



Doc ID: EP-04011

11 February 2026

Mr Trevor Thomas
General Manager – Geology
Ironback Pty Ltd
Suite 3.03; level 3; 30 Currie Street
ADELAIDE SA 5000

email: trevor.thomas@magnetitemines.com

Dear Mr. Thomas

Notification of Approved Exploration Program for Environment Protection and Rehabilitation (EPEPR)

In reference to your final submission dated 29 January 2026, the EPEPR has been approved pursuant to section 70B(5) of the *Mining Act 1971* (the Mining Act).

The approved EPEPR will be made publicly available on the Mining Register and the Department for Energy and Mining (DEM) website. Details of the approved EPEPR are listed below.

Approval Granted to	Ironback Pty Ltd
Tenement Type & Number	Exploration Licence 6126
Program Number	EP-04011
EPEPR Description	12 Month EPEPR - Drilling of 50AC drill holes totaling 3300m, approximately 57 km south-southeast of Yunta at the Ironback Hills REE Project area.

You are reminded that you must always implement and comply with this approved EPEPR.

This approval does not constitute endorsement of the systems that you have in place to manage the mining operations in compliance with the *Mining Act*. Whilst your capability to undertake this activity has been considered in this approval, the responsibility for compliance with the Mining Act always remains with the tenement holder.

The legislative requirements associated with the EPEPR are outlined below, and certain requirements must be actioned prior to commencement of operations authorised by the EPEPR.

1	Public Liability Insurance Pursuant to Regulation 81 of the <i>Mining Regulations 2020</i> (the Mining Regulations), you are required to provide a copy of a certificate evidencing the insurance coverage over the tenement.
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MINERALS REGULATION



2	Compliance Reporting You are required to submit an annual exploration compliance report. The report is required to be submitted within 2 months after the anniversary of the date the licence was granted, or in accordance with joint reporting requirements agreed to with the Minister. Please refer to the DEM website for more information on the reporting requirements. You are reminded that a separate compliance report is required 2 months after the expiry or surrender of the EL.
3	Work, Health and Safety Compliance In accordance with Chapter 10 of the <i>Work Health and Safety Regulations 2012 (SA)</i> , you must meet the requirements for mine operators in South Australia, which include a notification for mining operations, the establishment of a Safety Management System, the identification of Principal Mining Hazards and development of a Principal Mining Hazard Management Plan. Further information on your responsibilities, including a guide to Chapter 10, and the Mine Operator Notification Form, is available on the SafeWork SA website .
4	EPEPR Timeframe The EPEPR is approved for a period of twelve months from the date of this letter. A further 3 months after expiry of the 12-month period is provided to complete all rehabilitation.

Please note, proposed changes to exploration operations stated in the approved EPEPR may require a EPEPR review to be submitted for assessment. Where a EPEPR review is required, implementation of the operational changes can only occur after the revised EPEPR is approved. Further information on when an exploration PEPR review is required can be found in Departmental guideline [MG22 Conducting mineral exploration](#).

In addition to the requirements under the *Mining Act*, you are reminded that your operation will have other legislative requirements that you will need to comply with.

If you have any further queries, please contact DEM staff as below:

General enquiries	Cobus Martins Assessment Officer, Exploration Regulation DEM.exploration@sa.gov.au
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Yours sincerely

Simon Constable
DIRECTOR, MINERALS EXPLORATION
In accordance with delegated powers and functions

Exploration PEPR - EPEPR | 12 Month PEPR

Reference Number: **EP-04011** • Status: **Assessment**

Select Applicable PEPR

Is historical?

No Yes

Previous PEPR ID

—

Search PEPRs

—

Applicant and General Details

Applicant Details

Matthew Paul

Full Name *

Matthew Paul

Business Phone

Mobile Phone

Email *

matthew.paul@magnetitemines.com (mailto:matthew.paul@magnetitemines.com)

Project Supervisor

Matthew Paul
Senior Geologist
Mob: 0422 375 023
Email: matthew.paul@magnetitemines.com

Trevor Thomas
Director of Studies
Mob: 0419 734 088
Email: trevor.thomas@magnetitemines.com

General Details

Tenement Details *

Tenement Type	Tenement Name	Tenement Holder
Exploration Licence	EL 6126	Ironback Pty Ltd

Operating Company

Ironback Pty Ltd

If there is another Operating Company, please provide

Account Name	Entity Type	Registered Address	Registered Email
There are no records to display.			

Project/prospect name

Ironback Hills REE

Mineral Model

Clay-hosted rare earth element (REE) mineralisation at Ironback Hill occurs within shallow, oxidised clay-silt horizons developed above weathered saprolitic basement and is strongly aligned with creek-related drainage sediments. Mineralisation is interpreted to be regolith-hosted, formed through weathering, mobilisation and secondary concentration of REE-bearing material within fluvial settings. Ongoing drilling and mineralogical testwork will refine the extent, continuity and extractability of these clay-hosted REE horizons.

Primary Commodities *

Commodity Name ↑	Commodity Group	Grade
Rare Earths	Exploration	

Secondary Commodities

Commodity Name ↑	Commodity Group	Grade
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There are no records to display.

Project Description

The drilling method will be aircore, mounted on a Toyota LandCruiser 6×6 light vehicle. Only minor drill pads will be required and no sumps will be excavated. Drill samples will be collected at one-metre intervals into half-size green polyethylene sample bags. All samples will be removed from site, and each drillhole will be immediately backfilled with clean in-situ material and capped in accordance with M21 specifications, ensuring full progressive rehabilitation before the drilling rig moves to the next location.

The proposed exploration program on EL 6126 is designed to evaluate the potential for clay-hosted rare earth element (REE) mineralisation within shallow, oxidised clay and silt horizons associated with drainage systems. Drilling will improve geological confidence by defining the extent, thickness and continuity of REE-enriched clay horizons and provide representative material for mineralogical and leachability testwork. Up to 54 aircore drillholes may be completed, with hole locations adjusted where necessary to avoid vegetation, cultural heritage constraints, or pastoral infrastructure.

Site access will utilise existing station tracks, with minor, light vehicle off-track access and no field camps will be established. Personnel will be accommodated at the Braemar Shearers' Quarters, and no additional infrastructure, fuel storage or cleared areas are required.

The intent of the program is to obtain high-quality regolith samples, refine the clay-hosted REE mineral model, and determine whether near-surface mineralisation occurs at scales warranting further investigation and potential future resource assessment.

Proposed Project Schedule

Start Date

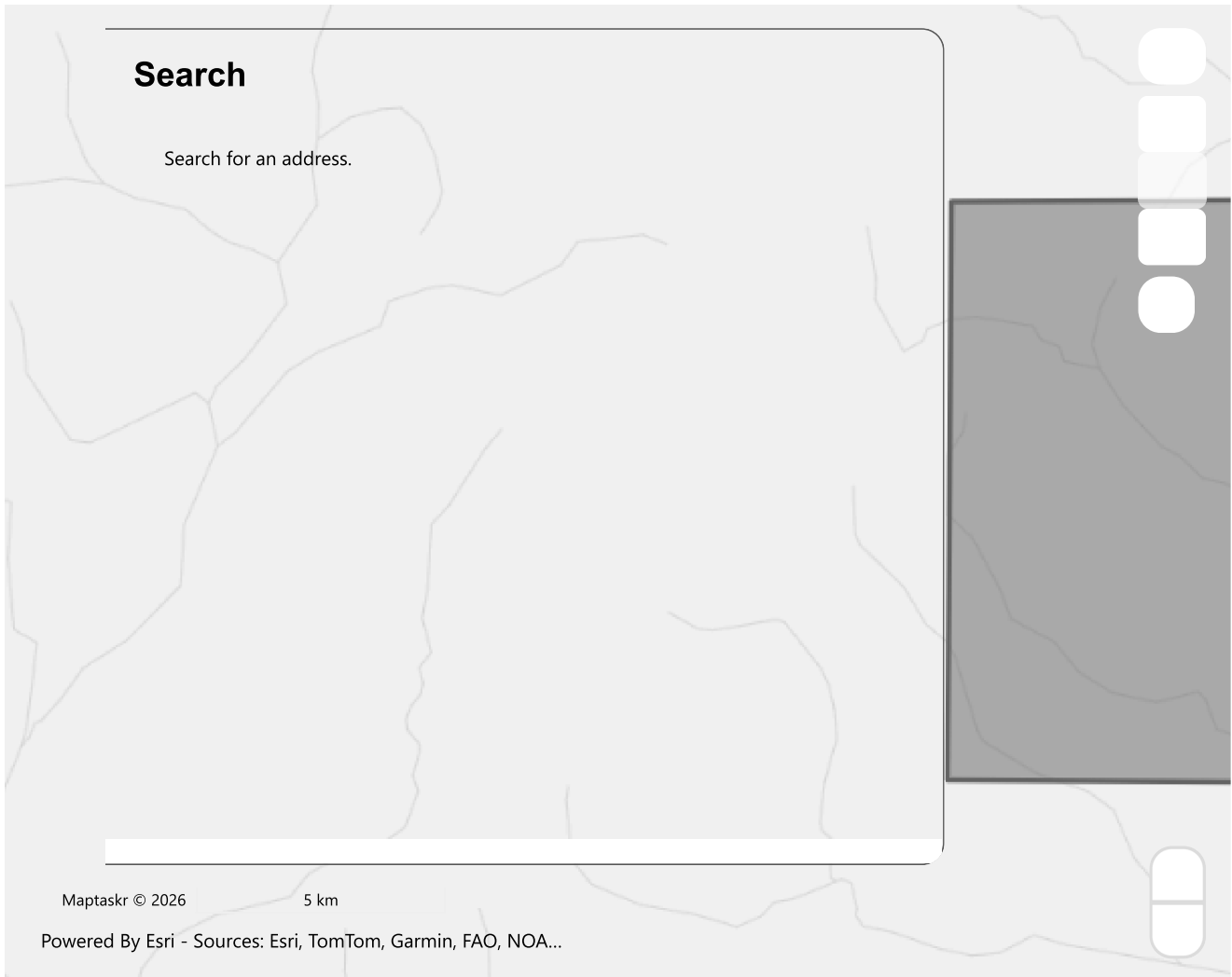
02/02/2026

End date

02/02/2027

Clearly describe why a PEPR review is required, summarise all content changes made to the approved PEPR, and provide appropriate justification where a time extension is required.

Identify Application Area



Map Layer Intersects

Application Area Details

Location Description

Faraway Hill area, approximately 57km south-southeast of Yunta

Area (Sqkm)

103.13

Spatial Data Intersects - Summary Table

Show entries

Search:

Spatial Layer Name	Category	Referral	Intersect Count
1:250K mapsheets	Other		1

Spatial Layer Name	Category	Referral	Intersect Count
Cadastral Parcels	Other		6
Determinations of Native Title	Other		1
Exploration licences (mineral/opal)	No-Go Area		1
Registered Native Title Determination Applications	Other		1
Schedule of Native Title Claims	Other		1

Showing 1 to 6 of 6 entries

Previous 1 Next

Spatial Data Intersects - Details Table

Show 10 entries

Search:

Spatial Layer Name	Shape	Primary Attribute	All Attributes	Category
1:250K mapsheets	Shape 1	CHOWILLA	View attributes	Other
Cadastral Parcels	Shape 1	H835900SE1389	View attributes	Other
Cadastral Parcels	Shape 1	H835900SE1397	View attributes	Other
Cadastral Parcels	Shape 1	H835900SE117	View attributes	Other
Cadastral Parcels	Shape 1	F219582AL50	View attributes	Other
Cadastral Parcels	Shape 1	H835900SE1396	View attributes	Other
Cadastral Parcels	Shape 1	H835900SE1395	View attributes	Other
Determinations of Native Title	Shape 1	Ngadjuri Nation #2	View attributes	Other
Exploration licences (mineral/opal)	Shape 1	EL 6126	View attributes	No-Go Area
Registered Native Title Determination Applications	Shape 1	Ngadjuri Nation #2	View attributes	Other

Showing 1 to 10 of 11 entries

Previous 1 2 Next

Program Preparation

Work undertaken in preparing the proposal

- Ongoing consultation with Northpoint (Port Pirie) Pty Ltd, the owner of the Braemar Station pastoral lease (PL 2344), regarding proposed access routes, water points, station operations and timing of exploration activities. Multiple discussions were held with the station manager to ensure operational compatibility and minimise impacts on pastoral activities.
- Engagement with Ngadjuri Nation #2 Native Title holders and SA Native Title Services regarding the proposed exploration program. Draft PEPR information and mapped drill sites were provided for review. Field operations will only commence following confirmation that Native Title consultation requirements have been satisfied.
- Consultation undertaken with the Department for Environment and Water, SA Native Vegetation Council, and other regulatory bodies through formal land access notifications and the Section 23 Native Vegetation clearance assessment (noting that no vegetation clearing is proposed).
- Several drilling contractors have provided quotations and final contractor selection will be made pending availability.

Operator Capability

Magnetite Mines (MGT) (formerly Royal Resources), as tenement holder and operator, has the necessary system/procedural capabilities, as well as the professional capabilities and support, to complete the intended works successfully. A summary of these capabilities is provided below.

It is Magnetite Mines' objective to complete field works with as minimal impact as possible to the environment, cultural heritage and other landholders, while maintaining a high level of technical output.

Professional capabilities

- Study Director - Trevor Thomas: Over 10 years' experience working in the Braemar Iron Province and on the Razorback Project; provides strategic oversight of the infill and metallurgical program, along with technical, logistical and land access support for the drilling program.
- Senior Geologist - Matthew Paul: A geologist with over 10 year's experience, including a total of over seven years in iron ore and base metals; provides technical and logistical support for the drilling program
- Director Sustainability - Allan Kane: Approximately 15 years of experience working in environmental, stakeholder, land access and cultural heritage management roles; will be the lead supervisor for this program for land access management requirements.

System capabilities

Magnetite Mines maintains an overarching cloud-based management system to drive its compliance and performance for its broad scope of activities. This management system includes a suite of procedures, manuals, checklists and other reporting templates to set a standard of operational governance,

supervision, monitoring and record keeping. System structures of relevance to this groundwater drilling program include:

- Field exploration procedures manual (technical governance)
- Field safety procedures – various (operational governance)
- Safe Work Procedures – various, and JSA templates for non-standard works
- Field induction
- Environmental risk assessment sheet (inclusive within PEPR risk assessment).

It is anticipated that, in addition to the existing system governance structure, the following practices will be enacted:

- As part of the field induction, further information will be provided on updated regulatory requirements and land access requirements (as may have been committed to relevant landowners).
 - If and as required, materials will be developed to assist field personnel to meet relevant requirements
- Periodic check-ins with landowners of general performance, access track conditions and any other relevant matters

Lease Conditions

N/A

Land Access

Identify the Owners of Land and authority to access land

Land Title Reference	Plan Parcel Reference	Type of Land	Owner of Land ↑	Land Access Authorisation Method	Date of Form 21 or Agreement Signed	Instrument or Uploaded Document Id	Uncheck land not applicable to your application ar
CL 6185/124	H8359 00SE1 17	Crown	Crown Lands Program , DEW	Service of Notice of Entry	01/12/2025	NT-01101	Checked
CL 6185/125	H8359 00SE1 389	Crown	Crown Lands Program , DEW	Service of Notice of Entry	01/12/2025	NT-01101	Checked
CL 6185/126	H8359 00SE1 395	Crown	Crown Lands Program , DEW	Service of Notice of Entry	01/12/2025	NT-01101	Checked
CL 6185/126	H8359 00SE1 396	Crown	Crown Lands Program , DEW	Service of Notice of Entry	01/12/2025	NT-01101	Checked
CL 6185/126	H8359 00SE1 397	Crown	Crown Lands Program , DEW	Service of Notice of Entry	01/12/2025	NT-01101	Checked
CR 6221/462	F2195 82AL5 0	Crown	Crown Lands Program , DEW	Service of Notice of Entry	01/12/2025	NT-01101	Checked
CL 6176/115	F25115 8AL1	Leasee	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked
CR 6221/462	F2195 82AL5 0	Crown	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked
CL 6185/125	H8359 00SE1 389	Perpetual Lease	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked

Land Title Reference	Plan Parcel Reference	Type of Land	Owner of Land ↑	Land Access Authorisation Method	Date of Form 21 or Agreement Signed	Instrument or Uploaded Document Id	Uncheck land not applicable to your application ar
CL 6185/126	H8359 00SE1 397	Perpetual Lease	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked
CL 6185/124	H8359 00SE1 17	Perpetual Lease	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked
CL 6185/126	H8359 00SE1 396	Perpetual Lease	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked
CL 6185/126	H8359 00SE1 395	Perpetual Lease	Faraway - Braemar Pastoral Company	Service of Notice of Entry	01/12/2025	NT-01100	Checked
CL 6176/115	F25115 8AL1	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked
CL 6185/126	H8359 00SE1 397	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked
CL 6185/126	H8359 00SE1 395	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked

Land Title Reference	Plan Parcel Reference	Type of Land	Owner of Land ↑	Land Access Authorisation Method	Date of Form 21 or Agreement Signed	Instrument or Uploaded Document Id	Uncheck land not applicable to your application ar
CL 6185/126	H8359 00SE1 396	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked
CL 6185/125	H8359 00SE1 389	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked
CL 6185/124	H8359 00SE1 17	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked
CR 6221/462	F2195 82AL5 0	Crown	Minister for Environment and Water	Service of Notice of Entry	01/12/2025	NT-01102	Checked
CL 6185/126	H8359 00SE1 397	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked
CT 6185/126	H8359 00SE1 396	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked
CL 6185/126	H8359 00SE1 395	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked

Land Title Reference	Plan Parcel Reference	Type of Land	Owner of Land ↑	Land Access Authorisation Method	Date of Form 21 or Agreement Signed	Instrument or Uploaded Document Id	Uncheck land not applicable to your application ar
CL 6185/125	H8359 00SE1 389	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked
CL 6185/124	H8359 00SE1 17	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked
CL 6176/115	F25115 8AL1	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked
CR 6221/462	F2195 82AL5 0	Native Title Land	Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Service of Notice of Entry	01/12/2025	NT-01103	Checked
CL 6176/115	F25115 8AL1	Crown	Pastoral Board of SA	Service of Notice of Entry	28/11/2025	NT-01099	Checked
CL 6185/124	H8359 00SE1 17	Native Title Land	SA Native Title Services	Service of Notice of Entry	01/12/2025	NT-01105	Checked
CL 6185/125	H8359 00SE1 389	Native Title Land	SA Native Title Services	Service of Notice of Entry	01/12/2025	NT-01105	Checked
CL 6185/126	H8359 00SE1 395	Native Title Land	SA Native Title Services		01/12/2025	NT-01105	Checked
CL 6185/126	H8359 00SE1 396	Native Title Land	SA Native Title Services	Service of Notice of Entry	01/12/2025	NT-01105	Checked

Land Title Reference	Plan Parcel Reference	Type of Land	Owner of Land ↑	Land Access Authorisation Method	Date of Form 21 or Agreement Signed	Instrument or Uploaded Document Id	Uncheck land not applicable to your application ar
CL 6185/126	H8359 00SE1 397	Native Title Land	SA Native Title Services	Service of Notice of Entry	01/12/2025	NT-01105	Checked
CL 6176/115	F25115 8AL1	Native Title Land	SA Native Title Services	Service of Notice of Entry	01/12/2025	NT-01105	Checked
CR 6221/462	F2195 82AL5 0	Crown	SA Native Title Services	Service of Notice of Entry	01/12/2025	NT-01105	Checked

Is any of the application area over a road, street or highway

No

Woomera Prohibited Area (WPA)

Will activities be conducted within the WPA

No

In which zone will activities be conducted?

Name	Are you intending to undertake work?	Closure start date	Closure end date
There are no records to display.			

Does the tenement holder hold a valid and current Resource Exploration Permit under the WPA Rule?

—

Permit No.

—

What is the expiry date of the permit?

—

Does the Exploration Permit allow the operator to conduct exploration operations in the WPA?

—

Other Land Owned or Controlled by the Commonwealth Department of Defence

Indicate if you are intending to undertake exploration operations within the identified defence land

No

Other Commonwealth defence land

Defence Land	Applicable
There are no records to display.	

Do you have a Deed of Access with Defence?

—

Expiry date of the Deed of Access

—

Date the Range Control Officer granted permission to conduct the proposed exploration operations.

—

Describe the results of consultation and how any concerns raised were addressed

—

Native Title

Does 'Native Title land' exist within the application area?

Yes

Using the table below, describe how you have complied with the requirements of Part 9B of the Mining Act for each tenement.

Name of Determined / Claimant Group	Agreement Type	Instrument Number	Applicable
Ngadjuri Nation #2	Native Title	233	Yes

Provide any additional relevant information

Exempt Land

Exempt Land

Has Exempt land been identified?

No

If a "Waiver of Exemption" has been reached to waive the benefit of the exemption, a notice of the agreement must be given to the Mining Registrar, either within 21 days after the agreement was entered into or when an application for the mineral tenement is made under the Mining Act.

In the table below enter the relevant instrument numbers for any Form 23C - Notice of wavier of exemption provided to the Mining Registrar.*

Land Title	Plan Parcel	Owner of Land that has benefit of exemption ↑	Why is the land exempt land?	Waiver of exemption(s) been negotiated	Instrument Number or Uploaded Document Id
CL 6185/126	H83590 0SE139 7	Crown Lands Program, DEW			
CL 6185/126	H83590 0SE139 6	Crown Lands Program, DEW			
CL 6185/126	H83590 0SE139 5	Crown Lands Program, DEW			
CL 6185/124	H83590 0SE117	Crown Lands Program, DEW			
CL 6185/125	H83590 0SE138 9	Crown Lands Program, DEW			
CR 6221/462	F21958 2AL50	Crown Lands Program, DEW			
CL 6185/125	H83590 0SE138 9	Faraway-Braemar Pastoral Company			
CL 6185/126	H83590 0SE139 6	Faraway-Braemar Pastoral Company			
CL 6185/124	H83590 0SE117	Faraway-Braemar Pastoral Company			
CL 6185/126	H83590 0SE139 5	Faraway-Braemar Pastoral Company			
CL 6176/115	F25115 8AL1	Faraway-Braemar Pastoral Company			
CL 6185/126	H83590 0SE139 7	Faraway-Braemar Pastoral Company			
CR 6221/462	F21958 2AL50	Faraway-Braemar Pastoral Company			
CR 6221/462	F21958 2AL50	Minister for Environment and Water			
CL 6185/126	H83590 0SE139 7	Minister for Environment and Water			

Land Title	Plan Parcel	Owner of Land that has benefit of exemption ↑	Why is the land exempt land?	Waiver of exemption(s) been negotiated	Instrument Number or Uploaded Document Id
CL 6185/124	H83590 0SE117	Minister for Environment and Water			
CL 6185/125	H83590 0SE138 9	Minister for Environment and Water			
CL 6176/115	F25115 8AL1	Minister for Environment and Water			
CL 6185/126	H83590 0SE139 5	Minister for Environment and Water			
CL 6185/126	H83590 0SE139 6	Minister for Environment and Water			
CL 6185/126	H83590 0SE139 7	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CT 6185/126	H83590 0SE139 6	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CL 6185/126	H83590 0SE139 5	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CL 6176/115	F25115 8AL1	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CL 6185/125	H83590 0SE138 9	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CL 6185/124	H83590 0SE117	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CR 6221/462	F21958 2AL50	Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
CL 6176/115	F25115 8AL1	Pastoral Board of SA			
CL 6185/126	H83590 0SE139 5	SA Native Title Services			
CL 6176/115	F25115 8AL1	SA Native Title Services			
CR 6221/462	F21958 2AL50	SA Native Title Services			
CL 6185/126	H83590 0SE139 6	SA Native Title Services			
CL 6185/126	H83590 0SE139 7	SA Native Title Services			
CL 6185/124	H83590 0SE117	SA Native Title Services			

Land Title	Plan Parcel	Owner of Land that has benefit of exemption ↑	Why is the land exempt land?	Waiver of exemption(s) been negotiated	Instrument Number or Uploaded Document Id
CL 6185/125	H83590 0SE138 9	SA Native Title Services			

Consultation

Consultation

Stakeholder ↑	Land Use	Matters raised	Stakeholder concerns raised and how addressed
Crown Lands Program, DEW	Grazing	Government agency wants to ensure that the Crown Perpetual lessee is suitably consulted by the explorer	Explorer has undertaken preliminary (pre NoE) and subsequent engagement with lessee, and will continue to engage as per processes outlined in the NoE.
Crown Lands Program, DEW			
Crown Lands Program, DEW			
Crown Lands Program, DEW			
Crown Lands Program, DEW			
Crown Lands Program, DEW			
Faraway-Braemar Pastoral Company	Grazing	Landowner interested in timing of proposed exploration activities around stock management activities	Explorer has committed to undertaking activities in January-March 2026 to avoid key stock management activities on the property
Faraway-Braemar Pastoral Company	Grazing	Landowner wants to direct the explorer on which station tracks can be used.	Explorer accepts the landowners request to direct use of specific tracks; landowner to provide specific direction closer to proposed commencement.
Faraway-Braemar Pastoral Company			
Faraway-Braemar Pastoral Company			
Faraway-Braemar Pastoral Company			
Faraway-Braemar Pastoral Company			
Faraway-Braemar Pastoral Company			
Faraway-Braemar Pastoral Company			
Minister for Environment and Water	Grazing	Government agency wants to ensure that the Crown Perpetual lessee is suitably consulted by the explorer	Explorer has undertaken preliminary (pre NoE) and subsequent engagement with lessee, and will continue to engage as per processes outlined in the NoE.
Minister for Environment and Water			

Stakeholder ↑	Land Use	Matters raised	Stakeholder concerns raised and how addressed
Minister for Environment and Water			
Minister for Environment and Water			
Minister for Environment and Water			
Minister for Environment and Water			
Minister for Environment and Water			
Ngadjuri Applicants for Ngadjuri Nation #2 Claim	Grazing	Engagement continuing - issues to be confirmed	No actions undertaken as yet - engagement continuing
Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
Ngadjuri Applicants for Ngadjuri Nation #2 Claim			
Ngadjuri Applicants for Ngadjuri Nation #2 Claim			

Stakeholder ↑	Land Use	Matters raised	Stakeholder concerns raised and how addressed
Ngadjuri Nation Aboriginal Corporation	Other (e.g. historic mining)		
Pastoral Board of SA	Grazing	Pastoral Board has acknowledged the receipt of the NoE and supplied no further commentary.	No action required
SA Native Title Services	Grazing	Engagement continuing - issues to be confirmed; not expecting any response from SA Natie Title Services given active advanced claim is in process with Ngadjuri.	No actions undertaken as yet - engagement continuing
SA Native Title Services			
SA Native Title Services			
SA Native Title Services			
SA Native Title Services			
SA Native Title Services			
SA Native Title Services			
SA Native Title Services			
SA Native Title Services			

If any individual or group of similar affected persons were not able to be consulted, what steps were taken to consult with them?

Not applicable

Provide any additional relevant information.

—

Describe any council policies (or out of council) or development plans that may impact the program area and a description of any known plans for future land use changes by other parties.

No policies, development plans or other land use changes have been identified that are relevant to the proposed program area.

Description of Environment

Proximity to Infrastructure and Housing

Provide the following information:

Settlements:

There are no settlements or towns within the proposed exploration area; the nearest community to a proposed drill site is Terowie, approximately 70km west. The closest residence to the proposed operations is Braemar Homestead (operated by AJ and PA McBride); Ironback is using the associated Braemar Shearers' Quarters as the accommodation base for the proposed exploration activities, as is engaging with the owner accordingly.

Roads and tracks:

The area has limited road public road infrastructure, with only Lilydale Road and Hogback Land providing access; both of these are unsealed roads under the control of the Department of Infrastructure and Transport. Access to the exploration area is from Burra, via the Eastern Road, Hogback lane and Lilydale Road. Other access routes include from Terowie via Hogback Lane, or from Yunta via the Sturt Vale Road and Lilydale Road (from north/east).

All other tracks in the area are under the care and control of the Braemar/Faraway Hill pastoral operations; all tracks are unsealed, generally graded into the surface, and of variable condition. These tracks are likely to be susceptible to wet conditions that may render them unusable. Ironback has agreed with the pastoral landowner to only use those tracks designated by the landowner.

Other infrastructure:

There are no schools or hospitals in the area; the nearest medical facilities are in Burra, approximately 90km southwest. There are no commercial or industrial sites, or any noted European heritage sites. As an operating pastoral station, there are associated bores, dams/ground tanks, water reticulation (see below) and storage, stock troughs, fences and yards - some of which classify as exempt land. Ironback has amended its program to not impact exempt lands, and is working closely with the landowner to avoid any sensitive areas.

There are no railway lines, transmission lines, gas pipelines, utility-scale water pipelines or communications lines within the vicinity of the proposed exploration operations. It is noted that low-pressure water supply lines, operated by the pastoral landowner, are within the general area and will be avoided; consultation with the landholder continues and will be reviewed prior to commencement of operations.

Attach Files 

Expand/Collapse

File Name	File Size (Mb)	Created On	Download
20251202 - 2026 Ironback Hills REE drilling EPEPR - general topography.pdf	6.05 Mb	03-12-2025 12:42:56	Download (MERS/EP-04011/Proximity to infrastructure/20251202 - 2026 Ironback Hills REE drilling EPEPR - general topography_2025-12-03T02-13-01.163Z.pdf)

Landform, topography, soil and surface cover

Describe the topography and soil and surface cover (e.g. gibber) of the general area affected by the exploration program. Include details on the susceptibility to compaction, erosion, dust, runoff and visual attributes (steep or undulating slopes, plains, rocky outcrops, dunes, saltpans, claypans etc) any other characteristics (e.g. acid sulphate soils) that may require control strategies to reduce environmental impacts during operations or rehabilitation.

Topography:

The topography of the exploration area is dominated by flat calcareous plains, gently sloping downwards from the Ironback Hill that bisects the area in a northeast-southwest alignment. The slopes of the hill range are noticeably steeper than surrounding areas, at an approximate 1:4 gradient. Proposed drill sites avoid the steeper inclines; gradients of 1:40 to 1:120 are expected at proposed drill sites further away from Ironback Hill, while those drill sites located at the northeastern end of the proposed program area (and closer to Ironback Hill) have gradients at up to 1:25.

Ephemeral creeks and drainage lines intersperse the exploration area and are expected to have excised channels in some areas. The catchment head is formed by the Levi/Pualco Range to the northwest, with the Ironback Hills generally forming a barrier range mid-catchment and creating a series of small sub-catchments principally on its southeastern flank.

Soils and surface:

The entire exploration area sits within the BB1 unit type, as per the Digital Atlas of Australian Soils. This unit type is described as (National Resource Information Centre 1991):

“Hills and plains: hills and ranges of rock outcrops and shallow calcareous loamy soils (Um5.11) and possibly other shallow soils (unclassified); flanked by pediments of crusty loamy soils (Dr1.13 and Dr1.33); and interspersed by broad plains of brown calcareous earths (Gc) with saline soils (unclassified) in the lower-lying situations; a few dune tracts of brown sands (Uc5.11 and Uc5.12).”

These neutral to alkaline soils have shallow to moderate soil profile depths, poor permeability and low water holding capacity, and resulting low-to-moderate gross nutrient status. It is anticipated that deeper and more productive soils will be located alongside drainage features and within adjacent floodplains (coincident with the majority of proposed drilling locations).

Impacts/controls:

Avoidance of steeper slopes and the dominant use of existing access routes are the primary controls for the proposed program; these reduce the probability of visual impacts on the landscape (i.e., new tracks), soil compaction and erosion processes. Further, the low-impact nature of the proposed drilling activities (4WD-mounted rig, no pad clearance, no track clearance [vehicles are walked], unidirectional travel [limitation on vehicle turnarounds], prioritised use of existing access tracks and fence lines) all substantially de-risk proposed activities to ensure extremely limited potential for impacts.

Attach Files 

Expand/Collapse

File Name	File Size (Mb)	Created On	Download
20251202 - 2026 Ironback Hills REE drilling EPEPR - soils.pdf	6.94 Mb	03-12-2025 13:54:07	Download (MERS/EP-04011/Landform, topography/20251202 - 2026 Ironback Hills REE drilling EPEPR - soils_2025-12-03T03-24-10.399Z.pdf)

Surface Water

Will the proposed program interfere with surface water bodies and natural drainage (e.g. drainage lines, creeks, floodplains, wetlands)?

Yes

Describe the potential interference and surface water bodies and natural drainage on maps.

Proposed drilling locations are immediately adjacent to ephemeral creeks and drainage lines, reflecting the exploration model targeted by this program. While activities will be located close to these natural drainage features, activities will not impact their function. All drilling will be located outside of drainage channels and principally within the adjacent floodplain areas.

Crossing of natural drainage features will occur along existing tracks and fence lines only; no access track development/preparation is planned for this program.

The majority of drilling locations have been positioned along existing tracks and fence lines; for those sites located off-track, vehicles will be walked over the natural surface. Drilling activities are inherently low impact, with no pad preparation or mechanical sump excavation. Any residual materials will be backfilled into the drill hole and the hole plugged, with all rehabilitation to be completed at the completion of each hole. As a result, it is anticipated that the proposed drilling in floodplain areas will have no material impacts on water flow regimes, water quality or other factor.

Ironback confirms that all proposed drill collars are in excess of 150 metres from any nearby surface dams; with specific regards to pDH041, that drill collar is over 340 metres from the nearest surface water dam (East Block Dam).

Indicate how you will avoid disturbance

Is the program area located within water protection areas defined under the River Murray Act 2003?

No

Select the name(s) of protected water areas

Is the program area located within any prescribed watercourses or prescribed surface water areas under the Landscape?

No

Select the name(s) of the prescribed watercourses or prescribed surface water areas under the Landscape South Australia Act 2019.

Attach Files 

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File Name	File Size (Mb)	Created On	Download
20251202 - 2026 Ironback Hills REE drilling EPEPR - terrain and runoff.pdf	7.15 Mb	03-12-2025 14:24:20	Download (MERS/EP-04011/Surface water/20251202 - 2026 Ironback Hills REE drilling EPEPR - terrain and runoff_2025-12-03T03-54-21.554Z.pdf)

Name

Applicable

There are no records to display.

Groundwater

Is groundwater likely to be intersected when conducting the exploration program?

No

Provide evidence or any supporting information demonstrating this.

Groundwater within the targeted exploration area and surrounding region are primarily hosted in the following four hydrostratigraphic units:

- Neoproterozoic Adelaide Geosyncline fractured rock aquifer(s)
- Tertiary Murray Basin sedimentary aquifer(s)
- Neogene fluvial aquifer(s)/paleovalley(s)
- Neogene perched aquifer(s)

Based on assessments undertaken by Magnetite Mines (parent company of Ironback) for the nearby Razorback Project, Tertiary Murray Basin sedimentary aquifers are not expected to occur within the targeted exploration area. Further, it is expected that the only Neogene fluvial aquifer/paleovalley within the region is along the Manunda Creek system approximately 15km east of the nearest proposed drill site. As a result, only the Adelaide Geosyncline fractured rock aquifer and Neogene perched aquifer(s) remain as credible groundwater systems within the targeted exploration area.

Unconfined Neoproterozoic Adelaide Geosyncline fractured rock aquifer(s) are situated throughout the region, including within the targeted exploration area. The saturated depth of the fractured rock aquifer likely varies but is likely limited to a zone approximately 100-200 metres below ground level (though may become shallower nearer to sections of outcrop). No Neogene perched aquifer systems have been specifically recorded in the targeted exploration area.

A major drilling program was completed at Ironback Hills (immediately adjacent the majority of proposed drill sites) between September 2011 and March 2012. Both RC and DD drilling was completed, with drill depths between 90 and 453 metres. During these drilling activities, no groundwater was intersected shallower than 60 metres, with water only being intersected within the fractured rock aquifer system of Braemar Iron Formation and not within the overlying Pooraka Formation.

Stratigraphic drilling and groundwater production testing was completed by Magnetite Mines (parent company to Ironback) in 2022 at locations north, west and northwest of the targeted exploration area. The closest stratigraphic hole is located ~4 kilometres north of the targeted exploration area, and is deemed to be representative of the majority of the targeted exploration area. Drill logs for this site indicate layers of mudstones beneath highly weathered quartzites. The hole was dry until a saturated zone was encountered at 84 metres depth, reflecting the anticipated depth to groundwater in the general region. Yields were generally low at 1.0-1.5 litres per second.

The proposed drilling program has a maximum hole depth of 50 metres, and is not anticipated to intersect the fractured rock aquifer system that occur at depths of greater than 60 metres.

Further, there is a low probability of intersecting small, isolated perched aquifer systems (Neogene fluvial sediments). These systems are generally small, localised perched aquifers that can form in the Quaternary sediments where shallow impermeable layers underlie more permeable sediments that can store groundwater. Ironbark is aware of only one occurrence of this type of aquifer in the region, which is over 25 kilometres north of the targeted exploration area.

Description of the localities/areas where different groundwater conditions may be encountered

Allan

Add the different groundwater conditions for each localities/areas to the table below.

Name ↑	Formation age and/or stratigraphic unit	Stratigraphic intervals (depth range) (m)	Aquifer formation name	Aquifer Interval/thickness (from-to) (m)	Aquifer Type	Aquifer salinity (TDS)	Depth to groundwater (m)	Comments
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There are no records to display.

Provide the environmental value of each aquifer present determined according to the current Environment Protection (Water Quality) Policy.

Provide a description of the existence, location and value of all Groundwater Dependent Ecosystems (GDE) within and immediately surrounding the project area

The proposed exploration activities are not located within an area identified as a potential groundwater dependent ecosystem (GDE), as per the Australian Government's Groundwater Dependent Ecosystems Atlas. No aquatic or subterranean GDEs are located proximate to the proposed drill sites; however, three terrestrial GDEs are located within 5 kilometres of proposed drill sites, being:

- Casuarina pauper (mixed) woodland - 2.7 kilometres SE from nearest proposed drill location
- Maireana sedifolia shrubland (1m) - 4.0 kilometres S from nearest proposed drill location
- Eucalyptus socialis ssp. mallee woodland - 5 kilometres NE from nearest proposed drill location.

All three terrestrial GDEs have been assessed as having a low potential for groundwater interaction.

Is the proposed program located within a prescribed wells area?

No

Select the prescribed wells

Is the proposed program located within a prescribed water resource area?

No

Select the prescribed water resource areas

Provide any additional information

Given the low probability of intersection of groundwater and, in the event groundwater is intersected impacts are expected to be insignificant, there is no likelihood of impact to GDEs as a result of Ironback's proposed activities.

Attach Files 

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File Name	File Size (Mb)	Created On	Download
20251202 - 2026 Ironback Hills REE drilling EPEPR - GDE.pdf	5.87 Mb	03-12-2025 12:50:29	Download (MERS/EP-04011/Groundwater/20251202 - 2026 Ironback Hills REE drilling EPEPR - GDE_2025-12-03T02-20-30.809Z.pdf)

Native Vegetation

Will you be working within areas of native vegetation?

Yes

Provide the following information:

Vegetation communities within the exploration area are listed below:

- *Atriplex vesicaria* ssp., *Maireana astrotricha* +/- *Maireana pyramidata* +/- *Rhagodia spinescens* low open shrubland
 - *Casuarina pauper* +/- *Alectryon oleifolius* ssp. *canescens* low open woodland
 - *Eucalyptus socialis* ssp., *Eucalyptus gracilis* +/- *Myoporum platycarpum* ssp. +/- *Callitris glaucophylla* mid mallee woodland
 - *Eucalyptus socialis* ssp., *Eucalyptus oleosa* ssp. *oleosa* +/- *Myoporum platycarpum* ssp. +/- *Eucalyptus dumosa* mid mallee woodland
 - *Maireana pyramidata*, *Rhagodia spinescens*, *Atriplex vesicaria* ssp., *Maireana astrotricha* low open shrubland
 - *Maireana sedifolia*, *Maireana pyramidata* low open shrubland
- Sida petrophila*, *Ptilotus obovatus* var. +/- *Prostanthera striatiflora* +/- *Chenopodium curvispicatum*, *Enchylaena tomentosa* var. low open shrubland

Most areas of exploration activity are in or adjacent to previously cleared areas (i.e., use of existing access tracks, drilling activities adjacent tracks). Plans for 13 of the proposed drill sites are 'off-track', requiring the drill rig and support vehicles to 'walk' across existing land surface/vegetation; such activities have been planned to occur in vegetation community types amenable to such vehicle movements (i.e., open, low density areas). Off-track drilling activities will occur in the *Maireana sedifolia* low open shrubland, *Casuarina pauper* low open shrubland and *Atriplex vesicaria* low open shrubland communities.

Indicate why you will not be working within areas of native vegetation?

Attach Files 

File Name	File Size (Mb)	Created On	Download
20251202 - 2026 Ironback Hills REE drilling EPEPR - vegetation units.pdf	5.91 Mb	03-12-2025 16:21:25	Download (MERS/EP-04011/Native Vegetation/20251202 - 2026 Ironback Hills REE drilling EPEPR - vegetation units_2025-12-03T05-51-27.395Z.pdf)

Fauna

Describe the native and feral fauna that may be present in the application area, including feral species.

State fauna databases record the following native species within 1.5km of the proposed drill sites and key access corridors:

- *Anthus novaseelandiae novaseelandiae* (Australian Pipit)
- *Aphelocephala leucopsis leucopsis* (Southern Whiteface)
- *Artamus (Angroyan) cinereus* (Black-faced Woodswallow)
- *Diplodactylus furcosus* (Ranges Stone Gecko)
- *Diplodactylus vittatus* (Eastern Stone Gecko)
- *Dromaius novahollandiae* (Emu)
- *Eolophus roseicapilla* (Galah)
- *Falco cenchroides cenchroides* (Nankeen Kestrel)
- *Gehyra variegata* (Tree Dtella)
- *Heteronotia binoei* (Bynoe's Gecko)
- *Lophochroa leadbeateri* (Pink Cockatoo)
- *Macropus fuliginosis* (Western Grey Kangaroo)
- *Malurus leucopterus leuconotus* (White-winged Fairy-wren)
- *Melopsittacus undulatus* (Budgerigar)
- *Osphranter robustus robustus* (Common Wallaroo)
- *Osphranter rufus* (Red Kangaroo)
- *Pogona vitticeps* (Central Bearded Dragon)
- *Sminthopsis crassicaudata* (Fat-tailed Dunnart)
- *Underwoodisaurus milii* (Thick-tailed Gecko)

State fauna databases record the following introduced species within 1.5km of the proposed drill sites and key access corridors:

- *Capra hircus* (Goat)
- *Oryctolagus cuniculus* (Rabbit)
- *Mus musculus* (House Mouse)
- *Sturnus vulgaris* (Common Starling)
- *Vulpes vulpes* (Red Fox)

It is also expected that *Ovis aries* (Domestic Sheep) and *Bos taurus* (Domestic Cow) are present in the area, and *Canis familiaris* (Domestic Dog, wild) has been sighted by the landowner.

It is acknowledged that this database is limited in its record of specific occurrences; however, it provides an indication of the types of species that are likely to exist, or may be prevalent, within the targeted exploration area.

Significant Habitats, Flora & Fauna

Are there any significant habitats, flora and fauna within the project area?

Yes

Use the table below to list any significant habitats and any rare or endangered flora and fauna species located or reported to have been in the area that may be impacted by the proposed program. Include known sightings of listed species on a locality plan/map.

Species name/habitat	Common name	NPW Act Rating	EBPC Act Rating
Codonocarpus pyramidalis	Slender Bellfruit	Endangered (EN)	Endangered
Aphelocephala leucopsis leucopsis	Southern Whiteface	Least concern (LC)	Vulnerable
Lophochroa leadbeateri	Major Mitchell's Cockatoo	Rare (RA)	Conservation dependent

Attach Files

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File Name	File Size (Mb)	Created On	Download
20251210 - 2026 Ironback Hills REE drilling EPEPR - Listed species.pdf	5.87 Mb	10-12-2025 13:32:26	Download (MERS/EP-04011/Fauna/20251210 - 2026 Ironback Hills REE drilling EPEPR - Listed species_2025-12-10T03-02-27.516Z.pdf)

Weeds and Pathogens

Provide information of the extent the area is affected or potentially affected by weeds and pathogens (e.g. phytophthora; buffel grass Cenchrus ciliaris).

State flora databases record the following introduced species within 1.5km of the proposed drill sites and key access corridors:

- Alyssum linifolium (Flax-leaf Allysum)
- Asphodelus fistulosus (Onion Weed)
- Carrichtera annua (Ward's Weed)
- Erodium cicutarium (Common Heron's-bill)
- Herniaria coneria (Rupturewort)
- Hordeum (Barley)
- Lycium ferocissimum (African Boxthorn); Weed of National Significance
- Medicago polymorpha (Spineless Burr Medic)
- Schismus barbatus (Arabian Grass)
- Sisymbrium ersimoides (Smooth Mustard)
- Sonchus oleraceus (Common Sow-thistle)
- Taraxacum officinale (Garden Dandelion)

It is acknowledged that this database is limited in its record of specific occurrences; however, it provides an indication of the types of species that are likely to exist, or may be prevalent, within the targeted exploration area.

Attach Files

File Name	File Size (Mb)	Created On	Download
20251204 - 2026 Ironback Hills REE drilling EPEPR - Introduced flora.pdf	5.88 Mb	04-12-2025 14:19:46	Download (MERS/EP-04011/Weeds and Pathogens/20251204 - 2026 Ironback Hills REE drilling EPEPR - Introduced flora_2025-12-04T03-49-47.577Z.pdf)

Aboriginal Heritage

Describe the steps taken to identify Aboriginal heritage sites within the proposed area of exploration. Include a statement advising if an Aboriginal heritage survey has been conducted by the proponent and if so, the results of the survey.

Ironback has liaised with Ngadjuri Nation regarding the preferred heritage management approach to the program. A presentation to the Ngadjuri Board was held in December 2025, at which a preference for a clearance survey was established. Ironback is currently planning a clearance survey with Ngadjuri/SANTS that will be completed prior to commencement of exploration activities.

Ironback is committed to working collaboratively to safeguard Ngadjuri heritage values during its exploration programs, and will be implementing exclusions and other controls as recommended in the upcoming clearance survey.

Environmentally Sensitive Locations

Indicate if you are intending to undertake exploration operations within the environmentally sensitive locations listed.

No

Name	Applicable
There are no records to display.	

Are you likely to impact on the environmentally sensitive area?

—

Detail the likely effects the proposed program may have.

Attach Files 

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File Name	File Size (Mb)	Created On	Download
No Files Uploaded			

Exploration Operations

Equipment and Personnel requirements

Using the table below, describe the maximum composition of field crews (operator, contractors, and geologists) and proposed working hours/days for each type of activity.

Type of Personnel	Number	Name of contractor company (if applicable)
Drilling Crew	3	TBA
Geologists	1	Magnetite Mines Limited
Field assistants/technicians	1	Magnetite Mines Limited

Shifts worked per day	Hours worked per day	Days worked per week
1	10	7

Using the table below, describe the equipment (size, number and contractor details) required to conduct the proposed operations.

Name	Owner/Operator	Description/capacity	Activity/purpose
Light Vehicle	Magnetite Mines Limited	Landcruiser cab chassis or similar	Personnel access to site, sample collection
Aircore drill rig	TBA	Toyota Landcruiser 79 series 6x6 (1VD-FTV 4.5L V8 Turbo Diesel) Dump mast, On board water tank, Dual breakout system, Stand up rod bin, Height adjustable sample system, Rod gate with rotation interlock, Control panel FOPS structure	AC Drilling.
Light support vehicle	TBA	Isuzu 4x4 or similar - Water, Fuel, rods, tooling, and spares	AD Drilling
Light Vehicle	Magnetite Mines Limited	Landcruiser cab chassis or similar	Personnel access to site, sample collection

Low impact exploration activities

Will low impact exploration operations be conducted that are not covered by the Generic program for environment protection and rehabilitation – low impact mineral exploration in South Australia, (generic PEPR)?

No

Describe each type of low impact operations proposed.

Drilling Operations

Will exploration drilling Operations be conducted?

Yes

Fill out the below table

Tenement	Drilling Types	Maximum number of drillholes	Maximum drillhole depth (m)	Number of drill pads	Maximum number of sumps required at each site	Maximum size of sumps (length x depth x width)	Average size of each drill pad	Number of sites requiring pad excavation	Average volume of material to be excavated
EL 6126	Aircore	55	60.00	0	0	0.00	0.00	0	0.00

Other Drilling Method(s)

Drillsite preparation

If exploration drilling activities are proposed, describe the methods used to prepare sites, including vegetation clearance requirements, site levelling and digging of sumps.

The Landcruiser-mounted aircore rig and support vehicles will access sites cross-country, with collar locations adjusted to avoid vegetation or dunes. Sampling will be conducted using green bags and placed on cleared ground away from vegetation.

Drillhole construction and decommissioning

Drillhole construction and decommissioning

Drillholes will be open holes. Each hole will be backfilled using clean in-situ material. Rehabilitation will follow the Mineral Exploration Drillholes – General Specifications for Construction and Backfilling (DEM M21) and be completed within three months of program completion.

Have the personnel responsible for implementing the proposed program read and understood the Earth Resources Information Sheet M21, Mineral exploration drillholes – general specifications for construction and backfilling?

Yes

Describe how drillholes will be constructed, including the casing material to be used, depth of casing, if the casing will be cemented, cementing intervals and the class of driller that will install the casing.

Drillholes will be drilled as open holes using aircore methods. If necessary, short PVC casing (up to 1 m) will be temporarily installed and removed during backfilling. No cementing is required as water intersection is unlikely. A qualified Level 1–3 driller will supervise all construction and ensure compliance with DEM M21 specifications.

When describing drillhole decommissioning requirements, include the materials to be used, stratigraphic intervals where cement plugs will be placed, if the casing will be removed and when decommissioning will occur after drilling is completed.

Drillholes will be drilled as open holes using aircore methods. If necessary, short PVC casing (up to 1 m) may be temporarily installed to stabilise the collar and will be removed during backfilling. No cementing is required, as interception of groundwater is unlikely. All drilling activities will be supervised by a qualified Level 1–3 driller in accordance with Mineral Exploration Drillholes – General Specifications for Construction and Backfilling (DEM M21).

Upon completion of each drillhole, the collar will be immediately plugged with a plastic hole plug to prevent fauna ingress. Progressive rehabilitation will be implemented, with each drillhole fully decommissioned before drilling proceeds to the next location. All green sample bags will be removed from site for laboratory analysis and/or licensed disposal, and no drill spoil will remain onsite.

Drillholes will be backfilled using clean in-situ material sourced from the immediate collar area, and the surface reinstated to match surrounding natural ground conditions. No drill pads or sumps will be constructed as part of this program.

All personnel responsible for implementing the proposed program have read and understood Earth Resources Information Sheet M21 – Mineral exploration drillholes: general specifications for construction and backfilling.

Attach Files 

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No Files Uploaded			

Costeans and bulk sample disposal pits

Will costeans/bulk sample disposal pits be required for the proposed program?

No

Tenement	Number of costeans/pits	Size of costean (length x width) (m2)	Average depth (m)	Volume excavated (m3)	Total Volume Excavated (m3)	Total area of disturbance
There are no records to display.						

Describe site preparation methods, vegetation clearance, and safety and maintenance requirements

N/A

Sample management

Describe the size of samples collected (including drilling samples and bulk sampling), collection methods, materials used when collecting the sample, sample disposal methods (including removal of sample bags), safety management and any other sample management requirements at the exploration site (e.g. tarps or matting used to contain cuttings). Include requirements for on-site geological sample management (splitting of archive samples, bag farms, core processing and storage).

Sample Collection and Containment

Drill cuttings will be collected from the cyclone at one-metre intervals using a splitter. Samples will be directed into half-size heavy-duty green polyethylene bags (approx. 450 × 750 mm). Each bag will be sealed and labelled immediately after collection to prevent spillage or wind dispersal. Sampling will occur adjacent to the drill collar on the natural ground surface, without vegetation clearance. Tarpaulins or shade-cloth matting will be used beneath the cyclone discharge to capture any loose material and prevent dispersal of cuttings onto surrounding ground.

Temporary Storage on Site

Filled sample bags will be placed upright in palletcons located at the designated drill rig laydown area on firm, level ground. Palletcons will be positioned clear of drainage lines, vegetation and vehicle traffic. No samples will be stored directly on the ground. Temporary storage will be confined to already disturbed areas associated with drilling activities to avoid additional surface disturbance.

Sample Removal and Disposal

Once drilling at each location is completed, all green sample bags will be removed from the field and transported to the Magnetite Mines storage facility. No sample material, empty bags or waste will be left at the drill site. Following removal of samples, the collar area will be inspected to ensure no residual material remains prior to progressive rehabilitation and movement to the next location.

Environmental and Safety Management

All sampling activities will be conducted to prevent dust, litter or contamination. Any loose cuttings generated during sampling will be immediately collected and contained on the tarpaulin or matting beneath the cyclone. Waste plastics or damaged bags will be collected and removed from site for disposal at a licensed waste facility. Personnel handling samples will wear appropriate personal protective equipment, including gloves, dust masks and eye protection. Spill kits and fire extinguishers will be maintained at the drill rig laydown area.

Compliance Statement

Sample management procedures comply with DEM MD 013 §5.5 – Sample Management and M21 – Mineral Exploration Drillholes: General Specifications for Construction and Backfilling, ensuring all drill cuttings and sample materials are contained, removed from site, and managed in a manner that prevents environmental harm.

Access routes to work areas

Will existing tracks require upgrading and/or maintenance?

Yes

Detail the work required to upgrade/maintain existing tracks.

Track maintenance undertaken in consultation with landholder per their requirements.

Will access be required across adjoining tenements?

No

Detail the method(s) for gaining access, and if an agreement is in place with all stakeholders. Include the total area of disturbance required (i.e. length (km) and width (m) of tracks) and provide on a locality map.

The site is accessible via EL 6126 from the Lilydale Road (public) and from station tracks as approved by the landowner.

Will access off existing tracks be required?

Yes

Detail the method(s) for gaining access and if vegetation clearance is required. Details of the total area of disturbance (includes drill traverses and seismic lines) required off existing tracks (i.e. length (km) and width (m) of new tracks) must be provided in the program notification.

Limited drill site locations occur off of existing station tracks (approximately 13 of 54); these locations will be accessed by walking vehicles across the natural surface, avoiding significant vegetation. No vegetation will be cleared as no specific access track preparation is proposed (although ground cover/bushes may be tracked over).

Vehicles will track over the natural surface for an estimated total of 3.8km, noting that none of this length of tracks is being prepared/cleared.

Attach Files 

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File Name	File Size (Mb)	Created On	Download
Drilling_access_track_map.png	0.61 Mb	12-12-2025 14:08:15	Download (MERS/EP-04011/Access routes to work areas/Drilling_access_track_map_2025-12-12T03-38-16.647Z.png)

Campsites and equipment laydown areas

Indicate where staff and contractors will be accommodated during the exploration program.

Ironback will procure accommodation on a walk-in/walk-out basis at the Braemar Shearers' Quarters, which is already established with power and water supply, as well as ablutions.

What is the maximum number of personnel requiring accommodation?

7

Is a campsite required to be established?

No

Provide a description and justification of the camp location (e.g. previously cleared areas etc.), and any other relevant information.

As per above, no undertakings are required to establish a camp or camp services - existing accommodation at the Braemar Shearers' Quarters is to be used.

What will be the total area (ha) of the campsite(s)?

0.00

Will native vegetation clearance be required?

No

What will be the total area (ha) of vegetation clearance for the campsite?

0.00

Describe the methods used to prepare the campsite including vegetation requirements and site levelling.

N/A

Will any excavations be required?

No

Describe the purpose of the excavation

N/A

Describe the maximum volume (m3) of material to be excavated.

0.00

Provide confirmation that the proposed ablution facilities have been endorsed for use by the Department of Health or local council, where applicable.

Yes

Indicate why endorsement approval is not required by the Department of Health or local council.

As per above, existing accommodation at the Braemar Shearers' Quarters is to be used that also includes ablutions.

Proposed infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)

Proposed infrastructure	Quantity	Description / capacity
Water storage	1	1000L IBC for drilling water.

Will laydown areas be required?

Yes

Will the laydown area(s) be located at the same location as the campsite?

Yes

Provide a description and justification of the location (e.g. previously cleared areas), and any other relevant information if required.

An existing hardstand area at the Braemar Shearers' Quarters will be used to park vehicles and store limited equipment.

What will be the maximum area (ha) required for the laydown area(s)?

0.00

Will native vegetation clearance be required?

No

What will be the total area (ha) of vegetation clearance for the site?

0.00

Describe the methods used to prepare the laydown area including vegetation requirements and site levelling.

N/A - existing hardstand area at accommodation location to be used.

Will any excavations be required?

No

Describe the purpose of the excavation.

N/A

What will be the volume (m3) of material to be excavated.

0.00

Proposed infrastructure (includes hydrocarbon and water storage requirements)

Proposed infrastructure	Quantity	Description / capacity
Fuel pod	1	600L trailer mounted diesel tank.

Attach Files 

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File Name	File Size (Mb)	Created On	Download
20251210 - 2026 Ironback Hills REE drilling EPEPR - general topography and camp.pdf	6.25 Mb	10-12-2025 17:46:18	Download (MERS/EP-04011/Campsites and equipment laydown areas/2025-1210-2026 Ironback Hills REE drilling EPEPR - general topography and camp_2025-12-10T07-16-19.028Z.pdf)

Other exploration methods and/or ancillary operations

Are any other proposed exploration methods (e.g. seismic) and/or ancillary exploration operations required?

No

Describe the activity(s), site preparation, vegetation clearance, and safety and maintenance requirements.

N/A

Water supply and management

Will camp and/or drilling water be required?

Yes

Describe how and where water will be sourced for drilling, track maintenance and camping purposes (e.g. groundwater, surface water, mains). Indicate how wastewater and/or runoff water will be managed.

Camp water is supplied by the manager of Braemar Station as part of the agreed supply arrangements.

Very limited volumes of water (~10 kL) may be required for discreet dust suppression requirements. This water will be sourced from:

- tank/bore water supplied by the landowner, or
- purchased from a reticulated source in a nearby community (Terowie, Burra).

Will surface water and/or mineral drillholes be used as a water source/supply?

No

Indicate if a licence for water extraction/usage is required (refer to relevant Natural Resources Management water allocation plan available on the Department for Environment and Water (DEW) website.

No

Attach a copy of the licence or include a statement confirming that a licence will be obtained before the extraction and/or usage of water.

N/A

Groundwater investigation and water affecting activities

Will any water investigation (e.g. pump testing, water monitoring sites, water storage, turkey nests/dams) and/or water affecting activities, be undertaken (refer to s. 127 of the Landscape South Australia Act 2019)?

No

Describe the water investigation and/or water affecting activities, including site preparation, vegetation clearance, and safety and maintenance requirements.

N/A

Indicate if water affecting activities permits (eg well and water extraction/discharge permits) have been obtained and in accordance with the Landscape South Australia Act 2019.

No

Attached Files

Expand/Collapse

File Name	File Size (Mb)	Created On	Download
No Files Uploaded			

Management of hazardous materials

Will activities be conducted in areas of known uranium and thorium mineralisation?

No

Attach Files 

[Expand/Collapse](#)

File Name	File Size (Mb)	Created On	Download
No Files Uploaded			

Will any other hazardous material be encountered when exploring in the area?

No

List the types of hazardous materials and provide a management plan on how these materials will be managed.

General dust generation during drilling (occupational exposure) - dust management strategies to be considered on a case-by-case basis, with management controls to include application of water and dust masks.

Rehabilitation

Detail all the activities and strategies relating to the remediation of all impacts associated with the proposed exploration operations (includes exploration camps and laydown areas, tracks). Completion of rehabilitation must be achieved within 3 months after the expiry of each program notification.

Primary rehabilitation will form as the plugging and surface reinstatement of each drill hole. The surface may be hand-raked to reduce the visibility of the drilling location. For areas where vehicles have tracked across the natural surface, MGT will assess whether any disguising of wheel tracks from established access roads will be required to reduce third party access; such remedial work will also be completed by hand.

No rehabilitation is required for camping or laydown areas.

Any remedies for impacts incurred to pastoral infrastructure will be negotiated directly with the landowner.

State the estimated budget required to rehabilitate all impacted sites. State the estimated budget required to rehabilitate all impacted sites. Include a breakdown of the cost associated with each rehabilitation component

The direct cost of rehabilitation is deemed to be negligible, given rehabilitation activities are the installation of a bore plug (less than \$100 equipment cost) and all rehabilitation is to be completed by hand before leaving the drill site and progressing to the next drilling location. No further rehabilitation is planned.

Site inspections will occur to ensure the competency of drill hole rehabilitation.

Vegetation Clearance

Will any area of cleared native vegetation be unrehabilitated after the authorised period?

No

Provide a map and description of the vegetation present in the application area, the extent of any proposed vegetation clearance and the likelihood of the presence of threatened flora.

No clearance of vegetation is proposed. Vehicles will track across the existing surface in discrete areas, which may flatten small vegetation but leave the specimen intact. Maps of vegetation communities and listed species/communities has been provided previously.

State the estimated quantum of significant environmental benefit (SEB) to be gained in exchange for the proposed native vegetation clearance and describe how the SEB will be provided.

The prevailing SEB exemption for mineral exploration activities will apply given the operator will incorporate best practice methodologies by proposing no clearance of vegetation.

System

Tenement Name ↑	Tenement Holder	Tenement Operators	Grant Date	Expiry Date	Tenement Type	Location Description	Tenement Area	Tenement Status	Shape Identifier
EL 6126	Ironback Pty Ltd		17/09/2017	16/09/2028	Exploration Licence	Manunda area approximately 110km southwest of Olary	725.00	Active	10009897-0002

Management of Environmental Impacts

Applicable environmental aspects and potential impacts

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Fire	Community/landowners	Damage to infrastructure and loss of income through fire.	Monitoring of and compliance with fire danger ratings during work program. Avoidance of driving/parking in tall grass; maintain vehicles on access tracks or in clear areas, as appropriate Appropriate firefighting response equipment on hand (i.e., fire extinguisher in each vehicle, fire response trailer on hand). Ensure fire awareness and response processes, including emergency service contact procedures, are included in site induction processes. Maintain active communication with landowners on conditions and fire risks.	Mod erat e	No loss of infrastructure or income through fire as a result of exploration activities.	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming that no uncontrolled fires* occurred. Alternatively, provide a report on the independent investigation of all uncontrolled fires* demonstrating that the licensee could not have reasonably prevented the fire through the implementation of precautionary measures.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
General Public	General Public	Injury or death to members of the public as a result of exploration activities.	No exploration activities occurring within publicly accessible areas (private property). Maintain regular contact/liaison with landowner. Only use access tracks approved by landowner. Adhere to speed limits on public access routes, and drive to conditions on unsealed surfaces; additional focus on crossing Lilydale Road in the vicinity of Braemar Station/Braemar Shearers' Quarters.	Mod erat e	No accidents involving the public that could have been reasonably prevented by the licensee.	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming no accidents occurred involving the public during and after the exploration program. If an accident involving the public did occur, provide a copy of the independent investigation report within the annual exploration compliance report demonstrating that the licensee could not have reasonably prevented the accident through the implementation of precautionary measures.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Native Vegetation	Flora and fauna and their habitats; includes Common wealth and state scheduled species.	Loss/modification of native vegetation and associated habitats through the clearance of vegetation.	No specific civils work required for program (no preparation of drill pads; therefore, no vegetation/habitat removal). Broad utilisation of existing station tracks for access; no new access tracks to be prepared (therefore, no vegetation/habitat removal). Majority of exploration drilling to occur adjacent to existing tracks. Utilisation of a one-way vehicle driving system (i.e., no turnarounds), as is practicable. Only limited access off of existing tracks for drilling in approximately 13 locations (out of 44); track over existing surface only and no direct removal of vegetation. Suitable plugging and rehabilitation of drill holes. Offsite removal of drill cuttings for analysis/sampling. No likely S-P-R identified for specific listed species/communities.		No permanent loss/modification of native flora and fauna populations and their habitats through: • clearance • fire • other unless prior approval under the relevant legislation is obtained.	Maintain before, during and after photographic evidence of all exploration sites (e.g. drillsites, new track exit/entry points off existing tracks, costeans, campsites) demonstrating that: • The area and method of disturbance is consistent with that described in the PEPR. • No uncontrolled fires* occurred as a result of exploration activities. Representative photos to be included within the annual exploration compliance report.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Stakeholders	Stakeholders	Interference to existing or permissible land use (includes loss of income, noise, dust, light and other emissions). • buildings, structures, existing tracks or other infrastructure. • aesthetic values of an area. Noncompliance with legislative requirements.	<ul style="list-style-type: none"> • Notices of entry provided to landowners, with detailed program maps • Direct and early engagement with representatives to align schedules so as to not impact stock management activities • Use of access tracks approved by landowner - landowner discretion to manage potential impact to tracks • No interference with pastoral infrastructure permitted; • reporting process if issues identified by field crew • Daylight exploration activities only. Use of station camp accommodation - direct procurement from landowner on for-fee basis. • Rehabilitation/repair of any damage to pastoral infrastructure (including tracks) caused by exploration activities (in consultation with landowner). 	Stakeholders are fully informed and satisfied with the proposed methods used to conduct exploration activities on their land, and all prescribed forms are served and agreement is obtained in accordance with the Mining Act.	Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders are resolved to the satisfaction of both parties prior to and ongoing during the course of exploration program, without the involvement of DEM. Provide the information requested within the 'Landowner details and liaison' section of the annual exploration compliance report demonstrating that prescribed forms were served and agreements obtained in accordance with the Mining Act prior to the commencement of exploration activities.	

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Surface Water	Surface Water	Alteration to surface water – interference to surface drainage.	<p>While activities will be located close to natural drainage features, exploration activities will not impact their function. All drilling will be located outside of defined drainage channels and principally within adjacent floodplain areas. No modification to hydrological features will occur that would affect surface water flow paths or water quality parameters. No access track or pad preparation will be undertaken. Existing station tracks will be used to cross creeks where required; no new crossings will be constructed. Drilling and vehicle access will be avoided during and immediately following rainfall events where ground conditions are wet, to prevent bogging, rutting or damage to surface drainage and vegetation. Vehicles will be removed from flood-prone areas during rainfall events where there is a risk of surface water interference.</p>	No	<p>permanent modification to hydrological features caused by exploration activities without obtaining a water affecting permit from the relevant Landscape Board (under Landscapes Act SA 2019).</p>	<p>Provide before, during and after photographic evidence within the annual exploration compliance report demonstrating that original drainage contours (watercourses and lakes) are consistent with the natural relief post rehabilitation within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period). Alternatively, provide copies of water affecting permits within the annual exploration compliance report.</p>

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Weeds and Pathogens	All flora and fauna, especially listed species.	Loss/modification of the environment (biological, social and economic) through the introduction of weeds and pathogens.	Inspection of vehicle for weeds, soil and other debris prior to leaving bitumen road (i.e., Burra/Burra area); materials removed as identified. Major soiling of a vehicle/equipment may necessitate vehicle washing. Assessment of weed/pest risk of preceding drill program (driller's vehicles only) - if material, a vehicle wash may be mandated by Ironback. Vehicle inspection on demobilisation, with any materials removed as may be necessary.	Mod erat e	No introductio n of new species of weeds and plant pathogens , nor increase in abundanc e of existing weeds species.	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report, confirming that: <ul style="list-style-type: none"> • Vehicle logs were kept during the exploration program, demonstrating that all vehicles are clean and free of plant and mud material prior to entering properties† within the tenement areas, unless otherwise agreed to with the relevant landowners. • Photographic evidence before and during exploration operations and after rehabilitation of disturbed sites was captured, demonstrating that no new weeds and plant pathogens were introduced, nor an increase in abundance of existing weeds recorded.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Aboriginal heritage	Aboriginal heritage sites	Disturbance to Aboriginal heritage	Proposal submitted to Ngadjuri Nation #2 representatives for heritage monitoring; alternative option for a heritage clearance to be completed in early January 2026 - discussions continuing. In event heritage monitoring occurs, following directions of monitors to avoid any items/sites of significance. In event a heritage survey is commissioned instead, follow go/no go areas as delineated in clearance report. Chance discovery process in place and crew instructed on its use as part of site induction (stop-work process basis)	Moderate	No disturbance to Aboriginal artefacts or sites of significance unless prior approval under the relevant legislation is obtained.	Maintain a database and provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report demonstrating that: <ul style="list-style-type: none"> Heritage sites were not impacted during the conduct of the exploration program, unless prior approval was obtained under the appropriate legislation Work ceased on discovery of a significant site and recommenced only after authorisation. Aboriginal heritage sites identified during the exploration program were appropriately recorded and reported to authorities, if not previously known.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Contamination	Soil/vegetation/farina	Soil/vegetation contamination (e.g. hydrocarbons, rubbish, drill samples/cuttings, ablutions, other sources)	Compliant fuel trailer to be mobilised onto hardstand at accommodation site, with transport to rig/vehicles only if required (otherwise refuel nightly). Storage of limited volumes of other products required for drilling/vehicle maintenance. All rubbish to be removed from the area and disposed of at a licensed facility or transfer station (i.e., Burra, Adelaide); domestic wastes from camp (i.e. grey water, black water) to be managed in accordance with standard processes at Braemar Station). Drill samples/cuttings to be bagged and transported to Adelaide; not expecting surplus materials for hole backfill.	Low	No contamination of soil and vegetation as a result of exploration activities.	Demonstrate that all domestic or industrial waste (includes general rubbish and hydrocarbons) is disposed of in accordance with the Environment Protection Act 1993 within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), and that all fuel and chemicals are stored in accordance with EPA requirements, by providing: <ul style="list-style-type: none"> • The name, location and contact details of the authorised waste disposal facility. • A statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming domestic and industrial waste was removed from all exploration sites and disposed of at an authorised waste disposal facility. • Photographic evidence within the annual exploration compliance report demonstrating that all fuel and chemical storage facilities were managed in accordance with EPA requirements. Maintain photographs of all exploration sites and provide representative photos within the annual exploration compliance report demonstrating that drill cuttings are: <ul style="list-style-type: none"> • removed from site and disposed of at a licensed facility • buried under a minimum of 30 cm of soil, or in accordance with EPA guideline, Radiation protection guidelines on mining in South Australia: mineral exploration, available on the EPA website, or • backfilled down the drillhole, within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Provide the information requested within

Environmental Aspect Receptor Potential Impact Control Strategies Risk Outcomes Outcome Measurement Criteria

					the 'Rehabilitation' section of the annual exploration compliance report.
Fauna	All fauna	Entrapment of fauna through open drillholes and excavations.	All drillholes will be plugged immediately upon completion using a plastic hole plug to prevent fauna and livestock ingress. Progressive rehabilitation will be implemented, with each drillhole backfilled using clean in-situ material before drilling proceeds to the next location. No sumps or excavations will be constructed as part of the program. Drill sites will be inspected prior to demobilisation to confirm that no open holes remain. All personnel will be inducted on fauna protection requirements in accordance with Mineral Exploration Drillholes – General Specifications for Construction and Backfilling (DEM M21).	No fauna traps created as a result of exploration activities.	Maintain before, during and after photographic evidence of all drillholes and/or excavations demonstrating that: <ul style="list-style-type: none"> • All drillholes were permanently or temporarily capped/plugged immediately upon completion. • No fauna and livestock became trapped in drillholes and/or excavations throughout the duration of the program. • All rehabilitation was completed within 3 months of expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Representative photos are to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.
Other	Fauna/landowner	Failure of drill hole abandonment	Closure methodology established and followed for each drill hole, including a supervisor inspection of plug. Hand tools used for rehabilitation (shovels/rakes/tampons).	No entrapment of fauna through open drillholes and excavations	Maintain before, during and after photographic evidence of all exploration sites (e.g. drillsites, new track exit/entry points off existing tracks, costeans, campsites) demonstrating that: <ul style="list-style-type: none"> • The area and method of disturbance is consistent with that described in the PEPR. • Holes are plugged greater than 30cm below land surface, covered with material with residual surface blended into surroundings (i.e. no significant colour disparity)

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Soil	Soil	Disturbance to the soil profile and topography, and accelerated soil erosion caused by exploration activities (e.g. construction of sumps, new tracks and drill pads; ground compaction at laydown areas and camps).	No drill pads, sumps or excavations will be constructed as part of the exploration program. Existing station tracks will be used for principal access, with approximately 31 of the 44 proposed drill sites located immediately adjacent to existing tracks. For drill sites not accessible via existing tracks (approximately 13 locations), vehicles will traverse the natural surface with no vegetation clearing and minimal trampling only. Low-impact aircore drilling will be undertaken using light vehicles only, with limited turning movements; significant ground compaction or wheel rutting is not anticipated. No field camps, laydown yards or ablution facilities will be established; personnel will utilise existing accommodation at Braemar. Drill cuttings will be removed from site for analysis. Drillholes will be plugged and backfilled using clean in-situ material from the collar area, with the surface reinstated to blend with surrounding natural conditions	Low	Where soil disturbance occurs as a result of exploration activities, ensure topsoil quality and quantity is maintained • the soil profile and topography is reinstated to original conditions • there is no accelerated soil erosion.	Maintain before, during and after photographic evidence of all excavations, drillsites, camps, laydown areas and new tracks demonstrating that: • The soil profile and topography is reinstated to original conditions and is consistent with natural surroundings within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. • Where required, sufficient topsoil is removed (depending on soil profile), stored separately from subsoil and reinstated (in the correct order) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. • There are no signs of accelerated soil erosion during and post rehabilitation of disturbed sites. Representative photos to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.

Environmental Aspect Receptor Potential Impact Control Strategies Risk Outcomes Outcome Measurement Criteria

(anticipated disturbance footprint $\leq 1-2 \text{ m}^2$ per hole).
Hydrocarbon contamination controls: All vehicles and drilling equipment will be maintained in a roadworthy condition. Refuelling will occur off-site or in designated low-risk areas only. Spill kits will be carried on drilling and support vehicles. Drip trays will be used where required during maintenance activities. Any hydrocarbon spills will be immediately contained, cleaned up, and contaminated material removed from site for disposal at a licensed facility.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Fauna	All fauna	Entrapment of fauna through open drillholes and excavations.	All drillholes will be plugged immediately upon completion using a plastic hole plug to prevent fauna and livestock ingress. Progressive rehabilitation will be implemented, with each drillhole fully backfilled using clean in-situ material before drilling proceeds to the next location. No sumps or excavations will be constructed as part of the program. Drill sites will be inspected prior to demobilisation to confirm that no open holes remain. All personnel will be inducted on fauna protection requirements in accordance with Mineral Exploration Drillholes – General Specifications for Construction and Backfilling (DEM M21).	Low	No fauna traps created as a result of exploration activities.	Maintain before, during and after photographic evidence of all drillholes and/or excavations demonstrating that: <ul style="list-style-type: none"> • All drillholes were permanently or temporarily capped/plugged immediately upon completion. • No fauna and livestock became trapped in drillholes and/or excavations throughout the duration of the program. • All rehabilitation was completed within 3 months of expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Representative photos are to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.

Environmental Aspect	Receptor	Potential Impact	Control Strategies	Risk	Outcomes	Outcome Measurement Criteria
Third party access	Soil/vegetation/farina	Degradation of rehabilitated access tracks caused by third party access (includes previously closed and rehabilitated access tracks).	No new access tracks will be constructed as part of the exploration program. Existing station tracks will be used for access during operations and will remain open only where required for pastoral or landholder use. Any access tracks temporarily used and no longer required for ongoing land use will be rehabilitated progressively to discourage unauthorised third-party access. Rehabilitation measures may include reshaping of wheel ruts, placement of natural surface material, and use of physical deterrents (e.g. brush or surface roughening) where appropriate, in consultation with the landholder. Track closures and rehabilitation measures will be undertaken in a manner consistent with surrounding land use and pastoral operations. Rehabilitated tracks will be inspected prior to demobilisation to confirm effective closure and stability.	Low	Rehabilitated access tracks remain permanently closed, unless prior approval under the relevant legislation is obtained.	Maintain before and after photographic evidence demonstrating that all tracks are closed and rehabilitated within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Representative photos are to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.

Supporting Information

Photos

Upload Photos 

				<u>Expand/Collapse</u>
File Name	File Size (Mb)	Created On	Download	
ExampleDrillingLocation1.jpeg	0.51 Mb	12-12-2025 12:40:09	Download (MERS/EP-04011/Supporting information/Photos/ExampleDrillingLocation1_2025-12-12T02-10-10.595Z.jpeg)	
ExampleDrillingLocation2.jpeg	0.62 Mb	12-12-2025 12:36:16	Download (MERS/EP-04011/Supporting information/Photos/ExampleDrillingLocation2_2025-12-12T02-06-17.236Z.jpeg)	

File Name	File Size (Mb)	Created On	Download
Shearers_quarters.jpeg	0.48 Mb	12-12-2025 12:34:11	Download (MERS/EP-04011/Supporting information/Photos/Shearers_quarters_2025-12-12T02-04-13.638Z.jpeg)

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (DGA94)	Zone	Details and comments	Document ID
Example drilling area 2	11/12/2025	3	376935	6339684	54	Example off-track drilling area with minimal vegetation.	
Example drilling area 1	11/12/2025	2	374520	6337415	54	Example drilling area immediately adjacent to access track.	
Shearer's Quarters - Braemar Station	04/05/2021	1	372206	6327004	54	Accommodation - Braemar station shearer's quarters	

Supporting Maps

Upload Maps

File Name	File Size (Mb)	Created On	Download	Expand/Collapse
Drilling_location_map.png	2.69 Mb	12-12-2025 14:11:22	Download (MERS/EP-04011/Supporting information/Maps/Drilling_location_map_2025-12-12T03-41-23.580Z.png)	

Figure Description	Document ID
Drilling Location Map	

Additional Information

List any other supporting information and/or documents submitted with the application, including land access approvals/permits required to conduct the proposed exploration program.

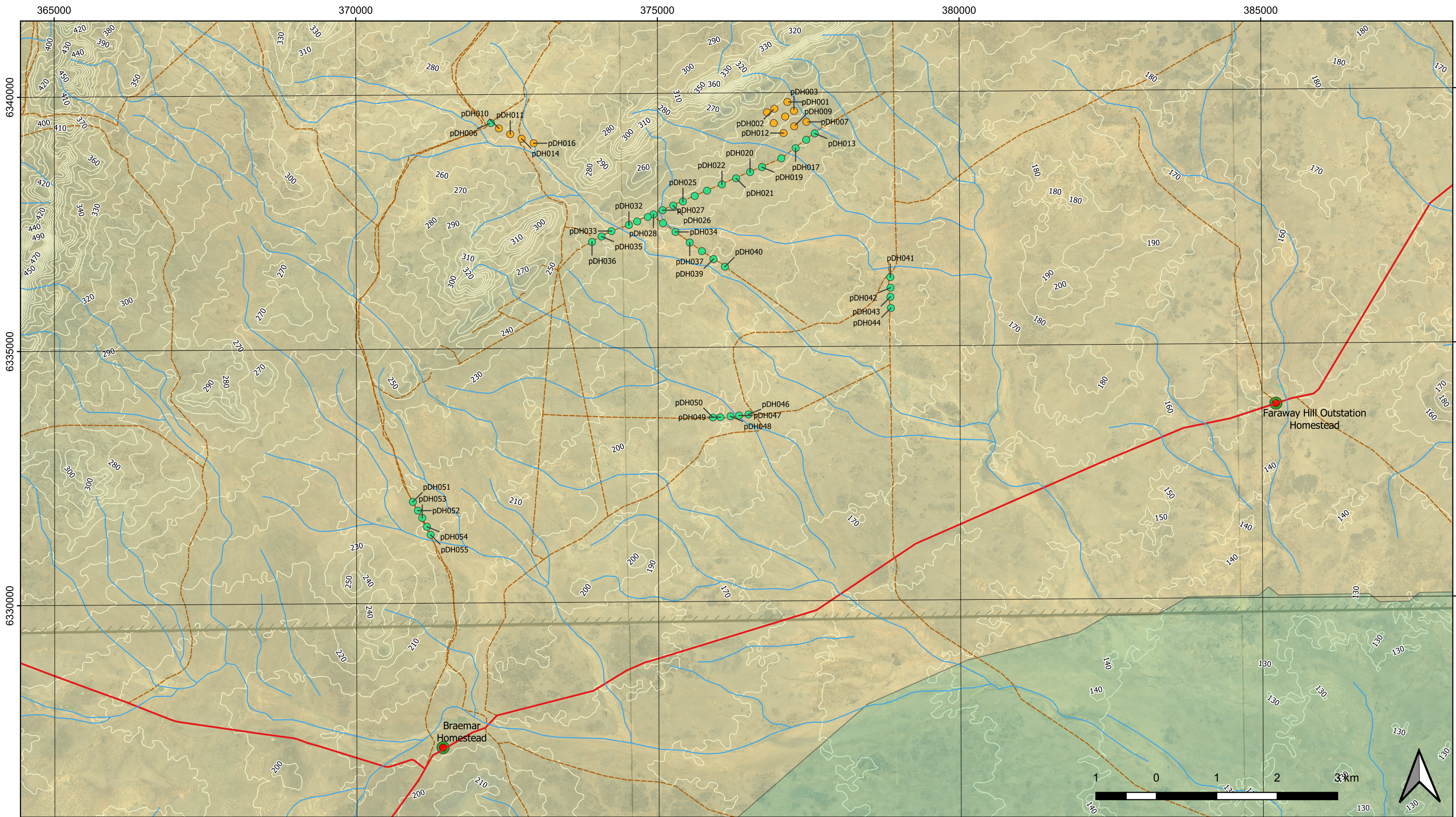
Groundwater conditions table

Row 1

- Locality/Area: Braemar - Faraway Hill Station
- Formation/unit: Quaternary - Tertiary (surficial sediments / overburden)
- Stratigraphic interval (m): ~0-60
- Aquifer formation: Alluvium / Colluvium (overburden)
- Aquifer interval/thickness (m): -
- Aquifer type: Sedimentary (likely unsaturated; localised/perched potential)
- TDS: -
- Depth to groundwater (m): -
- Comments: No shallow groundwater recorded

Row 2

- Locality/Area: Braemar - Faraway Hill Station
- Formation/unit: Neoproterozoic (bedrock)
- Stratigraphic interval (m): ~0-150
- Aquifer formation: Adelaide Geosyncline fractured rock aquifer
- Aquifer interval/thickness (m): ~76-102 (water-bearing intervals observed)
- Aquifer type: Fractured rock (unconfined to semi-confined)
- TDS: 11,100-16,100 mg/L
- Depth to groundwater (m): 59.5-71.9
- Comments: -



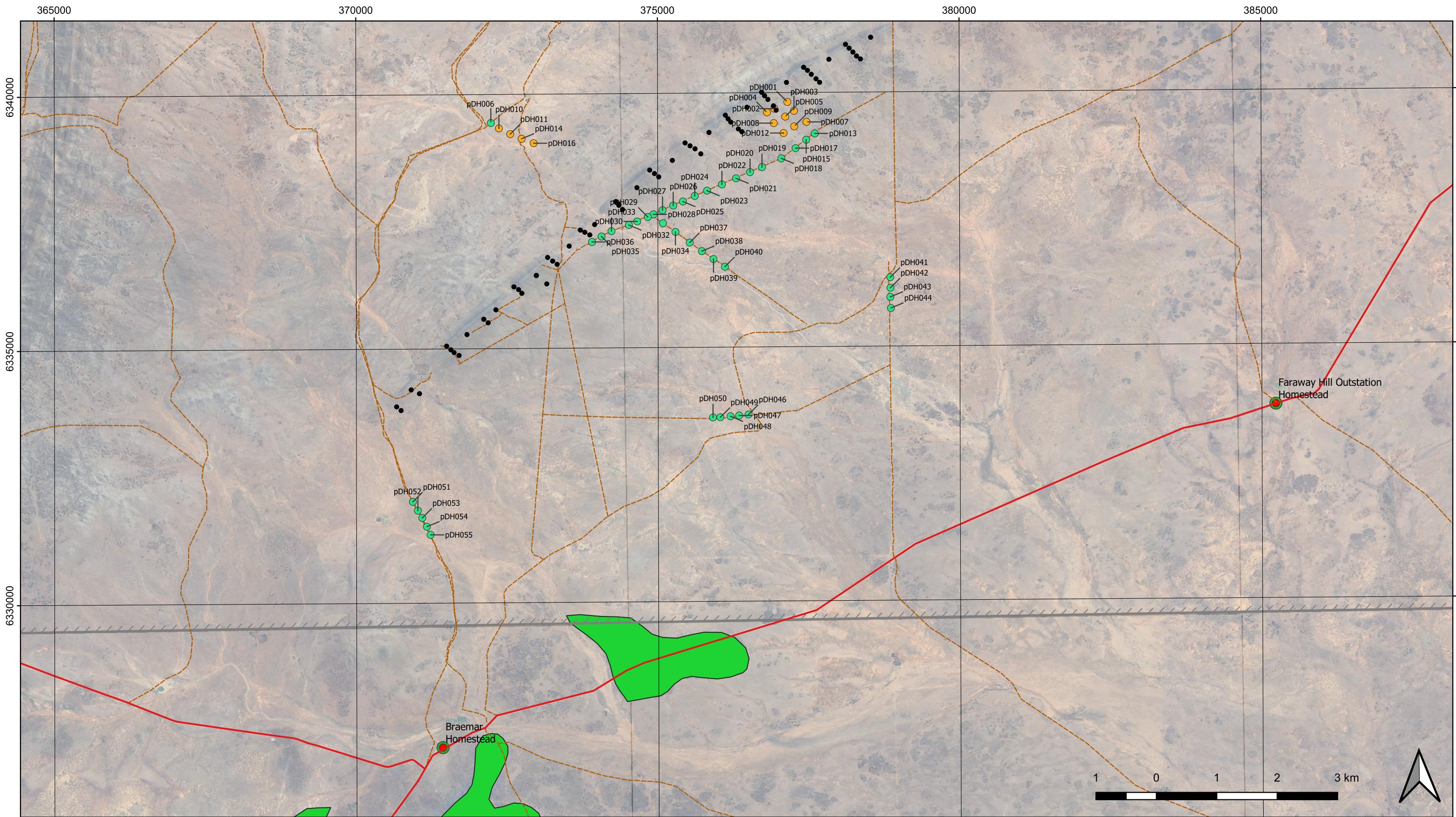
2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - SOILS AND SURFACE RELIEF

Note: SA Cadastre is subject to misalignment with actual property boundaries

- | | | | |
|----------------------------|--------------------------------|------------------------------------|---|
| Roads (by category) | Pastoral infrastructure | Proposed drilling locations | Topography |
| Local | Homestead | Off-track | Contours - 10m (AHD) |
| Track (station) | Water resources | On-track | Atlas of Australian Soils (soil units) |
| Ironback Pty Ltd (EL 6126) | Water courses | | BB1 |
| | | | DD2 |



GDA 2020 Zone 54 - 1:45,000 @ A3
 Drawn: A Kane | 2 December 2025
 2026 Ironback Hills REE Drilling



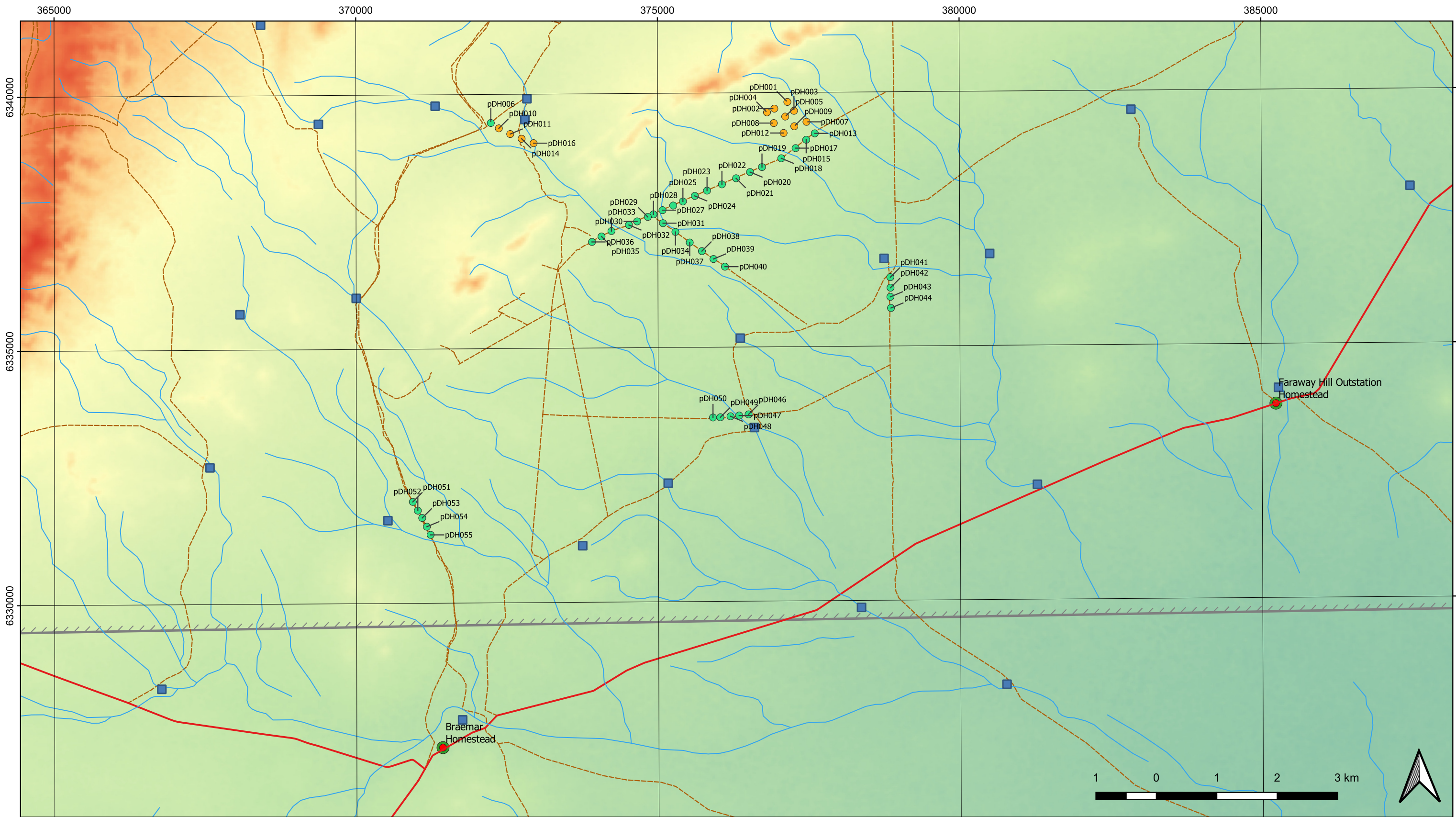
2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - GROUNDWATER DEPENDENT ECOSYSTEMS

Note: SA Cadastre is subject to misalignment with actual property boundaries

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|--|--|--|--|
| <p>Roads (by category)</p> <ul style="list-style-type: none"> — Local — Track (station) Ironback Pty Ltd (EL 6126) | <p>Pastoral infrastructure</p> <ul style="list-style-type: none"> Homestead | <p>Proposed drilling locations</p> <ul style="list-style-type: none"> ● Off-track ● On-track <p>Existing drilling locations</p> <ul style="list-style-type: none"> ● Collar locations | <p>Groundwater dependent ecosystems (by potential)</p> <ul style="list-style-type: none"> Low potential for GW interaction |
|--|--|--|--|

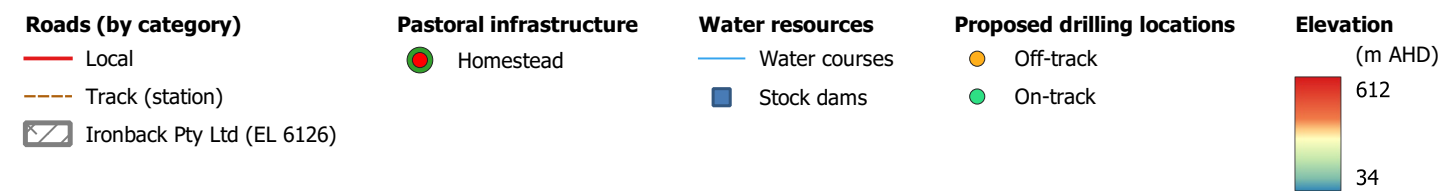


GDA 2020 Zone 54 - 1:45,000 @ A3
 Drawn: A Kane | 2 December 2025
 2026 Ironback Hills REE Drilling

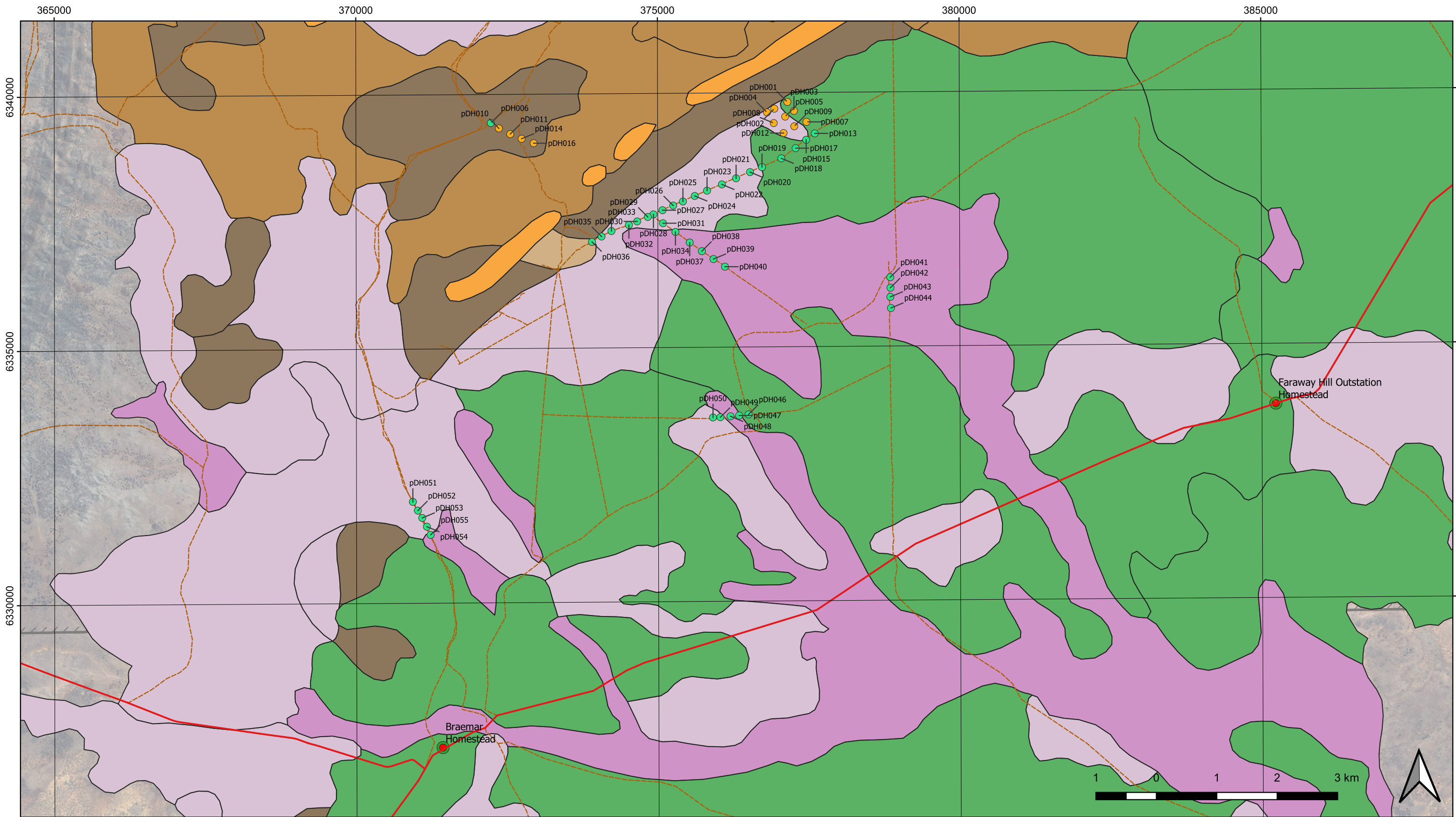


2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - RELIEF AND RUNOFF

Note: SA Cadastre is subject to misalignment with actual property boundaries



GDA 2020 Zone 54 - 1:45,000 @ A3
 Drawn: A Kane | 2 December 2025
 2026 Ironback Hills REE Drilling



2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - VEGETATION COMMUNITIES

Note: SA Cadastre is subject to misalignment with actual property boundaries

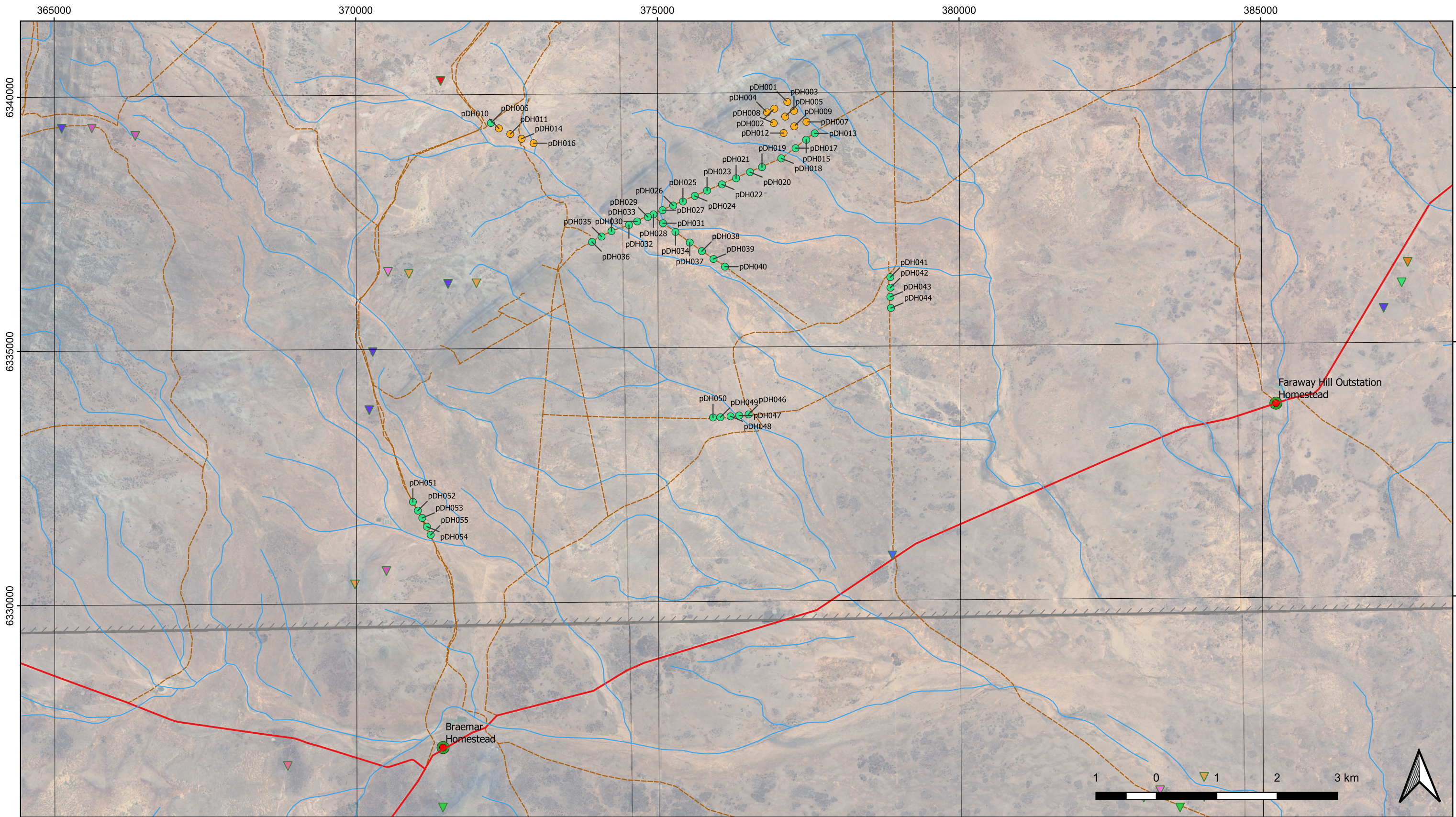
- | | | | |
|---|---|--|---|
| <p>Roads (by category)</p> <ul style="list-style-type: none"> — Local — Track (station) Ironback Pty Ltd (EL 6126) | <p>Pastoral infrastructure</p> <ul style="list-style-type: none"> ● Homestead <p>Proposed drilling locations</p> <ul style="list-style-type: none"> ● Off-track ● On-track | <p>Vegetation communities</p> <ul style="list-style-type: none"> ■ <i>Atriplex vesicaria</i> ssp., <i>Maireana astrotricha</i> +/- <i>Maireana pyramidata</i> +/- <i>Rhagodia spinescens</i> low open shrubland ■ <i>Casuarina pauper</i> +/- <i>Alectryon oleifolius</i> ssp. <i>canescens</i> low open woodland ■ <i>Eucalyptus socialis</i> ssp., <i>Eucalyptus gracilis</i> +/- <i>Myoporum platycarpum</i> ssp. +/- <i>Callitris glaucophylla</i> mid mallee woodland ■ <i>Eucalyptus socialis</i> ssp., <i>Eucalyptus oleosa</i> ssp. <i>oleosa</i> +/- <i>Myoporum platycarpum</i> ssp. +/- <i>Eucalyptus dumosa</i> mid mallee woodland | <ul style="list-style-type: none"> ■ <i>Maireana pyramidata</i>, <i>Rhagodia spinescens</i>, <i>Atriplex vesicaria</i> ssp., <i>Maireana astrotricha</i> low open shrubland ■ <i>Maireana sedifolia</i>, <i>Maireana pyramidata</i> low open shrubland ■ <i>Sida petrophila</i>, <i>Ptilotus obovatus</i> var. +/- <i>Prostanthera striatiflora</i> +/- <i>Chenopodium curvispicatum</i>, <i>Enchylaena tomentosa</i> var. low open shrubland |
|---|---|--|---|



GDA 2020 Zone 54 - 1:45,000 @ A3

Drawn: A Kane | 2 December 2025

2026 Ironback Hills REE Drilling



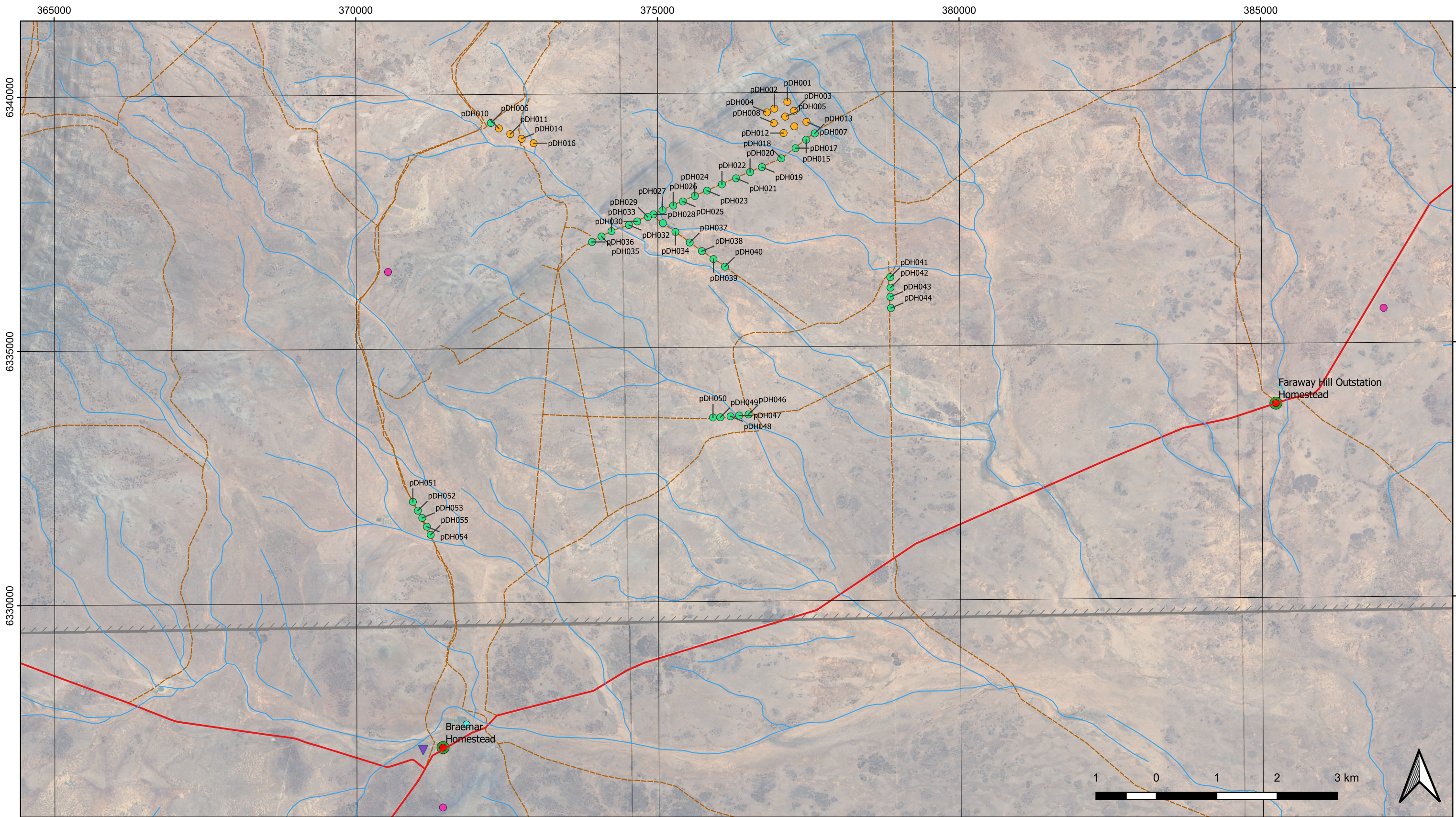
2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - INTRODUCED FLORA SPECIES RECORDS

Note: SA Cadastre is subject to misalignment with actual property boundaries

<p>Roads (by category)</p> <ul style="list-style-type: none"> — Local — Track (station) Ironback Pty Ltd (EL 6126) 	<p>Pastoral infrastructure</p> <ul style="list-style-type: none"> Homestead <p>Water resources</p> <ul style="list-style-type: none"> — Water courses 	<p>Proposed drilling locations</p> <ul style="list-style-type: none"> ● Off-track ● On-track <p>Flora records - introduced species</p> <ul style="list-style-type: none"> ▽ Alyssum linifolium ▽ Asphodelus fistulosus ▽ Carrichtera annua ▽ Carthamus lanatus ▽ Centaurea melitensis ▽ Echium plantagineum ▽ Erodium aureum ▽ Erodium cicutarium ▽ Herniaria cinerea ▽ Hordeum ▽ Hordeum glaucum ▽ Hordeum leporinum ▽ Hypochaeris glabra ▽ Lycium ferocissimum ▽ Marrubium vulgare ▽ Medicago minima ▽ Medicago polymorpha ▽ Salvia verbenaca ▽ Salvia verbenaca var. vernalis ▽ Schismus barbatus ▽ Sisymbrium ▽ Sisymbrium erysimoides ▽ Sonchus oleraceus ▽ Taraxacum
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GDA 2020 Zone 54 - 1:45,000 @ A3
 Drawn: A Kane | 4 December 2025
 2026 Ironback Hills REE Drilling



2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - LISTED SPECIES AND COMMUNITIES RECORDS

Note: SA Cadastre is subject to misalignment with actual property boundaries

- | | | | |
|------------------------------|--------------------------------|------------------------------------|-------------------------------------|
| Roads (by category) | Pastoral infrastructure | Proposed drilling locations | Listed flora |
| — Local | ● Homestead | ● Off-track | ▼ Codonocarpus pyramidalis |
| — Track (station) | Water resources | ● On-track | Listed fauna |
| ▭ Ironback Pty Ltd (EL 6126) | — Water courses | | ● Lophochroa leadbeateri |
| | | | ● Aphelocephala leucopsis leucopsis |



GDA 2020 Zone 54 - 1:45,000 @ A3
 Drawn: A Kane | 10 December 2025
 2026 Ironback Hills REE Drilling

376000

377000

378000

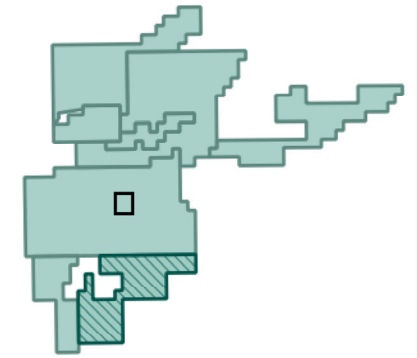
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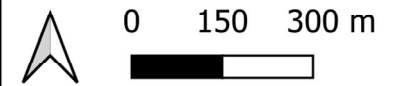
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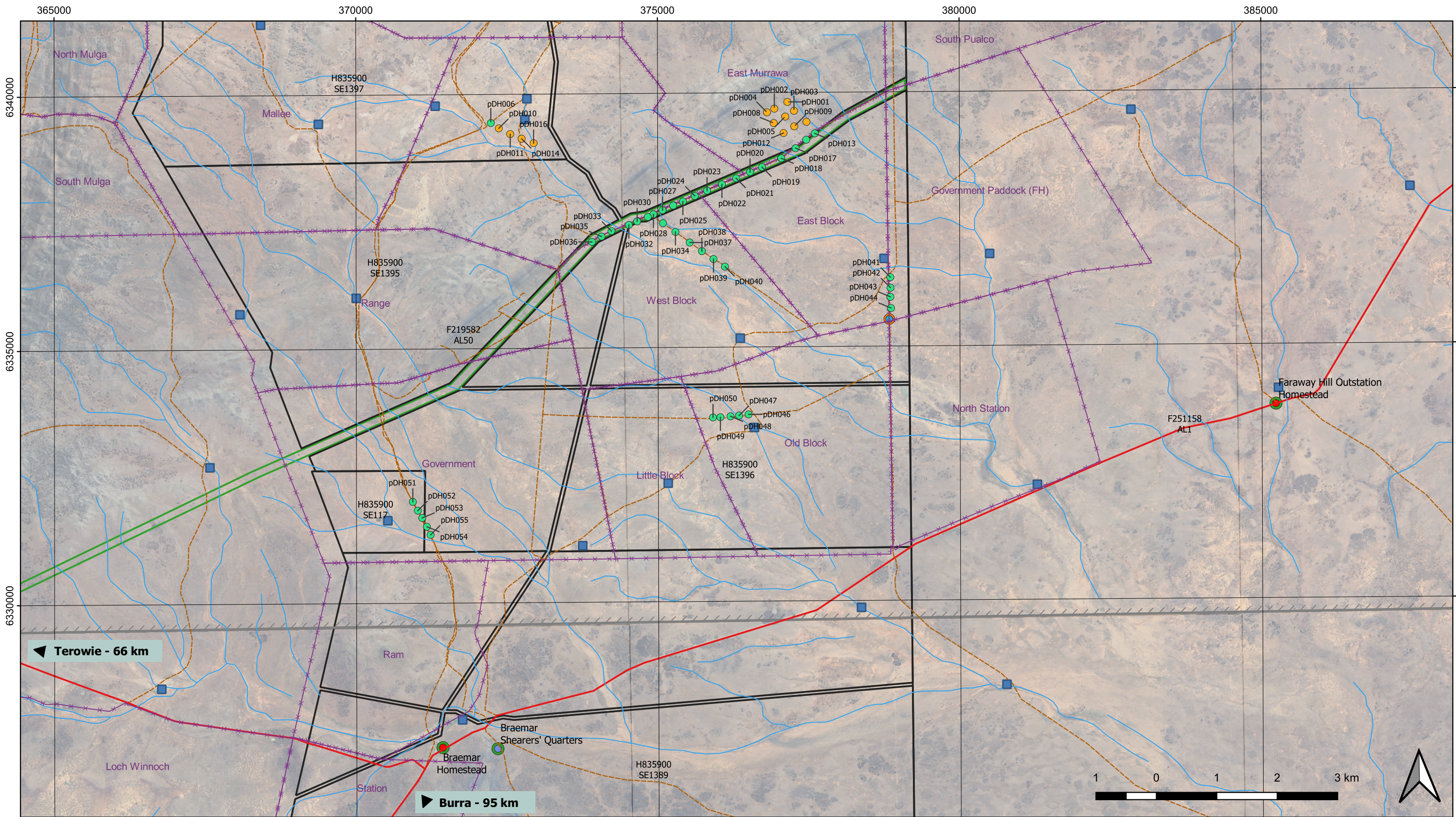


EPEPR EP-04011 Drilling acces track Map



- Proposed drillholes
- Previous drillholes
- Existing access tracks
- - - - - Drilling access track

Prepared by: Matthew Paul
Date: 12/12/2025
Scale: 1:100,000
Datum: GDA94 Zone 54



2026 IRONBACK HILLS REE DRILLING PROGRAM - 2026 | BRAEMAR / FARAWAY HILL | NGADJURI COUNTRY
EPEPR - GENERAL TOPOGRAPHIC FEATURES

Note: SA Cadastre is subject to misalignment with actual property boundaries

- | | | | | |
|----------------------------|---|--------------------------------|------------------------|------------------------------------|
| Roads (by category) | Relevant titles and tenements (by owner) | Pastoral infrastructure | Water resources | Proposed drilling locations |
| — Local | Faraway-Braemar Pastoral Co | ● Homestead | — Water courses | ● Off-track |
| - - - Track (station) | Minister for Environment and Water | ● Shearers' Quarters | ■ Stock dams | ● On-track |
| | Ironback Pty Ltd (EL 6126) | ● Yards | | |
| | | ⊠ Paddocks (selected) | | |



GDA 2020 Zone 54 - 1:45,000 @ A3
 Drawn: A Kane | 2 December 2025
 2026 Ironback Hills REE Drilling

365000

370000

375000

380000

385000

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6335000

6330000

365000

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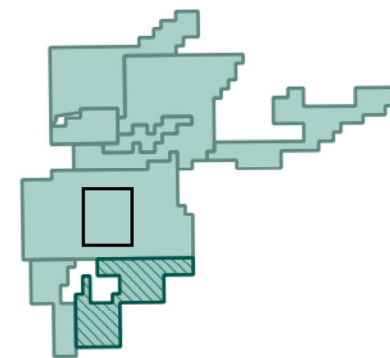
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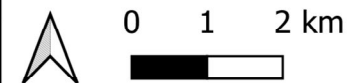
385000

MAGNETITE

M I N E S



EPEPR EP-04011
Drilling Location Map



- Proposed drillholes
- Previous drillholes
- ⋯ Existing access tracks
- Drilling access track
- Gazetted Roads
- PEPR polygon
- MGT Tenements
- ⊙ Braemar Station

Prepared by: Matthew Paul
Date: 12/12/2025
Scale: 1:100,000
Datum: GDA94 Zone 54

