



Government
of South Australia

Department for
Energy and Mining

14 April 2025

Mr. David Paterson,
Agent,
Tarcowie Phosphate Company Pty Ltd,
P.O.Box 200,
LOBETHAL, SOUTH AUSTRALIA, 5241

Email: david.p@gehughes.com.au

Dear Mr. Paterson,

Approval Notification - Exploration Program for Environment Protection and Rehabilitation (EPEPR2025-004) EL 5765

The program for EL 5765, final version submitted on 09 April 2025, to conduct drilling of 50AC holes, 12 costeans targeting phosphate and manganese mineralisation located approximately 4.5km south-east of Tarcowie, has been approved in accordance with Section 70B(5) of the *Mining Act, 1971 (the Act)*.

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

In accordance with section 62(1) of the *Mining Act, 1971*, a rehabilitation bond/bank guarantee to the value of **\$21,000** is required to be lodged with the Mining Registrar. Appropriate documentation will be forwarded to you shortly. The bond must be lodged within 28 days of receiving these documents.

You are reminded that:

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

(unless the Minister has authorised, on application by the tenement holder in a manner and form set out in the guidelines, the destruction or disposal of the samples).

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

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

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

The proposed program may be subject to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Mineral exploration industry-specific information is contained in an appendix in the EPBC Matters of National Environmental Significance – Significant impact guidelines 1.1. This document is available on the Australian Government’s Department for Agriculture, Water and the Environment website at <http://www.environment.gov.au/resource/significant-impact-guidelines-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 / Jonathan Gnanapragasam on 08 8429 7038 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 5765		
Tenement holder(s) (for each tenement)	Tarcowie Phosphate Company Pty Ltd (TPC)		
Operating company	GE Hughes Construction Co (GEH) being parent entity of TPC		
Agency agreement (if applicable)	N/a		
PEPR prepared by	David Paterson (agent for TPC) c/- PO Box 200 Lobethal SA 5241 mobile : 0417 823 654 email david.p@gehughes.com.au		
Project supervisor/contact person(s)	David Paterson – resume previously provided to DEM		
Project/prospect name	Sect 147 Tarcowie		
Location details	Approx. 4.5 Km SE of town of Tarcowie SA 5431		
Project description, commodity type and mineralisation model	Aircore drilling (up to 50 holes) and costeaning (up to 12 trenches) targeting rock phosphate and related minerals (Mn, trace elements) Phosphate mineralisation model similar to ML 6208 being altered and near surface stratigraphic unit identified by soil geochemistry, century ago prospecting circa 1910 & Dec 2024 TPC low impact exploration. Mineralisation likely old sedimentary phosphorite beds related to Brighton limestone equivalent that have been subject to tectonic activity, low grade metamorphism & numerous near surface weathering concentration processes.		
Proposed project schedule	Start date	May / June 2025	End date Sept / Oct 2025

DECLARATION

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

Name	Duane Adam HUGHES	Signature (digital allowed)	
Position	Managing Director GEH / Sole Director TPC	Date	__09 April 2025

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

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

SECTION B – PROGRAM PREPARATION AND ACCESS TO LAND

Work undertaken in preparing the proposal

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

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

1.	Review of past geological mapping & exploration including Bulletin #7 SA Geological Survey 1917, various reports by SA govt geologists including K Johns & RA Cullen. Open file envelope 265 dated 1962 produced by Enterprise Exploration for CRA.
2.	Regional soil geochemical survey undertaken by Flinders Mines 2008 - 10 and reprocessing by TPC 2020
3.	Extrapolation of geological observations since GEH purchased TPC in March 2023 and re-commenced rock phosphate mining at ML 6208
4.	Low Impact Exploration (LIE) carried out by TPC in Dec 24 pursuant to a Form 21A dated 24 July 24 and MOU signed with the Landowner, Wayside Landholdings Pty Ltd (Wayside) dated 27 Nov 24.
5.	LIE comprised drone photography, rock chip sampling, auger soil /subcrop sampling (depth 0.8m max), geological mapping and XRF analysis on soil and rock phosphate outcrop and subcrop samples. XRD on auger soil samples.
6.	Discussions with drilling contractors (targeting suitable air core 4WD mounting rig with low environmental impact footprint. Note : McLeod Drilling have been selected as the preferred contractor for Aircore program. . Discussion with GEH to determine suitable trenching / costeaning equipment.

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 5765	Wayside Landholdings P/L [Annette Lang]	Part Section 147 Tarcowie – Peterborough Rd 4.5 kms SE Tarcowie	Sheep Grazing W & NE portions Cropping SE portion	Form 21A dated 24 July 24	Cropping land [note: not being explored at this time] Two small dry dams A buffer of 25 metres will be maintained to the north of the dams and 50 metres south.	N/a as no exploration on cropping land As per 26 Feb 25 MoU re 2 small dams	LIE MOU / LAA signed 27 Nov 24 Advanced Exploration MoU / LAA signed 26 Feb 25 & lodged with DEM	DEM aware of court action initiated by Wayside / Lang Family. This action curtailed following a mediation of the parties that resulted in the 27 Nov 24 MoU. Stakeholder concerns were related to a general misunderstanding of TPC's proposed exploration & impacts. Addressed at mediation. Communications in recent months resulted in 26 Feb 25 advanced exploration MoU / LAA.

Exploration PEPR application – 12-month period

Tenement	Stakeholder	Land tenure	Land use	Date and type of NOE served	Type of exempt land	Date waiver obtained	Date consultation/access agreement and/or permits signed/authorised	Stakeholder concerns raised and how addressed
EL 5765	Durnford	Sections 151, 150N, a354 Adjoin s147 & ML6208	Sheep grazing and cropping	N/a	Cropping	N/a	WIP – no exploration currently planned on Durnford land.	There was regular contact with Heather Durnford in 2 nd half of 2024 which included agreement for the Durnford's to agist sheep on ML 6208.
EL 5765	Thomas	a350, s148, s128W Ajoin s 147	Sheep grazing and cropping	N/a	Cropping	N/a	LAA in draft – not signed . WIP – no exploration or disruption currently planned on Thomas land	2024 discussions require follow up as initially Malcolm Thomas was supportive of TPC exploration in the district. Work in progress – precise concerns unknown at this time.

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

n/a

Provide any additional relevant information.

TPC confirms that proposed Advanced Exploration (drilling & costeaning) will only be carried out on Section 147 owned by Wayside Landholdings (Lang Family). The two work areas are within Section 147 grazing land.

SECTION C – DESCRIPTION OF THE ENVIRONMENT

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

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

Proximity to infrastructure and housing

Provide the following information:

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

Provide this information on a locality plan/map. Refer Figures 1-3 and photograph 02 for info sought above.

Tarcowie = 4.0km NE, Lange residence 0.8km W, Durnford residence 1.5km N, Catford residence 1.4km E, Thomas residence 2km E
 Roads as per SDARIG map attached. Dams bores pumps & troughs marked on location plan. Existing tracks & TPC access ways as per attached maps.

Land use and tenure

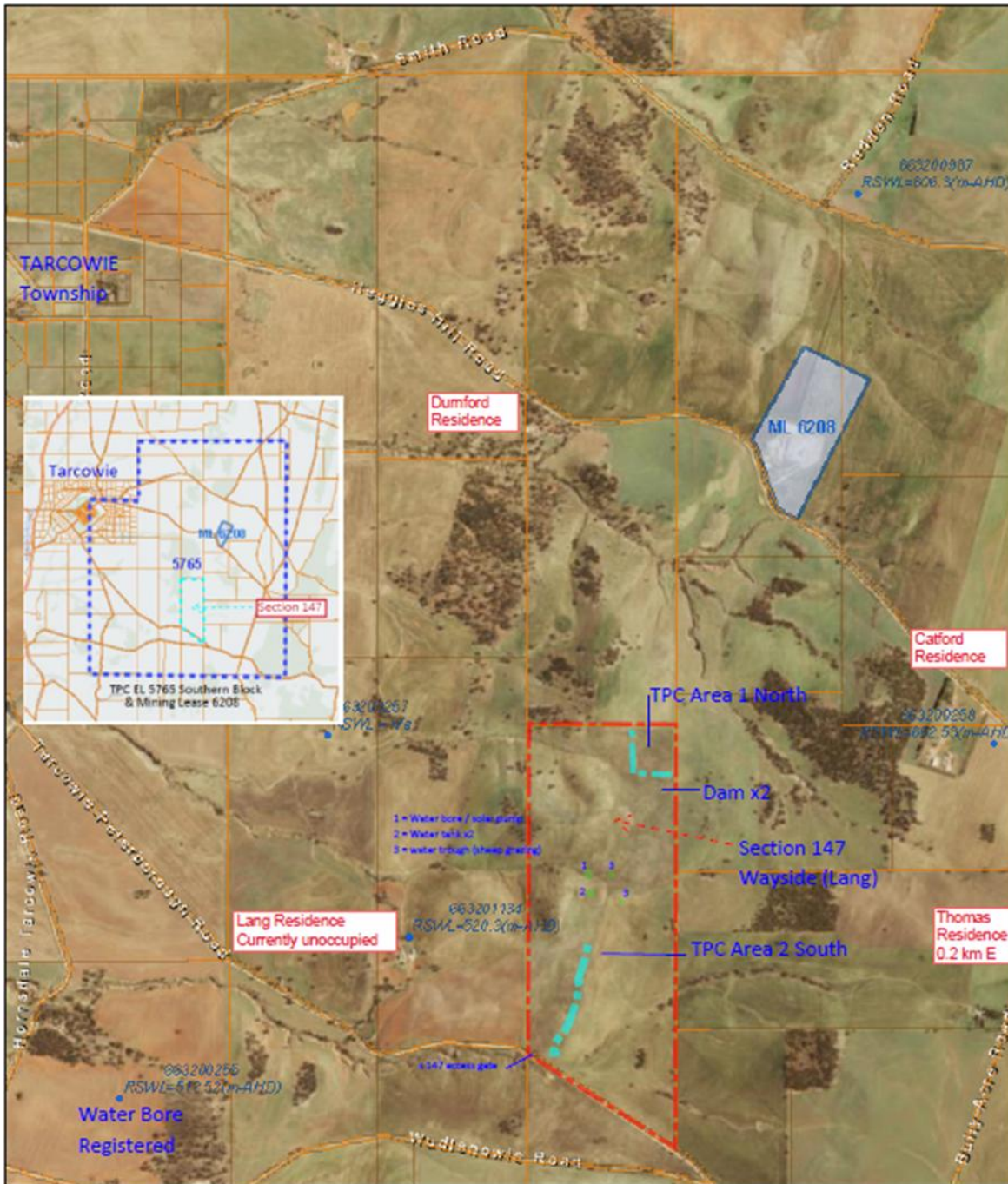
Using the table below, select the land tenure and land use that the proposed exploration activities will occur in. Include additional information where prompted.

Land tenure/type	Applicable
Freehold	<input checked="" type="checkbox"/>
Pastoral lease	<input type="checkbox"/>
Perpetual lease	<input type="checkbox"/>
Crown land	<input type="checkbox"/>
Mining reserve	<input type="checkbox"/>
Aboriginal freehold/leasehold land (e.g. Anangu Pitjantjatjara Yankunytjatjara and Maralinga Tjarutja lands)	<input type="checkbox"/>
Forestry reserve	<input type="checkbox"/>
Marine parks	<input type="checkbox"/>
National parks, conservation parks, conservation reserves, regional reserves*	<input type="checkbox"/>
Adelaide Dolphin Sanctuary	<input type="checkbox"/>
Murray Darling Basin	<input type="checkbox"/>
Other*	<input type="checkbox"/>

Land use	Applicable
Grazing	<input checked="" type="checkbox"/>
Cultivated land	<input type="checkbox"/>
Residential	<input type="checkbox"/>
Township	<input type="checkbox"/>
Industrial	<input type="checkbox"/>
Tourism	<input type="checkbox"/>
Conservation	<input type="checkbox"/>
Defence activity	<input type="checkbox"/>
Road reserve	<input type="checkbox"/>
Sites of scientific significance (geological monuments, fossil reserves etc.)	<input type="checkbox"/>
Orchard/vineyard	<input type="checkbox"/>
*Native vegetation heritage agreements	<input type="checkbox"/>
*European heritage sites	<input type="checkbox"/>
*Other (e.g. historic mining)	
Two small pits located within TPC Area 2 South. Refer photographs 6 & 7.	

* Indicates more information required in field immediately below.
 12-month Exploration PEPR template – January 2021

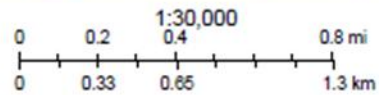
SARIG Map



March 1, 2025



TPC EL 5765 - Section 147 PEPR - Location Plan



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Exploration PEPR application – 12-month period

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

None known – Norther Areas Council aware of TPC operations at ML 6208

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

None known

Provide any additional relevant information.

Refer various TPC drone photographs and photographs 3-6 which document past clearing and lack of vegetation.

Woomera Prohibited Area (WPA)

Will activities be conducted within the WPA	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Do you have a resource exploration permit in place?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
In which zone will activities be conducted?	Not Applicable				
Does the Exploration Permit allow the operator to conduct exploration operations in the WPA?				Yes <input type="checkbox"/>	No <input type="checkbox"/>
What is the expiry date of the resource exploration permit?					
Identify closure periods that may impact on the exploration program.					

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"/>
NOT APPLICABLE		
Do you have a Deed of Access with Defence?	Yes <input type="checkbox"/>	No <input 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.		

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 type="checkbox"/> No <input checked="" 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 type="checkbox"/> No <input type="checkbox"/>	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 type="checkbox"/>	Is the agreement registered?*	Yes <input type="checkbox"/> No <input type="checkbox"/>

Exploration PEPR application – 12-month period

Have you accepted an Indigenous land use agreement (ILUA)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is the ILUA registered?*	
		Yes <input type="checkbox"/> No <input type="checkbox"/>	
Have you obtained ERD Court determination?†	Yes <input type="checkbox"/> No <input type="checkbox"/>	Is the determination registered?*	
		Yes <input type="checkbox"/> No <input type="checkbox"/>	

* 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.

Not applicable

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.).

Undulating slopes tending to nearly flat in portions of both work areas. Slopes tending to steep, away from the two work areas and on the western side of Section 147. Refer attached photos 2-5. Substantial rocky limy siltstone outcrops / subcrops on the western side of TPC Area 2 South. Outside and to the east of Area 2 is undulating cropping land (not covered by 26 Feb 25 MoU). TPC Area 1 North covers the NE corner of Section 147 and is sloping grazing land with a distinct outcrop / subcrop area (20%) located middle eastern side abutting the boundary fence. It forms a distinct knob and is the start of a steeper slope to the east of the work area and the boundary fence. Parts of the western portion of Section 147 and well away from the prospective phosphate lode horizon are steeper slopes with noticeable erosion gullies.

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.

TPC has conducted limited but likely representative auger soil sampling holes (Dec 24 low impact exploration) across Area 1 and Area 2. Hole depths were to a maximum of 0.9 metres. Soil profile depths ranged from 0.3m to >0.9m, with the majority encountering impenetrable subcrop at depths ranging from 0.4 – 0.8 metres. Refer examples of soil profiles caught in photograph 1. showing ADI 1 and ADI 18 profiles. Soils are generally light to dark brown silty loams with some clay. Small rock fragments close to subcrop. SARIG shows Area 2 South subgroups = 20% C3, 15% D2 & 65%D3. Area 1 North is shown as outcrop however that only applies to about 20% of the area. Soils encountered by TPC auger work showed predominance light brown silty loams with clayey units. No deleterious minerals eg sulphides anticipated. Compaction should not be an issue based on Dec 24 experience with 4WD vehicles. No erosion or runoff issues anticipated from drilling. Costeaming rehabilitation will require a dedication to ensure limited or no subsidence and may require the placement of subcrop boulders / rocks to limit future runoff issues. There are ample rock piles in close vicinity. Given the lack of rain in the district in the last 6 months dust will be a small but limited issue. The four house blocks (Catford, Thomas, Lang, Durnford) will not be impacted by dust. Refer Figure 2 for residence locations.

Surface water

Will the proposed program interfere with surface water bodies and natural drainage (e.g. drainage lines, creeks, floodplains, wetlands)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, describe the potential interference and surface water bodies and natural drainage on maps. If no, indicate why.		
N/a		
Is the program area located within water protection areas defined under the <i>River Murray Act 2003</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
If yes, provide the name(s).		
N/a		
Is the program area located within any prescribed watercourses or prescribed surface water areas under the <i>Landscape South Australia Act 2019</i> ? If yes, provide the name(s).	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/a		

Groundwater

Is groundwater likely to be intersected when conducting the exploration program?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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.		
Proposed Aircore drilling unlikely to exceed depth of 25 metres. Bores in the near vicinity indicate water table > 100 metres in depth		

Exploration PEPR application – 12-month period

Description of the locality/area where different groundwater conditions may be encountered					
<i>Not Applicable</i>					
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

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

Not applicable

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

There are no known groundwater dependent ecosystems within Section 147 or nearby. Section 147 has one operating waterbore filling two surface tanks (via solar pump) which feed two troughs used to support sheep grazing. Due to the lack of "natural grass feed" at present stock levels are very low.

Is the proposed program located within a prescribed wells area or prescribed water resource area? If yes, provide the name of the area.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/a		

Provide any additional information, if required.

None applicable

Native vegetation

Will you be working within areas of native vegetation? If yes, provide the following information: <ul style="list-style-type: none"> description of the formation and structure of vegetation in the area (e.g. woodland, shrubland, grassland) list of the dominant species. If no, indicate why you will not be working within areas of native vegetation?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Section 147 is essentially now rocky grassland with a few patches of native trees and shrubs. It appears that Section 147 was subject to substantive vegetation clearing in its early farming days. Both Area 1 North and Area 2 South are devoid of trees, shrubs, brush or scrub cover. Tree and scrub areas are well away from TPC proposed working areas. Access for the proposed Advanced Exploration will not require any clearing of vegetation. Use will be made of existing tracks, fence lines and some new drill rig and excavator access ways. In more normal seasons there would be grasses possibly up to 0.3m in places across Areas 1 North & 2 South. At present grass is at an absolute minimum due to past grazing and lack of rain. This is unlikely to change in the next few months scheduled for TPC advanced exploration covered by this PEPR.		
TPC has details of Indigenous Plant Species surveys carried out by Kieran Brewer in Dec 2006, June 2011 and February 2016 in part relating to ML 6208. In excess of 40 individual indigenous plant species were recorded. This information will be available and possibly relevant to future exploration activities on EL 5765 and away from Section 147.		

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 Comments	Common name	NPW Act rating*	EPBC Act rating†
See table below	See table below		
Comment	Comment		
Given comments above believe it reasonable to say 'there is no measurable likelihood that TPC's proposed programs will impact significant habitats nor any rare or endangered flora species'.	The nearest reserve is the "Tarcowie Native Flora Reserve" about 4 kms to the Northeast; It is located on the edge of Tarcowie township. Refer Figures 5 & 6		

Exploration PEPR application – 12-month period

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* *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.

SPECIES	COMMON NAME	NATIVE	NATIONAL RATING	STATE RATING
<i>Maireana rohrlachii</i>	Rohrlach's Bluebush	Y		R
<i>Ptilotus erubescens</i>	Hairy-tails	Y		R
<i>Brachyscome ciliaris</i> var. <i>subintegrifolia</i>		Y		R
<i>Leptorhynchos elongatus</i>	Lanky Buttons	Y		E
<i>Olearia pannosa</i> ssp. <i>pannosa</i>	Silver Daisy-bush	Y	VU	V
<i>Olearia picridifolia</i>	Rasp Daisy-bush	Y		R
<i>Podolepis decipiens</i>		Y		R*
<i>Podolepis jaceoides</i> (NC)	Showy Copper-wire Daisy	Y		R
<i>Pycnosorus globosus</i>	Drumsticks	Y		V
<i>Senecio macrocarpus</i>	Large-fruit Groundsel	Y	VU	V
<i>Caladenia argocalla</i>	White Beauty Spider-orchid	Y	EN	E
<i>Cryptandra campanulata</i>	Long-flower Cryptandra	Y		R
<i>Myoporum parvifolium</i>	Creeping Boobiella	Y		R

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*).

Three weeds (African Boxthorn, Bridal Creeper, Boneseed) were identified by a NatureMapSA search. All occurrences were outside Section 147 – Tarcowie.

Please refer to **Figure 7** below which showing “**Weeds of National Significance & Buffel Grass**” sourced from NatureMaps SA.

The current owners of Section 147 Wayside included weed mitigation measures in the MoU (refer point 2 Operative Part) which TPC is happy to comply with.

Given TPC's recent activities via exploration away from ML 6208 it has recognised the need to improve its knowledge with regards to weeds and pathogens. The Tarcowie Landcare Group have for many years been involved with plantings of natives and weed eradication. Plantings have included three located on or near ML 6208. TPC plans to be involved with the group in 2025 as a means building its knowledge base.

Before commencing work pursuant to this PEPR TPC will make further contact with Wayside to document the history related to seed control and areas which may be affected close by TPC work areas.

Dec 24 low impact work did not highlight any obvious weed or pathogen issues on the tracks & lines traversed across Section 147 by TPC.

As noted above TPC Area 1 North & Area 2 South are current devoid of significant grasses – native or otherwise. Weeds do not rank as a significant risk resulting from TPC's proposed work.

Fauna

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

Please refer **Figure 7** and the table immediately below which showing all Fauna (Native & Introduced) sourced from NatureMaps SA. The search area covers the south portion of EL 5765 and includes Section 147.

Exploration PEPR application – 12-month period

SPECIES	COMMON NAME	NATIVE	NATIONAL Rating	STATE Rating
<i>Crinia signifera</i>	Common Froglet	Y		
<i>Limnodynastes tasmaniensis</i>	Spotted Marsh Frog	Y		
<i>Neobatrachus pictus</i>	Burrowing Frog	Y		
<i>Acanthagenys rufogularis</i>	Spiny-cheeked Honeyeater	Y		
<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	Y		
<i>Acanthiza uropygialis</i>	Chestnut-rumped Thornbill	Y		
<i>Accipiter cirrocephalus cirrocephalus</i>	Collared Sparrowhawk	Y		
<i>Accipiter fasciatus fasciatus</i>	Brown Goshawk	Y		
<i>Aegotheles cristatus cristatus</i>	Australian Owlet-nightjar	Y		
<i>Anthochaera carunculata</i>	Red Wattlebird	Y		
<i>Aquila audax audax</i>	Wedge-tailed Eagle	Y		
<i>Barnardius zonarius</i>	Australian Ringneck	Y		
<i>Barnardius zonarius barnardi</i>	Mallee Ringneck	Y		
<i>Chenonetta jubata</i>	Maned Duck	Y		
<i>Cheramoeca leucosterna</i>	White-backed Swallow	Y		
<i>Climacteris picumnus picumnus</i>	Brown Treecreeper	Y		
<i>Colluricincla harmonica</i>	Grey Shrike-thrush	Y		
<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	Y		
<i>Corvus coronoides</i>	Australian Raven	Y		
<i>Corvus mellori</i>	Little Raven	Y		
<i>Corvus sp.</i>	Ravens, Crows	Y		
<i>Crocticus torquatus leucopterus</i>	Grey Butcherbird	Y		
<i>Dacelo novaeguineae novaeguineae</i>	Laughing Kookaburra	Y		
<i>Daphoenositta chrysoptera pileata</i>	Black-capped Sittella	Y		
<i>Dicaeum hirundinaceum hirundinaceum</i>	Mistletoebird	Y		
<i>Egretta novaehollandiae</i>	White-faced Heron	Y		
<i>Eolophus roseicapilla</i>	Galah	Y		
<i>Gavicalis virescens</i>	Singing Honeyeater	Y		
<i>Geopelia placida placida</i>	Peaceful Dove	Y		
<i>Gymnorhina tibicen</i>	Australian Magpie	Y		
<i>Hirundo neoxena neoxena</i>	Welcome Swallow	Y		
<i>Manorina melanocephala</i>	Noisy Miner	Y		
<i>Melithreptus brevirostris</i>	Brown-headed Honeyeater	Y	ssp	
<i>Ocyphaps lophotes lophotes</i>	Crested Pigeon	Y		
<i>Pachycephala rufiventris rufiventris</i>	Rufous Whistler	Y		
<i>Pardalotus striatus striatus</i>	Striated Pardalote	Y		
<i>Passer domesticus domesticus</i>	House Sparrow	N		
<i>Petrochelidon ariel</i>	Fairy Martin	Y		
<i>Petroica goodenovii</i>	Red-capped Robin	Y		
<i>Phaps chalcoptera</i>	Common Bronzewing	Y		
<i>Platycercus elegans subadelaidae</i>	Adelaide Rosella (southern FR)	Y		
<i>Podargus strigoides</i>	Tawny Frogmouth	Y		
<i>Pomatostomus superciliosus</i>	White-browed Babbler	Y		
<i>Psephotus haematonotus</i>	Red-rumped Parrot	Y		
<i>Psephotus haematonotus haematonotus</i>	Red-rumped Parrot (eastern SA except NE)	Y		
<i>Ptilotula penicillata</i>	White-plumed Honeyeater	Y		
<i>Purnella albifrons</i>	White-fronted Honeyeater	Y		
<i>Rhipidura leucophrys leucophrys</i>	Willie Wagtail	Y		
<i>Smicromis brevirostris</i>	Weebill	Y		
<i>Struthidea cinerea cinerea</i>	Apostlebird	Y		
<i>Sturnus vulgaris vulgaris</i>	Common Starling	N		
<i>Zosterops lateralis</i>	Silvereye	Y		
<i>Austronomus australis</i>	White-striped Free-tailed Bat	Y		
<i>Chalinolobus gouldii</i>	Gould's Wattled Bat	Y		
<i>Chalinolobus morio</i>	Chocolate Wattled Bat	Y		
<i>Lepus europaeus</i>	European Brown Hare	N		
<i>Macropus (Osphranter) robustus</i>	Euro	Y		
<i>Macropus (Osphranter) rufus</i>	Red Kangaroo	Y		
<i>Macropus fuliginosus</i>	Western Grey Kangaroo	Y		
<i>Macropus sp.</i>		Y		
<i>Mormopterus sp.</i>		Y		
<i>Mus musculus</i>	House Mouse	N		
<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat	Y		
<i>Oryctolagus cuniculus</i>	Rabbit (European Rabbit)	N		
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	Y	ssp	ssp
<i>Trichosurus vulpecula</i>	Common Brushtail Possum	Y		R
<i>Vespadelus sp.</i>		Y		
<i>Vulpes vulpes</i>	Fox (Red Fox)	N		
<i>Christinus marmoratus</i>	Marbled Gecko	Y		
<i>Hemiergis peronii</i>	Four-toed Earless Skink	Y		
<i>Morethia boulengeri</i>	Common Snake-eye	Y		
<i>Morethia obscura</i>	Mallee Snake-eye	Y		
<i>Pogona vitticeps</i>	Central Bearded Dragon	Y		
<i>Pseudonaja textilis</i>	Eastern Brown Snake	Y		
<i>Tiliqua rugosa</i>	Sleepy Lizard	Y		

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Fauna seen on or near Section 147 by TPC

NATIVE – seen Dec 24

Kangaroo, wallaby, dingo, sleepy & blue tongue lizard,
Gala, white cockatoo, hawk, crow

FERAL – seen Dec 24

Fox, cat, rabbit

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
The table below lists threatened was extracted via Nature maps and covers the area marked in Figure 6 below.			

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.

Fauna SPECIES	COMMON NAME	NATIVE	NATIONAL RATING	STATE RATING
Melithreptus brevirostris	Brown-headed Honeyeater	Y	ssp	
Tachyglossus aculeatus	Short-beaked Echidna	Y	ssp	ssp
Trichosurus vulpecula	Common Brushtail Possum	Y		R

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 type="checkbox"/>	No <input checked="" type="checkbox"/>
N/a		
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"/>
Special note: Photograph 07 shows an old pit containing rubbish. The photo was provided as a matter of record. TPC has not and will not add additional rubbish to this pit.		
All rubbish associated with the proposed work programs will be disposed of using an appropriate Northern Areas Council rubbish bin and / or licensed facility.		
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.		
Aboriginal heritage survey has not been conducted & not proposed by TPC		

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	Consultant – David Paterson
Land access/environmental	1	GE Hughes being TPC parent company
Field assistants/technicians	2	GE Hughes being TPC parent company

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Drilling crew	2	McLeod Drilling
Site preparation and rehabilitation	2	GE Hughes being TPC parent company
Shifts worked per day	Hours worked per day	
One	10 – 11 hrs est.	
Equipment type	Owner/operator	Description/capacity
4WD mounted drill rig & support vehicles	McLeod Drilling	Refer attached flyer
Volvo 24T excavator	GE Hughes (TPC parent Co.)	450mm bucket / with auger capability
Draker low loader	GE Hughes (TPC parent Co.)	
fuel trailer tanker	GE Hughes (TPC parent Co.)	Trailer mounted
small water tank trailer	GE Hughes (TPC parent Co.)	Trailer mounter
Skid steer	GE Hughes (TPC parent Co.)	Kubota SSV75
2X 4WD support vehicles Tandem trailer	GE Hughes (TPC parent Co.)	Ford or similar 4WD tray tops

Provide any additional information, if required.

Nothing at this time / supplemental information provided to DEM as required.

Low impact exploration activities

Will low impact exploration operations be conducted that are not covered by the Generic program for environment protection and rehabilitation – low impact mineral exploration in South Australia , (generic PEPR)? If yes, describe each type of low impact operations proposed.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
N/a		

Drilling activities

Will exploration drilling activities be conducted? If yes, fill out the below table	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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Tenement	Drilling type	Maximum number of drillholes	Maximum drillhole depth (m)	Maximum number of sumps required at each site	Maximum size of sumps (length x 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 5765	Aircore Planned Ground condition may require RC	50	25 metres 2 or 3 to 30 metres	n/a	n/a	Drill pad and sample collection area = Drill rig footprint + 16 sq m for sample along access track See access point info below	Nil	N/a
TOTAL		Est 50	1320 m					

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).

* The footprint includes all areas of disturbance associated with the drillsite.

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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.

Minimal site clearance to provide safe work area. Most sites will require no work. No vegetation clearance, no sumps, no site levelling. A little rock clearing required over 20% of TPC Area 1 North.

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.		
Polypipe drill collars to depth of 1-2 metres expected based on TPC auger drilling Dec 2024. Collars will not be cemented. Water may be used to “consolidate” and supports soil around casing. Any deviation from this will be reported to DEM		
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.		
No cement plugs given near surface target zone and max depth 30 m. Holes to be backfilled with excess drill cuttings. Polypipe collars to be removed.		
If an aquifer(s) is intersected TPC will follow the guidelines and requirements set out in DEM Information Sheet M21 (Mineral Exploration Drillholes – General Specifications for construction and backfilling) and Information Sheet M33.		
Any hole encountering water or an aquifer will likely see drilling ceased and the required backfilling undertaken per ISM 21. Any water flow will be sampled and details recorded and reported to DEM.		

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?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
If yes, fill out the table below. PLEASE NOTE : the number of and length of individual costeans will be a function of drilling results. Depth of each costean will likely vary depending on geology, depth to hard rock and other geotechnical issues presently unknown.		

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)
EL 5765 Area 1 North	6 max	60 - 100m x 0.45m 270m ²	5 – 7m	315 (max)	1890 (max)	6 x 100 x 3.5 (track width) 2100m ² (max)
EL 5765 Area 2 South	6 max	20 – 30m x 0.45m 81m ²	5 - 7m	94.5 (max)	567 (max)	6 x 30 x 3.5 (track width) 630m ² (max)
TOTAL	12				2457 (max)	2730m ² (max)

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.

Excavator access via existing tracks and fence lines into Work Area 1 North & existing tracks to Work Area 2 South. There will be no vegetation clearance required as referenced above. Digging of trenches will be pursuant to GEH / TPC HSEQ Management plan that forms a part of this PEPR. Safety Management will involve normal signage, physical barriers for each open trench and negotiation with the landowner to limit or have no livestock on the work areas if possible. There will be no separate costean / bulk sample disposal pits.

Exploration PEPR application – 12-month period

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, thick plastic or matting used to contain cuttings). Include requirements for on-site geological sample management (splitting of archive samples, bag farms, core processing and storage).

Aircore drill hole samples

Large and medium heavy duty plastic bags / 5 – 10 kg samples using splitter. Mineralised zones may see 100% sample bagged. Rock chip samples will be collected where appropriate (mineralised sections, unusual host rock), labelled and stored in sealable plastic trays. Photography will be employed when possible or appropriate.

Hand held XRF readings will be taken during the drilling process and over the last few metres of each hole before terminating.

Tarps will be used to limit sample spillage as per Dec 24 auger program.

GEH / TPC HSEQ Management plan as applicable.

All bagged samples will be transported to ML 6208 initially for additional processing, splitting and some hand held XRF analysis and logging and interpretation. Samples will then be stored on pallets at G.E. Hughes Construction Lobethal Depot in a secure dry place.

Excess cuttings will be returned downhole and / or removed to ML 6208 for disposal via an appropriate licensed facility as required.

Costean sampling

Precise detailing of how each costeans will be sampled is not possible at this time. Geologic structure(s), mineralisation types and patterns, costean depth & competency will drive the process & outcome. It will likely involve a combination of stockpiled excavated material (grab & spear where possible).

Costean walls will be geologically mapped & with representative channel samples taken as a priority. Photography will be employed when possible or appropriate. Samples will be collected in large and medium heavy duty plastic bags / 5 – 10 kg. Better representative mineralised samples will be stored in solid plastic buckets (25kgs approx.) with lids to retain moisture. Samples collected will be transferred to ML 6208 for further processing (refer process for Aircore samples)

Hand held XRF readings will be taken, recorded and used to optimise and support mapping mineralisation distribution.

Note :

(a) advise to be taken from Challenger Geological regarding sample collection and management to cross check process, best practice & to ensure DEM compliance.

(b) check assays (XRF & XRD) will be carried out by various contract labs post completion of this drill program.

Exploration PEPR application – 12-month period

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"/>
Will access be required across adjoining tenements? If yes, detail the method(s) for gaining access, and if an agreement is in place with all stakeholders. Include the total area of disturbance required (i.e. length (km) and width (m) of tracks) and provide on a locality map.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Neighbouring landowners will not be impacted by proposed access or in the carrying out of work to be approved by this PEPR.		
Will access off existing tracks be required? If yes, detail the method(s) for gaining access and if vegetation clearance is required. Include the total area of disturbance (includes drill traverses and seismic lines) required off existing tracks (i.e. length (km) and width (m) of new tracks).	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<p><u>Area 1 North- drilling</u> Directly off the fence line used in Dec 24 LIE No vegetation clearance – none exists except short dead grass 6 – 8 east west drill traverses up to 150m long and drill rig width (say 2.2m) = 8 x 150 x 2.2 = 2640 m2 footprint</p> <p><u>Area 1 North- costeans</u> Directly off the fence line used in Dec 24 LIE No vegetation clearance – none exists except short dead grass 4 to 6 – 60 to 100m x 3.5m = 2100 m2 costean footprint</p> <p><u>Area 2 South – drilling</u> Directly off the fence line used in Dec 24 LIE No vegetation clearance – none exists except short dead grass 4 – 6 east west drill traverses up to 40m long and drill rig width (say 2.2m) = 6 x 40 x 2.2 = 528 m2 footprint</p> <p><u>Area 2 South - costeans</u> Directly off the fence line used in Dec 24 LIE No vegetation clearance – none exists except short dead grass 4 to 6 – 20 to 30m x 3.5m = 630 m2 costean footprint 6 – 8 east west drill traverses up to 150m long and drill rig width (say 2.2m) = 8 x 150 x 2.2 = 2640 m2 footprint</p> <p>Note : Some costean footprints will overlay drill traverse footprints. Eg maybe 50% / not possible to confirm at his time as precise costean locations is best determined after Aircore program completion and the first 1 or 2 costeans in each of the work areas.</p>		

Indicate planned access routes on a locality plan and distinguish between existing and proposed new access tracks and drill lines (including fence lines). [Refer attached plans and photographs.](#)

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.		
Jamestown hotels and / or caravan parks		
What is the maximum number of personnel requiring accommodation?	Five / six	
Is a campsite required to be established? If no, no further information is required.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Provide a description and justification of the camp location (e.g. previously cleared areas etc.), and any other relevant information.		
N/a		
What will be the total area (ha) of the campsite(s)?		
What will be the total area (ha) of vegetation clearance for the campsite?		
If vegetation clearance is required, describe the methods used to prepare the site.		
Will any excavations be required?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

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If yes, describe the purpose of the excavation and the maximum volume (m ³) of material to be excavated.		
Are the proposed ablution facilities endorsed/approved for use by the Department of Health or local council, where applicable? If no, indicate why. Not applicable	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Proposed infrastructure (includes caravans, tents, offices, hydrocarbon and water storage requirements etc)	Quantity	Description/capacity
		<i>N/a</i>

Laydown area details		
Will laydown areas be required? If no, no further information is required.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Will the laydown area(s) be located at the same location as the campsite? If no, has the location(s) been discussed with the landowner?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<i>TPC owns ML 6208 a few kms to the north of the proposed AE areas. This will be used for any required laydown area.</i>		
What will be the maximum area (ha) required for the laydown area(s)?	<i>n/a</i>	
What will be the total area (ha) of vegetation clearance for the site?	<i>n/a</i>	
If vegetation clearance is required, describe the methods used to prepare the site.		
<i>n/a</i>		
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"/>
Proposed infrastructure (includes hydrocarbon and water storage requirements)	Quantity	Description/capacity
<i>No infrastructure required</i>		<i>Not applicable</i>
Provide a description and justification of the location (e.g. previously cleared areas), and any other relevant information if required.		

Other exploration methods and/or ancillary operations

Are any other proposed exploration methods (e.g. seismic) and/or ancillary exploration operations required? If yes, describe the activity(s), site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>Usual mapping & sample collection & photography relating to proposed costeans. On-site hand held XRF assaying of samples and drill chips sections. Drone aerial photography pre commencement, post drilling & costeaning and post rehabilitation. No additional site preparation, no vegetation clearance, standard safety gear eg hardhats/ steel capped boots / protective glasses / gloves as required. Radiation signs as required for XRF assaying.</i>		

Commencement, post drilling & costeaning & post rehabilitation

Water supply and management

Will camp and/or drilling water be required? If yes, describe how and where water will be sourced for drilling, track maintenance and camping purposes (e.g. groundwater, surface water, mains). Provide details on the volume of water required and how wastewater or runoff water will be managed.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>Some water may be required to assist stabilising drill collars and for safety (bushfire defence) TPC has a 650 litre trailer mounted water cart which will be filled from mains water.</i>		
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"/>

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Groundwater and drilling investigation activities

Will any water bores be required and/or water investigation activities (e.g. pump testing, water monitoring sites, water storage, turkey nests/dams) be conducted? If yes, describe the water drilling and investigation activities, including site preparation, vegetation clearance, and safety and maintenance requirements.	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
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 type="checkbox"/>
Not applicable		

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"/>

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. Plan and implement daily work schedule & practise that facilitates 1 thru 4 below Strategy 1 = IMPOSE least Harm to environment Strategy 2 = Limit and monitor people and vehicle movements (via GEH Site Pass process) Strategy 3 = Daily photography of all drill sites, traverse lines and costeans, Review by HSEQ Manager, Lobethal HQ Strategy 4 = Rehabilitate drill sites daily. Regular contact and updates will be made with / provided to the landowner during drilling, costeaning and rehabilitation activities. Drill hole collars will be temporarily closed using PVC pipe and cap to prevent wildlife access. Following review of results holes will be plugged 30 cm below surface (likely using a nearby boulder from various spoil dumps). Holes will then be backfilled, compacted and mounded to prevent soil erosion. In appropriate areas a rock will be placed at the collar to finalise rehab and prevent erosion. No drill sites require earthworks, pad construction or sumps. Drill sites will be visited and photographed 60 days post completion to document and ensure appropriated rehab. Copies of photographs will be made available to the landowner on request.
State the estimated budget required to rehabilitate impacted sites.

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.

Based on wages for 2 field hands, 1 supervisor, 5 full days, vehicle and accommodation costs, plant hire allocation ex GE Hughes rehab provided / estimated at :

Area 1 North Aircore drill sites (30) \$2,500 Area 2 South Aircore drill sites (20) \$2,000

Area 1 North Costeans \$5,500 (3) Area 2 South Costeans \$4,000 (4)

\$5,000 has been allocated for access track rehab if required

\$2,500 also allocated for drone & other photography & documentation (recording before & after)

TOTAL REHABILITATION est 21,500 (assumes all drill holes and 6 costeans)

Vegetation Clearance

Will any area of cleared native vegetation be unrehabilitated after the authorised period? [Not applicable](#) 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.

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. [Not applicable](#)

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.

[Not applicable](#)

SECTION F – MANAGEMENT OF ENVIRONMENTAL IMPACTS

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

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

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

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

How to fill out the table

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

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

Exploration PEPR application – 12-month period

Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
Lists are not exhaustive.	Lists are not exhaustive.	Some potential impacts are applicable to all programs.	Indicate where there is uncertainty pertaining to the likely effectiveness of the control strategies. Where the risk is not considered low, provide justification that the risk is acceptable, or consider additional strategies to reduce the risk to an acceptable level. – refer to Minerals Regulatory Guidelines MG22 for more information.	LH = likelihood of consequence CQ = severity of consequence	LH	CQ		
<p>Stakeholders:</p> <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. 	<p>Interference to:</p> <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. <p>Noncompliance with legislative requirements.</p>	<p>Yes (Applicable to all programs.)</p>	<p>TPC uses the MGM MG4 as the guideline for contact with stakeholders including landowners.</p> <ul style="list-style-type: none"> • stakeholders identified. • discussion / meeting(s) will be held with the landowner prior to the commencement of drilling as per MoU. • several updates will be provided to landowner during drilling and costeaning by TPC MD / site geologist. • At the completion of the program TPC will seek a signoff by the landowner. <p>Site Pass daily login by all TPC related parties entering Section 147.</p> <p>Mitigation and rehabilitation strategies used to reduce the land use impact</p> <p>Refer strategies outlined at rehabilitation section PLUS.</p> <ul style="list-style-type: none"> • Ensuring statutory forms are served in timely manner. • Daily photography monitor track conditions for deterioration. • Constructing and rehabilitating drill holes and tracks etc. in line with ISM21 	1	B	Low	<p>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.</p>	<p>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.</p> <p>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.</p>

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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
			& best practice. • Wetting of tracks for dust mitigation – possible but likely not necessary • Limit speeds as per MoU • Avoid livestock & infrastructure • minimise the number of individual vehicle movements • Rehabilitating existing tracks & fence line accesses to the satisfaction of the landowner Inductions detailing correct behaviour on stakeholders' properties and compliance with MoU conditions: • Including biosecurity vehicle inspection procedure to minimise the spread and propagation of weed species (refer MoU) • Fire Risk Minimisation Communication with landowner at a level they are comfortable with. Documentation of all communications which are generally via email.					
Stakeholder: DEW	Interference to: <ul style="list-style-type: none"> existing or permissible land use. buildings, structures, existing tracks or other infrastructure. 	No (Applicable to programs located adjacent to or within parks and reserves.)	Not applicable	n/a	n/a	n/a	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

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Impact assessment							Outcomes	Outcome measurement criteria (inc. monitoring plan)
Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
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	<ul style="list-style-type: none"> aesthetic values of an area. Noncompliance with legislative requirements.						<ul style="list-style-type: none"> Program notifications for PEPRs approved for an ongoing period of time, were submitted to DEW and the DEM at least 21 days prior to entry into regional reserves, national, conservation and marine parks. 	
Flora and fauna and their habitats; includes Commonwealth and state scheduled species.	Loss/modification of native vegetation and associated habitats through the clearance of vegetation.	No impact on native vegetation.	Not applicable Work areas are rocky cleared grazing land – no trees or shrubs – so no loss of habitat			N/a	<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>	Maintain before, during and after photographic evidence of all exploration sites (e.g. drillsites, new track exit/entry points off existing tracks, costeans, campsites) demonstrating that: <ul style="list-style-type: none"> The area and method of disturbance is consistent with that described in the PEPR. No uncontrolled fires* occurred as a result of exploration activities. Representative photos to be included within the annual exploration compliance report.
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.)	Refer section in MoU / LAA that includes requirement for daily pressure washing of vehicles at Jamestown before entry on Section 147. Daily Sitepass access includes section on weed mitigation. Record of compliance will be kept. Low impact exploration completed in Dec 24 indicated proposed work areas are substantially devoid of	1	A	Low	<p>No introduction of new species of weeds and plant pathogens, nor increase in abundance of existing weeds species.</p>	Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report, confirming that: <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

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	CQ	Risk		
			grass & weeds at this time. Risk perceived as very low.					after rehabilitation of disturbed sites was captured, demonstrating that no new weeds and plant pathogens were introduced, nor an increase in abundance of existing weeds recorded.
All fauna	Entrapment of fauna through open drillholes and excavations.	Yes (Applicable to exploration programs that involve drilling and/or require excavations.)	<p>DRILLING Capping (temporary & final) described in the rehabilitation section of this PEPR will ensure near zero chance of entrapment.</p> <p>COSTEANING The size of the proposed costeans / trenches sees an elevated risk to fauna, native and otherwise.</p> <p><u>Strategies and process.</u></p> <p>(a) Costeans will be backfilled the same day as digging whenever possible.</p> <p>(b) Operating machinery and personnel will significantly reduce the likely hood of entrapment while costeans are open.</p> <p>(c) Discussions with landowners to ensure no sheep are</p>	1	A	Low	<p>No fauna traps created as a result of drilling exploration activities.</p> <p>Fauna traps created as a result of costeaning activities minimised by strategies detailed at this section..</p>	<p>Maintain before, during and after photographic evidence of all drillholes and/or excavations demonstrating that:</p> <ul style="list-style-type: none"> All drillholes were permanently or temporarily capped/plugged immediately upon completion. No fauna and livestock became trapped in drillholes and/or excavations throughout the duration of the program. All rehabilitation was completed within 3 months of expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised. <p>Representative photos are to be included within the annual exploration compliance report.</p>

Exploration PEPR application – 12-month period

Impact assessment						Outcomes	Outcome measurement criteria (inc. monitoring plan)	
Receptor	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
			<p>present in paddock being trenched.</p> <p>(d) Bunting will be used in accordance with GE Hughes policy to limit access to trenching areas.</p>				Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.	
Aboriginal heritage sites	Disturbance to Aboriginal heritage.	Yes (Applicable to all programs.)	<p>As stated elsewhere and evidenced in various supporting photographs there has been extensive vegetation clearing, cropping and grazing over Section 147 for 50+ years.</p> <p>TPC low impact exploration in Dec 24 included a review of the likelihood of Aboriginal heritage and artefacts. Nothing reportable under relevant legislation was identified.</p> <p>The likelihood of artefacts is considered rare.</p> <p>As each drill collar and costean line is planned, a field check by the site geologist will search for potential artefacts or heritage sites and notification will be made to management, the site cordoned off, site location recorded, and photographs taken. Should this be necessary the program will be re-assessed / relocated.</p>	2	B	Low	<p>No disturbance to Aboriginal artefacts or sites of significance unless prior approval under the relevant legislation is obtained.</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"> 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. 	

Exploration PEPR application – 12-month period

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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	Risk
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.)	TPC low impact exploration in Dec 24 confirms an absence of European heritage sites.			<p>No disturbance to European heritage sites and to sites of scientific and environmental significance unless prior approval under the relevant legislation is obtained.</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	CQ			Risk
Soil/vegetation/fauna	Soil/vegetation contamination (e.g. hydrocarbons, rubbish, drill samples/cuttings, ablutions, other sources).	Yes (Applicable to all programs.)	<p>Site induction of all personnel before working at site cover off on rubbish management and expectations.</p> <ul style="list-style-type: none"> Vehicles and drill rigs are inspected prior to going on site for the first time to ensure they comply with GE Hughes best practice. <p>Aircore Drilling</p> <ul style="list-style-type: none"> Vehicle inspections include but not limited to. <ul style="list-style-type: none"> Free of hydrocarbon leaks Free of mud and vegetable matter Operation spill kit, first aid kit, fire extinguishers. All rubbish removed from site daily. Cigarette butts disposed of offsite. Spill kit onsite for drill rig and support vehicles. All personnel trained to use the spill kit. Any contaminated materials bagged and removed from site to be disposed of at the nearest waste transfer station. Workers accommodation offsite, toilets use in the morning. Samples collected in plastic and calico sample bags and removed from site regularly if not daily. 	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

Exploration PEPR application – 12-month period

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				LH	CQ	Risk
			<ul style="list-style-type: none"> • Sample bags monitored for any deterioration • Site inspections will be undertaken, and corrective actions implemented before project sign-off is completed. <p>Plastic sheeting to be laid out under rig and cyclone area to ensure no soil/vegetation/fauna contamination from drilling activities.</p> <ul style="list-style-type: none"> • Upon completion of drilling, each RC hole will be rehabilitated and backfilled in accordance with ISM21 • Prestart checks on vehicles and machinery conducted prior to site entry. <p><u>Costeaming</u></p> <p>Where applicable practises outlined above for drilling apply. Increased risk is associated with the physical size and testing method. The increased risk is limited to SOIL and addressed in the next section.</p>	3	B	Mod
						<ul style="list-style-type: none"> • 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

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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
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.)	<p>Use of existing tracks including those along fence lines as already clear of vegetation and in compliance with the MoU.</p> <p>The drill rig proposed (McLeod Drilling) is designed for low impact.</p> <p>Drillholes will be backfilled and capped as soon as possible to prevent contamination from surface.</p> <ul style="list-style-type: none"> After heavy rain (as per MoU) vehicle movements will be suspended till the ground has dried out sufficiently to all trucks and vehicles to pass without damage Heavy vehicle (excavator) movements will be minimised, i.e., planning of drill holes & costeans so as to minimise back tracking areas and to minimise potential ground compaction. If costean or other sites, or tracks become compacted then they will be lightly scarified at the completion of the work in consultation with the landowner. All tracks will be rehabilitated in accordance with Environmental 	4	B	Mod	<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>

Exploration PEPR application – 12-month period

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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	Risk	
			<p>objectives and guidelines for mineral exploration activities Information Sheet ISM33</p> <ul style="list-style-type: none"> Plastic will be laid out under the drill rig & cyclone area to limit dust and stop any potential hydrocarbon spills. <p><u>COSTEANING</u></p> <p>Strategies to be used to minimise to preserve / restore soil profile and limit soil erosion.</p> <ol style="list-style-type: none"> The number of costeans can not be determined at this time ie pre drilling. It will be kept to a minimum and it is likely that they will not be continuous except across the mineralised zone(s). This will minimise disturbance. A geologist will be on-site for all costeaning activities to maximise geological information gained and at the same time keep disturbance at an absolute minimum. Heavy duty plastic will be used to constrain material excavated from all costeans. Topsoil (approx. 1 metre) will be piled on one side of the trench & remainder on the opposite side. Planning and location of costeans will have the 				Provide the information requested within the 'Rehabilitation' section of the annual exploration compliance report.

Exploration PEPR application – 12-month period

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			objective of minimising the footprint of the excavator, minimising the distance it travels on Section 147 and ensuring there is no “cross country” traversing.					
Surface water	Alteration to surface water – interference to surface drainage.	No (Applicable to exploration programs that are likely to impact on surface drainage channels.)	Not applicable				<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>	

Exploration PEPR application – 12-month period

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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). 	No (Applicable to all exploration programs that may intersect groundwater.)	Not applicable				<p>Drillholes restored to controlling geological conditions that existed before the hole was drilled or, where it is intended to re-enter the hole, the hole must be completed with casing of adequate strength and the casing cemented so that all aquifers are isolated to prevent the movement of any fluids behind the casing.</p> <p>Maintain evidence demonstrating that drillholes are decommissioned in accordance with Earth Resources Information Sheet M21, Mineral exploration drillholes – general specifications for construction and backfilling, and/or specific conditions from DEW (Groundwater) within 3 months of the expiry of the PEPR approval (for PEPRs approved for a period of 12 months), or 3 months after the expiry of a program notification (for PEPRs approved for an ongoing period), unless otherwise authorised.</p> <p>Provide the information requested within the 'Groundwater' section of the annual exploration compliance report.</p>	
Soil/vegetation/fauna	Discharge of groundwater into the surrounding environment.	No (Applicable to all exploration programs that may intersect groundwater or where activities require the discharge of groundwater into the surrounding environment.)	Not applicable				<p>No discharge of groundwater outside of the exploration site (e.g. drillsite) into the surrounding environment and no discharge of water into a watercourse, unless prior approval under the relevant legislation is obtained.</p> <p>Maintain photographic evidence of all drillsites demonstrating that groundwater was not discharged into the surrounding environment, unless water affecting activity permits were obtained allowing the discharge of groundwater into watercourses and/or lakes.</p> <p>Representative photos and water affecting activity permits (where applicable) to be included within the annual exploration compliance report.</p>	
Groundwater users	Interference to existing water users when extracting water from existing dams, water bores or mineral drillholes.	No (Applicable to all exploration programs that may require the use of water from	Not applicable				<p>No public nuisance impacts resulting from the extraction of water for exploration purposes, unless prior approval under the relevant legislation is obtained.</p> <p>Provide the information requested within the 'Complaints' section of the annual exploration compliance report demonstrating that all reasonable complaints from stakeholders were</p>	

Exploration PEPR application – 12-month period

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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
		existing dams, water bores or mineral drillholes.)					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.)	There will be no new tracks and the area of drilling / costeaning is already cleared of vegetation. Minor cross-country driving is required from track / costean to drill site (vehicle / excavator width only). All sites have existing tracks / fence line access leading to them. <ul style="list-style-type: none"> • Induction to cover track use and vehicle use around drill sites including parking and entry/exit points to reduce vehicle movements. • Access and tracks to be used based on discussion with landholder as required. • Property has gates on all entry points– these will be closed to prevent third party use. Additional no entry signs will be placed. • Vehicle traffic kept to minimum and vehicles to travel slowly as per MoU. 	1	A	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.	

Exploration PEPR application – 12-month period

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Receptor	Potential impacts	Is the potential impact applicable (Yes/No)	Control strategies	Risk assessment				
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			<ul style="list-style-type: none"> Tracks will be monitored for sign of degradation and a plan put in place with the landowner if this occurs. Vehicles to stay off tracks in wet conditions that may lead to track degradation. Access limited on rain days as per MoU 					
Community/landowners	Damage to infrastructure and loss of income through fire.	Yes (Applicable to all programs.)	<ul style="list-style-type: none"> Site pass covers fire risk. Vehicles are fitted with appropriate fire extinguishers. Emergency contact numbers are in the site induction and vehicles. Vehicles are diesel. Fire ban status will be monitored daily and adhered too – no drilling or costeaning conducted on Total Fire Ban days. No equipment to be used on site that uses an open flame or spark (i.e., cutting torch, angle grinder etc.) during fire ban days. 	1	A	Low	<p>No loss of infrastructure or income through fire as a result of exploration activities.</p> <p>Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming that no uncontrolled fires* occurred.</p> <p>Alternatively, provide a report on the independent investigation of all uncontrolled fires* demonstrating that the licensee could not have reasonably prevented the fire through the implementation of precautionary measures.</p>	
General public	Injury or death to members of the public as a result of exploration activities.	Yes (Applicable to all programs.)	<p>Public and third parties unlikely to be on Section 147. Gates are closed to prevent uncontrolled entry of third parties.</p> <p>No Entry Signage will be in place Where public roads are used, and all employee drivers have the required driver's license.</p> <p>Company representatives are inducted which includes information on driving</p>	1	E	High	<p>No accidents involving the public that could have been reasonably prevented by the licensee.</p> <p>Provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report confirming no accidents occurred involving the public during and after the exploration program.</p> <p>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</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	Risk	
			<p>safely i.e.: drive to conditions.</p> <p>Work is only conducted in daylight hours – limited or no night driving.</p> <p>Signage around drill rigs, paddock entry points and work areas to indicate PPE requirements and authorised access.</p> <p>Safety procedures requiring induction to drill rigs & excavator prior to access.</p> <p>Hazard reporting procedures to immediately identify and correct issues</p> <p>Safety meetings to discuss issues which have occurred and plan for the ongoing work program.</p> <p>Pre-start meetings so that all staff are aware of potential hazards and the location of everyone so that help can be actioned in a fast and efficient manner.</p> <p>Refer GE Hughes HSEQ Management Plan – version 3 which covers health and safety management issues,</p> <p>Emergency numbers including fire & ambulance to be posted in all vehicles.</p>				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	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	Risk	
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.)	Not applicable			No increase in background radiation levels, and employee/contractor exposure levels during the exploration program are within safe limits.	Maintain a database and provide a statement within the 'Compliance with approved programs' section of the annual exploration compliance report demonstrating that: <ul style="list-style-type: none"> • Radiation levels post exploration and rehabilitation are consistent with pre-existing background levels. • Employee and contractors exposure levels were within safe limits during the exploration program.
Other (if applicable)							

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

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

SECTION G - OPERATOR CAPABILITY

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

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



List of TPC Consultants & Contractors for 2025 Advanced Exploration – Section 147

- G.E. Hughes Construction Co. (parent company of TPC)
- David Paterson – Consultant Geologist
- McLeod Drilling
- Challenger Geological

Given the size, nature and timeframe of work covered by this PEPR management is confident that the combined skills of the above consultants is adequate and will generate professional, safe and timely process and acceptable high end outcomes.

G.E. Hughes Construction Co. employs 120 people, has >200 major items of plant, 65 trucks and 50 support vehicles. It has not been involved directly in the exploration & mining industry prior to March 2023, being the acquisition date of Tarcowie Phosphate Company Pty Ltd. (TPC) and control of EL 5765 & ML 6208.

Indirect experience in the mining industry comprises a substantial asset of the company being a pool of mining related knowledge within its worker base.

All projects in the group are covered by an extensive Health, Safety, Environmental & Quality Management Plan. (HSEQMP).

A copy of the HSEQMP covering TPC's operations (ML 6208 & EL 5765) is available on request. It covers the Section 147 – Tarcowie Advanced Exploration Program.



The diversity of businesses is well illustrated within the Company's website. <https://gehughes.com.au/>

The Hughes story is rooted in strong family tradition. The business was started by the late Garry Hughes in 1972 in partnership with his wife in the Adelaide Hills. He worked alongside his late father, Perce, who was a bricklayer himself. The company has progressed from its smaller building services to **the current much wider scope encompassing domestic, commercial, civil and industrial construction, as well as the haulage sector.** The company has maintained the family tradition with multiple immediate and extended family members still at the wheel and in the engine room of the business.

The G.E. Hughes approach continues to be the provision of high-quality services, driven by the 'one stop source' principle.

Our Vision

G.E. Hughes Construction Co. intends to continually improve its capacity as a 'one stop source' of high quality, safe and sustainable construction services to the private sector and commercial industry in South Australia and beyond.

Intention

Being a 'one-stop' source for all your safe and sustainable construction needs in the private and commercial sectors across South Australia and beyond!

Exploration PEPR application – 12-month period

Having extensive operations based in the Adelaide Hills at Lobethal, G.E. Hughes Construction Co is proud to be celebrating almost 50 years of serving our community, customers and industry, and look forward to the next 50 years. We hope to meet many more great people, and customers on our journey.

Our depot consists of company offices housing corporate staff, steel manufacturing workshop, cabinetmaking division, carpentry, civil works, transport division which is backed by an accredited mechanic's workshop, storage for all our equipment and fleet, fuel pods and vehicle wash system.

G.E. Hughes Construction Co. has a triple certified integrated management system to guide our work. This management system includes all company policies, procedures, and forms.

Our system is certified by ECAAS to the following standards:

- Quality ISO 9001
- Environmental ISO 14001
- WHS ISO 45001
- HSEQ ISO integrated management system

G.E. Hughes Construction Co has worked on all forms of renewables; civil construction and Earth works including windfarms; solar farms and battery farms which includes turn key works from site works to substations, BESS's harmonic filters, transmission lines, turn in towers and windfarm trenching over the last 20 years throughout Australia.

G.E. Hughes utilise all their own personnel and plant to provide work to the highest standards with the experience and problem-solving skills to always get the job done on time, safely and on budget.

Recent projects include the **AGL Torrens Island BESS yard**, substation, 275kv Link and Harmonic Filter and all civil works for the **Electranet Interconnector substation** at Bunday, South Australia.

GE Hughes Construction Co has previously worked on BESS (Battery Energy Storage System) installations for South Australian strategic locations at AGL at Torrens Island, Dalrymple Substation at Stansbury and the Hornsdale wind farm, Hornsdale in the Mid-north.

The Hornsdale projects located a few kms south of Section 147 – Tarcowie / EL 5765.

Some Current Projects

We are currently working on the Bungama BESS project near Port Pirie completing all the earth works and civil works for the project.

GE Hughes Construction Co is proud to work on this project to produce cheaper power from renewable energy and contribute to the green energy initiatives of the government to ensure Australia has a green economy and sustainable future with a more reliable grid preventing fewer blackouts.

RESUME – SUMMARY

NAME: David Alaster PATERSON

EDUCATION:

Secondary Attended Pulteney Grammar School, Adelaide
PEB Matriculation Certificate 1970

Tertiary Bachelor of Applied Science in Applied Geology, South Australian Institute
of Technology, 1973 (now Uni. of SA)
Graduate Diploma in Business Administration, South Australian
Institute of Technology 1983 - 84.

EMPLOYMENT / BOARDS

2006 – present (various periods)	Consultant – Tarcowie Phosphate Company P/L and since March 2023 GE Hughes Construction Pty Ltd
Dec 2011 – Oct 2017	Director – UraniumSA Limited (USA)
Jan 2014 – Oct 2017	Director – Bulletproof Group Limited (BPF)
Mar 2011 – Jan 2014	Chairman – Spencer Resources Ltd
May 2009 – Sept 2017	Consultant – mining exploration focus
Dec 2005 – Mar 2009	Executive & Non executive Director Terramin Aust. Limited (TZN)
Sept 2001 – Dec 2005	Prescott Securities / WHK Group
Aug 1996 – Sept 2001	Ord Minnett SA Pty Ltd & JP Morgan
July 1995 - Aug 1996	D&D-Tolhurst Ltd - Adelaide Office
April 1991 - July 1995	Adelaide Investment Services P/L
Sept 1985 - Feb 1991	Morgan Stockbroking Limited
Jan 1979 - Jan 1983	BHP Co Ltd. Exploration Division
Mar. 1976 - Feb 1978	New Guinea Goldfields Limited
Nov 1973 - Mar 1976	Broken Hill - Zinc Corp.- MMM Limited

STOCKBROKING & FINANCIAL PLANNING EXPERIENCE:

Initially joined Goldsmith & Co. September 1985- Equities Advisor
Associate Directorship Paul Morgan (SA) August, 1987
Director (SA) Jarden Morgan Australia Limited, August 1988
State Manager Corporate Services, Morgan Stockbroking Limited Aug. 89
Senior Equities Advisor and Director, Adelaide Investment Services Pty Ltd
(formerly Langman Pearson Stockbroking).
Manager SA, D&D-Tolhurst Ltd July 1995 to August 1996
State Manager SA - Equities Ord Minnett & then JP Morgan Aug 1996 – Sept 2001
Senior Consultant Prescott Consultants Sept 2001 – April 2003
National Manager Research & Stockbroking April 2003 – Dec 2005 WHK Group (previously Investor
Group)
20 years diversified stockbroking and investment advice covering: client advice (portfolio planning,
fixed interest, superannuation), SEATS supervision
ASX company research, corporate advice (capital raising, ASX listings, information memorandum, takeover
reports and advice), provision of ASX and Statutory Reports

ASX DETAILS:

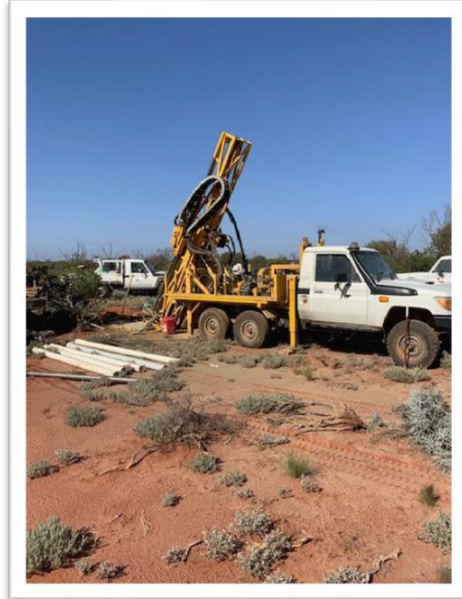
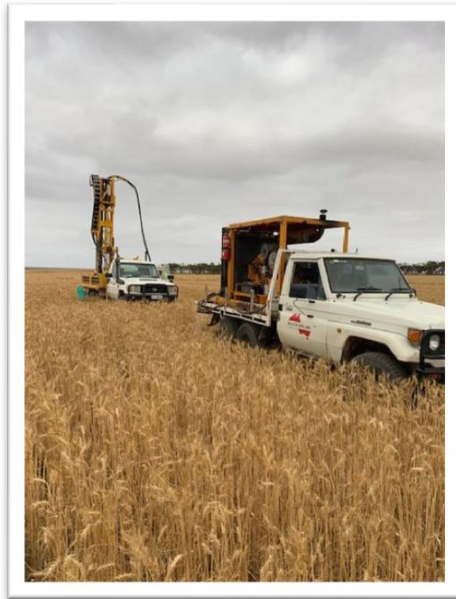
Joined the Stock Exchange of Adelaide Ltd, Listing Committee in Sept 86.
Member Australian Stock Exchange Limited, November 1988.
Chair, Adelaide Listing Committee & Adelaide delegate to National Listing Committee Nov 88 - Dec. 94.

OTHER ASSOCIATIONS:

Holdfast Quays Marina Association Inc – Committee Member - Dec 2017 – Sept 2019
Aust. Institute of Mining and Metallurgy, Fellow Finsia (F Fin) 1970 – Jan 2023.
Securities Institute of Aus now Finsa - resigned 2022 (Lecturer Mining Invest. Analysis 88 to 95)
Director & Treasurer Leukemia Foundation of SA – 1998 to 2007.

David Paterson

September 2023

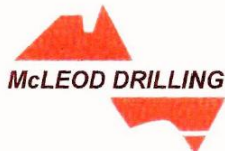


Toyota Landcruiser rig

A small, compact powerful drilling rig with onboard rods and water
Capable of Auger, Aircore, RC, Mud drilling
Vertical or Angled holes to 150m

*Minimal environmental impact, go anywhere rig
No cleared tracks or pads needed*

- Mounted on V8 Turbo Diesel Landcruiser
- Separate 6wd compressor support vehicle
- Vertical or horizontal with dump mast
- Onboard cyclone and sample diverter
- Full remote camp available
- PTO driven hydraulics
- Rod tilt bin for easy rod handling



Jim 0408365005

jrmde@bigpond.com



Our Services

Logistical Services

Project Planning & Logistics Support
On-site Sampling Supervision
Sample Labelling, Packaging/Repackaging
Safe & Secure Sample Transport

Processing Services

XRF & Core Gamma; in Field & Laboratory
Core Cutting, Slabbing & Plugging
Core & Sample Photography; white light, UV, Micro & Macro.
Sample Storage

Field Supplies

Challenger can supply or organise via sub-contractors for the client the following-

- Experienced Field Support Personnel
- Field Equipment and Consumables
- Field Vehicles for Transport of Personnel and Logistical Support
- Core Trays Specific to the Clients Needs
- Sample Bags, Boxes, Labels, Tags etc
- Fluid Containers
- South Australia Core library approved sample storage boxes
- Other equipment and Consumables as required by the Client

OTHER ASSETS & CAPABILITIES

G.E. Hughes Construction Co. is a recent entrant to the South Australian mining and exploration scene. Its tradition & expertise established across other business units in past years will be extended to its “mining division”

June 2023 saw the purchase of a Victorian mobile library. This has been transformed into a mobile field office, client relations and community consultation asset. **TPC was an Exhibitor at the 2023 Jamestown Show**

Other Assets

- Sci-Apps X-500 Hand-held XRF purchased November 2023
- Access to GEH workforce at short notice
- Extensive “in-house” selection of plant & equipment



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.

[Section 147 MoU / LAA – Wayside & TPC dated ZZ February 2025](#)
[HSEQ Management Plan – version 3.](#)
[GE Hughes Site Pass – \(daily sign-in for all employees & contractors entering Section 147 EL 5765\)](#)

Note : the above 3 documents are available on request – they are considered confidential & not for publication within this PEPR.

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
TPC Area 1 North	7 Dec 2024	01	271660	6349162	54	ADI 18 auger soil sampling hole soil section
TPC Area 2 South	6 Dec 2024	PEPR Section C	271170	6347837	54	ADI 1 auger soil sampling hole soil section

TPC Dec 24 AUGER SOIL SAMPLING HOLES (ADI 1 & ADI 18)



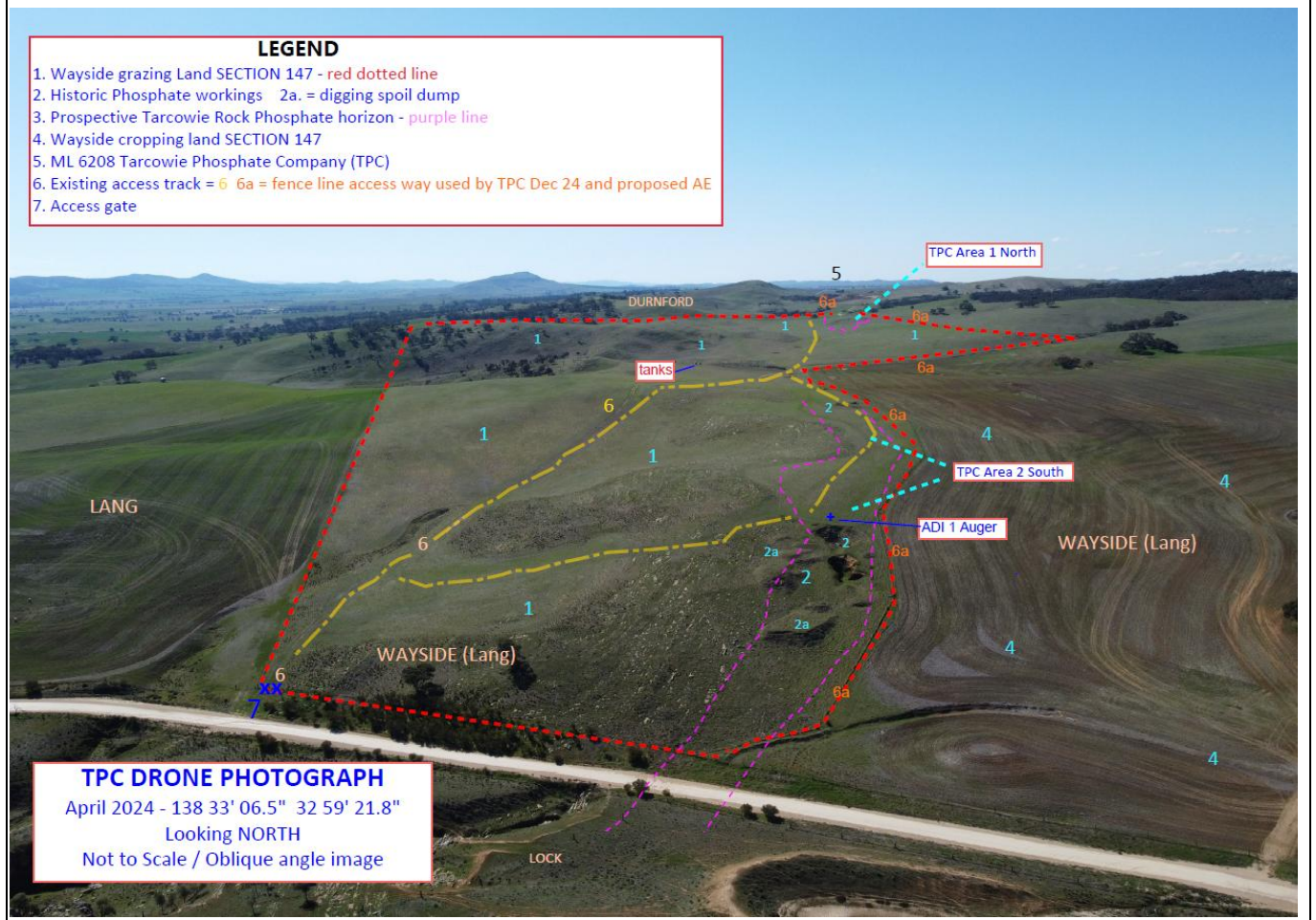
TPC Area 1 North Auger ADI 18 looking South (32° 58' 21.36" S / 138° 33' 5.76" E)



TPC Area 2 South Auger ADI 1 looking North (32° 59' 2.1228" / 138° 33' 4.4388)

Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Section 147 Tarcowie	April 2024	02 PEPR Section C	271229	6347381	54	Drone oblique image Sect 1247 looking North showing TPC work areas, tracks & grazing land boundaries.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
TPC Area 1 North Sect 147 Tarcowie	22 Dec 24	03 PEPR Section C & D	271498	6349281	54	Foreground grazing land Section 147 Tarcowie..



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
TPC Area 1 North Sect 147 Tarcowie	22 Dec 24	04 PEPR Section C & D	271498	6349281	54	Cleared grazing land Section 147 Tarcowie.. Area 1 North work area



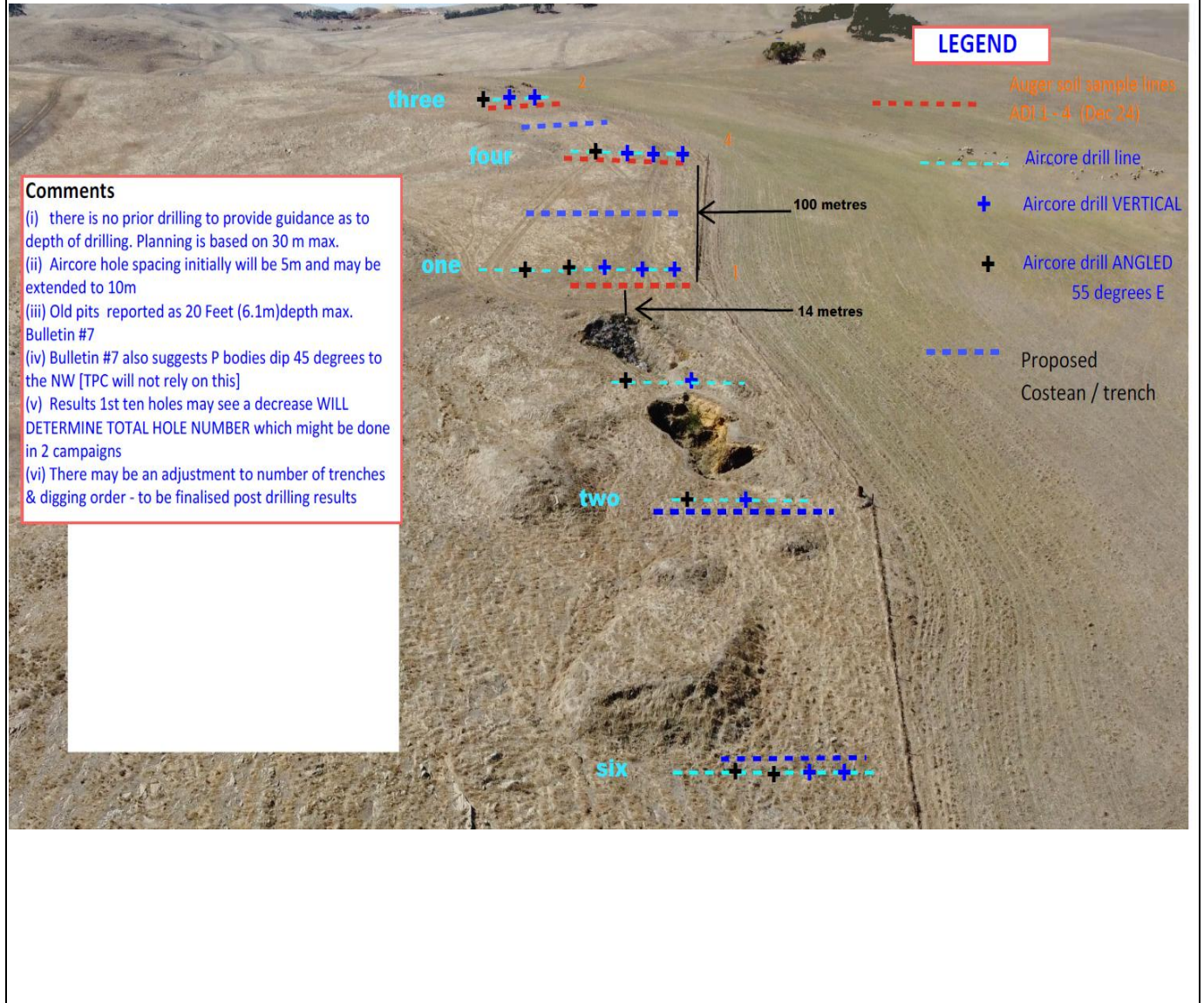
Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
TPC Area 1 North Sect 147 Tarcowie	22 Dec 24	05 PEPR Section C & D	271498	6349281	54	Foreground grazing land Section 147 Tarcowie. Phosphate gossan outcrop



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Portion Section 147 - Tarcowie	April 2024	06 PEPR Section C & D	271161	6347536	54	Land use , old pits and proposed / indicative drilling TPC Area 2 South.



Exploration PEPR application – 12-month period

Site identification	Date taken	Photo number & PEPR section reference	Easting (GDA94)	Northing (GDA94)	Zone	Details and Comments
Section 147 Tarcowie 250 metres north of Tarcowie – Peterborough Rd	6 Dec 24	07 PEPR Section C	271164	6347809	54	Old pit north. TPC Area 2 South



SECTION J – MAPS

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

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

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

Exploration PEPR application – 12-month period

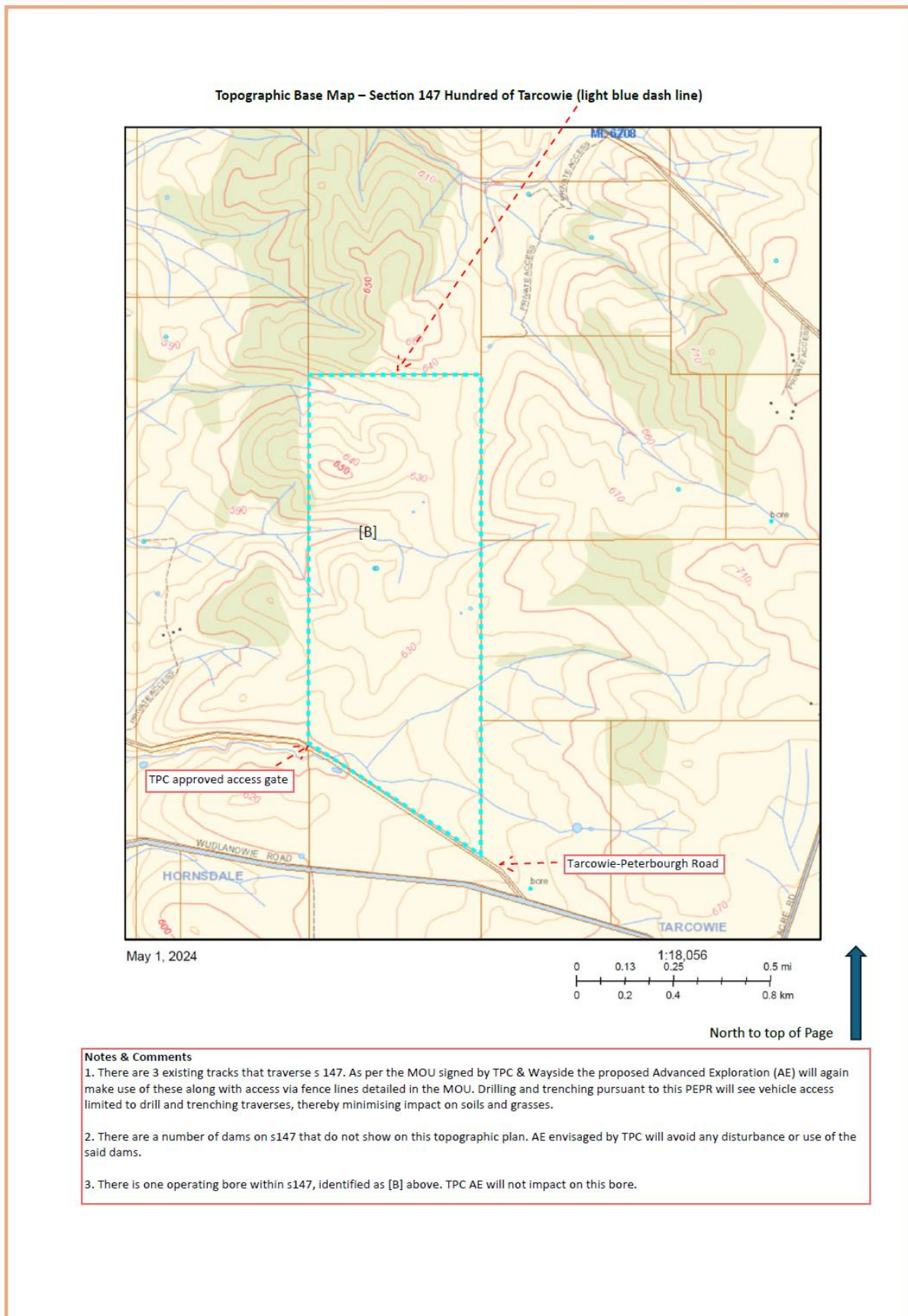
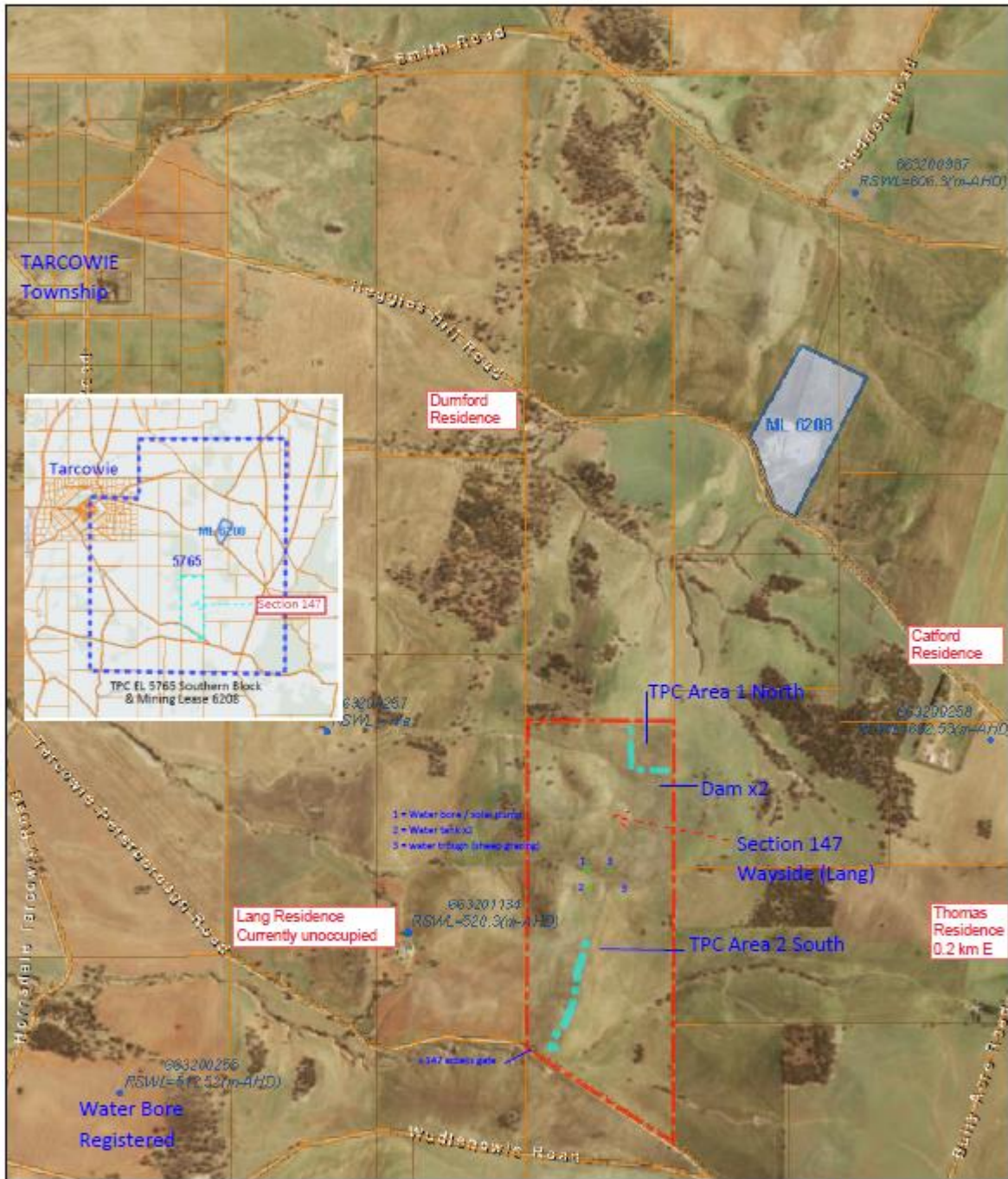
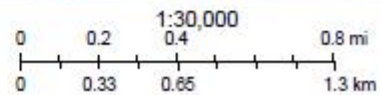


Figure 1 Topographic MAP with Section 147 boundary

SARIG Map



March 1, 2025



TPC EL 5765 - Section 147 PEPR - Location Plan

© OpenStreetMap (and) contributors, CC-BY-SA

Published by and with the authority of the Government of South Australia

<A

Figure 2 EL 5675 Location Plan with Tarcowie Township, Residences & Water Bores

SARIG Map

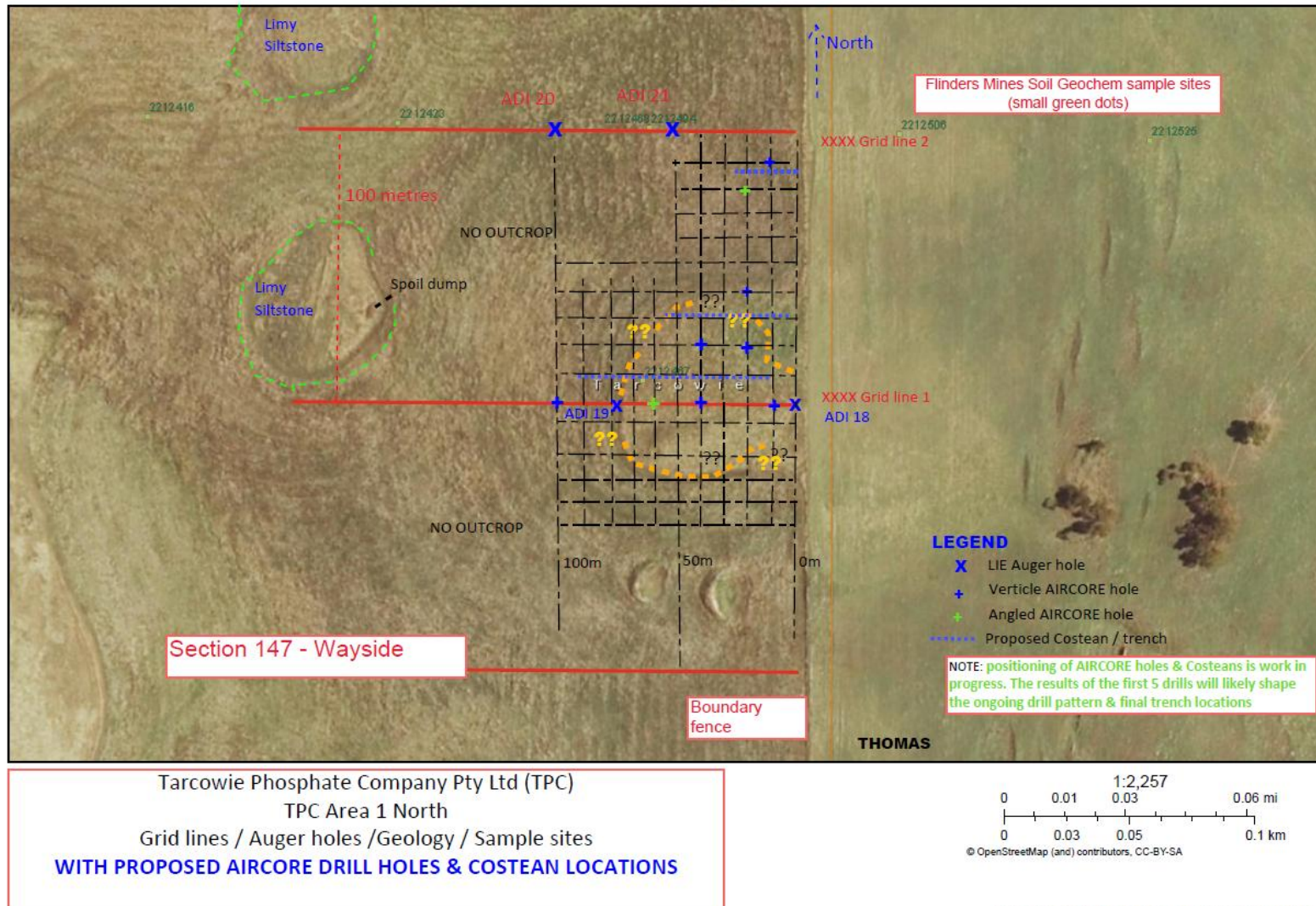


Figure 3 TPC Area 1 North Section 147

Section 147 - Tarcowie showing TPC work areas and Land Use

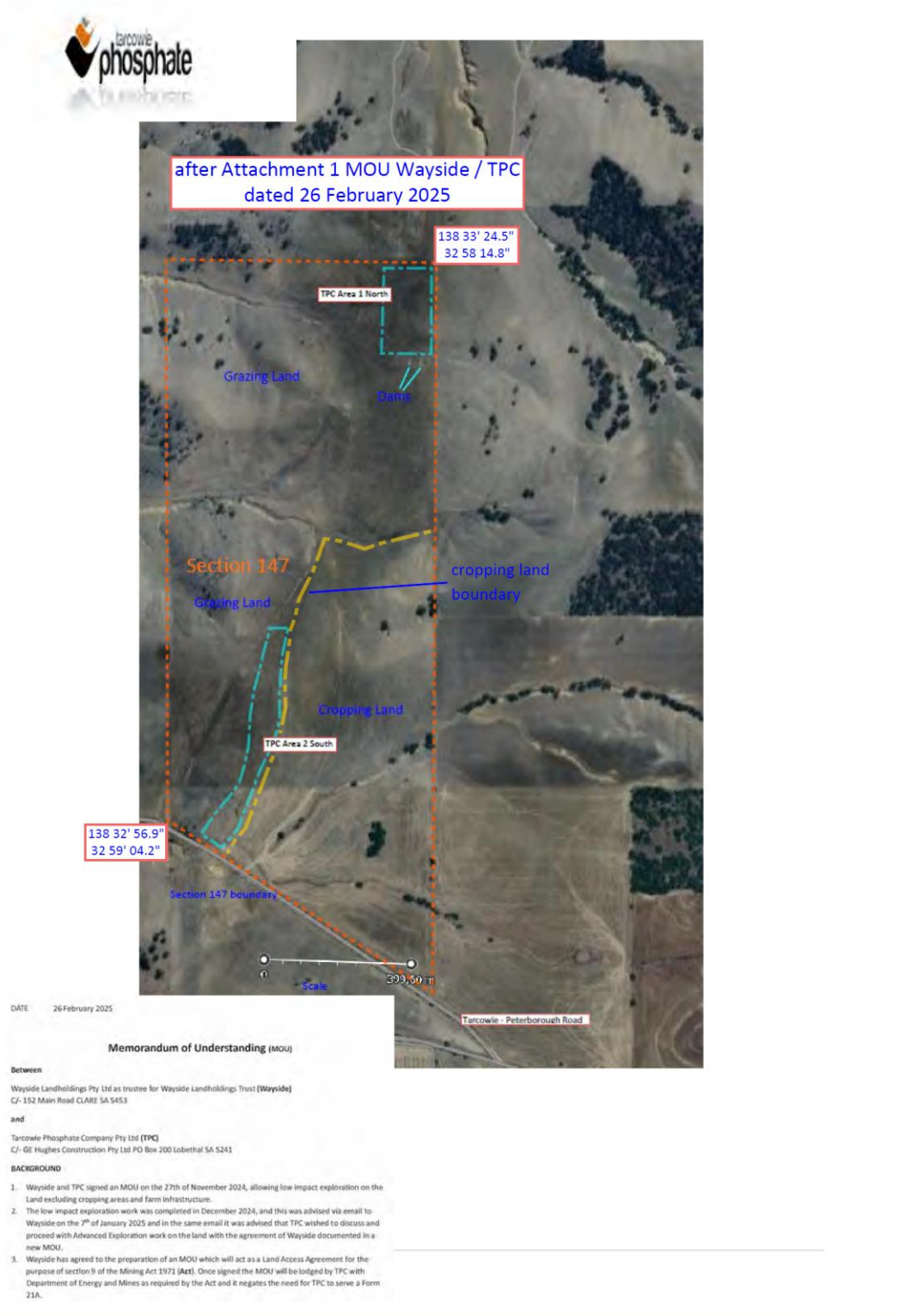
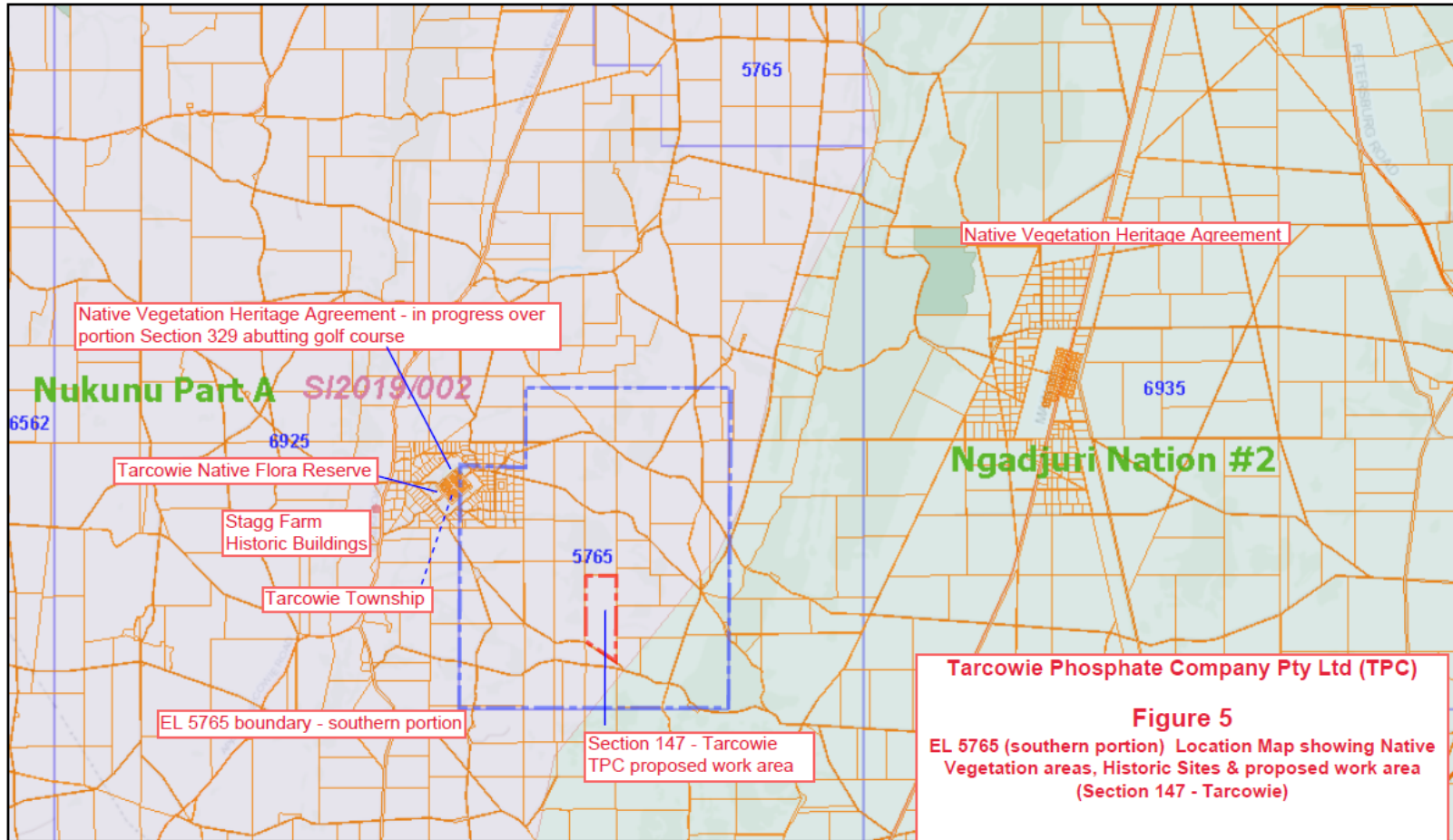


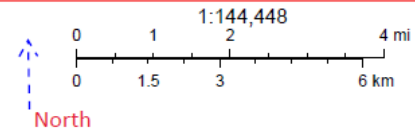
Figure 4 Aerial Photo Section147 showing boundary cropping / grazing land.

SARIG Map

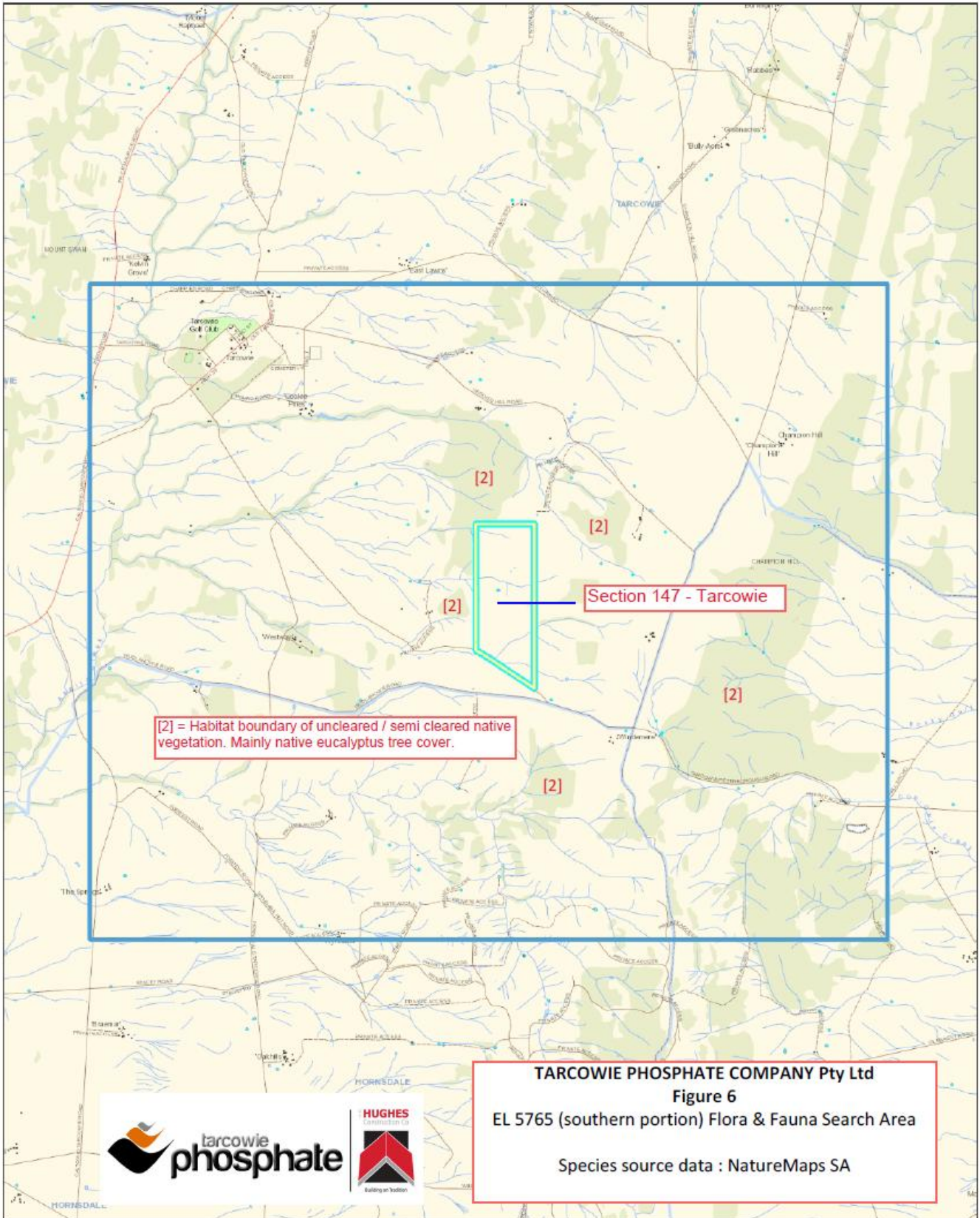


Tarcowie Phosphate Company Pty Ltd (TPC)
Figure 5
 EL 5765 (southern portion) Location Map showing Native Vegetation areas, Historic Sites & proposed work area (Section 147 - Tarcowie)

March 31, 2025



Disclaimer: Although every effort has been made to ensure the accuracy of the information displayed, the Department, its agents, officers and employees make no representations, either express or implied, that the information displayed is accurate or fit for any purpose and expressly disclaims all



Map data is compiled from a variety of sources and hence its accuracy is variable.

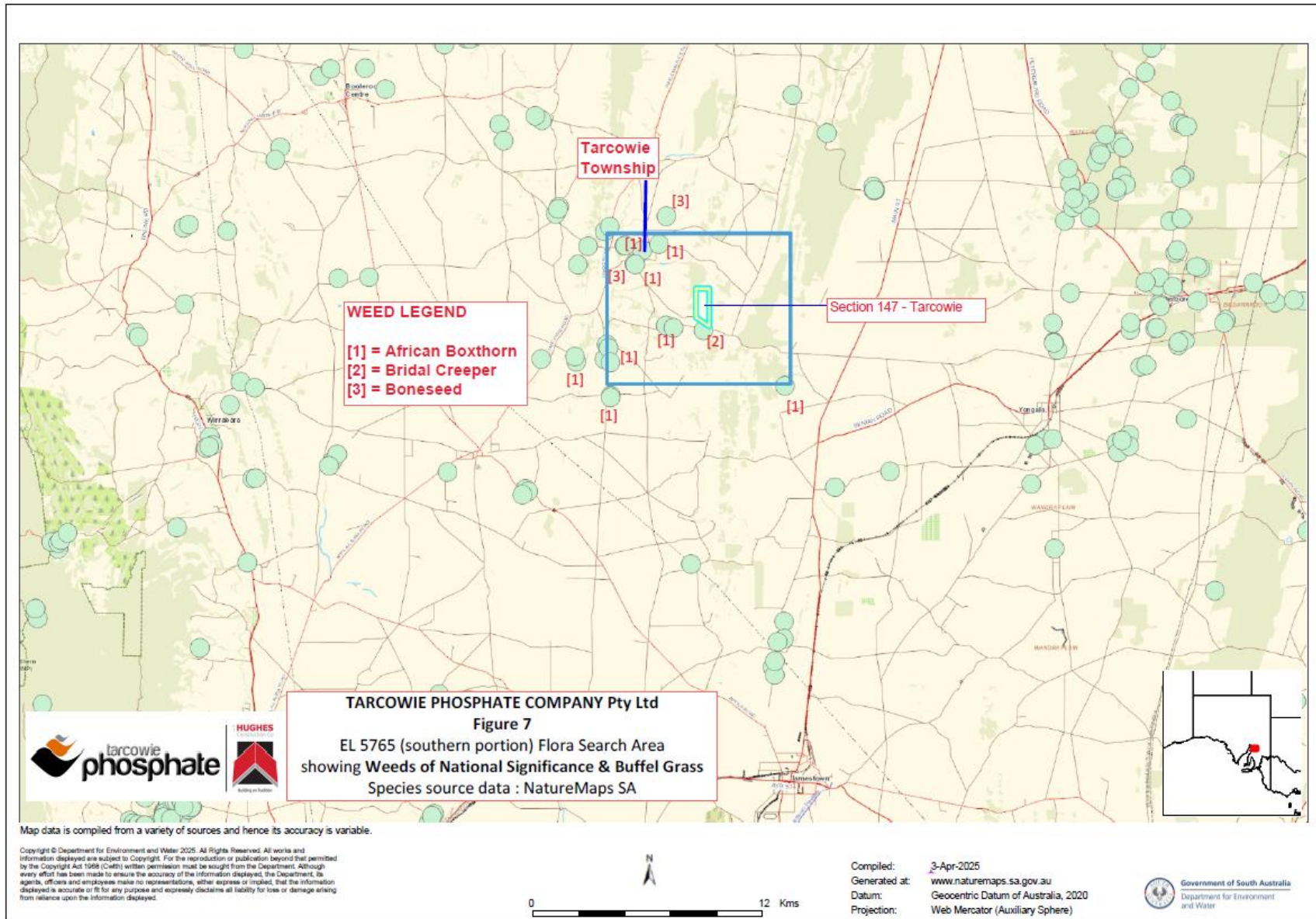
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Compiled: 3-Apr-2025
 Generated at: www.naturemaps.sa.gov.au
 Datum: Geocentric Datum of Australia, 2020
 Projection: Web Mercator (Auxiliary Sphere)



Exploration PEPR application – 12-month period



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.