and Safety File No. EARS-POW-68758 as Doc ID 5160729</li> </ul>	12/02/2018	



#	CONDITIONS	Start Date	End Date
	Where a difference exists between the above documents and the following conditions, then the following conditions shall prevail.		
	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90.</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No. 2122/92.</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94.</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul>	24/03/2017	11/02/2018
	Where a difference exists between the above documents and the following conditions, then the following conditions shall prevail.		
	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90.</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No. 2122/92.</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94.</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> </ul>	02/05/2014	23/03/2017
	Where a difference exists between the above documents and the following conditions, then the following conditions shall prevail.		
	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90.</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No. 2122/92.</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94.</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	01/05/2014
	Where a difference exists between the above documents and the following conditions, then the following conditions shall prevail.		

#	CONDITIONS	Start Date	End Date
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90.</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No. 2122/92.</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94.</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> </ul> <p>Where a difference exists between the above documents and the following conditions, then the following conditions shall prevail:</p>	28/02/2001	10/03/2014
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90.</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Minerals and Energy Department File No. 2122/92.</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94.</li> </ul> <p>Where a difference exists between the above documents and the following conditions, then the following conditions shall prevail:</p>	14/11/1994	27/02/2001
	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the State Mining Engineer for his assessment and until his written approval to proceed has been obtained upon concurrence with the Executive Director, CALM..	01/11/1994	13/11/1994
		15/07/1992	31/10/1994
29	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.	14/11/1994	
		01/11/1994	13/11/1994
	The lessee providing a Bond in favour of the Minister for Mines in the sum of \$5000 for due compliance with the conditions of the lease.	15/07/1992	31/10/1994
30	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	14/11/1994	
		01/11/1994	13/11/1994
	The lessee submitting to the State Mining Engineer and the Executive Director of the Department of Conservation and Land Management in November of each year, a brief annual report outlining the operations and rehabilitation work undertaken in the previous 12 months and the proposed operations and rehabilitation programmes for the next 12 months for approval.	15/07/1992	31/10/1994
31	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer.	14/11/1994	
32	All rubbish and scrap being progressively disposed of in a suitable manner.	14/11/1994	
33	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the Director, Environment, DoIR for his assessment and until his written approval to proceed has been obtained.	12/08/2005	
	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the State Mining Engineer for his assessment and until his written approval to proceed has been obtained.	14/11/1994	11/08/2005
34	<p>The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of:</p> <ul style="list-style-type: none"> <li>\$1,072,000.</li> </ul>	27/07/2001	29/07/2013

#	CONDITIONS	Start Date	End Date
	The lessee arranging lodgement of an Unconditional Performance Bond executed by a Bank or other approved financial institution in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$50,000.</li> </ul>	28/12/1984	26/07/2001
35	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
36	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

#### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA  
By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease

REGISTERED 9:00 AM 28 Dec 1984

Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

#### Mortgage 15H/856

Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES

REGISTERED 11:30 AM 11 Nov 1985

Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.

REGISTERED 10:20 AM 29 Apr 1992

Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd.

REGISTERED 10:20 AM 29 Apr 1992

#### Agreement 118H/856

Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985

REGISTERED 4:00 PM 23 Oct 1985

WITHDRAWN 9:30:00 AM 18 Aug 2006

#### Mortgage 78H/878

Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES

REGISTERED 11:00 AM 01 Jul 1988

Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales

REGISTERED 10:20 AM 29 Apr 1992



	Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992
<b>Bond PE0480</b>	Lodged on 05 Jul 1991 For \$50,000.00 (Unconditional Performance Bond) RECORDED 05 Jul 1991 RETIRED: 15 May 2009
<b>Caveat 1033H/912</b>	Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 day notice sent 19 Feb 1992 Caveat to remain in full force and effect by Order of Warden, P.G.Thobaven 28 Feb 1992 Re Mortgages 25H/967 & 29H/967 - 14 day notice sent 16 Jan 1997. Order under Section 122(1)(c) that caveat remains in full force and effect upon expiry of the 14 day notice, signed Paul Heaney, Warden 24 Jan 1997 Re Mortgage 3H/989 - 14 day notice sent 28 Jul 1998 LAPSED 12:00 Midnight 11 Aug 1998
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Bond PE0779</b>	Lodged on 09 Jul 1992 For \$5,000.00 (Personal Surety) RECORDED 09 Jul 1992 RETIRED 31 Oct 1994
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Caveat 1712H/978</b>	Lodged 3:45:00 PM on 30 Apr 1998 by CABOT CORPORATION in respect to 100/100ths shares in the name of GREENBUSHES LTD

	RECORDED 3:45 PM 30 Apr 1998 Re Mortgage 3H/989 - 14 day notice sent 28 Jul 1998 Order under Section 122(1)(c) that caveat shall not cease to have effect upon expiration of 14 days, G.Calder, Warden 07 Aug 1998 Re Agreements 74H/989 & 75H/989 - 14 day notice sent 16 Dec 1998 Re Caveat to remain in full force and effect upon registration of Agreement, signed by Warden 10:00 AM on 30 Dec 1998 WITHDRAWN 10:00 AM 13 Feb 2006
<b>Mortgage 3H/989</b>	Lodged 4:10:00 PM on 06 Jul 1998 in favour of CABOT CORPORATION in respect to 100/100ths shares in the name of GREENBUSHES LTD Discharged by Withdrawal 120H/056 lodged 10:00:00 AM on 13 Feb 2006
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Agreement 74H/989</b>	Agreement (Deed of Charge) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD, GWALIA MINERALS NL, GWALIA TANTALUM PTY LTD, BANK OF WESTERN AUSTRALIA LTD, GWALIA CONSOLIDATED LTD and GREENBUSHES LTD Lodged 11:45 AM on 02 Dec 1998 REGISTERED 10:00 AM 30 Dec 1998 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Agreement 75H/989</b>	Agreement (Deed of Assignment) LITHIUM AUSTRALIA LTD, SEVAKE PTY LTD, GWALIA TANTALUM PTY LTD, BANK OF WESTERN AUSTRALIA LTD, CITISECURITIES LTD, GWALIA CONSOLIDATED LTD, DRESDNER KLIENWORT BENSON AUSTRALIA LTD, GREENBUSHES LTD and GWALIA MINERALS NL Lodged 11:45:00 AM on 02 Dec 1998 REGISTERED 10:00 AM 30 Dec 1998 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1033H/912 REJECTED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Bond PE6661</b>	Lodged on 22 Aug 2001 For \$1,022,000.00 RECORDED 22 Aug 2001 RETIRED 16 Nov 2007
<b>Extension / Renewal of Term 44H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Mortgage - Discharge 120H/056</b>	In respect to Mortgage 3H/989 lodged 10:00:00 AM on 13 Feb 2006 REGISTERED 10:00 AM 13 Feb 2006
<b>Withdrawal of Dealing 119H/056</b>	Lodged 10:00:00 AM on 13 Feb 2006 withdrawing Caveat 1712H/978 RECORDED 10:00 AM 13 Feb 2006
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Withdrawal of Dealing 246235</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 74H/989 RECORDED 9:30 AM 18 Aug 2006
<b>Withdrawal of Dealing 26H/067</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 75H/989 RECORDED 9:30 AM 18 Aug 2006

**Mortgage 274385**

Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION  
 REJECTED 12:45 PM 03 Sep 2007  
 RELODGED 10:00 AM 30 Oct 2007  
 REGISTERED 10:00 PM 30 Oct 2007  
 DISCHARGED: 14:50 25 February 2010

**Bond 277192**

Lodged on 01 Nov 2007 For \$1,122,000.00 (Unconditional Performance Bond)  
 RECORDED 01 Nov 2007  
 RETIRED: 18 March 2010

**Bond Requirement 314090**

Requirement Date: 27/07/2001  
 Amount: \$1,072,000.00  
 RECORDED: 15:19:31 27 July 2001  
 FINALISED: 07:50:43 16 October 2014

**Mortgage - Discharge 341667**

Lodged: 14:50 25 February 2010  
 In respect to: Mortgage 274385  
 REGISTERED: 14:50 25 February 2010

**Mortgage 341684**

Lodged: 14:50 25 February 2010  
 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 Mortgagee: WESTPAC BANKING CORPORATION  
 REGISTERED: 14:50 25 February 2010  
 DISCHARGED: 11:13 24 December 2010  
 Full Discharge: 362313 Registered 11:13 24 December 2010

**Bond 342859**

Lodged: 14:00 17 March 2010  
 Bond Type: Unconditional Performance Bond  
 Bond Amount: \$1,072,000.00  
 RECORDED: 17 March 2010  
 RETIRED: 16 February 2011

**Application to Amend 353570**

Lodged: 10:00 17 August 2010  
 Amending: Address  
 From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000  
 To: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850  
 RECORDED: 10:00 17 August 2010

**Mortgage 364473**

Lodged: 10:36 22 December 2010  
 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  
 Mortgagee: COMMONWEALTH BANK OF AUSTRALIA  
 REGISTERED: 10:36 22 December 2010  
 DISCHARGED: 15:00 07 November 2013  
 Full Discharge: 434701 Registered 15:00 07 November 2013

**Mortgage - Discharge 362313**

Lodged: 11:13 24 December 2010  
 In respect to: Mortgage 341684  
 REGISTERED: 11:13 24 December 2010

**Bond 365756**

Lodged: 15:25 15 February 2011  
 Bond Type: Unconditional Performance Bond  
 Bond Amount: \$1,072,000.00  
 RECORDED: 15 February 2011



<b>Caveat 400181</b>	RETIRED - MRF:	16 October 2014
	Lodged:	12:10 22 June 2012
	Caveat Type:	Absolute Caveat
	Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	12:10 22 June 2012
	Affected Dealing:	Mortgage 472080
<b>Mortgage - Discharge 434701</b>	14 day notice sent:	11 August 2015
	Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
	Lodged:	15:00 07 November 2013
<b>Mortgage 472080</b>	In respect to:	Mortgage 364473
	REGISTERED:	15:00 07 November 2013
	Lodged:	10:15 30 July 2015
	Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
<b>Caveat 472089</b>	Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
	REGISTERED:	10:00 13 August 2015
	Lodged:	10:15 30 July 2015
	Caveat Type:	Consent Caveat
	Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	10:01 13 August 2015

## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
365756	COMMONWEALTH BANK OF AUSTRALIA	\$1,072,000.00	15/02/2011	Retired - MRF	16/10/2014
342859	WESTPAC BANKING CORPORATION	\$1,072,000.00	17/03/2010	Retired	16/02/2011
277192	WESTPAC BANKING CORPORATION	\$1,122,000.00	01/11/2007	Retired	18/03/2010
PE6661	BANK OF WESTERN AUSTRALIA LTD	\$1,022,000.00	22/08/2001	Retired	16/11/2007
PE0480	THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA	\$50,000.00	05/07/1991	Retired	15/05/2009

## RENT DETAILS

Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	6800874577	TALISON LITHIUM TALISON LITHIUM	OL	\$17,564.80	997.10000 HA	23/03/2005	\$17,564.80	\$0.00
Payment	2017	28/12/2016		MT-210010864421-EF	OL	\$17,015.90	997.10000 HA	23/03/2005	\$17,015.90	\$0.00
Payment	2016	27/01/2016		MT-210010481233-EF	OL	\$16,467.00	997.10000 HA	23/03/2005	\$16,467.00	\$0.00

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2015	27/01/2015		MT-210010226403-EF	OL	\$16,067.80	997.10000 HA	23/03/2005	\$16,067.80	\$0.00
Payment	2014	21/01/2014		MT-210010156188-EF	OL	\$15,668.60	997.10000 HA	23/03/2005	\$15,668.60	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,369.20	997.10000 HA	23/03/2005	\$15,369.20	\$0.00
Payment	2012	25/01/2012		06-105241	PE	\$14,970.00	997.10000 HA	23/03/2005	\$14,970.00	\$0.00
Payment	2011	27/01/2011		89308	PE	\$15,918.10	997.10000 HA	23/03/2005	\$15,918.10	\$0.00
Payment	2010	15/01/2010		74451	PE	\$15,588.76	997.10000 HA	23/03/2005	\$15,588.76	\$0.00
Payment	2009	23/01/2009		60707	PE	\$14,930.08	997.10000 HA	23/03/2005	\$14,930.08	\$0.00
Payment	2008	18/01/2008		47128	PE	\$14,490.96	997.10000 HA	23/03/2005	\$14,490.96	\$0.00
Payment	2007	24/01/2007		33490	PE	\$13,832.28	997.10000 HA	23/03/2005	\$13,832.28	\$0.00
Payment	2006	16/12/2005		19118	PE	\$13,393.16	997.10000 HA	23/03/2005	\$13,393.16	\$0.00
Refund	2005	24/11/2006		(REFUND) 6103	PE	\$402.82	997.10000 HA	23/03/2005	\$13,063.82	-\$376.64
Payment	2005	17/12/2004		6103	PE	\$13,090.00				
Payment	2004	19/12/2003		67510	PE	\$12,760.00	997.10000 HA	23/03/2005	\$12,734.48	\$25.52
Payment	2003	23/12/2002		55944	PE	\$12,320.00	997.10000 HA	23/03/2005	\$12,295.36	\$24.64
Payment	2002	29/01/2002		44977	PE	\$12,000.00	997.10000 HA	23/03/2005	\$11,976.00	\$24.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	997.10000 HA	23/03/2005	\$11,307.34	\$22.66
Payment	2000	28/07/2000		25767	PE	\$506.56	997.10000 HA	23/03/2005	\$10,784.94	\$21.62
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	997.10000 HA	23/03/2005	\$10,279.40	\$20.60
Payment	1998	29/01/1998		173719	PE	\$10,000.00	997.10000 HA	23/03/2005	\$9,980.00	\$20.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	997.10000 HA	23/03/2005	\$9,980.00	\$20.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	997.10000 HA	23/03/2005	\$9,980.00	\$20.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	997.10000 HA	23/03/2005	\$9,281.40	\$18.60
Payment	1994	01/02/1994		102570	PE	\$9,300.00	997.10000 HA	23/03/2005	\$9,281.40	\$18.60
Payment	1993	26/01/1993		84964	PE	\$9,300.00	997.10000 HA	23/03/2005	\$9,281.40	\$18.60
Payment	1992	28/01/1992		69332	PE	\$9,300.00	997.10000 HA	23/03/2005	\$9,281.40	\$18.60
Payment	1991	01/02/1991		1	PE	\$8,700.00	997.10000 HA	23/03/2005	\$8,682.60	\$17.40
Payment	1990	20/12/1989		1	PE	\$8,100.00	997.10000 HA	23/03/2005	\$8,083.80	\$16.20
Payment	1989	16/12/1988		1	PE	\$8,100.00	997.10000 HA	23/03/2005	\$8,083.80	\$16.20
Payment	1988	21/12/1987		1	PE	\$7,700.00	997.10000 HA	23/03/2005	\$7,684.60	\$15.40
Payment	1987	16/12/1986		1	PE	\$7,000.00	997.10000 HA	23/03/2005	\$6,986.00	\$14.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	997.10000 HA	23/03/2005	\$5,988.00	\$12.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	997.10000 HA	23/03/2005	\$5,988.00	\$12.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$99,800.00							
2017	\$99,800.00							
2016	\$99,800.00	24/02/2017	\$13,724,900.00					
2015	\$99,800.00	25/02/2016	\$221,195.00					
2014	\$99,800.00	24/02/2015	\$19,258,341.00					
2013	\$99,800.00	25/02/2014	\$4,774,272.00					
2012	\$99,800.00	25/02/2013	\$7,509,275.00					
2011	\$99,800.00	23/02/2012	\$9,485,800.00					
2010	\$99,800.00	22/02/2011	\$8,422,242.00					
2009	\$99,800.00	25/02/2010	\$16,958,118.00					
2008	\$99,800.00	24/02/2009	\$10,373,517.00					
2007	\$99,800.00	22/02/2008	\$7,265,384.00					

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2006	\$99,800.00	23/02/2007	\$4,809,770.00					
2005	\$99,850.00	21/02/2006	\$10,835,383.00					
2004	\$100,000.00	16/02/2005	\$8,946,052.00					
2003	\$100,000.00	22/01/2004	\$6,247,865.00					
2002	\$100,000.00	23/01/2003	\$5,371,558.00					
2001	\$100,000.00	26/02/2002	\$7,568,436.00					
2000	\$100,000.00	26/02/2001	\$1,343,068.00					
1999	\$100,000.00	25/02/2000	\$6,835,021.00					
1998	\$100,000.00	25/02/1999	\$57,200.00	\$42,800.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$30,000.00	\$70,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$0.00	\$100,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$1,787,582.00					
1994	\$100,000.00	20/02/1995	\$618,000.00					
1993	\$100,000.00	24/02/1994	\$668,238.00					
1992	\$100,000.00	12/02/1993	\$5,297,473.00					
1991	\$100,000.00	17/03/1992	\$4,062,251.00					
1990	\$100,000.00	07/03/1991	\$3,963,895.00					
1989	\$100,000.00	26/02/1990	\$6,190,728.00					
1988	\$100,000.00	17/03/1989	\$4,519,501.00					
1987	\$100,000.00	08/02/1988	\$2,485,202.00					
1986	\$100,000.00	17/02/1987	\$873,480.00					
1985	\$100,000.00	06/03/1986	\$2,585,000.00					

## Expenditure Details

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$440,794.00	\$11,470,126.00	\$0.00	\$23,776.00	\$1,790,204.00	\$0.00	\$13,724,900.00
2015	25/02/2016	\$169,199.00	\$0.00	\$0.00	\$23,145.00	\$28,851.00	\$0.00	\$221,195.00
2014	24/02/2015	\$202,156.00	\$16,521,946.00	\$0.00	\$22,282.00	\$2,511,957.00	\$0.00	\$19,258,341.00
2013	25/02/2014	\$0.00	\$4,130,937.00	\$0.00	\$20,612.00	\$622,723.00	\$0.00	\$4,774,272.00
2012	25/02/2013	\$770,373.00	\$6,036,895.00	\$0.00	\$19,710.00	\$682,297.00	\$0.00	\$7,509,275.00
2011	23/02/2012	\$0.00	\$8,230,270.00	\$0.00	\$18,252.00	\$1,237,278.00	\$0.00	\$9,485,800.00
2010	22/02/2011	\$0.00	\$7,307,006.00	\$0.00	\$16,683.00	\$1,098,553.00	\$0.00	\$8,422,242.00
2009	25/02/2010	\$331,690.00	\$14,443,544.00	\$0.00	\$16,353.00	\$2,166,531.00	\$0.00	\$16,958,118.00
2008	24/02/2009	\$331,690.00	\$9,302,412.00	\$0.00	\$15,682.00	\$723,733.00	\$0.00	\$10,373,517.00
2007	22/02/2008	\$128,089.00	\$6,790,220.00	\$0.00	\$14,490.00	\$332,585.00	\$0.00	\$7,265,384.00
2006	23/02/2007	\$252,943.00	\$4,326,000.00	\$0.00	\$14,527.00	\$216,300.00	\$0.00	\$4,809,770.00
2005	21/02/2006	\$0.00	\$10,305,996.00	\$0.00	\$14,088.00	\$515,299.00	\$0.00	\$10,835,383.00
2004	16/02/2005	\$6,019.00	\$8,498,447.00	\$0.00	\$13,705.00	\$427,881.00	\$0.00	\$8,946,052.00
2003	22/01/2004	\$0.00	\$5,937,380.00	\$0.00	\$12,968.00	\$297,517.00	\$0.00	\$6,247,865.00
2002	23/01/2003	\$325,454.00	\$4,138,374.00	\$0.00	\$12,470.00	\$895,260.00	\$0.00	\$5,371,558.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,568,436.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,343,068.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,835,021.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$57,200.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30,000.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,787,582.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$618,000.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$668,238.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,297,473.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,062,251.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,963,895.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,190,728.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,519,501.00



Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,485,202.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$873,480.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,585,000.00

### COMBINED REPORTING DETAILS

**C Number :** 296/1994

**Reporting Date :** 28/02

**Project :** Greenbushes

**Affecting  
Period :** 01/01 - 31/12

**Active Tenements:**

M 01/2 (18/07/1994)

M 01/3 (18/07/1994)

M 01/4 (18/07/1994)

M 01/5 (18/07/1994)

M 01/6 (18/07/1994)

M 01/7 (18/07/1994)

M 01/8 (18/07/1994)

M 01/9 (18/07/1994)

M 01/10 (18/07/1994)

M 01/11 (18/07/1994)

M 01/16 (14/07/1995)

M 01/18 (14/07/1995)

M 70/765 (14/07/1995)

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/8



Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:48:15 15/02/2018**

### Tenement Summary

**Identifier :** M 01/8

**District :** GREENBUSHES M.F.

**Current Area :** 998.95000 HA

**Status :** Live

**Mark Out :** 08/12/1983 14:00:00

**Received :** 12/12/1983 10:50:00

**Term Granted :** 21 Years (Renewed)

**Lodging Office :** PERTH

**Commence :** 28/12/1984

**Expiry :** 27/12/2026

**Purpose :**

**Death :**

### Rent Status

**Due for Year End 27/12/2018 :**

**Previous Amount Outstanding :** \$0.00

**Current Due :** \$0.00

**Rent for Year End 27/12/2019 :** \$17,582.40

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged

**Current Year (27/12/2018) Commitment :** \$99,900.00

### OWNERSHIP DETAILS

#### Current Holders

##### **Name and Address**

TALISON LITHIUM AUSTRALIA PTY LTD  
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

##### **Shares**

100

**Total Shares:**

100

#### Holder Changes

**Dealing**

**Status Date**

**From (Shares)**

**To (Shares)**

A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274312	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341677	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 5697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

5000 metres bearing 360 degrees

2000 metres bearing 90 degrees along a part of the north boundary of the Greenbushes Mineral Field

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees

BACK TO DATUM

Area :	Type	Dealing No	Start Date	Area
	Surveyed		11/06/2011	998.95000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
998.95000 HA	11/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram



65962

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984

Application Fee : \$15.00

File Reference : 15599/83

Survey Fee : \$1,730.00

Receipt Number : 25561

**Special Indicator**

Special Indicator	Start	End
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## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		998.95000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984	Holder Notified : 28/12/1984	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed) From : 28/12/1984 To : 27/12/2026

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	14/11/1994	
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	

#	CONDITIONS	Start Date	End Date
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	28/12/1984	

#	CONDITIONS	Start Date	End Date
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	28/12/1984	
19	No mining on a strip of land 60 metres wide with the Bunbury-Northcliffe Railway Line as the centre-line and no materials being deposited or machinery or buildings being erected on such strip of land.	28/12/1984	
20	Blasting operations being controlled so that no damage or injury can be caused by fly rock, concussion, vibration or other means.	28/12/1984	
21	No mining on Recreation Reserve 8361 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	
22	The complete excision of any portion encroaching on Garden Areas 01/27 and 01/42 and mining thereunder being restricted to below a depth of 15 metres from the natural surface.	28/12/1984	
23	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
24	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
25	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
26	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
27	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard	14/11/1994	11/08/2005



#	CONDITIONS	Start Date	End Date
	the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.		
28	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
29	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
30	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	24/03/2017	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	23/03/2017
31	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

#### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA  
By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease  
REGISTERD 9:00 AM 28 Dec 1984  
Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

<b>Mortgage 15H/856</b>	<p>Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES</p> <p>REGISTERED 11:30 AM 11 Nov 1985</p> <p>Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p> <p>Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R &amp; I Bank of Western Australia Ltd.</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Agreement 118H/856</b>	<p>Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985</p> <p>REGISTERED 4:00 PM 23 Oct 1985</p> <p>WITHDRAWN 9:30:00 AM 18 Aug 2006</p>
<b>Mortgage 78H/878</b>	<p>Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES</p> <p>REGISTERED 11:00 AM 01 Jul 1988</p> <p>Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p> <p>Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R &amp; I Bank of Western Australia</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Caveat 1034H/912</b>	<p>Lodged 3:05:00 PM on 28 Jan 1992 by R &amp; I BANK OF WESTERN AUSTRALIA LTD</p> <p>RECORDED 3:05 PM 28 Jan 1992</p> <p>Re Mortgage 29H/912 - 14 day notice sent 19 Feb 1992</p> <p>Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992</p> <p>Re Mortgage 25H/967 &amp; 29H/967 - 14 day notice sent 16 Jan 1997.</p> <p>Under Section 122(1)(c), caveat to remain in full force and effect upon expiry of 14 day notice, signed Paul Heaney, Warden on 24 Jan 1997</p> <p>WITHDRAWN 9:30:00 AM 30 Nov 2000</p>
<b>Mortgage 29H/912</b>	<p>Lodged 11:20 AM on 30 Jan 1992 in favour of R &amp; I BANK OF WESTERN AUSTRALIA LTD</p> <p>REGISTERED 10:00 AM 28 Feb 1992</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001</p>
<b>Mortgage - Discharge 857H/912</b>	<p>In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 858H/912</b>	<p>In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:45 AM 13 Apr 1992</p>
<b>Mortgage - Discharge 859H/912</b>	<p>In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 914H/912</b>	<p>In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 915H/912</b>	<p>In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Application to Amend 310H/923</b>	<p>Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005"</p> <p>REGISTERED 2:46 PM 19 Mar 1993</p>
<b>Mortgage 25H/967</b>	<p>Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD</p> <p>REGISTERED 10:00 AM 24 Jan 1997</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p>

	Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1034H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Extension / Renewal of Term 45H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Extension of Time 343576</b>	Lodged: 15:13 25 March 2010 Type: Stat Dec RECORDED: 15:13 25 March 2010 Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition APPROVED: 13:10:44 26 March 2010
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES



			TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
		To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Extension of Time 367988</b>		Lodged:	09:59 22 March 2011
		Type:	Stat Dec
		RECORDED:	09:59 22 March 2011
		Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition	
		APPROVED:	13:35:37 22 March 2011
<b>Caveat 400182</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Extension of Time 464482</b>		Lodged:	15:18 24 March 2015
		Type:	Stat Dec
		RECORDED:	15:18 24 March 2015
		APPROVED:	15:29:31 25 March 2015
		Time extended to 17 April 2015	
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472090</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

RECORDED: 10:01 13 August 2015

**BOND DETAILS**

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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**RENT DETAILS****Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	3661290498	TALISON LITHIUM TALISON LITHIUM	OL	\$17,582.40	998.95000 HA	11/06/2011	\$17,582.40	\$0.00
Payment	2017	28/12/2016		MT-210010864421- EF	OL	\$17,032.95	998.95000 HA	11/06/2011	\$17,032.95	\$0.00
Payment	2016	27/01/2016		MT-210010481233- EF	OL	\$16,483.50	998.95000 HA	11/06/2011	\$16,483.50	\$0.00
Payment	2015	27/01/2015		MT-210010226403- EF	OL	\$16,083.90	998.95000 HA	11/06/2011	\$16,083.90	\$0.00
Payment	2014	21/01/2014		MT-210010156188- EF	OL	\$15,684.30	998.95000 HA	11/06/2011	\$15,684.30	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,384.60	998.95000 HA	11/06/2011	\$15,384.60	\$0.00
Refund	2012	10/05/2013		(REFUND) 06-105241	PE	\$304.74	998.95000 HA	11/06/2011	\$14,985.00	\$0.00
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00				
Payment	2011	27/01/2011		89308	PE	\$15,950.00	998.95000 HA	11/06/2011	\$15,934.05	\$15.95
Payment	2010	15/01/2010		74451	PE	\$15,620.00	998.95000 HA	11/06/2011	\$15,604.38	\$15.62
Payment	2009	23/01/2009		60707	PE	\$14,960.00	998.95000 HA	11/06/2011	\$14,945.04	\$14.96
Payment	2008	18/01/2008		47128	PE	\$14,520.00	998.95000 HA	11/06/2011	\$14,505.48	\$14.52
Payment	2007	24/01/2007		33490	PE	\$13,860.00	998.95000 HA	11/06/2011	\$13,846.14	\$13.86
Payment	2006	16/12/2005		19118	PE	\$13,420.00	998.95000 HA	11/06/2011	\$13,406.58	\$13.42
Payment	2005	17/12/2004		6103	PE	\$13,090.00	998.95000 HA	11/06/2011	\$13,076.91	\$13.09
Payment	2004	19/12/2003		67510	PE	\$12,760.00	998.95000 HA	11/06/2011	\$12,747.24	\$12.76
Payment	2003	23/12/2002		55944	PE	\$12,320.00	998.95000 HA	11/06/2011	\$12,307.68	\$12.32
Payment	2002	29/01/2002		44977	PE	\$12,000.00	998.95000 HA	11/06/2011	\$11,988.00	\$12.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	998.95000 HA	11/06/2011	\$11,318.67	\$11.33
Payment	2000	28/07/2000		25767	PE	\$506.56	998.95000 HA	11/06/2011	\$10,795.75	\$10.81
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	998.95000 HA	11/06/2011	\$10,289.70	\$10.30
Payment	1998	29/01/1998		173719	PE	\$10,000.00	998.95000 HA	11/06/2011	\$9,990.00	\$10.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	998.95000 HA	11/06/2011	\$9,990.00	\$10.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	998.95000 HA	11/06/2011	\$9,990.00	\$10.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	998.95000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1994	01/02/1994		102570	PE	\$9,300.00	998.95000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1993	26/01/1993		84964	PE	\$9,300.00	998.95000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1992	28/01/1992		69332	PE	\$9,300.00	998.95000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1991	01/02/1991		1	PE	\$8,700.00	998.95000 HA	11/06/2011	\$8,691.30	\$8.70
Payment	1990	20/12/1989		1	PE	\$8,100.00	998.95000 HA	11/06/2011	\$8,091.90	\$8.10
Payment	1989	16/12/1988		1	PE	\$8,100.00	998.95000 HA	11/06/2011	\$8,091.90	\$8.10
Payment	1988	21/12/1987		1	PE	\$7,700.00	998.95000 HA	11/06/2011	\$7,692.30	\$7.70
Payment	1987	16/12/1986		1	PE	\$7,000.00	998.95000 HA	11/06/2011	\$6,993.00	\$7.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	998.95000 HA	11/06/2011	\$5,994.00	\$6.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	998.95000 HA	11/06/2011	\$5,994.00	\$6.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$99,900.00							
2017	\$99,900.00							
2016	\$99,900.00	24/02/2017	\$28,324.00	\$99,900.00	23/02/2017	501614	Granted	05/04/2017
2015	\$99,900.00	25/02/2016	\$26,643.00	\$99,900.00	25/02/2016	482273	Granted	17/06/2016
2014	\$99,900.00	24/02/2015	\$25,649.00	\$99,900.00	24/02/2015	462978	Granted	07/05/2015
2013	\$99,900.00	25/02/2014	\$23,703.00	\$99,900.00	20/02/2014	440728	Granted	25/07/2014
2012	\$99,900.00	25/02/2013	\$22,740.00	\$99,900.00	14/02/2013	417023	Granted	07/08/2013
2011	\$99,950.00	23/02/2012	\$21,031.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$19,222.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$18,842.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$18,068.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,703.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$26,487.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$29,551.00	\$100,000.00	05/02/2004	258H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$18,221.00	\$100,000.00	23/01/2003	202H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$10,820.00	\$89,180.00	25/02/2002	202H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$10,769.00	\$89,231.00	26/02/2001	209H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1999	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$0.00	\$100,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$40,975.00	\$59,025.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$45,885.00	\$54,115.00	20/02/1995	265H/945	Granted	16/05/1995
1993	\$100,000.00	24/02/1994	\$77,250.00	\$22,750.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$5,500.00	\$94,500.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$5,274.00	\$94,726.00	17/03/1992	147H/912	Granted	29/04/1992
1990	\$100,000.00	07/03/1991	\$4,877.00	\$95,123.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$12,984.00					
1988	\$100,000.00	17/03/1989	\$185,966.00					
1987	\$100,000.00	08/02/1988	\$158,994.00					
1986	\$100,000.00	17/02/1987	\$174,180.00					
1985	\$100,000.00	06/03/1986	\$547,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$830.00	\$0.00	\$0.00	\$23,800.00	\$3,694.00	\$0.00	\$28,324.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$23,168.00	\$3,475.00	\$0.00	\$26,643.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$22,304.00	\$3,345.00	\$0.00	\$25,649.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$20,612.00	\$3,091.00	\$0.00	\$23,703.00
2012	25/02/2013	\$0.00	\$0.00	\$0.00	\$19,774.00	\$2,966.00	\$0.00	\$22,740.00
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$18,288.00	\$2,743.00	\$0.00	\$21,031.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$16,715.00	\$2,507.00	\$0.00	\$19,222.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$16,385.00	\$2,457.00	\$0.00	\$18,842.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$15,712.00	\$2,356.00	\$0.00	\$18,068.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,183.00	\$0.00	\$16,703.00
2006	23/02/2007	\$0.00	\$0.00	\$0.00	\$14,555.00	\$2,183.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$3,518.00	\$6,363.00	\$0.00	\$13,705.00	\$2,901.00	\$0.00	\$26,487.00



Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2003	22/01/2004	\$0.00	\$15,176.00	\$0.00	\$12,968.00	\$1,407.00	\$0.00	\$29,551.00
2002	23/01/2003	\$0.00	\$2,714.00	\$0.00	\$12,470.00	\$3,037.00	\$0.00	\$18,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,820.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,769.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,975.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$77,250.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,500.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,274.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,877.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12,984.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$185,966.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$158,994.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$174,180.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$547,000.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

**Active Tenements:**

M 01/2 (18/07/1994)	M 01/3 (18/07/1994)	M 01/4 (18/07/1994)
M 01/5 (18/07/1994)	M 01/6 (18/07/1994)	M 01/7 (18/07/1994)
M 01/8 (18/07/1994)	M 01/9 (18/07/1994)	M 01/10 (18/07/1994)
M 01/11 (18/07/1994)	M 01/16 (14/07/1995)	M 01/18 (14/07/1995)
M 70/765 (14/07/1995)		

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/9



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:48:18 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/9	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 997.25000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 14:00:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,564.80

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$99,800.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274313	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341678	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 5697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOC 991(AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

2000 metres bearing 270 degrees

5000 metres bearing 360 degrees

2000 metres bearing 90 degrees along a part of the north boundary of the Greenbushes Mineral Field

5000 metres bearing 180 degrees

BACK TO DATUM AND EXCLUDING THESE CONTAINED IN PART OF MINERAL CLAIMS 01/271 and 01/272

Area :	Type	Dealing No	Start Date	Area
	Surveyed		11/06/2011	997.25000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
997.25000 HA	11/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram



65962

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984

File Reference : 15600/83

Receipt Number : 25561

Application Fee : \$15.00

Survey Fee : \$1,730.00

**Special Indicator**

Special Indicator	Start	End

## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		997.25000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984	Holder Notified : 28/12/1984	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed)	From : 28/12/1984	To : 27/12/2026
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## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>	14/11/1994	
#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	

#	CONDITIONS	Start Date	End Date
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	28/12/1984	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	

#	CONDITIONS	Start Date	End Date
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	28/12/1984	
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	28/12/1984	
19	No mining on a strip of land 60 metres wide with the Bunbury-Northcliffe Railway Line as the centre-line and no materials being deposited or machinery or buildings being erected on such strip of land.	28/12/1984	
20	Blasting operations being controlled so that no damage or injury can be caused by fly rock, concussion, vibration or other means.	28/12/1984	
21	No mining being commenced until the lessee has constructed to the satisfaction of the Public Works Department, such dams, banks, culverts and other works as are required to prevent any impairment by the mining operation of the physical, chemical or biological condition of the waters in the Dumphling Creek Dam. The lessee maintaining and keeping in repair these works for the duration of the mining operation.	28/12/1984	
22	The lessee being responsible for all costs incurred by the Public Works Department in treating the water or developing a new source, should the failure of these works or the mining operation result in impairment of the physical, chemical or biological quality of the water in Dumphling Creek Dam to the extent that it no longer conforms with the Desirable Current Criteria for Drinking Water of the National Health and Medical Research Council.	28/12/1984	
23	The lessee being responsible for the cost and expense to construct, operate and maintain such dams, pump stations, pipelines and works as are necessary to augment the Dumphling Creek Dam storage so that the demand of the Greenbushes Townsite is met at all times.	28/12/1984	
24	The lessee arranging for the water delivered to Dumphling Creek Dam to be sampled monthly and analysed for physical and chemical characteristics by a recognised laboratory to ensure that the quality of the water being delivered by the lessee to Dumphling Creek Dam conforms with the Desirable Current Criteria for Drinking Water in Australia of the National Health and Research Council of Australia, and the results of the tests being forwarded to the Public Works Department within on week of the sampling date.	28/12/1984	
25	The lessee within two weeks of receiving any test results referred to in condition 24 above that shows the water being delivered by the lessee to Dumphling Creek Dam is not meeting the Current Desirable Criteria for Drinking Water, shall arrange for treatment of the water or for supply to be drawn from another source or take such other action as may be necessary to ensure that the quality of the water to the dam is maintained.	28/12/1984	
26	The lessee, within three months of completing mining, unless granted an extension of this approval by December 31, 1986, rehabilitating to the satisfaction of the Public Works Department all mining pits, tailings dumps and other works on the catchment to the extent necessary to ensure that the flow of water to Dumphling Creek Dam is not impaired in quantity or quality.	28/12/1984	



#	CONDITIONS	Start Date	End Date
27	No mining on North Greenbushes Townsite and Greenbushes Townsite and Recreation Reserve 8361 without the prior written consent of the Minister for Minerals and Energy.	17/03/1987	
	No mining on North Greenbushes Townsite and Greenbushes Townsite, Water Reserves 1929 and 15466, Camping Reserve 7005, Recreation Reserve 8361 without the prior written consent of the Minister for Minerals and Energy.	28/12/1984	16/03/1987
28	The complete excision of any portion encroaching on Water Right 01/302.	28/12/1984	
29	The complete excision of any portion encroaching on Garden Areas 01/49, 01/50, 01/52, 01/55 and 01/62, Residence Area 01/353 and mining thereunder being restricted to below a depth of 15 metres from the natural surface.	28/12/1984	
30	Mining on Miner's Homestead Lease 01/35 being confined to below a depth of 15 metres from the natural surface of the land.	28/12/1984	
	<b>By approval of the Minister for Minerals and Energy, consent to mine on Water Reserves 1929 and 15466, Camping Reserve 7005 and "A" Class Reserve 2687 was granted, subject to the following:</b>	28/12/1984	
31	A buffer zone of undisturbed land being left between the mining face and the outer area of the sportsground (situated on "A" Class Recreation Reserve 2687) as determined and agreed between the company and the Bridgetown - Greenbushes Shire Council.	17/03/1987	
32	The excavated area behind the sportsground being backfilled and contoured such that the rehabilitated area and the buffer zone are joined by gradual slopes.	17/03/1987	
33	The excavated area being revegetated with suitable grasses and a variety of large tree species, planted at open parkland spacing.	17/03/1987	
34	Inadvertent entry to the mining area being prevented by the construction of suitable fences where necessary, particularly in the vicinity of the sportsground.	17/03/1987	
35	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
36	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
37	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
38	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
39	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
40	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	

#	CONDITIONS	Start Date	End Date
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM:	14/11/1994	22/12/2013
41	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
42	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	24/03/2017	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	23/03/2017
43	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

#### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA  
By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease  
REGISTERED 9:00 AM 28 Dec 1984

Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

#### Mortgage 15H/856

Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES

REGISTERED 11:30 AM 11 Nov 1985

Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.

REGISTERED 10:20 AM 29 Apr 1992

	Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd. REGISTERED 10:20 AM 29 Apr 1992
<b>Agreement 118H/856</b>	Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985 REGISTERED 4:00 PM 23 Oct 1985 WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Mortgage 78H/878</b>	Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES REGISTERED 11:00 AM 01 Jul 1988 Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992
<b>Caveat 1035H/912</b>	Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 day notice sent 19 Feb 1992 Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992 Re Mortgage 25H/967 & 29H/967 - 14 day notice sent 16 Jan 1997. Order under Section 122(1)(c), caveat to remain in full force and effect upon expiry of 14 day notice, signed Paul Heaney, Warden 24 Jan 1997 WITHDRAWN 9:30:00 AM 30 Nov 2000
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997



	Mortgage Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001	168H/989 Registered 11:50 15 July 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998	
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998	
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998	
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1035H/912 REGISTERED 9:30 AM 30 Nov 2000	
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001	
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001	
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001	
<b>Extension / Renewal of Term 46H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years	
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006	
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010	
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010	
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010	
<b>Extension of Time 343576</b>	Lodged: 15:13 25 March 2010 Type: Stat Dec RECORDED: 15:13 25 March 2010 Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition APPROVED: 13:10:44 26 March 2010	
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000	

		To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Extension of Time 367988</b>		Lodged:	09:59 22 March 2011
		Type:	Stat Dec
		RECORDED:	09:59 22 March 2011
		Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition	
		APPROVED:	13:35:37 22 March 2011
<b>Caveat 400183</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Extension of Time 464482</b>		Lodged:	15:18 24 March 2015
		Type:	Stat Dec
		RECORDED:	15:18 24 March 2015
		APPROVED:	15:29:31 25 March 2015
		Time extended to 17 April 2015	
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472091</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	10:01 13 August 2015

## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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## RENT DETAILS

Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	1957830266	TALISON LITHIUM TALISON LITHIUM	OL	\$17,564.80	997.25000 HA	11/06/2011	\$17,564.80	\$0.00
Payment	2017	28/12/2016		MT-210010864421- EF	OL	\$17,015.90	997.25000 HA	11/06/2011	\$17,015.90	\$0.00
Payment	2016	27/01/2016		MT-210010481233- EF	OL	\$16,467.00	997.25000 HA	11/06/2011	\$16,467.00	\$0.00
Payment	2015	27/01/2015		MT-210010226403- EF	OL	\$16,067.80	997.25000 HA	11/06/2011	\$16,067.80	\$0.00
Payment	2014	21/01/2014		MT-210010156188- EF	OL	\$15,668.60	997.25000 HA	11/06/2011	\$15,668.60	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,369.20	997.25000 HA	11/06/2011	\$15,369.20	\$0.00
Refund	2012	15/05/2013		(REFUND) 06-105241	PE	\$609.48	997.25000 HA	11/06/2011	\$14,970.00	-\$579.48
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00				
Payment	2011	27/01/2011		89308	PE	\$15,950.00	997.25000 HA	11/06/2011	\$15,918.10	\$31.90
Payment	2010	15/01/2010		74451	PE	\$15,620.00	997.25000 HA	11/06/2011	\$15,588.76	\$31.24
Payment	2009	23/01/2009		60707	PE	\$14,960.00	997.25000 HA	11/06/2011	\$14,930.08	\$29.92
Payment	2008	18/01/2008		47128	PE	\$14,520.00	997.25000 HA	11/06/2011	\$14,490.96	\$29.04
Payment	2007	24/01/2007		33490	PE	\$13,860.00	997.25000 HA	11/06/2011	\$13,832.28	\$27.72
Payment	2006	16/12/2005		19118	PE	\$13,420.00	997.25000 HA	11/06/2011	\$13,393.16	\$26.84
Payment	2005	17/12/2004		6103	PE	\$13,090.00	997.25000 HA	11/06/2011	\$13,063.82	\$26.18
Payment	2004	19/12/2003		67510	PE	\$12,760.00	997.25000 HA	11/06/2011	\$12,734.48	\$25.52
Payment	2003	23/12/2002		55944	PE	\$12,320.00	997.25000 HA	11/06/2011	\$12,295.36	\$24.64
Payment	2002	29/01/2002		44977	PE	\$12,000.00	997.25000 HA	11/06/2011	\$11,976.00	\$24.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	997.25000 HA	11/06/2011	\$11,307.34	\$22.66
Payment	2000	28/07/2000		25767	PE	\$506.56	997.25000 HA	11/06/2011	\$10,784.94	\$21.62
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	997.25000 HA	11/06/2011	\$10,279.40	\$20.60
Payment	1998	29/01/1998		173719	PE	\$10,000.00	997.25000 HA	11/06/2011	\$9,980.00	\$20.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	997.25000 HA	11/06/2011	\$9,980.00	\$20.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	997.25000 HA	11/06/2011	\$9,980.00	\$20.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	997.25000 HA	11/06/2011	\$9,281.40	\$18.60
Payment	1994	01/02/1994		102570	PE	\$9,300.00	997.25000 HA	11/06/2011	\$9,281.40	\$18.60
Payment	1993	26/01/1993		84964	PE	\$9,300.00	997.25000 HA	11/06/2011	\$9,281.40	\$18.60
Payment	1992	28/01/1992		69332	PE	\$9,300.00	997.25000 HA	11/06/2011	\$9,281.40	\$18.60
Payment	1991	01/02/1991		1	PE	\$8,700.00	997.25000 HA	11/06/2011	\$8,682.60	\$17.40
Payment	1990	20/12/1989		1	PE	\$8,100.00	997.25000 HA	11/06/2011	\$8,083.80	\$16.20
Payment	1989	16/12/1988		1	PE	\$8,100.00	997.25000 HA	11/06/2011	\$8,083.80	\$16.20
Payment	1988	21/12/1987		1	PE	\$7,700.00	997.25000 HA	11/06/2011	\$7,684.60	\$15.40
Payment	1987	16/12/1986		1	PE	\$7,000.00	997.25000 HA	11/06/2011	\$6,986.00	\$14.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	997.25000 HA	11/06/2011	\$5,988.00	\$12.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	997.25000 HA	11/06/2011	\$5,988.00	\$12.00



## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$99,800.00							
2017	\$99,800.00							
2016	\$99,800.00	24/02/2017	\$31,403.00	\$99,800.00	23/02/2017	501614	Granted	05/04/2017
2015	\$99,800.00	25/02/2016	\$26,616.00	\$99,800.00	25/02/2016	482273	Granted	17/06/2016
2014	\$99,800.00	24/02/2015	\$25,624.00	\$99,800.00	24/02/2015	462978	Granted	07/05/2015
2013	\$99,800.00	25/02/2014	\$23,703.00	\$99,800.00	20/02/2014	440728	Granted	25/07/2014
2012	\$99,800.00	25/02/2013	\$22,675.00	\$99,800.00	14/02/2013	417023	Granted	07/08/2013
2011	\$99,900.00	23/02/2012	\$21,031.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$19,221.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$18,842.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$18,068.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,698.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$34,659.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$34,012.00	\$100,000.00	05/02/2004	259H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$24,221.00	\$100,000.00	23/01/2003	203H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$16,570.00	\$83,430.00	25/02/2002	203H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$20,788.00	\$79,212.00	26/02/2001	210H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1999	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$3,000.00	\$97,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$56,938.00	\$43,062.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$43,885.00	\$56,115.00	20/02/1995	265H/945	Granted	16/05/1995
1993	\$100,000.00	24/02/1994	\$77,250.00	\$22,750.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$5,500.00	\$94,500.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$146,727.00					
1990	\$100,000.00	07/03/1991	\$4,876.00	\$95,124.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$61,191.00					
1988	\$100,000.00	17/03/1989	\$212,483.00					
1987	\$100,000.00	08/02/1988	\$887,870.00					
1986	\$100,000.00	17/02/1987	\$153,880.00					
1985	\$100,000.00	06/03/1986	\$117,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$3,530.00	\$0.00	\$0.00	\$23,777.00	\$4,096.00	\$0.00	\$31,403.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$23,145.00	\$3,471.00	\$0.00	\$26,616.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$22,282.00	\$3,342.00	\$0.00	\$25,624.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$20,612.00	\$3,091.00	\$0.00	\$23,703.00
2012	25/02/2013	\$0.00	\$0.00	\$0.00	\$19,718.00	\$2,957.00	\$0.00	\$22,675.00
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$18,288.00	\$2,743.00	\$0.00	\$21,031.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$16,714.00	\$2,507.00	\$0.00	\$19,221.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$16,385.00	\$2,457.00	\$0.00	\$18,842.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$15,712.00	\$2,356.00	\$0.00	\$18,068.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,178.00	\$0.00	\$16,698.00
2006	23/02/2007	\$0.00	\$0.00	\$0.00	\$14,555.00	\$2,183.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$4,815.00	\$12,726.00	\$0.00	\$13,705.00	\$3,413.00	\$0.00	\$34,659.00

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2003	22/01/2004	\$0.00	\$19,425.00	\$0.00	\$12,968.00	\$1,619.00	\$0.00	\$34,012.00
2002	23/01/2003	\$0.00	\$7,714.00	\$0.00	\$12,470.00	\$4,037.00	\$0.00	\$24,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16,570.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20,788.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,000.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$56,938.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$77,250.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,500.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$146,727.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,876.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$61,191.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$212,483.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$887,870.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$153,880.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$117,000.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

**Active Tenements:**

M 01/2 (18/07/1994)	M 01/3 (18/07/1994)	M 01/4 (18/07/1994)
M 01/5 (18/07/1994)	M 01/6 (18/07/1994)	M 01/7 (18/07/1994)
M 01/8 (18/07/1994)	M 01/9 (18/07/1994)	M 01/10 (18/07/1994)
M 01/11 (18/07/1994)	M 01/16 (14/07/1995)	M 01/18 (14/07/1995)
M 70/765 (14/07/1995)		

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/10



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:48:22 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/10	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 999.60000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 15:45:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,600.00

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$100,000.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274314	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341679	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 7697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

2000 metres bearing 90 degrees

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees along a part of the south boundary of the Greenbushes Mineral Field

5000 metres bearing 360 degrees

BACK TO STARTING POINT

Area :	Type	Dealing No	Start Date	Area
	Surveyed		23/03/2005	999.60000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
999.60000 HA	23/03/2005	LOWTH, SJ	24	31/01/2005	12040

Standard Plan

Diagram

TENGRAPH

31175 (2751)

**GENERAL DETAILS****General**

Objection Closing Date : 11/01/1984

Application Fee : \$15.00

File Reference : 15601/83

Survey Fee : \$1,730.00

Receipt Number : 25561

**Special Indicator**

Special Indicator	Start	End
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**SHIRE DETAILS****Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		999.60000 HA

**NATIVE TITLE DETAILS****Native Title Referrals****DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation**

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

**GRANT DETAILS****Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984	Holder Notified : 28/12/1984	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed)	From : 28/12/1984	To : 27/12/2026
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**ENDORSEMENTS/CONDITIONS DETAILS****Endorsements and Conditions**

----- No ENDORSEMENTS -----

#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations	28/12/1984	13/11/1994

#	CONDITIONS	Start Date	End Date
	associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.		
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The lessee arranging lodgement of a Bond in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$5,000</li> </ul>	27/07/2001	15/01/2013
	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	26/07/2001
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and	28/12/1984	



#	CONDITIONS	Start Date	End Date
	the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.		
13	The lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	
14	The lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	<del>The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.</del>	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	<del>The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.</del>	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	Mining on any road or road reserve being confined to below a depth of 15 metres from the natural surface.	28/12/1984	
19	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
20	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	<del>All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.</del>	14/11/1994	11/08/2005
21	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
22	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	<del>Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.</del>	14/11/1994	11/08/2005
23	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	<del>No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.</del>	14/11/1994	11/08/2005
24	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	

#	CONDITIONS	Start Date	End Date
25	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
26	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail. <p>The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled:</p> <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	24/03/2017	
		11/03/2014	23/03/2017
27	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in: <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Mortgage 1H/82

#### Encumbrances

Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA  
By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease  
REGISTERED 9:00 AM 28 Dec 1984

Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd

#### Mortgage 15H/856

Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES

REGISTERED 11:30 AM 11 Nov 1985

Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.  
REGISTERED 10:20 AM 29 Apr 1992

Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R & I Bank of Western Australia Ltd.  
REGISTERED 10:20 AM 29 Apr 1992

#### Agreement 118H/856

Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985  
REGISTERED 4:00 PM 23 Oct 1985

	WITHDRAWN 9:30:00 AM 18 Aug 2006
<b>Mortgage 78H/878</b>	Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES REGISTERED 11:00 AM 01 Jul 1988 Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales REGISTERED 10:20 AM 29 Apr 1992 Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R & I Bank of Western Australia REGISTERED 10:20 AM 29 Apr 1992
<b>Caveat 1036H/912</b>	Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD RECORDED 3:05 PM 28 Jan 1992 Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992, Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992 Re Mortgages 25H/967 & 29H/967 - 14 day notice sent 16 Jan 1997. Order under Section 122(1)(c), caveat to remain in full force and effect upon expiry of 14 day notice, signed Paul Heaney, Warden 24 Jan 1997 WITHDRAWN 9:30:00 AM 30 Nov 2000
<b>Mortgage 29H/912</b>	Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 28 Feb 1992 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Discharge 857H/912</b>	In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 858H/912</b>	In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:45 AM 13 Apr 1992
<b>Mortgage - Discharge 859H/912</b>	In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 914H/912</b>	In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Mortgage - Discharge 915H/912</b>	In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992 REGISTERED 10:20 AM 29 Apr 1992
<b>Bond PE0745</b>	Lodged on 04 Jun 1992 For \$5,000.00 (Personal Surety) REJECTED 14 Jul 1992
<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001



<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1036H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Bond PE6657</b>	Lodged on 22 Aug 2001 For \$5,000.00 (Security) RECORDED 22 Aug 2001 RETIRED 20 Sep 2007
<b>Extension / Renewal of Term 47H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Bond 274877</b>	Lodged on 03 Sep 2007 For \$5,000.00 (Security) RECORDED 03 Sep 2007 RETIRED: 18 March 2010
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Bond Requirement 314103</b>	Requirement Date: 27/07/2001 Amount: \$5,000.00 RECORDED: 07:26:12 27 July 2001 FINALISED: 13:17:11 15 January 2013
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Bond 342686</b>	Lodged: 13:00 15 March 2010 Bond Type: Security Bond Amount: \$5,000.00 RECORDED: 15 March 2010 RETIRED: 15 January 2013
<b>Extension of Time 343576</b>	Lodged: 15:13 25 March 2010 Type: Stat Dec RECORDED: 15:13 25 March 2010

		Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition APPROVED: 13:10:44 26 March 2010
<b>Application to Amend 353570</b>	Lodged: Amending: From:	10:00 17 August 2010 Address Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
	To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
	RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>	Lodged: Mortgaged Shares: Mortgagee: REGISTERED: DISCHARGED: Full Discharge:	10:36 22 December 2010 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD COMMONWEALTH BANK OF AUSTRALIA 10:36 22 December 2010 15:00 07 November 2013 434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>	Lodged: In respect to: REGISTERED:	11:13 24 December 2010 Mortgage 341684 11:13 24 December 2010
<b>Extension of Time 367988</b>	Lodged: Type: RECORDED:	09:59 22 March 2011 Stat Dec 09:59 22 March 2011
		Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition APPROVED: 13:35:37 22 March 2011
<b>Caveat 400184</b>	Lodged: Caveat Type: Caveator:  Shares Caveated:  RECORDED: Affected Dealing: 14 day notice sent:	12:10 22 June 2012 Absolute Caveat GLOBAL ADVANCED METALS GREENBUSHES PTY LTD  100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD  12:10 22 June 2012 Mortgage 472080 11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.
<b>Mortgage - Discharge 434701</b>	Lodged: In respect to: REGISTERED:	15:00 07 November 2013 Mortgage 364473 15:00 07 November 2013
<b>Extension of Time 464482</b>	Lodged: Type: RECORDED: APPROVED:	15:18 24 March 2015 Stat Dec 15:18 24 March 2015 15:29:31 25 March 2015
		Time extended to 17 April 2015
<b>Mortgage 472080</b>	Lodged: Mortgaged Shares: Mortgagee:	10:15 30 July 2015 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED

<b>Caveat 472092</b>	REGISTERED:	10:00 13 August 2015
	Lodged:	10:15 30 July 2015
	Caveat Type:	Consent Caveat
	Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	10:01 13 August 2015

**BOND DETAILS**

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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**RENT DETAILS****Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	5507442878	TALISON LITHIUM TALISON LITHIUM	OL	\$17,600.00	999.60000 HA	23/03/2005	\$17,600.00	\$0.00
Payment	2017	28/12/2016		MT-210010864421-EF	OL	\$17,050.00	999.60000 HA	23/03/2005	\$17,050.00	\$0.00
Payment	2016	27/01/2016		MT-210010481233-EF	OL	\$16,500.00	999.60000 HA	23/03/2005	\$16,500.00	\$0.00
Payment	2015	27/01/2015		MT-210010226403-EF	OL	\$16,100.00	999.60000 HA	23/03/2005	\$16,100.00	\$0.00
Payment	2014	21/01/2014		MT-210010156188-EF	OL	\$15,700.00	999.60000 HA	23/03/2005	\$15,700.00	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,400.00	999.60000 HA	23/03/2005	\$15,400.00	\$0.00
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00	999.60000 HA	23/03/2005	\$15,000.00	\$0.00
Payment	2011	27/01/2011		89308	PE	\$15,950.00	999.60000 HA	23/03/2005	\$15,950.00	\$0.00
Payment	2010	15/01/2010		74451	PE	\$15,620.00	999.60000 HA	23/03/2005	\$15,620.00	\$0.00
Payment	2009	23/01/2009		60707	PE	\$14,960.00	999.60000 HA	23/03/2005	\$14,960.00	\$0.00
Payment	2008	18/01/2008		47128	PE	\$14,520.00	999.60000 HA	23/03/2005	\$14,520.00	\$0.00
Payment	2007	24/01/2007		33490	PE	\$13,860.00	999.60000 HA	23/03/2005	\$13,860.00	\$0.00
Payment	2006	16/12/2005		19118	PE	\$13,420.00	999.60000 HA	23/03/2005	\$13,420.00	\$0.00
Payment	2005	17/12/2004		6103	PE	\$13,090.00	999.60000 HA	23/03/2005	\$13,090.00	\$0.00
Payment	2004	19/12/2003		67510	PE	\$12,760.00	999.60000 HA	23/03/2005	\$12,760.00	\$0.00
Payment	2003	23/12/2002		55944	PE	\$12,320.00	999.60000 HA	23/03/2005	\$12,320.00	\$0.00
Payment	2002	29/01/2002		44977	PE	\$12,000.00	999.60000 HA	23/03/2005	\$12,000.00	\$0.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	999.60000 HA	23/03/2005	\$11,330.00	\$0.00
Payment	2000	28/07/2000		25767	PE	\$506.56	999.60000 HA	23/03/2005	\$10,806.56	\$0.00
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	999.60000 HA	23/03/2005	\$10,300.00	\$0.00
Payment	1998	29/01/1998		173719	PE	\$10,000.00	999.60000 HA	23/03/2005	\$10,000.00	\$0.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	999.60000 HA	23/03/2005	\$10,000.00	\$0.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	999.60000 HA	23/03/2005	\$10,000.00	\$0.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1994	01/02/1994		102570	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1993	26/01/1993		84964	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1992	28/01/1992		69332	PE	\$9,300.00	999.60000 HA	23/03/2005	\$9,300.00	\$0.00
Payment	1991	01/02/1991		1	PE	\$8,700.00	999.60000 HA	23/03/2005	\$8,700.00	\$0.00
Payment	1990	20/12/1989		1	PE	\$8,100.00	999.60000 HA	23/03/2005	\$8,100.00	\$0.00



Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	1989	16/12/1988		1	PE	\$8,100.00	999.60000 HA	23/03/2005	\$8,100.00	\$0.00
Payment	1988	21/12/1987		1	PE	\$7,700.00	999.60000 HA	23/03/2005	\$7,700.00	\$0.00
Payment	1987	16/12/1986		1	PE	\$7,000.00	999.60000 HA	23/03/2005	\$7,000.00	\$0.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	999.60000 HA	23/03/2005	\$6,000.00	\$0.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	999.60000 HA	23/03/2005	\$6,000.00	\$0.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$100,000.00							
2017	\$100,000.00							
2016	\$100,000.00	24/02/2017	\$31,618.00	\$100,000.00	23/02/2017	501614	Granted	05/04/2017
2015	\$100,000.00	25/02/2016	\$26,669.00	\$100,000.00	25/02/2016	482273	Granted	17/06/2016
2014	\$100,000.00	24/02/2015	\$25,674.00	\$100,000.00	24/02/2015	462978	Granted	07/05/2015
2013	\$100,000.00	25/02/2014	\$23,750.00	\$100,000.00	20/02/2014	440728	Granted	25/07/2014
2012	\$100,000.00	25/02/2013	\$22,711.00	\$100,000.00	14/02/2013	417023	Granted	07/08/2013
2011	\$100,000.00	23/02/2012	\$21,031.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$19,222.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$18,842.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$18,068.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,698.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$27,089.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$21,583.00	\$100,000.00	05/02/2004	260H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$18,221.00	\$100,000.00	23/01/2003	204H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$10,820.00	\$89,180.00	25/02/2002	204H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$1,076.00	\$89,231.00	26/02/2001	211H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1999	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$0.00	\$100,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$40,975.00	\$59,025.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$43,885.00	\$56,115.00	20/02/1995	265H/945	Granted	16/05/1995
1993	\$100,000.00	24/02/1994	\$43,885.00	\$56,115.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$8,000.00	\$92,000.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$5,274.00	\$94,726.00	17/03/1992	147H/912	Granted	29/04/1992
1990	\$100,000.00	07/03/1991	\$16,709.00	\$83,291.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$103,841.00					
1988	\$100,000.00	17/03/1989	\$204,037.00					
1987	\$100,000.00	08/02/1988	\$229,677.00					
1986	\$100,000.00	17/02/1987	\$444,170.00					
1985	\$100,000.00	06/03/1986	\$547,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$3,670.00	\$0.00	\$0.00	\$23,824.00	\$4,124.00	\$0.00	\$31,618.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$23,191.00	\$3,478.00	\$0.00	\$26,669.00
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$22,326.00	\$3,348.00	\$0.00	\$25,674.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$20,652.00	\$3,098.00	\$0.00	\$23,750.00
2012	25/02/2013	\$0.00	\$0.00	\$0.00	\$19,749.00	\$2,962.00	\$0.00	\$22,711.00

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$18,288.00	\$2,743.00	\$0.00	\$21,031.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$16,715.00	\$2,507.00	\$0.00	\$19,222.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$16,385.00	\$2,457.00	\$0.00	\$18,842.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$15,712.00	\$2,356.00	\$0.00	\$18,068.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,178.00	\$0.00	\$16,698.00
2006	23/02/2007	\$0.00	\$0.00	\$0.00	\$14,555.00	\$2,183.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$4,018.00	\$6,363.00	\$0.00	\$13,705.00	\$3,003.00	\$0.00	\$27,089.00
2003	22/01/2004	\$0.00	\$7,588.00	\$0.00	\$12,968.00	\$1,027.00	\$0.00	\$21,583.00
2002	23/01/2003	\$0.00	\$2,714.00	\$0.00	\$12,470.00	\$3,037.00	\$0.00	\$18,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,820.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,076.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,975.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$8,000.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,274.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16,709.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$103,841.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$204,037.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$229,677.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$444,170.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$547,000.00

## COMBINED REPORTING DETAILS

C Number : 296/1994

Reporting Date : 28/02

Project : Greenbushes

Affecting  
Period : 01/01 - 31/12

## Active Tenements:

M 01/2 (18/07/1994)

M 01/3 (18/07/1994)

M 01/4 (18/07/1994)

M 01/5 (18/07/1994)

M 01/6 (18/07/1994)

M 01/7 (18/07/1994)

M 01/8 (18/07/1994)

M 01/9 (18/07/1994)

M 01/10 (18/07/1994)

M 01/11 (18/07/1994)

M 01/16 (14/07/1995)

M 01/18 (14/07/1995)

M 70/765 (14/07/1995)

End of Search

# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/11



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:48:25 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/11	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 998.90000 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/12/1983 15:45:00	<b>Received :</b> 12/12/1983 10:50:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/12/1984	<b>Expiry :</b> 27/12/2026
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/12/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/12/2019 :** \$17,582.40

### Expenditure Status

**Expended Year End 27/12/2017 :** No Expenditure Lodged  
**Current Year (27/12/2018) Commitment :** \$99,900.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (100)	GREENBUSHES LTD (100)
Transfer 274315	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341680	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES TIN LTD  
PMB 16, WEST PERTH, WA, 6872

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** SITUATED 7697.64 METRES AT 90 DEGREES FROM THE SE CORNER OF NELSON LOCATION 991 (AS SHOWN ON ITS TITLE DEED VOL 782 FOL 7)

**Boundary :** THENCE:

5000 metres bearing 360 degrees

2000 metres bearing 90 degrees along a part of the north boundary of the Greenbushes Minerral Field

5000 metres bearing 180 degrees

2000 metres bearing 270 degrees

BACK TO DATUM

Area :	Type	Dealing No	Start Date	Area
	Surveyed		11/06/2011	998.90000 HA
	Granted		28/12/1984	1,000.00000 HA
	Applied For		08/12/1983	1,000.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
998.90000 HA	11/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram

65962

## GENERAL DETAILS

**General**

Objection Closing Date : 11/01/1984

Application Fee : \$15.00

File Reference : 15602/83

Survey Fee : \$1,730.00

Receipt Number : 25561

**Special Indicator**

Special Indicator	Start	End
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## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/12/1983		998.90000 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/01/1984

**Grant**

Granted : 28/12/1984	Holder Notified : 28/12/1984	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed)	From : 28/12/1984	To : 27/12/2026
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## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

----- No ENDORSEMENTS -----

#	CONDITIONS	Start Date	End Date
1	Survey	28/12/1984	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	28/12/1984	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	28/12/1984	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations	28/12/1984	13/11/1994

#	CONDITIONS	Start Date	End Date
	associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.		
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	28/12/1984	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	28/12/1984	06/10/2009
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	28/12/1984	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	28/12/1984	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	28/12/1984	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	28/12/1984	
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	28/12/1984	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	28/12/1984	
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	28/12/1984	



#	CONDITIONS	Start Date	End Date
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	28/12/1984	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	28/12/1984	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	28/12/1984	13/11/1994
17	The grant in respect of all private land being confined to below a depth of 30 metres from the natural surface.	28/12/1984	
18	Mining on any road or road reserve being confined to below a depth of 15 metres from the natural surface.	28/12/1984	
19	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
20	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
21	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
22	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005
23	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR, for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained, in concurrence with Executive Director, CALM.	14/11/1994	11/08/2005
24	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	

## DEALINGS DETAILS

### Dealings

### Encumbrances

<b>Mortgage 1H/82</b>	<p>Lodged 3:30 PM on 02 Jun 1982 in favour of the Commisioners of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA</p> <p>By virtue of Agreement 159H/84 (Deed of Variation) and pursuant to Regulation 47(2) mortgage shall continue in full force and effect against the Mining Lease</p> <p>REGISTERED 9:00 AM 28 Dec 1984</p> <p>Discharged by Withdrawal 858H/912 lodged 10:45:00 AM on 13 Apr 1992 in respect to the R &amp; I Bank of Western Australia Ltd</p>
<b>Mortgage 15H/856</b>	<p>Lodged 12:40:00 PM on 18 Oct 1985 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES</p> <p>REGISTERED 11:30 AM 11 Nov 1985</p> <p>Discharged by Withdrawal 915H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales Ltd.</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p> <p>Discharged by Withdrawal 859H/912 lodged 10:45 AM on 13 Apr 1992 in respect to the R &amp; I Bank of Western Australia Ltd.</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Agreement 118H/856</b>	<p>Agreement (Deed of Charge) STATE BANK OF NEW SOUTH WALES and THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA Lodged 4:00:00 PM on 23 Oct 1985</p> <p>REGISTERED 4:00 PM 23 Oct 1985</p> <p>WITHDRAWN 9:30:00 AM 18 Aug 2006</p>
<b>Mortgage 78H/878</b>	<p>Lodged 11:00:00 AM on 01 Jul 1988 in favour of THE RURAL AND INDUSTRIES BANK OF WESTERN AUSTRALIA and STATE BANK OF NEW SOUTH WALES</p> <p>REGISTERED 11:00 AM 01 Jul 1988</p> <p>Discharged by Withdrawal 914H/912 lodged 8:57:00 AM on 24 Apr 1992 in respect to the State Bank of New South Wales</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p> <p>Discharged by Withdrawal 857H/912 lodged 10:45 AM on 13 Apr 1992 in respect to R &amp; I Bank of Western Australia</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Caveat 1037H/912</b>	<p>Lodged 3:05:00 PM on 28 Jan 1992 by R &amp; I BANK OF WESTERN AUSTRALIA LTD</p> <p>RECORDED 3:05 PM 28 Jan 1992</p> <p>Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992</p> <p>Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992</p> <p>Re Mortgages 25H/967 &amp; 29H/967 - 14 day notice sent 16 Jan 1997.</p> <p>Order under Section 122(1)(c), caveat to remain in full force and effect upon expiry of 14 day notice, signed, Paul Heaney, Warden 24 Jan 1997</p> <p>WITHDRAWN 9:30:00 AM 30 Nov 2000</p>
<b>Mortgage 29H/912</b>	<p>Lodged 11:20 AM on 30 Jan 1992 in favour of R &amp; I BANK OF WESTERN AUSTRALIA LTD</p> <p>REGISTERED 10:00 AM 28 Feb 1992</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 275H/001 lodged 4:00:00 PM on 12 Mar 2001</p>
<b>Mortgage - Discharge 857H/912</b>	<p>In respect to Mortgage 78H/878 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 858H/912</b>	<p>In respect to Mortgage 1H/82 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:45 AM 13 Apr 1992</p>
<b>Mortgage - Discharge 859H/912</b>	<p>In respect to Mortgage 15H/856 lodged 10:45:00 AM on 13 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 914H/912</b>	<p>In respect to Mortgage 78H/878 lodged 8:57:00 AM on 24 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>
<b>Mortgage - Discharge 915H/912</b>	<p>In respect to Mortgage 15H/856 lodged 8:57:00 AM on 24 Apr 1992</p> <p>REGISTERED 10:20 AM 29 Apr 1992</p>

<b>Application to Amend 310H/923</b>	Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005" REGISTERED 2:46 PM 19 Mar 1993
<b>Mortgage 25H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 272H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage 29H/967</b>	Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD REGISTERED 10:00 AM 24 Jan 1997 Mortgage 168H/989 Registered 11:50 15 July 1998 Transfer: New Mortgagee: CITISECURITIES LTD Discharged by Withdrawal 277H/001 lodged 4:00:00 PM on 12 Mar 2001
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Transfer 168H/989</b>	Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD REGISTERED 11:50 AM 15 Jul 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1037H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 272H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 275H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 277H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Extension / Renewal of Term 48H/056</b>	Lodged 4:15:00 PM on 15 Dec 2005 applied for a period of 21 Years RECORDED 4:15 PM 15 Dec 2005 GRANTED 22 Dec 2005 for a further period of 21 Years
<b>Withdrawal of Dealing 246234</b>	Lodged 9:30:00 AM on 18 Aug 2006 withdrawing Agreement 118H/856 RECORDED 9:30 AM 18 Aug 2006
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Extension of Time 343576</b>	Lodged: 15:13 25 March 2010



	Type:	Stat Dec
	RECORDED:	15:13 25 March 2010
	Extension of time until 22 April 2010 to lodge a statutory declaration in support of application for exemption from expenditure condition	
	APPROVED:	13:10:44 26 March 2010
<b>Application to Amend 353570</b>	Lodged:	10:00 17 August 2010
	Amending:	Address
	From:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
	To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
	RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>	Lodged:	10:36 22 December 2010
	Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
	REGISTERED:	10:36 22 December 2010
	DISCHARGED:	15:00 07 November 2013
	Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>	Lodged:	11:13 24 December 2010
	In respect to:	Mortgage 341684
	REGISTERED:	11:13 24 December 2010
<b>Extension of Time 367988</b>	Lodged:	09:59 22 March 2011
	Type:	Stat Dec
	RECORDED:	09:59 22 March 2011
	Extension of time until 22 April 2011 to lodge a statutory declaration in support of application for exemption from expenditure condition	
	APPROVED:	13:35:37 22 March 2011
<b>Caveat 400185</b>	Lodged:	12:10 22 June 2012
	Caveat Type:	Absolute Caveat
	Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	12:10 22 June 2012
	Affected Dealing:	Mortgage 472080
	14 day notice sent:	11 August 2015
	Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>	Lodged:	15:00 07 November 2013
	In respect to:	Mortgage 364473
	REGISTERED:	15:00 07 November 2013
<b>Extension of Time 464482</b>	Lodged:	15:18 24 March 2015
	Type:	Stat Dec
	RECORDED:	15:18 24 March 2015
	APPROVED:	15:29:31 25 March 2015
	Time extended to 17 April 2015	
<b>Mortgage 472080</b>	Lodged:	10:15 30 July 2015
	Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

<b>Caveat 472093</b>	Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
	REGISTERED:	10:00 13 August 2015
	Lodged:	10:15 30 July 2015
	Caveat Type:	Consent Caveat
	Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED
	Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
	RECORDED:	10:01 13 August 2015

**BOND DETAILS**

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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**RENT DETAILS****Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	28/12/2017	1460753633	TALISON LITHIUM TALISON LITHIUM	OL	\$17,582.40	998.90000 HA	11/06/2011	\$17,582.40	\$0.00
Payment	2017	28/12/2016		MT-210010864421-EF	OL	\$17,032.95	998.90000 HA	11/06/2011	\$17,032.95	\$0.00
Payment	2016	27/01/2016		MT-210010481233-EF	OL	\$16,483.50	998.90000 HA	11/06/2011	\$16,483.50	\$0.00
Payment	2015	27/01/2015		MT-210010226403-EF	OL	\$16,083.90	998.90000 HA	11/06/2011	\$16,083.90	\$0.00
Payment	2014	21/01/2014		MT-210010156188-EF	OL	\$15,684.30	998.90000 HA	11/06/2011	\$15,684.30	\$0.00
Payment	2013	15/01/2013		06-119453	PE	\$15,384.60	998.90000 HA	11/06/2011	\$15,384.60	\$0.00
Refund	2012	10/05/2013		(REFUND) 06-105241	PE	\$304.74	998.90000 HA	11/06/2011	\$14,985.00	-\$289.74
Payment	2012	25/01/2012		06-105241	PE	\$15,000.00				
Payment	2011	27/01/2011		89308	PE	\$15,950.00	998.90000 HA	11/06/2011	\$15,934.05	\$15.95
Payment	2010	15/01/2010		74451	PE	\$15,620.00	998.90000 HA	11/06/2011	\$15,604.38	\$15.62
Payment	2009	23/01/2009		60707	PE	\$14,960.00	998.90000 HA	11/06/2011	\$14,945.04	\$14.96
Payment	2008	18/01/2008		47128	PE	\$14,520.00	998.90000 HA	11/06/2011	\$14,505.48	\$14.52
Payment	2007	24/01/2007		33490	PE	\$13,860.00	998.90000 HA	11/06/2011	\$13,846.14	\$13.86
Payment	2006	16/12/2005		19118	PE	\$13,420.00	998.90000 HA	11/06/2011	\$13,406.58	\$13.42
Payment	2005	17/12/2004		6103	PE	\$13,090.00	998.90000 HA	11/06/2011	\$13,076.91	\$13.09
Payment	2004	19/12/2003		67510	PE	\$12,760.00	998.90000 HA	11/06/2011	\$12,747.24	\$12.76
Payment	2003	23/12/2002		55944	PE	\$12,320.00	998.90000 HA	11/06/2011	\$12,307.68	\$12.32
Payment	2002	29/01/2002		44977	PE	\$12,000.00	998.90000 HA	11/06/2011	\$11,988.00	\$12.00
Payment	2001	29/01/2001		32828	PE	\$11,330.00	998.90000 HA	11/06/2011	\$11,318.67	\$11.33
Payment	2000	28/07/2000		25767	PE	\$506.56	998.90000 HA	11/06/2011	\$10,795.75	\$10.81
Payment	2000	31/01/2000		182894	PE	\$10,300.00				
Payment	1999	21/01/1999		182590	PE	\$10,300.00	998.90000 HA	11/06/2011	\$10,289.70	\$10.30
Payment	1998	29/01/1998		173719	PE	\$10,000.00	998.90000 HA	11/06/2011	\$9,990.00	\$10.00
Payment	1997	31/01/1997		156210	PE	\$10,000.00	998.90000 HA	11/06/2011	\$9,990.00	\$10.00
Payment	1996	29/01/1996		138160	PE	\$10,000.00	998.90000 HA	11/06/2011	\$9,990.00	\$10.00
Payment	1995	24/01/1995		120497	PE	\$9,300.00	998.90000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1994	01/02/1994		102570	PE	\$9,300.00	998.90000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1993	26/01/1993		84964	PE	\$9,300.00	998.90000 HA	11/06/2011	\$9,290.70	\$9.30

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	1992	28/01/1992		69332	PE	\$9,300.00	998.90000 HA	11/06/2011	\$9,290.70	\$9.30
Payment	1991	01/02/1991		1	PE	\$8,700.00	998.90000 HA	11/06/2011	\$8,691.30	\$8.70
Payment	1990	20/12/1989		1	PE	\$8,100.00	998.90000 HA	11/06/2011	\$8,091.90	\$8.10
Payment	1989	16/12/1988		1	PE	\$8,100.00	998.90000 HA	11/06/2011	\$8,091.90	\$8.10
Payment	1988	21/12/1987		1	PE	\$7,700.00	998.90000 HA	11/06/2011	\$7,692.30	\$7.70
Payment	1987	16/12/1986		1	PE	\$7,000.00	998.90000 HA	11/06/2011	\$6,993.00	\$7.00
Payment	1986	13/01/1986		1	PE	\$6,000.00	998.90000 HA	11/06/2011	\$5,994.00	\$6.00
Payment	1985	12/12/1983		25561	PE	\$6,000.00	998.90000 HA	11/06/2011	\$5,994.00	\$6.00

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$99,900.00							
2017	\$99,900.00							
2016	\$99,900.00	24/02/2017	\$28,324.00	\$99,900.00	23/02/2017	501614	Granted	05/04/2017
2015	\$99,900.00	25/02/2016	\$26,458.00	\$99,900.00	25/02/2016	482273	Granted	17/06/2016
2014	\$99,900.00	24/02/2015	\$25,649.00	\$99,900.00	24/02/2015	462978	Granted	07/05/2015
2013	\$99,900.00	25/02/2014	\$23,727.00	\$99,900.00	20/02/2014	440728	Granted	25/07/2014
2012	\$99,900.00	25/02/2013	\$22,694.00	\$99,900.00	14/02/2013	417023	Granted	07/08/2013
2011	\$99,950.00	23/02/2012	\$21,031.00	\$100,000.00	23/02/2012	391978	Granted	30/04/2012
2010	\$100,000.00	22/02/2011	\$19,222.00	\$100,000.00	22/02/2011	366150	Granted	27/06/2011
2009	\$100,000.00	25/02/2010	\$18,842.00	\$100,000.00	25/02/2010	341780	Granted	27/08/2010
2008	\$100,000.00	24/02/2009	\$18,068.00	\$100,000.00	24/02/2009	313884	Granted	05/08/2009
2007	\$100,000.00	22/02/2008	\$16,703.00	\$100,000.00	22/02/2008	284643	Granted	20/08/2008
2006	\$100,000.00	23/02/2007	\$16,738.00	\$100,000.00	23/02/2007	212H/067	Granted	16/07/2007
2005	\$100,000.00	21/02/2006	\$16,232.00	\$100,000.00	07/02/2006	196H/056	Granted	19/05/2006
2004	\$100,000.00	16/02/2005	\$22,009.00	\$100,000.00	21/02/2005	247H/045	Granted	16/06/2005
2003	\$100,000.00	22/01/2004	\$13,616.00	\$100,000.00	05/02/2004	261H/034	Granted	14/05/2004
2002	\$100,000.00	23/01/2003	\$18,221.00	\$100,000.00	23/01/2003	205H/023	Granted	02/04/2003
2001	\$100,000.00	26/02/2002	\$10,820.00	\$89,180.00	25/02/2002	205H/012	Granted	07/01/2003
2000	\$100,000.00	26/02/2001	\$10,769.00	\$89,231.00	26/02/2001	212H/001	Granted	03/04/2001
1999	\$100,000.00	25/02/2000	\$10,749.00	\$89,251.00	25/02/2000	275H/990	Granted	26/04/2000
1998	\$100,000.00	25/02/1998	\$0.00	\$100,000.00	24/02/1999	266H/989	Granted	30/03/1999
1997	\$100,000.00	24/02/1998	\$0.00	\$100,000.00	24/02/1998	239H/978	Granted	31/03/1998
1996	\$100,000.00	24/02/1997	\$0.00	\$100,000.00	24/02/1997	276H/967	Granted	09/05/1997
1995	\$100,000.00	23/02/1996	\$40,975.00	\$59,025.00	23/02/1996	265H/956	Granted	23/04/1996
1994	\$100,000.00	20/02/1995	\$43,885.00	\$56,115.00	20/02/1995	265H/945	Granted	16/05/1995
1993	\$100,000.00	24/02/1994	\$43,885.00	\$56,115.00	24/02/1994	185H/934	Granted	28/07/1994
1992	\$100,000.00	12/02/1993	\$5,500.00	\$94,500.00	12/02/1993	132H/923	Granted	22/04/1993
1991	\$100,000.00	17/03/1992	\$5,274.00	\$94,726.00	17/03/1992	147H/912	Granted	29/04/1992
1990	\$100,000.00	07/03/1991	\$4,877.00	\$95,123.00	07/03/1991	148H/901	Granted	30/04/1991
1989	\$100,000.00	26/02/1990	\$3,598.00					
1988	\$100,000.00	17/03/1989	\$180,329.00					
1987	\$100,000.00	08/02/1988	\$0.00	\$100,000.00	08/02/1988	43H/878	Granted	15/08/1988
1986	\$100,000.00	17/02/1987	\$0.00	\$100,000.00	17/02/1987	1H/867	Granted	17/02/1987
1985	\$100,000.00	06/03/1986	\$100,000.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2016	24/02/2017	\$830.00	\$0.00	\$0.00	\$23,800.00	\$3,694.00	\$0.00	\$28,324.00
2015	25/02/2016	\$0.00	\$0.00	\$0.00	\$23,007.00	\$3,451.00	\$0.00	\$26,458.00



Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2014	24/02/2015	\$0.00	\$0.00	\$0.00	\$22,304.00	\$3,345.00	\$0.00	\$25,649.00
2013	25/02/2014	\$0.00	\$0.00	\$0.00	\$20,632.00	\$3,095.00	\$0.00	\$23,727.00
2012	25/02/2013	\$0.00	\$0.00	\$0.00	\$19,734.00	\$2,960.00	\$0.00	\$22,694.00
2011	23/02/2012	\$0.00	\$0.00	\$0.00	\$18,288.00	\$2,743.00	\$0.00	\$21,031.00
2010	22/02/2011	\$0.00	\$0.00	\$0.00	\$16,715.00	\$2,507.00	\$0.00	\$19,222.00
2009	25/02/2010	\$0.00	\$0.00	\$0.00	\$16,385.00	\$2,457.00	\$0.00	\$18,842.00
2008	24/02/2009	\$0.00	\$0.00	\$0.00	\$15,712.00	\$2,356.00	\$0.00	\$18,068.00
2007	22/02/2008	\$0.00	\$0.00	\$0.00	\$14,520.00	\$2,183.00	\$0.00	\$16,703.00
2006	23/02/2007	\$14,555.00	\$2,183.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16,738.00
2005	21/02/2006	\$0.00	\$0.00	\$0.00	\$14,115.00	\$2,117.00	\$0.00	\$16,232.00
2004	16/02/2005	\$5,433.00	\$0.00	\$0.00	\$13,705.00	\$2,871.00	\$0.00	\$22,009.00
2003	22/01/2004	\$0.00	\$0.00	\$0.00	\$12,968.00	\$648.00	\$0.00	\$13,616.00
2002	23/01/2003	\$0.00	\$2,714.00	\$0.00	\$12,470.00	\$3,037.00	\$0.00	\$18,221.00
2001	26/02/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,820.00
2000	26/02/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,769.00
1999	25/02/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$10,749.00
1998	25/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	24/02/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	24/02/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1995	23/02/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,975.00
1994	20/02/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1993	24/02/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43,885.00
1992	12/02/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,500.00
1991	17/03/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,274.00
1990	07/03/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,877.00
1989	26/02/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,598.00
1988	17/03/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$180,329.00
1987	08/02/1988	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1986	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1985	06/03/1986	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$100,000.00

## COMBINED REPORTING DETAILS

C Number : 296/1994

Reporting Date : 28/02

Project : Greenbushes

Affecting Period : 01/01 - 31/12

## Active Tenements:

M 01/2 (18/07/1994)

M 01/3 (18/07/1994)

M 01/4 (18/07/1994)

M 01/5 (18/07/1994)

M 01/6 (18/07/1994)

M 01/7 (18/07/1994)

M 01/8 (18/07/1994)

M 01/9 (18/07/1994)

M 01/10 (18/07/1994)

M 01/11 (18/07/1994)

M 01/16 (14/07/1995)

M 01/18 (14/07/1995)

M 70/765 (14/07/1995)

End of Search

**MINING TENEMENT REGISTER SEARCH****MINING LEASE 01/16**

This Register Search issued pursuant to Section 103F(4) of the Mining Act, 1978 at: **10:48:29 15/02/2018**

Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

**Tenement Summary**

**Identifier :** M 01/16

**District :** GREENBUSHES M.F.

**Current Area :** 18.00500 HA

**Status :** Live

**Mark Out :** 24/05/1985 17:15:00

**Received :** 27/05/1985 10:50:00

**Term Granted :** 21 Years (Renewed)

**Lodging Office :** PERTH

**Commence :** 06/06/1986

**Expiry :** 05/06/2028

**Purpose :**

**Death :**

**Rent Status**

**Due for Year End 05/06/2018 :**

**Previous Amount Outstanding :** \$0.00

**Current Due :** \$0.00

**Rent for Year End 05/06/2019 :** \$334.40

**Expenditure Status**

**Expended Year End 05/06/2017 :** EXPENDED IN FULL

**Current Year (05/06/2018) Commitment :** \$10,000.00

**OWNERSHIP DETAILS****Current Holders****Name and Address**

TALISON LITHIUM AUSTRALIA PTY LTD  
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

**Shares**

100

**Total Shares:**

100

**Holder Changes**

**Dealing**

**Status Date**

**From (Shares)**

**To (Shares)**

A to A (Name) 555H/856	Registered 27/02/1986 09:00:00	GREENBUSHES TIN LTD (26)	GREENBUSHES LTD (26)
A to A (Name) 494H/867	Registered 09/03/1987 08:00:00	JEWELL INVESTMENTS PTY LTD (74)	LITHIUM AUSTRALIA LTD (74)
Transfer 274316	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (26)	GREENBUSHES PROPERTIES PTY LTD (26)
Transfer 274317	Registered 03/09/2007 12:45:00	LITHIUM AUSTRALIA LTD (74)	GREENBUSHES PROPERTIES PTY LTD (74)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341681	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

JEWELL INVESTMENTS PTY LTD  
METALS HOUSE, 91 KENSINGTON ST, EAST PERTH, WA, 6000  
GREENBUSHES TIN LTD  
91 KENSINGTON ST, EAST PERTH, WA, 6000

### Shares

74

26

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** GREENBUSHES

**Datum :** D.P. IS SITUATED 370 METRES AT 135 DEGREES 01 MINUTE ALONG SURVEYED WESTERN BOUNDARY OF SURRENDERED ML 665 FROM ITS NW CORNER

**Boundary :** THENCE:

400 metres bearing 45 degrees 01 minutes

450 metres bearing 135 degrees 01 minutes

400 metres bearing 225 degrees 01 minutes

450 metres beaaring 315 degrees 01 minutes

BACK TO DATUM

Area :	Type	Dealing No	Start Date	Area
	Surveyed		24/03/2005	18.00500 HA
	Granted		06/06/1986	18.00000 HA
	Applied For		24/05/1985	18.00000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Linked			G 01/1	Live
Linked			G 01/2	Live



## SURVEY DETAILS

Survey

Surveyed Area	Surveyed Date	Surveyor's Name	Field Book	Instruction Date	Project
18.00500 HA	24/03/2005	LOWTH, SJ	25	31/01/2005	12040
<b>Standard Plan</b>		<b>Diagram</b>			
TENGRAPH		31175 (2751)			

## GENERAL DETAILS

General

Objection Closing Date : 26/06/1985

File Reference : 5545/85

Receipt Number : 25587

Application Fee : \$15.00

Survey Fee : \$140.00

Special Indicator

Special Indicator	Start	End
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## SHIRE DETAILS

Shire

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	24/05/1985		18.00500 HA

## NATIVE TITLE DETAILS

Native Title Referrals

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

Recommendation

Recommended for : Grant 18/09/1985

Grant

Granted : 03/06/1986      Holder Notified : 06/06/1986      Licence/Lease issued :

Term

Term : 21 Years (Renewed)      From : 06/06/1986      To : 05/06/2028

## ENDORSEMENTS/CONDITIONS DETAILS

Endorsements and Conditions

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Wildlife Conservation Act 1950;</li> </ul>	14/11/1994	

#	ENDORSEMENTS	Start Date	End Date
	<ul style="list-style-type: none"> <li>the Environmental Protection Act 1986;</li> <li>the Rights of Water &amp; Irrigation Act 1914; and</li> <li>the Aboriginal Heritage Act 1972.</li> </ul>		
	<ul style="list-style-type: none"> <li>the Aboriginal Heritage Act 1972.</li> </ul>	25/02/1994	13/11/1994
#	CONDITIONS	Start Date	End Date
1	Survey	06/06/1986	
2	Compliance with the provisions of the Aboriginal Heritage Act, 1972 to ensure that no action is taken which is likely to interfere with or damage any Aboriginal site.	06/06/1986	
3	Compliance with the provisions of the: Water Authority Act, Regulations and Bylaws, Forests Act and Regulations, Bush Fires Act and Regulations.	06/06/1986	
4	The lessee shall give the District Manager (CALM) six (6) months notice in writing of its intention to enter upon area of State Forest or Crown Land for the purposes of mining or any operation associated with mining.	14/11/1994	
	The Lessee shall give the Conservator of Forests six (6) months notice in writing of its intention to enter upon any area of State Forest or Crown Land for the purposes of mining or operations associated with mining. The Forest Department reserves the right to remove any marketable timber from such area in advance of mining operations.	06/06/1986	13/11/1994
5	The lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including rehabilitation enrichment of forest disease affected areas resulting from the lessee's mining or operations associated with mining to the reasonable requirements of the State Mining Engineer and Regional Manager, CALM.	14/11/1994	
	The Lessee at its own expense shall rehabilitate all areas affected by mining or operations associated with mining including the rehabilitation enrichment of dieback or other forest disease affected areas resulting from the lessee's mining or operations associated with the mining to the reasonable requirements of the State Mining Engineer and the Conservator of Forests.	06/06/1986	13/11/1994
6	The Lessee shall within ninety (90) days of the granting of the lease enter into and maintain a bond of Fifty Thousand Dollars (50,000.00) with an approved surety with the Mines Department for due annual performance of the approved rehabilitation programme.	06/06/1986	24/08/1986
7	At the completion of mining operations and wherein the opinion of the Mining Engineer/ District Inspector of Mines a hazard exists to the Public, adequate safety precautions must be taken by the Lessee including provision of regularly maintained effective fences.	06/06/1986	
8	The lessee shall pay royalty at current rates to the Executive Director, CALM, for any forest produce contained from State Forest and Crown land used in connection with mining operations on the leases.	14/11/1994	
	The Lessee shall pay royalty at current rates to the Conservator of Forests for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the leases.	06/06/1986	13/11/1994
9	The lessee shall pay to the Executive Director, CALM, compensation for rest destroyed by or in connection with mining. The rate of compensation being \$3,089.11 per hectare as from 15 February 1991 to 14 February 1996. After this expiry date the clearing rate will again be subject to CPI adjustment on an annual basis. No compensation payment is required for such land defined as totally disturbed by mining (definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map Number F.D. 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	14/11/1994	
	The Lessee shall pay to the Conservator of Forests compensation for forest destroyed by or in connection with mining. The rate of compensation within the Greenbushes Tin Mining Field will be determined annually by the Minister for Minerals and Energy and the Minister for Forests. No compensation payment is required for such land defined as totally disturbed by mining (Definition of disturbed and undisturbed land is as per Greenbushes Tin Limited Map number F.D 1364D, dated 16 December 1983). Such payments will be made in advance in the month of January of each year on the area of forest proposed to be affected in that year and payments by way of any necessary adjustment shall be made in the month of January next following.	06/06/1986	13/11/1994
10	The Lessee undertakes to formulate detailed rehabilitation proposals within twelve (12) months of the granting of the leases. The Lessee shall prepare a conceptual plan for the consideration of the State Mining Engineer and the Conservator of Forests indicating the final land form after mining and the broad details of how this plan will be achieved. The supervision of the rehabilitation shall be carried out by the State Mining Engineer in conjunction with the Conservator of Forests.	06/06/1986	

#	CONDITIONS	Start Date	End Date
11	After consultation with the State Mining Engineer and the Conservator of Forests, the Lessee shall prepare and submit to the State Mining Engineer no later than the 30th June, 1985, a plan of reasonable detail of its proposed mining operations upon the leases during the succeeding ten (10) years and such plan after like consultation shall be reviewed and re-submitted thereafter at five (5) yearly intervals.	06/06/1986	
12	The Lessee shall also prepare and submit to the State Mining Engineer with a copy to the Conservator of Forests its detailed annual mining proposals and management programmes which will specify such matters as the areas it is proposed to mine, the method of mining and the proposed method of rehabilitation, water body management and road access for approval by the Minister for Minerals and Energy. The Lessee undertakes to consult with the State Mining Engineer and the Conservator of Forests in the preparation of these programmes.	06/06/1986	
13	The Lessee shall submit Annual Reports on progress and expenditure relating to rehabilitation to the State Mining Engineer and the Conservator of Forests. Such reports shall be submitted by February 28th of each year. Reports will cover the twelve months period ending the 31st December.	06/06/1986	14/06/2013
14	The Lessee shall take all precautions necessary to prevent damage to the forest and pollution of streams within State Forest and Crown Lands.	06/06/1986	
15	The lessee at his own expense shall carry out all necessary measures to prevent the spread of forest diseases (including Phytophthora species) on the area of the lease and shall liaise with the District Manager, CALM, before commencing exploratory work outside areas being mined.	14/11/1994	
	The Lessee at his own expense shall carry out all necessary measures prevent the spread of jarrah dieback disease on the area of the lease and shall liaise with the Divisional Forests Officer before commencing exploratory work outside areas being mined.	06/06/1986	13/11/1994
16	The lessee shall take all necessary precautions as may be indicated by the District Manager, CALM, to prevent the occurrence or spread of any fire within or adjacent to the lease area.	14/11/1994	
	The Lessee shall take all such necessary precautions as may be indicated by the Conservator of Forests to prevent the occurrence or spread of any fire within or adjacent to the lease area.	06/06/1986	13/11/1994
17	No excavation, excepting shafts, approaching closer to the South Western Highway or the road reserve than a distance equal to twice the depth of the excavation and mining on the South Western Highway being confined to below a depth of 30 metres from the natural surface, and on any other road, to below a depth of 15 metres from the natural surface.	06/06/1986	24/08/1986
18	The lessee arranging lodgement of a Bond in favour of the Minister for State Development for due compliance with the environmental conditions of the lease in the sum of: <ul style="list-style-type: none"> <li>\$6,000</li> </ul> The lessees entering into a security in the sum of \$5000 on Form 32 as provided in Section 26 of the Mining Act 1978 for due performance of the approved rehabilitation programme.	27/07/2001	15/01/2013
19	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	14/11/1994	
20	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	14/11/1994	11/08/2005
21	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	14/11/1994	
22	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	14/11/1994	11/08/2005



#	CONDITIONS	Start Date	End Date
23	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR for assessment; and until his written approval has been obtained.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained.	14/11/1994	11/08/2005
24	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	The Lessee by November of each year consulting with the Environmental Officer (DOME) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmes to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	14/11/1994	22/12/2013
25	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Department of Minerals and Energy File No. 2122/92;</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94;</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382;</li> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> <li>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</li> </ul> Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.	24/03/2017	
	The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled: <ul style="list-style-type: none"> <li>"Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>"Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Department of Minerals and Energy File No. 2122/92;</li> <li>"Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94;</li> <li>"Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471;</li> <li>(MP Reg ID 45382) "Greenbushes Operations 2013 Mining Proposal - Continuation of Hardrock Mining III" dated 9 April 2014 signed by Patrick Scallan and Ian McGuire and retained on Department of Mines and Petroleum File No. EARS-MP-45382</li> <li>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail.</li> </ul>	02/05/2014	23/03/2017

#	CONDITIONS	Start Date	End Date
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>• "Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>• "Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Department of Minerals and Energy File No. 2122/92;</li> <li>• "Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94;</li> <li>• "Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99;</li> <li>• (Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	11/03/2014	01/05/2014
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>• "Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>• "Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Department of Minerals and Energy File No. 2122/92;</li> <li>• "Proposed construction of Lithium carbonate Plant - Greenbushes Mine" dated 21 June 1994 and retained on Department of Minerals and Energy File No. 2056-94;</li> <li>• "Greenbushes Operations - Preliminary Project Proposal - Continuation of Hard Rock Mining" dated March 1999 and retained on Department of Minerals and Energy File No. 2549/99.</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	28/02/2001	10/03/2014
	<p>The construction and operation of the project and measures to protect the environment being carried out generally in accordance with the documents titled:</p> <ul style="list-style-type: none"> <li>• "Greenbushes Notice of Intent: Greenbushes Tantalum/Lithium Project: Greenbushes, Western Australia" dated April 1991 and retained on Minerals and Energy Department File No. 643/90</li> <li>• "Notice of Intent to build an additional waste dump for material from the Tantalum and Lithium Pits at the Greenbushes Minesite" dated 13 July 1993 and retained on Department of Minerals and Energy File No. 2122/92;</li> </ul> <p>Where a difference exists between the above document(s) and the following conditions, then the following conditions shall prevail:</p>	14/11/1994	27/02/2001
26	The development and operation of the project being carried out in such a manner so as to create the minimum practicable disturbance to the existing vegetation and natural landform.	14/11/1994	
27	All topsoil being removed ahead of all mining operations from sites such as pit areas, waste disposal areas, ore stockpile areas, pipeline, haul roads, and new access roads and being stockpiled for later respreading or immediately respread as rehabilitation progresses.	14/11/1994	
28	At the completion of operations, all buildings and structures being removed from site or demolished and buried to the satisfaction of the State Mining Engineer.	14/11/1994	
29	All rubbish and scrap being progressively disposed of in a suitable manner.	14/11/1994	
30	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the Director, Environment, DoIR for his assessment and until his written approval to proceed has been obtained.	12/08/2005	
	Any alteration or expansion of operations within the lease boundaries beyond that outlined in the above document(s) not commencing until a plan of operations and a programme to safeguard the environment are submitted to the State Mining Engineer for his assessment and until his written approval to proceed has been obtained.	14/11/1994	11/08/2005
31	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website:	24/03/2017	

#	CONDITIONS	Start Date	End Date
	<ul style="list-style-type: none"> <li>2019</li> </ul> <p>A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website:</p>	11/03/2014	23/03/2017
	<ul style="list-style-type: none"> <li>2016</li> </ul> <p>A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website:</p>	14/06/2013	10/03/2014
	<ul style="list-style-type: none"> <li>2015</li> </ul>		
32	<p>The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report is to be submitted each year in:</p> <ul style="list-style-type: none"> <li>September.</li> </ul>	01/12/2014	

## DEALINGS DETAILS

### Dealings

#### Caveat 1038H/912

##### Encumbrances

Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD in respect to 26/100ths shares in the name of GREENBUSHES LTD  
 RECORDED 3:05 PM 28 Jan 1992  
 Re Mortgage 29H/912 - 14 days notice sent 19 Feb 1992  
 Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Feb 1992  
 Re Mortgages 24H/967, 25H/967, 28H/967 & 29H/967 - 14 days notice sent 16 Jan 1997.  
 Order under Section 122(1)(c), caveat to remain in full force and effect upon the expiry of 14 day notice, signed, Paul Heaney, Warden on 24 Jan 1997  
 WITHDRAWN 9:30:00 AM 30 Nov 2000

#### Caveat 1039H/912

Lodged 3:05:00 PM on 28 Jan 1992 by R & I BANK OF WESTERN AUSTRALIA LTD in respect to 74/100ths shares in the name of LITHIUM AUSTRALIA LTD  
 RECORDED 3:05 PM 28 Jan 1992  
 Re Mortgage 31H/912 - 14 days notice sent 19 Feb 1992, Caveat to remain in full force and effect by Order of Warden, P.G. Thobaven 28 Dec 1992  
 Re Mortgages 24H/967, 25H/967, 28H/967 & 29H/967 - 14 days notice sent 16 Jan 1997.  
 Order under Section 122(1)(c), caveat to remain in full force and effect upon the expiry of 14 day notice, signed, Paul Heaney, Warden on 24 Jan 1997  
 WITHDRAWN 9:30:00 AM 30 Nov 2000

#### Mortgage 29H/912

Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD in respect to 26/100ths shares in the name of GREENBUSHES LTD  
 REGISTERED 10:00 AM 28 Feb 1992  
 Mortgage 168H/989 Registered 11:50 15 July 1998  
 Transfer:  
 New Mortgagee: CITISECURITIES LTD  
 Discharged by Withdrawal 274H/001 lodged 4:00:00 PM on 12 Mar 2001

#### Mortgage 31H/912

Lodged 11:20 AM on 30 Jan 1992 in favour of R & I BANK OF WESTERN AUSTRALIA LTD in respect to 74/100ths shares in the name of LITHIUM AUSTRALIA LTD  
 REGISTERED 10:00 AM 28 Feb 1992



	<p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 61H/989 lodged 10:40:00 AM on 03 Sep 1998</p>
<b>Application to Amend 311H/923</b>	<p>Lodged 2:46:00 PM on 19 Mar 1993 amending address to read: "16 Parliament Place, West Perth, WA 6005"</p> <p>REGISTERED 2:46 PM 19 Mar 1993</p>
<b>Mortgage 24H/967</b>	<p>Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD in respect to 74/100ths shares in the name of LITHIUM AUSTRALIA LTD</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>REGISTERED 10:00 AM 24 Jan 1997</p> <p>Discharged by Withdrawal 68H/989 lodged 10:40:00 AM on 03 Sep 1998</p>
<b>Mortgage 25H/967</b>	<p>Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD in respect to 26/100ths shares in the name of GREENBUSHES LTD</p> <p>REGISTERED 10:00 AM 24 Jan 1997</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 271H/001 lodged 4:00:00 PM on 12 Mar 2001</p>
<b>Mortgage 28H/967</b>	<p>Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD in respect to 74/100ths shares in the name of LITHIUM AUSTRALIA LTD</p> <p>REGISTERED 10:00 AM 24 Jan 1997</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 63H/989 lodged 10:40:00 AM on 03 Sep 1998</p>
<b>Mortgage 29H/967</b>	<p>Lodged 3:10 PM on 05 Dec 1996 in favour of BANK OF WESTERN AUSTRALIA LTD in respect to 26/100ths shares in the name of GREENBUSHES LTD</p> <p>REGISTERED 10:00 AM 24 Jan 1997</p> <p>Mortgage 168H/989 Registered 11:50 15 July 1998</p> <p>Transfer:</p> <p>New Mortgagee: CITISECURITIES LTD</p> <p>Discharged by Withdrawal 276H/001 lodged 4:00:00 PM on 12 Mar 2001</p>
<b>Mortgage - Transfer 168H/989</b>	<p>Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 31H/912 to CITISECURITIES LTD</p> <p>REGISTERED 11:50 AM 15 Jul 1998</p>
<b>Mortgage - Transfer 168H/989</b>	<p>Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 24H/967 to CITISECURITIES LTD</p> <p>REGISTERED 11:50 AM 15 Jul 1998</p>
<b>Mortgage - Transfer 168H/989</b>	<p>Lodged 11:50:00 AM on 15 Jul 1998 of the full benefit of Mortgage 28H/967 to CITISECURITIES LTD</p> <p>REGISTERED 11:50 AM 15 Jul 1998</p>
<b>Mortgage - Transfer 168H/989</b>	<p>Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/912 to CITISECURITIES LTD</p> <p>REGISTERED 11:50 AM 15 Jul 1998</p>
<b>Mortgage - Transfer 168H/989</b>	<p>Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 25H/967 to CITISECURITIES LTD</p> <p>REGISTERED 11:50 AM 15 Jul 1998</p>
<b>Mortgage - Transfer 168H/989</b>	<p>Lodged 11:50 AM on 15 Jul 1998 of the full benefit of Mortgage 29H/967 to CITISECURITIES LTD</p>

	REGISTERED 11:50 AM 15 Jul 1998
<b>Mortgage - Discharge 61H/989</b>	In respect to Mortgage 31H/912 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 68H/989</b>	In respect to Mortgage 24H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Mortgage - Discharge 63H/989</b>	In respect to Mortgage 28H/967 lodged 10:40:00 AM on 03 Sep 1998 REGISTERED 10:40 AM 03 Sep 1998
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1038H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Withdrawal of Dealing 158H/001</b>	Lodged 9:30:00 AM on 30 Nov 2000 withdrawing Caveat 1039H/912 REGISTERED 9:30 AM 30 Nov 2000
<b>Mortgage - Discharge 271H/001</b>	In respect to Mortgage 25H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 274H/001</b>	In respect to Mortgage 29H/912 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Mortgage - Discharge 276H/001</b>	In respect to Mortgage 29H/967 lodged 4:00:00 PM on 12 Mar 2001 REGISTERED 4:00 PM 12 Mar 2001
<b>Bond PE6658</b>	Lodged on 22 Aug 2001 For \$6,000.00 (Security) RECORDED 22 Aug 2001 RETIRED 20 Sep 2007
<b>Extension / Renewal of Term 67H/067</b>	Lodged 1:40:00 PM on 04 May 2007 applied for a period of 21 Years RECORDED 1:40 PM 04 May 2007 GRANTED 22 May 2007 for a further period of 21 Years
<b>Bond 274876</b>	Lodged on 03 Sep 2007 For \$6,000.00 (Security) RECORDED 03 Sep 2007 RETIRED: 07 April 2010
<b>Mortgage 274385</b>	Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION REJECTED 12:45 PM 03 Sep 2007 RELODGED 2:30 PM 14 Sep 2007 REGISTERED 2:30 PM 14 Sep 2007 DISCHARGED: 14:50 25 February 2010
<b>Bond Requirement 314104</b>	Requirement Date: 27/07/2001 Amount: \$6,000.00 RECORDED: 07:30:38 27 July 2001 FINALISED: 13:20:39 15 January 2013
<b>Mortgage - Discharge 341667</b>	Lodged: 14:50 25 February 2010 In respect to: Mortgage 274385 REGISTERED: 14:50 25 February 2010
<b>Mortgage 341684</b>	Lodged: 14:50 25 February 2010 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: WESTPAC BANKING CORPORATION REGISTERED: 14:50 25 February 2010 DISCHARGED: 11:13 24 December 2010 Full Discharge: 362313 Registered 11:13 24 December 2010
<b>Bond 344213</b>	Lodged: 15:00 25 February 2010 Bond Type: Security Bond Amount: \$6,000.00 RECORDED: 25 February 2010 RETIRED: 15 January 2013
<b>Application to Amend 353570</b>	Lodged: 10:00 17 August 2010 Amending: Address From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL

		To:	36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000 Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Caveat 400186</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
			Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.
<b>Extension of Time 402798</b>		Lodged:	12:06 31 July 2012
		Type:	Form 5
		RECORDED:	12:06 31 July 2012
			Extension of time until 17 August 2012 to lodge Form 5 for the year ending 5 June 2012
		APPROVED:	15:32:02 31 July 2012
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Forfeiture 440668</b>		Initiated:	21/02/2014 for non-compliance with royalty provisions
		RECORDED:	11:04:41 19 February 2014
		Notice Issued:	Regulation 50 Notice sent 21/02/2014 for non-compliance with royalty provisions pursuant to Sec 82(1)(a).
		Compliance Date:	25/03/2014
		FINALISED:	Order by Minister on 07 April 2014 that M 01/16 be No Penalty Imposed
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472094</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat
		Caveator:	THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED



Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA  
PTY LTD

RECORDED: 10:01 13 August 2015

### BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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### RENT DETAILS

### Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	17/05/2017		06-160423	PE	\$323.95	18.00500 HA	24/03/2005	\$323.95	\$0.00
Payment	2017	10/06/2016		MT-210010615960-EF	OL	\$313.50	18.00500 HA	24/03/2005	\$313.50	\$0.00
Payment	2016	03/06/2015		MT-210010269368-EF	OL	\$305.90	18.00500 HA	24/03/2005	\$305.90	\$0.00
Payment	2015	06/06/2014		MT-210010183152-EF	OL	\$298.30	18.00500 HA	24/03/2005	\$298.30	\$0.00
Payment	2014	21/06/2013		06-125274	PE	\$292.60	18.00500 HA	24/03/2005	\$292.60	\$0.00
Payment	2013	11/05/2012		06-109754	PE	\$285.00	18.00500 HA	24/03/2005	\$285.00	\$0.00
Payment	2012	27/06/2011		96104	PE	\$303.05	18.00500 HA	24/03/2005	\$303.05	\$0.00
Payment	2011	01/06/2010		79897	PE	\$296.78	18.00500 HA	24/03/2005	\$296.78	\$0.00
Payment	2010	19/06/2009		66035	PE	\$284.24	18.00500 HA	24/03/2005	\$284.24	\$0.00
Payment	2009	13/06/2008		52557	PE	\$275.88	18.00500 HA	24/03/2005	\$275.88	\$0.00
Payment	2008	04/05/2007		37139	PE	\$263.34	18.00500 HA	24/03/2005	\$263.34	\$0.00
Payment	2007	02/06/2006		24991	PE	\$254.98	18.00500 HA	24/03/2005	\$254.98	\$0.00
Payment	2006	12/12/2006		32192	PE	\$13.09	18.00500 HA	24/03/2005	\$248.71	\$0.00
Payment	2006	20/06/2005		12256	PE	\$235.62				
Payment	2005	12/12/2006		32192	PE	\$12.76	18.00500 HA	24/03/2005	\$242.44	\$0.00
Payment	2005	05/07/2004		105	PE	\$229.68				
Payment	2004	12/12/2006		32192	PE	\$12.32	18.00500 HA	24/03/2005	\$234.08	\$0.00
Payment	2004	30/06/2003		61779	PE	\$221.76				
Payment	2003	12/12/2006		32192	PE	\$12.00	18.00500 HA	24/03/2005	\$228.00	\$0.00
Payment	2003	19/06/2002		49867	PE	\$216.00				
Payment	2002	12/12/2006		32192	PE	\$11.33	18.00500 HA	24/03/2005	\$215.27	\$0.00
Payment	2002	26/06/2001		37979	PE	\$203.94				
Payment	2001	12/12/2006		32192	PE	\$11.26	18.00500 HA	24/03/2005	\$213.93	\$0.00
Payment	2001	12/07/2000		24840	PE	\$202.67				
Payment	2000	12/12/2006		32192	PE	\$10.30	18.00500 HA	24/03/2005	\$195.70	\$0.00
Payment	2000	02/07/1999		12959	PE	\$185.40				
Payment	1999	12/12/2006		32192	PE	\$10.00	18.00500 HA	24/03/2005	\$190.00	\$0.00
Payment	1999	16/06/1998		179746	PE	\$180.00				
Payment	1998	12/12/2006		32192	PE	\$10.00	18.00500 HA	24/03/2005	\$190.00	\$0.00
Payment	1998	09/06/1997		162881	PE	\$180.00				
Payment	1997	12/12/2006		32192	PE	\$10.00	18.00500 HA	24/03/2005	\$190.00	\$0.00
Payment	1997	30/05/1996		144095	PE	\$180.00				
Payment	1996	12/12/2006		32192	PE	\$9.30	18.00500 HA	24/03/2005	\$176.70	\$0.00
Payment	1996	15/06/1995		127501	PE	\$167.40				
Payment	1995	12/12/2006		32192	PE	\$9.30	18.00500 HA	24/03/2005	\$176.70	\$0.00
Payment	1995	31/05/1994		108771	PE	\$167.40				
Payment	1994	12/12/2006		32192	PE	\$9.30	18.00500 HA	24/03/2005	\$176.70	\$0.00
Payment	1994	01/07/1993		92063	PE	\$167.40				
Payment	1993	12/12/2006		32192	PE	\$9.30	18.00500 HA	24/03/2005	\$176.70	\$0.00

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	1993	19/06/1992		75822	PE	\$167.40				
Payment	1992	12/12/2006		32192	PE	\$8.70	18.00500 HA	24/03/2005	\$165.30	\$0.00
Payment	1992	04/07/1991		60432	PE	\$156.60				
Payment	1991	12/12/2006		32192	PE	\$8.70	18.00500 HA	24/03/2005	\$165.30	\$0.00
Payment	1991	30/05/1990		41181	PE	\$156.60				
Payment	1990	12/12/2006		32192	PE	\$8.10	18.00500 HA	24/03/2005	\$153.90	\$0.00
Payment	1990	08/06/1989		1	PE	\$145.80				
Payment	1989	12/12/2006		32192	PE	\$7.70	18.00500 HA	24/03/2005	\$146.30	\$0.00
Payment	1989	06/05/1988		1	PE	\$138.60				
Payment	1988	12/12/2006		32192	PE	\$7.00	18.00500 HA	24/03/2005	\$133.00	\$0.00
Payment	1988	26/05/1987		1	PE	\$126.00				
Payment	1987	12/12/2006		32192	PE	\$6.00	18.00500 HA	24/03/2005	\$114.00	\$0.00
Payment	1987	27/05/1985		25587	PE	\$108.00				

## EXPENDITURE/EXEMPTION DETAILS

**Expenditure/Exemptions**

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$10,000.00							
2017	\$10,000.00	03/08/2017	\$7,381,927.00					
2016	\$10,000.00	04/08/2016	\$5,255,275.00					
2015	\$10,000.00	04/08/2015	\$15,399,239.00					
2014	\$10,000.00	31/07/2014	\$14,798,001.00					
2013	\$10,000.00	01/08/2013	\$11,006,815.00					
2012	\$10,000.00	14/08/2012	\$15,870,328.00					
2011	\$10,000.00	02/08/2011	\$1,316,837.00					
2010	\$10,000.00	30/07/2010	\$7,461,524.00					
2009	\$10,000.00	04/08/2009	\$2,246,746.00					
2008	\$10,000.00	30/07/2008	\$4,218,663.00					
2007	\$10,000.00	01/08/2007	\$11,802,263.00					
2006	\$10,000.00	31/07/2006	\$7,811,049.00					
2005	\$10,000.00	04/08/2005	\$10,110,311.00					
2004	\$10,000.00	16/06/2004	\$13,563.00					
2003	\$10,000.00	21/07/2003	\$4,106,883.00					
2002	\$10,000.00	24/07/2002	\$2,414,669.00					
2001	\$10,000.00	11/07/2001	\$2,450,512.00					
2000	\$10,000.00	25/07/2000	\$1,182,234.00					
1999	\$10,000.00	29/07/1999	\$1,122,338.00					
1998	\$10,000.00	23/07/1998	\$2,262,913.00					
1997	\$10,000.00	29/07/1997	\$6,759,897.00					
1996	\$10,000.00	24/06/1996	\$5,889,414.00					
1995	\$10,000.00	26/07/1995	\$1,721,036.00					
1994	\$10,000.00	22/07/1994	\$1,027,327.00					
1993	\$10,000.00	16/07/1993	\$964,128.00					
1992	\$10,000.00	07/08/1992	\$1,067,950.00					
1991	\$10,000.00	02/08/1991	\$2,273,800.00					
1990	\$10,000.00	31/07/1990	\$1,699,234.00					
1989	\$10,000.00	28/07/1989	\$916,656.00					
1988	\$10,000.00							
1987	\$10,000.00	17/02/1987	\$965,240.00					

**Expenditure Details**

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2017	03/08/2017	\$341,780.00	\$6,075,697.00	\$0.00	\$1,590.00	\$962,860.00	\$0.00	\$7,381,927.00
2016	04/08/2016	\$0.00	\$4,568,724.00	\$0.00	\$1,081.00	\$685,470.00	\$0.00	\$5,255,275.00
2015	04/08/2015	\$150,000.00	\$13,239,606.00	\$0.00	\$1,037.00	\$2,008,596.00	\$0.00	\$15,399,239.00
2014	31/07/2014	\$0.00	\$12,867,054.00	\$0.00	\$889.00	\$1,930,058.00	\$0.00	\$14,798,001.00
2013	01/08/2013	\$0.00	\$9,638,256.00	\$0.00	\$862.00	\$1,367,697.00	\$0.00	\$11,006,815.00
2012	14/08/2012	\$0.00	\$14,443,171.00	\$0.00	\$1,099.00	\$1,426,058.00	\$0.00	\$15,870,328.00
2011	02/08/2011	\$11,700.00	\$1,132,275.00	\$0.00	\$1,101.00	\$171,761.00	\$0.00	\$1,316,837.00
2010	30/07/2010	\$0.00	\$6,487,359.00	\$0.00	\$1,062.00	\$973,103.00	\$0.00	\$7,461,524.00
2009	04/08/2009	\$0.00	\$2,041,554.00	\$0.00	\$1,037.00	\$204,155.00	\$0.00	\$2,246,746.00
2008	30/07/2008	\$0.00	\$3,834,873.00	\$0.00	\$275.00	\$383,515.00	\$0.00	\$4,218,663.00
2007	01/08/2007	\$0.00	\$11,240,000.00	\$0.00	\$263.00	\$562,000.00	\$0.00	\$11,802,263.00
2006	31/07/2006	\$0.00	\$7,438,840.00	\$0.00	\$255.00	\$371,954.00	\$0.00	\$7,811,049.00
2005	04/08/2005	\$0.00	\$9,627,990.00	\$0.00	\$878.00	\$481,443.00	\$0.00	\$10,110,311.00
2004	16/06/2004	\$0.00	\$11,233.00	\$0.00	\$870.00	\$1,460.00	\$0.00	\$13,563.00
2003	21/07/2003	\$0.00	\$4,034,182.00	\$0.00	\$843.00	\$71,858.00	\$0.00	\$4,106,883.00
2002	24/07/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,414,669.00
2001	11/07/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,450,512.00
2000	25/07/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,182,234.00
1999	29/07/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,122,338.00
1998	23/07/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,262,913.00
1997	29/07/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$6,759,897.00
1996	24/06/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,889,414.00
1995	26/07/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,721,036.00
1994	22/07/1994	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,027,327.00
1993	16/07/1993	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$964,128.00
1992	07/08/1992	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,067,950.00
1991	02/08/1991	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,273,800.00
1990	31/07/1990	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,699,234.00
1989	28/07/1989	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$916,656.00
1987	17/02/1987	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$965,240.00

**COMBINED REPORTING DETAILS****C Number :** 296/1994**Reporting Date :** 28/02**Project :** Greenbushes**Affecting** 01/01 - 31/12**Period :****Active Tenements:**

M 01/2 (18/07/1994)

M 01/3 (18/07/1994)

M 01/4 (18/07/1994)

M 01/5 (18/07/1994)

M 01/6 (18/07/1994)

M 01/7 (18/07/1994)

M 01/8 (18/07/1994)

M 01/9 (18/07/1994)

M 01/10 (18/07/1994)

M 01/11 (18/07/1994)

M 01/16 (14/07/1995)

M 01/18 (14/07/1995)

M 70/765 (14/07/1995)

End of Search



# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 01/18



Rick Rogerson  
Executive Director  
Resource Tenure  
Department of Mines, Industry Regulation  
and Safety

This Register Search issued pursuant to Section 103F(4) of  
the Mining Act, 1978 at: **10:48:33 15/02/2018**

### Tenement Summary

<b>Identifier :</b> M 01/18	<b>District :</b> GREENBUSHES M.F.
<b>Current Area :</b> 3.03650 HA	<b>Status :</b> Live
<b>Mark Out :</b> 08/04/1993 14:30:00	<b>Received :</b> 16/04/1993 16:15:00
<b>Term Granted :</b> 21 Years (Renewed)	<b>Lodging Office :</b> PERTH
<b>Commence :</b> 28/09/1994	<b>Expiry :</b> 27/09/2036
<b>Purpose :</b>	<b>Death :</b>

### Rent Status

**Due for Year End 27/09/2018 :**  
**Previous Amount Outstanding :** \$0.00  
**Current Due :** \$0.00  
**Rent for Year End 27/09/2019 :** \$70.40

### Expenditure Status

**Expended Year End 27/09/2017 :** EXPENDED IN FULL  
**Current Year (27/09/2018) Commitment :** \$5,000.00

### OWNERSHIP DETAILS

#### Current Holders

Name and Address	Shares
TALISON LITHIUM AUSTRALIA PTY LTD LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850	100
<b>Total Shares:</b>	<b>100</b>

#### Holder Changes

Dealing	Status Date	From (Shares)	To (Shares)
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Transfer 274318	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341682	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### **Name and Address**

GREENBUSHES LTD  
C/- SONS OF GWALIA LTD:, LOCKED BAG 40 - CLOISTERS SQUARE,  
PERTH, WA, 6850

### **Shares**

100

**Total Shares:**

100

## DESCRIPTION DETAILS

### Description

<b>Locality :</b>	Greenbushes		
<b>Datum :</b>	Datum situated south east corner of late surveyed Water Right 302		
<b>Boundary :</b>	Identical to late surveyed Water Right 302		
<b>Area :</b>	<b>Type</b>	<b>Dealing No</b>	<b>Start Date</b>
	Surveyed		11/06/2011
	Granted		28/09/1994
	Applied For		08/04/1993

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
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## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
3.03650 HA	11/06/2011	RICHARDS, PI	273	08/02/2011	12638
<b>Standard Plan</b>		<b>Diagram</b>			
		65962			

## GENERAL DETAILS

### General

**Objection Closing Date :** 17/05/1993  
**File Reference :** 7471/93  
**Receipt Number :** 88616

**Application Fee :** \$165.40  
**Survey Fee :**

### Special Indicator

Special Indicator	Start	End
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## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	08/04/1993		3.03650 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

**DISCLAIMER:** Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 07/09/1994

**Grant**

Granted : 16/09/1994      Holder Notified : 28/09/1994      Licence/Lease issued :

**Term**

Term : 21 Years (Renewed)      From : 28/09/1994      To : 27/09/2036

## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
1	The lessee's attention is drawn to the provisions of:- <ul style="list-style-type: none"> <li>the Conservation and Land Management Act, 1984 and the Regulations thereunder;</li> <li>the Bush Fires Act, 1954-77 and Regulations;</li> <li>the Wildlife Conservation Act, 1950 and Regulations thereunder; and</li> <li>the Aboriginal Heritage Act, 1972.</li> </ul>	28/09/1994	
#	CONDITIONS	Start Date	End Date
1	Survey	28/09/1994	
2	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	28/09/1994	
3	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR). Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.	12/08/2005	
	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.	28/09/1994	11/08/2005
4	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	28/09/1994	
5	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being	12/08/2005	



#	CONDITIONS	Start Date	End Date
	removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.		
	Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface disturbance or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	28/09/1994	11/08/2005
6	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR for assessment; and until his written approval has been obtained.	12/08/2005	
	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained.	28/09/1994	11/08/2005
7	Mining on any road, road verge or road reserve being confined to below a depth of 15 metres from the natural surface.	28/09/1994	
	<b>Consent to Mine on State Forest No.20 granted by the Minister for Mines subject to the following conditions:</b>	28/09/1994	
8	The lessee giving the Executive Director, Department of Conservation and Land Management (CALM) three (3) months notice in writing of the intention to enter upon any uncleared area of State Forest for the purposes of mining or operations associated with mining. Rights to remove any marketable timber from such area in advance of mining operations being with the Executive Director.	28/09/1994	
9	The lessee paying to the Executive Director, Department of Conservation and Land Management (CALM), compensation for all areas cleared of vegetation for mining, in support of mining and degraded as a result of mining in association with this lease. Provided that the Executive Director and the lessee may agree from time to time that land shall be transferred or works undertaken by the lessee in lieu of payment under this condition. The rate of compensation being \$3,100 per hectare and being adjusted annually by the Executive Director. The C.P.I. for Perth providing the basis of such adjustments. The Executive Director issuing a notice for the amount of compensation due and the lessee paying the amount within 2 months of the date of such notice. A penalty of interest at the Commonwealth bond rate being charged for late payment. The Lessee providing detailed surveys of areas cleared in conjunction with annual mining proposals.	28/09/1994	
10	The lessee paying royalty at current rates to the Executive Director for any forest produce obtained from State Forest and Crown Land used in connection with mining operations on the lease.	28/09/1994	
11	The lessee at his expense carrying out all necessary measures to prevent the spread of the forests disease Phytophthora Cinnamomi (or Jarrah Dieback) on the area of the lease and liaising with the District Manager (CALM) before commencing exploratory work outside areas being mined.	28/09/1994	
12	Lessee taking all such necessary precautions as may be indicated by the District Manager CALM to prevent the occurrence or spread of any fire within or adjacent to the leased area.	28/09/1994	
13	The lessee at his expense rehabilitating all areas affected by mining or operations associated with mining conducted during the term of the lease. Rehabilitation being to the satisfaction of the State Mining Engineer and in agreement with the Regional Manager CALM and in accordance with CALM policy No. 10 (Rehabilitation of Disturbed Lands).	28/09/1994	
14	No developmental or productive mining being commenced until the lessee has submitted a Notice of Intent (N.O.I.) for the proposed operations, including measures to safeguard the environment, to the Director, Mining Operations Division for assessment and until his written approval has been obtained, subject to the agreement for the Executive Director, CALM. The approval N.O.I (as amended) then becoming a condition of this lease and the lessee providing a bond in favour of the Minister for Mines for the sum specified in the NOI approval for due compliance with the environmental conditions of the lease.	28/09/1994	
15	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and with one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmed to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	Each year on the anniversary date of the approval of the NOI, the lessee consulting with the District Mining Engineer and District Manager to review the past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals	28/09/1994	22/12/2013

#	CONDITIONS	Start Date	End Date
	and management programmes for approval to the Director, Mining Operations Division in agreement with the Regional Manager, CALM.		
16	The lessee designating to the Regional Manager, CALM a responsible officer to direct and control the rehabilitation programme.	28/09/1994	
17	Exploration programmes involving vegetation disturbance are subject to the approval of the State Mining Engineer in consultation with the District Manager, CALM.	28/09/1994	
18	Where reasonable, the lessee permitting CALM to remove for CALM requirements, sand, rock, clay, gravel and soil subject to a working agreement.	28/09/1994	
19	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>September</li> </ul> The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>November.</li> </ul>	23/12/2013	
		07/06/2013	22/12/2013
20	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul> A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul> A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	24/03/2017	
		11/03/2014	23/03/2017
		07/06/2013	10/03/2014
21	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul> The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	24/03/2017	
		11/03/2014	23/03/2017

## DEALINGS DETAILS

### Dealings

#### Mortgage 274385

#### Encumbrances

Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION

REJECTED 12:45 PM 03 Sep 2007

RELODGED 2:30 PM 14 Sep 2007

REGISTERED 2:30 PM 14 Sep 2007

DISCHARGED: 14:50 25 February 2010

#### Extension of Time 278372

Lodged 1:01 PM on 22 Nov 2007 to extend time for the lodgement of Form 5 for the year ending 27 September 2007 until 4 December 2007

Approved on 22 Nov 2007

<b>Mortgage - Discharge 341667</b>		Lodged:	14:50 25 February 2010
		In respect to:	Mortgage 274385
		REGISTERED:	14:50 25 February 2010
<b>Mortgage 341684</b>		Lodged:	14:50 25 February 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	WESTPAC BANKING CORPORATION
		REGISTERED:	14:50 25 February 2010
		DISCHARGED:	11:13 24 December 2010
		Full Discharge:	362313 Registered 11:13 24 December 2010
<b>Application to Amend 353570</b>		Lodged:	10:00 17 August 2010
		Amending:	Address
		From:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000
		To:	Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850
		RECORDED:	10:00 17 August 2010
<b>Mortgage 364473</b>		Lodged:	10:36 22 December 2010
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	COMMONWEALTH BANK OF AUSTRALIA
		REGISTERED:	10:36 22 December 2010
		DISCHARGED:	15:00 07 November 2013
		Full Discharge:	434701 Registered 15:00 07 November 2013
<b>Mortgage - Discharge 362313</b>		Lodged:	11:13 24 December 2010
		In respect to:	Mortgage 341684
		REGISTERED:	11:13 24 December 2010
<b>Caveat 400187</b>		Lodged:	12:10 22 June 2012
		Caveat Type:	Absolute Caveat
		Caveator:	GLOBAL ADVANCED METALS GREENBUSHES PTY LTD
		Shares Caveated:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		RECORDED:	12:10 22 June 2012
		Affected Dealing:	Mortgage 472080
		14 day notice sent:	11 August 2015
		Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.	
<b>Mortgage - Discharge 434701</b>		Lodged:	15:00 07 November 2013
		In respect to:	Mortgage 364473
		REGISTERED:	15:00 07 November 2013
<b>Mortgage 472080</b>		Lodged:	10:15 30 July 2015
		Mortgaged Shares:	100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD
		Mortgagee:	THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED
		REGISTERED:	10:00 13 August 2015
<b>Caveat 472095</b>		Lodged:	10:15 30 July 2015
		Caveat Type:	Consent Caveat



Caveator: THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED

Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

RECORDED: 10:01 13 August 2015

Lodged: 08:30 04 September 2015

Applied For Period: 21 Years

RECORDED: 08:30 04 September 2015

GRANTED: 01 October 2015

Granted Period: 21 Years

Term Renewed To: 27/09/2036

**Extension / Renewal of Term 473960****BOND DETAILS**

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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**RENT DETAILS****Rent Payments**

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	18/09/2017	1693748509	TALISON LITHIUM TALISON LITHIUM	OL	\$70.40	3.03650 HA	11/06/2011	\$70.40	\$0.00
Payment	2017	05/09/2016		MT-210010720459-EF	OL	\$68.20	3.03650 HA	11/06/2011	\$68.20	\$0.00
Payment	2016	16/09/2015		MT-210010367756-EF	OL	\$66.00	3.03650 HA	11/06/2011	\$66.00	\$0.00
Payment	2015	09/10/2014		MT-210010208772-EF	OL	\$64.40	3.03650 HA	11/06/2011	\$64.40	\$0.00
Payment	2014	24/09/2013		06-128744	PE	\$62.80	3.03650 HA	11/06/2011	\$62.80	\$0.00
Payment	2013	23/08/2012		06-114123	PE	\$61.60	3.03650 HA	11/06/2011	\$61.60	\$0.00
Payment	2012	10/04/2017		MT-210010998440-EF	OL	\$15.00	3.03650 HA	11/06/2011	\$60.00	\$0.00
Payment	2012	13/10/2011		101247	PE	\$45.00				
Payment	2011	10/04/2017		MT-210010998440-EF	PE	\$15.95	3.03650 HA	11/06/2011	\$63.80	\$0.00
Payment	2011	29/09/2010		84728	PE	\$47.85				
Payment	2010	10/04/2017		MT-210010998440-EF	PE	\$15.62	3.03650 HA	11/06/2011	\$62.48	\$0.00
Payment	2010	21/09/2009		5564	MB	\$46.86				
Payment	2009	10/04/2017		MT-210010998440-EF	PE	\$14.96	3.03650 HA	11/06/2011	\$59.84	\$0.00
Payment	2009	15/10/2008		57452	PE	\$44.88				
Payment	2008	10/04/2017		MT-210010998440-EF	PE	\$14.52	3.03650 HA	11/06/2011	\$58.08	\$0.00
Payment	2008	03/10/2007		43129	PE	\$43.56				
Payment	2007	10/04/2017		MT-210010998440-EF	PE	\$13.86	3.03650 HA	11/06/2011	\$55.44	\$0.00
Payment	2007	29/09/2006		29388	PE	\$41.58				
Payment	2006	10/04/2017		MT-210010998440-EF	PE	\$13.42	3.03650 HA	11/06/2011	\$53.68	\$0.00
Payment	2006	22/09/2005		15917	PE	\$40.26				

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2005	10/04/2017		MT-210010998440- EF	PE	\$13.09	3.03650 HA	11/06/2011	\$52.36	\$0.00
Payment	2005	05/10/2004		3329	PE	\$39.27				
Payment	2004	10/04/2017		MT-210010998440- EF	PE	\$12.76	3.03650 HA	11/06/2011	\$51.04	\$0.00
Payment	2004	02/10/2003		64881	PE	\$38.28				
Payment	2003	10/04/2017		MT-210010998440- EF	PE	\$12.32	3.03650 HA	11/06/2011	\$49.28	\$0.00
Payment	2003	17/09/2002		52926	PE	\$36.96				
Payment	2002	10/04/2017		MT-210010998440- EF	PE	\$12.00	3.03650 HA	11/06/2011	\$48.00	\$0.00
Payment	2002	19/10/2001		41897	PE	\$36.00				
Payment	2001	10/04/2017		MT-210010998440- EF	PE	\$11.33	3.03650 HA	11/06/2011	\$45.32	\$0.00
Payment	2001	07/11/2000		29955	PE	\$33.99				
Payment	2000	10/04/2017		MT-210010998440- EF	PE	\$10.55	3.03650 HA	11/06/2011	\$42.20	\$0.00
Payment	2000	28/07/2000		25767	PE	\$0.75				
Payment	2000	04/10/1999		16085	PE	\$30.90				
Payment	1999	10/04/2017		MT-210010998440- EF	PE	\$10.30	3.03650 HA	11/06/2011	\$41.20	\$0.00
Payment	1999	20/10/1998		3335	PE	\$30.90				
Payment	1998	10/04/2017		MT-210010998440- EF	PE	\$10.00	3.03650 HA	11/06/2011	\$40.00	\$0.00
Payment	1998	01/10/1997		168557	PE	\$30.00				
Payment	1997	10/04/2017		MT-210010998440- EF	PE	\$10.00	3.03650 HA	11/06/2011	\$40.00	\$0.00
Payment	1997	09/10/1996		150756	PE	\$30.00				
Payment	1996	10/04/2017		MT-210010998440- EF	PE	\$10.00	3.03650 HA	11/06/2011	\$40.00	\$0.00
Payment	1996	11/09/1995		131854	PE	\$30.00				
Payment	1995	10/04/2017		MT-210010998440- EF	PE	\$9.30	3.03650 HA	11/06/2011	\$37.20	\$0.00
Payment	1995	16/04/1993		88616	PE	\$27.90				

## EXPENDITURE/EXEMPTION DETAILS

Expenditure/Exemptions

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$5,000.00							
2017	\$5,000.00	21/11/2017	\$51,928.00					
2016	\$5,000.00	24/11/2016	\$9,423.00					
2015	\$5,000.00	25/11/2015	\$5,152.00					
2014	\$5,000.00	18/11/2014	\$27,307.00					
2013	\$5,000.00	07/11/2013	\$11,255.00					
2012	\$5,000.00	15/11/2012	\$12,867.00					
2011	\$5,000.00	22/11/2011	\$12,606.00					
2010	\$5,000.00	10/11/2010	\$13,400.00					
2009	\$5,000.00	23/11/2009	\$12,700.00					
2008	\$5,000.00	21/11/2008	\$6,031.00					
2007	\$5,000.00	29/11/2007	\$7,467.00					
2006	\$5,000.00	08/11/2006	\$7,450.00					
2005	\$5,000.00	04/11/2005	\$8,747.00					
2004	\$5,000.00	22/10/2004	\$6,245.00					
2003	\$5,000.00	29/10/2003	\$1,844.00	\$5,000.00	30/10/2003	162H/034	Granted	10/02/2004

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2002	\$5,000.00	18/11/2002	\$3,637.00	\$5,000.00	18/11/2002	135H/023	Granted	07/01/2003
2001	\$5,000.00	08/11/2001	\$5,087.00					
2000	\$5,000.00	22/11/2000	\$5,138.00					
1999	\$5,000.00	18/11/1999	\$5,073.00					
1998	\$5,000.00	24/11/1998	\$0.00	\$5,000.00	24/11/1998	151H/989	Granted	23/12/1998
1997	\$5,000.00	20/11/1997	\$0.00	\$5,000.00	20/11/1997	164H/978	Granted	18/12/1997
1996	\$5,000.00	26/11/1996	\$5,014.00					
1995	\$5,000.00	22/11/1995	\$5,106.00					

## Expenditure Details

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2017	21/11/2017	\$0.00	\$44,077.00	\$0.00	\$1,078.00	\$6,773.00	\$0.00	\$51,928.00
2016	24/11/2016	\$6,860.00	\$0.00	\$0.00	\$1,334.00	\$1,229.00	\$0.00	\$9,423.00
2015	25/11/2015	\$0.00	\$3,460.00	\$0.00	\$834.00	\$858.00	\$0.00	\$5,152.00
2014	18/11/2014	\$0.00	\$22,950.00	\$0.00	\$796.00	\$3,561.00	\$0.00	\$27,307.00
2013	07/11/2013	\$0.00	\$9,600.00	\$0.00	\$632.00	\$1,023.00	\$0.00	\$11,255.00
2012	15/11/2012	\$0.00	\$10,575.00	\$0.00	\$614.00	\$1,678.00	\$0.00	\$12,867.00
2011	22/11/2011	\$0.00	\$10,100.00	\$0.00	\$862.00	\$1,644.00	\$0.00	\$12,606.00
2010	10/11/2010	\$0.00	\$10,932.00	\$0.00	\$812.00	\$1,656.00	\$0.00	\$13,400.00
2009	23/11/2009	\$0.00	\$10,234.00	\$0.00	\$810.00	\$1,656.00	\$0.00	\$12,700.00
2008	21/11/2008	\$0.00	\$4,450.00	\$0.00	\$795.00	\$786.00	\$0.00	\$6,031.00
2007	29/11/2007	\$0.00	\$5,730.00	\$0.00	\$766.00	\$971.00	\$0.00	\$7,467.00
2006	08/11/2006	\$0.00	\$5,730.00	\$0.00	\$749.00	\$971.00	\$0.00	\$7,450.00
2005	04/11/2005	\$0.00	\$7,450.00	\$0.00	\$687.00	\$610.00	\$0.00	\$8,747.00
2004	22/10/2004	\$812.00	\$4,450.00	\$0.00	\$686.00	\$297.00	\$0.00	\$6,245.00
2003	29/10/2003	\$0.00	\$1,050.00	\$0.00	\$664.00	\$130.00	\$0.00	\$1,844.00
2002	18/11/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,637.00
2001	08/11/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,087.00
2000	22/11/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,138.00
1999	18/11/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,073.00
1998	24/11/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1997	20/11/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	26/11/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,014.00
1995	22/11/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,106.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

### Active Tenements:

M 01/2 (18/07/1994)	M 01/3 (18/07/1994)	M 01/4 (18/07/1994)
M 01/5 (18/07/1994)	M 01/6 (18/07/1994)	M 01/7 (18/07/1994)
M 01/8 (18/07/1994)	M 01/9 (18/07/1994)	M 01/10 (18/07/1994)
M 01/11 (18/07/1994)	M 01/16 (14/07/1995)	M 01/18 (14/07/1995)
M 70/765 (14/07/1995)		

End of Search





# MINING TENEMENT REGISTER SEARCH

## MINING LEASE 70/765

This Register Search issued pursuant to Section 103F(4) of the Mining Act, 1978 at: **10:48:36 15/02/2018**

Rick Rogerson  
Executive Director  
Resource Tenure

Department of Mines, Industry Regulation  
and Safety

### Tenement Summary

**Identifier :** M 70/765

**District :** SOUTH WEST M.F.

**Current Area :** 70.38500 HA

**Status :** Live

**Mark Out :** 22/07/1992 11:33:00

**Received :** 23/07/1992 14:00:00

**Term Granted :** 21 Years (Renewed)

**Lodging Office :** PERTH

**Commence :** 20/06/1994

**Expiry :** 19/06/2036

**Purpose :**

**Death :**

### Rent Status

**Due for Year End 19/06/2018 :**

**Previous Amount Outstanding :** \$0.00

**Current Due :** \$0.00

**Rent for Year End 19/06/2019 :** \$1,249.60

### Expenditure Status

**Expended Year End 19/06/2017 :** EXPENDED IN FULL

**Current Year (19/06/2018) Commitment :** \$10,000.00

### OWNERSHIP DETAILS

#### Current Holders

##### **Name and Address**

TALISON LITHIUM AUSTRALIA PTY LTD  
LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

##### **Shares**

100

**Total Shares:**

100

#### Holder Changes

**Dealing**

**Status Date**

**From (Shares)**

**To (Shares)**

Transfer 274365	Registered 03/09/2007 12:45:00	GREENBUSHES LTD (100)	GREENBUSHES PROPERTIES PTY LTD (100)
A to A (Name) 280900	Recorded 03/01/2008 13:15:00	GREENBUSHES PROPERTIES PTY LTD (100)	TALISON GREENBUSHES PTY LTD (100)
Transfer 341683	Registered 25/02/2010 14:50:00	TALISON GREENBUSHES PTY LTD (100)	TALISON LITHIUM AUSTRALIA PTY LTD (100)

## Applicants on Receival

### Name and Address

GREENBUSHES LTD  
C/- SONS OF GWALIA LTD:, LOCKED BAG 40 - CLOISTERS SQUARE,  
PERTH, WA, 6850

### Shares

100

Total Shares:

100

## DESCRIPTION DETAILS

### Description

**Locality :** Woljenup

**Datum :** Datum peg situated at north east corner of location 5220 (nelson L.D.)

**Boundary :** Thence 360 metres bearing 270 degrees (Along northern boundary of location 5220)

Thence northerly along Perry Road to southern boundary of Greenbushes Mineral Field

Thence 1170 metres bearing 090 degrees (Along southern boundary of Greenbushes Mineral Field)

Thence 570 metres bearing 180 degrees

Thence 940 metres bearing 270 degrees

Back to Datum

Area :	Type	Dealing No	Start Date	Area
	Surveyed		10/06/2011	70.38500 HA
	Granted		20/06/1994	73.60000 HA
	Applied For		22/07/1992	73.60000 HA

## RELATIONSHIPS

### Relationships

Relationship	Dealing No	Dealing Status	Tenement ID	Tenement Status
Section 67			E 70/297	Dead

## SURVEY DETAILS

### Survey

Surveyed Area	Surveyed Date	Surveyor`s Name	Field Book	Instruction Date	Project
70.38500 HA	10/06/2011	RICHARDS, PI	273	08/02/2011	12638

Standard Plan

Diagram  
65960

## GENERAL DETAILS

**General**

Objection Closing Date : 22/08/1992

File Reference : 7578/92

Receipt Number : 77226

Application Fee : \$165.40

Survey Fee :

**Special Indicator**

Special Indicator	Start	End

## SHIRE DETAILS

**Shire**

Shire	Shire No	Start	End	Area
BRIDGETOWN-GREENBUSHES SHIRE	840	22/07/1992		70.38500 HA

## NATIVE TITLE DETAILS

**Native Title Referrals**

DISCLAIMER: Complete Native Title Information is not available for this Tenement/Amalgamation

Date Referred	Referral Type	Procedure	Current Status
	Tenement Application		

## GRANT DETAILS

**Recommendation**

Recommended for : Grant 25/05/1994

**Grant**

Granted : 15/06/1994	Holder Notified : 20/06/1994	Licence/Lease issued :
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**Term**

Term : 21 Years (Renewed)	From : 20/06/1994	To : 19/06/2036
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## ENDORSEMENTS/CONDITIONS DETAILS

**Endorsements and Conditions**

#	ENDORSEMENTS	Start Date	End Date
	<b>Consent to mine on State Forest No. 30 granted by the Minister for Mines subject to:</b>	20/06/1994	
1	The lessee's attention is drawn to the provisions of: <ul style="list-style-type: none"> <li>the Aboriginal Heritage Act, 1972;</li> <li>the Conservation and Land Management Act, 1984 and the Regulations thereunder;</li> <li>the Bush Fires Act, 1954-77 and Regulations thereunder; and</li> <li>Wildlife Conservation Act, 1950 as amended and the Regulations thereunder.</li> </ul>	20/06/1994	
#	CONDITIONS	Start Date	End Date
1	Survey.	20/06/1994	
2	All surface holes drilled for the purpose of exploration are to be capped, filled or otherwise made safe after completion.	20/06/1994	
3	All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the Environmental Officer, Department of Industry and Resources (DoIR).	12/08/2005	



#	CONDITIONS	Start Date	End Date
	Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the Environmental Officer, DoIR.		
	<del>All costeans and other disturbances to the surface of the land made as a result of exploration, including drill pads, grid lines and access tracks, being backfilled and rehabilitated to the satisfaction of the District Mining Engineer. Backfilling and rehabilitation being required no later than 6 months after excavation unless otherwise approved in writing by the District Mining Engineer.</del>	20/06/1994	11/08/2005
4	All waste materials, rubbish, plastic sample bags, abandoned equipment and temporary buildings being removed from the mining tenement prior to or at the termination of exploration programme.	20/06/1994	
5	Unless the written approval of the Environmental Officer, DoIR is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface clearing or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.	12/08/2005	
	<del>Unless the written approval of the District Mining Engineer is first obtained, the use of scrapers, graders, bulldozers, backhoes or other mechanised equipment for surface clearing or the excavation of costeans is prohibited. Following approval, all topsoil being removed ahead of mining operations and separately stockpiled for replacement after backfilling and/or completion of operations.</del>	20/06/1994	11/08/2005
6	No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the Director, Environment, DoIR for assessment; and until his written approval has been obtained.	12/08/2005	
	<del>No developmental or productive mining or construction activity being commenced until the tenement holder has submitted a plan of the proposed operations and measures to safeguard the environment to the State Mining Engineer for assessment; and until his written approval has been obtained.</del>	20/06/1994	11/08/2005
	<b>Consent to mine on State Forest No. 30 granted by the Minister for Mines subject to:</b>	20/06/1994	
7	The lessee giving the Executive Director, Department of Conservation and Land Management (CALM) three (3) months notice in writing of the intention to enter upon any uncleared area of State Forest for the purpose of mining or operations associated with mining. Rights to remove any marketable timber from such area in advance of mining operations being with the Executive Director.	20/06/1994	
8	The lessee paying to the Executive Director, Department of Conservation and Land Management (CALM), compensation for all areas cleared of vegetation for mining, in support of mining and degraded as a result of mining in association with this lease. Provided that the Executive Director and the lessee may agree from time to time that land shall be transferred or works undertaken by the lessee in lieu of payment under this condition. The rate of compensation being \$3,100.00 per hectare and being adjusted annually by the Executive Director. The C.P.I. for Perth providing the basis of such adjustments. The Executive Director issuing a notice for the amount of compensation due and the lessee paying the amount within 2 months of the date of such notice. A penalty of interest at the Commonwealth bond rate being charged for late payment. The Lessee providing detailed surveys of areas cleared in conjunction with annual mining proposals.	20/06/1994	
9	The lessee paying royalty at current rates to the Executive Director for any forest products obtained from State Forest and Crown Land used in connection with mining operations on the lease.	20/06/1994	
10	The lessee at his expense carrying out all necessary measures to prevent the spread of the forests disease Phytophthora Cinnamomi (or Jarrah Dieback) on the area of the lease and liaising with the District Manager CALM before commencing exploratory work outside areas being mined.	20/06/1994	
11	Lessee taking all such necessary precautions as may be indicated by the District Manager CALM to prevent the occurrence or spread of any fire within or adjacent to the leased area.	20/06/1994	
12	The lessee at his expense rehabilitating all areas affected by mining or operations associated with mining conducted during the term of the lease. Rehabilitation being to the satisfaction of the State Mining Engineer and in agreement with the Regional Manager CALM and in accordance with CALM Policy No. 10 (Rehabilitation of Disturbed Lands).	20/06/1994	
13	No developmental or productive mining being commenced until the lessee has submitted a Notice of Intent (N.O.I.) for the proposed operations, including measures to safeguard the environment and until his written approval has been obtained, subject to the agreement of the Executive Director, CALM. The approved N.O.I. (as amended) then becoming a condition of this lease and the lessee providing a bond in favour of the Minister for Mines for the sum	20/06/1994	

#	CONDITIONS	Start Date	End Date
	specified in the NOI approval for due compliance with the environmental conditions of the lease.		
14	The Lessee by September of each year consulting with the Environmental Officer (DMP) and District Manager (CALM) to review past programmes and within one (1) month of this review the lessee to prepare and submit detailed annual mining proposals and environmental management programmed to the Director, Mining Operations for assessment and written approval in concurrence with the Executive Director, CALM.	23/12/2013	
	Each year on the anniversary date of the approval of the NOI, the lessee consulting with the District Mining Engineer and District Manager to review the lessee to prepare and submit detailed annual mining proposals and management programmes for approval to the Director, Mining Operations Division in agreement with the Regional Manager, CALM.	20/06/1994	22/12/2013
15	The lessee designating to the Regional Manager, CALM a responsible officer to direct and control the rehabilitation programme.	20/06/1994	
16	Exploration programmes involving vegetation disturbance are subject to the approval of the State Mining Engineer in consultation with the District Manager, CALM.	20/06/1994	
17	Where reasonable, the lessee permitting CALM to remove for CALM requirements, sand, rock, clay, gravel and soil subject to a working agreement.	20/06/1994	
18	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2019</li> </ul>	24/03/2017	
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2016</li> </ul>	11/03/2014	23/03/2017
	A Mine Closure Plan is to be submitted in the Annual Environmental Reporting month specified in tenement conditions in the year specified below, unless otherwise directed by an Environmental Officer, DMP. The Mine Closure Plan is to be prepared in accordance with the "Guidelines for Preparing Mine Closure Plans" available on DMP's website: <ul style="list-style-type: none"> <li>2015</li> </ul>	14/06/2013	10/03/2014
19	The Lessee submitting to the Executive Director, Environment Division, DMP, a brief annual report outlining the project operations, minesite environmental management and rehabilitation work undertaken in the previous 12 months and the proposed operations, environmental management plans and rehabilitation programmes for the next 12 months. This report to be submitted each year in: <ul style="list-style-type: none"> <li>November.</li> </ul>	14/06/2013	
20	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699;</li> <li>(Reg ID 68758) "Programme of Work Application, Talison Lithium Australia Pty Limited - Dieback Hygiene Procedure Final" dated 26 June 2017 and retained on Department of Mines, Industry Regulation and Safety File No. EARS-POW-68758 as Doc ID 5160729</li> </ul>	12/02/2018	
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 60857) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2016" dated 23 February 2017 signed by Stephen Green and retained on Department of Mines and Petroleum File No. EARS-MCP-60857 as Doc Id 4833699</li> </ul>	24/03/2017	11/02/2018
	The construction and operation of the project and measures to protect the environment to be carried out in accordance with the document titled: <ul style="list-style-type: none"> <li>(Reg ID 45471) "Talison Lithium Australia Pty Ltd - Greenbushes Operations Mine Closure Plan 2013" dated 18 December 2013 signed by Pat Scallan and retained on Department of Mines and Petroleum File No. EARS-MCP-45471</li> </ul>	11/03/2014	23/03/2017

## DEALINGS DETAILS

Dealings**Mortgage 274385****Encumbrances**

Lodged 12:45 PM on 03 Sep 2007 in favour of WESTPAC BANKING CORPORATION

REJECTED 12:45 PM 03 Sep 2007

RELODGED 2:30 PM 14 Sep 2007

REGISTERED 2:30 PM 14 Sep 2007

DISCHARGED: 14:50 25 February 2010

**Extension of Time 299330**

Lodged: 16:07 08 September 2008

APPROVED: 12:40 09 September 2008

TO LODGE A STATUTORY DECLARATION IN SUPPORT OF APPLICATION FOR EXEMPTION FROM EXPENDITURE CONDITION UNTIL 26 SEPTEMBER 2008.

**Mortgage - Discharge 341667**

Lodged: 14:50 25 February 2010

In respect to: Mortgage 274385

REGISTERED: 14:50 25 February 2010

**Mortgage 341684**

Lodged: 14:50 25 February 2010

Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

Mortgagee: WESTPAC BANKING CORPORATION

REGISTERED: 14:50 25 February 2010

Full Discharge: 362313 Registered 11:13 24 December 2010

DISCHARGED: 11:13 24 December 2010

**Application to Amend 353570**

Lodged: 10:00 17 August 2010

Amending: Address

From: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, LEVEL 4, 37 ST GEORGES TERRACE, PERTH, WA, 6000 and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, C/- FREEHILLS, LEVEL 36, QV.1 BUILDING, 250 ST GEORGES TERRACE, PERTH, WA, 6000

To: Residential : TALISON LITHIUM AUSTRALIA PTY LTD, SAME AS CORRESPONDENCE and Correspondence :TALISON LITHIUM AUSTRALIA PTY LTD, LOCKED BAG 40, CLOISTERS SQUARE, PERTH, WA, 6850

RECORDED: 10:00 17 August 2010

**Mortgage 364473**

Lodged: 10:36 22 December 2010

Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

Mortgagee: COMMONWEALTH BANK OF AUSTRALIA

REGISTERED: 10:36 22 December 2010

Full Discharge: 434701 Registered 15:00 07 November 2013

DISCHARGED: 15:00 07 November 2013

**Mortgage - Discharge 362313**

Lodged: 11:13 24 December 2010

In respect to: Mortgage 341684

REGISTERED: 11:13 24 December 2010

**Caveat 400188**

Lodged: 12:10 22 June 2012

Caveat Type: Absolute Caveat

Caveator: GLOBAL ADVANCED METALS GREENBUSHES PTY LTD

Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD

RECORDED: 12:10 22 June 2012

Affected Dealing: Mortgage 472080



	14 day notice sent: 11 August 2015 Mortgage 472080 may be registered while this caveat remains in full force and effect by order of Warden A Maughan 13/08/2015.
<b>Mortgage - Discharge 434701</b>	Lodged: 15:00 07 November 2013 In respect to: Mortgage 364473 REGISTERED: 15:00 07 November 2013
<b>Extension / Renewal of Term 467481</b>	Lodged: 11:56:09 14 May 2015 Applied For Period: 21 Years RECORDED: 11:56:09 14 May 2015 GRANTED: 02 June 2015 Granted Period: 21 Years Term Renewed To: 19/06/2036
<b>Mortgage 472080</b>	Lodged: 10:15 30 July 2015 Mortgaged Shares: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD Mortgagee: THE HONG KONG AND SHANGHAI BANKING CORPORATION LIMITED REGISTERED: 10:00 13 August 2015
<b>Caveat 472096</b>	Lodged: 10:15 30 July 2015 Caveat Type: Consent Caveat Caveator: THE HONGKONG AND SHANGHAI BANKING CORPORATION LIMITED Shares Caveated: 100/100 shares TALISON LITHIUM AUSTRALIA PTY LTD RECORDED: 10:01 13 August 2015

## BOND DETAILS

Bond	Surety	Amount	Bond date	Bond status	Bond status date
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## RENT DETAILS

Rent Payments

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2018	07/06/2017	6854597934	TALISON LITHIUM TALISON LITHIUM	PE	\$1,210.55	70.38500 HA	10/06/2011	\$1,210.55	\$0.00
Payment	2017	10/06/2016		MT-210010615960-EF	OL	\$1,171.50	70.38500 HA	10/06/2011	\$1,171.50	\$0.00
Payment	2016	21/05/2015		MT-210010260478-EF	OL	\$1,143.10	70.38500 HA	10/06/2011	\$1,143.10	\$0.00
Payment	2015	06/06/2014		MT-210010183152-EF	OL	\$1,114.70	70.38500 HA	10/06/2011	\$1,114.70	\$0.00
Payment	2014	21/06/2013		06-125275	PE	\$1,093.40	70.38500 HA	10/06/2011	\$1,093.40	\$0.00
Payment	2013	19/06/2012		06-111263	PE	\$1,065.00	70.38500 HA	10/06/2011	\$1,065.00	\$0.00
Refund	2012	01/06/2012		(REFUND) 96102	PE	\$47.85	70.38500 HA	10/06/2011	\$1,132.45	\$0.00
Payment	2012	27/06/2011		96102	PE	\$1,180.30				
Refund	2011	01/06/2012		(REFUND) 79897	PE	\$612.23	70.38500 HA	10/06/2011	\$1,109.02	-\$565.37
Payment	2011	01/06/2010		79897	PE	\$1,155.88				
Payment	2010	10/07/2009		5310	MB	\$1,107.04	70.38500 HA	10/06/2011	\$1,062.16	\$44.88

Type	Year	Receipt Date	Payment No	Receipt No	MR Lodged	Amount	Rental Area	Effective Date	Amount Due	Discrepancy
Payment	2009	13/06/2008		52557	PE	\$1,074.48	70.38500 HA	10/06/2011	\$1,030.92	\$43.56
Payment	2008	27/06/2007		39054	PE	\$1,025.64	70.38500 HA	10/06/2011	\$984.06	\$41.58
Payment	2007	21/06/2006		25621	PE	\$993.08	70.38500 HA	10/06/2011	\$952.82	\$40.26
Payment	2006	14/07/2005		13200	PE	\$968.66	70.38500 HA	10/06/2011	\$929.39	\$39.27
Payment	2005	05/07/2004		105	PE	\$944.24	70.38500 HA	10/06/2011	\$905.96	\$38.28
Payment	2004	30/06/2003		61779	PE	\$911.68	70.38500 HA	10/06/2011	\$874.72	\$36.96
Payment	2003	19/06/2002		49867	PE	\$888.00	70.38500 HA	10/06/2011	\$852.00	\$36.00
Payment	2002	17/07/2001		38685	PE	\$838.42	70.38500 HA	10/06/2011	\$804.43	\$33.99
Payment	2001	12/07/2000		24840	PE	\$836.12	70.38500 HA	10/06/2011	\$802.23	\$33.89
Payment	2000	02/07/1999		12959	PE	\$762.20	70.38500 HA	10/06/2011	\$731.30	\$30.90
Payment	1999	09/07/1998		180804	PE	\$740.00	70.38500 HA	10/06/2011	\$710.00	\$30.00
Payment	1998	10/07/1997		164497	PE	\$740.00	70.38500 HA	10/06/2011	\$710.00	\$30.00
Payment	1997	17/07/1996		146441	PE	\$740.00	70.38500 HA	10/06/2011	\$710.00	\$30.00
Payment	1996	20/06/1995		127699	PE	\$688.20	70.38500 HA	10/06/2011	\$660.30	\$27.90
Payment	1995	23/07/1992		77226	PE	\$688.20	70.38500 HA	10/06/2011	\$660.30	\$27.90

## EXPENDITURE/EXEMPTION DETAILS

## Expenditure/Exemptions

Year	Minimum Expenditure	Expenditure Lodged	Total Expenditure	Exemption Amount	Exemption Lodged	Exemption Number	Exemption Status	Outcome Date
2018	\$10,000.00							
2017	\$10,000.00	17/08/2017	\$4,815.00	\$10,000.00	17/08/2017	512722	Granted	26/09/2017
2016	\$10,000.00	18/08/2016	\$2,229.00	\$10,000.00	18/08/2016	492536	Granted	30/09/2016
2015	\$10,000.00	18/08/2015	\$5,607.00	\$10,000.00	18/08/2015	472993	Granted	21/12/2015
2014	\$10,000.00	14/08/2014	\$1,961.70	\$10,000.00	14/08/2014	452935	Granted	13/05/2015
2013	\$10,000.00	13/08/2013	\$1,911.00	\$10,000.00	13/08/2013	428959	Granted	14/11/2013
2012	\$10,000.00	16/08/2012	\$2,494.00	\$10,000.00	16/08/2012	404006	Granted	17/10/2012
2011	\$10,000.00	11/08/2011	\$2,275.00	\$10,000.00	11/08/2011	379066	Granted	03/11/2011
2010	\$10,000.00	17/08/2010	\$2,209.00	\$10,000.00	17/08/2010	353546	Granted	05/10/2010
2009	\$10,000.00	14/08/2009	\$2,138.00	\$10,000.00	14/08/2009	327800	Granted	12/04/2010
2008	\$10,000.00	13/08/2008	\$2,069.00	\$10,000.00	13/08/2008	297310	Granted	12/02/2009
2007	\$10,000.00	07/08/2007	\$1,995.00	\$10,000.00	07/08/2007	272075	Granted	14/01/2008
2006	\$10,000.00	17/08/2006	\$1,142.00	\$10,000.00	17/08/2006	40H/067	Granted	09/11/2006
2005	\$10,000.00	18/08/2005	\$1,858.00	\$10,000.00	18/08/2005	58H/056	Granted	13/10/2005
2004	\$10,000.00	20/07/2004	\$2,345.00	\$10,000.00	21/07/2004	21H/045	Granted	11/11/2004
2003	\$10,000.00	21/07/2003	\$2,043.00	\$10,000.00	22/07/2003	63H/034	Granted	05/11/2003
2002	\$10,000.00	13/08/2002	\$1,317.00	\$8,683.00	13/08/2002	49H/023	Granted	07/01/2003
2001	\$10,000.00	17/08/2001	\$1,282.00	\$8,718.00	17/08/2001	43H/012	Granted	23/10/2001
2000	\$10,000.00	11/08/2000	\$1,211.00	\$8,789.00	11/08/2000	28H/001	Granted	13/11/2000
1999	\$10,000.00	13/08/1999	\$1,189.00	\$8,811.00	18/08/1999	49H/990	Granted	24/09/1999
1998	\$10,000.00	09/07/1998	\$11,555.00					
1997	\$10,000.00	14/08/1997	\$0.00	\$10,000.00	14/08/1997	50H/978	Granted	02/10/1997
1996	\$10,000.00	14/08/1996	\$207.00	\$9,793.00	14/08/1996	72H/967	Granted	27/12/1996
1995	\$10,000.00	28/07/1995	\$1,553.00	\$8,447.00	28/07/1995	54H/956	Granted	19/09/1995

## Expenditure Details

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2017	17/08/2017	\$1,750.00	\$0.00	\$0.00	\$2,437.00	\$628.00	\$0.00	\$4,815.00
2016	18/08/2016	\$0.00	\$0.00	\$0.00	\$1,939.00	\$290.00	\$0.00	\$2,229.00
2015	18/08/2015	\$3,000.00	\$0.00	\$0.00	\$1,875.00	\$732.00	\$0.00	\$5,607.00
2014	14/08/2014	\$0.00	\$0.00	\$0.00	\$1,705.70	\$256.00	\$0.00	\$1,961.70
2013	13/08/2013	\$0.00	\$0.00	\$0.00	\$1,662.00	\$249.00	\$0.00	\$1,911.00

Year	Lodged	Exploration Activities	Mining Activities	Aboriginal Survey	Rent/Rates	Admin.	Prospecting	Total Expenditure
2012	16/08/2012	\$0.00	\$0.00	\$0.00	\$1,924.00	\$570.00	\$0.00	\$2,494.00
2011	11/08/2011	\$0.00	\$0.00	\$0.00	\$1,978.00	\$297.00	\$0.00	\$2,275.00
2010	17/08/2010	\$0.00	\$0.00	\$0.00	\$1,921.00	\$288.00	\$0.00	\$2,209.00
2009	14/08/2009	\$0.00	\$0.00	\$0.00	\$1,859.00	\$279.00	\$0.00	\$2,138.00
2008	13/08/2008	\$0.00	\$0.00	\$0.00	\$1,799.00	\$270.00	\$0.00	\$2,069.00
2007	07/08/2007	\$0.00	\$0.00	\$0.00	\$1,735.00	\$260.00	\$0.00	\$1,995.00
2006	17/08/2006	\$0.00	\$0.00	\$0.00	\$993.00	\$149.00	\$0.00	\$1,142.00
2005	18/08/2005	\$0.00	\$0.00	\$0.00	\$1,616.00	\$242.00	\$0.00	\$1,858.00
2004	20/07/2004	\$425.00	\$0.00	\$0.00	\$1,560.00	\$360.00	\$0.00	\$2,345.00
2003	21/07/2003	\$0.00	\$0.00	\$0.00	\$1,515.00	\$528.00	\$0.00	\$2,043.00
2002	13/08/2002	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,317.00
2001	17/08/2001	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,282.00
2000	11/08/2000	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,211.00
1999	13/08/1999	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,189.00
1998	09/07/1998	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$11,555.00
1997	14/08/1997	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1996	14/08/1996	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$207.00
1995	28/07/1995	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,553.00

## COMBINED REPORTING DETAILS

**C Number :** 296/1994  
**Project :** Greenbushes

**Reporting Date :** 28/02  
**Affecting Period :** 01/01 - 31/12

**Active Tenements:**

M 01/2 (18/07/1994)	M 01/3 (18/07/1994)	M 01/4 (18/07/1994)
M 01/5 (18/07/1994)	M 01/6 (18/07/1994)	M 01/7 (18/07/1994)
M 01/8 (18/07/1994)	M 01/9 (18/07/1994)	M 01/10 (18/07/1994)
M 01/11 (18/07/1994)	M 01/16 (14/07/1995)	M 01/18 (14/07/1995)
M 70/765 (14/07/1995)		

End of Search



## Appendix C – Certificates of Title

WESTERN



AUSTRALIA

# RECORD OF CERTIFICATE OF TITLE UNDER THE TRANSFER OF LAND ACT 1893

REGISTER NUMBER <b>9815/DP153640</b>	
DUPLICATE EDITION <b>N/A</b>	DATE DUPLICATE ISSUED <b>N/A</b>

VOLUME  
**2050**FOLIO  
**507**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

## LAND DESCRIPTION:

LOT 9815 ON DEPOSITED PLAN 153640

## REGISTERED PROPRIETOR: (FIRST SCHEDULE)

MICHAEL JOHN VAISEY OF 26 CASILDA ROAD, DUNCRAIG  
GERRARD SCHUTS OF 9A MAST PLACE, OCEAN REEF  
AS JOINT TENANTS

(T F975237 ) REGISTERED 8/9/1995

## LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS: (SECOND SCHEDULE)

1. F975238 MORTGAGE TO WESTPAC BANKING CORPORATION REGISTERED 8/9/1995.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

## STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 2050-507 (9815/DP153640)  
PREVIOUS TITLE: 1078-69  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES

NOTE 1: A000001A LAND PARCEL IDENTIFIER OF NELSON LOCATION 9815 (OR THE PART THEREOF) ON SUPERSEDED PAPER CERTIFICATE OF TITLE CHANGED TO LOT 9815 ON DEPOSITED PLAN 153640 ON 23-SEP-02 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.  
NOTE 2: THE ABOVE NOTE MAY NOT BE SHOWN ON THE SUPERSEDED PAPER CERTIFICATE OF TITLE OR ON THE CURRENT EDITION OF DUPLICATE CERTIFICATE OF TITLE.

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>13524/DP220028</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>3</b>	<b>15/8/2017</b>

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 2217 FOLIO 995

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13524 ON DEPOSITED PLAN 220028

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

NOEL FRANCIS SMITH  
JOZEFA SMITH  
BOTH OF 1791 MANDURAH ROAD, KARNUP  
AS JOINT TENANTS

(T M418861 ) REGISTERED 2/10/2013

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. N691925 MORTGAGE TO BROOKSBURY PTY LTD REGISTERED 9/8/2017.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP220028  
PREVIOUS TITLE: LR3111-619  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES



WESTERN



AUSTRALIA

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

REGISTER NUMBER	
<b>13525/DP220028</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>1</b>	<b>7/4/2005</b>

VOLUME 2217 FOLIO 996

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13525 ON DEPOSITED PLAN 220028

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

BRYAN JAMES PERRIN  
FIONA ELIZABETH LINDSAY  
BOTH OF PO BOX 97, GREENBUSHES  
AS JOINT TENANTS

(T J216423 ) REGISTERED 16/3/2005

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP220028  
PREVIOUS TITLE: LR3111-620  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>377/DP254574</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE  
UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
NO DUPLICATE CREATED**

VOLUME **LR3003** FOLIO **197**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 377 ON DEPOSITED PLAN 254574

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)****STATUS ORDER/INTEREST:** RESERVE UNDER MANAGEMENT ORDER**PRIMARY INTEREST HOLDER:** SHIRE OF BRIDGETOWN-GREENBUSHES**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. PART CLASS A RESERVE 2687 FOR THE PURPOSE OF RECREATION  
MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP254574  
PREVIOUS TITLE: LR3003-197  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

NOTE 1: K739236 CORRESPONDENCE FILE 03770-1894-01RO

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>10155/DP153709</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

## RECORD OF QUALIFIED CERTIFICATE

VOLUME  
**LR3003**FOLIO  
**810**

OF  
**CROWN LAND TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 10155 ON DEPOSITED PLAN 153709

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE)**STATUS ORDER/INTEREST:** VESTED UNDER STATUTE

**PRIMARY INTEREST HOLDER:** CONSERVATION COMMISSION OF WESTERN AUSTRALIA OF CARE OF  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LOCKED BAG 104,  
BENTLEY DELIVERY CENTRE

(XE K749275 ) REGISTERED 22/10/2008

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. STATE FOREST NO. 20
2. K749275 VESTED. PURSUANT TO SECTION 7(1) OF THE CONSERVATION AND LAND MANAGEMENT ACT 1984 REGISTERED 22/10/2008.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP153709  
PREVIOUS TITLE: LR3003-810  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES

END OF PAGE 1 - CONTINUED OVER



ORIGINAL CERTIFICATE OF CROWN LAND TITLE  
QUALIFIED

REGISTER NUMBER: 10155/DPI53709

VOLUME/FOLIO: LR3003-810

PAGE 2

RESPONSIBLE AGENCY:

DEPARTMENT OF BIODIVERSITY, CONSERVATION AND  
ATTRACTIONS (SCLM)

WESTERN



AUSTRALIA

REGISTER NUMBER <b>500/DP76411</b>	
DUPLICATE EDITION <b>N/A</b>	DATE DUPLICATE ISSUED <b>N/A</b>

VOLUME  
**LR3024**FOLIO  
**650**

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE**  
 UNDER THE TRANSFER OF LAND ACT 1893  
 AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 500 ON DEPOSITED PLAN 76411

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
 (FIRST SCHEDULE)

**STATUS ORDER/INTEREST:** RESERVE UNDER MANAGEMENT ORDER

**PRIMARY INTEREST HOLDER:** SHIRE OF BRIDGETOWN-GREENBUSHES OF PO BOX 271, BRIDGETOWN  
 (XE M597867 ) REGISTERED 3/4/2014

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
 (SECOND SCHEDULE)

1. M597866 RESERVE 8361 FOR THE PURPOSE OF RECREATION REGISTERED 3/4/2014.  
 M597867 MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED. WITH POWER TO LEASE FOR ANY TERM NOT EXCEEDING 21 YEARS, SUBJECT TO THE CONSENT OF THE MINISTER FOR LANDS. REGISTERED 3/4/2014.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
 Lot as described in the land description may be a lot or location.  
 (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
 (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	DP76411
PREVIOUS TITLE:	LR3024-650
PROPERTY STREET ADDRESS:	72 GREENBUSHES-BOYUP BROOK RD, NORTH GREENBUSHES.
LOCAL GOVERNMENT AUTHORITY:	SHIRE OF BRIDGETOWN-GREENBUSHES
RESPONSIBLE AGENCY:	DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE  
QUALIFIED

REGISTER NUMBER: 500/DP76411

VOLUME/FOLIO: LR3024-650

PAGE 2

NOTE 1: M597866 CORRESPONDENCE FILE 08464-1902-01RO



WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>1002/DP103428</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE

VOLUME  
**LR3026**

FOLIO  
**1**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 1002 ON DEPOSITED PLAN 103428

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE)**STATUS ORDER/INTEREST:** VESTED UNDER STATUTE

**PRIMARY INTEREST HOLDER:** CONSERVATION COMMISSION OF WESTERN AUSTRALIA OF CARE OF  
DEPARTMENT OF PARKS AND WILDLIFE, LOCKED BAG 104, BENTLEY  
DELIVERY CENTRE

(XE N190184 ) REGISTERED 1/12/2015

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. TITLE EXCLUDES THE LAND SHOWN ON DEPOSITED PLANS 76411, 105745, 153458, 153640 & 210331.
2. STATE FOREST NO.20
3. N190184 VESTED. PURSUANT TO SECTION 7(1) OF THE CONSERVATION AND LAND MANAGEMENT ACT 1984. REGISTERED 1/12/2015.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP103428  
PREVIOUS TITLE: LR3026-1  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE  
QUALIFIED

REGISTER NUMBER: 1002/DP103428

VOLUME/FOLIO: LR3026-1

PAGE 2

LOCAL GOVERNMENT AUTHORITY:  
RESPONSIBLE AGENCY:

SHIRE OF BRIDGETOWN-GREENBUSHES  
DEPARTMENT OF BIODIVERSITY, CONSERVATION AND  
ATTRACTIONS (SCLM)

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>161/DP28825</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE  
UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
NO DUPLICATE CREATED**

VOLUME **LR3125** FOLIO **35**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 161 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)****STATUS ORDER/INTEREST:** ROAD**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. J538218 DEDICATED ROAD REGISTERED 6/12/2005.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP28825  
PREVIOUS TITLE: LR3125-35  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (ROAD)

NOTE 1: J538216 CORRESPONDENCE FILE 02659-1996-01RO



WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>163/DP28825</b>	
DUPLICATE EDITION <b>N/A</b>	DATE DUPLICATE ISSUED <b>N/A</b>

RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE

VOLUME  
**LR3125**

FOLIO  
**37**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 163 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE)**STATUS ORDER/INTEREST:** UNALLOCATED CROWN LAND**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

- Warning:
- (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
  - (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
  - (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP28825  
PREVIOUS TITLE: LR3136-496  
PROPERTY STREET ADDRESS: 1 WILLIAMS ST, NORTH GREENBUSHES.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

NOTE 1: J599820 CORRESPONDENCE FILE 02659-1996-01RO

WESTERN



AUSTRALIA

REGISTER NUMBER <b>165/DP28825</b>	
DUPLICATE EDITION <b>N/A</b>	DATE DUPLICATE ISSUED <b>N/A</b>

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE**

VOLUME **LR3125** FOLIO **39**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 165 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)**

**STATUS ORDER/INTEREST:** UNALLOCATED CROWN LAND**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

- Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP28825  
PREVIOUS TITLE: LR3136-498  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

NOTE 1: J599822 CORRESPONDENCE FILE 02659-1996-01RO

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>13734/DP28825</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE  
UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
NO DUPLICATE CREATED**

VOLUME **LR3125** FOLIO **41**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13734 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)****STATUS ORDER/INTEREST:** ROAD**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. J538218 DEDICATED ROAD REGISTERED 6/12/2005.

- Warning:
- (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
  - (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
  - (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP28825  
PREVIOUS TITLE: LR3125-41  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (ROAD)

NOTE 1: J599824 CORRESPONDENCE FILE 02659-1996-01RO



WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>13735/DP28825</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE

VOLUME  
**LR3125**

FOLIO  
**42**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13735 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE)**STATUS ORDER/INTEREST:** UNALLOCATED CROWN LAND**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

- Warning:
- (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
  - (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
  - (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP28825  
PREVIOUS TITLE: LR3125-42  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

NOTE 1: J599825 CORRESPONDENCE FILE 02659-1996-01RO

WESTERN



AUSTRALIA

RECORD OF CERTIFICATE  
OF  
CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

REGISTER NUMBER

**13746/DP253074**DUPLICATE  
EDITION  
**N/A**

DATE DUPLICATE ISSUED

**N/A**VOLUME  
**LR3125**FOLIO  
**75**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13746 ON DEPOSITED PLAN 253074

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)****STATUS ORDER/INTEREST:** STATE FOREST**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. STATE FOREST NO. 20

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: LR3125-75 (13746/DP253074)  
PREVIOUS TITLE: 1273-516  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF BIODIVERSITY, CONSERVATION AND  
ATTRactions (SCLM)

NOTE 1: A000001A CORRESPONDENCE FILE 04085-1926-01RO.  
NOTE 2: LAND PARCEL IDENTIFIER OF NELSON LOCATION 13746 ON SUPERSEDED PAPER  
CERTIFICATE OF CROWN LAND TITLE CHANGED TO LOT 13746 ON DEPOSITED PLAN  
253074 ON 11-SEP-02 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE

REGISTER NUMBER: 13746/DP253074

VOLUME/FOLIO: LR3125-75

PAGE 2

NOTE 3:

THE ABOVE NOTE MAY NOT BE SHOWN ON THE SUPERSEDED PAPER CERTIFICATE  
OF TITLE.



WESTERN



AUSTRALIA

RECORD OF CERTIFICATE  
OF  
CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

REGISTER NUMBER

**13747/DP253074**DUPLICATE  
EDITION  
**N/A**

DATE DUPLICATE ISSUED

**N/A**VOLUME  
**LR3125**FOLIO  
**76**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13747 ON DEPOSITED PLAN 253074

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)****STATUS ORDER/INTEREST:** STATE FOREST**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. STATE FOREST NO. 20

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

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SKETCH OF LAND: LR3125-76 (13747/DP253074)  
PREVIOUS TITLE: 1273-517  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF BIODIVERSITY, CONSERVATION AND  
ATTRACTIONS (SCLM)

NOTE 1: A000001A CORRESPONDENCE FILE 04085-1926-01RO.  
NOTE 2: LAND PARCEL IDENTIFIER OF NELSON LOCATION 13747 ON SUPERSEDED PAPER  
CERTIFICATE OF CROWN LAND TITLE CHANGED TO LOT 13747 ON DEPOSITED PLAN  
253074 ON 11-SEP-02 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE

REGISTER NUMBER: 13747/DP253074

VOLUME/FOLIO: LR3125-76

PAGE 2

NOTE 3:

THE ABOVE NOTE MAY NOT BE SHOWN ON THE SUPERSEDED PAPER CERTIFICATE  
OF TITLE.

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>13786/DP28825</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE  
UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
NO DUPLICATE CREATED**

VOLUME **LR3127** FOLIO **603**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 13786 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)****STATUS ORDER/INTEREST:** ROAD**PRIMARY INTEREST HOLDER:** STATE OF WESTERN AUSTRALIA**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. J538218 DEDICATED ROAD REGISTERED 6/12/2005.

- Warning:
- (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
  - (2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
  - (3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

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SKETCH OF LAND: DP28825  
PREVIOUS TITLE: LR3127-603  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (ROAD)

NOTE 1: J599826 CORRESPONDENCE FILE 02659-1996-01RO



WESTERN



AUSTRALIA

REGISTER NUMBER <b>11339/DP144249</b>	
DUPLICATE EDITION <b>N/A</b>	DATE DUPLICATE ISSUED <b>N/A</b>

**RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE  
UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
NO DUPLICATE CREATED**

VOLUME **LR3148** FOLIO **894**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 11339 ON DEPOSITED PLAN 144249

**STATUS ORDER AND PRIMARY INTEREST HOLDER:  
(FIRST SCHEDULE)**

**STATUS ORDER/INTEREST:** RESERVE UNDER MANAGEMENT ORDER**PRIMARY INTEREST HOLDER:** SHIRE OF BRIDGETOWN GREENBUSHES

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:  
(SECOND SCHEDULE)**

1. CLASS A RESERVE 22315 FOR THE PURPOSE OF RECREATION SWIMMING POOL  
MANAGEMENT ORDER. CONTAINS CONDITIONS TO BE OBSERVED.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
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(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP144249  
PREVIOUS TITLE: LR3148-894  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES  
RESPONSIBLE AGENCY: DEPARTMENT OF PLANNING, LANDS AND HERITAGE (SLSD)

NOTE 1: K396013 CORRESPONDENCE FILE 02888-1931-01RO

O.G. 25/11/43  
R.

Sch. 5.  
50 V. 14.  
623/8  
8941/2  
ORIG. CROWN GRANT.  
9107/40



WESTERN AUSTRALIA.

REGISTER BOOK.  
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(S)

CULLED

Certificate of Title under "The Transfer of Land Act, 1893."

William Forward of Northam farmer

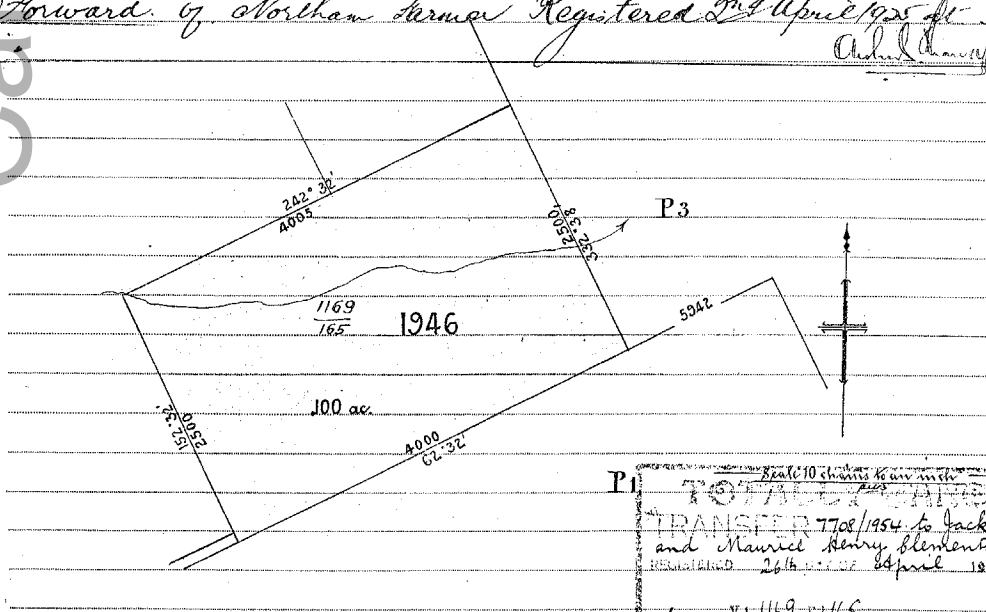


As now the sole proprietor

of an estate in fee simple in possession subject to the easements and encumbrances notified hereunder in  
ALL that piece of land delineated and coloured green on the map hereon  
containing one hundred acres

or thereabouts being Avon Location 1946 bounded by lines starting  
from an angle in the south west boundary of Avon Location P3  
said angle being situate on the north west boundary of Avon Location P1  
and distant fifty nine chains forty two links in direction 242 degrees  
32 minutes from its North corner and extending 332 degrees 38 minutes  
twenty five chains along part of <sup>aforsaid</sup> South West boundary of Location P3  
thence 242 degrees 32 minutes forty chains five links, thence 152 degrees  
32 minutes twenty five chains, and thence 62 degrees 32 minutes forty  
chains along part of the aforesaid North West boundary of Location P1 to the  
starting point All bearings being true or thereabouts the measurements  
were or less, and a post placed at each corner of the Location.

Transfer 2469/1928. Transferred by endorsement to Herbert Roy  
Forward of Northam Farmer Registered 2nd April 1928 at 30/-  
Arthur Murray  
ACTING REGISTRAR OF TITLES.



Scale 10 chains to an inch  
**TOTAL CULLED.**  
TRANSFER 7708/1954 to Jack Perival Clements  
and Maurice Henry Clements  
REGISTERED 26th April 1954 AT 9.40 a.m.  
W. 1169 13/165  
G. B. Buchanan  
Registrar of Titles.

Dated the twenty second day of November One thousand eight hundred  
and ninety three

Reginald Stuart  
Registrar of Titles.

EASEMENTS AND ENCUMBRANCES REFERRED TO.

*Cancellation of Encumbrance with Mortgage stamped together f 9-5- Instrument previously stamped 1/5/1940 at 25/00*

*Caveat 254/1950 Lodged 3/5/1950 at 9/00*

ASSISTANT REGISTRAR OF TITLES  
*P. Johnson*

DISCHARGE	1033/1951 of mortgage 1212/1940.
Discharged	15/11/1951
At	11
<i>G. B. Lott</i>	
REGISTRAR OF TITLES	

Re transfer 7700/1954 FOURTEEN DAYS NOTICE SENT.  
on caveat 254/1950 on 22/4/1954 until 12/5/1954  
*G. B. Lott*  
ASSISTANT REGISTRAR OF TITLES

Cancelled

vol 56 fol 14





12387

0.5

Sch. 5.  
50 V. 18  
ORIG. CROWN GRANT.Gr. Consent. 1/11/92  
Cor 18/10/92

WESTERN AUSTRALIA.

REGISTER BOOK.

Vol. LVI.  
56

Fol. 145

CT 0056 0145 F

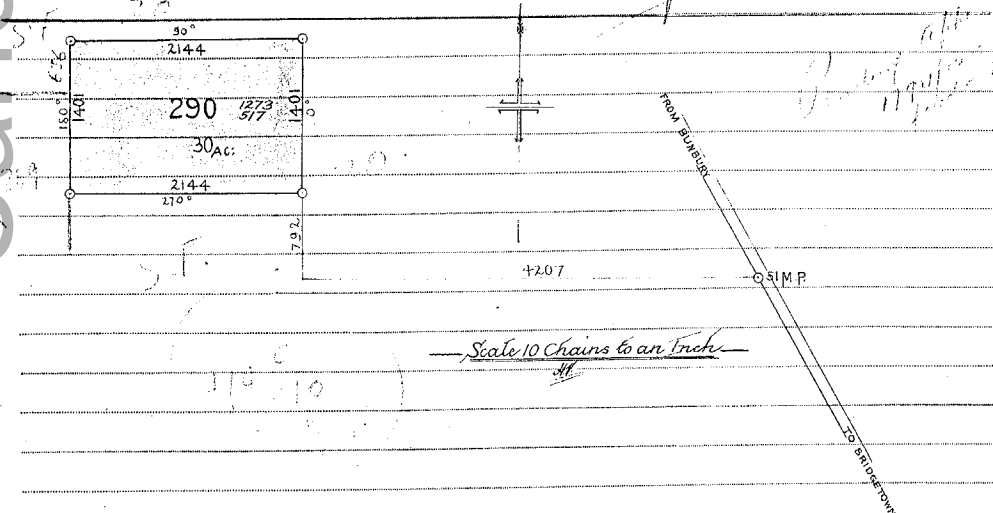


CULLED

## Certificate of Title under "The Transfer of Land Act, 1893."

Matthew Gibney of Perth Roman Catholic Bishop.is now the Solo proprietorof an estate in fee simple in possession subject to the easements and encumbrances notified hereunder in  
ALL that piece of land delineated and coloured Green on the map hereoncontaining Thirty Acresor thereabouts being Nelson Location 290. Bounded on the East and South by linesextending North fourteen chains one link and West twenty one chains forty four  
links from a point situate forty two chains seven links West and seven chains ninety  
two links North from the 51 mile post on the road from Banturuf to Bungeena and  
by Opposite Boundaries parallel and equal. All bearings being true or thereabouts, the  
measurements more or less and a post placed at each corner of the Location.Transfer 7282/65. Totally transferred by endorsement  
to the Greenbushes Tin Mining and Water Supply  
Company Limited of St Georges Terrace Perth Registered  
2.45.06 11<sup>th</sup> December 1905 ajg/grade

ASSISTANT REGISTRAR OF TITLES

Transfer 3995/1905. Totally transferred by endorsement to Greenbushes  
Development Company Limited of St Georges Terrace Perth.  
Registered 11<sup>th</sup> September 1905 at 12.20.00 pm. ajg/grade

ASSISTANT REGISTRAR OF TITLES

Dated the Thirtieth day of April One thousand eight hundredand ninety fourajg/grade  
Registrar of Titles.Application 25485/163. By an Order of the Supreme Court of Western Australia made 26<sup>th</sup> March 1963 pursuant  
to the provisions of Section 182 of the Transfer of Land Act 1893 as amended the estate and interest of  
the registered proprietor is vested in Rose Lindsay of Greenbushes widow and a new Certificate of Title  
issued. 8<sup>th</sup> May 1965 ajg/grade  
CT 1233-517 Sub 1/7 of vol. 1233

EASEMENTS AND ENCUMBRANCES REFERRED TO.

~~WITHDRAWN~~

1434/03 lodged. 13. 5. 03. *Alphide* ASSISTANT REGISTRAR OF TITLES.

Merged or  $\frac{7282}{05}$  1903. Declaration of Trust. Registered No. 15. 2352. *Alphide* ASSISTANT REGISTRAR OF TITLES.

Withdrawal. 162/03 of easement. 1434/03 lodged. 19. 9. 03. *Alphide* ASSISTANT REGISTRAR OF TITLES.

Cancelled

CT 0056 0145 B



vol 56 vol 145.

12367

O. G.

C. 1070  
947809  
08Sch. 6.  
66 V. 11.  
ORIG. CROWN GRANT.for consent to MfA.  
for 78/08

CANCELLED



WESTERN AUSTRALIA.

REGISTER BOOK.

Vol. LVI.  
56

Fol. 147

CT 0056 0147 F



CULLED

## Certificate of Title under "The Transfer of Land Act, 1893."

Matthew Gibney of Perth Roman Catholic Bishop

is now the sole proprietor.

of an estate in fee simple in possession subject to the easements and encumbrances notified hereunder in

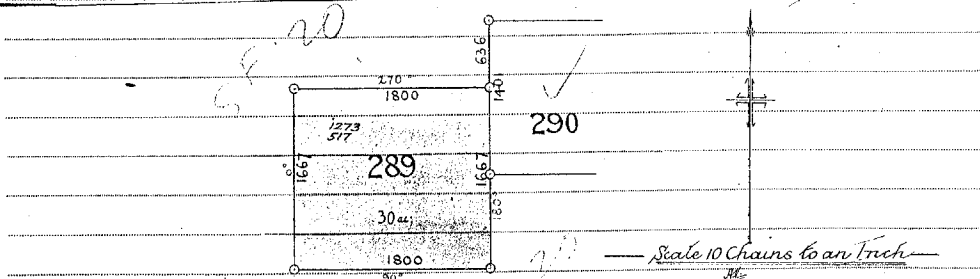
ALL that piece of land delineated and coloured Green on the map hereoncontaining Thirty Acres

or thereabouts being Nelson Location 289. Bounded on the East and North by lines starting from a spot on the West boundary of Nelson Location 290 situate five chains thirty six links South from its North West corner and extending South fifteen chains sixty seven links passing through the South West corner of Location 290 aforesaid and West eighteen chains and by opposite boundaries parallel and equal. All bearings being true or thereabouts the measurements nine or less and a post placed at each corner of the Location.

Transfer 728305 Totally transferred by endorsement to the Greenbushes Fur Mining and Water Supply

Company Limited of St Georges Terrace, Perth  
Registered 2.45 to 11. December 1905 Alfred

ASSISTANT REGISTRAR OF TITLES



Transfer 3995 Totally transferred by endorsement to Greenbushes  
Development Company Limited of St Georges Terrace, Perth, Registered  
11th September 1908 at 12.30 o'clock Alfred

ASSISTANT REGISTRAR OF TITLES

Dated the Twentieth day of April One thousand eight hundredand ninety four

Registrar of Titles.

Application 2548312. By an Order of the Supreme Court of Western Australia made 26th March 1903 pursuant to the provisions of Section 182 of the Transfer of Land Act 1893 as amended the estate and interest of the registered proprietor is vested in Rose Lindsay of Greenbushes Western and a new Certificate of Title issued.

L. J. Symes, ASSISTANT REGISTRAR OF TITLES

8th May 1903

C/S 1272-516 did not follow



EASEMENTS AND ENCUMBRANCES REFERRED TO.

*Cancelled*  
*WITHDRAWN*  
Merged on 12/05/03. Declaration of Trust. Registered 14/15/03. 23rd July 1903. *Alfred* ASSISTANT REGISTRAR OF TITLES.  
Mikharawal. 162/03 present. 11/3/03 lodged. 19. 9. 03. *Alfred* ASSISTANT REGISTRAR OF TITLES.

Cancelled

CT 0056 0147 B



Vol 56 p 147

3454/53 9914 11557/42  
INDEXED. S. 287D. 18936/46  
LANDS.

WESTERN



AUSTRALIA.

INDEXED.

REGISTER BOOK.

Land 11/40 Vol. 1078 Fol. 69  
Permit 11/40  
Lease 54333-11/40  
Name 11/40 C.L. No.

George the Sixth, by the Grace of God, of Great Britain, Ireland, and the British Dominions beyond the Seas, King, Defender of the Faith, Emperor of India. To all to whom these Presents shall come, Greeting: Know Ye that We, of Our especial Grace, certain knowledge, and more motion, have given and granted, and We do by these Presents, for Us, Our heirs and successors, in consideration of the payment of the sum of One Pound and the fulfilment of the prescribed conditions to the satisfaction of Our Governor of Our State of Western Australia, Give and Grant unto

Wellington Nelson Selfe of Greenbushes in Our said State, Seaboard.

CANCELLED

(hereinafter called the Grantee), the natural surface and so much of the land as is below the natural surface to a depth of forty feet of ALL THAT Tract or Parcel of Land situate and being in the District of Nelson, in Our said State, containing 106 acres 3 roods 36 perches more or less, and marked and distinguished in the Maps and Books of the Department of Lands and Surveys of Our said State as Nelson Section 9815 and as the same is delineated and coloured green in the plan drawn hereon; together with all Profits, Commodities, Hereditaments, and Appurtenances whatsoever thereto belonging, or in anywise appertaining: To HAVE AND TO HOLD the said Tract or Parcel of Land to the depth aforesaid, and all and singular the Premises hereby granted, with their appurtenances, unto the said Grantee, in fee simple; YIELDING AND PAYING for the same to Us, Our heirs and successors, one peppercorn of yearly rent on the twenty-fifth day of March in each year, or so soon thereafter as the same shall be lawfully demanded: PROVIDED, nevertheless, that it shall at all times be lawful for Us, Our heirs and successors, or for any person or persons acting in that behalf by Our or their authority, to resume and enter upon possession of any part of the said land which it may at any time by Us, Our heirs and successors, be deemed necessary to resume for roads, tramways, railways, railway stations, bridges, canals, towing paths, harbour or river improvement works, drainage, or irrigation works, or quarries, and generally for any other works or purposes of public use, utility, or convenience, and for the purpose of exercising the power to search for minerals hereinafter reserved, and such Lands so resumed to hold to Us, Our heirs and successors, as of Our or their former estate without making to the said Grantee, or any person claiming under him, any compensation in respect thereof, otherwise than is provided by section 4 of the Land Act Amendment Act, 1920, so nevertheless, that the land so to be resumed shall not exceed one-twentieth part in the whole of the lands aforesaid, and that no such resumption be made of the part of any lands upon which any buildings may have been erected, or which may be in use as gardens, or otherwise, for the more convenient occupation of any such buildings, without compensation: AND, PROVIDED ALSO, that it shall be lawful at all times for Us, Our heirs and successors, or for any person or persons acting in that behalf, by Our or their authority, to cut and take away any such indigenous timber, and to search and dig for and carry away any stones or other materials which may be required for making or keeping in repair any roads, tramways, railways, railway stations, bridges, canals, towing-paths, harbour works, bivalve works, river improvements, drainage or irrigation works, and generally for any other works or purposes of public use, utility, or convenience, without making to the said Grantee, or any person claiming under him, any compensation in respect thereof; and We do hereby save and reserve to Us, Our heirs and successors, all Mines of Gold, Silver, Copper, Tin, or other Metals, Ores, and Minerals, or other substances containing Minerals, and all Coals or Precious Stones and Coal or Mineral Oil and all Phosphoric Substances in and under the said lands, with full liberty at all times to search and dig for and carry away the same; and all marketable timber on the said lands, with full liberty to Us, Our heirs and successors, of bona fide clearing for cultivation and use any of such timber felled for his own reasonable requirements in connection with farming operations on the said lands, with full liberty to Us, Our heirs and successors, and persons authorised by Us or by any person or corporation in whom the control of forests is for the time being vested to enter, fell, and remove the same, and for that purpose or for the purpose of extracting timber from any other land in the locality, full liberty for Us and any of the persons aforesaid to pass and ropan over the said lands with or without workmen, machinery, horses or cattle, and to take water from any spring, stream, well or water hole, and to lay down and construct pipe lines for conveying such water, and to make roads and ways, and for that purpose or for the purpose of extracting timber from any other land in the locality, to no other direct and satisfactory route being available through Crown lands reserves or State forests, without making to the Grantee, or any person claiming under him, any compensation in respect of any of the matters aforesaid: Provided that We, Our heirs and successors will make good the actual amount of any structural damage done to any buildings, erections or fences in the exercise of such rights, and where a fence forming part of a cattle or sheep-proof enclosure is opened, provide and maintain cattle pits and other efficient means to prevent the escape therefrom of sheep and cattle.

IN WITNESS whereof We have caused Our trusty and well-beloved THE HONOURABLE SIR JAMES MITCHELL, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Lieutenant-Governor in and over the State of Western Australia and its Dependencies, in the Commonwealth of Australia, to affix to these Presents the Public Seal of the said State.

Scaled this 6th day of June One thousand nine hundred and forty-two

Grant under the Land Act, 1898, and Amendments.

ENTERED ON RECORD this

CT 1078 0069 F

9th day of June 1912  
H. Gallagher  
for Minister for Lands.

J. D. L. L. L.  
Minister for Lands.

Certificate of Title under the Transfer of Land Act, 1893.

This above-named Grantee is now the registered proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in all the land described in this grant.

Dated the 6th day of June One thousand nine hundred and forty-two

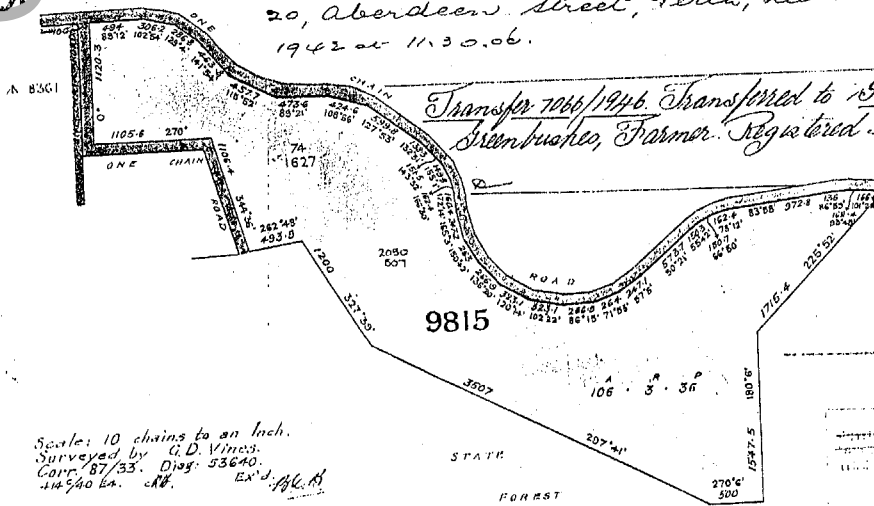
R. C. L. L.  
ASST. REGISTRAR OF TITLES.

The bearings on the Plan below are true or thereabouts, the measurements more or less, and a post has been placed at each corner of the land

PLAN HEREIN REFERRED TO:

Transfer 5482/1942. Transferred to Leslie Rance Selfe of 20, Aberdeen Street, Perth, Seaboard. Registered 8th December 1942 at 11.30.06.

Transfer 1066/1946. Transferred to Gio Battista De Guglielmi of Greenbushes, Farmer. Registered 30th May 1946 at 10.30.06.



Scale: 10 chains to an inch.  
Surveyed by G. D. Vines.  
Corr. 87/33. Dist. 53640.  
14540 EA. AB.

W. H. L. L.  
Surveyor General

Application F975236 The registered proprietor is Kevin Ernest Baruffi of 40 Holmes Street, Shelley, as Executor of the Will of Giovanni Battista De Guglielmi known as Gio Battista De Guglielmi who died on 21-8-1994. (Probate granted 6-12-1994).

8th September 1995

F 975237  
To Vol. 1050 507  
8-9-95 at 9:11 hrs.

NATIONALITY DECLARATION FILED.

For encumbrances and other matters affecting the land see back.

EASEMENTS AND ENCUMBRANCES REFERRED TO.

Cancelled

CT 1078 0069 B



CROWN GRANT.

Vol..... Fol.....



31977/23 Application 25485/63 (61562)  
Volume 56 Folio 147



ORIGINAL  
REGISTER BOOK

INDEXED

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WESTERN AUSTRALIA.

# Certificate of Title

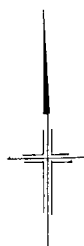
CT 1273 0516 F



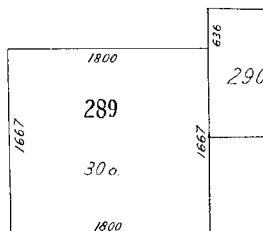
CANCELLED

under "The Transfer of Land Act, 1893" (56 Vic., 14. Sch. 5).

Rose Lindsay of Greenbushes, Widow, is now the proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in all that piece of land delineated and coloured green on the map hereon containing thirty acres or thereabouts, being Nelson Location 289.



SF 20



CANCELLED

Scale: 10 chains to an inch.

Dated the eighth day of May One thousand nine hundred and sixty-three.

*L. F. Hynes*  
Asst. Registrar of Titles.

*Transfer 366/64 to Huntley Edward Lindsay of 5 Goldsmith Road Claremont, Company Director. Registered 22nd January 1964 at 9.35 am*

*A. Blackmore*  
ASSISTANT REGISTRAR OF TITLES

*Transfer 68676/64 to Greenbushes Tim N.L. of 49 William Street, Perth. Registered 13th October 1964 at 11.33 a.m.*

*L. F. Hynes*  
ASSISTANT REGISTRAR OF TITLES

Transfer H894030 to State of Western Australia. Registered 10th October 2001 at 15.13 hrs.



TRANSFER  
REVESTMENT ORDER H894028  
REVESTED AND TOTALLY CANCELLED  
NOW: NELSON LOCATION 13746  
To VOL. 3125 FOL. 75  
REMOVED FROM THE OPERATION OF THE  
TRANSFER OF LAND ACT

CANCELLED

For encumbrances and other matters affecting the land see back.

66191/112/62-48,500-111C

EASEMENTS AND ENCUMBRANCES REFERRED TO

**DISCHARGED**  
Collateral Debenture stamped £100-0-0.  
Mortgage 39261/65. Greenbushes Twp N.L. to The National Bank of Australasia  
Lim. Registered 31<sup>st</sup> May 1965 at 9.19 o/c.

*Ol Brindal*  
 Asst. Registrar of Titles.

**DISCHARGED**  
Collateral to Debenture stamped to secure £115,000.  
Mortgage 39262/65. Greenbushes Twp N.L. to THE COMMISSIONERS OF THE RURAL AND  
INDUSTRIES BANK OF WESTERN AUSTRALIA  
June 1965 at 9.10 o/c.

Registered 4<sup>th</sup>

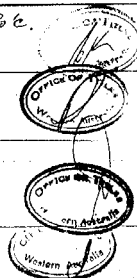
*Ol Brindal*  
 Asst. Registrar of Titles.

Discharge A327271 of Mortgage 39262/65. Registered 18<sup>th</sup> September 1970 at 11.39 o/c.

Discharge A379315 of Mortgage 39261/65. Registered 10<sup>th</sup> March 1971 at 9.58 o/c.

**DISCHARGED**  
Mortgage A652649 to Bank of New South Wales. Registered 12<sup>th</sup> April 1973 at 9.57 o/c.

Discharge C329826 of Mortgage A652649. Registered 29<sup>th</sup> March 1982 at 9.06 o/c.



Cancelled

CT 1273 0516 B



CERTIFICATE OF TITLE

Vol. 1273 Fol. N<sup>o</sup> 516

31977/63 Application 25485/63 (61562)  
Volume 56 Folio 145



WESTERN AUSTRALIA.

REGISTER BOOK

Vol. 1273 Fol. No 517

# Certificate of Title

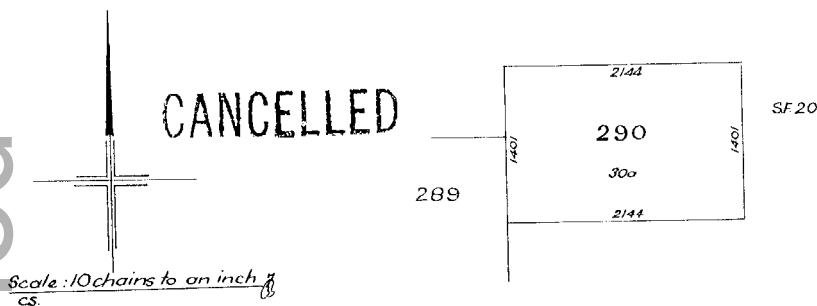
CT 1273 0517 F



CANCELLED

under "The Transfer of Land Act, 1893" (56 Vic. 14, Sch. 5).

Rose Lindsay of Greenbushes, Widow, is now the proprietor of an estate in fee simple subject to the easements and encumbrances notified hereunder in all that piece of land delineated and coloured green on the map hereon containing thirty acres or thereabouts, being Nelson Location 290.



Scale: 10 chains to an inch  
CS

Dated the eighth day of May One thousand nine hundred and sixty-three.

*L. F. Hynes*  
Asst. Registrar of Titles.

*Transfer 3660/64 to Huntley Edward Lindsay, of 5 Goldsmith Road Claremont, Company Director. Registered 22nd January 1964 at 9:35:15*

*A. Blackmore*  
ASSISTANT REGISTRAR OF TITLES

*Transfer 68676/64 to Greenbushes Tim W. L. of 49 William Street, Perth. Registered 13th October 1964 at 11:33:00.*

*L. F. Hynes*  
ASSISTANT REGISTRAR OF TITLES

Transfer 1894030 to State of Western Australia. Registered 10th October 2001 at 15:13 hrs.



TRANSFER  
REVESTMENT ORDER 1894028  
REVESTED AND TOTALLY CANCELLED  
NOW: NELSON LOCATION 13747  
TO VOL. 3125 FOL. 76  
REMOVED FROM THE OPERATION OF THE  
TRANSFER OF LAND ACT

CANCELLED

For encumbrances and other matters affecting the land see back.

66191/12/62-48,500-111C



EASEMENTS AND ENCUMBRANCES REFERRED TO

*collateral to Debenture stamped £100-0-0.*  
*Mortgage 39261/65. Greenbushes Tin N.L. to The National Bank of Australasia*  
*Limited. Registered 31<sup>st</sup> May 1965 at 9.19 o/c.*

**DISCHARGED**

*On Brindal*  
 Asst. Registrar of Titles.

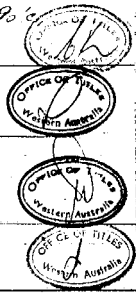
*collateral to Debenture stamped to secure £175,000.*  
*Mortgage 39262/65. Greenbushes Tin N.L. to THE COMMISSIONERS OF THE LAND AND*  
*June 1965 at 9.10 o/c. INDUSTRIES BANK OF WESTERN AUSTRALIA*

**DISCHARGED**

*Registered 4<sup>th</sup>*  
*On Brindal*  
 Asst. Registrar of Titles.

*Discharge A327271 of Mortgage 39262/65. Registered 18<sup>th</sup> September 1970 at 11.38 o/c.*

*Discharge A379315 of Mortgage 39261/65. Registered 10<sup>th</sup> March 1971 at 9.58 o/c.*



*Mortgage A652649* **DISCHARGED** *South Wales. Registered 12<sup>th</sup> April 1973 at 9.57 o/c.*

*Discharge G329826 of Mortgage A6526119. Registered 29<sup>th</sup> March 1982 at 9.06 o/c.*

Cancelled

CT 1273 0517 B



CERTIFICATE OF TITLE

Vol. 1273 Fol. N° 517

WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>10154/DP153708</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE

VOLUME  
**LR3003**

FOLIO  
**809**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 10154 ON DEPOSITED PLAN 153708

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE)**STATUS ORDER/INTEREST:** VESTED UNDER STATUTE

**PRIMARY INTEREST HOLDER:** CONSERVATION COMMISSION OF WESTERN AUSTRALIA OF CARE OF  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LOCKED BAG 104,  
BENTLEY DELIVERY CENTRE

(XE K749275 ) REGISTERED 22/10/2008

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. STATE FOREST NO. 20
2. K749275 VESTED. PURSUANT TO SECTION 7(1) OF THE CONSERVATION AND LAND MANAGEMENT ACT 1984 REGISTERED 22/10/2008.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP153708  
PREVIOUS TITLE: LR3003-809  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE  
QUALIFIED

REGISTER NUMBER: 10154/DPI53708

VOLUME/FOLIO: LR3003-809

PAGE 2

RESPONSIBLE AGENCY:

DEPARTMENT OF BIODIVERSITY, CONSERVATION AND  
ATTRACTIONS (SCLM)



WESTERN



AUSTRALIA

REGISTER NUMBER	
<b>10155/DP153709</b>	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
<b>N/A</b>	<b>N/A</b>

RECORD OF QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE

VOLUME  
**LR3003**

FOLIO  
**810**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997  
**NO DUPLICATE CREATED**

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.



REGISTRAR OF TITLES

**LAND DESCRIPTION:**

LOT 10155 ON DEPOSITED PLAN 153709

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE)**STATUS ORDER/INTEREST:** VESTED UNDER STATUTE

**PRIMARY INTEREST HOLDER:** CONSERVATION COMMISSION OF WESTERN AUSTRALIA OF CARE OF  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION, LOCKED BAG 104,  
BENTLEY DELIVERY CENTRE

(XE K749275 ) REGISTERED 22/10/2008

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. STATE FOREST NO. 20
2. K749275 VESTED. PURSUANT TO SECTION 7(1) OF THE CONSERVATION AND LAND MANAGEMENT ACT 1984 REGISTERED 22/10/2008.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP153709  
PREVIOUS TITLE: LR3003-810  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AUTHORITY: SHIRE OF BRIDGETOWN-GREENBUSHES

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE  
QUALIFIED

REGISTER NUMBER: 10155/DPI53709

VOLUME/FOLIO: LR3003-810

PAGE 2

RESPONSIBLE AGENCY:

DEPARTMENT OF BIODIVERSITY, CONSERVATION AND  
ATTRACTIONS (SCLM)

APPLICATION J538216  
ROAD CLOSURE J538217

WESTERN



AUSTRALIA

REGISTER NUMBER

N/A

**QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997

VOLUME FOLIO  
LR 3136 496



NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE of WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.

**CANCELLED**

*RG Roberts*  
REGISTRAR OF TITLES



DATED 6 DECEMBER 2005

## LAND DESCRIPTION:

LOT 1 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE continued overleaf)

STATUS ORDER/INTEREST: UNALLOCATED CROWN LAND

PRIMARY INTEREST HOLDER: STATE OF WESTERN AUSTRALIA

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE continued overleaf)

1. J538216 FOLIO CANCELLED. NEW FOLIOS HAVE BEEN CREATED FOR LOT(S) ON DP28825 TO VOL. 3125 FOL. 37. REGISTERED 6.12.2005.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

## STATEMENTS:

The statement set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF THE LAND: DP28825  
PREVIOUS TITLE: THIS TITLE  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AREA: NO LOCAL GOVERNMENT AUTHORITY INFORMATION AVAILABLE.

NOTE 1: A000001A CORRESPONDENCE FILE 02659-1996-01RO

END OF PAGE 1 – CONTINUED OVER



ORIGINAL CERTIFICATE OF CROWN LAND TITLE

REGISTER NUMBER: N/A

VOLUME/FOLIO: LR3136-496

PAGE 2

Cancelled

APPLICATION J538216  
ROAD CLOSURE J538217

WESTERN



AUSTRALIA

REGISTER NUMBER

N/A

**QUALIFIED CERTIFICATE  
OF  
CROWN LAND TITLE**

UNDER THE TRANSFER OF LAND ACT 1893  
AND THE LAND ADMINISTRATION ACT 1997

VOLUME FOLIO  
LR 3136 498



NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE of WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.

**CANCELLED**

*RG Roberts*  
REGISTRAR OF TITLES



DATED 6 DECEMBER 2005

## LAND DESCRIPTION:

LOT 3 ON DEPOSITED PLAN 28825

**STATUS ORDER AND PRIMARY INTEREST HOLDER:**  
(FIRST SCHEDULE continued overleaf)

STATUS ORDER/INTEREST: UNALLOCATED CROWN LAND

PRIMARY INTEREST HOLDER: STATE OF WESTERN AUSTRALIA

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE continued overleaf)

1. J538216 FOLIO CANCELLED. NEW FOLIOS HAVE BEEN CREATED FOR LOT(S) ON DP28825 TO VOL. 3125 FOL. 39. REGISTERED 6.12.2005.

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
Lot as described in the land description may be a lot or location.  
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.  
(3) The interests etc. shown hereon may have a different priority than shown.

-----END OF CERTIFICATE OF CROWN LAND TITLE-----

## STATEMENTS:

The statement set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF THE LAND: DP28825  
PREVIOUS TITLE: THIS TITLE  
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.  
LOCAL GOVERNMENT AREA: NO LOCAL GOVERNMENT AUTHORITY INFORMATION AVAILABLE.

NOTE 1: A000001A CORRESPONDENCE FILE 02659-1996-01RO

END OF PAGE 1 - CONTINUED OVER

ORIGINAL CERTIFICATE OF CROWN LAND TITLE

REGISTER NUMBER: N/A

VOLUME/FOLIO: LR3136-498

PAGE 2

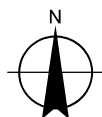
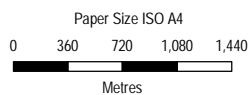
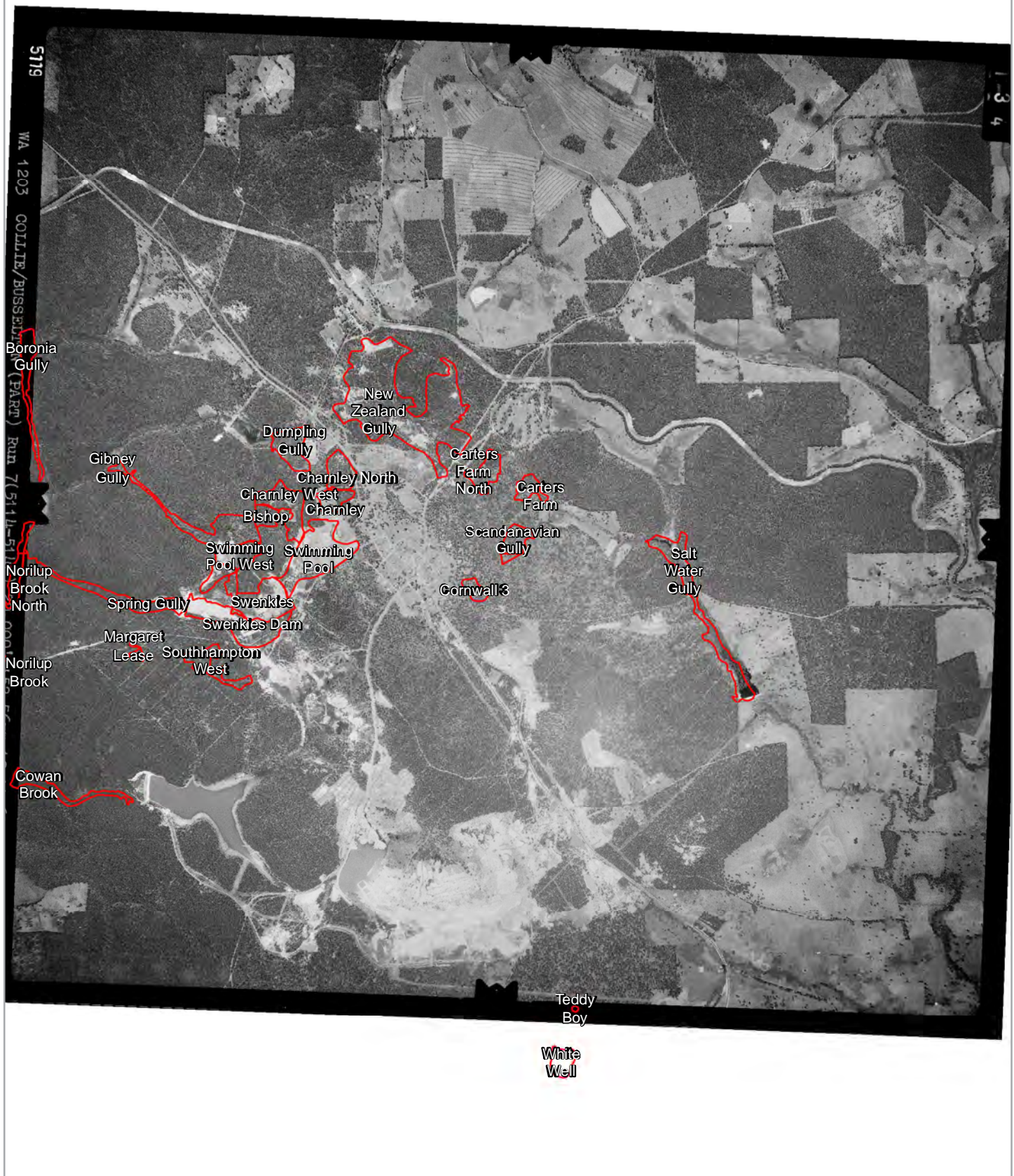
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## Appendix D – Historical Aerial Photographs

**Legend**

Historical Rehabilitation Areas



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50

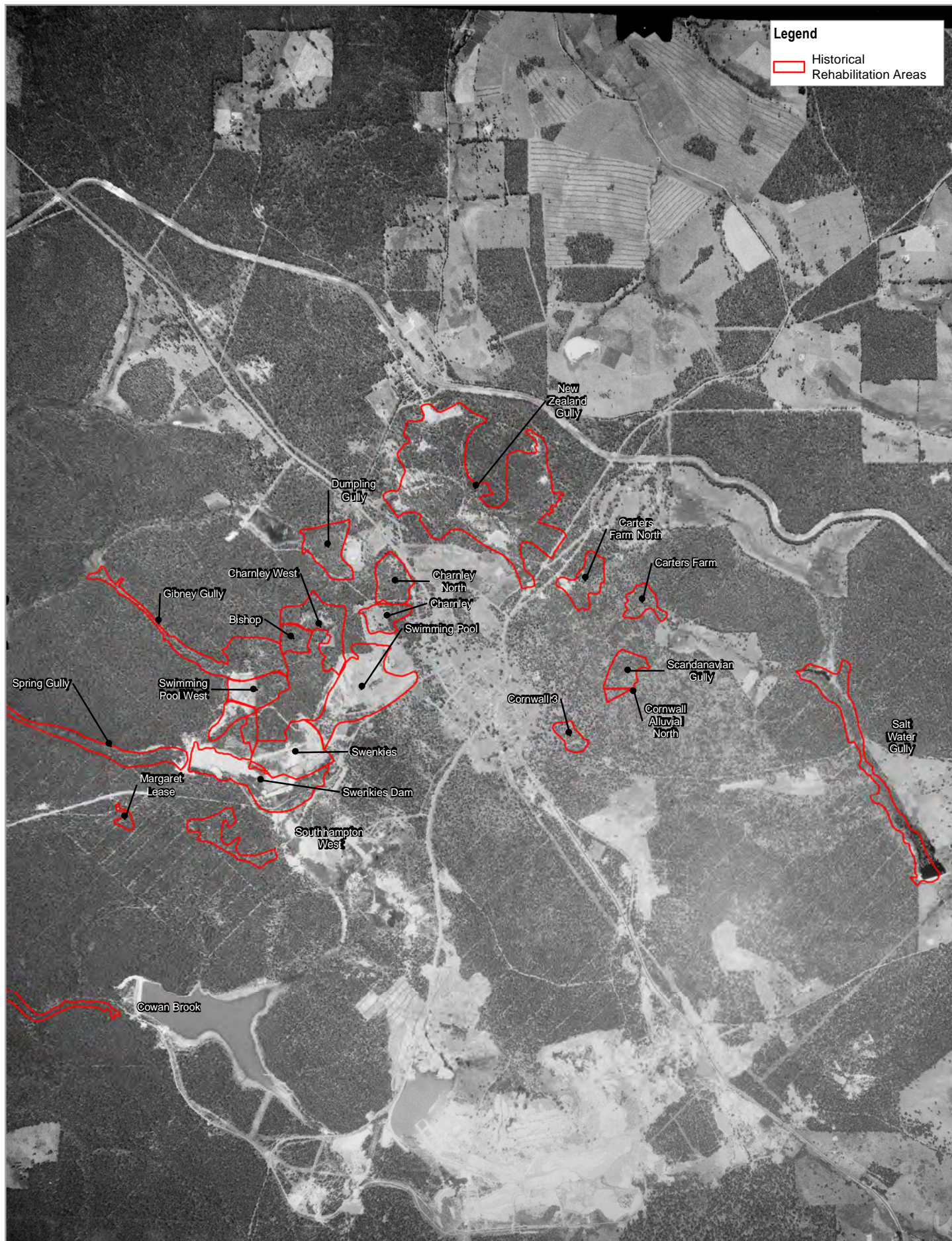
**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**November 1969 Scene 1**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

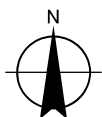
**FIGURE D.1**





Paper Size ISO A4  
0 250 500 750 1,000  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**November 1969 Scene 1**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

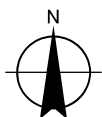
**FIGURE D.2**





Paper Size ISO A4  
 0 175 350 525 700  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**November 1969 Scene 2**

Project No. **61-3569100**  
 Revision No. **A**  
 Date **11/07/2018**

**FIGURE D.3**





**Legend**

Historical Rehabilitation Areas

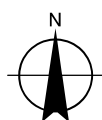
Cowan Brook

Teddy Boy

White Well

Paper Size ISO A4  
0 230 460 690 920  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



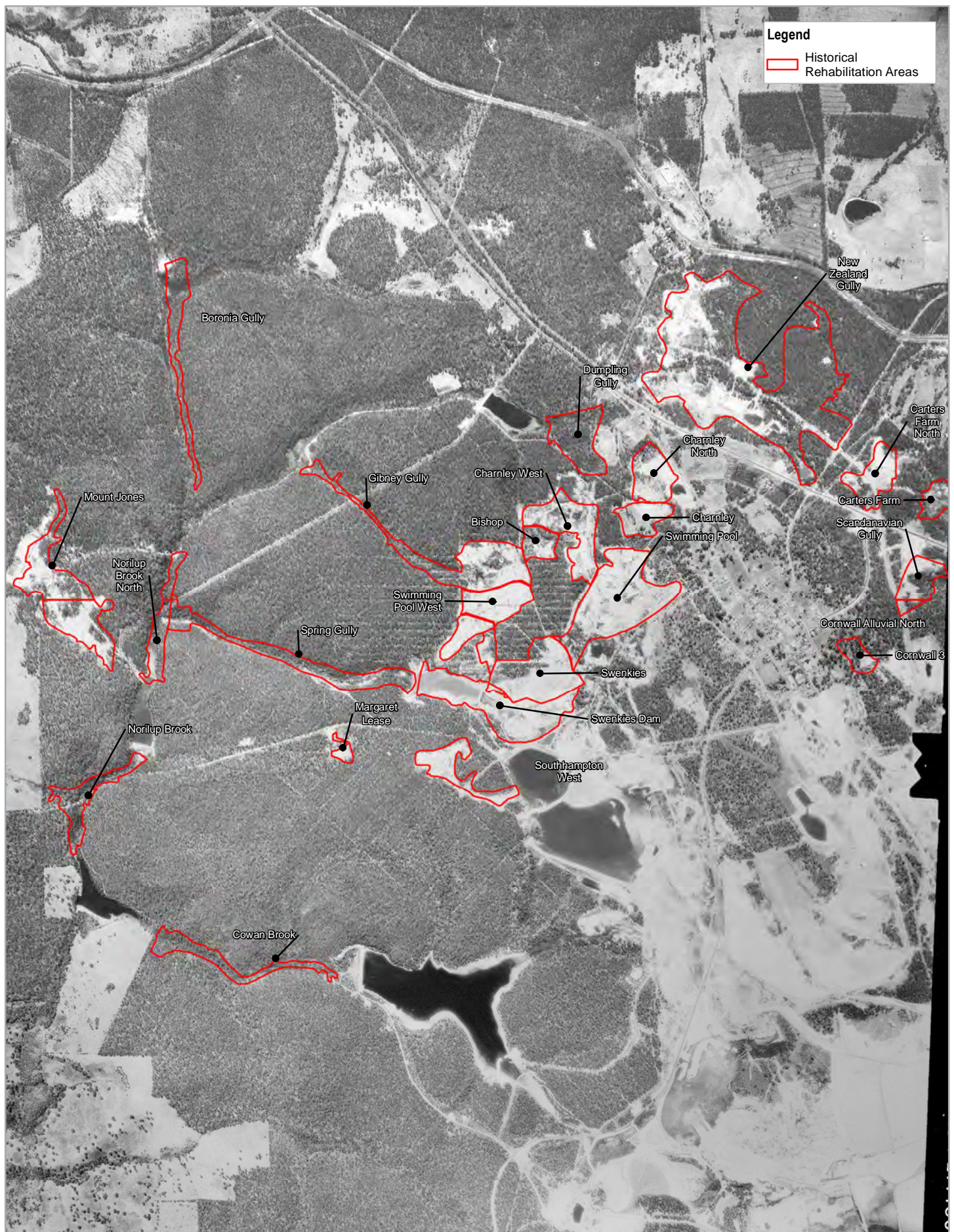
**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**November 1969 Scene 3**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

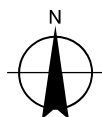
**FIGURE D.4**





Paper Size ISO A4  
0 225 450 675 900  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



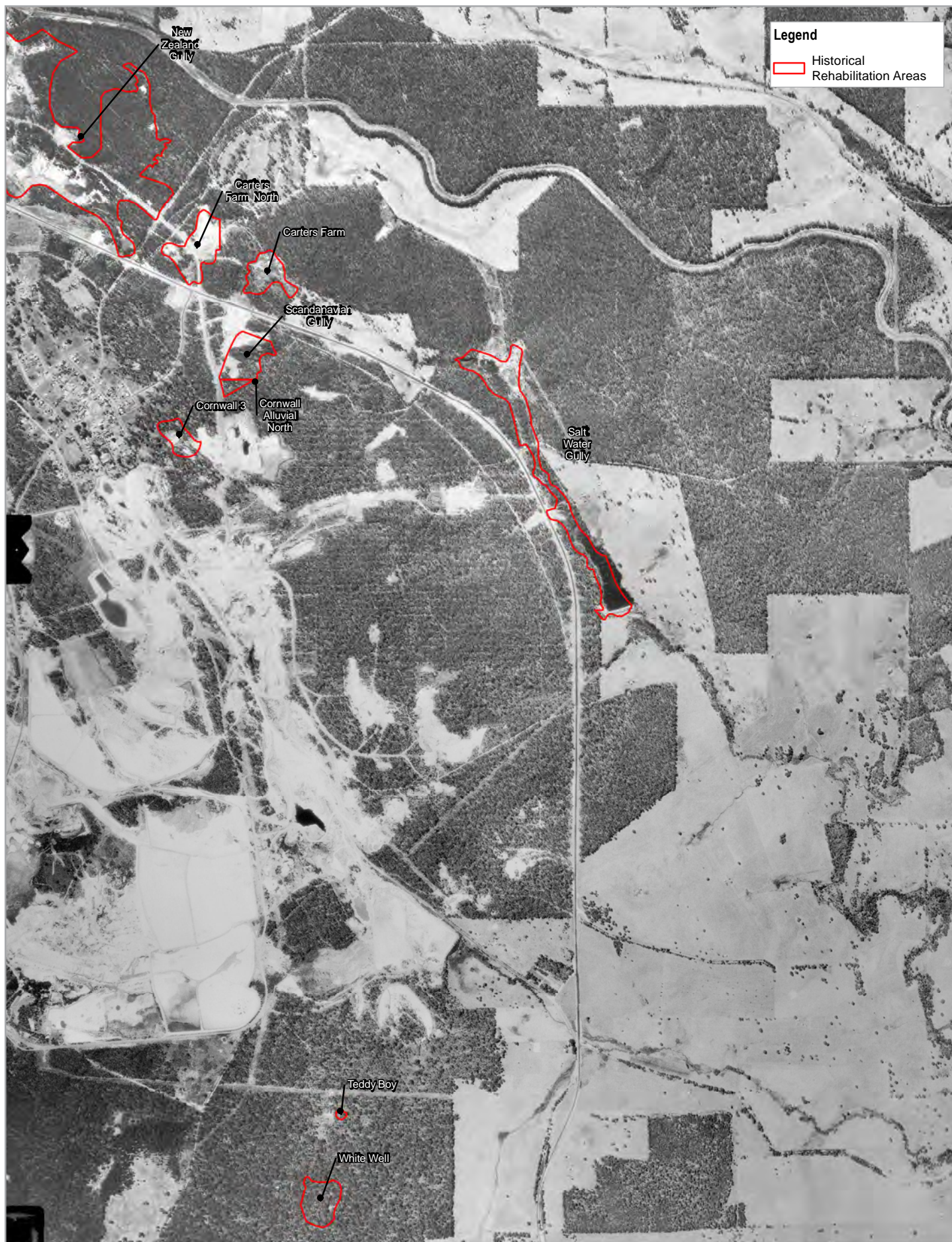
**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**March 1977 Scene 1**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

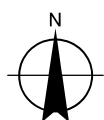
**FIGURE D.5**





Paper Size ISO A4  
0 210 420 630 840  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



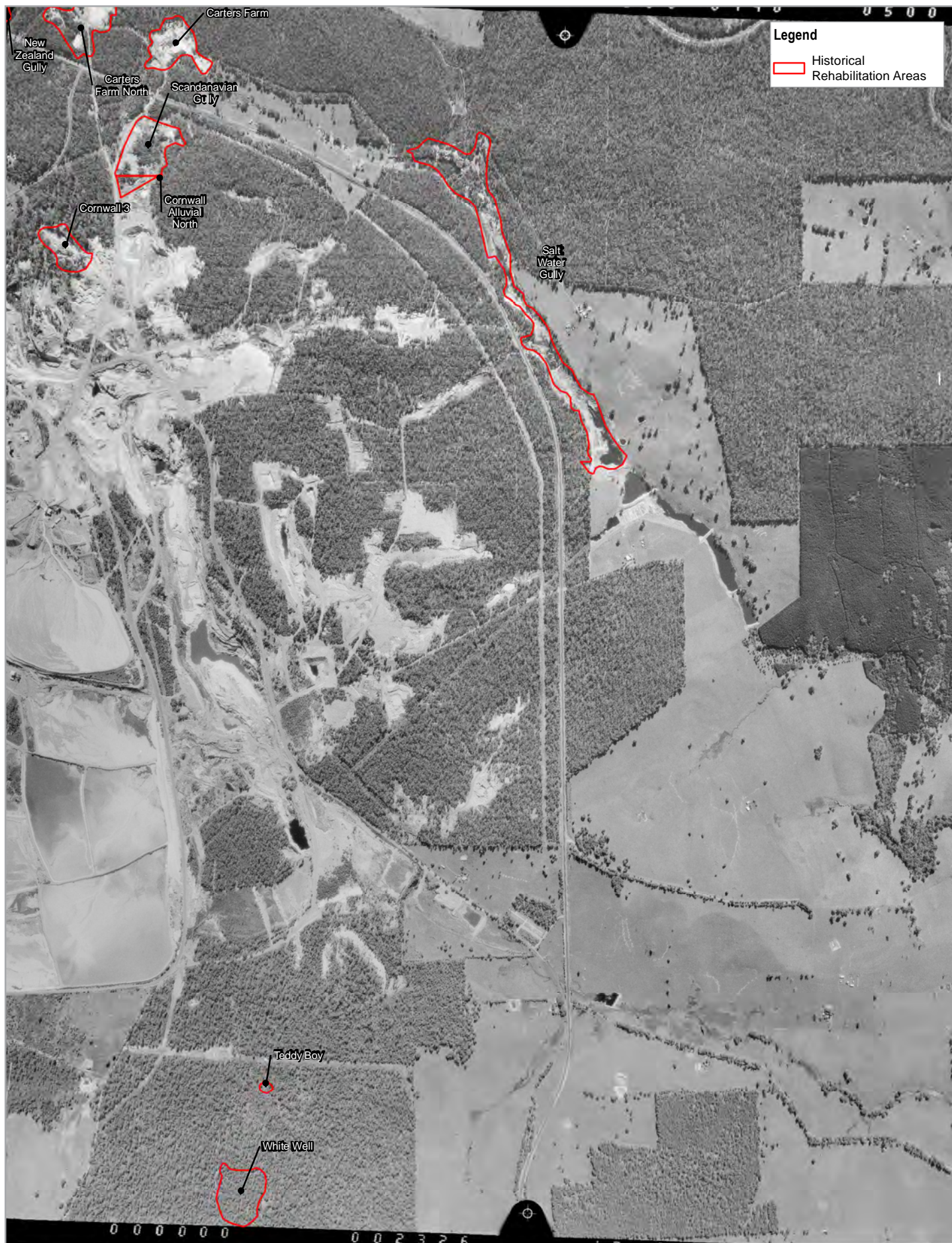
**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**March 1977 Scene 2**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

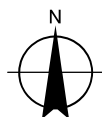
**FIGURE D.6**





Paper Size ISO A4  
 0 170 340 510 680  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



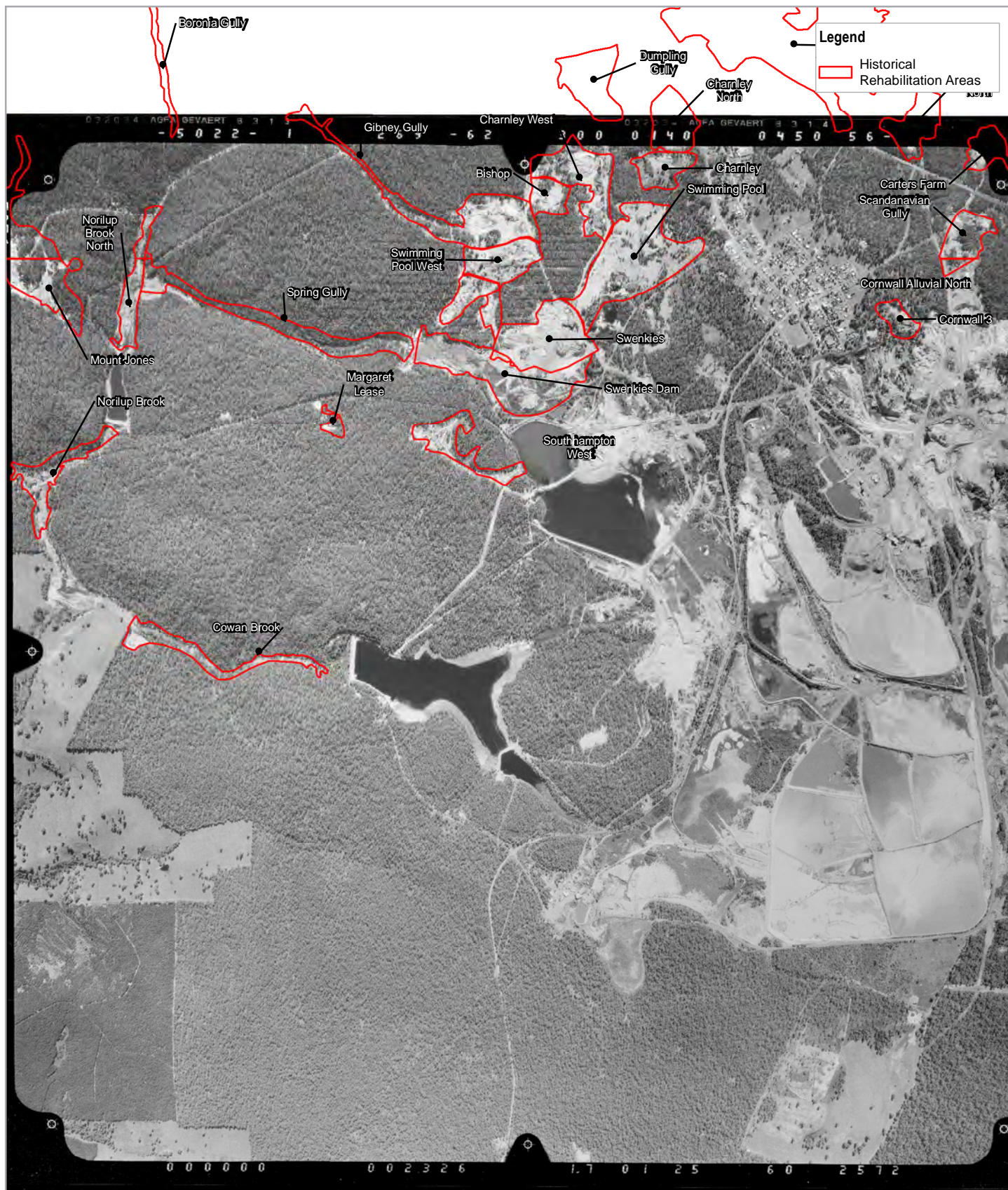
**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**May 1987 Scene 1**

Project No. **61-3569100**  
 Revision No. **A**  
 Date **11/07/2018**

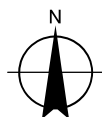
**FIGURE D.7**





Paper Size ISO A4  
0 220 440 660 880  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**May 1987 Scene 2**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

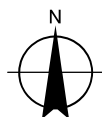
**FIGURE D.8**





Paper Size ISO A4  
0 190 380 570 760  
Metres

Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50



**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**May 1987 Scene 3**

Project No. **61-3569100**  
Revision No. **A**  
Date **11/07/2018**

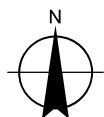
**FIGURE D.9**





Paper Size ISO A4  
 0 140 280 420 560  
 Metres

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50



**TALISON LITHIUM**  
**GREENBUSHES REHABILITATION AREAS**

**Landgate Historical Images**  
**May 1987 Scene 4**

Project No. **61-3569100**  
 Revision No. **A**  
 Date **11/07/2018**

**FIGURE D.10**



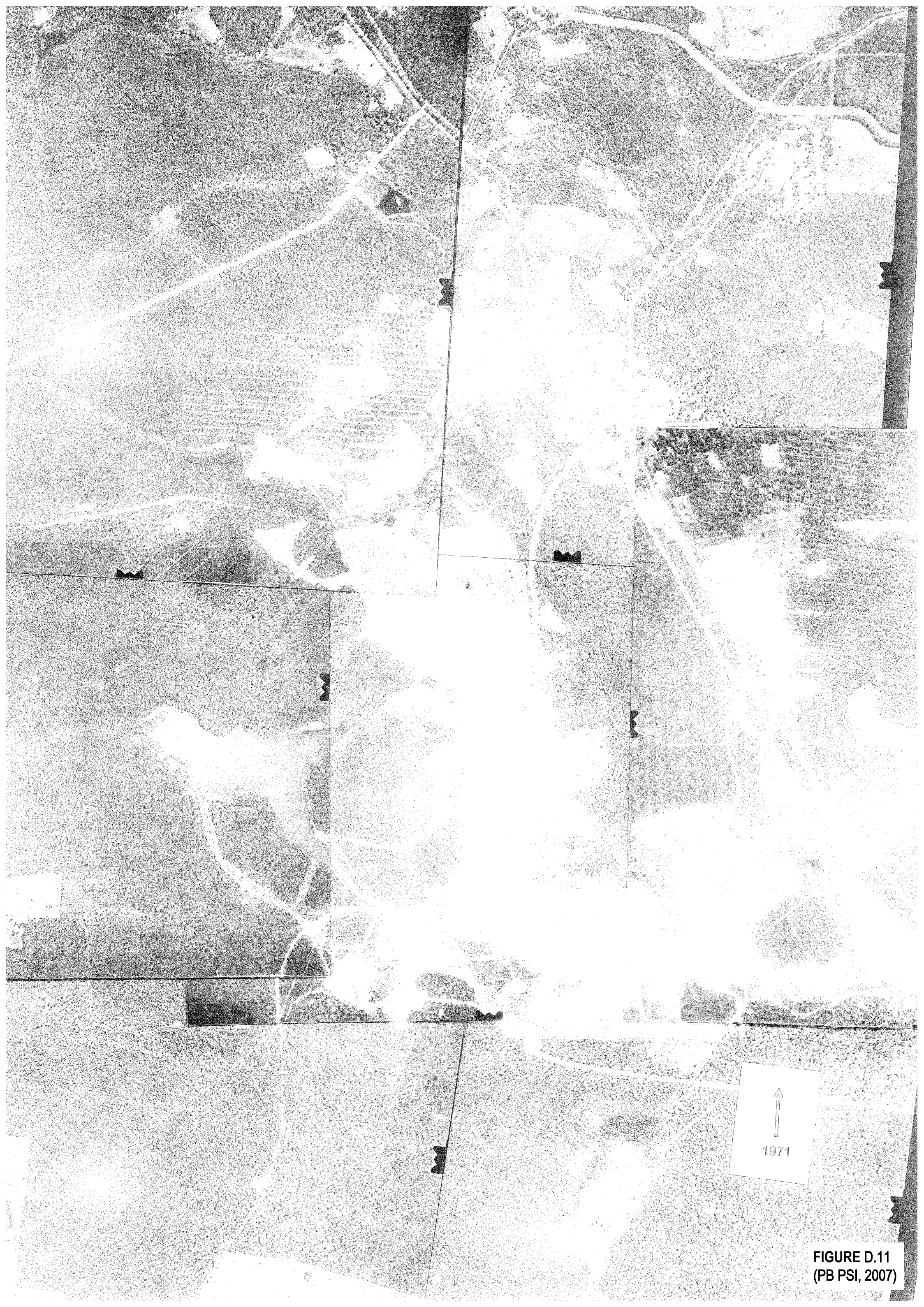
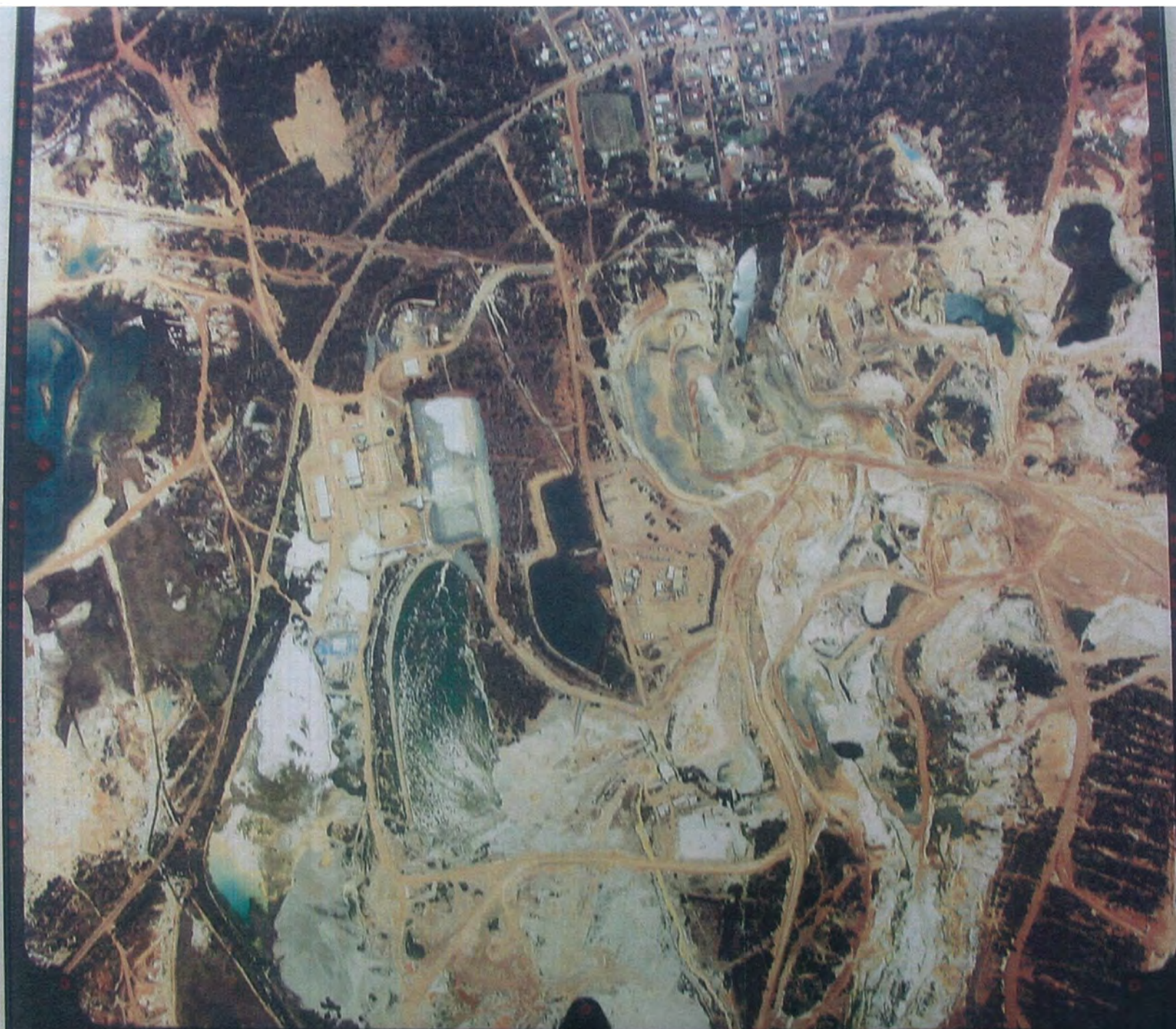


FIGURE D.11  
(PB PSI, 2007)





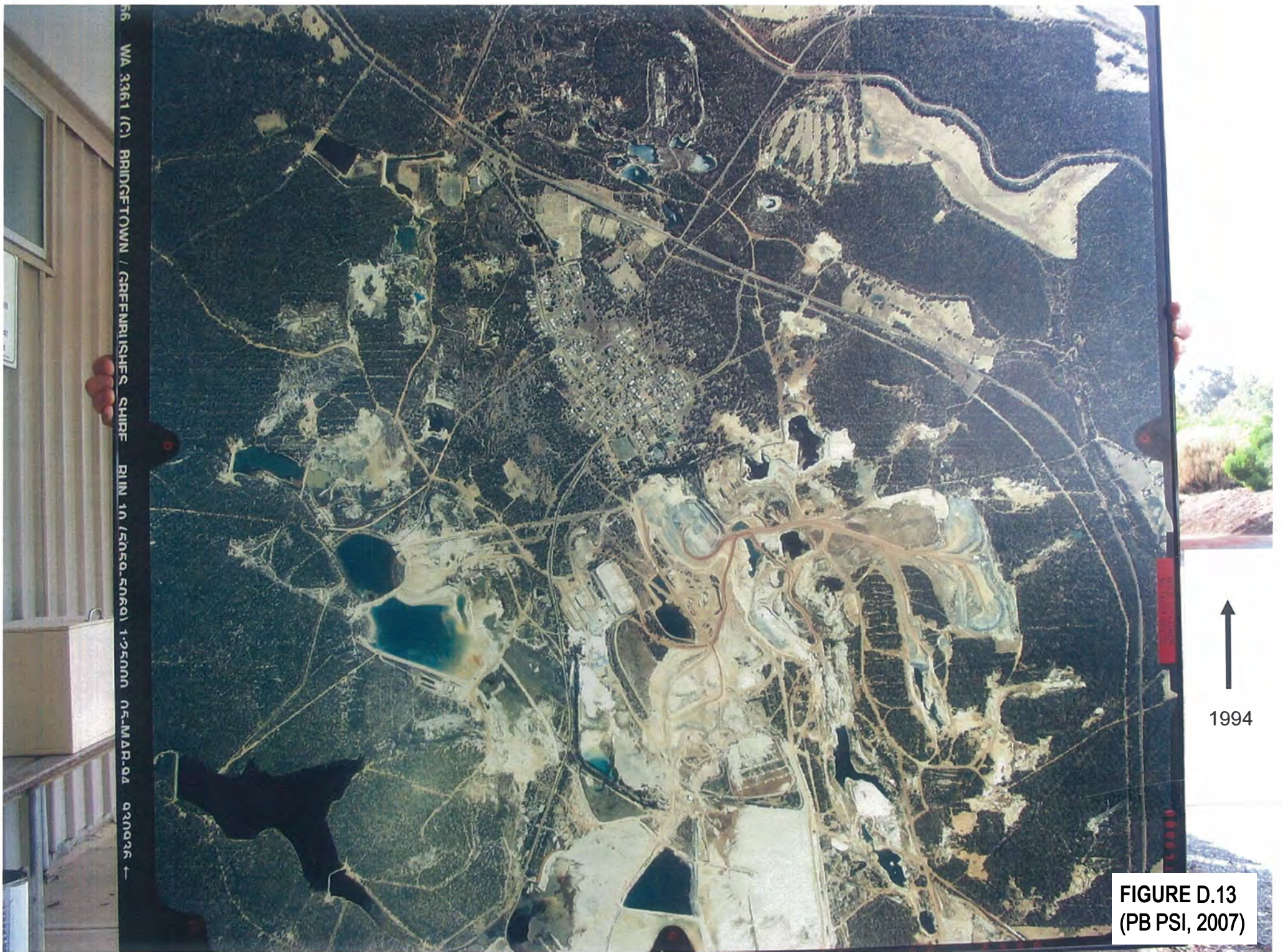
5051 WA 3133(C) GREENBUSHES T.S. (5049-5051) 1:10000 19-OCT-92 920838 \



1992

**FIGURE D.12**  
(PB PSI, 2007)





56 WA 3361 (C) BRIDGETOWN / GREENRISHES SHIRE BLN 10 / 5050-5060 1-25000 05-MAR-94 020026 ←

FIGURE D.13  
(PB PSI, 2007)





FIGURE D.14  
(PB PSI, 2007)





FIGURE D.15  
(PB PSI, 2007)





2002



GREENBUSHES

AAM Surveys Ref No 325061

QAS.3313c  
06.01.01



SPOT SHOT  
6920

17500'ASL  
1:35000



PRODUCT OF  
QASCO AUSTRALIA ©  
PHONE (08) 9472 5472

FIGURE D.16  
(PB PSI, 2007)





**FIGURE D.17**  
**(PB PSI, 2007)**

↑  
2004



## Appendix E – Freedom of Information Searches

---

**DEPARTMENT OF MINES, INDUSTRY REGULATION AND SAFETY (DMIRS)**  
**NOTICE OF DECISION UNDER s.30 OF THE FREEDOM OF INFORMATION ACT 1992 (THE ACT)**

---

**Application:**

17/18-48

**Date of decision:**

19 February 2018

**Scope of Request:**

The applicant is conducting a contaminated site assessment of historical areas within the Greenbushes district in the area outside of Talison Lithium Australia Pty Ltd's Greenbushes Lithium Mines active mine area, and states that mining commenced in the area in the late 1880s. The applicant seeks the following information from the period prior to the 1990s:

- a) historical documents containing maps, drawings, anecdotal information, photographs and any other information regarding the minerals mined and mineral processing activities undertaken, and any other activities which have occurred that could potentially have caused contamination;
- b) records of any permits, licences and approvals with regard to historical mining and mineral processing activities on the individual sites; and
- c) any reports of historical type incidents which have occurred.

**Decision maker:**

Ms Karen Caple, Acting Executive Director, Resource and Environmental Compliance Division (delegated decision maker by a general directive from the Director General as provided under s.100 (1)(b) of the Act).

**Decision:**

Access is denied under s.26 of the Act.

**The Facts:**

- 1) The access applicant supplied a list of sites and a shape file containing spatial data to guide the document search.
- 2) The FOI Coordinator searched in the Records Manager database on each of the listed sites. Results were found only for the Salt Water Gully site, however the resulting two files held no relevant documents.
- 3) The FOI Coordinator asked the Geoscience Information Branch to provide a list of dead tenements overlaying the area in the shape file. A Senior Geospatial Officer identified 436 tenements.
- 4) The Department does not have the resources to investigate 436 tenements. The access applicant was asked to provide a list of 40 priority tenements. The FOI Coordinator searched in Records Manager on each of the 40 tenements. There were either no results, or the resulting files had been disposed of in accordance with the Department's Retention and Disposal Schedule.
- 5) The FOI Coordinator then searched in Records Manager by placing "Greenbushes" in the "contains" field of the file search screen, thus searching for file titles containing the word

“Greenbushes’. This search resulted in 789 files. Many were either disposed of, irrelevant, amalgamated, transferred to State Archives, outside of the date range and/or related to a tenement that was not on the list of 436 tenements overlaying the given area.

- 6) Of the 789 files, eight related to a Greenbushes Tin-Tantalum-Lithium Project in the pre-1990s period. It is not known to which tenements (including current tenements) or sites these files relate, or whether they relate to sites outside of the existing Greenbushes Lithium Mine.
- 7) Attached as an appendix to this document is a list of files that may be relevant and can be accessed at the State Archives.
- 8) As a result of the broad range of the scope and its historical nature, it has not been possible to identify information falling within the scope.

### **Decision**

- 9) Section 26 of the Act provides –

---

#### **26. Documents that cannot be found or do not exist**

- (1) *The agency may advise the applicant, by written notice, that it is not possible to give access to a document if –*
    - (a) *all reasonable steps have been taken to find the documents; and*
    - (b) *the agency is satisfied that the document –*
      - i. *is in the agency’s possession but cannot be found; or*
      - ii. *does not exist.*
  - (2) *For the purposes of this Act the sending of a notice under subsection (1) in relation to a document is to be regarded as a decision to refuse access to the document, and on a review under Part 4 the agency may be required to conduct further searches for the document.*
- 

- 10) The DMIRS could not identify documents falling within the scope of your application therefore I must deny your request under s.26 of the Act.

### **Review Process**

- 11) If you are not satisfied with the decision, you have the right of appeal.

#### **Internal Review (ss.39-40)**

If you are dissatisfied or aggrieved by certain decisions of an agency regarding access to documents or amendment of personal information, you can apply to the agency concerned for an internal review of its decision.

To apply for an internal review, you must write a letter and send it to the agency which made the decision within 30 days after being given notice of the decision. The letter should give details of the decision you wish to have reviewed and an address within Australia to which notices can be sent. There is no charge for an internal review of a decision.

### **Appendix**

(see next page)



## APPENDIX

### FILES TRANSFERRED TO STATE ARCHIVES THAT MAY HOLD INFORMATION FALLING WITHIN THE SCOPE

File number	File Title
529-86VOL01	GREENBUSHES TIN LTD - GENERAL
40-42GSDVOL01	RAPERS TANTALITE FIND - GREENBUSHES
24-42GSDVOL01	SOAPSTONE DEPOSITS - MEANEYS BRIDGE - NEAR GREENBUSHES
18-42GSDVOL01	TIN DEVELOPMENT - GREENBUSHES - INDUSTRIAL PANEL
43-43GSDVOL01	GREENBUSHES TIN FIELD - INFORMATION FROM PRIVATE SOURCES
33-43GSDVOL01	SURVEY - GREENBUSHES TIN FIELD
23-43GSDVOL02	INSPECTION - GREENBUSHES DISTRICT
8-43GSDVOL01	GREENBUSHES TIN FIELD SURVEY 1942 - REPORTS
35-43GSDVOL01	GREENBUSHES TANTALITE
2917-66VOL03	MC01-58 - GREENBUSHES TIN NL
2589-66VOL01	ABANDONED SHAFTS GREENBUSHES DISTRICT - GREENBUSHES ROAD BOARD
77-14GSDVOL01	GREENBUSHES TIN DEPOSITS - REPORT - KRUSCH
8-14GSDVOL01	KAPANGA MINES - REPORT - GREENBUSHES
117-10GSDVOL01	SOUTH CORNWALL MINE - GREENBUSHES
89-07GSDVOL01	TOPOGRAPHICAL AND GEOLOGICAL SURVEY - GREENBUSHES TINFIELD
265-03GSDVOL01	GREENBUSHES TINFIELD – REPORTS
2555-72VOL01	ML01-726 - POLICE CUT - GREENBUSHES TIN LTD
883-72VOL01	ML01-725 - HIGHGATE - GREENBUSHES TIN NL
1500-71VOL01	INTERDEPARTMENTAL COMMITTEE TO STUDY RECLAMATION OF MINES - AT GREENBUSHES - DIRECTOR OF ENVIRONMENTAL PROTECTION - INCLUDING DEPT OF INDUSTRIAL DEVELOPMENT UNDER SECRETARY FOR MINES
20-31GSDVOL01	TIN DISCOVERY - 9 MILES SOUTH WEST OF GREENBUSHES - HILLMAN AND FYFE - BLATCHFORD T
34-28GSDVOL01	STATE BORING - GREENBUSHES

36-39GSDVOL01	BORING RESULTS - GREENBUSHES TIN LIMITED
12-38GSDVOL01	VULCAN TIN MINES - GREENBUSHES - INSPECTION BY ELLIS H A
29-54GSDVOL01	TIN AND TANTALITE - REPORT ON DC102 DC111 - GREENBUSHES MINERAL FIELD
195/196402	GREENBUSHES TIN – TIN
195/196401	GREENBUSHES TIN – TIN
18/198301	GREENBUSHES - SPODUMENE PROPOSED AGREEMENT
140/197703	GREENBUSHES TIN - GREENBUSHES MINE
140/197702	GREENBUSHES TIN NL - GREENBUSHES MINE – GENERAL
140/197701	GREENBUSHES TIN - GREENBUSHES MINE
28-62GSDVOL01	GREENBUSHES MINERAL FIELD – GENERAL

## Appendix F – Equipment Calibration Sheet



## EQUIPMENT INFORMATION

Instrument: YSIProDSS-1A

Serial Number: 17K102848 (Display)

17K103853(Sonde)

### EQUIPMENT CHECK

Enclosed

Comment

YSI Pro DSS Display



YSI 4 port Sonde



- YSI pH / ORP probe



- YSI-Turbidity Probe



- YSI Cond/Temp Probe



- YSI ODO Sensor



Flow Cell



Probe Guard &amp; weight



Storage/Calibration Sleeve (with Gasket)



Charger &amp; PC Cable



Instruction Manual &amp; Field Sheets



Battery Charged 100%



### SENSOR CALIBRATION DETAILS

		Calibration Undertaken	Accuracy	Pass	Fail
Temperature		Factory Calibrated	$\pm 0.2^{\circ}\text{C}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Dissolved Oxygen	<input checked="" type="checkbox"/>	100% Saturation	$\pm 2\%$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
		Pressure Compensation	1013 hPa	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Conductivity	<input checked="" type="checkbox"/>	1288mS/cm	$\pm 0.5\%$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	Check linearity at 1.4mS/cm	$\pm 0.5\%$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Salinity		Auto Calibrated	$\pm 1\%$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
pH	<input checked="" type="checkbox"/>	pH 7.00	$\pm 0.2$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/>	pH 4.00	$\pm 0.2$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ORP	<input checked="" type="checkbox"/>	231 mV at 24 $^{\circ}\text{C}$	$\pm 20\text{mV}$	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Turbidity		0, 124 NTU / FNU			
		Sonde – 17K103332			

This is to certify that where possible, this instrument has been calibrated in accordance with the manufacturer's calibration procedure as recommended in the instrument service manual.

ECO Standard Rental Terms & Conditions apply to all equipment calibrations.

Regards,

S. Trimble

ECO Environmental Equipment Specialist

Date: 30.04.2018

## Appendix G – Certificates of Analysis and Chain of Custody Documentation

[illegible]



**ANALYTICAL SCOPE & RATES**

Prices apply for the scope of laboratory testing requested and do not apply to secondary/QC samples unless agreed otherwise. The price provided for Analytical suites are only applicable if the suite is referenced on the chain of custody form.

**— WATER ANALYSIS —**

<i>Analysis</i>	<i>Sample Number</i>	<i>Price per Sample</i>	<i>Price</i>
Total Recoverable Hydrocarbons (TRH)	2	\$26.00	\$52.00
<b>Total Metals M12*<sup>1</sup></b> : IWRG 621 Metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Mo, Se, Ag, Sn)	2	\$20.80	\$41.60
<b>Dissolved Metals M12*<sup>1</sup></b> : IWRG 621 Metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Mo, Se, Ag, Sn)	2	\$20.80	\$41.60
Nitrogens - speciated (TKN, NH <sub>3</sub> , NO <sub>2</sub> , NO <sub>3</sub> , Total N, Organic N, NOX)	2	\$29.30	\$58.60
Phosphate (Total)	2	\$7.20	\$14.40
<b>Total Analytical Cost per sample (ex GST)</b>			<b>\$104.10</b>
<b>Total Analytical Cost (ex GST)</b>			<b>\$156.20</b>

\*1 The price provided for Analytical suites are only applicable if the suite is reference on the chain of custody form.

**— ASSOCIATED FEES —**

<i>Associated Fees</i>	<i>Price</i>
Project fee	\$30.00 per batch

Will O'Haire  
606548 6/7/18

## Sample Receipt Advice

Company name: **GHD Pty Ltd WA**  
Contact name: **Jon Cramer**  
Project name: **TAILSON-GREENBUSHES REHABILITATION**  
Project ID: **613569100**  
COC number: **Not provided**  
Turn around time: **5 Day**  
Date/Time received: **Jul 5, 2018 12:45 PM**  
Eurofins | mgt reference: **606548**

### Sample information

- ☒ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☒ All samples have been received as described on the above COC.
- ☒ COC has been completed correctly.
- ☒ Attempt to chill was evident.
- ☒ Appropriately preserved sample containers have been used.
- ☒ All samples were received in good condition.
- ☒ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☒ Appropriate sample containers have been used.
- ☒ Sample containers for volatile analysis received with zero headspace.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Robert Johnston on Phone : or by e.mail: RobertJohnston@eurofins.com

Results will be delivered electronically via e.mail to Jon Cramer - jon.cramer@ghd.com.

# Certificate of Analysis

GHD Pty Ltd WA  
 999 Hay Street Perth  
 Perth  
 WA 6004



NATA Accredited  
 Accreditation Number 1261  
 Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing  
 The results of the tests, calibrations and/or  
 measurements included in this document are traceable  
 to Australian/national standards.

Attention: Jon Cramer

Report 606548-W-V2  
 Project name TAILSON-GREENBUSHES REHABILITATION  
 Project ID 613569100  
 Received Date Jul 05, 2018

Client Sample ID			NBN22 Water	QA3 Water	SD23 Water	CH21 Water
Sample Matrix			M18-JI07638	M18-JI07639	M18-JI07640	M18-JI07641
Eurofins   mgt Sample No.			Jul 04, 2018	Jul 04, 2018	Jul 04, 2018	Jul 04, 2018
Date Sampled						
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.01	mg/L	0.04	0.12	0.15	0.12
Nitrate & Nitrite (as N)	0.05	mg/L	< 0.05	0.09	0.09	< 0.05
Nitrate (as N)	0.02	mg/L	< 0.02	0.09	0.09	< 0.02
Nitrite (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Organic Nitrogen (as N)	0.2	mg/L	0.22	< 0.2	< 0.2	< 0.2
Phosphate total (as P)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Total Kjeldahl Nitrogen (as N)	0.2	mg/L	0.3	0.3	0.2	0.3
Total Nitrogen (as N)	0.2	mg/L	0.3	0.3	0.3	0.3
<b>Heavy Metals</b>						
Arsenic	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Cadmium	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chromium	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper	0.001	mg/L	0.001	< 0.001	0.001	0.002
Copper (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Lead	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Lithium	0.005	mg/L	0.046	1.1	1.0	< 0.005



Client Sample ID			NBN22 Water	QA3 Water	SD23 Water	CH21 Water
Sample Matrix			M18-JI07638	M18-JI07639	M18-JI07640	M18-JI07641
Eurofins   mgt Sample No.			Jul 04, 2018	Jul 04, 2018	Jul 04, 2018	Jul 04, 2018
Date Sampled						
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Lithium (filtered)	0.005	mg/L	0.046	1.1	0.94	< 0.005
Mercury	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Molybdenum	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Molybdenum (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	0.001	mg/L	< 0.001	< 0.001	0.001	< 0.001
Nickel (filtered)	0.001	mg/L	< 0.001	< 0.001	0.001	< 0.001
Selenium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Silver	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Silver (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Tin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Tin (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	0.005	mg/L	< 0.005	< 0.005	< 0.005	0.009
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.  
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C36	Melbourne	Jul 11, 2018	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Melbourne	Jul 07, 2018	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Melbourne	Jul 11, 2018	7 Day
<b>Nitrogens (speciated)</b>			
Ammonia (as N) - Method: APHA 4500-NH3 Ammonia Nitrogen by FIA	Melbourne	Jul 07, 2018	28 Day
Nitrate & Nitrite (as N) - Method: APHA 4500-NO3/NO2 Nitrate-Nitrite Nitrogen by FIA	Melbourne	Jul 07, 2018	28 Day
Nitrate (as N) - Method: APHA 4500-NO3 Nitrate Nitrogen by FIA	Melbourne	Jul 07, 2018	28 Day
Nitrite (as N) - Method: APHA 4500-NO2 Nitrite Nitrogen by FIA	Melbourne	Jul 07, 2018	2 Day
Organic Nitrogen (as N) - Method: APHA 4500 Organic Nitrogen (N)	Melbourne	Jul 06, 2018	7 Day
Total Kjeldahl Nitrogen (as N) - Method: LTM-INO-4310 TKN in Waters & Soils by FIA	Melbourne	Jul 07, 2018	7 Day
Phosphate total (as P) - Method: APHA 4500-P E. Phosphorous	Melbourne	Jul 07, 2018	28 Day
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Jul 07, 2018	28 Day
Metals IWRG 621 : Metals M12 filtered - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Jul 07, 2018	28 Day
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Aug 07, 2018	180 Day
Heavy Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Aug 07, 2018	180 Day

**Company Name:** GHD Pty Ltd WA  
**Address:** 999 Hay Street Perth  
Perth  
WA 6004

**Project Name:** TAILSON-GREENBUSHES REHABILITATION  
**Project ID:** 613569100

**Order No.:**  
**Report #:** 606548  
**Phone:** 08 6222 8222  
**Fax:** 08 9429 6555

**Received:** Jul 5, 2018 12:45 PM  
**Due:** Jul 12, 2018  
**Priority:** 5 Day  
**Contact Name:** Jon Cramer

**Eurofins | mgt Analytical Services Manager : Robert Johnston**

Sample Detail						Phosphate total (as P)	Metals IWRG 621 : Metals M12	Metals IWRG 621 : Metals M12 filtered	Nitrogens (speciated)	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X	X	X
Sydney Laboratory - NATA Site # 18217										
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID					
1	NBN22	Jul 04, 2018		Water	M18-JI07638	X	X	X	X	X
2	QA3	Jul 04, 2018		Water	M18-JI07639	X	X	X	X	X
3	SD23	Jul 04, 2018		Water	M18-JI07640	X	X	X	X	X
4	CH21	Jul 04, 2018		Water	M18-JI07641	X	X	X	X	X
Test Counts						4	4	4	4	4



## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**\*\*NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>CRM</b>	Certified Reference Material - reported as percent recovery.
<b>Method Blank</b>	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>QSM</b>	Quality Systems Manual ver 5.1 US Department of Defense
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
<b>TEQ</b>	Toxic Equivalency Quotient

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

## Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
<b>Method Blank</b>							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Nitrate & Nitrite (as N)	mg/L	< 0.05			0.05	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Phosphate total (as P)	mg/L	< 0.05			0.05	Pass	
Total Kjeldahl Nitrogen (as N)	mg/L	< 0.2			0.2	Pass	
Total Nitrogen (as N)	mg/L	< 0.2			0.2	Pass	
<b>Method Blank</b>							
<b>Heavy Metals</b>							
Arsenic	mg/L	< 0.001			0.001	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Cadmium (filtered)	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Lithium	mg/L	< 0.005			0.005	Pass	
Lithium (filtered)	mg/L	< 0.005			0.005	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Molybdenum	mg/L	< 0.005			0.005	Pass	
Molybdenum (filtered)	mg/L	< 0.005			0.005	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver	mg/L	< 0.005			0.005	Pass	
Silver (filtered)	mg/L	< 0.005			0.005	Pass	
Tin	mg/L	< 0.005			0.005	Pass	
Tin (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	%	104			70-130	Pass	

Test				Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14				%	102			70-130	Pass	
LCS - % Recovery										
Total Recoverable Hydrocarbons - 2013 NEPM Fractions										
Naphthalene				%	102			70-130	Pass	
TRH C6-C10				%	110			70-130	Pass	
TRH >C10-C16				%	95			70-130	Pass	
LCS - % Recovery										
Ammonia (as N)				%	108			70-130	Pass	
Nitrate & Nitrite (as N)				%	109			70-130	Pass	
Nitrate (as N)				%	109			70-130	Pass	
Nitrite (as N)				%	114			70-130	Pass	
Phosphate total (as P)				%	72			70-130	Pass	
Total Kjeldahl Nitrogen (as N)				%	89			70-130	Pass	
Total Nitrogen (as N)				%	120			70-130	Pass	
LCS - % Recovery										
Heavy Metals										
Arsenic				%	88			80-120	Pass	
Arsenic (filtered)				%	94			80-120	Pass	
Cadmium				%	86			80-120	Pass	
Cadmium (filtered)				%	96			80-120	Pass	
Chromium				%	89			80-120	Pass	
Chromium (filtered)				%	100			80-120	Pass	
Copper				%	89			80-120	Pass	
Copper (filtered)				%	96			80-120	Pass	
Lead				%	90			80-120	Pass	
Lead (filtered)				%	98			80-120	Pass	
Lithium				%	90			70-130	Pass	
Lithium (filtered)				%	100			70-130	Pass	
Mercury				%	90			75-125	Pass	
Mercury (filtered)				%	95			70-130	Pass	
Molybdenum				%	84			80-120	Pass	
Molybdenum (filtered)				%	98			80-120	Pass	
Nickel				%	90			80-120	Pass	
Nickel (filtered)				%	95			80-120	Pass	
Selenium				%	90			80-120	Pass	
Selenium (filtered)				%	93			80-120	Pass	
Tin				%	92			80-120	Pass	
Tin (filtered)				%	89			80-120	Pass	
Zinc				%	102			80-120	Pass	
Zinc (filtered)				%	95			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1				Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery										
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					Result 1					
TRH C6-C9	S18-JI09600	NCP	%	123				70-130	Pass	
TRH C10-C14	M18-JI05295	NCP	%	71				70-130	Pass	
Spike - % Recovery										
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					Result 1					
Naphthalene	S18-JI09600	NCP	%	82				70-130	Pass	
TRH C6-C10	S18-JI09600	NCP	%	127				70-130	Pass	
TRH >C10-C16	M18-JI05295	NCP	%	73				70-130	Pass	
Spike - % Recovery										
					Result 1					
Ammonia (as N)	M18-JI08707	NCP	%	101				70-130	Pass	
Nitrate & Nitrite (as N)	M18-JI08707	NCP	%	102				70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nitrate (as N)	M18-JI08707	NCP	%	102			70-130	Pass	
Nitrite (as N)	M18-JI08707	NCP	%	107			70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Heavy Metals</b>				Result 1					
Arsenic	S18-JI05585	NCP	%	86			75-125	Pass	
Arsenic (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Cadmium	S18-JI05585	NCP	%	82			75-125	Pass	
Cadmium (filtered)	M18-JI06862	NCP	%	87			70-130	Pass	
Chromium	S18-JI05585	NCP	%	88			75-125	Pass	
Chromium (filtered)	M18-JI06862	NCP	%	91			70-130	Pass	
Copper	S18-JI05585	NCP	%	85			75-125	Pass	
Copper (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Lead	S18-JI05585	NCP	%	87			75-125	Pass	
Lead (filtered)	M18-JI06862	NCP	%	88			70-130	Pass	
Lithium	S18-JI05585	NCP	%	82			70-130	Pass	
Lithium (filtered)	M18-JI06862	NCP	%	88			75-125	Pass	
Mercury	S18-JI05585	NCP	%	90			70-130	Pass	
Mercury (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Molybdenum	S18-JI05585	NCP	%	88			75-125	Pass	
Molybdenum (filtered)	M18-JI06862	NCP	%	84			75-125	Pass	
Nickel	S18-JI05585	NCP	%	84			75-125	Pass	
Nickel (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Selenium	S18-JI05585	NCP	%	82			75-125	Pass	
Selenium (filtered)	M18-JI06862	NCP	%	89			70-130	Pass	
Silver	S18-JI05585	NCP	%	82			75-125	Pass	
Silver (filtered)	M18-JI06862	NCP	%	82			75-125	Pass	
Tin	S18-JI05585	NCP	%	83			75-125	Pass	
Tin (filtered)	M18-JI06862	NCP	%	82			75-125	Pass	
Zinc	S18-JI05585	NCP	%	87			75-125	Pass	
Zinc (filtered)	M18-JI06862	NCP	%	87			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>				Result 1	Result 2	RPD			
TRH C6-C9	M18-JI10212	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	M18-JI05294	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>				Result 1	Result 2	RPD			
Naphthalene	M18-JI10212	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	M18-JI10212	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C10-C16	M18-JI05294	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
Ammonia (as N)	P18-Jn33761	NCP	mg/L	0.63	0.63	<1	30%	Pass	
Nitrate & Nitrite (as N)	P18-Jn33761	NCP	mg/L	0.05	0.05	3.0	30%	Pass	
Nitrate (as N)	P18-Jn33761	NCP	mg/L	0.05	0.05	3.0	30%	Pass	
Nitrite (as N)	P18-Jn33761	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Phosphate total (as P)	M18-JI07064	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Total Kjeldahl Nitrogen (as N)	M18-JI07064	NCP	mg/L	0.3	0.2	36	30%	Fail	Q15
Total Nitrogen (as N)	M18-JI07064	NCP	mg/L	0.3	0.2	36	30%	Fail	Q15

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Arsenic (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Cadmium	S18-JI05585	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Cadmium (filtered)	M18-JI06862	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Chromium	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chromium (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Copper	S18-JI05585	NCP	mg/L	< 0.001	0.001	38	30%	Fail
Copper (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lead	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lead (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lithium	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Lithium (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Mercury	S18-JI05585	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Mercury (filtered)	M18-JI06862	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Molybdenum	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Molybdenum (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Nickel	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Nickel (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Selenium	S18-JI05585	NCP	mg/L	0.002	0.002	2.0	30%	Pass
Selenium (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Silver	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Silver (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Tin	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Tin (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Zinc	S18-JI05585	NCP	mg/L	0.008	0.010	19	30%	Pass
Zinc (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass

## Comments

V2 - This report has been amended to provide Lithium results

## Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

## Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
Q15	The RPD reported passes Eurofins   mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

## Authorised By

Robert Johnston	Analytical Services Manager
Alex Petridis	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Michael Brancati	Senior Analyst-Inorganic (VIC)



**Glenn Jackson**

**National Operations Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

Eurofins | mgt shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins | mgt be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.



[illegible]

**ANALYTICAL SCOPE & RATES**

Prices apply for the scope of laboratory testing requested and do not apply to secondary/QC samples unless agreed otherwise. The price provided for Analytical suites are only applicable if the suite is referenced on the chain of custody form.

**— WATER ANALYSIS —**

Analysis	Sample Number	Price per Sample	Price
Total Recoverable Hydrocarbons (TRH)	2	\$26.00	\$52.00
<b>Total Metals M12*<sup>1</sup></b> : IWRG 621 Metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Mo, Se, Ag, Sn)	2	\$20.80	\$41.60
<b>Dissolved Metals M12*<sup>1</sup></b> : IWRG 621 Metals (As, Cd, Cr, Cu, Ni, Pb, Zn, Hg, Mo, Se, Ag, Sn)	2	\$20.80	\$41.60
Nitrogens - speciated (TKN, NH <sub>3</sub> , NO <sub>2</sub> , NO <sub>3</sub> , Total N, Organic N, NOX)	2	\$29.30	\$58.60
Phosphate (Total)	2	\$7.20	\$14.40
<b>Total Analytical Cost per sample (ex GST)</b>			<b>\$104.10</b>
<b>Total Analytical Cost (ex GST)</b>			<b>\$156.20</b>

\*1 The price provided for Analytical suites are only applicable if the suite is reference on the chain of custody form.

**— ASSOCIATED FEES —**

Associated Fees	Price
Project fee	\$30.00 per batch

Will O'Haire  
606548 6/7/18

## Sample Receipt Advice

Company name: **GHD Pty Ltd WA**  
Contact name: **Jon Cramer**  
Project name: **TAILSON-GREENBUSHES REHABILITATION**  
Project ID: **613569100**  
COC number: **Not provided**  
Turn around time: **5 Day**  
Date/Time received: **Jul 5, 2018 12:45 PM**  
Eurofins | mgt reference: **606548**

### Sample information

- ☒ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☒ All samples have been received as described on the above COC.
- ☒ COC has been completed correctly.
- ☒ Attempt to chill was evident.
- ☒ Appropriately preserved sample containers have been used.
- ☒ All samples were received in good condition.
- ☒ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☒ Appropriate sample containers have been used.
- ☒ Sample containers for volatile analysis received with zero headspace.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

### Contact notes

If you have any questions with respect to these samples please contact:

Robert Johnston on Phone : or by e.mail: RobertJohnston@eurofins.com

Results will be delivered electronically via e.mail to Jon Cramer - jon.cramer@ghd.com.



## Certificate of Analysis

GHD Pty Ltd WA  
999 Hay Street Perth  
Perth  
WA 6004



NATA Accredited  
Accreditation Number 1261  
Site Number 1254

Accredited for compliance with ISO/IEC 17025 – Testing  
The results of the tests, calibrations and/or  
measurements included in this document are traceable  
to Australian/national standards.

Attention: Jon Cramer

Report 606548-W-V2  
Project name TAILSON-GREENBUSHES REHABILITATION  
Project ID 613569100  
Received Date Jul 05, 2018

Client Sample ID			NBN22 Water	QA3 Water	SD23 Water	CH21 Water
Sample Matrix			M18-JI07638	M18-JI07639	M18-JI07640	M18-JI07641
Eurofins   mgt Sample No.			Jul 04, 2018	Jul 04, 2018	Jul 04, 2018	Jul 04, 2018
Date Sampled						
Test/Reference	LOR	Unit				
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>						
TRH C6-C9	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH C15-C28	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C29-C36	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH C10-36 (Total)	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>						
Naphthalene <sup>N02</sup>	0.01	mg/L	< 0.01	< 0.01	< 0.01	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH C6-C10 less BTEX (F1) <sup>N04</sup>	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C10-C16 less Naphthalene (F2) <sup>N01</sup>	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
TRH >C16-C34	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C34-C40	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	< 0.1	< 0.1	< 0.1	< 0.1
Ammonia (as N)	0.01	mg/L	0.04	0.12	0.15	0.12
Nitrate & Nitrite (as N)	0.05	mg/L	< 0.05	0.09	0.09	< 0.05
Nitrate (as N)	0.02	mg/L	< 0.02	0.09	0.09	< 0.02
Nitrite (as N)	0.02	mg/L	< 0.02	< 0.02	< 0.02	< 0.02
Organic Nitrogen (as N)	0.2	mg/L	0.22	< 0.2	< 0.2	< 0.2
Phosphate total (as P)	0.05	mg/L	< 0.05	< 0.05	< 0.05	< 0.05
Total Kjeldahl Nitrogen (as N)	0.2	mg/L	0.3	0.3	0.2	0.3
Total Nitrogen (as N)	0.2	mg/L	0.3	0.3	0.3	0.3
<b>Heavy Metals</b>						
Arsenic	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Arsenic (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Cadmium	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Cadmium (filtered)	0.0002	mg/L	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Chromium	0.001	mg/L	< 0.001	< 0.001	< 0.001	0.001
Chromium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Copper	0.001	mg/L	0.001	< 0.001	0.001	0.002
Copper (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Lead	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Lead (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Lithium	0.005	mg/L	0.046	1.1	1.0	< 0.005

Client Sample ID			NBN22	QA3	SD23	CH21
Sample Matrix			Water	Water	Water	Water
Eurofins   mgt Sample No.			M18-JI07638	M18-JI07639	M18-JI07640	M18-JI07641
Date Sampled			Jul 04, 2018	Jul 04, 2018	Jul 04, 2018	Jul 04, 2018
Test/Reference	LOR	Unit				
<b>Heavy Metals</b>						
Lithium (filtered)	0.005	mg/L	0.046	1.1	0.94	< 0.005
Mercury	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Mercury (filtered)	0.0001	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Molybdenum	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Molybdenum (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Nickel	0.001	mg/L	< 0.001	< 0.001	0.001	< 0.001
Nickel (filtered)	0.001	mg/L	< 0.001	< 0.001	0.001	< 0.001
Selenium	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Selenium (filtered)	0.001	mg/L	< 0.001	< 0.001	< 0.001	< 0.001
Silver	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Silver (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Tin	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Tin (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005
Zinc	0.005	mg/L	< 0.005	< 0.005	< 0.005	0.009
Zinc (filtered)	0.005	mg/L	< 0.005	< 0.005	< 0.005	< 0.005

## Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results (regarding both quality and NATA accreditation).

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions - Method: LTM-ORG-2010 TRH C6-C36	Melbourne	Jul 11, 2018	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Melbourne	Jul 07, 2018	7 Day
Total Recoverable Hydrocarbons - 2013 NEPM Fractions - Method: TRH C6-C40 - LTM-ORG-2010	Melbourne	Jul 11, 2018	7 Day
<b>Nitrogens (speciated)</b>			
Ammonia (as N) - Method: APHA 4500-NH3 Ammonia Nitrogen by FIA	Melbourne	Jul 07, 2018	28 Day
Nitrate & Nitrite (as N) - Method: APHA 4500-NO3/NO2 Nitrate-Nitrite Nitrogen by FIA	Melbourne	Jul 07, 2018	28 Day
Nitrate (as N) - Method: APHA 4500-NO3 Nitrate Nitrogen by FIA	Melbourne	Jul 07, 2018	28 Day
Nitrite (as N) - Method: APHA 4500-NO2 Nitrite Nitrogen by FIA	Melbourne	Jul 07, 2018	2 Day
Organic Nitrogen (as N) - Method: APHA 4500 Organic Nitrogen (N)	Melbourne	Jul 06, 2018	7 Day
Total Kjeldahl Nitrogen (as N) - Method: LTM-INO-4310 TKN in Waters & Soils by FIA	Melbourne	Jul 07, 2018	7 Day
Phosphate total (as P) - Method: APHA 4500-P E. Phosphorous	Melbourne	Jul 07, 2018	28 Day
Metals IWRG 621 : Metals M12 - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Jul 07, 2018	28 Day
Metals IWRG 621 : Metals M12 filtered - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Jul 07, 2018	28 Day
Heavy Metals - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Aug 07, 2018	180 Day
Heavy Metals (filtered) - Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS	Melbourne	Aug 07, 2018	180 Day



**Company Name:** GHD Pty Ltd WA  
**Address:** 999 Hay Street Perth  
Perth  
WA 6004

**Project Name:** TAILSON-GREENBUSHES REHABILITATION  
**Project ID:** 613569100

**Order No.:**  
**Report #:** 606548  
**Phone:** 08 6222 8222  
**Fax:** 08 9429 6555

**Received:** Jul 5, 2018 12:45 PM  
**Due:** Jul 12, 2018  
**Priority:** 5 Day  
**Contact Name:** Jon Cramer

**Eurofins | mgt Analytical Services Manager : Robert Johnston**

Sample Detail						Phosphate total (as P)	Metals IWRG 621 : Metals M12	Metals IWRG 621 : Metals M12 filtered	Nitrogens (speciated)	Total Recoverable Hydrocarbons
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X	X	X
Sydney Laboratory - NATA Site # 18217										
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID					
1	NBN22	Jul 04, 2018		Water	M18-JI07638	X	X	X	X	X
2	QA3	Jul 04, 2018		Water	M18-JI07639	X	X	X	X	X
3	SD23	Jul 04, 2018		Water	M18-JI07640	X	X	X	X	X
4	CH21	Jul 04, 2018		Water	M18-JI07641	X	X	X	X	X
Test Counts						4	4	4	4	4

## Internal Quality Control Review and Glossary

### General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. This report replaces any interim results previously issued.

### Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

**\*\*NOTE:** pH duplicates are reported as a range NOT as RPD

### Units

**mg/kg:** milligrams per kilogram

**mg/L:** milligrams per litre

**ug/L:** micrograms per litre

**ppm:** Parts per million

**ppb:** Parts per billion

**%:** Percentage

**org/100mL:** Organisms per 100 millilitres

**NTU:** Nephelometric Turbidity Units

**MPN/100mL:** Most Probable Number of organisms per 100 millilitres

### Terms

<b>Dry</b>	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
<b>LOR</b>	Limit of Reporting.
<b>SPIKE</b>	Addition of the analyte to the sample and reported as percentage recovery.
<b>RPD</b>	Relative Percent Difference between two Duplicate pieces of analysis.
<b>LCS</b>	Laboratory Control Sample - reported as percent recovery.
<b>CRM</b>	Certified Reference Material - reported as percent recovery.
<b>Method Blank</b>	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
<b>Surr - Surrogate</b>	The addition of a like compound to the analyte target and reported as percentage recovery.
<b>Duplicate</b>	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
<b>USEPA</b>	United States Environmental Protection Agency
<b>APHA</b>	American Public Health Association
<b>TCLP</b>	Toxicity Characteristic Leaching Procedure
<b>COC</b>	Chain of Custody
<b>SRA</b>	Sample Receipt Advice
<b>QSM</b>	Quality Systems Manual ver 5.1 US Department of Defense
<b>CP</b>	Client Parent - QC was performed on samples pertaining to this report
<b>NCP</b>	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
<b>TEQ</b>	Toxic Equivalency Quotient

### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 50-150%-Phenols & PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.1 where no positive PFAS results have been reported have been reviewed and no data was affected.

### QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " - " in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

## Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C15-C28	mg/L	< 0.1			0.1	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
<b>Method Blank</b>							
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
<b>Method Blank</b>							
Ammonia (as N)	mg/L	< 0.01			0.01	Pass	
Nitrate & Nitrite (as N)	mg/L	< 0.05			0.05	Pass	
Nitrate (as N)	mg/L	< 0.02			0.02	Pass	
Nitrite (as N)	mg/L	< 0.02			0.02	Pass	
Phosphate total (as P)	mg/L	< 0.05			0.05	Pass	
Total Kjeldahl Nitrogen (as N)	mg/L	< 0.2			0.2	Pass	
Total Nitrogen (as N)	mg/L	< 0.2			0.2	Pass	
<b>Method Blank</b>							
<b>Heavy Metals</b>							
Arsenic	mg/L	< 0.001			0.001	Pass	
Arsenic (filtered)	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Cadmium (filtered)	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Chromium (filtered)	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Copper (filtered)	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Lead (filtered)	mg/L	< 0.001			0.001	Pass	
Lithium	mg/L	< 0.005			0.005	Pass	
Lithium (filtered)	mg/L	< 0.005			0.005	Pass	
Mercury	mg/L	< 0.0001			0.0001	Pass	
Mercury (filtered)	mg/L	< 0.0001			0.0001	Pass	
Molybdenum	mg/L	< 0.005			0.005	Pass	
Molybdenum (filtered)	mg/L	< 0.005			0.005	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Nickel (filtered)	mg/L	< 0.001			0.001	Pass	
Selenium	mg/L	< 0.001			0.001	Pass	
Selenium (filtered)	mg/L	< 0.001			0.001	Pass	
Silver	mg/L	< 0.005			0.005	Pass	
Silver (filtered)	mg/L	< 0.005			0.005	Pass	
Tin	mg/L	< 0.005			0.005	Pass	
Tin (filtered)	mg/L	< 0.005			0.005	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Zinc (filtered)	mg/L	< 0.005			0.005	Pass	
<b>LCS - % Recovery</b>							
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>							
TRH C6-C9	%	104			70-130	Pass	



Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14			%	102			70-130	Pass	
LCS - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions									
Naphthalene			%	102			70-130	Pass	
TRH C6-C10			%	110			70-130	Pass	
TRH >C10-C16			%	95			70-130	Pass	
LCS - % Recovery									
Ammonia (as N)			%	108			70-130	Pass	
Nitrate & Nitrite (as N)			%	109			70-130	Pass	
Nitrate (as N)			%	109			70-130	Pass	
Nitrite (as N)			%	114			70-130	Pass	
Phosphate total (as P)			%	72			70-130	Pass	
Total Kjeldahl Nitrogen (as N)			%	89			70-130	Pass	
Total Nitrogen (as N)			%	120			70-130	Pass	
LCS - % Recovery									
Heavy Metals									
Arsenic			%	88			80-120	Pass	
Arsenic (filtered)			%	94			80-120	Pass	
Cadmium			%	86			80-120	Pass	
Cadmium (filtered)			%	96			80-120	Pass	
Chromium			%	89			80-120	Pass	
Chromium (filtered)			%	100			80-120	Pass	
Copper			%	89			80-120	Pass	
Copper (filtered)			%	96			80-120	Pass	
Lead			%	90			80-120	Pass	
Lead (filtered)			%	98			80-120	Pass	
Lithium			%	90			70-130	Pass	
Lithium (filtered)			%	100			70-130	Pass	
Mercury			%	90			75-125	Pass	
Mercury (filtered)			%	95			70-130	Pass	
Molybdenum			%	84			80-120	Pass	
Molybdenum (filtered)			%	98			80-120	Pass	
Nickel			%	90			80-120	Pass	
Nickel (filtered)			%	95			80-120	Pass	
Selenium			%	90			80-120	Pass	
Selenium (filtered)			%	93			80-120	Pass	
Tin			%	92			80-120	Pass	
Tin (filtered)			%	89			80-120	Pass	
Zinc			%	102			80-120	Pass	
Zinc (filtered)			%	95			80-120	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S18-JI09600	NCP	%	123			70-130	Pass	
TRH C10-C14	M18-JI05295	NCP	%	71			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S18-JI09600	NCP	%	82			70-130	Pass	
TRH C6-C10	S18-JI09600	NCP	%	127			70-130	Pass	
TRH >C10-C16	M18-JI05295	NCP	%	73			70-130	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	M18-JI08707	NCP	%	101			70-130	Pass	
Nitrate & Nitrite (as N)	M18-JI08707	NCP	%	102			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Nitrate (as N)	M18-JI08707	NCP	%	102			70-130	Pass	
Nitrite (as N)	M18-JI08707	NCP	%	107			70-130	Pass	
<b>Spike - % Recovery</b>									
<b>Heavy Metals</b>				Result 1					
Arsenic	S18-JI05585	NCP	%	86			75-125	Pass	
Arsenic (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Cadmium	S18-JI05585	NCP	%	82			75-125	Pass	
Cadmium (filtered)	M18-JI06862	NCP	%	87			70-130	Pass	
Chromium	S18-JI05585	NCP	%	88			75-125	Pass	
Chromium (filtered)	M18-JI06862	NCP	%	91			70-130	Pass	
Copper	S18-JI05585	NCP	%	85			75-125	Pass	
Copper (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Lead	S18-JI05585	NCP	%	87			75-125	Pass	
Lead (filtered)	M18-JI06862	NCP	%	88			70-130	Pass	
Lithium	S18-JI05585	NCP	%	82			70-130	Pass	
Lithium (filtered)	M18-JI06862	NCP	%	88			75-125	Pass	
Mercury	S18-JI05585	NCP	%	90			70-130	Pass	
Mercury (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Molybdenum	S18-JI05585	NCP	%	88			75-125	Pass	
Molybdenum (filtered)	M18-JI06862	NCP	%	84			75-125	Pass	
Nickel	S18-JI05585	NCP	%	84			75-125	Pass	
Nickel (filtered)	M18-JI06862	NCP	%	86			70-130	Pass	
Selenium	S18-JI05585	NCP	%	82			75-125	Pass	
Selenium (filtered)	M18-JI06862	NCP	%	89			70-130	Pass	
Silver	S18-JI05585	NCP	%	82			75-125	Pass	
Silver (filtered)	M18-JI06862	NCP	%	82			75-125	Pass	
Tin	S18-JI05585	NCP	%	83			75-125	Pass	
Tin (filtered)	M18-JI06862	NCP	%	82			75-125	Pass	
Zinc	S18-JI05585	NCP	%	87			75-125	Pass	
Zinc (filtered)	M18-JI06862	NCP	%	87			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 1999 NEPM Fractions</b>				Result 1	Result 2	RPD			
TRH C6-C9	M18-JI10212	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH C10-C14	M18-JI05294	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
<b>Duplicate</b>									
<b>Total Recoverable Hydrocarbons - 2013 NEPM Fractions</b>				Result 1	Result 2	RPD			
Naphthalene	M18-JI10212	NCP	mg/L	< 0.01	< 0.01	<1	30%	Pass	
TRH C6-C10	M18-JI10212	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
TRH >C10-C16	M18-JI05294	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	M18-JI05294	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
<b>Duplicate</b>									
				Result 1	Result 2	RPD			
Ammonia (as N)	P18-Jn33761	NCP	mg/L	0.63	0.63	<1	30%	Pass	
Nitrate & Nitrite (as N)	P18-Jn33761	NCP	mg/L	0.05	0.05	3.0	30%	Pass	
Nitrate (as N)	P18-Jn33761	NCP	mg/L	0.05	0.05	3.0	30%	Pass	
Nitrite (as N)	P18-Jn33761	NCP	mg/L	< 0.02	< 0.02	<1	30%	Pass	
Phosphate total (as P)	M18-JI07064	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
Total Kjeldahl Nitrogen (as N)	M18-JI07064	NCP	mg/L	0.3	0.2	36	30%	Fail	Q15
Total Nitrogen (as N)	M18-JI07064	NCP	mg/L	0.3	0.2	36	30%	Fail	Q15

Duplicate								
Heavy Metals				Result 1	Result 2	RPD		
Arsenic	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Arsenic (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Cadmium	S18-JI05585	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Cadmium (filtered)	M18-JI06862	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass
Chromium	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Chromium (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Copper	S18-JI05585	NCP	mg/L	< 0.001	0.001	38	30%	Fail
Copper (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lead	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lead (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Lithium	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Lithium (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Mercury	S18-JI05585	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Mercury (filtered)	M18-JI06862	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass
Molybdenum	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Molybdenum (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Nickel	S18-JI05585	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Nickel (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Selenium	S18-JI05585	NCP	mg/L	0.002	0.002	2.0	30%	Pass
Selenium (filtered)	M18-JI06862	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass
Silver	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Silver (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Tin	S18-JI05585	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Tin (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass
Zinc	S18-JI05585	NCP	mg/L	0.008	0.010	19	30%	Pass
Zinc (filtered)	M18-JI06862	NCP	mg/L	< 0.005	< 0.005	<1	30%	Pass



## Comments

V2 - This report has been amended to provide Lithium results

## Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

## Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
Q15	The RPD reported passes Eurofins   mgt's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

## Authorised By

Robert Johnston	Analytical Services Manager
Alex Petridis	Senior Analyst-Metal (VIC)
Harry Bacalis	Senior Analyst-Volatile (VIC)
Joseph Edouard	Senior Analyst-Organic (VIC)
Michael Brancati	Senior Analyst-Inorganic (VIC)



**Glenn Jackson**

## National Operations Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

\* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please [click here](#).

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## CERTIFICATE OF ANALYSIS

**Work Order** : **EP1805727**  
**Client** : **GHD PTY LTD**  
**Contact** : **MR JON CRAMER**  
**Address** : **999 HAY STREET**  
**PERTH WA, AUSTRALIA 6000**  
**Telephone** : **+61 08 6222 8222**  
**Project** : **613569100**  
**Order number** :  
**C-O-C number** : **----**  
**Sampler** : **DOMINIQUE SHUTTLEWORTH**  
**Site** : **----**  
**Quote number** : **EN/005/17**  
**No. of samples received** : **16**  
**No. of samples analysed** : **16**

**Page** : 1 of 15  
**Laboratory** : Environmental Division Perth  
**Contact** : Marnie Thomsett  
**Address** : 26 Rigali Way Wangara WA Australia 6065  
**Telephone** : 08 9406 1311  
**Date Samples Received** : 08-May-2018 15:46  
**Date Analysis Commenced** : 09-May-2018  
**Issue Date** : 16-May-2018 18:45



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

### Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Canhuang Ke	Inorganics Supervisor	Perth Inorganics, Wangara, WA
Efua Wilson	Metals Chemist	Perth Inorganics, Wangara, WA
Indra Astuty	Instrument Chemist	Perth Inorganics, Wangara, WA
Santusha Pandra	Organic Supervisor	Perth Organics, Wangara, WA
Vanessa Nguyen	Organic Chemist	Perth Organics, Wangara, WA



## General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- It is recognised that TKN (EK061G) is less than ammonia (EK055G) for sample 'NZ06'. However, the difference is within experimental variation of the methods.
- EG020: It has been confirmed by re-digestion and re-analysis that total metal concentration is less than dissolved for some samples.



Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	NZ01	NZ02	NZ03	QA01	NZ04
Client sampling date / time				07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	
Compound	CAS Number	LOR	Unit	EP1805727-001	EP1805727-002	EP1805727-003	EP1805727-004	EP1805727-005	
				Result	Result	Result	Result	Result	
EG020F: Dissolved Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	0.002	0.002	<0.001	<0.001	0.003	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	0.056	0.087	0.068	0.069	0.072	
Lithium	7439-93-2	0.001	mg/L	0.043	0.023	0.001	0.001	0.001	
EG020T: Total Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	0.002	0.006	0.002	0.002	0.002	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	0.002	0.001	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	0.009	<0.005	<0.005	<0.005	<0.005	
Lithium	7439-93-2	0.001	mg/L	0.042	0.022	0.001	<0.001	<0.001	
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.18	0.03	0.03	0.43	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	0.04	<0.01	<0.01	<0.01	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	NZ01	NZ02	NZ03	QA01	NZ04
Client sampling date / time					07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805727-001	EP1805727-002	EP1805727-003	EP1805727-004	EP1805727-005
					Result	Result	Result	Result	Result
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued</b>									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	0.04	<0.01	<0.01	<0.01
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.3	0.7	0.4	0.5	1.8
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L		0.3	0.7	0.4	0.5	1.8
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L		<0.01	0.01	0.03	<0.01	<0.01
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	<50	<50
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	<100
<b>EP080: BTEXN</b>									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	2	%		107	116	67.4	137	110



## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )				Client sample ID	NZ01	NZ02	NZ03	QA01	NZ04
Client sampling date / time					07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805727-001	EP1805727-002	EP1805727-003	EP1805727-004	EP1805727-005
					Result	Result	Result	Result	Result
<b>EP080S: TPH(V)/BTEX Surrogates - Continued</b>									
<b>Toluene-D8</b>	2037-26-5	2	%		<b>78.5</b>	<b>74.7</b>	<b>92.3</b>	<b>97.4</b>	<b>95.1</b>
<b>4-Bromofluorobenzene</b>	460-00-4	2	%		<b>106</b>	<b>111</b>	<b>93.2</b>	<b>108</b>	<b>88.7</b>



Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	NZ05	NZ06	NZ07	DG08	CW09
Client sampling date / time				07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit	EP1805727-006	EP1805727-007	EP1805727-008	EP1805727-009	EP1805727-010	
				Result	Result	Result	Result	Result	
EG020F: Dissolved Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	0.002	<0.001	<0.001	<0.001	<0.001	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	0.016	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	0.043	0.076	0.050	0.050	0.047	
Lithium	7439-93-2	0.001	mg/L	0.043	0.038	0.025	0.011	<0.001	
EG020T: Total Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	0.002	0.001	<0.001	<0.001	<0.001	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	0.004	
Caesium	7440-46-2	0.001	mg/L	<0.001	0.002	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	0.016	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	<0.005	0.029	<0.005	<0.005	0.008	
Lithium	7439-93-2	0.001	mg/L	0.044	0.038	0.025	0.010	<0.001	
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.02	9.86	0.05	0.02	0.01	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	0.03	0.02	<0.01	<0.01	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analvser									



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	NZ05	NZ06	NZ07	DG08	CW09
Client sampling date / time					07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805727-006	EP1805727-007	EP1805727-008	EP1805727-009	EP1805727-010
					Result	Result	Result	Result	Result
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued</b>									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	0.03	0.02	<0.01	<0.01
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.4	9.6	0.4	0.4	0.4
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L		0.4	9.6	0.4	0.4	0.4
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L		<0.01	<0.01	<0.01	<0.01	<0.01
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	<50	<50
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	<100
<b>EP080: BTEXN</b>									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	2	%		89.0	116	117	114	122



## Analytical Results

Sub-Matrix: **WATER**  
 (Matrix: **WATER**)

Client sample ID

				NZ05	NZ06	NZ07	DG08	CW09
Client sampling date / time				07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit	EP1805727-006	EP1805727-007	EP1805727-008	EP1805727-009	EP1805727-010
				Result	Result	Result	Result	Result
EP080S: TPH(V)/BTEX Surrogates - Continued								
Toluene-D8	2037-26-5	2	%	84.8	77.3	91.1	95.9	95.6
4-Bromofluorobenzene	460-00-4	2	%	121	107	106	86.4	105



Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	NB10	MJ11	QA02	NBN12	CB13
Client sampling date / time				07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	
Compound	CAS Number	LOR	Unit	EP1805727-011	EP1805727-012	EP1805727-013	EP1805727-014	EP1805727-015	
				Result	Result	Result	Result	Result	
EG020F: Dissolved Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.001	0.001	0.001	
Bismuth	7440-69-9	0.001	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0005	0.0004	0.0006	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	0.002	<0.001	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	0.048	0.104	0.018	0.020	0.065	
Lithium	7439-93-2	0.001	mg/L	0.299	0.002	0.083	0.083	1.07	
EG020T: Total Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.001	0.001	0.001	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.0004	0.0004	0.0004	
Chromium	7440-47-3	0.001	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	0.005	<0.001	<0.001	<0.001	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	
Lithium	7439-93-2	0.001	mg/L	0.305	0.002	0.087	0.082	1.02	
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.03	0.48	0.02	0.02	0.02	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	0.03	0.03	<0.01	<0.01	0.04	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analvser									



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	NB10	MJ11	QA02	NBN12	CB13
Client sampling date / time					07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805727-011	EP1805727-012	EP1805727-013	EP1805727-014	EP1805727-015
					Result	Result	Result	Result	Result
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued</b>									
Nitrite + Nitrate as N	----	0.01	mg/L		0.03	0.03	<0.01	<0.01	0.04
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.6	1.4	0.6	0.6	0.1
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L		0.6	1.4	0.6	0.6	0.1
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L		0.01	0.04	0.01	<0.01	<0.01
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	280	300	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	230	250	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	510	550	<50
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		<100	<100	500	540	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	110	130	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	610	670	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	<100
<b>EP080: BTEXN</b>									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	2	%		99.8	74.4	105	118	102



## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )				Client sample ID	NB10	MJ11	QA02	NBN12	CB13
Client sampling date / time					07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00	07-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805727-011	EP1805727-012	EP1805727-013	EP1805727-014	EP1805727-015
					Result	Result	Result	Result	Result
<b>EP080S: TPH(V)/BTEX Surrogates - Continued</b>									
<b>Toluene-D8</b>	2037-26-5	2	%		<b>83.7</b>	<b>82.3</b>	<b>99.8</b>	<b>94.1</b>	<b>89.8</b>
<b>4-Bromofluorobenzene</b>	460-00-4	2	%		<b>116</b>	<b>88.8</b>	<b>83.4</b>	<b>86.1</b>	<b>107</b>



Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )		Client sample ID		CFN14		----	----	----	----
Client sampling date / time				07-May-2018 00:00		----	----	----	----
Compound	CAS Number	LOR	Unit	EP1805727-016		-----	-----	-----	-----
				Result		----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001		----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001		----	----	----	----
Bismuth	7440-69-9	0.001	mg/L	<0.001		----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001		----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001		----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001		----	----	----	----
Caesium	7440-46-2	0.001	mg/L	<0.001		----	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001		----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001		----	----	----	----
Zinc	7440-66-6	0.005	mg/L	0.041		----	----	----	----
Lithium	7439-93-2	0.001	mg/L	0.003		----	----	----	----
EG020T: Total Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001		----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	<0.001		----	----	----	----
Bismuth	7440-69-9	0.001	mg/L	<0.001		----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001		----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001		----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001		----	----	----	----
Caesium	7440-46-2	0.001	mg/L	<0.001		----	----	----	----
Nickel	7440-02-0	0.001	mg/L	<0.001		----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001		----	----	----	----
Zinc	7440-66-6	0.005	mg/L	<0.005		----	----	----	----
Lithium	7439-93-2	0.001	mg/L	0.004		----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001		----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001		----	----	----	----
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.02		----	----	----	----
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01		----	----	----	----
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	<0.01		----	----	----	----
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser									



## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )			Client sample ID	<b>CFN14</b>	----	----	----	----
Client sampling date / time				07-May-2018 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	<b>EP1805727-016</b>	-----	-----	-----	-----
Result				----	----	----	----	----
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued</b>								
Nitrite + Nitrate as N	----	0.01	mg/L	<0.01	----	----	----	----
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<b>0.7</b>	----	----	----	----
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>								
^ Total Nitrogen as N	----	0.1	mg/L	<b>0.7</b>	----	----	----	----
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>								
Total Phosphorus as P	----	0.01	mg/L	<b>0.01</b>	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	----	----	----	----
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L	<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	----	----	----
<b>EP080: BTEXN</b>								
Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ Total Xylenes	----	2	µg/L	<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----
<b>EP080S: TPH(V)/BTEX Surrogates</b>								
1,2-Dichloroethane-D4	17060-07-0	2	%	<b>113</b>	----	----	----	----

Page : 14 of 15  
 Work Order : EP1805727  
 Client : GHD PTY LTD  
 Project : 613569100



## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )				Client sample ID	CFN14	----	----	----	----
				Client sampling date / time	07-May-2018 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EP1805727-016	-----	-----	-----	-----
				Result		----	----	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
Toluene-D8	2037-26-5	2	%		84.2	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		107	----	----	----	----



Page : 15 of 15  
Work Order : EP1805727  
Client : GHD PTY LTD  
Project : 613569100



## Surrogate Control Limits

Sub-Matrix: <b>WATER</b>		Recovery Limits (%)	
Compound	CAS Number	Low	High
<b>EP080S: TPH(V)/BTEX Surrogates</b>			
<b>1,2-Dichloroethane-D4</b>	17060-07-0	61	141
<b>Toluene-D8</b>	2037-26-5	73	126
<b>4-Bromofluorobenzene</b>	460-00-4	60	125

Project #: 613569100

7/5/18

# Chain of Custody

Job Manager: Jon Cramer

Email Address (results): ~~Paul.Hamer@ghd.com~~  
dominique.shuttleworth@ghd.com

	GHD Sample ID	Lab ID	Date	Sample matrix	Type	No
1	NZ01		7/5/18	W	B	5
2	NZ02					
3	NZ03					
4	QA01					
5	NZ04					
6	NZ05					
7	NZ06					
8	NZ07					
9	DG08					
10	CW09					
11	NB10					
12	MJ11					
13	QA02					
	<del>QA03</del>					
14	NBN12					
15	CB13					
16	CFN14					

Analyses (12)			
TPH	Total Metals	Dissolved Metals	Nutrients
✓	✓	✓	✓

please test all samples for TPH, total metal, dissolved metals & nutrients.

Sampled by: DS

Date: 7/5/18

Received by: AD

Date: 8/5/18 3:46pm

Environmental Division  
Perth

Work Order Reference  
EP1805727



Telephone: +61-8-9406 1301

## CERTIFICATE OF ANALYSIS

**Work Order** : **EP1805773**  
**Client** : **GHD PTY LTD**  
**Contact** : **MR JON CRAMER**  
**Address** : **999 HAY STREET**  
**PERTH WA, AUSTRALIA 6000**  
**Telephone** : **+61 08 9964 3677**  
**Project** : **613569100**  
**Order number** :  
**C-O-C number** : **----**  
**Sampler** : **PAUL HAMER**  
**Site** : **Talison/Greenbushes**  
**Quote number** : **EN/005/17**  
**No. of samples received** : **6**  
**No. of samples analysed** : **6**

**Page** : 1 of 9  
**Laboratory** : Environmental Division Perth  
**Contact** : Marnie Thomsett  
**Address** : 26 Rigali Way Wangara WA Australia 6065  
**Telephone** : 08 9406 1311  
**Date Samples Received** : 09-May-2018 13:00  
**Date Analysis Commenced** : 09-May-2018  
**Issue Date** : 17-May-2018 16:41



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

### Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Canhuang Ke	Inorganics Supervisor	Perth Inorganics, Wangara, WA
Efua Wilson	Metals Chemist	Perth Inorganics, Wangara, WA
Indra Astuty	Instrument Chemist	Perth Inorganics, Wangara, WA
Santusha Pandra	Organic Supervisor	Perth Organics, Wangara, WA
Vanessa Nguyen	Organic Chemist	Perth Organics, Wangara, WA





## General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.  
LOR = Limit of reporting  
^ = This result is computed from individual analyte detections at or above the level of reporting  
ø = ALS is not NATA accredited for these tests.  
~ = Indicates an estimated value.

- EG020: It has been confirmed by re-digestion and re-analysis that total metal concentration is less than dissolved for some samples.

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	SWG 15	SWG 16	SWG 17	SWG 18	SWG 19
Client sampling date / time				08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	
Compound	CAS Number	LOR	Unit	EP1805773-001	EP1805773-002	EP1805773-003	EP1805773-004	EP1805773-005	
				Result	Result	Result	Result	Result	
EG020F: Dissolved Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.002	0.002	<0.001	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	<0.001	<0.001	0.011	0.016	<0.001	
Nickel	7440-02-0	0.001	mg/L	<0.001	<0.001	0.010	0.004	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	0.027	0.037	0.085	0.037	0.094	
Lithium	7439-93-2	0.001	mg/L	0.003	0.004	0.954	0.911	0.022	
EG020T: Total Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.002	0.002	0.005	
Bismuth	7440-69-9	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Cadmium	7440-43-9	0.0001	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
Chromium	7440-47-3	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Copper	7440-50-8	0.001	mg/L	0.001	<0.001	<0.001	<0.001	<0.001	
Caesium	7440-46-2	0.001	mg/L	<0.001	0.001	0.021	0.016	0.002	
Nickel	7440-02-0	0.001	mg/L	0.001	<0.001	0.010	0.004	<0.001	
Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	
Zinc	7440-66-6	0.005	mg/L	0.006	<0.005	0.006	<0.005	<0.005	
Lithium	7439-93-2	0.001	mg/L	0.003	0.004	0.882	0.821	0.020	
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.02	0.06	0.40	0.69	0.08	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	<0.01	0.01	0.03	<0.01	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	<0.01	<0.01	0.19	0.05	0.02	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analvser									



## Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	SWG 15	SWG 16	SWG 17	SWG 18	SWG 19
Client sampling date / time					08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805773-001	EP1805773-002	EP1805773-003	EP1805773-004	EP1805773-005
					Result	Result	Result	Result	Result
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued</b>									
Nitrite + Nitrate as N	----	0.01	mg/L		<0.01	<0.01	0.20	0.08	0.02
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>									
Total Kjeldahl Nitrogen as N	----	0.1	mg/L		0.7	0.7	1.0	1.6	0.7
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>									
^ Total Nitrogen as N	----	0.1	mg/L		0.7	0.7	1.2	1.7	0.7
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>									
Total Phosphorus as P	----	0.01	mg/L		<0.01	<0.01	0.02	0.02	0.01
<b>EP080/071: Total Petroleum Hydrocarbons</b>									
C6 - C9 Fraction	----	20	µg/L		<20	<20	<20	<20	<20
C10 - C14 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	50	µg/L		<50	<50	<50	<50	<50
^ C10 - C36 Fraction (sum)	----	50	µg/L		<50	<50	<50	<50	<50
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>									
C6 - C10 Fraction	C6_C10	20	µg/L		<20	<20	<20	<20	<20
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		<20	<20	<20	<20	<20
>C10 - C16 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C16 - C34 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	100	µg/L		<100	<100	<100	<100	<100
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		<100	<100	<100	<100	<100
<b>EP080: BTEXN</b>									
Benzene	71-43-2	1	µg/L		<1	<1	<1	<1	<1
Toluene	108-88-3	2	µg/L		<2	<2	<2	<2	<2
Ethylbenzene	100-41-4	2	µg/L		<2	<2	<2	<2	<2
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	<2	<2	<2	<2
ortho-Xylene	95-47-6	2	µg/L		<2	<2	<2	<2	<2
^ Total Xylenes	----	2	µg/L		<2	<2	<2	<2	<2
^ Sum of BTEX	----	1	µg/L		<1	<1	<1	<1	<1
Naphthalene	91-20-3	5	µg/L		<5	<5	<5	<5	<5
<b>EP080S: TPH(V)/BTEX Surrogates</b>									
1,2-Dichloroethane-D4	17060-07-0	2	%		104	103	122	116	107





## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )				Client sample ID	SWG 15	SWG 16	SWG 17	SWG 18	SWG 19
Client sampling date / time					08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00	08-May-2018 00:00
Compound	CAS Number	LOR	Unit		EP1805773-001	EP1805773-002	EP1805773-003	EP1805773-004	EP1805773-005
					Result	Result	Result	Result	Result
<b>EP080S: TPH(V)/BTEX Surrogates - Continued</b>									
<b>Toluene-D8</b>	2037-26-5	2	%		<b>98.4</b>	<b>98.3</b>	<b>86.0</b>	<b>85.8</b>	<b>97.7</b>
<b>4-Bromofluorobenzene</b>	460-00-4	2	%		<b>98.1</b>	<b>98.4</b>	<b>94.0</b>	<b>108</b>	<b>97.3</b>

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )				Client sample ID	SWG 20	----	----	----	----
Client sampling date / time				08-May-2018 00:00	----	----	----	----	
Compound	CAS Number	LOR	Unit	EP1805773-006	-----	-----	-----	-----	
				Result	----	----	----	----	
EG020F: Dissolved Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	----	----	----	----	
Arsenic	7440-38-2	0.001	mg/L	0.001	----	----	----	----	
Bismuth	7440-69-9	0.001	mg/L	<0.001	----	----	----	----	
Cadmium	7440-43-9	0.0001	mg/L	0.0002	----	----	----	----	
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----	
Copper	7440-50-8	0.001	mg/L	0.001	----	----	----	----	
Caesium	7440-46-2	0.001	mg/L	0.001	----	----	----	----	
Nickel	7440-02-0	0.001	mg/L	0.001	----	----	----	----	
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----	
Zinc	7440-66-6	0.005	mg/L	0.047	----	----	----	----	
Lithium	7439-93-2	0.001	mg/L	0.131	----	----	----	----	
EG020T: Total Metals by ICP-MS									
Antimony	7440-36-0	0.001	mg/L	<0.001	----	----	----	----	
Arsenic	7440-38-2	0.001	mg/L	0.001	----	----	----	----	
Bismuth	7440-69-9	0.001	mg/L	<0.001	----	----	----	----	
Cadmium	7440-43-9	0.0001	mg/L	0.0002	----	----	----	----	
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----	
Copper	7440-50-8	0.001	mg/L	0.001	----	----	----	----	
Caesium	7440-46-2	0.001	mg/L	0.004	----	----	----	----	
Nickel	7440-02-0	0.001	mg/L	0.001	----	----	----	----	
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----	
Zinc	7440-66-6	0.005	mg/L	0.007	----	----	----	----	
Lithium	7439-93-2	0.001	mg/L	0.118	----	----	----	----	
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----	
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----	
EK055G: Ammonia as N by Discrete Analyser									
Ammonia as N	7664-41-7	0.01	mg/L	0.08	----	----	----	----	
EK057G: Nitrite as N by Discrete Analyser									
Nitrite as N	14797-65-0	0.01	mg/L	<0.01	----	----	----	----	
EK058G: Nitrate as N by Discrete Analyser									
Nitrate as N	14797-55-8	0.01	mg/L	0.04	----	----	----	----	
EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analvser									



## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )			Client sample ID	<b>SWG 20</b>	----	----	----	----
Client sampling date / time				08-May-2018 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	<b>EP1805773-006</b>	-----	-----	-----	-----
Result				----	----	----	----	----
<b>EK059G: Nitrite plus Nitrate as N (NOx) by Discrete Analyser - Continued</b>								
Nitrite + Nitrate as N	----	0.01	mg/L	<b>0.04</b>	----	----	----	----
<b>EK061G: Total Kjeldahl Nitrogen By Discrete Analyser</b>								
Total Kjeldahl Nitrogen as N	----	0.1	mg/L	<b>0.9</b>	----	----	----	----
<b>EK062G: Total Nitrogen as N (TKN + NOx) by Discrete Analyser</b>								
^ Total Nitrogen as N	----	0.1	mg/L	<b>0.9</b>	----	----	----	----
<b>EK067G: Total Phosphorus as P by Discrete Analyser</b>								
Total Phosphorus as P	----	0.01	mg/L	<b>0.02</b>	----	----	----	----
<b>EP080/071: Total Petroleum Hydrocarbons</b>								
C6 - C9 Fraction	----	20	µg/L	<20	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	<50	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	<50	----	----	----	----
<b>EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions</b>								
C6 - C10 Fraction	C6_C10	20	µg/L	<20	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L	<20	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L	<100	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L	<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L	<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L	<100	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L	<100	----	----	----	----
<b>EP080: BTEXN</b>								
Benzene	71-43-2	1	µg/L	<1	----	----	----	----
Toluene	108-88-3	2	µg/L	<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L	<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L	<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L	<2	----	----	----	----
^ Total Xylenes	----	2	µg/L	<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L	<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L	<5	----	----	----	----
<b>EP080S: TPH(V)/BTEX Surrogates</b>								
1,2-Dichloroethane-D4	17060-07-0	2	%	<b>90.1</b>	----	----	----	----





## Analytical Results

Sub-Matrix: <b>WATER</b> (Matrix: <b>WATER</b> )				Client sample ID	SWG 20	----	----	----	----
				Client sampling date / time	08-May-2018 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit		EP1805773-006	-----	-----	-----	-----
				Result	----	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates - Continued									
Toluene-D8	2037-26-5	2	%		102	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%		94.8	----	----	----	----

Page : 9 of 9  
Work Order : EP1805773  
Client : GHD PTY LTD  
Project : 613569100



## Surrogate Control Limits

Sub-Matrix: **WATER**

		Recovery Limits (%)	
Compound	CAS Number	Low	High
<b>EP080S: TPH(V)/BTEX Surrogates</b>			
<b>1,2-Dichloroethane-D4</b>	17060-07-0	61	141
<b>Toluene-D8</b>	2037-26-5	73	126
<b>4-Bromofluorobenzene</b>	460-00-4	60	125





## Appendix H – Sample Results Tables

## Talison Historical Mining Rehabilitation Areas Preliminary Contamination Investigation



Appendix H  
Surface Water Analytical Results

Talison Historical Mining Rehabilitation Areas  
Preliminary Contamination Investigation

		8/05/2018 16:52	8/05/2018 16:52	8/05/2018 16:52	8/05/2018 16:52	8/05/2018 16:52	CH21	NBN22	SD23
		SWG 16	SWG 17	SWG 18	SG19	SP 20	CH21	NBN22	SD23
		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
		water	water	water	water	water	water	water	water
	Unit								
Inorganics									
Nitrite + Nitrate as N	mg/L	-	-	-	-	-	<0.05	<0.05	0.09
Nutrients									
Ammonia as N	mg/L	0.06	0.40	0.69	0.08	0.08	0.12	0.04	0.15
Nitrate (as N)	mg/L	<0.01	0.19	0.05	0.02	0.04	<0.02	<0.02	0.09
Nitrite (as N)	mg/L	<0.01	0.01	0.03	<0.01	<0.01	<0.02	<0.02	<0.02
Nitrogen (Total Oxidised) (as N)	mg/L	<0.01	0.20	0.08	0.02	0.04	-	-	-
Nitrogen (Total)	mg/L	0.7	1.2	1.7	0.7	0.9	0.3	0.3	0.3
Phosphate total (P)	µg/L	-	-	-	-	-	<50	<50	<50
Kjeldahl Nitrogen Total	mg/L	0.7	1.0	1.6	0.7	0.9	0.3	0.3	0.2
Nitrogen (Organic)	mg/L	-	-	-	-	-	<0.2	0.22	<0.2
Phosphorus (Total)	mg/L	<0.01	0.02	0.02	0.01	0.02	-	-	-
Metals									
Antimony	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-
Antimony (filtered)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-
Arsenic	mg/L	<0.001	0.002	0.002	0.005	0.001	0.001	<0.001	<0.001
Arsenic (filtered)	mg/L	<0.001	0.002	0.002	<0.001	0.001	0.001	<0.001	<0.001
Bismuth	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-
Bismuth (filtered)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	-	-	-
Cadmium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0002	<0.0002	<0.0002
Cadmium (filtered)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.0002	<0.0002	<0.0002	<0.0002
Caesium	µg/L	1	21	16	2	4	-	-	-
Caesium (filtered)	µg/L	<1	11	16	<1	1	-	-	-
Chromium (III+VI)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Chromium (III+VI) (filtered)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Copper	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	0.002	0.001	0.001
Copper (filtered)	mg/L	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lead (filtered)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Lithium	mg/L	0.004	0.882	0.821	0.020	0.118	<0.005	0.046	1.0
Lithium (filtered)	mg/L	0.004	0.954	0.911	0.022	0.131	<0.005	0.046	0.94
Mercury	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Mercury (filtered)	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum	mg/L	-	-	-	-	-	<0.005	<0.005	<0.005
Molybdenum (filtered)	mg/L	-	-	-	-	-	<0.005	<0.005	<0.005
Nickel	mg/L	<0.001	0.010	0.004	<0.001	0.001	<0.001	<0.001	0.001
Nickel (filtered)	mg/L	<0.001	0.010	0.004	<0.001	0.001	<0.001	<0.001	0.001
Selenium	mg/L	-	-	-	-	-	<0.001	<0.001	<0.001
Selenium (filtered)	mg/L	-	-	-	-	-	<0.001	<0.001	<0.001
Silver	mg/L	-	-	-	-	-	<0.005	<0.005	<0.005
Silver (filtered)	mg/L	-	-	-	-	-	<0.005	<0.005	<0.005
Tin	mg/L	-	-	-	-	-	<0.005	<0.005	<0.005
Tin (filtered)	mg/L	-	-	-	-	-	<0.005	<0.005	<0.005
Zinc	mg/L	<0.005	0.006	<0.005	<0.005	0.007	0.009	<0.005	<0.005
Zinc (filtered)	mg/L	0.037	0.085	0.037	0.094	0.047	<0.005	<0.005	<0.005
BTEXN									
Benzene	µg/L	<1	<1	<1	<1	<1	-	-	-
Toluene	µg/L	<2	<2	<2	<2	<2	-	-	-
Ethylbenzene	µg/L	<2	<2	<2	<2	<2	-	-	-
Xylene (o)	µg/L	<2	<2	<2	<2	<2	-	-	-
Xylene (m & p)	µg/L	<2	<2	<2	<2	<2	-	-	-
Xylene Total	µg/L	<2	<2	<2	<2	<2	-	-	-
BTEX (Sum of Total) - Lab Calc	µg/L	<1	<1	<1	<1	<1	-	-	-
Naphthalene (BTEXN)	µg/L	-	-	-	-	-	<10	<10	<10
TRH - NEPM 2013									
F1 (C6-C10 minus BTEXN)	µg/L	<20	<20	<20	<20	<20	<20	<20	<20
C6-C10 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20
F2 (>C10-C16 minus Naphthalene)	µg/L	<100	<100	<100	<100	<100	<50	<50	<50
>C10-C16 Fraction	µg/L	<100	<100	<100	<100	<100	<50	<50	<50
F3 (>C16-C34 Fraction)	µg/L	<100	<100	<100	<100	<100	<100	<100	<100
F4 (>C34-C40 Fraction)	µg/L	<100	<100	<100	<100	<100	<100	<100	<100
>C10-C40 (Sum of Total)	µg/L	<100	<100	<100	<100	<100	-	-	-
TRH - NEPM 1999									
C6-C9 Fraction	µg/L	<20	<20	<20	<20	<20	<20	<20	<20
C10-C14 Fraction	µg/L	<50	<50	<50	<50	<50	<50	<50	<50
C15-C28 Fraction	µg/L	<100	<100	<100	<100	<100	<100	<100	<100
C29-C36 Fraction	µg/L	<50	<50	<50	<50	<50	<100	<100	<100
C10-C36 (Sum of Total)	µg/L	<50	<50	<50	<50	<50	<100	<100	<100
PAHs									
Naphthalene	µg/L	<5	<5	<5	<5	<5	-	-	-

Comments

#1 ADWG 2011

#2 ADWG 2011, changed since DEC 2010

#3 ANZECC&ARMCANZ 2000

#4 Converted from original value of 0.5 of Ammor



		Location Code			RPD			RPD	NBN22	NBN22	RPD
		Date/Time	7/05/2018 15:00	7/05/2018 15:00 <th>7/05/2018 15:00</th> <th>7/05/2018 15:00</th> <th>4/07/2018</th> <th>4/07/2018</th>		7/05/2018 15:00	7/05/2018 15:00		4/07/2018	4/07/2018	
		Field ID	NBN12	QA02		NZ03	QA01		NBN22	QA3	
		Sample Type	Normal	Field_D		Normal	Field_D		Normal	Field_D	
		Matrix Type	water	water		water	water		water	water	
	Unit	EQL									
Inorganics											
Nitrite + Nitrate as N	mg/L	0.05	-	-	-	-	-	-	<0.05	0.09	57
Nutrients											
Ammonia as N	mg/L	0.01	0.02	0.02	0	0.03	0.03	0	0.04	0.12	100
Nitrate (as N)	mg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.02	0.09	127
Nitrite (as N)	mg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	<0.02	<0.02	0
Nitrogen (Total Oxidised) (as N)	mg/L	0.01	<0.01	<0.01	0	<0.01	<0.01	0	-	-	-
Nitrogen (Total)	mg/L	0.1	0.6	0.6	0	0.4	0.5	22	0.3	0.3	0
Phosphorus (Total)	mg/L	0.01	<0.01	0.01	0	0.03	<0.01	100	-	-	-
Phosphate total (P)	µg/L	50	-	-	-	-	-	-	<50	<50	0
Kjeldahl Nitrogen Total	mg/L	0.1	0.6	0.6	0	0.4	0.5	22	0.3	0.3	0
Nitrogen (Organic)	mg/L	0.2	-	-	-	-	-	-	0.22	<0.2	10
Metals											
Antimony	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	-	-	-
Antimony (filtered)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	-	-	-
Arsenic	mg/L	0.001	0.001	0.001	0	0.002	0.002	0	<0.001	<0.001	0
Arsenic (filtered)	mg/L	0.001	0.001	0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Bismuth	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	-	-	-
Bismuth (filtered)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	-	-	-
Cadmium	mg/L	0.0001	0.0004	0.0004	0	<0.0001	<0.0001	0	<0.0002	<0.0002	0
Cadmium (filtered)	mg/L	0.0001	0.0004	0.0005	22	<0.0001	<0.0001	0	<0.0002	<0.0002	0
Caesium	µg/L	1	<1	<1	0	<1	<1	0	-	-	-
Caesium (filtered)	µg/L	1	<1	<1	0	<1	<1	0	-	-	-
Chromium (III+VI)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Chromium (III+VI) (filtered)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Copper	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	0.001	<0.001	0
Copper (filtered)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Lead	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Lead (filtered)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Lithium	mg/L	0.001	0.082	0.087	6	0.001	<0.001	0	-	-	-
Lithium (filtered)	mg/L	0.001	0.083	0.083	0	0.001	0.001	0	-	-	-
Mercury	mg/L	0.0001	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0
Mercury (filtered)	mg/L	0.0001	<0.0001	<0.0001	0	<0.0001	<0.0001	0	<0.0001	<0.0001	0
Molybdenum	mg/L	0.005	-	-	-	-	-	-	<0.005	<0.005	0
Molybdenum (filtered)	mg/L	0.005	-	-	-	-	-	-	<0.005	<0.005	0

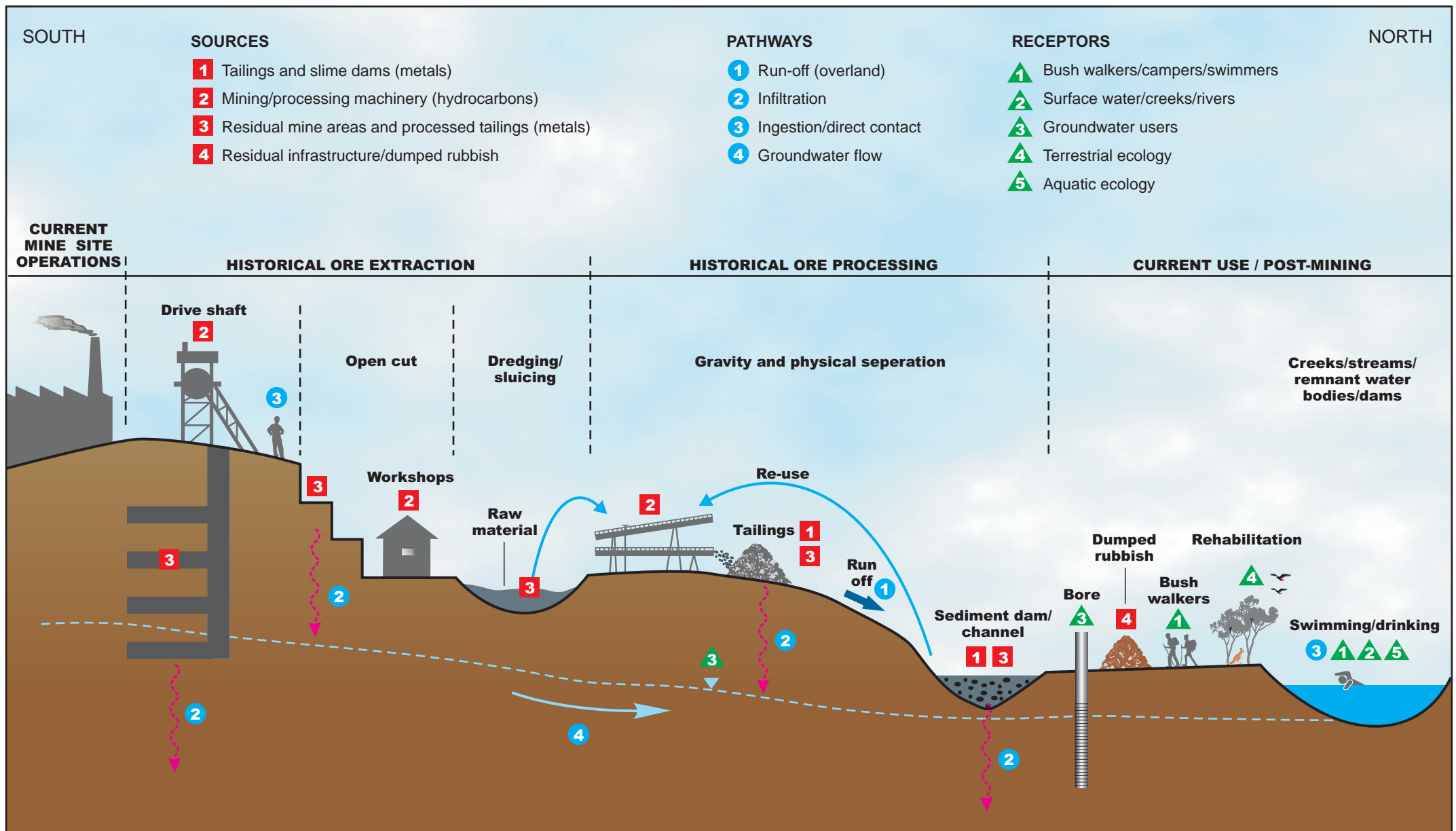
		Location Code							NBN22	NBN22	
		Date/Time	7/05/2018 15:00	7/05/2018 15:00		7/05/2018 15:00	7/05/2018 15:00		4/07/2018	4/07/2018	
		Field ID	NBN12	QA02		NZ03	QA01		NBN22	QA3	
		Sample Type	Normal	Field_D		Normal	Field_D		Normal	Field_D	
		Matrix Type	water	water	RPD	water	water	RPD	water	water	RPD
	Unit	EQL									
Nickel	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Nickel (filtered)	mg/L	0.001	<0.001	<0.001	0	<0.001	<0.001	0	<0.001	<0.001	0
Selenium	mg/L	0.001	-	-	-	-	-	-	<0.001	<0.001	0
Selenium (filtered)	mg/L	0.001	-	-	-	-	-	-	<0.001	<0.001	0
Silver	mg/L	0.005	-	-	-	-	-	-	<0.005	<0.005	0
Silver (filtered)	mg/L	0.005	-	-	-	-	-	-	<0.005	<0.005	0
Tin	mg/L	0.005	-	-	-	-	-	-	<0.005	<0.005	0
Tin (filtered)	mg/L	0.005	-	-	-	-	-	-	<0.005	<0.005	0
Zinc	mg/L	0.005	<0.005	<0.005	0	<0.005	<0.005	0	<0.005	<0.005	0
Zinc (filtered)	mg/L	0.005	0.020	0.018	11	0.068	0.069	1	<0.005	<0.005	0
BTEXN											
Benzene	µg/L	1	<1	<1	0	<1	<1	0	-	-	-
Toluene	µg/L	2	<2	<2	0	<2	<2	0	-	-	-
Ethylbenzene	µg/L	2	<2	<2	0	<2	<2	0	-	-	-
Xylene (o)	µg/L	2	<2	<2	0	<2	<2	0	-	-	-
Xylene (m & p)	µg/L	2	<2	<2	0	<2	<2	0	-	-	-
Xylene Total	µg/L	2	<2	<2	0	<2	<2	0	-	-	-
Naphthalene (BTEXN)	µg/L	10	-	-	-	-	-	-	<10	<10	0
BTEX (Sum of Total) - Lab Calc	µg/L	1	<1	<1	0	<1	<1	0	-	-	-
TRH - NEPM 2013											
F1 (C6-C10 minus BTEXN)	µg/L	20	<20	<20	0	<20	<20	0	<20	<20	0
C6-C10 Fraction	µg/L	20	<20	<20	0	<20	<20	0	<20	<20	0
F2 (>C10-C16 minus Naphthalene)	µg/L	50	<100	<100	0	<100	<100	0	<50	<50	0
>C10-C16 Fraction	µg/L	50	<100	<100	0	<100	<100	0	<50	<50	0
F3 (>C16-C34 Fraction)	µg/L	100	540	500	8	<100	<100	0	<100	<100	0
F4 (>C34-C40 Fraction)	µg/L	100	130	110	17	<100	<100	0	<100	<100	0
>C10-C40 (Sum of Total)	µg/L	100	670	610	9	<100	<100	0	-	-	-
TRH - NEPM 1999											
C6-C9 Fraction	µg/L	20	<20	<20	0	<20	<20	0	<20	<20	0
C10-C14 Fraction	µg/L	50	<50	<50	0	<50	<50	0	<50	<50	0
C15-C28 Fraction	µg/L	100	300	280	7	<100	<100	0	<100	<100	0
C29-C36 Fraction	µg/L	50	250	230	8	<50	<50	0	<100	<100	0
C10-C36 (Sum of Total)	µg/L	50	550	510	8	<50	<50	0	<100	<100	0
PAHs											
Naphthalene	µg/L	5	<5	<5	0	<5	<5	0	-	-	-

# Appendix I – Conceptual Site Model

Figure I.1 Sites located up hydraulic gradient from the active Talison minesite

Figure I.2 Sites located down hydraulic gradient from the active Talison minesite





Conceptual diagram only -  
not to scale

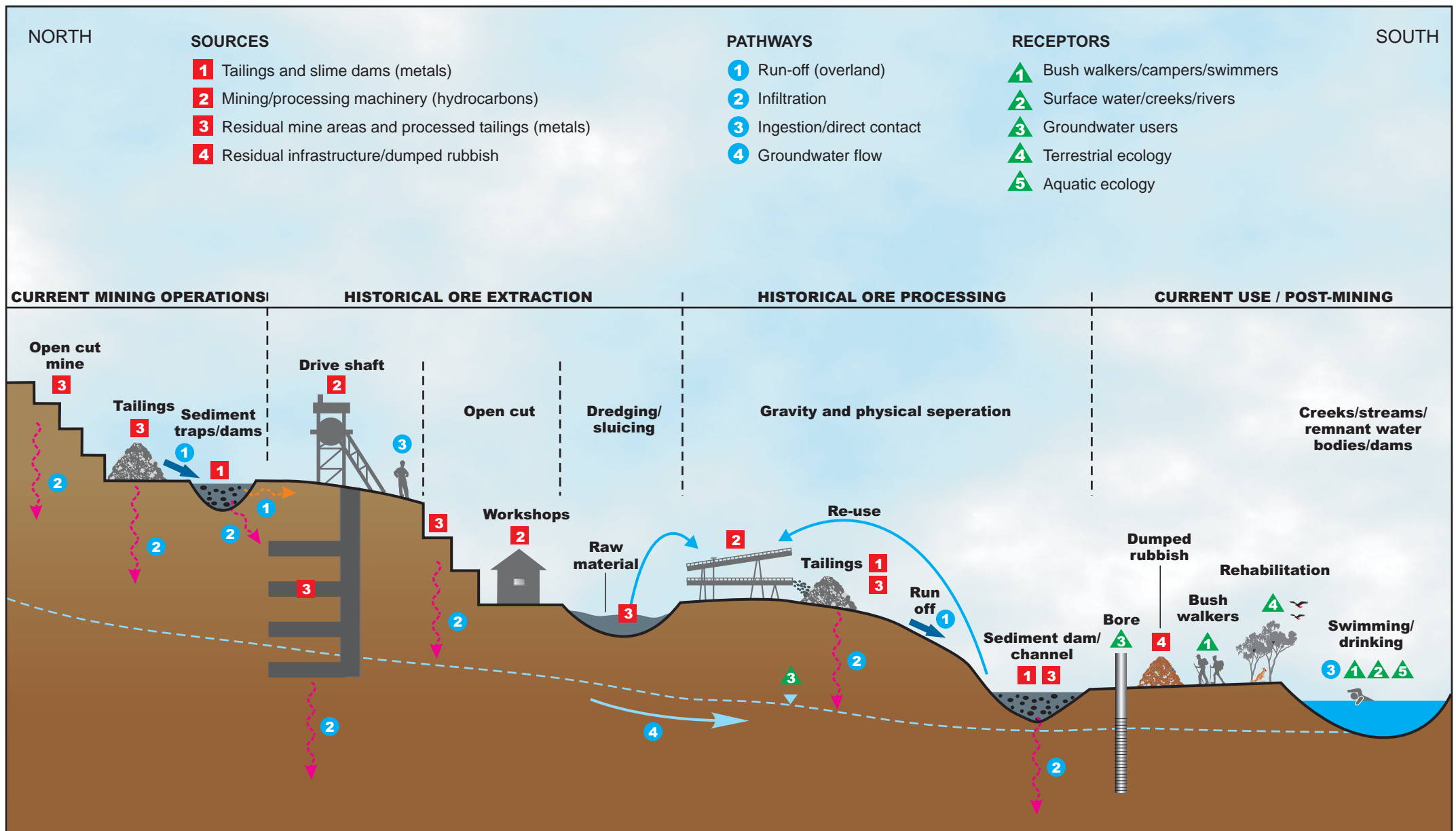


Talison Lithium Australia  
Contaminated Site Assessment  
Historical Mining Areas

Generic Conceptual Site Model  
Upgradient Areas

Job Number 61-35691  
Revision A  
Date 18 Jul 2018

Figure I.1



Conceptual diagram only -  
not to scale



Talison Lithium Australia  
Contaminated Site Assessment  
Historical Mining Areas

Generic Conceptual Site Model  
Downgradient Areas

Job Number 61-35691  
Revision A  
Date 18 Jul 2018

Figure I.2

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