



Government
of South Australia

Department for
Energy and Mining

5 February 2025

Rupert Verco,
General Manager SA
Pernatty Co Pty Ltd
Level 2, 161 Collins Street
MELBOURNE VIC 3000

rverco@discoverco.com.au

Dear Mr Verco,

Approval Notification - Exploration Program for Environment Protection and Rehabilitation (EPEPR2024-048) EL 6642

The program for EL 6642, final version submitted on 4 February 2025 to conduct reverse circulation and diamond drilling at your Pernatty prospects, has been approved in accordance with Section 70B(5) of the *Mining Act, 1971 (the Act)*.

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.

MINERALS REGULATION

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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 Daniel Podger on 8429 2618, Shelley Rasmussen 0409 797 670 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

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

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	EL 6642
Tenement holder(s) (for each tenement)	EL 6642 - Pernatty Co Pty Ltd (100%)
Operating company	Pernatty Co Pty Ltd, a wholly owned subsidiary of Discover Co Pty Ltd (DISC)
Agency agreement (if applicable)	
PEPR prepared by	Rupert Verco, General Manager SA, Pernatty Co (Discover Co)
Project supervisor/contact person(s)	<p>Michael McMaster, Exploration Geologist, Pernatty Co (Discover Co.), Mob: 0459196560 A geology professional with over 15 years of experience primarily in mineral exploration; experienced in exploration regulatory frameworks, exploration and project management in gold, base metal and gemstone projects across multiple jurisdictions.</p> <p>Rupert Verco, General Manager - SA, Pernatty Co (Discover Co.) Mob: 0438 862 406 A mining professional with a First Class Honours in Geology. He is a specialist in resource definition/reserve optimisation, operation start-up, mine planning, ramp-up and improvement implementation to surface and underground mining operations. He has 14 years of experience within the resource sector gained across Australia and overseas. He has been employed from operator to Mine Manager and provided value to operations through leadership, technical services, exploration and technical consulting. He has worked and managed operations through all phases of the mining cycle from exploration through to mine closure. His experience includes adding value to projects that cover a range of commodities including gold, copper, uranium, tin and iron ore.</p>
Project/prospect name	Pernatty Project (Pernatty and Pernatty South prospects)
Location details	<p>Proposed drilling is located on Oakden Hills approximately 100km north of Port Augusta, adjacent to the Stuart Highway, within the Torrens 1:250,000 map sheet.</p> <p>Pernatty Co Pty Ltd a 100% owned subsidiary of (Discover Co Pty Ltd -DISC) are the managers of all exploration activities on all licences of the Pernatty Project.</p> <p>Under a research agreement with the Centre for Ore Deposits and Earth Sciences (CODES) at the University of Tasmania, LA-ICPMS analysis of trace elements in diagenetic pyrite in marine shales throughout Australia identified the Neoproterozoic Tapley Hill Formation (THF) as prospective for gold and copper. As a result, DISC is targeting stratiform sediment hosted copper (SSH Cu) mineralisation on the Stuart Shelf using an exploration model developed in the similarly aged Zambian Copper Belt (ZCB).</p> <p>The critical elements of the Cu-Co model developed by a CODES research team working in the ZCB (ARC/AMIRA Projects P544 and 872) are:</p> <ul style="list-style-type: none"> • Oxidised, basinal brines (promotes Cu, Co transport). • Basement penetrating syn-sedimentary faults focus convective fluid flow cells. • Basal redbeds provide the stratal aquifer. • Overlying reduced shales provide the redox trap. • Evaporite units in the basin provide salinity and may act as a top seal to the hydrological system. <p>In such systems, the best potential for mineralisation is where the redbed aquifers pinch out at basin margins and/or against intra-basin highs and the overlying reduced shales are transitional to basin margin carbonates. Although they have a widely dispersed geochemical halo, chiefly of anomalous Cu, the ores do not generally have any expression in airborne geophysical surveys.</p> <p>DISC's copper targeting strategy is focussed on:</p> <ul style="list-style-type: none"> • Innovative geochemistry - CODES-based research using LA-ICPMS to compare the trace element chemistry of pyrites from a series of historical drill holes around known SSH Cu and
Project description, commodity type and mineralisation model	

IOCG systems to holes distal to mineralisation to determine chemical signatures that could provide vectors to mineralisation.

- Basin analysis – identification of THF basin margin settings comprising a basement high covered/flanked by shallow water carbonates that transition laterally into reduced THF shales in an adjacent basin.

The Pernatty Lagoon area was selected by DISC as a priority target for ZCB SSH Cu mineralization on the basis that:

- The CODES geochemical study identified proximal to ore signatures in DDHPN0603 to the east of Pernatty Lagoon. Subsequent examination of open file drilling on SARIG identified base metal anomalism at the Pandurra-THF contact in a number of holes confirming that ZCB style mineralising processes have been active in the area.
- A carbonate unit locally mapped in the area, the Woocalla Dolomite, is interpreted as a lateral equivalent of the THF shales and we regard it to define a basin margin along the basement high (Mesozoic Pandurra Formation).
- There is potential for areas that represent transitional facies of the type that host the ZCB deposits between the carbonates that fringe the Pandurra basement high and the deeper basinal THF shales that are untested by drilling.

Previous exploration in the area has targeted Mount Gunson-type mineralisation and more recently IOCG deposits in/below the Gawler Range Volcanics. While Mount Gunson is a SSH Cu deposit it is **NOT** a classic example as the best grades occur in breccias where the Whyalla Sandstone unconformably overlies the Pandura Formation sandstone. Targeting the Woocalla Dolomite-THF shale transition outboard of the Pandurra basement high represents a new exploration model for the Stuart Shelf and is the principal target for proposed drilling.


A total of 46 vertical RC drillholes are planned to test the selected target areas (see [Map 2 - Section J – Maps](#)). Holes are targeted to between 50-100m depth with approximately 3810m of planned RC drilling and a further 300m of planned diamond drilling (3 drillholes). Some of the holes, particularly the diamond drillholes are discretionary and will be dependent on results and field observations.

Proposed project schedule

Start date	10/02/2025	End date	31/01/2026
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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	Rupert Verco	Signature (digital allowed)	
Position	General Manager – SA, Pernatty Co	Date	03/02/2024

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 (e.g. 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.

Desktop Reviews

A desktop review of all open file historical exploration on SARIG was conducted, in the area of interest, with particular attention to cover depths and lithologies intersected. All historic exploration (including drilling) and geology has been assessed in relation to the application of a sedimentary Cu exploration model. Historic core stored at the Tonsley core library has been inspected. An assessment and modelling of open file gravity and magnetics data has been conducted. A desktop review of current PEPR guidelines, Ministerial Determinations, example PEPR's and Generic PEPR to ensure compliance. A desktop review of GIS datasets from government agencies (including DEM and DEW) for the area has been conducted with specific information gathered regarding environmental, flora and fauna and groundwater conditions.

Field visits, Reconnaissance and Landowner Consultation

Four previous drilling programs have been undertaken across the project area: 1) February-March 2021; 2) September-October 2021; 3) May 2024 (RC Drilling) and 4) September 2024 in the areas of interest and involved activities such as a heritage surveys which involved clearing proposed pads and tracks with the Traditional Owners. Previous Heritage clearance surveys were undertaken in October and November 2023 by the Kokatha traditional owners, accompanied by an independent anthropologist, to clear proposed drill sites for the most recent drilling (May and September 2024). Landowner consultation is ongoing with the company working together with the pastoralists to ensure that advanced exploration activities does not coincide/interfere with shearing or mustering periods. A 'Stakeholder Engagement Register' has been maintained and is updated on a regular basis.

Existing tracks have been mapped with the aid of satellite imagery with reconnaissance of the existing tracks undertaken during recent drilling programs and subsequent rehabilitation activities. As per recent Exploration Compliance reporting rehabilitation has essentially been completed for all previous drilling (drill pads and access tracks). The only pending rehabilitation is 2 drill pads (PE044 & PE046) at the Pernatty South prospect which were utilised for recent diamond drilling (PEDD002 & PEDD001 respectively) and 3.35km of cleared access tracks which will be reutilized during proposed RC drilling. An additional field visit was undertaken between the 1st - 5th November to check on the condition of existing tracks after recent storms as well as place survey pegs at all proposed drillhole locations with 'pre-cleared' photos taken at all drill sites - see [SECTION I – PHOTOS](#). Some adjustments were made to drillhole locations and access to avoid large trees.

Discussions and service of Notices have been undertaken and communications are ongoing with the owners and station managers, regarding reuse of Shearing's quarter at Oakden Hill Station, water usage and drilling operations for the coming programs. Discussions are continuing with the Kokatha Aboriginal Corporation in relation to exploration activities and timing of heritage surveys. A heritage clearance survey of proposed drilling was undertaken between the 18th and 22nd of November 2024 with the Kokatha traditional owners and accompanied by an independent anthropologist. Heritage clearance was completed on seventy-four (74) of the ninety-seven (92) drillholes, two (2) drillholes were removed due to access issues and remaining sixteen (16) were not visited due to a lack of time.

Soil Sampling

A pilot Ultrafine soil sampling program was completed in August 2024 across the Pernatty South prospect with 269 samples taken including a detailed sample grid across drillhole PE046. The aim of this survey was to determine if the Cu mineralisation at depth produces a surface geochemical signature including the identification of pathfinder elements. The results of this survey will help guide planned drilling with further soil sampling planned (249 samples) at the Pernatty and Pernatty South prospects in December 2024. It envisaged that soil sampling will be expanded to other prospect areas during the forthcoming exploration program.

Contractor Consultation

A tender process for drilling contractors has been conducted and discussions have been held with potential earthmoving operators regarding necessary equipment for rehabilitation and drilling operations. Local contractors and the station owners will be sought providing they can adequately fulfil requirements, meet the requirements of the approved PEPR and are commercially competitive.

Local based Contractors McLeod Drilling (of Stirling North, SA) have been consulted for use of their Slimline RC drill rig (refer Photo 17 in [Section I - Photos](#)). They are also able to assist with supplying earthmoving equipment for rehabilitation and support of drilling operations. Rehabilitation of recent RC Drilling was completed by McLeod Drilling.

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
ELs 6402, 6640, 6641, 6642, 6643, 6754, 6853, 6858, 6909 & 6981	Kokatha (People no 2)	Native Title	Native Title Holders	21/12/2020 & 17/06/2021			<i>NTMA signed between Gawler Resource (IVR) and the Kokatha dated 19th December 2016.</i>	<i>Registered NTMA between Gawler Resources and the Kokatha Aboriginal Corporation. DISC have regular contact.</i>
EL's 6640, 6641, 6642, 6643, 6402	Yudnapinna Station - McBride Yudnapinna Pty Ltd	Lease	Pastoral	06/02/2024 - NOE Low Impact and Advanced Activities (INV)				
EL's 6640, 6641, 6642, 6643, 6402	Oakden Hills Station, Bruce Nutt – Nutt Brothers Nominees Pty Ltd	Lease	Pastoral	06/02/2024 - NOE Low Impact and Advanced Activities				
EL's 6640, 6641, 6642, 6643, 6402	Kokatha Aboriginal Corporation RNTBC	Native Title	Native Title Holders	06/02/2024 - NOE Low Impact and Advanced Activities				<i>No concerns have been raised– DISC and Kokatha have undertaken a heritage survey of all proposed pads and tracks (RC drilling May 2024).</i>
EL 6642, EL 5929, EL 6507, EL 6636	Kokatha Aboriginal Corporation RNTBC	Native Title	Native Title Holders	16/08/2024 - Heritage Survey Request submitted to Kokatha Aboriginal Corporation RNTBC				<i>Heritage Survey Scheduled for week beginning 17/11/2024</i>
EL 6642	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	20/08/2024 - Spoke to James Gibson (manager) on the phone to discuss rehabilitation of RC drilling undertaken in May 2024				James requested that the rehabilitation be undertaken after completion of mustering scheduled for the week beginning 26th September. Rehab scheduled for the week beginning 2nd September
EL 6642	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	20/08/2024 - Spoke to James Gibson (manager) on the phone to discuss rehabilitation of RC drilling undertaken in May 2024				<i>James requested that the rehabilitation be undertaken after completion of mustering scheduled for the week beginning 26th September. Rehab scheduled for the week beginning 2nd September</i>

Exploration PEPR application – 12-month period

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
EL 6302, EL 6507, EL 6640, EL 6642, EL 6643	Oakden Hills Station - Bruce Nutt (owner)	Lease	Pastoral	02/09/2024 - Met with Bruce Nutts (landholder) and Mick (Station Manager) at Oakden Hills Station to discuss rehabilitation of RC drilling undertaken in May 2024 as well the upcoming diamond drilling program.				<p><i>"Bruce expressed concerns about the size and number of drill pads and access tracks cleared for the RC drilling undertaken in May 2024. Provided reassurance that the size of drill pads will be kept to a minimum for future drilling and the number of drill access tracks will be limited.</i></p> <p><i>A loader from Oakden Hills Station will be used for rehabilitation at the Moseley prospect to the north of the Homestead.</i></p> <p><i>The shearers quarters continue to be available as accommodation during diamond drilling scheduled for Sept 2024.</i></p> <p><i>Water is also available for the diamond drilling chargeable at the same rate as the main's supply (pipeline).</i></p>
EL 6642	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	02/09/2024 - Follow-up phone call to confirm access to Yudnapinna Station to undertake rehab on 5th & 6th of September.				<i>No Concerns raised</i>
EL 6642	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	17/09/2024 - Follow-up phone call to confirm access to Yudnapinna Station with loader on 18th & 19th of September to undertake final drillsite rehab.				<i>No Concerns raised</i>
EL 6642, EL 5929	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	20/09/2024 - Spoke to James Gibson (manager) to discuss completed rehabilitation (ELK 6642) and proposed follow-up RC Drilling (EL 5929)				<i>James was onsite during final drillsite rehabilitation undertaken on Thursday 19th September. He is satisfied with the rehabilitation work that has been done.</i>

Exploration PEPR application – 12-month period

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
EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	20/09/2024 - Spoke to Mick (manager) on phone to advise of completion of diamond drilling program and demobilisation from site on Saturday 21/09/2024. Will provide total water usage via email.				
EL 6302, EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	24/10/2024 - Phone call regarding drillsite rehabilitation and upcoming work				<i>No Concerns raised. However, the Shearer's Quarters at Oakden Hills Station is temporarily unavailable for accommodation with repairs required after storm damage.</i>
EL 6642, EL 5929	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	24/10/2024 - Phone call regarding drillsite rehabilitation and upcoming work (Heritage clearance - 4th November)				<i>No Concerns raised. Contact details provided for Scott Dayman - Station Manager of Kootaberra Station (Owners John & Susan Wilkinson). Further details of work (maps) etc to be sent via email.</i>
EL 6302, EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	25/10/2024 - Follow-up phone call regarding upcoming work (Heritage clearance 4th November)				<i>Shearers' Quarters not available as accommodation until December at the earliest. Further details of work (maps) etc to be sent via email.</i>
EL 6302, EL 6507, EL 6642	Oakden Hills Station, Bruce Nutt – Nutt Brothers Nominees Pty Ltd	Lease	Pastoral	25/10/2024 - Follow-up phone call regarding use of Shearer's Quarters				<i>Bruce mentioned that the "food had been left in the Shearers Quarters' cold room at the end of Diamond Drilling campaign (Sept 2024) and with the power going off after recent storm damage all of this food went off. This is the second time this has happened with a similar situation occurring at the end of RC drilling (May 2024)." Bruce does not want drillers staying at the Shearer's Quarters in the future.</i>
EL 6642, EL 5929	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	30/10/2024 - Update Letter sent via email with further details of Proposed drilling and Heritage Clearance.				
EL 6642, EL 5929	Oakden Hills Station, Bruce Nutt – Nutt Brothers Nominees Pty Ltd	Lease	Pastoral	01/11/2024 - Update Letter sent via email to provide further details of Proposed drilling and Heritage Clearance.				<i>Letter included written apology for what happened with the cold room at the end of the drill campaign and an offer made for DISC to financially assist with building repairs at Oakden Hills Station.</i>

Exploration PEPR application – 12-month period

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
EL 6302, EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	04/11/2024 - Follow-up phone call regarding delay to upcoming work (Heritage clearance rescheduled to 18th November)				<i>Apology made regarding food left in cool room. If DISC Co uses facilities at the Oakden Hill Station again there will be clear guidance to all contractors about the expected standards regarding the use of share facilities such as the kitchen, bathroom and laundry etc. Discover staff will be onsite to ensure compliance with these standards.</i>
EL 6642, EL 5929	Yudnapinna Station - James Gibson Manager	Lease	Pastoral	04/11/2024 - Message sent regarding delay to upcoming work (Heritage clearance rescheduled to 18th November)				<i>James requested that proposed drillholes on Yudnappina station be placed on the north side of the road to avoid the water pipeline on the left hand (south side) of the road.</i>
EL 6302, EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	15/11/2024 - Voicemail message left confirming Heritage Clearance Survey to begin on Monday 18th November.				
EL 6302, EL 6507, EL 6642	Kokatha Traditional Owners	Native Title	Native Title Holders	18-22/11/2024 - Heritage Clearance Survey				2-3 possible sites identified (artefacts), heritage clearance of 74 drillholes of the 92 proposed drillholes
EL 6302, EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	22/11/2024 - Voicemail message left, and text message sent regarding completion of Heritage Clearance survey.				No concerns raised
EL 6302, EL 6507, EL 6642	Oakden Hills Station - Mick (manager)	Lease	Pastoral	22/11/2024 - Phone call to advise of planned soil sampling at Pernatty and Pernatty South Prospects scheduled for week beginning 02/12/2024.				No concerns raised - Mick's contact details to be provided to Euro Exploration.

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

Landowners and Registered NT holders have been consulted – DISC will continue to consult and update stakeholders regarding the progress of exploration activities.

Provide any additional relevant information.

Form 21 notices are current, and DISC will continue to liaise with landowners to ensure their activities are not unduly affected (i.e. mustering not affected or similar). Ongoing consultation leading up to the work programs is regularly maintained to keep stakeholders well informed of our field activities.

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 majority of proposed drilling is at the Pernatty South prospect located adjacent to Stuart Highway almost exactly halfway between Port August (92km to the south) and Woomera (85 km to the north) - refer to Map 1 – [Section J – Maps](#).

The project areas are accessed from the Stuart Highway onto the numerous stations tracks that cross the areas covered by the tenements and with the permission of the pastoralists, may be used for vehicle access. Major tracks connecting homesteads to the highway will be used in preference, due to them being regularly maintained by Department of Planning Transport and Infrastructure. Numerous fences exist within the pastoral stations and some interaction or modification may be required to conduct exploration within the areas. Drill sites can be repositioned away from any active water access points and station water pipelines.

The Port Augusta Woomera water pipeline and Adelaide to Darwin rail line both run in close proximity to the Stuart Highway as well as three high-voltage electricity transmission line 1.6- 2.5km east of the highway at the Pernatty South prospect. This infrastructure will be avoided by proposed drilling - refer to Map 2 – [Section J – Maps](#).

The main area of interest (Pernatty South prospect – Stage 1-3) is located on **ELs 6302, 6507 & 6642** with proposed drillholes between 500m and 6km east of the Stuart Highway and an additional 4 drillholes located approximately 1.5km west of the highway. The drilling area is contained entirely within Oakden Hill Station and is accessible via existing station tracks/fence lines with additional drill access tracks proposed – refer to Photos 1 & 2 – [Section I – Photos](#) and Maps 1 & 2 – [Section J – Maps](#).

Due to the distance between areas of interest and homesteads it is envisaged that there will be no impact from noise or dust.

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. Refer to Maps 3 & 4 – [Section J – Maps](#).

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 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 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"/>
<If park/reserve is selected, please provide the name of the park>		*Native vegetation heritage agreements	<input type="checkbox"/>
Other*	<input type="checkbox"/>	<Provide the name of the area>	
<If other is selected, describe the land tenure here.>		*European heritage sites	<input type="checkbox"/>
		<Provide the name of the site>	
		*Other (e.g. historic mining)	
		<Provide the name of the site>	

* 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.

Out of Councils - NIL

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

No changes proposed

Provide any additional relevant information.

A number of salt lakes exist in the region of the proposed exploration; however, no exploration activities are planned in the vicinity of salt lakes under this PEPR. Refer to Maps 1-7 – Section J – Maps .

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?					
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?					
Identify closure periods that may impact on the exploration program.					
N/A					

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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?		
Provide the date the Range Control Officer granted access permission to conduct the proposed exploration operations.		
Describe the results of consultation and how any concerns raised were addressed.		
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"/>	The Kokatha People	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? * Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	EL 6642 is covered by a registered NTMA between the Kokatha Aboriginal Corporation RNTB and Gawler Resources Ltd..
Have you accepted an Indigenous land use agreement (ILUA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the ILUA registered? * Yes <input type="checkbox"/> No <input type="checkbox"/>	<List the tenements covered by the ILUA>
Have you obtained ERD Court determination? †	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is the determination registered? * Yes <input type="checkbox"/> No <input type="checkbox"/>	<List the tenements covered by the determination>

* 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).

Provide any additional relevant information.

<p>The Kokatha Aboriginal Corporation have received ongoing communication regarding the program of work. A Cultural Heritage Clearance survey for the proposed drilling was undertaken with the Kokatha traditional owners between the 18th and 22nd of November for the proposed drilling. Forty-six (46) of the proposed forty-eight (48) drill sites were 'cleared' during the survey. Two drillhole locations were removed from the proposed drilling, namely PESDRC24028 due to difficulty in accessing the drill site (denser vegetation) and PESDRC25042 due to its proximity to water infrastructure (tanks and troughs). It should also be noted that the four (3) proposed diamond drillholes will re-utilize the proposed RC drill sites/pads.</p>

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.).

<p>The tenements of the Pernatty Project are located within the South Australian Arid Lands (NRM Region) and according to the Interim Biogeographic Regionalisation for Australia (IBRA v7) lie within the Gawler Region with the proposed drilling within the Gawler Lakes (GAW03) subregion. This region is characterised by sandy plains, salt lakes, stony rises and stony plains in parts as well as undulating tablelands.</p> <p>Under the Pastoral Land System (NatureMaps) the proposed drill sites are located within the "Hesso" land system characterised by extensive sand sheets with the landscape being predominantly flat lying (sandy plains) with sandy cover (sandy plains – Hesso Land System) often with</p>

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calcrete formation over shallowly buried Adelaidean sediments (Whyalla Sandstone) – see Maps 6 & 7 – [Section J Maps](#). There is sporadic outcropping of this sandstone unit and some evidence of silcrete formation. The sandstone/silcrete can form broad, sparsely vegetated stony rises and plateaus (Bowen Land System) as is the case in the vicinity of previous drilling at the Moseley Prospect to the north-east of the Oakden Hills Homestead. An undulating tableland ('Arcoona' Land system) is also present along the Stuart Highway to the north-west of the proposed drilling at the Pernatty South Prospect. Isolated mesas such as South Oakden Hill also form part of the 'Arcoona' land system – see Photo 3 – [Section I – Photos](#).

Dune fields and longitudinal dunes (Roxby Land System) are present in the northern and northeastern portion of the project area and in some places, longitudinal dunes occur that are 50-80 m wide, orientated ESE-WNW, and have flat floored dune swales 100 to 200m wide. However, dune fields are not present in the areas of proposed drilling on EL 6642. Nonetheless, sandy soils occur across all areas of proposed drilling and tracks over sandy areas can be prone to wind erosion and rutting due to vehicle movement. All tracks will be monitored and rehabilitated in consultation with the pastoralist. Further details of the soil and surface cover and the native vegetation of the exploration areas are provided below.

Pernatty Lagoon and several smaller salt lakes are present throughout the exploration tenements. No exploration activities are planned in the immediate vicinity of any salt lakes. There are no major watercourses in the vicinity of the exploration areas, although shallow, intermittent drainages are present. Drillhole and track design will ensure that tracks and pads avoid known shallow drainages.

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.

The soil (and environment) of the region has been described in the 'Gawler Ranges Soil Conservation Plan' 2004. The exploration licence areas fall dominantly within the 'Hesso Zone' within the corresponding Hesso Land System (Pastoral Land System – [NatureMaps](#)). The characteristics of this Land System and associated Land Systems are described above in [Landform and Topography](#). The sandy plains and dunes are the most sensitive types of soil and surface cover, with potential for increased wind erosion if there is disturbance to the soils lichen crust and/or removal of chenopod groundcover.

As observed during previous drilling programs across the exploration areas the predominant top metre of the 'soil profile' is an aeolian orange-red quartz sand-silt, iron oxides and other rock lithic grains composition that transitions into a calcrete horizon. Track conditions and drill pad design from the 2021 drilling program encountered areas for improvement in the initial design and clearing phase, with the later drilling programs (e.g. May 2024) programs designed differently to counter truck turning circles, utilising bell and necking of tracks and general one-way direction of access drill sites and program advancement. Further improvements can be made by keeping drill access lines as straight as possible. The necessity to navigate around live trees did create some meandering that could not be avoided - (see Photo 4 – [Section I - Photos](#)).

Design of the proposed program locates drill holes adjacent to existing tracks (see Photo 5 – [Section I - Photos](#)) where possible in addition to utilising one way direction of traffic. Observations from earlier programs recorded track rutting due to the sand spreading under the weight of vehicles and the weaving nature of the tracks created. The 2021 drilling program required multiple vehicle crossings of the same track and accessing dead end tracks over several days increased track use. This has been taken into consideration for future design drilling programs to be designed as a one-way continuous drill track where possible and sumps located beside the track to limit the clearing of larger drill pads with bell and necking of new tracks at drill sites. Where tracks cannot exit due to other environmental factors and existing infrastructure (pipelines etc) a turnaround point will be made utilising the cleared drill pad.

Some track rutting will occur due to the nature of the ground vehicles are passing over, however new tracks will be created to limit weaving and keep tracks as straight as reasonably practical. Speed on drill tracks was not observed as an issue during the recent programs with all drivers aware and driving to the conditions. No heavy vehicle movements are permitted on significant rainfall days and tracks are inspected in light vehicle prior to restarting the drill program. During rehabilitation tyre rutting is relevelled and rehabilitated to the pre-existing condition as well as grading of station tracks if required.

The thin sandy-silt soils that dominate the area are not expected to suffer from any significant compaction or erosion from drilling activities. Due to the limited period that the rig will be on a drill pad (1-3 days) there will be minimal compaction, and sandy material will be easily moved for rehabilitation. During sump excavation the top 30cm of the "soil" profile will be scrapped separately before using the remaining sump material to build bunds. Loader operators will be instructed to remove the top 30cm of soil and place behind the sump for final rehabilitation. Any track and vegetation clearance will be kept to a minimum wherever possible – 'scrapping' of drill pads /removal of top soil during drill pad and track clearance will be avoided with the preference being to flatten/roll vegetation.

The creation of new tracks will be kept to the bare minimum by utilising existing tracks and fence lines, however when new tracks are created, they will be kept in a straight line wherever possible, limit impacts to vegetation and avoid dunal areas. With changes to the design of the program it is envisaged less drill pad area and track disturbance will be achieved.

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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 only minor drainages in the vicinity of salt lakes (e.g. Pernatty Lagoon) in the area. The drill collars will be positioned away from any drainages and tracks will be created to avoid such areas. Due to the sandy soils, there are minimal drainages in the area. Refer to Maps 2, 5, 7 & 8 – Section J – Maps .		
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"/>
N/A		
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"/>
N/A		

Groundwater

Is groundwater likely to be intersected when conducting the exploration program? 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. If no, provide evidence or any supporting information demonstrating this.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
The groundwater in the area is in the unconfined basement fractured rock aquifer with high salinity and low yields, making them poor or unsuitable for agricultural use. Salinity generally increases with proximity to salt lakes and decreases closer to soaks and drainage lines. Groundwater data (Waterconnect website) shows water well information with aquifer descriptors being Mesoproterozoic Pandurra Formation and Adelaidean Tapley Hill Formation. However, most bores are drilled into Adelaidean sediments. Water results to date indicate a highly saline groundwater aquifer with yields of 0.1-1 litre/per second flow. Recent drilling conducted by DGO Gold in the area supports this. DGO's recorded water intersections are listed below.					
Hole_ID	East	North	Grid	Depth Water Intersected	Geology
21SSRC0004	718291	6490700	MGA94_53	66	Tapley Hill Fm
21SSRC0005	718293	6492077	MGA94_53	54	Tapley Hill Fm
21SSRC0006	718353	6493172	MGA94_53	24	Whyalla SST
21SSRC0010	720581	6490643	MGA94_53	131	contact of Tapley Hill Fm & Pandurra Fm
21SSRC0011	721360	6490618	MGA94_53	62	Whyalla SST
21SSRC0013	723039	6490567	MGA94_53	143	Beda Volcanics
21SSRC0014	696553	6464230	MGA94_53	60	Pandurra SST
21SSRC0017	696052	6464412	MGA94_53	56	Pandurra SST
21SSRC0018	688111	6465231	MGA94_53	19	Tapley Hill Fm
21SSRC0038	694029	6505740	MGA94_53	47	Whyalla SST
21SSRC0041	691863	6506167	MGA94_53	35	Whyalla SST

Description of the locality/area where different groundwater conditions may be encountered					
Stuart Shelf sediments – potential for unconfined groundwater, particularly the Whyalla sandstone.					
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
Adelaidean and Mesoproterozoic sediments particularly Whyalla sandstone	0-150m	Whyalla Sandstone	0-150m	Unconfined	Generally, 30,000 TDS but can be up to 120 000 TDS. SWL approx. 40-800m. Yields vary from 0.1 to 1L/sec.

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

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With such high TDS (greater than 13 000 mg/L), groundwater in the area does not record an environmental value under the EPA Water Quality Policy.

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

Presently GDEs defined in the region are related to surface salt water lakes. Reviewing the GDE Atlas produced by the Bureau of Meteorology all salt lakes in the area are classified as high potential GDE under a national assessment. The drilling program proposed in this PEPR will not impact any salt lakes in the region. Please refer to Map 5 - [Section J - Maps](#) .

Is the proposed program located within a prescribed wells area or prescribed water resource area?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
---------------------------------------------------------------------------------------------------	------------------------------	----------------------------------------

If yes, provide the name of the area.

N/A

Provide any additional information, if required.

Each drillhole for this program will make use of above ground sumps with small backhoe kept onsite to excavate in ground sumps as required to capture any potential groundwater discharge. Previous drilling by DGO (91 drill holes) across the project area only intersected groundwater on several occasions with sufficient quantity to enter the sumps via the t-piece diversion. The estimated yields were less than 1L/s and EC recorded greater than 20,000 and up to 80,000.

Native vegetation

Will you be working within areas of native vegetation? If yes, provide the following information:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
---------------------------------------------------------------------------------------------------	-----------------------------------------	-----------------------------

- description of the formation and structure of vegetation in the area (e.g. woodland, shrubland, grassland)
- list of the dominant species.

If no, indicate why you will not be working within areas of native vegetation?

As described above in the section on [Landform and topography](#); the Pernatty Project covers a wide range of landscapes and under the Pastoral Land System ([NatureMaps](#)) these include the Arcoona, Beacon, Bowen, Hesso, Jungle Dam, Pandurra, Roxby, Torrens and Yudnapinna Land Systems – See Maps 6 & 7 – [Section J - Maps](#).

The exploration program will be undertaken in areas dominated by woody native vegetation generally > 1 m tall and include eucalypt stands and woodlands, wattle shrublands, mulga and hop-bush shrublands. Under the Pastoral Land System ([NatureMaps](#)) this vegetation is described as part of the Hesso Land System: *Extensive sand sheets with calcareous soils. Plains of Myall, sugarwood woodland over pearl bluebush +/- bladder saltbush; plains and rises of mulga and Myall woodland with pinbush wattle, pearl bluebush and spiny fan flower.* Refer to Photos 3 to 7 – [Section I -Photos](#). All the proposed drillholes are located within the Hesso Land System.

It is worth noting that the Statewide NVIS dataset of Native Vegetation Floristic Areas does not cover the project area but in general terms the vegetation of Hesso Landform system can be classified as Acacia woodland (Acacia low open woodland\Aristida (mixed) tussock grass).

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.

Please refer to Map 8 ([Section J – Maps](#)) for the locations of significant flora (nationally and state rated flora) identified within and in the vicinity of the Pernatty and Pernatty South prospects; two species (**Wild Violet & One Bristle Everlasting**) occur in the immediate vicinity of the areas subject to this application. Note that proposed drilling is restricted to the Pernatty South Prospect.

Species/habitat	Common name	NPW Act rating*	EPBC Act rating†
Androcalva multiloba	Trailing Commersonia	Endangered	
Caladenia dilatata	Fairy Orchids	Endangered	
Brachyscome ciliaris¹	Variable Daisy	Rare	
Gilesia biniflora	Western Tar-vine	Rare	
Gratwickia monochaeta	One-bristle Everlasting	Rare	
Lawrenca berthae	Showy Lawrenca	Rare	
Ophioglossum polyphyllum	Ophioglossum	Rare	
Ptilotus erubescens	Hairy-tails	Rare	
Swainsona microcalyx¹	Wild Violet	Rare	

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Species/habitat	Common name	NPW Act rating*	EPBC Act rating†
<i>Atriplex kochiana</i>	Koch's Saltbush	Vulnerable	
<i>Limosella granitica</i>	Granite Mudwort	Vulnerable	Vulnerable
<i>Maireana excavate</i>	Bottle Fissure-plant	Vulnerable	
<i>Malacocera gracilis</i>	Slender Soft-horns	Vulnerable	
<i>Santalum spicatum</i>¹	Sandalwood	Vulnerable	

* *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.

1. Significant flora located within area that may be impacted by the proposed program.

In addition to the flora species listed above; one (1) endangered and three (3) vulnerable plant species are listed in EPBC Act Protected Matters Reports ([EPBC ACT Protected Matters Search Tool](#) generated 12th November 2024 for the Pernatty project areas as "likely to occur" and "may occur within the area" respectively:

- *Frankenia plicata* (Braided Sea-heath) – likely to occur
- *Hibbertia crispula* (Ooldea Guinea-flower) – may occur
- *Pterostylis xerophila* (Desert Greenhood) – may occur
- *Swainsona pyrophila* (Yellow Swainson-pea) – may occur in 1km buffer area only

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*).

The [Nature Maps Web App](#) lists recorded sightings of 129 (54) invasive plant species within the Pernatty project area and surrounds, with three species, **African Boxthorn**, **Athel Pine**, **Erect Prickly Pear**, considered weeds of National Significance (WoNS). However, there are only isolated occurrences of these invasive species across the project area – see Maps 6 & 7 – [Section J - Maps](#).

In contrast the [Nature Maps Web App](#) shows a significant number of recorded sightings of buffel grass within the Pernatty Project area particularly along the Stuart Highway, but also along the part of the powerline road at the northern end of the Pernatty South Prospect - see – see Maps 6 & 7 – [Section J - Maps](#). The preferred access to the Pernatty South prospect is from the south via the Stuart Highway truck stop rest area across the road from the turnoff to Narkana House (Oakden Hills outstation) – see Map 2 – [Section J - Maps](#). All staff and contractors will be advised of the locations of significant weeds and to monitor vehicles.

Please see the Nature Maps species spreadsheets attached to this application for a full list of introduced species within the project area.

Fauna

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

A full list of identified (native) species within the project area and surrounds as shown by the [Nature Maps Web App](#) (DEW) is provided in the species spreadsheets attached to this application. This species list includes 2 species of amphibians; Spotted Marsh Frog (*Limnodynastes tasmaniensis*) and Sudell's Frog (*Neobatrachus sudellae*), 181 bird species including 26 listed birds species Wedge-tailed Eagle (*Aquila audax*), Black-faced Woodswallow (*Artamus cinereus*), Rufous Fieldwren (Calamanthus campestris), Australian Raven (*Corvus coronoides*), Grey Butcherbird (*Cracticus torquatus*), Galah (*Eolophus roseicapilla*), Nankeen Kestrel (*Falco cenchroides*), Singing Honeyeater (*Lichenostomus virescens*), Australian Magpie (*Cracticus tibicen*), White-winged Fairywren (*Malurus leucopterus*), Eastern, Crested Pigeon (*Ocyphaps lophotes*), White-browed Babbler (*Pomatostomus superciliosus*), Mulga Parrot (*Psephotus varius*), Willie Wagtail (*Rhipidura leucophrys*), Hoary-headed Grebe (*Poliiocephalus poliocephalus*), Pacific Black Duck (*Anas superciliosa*), and Zebra Finch (*Taeniopygia guttata*).

Emu (*Dromaius novaehollandiae*) and large macropods including; Euro/Common wallaroo (*Macropus robustus*), Red Kangaroo (*Macropus rufus*), Western Grey Kangaroo (*Macropus fuliginosus*) have a high number of sightings - see Photo 7 – [Section I – Photos](#). Small marsupials' sightings include Fat-tailed Dunnart (*Sminthopsis crassicaudata*), and Stripe-faced Dunnart (*Sminthopsis macroura*).

A number of reptiles have been sighted including Eyre Peninsula Dragon, Saltbush Ctenotus (*Ctenotus olympicus*), Eastern Desert Ctenotus (*Ctenotus regius*), Tessellated Gecko (*Diplodactylus tessellatus*), Common Snake-eye (*Morethia boulengeri*), Beaked Gecko (*Rhynchoedura ornate*), Beaded Gecko (*Lucasium damaeum*), Eyrean Earless Dragon (*Tympanocryptis tetraporophora*), Crested Dragon (*Ctenophorus cristatus*), Central Netted Dragon (*Ctenophorus nuchalis*), Eastern Brown Snakes (*Pseudonaja textilis*), Desert Banded Snake (*Simoselaps anomalus*), Sand Goannas (*Varanus gouldii*), Central Bearded Dragon (*Pogona vitticeps*) and Shingleback Skinks (*Tiliqua rugosa*) – see Photos 8 to 10 – [Section I – Photos](#).

Eight (10) species of threatened bird species, two (2) threatened mammal species and one (1) threatened reptile species are listed in [EPBC Act Protected Matters Reports](#) generated on 12 November 2024 for the Pernatty Project area as "may occur within the area", "likely to occur" or "known to occur in the area" namely:

Threatened Bird species:

- *Pedionomus torquatus* (Plains-wanderer) – may occur within area

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- *Rostratula australis* (Australian Painted Snipe) – may occur within area
- *Falco hypoleucos* (Grey Falcon) – may occur within area
- *Grantiella picta* (Painted Honeyeater) – may occur within area
- *Leipoa ocellata* (Malleefowl) – likely to occur
- *Amytornis textilis myall* (Western Grasswren - Gawler Ranges) – known to occur
- *Amytornis modestus* (Thick-billed Grasswren) – likely to occur
- *Polytelis alexandrae* (Princess Parrot, Alexandra's Parrot) – may occur within area
- *Neophema chrysostoma* (Blue-winged Parrot) – known to occur
- *Aphelocephala leucopsis* (Southern Whiteface) – known to occur

Threatened Mammal species:

- *Sminthopsis psammophila* (Sandhill Dunnart) – likely to occur
- *Pseudomys australis* (Plains Rat, Palyoora, Plains Mouse) – known to occur

Threatened Reptile species:

- *Aprasia pseudopulchella* (Flinders Ranges Worm-lizard) – likely to occur

Four (4) species of migratory species are listed in the EPBC Act Protected Matters Report generated 12 November 2024 for the project areas as "likely to occur" or "may occur within the area."

Migratory wetlands species:

- *Calidris ferruginea* (Curlew Sandpiper) – may occur within area
- *Tringa nebularia* (Common Greenshank, Greenshank) – may occur within area
- *Calidris acuminata* (Sharp-tailed Sandpiper) – likely to occur
- *Gallinago hardwickii* (Latham's Snipe, Japanese Snipe) – may occur within area

The [Nature Maps Web App](#) lists recorded sightings of four (4) invasive bird species and ten (10) invasive mammal species as listed below:

Invasive bird species may include:

- *Carduelis carduelis britannica* (European Goldfinch)
- *Columba livia* (Feral Pigeon)
- *Passer domesticus domesticus* (House Sparrow)
- *Sturnus vulgaris vulgaris* (Common Starling)

Invasive mammal species may include:

- *Bos taurus* (European Cattle)
- *Camelus dromedarius* (One-humped Camel - Dromedary, Arabian Camel)
- *Canis lupus familiaris* (Feral Dog)
- *Capra hircus* (Feral Goat)
- *Equus caballus* (Horse - Brumby)
- *Felis catus* (Feral Cat)
- *Mus musculus* (House Mouse)
- *Oryctolagus cuniculus* (European Rabbit)
- *Ovis aries* (Feral Sheep)
- *Vulpes vulpes* (Fox - Red Fox)

The Australian Living Atlas ([ALA – Pernatty Project](#)) also lists the Australian Plague Locust (*Chortoicetes terminifera*) as occurring in the area.

Please refer to the Nature Maps fauna species spreadsheets and EPBC Act Protected Matters Report attached to this application for a full list of all species within proposed work areas and surrounds and further information regarding occurrences and locations. Please also refer to Maps 6 to 8 – [Section J - Maps](#) .

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
A number of significant fauna (nationally and state rated fauna) have been reported as occurring within the Pernatty Project area (NatureMaps). However no listed species that have been sighted within the areas subject to this application – see Map 8 – Section J - Maps .			
<i>Acanthiza iredalei iredalei</i>	Slender-billed Thornbill (western)	Rare	
<i>Amytornis textilis myall</i>	Western Grasswren	Vulnerable	Vulnerable
<i>Aphelocephala leucopsis leucopsis</i>	Southern Whiteface		sp ¹
<i>Ardeotis australis</i>	Australian Bustard	Vulnerable	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper		Vulnerable
<i>Cinclosoma castanotum</i> (NC)	Chestnut-backed Quailthrush (Chestnut Quailthrush)	ssp ²	

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Species	Common name	NPW Act rating	EPBC Act rating
<i>Cladorhynchus leucocephalus</i>	Banded Stilt	Vulnerable	
<i>Corcorax melanorhamphos</i>	White-winged Chough	Rare	
<i>Dromaius novaehollandiae</i>	Emu	ssp ³	ssp ³
<i>Falco peregrinus macropus</i>	Peregrine Falcon	Rare	
<i>Gerygone fusca</i>	Western Gerygone	Rare	
<i>Limosa limosa melanuroides</i>	Black-tailed Godwit	Rare	sp
<i>Lophochroa leadbeateri</i>	Major Mitchell's Cockatoo	Rare	ssp
<i>Lophochroa leadbeateri mollis</i>	Major Mitchell's Cockatoo (NW, EP)	SP	
<i>Manorina flavigula</i>	Yellow-throated Miner (complex)	ssp ⁴	ssp ⁴
<i>Microeca fascinans</i>	Jacky Winter	ssp ⁵	
<i>Myiagra inquieta</i>	Restless Flycatcher	Rare	
<i>Neophema chrysostoma</i>	Blue-winged Parrot	Vulnerable	Vulnerable
<i>Neophema elegans elegans</i>	Elegant Parrot	Rare	
<i>Neophema splendida</i>	Scarlet-chested Parrot	Rare	
<i>Pachycephala inornata</i>	Gilbert's Whistler	Rare	
<i>Phaps histrionica</i>	Flock Bronzewing	Rare	
<i>Spatula rhynchotis</i>	Australasian Shoveler	Rare	
Stictonetta naevosa	Freckled Duck	Vulnerable	
<i>Tringa glareola</i>	Wood Sandpiper	Rare	
<i>Tringa nebularia</i>	Common Greenshank		Endangered
<i>Pseudomys australis</i>	Plains Mouse	Vulnerable	Vulnerable
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	ssp ⁶	ssp ⁶
<i>Nephurus deleani</i>	Pernatty Knob-tailed Gecko	Rare	

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.

A value of "ssp." indicates that at least one subspecies for this species has been given a conservation rating.

A value of "sp." indicates that the species level related to this subspecies has a rating.

- The Southern Whiteface is listed at the species level as vulnerable. ([Species Profile and Threats Database](#))
- A related subspecies – the Mt Lofty Ranges Spotted Quail-thrush (*Cinncosoma punctatum anachoreta*) is listed as Critically Endangered ([Species Profile and Threats Database](#)) but does not occur in the area.
- Several emu subspecies are considered extinct, but the mainland emu population is considered stable, and they are not listed as endangered or threatened. ([Species Profile and Threats Database](#))
- A related subspecies the Black-eared miner (*Manorina flavigula melanotis*) is listed as endangered but does not occur in the area. ([Species Profile and Threats Database](#))
- The southern subspecies of the Jacky Winter (*Microeca fascinans fascinans*) is listed as threatened within South Australia particularly within the Adelaide and Mount Lofty ranges ([Threatened Species Profile](#)).
- A related subspecies, the Kangaroo Island Echidna (*Tachyglossus aculeatus multiaculeatus*) is listed as endangered but does not occur in the area. ([Species Profile and Threats Database](#))

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"/>
The Pernatty Lagoon Salt Lake southern 'shoreline' is located some 7km north of the proposed drilling at the Pernatty South prospect (refer Maps 1 & 2 - Section J - Maps).		
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"/>
Access to drill sites utilises the existing station tracks network. Field personnel and contractors, as part of the induction process, will be advised of areas of cultural significance and to restrict movements to demarcated tracks. The track network will be monitored for compliance.		
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.		

Exploration PEPR application – 12-month period

<p>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.</p>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p>The Pernatty Lagoon Salt Lake southern 'shoreline' is located some 7km north of the proposed drilling at the Pernatty South prospect (refer Maps 1 & 2 - Section J - Maps).</p>		
<p>Are you likely to impact on the environmentally sensitive area? If yes, detail the likely effects the proposed program may have.</p>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<p>Access to drill sites utilises the existing station tracks network. Field personnel and contractors, as part of the induction process, will be advised of areas of cultural significance and to restrict movements to demarcated tracks. The track network will be monitored for compliance.</p>		
<p>Cultural Heritage Surveys were previously completed for Phase 1 and 2 drilling. An additional Cultural Heritage Clearance survey for the proposed drilling was undertaken with the Kokatha traditional owners between the 18th and 22nd of November for the proposed drilling. Forty-six (46) of the proposed forty-eight (48) drill sites were 'cleared' during the survey. Two drillhole locations were removed from the proposed drilling, namely PESDRC24028 due to difficulty in accessing the drill site (denser vegetation) and PESDRC25042 due to its proximity to water infrastructure (tanks and troughs) - see Photos 11 & 12 Section I – Photos.</p> <p>Two culturally sensitive sites were identified during the survey with scattered artefacts observed in a couple of locations along proposed access tracks (see Photos 13A& B -Section I – Photos). Access tracks and drillpads were shifted/adjusted to suit and exclusion zones will be established around the more significant sites. Access tracks were also adjusted with the guidance of traditional owners to avoid larger trees and excessive clearing whilst also maintaining tracks as straight as possible to avoid tyre rutting.</p> <p>A Heritage clearance was also undertaken of a potential location for a temporary 5-10 person exploration camp at a previously disturbed site south of the access road to the Pernatty South Prospect (see Photo 14 - Section I - Photos and Map 2 - Section J - Maps) The final report from this cultural heritage survey is pending from the Australian Heritage Surveys who are acting on behalf of the Kokatha Aboriginal Corporation.</p>		

Exploration PEPR application – 12-month period

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	1-2	DISC	
Land access/environmental	(1)	(DISC geologist will be the liaison officer)	
Field assistants/technicians	1	Contract labour hire company	
Field assistants/technicians (soil sampling)	1-2	Euro Exploration Services	
Drilling crew	5	Contract drill company (Bullion or McLeod)	
Site preparation and rehabilitation	1-2	Contract earthworks company (Martin Civil or Brisley's Contracting)	
Other (provide details)			
Shifts worked per day	Hours worked per day	Days worked per week	
1	12	7	
Equipment type	Owner/operator	Description/capacity	Activity/purpose
Toyota Landcruiser	DISC	4x4 Landcruiser	<i>Support and transport</i>
1 x tandem trailer	DISC	Tandem trailer	<i>Sample transport and rehabilitation</i>
Toyota Landcruiser	Euro Exploration Services	4WD or dual cab light truck.	<i>Soil Sampling – support vehicle</i>
2 x Quad Bikes	Euro Exploration Services	ATV/Quad Bike	<i>Soil Sampling (Refer Photo 15)</i>
1 x Trailer	Euro Exploration Services	2-tonne trailer	<i>Soil Sampling – transport of Quad bikes</i>
1 x 4.5 tonne bobcat (or similar)	Brisley's Contracting, Wudinna SA 5652	Skidsteer loader (bobcat)	<i>Track and drill pad clearing (refer Photograph 17).</i>
1 x Slimline RC drill rig	McLeod Drilling Stirling North SA 5710	MD1 Almet drill rig mounted on a 6x6 Land Cruiser ute	<i>AC/Slimline RC drilling (Photo 18)</i>
1 x 6x6 Support ute	McLeod Drilling	Sullair compressor mounted on a 6x6 Land Cruiser ute	<i>Provides compressed air to MD1 drill rig.</i>
1 x Landcruiser tray back ute	McLeod Drilling	Support/Crew vehicle	<i>Transport for McLeod Drilling crew</i>
1 x truck mounted RC drill rig	Bullion Drilling Port Augusta SA 5700	6x6 RC drill rig	<i>RC exploration drilling (Photo 19)</i>
1 x support/booster truck	Bullion Drilling	6x6 Support/Booster truck	<i>Support vehicle to RC rig</i>
1 x Support/Water Trucks	Bullion Drilling	Support/water truck	<i>Support/Water Truck used to support RC drilling</i>
1 x Landcruiser tray back ute	Bullion Drilling	Support/Crew vehicle	<i>Transport for Bullion Drilling crew</i>
Grader (as required)	Martin Civil or similar (pastoralists)	Cat12H, 140H or similar	<i>Short term tracks network (as required)</i>
Wheel loader (as required)	Martin Civil or similar	Front end loader	<i>Site prep, tracks. rehabilitation</i>
Back Hoe or Excavator	Martin Civil or similar	3.5-20 tonne capacity	<i>Site prep and sumps</i>
Water truck (as required)	Martin Civil or similar	15-27KL capacity	<i>Dust suppression</i>
Small Tip Truck	Martin Civil or similar		<i>Drill site rehabilitation.</i>
Diamond rig	To be advised	UDR 1000/1200 or equivalent	<i>Diamond drilling</i>
Support truck	To be advised	Rod truck/equipment	<i>Support diamond drilling</i>
Water cart	To be advised	10-20,000L capacity	<i>Water for diamond drilling</i>

Exploration PEPR application – 12-month period

Provide any additional information, if required.

Drill contractor discussions in progress to secure timing and availability. Discussing with earthmoving companies with strong safety and environmental policies and accreditations are also in progress. Diamond drilling will occur if results of the RC drilling prove successful.

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 No

Soil Sampling Survey on quad bikes

An ultrafine soil sampling will be undertaken with the aid of quad bikes (ATV). The Quad bikes are fitted with wide tyres to minimise compaction of soil and can easily navigate between the sparse vegetation of the project area (see Photos 15A & B – [Section I - Photos](#)). Sample sites do not require any preparation with soil samples taken by hand at approximately 5-10cm depth after scraping away the top 1cm using a small shovel across an area of approximately 15cm x 15cm. Any coarse material >2 mm should be sieved out of the soil sample and discarded/returned to the sample hole. Following collection of materials, the small hole will be back filled and returned to a near flat surface as per the [CSIRO guidelines for Ultrafine+ Soil Sampling](#) (refer Photo 15B – [Section I - Photos](#)). Significant fauna nests/habitats will be avoided (with sample sites relocated), photographed and documented for future reference and training.

Drilling activities

Will exploration drilling activities be conducted? If yes, fill out the below table Yes No

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 depth 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)
EL 6642	RC	46	100	1	5x2x2 (20m ³)	(20x20m)=400m ²	0	0
EL 6642	DD	3	100	1	5x2x2 (20m ³)	Existing drill pad	0	0
TOTAL		49	4,110	49	980m ³	18400m ³	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.

Access Tracks

Access to drill sites will be via existing station tracks to get as close as possible to the drill targets. Where new tracks are required, the aim is to minimise disturbance to existing vegetation by using natural clearings for access and pad creation. Mature trees will be avoided and if trimming of trees is required to accommodate drill vehicle access hand pruning (chain saw) of tree branches, without harmful disturbance to roots or bark will be undertaken. In consultation with the traditional owners, creating new drill hole access pads utilising the existing tracks was encouraged and the new tracks proposed to be as short and straight as possible was appreciated to limit vegetation and surface disturbances.

Slimline RC & RC Drilling

Slimline RC and RC drill sites will be approximately 20m x 20m and within areas of native vegetation drill sites will be situated in cleared areas to avoid large trees and excessive clearing (see Photo 16 – [Section I - Photos](#)). If necessary, drill sites will be cleared with the use of bobcat (blade up) and/or roller to flatten vegetation, while maintaining rootstock (refer Photo 17 – [Section I - Photos](#)). Where clearing of under storey vegetation is required (chenopod shrubland e.g. bluebush, saltbush etc) for the drill work area, care will be taken to leave roots in place and to not cut into the soil (i.e. bucket/blade will skim over the ground surface and cut the vegetation). Where necessary, tree limbs may require trimming with a chainsaw to facilitate drill site access/working space for the drill rig and support vehicles. Any pruned or cut vegetation will be temporarily stockpiled for redistribution across the drill pad during rehabilitation. A slimline RC drill rig is being considered for use in the proposed RC drilling to reduce the footprint - refer Photo 18 – [Section I - Photos](#) with deeper holes (>120m) along existing tracks to be drilled by a 'traditional' RC drill rig (Photo 19 – [Section I - Photos](#))

An in-ground sump will be constructed at each drill site using with a 3-tonne excavator and will be approximately 5m (w) x 2m (l) x 2m (d) for a total of 20m³. Sumps will be constructed by first excavating the Topsoil (top 30cm) and stockpiling adjacent to the sump and separate from lower material which also will be used to build bunds around the sump. Sump construction will have one sloping face to allow egress should wildlife enter. One sump is planned per RC drillhole, but above ground sumps will also be used in the event of significant quantities of groundwater being intersected.

RC drilling samples will be collected in large plastic bags and laid out in rows on the ground. Rehabilitation of drill cuttings and bags will be undertaken as soon as practicable following completion of drilling and receipt of sample analysis results, with drill cuttings used to back-fill drill holes that are completed where possible. Excess drill cuttings will be buried in drill sumps. All plastic bags will be removed from site and disposed of at an authorised waste facility at Port Augusta. Diamond twins to the RC holes are designed and will utilise the RC drill pad and sumps if required.

Diamond Drilling

If positive results are obtained from planned RC Drilling and if considering necessary, up to five (5) diamond drillholes will be undertaken and will make use of existing drill pads and drill sumps with an above ground sump used to circulate drilling fluids. Nonetheless an additional 1 in-ground sump per diamond drillhole might be required. Drilling fluids will consist of potable water, mixed with groundwater, drill cuttings and biodegradable drilling muds where required

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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.		
<p>Slimline RC Drilling</p> <p>Casing will be constructed with a 100mm rotary mud blade and cased with 100mm PVC casing where necessary, to a maximum depth of 6m. Casing will not be cemented (but may use Driller's A and B foam) and will be removed at the completion of the drillhole by hand or if required, with the drill rig head. All drillholes will be constructed with an 78mm AC bit or 80mm slimline RC hammer where required. Drillholes will not intersect artesian aquifers but may intersect a single low-yielding, unconfined, aquifer (see Section C, Hydrogeology). A t-piece diversion box will be placed on the collar to allow any groundwater intersected during drilling to be directed into the sumps. Drillholes will be backfilled with cuttings upon receipt of sample assays. Casing will be capped beneath ground level during rehabilitation of drill sites (refer Photo 21 – Section I).</p>		
<p>RC Drilling</p> <p>RC drillholes will be cased with up to 6m of 200mm PVC class 12 pipe installed with a 200mm blade or hammer where necessary. Casing will not be cemented (but may use Driller's A and B foam) and will be fitted with a hole plug after completion to prevent the creation of a fauna trap. RC drillholes will be constructed with an 150mm RC hammer. A t-piece diversion box will be placed on the collar to allow any groundwater intersected during drilling to be directed into the sumps. Drillholes will be backfilled with cuttings upon receipt of sample assays. Casing will be capped beneath ground level during rehabilitation of drill sites (refer Photo 21 – Section I).</p>		
<p>Diamond Drilling</p> <p>Diamond drillholes will be undertaken as twins or tails to RC drillholes and as such will make use of existing drill pads and drill sumps at as such no further clearing, or excavation will be required. Plastic ground sheeting will be placed beneath sampling areas; the existing in-ground sump will be re-utilized together with an additional above ground sump to circulate drilling fluids.</p> <p>Diamond drillholes will be cased with up to 6m (or more as necessary) of 200mm PVC class 12 pipe installed with a 200mm blade or hammer where necessary. Casing will not be cemented (but may use Driller's A and B foam) and will be fitted with a hole plug after completion to prevent the creation of a fauna trap. Diamond drillholes will be constructed with an HQ, NQ or PQ diamond bit. Drillholes will be backfilled with any pre-collar cuttings upon receipt of sample assays. Casing (unable to be removable) will be capped at least 0.5m beneath ground level during rehabilitation (refer Photo 21 – Section I).</p>		
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.		
<p>Slimline RC & RC Drilling</p> <p>Slimline RC & RC drillhole casing will not be cemented but may use Driller's A and B foam. Drillhole decommissioning will review drilling conditions and hole records to ensure holes are backfilled in accordance with ISM21. Previous drilling intersected an unconfined basement aquifer and with drilling occurring in the same vicinity is also expected to intersect the same unconfined aquifer in this program. Upon completion, casing will be removed (where possible) with the assistance of the drill rig head. Where casing cannot be removed, it will be cut/capped during rehabilitation at least 0.5m beneath ground level and buried as per Earth Resources Information Sheet M21: Mineral Exploration Drillholes - General specifications for construction and backfilling; including the mounding of topsoil over the drillhole. Rehabilitation will be undertaken upon receipt of sample assays. Drillholes where casing has successfully been removed will be temporarily plugged between completion and rehabilitation. Drill cuttings will be used to backfill the drillhole and any excess cuttings and buried in drill sumps. All rubbish including sample bags, plastic sheeting and PVC casing will be removed and taken to a licenced waste facility. No confined aquifers have been encountered during drilling in the proposed areas so downhole cement plugs will not be required. The drill pad will be relevelled and stockpiled vegetation (if pruning and cutting occurred) will be distributed over the pad to aid re-vegetation (refer Photo 20 – Section I - Photos). Photo monitoring will be undertaken for Exploration Compliance reporting.</p>		
<p>Diamond Drilling</p> <p>Diamond drillhole casing will not be cemented but may use Driller's A and B foam. Upon completion, casing will be removed (where possible) with the assistance of the drill rig head. Where casing cannot be removed, it will be cut/capped during rehabilitation at least 0.5m beneath ground level and buried as per Earth Resources Information Sheet M21: Mineral Exploration Drillholes - General specifications for construction and backfilling; including the mounding of topsoil over the drillhole. Rehabilitation will be undertaken upon receipt of sample assays. Drillholes where casing has successfully been removed will be temporarily plugged between completion and rehabilitation. Any excess pre-collar cuttings and drill spoil will be buried in drill sumps. All rubbish including sample bags, plastic sheeting and PVC casing will be removed and taken to a licenced waste facility. No confined aquifers have been encountered during drilling in the proposed areas so downhole cement plugs will not be required. The drill pad will be relevelled and stockpiled vegetation (if pruning and cutting occurred) will be distributed over the pad to aid re-vegetation. Photo monitoring will be undertaken for Exploration Compliance reporting.</p>		

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)
						<i><Tab to add rows.></i>
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).

Slimline RC & RC Drilling

Drill bulk samples of approximately 25-30kg will be collected at one metre intervals from the sample cyclone into pre-numbered UV stable PVC sample bags and arranged in rows in the confines of the drill pad. A 3kg sub-sample (analytical sample) is split off the RC cyclone and delivered in a pre-numbered calico bag. Approximately 100g is washed and retained in a chip tray as a representative sample for geological logging. Approximately 300g is retained for pXRF analysis on-site/off-site. Remaining cuttings are stored adjacent the drill site between completion of drilling and rehabilitation. Samples will be taken offsite if required for further testing or the drill cuttings returned downhole as soon as possible after assaying is complete.

Due to the weight of each metre in a bulk sample (green UVA stabilised bags), a 50% reduction in sample recovery has been implemented as a safe work weight limit with the remaining bulk metre sample falling to the ground under the cyclone. Black plastic sheeting will be placed on the ground under the cyclone to capture this bulk material, thus reducing the spread of drill cutting across the ground and to facilitate post-drilling rehabilitation. Used black plastic sheeting will be disposed at a licenced waste facility (Port Augusta Resource Recovery Centre).

The UVA stabilised 'green' bags will not perish during the period between drilling and rehabilitation that will prevent drill cuttings from spreading over the ground and visually affecting the surface. Analytical samples in calicos will be placed in polyweave bags (~10 samples per bag) and taken back to camp each night for collation and storage in a bulka bag, which will be despatched to the laboratory upon filling.

During rehabilitation excess drill cuttings will either be returned downhole (backfill) or placed in the sump or taken offsite to a waste pit for disposal. Empty plastic bags will be taken to a licenced waste facility for disposal. Analytical samples stored at camp will be all despatched to the laboratory during and at the completion of the drilling program and chip trays stored in the company's storage facility.

Diamond Drilling

Pre-collar drill samples will be delivered off the sample cyclone into UV stable PVC sample bags, which will be stored adjacent the drill site between completion of drilling and rehabilitation. Plastic ground sheeting will be placed beneath the cyclone/sampling area. NQ Core is approximately 3-5kg/m for shale and sandstone (Tapley Hill Formation and Whyalla & Pandurra Formations) and will be stored in core trays before being transferred offsite. Diamond drill core will be cut and sampled off-site as was the case for diamond drilling undertaken in September 2024. Any pre-collar cuttings will be returned downhole as soon as possible after assaying is complete.

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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"/>
Station tracks, as managed by pastoral stations will be maintained by DISC under approval from the pastoralists. The tracks are currently in passable condition, however if they degrade during exploration, maintenance will be scheduled to occur using a grader at a time agreed with station owners. Frequent communication of track conditions and maintenance requirements will be communicated as required with the landowners/pastoral managers about track condition and maintenance. All station access tracks used in the program will be reinstated to their original condition on completion of program.		
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 type="checkbox"/>	No <input checked="" type="checkbox"/>
The drill sites are located on tenements currently held by either by Gawler Resources (IVR) or Yandan (GOR) and DISC are exploring as part of two separate Heads of Agreement. Existing station tracks are utilised, no adjoining tenement holder track access is required.		
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 tracks will be utilised wherever possible (see Maps 2 & 3 - Section J - Maps). New access tracks will be created in areas with minimal vegetation and the lowest topographical surface gradients to prevent potential wind and water erosion. Tracks will be single vehicle width and established after consultation with the respective landholders and traditional owners. Staff and contractors will be constrained to the single track with firm instructions to keep to the established tracks included in site induction material. Any significant compaction or erosion along the wheel tracks will be rehabilitated in consultation with the landholders. Access tracks will be paced by the Exploration Supervisor or Geologist ahead of the first pass of vehicles, in order to avoid impact to local fauna or livestock. Observed fauna nests/habitats will be avoided in favour of alternative routes, as well as photographed and documented for future reference and training. The routes will be as short as practical to also minimise the total area of disturbance. The drill line tracks will be initiated with a 4WD Utility, followed by a front-end loader with its bucket height set at above ground surface to remove tyre puncture hazards while leaving plant root stock and soil intact. Vehicles will follow the newly established access tracks to drill sites as far as reasonably practical and aim to prevent the unnecessary creation of multiple tracks.		
New track routes will be designed to avoid water courses; avoid stands of significant or established vegetation; and minimise potential for erosion. Mature vegetation will be avoided where possible and any overhanging trees will be trimmed by chainsaw of branches as opposed to wholesale tree removal. Where practical, entry and exit points will be created to accommodate a trucks ability to turn into the track and not the standard practise of dog legging an entrance. New tracks will follow a direct straight line where possible and avoid S bends during creation to limit tyre rutting. If meandering tracks are required, broad turning circles to prevent excessive erosion and rutting at bends. The use of earthmoving equipment to establish new tracks will be kept to the minimum required for a safe and accessible program.		
The total area of disturbance will be minimised to the greatest extent possible and will be discussed with landholders throughout the course of the exploration programs. It is anticipated that the tracks will be approximately 3-4m wide, however this is subject to change depending on the type of activity and required vehicles. An estimated total of 10.435 km of new track creation is proposed with a total maximum area of disturbance of 41,740 m ² (assumed maximum track width of 4m). Refer to Maps 2 & 3 - Section J - Maps for the locations of planned tracks.		

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.
DISC has a shipping container with drilling supplies, PPE etc stored at 'Narkanna House' (Oakden Hills Outstation), central to the exploration area and close to the Stuart Highway – refer Photos 22A & B and 23 – Section I – Photos and Map 2 – Section J - Maps . Staff and contractors were accommodated at this outstation during previous drilling campaigns, but it is presently occupied by station workers. The two most recent drilling campaigns (May and September 2024) made use of the Shearers' Quarters adjacent to the Oakden Hills Homestead. These facilities include ten rooms, multiple ablutions blocks (showers/toilets), laundry and a kitchen/mess with cold room and freezers. The Oakden Hills Homestead and Shearers' Quarters are connected to mains water via the Pt Augusta – Woomera pipeline, has mains power and installed septic systems.
Unfortunately, the homestead and associated infrastructure were damaged by an extreme weather (strong winds) on the 17 th of October 2024. In addition, food was left in the cool room at the end of the most recent drilling campaign (Sept 2024) and this food went rotten during the power outage associated with the storm on the 17 th of October 2024. The owners of Oakden Hills have stated that notwithstanding building repairs the Shearers' Quarters won't be available as accommodation during future drilling campaigns. Negotiations are ongoing with the owners of Oakden Hills' station to reestablish the Shearer's Quarters as an accommodation option. Noting that on the 1 st of November 2024, DISC made an offer to financially assist with building repairs at Oakden Hills Station.

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An alternative option is the Shearers Quarters is located on South Gap Station (Whittata) which provides accommodation for up to 10 personnel and has excess space to accommodate caravans if required. The quarters are powered by genset and have rain water and dam water reticulation.

As evident from the above, the Applicant's intention is to minimise increasing the disturbance footprint. In the event the above is unable to be utilised, a potential location for a temporary 5-10 person exploration camp has been identified in the vicinity of the high voltage transmission lines on EL 6642 – refer Photo 14 – [Section I – Photos](#) and Map 2 – [Section J - Maps](#)) This location is a previously disturbed site south of the access road to the Pernatty South Prospect and heritage clearance was undertaken during survey completed with the Kokatha traditional owners in November 2024 – see [Aboriginal heritage survey](#)

What is the maximum number of personnel requiring accommodation?	Up to 10	
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.		
Additional accommodation and messing maybe required for the drill contractors' staff and will include caravan/donga/ensuite style accommodation, a transportable ablution (shower/toilet) block to provide a third toilet. The ablution facilities can be plumbed into the existing septic system or separately contained and emptied as required by an accredited septic contractor. Narkanna House and the Shearers' Quarters at both Oakden Hills and South Gap Stations have clear established areas in proximity to the main building and there is abundant open ground for the positioning of the supplementary accommodation and other infrastructure (parking bays etc) – see Photos 22 & 23 - Section I - Photos .		
What will be the total area (ha) of the campsite(s)?	2ha	
What will be the total area (ha) of vegetation clearance for the campsite?	0ha	
If vegetation clearance is required, describe the methods used to prepare the site.		
N/A		
Will any excavations be required? If yes, describe the purpose of the excavation and the maximum volume (m ³) of material to be excavated.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
N/A		
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 checked="" type="checkbox"/> No <input type="checkbox"/>	
Existing ablutions are plumbed into an approved septic system and any additional ablution block is planned to be plumbed to this septic or separately contained and will be pumped out by a licenced contractor as required.		
Proposed infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)	Quantity	Description/capacity
Self-Bunded Diesel Tank	1	33,000L self-bunded diesel tank.
Generator	1	Mains power and 25KVA genset, backup if require extra caravan power
Caravan/s or other accommodation	2	Drilling contractor supplied accommodation/ensuite (caravans or containerised).
Ablutions block	1	Shower/toilet block plumbed to existing septic (or self-contained).
Portaloo	1	If ablutions block unable to be obtained.
Shower cubicle	1	If ablutions block unable to be obtained.
Carpark	1	Vehicles parked in a shared area and on existing disturbed ground.
Laydown	1	Laydown for equipment and storage of samples prior to dispatch.

Laydown area details		
Will laydown areas be required? If no, no further information is required.	Yes <input checked="" type="checkbox"/>	No <input 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 checked="" type="checkbox"/>	No <input type="checkbox"/>
Ample cleared room at Narkanna House and the Shearers' Quarters at Oakden Hills and South Gap Stations for laydown		
What will be the maximum area (ha) required for the laydown area(s)?	0.5ha	
What will be the total area (ha) of vegetation clearance for the site?	0ha	
If vegetation clearance is required, describe the methods used to prepare the site.		
N/A		
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 checked="" type="checkbox"/>

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N/A		
Proposed infrastructure (includes hydrocarbon and water storage requirements)	Quantity	Description/capacity
Drilling Fluids	1	<i>Biodegradable Drilling additives/fluids/muds will be required to be stored on pallets above the ground at the designated laydown unless used on the drill site.</i>
Hydrocarbon Storage	2	<i>Diesel fuel to be housed in a 33,000L self-bunded storage tank/truck. Drill contractors will have tanks on a support vehicle which will access the repository and take to drill sites. Drill support vehicle, drill rigs will be required to have spill kits, and the storage tank will have a spill kit positioned at the pump. At the accommodation site a limited storage of petrol in jerry can/s and engine oil will be maintained – this will be stored away from other flammable sources and under cover and on pallets with plastic to contain any potential leak. Volumes are expected to be low (1-2 jerry cans of fuel) up to 1x 200L drum of engine oil.</i>
Other Hydrocarbon storage	1	<i>Any other hydrocarbons – i.e. hydraulic oil, engine oil etc used by the drilling contractor will be required to be stored on pallets above the ground and have plastic sheeting beneath in such a way as to contain potential spills or leaks.</i>
Provide a description and justification of the location (e.g. previously cleared areas), and any other relevant information if required.		
The location of the laydown at each potential accommodation site is easily and readily accessible during the drilling program, being adjacent to entrance and exit tracks to the accommodation and in an area clear of vegetation.		

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"/>
A ground gravity survey has been undertaken over the area of interest of the drilling program. Two quads bike will be utilised to provide ease of transporting field equipment required. No ground or vegetation clearance is 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"/>
<p>The Shearers' Quarters at Oakden Hill station is mains water supplied with a meter located adjacent to the pipeline. It is estimated that the camp will use up to 1.5kL of water per day. Grey and black water use will be plumbed to the existing septic system. Grey water from washing machines and other sources will be distributed to a soakage point at the property. South Gap shearers quarters has rainwater storage and a nearby dam supplies showers and ablutions facilities. Waste water is collected into a septic system.</p> <p>Water required for dust suppression and cooling of booster/compressor units will be sourced from a metered offtake from the Pt Augusta-Woomera pipeline at Narkanna Outstation. An agreement with the landowners in regard to water usage is in place. As drilling is air based only small amounts of water required during drilling. If diamond drilling is undertaken, water supply might be sourced from the RC holes if groundwater is intersected, otherwise water carting from mains supply line will occur.</p> <p>Wetting of tracks is not anticipated to be required due to the limited number of vehicles that will use tracks each day and the seasonal timing of the drilling. If a water truck is required one will be sourced.</p>		
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"/>
Drill water will be sourced from the mains water supply via the Pt Augusta-Woomera pipeline. Until the RC holes have been drilled it is unknown if groundwater can be sourced from them as a supply for diamond drilling. If suitable quantities of groundwater are intersected, then a water extraction license would be obtained prior to extraction.		

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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		

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"/>
Extensive historic drilling and more recent drilling (May & Sept 2024) in the area has not encountered evidence of or identified any hazardous materials associated with expected lithologies; namely the Whyalla Sandstone, Tapley Hill Formation (siltstone, shale, dolomite), Wooralla Dolomite Member and Pandurra Formation (sandstone). A field portable XRF will be utilised during planned drilling to facilitate the characterisation of intercepted lithologies.		

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.
Drilling is planned in stages to manage and mitigate over clearing and to enable the number of holes to be reduced (subject to results). Drill stages are outlined in Maps 2 & 3. Progressive clearing and rehabilitation will be undertaken in line with stages 1-4 where sumps, drill pads and non-essential access tracks will be progressively rehabilitated upon the completion of drilling and receipt of results.
Drill Access Tracks Existing tracks will be utilised wherever possible (see Maps 1, 2 & 3 - Section J - Maps). New access tracks will be created in areas with minimal vegetation and the lowest topographical surface gradients to prevent potential wind and water erosion. Tracks will be single vehicle width and established after consultation with the respective landholders. Staff and contractors will be constrained to the single track with firm instructions to keep to the established tracks included in site induction material. Any significant compaction or erosion along the wheel tracks will be rehabilitated in consultation with the landholders. Access tracks will be paced by the Exploration Supervisor or Geologist ahead of the first pass of vehicles, in order to avoid impact to local fauna or livestock. Observed fauna nests/habitats will be and avoided in favour of alternative routes, as well as photographed and documented for future reference and training. The routes will be as short as practical to also minimise the total area of disturbance. The drill line tracks will be initiated with a 4WD Utility, followed by a front-end loader with its bucket height set at above ground surface to remove tyre puncture hazards while leaving plant root stock and soil intact. Alternatively, a bobcat may be used with a nudge bar and/or roller to flatten vegetation, while maintaining rootstock (see Photo 17 – Section I). Vehicles will follow the newly established access tracks to drill sites as far as reasonably practical and aim to prevent the unnecessary creation of multiple tracks.
New track routes will be designed to avoid water courses; avoid stands of significant or established vegetation; and minimise potential for erosion. Mature vegetation will be avoided where possible and any overhanging trees will be trimmed by chainsaw of branches as opposed to wholesale tree removal. Where practical, entry and exit points will be created to accommodate a trucks ability to turn into the track and not the standard practise of dog legging an entrance. New tracks will follow a direct straight line where possible and avoid S bends during creation to limit tyre rutting. If meandering tracks are required, broad turning circles to prevent excessive erosion and rutting at bends. The use of earthmoving equipment to establish new tracks will be kept to the minimum required for a safe and accessible program.
Access tracks will remain open during pad rehabilitation. Track rehabilitation will involve releveling on the tracks using a grader or front-end loader and where ruts are present, any excess material shall be brought over the tracks. Scarification will be undertaken with the teeth of the

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loader bucket or if compaction has occur using a grader fitted with tines. Noting that soil compaction is unlikely due to the sandy nature and low clay content of the soil in most areas. Where available, dead branches and vegetation shall be placed over scarified tracks to act as seed traps and to minimise wind erosion. Dead vegetation will also be placed and/or bunds will be constructed across entry points to discourage future vehicle access to rehabilitated tracks. Photo monitoring will be undertaken for compliance reporting and to account for rehabilitation progress.

Slimline RC & RC Drill Pads / Sumps

Slimline RC & RC drill sites will be approximately 20m x 20m and within areas of native vegetation drill sites will be situated in cleared areas to avoid large trees and excessive clearing. If necessary, drill sites will be cleared with the use of bobcat/loader (blade up) and/or roller to flatten vegetation, while maintaining rootstock (see Photo 17 – [Section I](#)). Where clearing of under storey vegetation is required (chenopod shrubland e.g. bluebush, saltbush etc) for the drill work area, care will be taken to leave roots in place and to not cut into the soil (i.e. bucket/blade will skim over the ground surface and cut the vegetation). Where necessary, tree limbs may require trimming with a chainsaw to facilitate drill site access/working space for the drill rig and support vehicles. During the rehabilitation the drill pad will be relevelled and stockpiled vegetation (if pruning and cutting occurred) will be distributed over the pad to aid re-vegetation / encourage seed regeneration (see Photo 20 – [Section I](#)). Photo monitoring will be undertaken for Exploration Compliance Reporting.

An in-ground sump will be constructed at each drill site using with a 3-tonne excavator and will be approximately 5m (w) x 2m (l) x 2m (d) for a total of 20m³. Sumps will be constructed by first excavating the Topsoil (top 30cm) and stockpiling adjacent to the sump and separate from lower material which also will be used to build bunds around the sump. Sump construction will have one sloping face to allow egress should wildlife enter. One sump is planned per RC drillhole, but above ground sumps will also be used in the event of significant quantities of groundwater being intersected.

Slimline RC & RC Drilling

Drill bulk samples of approximately 25-30kg will be collected at one metre intervals from the sample cyclone into pre-numbered UV stable PVC sample bags and arranged in rows in the confines of the drill pad. A 3kg sub-sample (analytical sample) is split off the RC cyclone and delivered in a pre-numbered calico bag. Approximately 100g is washed and retained in a chip tray as a representative sample for geological logging. Approximately 300g is retained for pXRF analysis on-site/off-site. Remaining cuttings are stored adjacent the drill site between completion of drilling and rehabilitation. Samples will be taken offsite if required for further testing or the drill cuttings returned downhole as soon as possible after assaying is complete.

Due to the weight of each metre in a bulk sample (green UVA stabilised bags), a 50% reduction in sample recovery has been implemented as a safe work weight limit with the remaining bulk metre sample falling to the ground under the cyclone. Black plastic sheeting will be placed on the ground under the cyclone to capture this bulk material, thus reducing the spread of drill cutting across the ground and to facilitate post-drilling rehabilitation. Used black plastic sheeting will be disposed at a licenced waste facility (Port Augusta Resource Recovery Centre) .

The UVA stabilised 'green' bags will not perish during the period between drilling and rehabilitation that will prevent drill cuttings from spreading over the ground and visually affecting the surface. Analytical samples in calicos will be placed in polyweave bags (~10 samples per bag) and taken back to camp each night for collation and storage in a bulka bag, which will be despatched to the laboratory upon filling.

During rehabilitation excess drill cuttings will either be returned downhole (backfill) or placed in the sump or taken offsite to a waste pit for disposal. Empty plastic bags will be taken to a licenced waste facility for disposal. Analytical samples stored at camp will be all despatched to the laboratory during and at the completion of the drilling program and chip trays stored in the company's storage facility.

Slimline RC & RC drillhole casing will not be cemented but may use Driller's A and B foam. Drillhole decommissioning will review drilling conditions and hole records to ensure holes are backfilled in accordance with ISM21. Previous drilling intersected an unconfined basement aquifer and with drilling occurring in the same vicinity it is expected to intersect the same unconfined aquifer in this program. Upon completion, casing will be removed (where possible) with the assistance of the drill rig head. Where casing cannot be removed, it will be cut/capped during rehabilitation at least 0.5m beneath ground level (see Photo 21 – [Section I](#)) and buried as per Earth Resources Information Sheet M21: Mineral Exploration Drillholes - General specifications for construction and backfilling; including the mounding of topsoil over the drillhole. Rehabilitation will be undertaken upon receipt of sample assays. Drillholes where casing has successfully been removed will be temporarily plugged between completion and rehabilitation. Drill cuttings will be used to backfill the drillhole and any excess cuttings and buried in drill sumps. All rubbish including sample bags, plastic sheeting and PVC casing will be removed and taken to a licenced waste facility. No confined aquifers have been encountered during drilling in the proposed areas so downhole cement plugs will not be required.

Diamond Drilling

Diamond drillholes will be undertaken as twins or tails to RC drillholes and as such will **make use of existing drill pads and drill sumps** at as such no further clearing, or excavation will be required. Pre-collar drill samples will be delivered off the sample cyclone into UV stable PVC sample bags, which will be stored adjacent the drill site between completion of drilling and rehabilitation. Plastic ground sheeting will be placed beneath the cyclone/sampling area; the existing in-ground sump will be re-utilized together with an additional above ground sump to circulate drilling fluids.

NQ Core is approximately 3-5kg/m for shale and sandstone (Tapley Hill Formation and Whyalla & Pandurra Formations) and will be stored in core trays before being transferred offsite. Diamond drill core will be cut and sampled off-site as was the case for diamond drilling undertaken in September 2024. Any pre-collar cuttings will be returned downhole as soon as possible after assaying is complete.

Diamond drillhole casing will not be cemented but may use Driller's A and B foam. Upon completion, casing will be removed (where possible) with the assistance of the drill rig head. Where casing cannot be removed, it will be cut/capped during rehabilitation at least 0.5m beneath ground level and buried as per Earth Resources Information Sheet M21: Mineral Exploration Drillholes - General specifications for construction and backfilling; including the mounding of topsoil over the drillhole. Rehabilitation will be undertaken upon receipt of sample assays. Drillholes

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where casing has successfully been removed will be temporarily plugged between completion and rehabilitation. Any excess pre-collar cuttings and drill spoil will be buried in drill sumps. All rubbish including sample bags, plastic sheeting and PVC casing will be removed and taken to a licenced waste facility. No confined aquifers have been encountered during drilling in the proposed areas so downhole cement plugs will not be required. The drill pad will be relevelled and stockpiled vegetation (if pruning and cutting occurred) will be distributed over the pad to aid re-vegetation. Photo monitoring will be undertaken for Exploration Compliance reporting.

State the estimated budget required to rehabilitate impacted sites.

Estimated rehabilitation cost for the proposed drill program are presented below. These values are based on rehabilitation of the recent RC Drilling (May 2024) which was completed in September 2024 – see below. An estimated all-in rehab cost of **~\$717/drillsite** which equates to a **total rehab budget of \$33,000** with contingency for this program. It is hoped that the rehabilitation costs will come in under budget due to the planned reduction in the size of drill pads, avoidance of excess clearing as well as changes to drill site access tracks, i.e. new tracks will follow a direct straight line where possible and avoid S bends during creation to limit tyre rutting.

Item	Rate	Unit	Proposed drilling		Cost
Dump Fees (green bags, calicos, casing)	\$ 0.20	per meter	4110	m	\$ 822
Track rehab	\$ 665	per kilometre	10.435	km	\$ 6,939
Drill site / sump rehab	\$ 465	per site /sump	46		\$ 21,390
SUBTOTAL					\$ 29,151
CONTIGENCY (13.2%)					\$ 3,849
GRAND TOTAL					\$ 33,000

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.		
<Include text here.>		
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.		
<Include text here.>		

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 (i.e. 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

- 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.
- 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.
- 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.
- For each applicable potential impact, the corresponding outcome and outcome measurement criteria are required.
- 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) 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"> All permitting and clearances as required by DEM through the Mining Act legislation will be completed and a record is maintained of all relevant notices and applications (e.g. Form 21). All Native Title parties with registered areas covering the proposed exploration are engaged by way of having a registered Native Title Mining Agreement (NTMA), having been consulted on locations of drilling and cleared any areas of work by way of a site or area clearance. A register of consultation and communication will be maintained. In addition to required regulatory communication relating to work programs under this E-PEPR DISC will maintain regular consultative engagement with the impacted pastoral lease holders to ensure that work does not adversely impact on their business operations or infrastructure. Early consultation (phone and face to face discussions) with Pastoral Lease holders and Kokatha to explain scope of program, and to ascertain areas of concern will occur. A traffic management plan will be clearly communicated to all workers and contractors regarding requirements to stick to existing tracks, drive at appropriate speeds and report issues relating to degradation of tracks or damage to infrastructure (fences/gates etc). Staff will use existing track networks wherever possible. DISC will undertake a hazard analysis relating to operations related to this E-PEPR and on a daily basis, as part of pre-start meetings assess the potential risks to external stakeholders from other potential impacts including fire danger both from ambient weather conditions, in addition to hot work activities. DISC have mandatory hot work permitting in place during the fire danger season. DISC will maintain a database of incidents where potential sites of Aboriginal heritage importance are identified within the program area. All new tracks and drill sites will be clearly demarcated and ensure that any clearing work undertaken is supervised with adequate recording of 	2	B	Minor	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.

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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		
			<p>work undertaken (including representative photographic evidence) to ensure work is undertaken in such a way as to minimise impact on the environment.</p> <ul style="list-style-type: none"> • DISC will ensure that rehabilitation is completed to required specifications and that records are maintained to support such rehabilitation efforts. Station tracks will be surveyed and similarly rehabilitated to a standard of “as good or better” than prior conditions. • Drill holes will be situated away from infrastructure and stock watering points (i.e. >200m). Most drill holes in this program are located >1km from the nearest residence. Two proposed drillholes, PESDRC25034 & PESDRC25037 are located 800m and 750m from Narkanna House. • Water for drilling ~will be sourced mains water supply at Narkanna House or RC holes if sufficient quantity is intersected during drilling. 					
Stakeholder: DEW	<p>Interference to:</p> <ul style="list-style-type: none"> • existing or permissible land use. • buildings, structures, existing tracks or other infrastructure. • aesthetic values of an area. <p>Noncompliance with legislative requirements.</p>	NO (Applicable to programs located adjacent to or within parks and reserves.)	N/A	1	B	Low	<p>For activities located within or adjacent to regional reserves, national, conservation and marine parks only:</p> <ul style="list-style-type: none"> • no unauthorised interference with park management activities. 	<p>Provide confirmation that:</p> <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, or • 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"> • DISC will ensure that workers/contractors are aware of threatened native flora species that are found in the area and will ensure that all workers are aware of the company’s traffic management plan in addition to a requirement to remain within the confines of cleared tracks when operating in the area. • All initial planning locations are to be inspected with drill sites located in naturally cleared areas where possible. Tracks will be planned to utilise naturally open areas to avoid trees and densely vegetated areas. • Any vegetation clearing activities should attempt to leave rootstock intact in soil, to promote new growth after rehabilitation. All vegetation clearing must be pre-approved by DISC staff. • During drilling phase, all vehicle movements to be limited to already created tracks and pads. • All new tracks and pads, and any areas where existing tracks had to be upgraded, are to be rehabilitated after the drilling program is complete. • All incidents involving native flora/fauna will be reported through established reporting guidelines. • DISC will minimise the spread of potential weeds within the working area by ensuring that all vehicles brought to site are clean and free of seeds and other vegetation material that may potentially introduce weed species. • Track and drill pad clearing operations will be surveyed in advance of clearing by DISC personnel to ensure that mature species or populations of plants of potential higher diversity are avoided wherever possible. • All vehicles will carry a fire extinguisher. A hot work permit system will be implemented onsite which includes a hazard risk assessment. • All hydrocarbons will be banded. Other chemicals or additives for the drill program will be stored in such a manner to ensure that inadvertent access by fauna and or spills are minimised. Safety data sheets shall be maintained at the drill rig. 	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, upgrades to existing tracks) 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>

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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		
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"> DISC will institute a requirement for all vehicles arriving on site to be clean and free of seeds and vegetation that might have potential to spread weeds and pathogens prior to entry to site. A database will be maintained (Safety Culture app) of completed weed and seed inspections. A vehicle washdown bay can be established at Narkanna outstation if required. Traffic management plan shall require vehicles to remain on existing tracks unless safety requirements dictate otherwise. 	2	B	Low	No introduction of new species of weeds and plant pathogens, nor increase in abundance of existing weeds species.	<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 properties¹ 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"> Drillholes will be capped on completion of drilling. Drilling sumps will be created with one ramped face to allow fauna to exit if entrapment occurs to allow egress. During rehabilitation casing will be cut to a depth of no less than 0.3m below ground surface, plugged (with concrete or similar plug) and back filled to prevent animal access. Rehabilitation to occur as soon as possible upon completion of the program and in liaison with the pastoral station owners work regime. 	2	B	Low	No fauna traps created as a result of exploration activities.	<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> <p>Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.</p>
Aboriginal heritage sites	Disturbance to Aboriginal heritage.	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> Heritage clearance survey to be conducted before the drill program or clearing of access tracks/pads occurs. Heritage clearance may be by way of site-specific clearance or area clearance as determined with Native Title holders. All employees and contractors will be inducted and made aware of their responsibilities regarding Aboriginal Heritage should any site be discovered in the area. Employees and contractors are to report any potential sites that may be regarded as heritage to the Site manager. 	2	B	Low	No disturbance to Aboriginal artefacts or sites of significance unless prior approval under the relevant legislation is obtained.	<p>Maintain a database and provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report demonstrating that:</p> <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.)	No sites of European or scientific significance have been identified within the area of proposed works.	1	A	Low	No disturbance to European heritage sites and to sites of scientific and environmental significance unless prior approval under the relevant legislation is obtained.	<p>Demonstrate no impact to heritage sites and sites of scientific and environmental significance by:</p> <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.

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/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 rubbish will be placed in secure bins or green sample bags, not accessible to wildlife. Rubbish collected in bins at Narkanna/South Gap camps will be disposed of at a registered waste facility. Recycling will be disposed of at a registered waste depot. Septic tanks to be pumped as required and at the conclusion of the program by a registered disposal contractor. Ensure hydrocarbon spills are reported within incident systems and appropriate clean up protocols are in place which will include bagging of all contaminated soil/absorbent pads and removal to a registered waste facility. Spill kits to be maintained at all fuel storage sites (such as Narkanna House) in addition to the drill rig/fuel trucks. All drilling additives and products used in the drilling of the drill hole are biodegradable with the exception of engine and hydraulic oils. No engine or hydraulic oil from part failure has occurred during drilling to date and in the event of a failure occurring shutdown of the machinery is immediate and onsite spill responses kits are utilised. A drill rig inspection (prior to commencing the drill program and randomly during the program) and regular daily checks will be made to identify any leaking hydraulics rams. Any leaking hydraulic rams identified during operations the drill contractor will be given notification to rectify within 48 hours and temporary containment measures put in place to keep operating. All drill cuttings are either placed back down the hole during rehabilitation, buried in the sump or taken to a waste facility. The thickness of soil placed over buried spoil will be equal to the depth of the sump (i.e. ~3m) to ensure the spoil remains buried, not uncovered by subsequent wind erosion, and to promote vegetation regrowth. All bulk diesel fuel storage will be within a 33,000L self-bunded tank supplied by the drilling contractor. Smaller vessels (i.e. 20L drums) are to be stored under cover in a designated area on a bunded pallet. Chemicals/muds to be stored neatly in packaging and on pallets in laydown area. Any oils or hazardous chemicals to be stored with plastic sheeting underneath. Heavy plastic RC & diamond sample bags (900mm x 600mm) will be kept in vehicles for the disposal of rubbish and any contaminated material. All rubbish will be removed from site daily. On completion of the program all rubbish associated with drilling (ground-sheeting etc.) will be taken to the Port Augusta Resource Recovery Centre. During activities, waste will be kept in suitable storage containers/bags as appropriate depending upon waste type. Plastic sheeting lining the inground sumps for diamond drilling be removed at completion of each program stage. 	2	B	Low	<p>No contamination of soil and vegetation as a result of exploration activities.</p> <p>*The minor 'hydrocarbon' marks observed on sites from Phase 1 drilling was identified as the rod handler when a rod is lifted vertical in the air, the biodegradable hammer oil (vegetable oil) drips onto the ground.</p>	<p>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:</p> <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. <p>Maintain photographs of all exploration sites and provide representative photos within the annual exploration compliance report demonstrating that drill cuttings are:</p> <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. <p>Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.</p>
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"> DISC staff to ensure earthwork operators are supervised and briefed on the importance of ensuring the minimal clearance as possible with as little disturbance of topsoil as possible. Existing tracks will be used as much as possible, and all vehicles will stay on established pads and tracks unless unsafe to do. New track turnoffs from existing tracks will not be "dog legged" but created to suit truck turning ability. Track creation will be conducted in a manner that minimises disturbance to mature vegetation and avoids tight bends on tracks (that cut into ground and widen track). Speed restrictions will be enforced and driving to the conditions. Any deviations around mature populations or particularly diverse populations of native species are undertaken by wide bends of the track as opposed to narrow, sharp turns in order to lessen the damage to soil and tracks by vehicles during the program. 	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 are maintained the soil profile and topography are 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.

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"> Rehabilitation to be undertaken such that the original profile of land is returned to a level that is consistent with its surroundings and that any stockpiled topsoil is redistributed evenly over the area. All rehabilitation includes the scarification/furrowing of the resultant completed works to allow for the capture of windblown native seeds and promote revegetation. All new tracks will have vegetation placed such that it camouflages the track turnoff (e.g. by placement of dead branches/stumps present in the area) in order to disincentivise the potential for vehicles to disturb rehabilitated areas. All employees and contractors will be aware of the traffic management plan which includes speed limits and the requirement to restrict driving to existing demarcated tracks and avoid creating new tracks. All drill cuttings are either placed back down the hole during rehabilitation, buried in the sump or taken to a waste facility. The thickness of soil placed over buried spoil will be at least 50cm to ensure the spoil remains buried, not uncovered by subsequent wind erosion, and to promote vegetation regrowth. 					<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.)	All surface water bodies (including salt lakes), and drainage courses will be avoided during the carrying out of exploration activities.	1	A	Low	<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"> All aquifers encountered during drilling will be reported to DISC staff and recorded (historic drillhole records indicate one unconfined aquifer likely to be encountered). DISC is to ensure drilling operator's muds/additives that they are degradable and non-hazardous in quantities used (MSDS verification). Drill holes will be temporarily capped or plugged following the completion of drilling and rehabilitated (backfilled with drill cuttings) once assay results for drill samples have been received. This will be undertaken as soon as possible following completion of each part of the exploration program, and progressively throughout the programs as necessary and if practicable. Significant groundwater (confined aquifers) has not been identified at any of the drill sites within the E-PEPR application areas, however drilling activities will be monitored closely to identify any groundwater encountered. The area of drilling is not artesian, and hydrostatic conditions are not anticipated to be affected by the drilling program. If required, drilling will be suspended to ensure that any groundwater does not exceed the capacity of sumps or tanks. Drillers will be made aware of the requirements for decommissioning and that should multiple aquifers be identified, appropriate casing off of separate aquifers will be required in accordance with DEW/DEM guidelines. 	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>
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	There may be potential for groundwater to be discharged as part of the drilling process, particularly during RC drilling. This E-PEPR has allowed for the collection of this water by way of sumps at the drill site so as to prevent excessive discharge into the environment, given the expected moderate to high salinity.	2	B	Low	<p>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</p>	<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>

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor <small>Lists are not exhaustive.</small>	Potential impacts <small>Lists are not exhaustive.</small>	Is the potential impact applicable (Yes/No) <small>Some potential impacts are applicable to all programs.</small>	Control strategies <small>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.</small>	Risk assessment <small>LH = likelihood of consequence CQ = severity of consequence</small>				
				LH	CQ	Risk		
		groundwater into the surrounding environment.)	Any groundwater intersected during RC or diamond drilling will be captured by plastic ground-sheeting beneath sampling areas and contained within in-ground sumps.				prior approval under the relevant legislation is obtained.	Representative photos and water affecting activity permits (where applicable) to be included within the annual exploration compliance report.
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.)	<ul style="list-style-type: none"> Water for the drilling program and camp operations will be sourced from mains water supply at Narkanna House. Water supply at South Gap is sourced from a nearby dam and water conservation methodologies will be employed during the exploration duration If RC drilling intersects sufficient quantities of groundwater and can be extracted with ease a water license for extraction will be obtained. 	1	A	Low	No public nuisance impacts resulting from the extraction of water for exploration purposes, unless prior approval under the relevant legislation is obtained.	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. 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.
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.)	<ul style="list-style-type: none"> DISC will complete rehabilitation of access tracks as per DEM guidelines. During rehabilitated of access tracks, dead vegetation will be placed at the entry point and/or bunds of soil to discourage/block vehicle entry along rehabilitated track. All sites will have pre and post rehabilitation photographs, including access points to tracks. 	1	B	Low	Rehabilitated access tracks remain permanently closed, unless prior approval under the relevant legislation is obtained.	Maintain before and after photographic evidence demonstrating that all tracks are closed and rehabilitated within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Representative photos are to be included within the annual exploration compliance report. Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.
Community/landowners	Damage to infrastructure and loss of income through fire.	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> DISC have a policy of no field activities on days marked as catastrophic fire days by the CFS and a Fire index rating of greater than 50. DISC have a policy of daily hazard assessment during the fire danger season and this incorporates checks of the CFS fire danger rating for the area of activity in addition to reference to local conditions – the site supervisor at toolbox meetings discusses the relevant hazards and has the authority to halt operations on a catastrophic fire danger day. Only diesel vehicles will be allowed on exploration / drill sites. The fuel storage will be located in a cleared area (fire break) with a spill kit. All vehicles will have fire extinguishing facilities (either fire extinguishers or fire suppression units). Hot Work Permits are mandatory for any hot work undertaken. DISC does not allow the construction of open fires for comfort at any camps within the fire danger season. Outside of fire danger season a hazard assessment will be undertaken. Designated smoking areas at camp will be established with appropriate butt disposal. Drillsite smoking if smokers are present will be required within the confines of the cleared pad and must have appropriate butt disposal. 	2	C	Moderate	No loss of infrastructure or income through fire as a result of exploration activities.	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming that no uncontrolled fires* occurred. Alternatively, provide a report on the independent investigation of all uncontrolled fires* demonstrating that the licensee could not have reasonably prevented the fire through the implementation of precautionary measures.
General public	Injury or death to members of the public as a result of exploration activities.	Yes (Applicable to all programs.)	<p>Note that whilst the likelihood of such an incident occurring is rated as rare, the consequence has been rated as Catastrophic, producing a risk ranking of 'High'. This is deemed acceptable by the Operator, given the extremely low likelihood, and the safety measures and level of supervision that will be present at the rig.</p> <ul style="list-style-type: none"> Inductions will be mandatory for the landholders to be able to visit specific drill site areas. Signage will be placed away from the drill rig advising no entry and the mandatory PPE for the site. Drilling will be undertaken in areas where there will be no interference with the activities of landholders, and this will be discussed with landholders prior to commencement particularly with respect to grazing land and stock movement. 	1	E	High	No accidents involving the public that could have been reasonably prevented by the licensee.	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming no accidents occurred involving the public during and after the exploration program. If an accident involving the public did occur, provide a copy of the independent investigation report within the annual exploration compliance report demonstrating that the licensee could not have reasonably prevented the accident through the implementation of precautionary measures.

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"> Vehicle speeds will be kept to the lowest speed possible so to prevent dust generation and impacts on any passing fauna, livestock or persons. The operator will maintain ongoing communications with the landholders to keep them informed of the drilling program's progression and to keep informed of the landholder's grazing activities in nearby areas. 					
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.)	The region has been drilled extensively in the past and there are no known sources of exposure (uranium or thorium) to low level radiation.	1	A	Low	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)								

* 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)

DISC employs leading practise exploration methodologies that are equally matched by its corporate policies and safe work procedures for the communities and environment in which we operate in. Our systems ensure all employees and contractors are inducted and informed of their obligations to Workplace Health and Safety, the environment and community we explore in. Our exploration programs are designed using best practises when considering the environment, Aboriginal heritage and safe work program.

DISC formulates and establishes stakeholder relationships to work mutually and cooperatively with landowners, traditional owners and other key agencies. These relationships build mutual benefit and interactions to each party to achieve the outcomes desired.

The South Australian projects are managed by a single point of contact with the support of DISC Management and Board to assist stakeholders with any concerns they may have.

All DISC staff and contractors receive an induction before commencing work on the Pernatty Project site, which includes the proposed work areas. The induction addresses site specific OHS, environmental, and heritage issues.

All DISC staff receive more detailed training and induction on the operation of exploration activities, which includes familiarisation with the Company's Safe Work Procedures. DISC has documented Safe Work Procedures including:

- Principal Hazard Management
- Contractor vehicle inspections and operator inductions
- Program and rehabilitation compliance reporting
- Daily safety and environmental reporting
- Safety & Environmental incident reporting.
- Work procedures and standards.

Documentation can be provided upon request.

A copy of the approved EPEPR is provided to all DISC staff working on the exploration activity.

DISC maintains a digital Vehicle Inspection Log Book with digital photographic evidence of vehicle inspections.

A Drill Hole Rehabilitation Register is maintained to document the rehabilitation status of all drill holes, and a GIS file documents the rehabilitation status of access tracks.

At the conclusion of rehabilitation work the activity is documented with details of the work completed and photographic evidence with before and after images.

Form 21B Notices inform landowners of DISC's planned exploration activities. DISC's Exploration Manager provides updates to relevant landholders as exploration activities progress.

A Complaints Register is maintained by DISC, with any complaints from stakeholders in regard to any of its exploration activities at the Pernatty Project promptly address and rectified.

Compliance is reported to the DEM in the annual Pernatty Project Environmental Compliance Report.

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.

Pernatty Project – Flora and Fauna Lists (Nature Maps – 11/11/2024, excel spreadsheet), EPBC Act Protected Matters Report - Pernatty Project - 1km buffer (12/11/2024, pdf & excel spreadsheet)

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 (GDA94)	Northing (GDA94)	Zone	Details and Comments
Powerline – Pernatty South Prospect (looking NW) – EL 6507	17/11/22	Photo 1, Section C	716385	6485471	53	Existing track running parallel to the three electricity transmission lines that cut across the Pernatty South and Pernatty prospects



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Fenceline – Pernatty South Prospect (looking W) – EL 6642	17/11/22	Photo 2, Section C	716480 mE	6484630 mN	53	New east-west fence line at the Pernatty South access which can be used for access to drill sites both to the south and north of the fence line.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
MODRC24010 (not drilled) - Moseley Prospect (EL 6640)	29/08/24	Photo 3, Section C (Landform & Topography)	697856	6498886	53	Edge of the Bowen land system at the Mosely Prospect looking south west across the Hesso land system towards the Oakden Hills Homestead and the isolate mesa - South Oakden Hill (Aracoona Land System)



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PES_23_002_rehab3 – Pernatty Prospect (EL 6302)	04/11/24	Photo 4, Section C (Soil and surface cover)	717458	6492088	53	Curve in 'meandering' access track, PES_23_002, used during RC Drilling undertaken in May 2024 and rehabilitated completed in September 2024 – photo looking east.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PESDRC25046 (proposed) – Pernatty Sth Prospect (EL 6302)	22/11/24	Photo 5, Section C (Soil and surface cover)	716603	6487263	53	Proposed “Stage 3’ drillhole, PESDRC045, adjacent to existing station track.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Typical vegetation assemblages	04/02/22	Photo 6, Section C	725500	6497580	53	Project area Note sandy soils



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Pernatty Prospect – existing track (EL 6302)	30/08/24	Photo 7, Section C (Fauna)	715910	6492920	53	Emu are common throughout the project area particularly in areas of sparser vegetation.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Pernatty South Prospect (EL 6302)	03/11/24	Photo 8, Section C	716607	6486762	53	Sand goannas (<i>Varanus gouldii</i>) have been observed during site visits.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PES_25_002 (Proposed Access track) - Pernatty South Prospect (EL 6507)	18/11/24	Photo 9, Section C	714705	6486159	53	Central Bearded Dragon (<i>Pogona vitticeps</i>) was observed in the vicinity of 'Stage 1' proposed access track, PES_25_002, during the Cultural heritage survey at the Pernatty South Prospect.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Existing station track – west of Yudnapinna Outstation (EL 6642)	05/09/24	Photo 10, Section C	712044	6468869	53	Shingleback Skinks / Sleepy Lizards (<i>Tiliqua rugosa</i>) were observed at a number of locations during RC drillsite rehabilitation undertaken in September 2024 included in the vicinity of the Oakden Hills Homestead and along an existing track within the Yudnappina Station.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PESDRC24028 (cancelled) – Pernatty Sth Prospect (EL 6642) – looking SE	02/11/24	Photo 11, Section C (Cultural Heritage Survey)	716629	6483808	53	Although the proposed drillsite, PESDRC24028, has sparse vegetation, this 'Stage 1' drillhole was removed from the proposed drilling program due to access issues – namely denser vegetation to the east in the vicinity of the powerline corridor restricting access to the drill site.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PESDRC25042 (cancelled) – Pernatty Sth Prospect (EL 6642) – looking SE	02/11/24	Photo 12, Section C (Cultural Heritage Survey)	720004	6486334	53	This drillhole was removed from the proposed drilling program due to its vicinity to water infrastructure namely tank and troughs for station livestock.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
CUL24_001 – isolated artefacts – Pernatty South Prospect	05/09/24	Photo 13A & B, Section C	714712	6486167	53	Isolated artefacts observed during the Nov24 Cultural heritage survey of the Pernatty South Prospect in the vicinity of proposed drill access track. The track (PES_25_002) was modified / shifted away from artefacts.



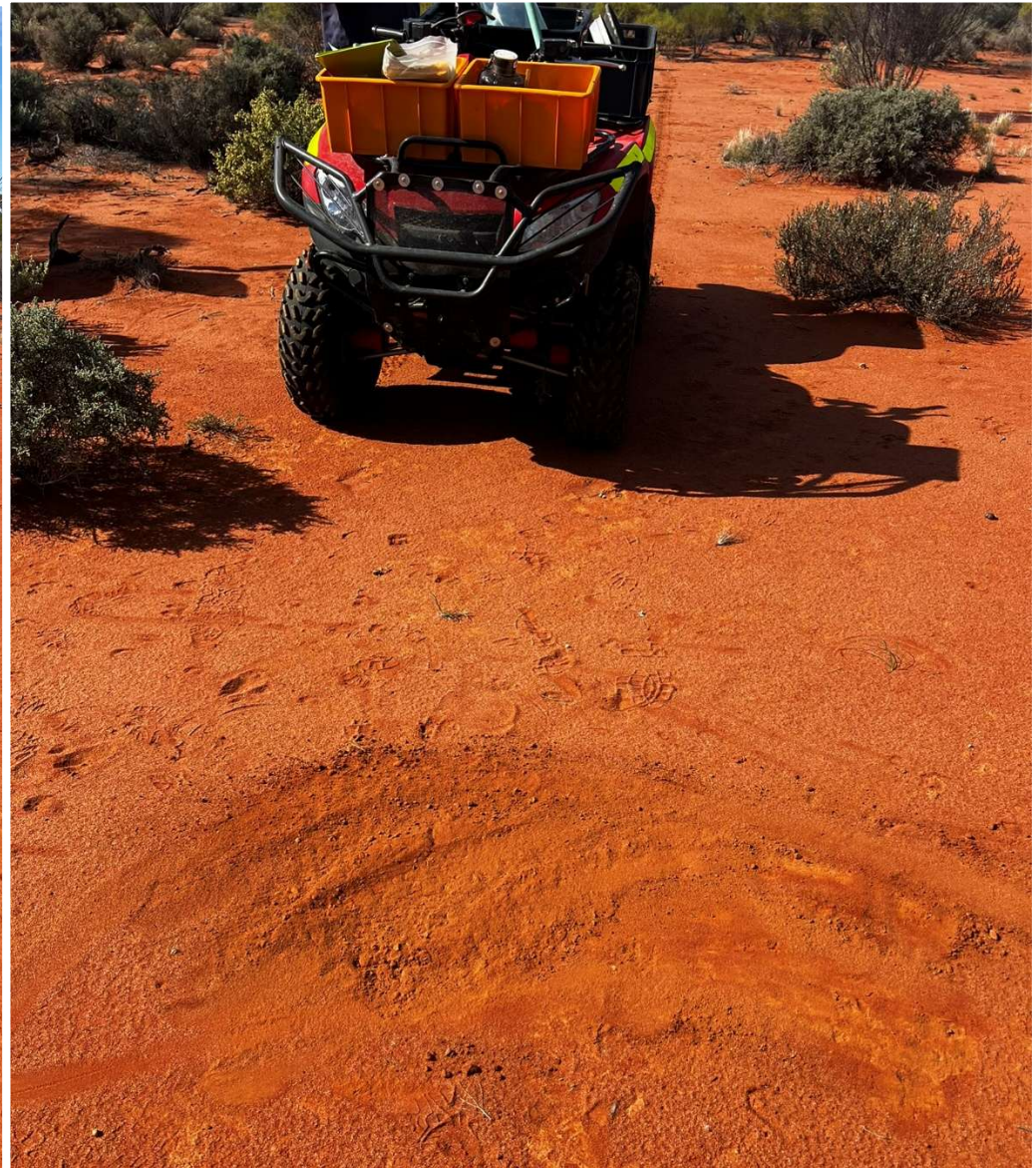
Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Potential Location for temporary camp (Pernatty Sth Prospect) – looking south – EL 6642	18/11/21	Photo 14, Sections C & D	717950	6482121	53	Potential location for temporary 5–10-person exploration camp – heritage clearance undertaken during Cultural Heritage Survey (18 th November 2024). Site is already disturbed and was possibly used as a laydown area or camp during construction of the high voltage powerline.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
SS240200 – soil sampling site, Pernatty Sth Prospect – EL 6507	18/11/21	Photos 15A & B, Section D	715114	6486721	53	Soil sampling is undertaken by Euro Exploration services with the aid of ATV/Quad bikes. The sample hole is backfilled and levelled after sampling.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PESDRC25008 (proposed DH) – Pernatty South Prospect – EL 6642	19/11/21	Photo 16, Section D	6484442	715708	53	Proposed drill site adjusted / shifted into natural clearing to avoid larger trees in consultation with Kokatha traditional owners during the Cultural Heritage survey.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Northern Eyre Peninsula	21/09/2016	Photo 17, Section D	n/a	n/a		Photograph shows the use of a bobcat and roller to clear and flatten Mallee scrub at an exploration project on the Eyre Peninsula



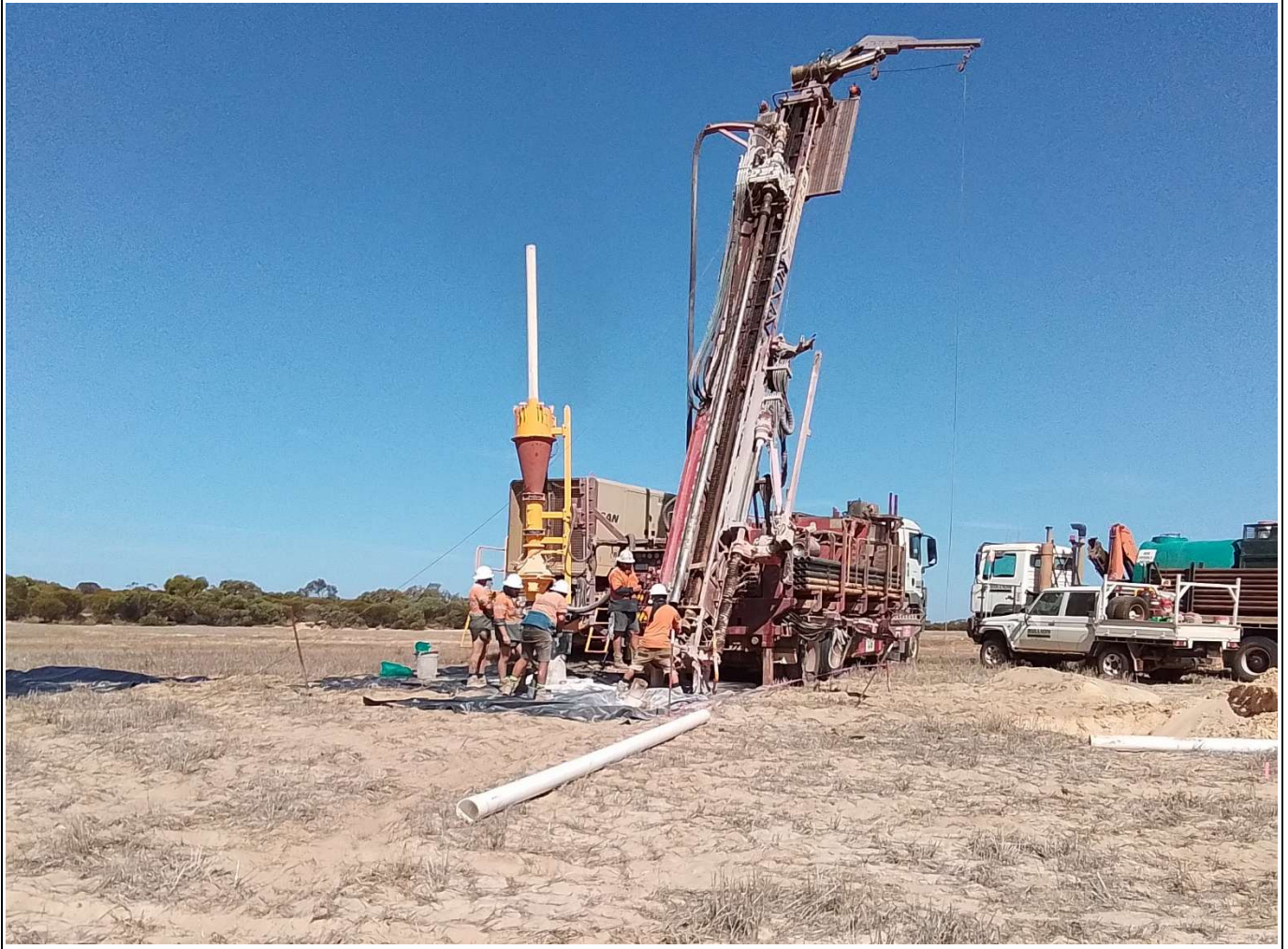
Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
McLeod Drilling MD1 Almet drill rig and compressor support vehicle mounted on 6x6 Land Cruisers (drilling in cropped land on the Eyre Peninsula)	n/a Photo provided by McLeod Drilling	Photo 18, Sections D	n/a	n/a	n/a	McLeod Drilling's MD1 Almet rig is capable of slimline RC to approximately 120m. The compact rig minimises the footprint of AC/slimline RC drill sites. Note: trailer mounted IBC and 1000L plastic tub for containing any intersected groundwater and plastic sheeting under sampling area.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Bullion Drilling Reverse Circulation (RC) drill rig - drilling in cropped land on the Eyre Peninsula.	18/03/2023 Photo provided by Bullion Drilling	Photo 19, Sections D	n/a	n/a	n/a	Bullion Drilling Reverse Circulation (RC) drill rig on 6x6 truck which can reach a depth of 200m, supported by a 6x6 booster truck, water truck and 4x4 Landcruiser ute. Option for drilling deeper holes (>120m) with ease of access at Pernatty Project.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PE005 - Moseley Prospect (EL 6640)	03/09/2024	Photo 20, Section D	697305	6499447	53S	Stockpile vegetation spread across rehabilitated drillsite (PE005) – looking north



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
PE038 - Pernatty South Prospect (EL 6507)	03/09/2024	Photo 21, Section D	714523	6487479	53S	Photograph casing being capped/cut below the ground surface during drillhole rehabilitation and after cuttings have been used to backfill drillhole.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Narkanna House	17/11/24	Photos 22A& B, Section C & D	714793	6483460	53	Shipping Container (Storage) and laydown area at Narkanna House



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Laydown area - Narkanna House	17/11/24	Photo 23, Section C & D	714793	6483460	53	View from Narkanna Outstation showing abundant clear area for additional infrastructure.



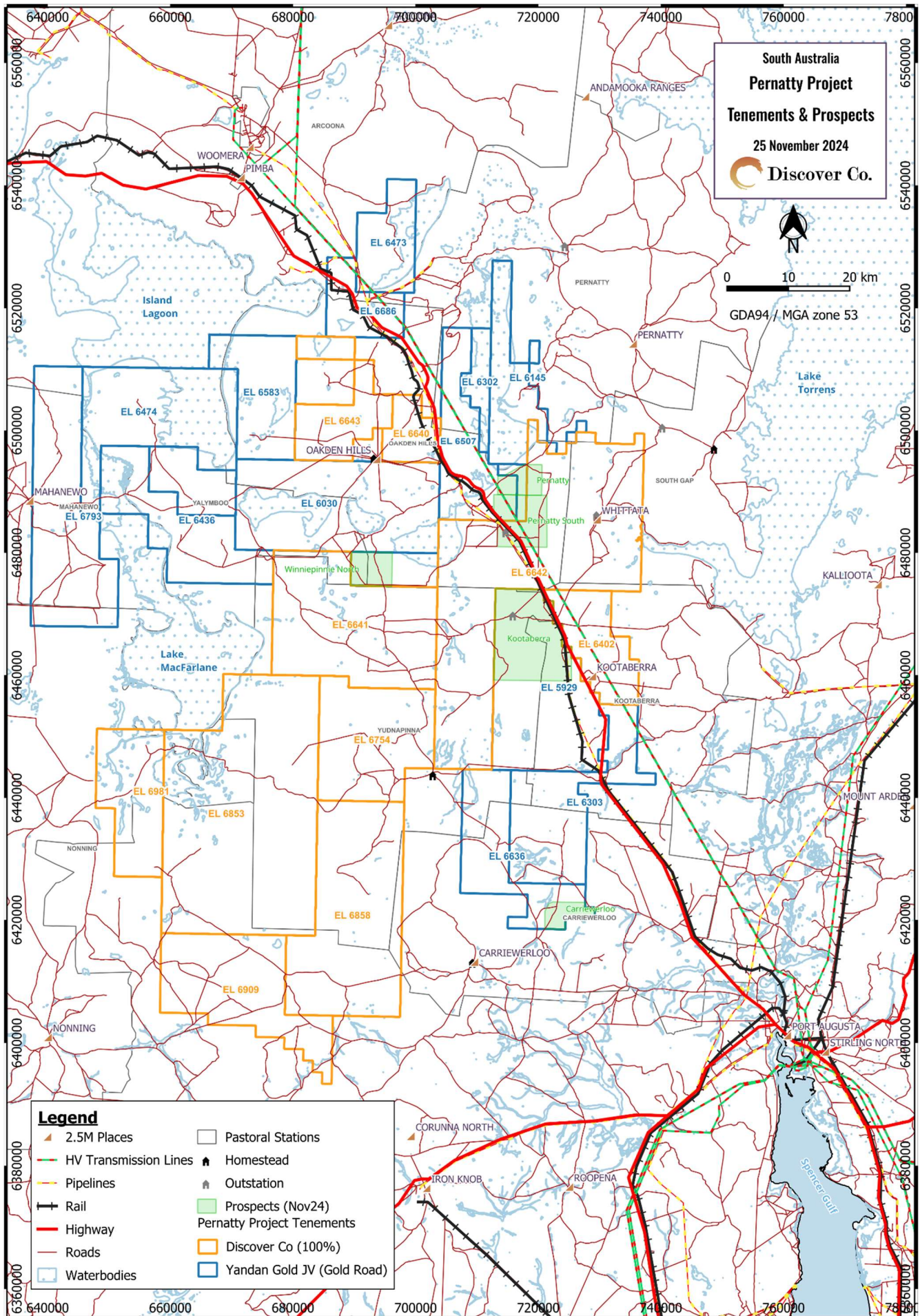
SECTION J – MAPS

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).

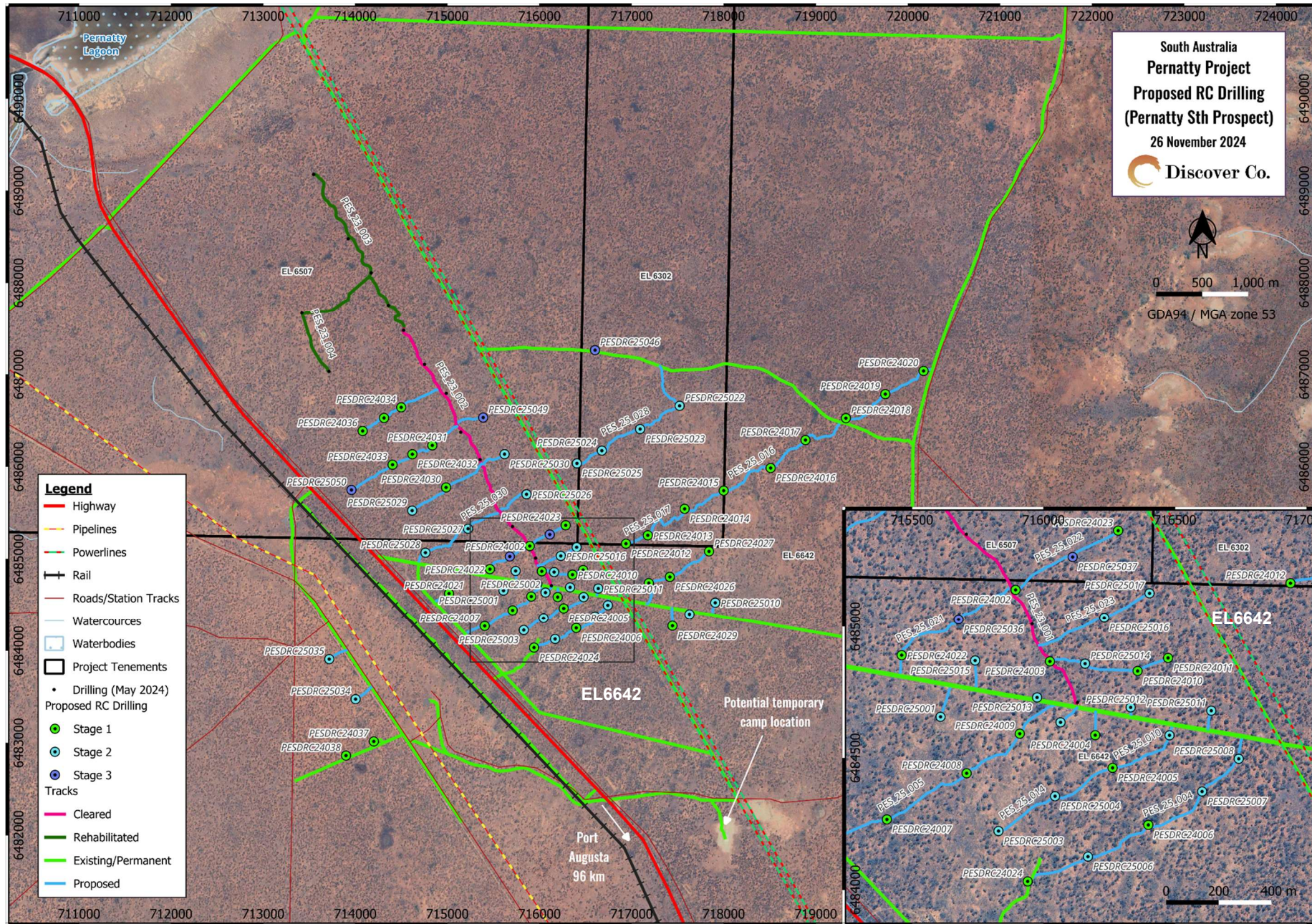
All maps and sections must conform to the standards outlined in the Exploration PEPR Terms of Reference.

Exploration PEPR application – 12-month period



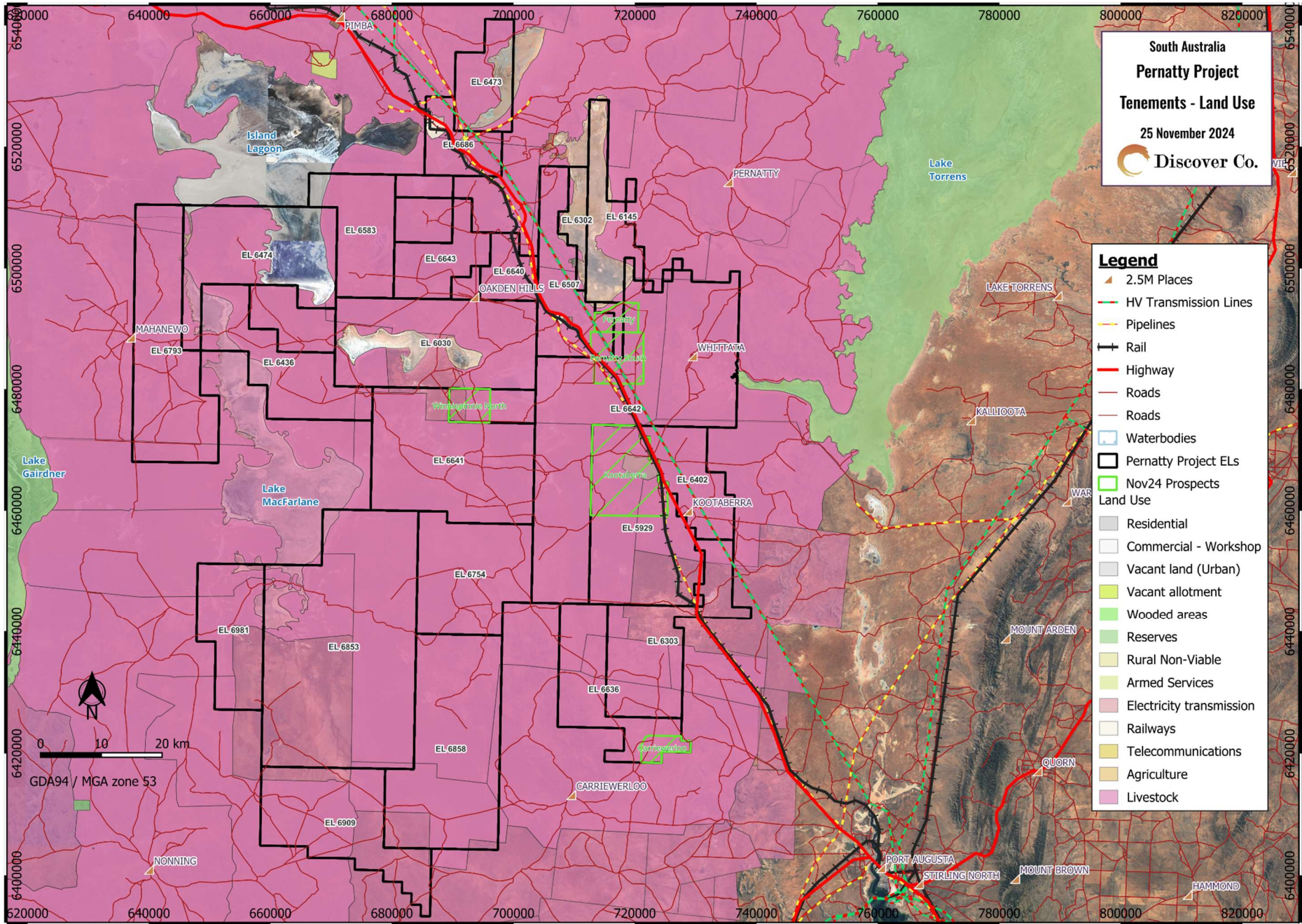
Map 1. Pernatty Project Location Map, Prospects and Infrastructure.

Exploration PEPR application – 12-month period



Map 2. Pernatty South Prospect - Access and Proposed Drilling (ELs 6302, 6507 & 6642) – Heritage Clearance has been undertaken of 69 drillsites and their respective access tracks.

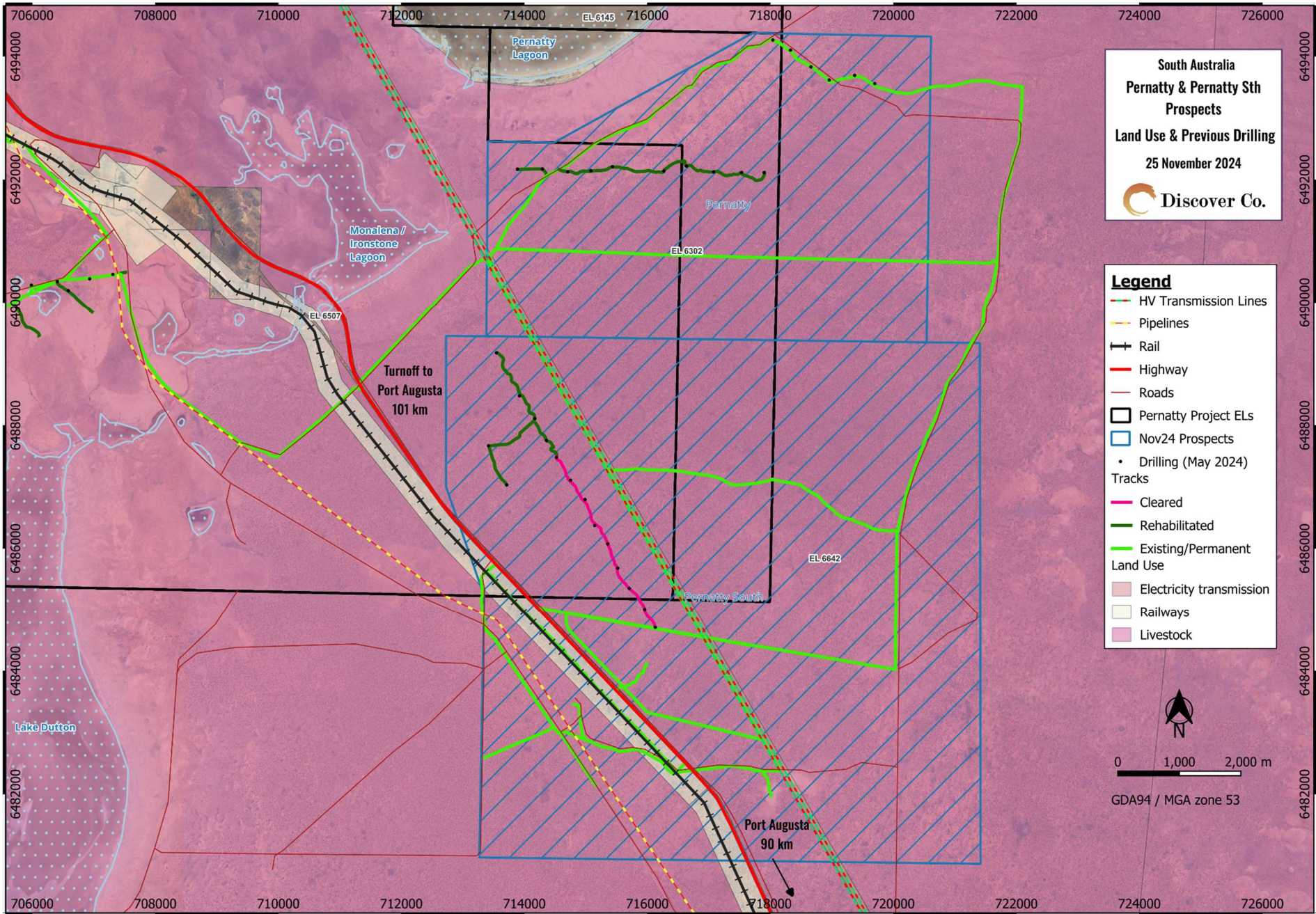
Exploration PEPR application – 12-month period

















Map 3. Pernatty Project – Land Use, Prospects and Infrastructure

12-month Exploration PEPR template – January 2021

Exploration PEPR application – 12-month period

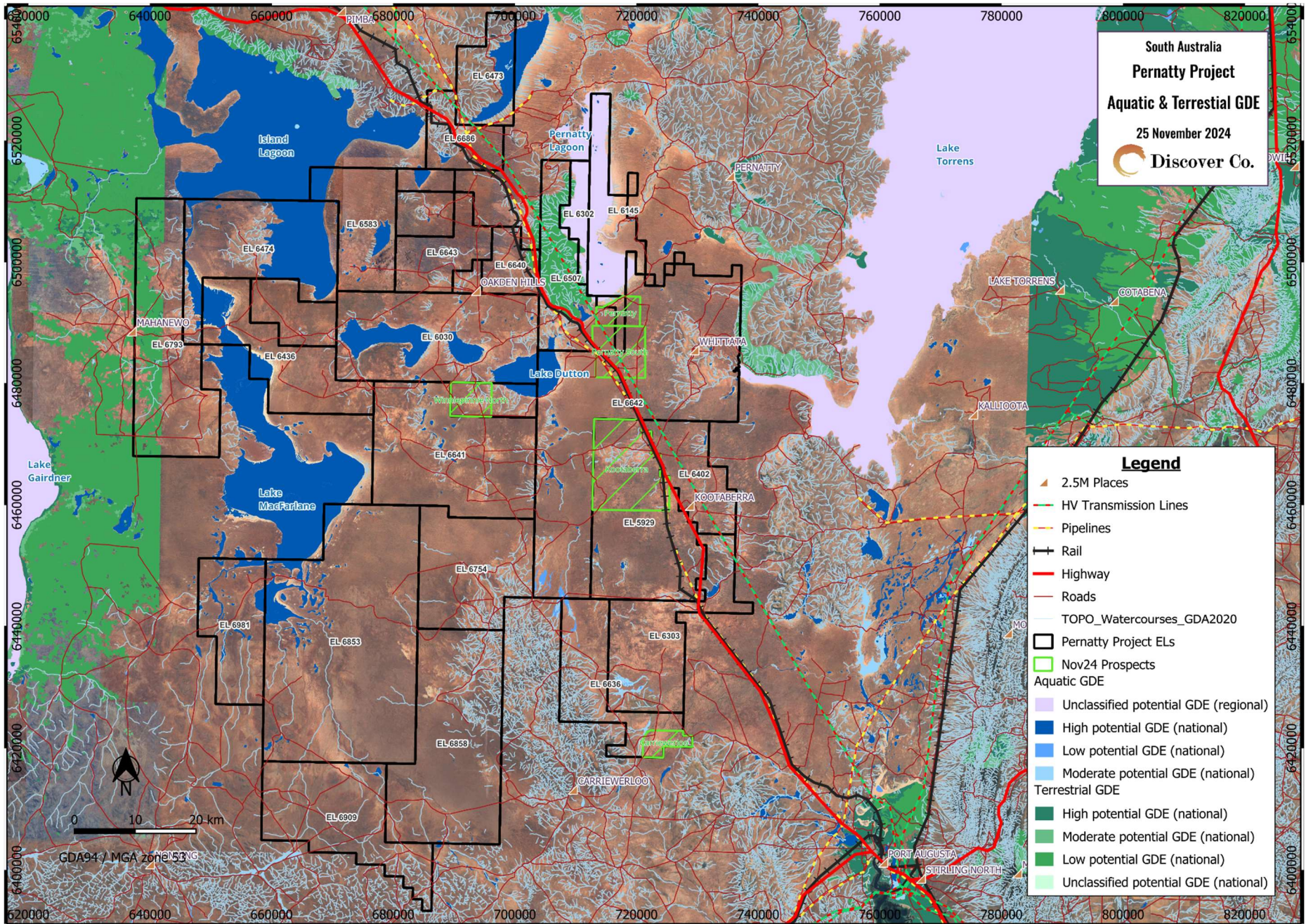


South Australia
**Pernatty & Pernatty Sth
 Prospects**
 Land Use & Previous Drilling
 25 November 2024


- Legend**
-  HV Transmission Lines
 -  Pipelines
 -  Rail
 -  Highway
 -  Roads
 -  Pernatty Project ELs
 -  Nov24 Prospects
 -  Drilling (May 2024) Tracks
 -  Cleared
 -  Rehabilitated
 -  Existing/Permanent Land Use
 -  Electricity transmission
 -  Railways
 -  Livestock

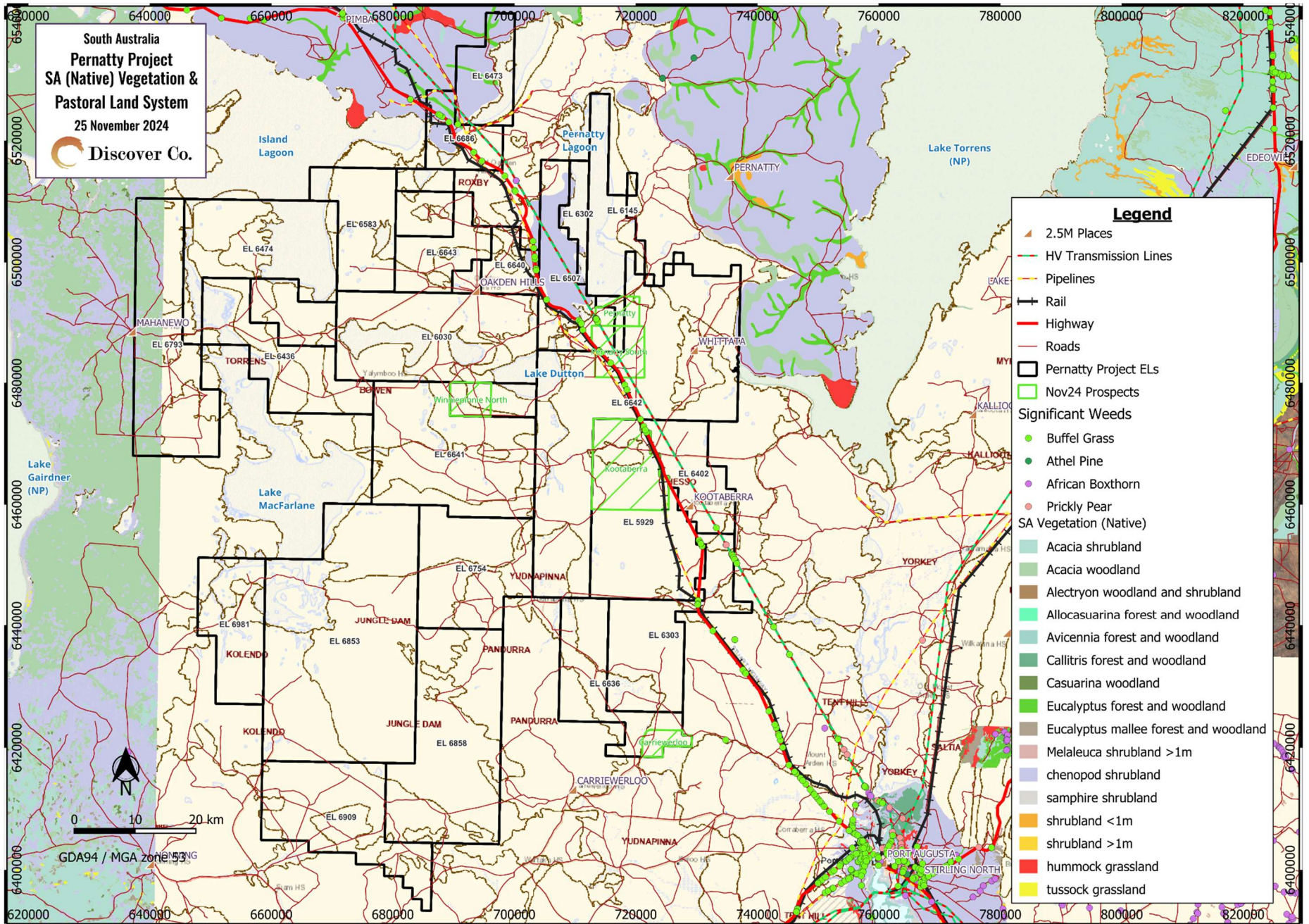
Map 4. Pernatty & Pernatty South Prospects - Land Use, Infrastructure and Previous Drilling (May 2024)

Exploration PEPR application – 12-month period



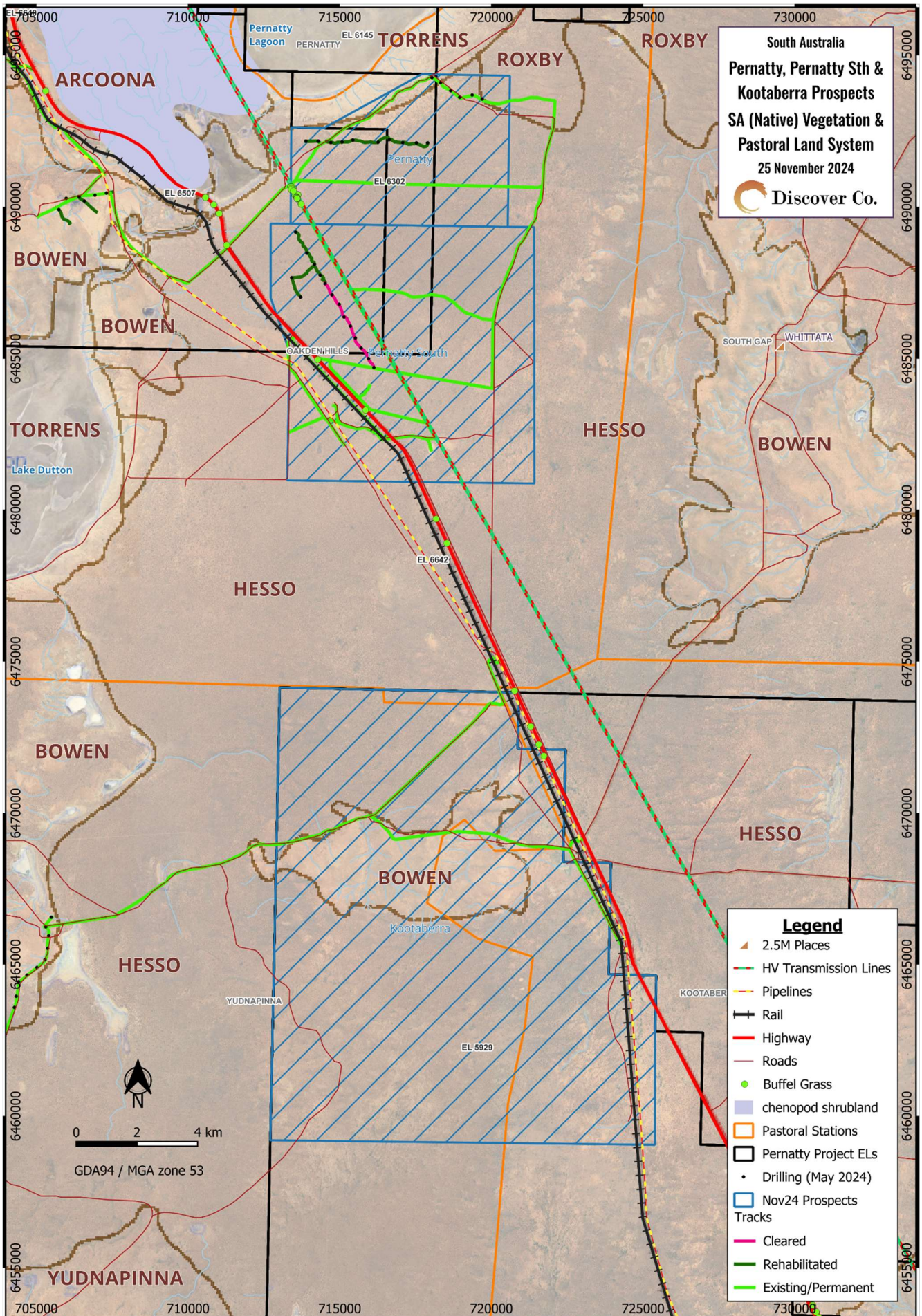
Map 5. Aquatic and Terrestrial GDE (Groundwater Dependent Ecosystems) – Pernatty Project Area

Exploration PEPR application – 12-month period

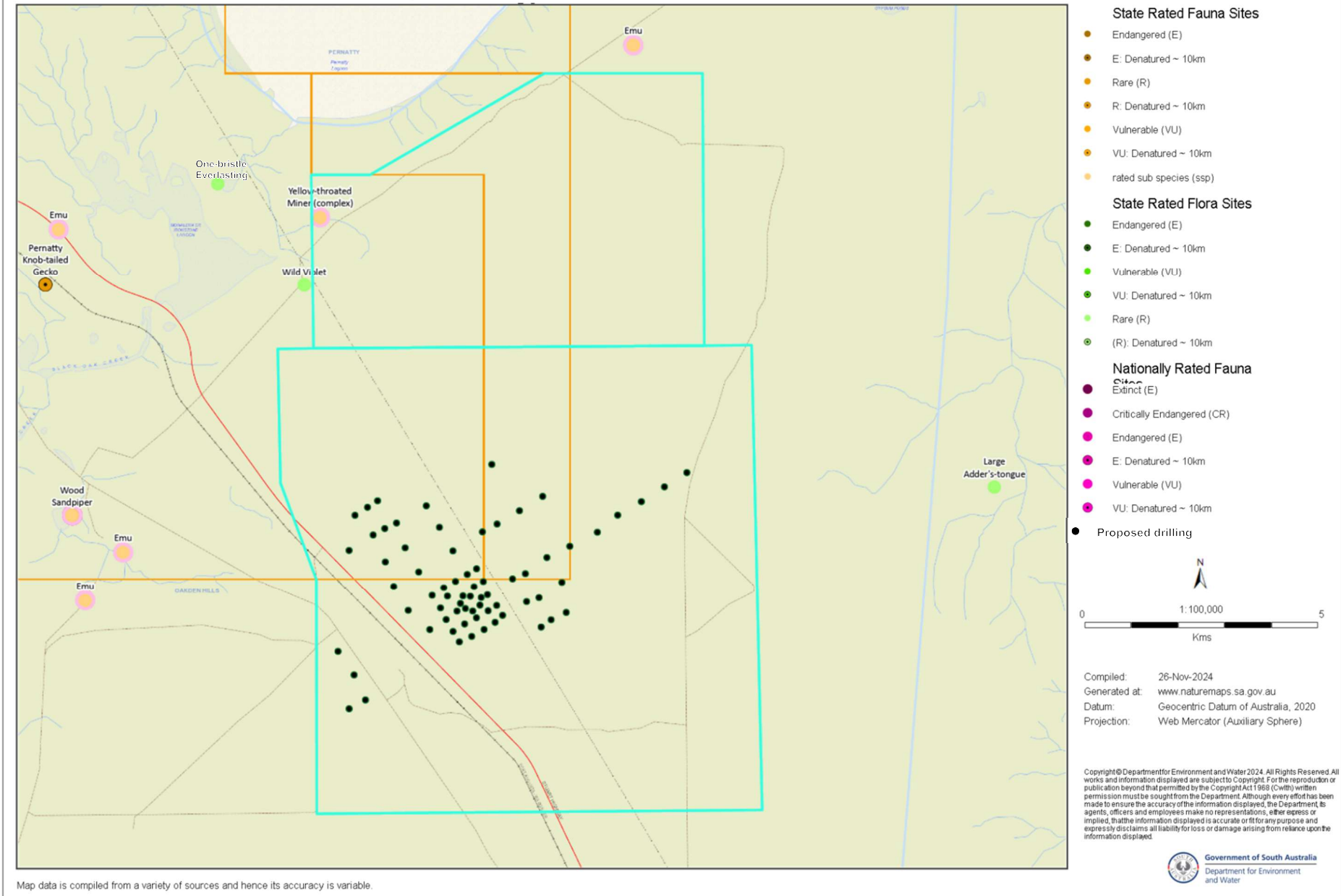


Map 6. Pernatty Project Tenements with SA Vegetation, Pastoral Land Systems and Significant Weeds

Exploration PEPR application – 12-month period



Pernatty & Pernatty Sth Prospects - Nationally and State Rated Flora and Fauna



Map 8. Nationally and State Rated Flora and Fauna Sites in relation to Pernatty & Pernatty Sth Prospects (turquoise polygons) and Project ELs (orange polygons) – Nature Maps

SECTION K – PUBLIC RELEASE

PEPR documents will be registered on the mining register and publicly released in full without the need to request consent from the tenement holder(s). Ultimately, it is the applicant's responsibility to ensure that confidential, or commercially sensitive, information is not included within the PEPR application.

SECTION L – SUBMISSION OF THE APPLICATION

An application for an Exploration PEPR or PEPR review, must be submitted in the following form, unless otherwise specified by the Director of Mines or an authorised officer:

- an electronic version of the PEPR must be submitted using the exploration PEPR template(s) provided on the DEM Minerals website,
- the electronic version must be submitted online through the DEM Minerals website using the exploration PEPR submission form,
- the electronic version must be submitted in one single Acrobat PDF file, and
- Microsoft Word-compatible files must be submitted if requested by the Director of Mines (or delegate), or other authorised officers.