

**Private and confidential**

Native Vegetation Assessment Branch  
Department of Mines, Industry Regulation and Safety  
100 Plain Street  
EAST PERTH WA 6004

Attention: The Environmental Officer

18 December 2018

**Our reference:** RTIO-HSE-0328583

**APPLICATION FOR AN AMENDMENT TO A CLEARING PERMIT (CPS 5636/4) – Juna Downs – E47/584, E47/631 and E47/1943**

Please find enclosed, an application for an amendment to an existing native vegetation clearing permit (CPS 5636/4) to allow for further hydrogeological drilling to be undertaken at Juna Downs, located in the central Pilbara region of Western Australia (Figure 1).

Exploration and hydrogeological drilling at Juna Downs has been subject to several Programmes of Work however, the area intersects an Environmentally Sensitive Area (ESA) as defined in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005* under section 51B of the *Environmental Protection Act 1986*. Therefore the exemption under Regulation 5 (Item 25) of the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* for clearing for exploration under an authority granted under the *Mining Act 1978* does not apply.

The Juna Downs exploration drilling programme was originally approved via;

- CPS 4391/1, granted September 2011. CPS 4391/1 authorised clearing of up to 11.5 hectares (ha) on E47/584 and E47/1943.
- CPS 5636/1, granted September 2013. CPS 5636/1 authorised clearing of up to 35 ha on E47/584, E47/631 and E47/1943.

Amendments to CPS 4391 and CPS 5636 have included increases to the boundary, clearing limit and purposes to facilitate further exploration and hydrogeological drilling.

The current CPS 4391/3, granted October 2016 authorises clearing of up to 26.5 ha for the purposes of '*mineral exploration*'.

The current CPS 5636/4, granted April 2018 authorises clearing of up to 125 ha for the purposes of '*mineral exploration, hydrogeological drilling and associated activities*'.

## **Request**

The Proponent, Hamersley Exploration Pty Limited is requesting to amend CPS 5636/4 to allow for further hydrogeological drilling to be undertaken across the Juna Downs region, intersecting E47/584, E47/631 and E47/1943.

The proposed groundwater monitoring bores will allow the Company to explore for water to begin to inform our understanding of the regional hydrogeological setting and the local aquifer characteristics. This information will potentially, eventually support approvals and subsequent mining of the Juna Downs deposits.

The Application for an Amendment to a Clearing Permit Form C4 is provided as Attachment 2 to this application.

The Company proposes to amend CPS 5636/4 as follows:

- **Combine Clearing Permits:** The Company requests that CPS 4391/3 be merged with, and superseded by, CPS 5636/5 (subject to approval of this application) so as to reduce the number of approvals in the Juna Downs region. On receipt of the revised clearing permit, a surrender application for CPS 4391/3 will be prepared and submitted to the Department.
- **Increase the Clearing Permit Boundary:** The Company proposes to amend the boundary of CPS 5636/4 to include the existing, approved boundary of CPS 4391/3 (Figure 2). The proposed permit boundary has been subject to previous assessment.
- **Increase the Clearing Limit:** The Company proposes to increase the clearing limit (Condition 3) of CPS 5636/4 by 90 ha, from 125 ha to 215 ha to allow for further hydrogeological drilling to be undertaken at Juna Downs and to include the existing, approved clearing limit of CPS 4391/3.
- **Extend the expiry date** of the permit from 31 December 2021 to 31 December 2029.

Clearing will be undertaken with a dozer using raised blade clearing where possible. Where already cleared, tracks and other areas requiring maintenance may be graded using blade down clearing.

## **Biological Surveys**

Vegetation and flora surveys have been undertaken over the Proposal area to support previous assessments. The relevant survey reports, including statements addressing the 10 clearing principles were provided with the original assessments of CPS 4915/1 and CPS 5636/1 and are provided as Attachment 2 and Attachment 3, 4 and 5 to this application.

The combined coverage of these surveys has enabled a detailed understanding of the existing vegetation and a considerable reference for the distribution of species (including Priority flora) in the Juna Downs region.

In summary:

- The area is adjacent to Karijini National Park and intersects an ESA.
- No Threatened or Priority Ecological Communities were recorded in the area.
- No Threatened species pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or the *Wildlife Conservation Act 1950* (WC Act) were recorded in the area.
- Eleven Priority (P) flora species were recorded in the area; *Brunonia* sp. long hairs (P1), *Eremophila* sp. Hamersley Range (P1), *Tetratheca fordiana* (P1), *Spartothamnella puberula* (P2), *Rhagodia* sp. Hamersley (P3), *Rostellularia adscendens* var. *latifolia* (P3), *Sida* sp. Barlee Range (P3), *Solanum kentrocaule* (P3), *Triodia* sp. Mt Ella (P3), *Acacia bromilowiana* (P4) and *Eremophila magnifica* subsp. *magnifica* (P4).

The Company is committed to minimising disturbance to Priority flora species as far as possible. It is considered unlikely that the proposed drilling will alter the conservation status or threaten the continued existence of any Priority flora species recorded.

- Seven primary habitat types considered suitable for conservation significant fauna were identified within the area; rock ledges, sheltered Valleys, caves, large roosting trees, steep elevated cliffs for raptor nesting sites, scree slopes with pebble stones of suitable size for the Western Pebble-mound Mouse, and soil suitable for burrowing and nesting.

These habitat types are widespread throughout the Pilbara. The survey area was considered as having a low level of conservation value in regards to the presence of unique or specialised habitat types associated with conservation significant species.

- A number of fauna species listed under the *Environmental Protection and Biodiversity Act 1999* and Schedule and Priority listed fauna were recorded or assessed as potentially occurring in the area.

Secondary evidence (scats) of the Northern Quoll (*Dasyurus hallucatus*) were recorded from rocky slopes. This habitat type is not restricted at a local or regional level, however it does contain rocky overhangs and small caves which may provide suitable habitat for Northern Quolls.

Secondary evidence (pebble mounds) of the Western Pebble-mound Mouse (*Pseudomys chapmani*) were also recorded within the area.

It is considered unlikely that the proposed drilling will impact on any population, alter the conservation status or threaten the continued existence of any conservation significant fauna species at a local or regional scale for the following reasons:

- The small scale of the clearing and low impact nature of the activities.
- Survey areas had few habitat types considered suitable for conservation significant fauna;
- Habitat types identified occur throughout the Pilbara and are not considered as being particularly unique;
- Conservation significant fauna identified as potentially occurring in the area have regional or national distributions;
- Conservation significant fauna identified as potentially occurring in the area have the ability to egress from the area; and
- The Company is committed to minimising disturbance for conservation significant species.

## **Environmental Management**

The Company operates under the Rio Tinto Iron Ore Group Health, Safety, Environment and Communities (HSEC) Management System. The HSEC Management System describes the Company's approach to health, safety, environment and social risk management and provides context and direction for continuous improvement. This Proposal will be undertaken in accordance with the HSEC Management System.


## **Cultural Heritage Management**

Detailed archaeological and ethnographic surveys have been conducted over some of the area. The Company is aware of its requirements under the *Aboriginal Heritage Act 1972* (WA) and will ensure that surveys are completed, sites are avoided or appropriate approvals are obtained prior to commencing clearing activities.

**RioTinto**

Should you have any queries on this application, please contact Carly Nixon in the first instance on 0448 873 730 or [carly.nixon@riotinto.com](mailto:carly.nixon@riotinto.com).

Yours sincerely



Sean Savage  
Superintendent, Government Approvals

**Attachments**









1. Figures
2. Application Forms C3 and C4
3. Botanical Survey for an Exploration Drilling Program at Juna Downs South and Supporting Document to a Native Vegetation Clearing Permit Application (January 2011)
4. Flora and Vegetation Survey for Drilling Areas at Juna Downs and Native Vegetation Clearing Permit Supporting Information (February 2012)
5. Flora, Vegetation and Fauna Habitat Assessment at Juna Downs and Native Vegetation Clearing Permit Supporting Report (May 2016)

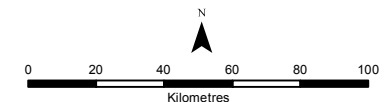
## Hydrogeological Drilling Programme at Juna Downs Regional Location

Drawn: T. Linklater  
Plan: PDE0164690v1  
Date: December 2018

Proj: GDA 1994 MGA Zone 50  
Scale: 1:2,225,000 @ A4  
gisteam@riotinto.com

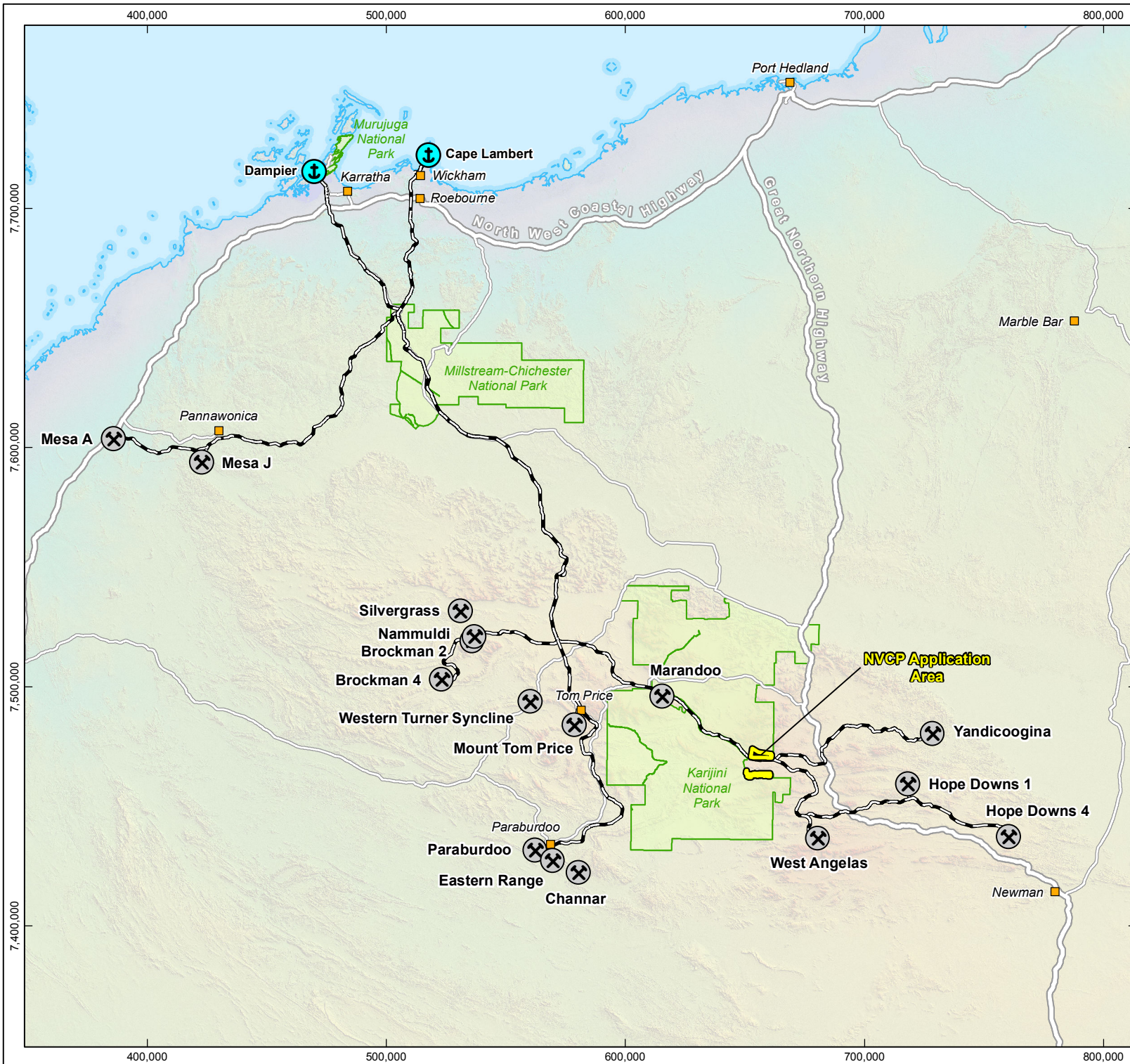
### Legend

-  Rio Tinto Mine
-  Port
-  Town
-  NCVP Application Area
-  National Park
-  Rio Tinto Railway
-  Highway
-  Major Road



Map units in metres

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






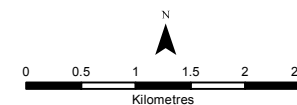
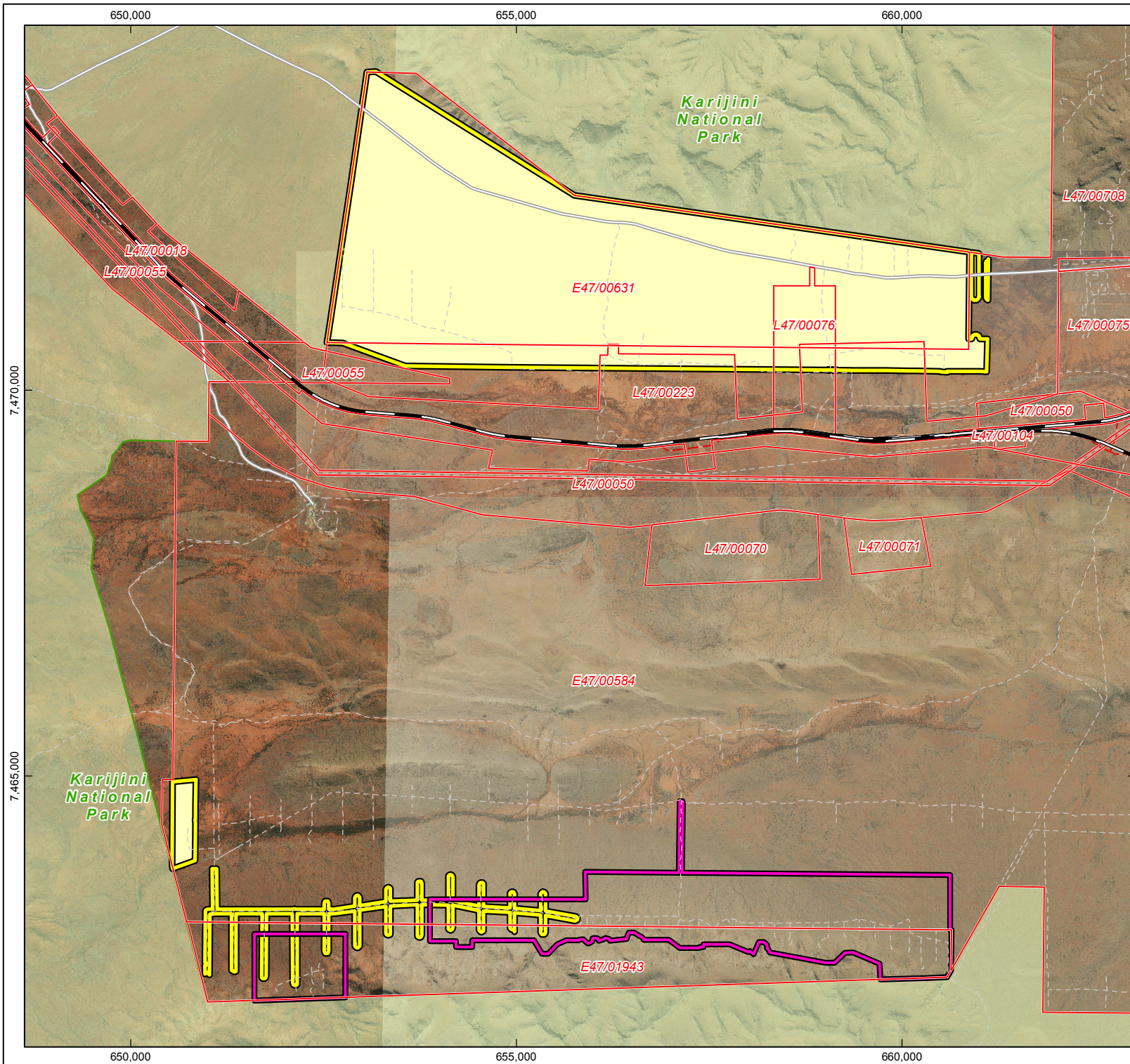
## Hydrogeological Drilling Programme at Juna Downs Existing NVCPs

Drawn: T. Linklater  
Plan: PDE0164801v1  
Date: December 2018

Proj: GDA 1994 MGA Zone 50  
Scale: 1:69,019 @ A4  
gisteam@riotinto.com

### Legend

-  Current CPS 4319/3
-  Current CPS 5636/5
-  Rio Tinto Live Mining Act Tenure
-  National Park
-  Railway
-  Minor Road
-  Rail Access Road
-  Track










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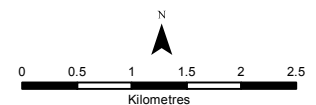
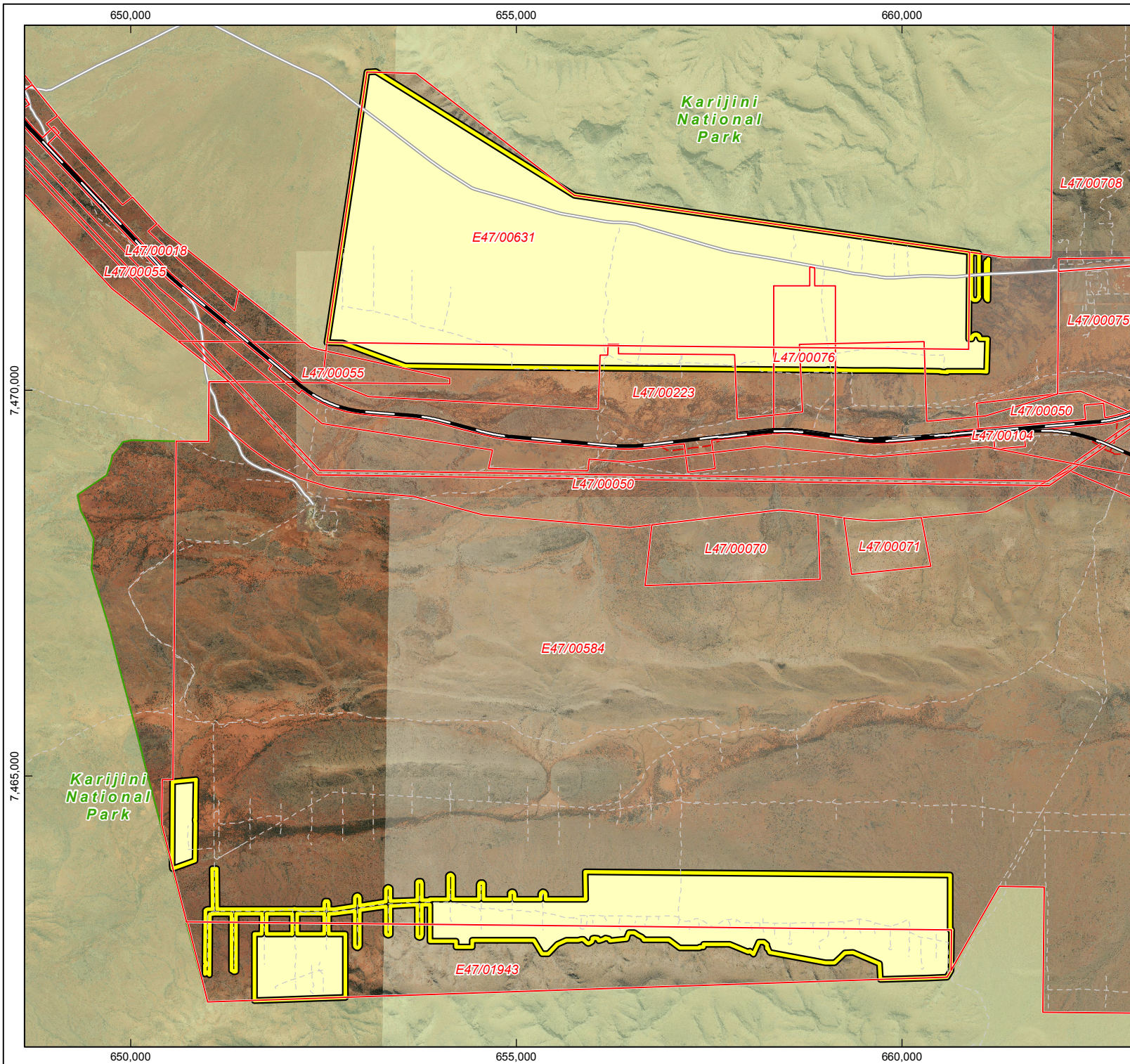
## Hydrogeological Drilling Programme at Juna Downs Proposed CPS 5636/6

Drawn: T. Linklater  
Plan: PDE0164801v1  
Date: December 2018

Proj: GDA 1994 MGA Zone 50  
Scale: 1:69,019 @ A4  
gisteam@riotinto.com

### Legend

-  Proposed CPS 5636/6
-  Rio Tinto Live Mining Act Tenure
-  National Park
-  Railway
-  Minor Road
-  Rail Access Road
-  Track



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