



Government
of South Australia

Department for
Energy and Mining

20 January 2025

Mr Aaron Brown
Director of Exploration
Marmota Limited
Unit 6, 79-81 Brighton Road
GLENELG, SA 5045

Email: aaron@marmota.com.au

Dear Mr Brown,

Approval Notification - Exploration Program for Environment Protection and Rehabilitation (EPEPR2022-036) Review EL 6166, EL 6463, EL 6513

The program review for **EL 6166, EL 6463, EL 6513**, final version submitted on 20 December 2024 to drill an additional 60 shallow (average 35m) Titanium drill holes on EL 6166, has been approved in accordance with Section 70C 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 17 October 2024.

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-1-1-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 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 6166, EL 6463 and EL 6513		
Tenement holder(s) (for each tenement)	Marmota Ltd– EL 6166 and EL 6463 Marmosa Pty Ltd (wholly owned subsidiary of Marmota)– EL 6513		
Operating company	Marmota Ltd		
Agency agreement (if applicable)			
PEPR prepared by	Katherine Williams Marmota Limited Tenement and Database Geologist		
Project supervisor/contact person(s)	Aaron Brown Marmota Limited Director of Exploration 08 8294 0899 or 0413 020 134		
Project/prospect name	Gawler Craton Project		
Location details	100km South West of Coober Pedy within Mulgathing Station		
Project description, commodity type and mineralisation model	<p>RAB/AC/RC Drilling to test for Rare Earth minerals and Gold within Southern Tenements, EL 6166, EL 6463 and EL 6513</p> <p>Original EPEPR – EL 6513 - 100 Drillholes (RAB.AC, RC). EL 6166 - 150 Drillholes (RAB.AC, RC). EL 6463 - 20 Drillholes (RAB.AC, RC). Estimated 270 drillholes, 13,500m and 270 sumps.</p> <p>Revision - 28/11/2022 – Update to tracks, pads, sample management to EPEPR for potential change in rig type.</p> <p>Revision - 24/05/2023 – Addition of 5 x drill holes (RAC/AC/RC) to drill hole depth of 135m holes within EL 6166.</p> <p>Revision – 7/09/2023 – Request for EPEPR extension for additional 12 Months to allow completion of Phase 2 Drilling and compiling, collecting further samples as required.</p> <p>Revision – 10/10/2024 – Request for EPEPR extension for additional 12 Months to allow completion of Phase 2 Drilling and compiling, collecting further samples as required.</p> <p>Revision – 16/12/2024 – Additional 30 drill holes for EL 6166 to complete shallow (Average 35m) Titanium drill holes – See figure 8 for proposed holes</p>		
Proposed project schedule	Start date	17/10/2022 (as per Approval Letter)	End date 17/10/2025 EPEPR EXTENSION REQUEST

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	Aaron Brown	Signature (digital allowed)	
Position	Director of Exploration	Date	16/12/20204

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

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

SECTION B – PROGRAM PREPARATION AND ACCESS TO LAND

Work undertaken in preparing the proposal

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

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

Marmota is familiar with the terrain and worked within these regions previously. It is anticipated the contractor will complete the works over weeks to months. The proposed works will use AC/RC or RAB rig.

Marmota has also reviewed along with the Drilling proposal:

- Protected Matter Search Tool – Department of Agriculture, Water and the Environment
- naturemaps
- SARIG
- PlanSA
- BOM (Ground Water) and Water Connect

Marmota has initially contacted Mulgathing Pastoral station of the proposed work through Form 21b submitted 15/08/2022, with pastoralist to be contacted again prior to finalising program of the timing and program specifics.

Marmota contacted Mulgathing Station to advise potential changes to Scope of Works on the 28/11/2022.

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
EL 6166 EL 6463 EL 6513	Darren Wilson Mulgathing Station	Pastoral	Grazing	15/8/2022			<i>In person – 29/11/2022 Phone + Email - 30/11/2022 Phone – 5/12/2022</i>	<i>Multiple communications regarding the updating program (tracks, hole locations etc) - No concerns regarding changes to PEPR</i>
EL 6166 EL 6463 EL 6513	AMYAC (MPS Law)	Native Title	Native Title	15/8/2022				<i>Request for further information, Surveys which covers exploration programs. Marmota responded that proposed exploration works have been planned within Heritage Cleared areas and surveys used to prepare PEPR</i>

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

<Include text here.>

Provide any additional relevant information.

Exploration PEPR application – 12-month period

<Include text here.>

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.
- Railways 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.

Please see attached Figure 1 for the overview of the infrastructure and Housing for the proposed programs.

The Gawler Craton Project Area as the crow fly's is ~100km Southwest of Coober Pedy

The proposed work areas are EL 6166 (tenement portions A and B), EL 6513 and EL 6463 (tenement portion C).

The proposed areas are approximately 100km of the sturt highway. The closest drill hole will be 6km from Mulgathing Homestead within EL 6166 (tenement Portion B) and 1.6km from Muckanippie outstation. The Proposed work area in EL 6513 (Ambrosia) contains Ambrosia Outstation, Water tanks and Bore Holes, Marmota will discuss with the station manager any drill holes around the outstations to ensure there is no disruption. EL 6463 (portion C) and EL 6166 (portion A) also contains Bore Holes which Marmota will not be interfere with.

Existing tracks are shown on Figure 1, which would be used for the exploration program.

Drill Lines, access tracks, pads and sumps. as an abundance of caution, if required - figure 1b. Clearing will be subject to ground conditions and if required for drill rig access.

Exploration PEPR application – 12-month period

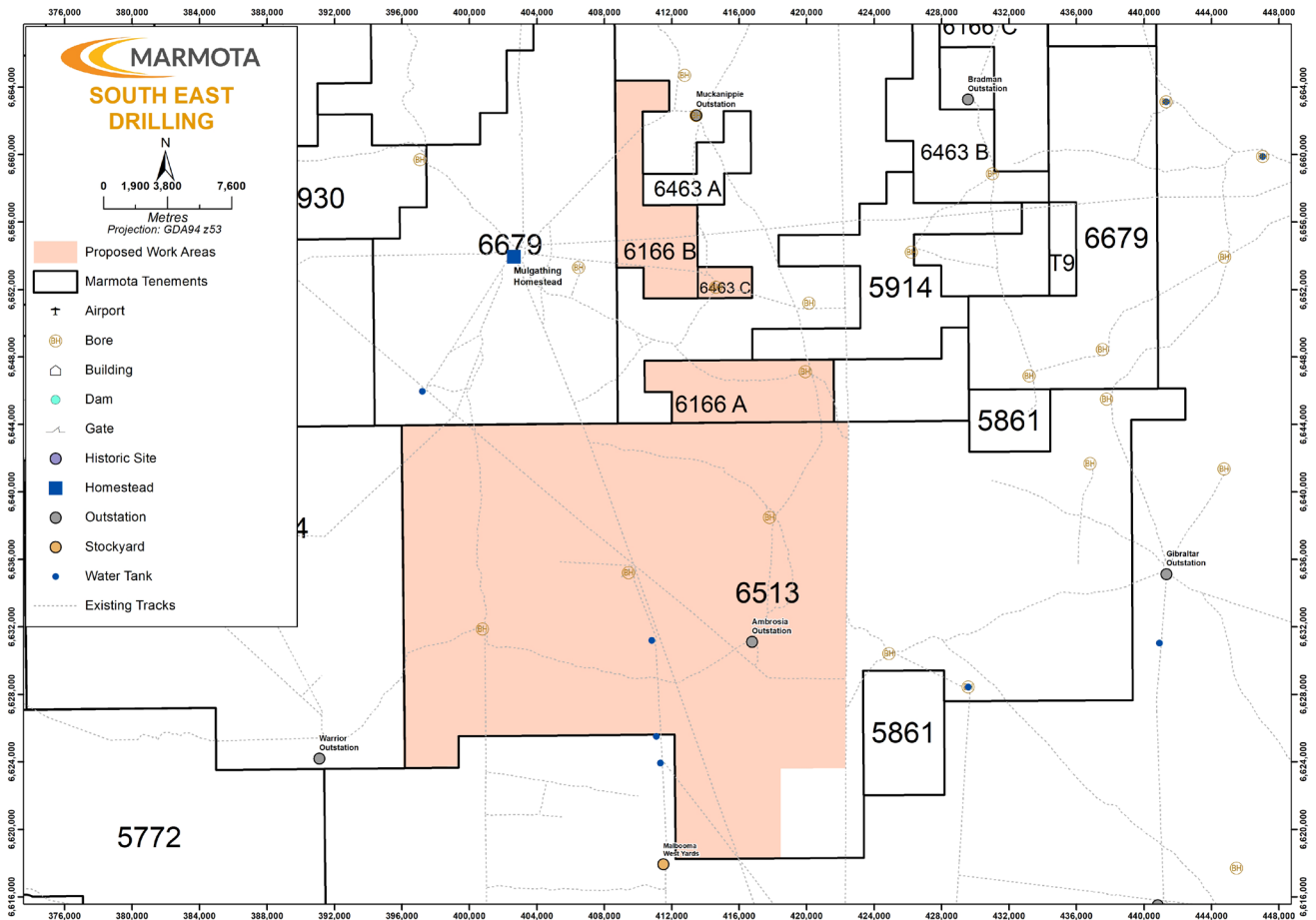


Figure 1 – Overview of the Proposed Work area and Proximity to infrastructure

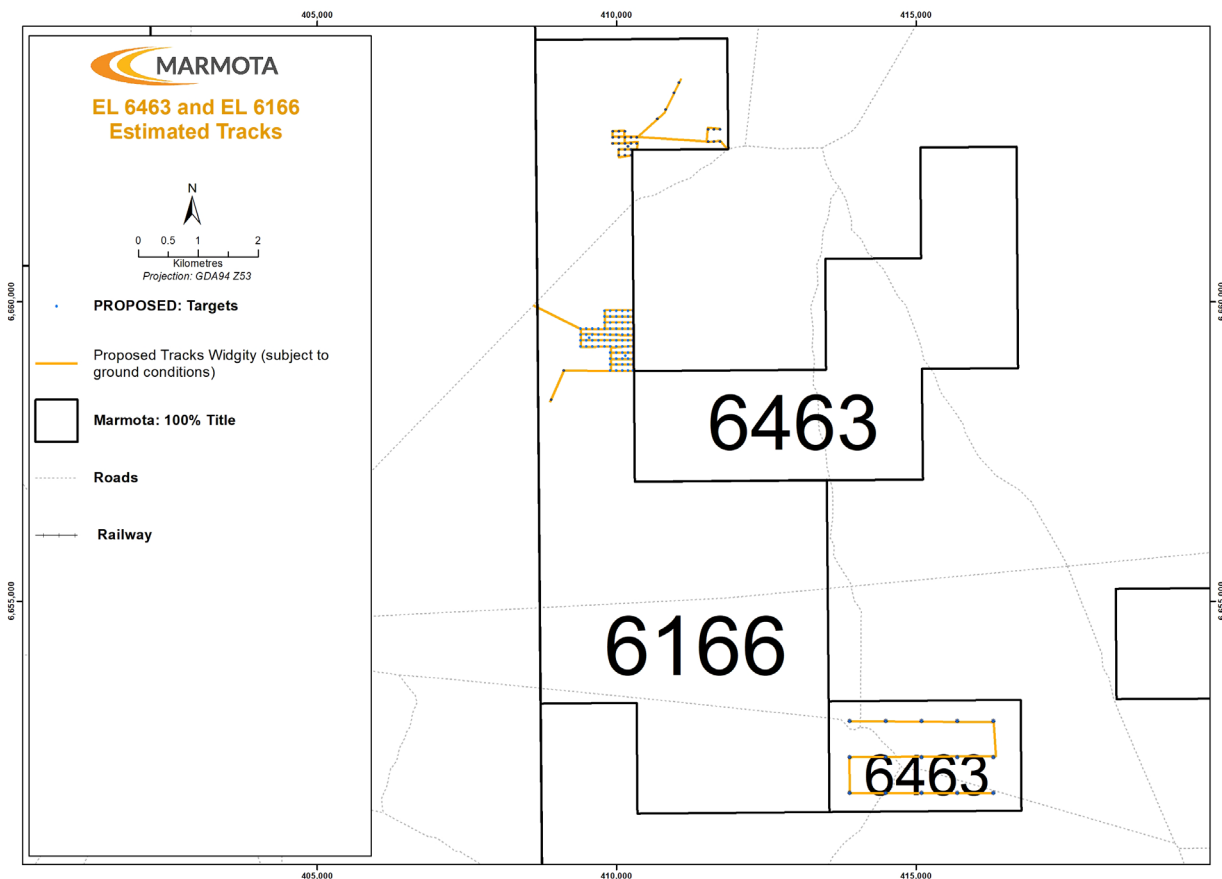


Figure 1b – Estimated Access tracks and drill lines (will be as required subject to ground conditions and hole approval).

Exploration PEPR application – 12-month period

Land use and tenure

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

Land tenure/type	Applicable	Land use	Applicable
Freehold	<input type="checkbox"/>	Grazing	<input checked="" type="checkbox"/>
Pastoral lease	<input checked="" type="checkbox"/>	Cultivated land	<input type="checkbox"/>
Perpetual lease	<input type="checkbox"/>	Residential	<input type="checkbox"/>
Crown land	<input 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 checked="" 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 council

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

<Include text here.>

Provide any additional relevant information.

<Include text here.>

Woomera Prohibited Area (WPA)

Will activities be conducted within the WPA	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Do you have a resource exploration permit in place?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
In which zone will activities be conducted?	Green				
Does the Exploration Permit allow the operator to conduct exploration operations in the WPA?			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
What is the expiry date of the resource exploration permit?			2/12/2028		
Identify closure periods that may impact on the exploration program.					
Amber Zone 2 –16 October 2022- 5th November 2022 & 20th February 2023 – 12th March 2023.					
Green Zone Closure –16 October 2022- 5th November 2022					

Exploration PEPR application – 12-month period

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"/>
<If yes, indicate which area.>		
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.		
<Include text here.>		

Native title

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

Native title			
Is the proposed area of exploration located on native title land?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (If no, no further information in this section required.)		
Are there registered native title party/parties in the area of proposed exploration?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Antakirinja Matu-Yankunytjatjara (AMYAC)	If no, an Environment, Resources and Development (ERD) Court determination is required.
Have you negotiated a native title mining agreement?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the agreement registered?*	<List the tenements covered by the agreement>
		Yes <input type="checkbox"/> No <input type="checkbox"/>	
Have you accepted an Indigenous land use agreement (ILUA)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the ILUA registered?*	EL 6166 - ALMAC Acceptance Document - Antakirinja ILUA (Endorsed 23/03/2014) EL 6463 - ALMAC Acceptance Document - Antakirinja ILUA (Endorsed 12/08/2016) EL 6513 - ALMAC Deed of Assumption between Monax Mining limited and Marmosa Pty Ltd. Refer NTRI 128 - ILUA (Endorsed 20/03/2014)
Have you obtained ERD Court determination?†	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the determination registered?*	<List the tenements covered by the determination>
		Yes <input type="checkbox"/> No <input type="checkbox"/>	

* 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.

<Include text here.>
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Landform and topography

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

The work areas are relatively flat lying with low level salt bush and occasional trees. As the land is relatively flat lying it is not envisaged that the area will be affected by erosion.

Exploration PEPR application – 12-month period

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 surface cover are predominantly Alluvial and undifferentiated Quaternary calcrete and Aeolian sediments. Minor Granite/tonalite/gneiss sub crop occurs throughout the tenement. The nature of the soils combined with the low relief landscape over the main area of interest would indicate that excessive erosion, runoff, compaction, or dust generations is not expected to be caused by exploration activities.

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"/>
Each drillhole location will be accessed prior to drilling if drilling holes are within drainage lines/creeks they will be adjusted to a minimum of 50m from drainage line and/or creek or if no suitable location can be established, they will not be included in the drilling		
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"/>
<If yes, provide the name(s)>		
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"/>
<If yes, provide the name(s)>		

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"/>
<Include text here.>		

Description of the locality/area where different groundwater conditions may be encountered

Eromanga Basin, Gawler Craton Province - Fractured Rocks Cambrian to Precambrian Rocks and Unconsolidated Sediments - includes alluvial sediments and wind blown sands. SWL ranges between 20-500m over EL 6513 and EL 6166 (portion A) and 10-20m over EL 6166 (portion B and EL 6463 (portion C). The shallow water yield of the water is recorded to be 0.5 L/S.

Recorded TDS – minimum 380 mg/L and Maximum 21,657mg/LL. The average TDS from all recorded water drill hole is 7,459 mg/L which is not suitable for Primary Industries – drinking water Primary Industries and aquaculture and human consumption of aquatic foods as greater than 3,000 mg/L. The recorded SWL is between 16-42m and average of 31m.

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
Fractured Rocks Cambrian to Precambrian Rocks		Fracture rocks		unconfined	See Description above for TDS and SWL over proposed work areas
Unconsolidated Sediments - includes alluvial sediments and wind blown sands		Unconsolidated sediments		unconfined	See Description above for TDS and SWL over proposed work areas

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

Unconfined aquifers

Recorded water drill holes within the explorations area have recorded TDS averaging greater than 7,000 mg/L and would not be suitable for Primary Industries (Livestock Drinking or Aquaculture and human consumption of aquatic foods) and will not be used for any water source during drilling. Where Water TDS has been recorded to be less than <3,000 mg/L they are within proximity of current infrastructure such as Ambrosia Outstation and Highlighted Bore Holes on Figure 1.

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

Exploration PEPR application – 12-month period

Aquatic GDE

There is no Aquatic GDE within the proposed work area or immediately surround the project

Terrestrial GDE

The work areas are either in no or Low Potential GDE – vegetation consisting of Acacia Woodland and low-lying Alluvial plains and salt lakes with some dunes of the Gairdner Region.

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

Yes

No

If yes, provide the name of the area.

<Insert the name of the area>

Provide any additional information, if required.

<Include text here.>

Native vegetation

Will you be working within areas of native vegetation? If yes, provide the following information:

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

Yes

No

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

The area is predominantly an open Acacia woodland, other flora identified in the proposed work area are listed below. The understory varies in response to landscape position along with changes in the near surface regolith materials and hydrology.

Significant habitats and flora

If you are working within areas of native vegetation, use the table below to list any significant habitats and any rare or endangered flora species located or reported to have been in the area that may be impacted by the proposed program. Include known sightings of listed species on a locality plan/map.

Species/habitat	Common name	NPW Act rating*	EPBC Act rating†
Acacia aneura complex	Mulga	No rating	No rating
Acacia aneura var. aneura	Mulga	No rating	No rating
Acacia aneura var. intermedia	Broad-leaf Mulga	No rating	No rating
Acacia sp.	Wattle	No rating	No rating
Acacia tetragonophylla	Dead Finish	No rating	No rating
Aristida contorta	Curly Wire-grass	No rating	No rating
Atriplex vesicaria	Bladder Saltbush	No rating	No rating
Brachyscome ciliaris var. lanuginosa	Woolly Variable Daisy	No rating	No rating
Calotis cymbacantha	Showy Burr-daisy	No rating	No rating
Calotis multicaulis	Woolly-headed Burr-daisy	No rating	No rating
Casuarina pauper	Black Oak	No rating	No rating
Cephalopterum drummondii	Pompom Head	No rating	No rating
Chrysocephalum pterochaetum	Shrub Everlasting	No rating	No rating
Digitaria brownii	Cotton Panic-grass	No rating	No rating
Dissocarpus paradoxus	Ball Bindyi	No rating	No rating
Dodonaea sp.	Hop-bush	No rating	No rating
Einadia nutans ssp. nutans	Climbing Saltbush	No rating	No rating
Enneapogon caerulescens	Blue Bottle-washers	No rating	No rating

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<i>Eragrostis eriopoda</i>	Woollybutt	No rating	No rating
<i>Eragrostis setifolia</i>	Bristly Love-grass	No rating	No rating
<i>Eragrostis xerophila</i>	Knotty-butt Neverfail	No rating	No rating
<i>Eremophila alternifolia</i>	Narrow-leaf Emubush	No rating	No rating
<i>Eremophila gilesii</i> ssp. <i>gilesii</i>	Hairy-fruit Emubush	No rating	No rating
<i>Eremophila latrobei</i> ssp. <i>glabra</i>	Crimson Emubush	No rating	No rating
<i>Eremophila scoparia</i>	Broom Emubush	No rating	No rating
<i>Eremophila serrulata</i>	Green Emubush	No rating	No rating
<i>Eriachne mucronata</i>	Mountain Wanderrie	No rating	No rating
<i>Erodium cygnorum</i>	Blue Heron's-bill	No rating	No rating
<i>Eucalyptus socialis</i> ssp. <i>socialis</i>	Beaked Red Mallee	No rating	No rating
<i>Euphorbia tannensis</i> ssp. <i>eremophila</i>	Desert Spurge	No rating	No rating
Gramineae sp.	Grass Family	No rating	No rating
<i>Hibiscus krichauffianus</i>	Velvet-leaf Hibiscus	No rating	No rating
<i>Lawrencella davenportii</i>	Davenport Daisy	No rating	No rating
<i>Leptospermum coriaceum</i>	Dune Tea-tree	No rating	No rating
<i>Maireana georgei</i>	Satiny Bluebush	No rating	No rating
<i>Maireana planifolia</i>	Flat-leaf Bluebush	No rating	No rating
<i>Maireana sedifolia</i>	Bluebush	No rating	No rating
<i>Maireana</i> sp.	Bluebush/Fissure-plant	No rating	No rating
<i>Malvastrum americanum</i> var. <i>americanum</i>	Malvastrum	No rating	No rating
<i>Melaleuca xerophila</i>	Boree	No rating	No rating
<i>Minuria leptophylla</i>	Minnie Daisy	No rating	No rating
<i>Monachather paradoxus</i>	Bandicoot Grass	No rating	No rating
<i>Ptilotus obovatus</i>	Silver Mulla Mulla	No rating	No rating
<i>Ptilotus obovatus</i> (NC)	Silver Mulla Mulla	No rating	No rating
<i>Pycnosorus pleiocephalus</i>	Soft Billy-buttons	No rating	No rating
<i>Rhyncharrhena linearis</i>	Bush Bean	No rating	No rating
<i>Santalum acuminatum</i>	Quandong	No rating	No rating
<i>Sclerolaena convexula</i>	Tall Bindyi	No rating	No rating
<i>Sclerolaena cuneata</i>	Tangled Bindyi	No rating	No rating
<i>Sclerolaena diacantha</i>	Grey Bindyi	No rating	No rating
<i>Sclerolaena divaricata</i>	Tangled Bindyi	No rating	No rating
<i>Sclerolaena eriacantha</i>	Silky Bindyi	No rating	No rating
<i>Sclerolaena obliquicuspis</i>	Oblique-spined Bindyi	No rating	No rating

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Senecio gregorii	Fleshy Groundsel	No rating	No rating
Senna artemisioides ssp. petiolaris		No rating	No rating
Sida calyxhymenia	Tall Sida	No rating	No rating
Sida fibulifera	Pin Sida	No rating	No rating
Solanum lasiophyllum	Flannel Bush	No rating	No rating
Solanum quadriloculatum	Plains Nightshade	No rating	No rating
Teucrium racemosum	Grey Germander	No rating	No rating
Thyridolepis multiculmis		No rating	No rating
Tragus australianus	Small Burr-grass	No rating	No rating

* 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.

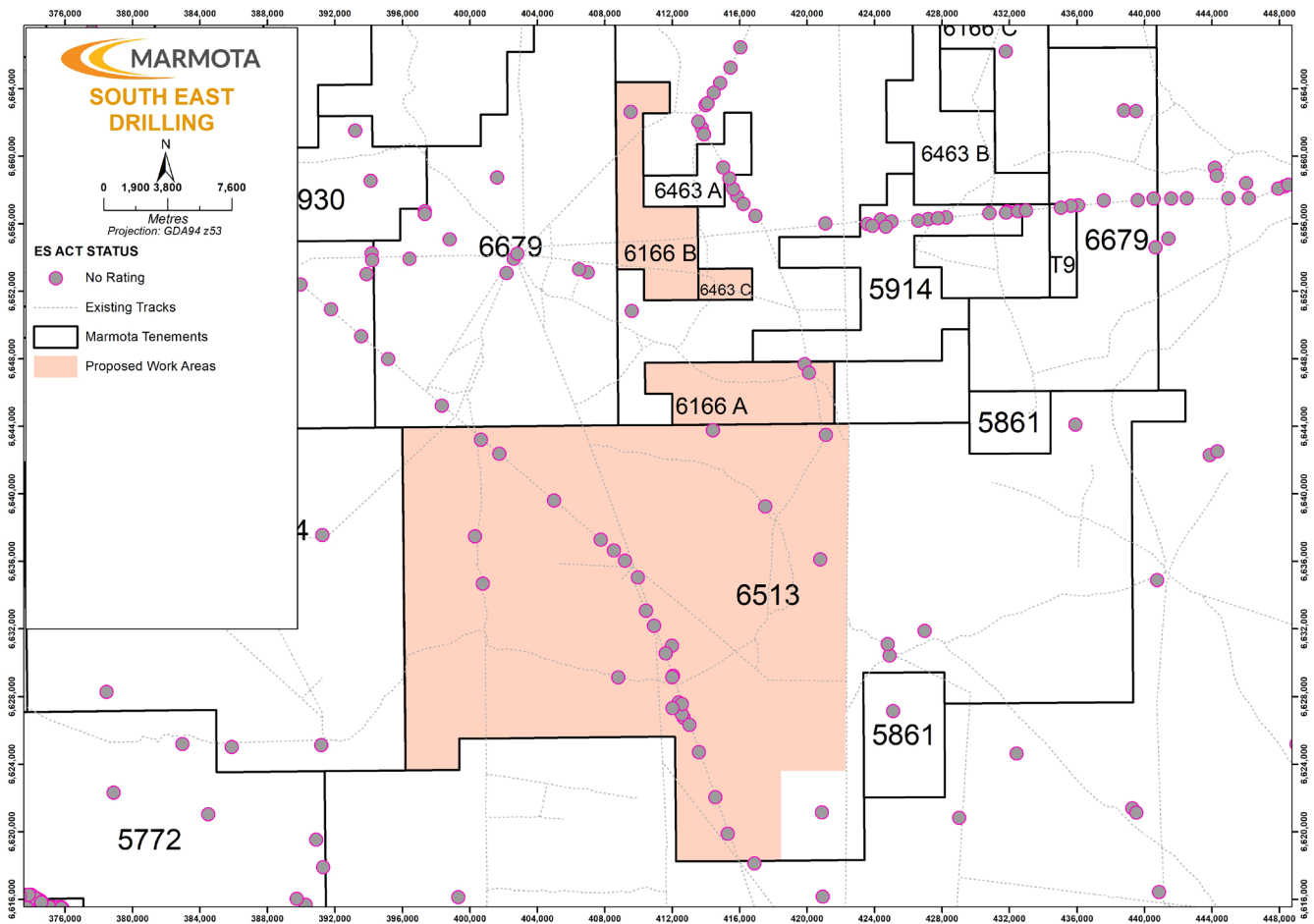


Figure 2 – ES Rating Extracted from Nature Maps (ABOVE) Showing no ES Act Status Rating as per Nature Maps.

Exploration PEPR application – 12-month period

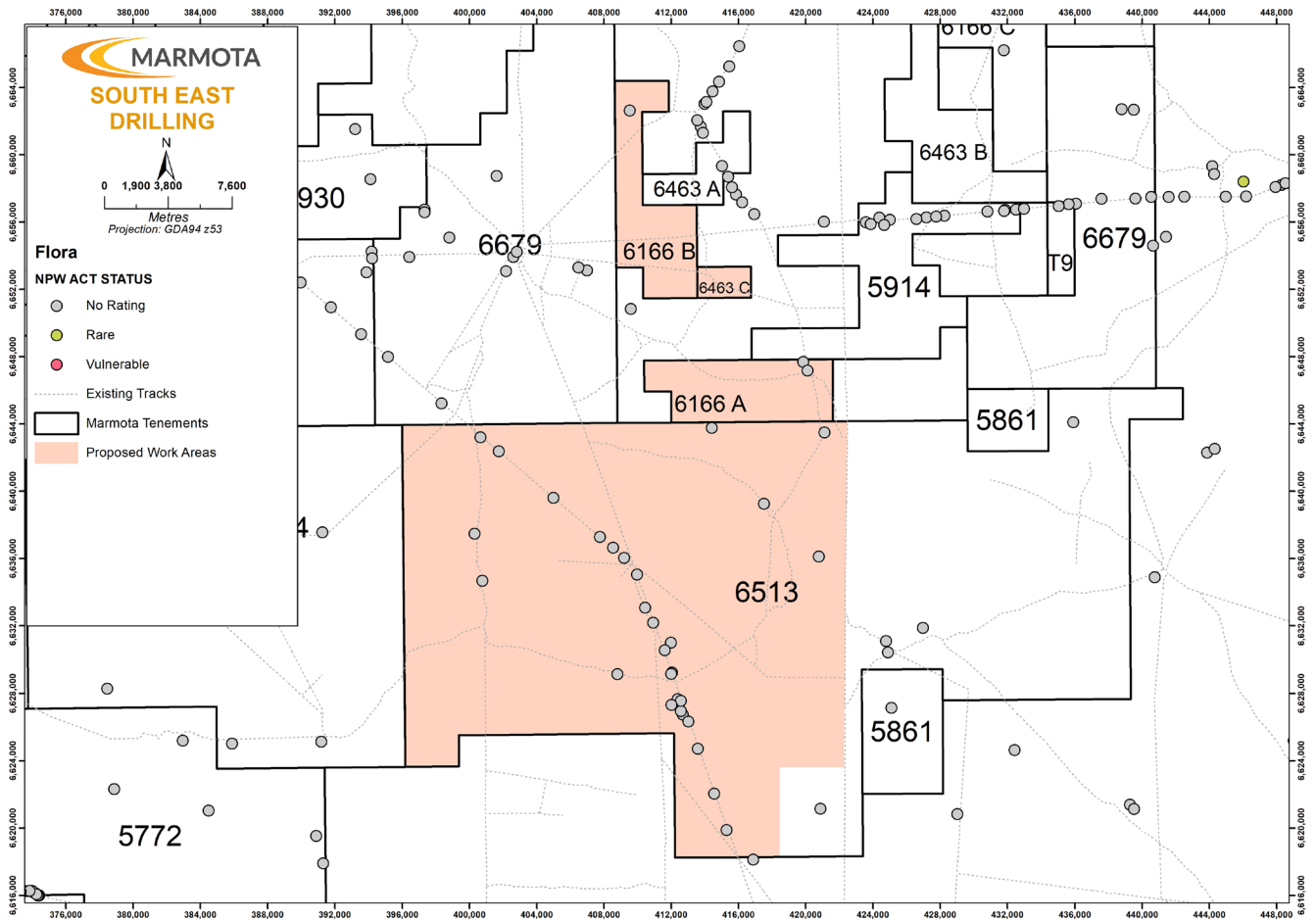


Figure 3. NPW Act Rating Extracted from Nature Map (ABOVE). No NPW or EPBC Act Rating for any Flora

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 exploration area occurs within the Arid Lands Natural Resources Management Region and within the KINGOONYA NRM District weed strategy (Reviewed June 2015). The Area is within a known Buffel Grass region- Zone 2 and Zone 3 on the SA Buffel Grass Strategic Plan 2019-2024. When looking at the map and Nature maps of known locations of Buffel Grass it is dominantly located along bitumen Stuart Highway and southern railway line. There are no known pathogens within the proposed drilling area. If any infestations of Buffel Grass or other weed species are encountered during the program, cleaning procedures will be implemented when leaving the area and the infestation will be avoided and reported.

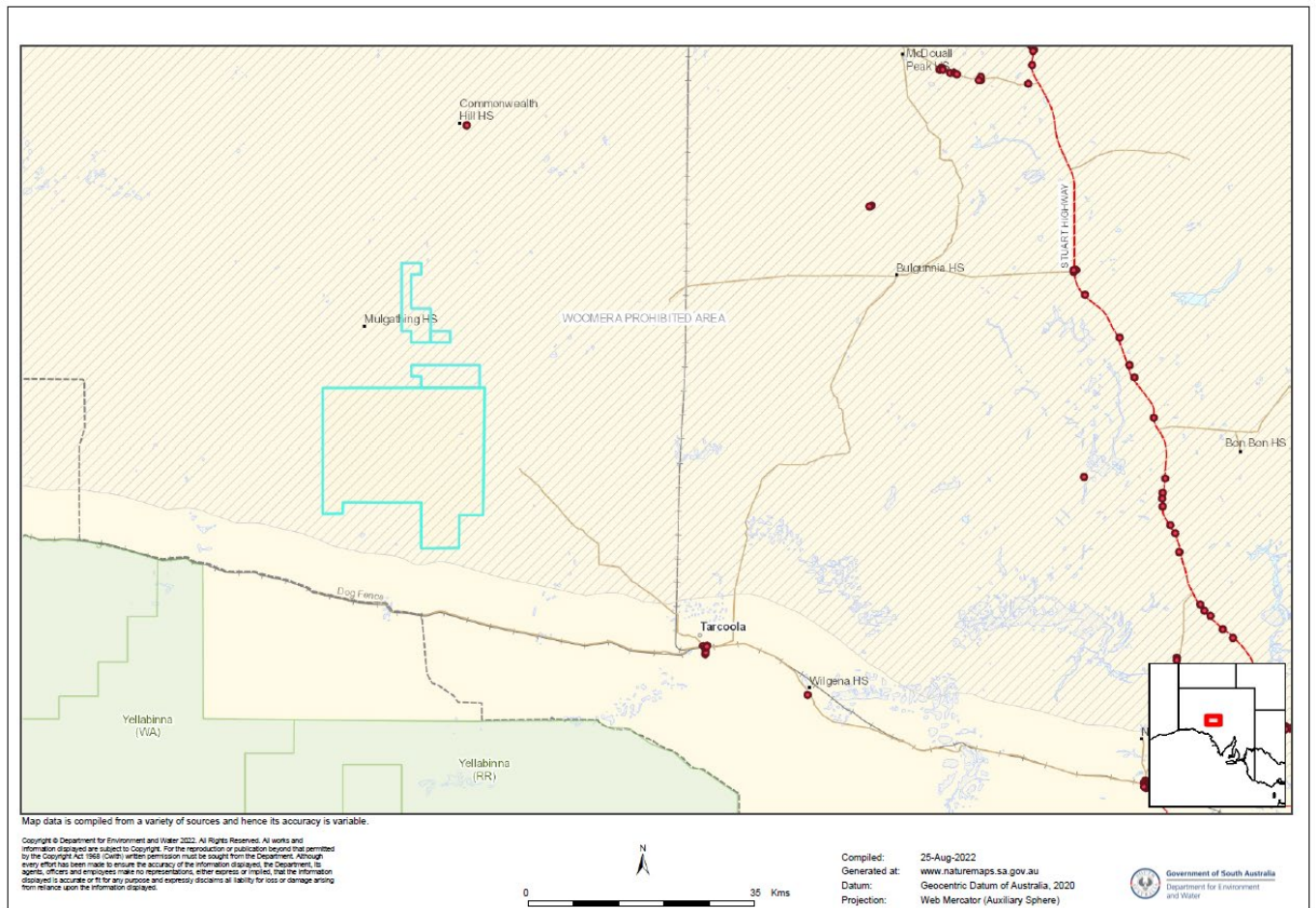


Figure 4 – Weeds of National significances from Nature Maps. Highlighted In teal is the Proposed work areas

Fauna

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

Fauna within the proposed work area includes Emus, Bluebonnet (Eastern and Naretha), Galah's, Fairywren, Parrots, Budgerigar, Cockatiels, Pigeons and Bellbirds, Kangaroos and Foxes. As shown in Table below and Figure 5. All the Species a have been reviewed against the "Regional Species Conservation Assessments DEWNR Fauna Conservation for ARID LANDS (Outback)" report with no NPW or EPBC rating.

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
Dromaius novaehollandiae	Emu	Nautre Maps - ssp=ated Regional Species Conservation Assessments DEWNR Outback Region Fauna Conservation for	Nature Maps - ssp=ated sub species. Regional Species Conservation Assessments DEWNR Outback Region

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		ARID LANDS (Outback) NO NPW ACT Status Code – No status Listed	Fauna Conservation for ARID LANDS (Outback) NO EPBC ACT Status Code – No status Listed
<i>Eolophus roseicapilla</i>	Galah		
<i>Malurus splendens callainus</i>	Turquoise Fairywren (NW, northern EP)		
<i>Melopsittacus undulatus</i>	Budgerigar		
<i>Neopsephotus bourkii</i>	Bourke's Parrot		
<i>Northiella haematogaster</i> (NC)	Bluebonnet (Eastern and Naretha)		Nature Maps and Regional Species Conservation Assessments DEWNR Outback Region-ssp=rated sub species No further information available in EPBC Act List of Threatened Fauna
<i>Nymphicus hollandicus</i>	Cockatiel		
<i>Ocyphaps lophotes lophotes</i>	Crested Pigeon		
<i>Oreoica gutturalis</i>	Crested Bellbird		
<i>Pomatostomus superciliosus</i>	White-browed Babbler		
<i>Rhipidura leucophrys leucophrys</i>	Willie Wagtail		
<i>Macropus (Osphranter) rufus</i>	Red Kangaroo		
<i>Macropus fuliginosus</i>	Western Grey Kangaroo		
<i>Vulpes vulpes</i>	Fox (Red Fox)		
<i>Ctenophorus nuchalis</i>	Central Netted Dragon		
<i>Varanus gouldii</i>	Sand Goanna	Nature Maps - ssp=rated Regional Species Conservation Assessments DEWNR Outback Region Fauna Conservation for ARID LANDS (Outback) NO NPW ACT Status Code – No status Listed	Nature Maps - ssp=rated Regional Species Conservation Assessments DEWNR Outback Region Fauna Conservation for ARID LANDS (Outback) No further information available in EPBC Act List of Threatened Fauna

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.

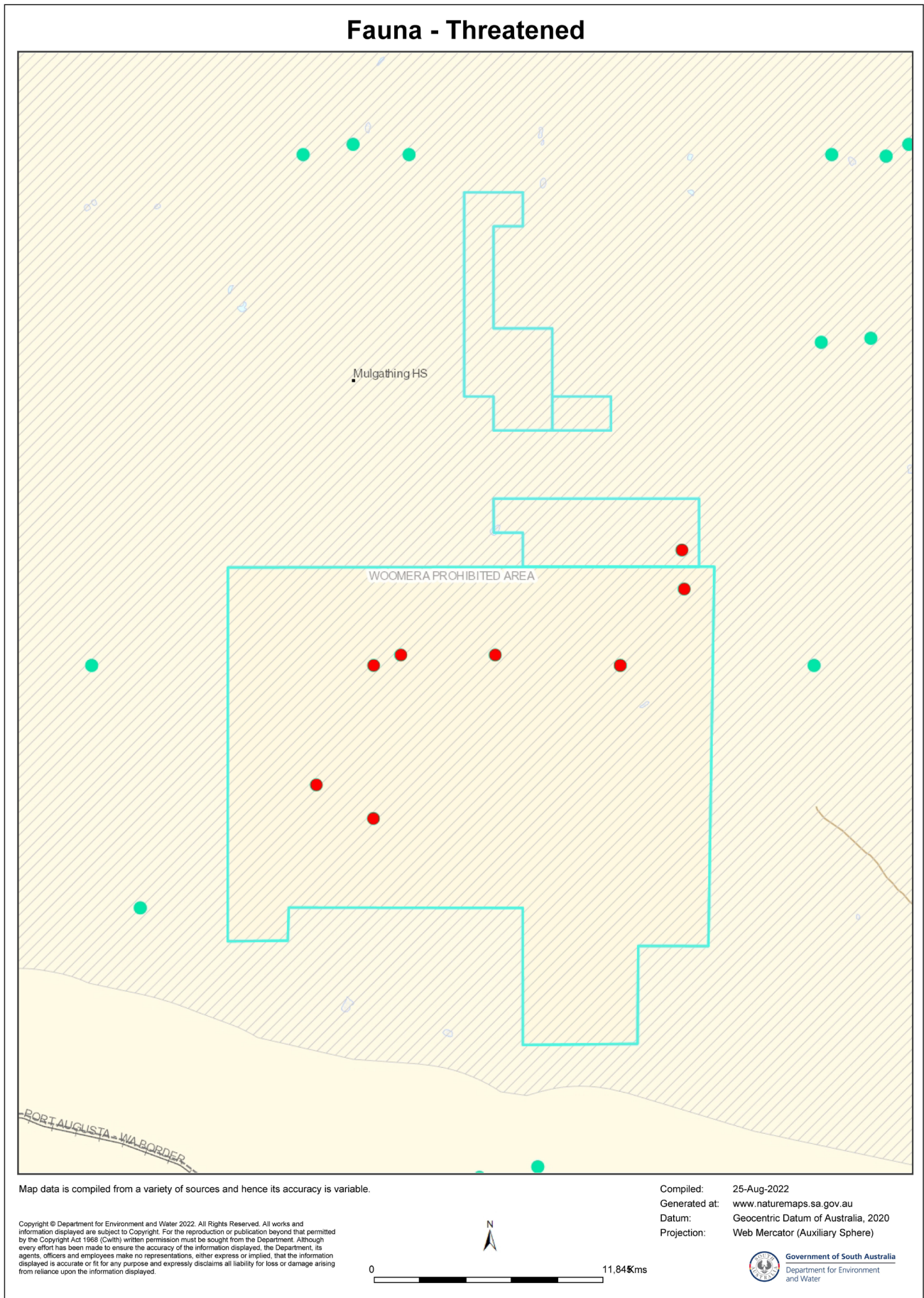


Figure 5 – Nature Map State / Nationally Rated Threatened Species. All species highlighted in red are the Threatened species identified by Nature Maps but further documentation has no further rating for Nationally or for the state. See comments in fauna table 12-month Exploration PEPR template – January 2021

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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"/>
There is a small exclusion zone within EL 6513, EL 6166 (both Portions). Heritage data will be used during a planning and there will be no planned disturbance within these areas. All staff and contractors will not be permitted to leave the existing access track where heritage crosses existing tracks.		
Are you likely to impact on the environmentally sensitive area? If yes, detail the likely effects the proposed program may have.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Include a statement concerning whether or not an Aboriginal heritage survey has been conducted by the proponent and if so, the results of the survey.		
Heritage Survey has been completed proposed work areas with exclusion zones identified Figure 7. No drilling, clearing or work is planned to be completed within these exclusion zones. Where access is required via existing station tracks or major roads, staff and contractors will not be able permitted to leave the existing tracks. The Survey also specifies no drilling with 50m of water drainage or within granite outcrops, clay pans. Marmota will ensure that during pegging of tracks and drill holes, these areas and available on maps, GPS and conveyed in inductions to ensure no disturbance to exclusion zones or general exclusions conditions (water drainage lines, clay pans and granite outcrops).		

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	Marmota Or Contractor	
Land access/environmental	0		
Field assistants/technicians	2	Marmota Or Contractor	
Drilling crew	3	Drill Contractor	
Site preparation and rehabilitation	1	Marmota Or Contractor	
Other (provide details)		<Include name and contact details here.>	
Shifts worked per day	Hours worked per day	Days worked per week	
1	12	7	
Equipment type	Owner/operator	Description/capacity	Activity/purpose
Drilling Rig (AC/RC)	Contractor	6x6 Toyota Landcruiser mounted drilling rig - 7m x 2m x 3m (LxWxH)	AC/RC Drilling
Compressor Truck	Contractor	4x4 Mitsubishi Canter mounted compressor truck OR 6X6 Landcruiser mounted compressor	Compressor for AC/RC Drilling
Landcruiser	Contractor	Utility	Support Vehicle for Driller offsider
Offroad caravan		Caravan	Drillers Accommodation
fuel and diesel support truck		Hino 13tonne truck	Fuel and diesel support truck
Landcruiser and Trailor	Marmota Ltd	Utility and trailer	Support Vehicle for Geologists and trailer for samples
Landcruiser	Marmota Ltd	Utility	Support Vehicle for Field Assistant (where required)
Drilling Rig	Contractor	Schramm 450WS RC Drill Rig. (35t) Or RAB/AC/RC Rig (or Equivalent)	Drill Rig (RAB, RC, AC) Subject to Availability
Support Truck Air	Contractor	6x6 Man Air Truck (22t) or Equivalent	Compressor and Booster truck

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Support Truck	Contractor	8x8 Merc Support Truck or Equivalent	Support truck water/ diesel
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Provide any additional information, if required.

The Proposed works is to complete drilling for REE, Au and Base metals over proposed areas in Figure 1, the drilling grid for the program is proposed to be 400x400m to 200x200m or closer spacing in specific areas depending on results. Drilling depth will be targeting saprolite and/or drilling to refusal.

The proposed use of the Landcruiser Mounted rig allows for lower environmental impact and ability to access drill areas without pad or access tracks.

If required for rig access Tracks may need to be cleared to allow for RC rig to access the work area and pads as shown in Figure 1b.

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

[<Include text here.>](#)

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 6513	RAB. AC, RC	100	60	1	2.5m x2.5m x2,5m = 15.6m ³	15 x 15 = 225m ²	0	0
EL 6166	RAB. AC, RC	150	60	1	2.5m x2.5m x2,5m = 15.6m ³	15 x 15 = 225m ²	0	0
EL 6166	RAB. AC, RC	5	135	1	2.5m x2.5m x2,5m = 15.6m ³	15 x 15 = 225m ²	0	0
EL 6166 Additional holes	RAB. AC, RC	30	60	1	2.5m x2.5m x2,5m = 15.6m ³	15 x 15 = 225m ²	0	0
EL 6463	RAB. AC, RC	20	60	1	2.5m x2.5m x2,5m = 15.6m ³	15 x 15 = 225m ²	0	0
TOTAL Updated		Estimated 305	Estimated 18,675m	305	4,758m³	68,625m²	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.

The Proposed rigs for this program are not anticipated to required track preparation. No drill site preparation will be required, no clearing of vegetation is expected. No sump will be required where water is intersected the hole will be stopped and hence no sumps or pads are required.

5 Additional holes of greater depth (approximately 120metres) may be required at the CAR prospect and within EL 6166 to follow up mineralisation.

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The drilling will be completed on a 400x400 to a 200x200m or closer spaced infill drilling in specific areas depending on results.

Due to rig availability, if PADS or Sumps are required these will be prepared using the following procedure:

AC, RC or RAB

PRIOR TO CLEARING PADS:

- Drill pads and clearing will be sited before commencing; Including reviewing and determining locations of heritage exclusion zones within proximity of drill locations and delineating exclusions where required.
- No tracks or drill pads will be created in drainage lines or creeks, drill sites will be relocated 50metres minimum from creeks or drainage line if no appropriate alternative can be located the hole and access track will not be cleared and drilled.
- Tracks and Drill pads will not be created within 200m of clay pans
- Tracks and pad locations will be sited to minimise vegetation removal and will pass around larger trees and isolated vegetation.
- Drill pads will be created along side proposed access tracks.

DRILL PADS AND SUMPS

- Drill pads will be cleared to 15m x 15m (225m²) with 1 x sump (2.5m x 2.5m x 2.5m)
- Drill pads will be cleared using raised blade clearing retaining the rootstock
- The drill pad will be cleared to allow drill rig and compressor support truck to sit on adjacently on drill pad allowing access around the drill rig and compressor support truck.
- Vegetation will be stockpiled allowing re-spreading as mulch, soil protection and seed material for re-generation on completions of a drill program.
- Sumps will be sloped on one side to allow for Fauna to escape

See **Access routes to work areas** section for tracks construction from station tracks to drill pad locations or sample locations are within Figures 1 to 1b.

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.		
Drill holes will be approx. 85-87mm and it is not expected casing will be used for the shallow depth of the holes. Generally, no casing is required, in case of unstable cover a max of 3m would be placed in ground 100mm casing, all casing will be removed at completion of hole. Rare to be used on this type of program. Figure 6 shoes the decommissioning for unconfined aquifers.		
If casing is required for change in rig – casing to 6m might be required.		
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.		
After completion of drilling each individual drillholes, samples collected in buckets will be emptied back down the hole, then a plastic plug will be inserted 0.5 – 2m below the surface and backfilled with 0.3 m of native topsoil and heaped on top to allow for subsidence. If a casing has been used it will be removed once hole is completed. Figure 6 shoes the decommissioning for unconfined aquifers		

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)
<Tab to add rows.>						
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.

<Insert information here.>

Sample management

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

Sample Collection

- For RAB, AC/RC drilling bulk drill cuttings will be collected in buckets or Sample Bags at 1m intervals.
- From these buckets/Samples bags, a 2-4m composite sample will be collected in a calico or green sample bag and submitted to a laboratory for geochemical analysis.
- The surplus bulk samples will then be used to backfill the holes immediately followed drilling and a non-degradable plug at 0.5 – 2m downhole and then the top 0.3 m of fill should consist of native soil, and a soil mound left over the hole's position to allow for any subsidence. Casing will be removed if used.

Alternate Rig Sample Collection Method:

AC, RC or RAB

Sample Collection

- For RC drilling bulk drill cuttings will be collected in large plastic bags at 1m intervals down the entire drill hole.
- From these bags, 4m composite samples will be collected in calico sample bags and submitted to a laboratory for geochemical analysis.
- surplus bulk drill cuttings will be left at each drill site until all geochemical results have been received from the laboratory to ensure no samples need to be resubmitted.
- The surplus bulk samples will then be used to backfill the holes followed by a non-degradable plug at 0.5 – 2m downhole and then topsoil backfilled to surface. The remaining bulk samples will be removed from the plastic sample bag and disposed of in a same sump as drilling.
- Plastic bags and surplus calico bags from 1m splits will be disposed of separately at a designated waste dump (as per example photo 1). All sample bags will be rehabilitated within the requested approval time monitoring for bag degradation.
- All sample bags will be rehabilitated within 3 months following expiry of this PEPR and ensuring monitoring of bag degradation.

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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 type="checkbox"/>	No <input checked="" type="checkbox"/>
To date Marmota uses well established, and regularly used station tracks for site access. Once Leaving main or station roads, if upgrading of tracks wis required they will be upgraded/widen using the method listed under Clearing Tracks below. Consultation of track upgrades will be made with Mulgathing Station. See Figure 1 and figure 1b for Major and Station Tracks for access to proposed work areas.		
Will access be required across adjoining tenements? If yes, detail the method(s) for gaining access, and if an agreement is in place with all stakeholders. Include the total area of disturbance required (i.e. length (km) and width (m) of tracks) and provide on a locality map.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
There is no planned disturbance between adjoining tenements, Marmota will be using existing Major Roads or Station tracks between Aurora Tank Camp (and/or temporary Camp Location) and proposed work location. If a temporary camp is used it will be located as close as possible to the drill targets in an area requiring no vegetation clearance. No maintenance of roads is anticipated prior to turning off station tracks onto exploration work area. See figure 1 for Major and Station Tracks.		
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"/>

PRIOR TO DRILLING:

- Existing station tracks will be utilised wherever possible to gain access to the drilling areas (See figure 1 for Major and Station Tracks). It is not anticipated that new access tracks will need to be created, due to the proposed use of Landcruiser Mounted Rigs. Vehicles will be driven across the unprepared terrain where there are areas of low or sparse vegetation, gibber, or scree surfaces.
- Where there are no established tracks and it is intended to traverse the same ground more than once, the same wheel tracks should be used each time.
- Vehicles speeds are adjusted to suit the conditions of the track, for example slower speed limits will be implemented between drill holes, and a maximum speed limit of 80km/hr is applicable on all permanent station tracks accessed. Speeds are reduced on corner entry to reduce compaction or cutting up of soft regolith materials.
- No access off the existing station tracks will be permitted by Staff or Contractors where the existing station tracks or major roads cross through Heritage exclusion zones
- No maintenance of existing station tracks is anticipated

- See Figure 1 for existing access tracks between Drill locations.

- Whilst it is still considered that no tracks will be required due to Low scrub. The following procedure will be used in the case that tracks are required:

AC, RC or RAB

Tracks will be created for AC, RC or RAB as required using the following procedure:

PRIOR TO CLEARING:

Existing station tracks will be utilised wherever possible to gain access to the drilling areas, ultimately new tracks may need to be created to access any new areas of drilling. The following procedure will be used to assess the drill areas then establish tracks:

- area will be scouted before clearing to ensure drill locations or access tracks do not intersect drainlines, creeks, clay pans and heritage exclusion or protected zones.
- Where possible vehicles will be driven across the unprepared terrain where there are areas of low or sparse vegetation, gibber, or scree surfaces.
- Where there are no established tracks and it is intended to traverse the same ground more than once, the same wheel tracks should be used each time.
- Vehicles speeds are adjusted to suit the conditions of the track, for example slower speed limits will be implemented on drill lines and temporary tracks, whilst a maximum speed limit of 80km/hr is applicable on all permanent station tracks accessed. Speeds are reduced on corner entry to reduce compaction or cutting up of soft regolith materials. If significant compaction does occur, these areas will be lightly scarified after completion of the work.
- No access off the existing station tracks will be permitted by Staff or Contractors where the existing station tracks or major roads cross through Heritage exclusion zones
- No maintenance of existing station tracks is anticipated, and no maintenance of station tracks within heritage exclusion zones will be conducted
- Drill pads will be created along side proposed tracks.
- Turn around will be constructed at the end of the drill lines to allow RC, AC or RAB rig to turn around if turn around cannot be completed on RC Pad.

CLEARING PROCEDURE - TRACKS:

- Where minimal vegetation exists, new access tracks will be created by simply driving a vehicle across the land and all proceeding vehicles following those tyre marks. Where this is not possible, track preparation will utilise a Backhoe which will involve clearing a small amount of vegetation where absolutely required.
- Clearing using Backhoe- Any clearing of vegetation will be carried out using a raised blade to preserve rootstock.
- Where topsoil has been collected it will be stockpiled to allowed to be respread.
- Vehicle movement along any track will be kept to a minimum to reduce the likelihood of compaction of the soil.
- Track preparation will only be enough to meet the needs of the exploration vehicles and machinery required to use it and will be kept to a minimum:
 - a. with a maximum width of 2.5 metres is anticipated for the RC, AC or RAB rig and compressor support vehicle. 1 blade widths (2.5m) will be cleared for the tracks, and then within the 5m approaching the drill pad, the track will be widened to 5m to allow for vehicles to pass. Drill pads will be kept to a minimum.

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- New access tracks are to be dog legged from existing tracks to minimise visual identification

PROPOSED LENGTH OF TRACKS

- There are multiple tracks which runs throughout the tenements which connect the main access tracks between Aurora Tank and proposed drill areas.
- The new proposed access tracks are currently estimated to be total 20 km (i.e 20km length x maximum 2.5m width)
- The length of tracks includes, drill lines and turn arounds

Not all drill lines will be cleared only those determined to be suitable for drilling, and those require clearing due to access/damage to equipment.

See Figure 1 and figure 1b for existing access tracks between proposed drill locations.

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.		
Staff and contractors will be accommodated at an established camp, close to Aurora Tank Prospect or in Caravans/Camper Trailers. The location of the camp to be discussed with the station owner at Mulgathing and to be set up on level ground. Not all staff will have accommodation and other personnel will camp at existing Aurora Tank camp with a max of 5 to be camping at EL 6166/EL 6463 or EL 6513.		
What is the maximum number of personnel requiring accommodation?	5	
Is a campsite required to be established? If no, no further information is required.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Provide a description and justification of the camp location (e.g. previously cleared areas etc.), and any other relevant information.		
Caravans and/or Camper Trailer may need to be used for proposed works. it is expected that no vegetation will be cleared and camp will be set up in cleared area in consultation with Mulgathing Pastoral Station.		
What will be the total area (ha) of the campsite(s)?	0.2 ha	
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.		
<Include text here.>		
Will any excavations be required?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If yes, describe the purpose of the excavation and the maximum volume (m ³) of material to be excavated.		
Widgity (EL 6166), Ambrosia (EL 6513) and Bradman (EL 6463) is currently campaign based with 2-3 weeks per campaign and may have additional campaigns. After each campaign all caravans, tents and generators are removed from site and the toilet facilities are backfilled and rehabilitated. Shower Facilities are provided in caravans brought to site for the program, with grey water allowed to drain into a small hand dug sump and allowed to seep freely into sandy soil within 5m of the campsite, with the sump rehabilitated after each program. Toilet facilities for each campaign consist of a ~6m deep drillhole with privacy tent and field toilet seat placed above it, A new hole will be drilled and used as a toilet facility for each drill program. Due to the short duration (2-3 weeks) of individual field campaigns and the small number of people involved (max 5).		
If the frequency of site activities increases, leading to more permanent camp requirements an amendment to this PEPR will be made, including advice from Health SA, regarding the need for upgraded sewage and grey water treatment.		
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"/>
SA Health Response (Mark Nash) – 7/12/2022 – “Please consider your proposal as ‘satisfying the Department for Health and Ageing Requirements”		
Proposed infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)	Quantity	Description/capacity
Caravans/Camper Trailers	2	2 Caravans/Camper trailers

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"/>

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<Include text here.>			
What will be the maximum area (ha) required for the laydown area(s)?		0.25ha	
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.			
<Include text here.>			
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"/>
<Include text here.>			
Proposed infrastructure (includes hydrocarbon and water storage requirements)	Quantity	Description/capacity	
Freight Trailer For carrying drill rods, casing and PVC casing (Camp Laydown)	1	TR1 – freight trailer	
Trailer fitted with mobile workshop (Camp Laydown Laydown)	1	TR2- 2011 Dog Trailer	
Fuel Trailer (Camp Laydown)	1	Fuel Cell mounted on trailer	
Provide a description and justification of the location (e.g. previously cleared areas), and any other relevant information if required.			
All Support vehicles for camp and drilling will be placed in the laydown near camp on level and area of no or little vegetation, it is not expected that vegetation will need to be cleared for the laydown.			

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 type="checkbox"/>	No <input checked="" type="checkbox"/>
<If yes, include text here.>		

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 type="checkbox"/>	No <input checked="" type="checkbox"/>
<Include text here.>		
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"/>
<Include text here.>		

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"/>
<If yes, include text here.>		
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"/>
<Include text here.>		

Exploration PEPR application – 12-month period

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"/>
<If yes, include text here.>		

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"/>
<If yes, include text here.>		

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.

Marmota Staff or contractors will be used in rehabilitation activities completed in full or partially after the completion of each drill hole. It is expected that each hole will be rehabbed immediately following drilling, however in the occasion that a hole is not completed immediately (i.e. mechanical failure or unexpected event) the hole will be rehabbed within 3 months following expiry of the PEPR.

Drill Pads and Samples

- Drill pads or sumps are not expected to be created for this drill program.
- For AC/RC drilling, bulk drill cuttings will be collected in large plastic buckets at 2-4m intervals down the entire drill hole. From these buckets, samples will be collected in calico sample bags or green and submitted to a laboratory for geochemical analysis. The green bags or calico bags will be loaded onto trailer being towed by a Ute. No Samples bags are anticipated to be left at drill holes following drilling.
- The surplus bulk drill cuttings collected in bucket will then be used to backfill the holes after drilling.
- A non-degradable plug at 0.5 – 2m downhole will be placed into the open hole and then topsoil backfilled to surface and heaped over drill hole to allow for subsidence.

Rubbish

- All rubbish, contaminated soil or work debris will be removed after drilling and disposed of at Approved District council dump. As per sample above Sample bags, sample buckets will be removed after drill hole completion
- Any Temporary markers (tapes and pegs) will be removed after drill hole completed

In the event that tracks or sump have been prepared the following procedure will be implemented:

Drill Pads and Samples

- For AC/RC drilling, bulk drill cuttings will be collected in large plastic buckets or green bags at 1-4m intervals down the entire drill hole. From these buckets or samples bags, further sub samples will be collected in calico sample bags or green and submitted to a laboratory for geochemical analysis. The green bags or calico bags will be loaded onto trailer being towed by a Ute. No Samples bags are anticipated to be left at drill holes following drilling, however if bulk samples are left behind:
 - 1) Plastic bags and surplus calico bags from 1m splits will be disposed of separately at a designated waste dump (example - photo 1).
 - 2) All sample bags will be rehabilitated within 3 months following expiry of this PEPR and ensuring monitoring of bag degradation.
- A non-degradable plug at 0.5 – 2m downhole will be placed into the open hole and then topsoil backfilled to surface.
- The remaining bulk samples will be removed from the plastic sample bag and disposed of in existing sumps on the hole it was drilled.
- If drill pads have been compacted by machinery, the drill holes or track will be ripped along the contour to loosen the soil.
- Topsoil which has been stockpiled will be re-spread to facilitate growth

Sump

- Drilling waters will be contained within sumps, with sumps back filled after water has evaporated.
- Bulk samples will be disposed of downhole with excess samples disposed of in the sump and covered with sub and topsoil in the correct order.
- excess sub-soil material will be added where possible to allowing for compaction
- Topsoil which has been stockpiled will be re-spread to facilitate growth

Tracks

- Will be rehabilitated to near original condition which facilitated revegetation after drilling
- If tracks have been compacted by machinery, the drill holes or track will be ripped along the contour to loose the soil.
- Topsoil will be respread and vegetation over the top to facilitate revegetation
- Obstacles such as mounds, tree trucks and branches across will be used to restrict access along rehabilitated tracks off major roads and station tracks.
- Road windrow of the existing major road to be re-established and landowner to be notified tracks have been rehabilitated

Exploration PEPR application – 12-month period

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.

Rubbish

- All rubbish, contaminated soil or work debris will be removed after drilling and disposed of at Approved District council dump. As per sample above Sample bags will be removed after assaying has been completed, whilst monitoring for bag degeneration.
- Temporary markers (tapes and pegs) will be removed

State the estimated budget required to rehabilitate impacted sites.

\$20,000

Vegetation Clearance

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

Yes

No

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.

<Include text here.>

SECTION F – MANAGEMENT OF ENVIRONMENTAL IMPACTS

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

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

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

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

How to fill out the table

- 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) Department of Defence state government departments. local government (councils) federal government native title parties. 	Interference to: <ul style="list-style-type: none"> existing or permissible land use (includes loss of income, noise, dust, light and other emissions). buildings, structures, existing tracks or other infrastructure. aesthetic values of an area. Noncompliance with legislative requirements.	Yes (Applicable to all programs.)	Landowners and Marmota personnel discuss drilling programs, access tracks, camps usage well in advance to ensure drilling activities will not interfere with station work and that our actions will not cause unnecessary disturbance to the environment. If concerns are raised, Marmota and the landowners work together to form an outcome that suits both parties. Other stakeholders including Native Title Parties, State Government Departments, Department of defence etc are always provided with the correct information to raise any issues prior to work commencing. Mitigation and rehabilitation strategies used to reduce the land use impact include but are not limited to: <ul style="list-style-type: none"> Monitoring of track conditions for deterioration Wetting tracks if deterioration occurs Using an alternate route Vehicle speed limits will be imposed to reflect road conditions and proximity to any infrastructure or livestock Planning and coordination will be used to minimise the number of individual vehicle movements Being informed of mustering and not interfere with these areas Constructing and rehabilitating drill holes, camps etc inline with information sheets M21 and M33. Undertaking photo monitoring before, during and after exploration activities. 	3	A	Low	Stakeholders are fully informed and satisfied with the proposed methods used to conduct exploration activities on their land, and all prescribed forms are served and agreements obtained in accordance with the Mining Act.	Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders are resolved to the satisfaction of both parties prior to and ongoing during the course of exploration program, without the involvement of DEM. Provide the information requested within the 'Landowner details and liaison' section of the annual exploration compliance report demonstrating that prescribed forms were served and agreements obtained in accordance with the Mining Act prior to the commencement of exploration activities.
Stakeholder: DEW	Interference to: <ul style="list-style-type: none"> existing or permissible land use. buildings, structures, existing tracks or other infrastructure. aesthetic values of an area. Noncompliance with legislative requirements.	No (Applicable to programs located adjacent to or within parks and reserves.)	<If the potential impact is applicable, list the control and rehabilitation strategies>				For activities located within or adjacent to regional reserves, national, conservation and marine parks only: <ul style="list-style-type: none"> no unauthorised interference with park management activities. 	Provide confirmation that: <ul style="list-style-type: none"> Park access notification forms were submitted to DEW and DEM at least 10 days prior to entry into regional reserves, national, conservation and marine parks, 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.

Exploration PEPR application – 12-month period

Impact assessment						Outcomes	Outcome measurement criteria (inc. monitoring plan)	
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH = likelihood of consequence CQ = severity of consequence	LH			CQ
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.)	<p>Vegetation in this region is predominantly an open to very open acacia Woodland. Mitigation and rehabilitation strategies used to reduce disturbance to native vegetation include but are not limited to;</p> <ul style="list-style-type: none"> • Unnecessary vegetation disturbance will be avoided with implementation of methods consistent with DEM guidelines and requirements of the Mining Act 1971 • Site access will use existing tracks in consultation with the pastoral station – Commonwealth Hill • Clearing of understory vegetation and mechanical clearing of tracks will be avoided, and not expected due to the proposed Landruiser mounted Rig and support trucks • Traffic will be restricted to one track, and contractors are reminded at the start of each program and during programs as needed to stick to existing tracks and follow single tracks • Rehabilitation will aim to restore the land to a stable condition that will facilitate land use consistent with that established prior to implementing the exploration program • All vehicles carry fire extinguishers in the event of a fire • Smoking will only be permitted on the drill site away from vegetation and all cigarette stubs will be disposed of in a designated container <p>Hot points on vehicles and machinery will be void of dry vegetation Marmota will aim to position drill holes to ensure minimal disturbance to native vegetation.</p> <p>If clearing of tracks or pads is required (in addition to the above points):</p> <ul style="list-style-type: none"> • All tracks and pads will avoid tress where possible • Likely vegetation to be cleared is bladder saltbush and pearl blue bush. No Tress clearance is required. • If clearing is required, it will be done by raised bucket and will aim to leave rootstocks intact to allow for revegetation. Drill pads and tracks will be lightly scarified upon completion of works if required. • New tracks will be sited to minimise the amount of vegetation removal and will pass around larger trees • Access track will be dog legged of existing tracks and continuous straight lines will be avoided • Drill sites will only be cleared if necessary, with holes sighted on non-vegetated ground if possible, • Traffic will be restricted to one track, and contractors are reminded at the start of each program and during programs as needed to stick to existing tracks and turn around areas • Tracks that will not be used again once rehabilitated • ruts levelled and vegetation debris removed during clearing and topsoil respread over track area. • Rehabilitation will aim to restore the land to a stable condition that will facilitate land use consistent with that established prior to implementing the exploration program • Wheel ruts to be avoided by driving on pre-existing station track, an minimising traffic along new access tracks. All vehicles will travel at low speed on access tracks, and travel through wet areas will be avoided if a large rainfall event occurs 	2	B	Low	<p>No permanent loss/modification of native flora and fauna populations and their habitats through:</p> <ul style="list-style-type: none"> • clearance • fire • other <p>unless prior approval under the relevant legislation is obtained.</p>	<p>Maintain before, during and after photographic evidence of all exploration sites (e.g. drillsites, new track exit/entry points off existing tracks, costeans, campsites) demonstrating that:</p> <ul style="list-style-type: none"> • The area and method of disturbance is consistent with that described in the PEPR. • No uncontrolled fires* occurred as a result of exploration activities. <p>Representative photos to be included within the annual exploration compliance report.</p>
All flora and fauna, especially listed species.	Loss/modification of the environment (biological, social and economic) through the introduction of weeds and pathogens.	Yes (Applicable to all programs.)	<p>The area is within a known Buffel Grass region however infestations are not located anywhere close to the area proposed for drilling. The ongoing management plan for Zone 2 - contain spread is 'To prevent the ongoing spread of Buffel Grass into clean or priority areas within or beyond Zone 2, aiming for a significant reduction in all infestations. The ongoing Management plan for Zone 3 - To significantly reduce the extent of buffel grass in Zone 3, locating and destroying all infestations aiming for local eradication at feasible sites.</p> <p>To prevent the ongoing spread of Buffel grass mitigation and rehabilitation strategies will include but are not limited to;</p> <ul style="list-style-type: none"> • Marmota staff and contractors will be made aware of Buffel grass, and a copy of the strategic plan will be on site for staff to refer to 	2	B	Low	<p>No introduction of new species of weeds and plant pathogens, nor increase in abundance of existing weeds species.</p>	<p>Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report, confirming that:</p> <ul style="list-style-type: none"> • Vehicle logs were kept during the exploration program, demonstrating that all vehicles are clean and free of plant and mud material prior to entering properties[†] within the tenement areas, unless otherwise agreed to with the relevant landowners. • Photographic evidence before and during exploration operations and after rehabilitation of disturbed sites was captured, demonstrating that no new weeds and plant pathogens were introduced, nor an increase in abundance of existing weeds recorded.

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"> Marmota will ensure vehicles, equipment and footwear are free of clods of soil and plant material particularly when off-road machinery enter the site. If any infestations of Buffel Grass are encountered during the drilling program, cleaning procedures will be implemented when leaving the infestation and the area of infestation avoided. <p>Surveys indicate potential risk, or if the landowner raises any concern over the spread of weeds. Discussions with Landholders has raised no concerns about the presence or spread of weeds due to Marmota's activities to date.</p> <p>This is an ongoing discussion with the landholders prior to each field program to ensure Marmota is aware of any issued relevant to the sites accessed for field work.</p> <p>Vehicles will be washed and clean before entering new sites where the risks warrant it (i.e. between exploration areas of different weed profiles)</p>					
All fauna	Entrapment of fauna through open drillholes and excavations.	Yes (Applicable to exploration programs that involve drilling and/or require excavations.)	<p>The area impacted by drilling is partially cleared sheep grazing land. At the completion of drilling, it is anticipated that the drillhole will be backfilled immediately, if not (for unforeseen circumstances) a temporary hole plug will be placed in the drill hole to ensure that no small animals can fall down the hole and no larger animals will suffer broken limbs from falling in the hole. If any unexpected and significant fauna is encountered, locations and photographs (where possible) will be recorded and the Department of Environment and Water will be notified.</p> <p>If Pads or Sumps are required: The area impacted by drilling is partially cleared sheep grazing land. A sump is likely at the drill site to contain groundwater from all forms of drilling. These sumps will be constructed with a ramp for an exit in the event an animal does fall into the pit. Bunding will also be erected if the sump has significant water in it, to deter animals from gaining entry, all sumps will be backfilled, within approved time frames. When possible, sumps will be back filled sooner. At the completion of drilling, a temporary hole plug will be placed in the drill hole to ensure that no small animals can fall down the hole and no larger animals will suffer broken limbs from falling in the hole. If any unexpected and significant fauna is encountered, locations and photographs (where possible) will be recorded, and the Department of Environment and Water will be notified.</p>	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.)	<p>General restrictions put in place in order that allow Marmota to drill within "Drilling Clearance areas" are such as avoid granite outcrops, rock holes, clay pans, salt lakes and drainage lines. However, should any Aboriginal artefacts or areas of possible cultural significance be encountered then Marmota staff will avoid those areas, recording details and photographs, and contact the relevant authority.</p> <p>Marmota uses GIS files with sensitive sites during planning and preparation of drillholes, known sensitive areas are placed on maps and GPS and re-iterated at site inductions and daily pre-starts. Where heritage zones are across existing main tracks, no stopping, maintenance or disturbance of the existing access and no access off the existing track will be permitted and be communicated to all staff and contractors through site inductions and pre-starts.</p> <p>Marmota will place delineation and/or signage around any sensitive are close to exploration work areas, as required. Signage/delineation will be removed after rehabilitation.</p>	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.)	<If the potential impact is applicable, list the control and rehabilitation strategies>				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	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH = likelihood of consequence CQ = severity of consequence	LH			CQ
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 general waste material including plastic sample bags and/or buckets, plastic sheeting placed under rig to catch spills and any other drilling related rubbish will be collected and brought back to Coober Pedy or Adelaide or Port Augusta and disposed of accordingly. The drill rig is equipped with a hydrocarbon spill kit and all drillers and offsideers are trained to deal with any spills as quickly and efficiently as possible, and waste will be disposed of at the nearest Waste Transfer Station on completion of works. A hydrocarbon spill kit will be stationed at the filling area adjacent to the Diesel tank to minimise risk of hydrocarbon contamination during refuelling. Pre-start checks (safety and environment) will be undertaken on equipment to identify any leaks Site inspections will be undertaken, and corrective actions implemented before project sign-off is completed. Camp waste will be contained, and either taken to Coober Pedy dump, or if not possible they will be brought back to Adelaide or Port Augusta and disposed of accordingly. Grey water at camp will be contained in small sump and allowed to evaporate, A 6m Long drop will be drilled near camp and is sufficient for the duration of this program and the number of people. The long drop will be capped at the end of the program. Drill cuttings will be disposed of by backfilling of drillholes following drilling Plastic drilling bags/buckets, calico drill bags and Rehabilitated PVC drill collars will be removed from site and disposed of at Coober Pedy or other authorised waste dump. Drill cuttings will be disposed in line with DEM guidelines Cuttings will be used to backfill the drill hole prior to plugging (see figure 6 for decommissioning of Drillhole) <p>Widgity (EL 6166), Ambrosia (EL 6513) and Bradman (EL 6463) is currently campaign based with 2-3 weeks per campaign and may have additional campaigns. After each campaign all caravans, tents and generators are removed from site and the toilet facilities are backfilled and rehabilitated. Shower Facilities are provided in caravans brought to site for the program, with grey water allowed to drain into a small hand dug sump and allowed to seep freely into sandy soil within 5m of the campsite, with the sump rehabilitated after each program. Toilet facilities for each campaign consist of a ~6m deep drillhole with privacy tent and field toilet seat placed above it, A new hole will be drilled and used as a toilet facility for each drill program. Due to the short duration (2-3 weeks) of individual field campaigns and the small number of people involved (max 5).</p> <p>If the frequency of site activities increases, leading to more permanent camp requirements an amendment to this PEPR will be made, including advice from Health SA, regarding the need for upgraded sewage and grey water treatment.</p> <p>As per ISM-33 Waste Pits will be constructed and used in such a manner as to prevent the dispersal of rubbish by wind and scavengers. Pits for disposing of sewerage and domestic waste will be of sufficient size to contain all waste and allow for burial to be minimum depth of 1 m. Pits will be located away from water courses.</p> <ul style="list-style-type: none"> Waste water from kitchens and ablutions trailers will be conveyed to earth drains constructed specifically for that purpose. Earth drains will be constructed to allow: 1) rapid infiltration into the soil 2) containment of all effluent 2) direction of effluent away from the camp areas frequented by personnel or vehicles. 	2	B	Low	<p>No contamination of soil and vegetation as a result of exploration activities.</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>	

Exploration PEPR application – 12-month period

Impact assessment						Outcomes	Outcome measurement criteria (inc. monitoring plan)	
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH = likelihood of consequence CQ = severity of consequence	LH			CQ
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"> Access to drill location will be created by simply driving a vehicle across the land and all proceeding vehicles following those tyre marks. There will be minimal compaction along the drill access tracks due to the nature of the soils in the area. Vehicle speeds will be under 80km/hr on established station tracks and will be set lower to suit local conditions on all other access tracks and between drill holes. Access tracks from camp to the main work are via an existing station track resulting in no significant rutting or other damage to the track to date. Tight corners will be avoided to minimize rutting in corners. Access points to rehabilitated tracks will be blocked with fallen vegetation Due to the remote nature of the area included in this PEPR, no general public access or traffic is expected. Movement in and around drill site will be kept to a minimum with vehicles to remain stationary after set up unless absolutely necessary. Single tracks are maintained and will be re-enforced in pre-starts, site induction and monitored by the supervising Marmota personnel. <p>If tracks, pads or Sumps are required, the following will be complete in addition to the above:</p> <ul style="list-style-type: none"> Drill tracks, sumps, drill pads will be rehabilitated within the approved time via scarification and spreading of vegetation debris to the individual landholder's specifications Cleared vegetation kept and subsequently spread back over drill pads, tracks and sumps during rehabilitation to assist with seed capture and regeneration. Raised blade clearing to retain rootstock during clearing to facilitate revegetation and regrowth Tracks drill pads and sumps will be lightly scarified as needed with any removed topsoil respread. Sumps will be allowed to dry prior to backfilling and a mound of excess topsoil laid over the excavation to allow for subsidence and compaction. Temporary Camps and laydowns will be placed on level and areas of no vegetation. 	2	B	Low	<p>Where soil disturbance occurs as a result of exploration activities, ensure that:</p> <ul style="list-style-type: none"> topsoil quality and quantity is maintained the soil profile and topography is reinstated to original conditions there is no accelerated soil erosion. 	<p>Maintain before, during and after photographic evidence of all excavations, drillsites, camps, laydown areas and new tracks demonstrating that:</p> <ul style="list-style-type: none"> The soil profile and topography is reinstated to original conditions and is consistent with natural surroundings within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. Where required, sufficient topsoil is removed (depending on soil profile), stored separately from subsoil and reinstated (in the correct order) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. There are no signs of accelerated soil erosion during and post rehabilitation of disturbed sites. <p>Representative photos to be included within the annual exploration compliance report.</p> <p>Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.</p>
Surface water	Alteration to surface water – interference to surface drainage.	No (Applicable to exploration programs that are likely to impact on surface drainage channels.)	<If the potential impact is applicable, list the control and rehabilitation strategies>				<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.)	<p>Drilling is not expected to intersect water, in the case that it does it is expected to be an unconfined aquifer. An unconfined aquifer is one in which the water is under atmospheric pressure, and generally remains at the level at which it was intersected.</p> <p>Although the aquifer is not under pressure groundwater discharge is possible during all drilling processes as the sample is returned to surface. Management and mitigation methods to control this include:</p> <ul style="list-style-type: none"> Prepare a sump to contain excess water in the event of groundwater discharge. Have machinery onsite to be available to modify the sump required to contain the groundwater if required Upon completion of drilling, the drillhole will be temporarily plugged so as not to introduce pollution from the surface. Complete rehabilitation will be tentative pending receipt of analytical results of the drill cuttings. This usually takes up to 6 – 8 weeks. When these drill cuttings are no longer required, rehabilitation can be completed and the drillhole will be backfilled with drill cuttings (please refer to Figure 13 and to drillhole construction and decommissioning section located at the end of this PEPR). 	2	B	Low	<p>Drillholes restored to controlling geological conditions that existed before the hole was drilled or, where it is intended to re-enter the hole, the hole must be completed with casing of adequate strength and the casing cemented so that all aquifers are isolated to prevent the movement of any fluids behind the casing.</p> <p>Maintain evidence demonstrating that drillholes are decommissioned in accordance with Earth Resources Information Sheet M21, Mineral exploration drillholes – general specifications for construction and backfilling, and/or specific conditions from DEW (Groundwater) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.</p> <p>Provide the information requested within the 'Groundwater' section of the annual exploration compliance report.</p>	

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH = likelihood of consequence CQ = severity of consequence	LH	CQ		
			<ul style="list-style-type: none"> Upon completion of drilling, the drillhole will be backfilled with surplus drill cutting and plugged (please refer to Figure 6 and to drillhole construction and decommissioning section located at the end of this PEPR). If not rehabbed immediately (for unforeseen circumstances) the hole will be temporarily plugged so as not to introduce pollution from the surface. If multiple aquifers are intersected, then procedures for decommissioning of drillholes as per South Australia Earth Resources Information Sheet M21 will be adhered to including cementing or grouting as needed, this is deemed to be unlikely due to drilling only drilling to base of saprolite layer or to refusal (AC/RC) 					
Soil/vegetation/fauna	Discharge of groundwater into the surrounding environment.	Yes (Applicable to all exploration programs that may intersect groundwater or where activities require the discharge of groundwater into the surrounding environment.)	RAB, AC or RC All ground water that is brought to surface will be captured and contained within sumps. Bunding around the collar of the rig leading to the sump will be used to direct any uplifted water coming to the surface around the collar, to the sump. Water and drilling sludge in the sump will be allowed to dry and then be buried in the sump.	2	B	Low	No discharge of groundwater outside of the exploration site (e.g. drillsite) into the surrounding environment and no discharge of water into a watercourse, unless prior approval under the relevant legislation is obtained.	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. 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.)	No extraction of water required from dams, water bore or mineral drill holes.	1	B	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.)	Due to the remote location of the work area under this PEPR, it is possible but unlikely that rehabilitated tracks will be disturbed. Where tracks are required: New access tracks are to be dog legged from existing tracks to minimise visual identification of tracks and access point to tracks are closed off with fallen logs and shrubs and road windrow of the existing road to be re-established and landowner to be notified tracks have been rehabilitated. Logs or vegetation will place placed at the start of the closed track to prevent previously rehabilitated track being driven on. Vegetations also respread over tracks to aid in reseeded and regrowth and to discourage access	2	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.)	All fire bans, regulations and directions from the Country Fire Service will be observed. Fires will not be permitted on fire ban days. Strict precautions will always be observed to prevent accidental fires, including correct disposal of cigarettes. All vehicles are fitted with appropriate fire extinguishers. Drillers will have Hot Works Permits for welding, cutting, and oxy-cutting and will provide a copy of that permit to Marmota. The drill rig has relevant fire suppression units fitted which are regularly checked to be in good working order.	1	B	Low	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.)	Due to the remote location of the work area, over 100km from the closest public access route, and within the Woomera Prohibited Area, the likelihood of the general public being at the work area during or after exploration activities is very unlikely. The only public access would be station workers, and Marmota will be in regular contact to inform drill locations and concerns before, during and after the drilling. Regardless of this all work areas will be monitored for unauthorised access during field activities to ensure members of the public, Station owners and other land users are kept away from hazards such as heavy vehicle, drilling equipment, power generators and drillholes. Appropriate signage will be displayed at drill locations and all members of the public or not associated with drill program to be escorted by rig inducted person at all times. As per rig procedures if a member of the public approaches the drill rig (work	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
			<p>exclusion distance as per the rig induction ~50m) the rig will be shut down and person(s) approached, and drilling will resumed only when personnel have moved out of area.</p> <p>Open drill holes will be clearly visible due to bunds or excavated dirt piles at sumps and flagged collars open collars. Drill hole cores will be rehabilitated where possible immediately following drilling, in the case it cannot a hole will be plugged and flagged to be rehabilitated.</p> <p>80kph speed limit to be communicated to all staff and contractors for station roads and speed limit on drill lines to be 20kph or less as per track conditions.</p> <p>If Sumps are Required: Open sumps and drill holes will be clearly visible due to bunds or excavated dirt piles at sumps and flagged collars open collars. Drill hole cores will be temporary plugged after drilling.</p> <p>Sumps and drillholes will be rehabilitated within the approved time frame, removing any long term risk</p>					
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.)	<If the potential impact is applicable, list the control and rehabilitation strategies>				<p>No increase in background radiation levels, and employee/contractor exposure levels during the exploration program are within safe limits.</p> <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"> • 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)

- Marmota and all contractors working onsite operate within the bounds of Marmota's field procedures and consultant specific field procedures, to ensure safe completion and environmentally sound operation and completion of all field programs. (Field Safety Operations Manual.doc 2015 WHS Manual.doc 2014.)
 - Marmota staff monitor adherence to safety and environmental compliance, and Marmota has procedures in place to report safety or environmental issues. (Incident report or damage.doc, 2017, Incident Investigation Checklist.doc, 2017)
 - Where issues arise that require reporting in accordance with regulation, Marmota will notify the department.
 - All staff and contractors are required to complete a site induction prior to work commencing. The induction covers site orientation safety and environmental requirements. If and where issues arise staff or contractors are reminded of the need for compliance with procedures and steps will be taken to remediate any breaches. (Site induction will be prepared specifically for the program and prior to commencing)
 - Marmota is in contact with all stake holders as required by legislation notices of entry and keeps a register of communications with stakeholder to ensure concerns are raised and actioned as required.
- Beyond required notifications, Marmota is in regular contact with Station Manager with regards to proposed programs and any potential issues, to avoid complaints due to field activities (Stakeholder Engagement.xlsx 2022)

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.

<Include text here.>

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
Example 1- Coober Pedy Rubbish Dump	25/9/2018	1 Section D				Marmota plastic waste at Coober Pedy Dump



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
WRC 015 (Historic Drilling) in foreground	13/08/2017	1 Section D	409960	6659230	53	Rehabilitation from 2017 and area proposed drilling of this PEPR.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
WRC 008 (Historic Drilling) in for ground	13/08/2017	1 Section D	409985	6659693	53	Rehabilitation from 2017 and area proposed drilling of this PEPR.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Example 3 - Rig	25/9/2018	3 and Section B				One of the proposed rigs mounted on a Landcruiser



6x6 Landcruiser rig

A small, compact, powerful drill rig with onboard air capable of Aircore RAB, auger, mud, hammer, drilling

Minimal environmental impact, go anywhere rig!

Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Example 2 - Rig	25/9/2018	2 and Section B				One of the proposed rigs mounted on a Landcruiser



6x6 Landcruiser rig

A small, compact, powerful drill rig with onboard rods, water and air
Aircore drilling to depths of approx 100m
Running NQ Aircore system

Minimal environmental impact, go anywhere rig!

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

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- 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.

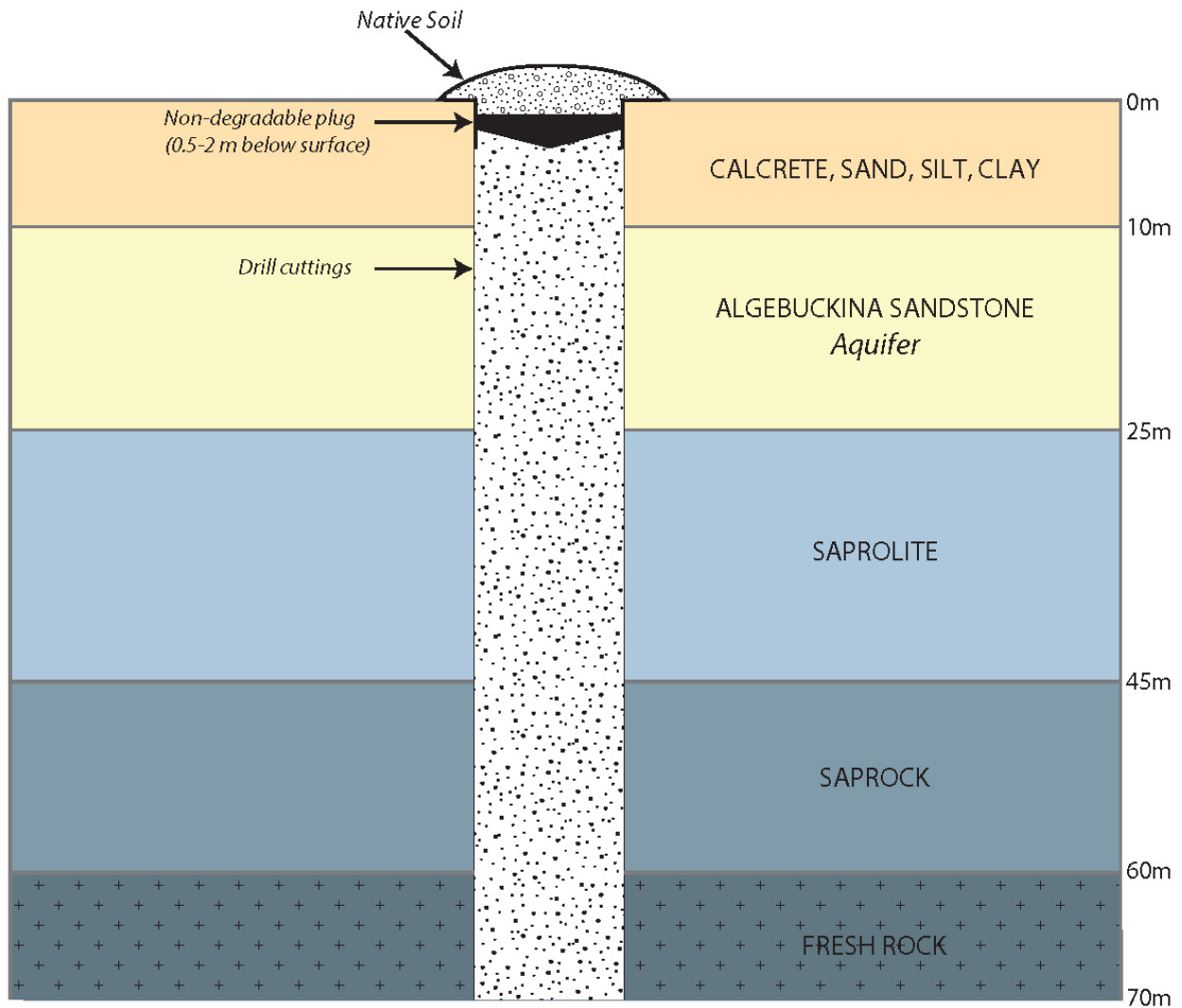


Figure 6 – Decommissioning Drill Holes

Exploration PEPR application – 12-month period

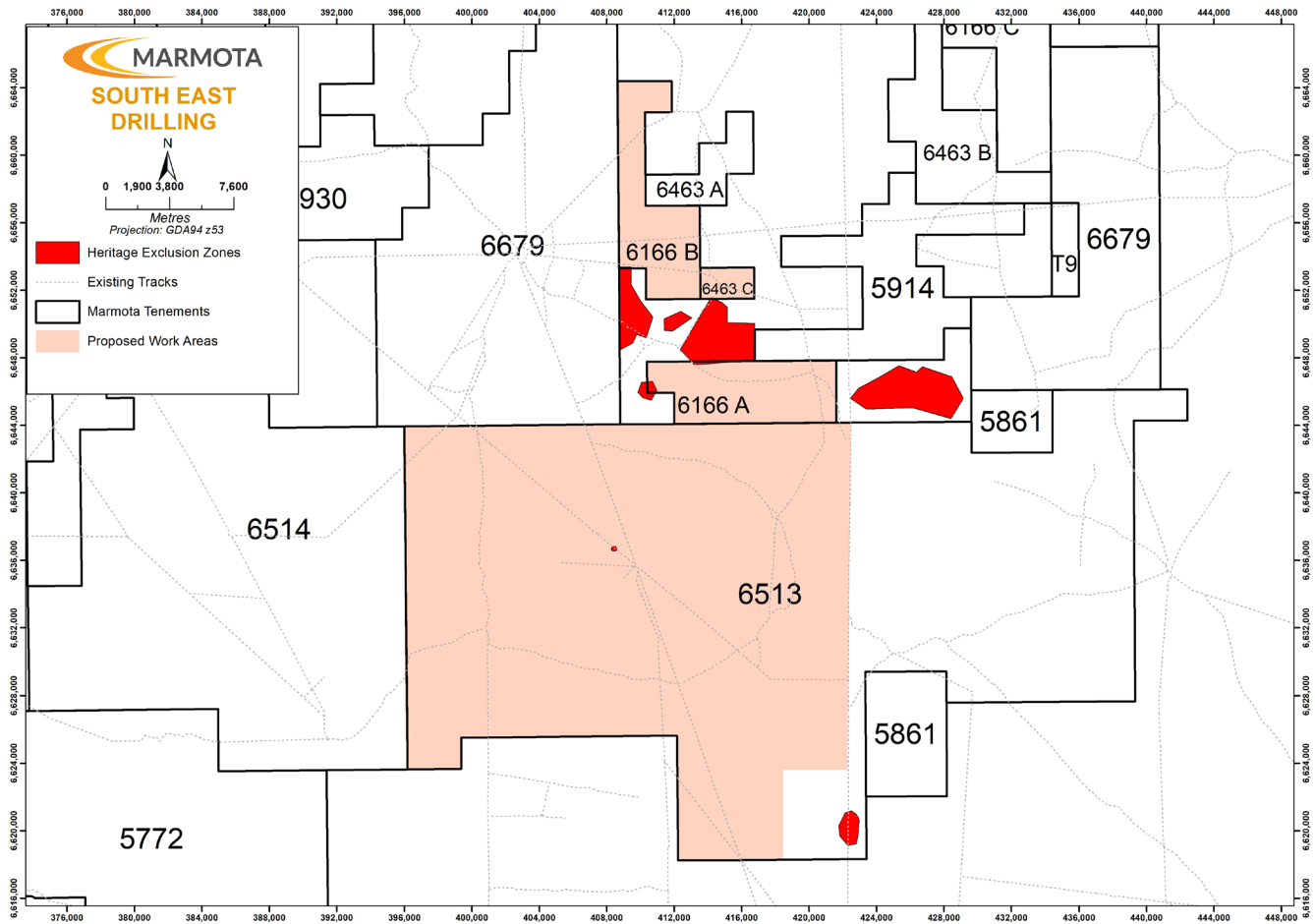


Figure 7 - Heritage Exclusion Zones and Proposed Work area

Exploration PEPR application – 12-month period

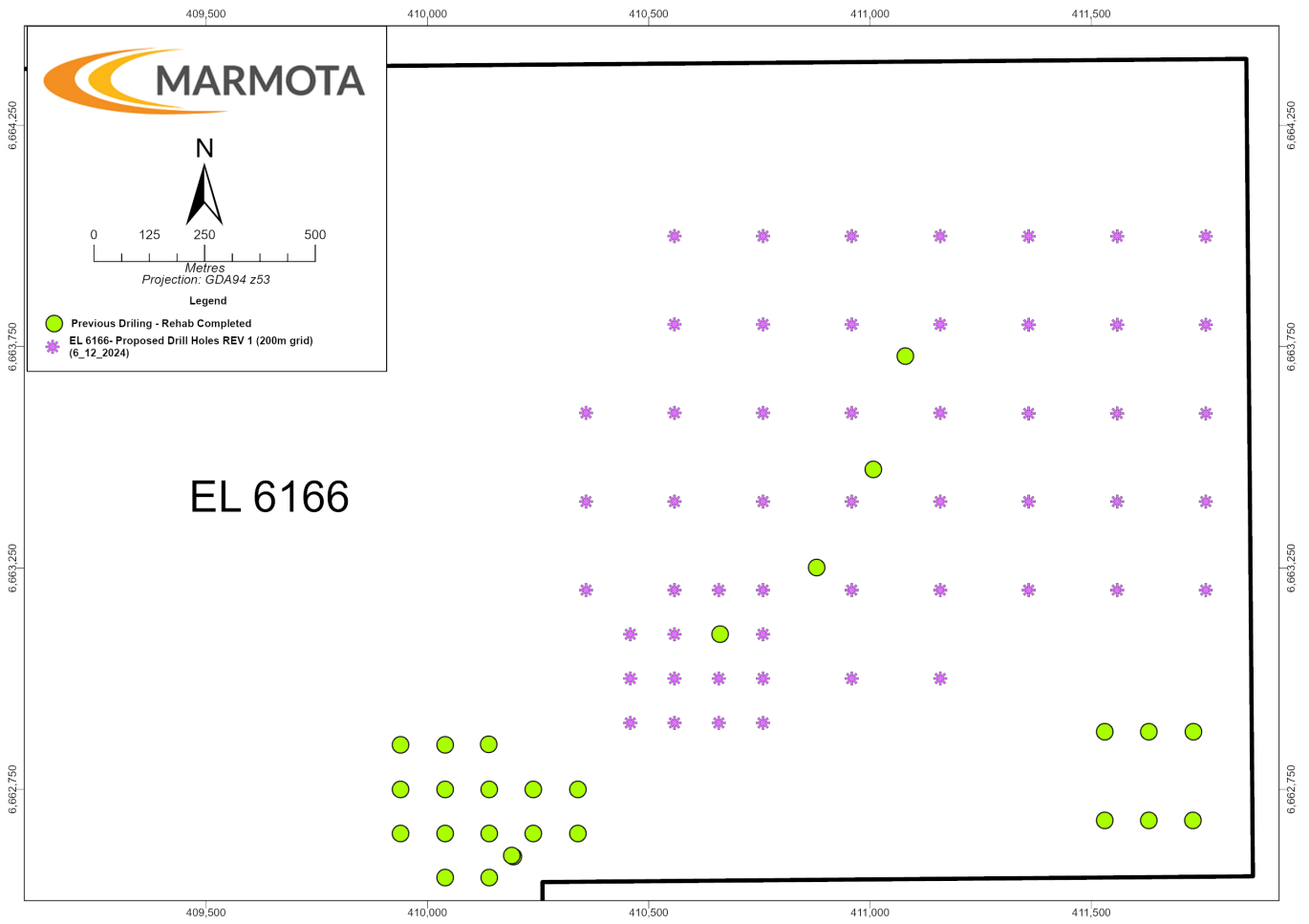


Figure 8 – Proposed Drill (PURPLE) within EL 6166 (UPDATED 16/12/2024)

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.