



12 February 2025

Mr Tim Sharp
Exploration Manager
Talisman Mining Limited
Suite 1, Ground Floor, 33 Colin Street
WEST PERTH WA 6005

tim.sharp@talismanmining.com.au

Dear Mr Sharp,

Approval Notification - Exploration Program for Environment Protection and Rehabilitation (EPEPR2025-001) EL6619, EL6620

The program for EL6619, EL6620, final version submitted on 6 February 2025 to conduct 5 planned Holes (200m mud rotary through cover) and diamond into Proterozoic basement to a max depth of 600m at Mabel Creek has been approved in accordance with Section 70B(5) of the *Mining Act, 1971 (the Act)*.

In accordance with section 70B(7a)(b) of the Act, the approved program is subject to the conditions listed in the attached notice.

In accordance with section 62(1) of the *Mining Act, 1971*, a rehabilitation bond/bank guarantee to the value of **\$40,000** is required to be lodged with the Mining Registrar. Appropriate documentation will be forwarded to you shortly. The bond must be lodged within 28 days of receiving these documents.

You are reminded that:

1. You must at all times implement and comply with the approved EPEPR.
2. The approved EPEPR will be made publicly available on the Mining Register.
3. Exploration operations on “native title land” (as defined in the *Native Title (South Australia) Act, 1994*) must be conducted in accordance with Part 9B of the Act.
4. In accordance with Section 70C of the Act, the licensee must review the EPEPR on request of the Minister’s Delegate within a time specified in the request and submit the revised EPEPR for approval.
5. As the operator for the approved EPEPR you must take all reasonable and practical measures to avoid undue damage to the environment and meet all the approved outcomes (when measured against the approved criteria) listed within the EPEPR.
6. In accordance with regulation 78 of the *Mining Regulations 2020* and Terms of Reference 012 (TOR 012), the licensee must submit an Exploration Compliance Report to the Mineral Exploration Branch each year, within 60 days after the anniversary of the date the licence was granted, and 60 days after the expiry or surrender of the EL, or in accordance with joint reporting requirements agreed to with the Minister.
7. In accordance with regulation 16(4) of the *Mining Regulations 2020*, drillhole and geological samples must be kept in accordance with guidelines issued by the Department for the term of the relevant tenement and for 7 years after the expiry, surrender,

cancellation or forfeiture of the tenement to which the sample relates. Furthermore, samples must be retained by the tenement holder, or provided to the Director, in accordance with those guidelines (unless the Minister has authorised, on application by the tenement holder in a manner and form set out in the guidelines, the destruction or disposal of the samples).

8. The EPEPR is approved for a period of twelve months from the date of this letter.

This approval does not constitute endorsement of the systems that you have in place to manage your exploration operations in compliance with the Act and licence conditions. In granting the approval, the EPEPR and your capacity to undertake the proposed activities have been considered. However, responsibility for compliance with the Act and the licence conditions, remains at all times with the licensee.

This approval relates only to the requirements of the Act. Other legislation relevant to this application includes the *South Australian Work Health and Safety Act, 2012* and Regulations. For example, Chapter 10 of the *Work Health and Safety Regulations, 2012* (SA) introduced new requirements for mine operators in South Australia. The new requirements include a notification for mining operations and the establishment of a Safety Management System. For further information on your responsibilities, including a guide to Chapter 10 and the Mine Operator Notification Form, contact SafeWork SA on 08 8303 0255 or via its website at www.safework.sa.gov.au.

The proposed program may be subject to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Mineral exploration industry-specific information is contained in an appendix in the EPBC Matters of National Environmental Significance – Significant impact guidelines 1.1. This document is available on the Australian Government's Department for Agriculture, Water and the Environment website at <http://www.environment.gov.au/resource/significant-impact-guidelines-11-matters-national-environmental-significance>. For further information, contact the Department for Agriculture, Water and the Environment, or visit its website at www.environment.gov.au/.

Proposed changes to exploration operations stated in the approved EPEPR may require a *PEPR review* to be submitted for assessment. Where a *PEPR 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](#).

If you require any further information, please contact Jason Perry on 8177 3413 or Simon Constable on 8429 2516 or email DEM.exploration@sa.gov.au.

Yours sincerely



Simon Constable
**GENERAL MANAGER MINERAL EXPLORATION
REGULATION & COMPLIANCE**

In accordance with delegated
Ministerial powers and functions

CC: DEW Drilling Inspector miningwatersciencereferrals@sa.gov.au

MINERALS REGULATION

Level 7, 11 Waymouth Street, Adelaide SA 5000 | GPO Box 320 Adelaide SA 5001

Tel (+61) 8 8463 3000 | www.energymining.sa.gov.au | ABN 83 768 683 934



CC: DEW Hydrogeologist miningwatersciencereferrals@sa.gov.au
CC: Ashley Wood, Coober Pedy office Ashley.wood@sa.gov.au

The Department's Regulatory Guidelines, Ministerial Determinations and Information Sheets are available at: http://energymining.sa.gov.au/minerals/knowledge_centre

Notice of Approval Conditions – EPEPR2025-001

In accordance with section 70B (7a)(b) of the Act, the approved program is subject to the following conditions:

1. Part or the entire proposed program falls within the Andamooka/Coober Pedy Precious Stones Field. For holes drilled in this area, a duplicate set of representative samples for the 0-50 m interval is to be bagged and submitted to Mr Ashley Wood, Manager Opal Fields - Coober Pedy office (ph: (08) 8678 9059, email: ashley.wood@sa.gov.au), to arrange the location for viewing by interested parties.

APPLICATION

Mining Act 1971 and Mining Regulations 2020



Government of South Australia

Department for Energy and Mining

EXPLORATION PROGRAM FOR ENVIRONMENT PROTECTION AND REHABILITATION (PEPR)

USE THIS TEMPLATE TO: Apply to conduct mineral exploration operations not covered by the Generic PEPR (Adopted Program) for a 12 month period of time on one or more exploration licences (ELs), retention leases (RLs) or mineral claims (MCs) in South Australia.

Refer to the Exploration PEPR Terms of Reference and [Minerals Regulatory Guidelines MG22](#) when completing this application. Further information on exploration requirements in South Australia is available on the Department for Energy and Mining (DEM) Minerals website www.energymining.sa.gov.au.


SECTION A – GENERAL DETAILS

Operational approval period	12-month approval period, with an additional 3 months to complete all rehabilitation
Tenement details	Exploration Licence No 6619 ('EL6619') and Exploration Licence No 6620 ('EL6620')
Tenement holder(s) (for each tenement)	Talisman Mining Limited (holder for both tenements)
Operating company	Talisman Mining Limited (operator for both tenements) Ground Floor, Suite 1, 33 Colin St, West Perth WA 6005 PO Box 349, West Perth WA 6872 Exploration Manager: Tim Sharp Phone: 0414 490 018 Email: tim.sharp@talismanmining.com.au
Agency agreement (if applicable)	N/A
PEPR prepared by	Chloe Bigg, Talisman Mining Limited, Environment & Compliance Geologist Email: chloe.bigg@talismanmining.com.au Phone: 0447 821 004 Exploration Manager: Tim Sharp Phone: 0414 490 018 Email: tim.sharp@talismanmining.com.au
Project supervisor/contact person(s)	Relevant experience/qualifications: <ul style="list-style-type: none"> • BAppSc (Geology) 1992 (UTS) • MSc Geology 1995 (UTS) • PhD Geology 2004 (UTS) • Member of AIG • Member of SEG • Talisman Mining Limited (2023-ongoing) <ul style="list-style-type: none"> ○ Exploration Manager • Japan Gold Corporation (2021-2023) <ul style="list-style-type: none"> ○ Chief Geologist • Barrick Gold Corporation (2019-2020) <ul style="list-style-type: none"> ○ Principal Geologist Africa, Middle East • Acacia Mining Plc (2010-2019) <ul style="list-style-type: none"> ○ Chief Geologist/General Manager Discovery ○ Exploration Manager, Kenya ○ Principal Regional Geologist, East Africa • IMX Resources (2009-2010) <ul style="list-style-type: none"> ○ Senior Exploration Geologist, Tanzania • Vale SA (2007-2009) <ul style="list-style-type: none"> ○ Senior Exploration Geologist, Australia • INCO (2005-2007) <ul style="list-style-type: none"> ○ Project Exploration Geologist, Australia • Geological Survey of New South Wales (2002-2005) <ul style="list-style-type: none"> ○ Project Geologist, NSW Australia
Project/prospect name	Mabel Creek

Location details	<p>The program is proposed in a Pastoral Unincorporated Area, within the following land parcels with title references:</p> <ul style="list-style-type: none"> • CR5435/460; • CL6183/278; • CL6182/55. <p>The program is located across three (3) suburbs, including:</p> <ul style="list-style-type: none"> • Mabel Creek; • Mount Clarence Station; • Coober Pedy. <p>The closest township is Coober Pedy, located approximately 22km east of the closest planned drilling location.</p> <p>The program area is accessible via the Anne Beadell Highway and some existing tracks.</p>		
Project description, commodity type and mineralisation model	<p>Project Description: 5 holes to investigate 5 gravity and near coincident magnetic highs with interpreted Mesoproterozoic basement beneath approximately 200m of cover.</p> <p>Commodity Type: Au Cu</p> <p>Mineralisation Model: IOCG and Orogenic Gold</p> <p>5 planned Holes (200m mud rotary through cover) and diamond into Proterozoic basement to a max depth of 600m</p>		
Proposed project schedule	Start date	1 st February 2025	End date 30 th June 2025

DECLARATION

I, the tenement holder, declare under regulation 84 of the Mining Regulations 2020, that I have taken reasonable steps to review the information in this PEPR/ revised PEPR to ensure its accuracy.

Name	Tim Sharp	Signature (digital allowed)	
Position	Exploration Manager	Date	6 February 2025

Copy and paste the above table if there is more than 1 tenement holder.

Note: An authorised representative from each tenement holder must sign the declaration (eg in accordance with the Corporations Act 2001).

SECTION B – PROGRAM PREPARATION AND ACCESS TO LAND

Work undertaken in preparing the proposal

Summarise the research and fieldwork undertaken in preparing the proposal including:

- desktop reviews of existing information
- field visits for reconnaissance
- contractor consultation (i.e. equipment scale, type)
- other information used when planning the proposed program.

Information stored within various SA Government GIS databases has been interrogated as a part of the desktop review of the proposed drilling program, and more specifically, the location of individual drill sites. Databases reviewed included those available via the SARIG Map, NatureMaps and SA Property and Planning Atlas.

A detailed ground gravity survey (500m and 250m grid for 14,500 stations) was completed by Talisman in 2024 across EL 6619, 6620 and 6627. Integration of this detailed ground gravity survey with existing regional geology, aerial magnetics, drilling and seismic surveys has resulted in the definition of 4 targets considered prospective targets for IOCG exploration. These gravity high anomalies with near coincident magnetic highs are interpreted to be hosted within Mesoproterozoic Gawler Range Volcanics beneath 200m of Palaeozoic-Mesozoic cover.

A field trip to visit and consult with pastoral leaseholders/property managers about planned drilling locations was undertaken in December 2024. No changes to drill site locations were identified during that visit. Feedback on the proposed program has been positive, and discussions will continue to be held to see how pastoral lease holders/property managers may be able to assist with supplying some logistical support to the program. Initial discussions have also been held to identify potential earthmoving operators, logistics and drilling contractors and potential equipment for drill site preparation, rehabilitation, and drilling operations. At this stage, no final decisions have been made, and no commercial contracts have been signed for the provision of these services.

An Aboriginal heritage survey was undertaken on 10th January 2025. No activities under this PEPR will be undertaken without heritage clearance.

Exploration PEPR application – 12-month period

Consultation (r. 64)

Using the table below, provide a summary of the individual or group of similarly affected persons and summarise the results of consultation that has been undertaken on the proposed operation. Types of interested or affected parties include residents, council, government agencies etc (exclude native title groups and defence owned or controlled lands – refer to relevant sections below).

Tenement	Stakeholder	Land tenure	Land use	Date and type of NOE served	Type of exempt land	Date waiver obtained	Date consultation/access agreement and/or permits signed/authorised	Stakeholder concerns raised and how addressed
EL6619 EL6620	A.M.Y. Nominees	Crown Lessee	Grazing – Native Vegetation	27/11/2024 (Low Impact Activities) 29/11/2024 (Advanced Exploration Activities)	N/A	N/A	No agreements or permits in place or required	No concerns have been raised by the stakeholder to date.
EL6619 EL6620	SA Minister for Environment and Water	Custodian	As above	As above	N/A	N/A	As above	No concerns have been raised by the stakeholder to date.
EL6619 EL6620	Noel Fraser	Property Manager	As above	As above	N/A	N/A	As above	Met with stakeholder on 13/12/24 – supportive of the project.
EL6619 EL6620	Palyari Minyungu Aboriginal Corporation	Primary Production Licence	As above	As above	N/A	N/A	As above	No concerns have been raised by the stakeholder to date.
EL6619 EL6620	SaltbushAg	Property Manager	As above	As above	N/A	N/A	As above	Met with stakeholder on 13/12/24 – supportive of the project. Offered to provide accommodation.
EL6619 EL6620	Walarintja Landholding Inc	Crown Lessee	As above	As above	N/A	N/A	As above	Stakeholder representative identified interest in participation in heritage survey.
N/A	Cooper Pedy District Council	N/A	N/A	N/A	N/A	N/A	N/A	Contacted to discuss water supply and waste disposal options.
EL6619 EL6620	SA State Drilling Inspector (Steve Bodey)	N/A	N/A	N/A	N/A	N/A	N/A	Contacted for groundwater advice, as advised by DEM Senior Exploration Officer, Jason Perry.

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

N/A

Provide any additional relevant information.

N/A

SECTION C – DESCRIPTION OF THE ENVIRONMENT

Include a description of the features of the environment that are expected to be affected by the proposed operations. Each of the elements of the existing environment listed below must be described only to the extent that they may need to be considered in assessing the impacts that the proposed exploration operations are reasonably expected to have on the environment. If the element is not likely to be impacted by the operation, a statement to that effect must be included.

Where the terms and conditions of an RL include environmental outcomes, include any new baseline environmental data relevant to the control strategies or measurement criteria, and where changes to the environment are identified, provide an updated description of the environment to describe the changes.

Proximity to infrastructure and housing

Provide the following information:

- Settlements – indicate the name and distance of the nearest town, and residences within, or near the proposed exploration operations.
- Roads and tracks – indicate existing fence lines, roads and tracks, including those which are to be used in the exploration program.
- Other human infrastructure such as schools, hospitals, commercial or industrial sites, roads, sheds, bores, dams, ruins, pumps, scenic lookouts.
- Railway lines, transmission lines, gas and water pipelines, communication lines – e.g. fibre optic cables etc., if these may be impacted by the exploration operations.

Provide this information on a locality plan/map.

The closest township is Coober Pedy, which is approximately 22km east of the closest planned drilling location (1B).

Mabel Creek Homestead is located approximately 7.5 km north-west of the closest planned drilling location (3A). Mount Clarence Homestead is located approximately 18.3 km north of the closest planned drilling location (2C).

The following Exempt Land is in the vicinity of the activity area, but none of those areas would be accessed for drilling activities:

- Woomera Prohibited Area (WPA);
- Tarcoola-Alice Springs Railway corridor;
- Mount Clarence Station Airfield.

Wherever possible, access to proposed drill sites will utilise the network of existing station tracks. Tracks will be maintained as required (in consultation with the pastoral lease holders), to ensure minimal disruption to station activities.

Before You Dig Searches have been completed and confirmed there is no infrastructure at or near the planned drilling locations.

The above relevant information is shown in the maps supporting this PEPR.

Exploration PEPR application – 12-month period

Land use and tenure

Using the table below, select the land tenure and land use that the proposed exploration activities will occur in. Include additional information where prompted.

Land tenure/type	Applicable	Land use	Applicable
Freehold	<input type="checkbox"/>	Grazing	<input checked="" type="checkbox"/>
Pastoral lease	<input checked="" type="checkbox"/>	Cultivated land	<input type="checkbox"/>
Perpetual lease	<input type="checkbox"/>	Residential	<input type="checkbox"/>
Crown land	<input checked="" type="checkbox"/>	Township	<input type="checkbox"/>
Mining reserve	<input type="checkbox"/>	Industrial	<input type="checkbox"/>
Aboriginal freehold/leasehold land (e.g. Anangu Pitjantjatjara Yankunytjatjara and Maralinga Tjarutja lands)	<input checked="" type="checkbox"/>	Tourism	<input type="checkbox"/>
Forestry reserve	<input type="checkbox"/>	Conservation	<input type="checkbox"/>
Marine parks	<input type="checkbox"/>	Defence activity	<input type="checkbox"/>
National parks, conservation parks, conservation reserves, regional reserves*	<input type="checkbox"/>	Road reserve	<input type="checkbox"/>
Adelaide Dolphin Sanctuary	<input type="checkbox"/>	Sites of scientific significance (geological monuments, fossil reserves etc.)	<input type="checkbox"/>
Murray Darling Basin	<input type="checkbox"/>	Orchard/vineyard	<input type="checkbox"/>
N/A		*Native vegetation heritage agreements	<input type="checkbox"/>
Other*	<input checked="" type="checkbox"/>	N/A	
Coober Pedy Precious Stone Fields (Opal Fields)		*European heritage sites	<input type="checkbox"/>
		N/A	
		*Other (e.g. historic mining)	
		N/A	

* Indicates more information required in field immediately below.

Describe any council policies (or out of council) or development plans that may impact the program area.

The Outback Communities Authority (OCA) has responsibility for the management and local governance of the unincorporated areas of South Australia and is the relevant authority for the program area. The OCA Strategic Management Plan 2020-25 objectives include "Grow our economy"; investment in the region via exploration supports this objective via employment opportunities and engaging local services. The OCA's draft "The Strategic Blueprint" also identifies the significance of mining operations and ongoing exploration in generating substantial opportunities for economic growth.

There are no other policies or development plans known to impact the program area.

Provide a description of any known plans for future land use changes by other parties.

No known plans for future land use changes by other parties has been identified through desktop review and consultation with stakeholders.

Provide any additional relevant information.

N/A

Exploration PEPR application – 12-month period

Woomera Prohibited Area (WPA)

Will activities be conducted within the WPA	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Do you have a resource exploration permit in place?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
In which zone will activities be conducted?			N/A		
Does the Exploration Permit allow the operator to conduct exploration operations in the WPA?				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
What is the expiry date of the resource exploration permit?				N/A	
Identify closure periods that may impact on the exploration program.					
N/A					

Other land owned or controlled by the Commonwealth Department of Defence

Lands in South Australia that are owned or controlled by the Commonwealth Department of Defence, which they manage either as a training or test area, include the Port Wakefield Proof and Experimental Establishment, Murray Bridge Training Area, and Cultana Training Area.

These lands remain to be mineral land under the Mining Act 1971 (SA) and can be accessed for mineral exploration and mining subject to certain restrictions and conditions under the Defence Act 1903 (Cth) and the Defence Regulation 2016 (Cth).

Will operations be conducted within the Port Wakefield Proof and Experimental Establishment, Murray Bridge Training Area, or Cultana Training Area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A		
Do you have a Deed of Access with Defence?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
What is the expiry date of the Deed of Access?	N/A	
Provide the date the Range Control Officer granted access permission to conduct the proposed exploration operations.	N/A	
Describe the results of consultation and how any concerns raised were addressed.	N/A	
N/A		

Native title

Using the table below, describe how you have complied with the requirements of Part 9B of the Mining Act for each tenement (for further information refer to [Minerals Regulatory Guidelines MG22](#)).

Native title			
Is the proposed area of exploration located on native title land?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, no further information in this section required.)		
Are there registered native title party/parties in the area of proposed exploration?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Antakirinja Matu-Yankunytjatjara Aboriginal Corporation RNTBC (Native Title Tribunal No SCD2011/001)	If no, an Environment, Resources and Development (ERD) Court determination is required.
Have you negotiated a native title mining agreement?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the agreement registered?*	Native Title Mining Agreement for Exploration between Talisman Mining Limited and Antakirinja Matu-Yankunytjatjara Aboriginal Corporation RNTBC – Covers EL6619, EL6620 and EL6627. Consent: 10/11/2023 Commenced: 01/10/2023 Endorsed: 14/11/2023
Have you accepted an Indigenous land use agreement (ILUA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the ILUA registered?*	N/A
Have you obtained ERD Court determination?†	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the determination registered?*	N/A

* The registration date refers to the date the agreement, determination or ILUA was registered with DEM.

† An ERD Court determination cannot be conjunctive (i.e. cannot apply to subsequent licences).

Exploration PEPR application – 12-month period

Provide any additional relevant information.

N/A

Landform and topography

Describe the topography of the general area affected by the exploration program. Include the susceptibility to erosion and visual attributes (steep or undulating slopes, plains, rocky outcrops, dunes, salt pans, clay pans etc.).

The landform is generally flat to mildly undulating, with predominantly bare rocky gibber plains with sparse vegetation, mostly concentrated around mapped watercourses (dry). There are some clay pans in the broader locality, but no drilling would be undertaken in those areas. There are no other significant landforms in the locality.

Efforts will be made to reposition proposed drill collars to flatter ground, thus minimising the need for drill pad earthworks. The ability to relocate drill sites will, however, be constrained to a certain degree by geological factors.

Given the very low gradient of the areas to be disturbed, it is expected that there will be very low susceptibility to erosion. Extremely heavy rainfall in a short period (e.g. a storm event) may produce a sheetwash effect in the general area, however, any erosional effects on areas impacted by drilling activities are likely to be localised.

Soil and surface cover

Describe soil types and soil surface cover - e.g. gibber, rocky - in the general area affected by the exploration program. Include details on the susceptibility to compaction, erosion, dust, runoff and any other soil characteristics – e.g. acid sulphate – that may require control strategies to reduce environmental impacts during operations or rehabilitation.

As described above, surface cover are bare rocky gibber plains with sparse vegetation. Negligible soil profile has been developed from the underlying bedrock. Compaction and dust lift-off may occur; however, erosion susceptibility is considered to be low. Mitigation measures will be implemented to minimise impacts to soils and minimise dust.

Surface water

Will the proposed program interfere with surface water bodies and natural drainage (e.g. drainage lines, creeks, floodplains, wetlands)? If yes, describe the potential interference and surface water bodies and natural drainage on maps. If no, indicate why.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
There are some mapped water courses in the locality, and those that do exist are minor and ephemeral in nature. All watercourses in the vicinity of drilling locations are currently dry. Planned drilling locations and proposed access tracks have been designed to avoid disturbance to any mapped watercourses. No crossings or modifications to watercourses are proposed.		
Is the program area located within water protection areas defined under the <i>River Murray Act 2003</i> ? If yes, provide the name(s).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Is the program area located within any prescribed watercourses or prescribed surface water areas under the <i>Landscape South Australia Act 2019</i> ? If yes, provide the name(s).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

Exploration PEPR application – 12-month period

Groundwater

<p>Is groundwater likely to be intersected when conducting the exploration program?</p> <p>If yes, use the table below to describe the expected groundwater (hydrogeological) conditions, and identify groundwater aquifers in the exploration area(s) that may be affected. Indicate the approximate depth of drillholes in each area. Copy and paste a new table for each area where different groundwater conditions are expected.</p> <p>If no, provide evidence or any supporting information demonstrating this.</p>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>Review of available groundwater data via SA Water Connect identified the following:</p> <ul style="list-style-type: none"> • 129 bores within a 5km radius of planned drilling locations. • 6 bores have aquifers listed, including: <ul style="list-style-type: none"> - JK1 (unconf) which is the GAB - Cadna-owie Formation/Algebuckina Sandstone - unconfined aquifer - JK-a (unconf) which is the GAB - Algebuckina Sandstone - aquifer - K-c (unconf) which is the GAB - Cadna-owie Formation - unconfined aquifer - Kmb which is the Bulldog Shale, known to be the main confining layer of the Cadna-owie – Algebuckina aquifer system. • 7 bores within a 5km radius have stratigraphic/hydrostratigraphic logs. • Drilled depths of 7-284m, with an average depth of 24.14m. • Standing water levels of 53-79.86m, with an average depth of 70.19m. • Near neutral pH ranging from 6.7-6.9. • Yields ranging between 0.16-3.07 L/sec, averaging 1.29L/sec. • Electrical conductivity ranging from 9,930-16,000 µS/cm, averaging 11,850 µS/cm, which is very saline. • Total Dissolved Solids (TDS) ranging from 5,658-9,323 mg/L, averaging 6,810 mg/L. • A broader search of the region for flowing bores identified the following information from well logs that are distant from Talisman's planned drilling locations: <ul style="list-style-type: none"> - The closest uncontrolled flowing bores (2) near Nilpinna Station (~115km north-east of Talisman's planned drilling). Of the two bores, one identifies the aquifer (JK1 – artesian) and the other bore (aquifer not stated) shows similar stratigraphy to Talisman's planned drilling area (i.e. Bulldog Shale 0-58m, Cadna-owie Formation 58-133.6m, Mount Toondina Formation 133.6-214m). - The closest controlled flowing bore south-east of Arckaringa (~120km north-east of Talisman's planned drilling) is also within JK-1 (artesian) with similar stratigraphy to Talisman's planned drilling area (i.e. Bulldog Shale 0-120m, Cadna-owie Formation 120-155m, Mount Toondina Formation >155m). - The closest controlled shut-in bores (2) near Nilpinna Station (~115km north-east of Talisman's planned drilling). Available well log data identifies JK1 (confined) and K-c (artesian) aquifers and shows similar stratigraphy to Talisman's planned drilling area (i.e. Bulldog Shale 0-50m, Cadna-owie Formation >50m). <p>Maximum drill hole depth is 600m and is therefore likely to intersect groundwater. Based on aquifers recorded in the area of Talisman's planned drilling, it is considered likely that aquifers intersected will not be pressurised. Notwithstanding this, the Bulldog Shale is noted to be a confining layer and is present in stratigraphic logs in the locality. Talisman will ensure that sufficient measures are in place to manage groundwater, as outlined in the <i>Drillhole construction and decommissioning</i> section and <i>Section F – Management of Environmental Impacts</i> of this PEPR.</p>		

Description of the locality/area where different groundwater conditions may be encountered
<p>The planned drilling locations are within the same aquifer province (Great Artesian Basin) and based on local bore data, they are likely to encounter similar groundwater conditions at all drilling locations.</p> <p>In the South Australian context, the Cadna-Owie–Algebuckina aquifer is known as the Great Artesian Basin (GAB) aquifer, sourcing most of the demand in the Far North Prescribe Wells Area (FNPWA) and supporting the ecologically significant GAB spring ecosystems. Most of the flowing artesian bores intercept this aquifer system, providing the shallowest flowing artesian water supplies in much of the GAB. This aquifer system is both artesian and non-artesian. Aquifer thickness of the Cadna-Owie Formation and Algebuckina Sandstone ranges from 500 m in the deeper parts of the basin (SA Arid Lands Natural Resources Management Board, 2009).</p> <p>The Bulldog Shale overlies the Cadna-owie Formation and Algebuckina Sandstone (known as the J-K aquifer), and may be absent or thin along the west, south-east and south-west margins of the Arckaringa Basin (DEWNR, 2015, p. 14). Local well log data indicates the Bulldog Shale is present in reasonable thickness across the area, predominantly between 60-70m thickness.</p> <p>Review of wirelog correlation data from the Arckaringa Basin (refer to Figure 3.2, DEWNR, 2013, p. 41) and the closest drillhole data (ARKEETA 1, located approximately 60km south of the closest planned drill holes) from the SA Geodata Database identifies the following ranges for the Mount Toondina Formation (and other underlying formations not likely to be intersected):</p> <ul style="list-style-type: none"> • Mount Toondina Formation: 47m – 713m (at the closest drill hole, ARKEETA 1, located approximately 60km south of the closest planned drill holes. • Stuart Range Formation: 713m – 968m (not included in Table below – unlikely to intersect). Potential aquitard (refer to Table 2.1, DNRW, 2014, p. 13). • Boorthanna Formation: 968-1,317m (not included in Table below – unlikely to intersect) <p>The Mount Toondina formation:</p> <ul style="list-style-type: none"> • has sandstone and coal units (potential aquifers) and clay and shale layers (potential aquitards) (refer to Table 3.1, DWNR, 2013, p. 38). • water quality ranging from saline to ultra-saline, extremely hard, and slightly acidic (DWNR, 2013, p. 44).

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With respect to the Toondina Formation, the following is noted from the Australian Government (2018) Bioregional Assessments:
A lack of confining layer between the Mount Toondina Formation and the overlying aquifers of the GAB suggests that there is potential for extensive connectivity between the GAB aquifer and aquifer units within the Mount Toondina Formation within the Arckaringa subregion (Ransley et al., 2012). That being said, the paucity of information concerning intra-formational variability with respect to lithology, spatial distribution and the impact of diagenetic changes such as fracture development or mineral dissolution renders only a general interpretation possible.

Sources:

- Australian Government, 2018. Hydrostratigraphic units and system boundaries. Accessed via: <https://www.bioregionalassessments.gov.au/assessments/11-context-statement-arckaringa-subregion/1143-groundwater-flow>
- Government of SA, Department of Water and Natural Resources (DWNR), 2013. *Australian Government Initiative On Coal Seam Gas And Large Coal Mining Arckaringa Basin And Pedirka Basin Groundwater Assessment Projects*, accessed via: https://www.waterconnect.sa.gov.au/Content/Publications/DEW/Arckaringa_Pedirka_Stage1_Report.pdf
- Government of SA, Department of Water and Natural Resources (DWNR), 2015. *Arckaringa Basin Numerical Groundwater Model 2014: DEWNR Technical report 2015/05*. Accessed via: <https://www.waterconnect.sa.gov.au/Content/Publications/DEW/DEWNR-TR-2015-05-Arckaringa-groundwater-model.pdf>
- SA Arid Lands Natural Resources Management Board (2009), *Water Allocation Plan for the Far North Prescribed Wells Area*, accessed via: <https://cdn.environment.sa.gov.au/landscape/docs/saal/far-north-water-allocation-plan.pdf>

Available groundwater/stratigraphic data (from 7 bores within a 5km radius) via SA Water Connect is provided below to inform stratigraphy and potential aquifer intervals likely to be intersected during drilling. Beyond the depth of available groundwater well logs (to 284m), some limited drillhole data with depths up to 394m have been used to infer likely geology at greater depths. This drill data is taken from 3 drillholes (drilled by Marathon Resources on EL3455) located approximately 10km west of the nearest planned hole. Additional formations are inferred from the ARKEETA 1 drill hole data provided above.

As groundwater is likely to be intersected, the drilling inspector will be notified at least 14 days prior to drilling commencing.

Formation age and/or stratigraphic unit	Stratigraphic intervals (depth range) (m)	Aquifer formation name	Aquifer interval/thickness (from-to) (m)	Type of aquifer(s) intersected (e.g. unconfined, confined, artesian)	Provide aquifer salinity, depth to water level and any other relevant comments
Quaternary sediment/rock	0-1.2m 0-4m 0-3.5m	N/A	N/A	N/A	N/A
Tertiary-Pleistocene alluvial and fluvial sediments / Tertiary silcrete	0-5.49m 0-8m 1.2-9m	N/A	N/A	N/A	N/A
Russo Beds (Pliocene-Pleistocene)	8-14m	N/A	N/A	N/A	N/A
Bulldog shale (Cretaceous to Jurassic)	4-68m >8m (no end depth provided in log) 5.49-81.69m 0-12m 8-74m 14-78m 9-78m	N/A	N/A	N/A	N/A
Cadna-owie Formation/Algebuckina Sandstone (Mid-Cretaceous to Jurassic)	>74m 78-100m 78-130m 68-196m >81.69m Local range is between 74-196m	Cadna-owie Formation/Algebuckina Sandstone	>74m 78-100m 78-130m 68-196m >81.69m Local range is between 74-196m	Unconfined (artesian and non-artesian)	As above: - SWL averages 70m in the locality - Aquifer salinity is high in the locality
Mount Toondina Formation (Permian)	>130m (well log) 47m – 713m (ARKEETA 1)	Mount Toondina Formation	47m – 713m (ARKEETA 1)	Unconfined (based on information provided above)	SWL not known Saline aquifer (as noted above)

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Palaeoproterozoic rocks (Term used in groundwater well log)	196-284m	N/A	N/A	N/A	N/A
Archaen-Palaeoproterozoic rocks (Data derived from nearby mineral drillhole data)	188.07-394m 214.3-387m 231.76-295m	N/A	N/A	N/A	N/A

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

<p>Review of Schedule 1—Environmental values of waters of the Environment Protection (Water Quality) Policy 2015 identifies that underground waters with a background TDS level of 3 000 mg/L or more, but less than 13 000 mg/L (consistent with TDS in bores in the locality), have the following environmental values:</p> <ul style="list-style-type: none"> • Primary industries - livestock drinking water • Primary industries - aquaculture and human consumption of aquatic foods
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Provide a description of the existence, location and value of all Groundwater Dependent Ecosystems (GDEs) within and immediately surrounding the project area.

No proposed disturbance areas affect mapped aquatic GDEs. Disturbance associated with Hole 4B is located within an area of mapped GDE – Terrestrial, associated with a minor drainage channel in the locality.
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Is the proposed program located within a prescribed wells area or prescribed water resource area? If yes, provide the name of the area.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
The program is located within the Far North Prescribed Wells Area.		

Provide any additional information, if required.

N/A

Native vegetation

<p>Will you be working within areas of native vegetation? If yes, provide the following information:</p> <ul style="list-style-type: none"> • description of the formation and structure of vegetation in the area (e.g. woodland, shrubland, grassland) • list of the dominant species. <p>If no, indicate why you will not be working within areas of native vegetation?</p>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>As the work areas relevant to this drilling program fall on pastoral stations with land use identified as grazing of native vegetation. The environment is relatively arid, vegetation is typically quite sparse and has been degraded to varying extents.</p> <p>Review of the SA Vegetation Database identified the following Vegetation Groups within the disturbance areas, consistent with photographs taken from planned drilling locations:</p> <ul style="list-style-type: none"> • Vegetation Group Code SD0013 for all disturbance areas except for those associated with Hole 4B. SD0013 is described as low open shrubland on stony plains/tablelands with the following species: <i>Atriplex vesicaria</i> ssp., <i>Atriplex nummularia</i> ssp. omissa, <i>Maireana astrotiricha</i>, <i>Maireana pyramidata</i>, <i>Rhagodia spinescens</i> low open shrubland over <i>Sclerolaena intricata</i>, <i>Eragrostis setifolia</i>, <i>Sclerolaena divaricata</i>, <i>Abutilon halophilum</i>, <i>Tecticornia medullosa</i> • Vegetation Group Code SD0006 for Hole 4B, which is described as tall open shrubland associated with stream channels, minor watercourses and flood outs. SD0006 has the following species: <i>Acacia ligulata</i>, <i>Acacia victoriae</i> ssp., <i>Acacia cambagei</i>, +/- <i>Dodonaea viscosa</i> ssp. <i>angustissima</i>, +/- <i>Acacia aneura</i> var. tall open shrubland over <i>Maireana aphylla</i>, <i>Atriplex vesicaria</i> ssp., <i>Maireana pyramidata</i>, <i>Rhagodia spinescens</i> low sparse shrubland over <i>Aristida contorta</i>, <i>Sclerolaena ventricosa</i>, <i>Frankenia serpyllifolia</i> <p>Review of the Flora and Fauna Super Tables via NatureMaps did not identify any records of threatened species within the proposed disturbance areas, including drill pads and proposed tracks. A search of those records for the broader locality identified the following:</p> <ul style="list-style-type: none"> • One flora species (<i>Swainsona vestita</i>) listed as Vulnerable under the SA <i>National Parks and Wildlife Act 1972</i>. This species is record is located 1.77 km south-west of the access track to planned drilling location 1B. • No records of threatened fauna species under SA or Commonwealth (EPBC Act) legislation. <p>A Protected Matters Search Tool report did not identify any threatened ecological communities or threatened flora species/habitat known to occur within the search area.</p>		

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Significant habitats and flora

If you are working within areas of native vegetation, use the table below to list any significant habitats and any rare or endangered flora 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/habitat	Common name	NPW Act rating*	EPBC Act rating†
N/A – no known records of significant flora present in proposed disturbance areas.			

* *National Parks and Wildlife Act 1972* (NPW Act) conservation status includes extinct, endangered, vulnerable, threatened and rare.

† *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) listings include extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent.

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*).

<p>A review of GIS information available via Nature Maps did not reveal any documented occurrences of Weeds of National Significance or buffel grass, in the areas relevant to the drilling program. Buffel grass is, however, documented as occurring in the immediate vicinity of the Anne Beadell Highway, near access points to drilling areas. Other weeds recorded in the broader locality include the Century Plant and others from the Cactaceae (i.e. Cactus) family, including Devil's Rope Pear, <i>Cylindropuntia fulgida</i> var. <i>mamillata</i>, <i>Cylindropuntia prolifera</i> and <i>Opuntia puberula</i>.</p> <p>Talisman will implement the following measures to minimise the spread of weeds:</p> <ul style="list-style-type: none"> • Conduct Weed and Seed inspections of all vehicles/machinery/equipment entering the drilling sites to ensure vehicles are clean before entering a new site. • Restrict vehicle movements to existing and identified proposed access tracks/drill pads. • Avoid walking or driving over any buffel grass infestations. • Inspect footwear and clothing to remove/dispose of any weed seed. • Follow applicable advice in the SA Department of Primary Industries and Regions (PIRSA) Fact Sheet – Buffel Grass Hygiene.
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Fauna

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

<p>Fauna observed in the locality to date includes crows, wedgetail eagles, emus and kangaroos. Although not sighted, snake and lizard occurrences are likely to be present. No feral species have been observed but may be present.</p> <p>Fauna Super Table Records have been obtained for all drill sites via SA NatureMaps and exported as maps, provided with this PEPR. There are no recorded fauna species at the drill sites or track locations. There is a single fauna species recorded in the broader locality – the Red-Necked Avocet (<i>Recurvirostra novaehollandiae</i>), which is not listed under State or Federal legislation as threatened.</p> <p>A Protected Matters Search Tool report identified the following threatened species or species habitat known to occur within the search area:</p> <ul style="list-style-type: none"> • Thick-billed Grasswren (<i>Amytornis modestus</i>) – Vulnerable • Southern Whiteface (<i>Aphelocephala leucopsis</i>) - Vulnerable

Significant fauna

Where possible, using the table below, list any rare or endangered 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	Common name	NPW Act rating	EPBC Act rating
<p><i>Amytornis modestus</i> Habitat: They live only in the densest bushes of the chenopod shrublands, mostly in lower lying areas such as watercourses and drainage lines and in vegetation surrounding dams. Source: SA Arid Lands Natural Resources Management Board, 2011</p>	Thick-billed Grasswren	Not Listed	Vulnerable
<p><i>Aphelocephala leucopsis</i> Habitat: Dry open forests and woodland and inland scrubs of mallee, mulga and saltbush are the preferred habitat of Southern Whiteface, especially areas with fallen timber or dead trees and stumps. Source: Birdlife Australia, n.d.</p>	Southern Whiteface	Not Listed	Vulnerable

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Note: NPW Act conservation status includes extinct, endangered, vulnerable, threatened and rare.
 EPBC Act listings include extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent.

Environmentally sensitive locations

Are there any environmentally sensitive locations within or close to the proposed exploration area (e.g. areas having particular ecological, cultural, scientific, aesthetic or conservation value)? If yes, provide a description of identified environmentally sensitive location(s). Mark these areas on a locality plan to identify any areas of conflict so that access roads or other activities can be planned and located effectively.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Claypans and creeks are sensitive areas near proposed exploration activities, but these areas would not be impacted. Clay pans will be identified on-ground prior to drilling. Mapped watercourses are shown in the maps supporting this PEPR.		
Are you likely to impact on the environmentally sensitive area? If yes, detail the likely effects the proposed program may have.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Include a statement concerning whether or not an Aboriginal heritage survey has been conducted by the proponent and if so, the results of the survey.		
A search of the Register of Aboriginal Sites and Objects was completed on 10/12/24. Two listed sites were identified in the search area but are not located within the disturbance areas associated with proposed exploration activities. An Aboriginal heritage survey was undertaken on 10 th January 2025. No activities under this PEPR will be undertaken without heritage clearance.		

SECTION D – DESCRIPTION OF PROPOSED EXPLORATION OPERATIONS

Each of the elements listed below must be described only to the extent that they apply to the proposed exploration program.

Equipment and personnel requirements

Using the table below, describe the equipment, size and composition of field crews, and proposed working hours/days required to conduct the proposed program.

Type of personnel	Number	Name of contractor company (if applicable)	
Geologists	2	Talisman	
Land access/environmental	1	Talisman	
Field assistants/technicians	2	Contractor to be determined	
Drilling crew	7	Contractor to be determined	
Site preparation and rehabilitation	2	Contractor to be determined	
Other (provide details)			
Shifts worked per day	Hours worked per day	Days worked per week	
Whole program: Single shift – Talisman staff/field technicians, earthworks contractors Double shift – Drilling crew	Typically, 12 hours per shift	Seven	
Equipment type	Owner/operator	Description/capacity	Activity/purpose
Grader	To be Determined (TBD)	Likely Cat12H or smaller	May be required to refurbish access tracks
Bobcat	To be Determined (TBD)	Bobcat	Pad establishment
Backhoe	To be Determined (TBD)	To be Determined (TBD)	Sump excavation
Drilling Rig – Diamond Coring	To be Determined (TBD)	Likely an 8-wheel drive, truck-mounted UDR1000	To provide diamond drill core samples
Drill Rod Truck	To be Determined (TBD)	Likely 6- or 8-wheel drive, flat-bed support truck	Carrying additional drill rods/supplies
Support Truck	To be Determined (TBD)	Likely 6- or 8-wheel drive, flat-bed support truck	Carrying fuel, water, supplies, and consumables
Drillers Light Truck	To be Determined (TBD)	Likely an Isuzu 4WD, dual cab light truck	Facilitates drill crew commute and carries light supplies daily
XRF	Talisman	Olympus Delta XRF	Provides XRF analysis in the field
Vacuum Truck	To be Determined (TBD)	To be Determined (TBD)	Sump waste removal

Provide any additional information, if required.

<p>Ancillary equipment for the drilling activities will include:</p> <ul style="list-style-type: none"> • a trailer mounted lighting plant and generator, • drillers office caravan next to drill rig • above ground water tank for management and mixing drill fluids. <p>Additional/different equipment may be required when the earthworks contractor is selected.</p> <p>Numerous 4WD vehicles will be involved in field activities for the full duration of the program (i.e. from initial reconnaissance trips, through drilling, and up to rehabilitation stage). All vehicles associated with the drill program will be required to limit movements to existing tracks and those tracks/pads approved for creation under this PEPR.</p>
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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)? If yes, describe each type of low impact operations proposed.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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Drilling activities

Will exploration drilling activities be conducted? If yes, fill out the below table	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Tenement	Drilling type	Maximum number of drillholes	Maximum drillhole depth (m)	Maximum number of sumps required at each site	Maximum size of sumps (length x width) (m ³)	Average size of each drill pad* (m ²) (no excavation required)	Number of sites requiring pad excavation	Average volume (m ³) of material to be excavated (excluding sumps)
EL6619	Mud rotary / diamond	3	3 x 600m holes = 1,800	4 sumps at each pad (3 pads x 4 sumps) = 12 sumps	3x3x1.5 = 13.5 x 12 sumps = 162	3 holes x 2,500 = 7,500	0	0
EL6620	Mud rotary / diamond	2	2 x 600m holes = 1,200	4 sumps at each pad (2 pads x 4 sumps) = 8 sumps	3x3x1.5 = 13.5 x 8 sumps = 108	2 holes x 2,500 = 5,000	0	0
TOTAL		5	3,000	20 sumps	270m ³	12,500	0	0

Total number of drillholes (add each row to calculate the total).	Total metres proposed (maximum number of holes x average depth for each row, then add each row to calculate the total).	Total number of sumps (maximum number of sumps x drillsites for each row, then add each row to calculate the total).	Total volume of sumps (maximum size of sumps x number of sumps for each row, then add each row to calculate the total).	Total area of disturbance (number of holes x average size for each row, then add each row to calculate the total).	Total number of pads requiring excavation (add each row to calculate the total).	Total volume of material to be excavated (number of sites requiring excavation x average volume for each row, then add each row to calculate the total).
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* The footprint includes all areas of disturbance associated with the drillsite.

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.

In terms of siting the proposed drill collars, there will be some degree of flexibility on a localised scale, with the objectives of the drilling program still being able to be met and site constraints be avoided. In this regard, it is intended that wherever feasible, drill collars will be placed on the flattest terrain possible, thereby minimising the need for levelling of terrain.

It is anticipated that all five proposed drill sites will be able to be prepared by simply using a Bobcat to scrape the sparse saltbush/bluebush vegetation from the surface. Any cleared vegetation/debris will be pushed to one end of the drill pad, so it can be easily salvaged and re-spread during the rehabilitation process. During pad and sump construction, topsoil will be stockpiled separately.

Minor levelling of drill sites may be required in some locations. Minimal topsoil will be removed during the pad preparation process. It is intended that plant rootstock will be left intact as much as possible to aid in later re-growth, however, it is also necessary to ensure the drill pad is free of objects (rocks/sticks/etc) that could pose a trip hazard to personnel, or damage to vehicle tyres. Drill pads will be prepared to the dimensions stated above, with earthworks supervised by a Talisman representative.

Sumps will be excavated (where required) using an appropriately sized bucket for the sump dimensions. Sump dimensions may change if ground conditions prevent excavation to 1.5m. The overall volume of sumps would not be exceeded. All in-ground sumps will be lined. Bunded and fenced edges will be maintained to prevent overflow and ensure safety. Construction of sumps will include at least one sloped edge to facilitate the egress of any animals that may fall into the sump.

Above ground sumps may also be used (where required). It is anticipated that a maximum of 4 x 5,000-10,000L tanks will be used at each drill site. Additional tanks will be supplied as a contingency for managing any excess water.

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Drillhole construction and decommissioning

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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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.		
Drilling activities and decommissioning will be conducted in accordance with the Mineral Exploration Drillholes Information Sheet M21: General specifications for construction and backfilling.		
Proposed drilling procedure: <ul style="list-style-type: none"> Rotary Mud (RM) drilling to 30-50m and insert PWT (6 5/8") steel casing, cement and case off. Continue Rotary mud drilling to base of cover sequence, which is estimated at 200m and insert HWT (41/2") casing and case off. Drill HQ diamond core tail to ~400m to 600m depth. 		
Use of appropriate biodegradable kill weight muds to balance formation pressure and hold back any in-ground water during drilling of the cover sequence.		
Available groundwater information (refer to Groundwater section of this PEPR) indicates pressurised aquifers are unlikely to be present at the proposed drilling locations. Therefore, it is not proposed to use a Class 3 driller for the drilling program. If, in the unlikely event a pressurised aquifer is encountered, an appropriate licence driller (Class 3) will be sourced by the drilling contractor to supervise the required drilling and grouting operations.		
While final contractor selection is not yet confirmed, the anticipated drilling contractor has Class 2 licenced drillers.		
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.		
Upon completion of the hole (and after any downhole geophysics that may be required based on drill results) the drill hole will be decommissioned according to the Mineral Exploration Drillholes Information Sheet M21: General specifications for construction and backfilling.		
Proposed drillhole abandonment procedure: <ul style="list-style-type: none"> Hole is drilled to EOH depth and all downhole survey completed. Hole is circulated and completely free of any obstruction. The hole will either be cemented from EOH up or a Van Ruth plug placed 15m below the top of basement and cemented from plug. Once the open hole is cemented below the casing, the HWT casing will be removed if possible. Casing cuts will take place to free any stuck casing, with extra cuts in the steel made in any casing left to allow cement to penetrate around the steel. Cement to surface. 		

Where confined or artesian conditions are expected, include a schematic diagram demonstrating how drillholes will be constructed and decommissioned

Costeans and bulk sample disposal pits

Will costeans/bulk sample disposal pits be required for the proposed program? If yes, fill out the table below.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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Tenement	Number of costeans/pits	Size of costean (length x width) (m ²)	Average depth (m)	Volume excavated (m ³)	Total volume excavated (m ³) (number of costeans/pits x volume)	Total area of disturbance* (length x width) (m ²)
TOTAL						

Total number of costeans/pits (add each row to calculate the total).

Total volume of material to be excavated (add each row to calculate the total)

Total area of disturbance (number of costeans/pits x area of disturbance for each row, then add each row to calculate the total).

*Includes storage of excavated material at the site (e.g. topsoil and subsoil segregation).

Costeans and bulk sample disposal pit preparation

If costeans/bulk sample disposal pits are required, 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).

The drilling method is mud rotary to ~ 200m to basement and the conventional diamond coring 200m into basement – core size will be a combination of HQ and NQ.

Mud rotary samples will be sampled on site and placed into chip trays. Small piles of material will be placed on the ground next to the sump using a shovel as a visual record of lithology intersected. Sample piles will be placed in the sump at the end of the programme during rehabilitation.

Core will be placed into core trays and taken to a designated area for logging etc. before later being transported back to Talisman facilities. The designated area will likely be at Mabel Creek Station or a facility in Coober Pedy; this is subject to confirmation with stakeholders.

Three of the holes (2C, 4B and 1B) are located within the Coober Pedy Precious Stone Fields (i.e. Opal Field). As such a duplicate set of samples from 0-50m will be bagged and submitted to Mr Ashley Wood, Manager Opal Fields - Coober Pedy office.

Solids will be captured in an above-ground tanks or in-ground sumps. Upon the completion of each drill hole, the remnant sludge will be disposed of at an approved waste facility or by an appropriate waste removal contractor (i.e. via sucker truck). At this stage no on-site core cutting is planned.

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Access routes to work areas

Will existing tracks require upgrading and/or maintenance? If yes, detail the work required to upgrade/maintain existing tracks.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
It is not anticipated that existing station tracks will require a significant amount of upgrade works prior to the drilling program commencing. It is, however, anticipated that the track network will require periodic ongoing maintenance work, given the movement of heavy vehicles. It is expected that maintenance work will largely be confined to re-grading activities.		
Will access be required across adjoining tenements? If yes, 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.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Access to both EL6619 and EL6620 is proposed via existing and proposed access tracks. Notices of Entry have been provided to all stakeholders. No agreements are in place or required.		
Proposed tracks are anticipated to be 3m wide with the following approximate lengths and associated disturbance areas: <ul style="list-style-type: none"> • To Hole 1B: 2,686m x 3m = 8,058m² • To Hole 2C: 474m x 3m = 1,422 m² • To Hole 2B: 555m x 3m = 1,665 m² • To Hole 3A: 857m x 3m = 2,571 m² • To Hole 4B: 271m x 3m = 813 m² • Total: 4,843m x 3m = 14,529 m² (1.45 ha) 		
Track length may vary to avoid any site constraints or to meet heritage clearance requirements.		
Anticipated track locations are shown in the maps supporting this PEPR.		
Will access off existing tracks be required? If yes, detail the method(s) for gaining access and if vegetation clearance is required. Include 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).	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Existing station tracks will be used wherever possible. Where this is not possible, it is anticipated that a new track will be formed by having vehicles drive overland across unprepared terrain in areas of low or sparse vegetation, gibber or scree surfaces. Vehicles will endeavour to use the same wheel tracks each time. Track routes will be marked out at regular intervals if required to aid visibility of the tracks while weaving around any vegetation. The anticipated location, length and disturbance areas of new access tracks are outlined above.		
New track routes will be designed to (where possible): avoid water courses; avoid stands of more significant or established vegetation; and minimise potential for erosion. Where practical, entry and exit points will be doglegged to reduce visibility and try to reduce possibility of third-party access.		
The use of earthmoving equipment to establish new tracks is expected to be very minimal (given the relatively flat gibber plains landscape) and will be confined to tasks such as moving rocks or large fallen branches. A grader is unlikely to be required but has been allowed for in this PEPR in the event it is required. It is expected that a Bobcat will be sufficient for most track/rehabilitation tasks. Blade work for access tracks will be kept to a minimum (if required at all); track preparation will only be sufficient to meet the needs of exploration vehicles. Any new track construction (excluding driving over land i.e. surface traffic) will include appropriate erosion control structures on sloping areas, such as spur drains, spoon drains or contour banks.		
No blading with heavy earthmoving equipment will be used on areas of gibber and silcrete plains. Ripping of any gibber plains landscapes will not be undertaken during wet conditions.		
Vehicle movements will be minimised during heavy rain or prolonged wet weather to reduce damage to tracks. Any damage to private roads will be backfilled and repaired.		
Continued use of access tracks by the public will be prevented by placing any available natural obstacles (i.e. branches, rock, soil mounds) across the track where public roads are intersected; trying to blend the obstacles into the surrounding environment as much as possible as very obvious obstacles may attract unwanted attention.		

Indicate planned access routes on a locality plan and distinguish between existing and proposed new access tracks and drill lines (including fence lines).

Campsites, storage and equipment laydown areas

Using the tables below, provide a description of campsites and/or laydown areas required. Indicate the campsite and laydown area on a locality plan.

Campsite details		
Indicate where staff and contractors will be accommodated during the exploration program.		
Accommodation will be provided in Coober Pedy or on Mabel Creek Station.		
What is the maximum number of personnel requiring accommodation?	12	
Is a campsite required to be established? If no, no further information is required.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Provide a description and justification of the camp location (e.g. previously cleared areas etc.), and any other relevant information.		
What will be the total area (ha) of the campsite(s)?	ha	
What will be the total area (ha) of vegetation clearance for the campsite?	ha	
If vegetation clearance is required, describe the methods used to prepare the site.		
N/A		
Will any excavations be required?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, describe the purpose of the excavation and the maximum volume (m ³) of material to be excavated.		
Are the proposed ablution facilities endorsed/approved for use by the Department of Health or local council, where applicable? If no, indicate why.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Proposed infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)	Quantity	Description/capacity

Laydown area details		
Will laydown areas be required? If no, no further information is required.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will the laydown area(s) be located at the same location as the campsite? If no, has the location(s) been discussed with the landowner?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
What will be the maximum area (ha) required for the laydown area(s)?	ha	
What will be the total area (ha) of vegetation clearance for the site?	ha	
If vegetation clearance is required, describe the methods used to prepare the site.		
Will any excavations be required? If yes, describe the purpose of the excavation and volume (m ³) of material to be excavated.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Proposed infrastructure (includes hydrocarbon and water storage requirements)	Quantity	Description/capacity
Fuel trailer (diesel storage)	1	12,000 litre capacity. The fuel trailer will be moved from pad to pad. No separate laydown area is proposed in this PEPR.
Provide a description and justification of the location (e.g. previously cleared areas), and any other relevant information if required.		
N/A		

Exploration PEPR application – 12-month period

Other exploration methods and/or ancillary operations

Are any other proposed exploration methods (e.g. seismic) and/or ancillary exploration operations required? If yes, describe the activity(s), site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If appropriate various forms of conventional downhole wireline logging will be conducted on the completed drillholes. Timing for this has not yet been determined, but it may require the drillhole collars to remain accessible for some weeks after drilling. No additional site preparation or vegetation clearance will be required.		

Water supply and management

Will camp and/or drilling water be required? If yes, describe how and where water will be sourced for drilling, track maintenance and camping purposes (e.g. groundwater, surface water, mains). Provide details on the volume of water required and how wastewater or runoff water will be managed.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Water will be required for drilling purposes. Discussions have already been held with the pastoral lease holders / land managers – indications are that they may be able to provide water for the program at an agreed rate. Consultation with Coober Pedy District Council has also confirmed that they can supply water to Talisman as well. The quantity of water required will depend on drilling conditions, however, it is not expected to exceed 10,000L per day at a maximum. Drilling water will be captured and managed at the rig using either above ground tanks or in ground sumps. Portable toilets can be pumped out by local contractors.		
Will surface water and/or mineral drillholes be used as a water source/supply? If yes, 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. If a licence is required and has been obtained please attach a copy. Where a licence has not been obtained, include a statement confirming that a licence will be obtained before the extraction and/or usage of water.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A		

Groundwater and drilling investigation activities

Will any water bores be required and/or water investigation activities (e.g. pump testing, water monitoring sites, water storage, turkey nests/dams) be conducted? If yes, describe the water drilling and investigation activities, including site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A		
Indicate if well permits have been obtained and whether or not a water extraction licence is required in accordance with the Landscape South Australia Act 2019. If yes, attach a copy of the permit(s)/licences. If no, provide a statement confirming that permits/licences will be obtained prior to commencement of water investigation activities.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A		

Water affecting activities

Will any water affecting activities, other than drilling a water well, be undertaken (refer to s. 127 of the Landscape South Australia Act 2019)? If yes, attach a copy of the permit. If a permit has not been obtained, provide a statement confirming that a water affecting activity permit(s) will be obtained and provide a description of the site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A		

Exploration PEPR application – 12-month period

Management of hazardous materials

Will activities be conducted in areas of known uranium and thorium mineralisation? If yes, attach a Radiation Management Plan and confirmation of endorsement of the plan by the Environment Protection Authority South Australia (EPA).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will any other hazardous material be encountered when exploring in the area? If yes, list the types of hazardous materials and provide a management plan on how these materials will be managed.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/A		

Rehabilitation

Detail all the activities and strategies relating to the remediation of impacts associated with the proposed exploration operations.
Completion of rehabilitation must be achieved within 3 months after the expiry of this PEPR.
Rehabilitation Methodology: <ul style="list-style-type: none"> • Remove all drilling equipment, machinery, and waste materials. • Properly dispose of non-recyclable waste and recycle where possible. • Decontaminate the site to ensure no harmful substances remain (e.g., fuels, oils). • Backfill, cap and seal drillholes (backfill with cuttings, cut off below ground level, and seal the top of the hole before covering with soil and burying any remaining cuttings). • Backfill and compact any subsidence around the drill hole, allowing slight mounding to allow for settlement. • Backfill sumps with subsoil, followed by topsoil, allowing for slight mounding for settlement. • Recontour the area to blend with the surrounding landscape (if required). • Lightly rip the surface to address any compaction (if required). Ripping of any gibber plains landscapes will not be undertaken during wet conditions. • Return any cleared vegetation across the disturbance areas, parallel to the contour, to assist with erosion and sediment control, and revegetation. • Monitor and maintain the site to ensure successful vegetation establishment and weed control.
State the estimated budget required to rehabilitate impacted sites.
Total Rehabilitation Liability Calculation from the DEM calculator: \$54,266.

Vegetation Clearance

Will any area of cleared native vegetation be unrehabilitated after the authorised period?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, provide a description of the vegetation present in the application area, the extent of the proposed vegetation clearance and the likelihood of the presence of threatened flora. Provide this information on a map.		
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.		

SECTION E – LEASE CONDITIONS

Retention leases

Where the retention lease includes specific conditions that are not environmental outcomes, demonstrate where these have been addressed in the PEPR (if relevant) or demonstrate how otherwise they have or will be complied with.

N/A

SECTION F – MANAGEMENT OF ENVIRONMENTAL IMPACTS

Use the table below (instructions provided) to identify all of the potential environmental, social and economic impact events that are likely to occur as a result of the proposed exploration operations, how each of the identified impacts will be managed, and the residual risk, i.e. the level of risk remaining after implementing control and management strategies. Identified potential impact events should be developed based on the aspects of the environment that may be impacted on and the proposed operational details. Potential impact events must have corresponding outcomes and measurement criteria.

Where the terms and conditions of an RL include environmental outcomes, list them (where different) in the table below and complete all sections (ie receptor, potential impacts, control strategies, risk assessment and measurement criteria).

Environmental management – potential impacts/events, outcomes, measurable criteria and monitoring plan

			Likelihood of consequence (LH)				
			1	2	3	4	5
			Rare	Unlikely	Possible	Likely	Almost certain
Severity of consequence (CQ)	A	Insignificant	Low	Low	Low	Low	Low
	B	Minor	Low	Low	Moderate	Moderate	Moderate
	C	Moderate	Moderate	Moderate	High	High	High
	D	Major	High	High	Extreme	Extreme	Extreme
	E	Catastrophic	High	Extreme	Extreme	Extreme	Extreme

How to fill out the table

1. Based on the description of the environment and exploration operations, indicate which potential impacts are applicable to the proposed program. Note that some potential impacts are applicable to all programs.
2. For each applicable potential impact (and corresponding receptor), describe control strategies that will reduce the risk of the potential impact to an acceptable level, and achieve the corresponding environmental outcomes.
3. Conduct an impact assessment to determine if the control strategies address the potential impact (i.e. reduce the risk to an acceptable level). Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level.
4. For each applicable potential impact, the corresponding outcome and outcome measurement criteria are required.
5. Based on the description of the environment and proposed exploration activities, determine if any other potential impacts are applicable. For each new potential impact, describe proposed control and rehabilitation strategies, conduct an impact assessment, and develop corresponding outcomes and outcome measurement criteria.

Use the above matrix to conduct an impact assessment for each potential impact.

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH	CQ	Risk		
Stakeholders: <ul style="list-style-type: none"> • freehold land owners • perpetual lease holders • pastoral lease holders • Aboriginal land (Anangu Pitjantjatjara Yankunytjatjara and Maralinga Tjarutja lands) • Department of Defence • state government departments. • local government (councils) • federal government • native title parties. 	Interference to: <ul style="list-style-type: none"> • 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.	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> - Consultation with affected stakeholders will be ongoing, with appropriate channels in place to resolve any concerns that may arise. - Meet with stakeholders as needed once program is underway. - Drill holes locations will be adjusted to avoid any stakeholder constraints/sensitive areas. - All proposed drill sites occur in a rural environment, on expansive pastoral leases, with distant neighbours. - Water for drilling to only be sourced from sites and in quantities approved by Station owners or sourced from local Council. - Use existing track networks wherever possible. - Vehicle speed limits will be imposed to reflect local road conditions and the proximity to any infrastructure or stock. - Planning and coordination will be used to minimise the number of individual vehicle movements. - Night-time vehicle movements will be minimal. - Minimal dust will be generated from drilling activities, as diamond coring will be used. - Rehabilitate any new tracks and pads at the end of the program. - The condition of existing tracks will be remediated to the satisfaction of the landowner upon completion of the program. - Conduct early engagement (phone and face to face discussions) with any determined Native Title holders, or Native Title claimants, as to proposed work plan and requirements for Heritage Clearances in areas to be disturbed. 	2	B	Low	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 agreements 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.
Stakeholder: DEW	Interference to: <ul style="list-style-type: none"> • existing or permissible land use. • buildings, structures, existing tracks or other infrastructure. • aesthetic values of an area. 	NO (Applicable to programs located adjacent to or within parks and reserves.)	N/A				For activities located within or adjacent to regional reserves, national, conservation and marine parks only:	Provide confirmation that: <ul style="list-style-type: none"> • Park access notification forms were submitted to DEW and DEM at least 10 days prior to entry into regional reserves, national, conservation and marine parks.

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor Lists are not exhaustive.	Potential impacts Lists are not exhaustive.	Is the potential impact applicable (Yes/No) Some potential impacts are applicable to all programs.	Control strategies Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	Risk assessment LH = likelihood of consequence CQ = severity of consequence				
				LH	CQ	Risk		
	Noncompliance with legislative requirements.						<ul style="list-style-type: none"> no unauthorised interference with park management activities. 	<ul style="list-style-type: none"> Program notifications for PEPRs approved for an ongoing period of time, were submitted to DEW and the DEM at least 21 days prior to entry into regional reserves, national, conservation and marine parks.
Flora and fauna and their habitats; includes Commonwealth and state scheduled species.	Loss/modification of native vegetation and associated habitats through the clearance of vegetation.	YES (Applicable to exploration programs located within or impacting on native vegetation.)	<ul style="list-style-type: none"> Interrogate relevant SA Govt. GIS databases to become familiar with the presence of significant flora and fauna species in the drilling area. Use existing station tracks wherever possible. Drill sites will be located in naturally cleared areas where possible. New track construction to take the most direct, practical routes. Tracks will be planned to utilise naturally open areas to avoid trees and densely vegetated areas. New tracks will be constructed by driving across unprepared ground to retain root stock and minimise potential for erosion. Any vegetation clearing activities should attempt to leave rootstock intact in soil, to promote new growth after rehabilitation. During the drilling phase, all vehicle movements must be limited to already created tracks and pads. All new tracks and pads are to be rehabilitated after the drilling program is complete. Adequate firefighting equipment must be on hand. No fires are to be lit. Internal process for managing hot works such as welding, grinding, and oxy cutting—i.e., firefighting provisions need to be in place. 	2	B	Low	<p>No permanent loss/modification of native flora and fauna populations and their habitats through:</p> <ul style="list-style-type: none"> clearance fire other <p>unless prior approval under the relevant legislation is obtained.</p>	<p>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:</p> <ul style="list-style-type: none"> The area and method of disturbance is consistent with that described in the PEPR. No uncontrolled fires* occurred as a result of exploration activities. <p>Representative photos to be included within the annual exploration compliance report.</p>
All flora and fauna, especially listed species.	Loss/modification of the environment (biological, social and economic) through the introduction of weeds and pathogens.	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> Interrogate relevant SA Govt. GIS databases to determine the presence and extent of current weed infestation. Make observations of current weed presence and distribution during the reconnaissance phase. Any new earthmoving equipment brought on site is to be thoroughly washed off-site first. A visual inspection for introduced mud/soil is to be made by Talisman personnel prior to machinery operation. All new vehicles entering the program area, or vehicles re-entering the program area after travelling on other unsealed roads, are to be cleaned at Coober Pedy first and be visually inspected (personnel to be made aware of various vehicle washing facilities in Coober Pedy). The risk of weed introduction is to be discussed with all new personnel coming to site as part of the induction process. The risk of weed introduction is to feature as a periodic topic at weekly toolbox safety meetings. Rehabilitated sites are to be revisited periodically. If weed infestation or an increase in the abundance of pre-existing weeds is noticed, selective spraying is to occur. 	2	B	Low	<p>No introduction of new species of weeds and plant pathogens, nor increase in abundance of existing weeds species.</p>	<p>Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report, confirming that:</p> <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.
All fauna	Entrapment of fauna through open drillholes and excavations.	YES (Applicable to exploration programs that involve drilling and/or require excavations.)	<ul style="list-style-type: none"> Small bunds will be placed around edges of sumps and barricade fencing will be erected. The fencing will remain in place until the rehabilitation is complete. Construction of sumps will include at least one sloped edge to facilitate the egress of any animals that may fall into the sump. Any sumps will be backfilled as soon as they are dry, and stockpiled topsoil will be replaced in the correct order. PVC collars will be installed at all drillholes before the rig moves off the pad. All collars will have concrete plugs inserted immediately after drilling. All drillhole collars that are no longer required for geoscientific purposes will be cut, plugged, and buried as per rehabilitation guidelines. 	1	A	Low	<p>No fauna traps created as a result of exploration activities.</p>	<p>Maintain before, during and after photographic evidence of all drillholes and/or excavations demonstrating that:</p> <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. <p>Representative photos are to be included within the annual exploration compliance report.</p>

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor Lists are not exhaustive.	Potential impacts Lists are not exhaustive.	Is the potential impact applicable (Yes/No) Some potential impacts are applicable to all programs.	Control strategies Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	Risk assessment LH = likelihood of consequence CQ = severity of consequence				
				LH	CQ	Risk		
								Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.
Aboriginal heritage sites	Disturbance to Aboriginal heritage.	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> – All vehicle movements are to be limited to existing station tracks where possible. – Where new tracks and drill pads are required, a Heritage Clearance Survey will need to be completed before any ground-disturbing activities can occur. – All personnel will be reminded of the possibility of Heritage sites existing and the importance of not disturbing any such sites during the induction process. – Heritage sites identified during the clearance survey process will be flagged in the field and avoided. Personnel will be notified of any heritage sites during the induction process, on maps, and at toolbox meetings, etc. – Any heritage sites identified during the surveys will be recorded on appropriate registers and reported to appropriate authorities. 	1	B	L	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.
European heritage sites and sites of scientific and environmental significance	Disturbance to European heritage sites and sites of scientific and environmental significance (e.g. geological monuments, fossil reserves).	NO (Applicable to exploration programs located close to or within European heritage sites and sites of scientific and environmental significance.)	N/A				No disturbance to European heritage sites and to sites of scientific and environmental significance unless prior approval under the relevant legislation is obtained.	Demonstrate no impact to heritage sites and sites of scientific and environmental significance by: <ul style="list-style-type: none"> • Maintaining evidence, including detailed maps showing sites compared to the location of exploration activities, and photographic evidence of sites before and after the conduct of the exploration program. • Providing a statement within the annual exploration compliance report confirming sites were not impacted during the conduct of the exploration program.
Soil/vegetation/fauna	Soil/vegetation contamination (e.g. hydrocarbons, rubbish, drill samples/cuttings, ablutions, other sources).	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> – All bulk diesel or other hydrocarbon/chemical storage is to be banded in accordance with EPA guidelines. – Designated refuelling areas are to be appropriately banded. – At least one large spill kit is to be present at the drill rig and another at any bulk diesel storage. – All personnel are to be reminded in the induction of the need to clean up any small hydrocarbon spills using shovels and green plastic bags. – Any hydrocarbon spills greater than 5L are to be reported. – All rubbish is to be securely placed in bins or bags and disposed of at an approved waste facility. – Rubbish is not to be left in areas accessible to wildlife or vermin. – Compliance with the zero-rubbish policy is to be measured daily through workplace inspections. – A port-a-loo will generally be available for use at each drill site. – Any excess drill cuttings will be disposed of at an approved waste facility, returned down the drillhole, or buried in sumps. 	2	B	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 <i>Environment Protection Act 1993</i> 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 the 'Rehabilitation' section of the annual exploration compliance report.

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor Lists are not exhaustive.	Potential impacts Lists are not exhaustive.	Is the potential impact applicable (Yes/No) Some potential impacts are applicable to all programs.	Control strategies Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	Risk assessment LH = likelihood of consequence CQ = severity of consequence				
				LH	CQ	Risk		
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).	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> – Pads will be clearly demarcated to ensure compliance with PEPR dimensions. – During pad and sump construction, topsoil will be stockpiled separately. Use existing tracks where possible. Where this is not possible, new tracks will be formed by having vehicles drive overland across unprepared terrain in areas of low or sparse vegetation, gibber or scree surfaces. – Vehicles will endeavour to use the same wheel tracks each time. – Track routes will be marked out at regular intervals if required to aide visibility of the tracks while weaving around any vegetation. – New track routes will be designed to (where possible): avoid water courses; avoid stands of more significant or established vegetation; and minimise potential for erosion. Where practical, entry and exit points will be doglegged to reduce visibility and try to reduce possibility of third-party access. – Blade work for access tracks will be kept to a minimum (if required at all); track preparation will only be sufficient to meet the needs of exploration vehicles. – No blading with heavy earthmoving equipment will be used on areas of gibber and silcrete plains. Ripping of any gibber plains landscapes will not be undertaken during wet conditions. – Any new track construction (excluding driving over land i.e. surface traffic) will include appropriate erosion control structures on sloping areas, such as spur drains, spoon drains or contour banks. – Vehicle movements will be minimised during heavy rain or prolonged wet weather to reduce damage to tracks. Any damage to private roads will be backfilled and repaired. – Avoid tight bends on tracks and impose speed restrictions. – Site drillholes on the flattest ground possible to avoid levelling. – Complete rehabilitation of new tracks and pads as per best-practice model—e.g., removing windrows, restoring original contours, lightly scarifying where appropriate; replacing topsoil and stockpiled vegetation. – Continued use of access tracks by the public will be prevented by placing any available natural obstacles (i.e. branches, rock, soil mounds) across the track where public roads are intersected; trying to blend the obstacles into the surrounding environment as much as possible as very obvious obstacles may attract unwanted attention. 	2	B	Low	<p>Where soil disturbance occurs as a result of exploration activities, ensure that:</p> <ul style="list-style-type: none"> • topsoil quality and quantity is maintained • the soil profile and topography is reinstated to original conditions • there is no accelerated soil erosion. 	<p>Maintain before, during and after photographic evidence of all excavations, drillsites, camps, laydown areas and new tracks demonstrating that:</p> <ul style="list-style-type: none"> • 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. <p>Representative photos to be included within the annual exploration compliance report.</p> <p>Provide the information requested within the ‘Rehabilitation’ section of the annual exploration compliance report.</p>
Surface water	Alteration to surface water – interference to surface drainage.	NO (Applicable to exploration programs that are likely to impact on surface drainage channels.)					<p>No 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).</p> <p>Alternatively, provide copies of water affecting permits within the annual exploration compliance report.</p>
Groundwater/aquifer	Groundwater contamination: <ul style="list-style-type: none"> • contamination of aquifers through entry of pollutants from the surface • interconnection between aquifers • degradation of natural hydrostatic conditions (maintain pre-drilling pressures). 	YES (Applicable to all exploration programs that may intersect groundwater.)	<ul style="list-style-type: none"> – As groundwater is likely to be intersected, the drilling inspector will be notified at least 14 days prior to drilling commencing. – Establish expected groundwater conditions in the area prior to drilling. – Alert drillers to the requirement to observe changing groundwater conditions during drilling. – Record pertinent details of any aquifers intersected. – Ensure only approved drilling products are used downhole (e.g., biodegradable rod grease). – Ensure drillholes are not used for the disposal of any unwanted hydrocarbons or chemicals. – Upon completion of the hole (and after any downhole geophysics that may be required based on drill results) the drill hole will be decommissioned 	2	B	Low	<p>Drillholes restored to controlling geological conditions that existed before the hole was drilled or, where it is intended to re-enter the hole, the hole must be completed with casing of adequate strength and the casing cemented so that all aquifers are isolated to prevent the movement of any fluids behind the casing.</p>	<p>Maintain evidence demonstrating that drillholes are decommissioned in accordance with Earth Resources Information Sheet M21, Mineral exploration drillholes – general specifications for construction and backfilling, and/or specific conditions from DEW (Groundwater) 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.</p> <p>Provide the information requested within the ‘Groundwater’ section of the annual exploration compliance report.</p>

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH = likelihood of consequence CQ = severity of consequence	LH	CQ		
			<p>according to the Mineral Exploration Drillholes Information Sheet M21: General specifications for construction and backfilling.</p> <p>– Proposed drillhole abandonment procedure:</p> <ul style="list-style-type: none"> • Hole is drilled to EOH depth and all downhole survey completed. • Hole is circulated and completely free of any obstruction. • The hole will either be cemented from EOH up or a Van Ruth plug placed 15m below the top of basement and cemented from plug. • Once the open hole is cemented below the casing, the HWT casing will be removed if possible. • Casing cuts will take place to free any stuck casing, with extra cuts in the steel made in any casing left to allow cement to penetrate around the steel. • Cement to surface. <p>– Ensure necessary casing and grout are either on site or readily available in the unlikely event that confined or multiple aquifers are intersected.</p>					
Soil/vegetation/fauna	Discharge of groundwater into the surrounding environment.	YES (Applicable to all exploration programs that may intersect groundwater or where activities require the discharge of groundwater into the surrounding environment.)	<p>– All water used during the diamond coring process will be captured via sumps and/or above ground poly tanks.</p> <p>– Additional tank(s) will be provided as contingency for excess water.</p> <p>– Any further excess water will be allowed to evaporate or be disposed of via an approved off-site facility.</p> <p>– If required, drilling operations will cease to ensure that no groundwater runs beyond the drill pad.</p>	2	A	Low	No discharge of groundwater outside of the exploration site (e.g. drillsite) into the surrounding environment and no discharge of water into a watercourse, unless prior approval under the relevant legislation is obtained.	<p>Maintain photographic evidence of all drillsites demonstrating that groundwater was not discharged into the surrounding environment, unless water affecting activity permits were obtained allowing the discharge of groundwater into watercourses and/or lakes.</p> <p>Representative photos and water affecting activity permits (where applicable) to be included within the annual exploration compliance report.</p>
Groundwater users	Interference to existing water users when extracting water from existing dams, water bores or mineral drillholes.	YES (Applicable to all exploration programs that may require the use of water from existing dams, water bores or mineral drillholes.)	<p>– Water will only be sourced from the pastoral stations (either from dams or bores) after approval from the pastoral lease holders.</p> <p>– Provision will be made to source any required additional water from approved sources—e.g., purchasing water from council standpipes.</p>	2	A	Low	No public nuisance impacts resulting from the extraction of water for exploration purposes, unless prior approval under the relevant legislation is obtained.	<p>Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders were resolved to the satisfaction of both parties, prior to and ongoing during the course of the exploration program without the involvement of DEM.</p> <p>Where permits are required for the extraction and/or usage of groundwater, provide copies of the licence or permit within the annual exploration compliance report.</p>
Soil/vegetation/fauna	Degradation of rehabilitated access tracks caused by third party access (includes previously closed and rehabilitated access tracks).	YES (Applicable to exploration programs that create new access tracks.)	<p>– Degradation of rehabilitated access tracks is unlikely to occur, given that drilling is occurring on privately owned pastoral leases (i.e., minimal through traffic).</p> <p>– Once rehabilitation is complete, access to tracks will be blocked and disguised with obstacles such as fallen tree trunks or branches.</p> <p>– New tracks will be doglegged off existing tracks where possible.</p>	1	B	Low	Rehabilitated access tracks remain permanently closed, unless prior approval under the relevant legislation is obtained.	<p>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.</p> <p>Representative photos are to be included within the annual exploration compliance report.</p> <p>Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.</p>
Community/landowners	Damage to infrastructure and loss of income through fire.	Yes (Applicable to all programs.)	<p>– Fires are not permitted.</p> <p>– Internal process for managing hot works such as welding, grinding, and oxy cutting—i.e., firefighting provisions need to be in place.</p> <p>– All vehicles will be fitted with fire extinguishers.</p> <p>– Fire suppression units will be fitted to large plant such as the rig.</p>	2	B	Low	No loss of infrastructure or income through fire as a result of exploration activities.	<p>Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming that no uncontrolled fires* occurred.</p> <p>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.</p>
General public	Injury or death to members of the public as a result of exploration activities.	Yes (Applicable to all programs.)	<p>– Given the drilling program is occurring on private pastoral leases, the likelihood of stray members of the public being present is reduced.</p> <p>– The presence of opal fields may increase the possibility of interactions with miners/prospectors. All interactions will be recorded in the Talisman SA Consultation and Complaints Register.</p>	1	C	Moderate	No accidents involving the public that could have been reasonably prevented by the licensee.	<p>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.</p>

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor Lists are not exhaustive.	Potential impacts Lists are not exhaustive.	Is the potential impact applicable (Yes/No) Some potential impacts are applicable to all programs.	Control strategies Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	Risk assessment LH = likelihood of consequence CQ = severity of consequence				
				LH	CQ	Risk		
			<ul style="list-style-type: none"> – Only inducted personnel who have a direct need to be in the work area of the rig will be permitted in close proximity to operations. – At drill sites near more major access tracks onto the stations, a physical barrier (e.g., safety fencing, bunting, or a line of cones) will be established around the entire site. – Any visitors to the drilling operations will undergo a visitor's induction and will be required to be accompanied by a fully inducted staff member. – Warning signs highlighting the hazards of drilling operations will be erected around the drill site. – Note that whilst the likelihood of such an incident occurring is rated as rare, the consequence has been rated as moderate, producing a risk ranking of 'Moderate'. This is deemed acceptable, given the highly unlikely likelihood, and the safety measures and level of supervision that will be present at the rig. 					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.
General public, employees, contractors and the environment	Contamination of the environment when exploring for known uranium and thorium deposits. Public and employee/contractor exposure to low level radiation.	NO (Applicable to exploration programs located within known uranium or thorium deposits.)					No increase in background radiation levels, and employee/contractor exposure levels during the exploration program are within safe limits.	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"> • Radiation levels post exploration and rehabilitation are consistent with pre-existing background levels. • Employee and contractors exposure levels were within safe limits during the exploration program.
Other (if applicable)	Risk of harm / non-compliance by accidental access to WPA area	YES	- Implement clear pad and track demarcation at Hole 3A due to proximity to the WPA. Ensure site inductions / project risk assessment addresses prohibited access to the WPA.				No access to WPA	Provide evidence of compliance with the control strategy i.e. photographs of pad/track demarcation. Provide the information within the relevant section of the annual exploration compliance report.

* Uncontrolled fires = fires that escape outside of the work area (e.g. drillsite).

† Properties = freehold (cropping and grazing land); perpetual/pastoral lease land; council land; regional reserves; national, conservation and marine parks; Aboriginal land; Commonwealth land etc.

SECTION G - OPERATOR CAPABILITY

Provide information demonstrating that the tenement holder and operator (where applicable) has the capability to conduct the program in a manner that consistently ensures ongoing achievement of the environmental outcomes. This may be demonstrated within the PEPR by providing an overview of the following:

- Manuals or standard operating procedures that outline the safe and environmentally sound operation of all critical operations associated with the exploration program that ensure compliance with the PEPR.
- Systems in place to monitor, audit and assess compliance against the criteria approved in the PEPR.
- Systems in place to identify and report any noncompliance with regulatory requirements or relevant environmental outcomes (e.g. measures in place to report incidents in accordance with regulation 79(3)).
- Practices and procedures in place to provide appropriate communication of regulatory requirements to employees and contractors (e.g. induction programs).
- Practices and procedures in place to respond to, and communicate with landowners and external parties on the proposed program and compliance matters (e.g. complaints)

Talisman maintain the following documents and systems to ensure our exploration activities are safe, environmentally sound and compliant:

- CorePlan – an online and mobile application for tracking all drilling activities, including safety, environmental and rehabilitation checklists/records, as well as incident reporting. CorePlan also provide offline access to our Standard Work Practices, approval documentation and maps, emergency response plans, policies and safety data sheets.
- Exploration Activity Tracker (excel based) for tracking all exploration activities, including approval details, actual disturbance, rehabilitation completed etc.
- Maintain a Health and Safety Management System (HSMS) and required supporting documents.
- Review of monthly Tenement Obligation Reports from our tenement management consultant, identifying all compliance obligations for our tenements SA.
- Maintaining a SA Consultation and Complaints Register to record all interactions with stakeholders.
- Providing contact details to all stakeholders to enable them to make a complaint or provide feedback. This has been completed via the Notice of Entry process.

SECTION H –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.

Fact Sheet - Buffel Grass Hygiene (Attachment A overleaf); M21 Backfilling Diagrams (Attachment B overleaf)

ATTACHMENT A

Fact Sheet – Buffel Grass Hygiene

Source: Government of South Australia (n.d.). *Fact Sheet – Buffel Grass Hygiene*. Accessed via:

https://www.pir.sa.gov.au/_data/assets/pdf_file/0003/275907/PIRSA_fact_sheet_Buffel_Grass_Hygiene_FA2_CJ.pdf



FACT SHEET

Buffel Grass Hygiene

Buffel grass is one of the greatest pest threats to South Australia. It is often referred to as a transformer species meaning it has the ability to alter entire ecosystems through the alteration of fire regimes and through competition with native flora. Following introduction into South Australia, buffel grass has invaded a significant portion of the state's arid and semi-arid rangelands.

Why is hygiene important?

Weeds reduce the quantity and quality of Australia's agricultural products. It is estimated that weeds cost Australian farmers around \$1.5 billion a year in weed control activities and a further \$2.5 billion a year in lost production.

Hygiene is important to protect agriculture as well as priority assets such as the Flinders Ranges, Great Victorian Desert and other sites of cultural and/or environmental significance.

Buffel grass is a prolific seeder. Due to the seeds small size and fine hairs it can spread long distances into remote areas via vehicles, earth moving and other machinery, stock, wind, water and other human activities.

Preventing weed spread – what can I do?

- ensure vehicles are clean before entering a new site
- stay on tracks
- avoid areas of high-risk or known buffel grass infestations. If unavoidable, plan a route from areas of low infestation to areas of high infestation.

How can I minimise Buffel Grass spread by animals and other products?

- Quarantine any animals suspected of carrying buffel grass seed in a withholding paddock for a minimum of 7 days. Monitor the withholding paddock following summer rains and carry out control as necessary.
- Decontaminate vehicles used for transportation of stock or other products. If not possible, be sure to undertake regular surveillance and control in the loading and unloading paddocks following summer rains.
- Avoid enabling dogs to run freely though areas infested with buffel grass.
- Avoid stockpiling items close to buffel grass infestations.



Decontaminate graders and ground engaging machinery

Tools You May Need For Vehicle Inspection and Decontamination

- mirror
- tools to remove covers and guards
- torch
- probe or rod
- wire brush
- high pressure washer/air hose
- scraping implement
- broom
- PPE
- container for contaminated material.



Effective Decontamination Options

Wash the Vehicle Down

- use a hose, high pressure cleaner or spraytank and pump
- wash-down adjacent to areas where buffelgrass needs to be contained. Choose sites where the land slopes back into an infested area or a site that can be monitored regularly and control of new germinations undertaken as required
- air blast hard-to-reach areas such as cavities and joints when the vehicle and contaminants are dry
- wash down all potential seed collection points and move the vehicle forward to ensure the entire tyre is clean
- sweep/vacuum inside the cab to remove contaminants.

Physical Removal

Where no wash-down facilities are available be sure to physically remove all clods of mud and visible plant material in addition to cleaning the foot-well and cabin of the vehicle.

Use a brush or scraping implement to remove contaminants such as burrs and clods of mud from tyres, mud guards, grader blades, ledges and crevices that could contain contaminants.

You can also consider:

- clean footwear and remove weed seeds from socks and clothing.
- clean the vehicle from the top down. Use the compressed air method prior to washing with water in dry conditions.
- use detergents to assist removal of grease, dirt and mud, which may contain weed contaminants.
- clean the undercarriage, springs and axles of trailers/caravans etc.
- use the same site for cleaning and monitor regularly for germinations following summer rains.
- visually inspect vehicles and camping equipment when leaving an area containing buffel grass.



Remove buffel grass seed from footwear, socks and clothing



Remove buffel grass seed from tools and camping equipment



Decontaminate wheels and steering

Vehicle decontamination checklist

Cabin:

- carpet
- mats
- foot wells
- pedals
- controls
- seats
- air condition filter.

Underside and other parts:

- guards and belly plates
- chassis rails and brackets
- recesses
- the swing-drive area.
- around counterweight
- around the fuel tank
- axle housing.

Wheels and Steering:

- treads
- inside and outside of rims
- wheel arches
- mud flaps
- brackets and brakes
- steering and suspension components.

Track Area:

- shoe
- links
- sprockets
- idler wheels
- track adjuster guards
- lubrication points
- inside the track area.

Blades/Buckets, Arms/Booms:

- front and back of grader blades
- teeth
- pivot points
- turning circle
- hydraulic rods and hoses
- bucket
- wear plates.



Clean foot well and floor mats



Remove belly plates for



Clean track area



Decontaminate front and back of grader blades and hydraulic rods



Decontaminate intercoolers and radiator fins

Engine:

- intercooler
- chain cases
- radiator fins and grills.
- in between cooling cores.
- engine mounts
- recesses.
- engine bays
- air filter.
- battery box.

Attachments:

- tynes and rippers.
- support frame.
- hydraulic hoses.

Slashers:

- care should be taken to thoroughly decontaminate all recesses and crevices on roadside slashers.
- air blast prior to high pressure wash in dry conditions.



Decontaminate recesses and crevices on slashers

When to Wash-down and Implement Hygiene Protocols

- if grading, slashing or using any ground engaging machinery
- when moving stock
- when receiving goods via rail or road train
- moving machinery out of a local area of operation
- moving machinery between properties
- using machinery along roadsides or along river banks
- using machinery to transport soil and quarry materials.
- using controlled-access vehicle tracks.

Disposal of Contaminated Material

- incinerate or burn the plant material.
- solar radiation can be used to kill the seed by placing in a black plastic bag and leaving in the sun for at least a month
- deep burial of at least 0.5m.

Contaminated material must be disposed of in a manner that ensures all weeds and seeds removed cannot spread or grow.

For Further Information

For resources and state-wide buffel grass management visit Biosecurity SA – Buffel grass webpage:
www.pir.sa.gov.au/buffel-grass

For regional buffel grass management and advice contact your local Natural Resources SA office:
www.naturalresources.sa.gov.au/home

Acknowledgements:

Images in this fact sheet have been kindly provided by Troy Bowman and Michaela Heinson – Biosecurity SA, Andrea Tschirner and PFG Australia Pty Ltd.



Native Vegetation Council

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Disclaimer: This publication is provided for the purpose of disseminating information relating to scientific and technical matters. The Government of South Australia does not accept liability for any loss and/or damage, including financial loss, resulting from the reliance upon any information, advice or recommendations contained in the publication. The contents of this publication should not necessarily be taken to represent the views of the participating organisations.

ATTACHMENT B

Backfilling Schematic Diagrams

Source: Government of South Australia (2012). *Mineral Exploration Drillholes - General specifications for construction and backfilling* (M21).

Accessed via: <https://sarigbasis.pir.sa.gov.au/WebtopEw/ws/samref/sarig1/image/DDD/ISM21.pdf>

SECTION I – PHOTOS

Include photographs in this section:

- that have been obtained during site visits
- that help describe relevant environmental and operational aspects in the PEPR.

To insert photos, copy and paste the photo into the template below. Resize photos to fit page width. Ensure that all information about each photo is completed and refer to the photo number in the relevant section of the PEPR.

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
3A	13/12/2024	N/A	436400	6791793	53	3A Pad North

Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
3A Access Track	13/12/2024	N/A	437163	6791653	53	3A Proposed Track

240 | • | • | • | • | W 270 | • | • | • | • | 300 | • | • | • | • | • | NW | 330 | • | • | • | • | • |

☉ 294°W (T) ☉ 53S 437163 6791653 ±3m ▲ 201m

3A access track

Mabel Creek
13 Dec 2024 2:24:57 pm

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
3A Station Track	13/12/2024	N/A	437169	6791652	53	3A Station Track

NW | • | • | • | • | • | N 0 | • | • | • | • | • | NE | 30 | • | • | • | • | • | 60 | • | • | • | • | • |

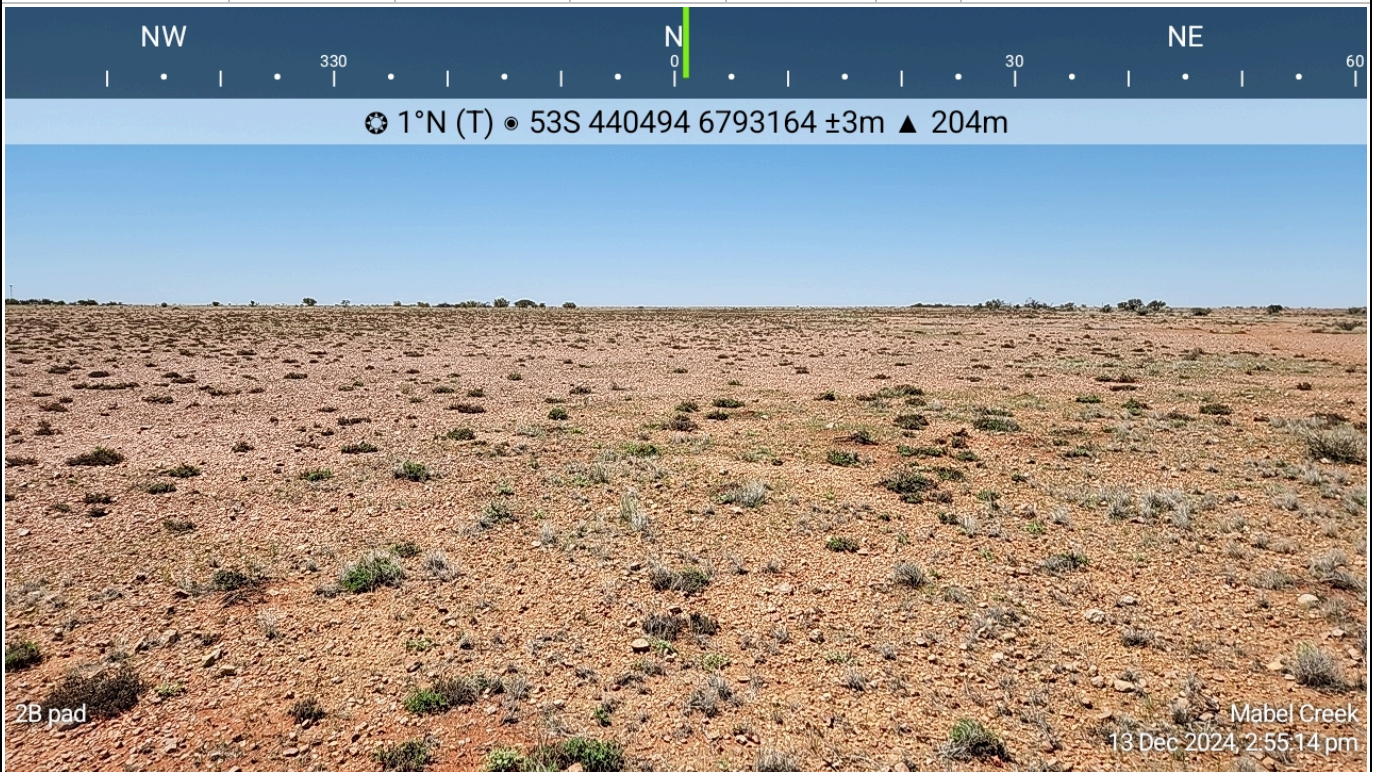
☉ 13°N (T) ☉ 53S 437169 6791652 ±3m ▲ 200m

3A station track

Mabel Creek
13 Dec 2024 2:25:24 pm

Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
2B	13/12/2024	N/A	440494	6793164	53	2B Pad North

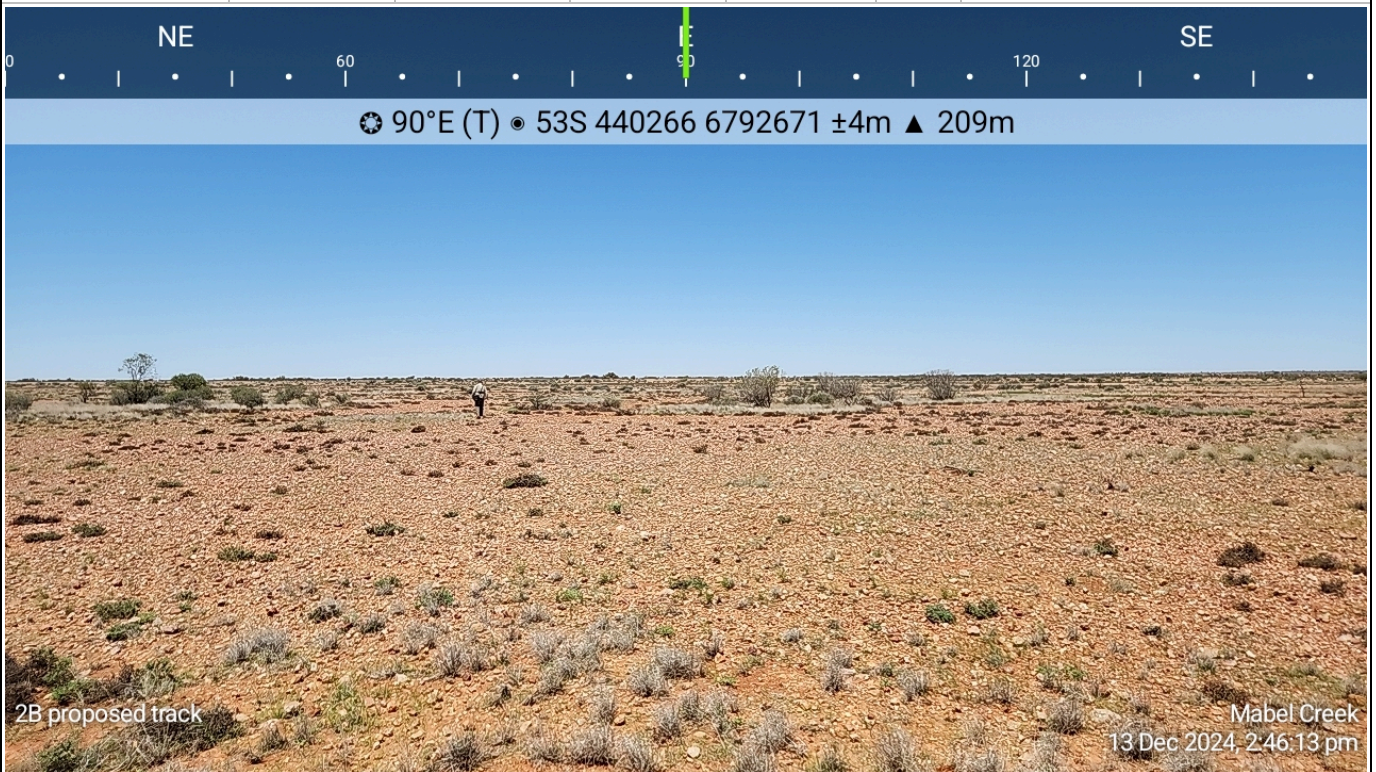


Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
2B	13/12/2024	N/A	440266	6792660	53	2B Station Track

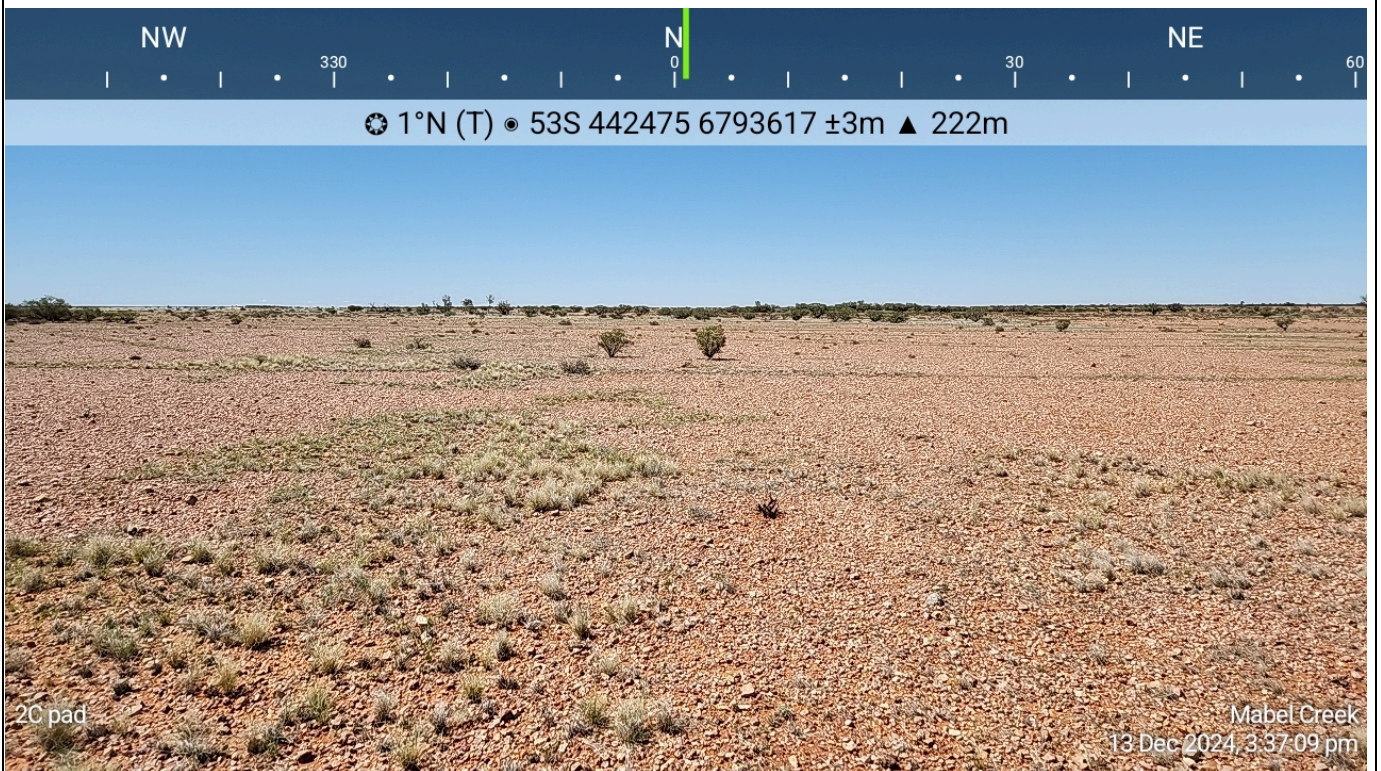


Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
2B	13/12/2024	N/A	440266	6792660	53	2B – Proposed Track



Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
2C	13/12/2024	N/A	442475	6793617	53	2C Pad North



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
2C	13/12/2024	N/A	442534	6794065	53	2C Proposed Access Track

SE S SW

120 | • | • | • | 150 | • | • | • | 180 | • | • | • | 210 | • | • |

📍 174°S (T) • 53S 442534 6794065 ±12m ▲ 223m

2C proposed track Mabel Creek
13 Dec 2024, 3:28:59 pm

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
2C	13/12/2024	N/A	442497	6793762	53	2B – Proposed Track (some existing disturbance)

SE S

120 | • | • | • | 150 | • | • | • | 180 | • | • | • | 210 | • | • |

📍 164°SE (T) • 53S 442497 6793762 ±9m ▲ 212m

2C alt track Mabel Creek
13 Dec 2024, 3:43:12 pm

Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
4B	13/12/2024	N/A			53	4B Pad North

NW 330 N 30 NE 60

📍 2°N (T) • 53S 447307 6792995 ±4m ▲ 196m

4B pad
Mabel Creek
13 Dec 2024 4:05:56 pm

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
4B	13/12/2024	N/A	447389	6793244	53	4B Proposed Access Track

SE 120 150 S 180 210 SW

📍 169°S (T) • 53S 447389 6793244 ±5m ▲ 198m

4B proposed track
Mabel Creek
13 Dec 2024 4:00:52 pm

Exploration PEPR application – 12-month period


Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
1B	13/12/2024	N/A	453153	6793506	53	1B Pad North
Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
1B	13/12/2024	N/A	453154	6793508	53	1B Pad East

Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA2020)	Northing (GDA2020)	Zone	Details and Comments
1B	13/12/2024	N/A	453180	6793427	53	1B Proposed Access Track

E
90
S
180
SE

📍 141°SE (T) ● 53S 453709 6792725 ±11m ▲ 221m



1B prop track
Mabel Creek
13 Dec 2024, 4:49:10 pm

SECTION J – MAPS






Provide a map(s) showing the following information that is located adjacent to or within the proposed area of operations, where applicable:

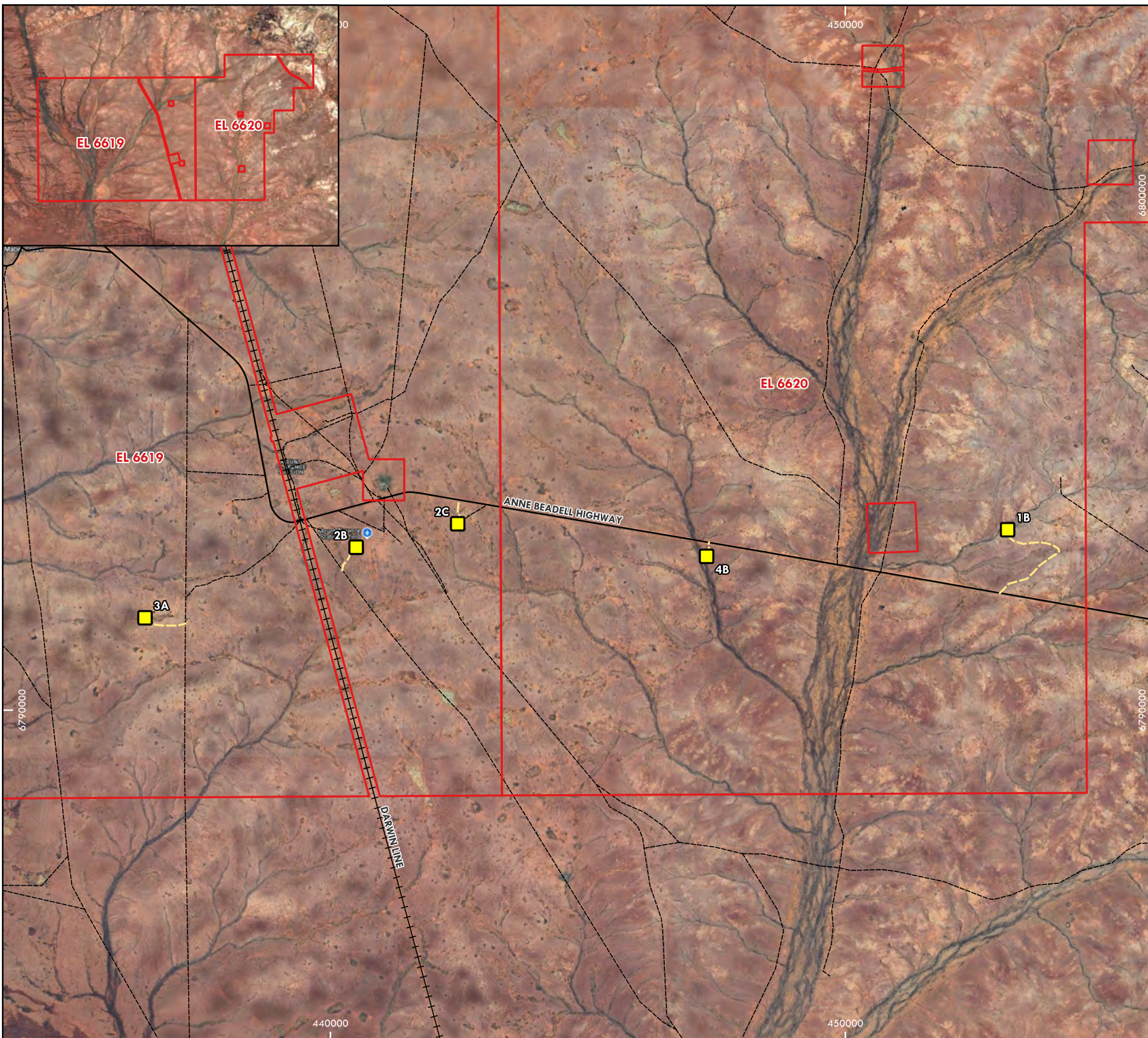
- tenement boundaries,
- cadastral information,
- existing surface contours,
- existing vegetation,
- location of the proposed exploration operations (includes drillholes, existing and new access tracks, drill traverses, campsites, laydown areas and other applicable information) and/or the target exploration area(s),
- location of existing ephemeral and permanent rivers, creeks, swamps, streams or watercourses and water management structures,
- location of towns, houses and homesteads, existing roads, rails, fences, transmission lines, buildings, dams and pipelines
- known sightings of listed species,
- location and extent of all environmentally sensitive areas,
- any relevant land use types (e.g. parks and reserves, Aboriginal freehold land, Woomera Prohibited Area).

All maps and sections must conform to the standards outlined in the Exploration PEPR Terms of Reference.

PEPR - EL6619 & EL6620 Exploration Licences

LEGEND






-  Exploration Licences
EL6619 and EL6620
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Roads
-  Existing Tracks

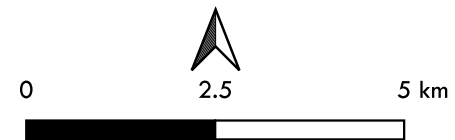
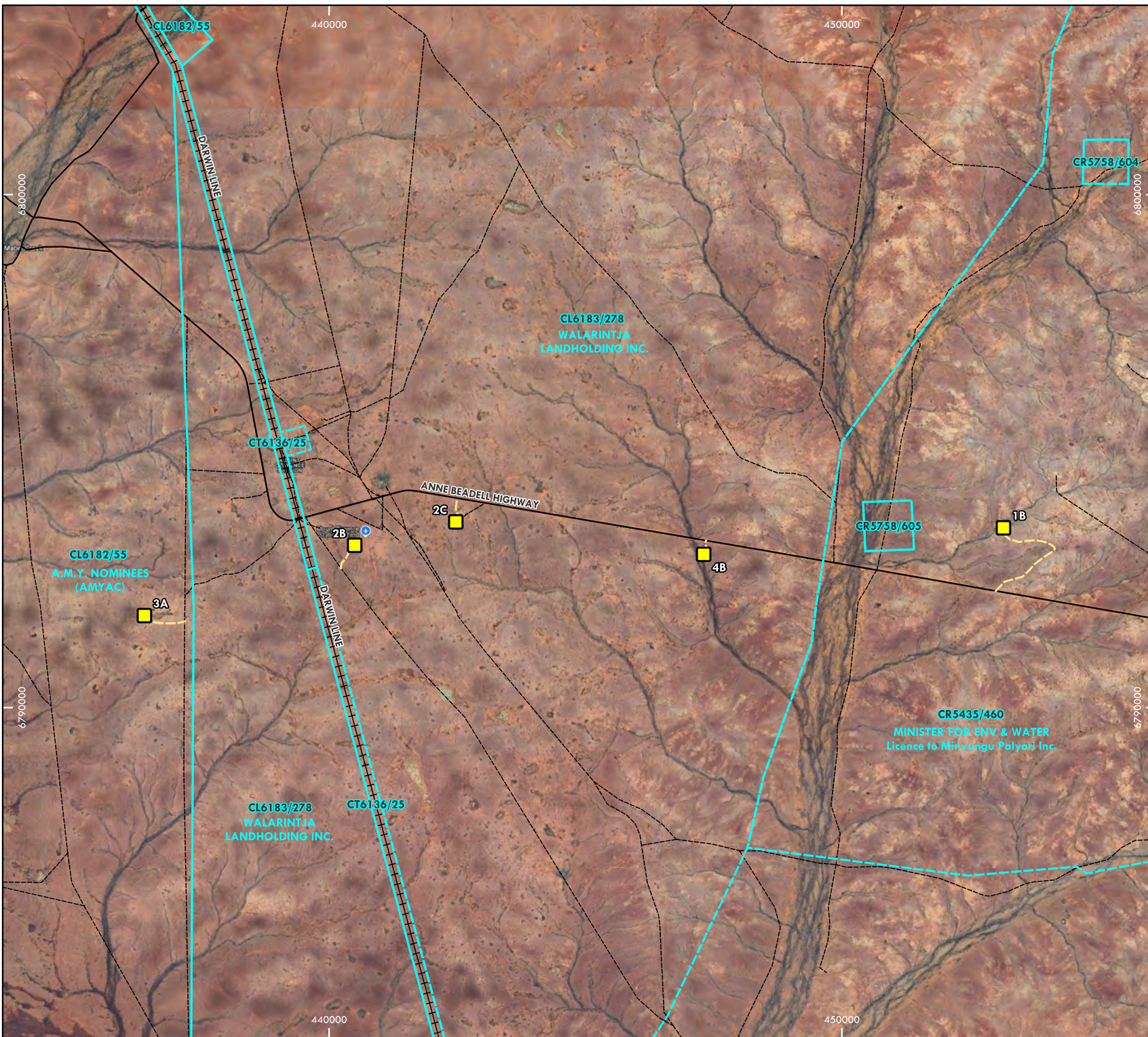




PEPR - EL6619 & EL6620 Land Parcels







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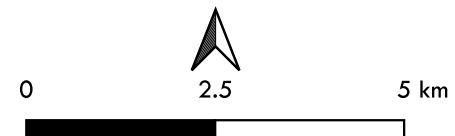
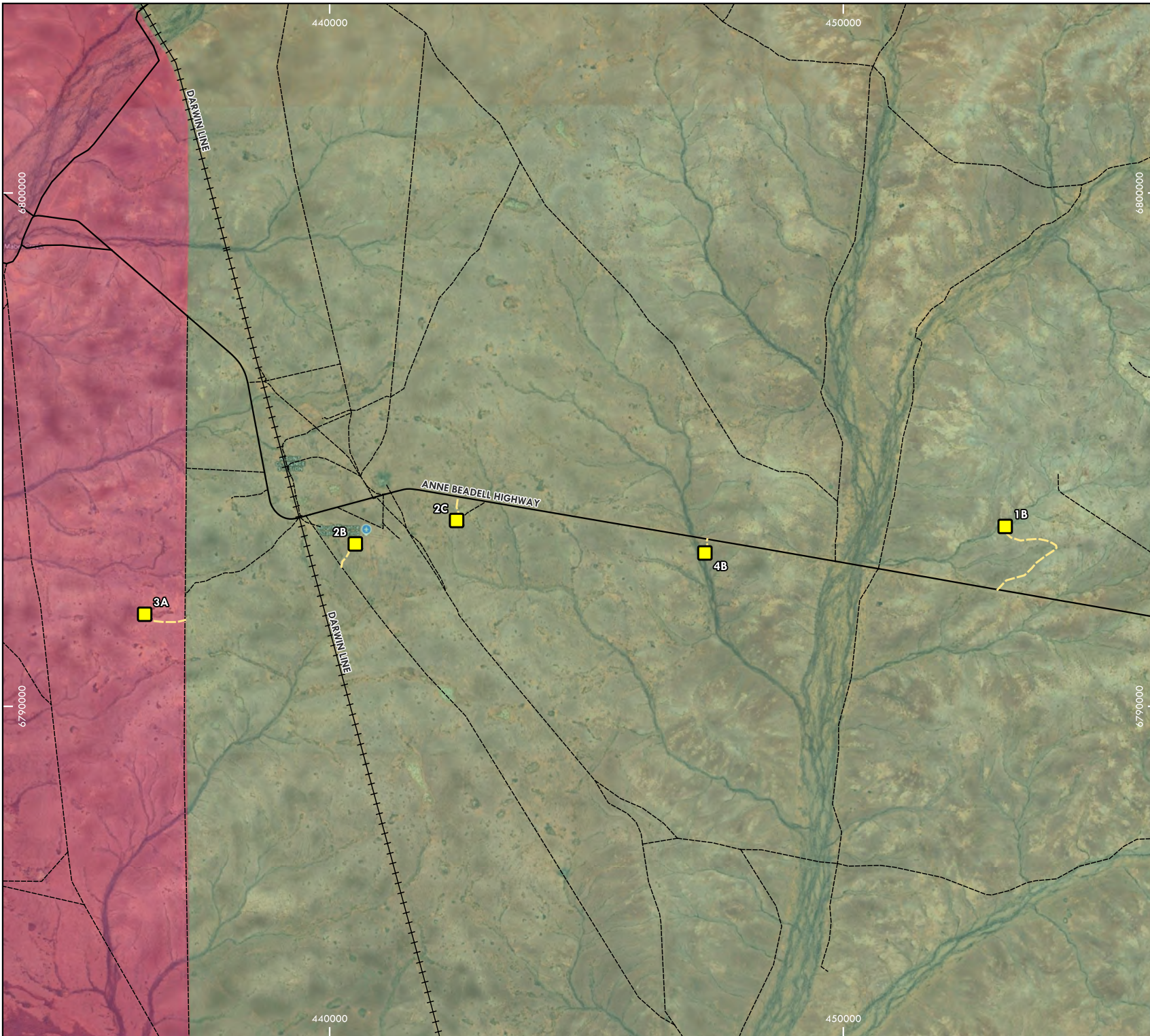
-  Land Parcels
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Roads
-  Existing Tracks



PEPR - EL6619 & EL6620
Pastoral Stations






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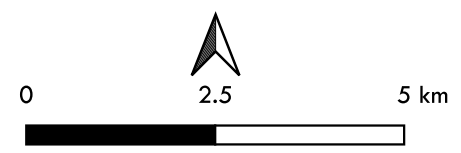
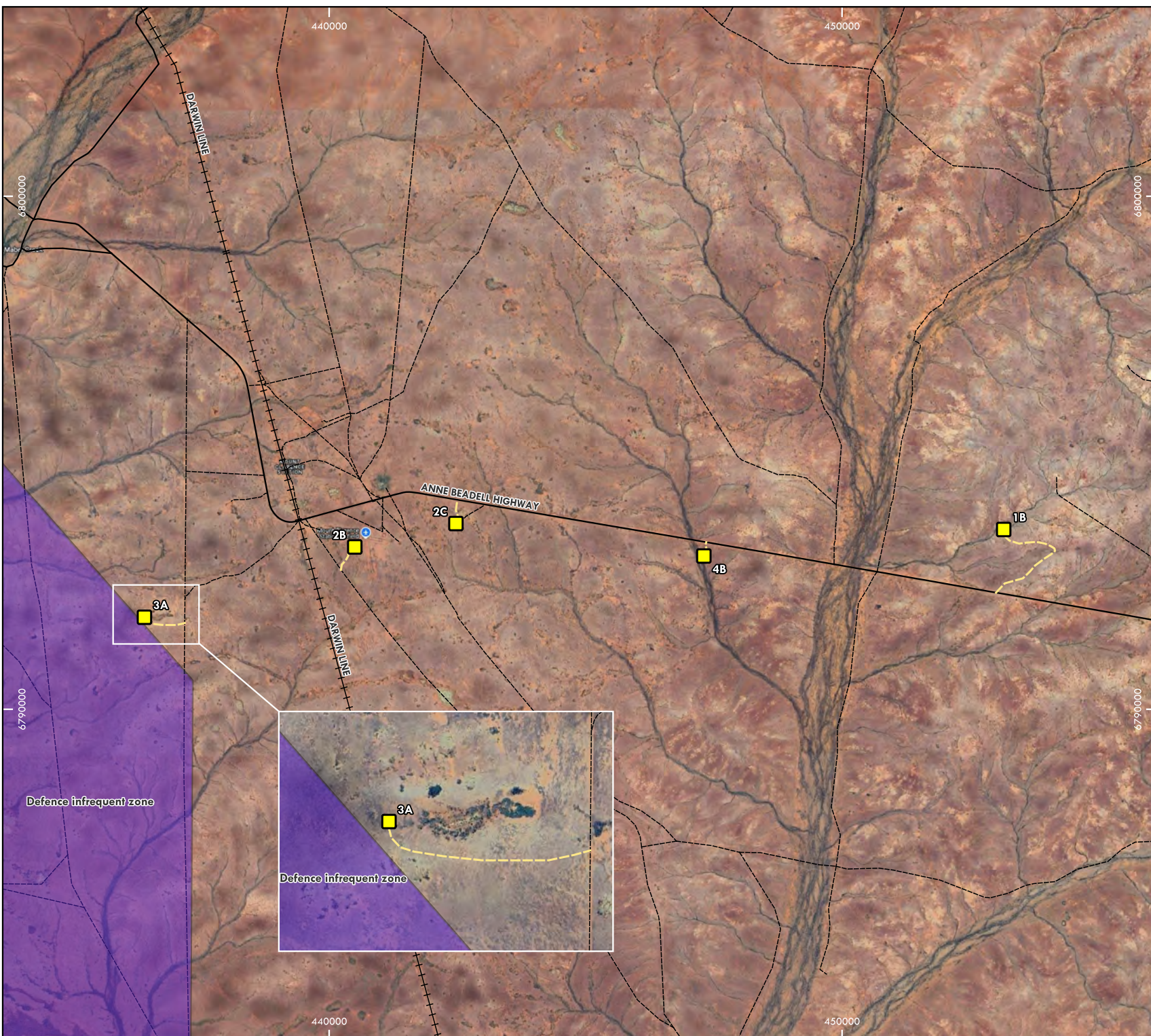
-  Planned Drilling Locations
 -  Planned Access Tracks
 -  Existing Roads
 -  Existing Tracks
- Pastoral Stations
-  Mabel Creek
 -  Mount Clarence



**PEPR - EL6619 & EL6620
Woomera Prohibited Area**



LEGEND

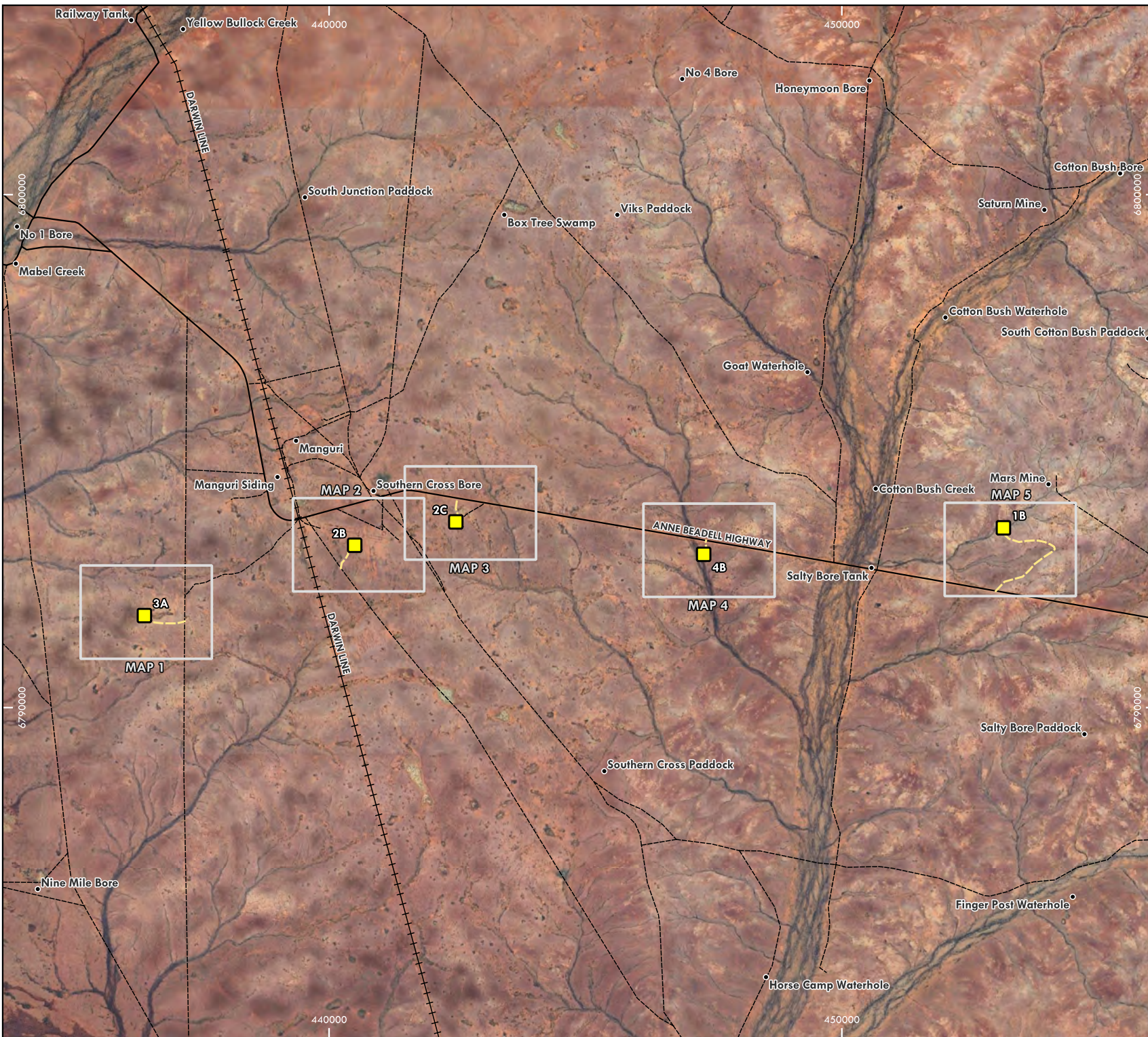
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Roads
-  Existing Tracks
- WPA Access Zone**
-  Defence infrequent zone



PEPR - EL6619 & EL6620 Overview Map






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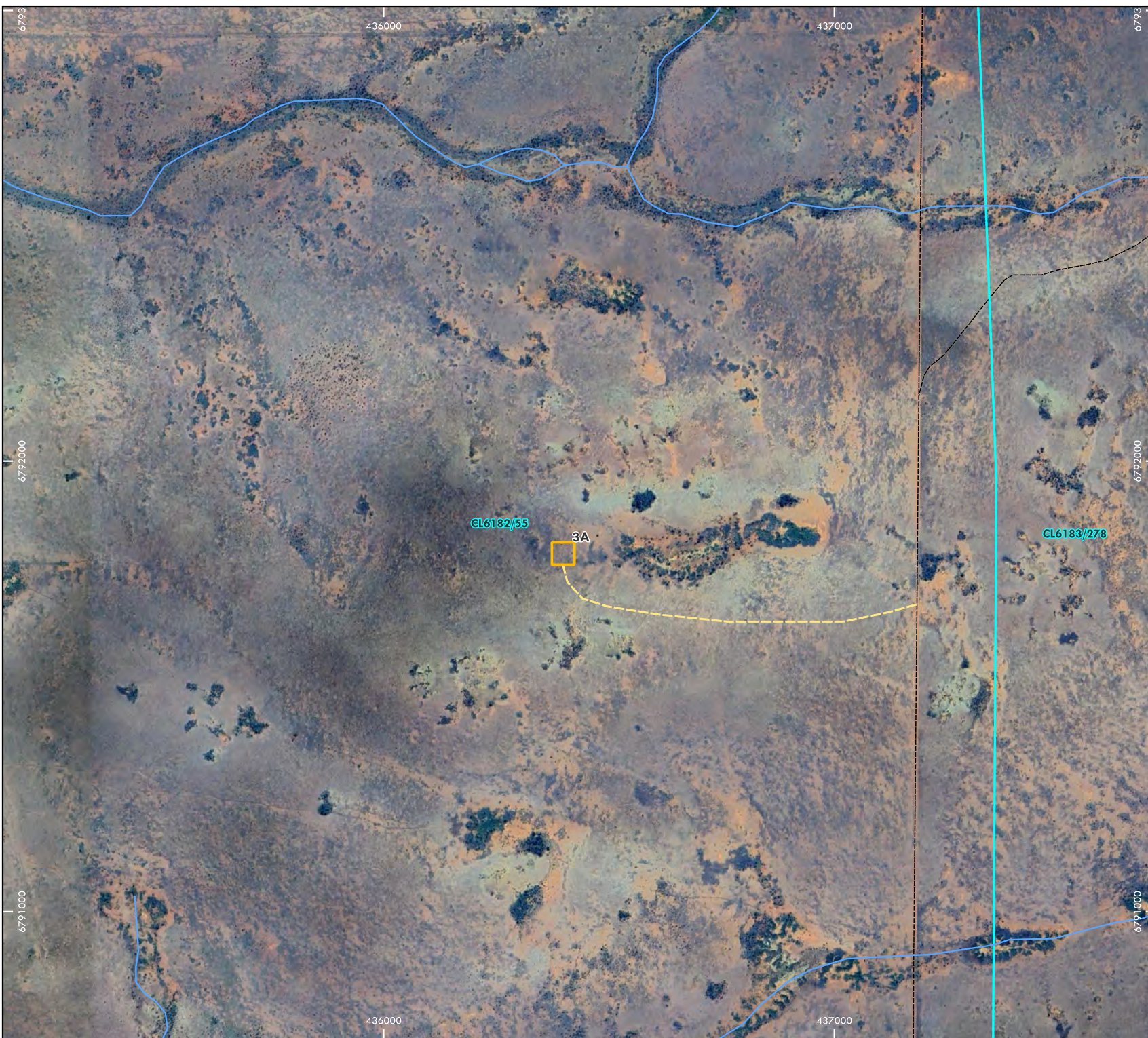
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Roads
-  Existing Tracks



PEPR - EL6619 & EL6620 Subset Map 1







LEGEND

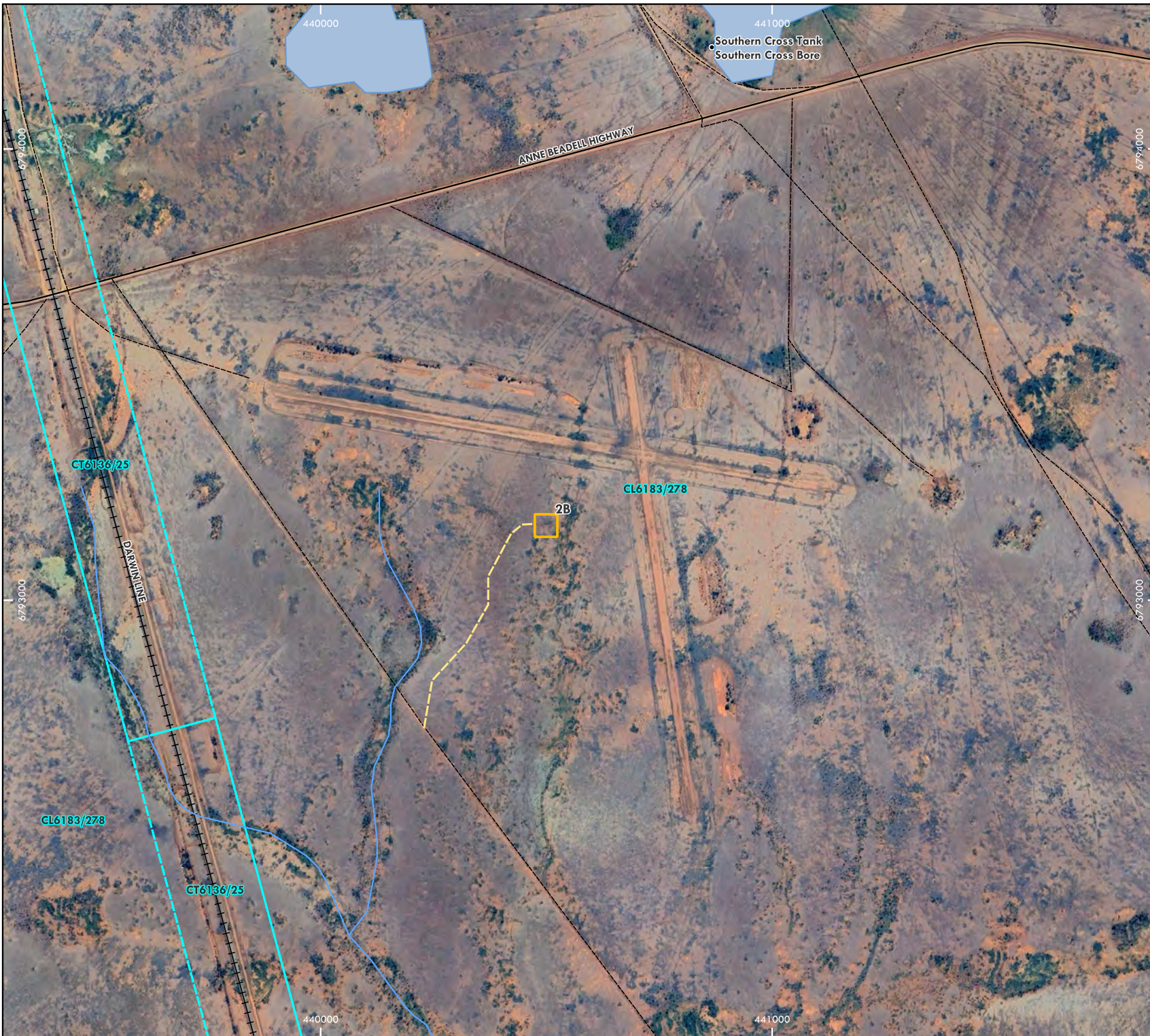
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Track
-  Non-Perennial Watercourses
-  Land Parcel



PEPR - EL6619 & EL6620
Subset Map 2






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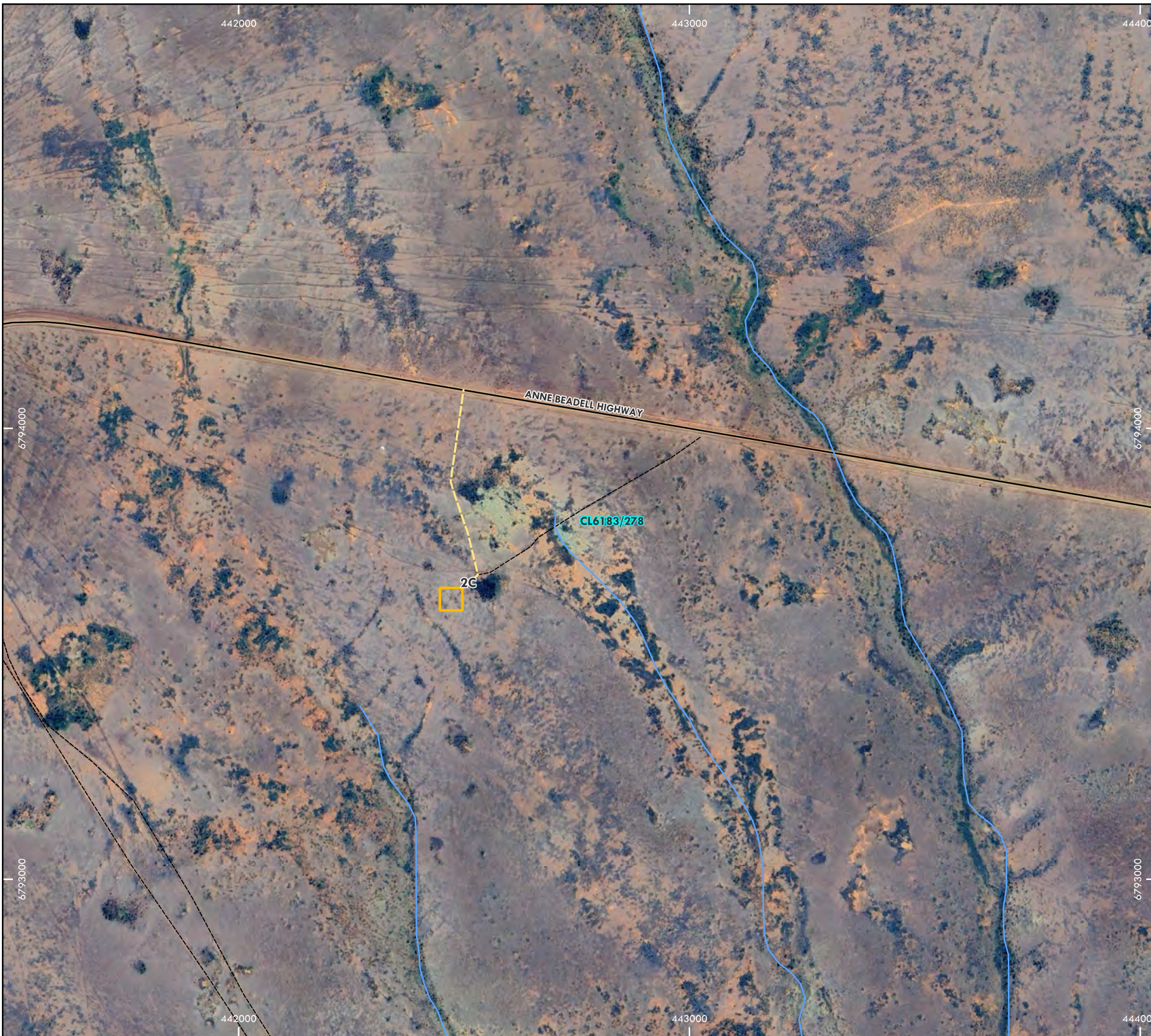
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Track
-  Non-Perennial Watercourses
-  Waterbodies
-  Land Parcel



PEPR - EL6619 & EL6620 Subset Map 3





LEGEND

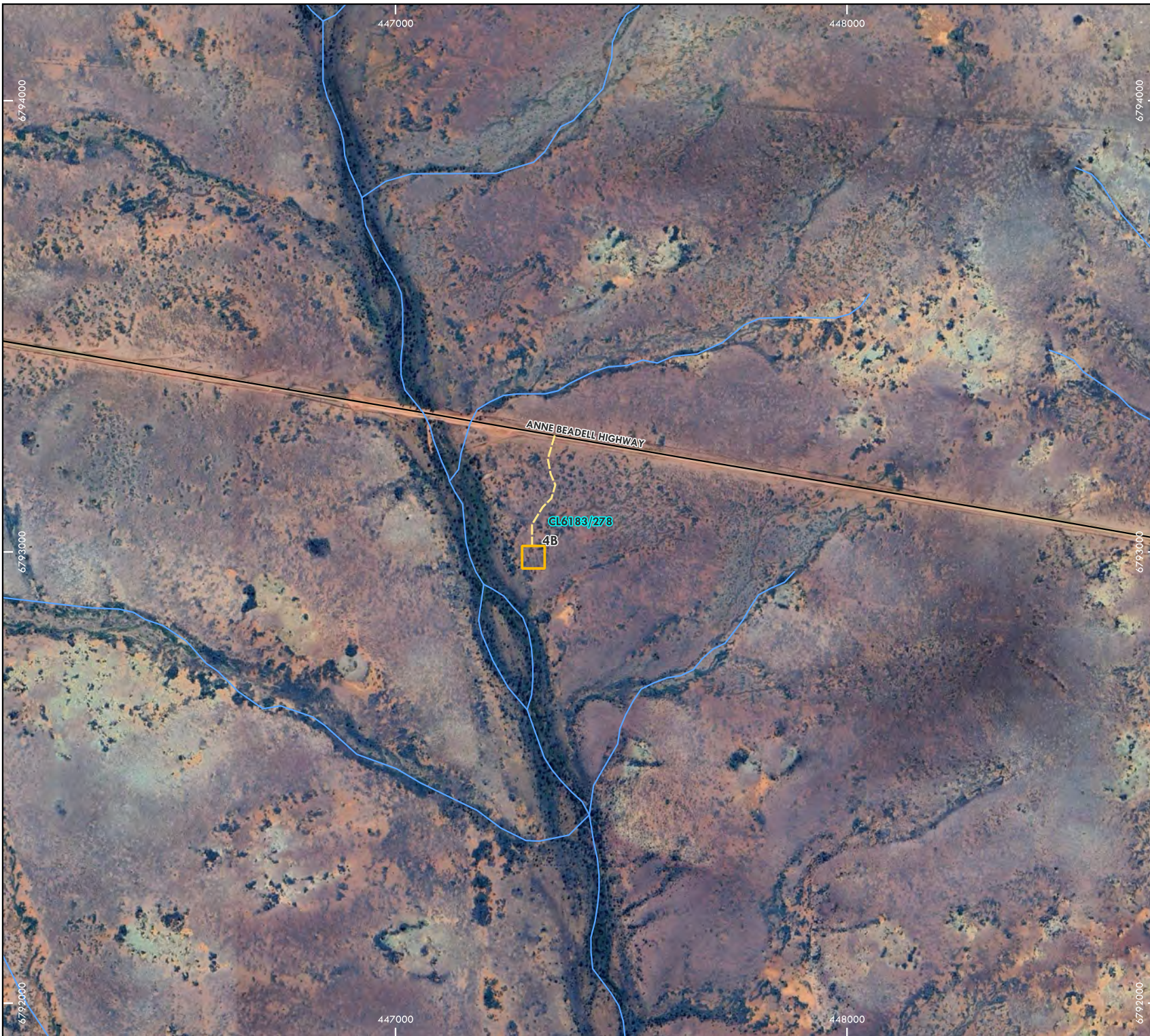
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Track
-  Non-Perennial Watercourses
-  Land Parcel



PEPR - EL6619 & EL6620 Subset Map 4






LEGEND

-  Planned Drilling Locations
-  Planned Access Tracks
-  Non-Perennial Watercourses
-  Land Parcel



PEPR - EL6619 & EL6620 Subset Map 5







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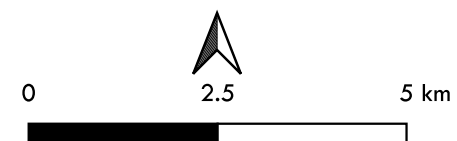
-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Track
-  Non-Perennial Watercourses
-  Land Parcel



PEPR - EL6619 & EL6620 Watercourses

LEGEND

-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Roads
-  Existing Tracks
-  Non-Perennial Watercourses
-  Waterbodies



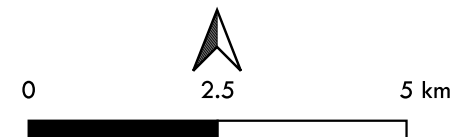
PEPR - EL6619 & EL6620 GDEs

LEGEND

-  Planned Drilling Locations
-  Planned Access Tracks
-  Existing Roads
-  Existing Tracks

Groundwater Dependent Ecosystems (GDEs)

-  Aquatic
-  Terrestrial





PEPR - EL6619 & EL6620 Vegetation

LEGEND

- Planned Drilling Locations
- Planned Access Tracks
- Existing Roads
- Existing Tracks

Vegetation Group Code

- CG0022
- GV0001
- GV0017
- SD0006
- SD0013

