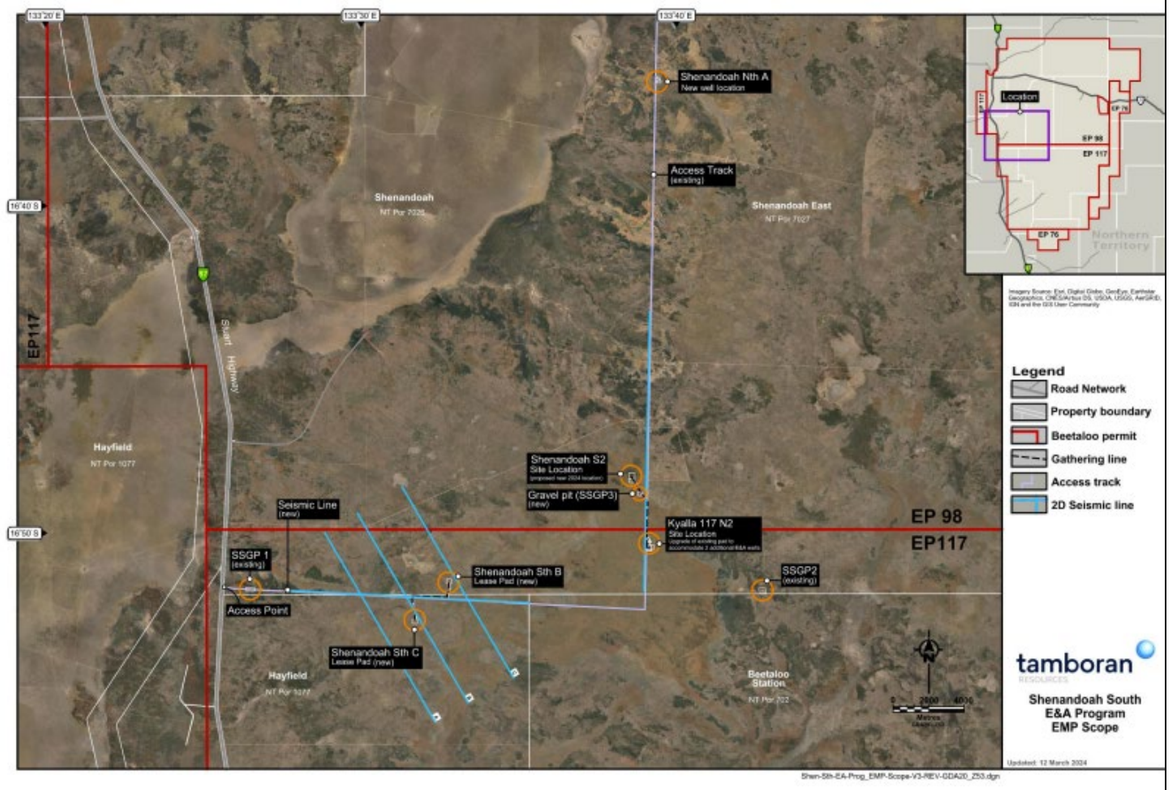
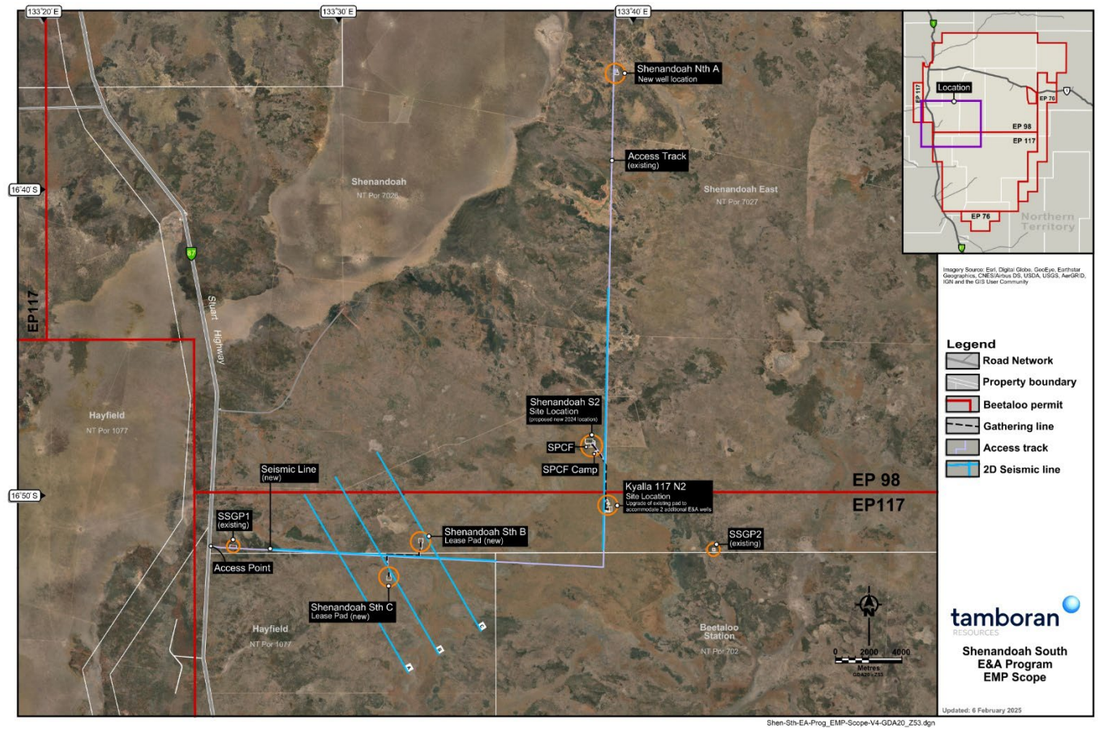
Appendix A: Change notice – Regulation 22

Interest holder	Tamboran B2 Pty Ltd	**EMP Title**	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	**Unique EMP ID**	TAM1-3	**Mod #**	9	**Date**	20 February 2025
Brief Description	Relocation of the gravel pit SSGP3.								
Geospatial files included?	Attached.								
Does the proposed change result in a new, or increased, or potential or actual environmental impact or risk?	**If an INCREASE in the existing potential or actual environmental risk, is it provided for in the EMP?**	**Does the proposed change require additional mitigation measures to be included?**	**Has additional stakeholder engagement been conducted?**	**Does it require additional environmental performance standards and measurement criteria?**	**Does it affect compliances with Sacred Site Authority Certificates?**	**Does it affect current rehabilitation, weed fire, wastewater, erosion and sediment control, spill or emergency response plans?**		**Will the environmental outcome continue to be achieved, and will the impacts and risks be managed to ALARP and acceptable?**	
No. There are no new or increased environmental impacts or risks. Overall gravel pit clearing remains the same.	No No increased impact or risk with sufficient controls outlined in the EMP.	No. Existing mitigation measures are in place covering stormwater release.	Yes. Stakeholder notification completed on 12 February 2025.	No. Environmental performance standards within the existing approved EMP are sufficient.	No. Activity covered under the existing AAPA certificates C2024-031.	Yes. Revised rehabilitation management plans for the Kyalla 117 N2 and Shenandoah S2 sites are attached. All other plans remain valid and appropriate.		Yes. Land clearing commitments are outlined in *Table 52: Environmental outcomes, performance standards and measurement criteria – terrestrial ecosystems*, will be met.	
Additional contextual information									

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

Current EMP text	Amended EMP text
Executive Summary • **Civil construction of 4 new E&A locations – Shenandoah S2, Shenandoah S B, Shenandoah S C, Shenandoah N A:** Civil construction of up to 4 new E&A well sites and associated infrastructure (access tracks, camp pads, helipads, laydown yards, fence lines, firebreaks, water bore, and all other ancillary infrastructure).Includes the construction of a new 5-hectare (ha) gravel pit (SSGP3).	**Executive Summary** • **Civil construction of 4 new E&A locations – Shenandoah S2, Shenandoah S B, Shenandoah S C, Shenandoah N A:** Civil construction of up to 4 new E&A well sites and associated infrastructure (access tracks, camp pads, helipads, laydown yards, fence lines, firebreaks, water bore, and all other ancillary infrastructure). Includes the increasing of gravel pit SSGP1 from 2.5 ha to 7.5 ha.
Executive Summary  **Figure 1: Location of new well pads, gravel pit (SSGP3), proposed seismic and existing Kyalla 117 N2 infrastructure**	**Executive Summary**  **Figure 1: Location of new well pads, existing gravel pits, proposed seismic and existing Kyalla 117 N2 infrastructure**
Executive Summary **Table 1: Project description** **Activity** | **Parameter** | **Description** Exploration-on site civil construction | ~13.75 ha | • Operation and maintenance of the existing / approved Kyalla 117 N2 gravel pits SSGP1 (2.5ha) • Operation and maintenance of the existing / approved Kyalla 117 N2 gravel pits SSGP2 (6.25ha) • Construction, operation and maintenance of a new gravel pit in the vicinity of Shenandoah S2 [SSGP3] (5 ha).	**Executive Summary** **Table 1: Project description** **Activity** | **Parameter** | **Description** Exploration-on site civil construction | ~13.75 ha | • Operation and maintenance of the existing / approved Kyalla 117 N2 gravel pits SSGP1 (2.5ha). Increase of SSGP1 from 2.5 ha to 7.5 ha • Operation and maintenance of the existing / approved Kyalla 117 N2 gravel pits SSGP2 (6.25 ha) • ~~Construction, operation and maintenance of a new gravel pit in the vicinity of Shenandoah S2 [SSGP3] (5 ha).~~

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

<table>
<tr><th>Current EMP text</th><th>Amended EMP text</th></tr>
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1 Introduction

1.2 Purpose

- **Civil construction of 4 new E&A locations – Shenandoah S2, Shenandoah S B, Shenandoah S C, Shenandoah N A:** Civil construction of up to 4 new E&A well sites and associated infrastructure (access tracks, camp pads, helipads, laydown yards, fence lines, firebreaks, water bore, and all other ancillary infrastructure as relevant). Includes the construction of a new 5-ha gravel pit (SSGP3).

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1 Introduction

1.2 Purpose

Civil construction of 4 new E&A locations – Shenandoah S2, Shenandoah S B, Shenandoah S C, Shenandoah N A: Civil construction of up to 4 new E&A well sites and associated infrastructure (access tracks, camp pads, helipads, laydown yards, fence lines, firebreaks, water bore, and all other ancillary infrastructure as relevant). ~~Includes the construction of a new 5-ha gravel pit (SSGP3).~~

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3.1 Activity summary

Table 9: Site activity summary

Activity	Parameter	Description
Exploration-on site civil construction	~13.75 ha	• Operation and maintenance of the existing / approved Kyalla 117 N2 gravel pits SSGP1 (2.5ha) • Operation and maintenance of the existing / approved Kyalla 117 N2 gravel pits SSGP2 (6.25ha) • Construction, operation and maintenance of a new gravel pit in the vicinity of Shenandoah S2 [SSGP3] (5 ha).

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3.3 Site Settings

3.3.2 Location and disturbance summary of activity

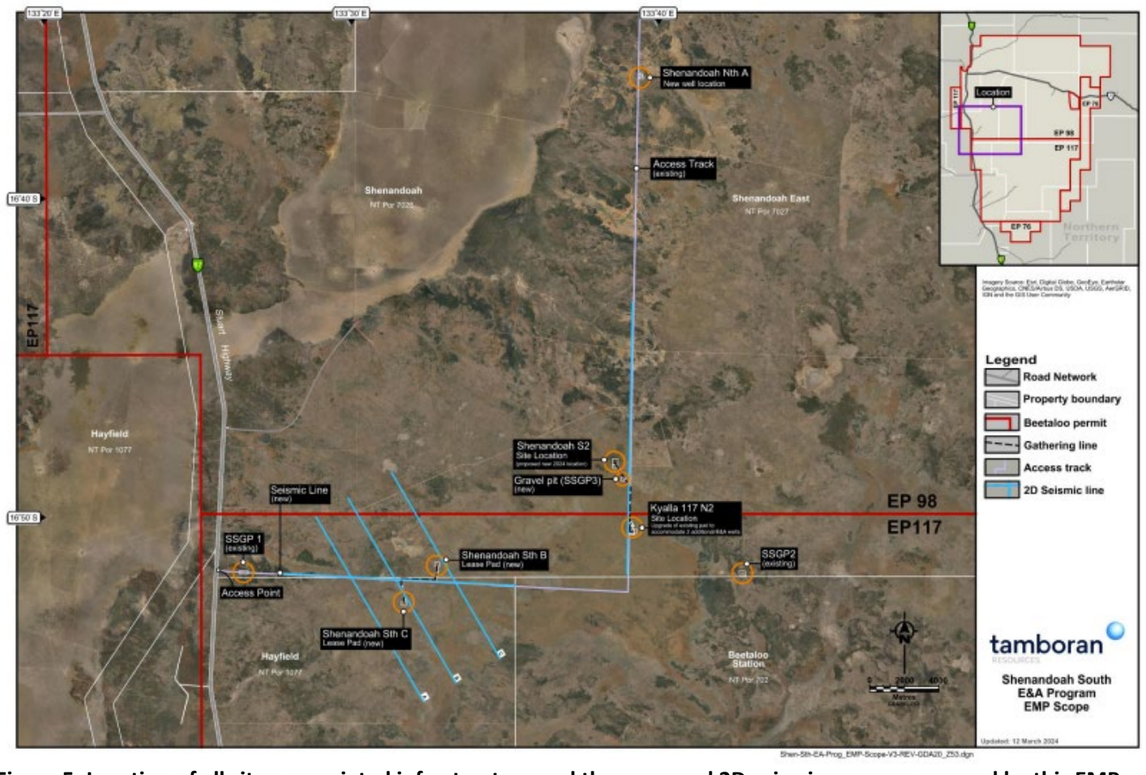

Figure 5: Location of all sites, associated infrastructure and the proposed 2D seismic program covered by this EMP

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3.3 Site Settings

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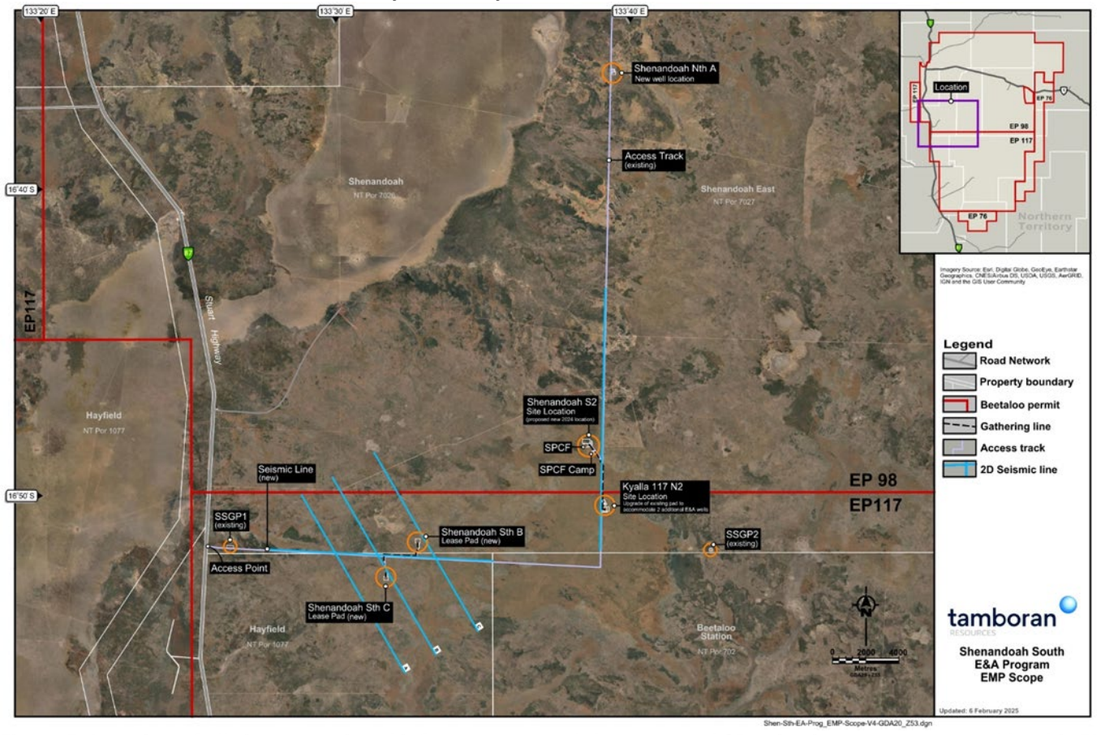

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Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

Current EMP text

3.3 Site Settings

3.3.2 Location and disturbance summary of activity

Table 6: Approximate location of infrastructure on EP 98 & EP 117 relevant to the Project

Infrastructure	EP	Zone*	Easting (approx.)	Northing (approx.)	Existing disturbance (ha)	New proposed disturbance (ha)	Total disturbance (ha)
Kyalla 117 N2: well pad, access track(s) and associated infrastructure [22]	117	53	356379.72	8137498.48	11.65	4.30	15.95
Kyalla 117: gravel pit SSGP1 (former gravel pit A)	117	52	333877.96	8135080.04	2.50	-	2.50
Kyalla 117: gravel pit SSGP2 (former gravel pit 3)	117	53	362753.93	8135089.25	6.25	-	6.25
Shenandoah S2: well pad, access track and associated infrastructure	98	53	355291	8140676	-	29.50	29.50
Shenandoah S2: gravel pit SSGP3	98	53	355823.97	8140510.08	-	5.00	5.00
Shenandoah S B: well pad, access track(s), laydown and associated infrastructure	117	53	345035	8135464	-	23.30	23.30
Shenandoah S C: well pad, access track(s) and associated infrastructure	117	53	343471	8133330	-	17.30	17.30
Gathering line: Kyalla 117 N2 to/from Shenandoah S2 (start to end)	117 & 98	53	356274 355060	8137505 8140071	-	4.50	4.50
Gathering line: Shenandoah S B to / from Shenandoah S C (start to end)	117	53	345035 343442	8135461 8133331	-	4.11	4.11
Shenandoah N A: well pad, camp pad, access track(s) and associated infrastructure	98	53	356687	8163762	-	12.00	12.00
Seismic: Shenandoah South Line A (13.00 km)**	117	53	337174.05 346089.96	337174.05 8128616.75	-	6.50	6.50
Seismic: Shenandoah South Line B (12.50 km)**	98 & 117	53	341094.69 349560.21	341094.69 8131483.21	-	6.50	6.50
Seismic: Shenandoah South Line C (12.50 km)**	98 & 117	53	338588.93 347420.93	338588.93 8129410.23	-	6.25	6.25
Seismic: Shenandoah access track(s) seismic line(s) (39.00 km)**	98 & 117	53	332988 356365	332988 8150204	-	-	-
Total clearing (ha)					20.40	119.26	136.66

*Universal Transverse Mercator geographic coordinate system is Geocentric Datum of Australia 94.
**Footprint area for 2D seismic based on 5 m wide seismic lines

[22] The combined disturbance approved under the *Beetaloo Basin Kyalla 117 N2 Civil Construction EP117 EMP*, approved 6 June 2019 and *Beetaloo Basin groundwater monitoring bore installation program – Kyalla 117 EMP*, approved 10 December 2018, excluding gravel pit disturbance listed separately.

3.6.3 Gravel pits

Tamboran proposes to source gravel from a new gravel pit in the vicinity of Shenandoah S2 (SSGP3) on EP 98 and the existing approved gravel pits on EP 117 – SSGP1 (2.5 ha, ~100 m x 250 m) and SSGP2 (6.25 ha, ~250 m x 250 m). SSGP3 will be up to 5 ha in size (see Figure 5). A typical image of a gravel pit in the Beetaloo is provided in Figure 13.

SSGP3 will be cleared, with topsoil and subsoil stripped, segregated and stockpiled onsite for future revegetation. SSGP3 will be progressively constructed up to a final dimension of 200 m x 250 m, with a total depth of less than 3 m (typically 1.5 m). The final size and depth of a gravel pit is determined by the quantity of gravel present on the site and

Amended EMP text

3.3 Site Settings

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Shenandoah S B: well pad, access track(s), laydown and associated infrastructure	117	53	345035	8135464	-	23.30	23.30
Shenandoah S C: well pad, access track(s) and associated infrastructure	117	53	343471	8133330	-	17.30	17.30
Gathering line: Kyalla 117 N2 to/from Shenandoah S2 (start to end)	117 & 98	53	356274 355060	8137505 8140071	-	4.50	4.50
Gathering line: Shenandoah S B to / from Shenandoah S C (start to end)	117	53	345035 343442	8135461 8133331	-	4.11	4.11
Shenandoah N A: well pad, camp pad, access track(s) and associated infrastructure	98	53	356687	8163762	-	12.00	12.00
Seismic: Shenandoah South Line A (13.00 km)**	117	53	337174.05 346089.96	337174.05 8128616.75	-	6.50	6.50
Seismic: Shenandoah South Line B (12.50 km)**	98 & 117	53	341094.69 349560.21	341094.69 8131483.21	-	6.50	6.50
Seismic: Shenandoah South Line C (12.50 km)**	98 & 117	53	338588.93 347420.93	338588.93 8129410.23	-	6.25	6.25
Seismic: Shenandoah access track(s) seismic line(s) (39.00 km)**	98 & 117	53	332988 356365	332988 8150204	-	-	-
Total clearing (ha)					20.40	119.26	139.66

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3.6.3 Gravel pits

Tamboran proposes to source gravel from the existing approved gravel pits on EP 117 – SSGP1 (2.5 ha, ~100 m x 250 m) and SSGP2 (6.25 ha, ~250 m x 250 m). SSGP1 will be increased in size to 7.5 ha, approximately 395 m x 190 m (see Figure 5). A typical image of a gravel pit in the Beetaloo is provided in Figure 13.

Gravel pits will be cleared, with topsoil and subsoil stripped, segregated and stockpiled onsite for future revegetation. SSGP1 will be progressively increased to a final dimension of approximately 395 m x 190 m, with a total depth of less than 3 m (typically 1.5 m). The final size and depth of a gravel pit is determined by the quantity of gravel present on

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

Current EMP text

gravel requirements. The pit may be fenced where the pit batters represent a potential fall hazard to livestock and fauna, noting that to date, there have been no recorded fauna or livestock incidents occurring at existing gravel pits. Pit batters are typically 4:1.

…

A breakdown of civil constructions activities across the existing and new sites is provided in Table 15.

3.6.3 Gravel pits

Table 15: Summary of civil construction activities at all sites (ha)

Infrastructure	Existing (ha)	New (ha)
Kyalla 117 N2		
Well pad	5.25	3.80
Camp pad (increase of 0.50 ha is contingency)	1.00	0.50
Helipad	0.50	
Access track, including turn ins and passing bays	0.9	
Laydown / storage / contingent		
Fence line and firebreak	4.00	
Gathering lines: Kyalla 117 N2 to / from Shenandoah S2		4.50
Gravel pit(s): SSGP1 (2.50 ha) and SSGP2 (6.25 ha)	8.75	
Subtotal	~20.40	8.80
Shenandoah S2		
Well pad	–	12.00
Camp pad	–	1.00
Helipad	–	–
Access track, including turn ins and passing bays	–	7.50
Laydown / storage / contingent	–	5.00
Fence line and firebreak	–	4.00
Gathering lines: Kyalla 117 N2 to / from Shenandoah S2	Included under Kyalla 117 N2 totals	
Gravel pit(s): SSGP3	–	5.00
Subtotal	–	34.50
Shenandoah S B		
Well pad	–	12.00
Camp pad	–	1.00
Helipad	–	0.50
Access track, including turn ins and passing bays	–	3.30
Laydown / storage / contingent	–	2.50
Fence line and firebreak	–	4.00
Gathering lines: Shenandoah S B to / from Shenandoah S C	–	4.11
Gravel pit(s)	–	–
Subtotal	–	27.41
Shenandoah S C		
Well pad	–	7.50
Camp pad	–	–
Helipad	–	0.50
Access track, including turn ins and passing bays	–	3.30
Laydown / storage / contingent	–	2.50
Fence line and firebreak	–	4.00
Gathering lines: Shenandoah S B to / from Shenandoah S C	Included under Shenandoah S B totals	
Gravel pit(s)	–	–
Subtotal		17.30
Shenandoah N A		
Well pad	–	3.00

Amended EMP text

the site and gravel requirements. The pit may be fenced where the pit batters represent a potential fall hazard to livestock and fauna, noting that to date, there have been no recorded fauna or livestock incidents occurring at existing gravel pits. Pit batters are typically 4:1.

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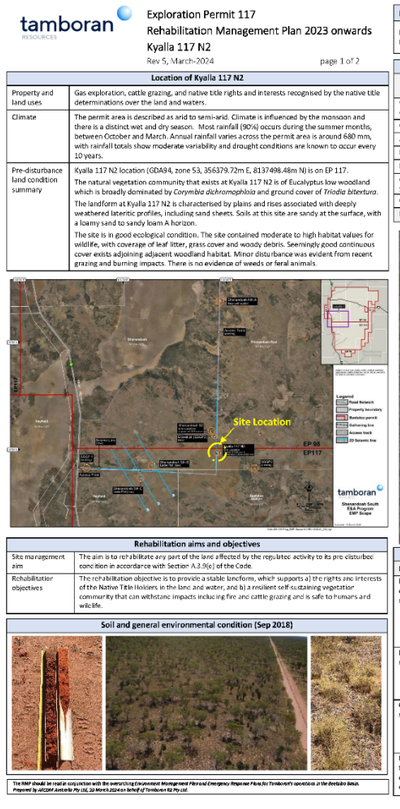
Camp pad (increase of 0.50 ha is contingency)	1.00	0.50
Helipad	0.50	
Access track, including turn ins and passing bays	0.9	
Laydown / storage / contingent		
Fence line and firebreak	4.00	
Gathering lines: Kyalla 117 N2 to / from Shenandoah S2		4.50
Gravel pit(s): SSGP1 (2.50 ha) and SSGP2 (6.25 ha)	8.75	5.00 (SSGP1)
Subtotal	~20.40	13.80
Shenandoah S2		
Well pad	–	12.00
Camp pad	–	1.00
Helipad	–	–
Access track, including turn ins and passing bays	–	7.50
Laydown / storage / contingent	–	5.00
Fence line and firebreak	–	4.00
Gathering lines: Kyalla 117 N2 to / from Shenandoah S2	Included under Kyalla 117 N2 totals	
~~Gravel pit(s): SSGP3~~	~~–~~	~~5.00~~
Subtotal	–	29.50
Shenandoah S B		
Well pad	–	12.00
Camp pad	–	1.00
Helipad	–	0.50
Access track, including turn ins and passing bays	–	3.30
Laydown / storage / contingent	–	2.50
Fence line and firebreak	–	4.00
Gathering lines: Shenandoah S B to / from Shenandoah S C	–	4.11
Gravel pit(s)	–	–
Subtotal	–	27.41
Shenandoah S C		
Well pad	–	7.50
Camp pad	–	–
Helipad	–	0.50
Access track, including turn ins and passing bays	–	3.30
Laydown / storage / contingent	–	2.50
Fence line and firebreak	–	4.00
Gathering lines: Shenandoah S B to / from Shenandoah S C	Included under Shenandoah S B totals	
Gravel pit(s)	–	–
Subtotal		17.30
Shenandoah N A		
Well pad	–	3.00

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

Current EMP text			Amended EMP text		
Camp pad	–	1.00	Camp pad	–	1.00
Helipad	–	–	Helipad	–	–
Access track, including turn ins and passing bays	–	6.00	Access track, including turn ins and passing bays	–	6.00
Laydown / storage / contingent	–	–	Laydown / storage / contingent	–	–
Fence line and firebreak	–	2.00	Fence line and firebreak	–	2.00
Gathering lines	–	–	Gathering lines	–	–
Gravel pit(s)	–	–	Gravel pit(s)	–	–
Subtotal	–	12.00	Subtotal	–	12.00
TOTAL	**20.40**	**100.01**	**TOTAL**	**20.40**	**100.01**

Appendix O Rehabilitation Management Plan

NOTE: To assist with report quality, the Kyalla 117 N2 and Shenandoah S2 revised RMPs are provided separately.



tamboran RESOURCES

Exploration Permit 117
Rehabilitation Management Plan 2023 onwards
Kyalla 117 N2
Rev 5, March-2024 page 1 of 2

Location of Kyalla 117 N2

Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	Kyalla 117 N2 location (GDA94, zone 53, 356379.72m E, 8137498.48m N) is on EP 117. The natural vegetation community that exists at Kyalla 117 N2 is of Eucalyptus low woodland which is broadly dominated by *Corymbia dichromophloia* and ground cover of *Triodia bitextura*. The landform at Kyalla 117 N2 is characterised by plains and rises associated with deeply weathered lateritic profiles, including sand sheets. Soils at this site are sandy at the surface, with a loamy sand to sandy loam A horizon. The site is in good ecological condition. The site contained moderate to high habitat values for wildlife, with coverage of leaf litter, grass cover and woody debris. Seemingly good continuous cover exists adjoining adjacent woodland habitat. Minor disturbance was evident from recent grazing and burning impacts. There is no evidence of weeds or feral animals.

Rehabilitation aims and objectives

Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to its pre-disturbed condition in accordance with Section A.3.9(c) of the Code.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.

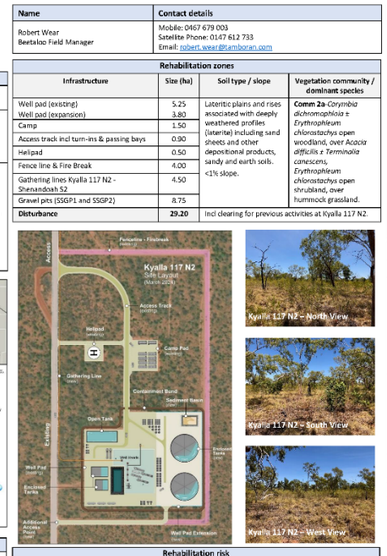
Soil and general environmental condition (Sep 2018)

The RMP should be read in conjunction with the overarching Environment Management Plan and Emergency Response Plan for Tamboran's operations in the Beetaloo Basin.
Prepared by ARCADIS Australia Pty Ltd, 16 March 2024 on behalf of Tamboran B2 Pty Ltd.

Name	Contact details
Robert Wear Beetaloo Field Manager	Mobile: 0467 679 003 Satellite Phone: 0147 612 733 Email: robert.wear@tamboran.com

Rehabilitation zones

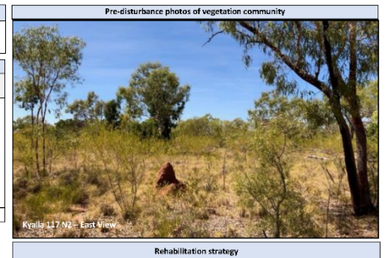
Infrastructure	Size (ha)	Soil type / slope	Vegetation community / dominant species
Well pad (existing) Well pad (expansion)	5.25 3.80	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils. <1% slope.	**Comm 2a**-*Corymbia dichromophloia* ± *Erythrophleum chlorostachys* open woodland, over *Acacia difficilis* ± *Terminalia canescens*, *Erythrophleum chlorostachys* open shrubland, over hummock grassland.
Camp	1.50		
Access track incl turn-ins & passing bays	0.90		
Helipad	0.50		
Fence line & Fire Break	4.00		
Gathering lines Kyalla 117 N2 - Shenandoah S2	4.50		
Gravel pits (SSGP1 and SSGP2)	8.75		
Disturbance	**29.20**	Incl clearing for previous activities at Kyalla 117 N2.	



Rehabilitation risk

Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. • Re-spread topsoil across the site to utilise the local seed bank. • Ongoing monitoring to identify if further seed inputs are required. • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	• Establish a mix of perennial and annual grass species. • Establish a mix of resprouting (e.g., *Eucalyptus* spp. and *Corymbia* spp.) and reseeding species (e.g., *Acacia* spp.). • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	• Establish a mix of perennial and annual grass species. • Re-spread timber with topsoil. • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required. • Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils. • Respread of topsoil and vegetated matter across the site. • Annual weed surveys of rehabilitated area once rehabilitation is established. • Control of any weed incursions.

Pre-disturbance photos of vegetation community

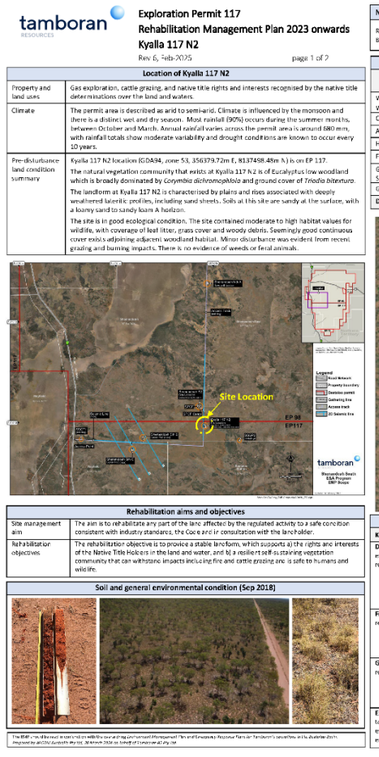


Rehabilitation strategy

Parameter	Methods	Objective
Vegetation	• Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers.	• Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). • Reinstate disturbance area to its pre-disturbed condition. • The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. • After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process.	
Landform stability	• All windrows are to be removed post construction and at completion of the activities.	

Final success criteria

Area to be rehabilitated	• Total area of approved surface disturbance is 29.20 ha. • Total area required for rehabilitation 29.20 ha.
Vegetation composition	• Vegetation composition (i.e. type, density) trending towards the target vegetation community and self-sustaining. • Vegetation is sustainable for long term with the only required maintenance consistent with the final land use. • Sign of woody vegetation regrowth (i.e. Acacia, Eucalypt and Bullwaddy) following rehabilitation and within 12-18 months. • Ground foliage cover consistent with the target vegetation community where disturbance occurred. • Achieve minimum of 30% diversity within the first 12 months and maintained for at least 3 years following rehabilitation consistent with analogue sample site. • Final success based on the following attributes - % canopy and ground cover, stratum 3 species richness, woody species diversity.
Watercourse crossings	• All stream crossings, where intersected, to be reinstated to the original topography.
Erosion	• Site stabilisation to occur and all erosion and sediment control infrastructure removed. • Less than 5 % erosion should be evident after the first 12 months and no subsidence or erosion should be evident for at least 5 years after completion.
Weeds	• No establishment of weed species declared under the NT *Weeds Management Act*.
Hazardous materials and waste	• All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities. • No residual soil contamination that poses a threat of environmental harm.
Safety for humans and wildlife	• Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. • Windrows removed. • Water bores and exploration wells to be sealed and isolated (as required). • Removal of all surface facilities including fencing (star pickets / fencing wire).



tamboran RESOURCES

Exploration Permit 117
Rehabilitation Management Plan 2023 onwards
Kyalla 117 N2
Rev 6, Feb-2025 page 1 of 2

Location of Kyalla 117 N2

Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	Kyalla 117 N2 location (GDA94, zone 53, 356379.72m E, 8137498.48m N) is on EP 117. The natural vegetation community that exists at Kyalla 117 N2 is of Eucalyptus low woodland which is broadly dominated by *Corymbia dichromophloia* and ground cover of *Triodia bitextura*. The landform at Kyalla 117 N2 is characterised by plains and rises associated with deeply weathered lateritic profiles, including sand sheets. Soils at this site are sandy at the surface, with a loamy sand to sandy loam A horizon. The site is in good ecological condition. The site contained moderate to high habitat values for wildlife, with coverage of leaf litter, grass cover and woody debris. Seemingly good continuous cover exists adjoining adjacent woodland habitat. Minor disturbance was evident from recent grazing and burning impacts. There is no evidence of weeds or feral animals.

Rehabilitation aims and objectives

Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to a safe condition consistent with industry standards, the Code and in consultation with the land holder.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.

Soil and general environmental condition (Sep 2018)

The RMP should be read in conjunction with the overarching Environment Management Plan and Emergency Response Plan for Tamboran's operations in the Beetaloo Basin.
Prepared by ARCADIS Australia Pty Ltd, 20 March 2024 on behalf of Tamboran B2 Pty Ltd.

Name	Contact details
Robert Wear Beetaloo Field Manager	Mobile: [redacted] Satellite Phone: [redacted] Email: [redacted]

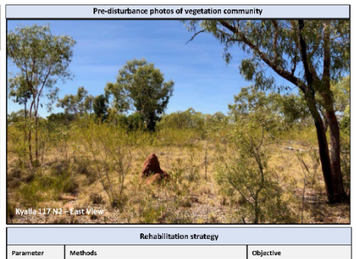
Rehabilitation zones

Infrastructure	Size (ha)	Soil type / slope	Vegetation community / dominant species
Well pad (existing) Well pad (expansion)	5.25 3.80	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils. <1% slope.	**Comm 2a**-*Corymbia dichromophloia* ± *Erythrophleum chlorostachys* open woodland, over *Acacia difficilis* ± *Terminalia canescens*, *Erythrophleum chlorostachys* open shrubland, over hummock grassland.
Camp	1.50		
Access track incl turn-ins & passing bays	0.90		
Helipad	0.50		
Fence line & Fire Break	4.00		
Gathering lines Kyalla 117 N2 - Shenandoah S2	4.50		
Gravel pits (SSGP1 and SSGP2)	11.75		
Disturbance	**34.20**	Incl clearing for previous activities at Kyalla 117 N2.	

Rehabilitation risk

Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. • Re-spread topsoil across the site to utilise the local seed bank. • Ongoing monitoring to identify if further seed inputs are required. • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	• Establish a mix of perennial and annual grass species. • Establish a mix of resprouting (e.g., *Eucalyptus* spp. and *Corymbia* spp.) and reseeding species (e.g., *Acacia* spp.). • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	• Establish a mix of perennial and annual grass species. • Re-spread timber with topsoil. • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required. • Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils. • Respread of topsoil and vegetated matter across the site. • Annual weed surveys of rehabilitated area once rehabilitation is established. • Control of any weed incursions.

Pre-disturbance photos of vegetation community



Rehabilitation strategy

Parameter	Methods	Objective
Vegetation	• Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers.	• Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). • Reinstate disturbance area to its pre-disturbed condition. • The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. • After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process.	
Landform stability	• All windrows are to be removed post construction and at completion of the activities.	

Final success criteria

Area to be rehabilitated	• Total area of approved surface disturbance is 34.20 ha. • Total area required for rehabilitation 34.20 ha.
Vegetation composition	• Vegetation composition (i.e. type, density) trending towards the target vegetation community and self-sustaining. • Vegetation is sustainable for long term with the only required maintenance consistent with the final land use. • Sign of woody vegetation regrowth (i.e. Acacia, Eucalypt and Bullwaddy) following rehabilitation and within 12-18 months. • Ground foliage cover consistent with the target vegetation community where disturbance occurred. • Achieve minimum of 30% diversity within the first 12 months and maintained for at least 3 years following rehabilitation consistent with analogue sample site. • Final success based on the following attributes - % canopy and ground cover, stratum 3 species richness, woody species diversity.
Watercourse crossings	• All stream crossings, where intersected, to be reinstated to the original topography.
Erosion	• Site stabilisation to occur and all erosion and sediment control infrastructure removed. • Less than 5 % erosion should be evident after the first 12 months and no subsidence or erosion should be evident for at least 5 years after completion.
Weeds	• No establishment of weed species declared under the NT *Weeds Management Act*.
Hazardous materials and waste	• All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities. • No residual soil contamination that poses a threat of environmental harm.
Safety for humans and wildlife	• Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. • Windrows removed. • Water bores and exploration wells to be sealed and isolated (as required). • Removal of all surface facilities including fencing (star pickets / fencing wire).

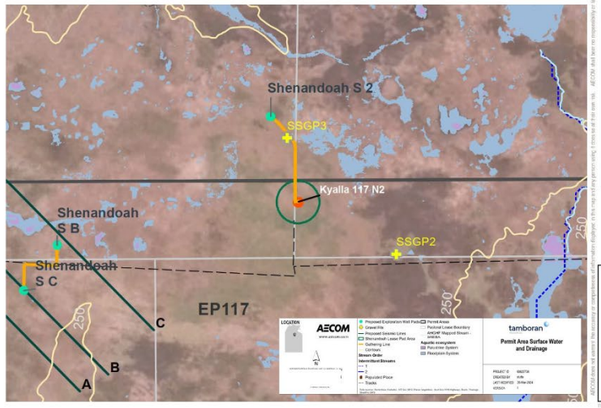
Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

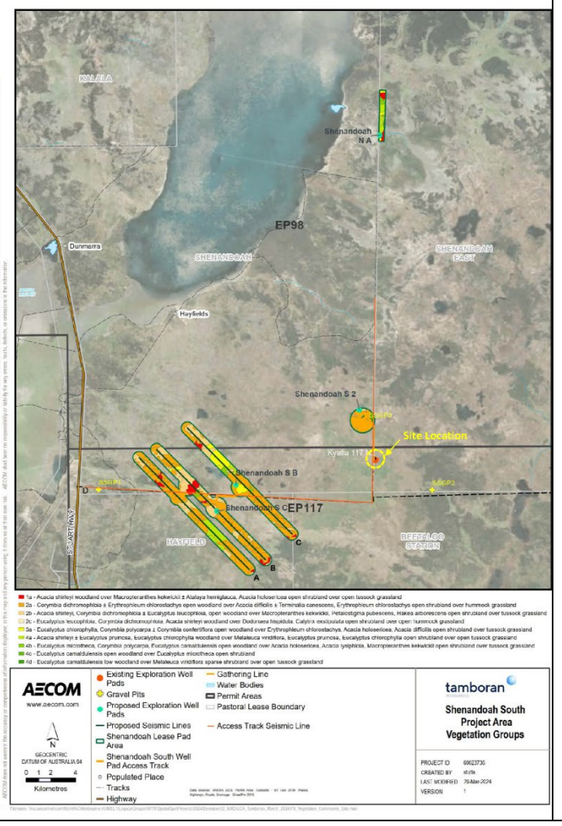
Current EMP text

tamboran RESOURCES

Exploration Permit 117
Rehabilitation Management Plan 2023 onwards
Kyalla 117 N2
Rev 5, March-2024 page 2 of 2

Monitoring program and schedule			
Stage	**Timing**	**Method**	**Measurable attributes**
Progressive rehabilitation	Within 6-12 weeks of completion of activities	• Topsoil, windrows and cleared vegetation stockpiled are to be respread following the works. • Refer to detail in Tamboran's Erosion and Sediment Control Plan	• All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran Erosion and Sediment Control Plan.
Preliminary assessment	Post rehabilitation, end of wet season survey (February to June) within 12 months.	• Analogue sites will be established for the two vegetation communities identified in the baseline Land Condition Assessment (AECOM 2023) at adjacent undisturbed sites. • Permanent 100 m x 4 m transects (one per vegetation community), will be established at disturbed and analogue sites including photo monitoring point(s). • Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. • Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects.	Following measurable attributes will be compared with analogue sites: • Seedling/sapling density of dominant species respective to each vegetation community. • Percentage of ground cover respective to bare land and vegetation. • Number of species at canopy, mid and ground strata. • Evidence of erosion (type of erosion, approximate area of erosion). • Weed presence/absence (species and density). • Disturbance (fire frequency and intensity, evidence of feral animal/ cattle) • Incidental observations.
Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to June).	• Monitoring to be undertaken using permanent transects at analogue and disturbed sites. • Collect data as per preliminary methods. • Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation).	• Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect. • Including assessment of species, DBH (>1.5 cm) and height (>2 m), in addition to parameters described within the preliminary assessment.
Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to June).	• Implement reseeding if species richness does not show a trajectory to achieving pre-disturbance conditions 5 years post disturbance. • Species which fail to naturally recover from soil seed bank will be selected for reseeding. • Annually review success criteria.	• Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during early rehabilitation stage.



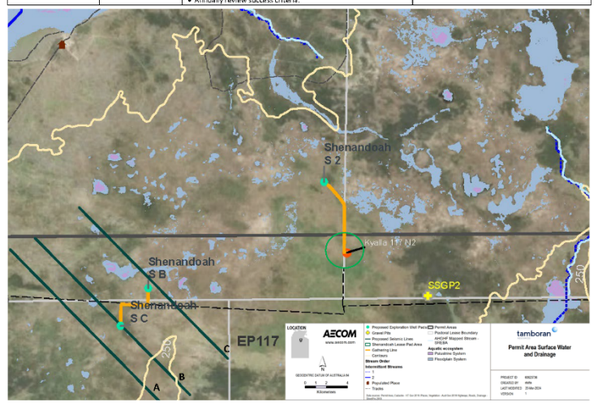


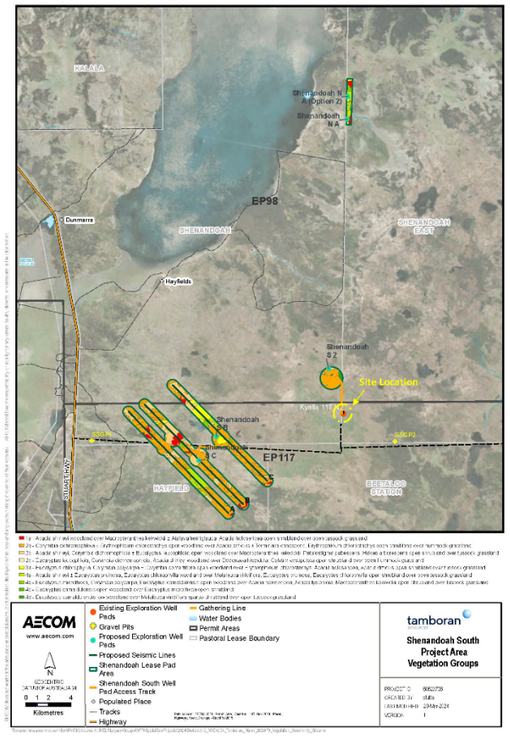
Amended EMP text

tamboran RESOURCES

Exploration Permit 117
Rehabilitation Management Plan 2023 onwards
Kyalla 117 N2
Rev 6, Feb-2025 page 2 of 2

Monitoring program and schedule			
Stage	**Timing**	**Method**	**Measurable attributes**
Progressive rehabilitation	Within 6-12 weeks of completion of activities	• Topsoil, windrows and cleared vegetation stockpiled are to be respread following the works. • Refer to detail in Tamboran's Erosion and Sediment Control Plan	• All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran Erosion and Sediment Control Plan.
Preliminary assessment	Post rehabilitation, end of wet season survey (February to June) within 12 months.	• Analogue sites will be established for the two vegetation communities identified in the baseline Land Condition Assessment (AECOM 2023) at adjacent undisturbed sites. • Permanent 100 m x 4 m transects (one per vegetation community), will be established at disturbed and analogue sites including photo monitoring point(s). • Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. • Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects.	Following measurable attributes will be compared with analogue sites: • Seedling/sapling density of dominant species respective to each vegetation community. • Percentage of ground cover respective to bare land and vegetation. • Number of species at canopy, mid and ground strata. • Evidence of erosion (type of erosion, approximate area of erosion). • Weed presence/absence (species and density). • Disturbance (fire frequency and intensity, evidence of feral animal/ cattle) • Incidental observations.
Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to June).	• Monitoring to be undertaken using permanent transects at analogue and disturbed sites. • Collect data as per preliminary methods. • Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation).	• Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect. • Including assessment of species, DBH (>1.5 cm) and height (>2 m), in addition to parameters described within the preliminary assessment.
Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to June).	• Implement reseeding if species richness does not show a trajectory to achieving pre-disturbance conditions 5 years post disturbance. • Species which fail to naturally recover from soil seed bank will be selected for reseeding. • Annually review success criteria.	• Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during early rehabilitation stage.





Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

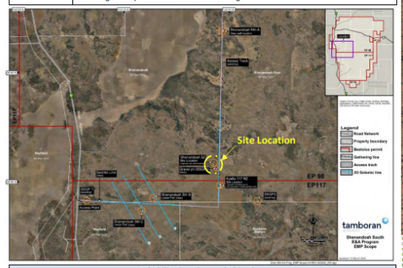
Current EMP text

tamboran RESOURCES

Exploration Permit 98
Rehabilitation Management Plan 2023 onwards
Shenandoah South 2

Rev 2, March-2024 page 1 of 2

Location of Shenandoah South 2	
Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	The Shenandoah South 2 location (GDA94, Zone 53, 355291.00mE, 8140676.00mN). The natural vegetation community is *Corymbia dichromophloia ± Erythrophleum chlorostachys* open woodland over *Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys* open shrubland over hummock grassland and *Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, Corymbia polycarpa* open woodland, over *Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens* open shrubland, over tussock grassland. The landform at Shenandoah South 2 is characterised by lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils. Habitat surrounding the site is in good condition. The habitat contained good refuge opportunities for small birds and reptiles in the form of dense grass cover, with some large woody debris and tree hollows and logs.



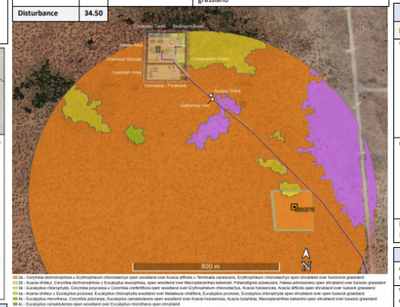
Rehabilitation aims and objectives	
Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to its pre-disturbed condition in accordance with Section A.3.9(d) of the Code.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.

Soil and general environmental condition (Dec 2022)

Name	Contact details
Robert Wear Beetaloo Field Manager	[redacted]

Rehabilitation zones

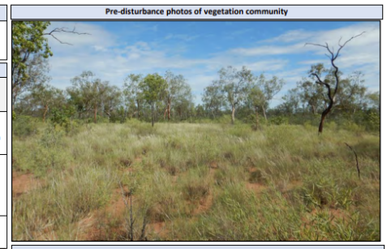
Infrastructure	Size (ha)	Soil type / slope canopy / ground cover	Vegetation community / dominant species
Lease pad	12.00	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils	Comm 2a-*Corymbia dichromophloia ± Erythrophleum chlorostachys* open woodland, over *Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys* open shrubland, over hummock grassland
Laydown	5.00		
Gravel Pit	5.00		
Helipad	-		Comm 2b-*Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, Corymbia polycarpa* open woodland, over *Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens* open shrubland, over tussock grassland
Camp	1.00		
Fencing & firebreaks	4.00		
Access track & gathering line	7.50		
		Floodplain/drainage depression	Comm 4d- *Eucalyptus camaldulensis* low woodland over *Melaleuca viridiflora* sparse shrubland over open tussock grassland
Disturbance	34.50		



Rehabilitation risk

Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. • Re-spread topsoil across the site to utilise the local seed bank. • Ongoing monitoring to identify if further seed inputs are required. • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	• Establish a mix of perennial and annual grass species. • Establish a mix of resprouting (e.g., *Eucalyptus* spp. and *Corymbia* spp.) and reseeding species (e.g., *Acacia* spp.). • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	• Establish a mix of perennial and annual grass species. • Re-spread timber with topsoil. • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required. • Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils. • Respread of topsoil and vegetated matter across the site. • Annual weed surveys of rehabilitated area once rehabilitation is established. • Control of any weed incursions.

Pre-disturbance photos of vegetation community



Rehabilitation strategy

Parameter	Methods	Objective
Vegetation	• Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers.	• Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). • Reinstate disturbance area to its pre-disturbed condition. • The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. • After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process.	
Landform stability	• All windrows are to be removed post construction and at completion of the activities.	

Final success criteria

Area to be rehabilitated	• Total area of approved surface disturbance is 34.50 ha. • Total area required for rehabilitation 34.50 ha.
Vegetation composition	• Vegetation composition (i.e. type, density) trending towards the target vegetation community and self-sustaining. • Vegetation is sustainable for long term with the only required maintenance consistent with the final land use. • Sign of woody vegetation regrowth (i.e. Acacia, Eucalypt and Bullwaddy) following rehabilitation and within 12-18 months. • Ground foliage cover consistent with the target vegetation community where disturbance occurred. • Achieve minimum of 30% diversity within the first 12 months and maintained for at least 3 years following rehabilitation consistent with analogue sample site. • Final success based on the following attributes - % canopy and ground cover, stratum 3 species richness, woody species diversity.
Watercourse crossings	• All stream crossings, where intersected, to be reinstated to the original topography. • No evidence of erosion as result of activity present within first 12 months.
Erosion	• Site stabilisation to occur and all erosion and sediment control infrastructure removed. • Less than 5 % erosion should be evident after the first 12 months and no subsidence or erosion should be evident for at least 5 years after completion.
Weeds	• No establishment of weed species declared under the NT *Weeds Management Act*.
Hazardous materials and waste	• All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities. • No residual soil contamination that poses a threat of environmental harm.
Safety for humans and wildlife	• Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. • Windrows removed. • Water bores and exploration wells to be sealed and isolated (as required). • Removal of all surface facilities including fencing (star pickets / fencing wire).

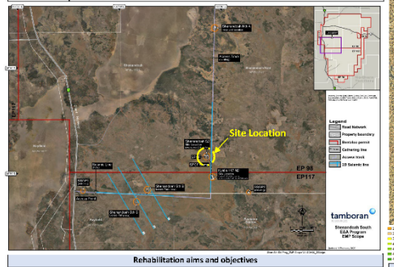
Amended EMP text

tamboran RESOURCES

Exploration Permit 98
Rehabilitation Management Plan 2023 onwards
Shenandoah South 2

Rev 3, February 2025 page 1 of 2

Location of Shenandoah South 2	
Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	The Shenandoah South 2 location (GDA94, Zone 53, 355291.00mE, 8140676.00mN). The natural vegetation community is *Corymbia dichromophloia ± Erythrophleum chlorostachys* open woodland over *Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys* open shrubland over hummock grassland and *Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, Corymbia polycarpa* open woodland, over *Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens* open shrubland, over tussock grassland. The landform at Shenandoah South 2 is characterised by lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils. Habitat surrounding the site is in good condition. The habitat contained good refuge opportunities for small birds and reptiles in the form of dense grass cover, with some large woody debris and tree hollows and logs.



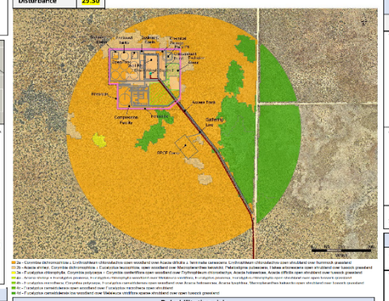
Rehabilitation aims and objectives	
Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to a safe condition consistent with industry standards, the Code and in consultation with the landholder.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.

Soil and general environmental condition (Dec 2022)

Name	Contact details
Robert Wear Beetaloo Field Manager	[redacted]

Rehabilitation zones

Infrastructure	Size (ha)	Soil type / slope canopy / ground cover	Vegetation community / dominant species
Lease pad	12.00	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils	Comm 2a-*Corymbia dichromophloia ± Erythrophleum chlorostachys* open woodland, over *Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys* open shrubland, over hummock grassland
Laydown	5.00		
Helipad	-		Comm 2b-*Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, Corymbia polycarpa* open woodland, over *Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens* open shrubland, over tussock grassland
Camp	1.00		
Fencing & firebreaks	4.00		
Access track & gathering line	7.50		
		Floodplain/drainage depression	Comm 4d- *Eucalyptus camaldulensis* low woodland over *Melaleuca viridiflora* sparse shrubland over open tussock grassland
Disturbance	29.50		



Rehabilitation risk

Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. • Re-spread topsoil across the site to utilise the local seed bank. • Ongoing monitoring to identify if further seed inputs are required. • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	• Establish a mix of perennial and annual grass species. • Establish a mix of resprouting (e.g., *Eucalyptus* spp. and *Corymbia* spp.) and reseeding species (e.g., *Acacia* spp.). • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	• Establish a mix of perennial and annual grass species. • Re-spread timber with topsoil. • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required. • Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils. • Respread of topsoil and vegetated matter across the site. • Annual weed surveys of rehabilitated area once rehabilitation is established. • Control of any weed incursions.

Pre-disturbance photos of vegetation community

Rehabilitation strategy

Parameter	Methods	Objective
Vegetation	• Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers.	• Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). • Reinstate disturbance area to its pre-disturbed condition. • The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. • After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process.	
Landform stability	• All windrows are to be removed post construction and at completion of the activities.	

Final success criteria

Area to be rehabilitated	• Total area of approved surface disturbance is 29.50 ha. • Total area required for rehabilitation 29.50 ha.
Vegetation composition	• Vegetation composition (i.e. type, density) trending towards the target vegetation community and self-sustaining. • Vegetation is sustainable for long term with the only required maintenance consistent with the final land use. • Sign of woody vegetation regrowth (i.e. Acacia, Eucalypt and Bullwaddy) following rehabilitation and within 12-18 months. • Ground foliage cover consistent with the target vegetation community where disturbance occurred. • Achieve minimum of 30% diversity within the first 12 months and maintained for at least 3 years following rehabilitation consistent with analogue sample site. • Final success based on the following attributes - % canopy and ground cover, stratum 3 species richness, woody species diversity.
Watercourse crossings	• All stream crossings, where intersected, to be reinstated to the original topography. • No evidence of erosion as result of activity present within first 12 months.
Erosion	• Site stabilisation to occur and all erosion and sediment control infrastructure removed. • Less than 5 % erosion should be evident after the first 12 months and no subsidence or erosion should be evident for at least 5 years after completion.
Weeds	• No establishment of weed species declared under the NT *Weeds Management Act*.
Hazardous materials and waste	• All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities. • No residual soil contamination that poses a threat of environmental harm.
Safety for humans and wildlife	• Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. • Windrows removed. • Water bores and exploration wells to be sealed and isolated (as required). • Removal of all surface facilities including fencing (star pickets / fencing wire).

Interest holder	Tamboran B2 Pty Ltd	EMP Title	Beetaloo Basin Shenandoah South E&A Program EP98 and EP117	Unique EMP ID	TAM1-3	Mod #	9	Date	20 February 2025

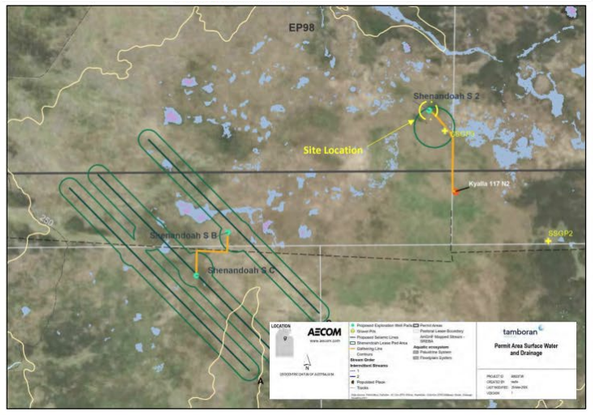
Current EMP text

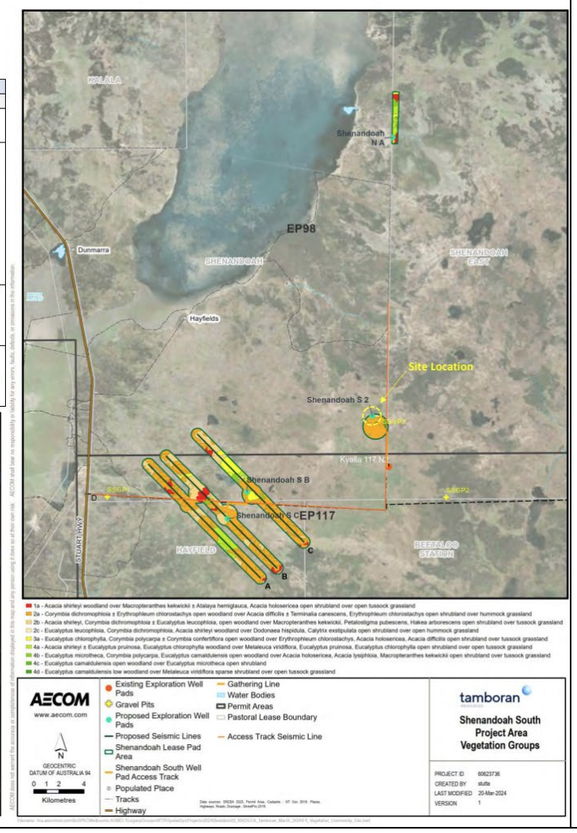
tamboran RESOURCES

Exploration Permit 98
Rehabilitation Management Plan 2023 onwards
Shenandoah South 2
Rev 2, March-2024 page 2 of 2

Monitoring program and schedule

Stage	Timing	Method	Measurable attributes
Progressive rehabilitation	Within 6-12 weeks of completion of activities	• Topsoil, windrows and cleared vegetation stockpiled are to be respread following the works. • Refer to detail in Tamboran's Erosion and Sediment Control Plan	• All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran Erosion and Sediment Control Plan.
Preliminary assessment	Post rehabilitation, end of wet season survey (February to June) within 12 months.	• Analogue sites will be established for the two vegetation communities identified in the baseline Land Condition Assessment (AECOM 2023) at adjacent undisturbed sites. • Permanent 100 m x 4 m transects (one per vegetation community), will be established at disturbed and analogue sites including photo monitoring point(s). • Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. • Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects.	Following measurable attributes will be compared with analogue sites: • Seedling/sapling density of dominant species respective to each vegetation community. • Percentage of ground cover respective to bare land and vegetation. • Number of species at canopy, mid and ground strata. • Evidence of erosion (type of erosion, approximate area of erosion). • Weed presence/absence (species and density). • Disturbance (fire frequency and intensity, evidence of feral animal/ cattle) • Incidental observations.
Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to June).	• Monitoring to be undertaken using permanent transects at analogue and disturbed sites. • Collect data as per preliminary methods. • Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation).	• Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect. • Including assessment of species, DBH (>1.5 cm) and height (>2 m), in addition to parameters described within the preliminary assessment.
Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to June).	• Implement reseeding if species richness does not show a trajectory to achieving pre-disturbance conditions 5 years post disturbance. • Species which fail to naturally recover from soil seed bank will be selected for reseeding. • Annually review success criteria.	• Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during early rehabilitation stage.





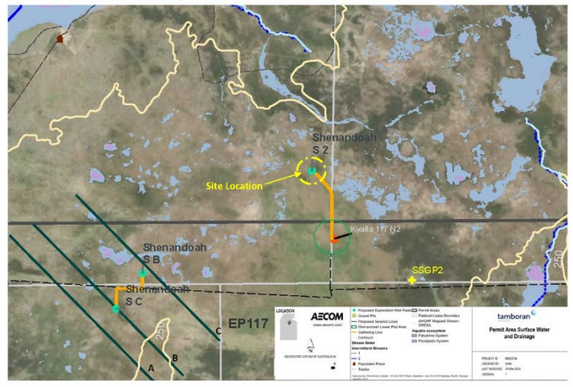
Amended EMP text

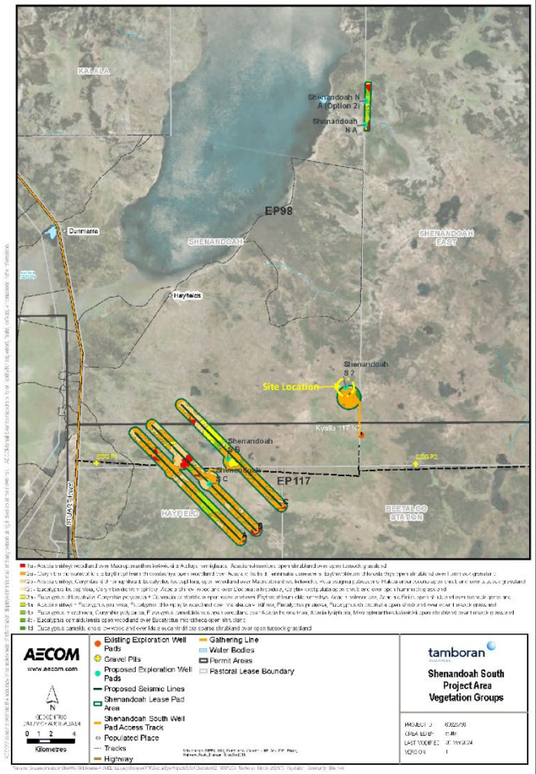
tamboran RESOURCES

Exploration Permit 98
Rehabilitation Management Plan 2023 onwards
Shenandoah South 2
Rev 3, February 2025 page 2 of 2

Monitoring program and schedule

Stage	Timing	Method	Measurable attributes
Progressive rehabilitation	Within 6-12 weeks of completion of activities	• Topsoil, windrows and cleared vegetation stockpiled are to be respread following the works. • Refer to detail in Tamboran's Erosion and Sediment Control Plan	• All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran Erosion and Sediment Control Plan.
Preliminary assessment	Post rehabilitation, end of wet season survey (February to June) within 12 months.	• Analogue sites will be established for the two vegetation communities identified in the baseline Land Condition Assessment (AECOM 2023) at adjacent undisturbed sites. • Permanent 100 m x 4 m transects (one per vegetation community), will be established at disturbed and analogue sites including photo monitoring point(s). • Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. • Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects.	Following measurable attributes will be compared with analogue sites: • Seedling/sapling density of dominant species respective to each vegetation community. • Percentage of ground cover respective to bare land and vegetation. • Number of species at canopy, mid and ground strata. • Evidence of erosion (type of erosion, approximate area of erosion). • Weed presence/absence (species and density). • Disturbance (fire frequency and intensity, evidence of feral animal/ cattle) • Incidental observations.
Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to June).	• Monitoring to be undertaken using permanent transects at analogue and disturbed sites. • Collect data as per preliminary methods. • Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation).	• Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect. • Including assessment of species, DBH (>1.5 cm) and height (>2 m), in addition to parameters described within the preliminary assessment.
Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to June).	• Implement reseeding if species richness does not show a trajectory to achieving pre-disturbance conditions 5 years post disturbance. • Species which fail to naturally recover from soil seed bank will be selected for reseeding. • Annually review success criteria.	• Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during early rehabilitation stage.

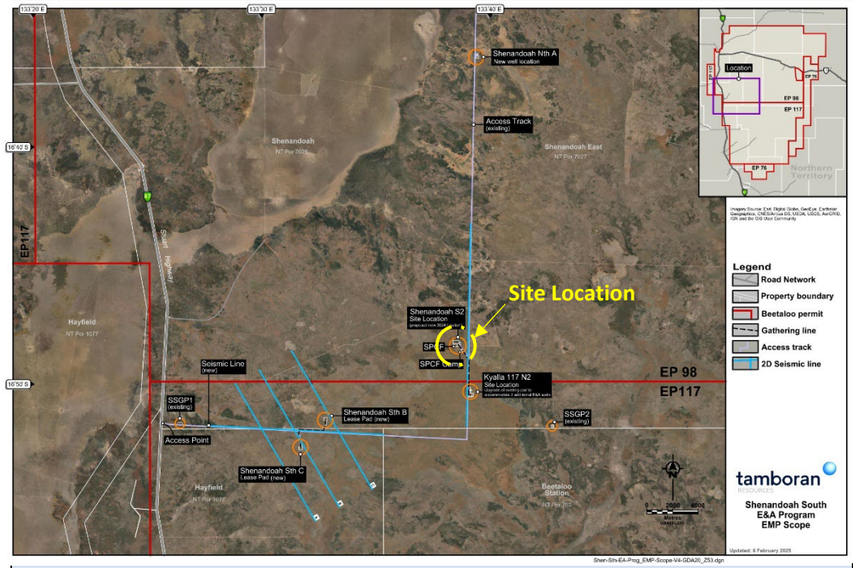




Exploration Permit 98
Rehabilitation Management Plan 2023 onwards
Shenandoah South 2

Rev 3, February 2025

Location of Shenandoah South 2	
Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	The Shenandoah South 2 location (GDA94, Zone 53, 355291.00mE, 8140676.00mN). The natural vegetation community is *Corymbia dichromophloia ± Erythrophleum chlorostachys* open woodland over *Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys open shrubland* over hummock grassland and *Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, Corymbia polycarpa* open woodland, over *Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens* open shrubland, over tussock grassland. The landform at Shenandoah South 2 is characterised by lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils. Habitat surrounding the site is in good condition. The habitat contained good refuge opportunities for small birds and reptiles in the form of dense grass cover, with some large woody debris and tree hollows and logs.



Rehabilitation aims and objectives	
Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to a safe condition consistent with industry standards, the Code and in consultation with the landholder.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.

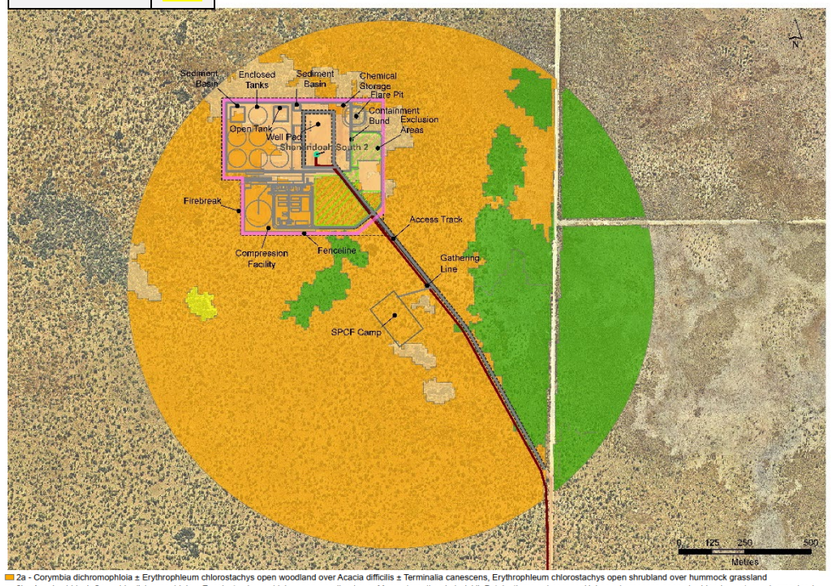
Soil and general environmental condition (Dec 2022)

The RMP should be read in conjunction with the overarching *Environment Management Plan and Emergency Response Plans for Tamboran's operations in the Beetaloo Basin. Prepared by AECOM Australia Pty Ltd, 20 March 2024 on behalf of Tamboran B2 Pty Ltd.*

Name	Contact details
Robert Wear Beetaloo Field Manager	[redacted]

Rehabilitation zones

Infrastructure	Size (ha)	Soil type / slope canopy / ground cover	Vegetation community / dominant species
Lease pad	12.00	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils	Comm 2a-*Corymbia dichromophloia ± Erythrophleum chlorostachys* open woodland, over A*cacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys* open shrubland, over hummock grassland
Laydown	5.00		
Helipad	-		
Camp	1.00		Comm 2b-*Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, Corymbia polycarpa* open woodland, over *Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens* open shrubland, over tussock grassland
Fencing & firebreaks	4.00		
Access track & gathering line	7.50		
		Floodplain/drainage depression	Comm 4d- *Eucalyptus camaldulensis* low woodland over *Melaleuca viridiflora* sparse shrubland over open tussock grassland
Disturbance	29.50		



2a - Corymbia dichromophloia ± Erythrophleum chlorostachys open woodland over Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys open shrubland over hummock grassland
2b - Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, open woodland over Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens open shrubland over tussock grassland
3a - Eucalyptus chlorophylla, Corymbia polycarpa ± Corymbia confertiflora open woodland over Erythrophleum chlorostachys, Acacia holosericea, Acacia difficilis open shrubland over tussock grassland
4a - Acacia shirleyi ± Eucalyptus pruinosa, Eucalyptus chlorophylla woodland over Melaleuca viridiflora, Eucalyptus pruinosa, Eucalyptus chlorophylla open shrubland over open tussock grassland
4b - Eucalyptus microtheca, Corymbia polycarpa, Eucalyptus camaldulensis open woodland over Acacia holosericea, Acacia lysiphloia, Macropteranthes kekwickii open shrubland over tussock grassland
4c - Eucalyptus camaldulensis open woodland over Eucalyptus microtheca open shrubland
4d - Eucalyptus camaldulensis low woodland over Melaleuca viridiflora sparse shrubland over open tussock grassland

Rehabilitation risk

Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. • Re-spread topsoil across the site to utilise the local seed bank. • Ongoing monitoring to identify if further seed inputs are required. • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	• Establish a mix of perennial and annual grass species. • Establish a mix of resprouting (e.g., *Eucalyptus* spp. and *Corymbia* spp.) and reseeding species (e.g., *Acacia* spp.). • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	• Establish a mix of perennial and annual grass species. • Re-spread timber with topsoil. • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required. • Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils. • Respread of topsoil and vegetated matter across the site. • Annual weed surveys of rehabilitated area once rehabilitation is established. • Control of any weed incursions.

Pre-disturbance photos of vegetation community

Rehabilitation strategy

Parameter	Methods	Objective
Vegetation	• Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers.	• Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). • Reinstate disturbance area to its pre-disturbed condition. • The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. • After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process.	
Landform stability	• All windrows are to be removed post construction and at completion of the activities.	

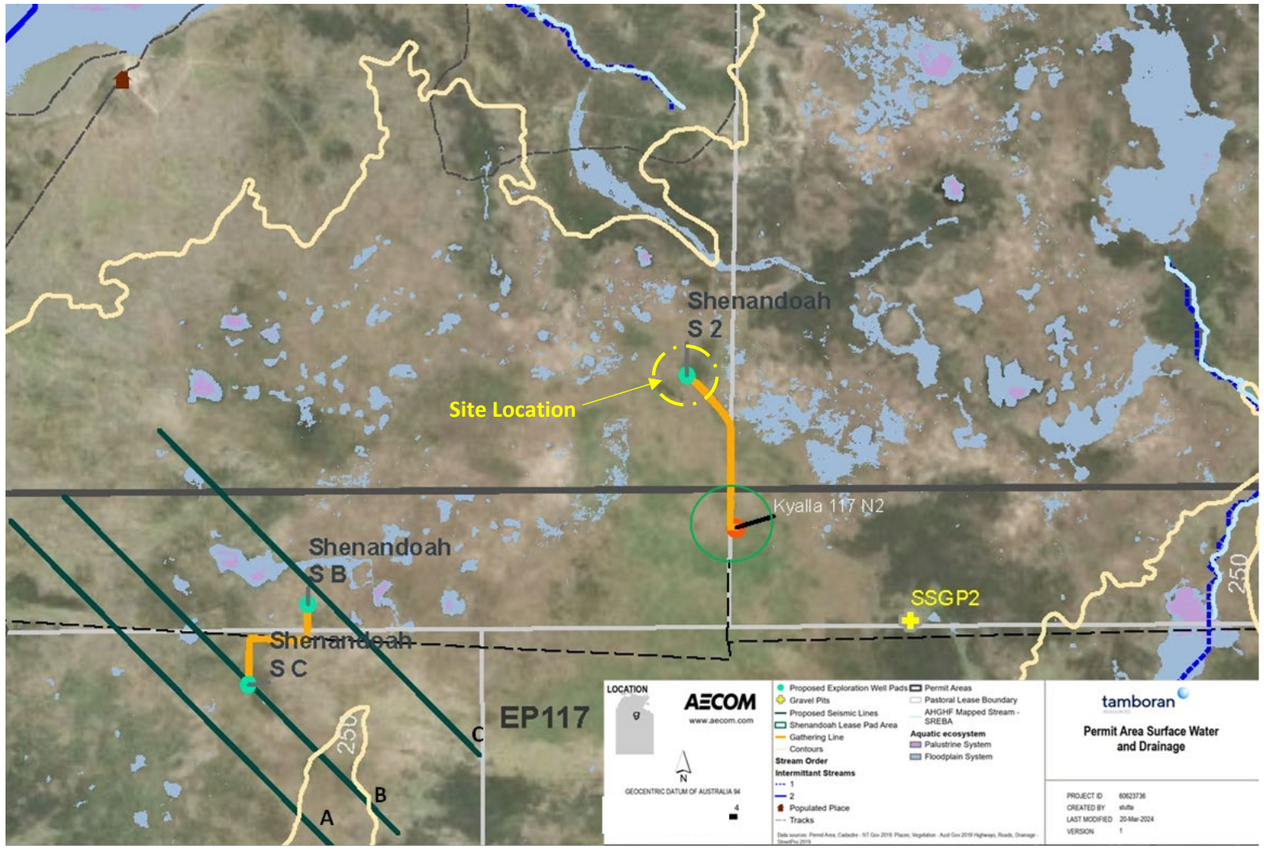
Final success criteria

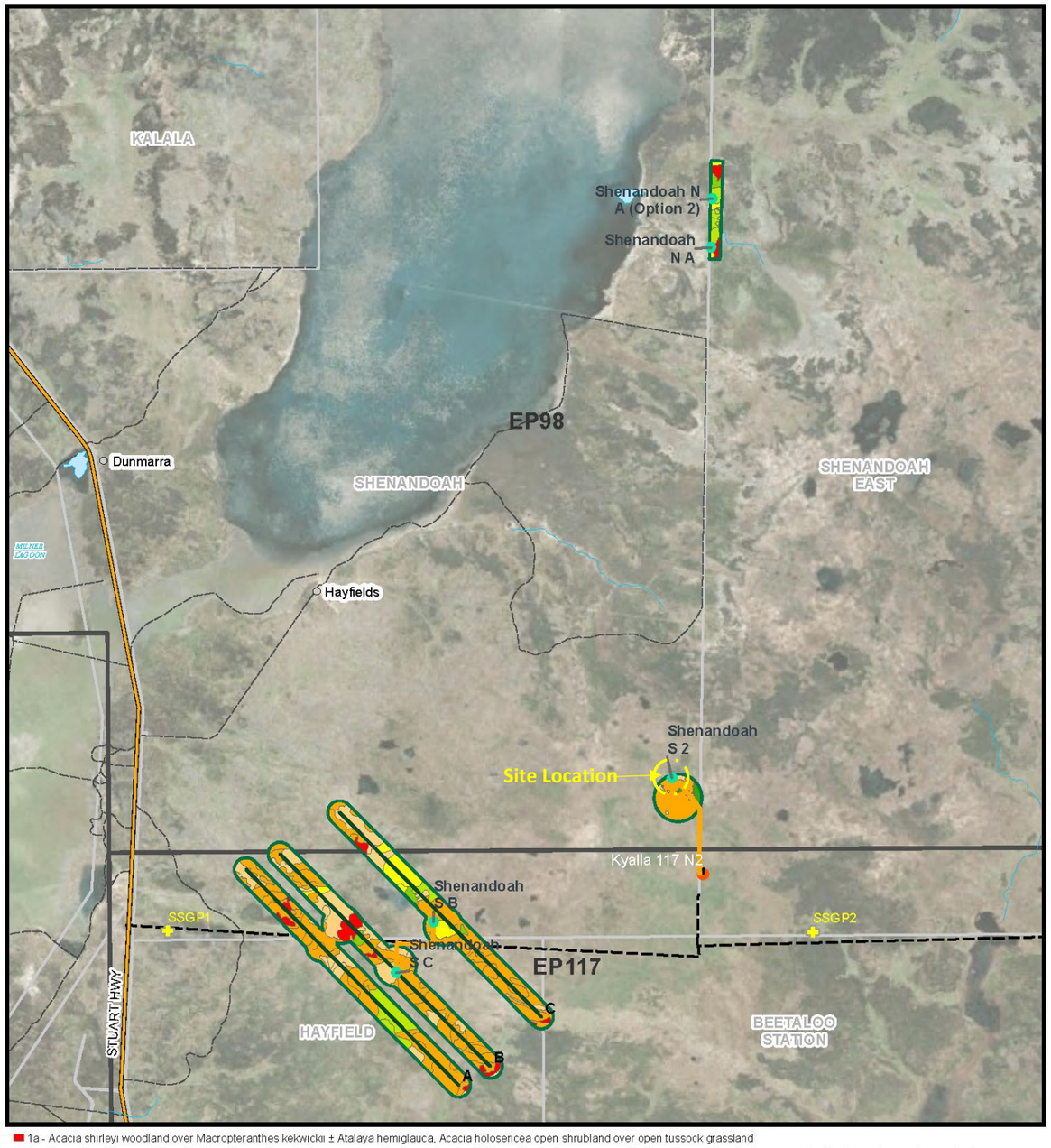
Area to be rehabilitated	• Total area of approved surface disturbance is 29.50 ha. • Total area required for rehabilitation 29.50 ha.
Vegetation composition	• Vegetation composition (i.e. type, density) trending towards the target vegetation community and self-sustaining. • Vegetation is sustainable for long term with the only required maintenance consistent with the final land use. • Sign of woody vegetation regrowth (i.e. Acacia, Eucalypt and Bullwaddy) following rehabilitation and within 12-18 months. • Ground foliage cover consistent with the target vegetation community where disturbance occurred. • Achieve minimum of 30% diversity within the first 12 months and maintained for at least 3 years following rehabilitation consistent with analogue sample site. • Final success based on the following attributes - % canopy and ground cover, stratum 3 species richness, woody species diversity.
Watercourse crossings	• All stream crossings, where intersected, to be reinstated to the original topography. • No evidence of erosion as result of activity present within first 12 months.
Erosion	• Site stabilisation to occur and all erosion and sediment control infrastructure removed. • Less than 5 % erosion should be evident after the first 12 months and no subsidence or erosion should be evident for at least 5 years after completion.
Weeds	• No establishment of weed species declared under the NT *Weeds Management Act*.
Hazardous materials and waste	• All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities. • No residual soil contamination that poses a threat of environmental harm.
Safety for humans and wildlife	• Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. • Windrows removed. • Water bores and exploration wells to be sealed and isolated (as required). • Removal of all surface facilities including fencing (star pickets / fencing wire).

Monitoring program and schedule			
Stage	**Timing**	**Method**	**Measurable attributes**
Progressive rehabilitation	Within 6-12 weeks of completion of activities	• Topsoil, windrows and cleared vegetation stockpiled are to be respread following the works. • Refer to detail in Tamboran's Erosion and Sediment Control Plan	• All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran Erosion and Sediment Control Plan.
Preliminary assessment	Post rehabilitation, end of wet season survey (February to June) within 12 months.	• Analogue sites will be established for the two vegetation communities identified in the baseline Land Condition Assessment (AECOM 2023) at adjacent undisturbed sites. • Permanent 100 m x 4 m transects (one per vegetation community), will be established at disturbed and analogue sites including photo monitoring point(s). • Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. • Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects.	Following measurable attributes will be compared with analogue sites: • Seedling/sapling density of dominant species respective to each vegetation community. • Percentage of ground cover respective to bare land and vegetation. • Number of species at canopy, mid and ground strata. • Evidence of erosion (type of erosion, approximate area of erosion). • Weed presence/absence (species and density). • Disturbance (fire frequency and intensity, evidence of feral animal/ cattle) • Incidental observations.

Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to June).	• Monitoring to be undertaken using permanent transects at analogue and disturbed sites.
		• Collect data as per preliminary methods.
		• Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation).
		  • Implement reseeding if species richness does not show a trajectory to achieving pre-disturbance conditions 5 years post disturbance.
		  • Species which fail to naturally recover from soil seed bank will be selected for reseeding.
		• Annually review success criteria.
			• Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect.
			• Including assessment of species, DBH (>1.5 cm) and height (>2 m), in addition to parameters described within the preliminary assessment.

Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to June).		• Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during early rehabilitation stage.





1a - Acacia shirleyi woodland over Macropteranthes kekwickii ± Atalaya hemiglauca, Acacia holosericea open shrubland over open tussock grassland
2a - Corymbia dichromophloia ± Erythrophleum chlorostachys open woodland over Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys open shrubland over hummock grassland
2b - Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, open woodland over Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens open shrubland over tussock grassland
2c - Eucalyptus leucophloia, Corymbia dichromophloia, Acacia shirleyi woodland over Dodonaea hispidula, Calytrix exstipulata open shrubland over open hummock grassland
3a - Eucalyptus chlorophylla, Corymbia polycarpa ± Corymbia confertiflora open woodland over Erythrophleum chlorostachys, Acacia holosericea, Acacia difficilis open shrubland over tussock grassland
4a - Acacia shirleyi ± Eucalyptus pruinosa, Eucalyptus chlorophylla woodland over Melaleuca viridiflora, Eucalyptus pruinosa, Eucalyptus chlorophylla open shrubland over open tussock grassland
4b - Eucalyptus microtheca, Corymbia polycarpa, Eucalyptus camaldulensis open woodland over Acacia holosericea, Acacia lysiphloia, Macropteranthes kekwickii open shrubland over tussock grassland
4c - Eucalyptus camaldulensis open woodland over Eucalyptus microtheca open shrubland
4d - Eucalyptus camaldulensis low woodland over Melaleuca viridiflora sparse shrubland over open tussock grassland

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GEOCENTRIC DATUM OF AUSTRALIA 94
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Kilometres

- Existing Exploration Well Pads
- Gravel Pits
- Proposed Exploration Well Pads
- Proposed Seismic Lines
- Shenandoah Lease Pad Area
- Shenandoah South Well Pad Access Track
- Populated Place
- Tracks
- Highway
- Gathering Line
- Water Bodies
- Permit Areas
- Pastoral Lease Boundary

Data sources: SREBA 2023, Permit Area, Cadastre - NT Gov 2019., Places, Highways, Roads, Drainage - StreetPro 2019.

tamboran RESOURCES

Shenandoah South Project Area Vegetation Groups

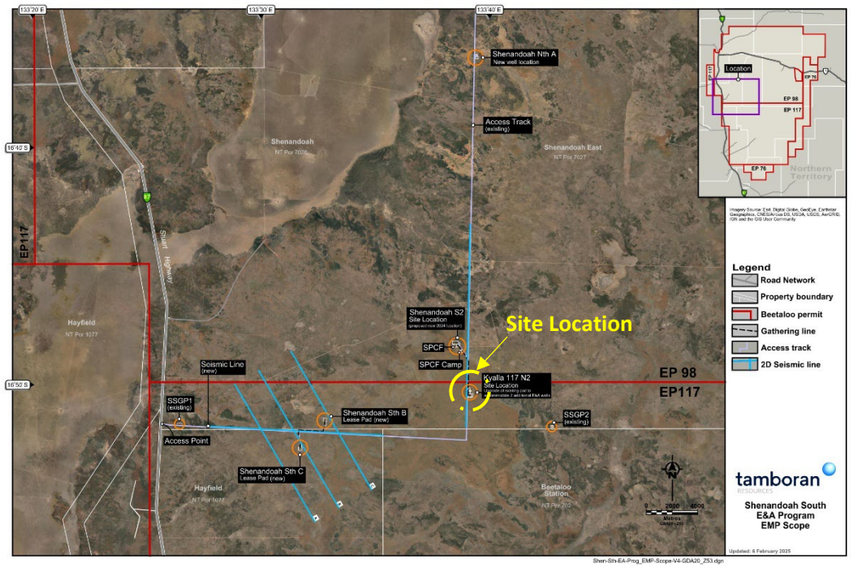
PROJECT ID	60623736
CREATED BY	stutta
LAST MODIFIED	20-Mar-2024
VERSION	1

Filename: \\na.aecomnet.com\ffs\APAC\Melbourne-AU\MEL\Legacy\Groups\WTR\SpatialSys\Projects\2024\Beetaloo\02_MXD\LCA_Tamboran_March_2024\F9_Vegetation_Community_Site.mxd

Exploration Permit 117
Rehabilitation Management Plan 2023 onwards
Kyalla 117 N2

Rev 6, Feb-2025

Location of Kyalla 117 N2	
Property and land uses	Gas exploration, cattle grazing, and native title rights and interests recognised by the native title determinations over the land and waters.
Climate	The permit area is described as arid to semi-arid. Climate is influenced by the monsoon and there is a distinct wet and dry season. Most rainfall (90%) occurs during the summer months, between October and March. Annual rainfall varies across the permit area is around 680 mm, with rainfall totals show moderate variability and drought conditions are known to occur every 10 years.
Pre-disturbance land condition summary	Kyalla 117 N2 location (GDA94, zone 53, 356379.72m E, 8137498.48m N) is on EP 117. The natural vegetation community that exists at Kyalla 117 N2 is of Eucalyptus low woodland which is broadly dominated by *Corymbia dichromophloia* and ground cover of *Triodia bitextura*. The landform at Kyalla 117 N2 is characterised by plains and rises associated with deeply weathered lateritic profiles, including sand sheets. Soils at this site are sandy at the surface, with a loamy sand to sandy loam A horizon. The site is in good ecological condition. The site contained moderate to high habitat values for wildlife, with coverage of leaf litter, grass cover and woody debris. Seemingly good continuous cover exists adjoining adjacent woodland habitat. Minor disturbance was evident from recent grazing and burning impacts. There is no evidence of weeds or feral animals.



Rehabilitation aims and objectives	
Site management aim	The aim is to rehabilitate any part of the land affected by the regulated activity to a safe condition consistent with industry standards, the Code and in consultation with the landholder.
Rehabilitation objectives	The rehabilitation objective is to provide a stable landform, which supports a) the rights and interests of the Native Title Holders in the land and water, and b) a resilient self-sustaining vegetation community that can withstand impacts including fire and cattle grazing and is safe to humans and wildlife.

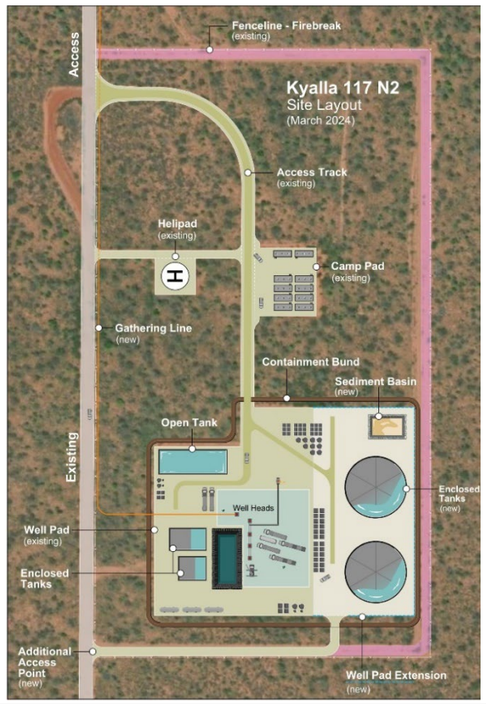
Soil and general environmental condition (Sep 2018)

The RMP should be read in conjunction with the overarching *Environment Management Plan and Emergency Response Plans for Tamboran's operations in the Beetaloo Basin. Prepared by AECOM Australia Pty Ltd, 20 March 2024 on behalf of Tamboran B2 Pty Ltd.*

Name	Contact details
Robert Wear Beetaloo Field Manager	Mobile: [redacted] Satellite Phone: [redacted] Email: [redacted]

Rehabilitation zones

Infrastructure	Size (ha)	Soil type / slope	Vegetation community / dominant species
Well pad (existing) Well pad (expansion)	5.25 3.80	Lateritic plains and rises associated with deeply weathered profiles (laterite) including sand sheets and other depositional products, sandy and earth soils. <1% slope.	**Comm 2a**-*Corymbia dichromophloia* ± *Erythrophleum chlorostachys* open woodland, over A*cacia difficilis* ± *Terminalia canescens, Erythrophleum chlorostachys* open shrubland, over hummock grassland.
Camp	1.50		
Access track incl turn-ins & passing bays	0.90		
Helipad	0.50		
Fence line & Fire Break	4.00		
Gathering lines Kyalla 117 N2 - Shenandoah S2	4.50		
Gravel pits (SSGP1 and SSGP2)	13.75		
Disturbance	**34.20**	Incl clearing for previous activities at Kyalla 117 N2.	



Rehabilitation risk

Key Risks	Controls
Drought - impacting the establishment of rehabilitated vegetation	• Time rehabilitation actions to coincide with the beginning of the wet season, to ensure access to the site and maximise the establishment period of vegetation over the wet season. • Re-spread topsoil across the site to utilise the local seed bank. • Ongoing monitoring to identify if further seed inputs are required. • Collection of seed from the local area to ensure seed stock is suited to the climatic conditions of the site.
Fire - impacting revegetation	• Establish a mix of perennial and annual grass species. • Establish a mix of resprouting (e.g., *Eucalyptus* spp. and *Corymbia* spp.) and reseeding species (e.g., *Acacia* spp.). • Ongoing monitoring to determine fire impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required.
Grazing - impacting revegetation	• Establish a mix of perennial and annual grass species. • Re-spread timber with topsoil. • Ongoing monitoring to determine grazing impacts on revegetation. • Ongoing monitoring to determine if further seed inputs are required. • Ongoing monitoring to determine if fencing is required.
Exposed ground - leading to an increase in weed establishment and/or erosion	• Remove windrows and topsoils. • Respread of topsoil and vegetated matter across the site. • Annual weed surveys of rehabilitated area once rehabilitation is established. • Control of any weed incursions.

Pre-disturbance photos of vegetation community

Rehabilitation strategy

Parameter	Methods	Objective
Vegetation	• Rehabilitation will be implemented for disturbance areas following completion of the individual activity within 12 months. • Disturbed areas to be allowed to naturally regenerate or revegetate on completion of the regulated activity. • All compacted areas to be ripped and scarified to promote regeneration of vegetation, this may require assistance through spread of native seed stock. Where possible, native seed stock would be supplied by local indigenous suppliers.	• Establish vegetation trending toward the target vegetation community for the area disturbed (i.e. species richness, %cover and structure) and in accordance with the Code (Clause A.3.9(d)). • Reinstate disturbance area to its pre-disturbed condition. • The type of ground cover applied to completed earthworks is to be compatible with the anticipated long-term land use, environmental risk, and site rehabilitation measures.
Ground cover	• Previously removed vegetation and topsoil will be uniformly respread over disturbed area. This will assist with the rehabilitation process by increasing infiltration and returning seed-bearing topsoil, as well as reducing erosion. • After first 12 months, additional input of native seed mix may be required from the area to assist rehabilitation process.	
Landform stability	• All windrows are to be removed post construction and at completion of the activities.	

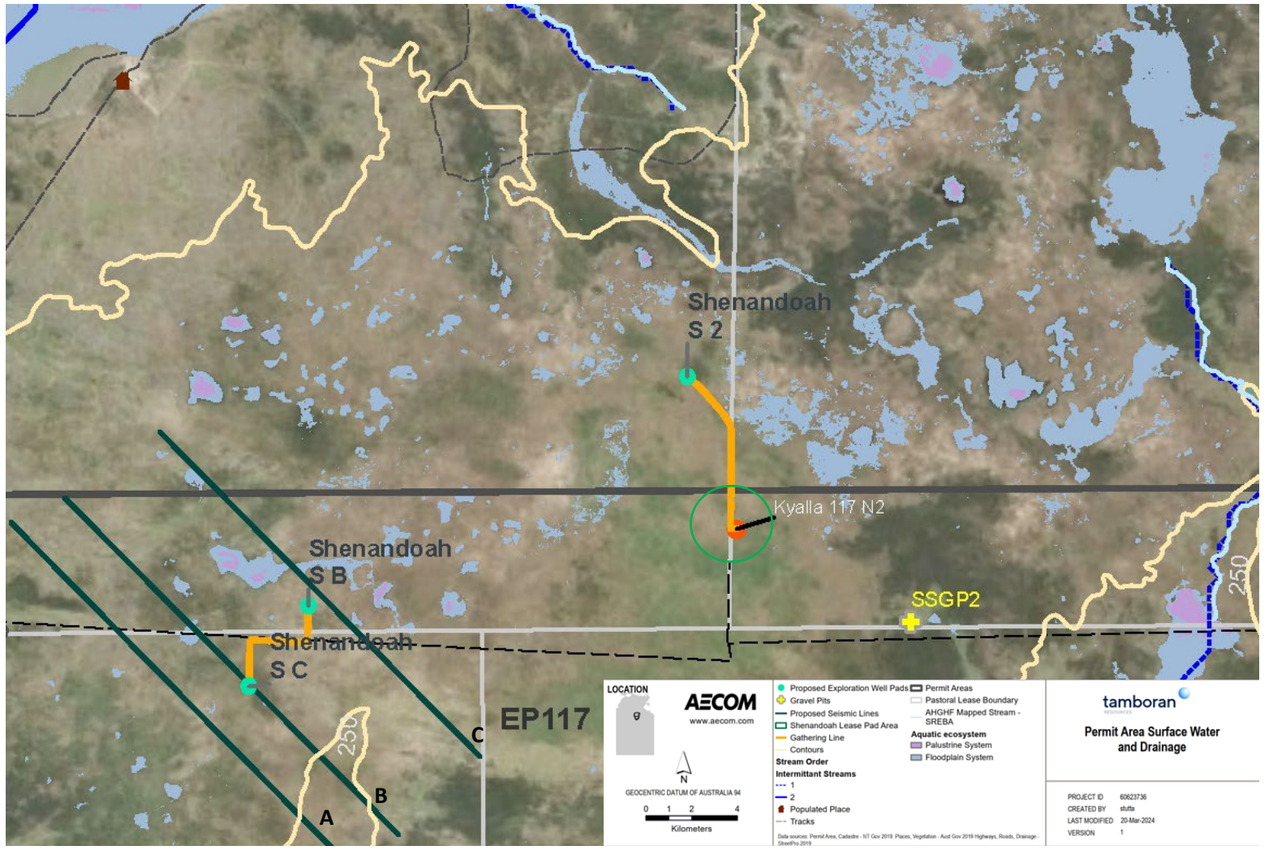
Final success criteria

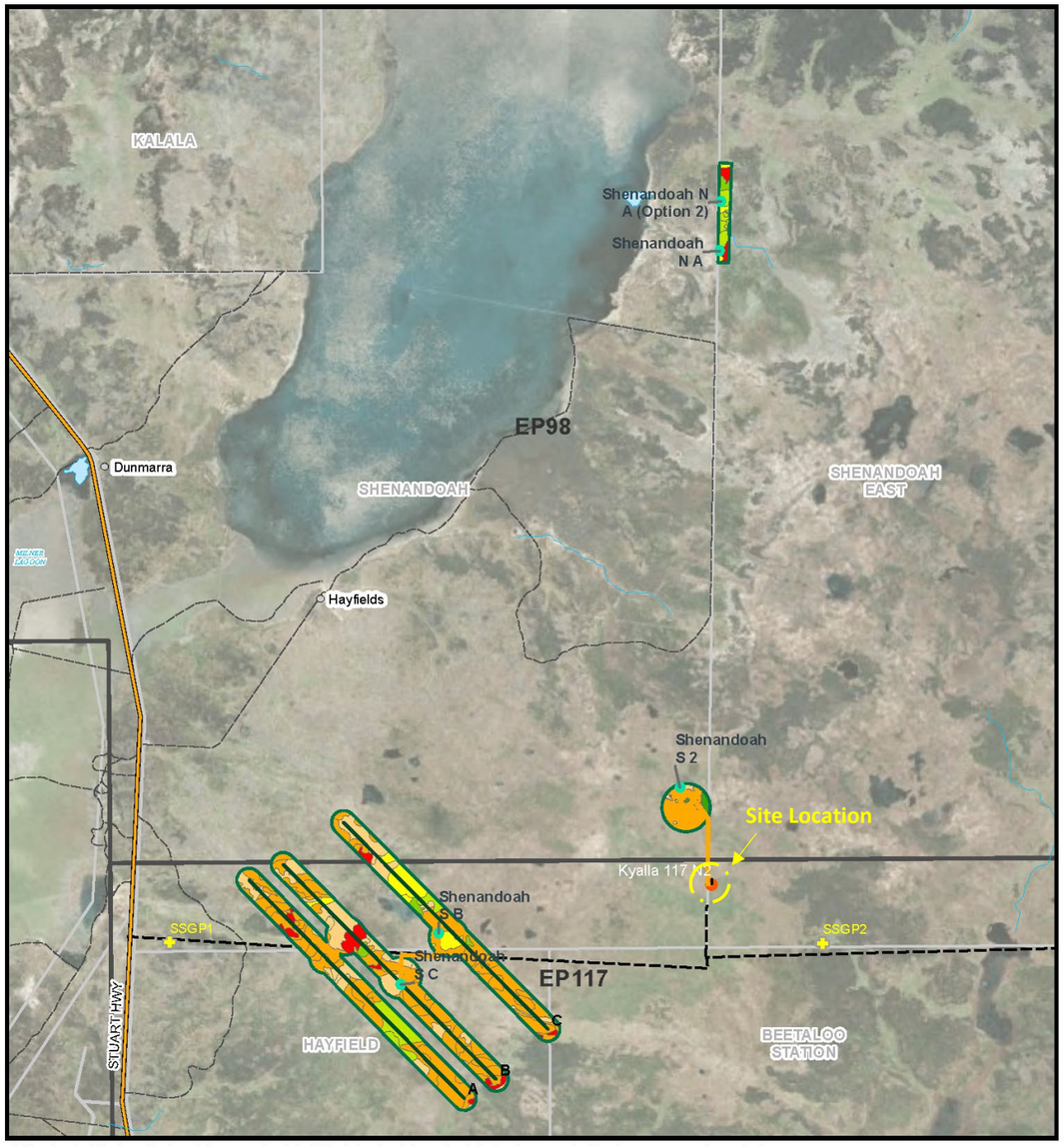
Area to be rehabilitated	• Total area of approved surface disturbance is 34.20 ha. • Total area required for rehabilitation 34.20 ha.
Vegetation composition	• Vegetation composition (i.e. type, density) trending towards the target vegetation community and self-sustaining. • Vegetation is sustainable for long term with the only required maintenance consistent with the final land use. • Sign of woody vegetation regrowth (i.e. Acacia, Eucalypt and Bullwaddy) following rehabilitation and within 12-18 months. • Ground foliage cover consistent with the target vegetation community where disturbance occurred. • Achieve minimum of 30% diversity within the first 12 months and maintained for at least 3 years following rehabilitation consistent with analogue sample site. • Final success based on the following attributes - % canopy and ground cover, stratum 3 species richness, woody species diversity.
Watercourse crossings	• All stream crossings, where intersected, to be reinstated to the original topography. • No evidence of erosion as result of activity present within first 12 months.
Erosion	• Site stabilisation to occur and all erosion and sediment control infrastructure removed. • Less than 5 % erosion should be evident after the first 12 months and no subsidence or erosion should be evident for at least 5 years after completion.
Weeds	• No establishment of weed species declared under the NT *Weeds Management Act*.
Hazardous materials and waste	• All hazardous material and waste removed from site upon completion of works to licensed landfill facilities or recycling facilities. • No residual soil contamination that poses a threat of environmental harm.
Safety for humans and wildlife	• Rehabilitation of disturbance areas should be similar in landform to the surrounding area. No steep slopes or barriers to remain on site that endanger wildlife, livestock or humans. • Windrows removed. • Water bores and exploration wells to be sealed and isolated (as required). • Removal of all surface facilities including fencing (star pickets / fencing wire).

Monitoring program and schedule			
Stage	**Timing**	**Method**	**Measurable attributes**
Progressive rehabilitation	Within 6-12 weeks of completion of activities	• Topsoil, windrows and cleared vegetation stockpiled are to be respread following the works. • Refer to detail in Tamboran's Erosion and Sediment Control Plan	• All disturbed areas must be considered suitably stabilised as per IECA Table in the Tamboran Erosion and Sediment Control Plan.
Preliminary assessment	Post rehabilitation, end of wet season survey (February to June) within 12 months.	• Analogue sites will be established for the two vegetation communities identified in the baseline Land Condition Assessment (AECOM 2023) at adjacent undisturbed sites. • Permanent 100 m x 4 m transects (one per vegetation community), will be established at disturbed and analogue sites including photo monitoring point(s). • Collect 1 x 1 m ground cover quadrats every 10 m along each 100 m transect. • Transects to be positioned <20 m from pastoral and gas infrastructure assets (i.e. access tracks, fence lines, well pads, water troughs) to reduce edge effects.	Following measurable attributes will be compared with analogue sites: • Seedling/sapling density of dominant species respective to each vegetation community. • Percentage of ground cover respective to bare land and vegetation. • Number of species at canopy, mid and ground strata. • Evidence of erosion (type of erosion, approximate area of erosion). • Weed presence/absence (species and density). • Disturbance (fire frequency and intensity, evidence of feral animal/ cattle) • Incidental observations.

Early rehabilitation	Years 1, 2 and 3 post rehabilitation, end of wet season survey (February to June).	• Monitoring to be undertaken using permanent transects at analogue and disturbed sites.
		• Collect data as per preliminary methods.
		• Compare results from monitoring sites with analogue sites and previous year's assessment to determine if require additional management inputs (i.e. seeding, stabilisation).
		  ◦ Implement reseeding if species richness does not show a trajectory to achieving pre-disturbance conditions 5 years post disturbance.
		  ◦ Species which fail to naturally recover from soil seed bank will be selected for reseeding.
		• Annually review success criteria.
			• Early assessment of rehabilitation will determine attributes of woody plants in each 100 m x 4 m transect.
			• Including assessment of species, DBH (>1.5 cm) and height (>2 m), in addition to parameters described within the preliminary assessment.

Long-term rehabilitation	Annually until final success criteria has been met, end of wet season survey (February to June).		• Long-term assessment to determine establishment, recruitment, and growth rate attributes of plant species, in addition to parameters described during early rehabilitation stage.





1a - Acacia shirleyi woodland over Macropteranthes kekwickii ± Atalaya hemiglauca, Acacia holosericea open shrubland over open tussock grassland
2a - Corymbia dichromophloia ± Erythrophleum chlorostachys open woodland over Acacia difficilis ± Terminalia canescens, Erythrophleum chlorostachys open shrubland over hummock grassland
2b - Acacia shirleyi, Corymbia dichromophloia ± Eucalyptus leucophloia, open woodland over Macropteranthes kekwickii, Petalostigma pubescens, Hakea arborescens open shrubland over tussock grassland
2c - Eucalyptus leucophloia, Corymbia dichromophloia, Acacia shirleyi woodland over Dodonaea hispidula, Calytrix exstipulata open shrubland over open hummock grassland
3a - Eucalyptus chlorophylla, Corymbia polycarpa ± Corymbia confertiflora open woodland over Erythrophleum chlorostachys, Acacia holosericea, Acacia difficilis open shrubland over tussock grassland
4a - Acacia shirleyi ± Eucalyptus pruinosa, Eucalyptus chlorophylla woodland over Melaleuca viridiflora, Eucalyptus pruinosa, Eucalyptus chlorophylla open shrubland over open tussock grassland
4b - Eucalyptus microtheca, Corymbia polycarpa, Eucalyptus camaldulensis open woodland over Acacia holosericea, Acacia lysiphloia, Macropteranthes kekwickii open shrubland over tussock grassland
4c - Eucalyptus camaldulensis open woodland over Eucalyptus microtheca open shrubland
4d - Eucalyptus camaldulensis low woodland over Melaleuca viridiflora sparse shrubland over open tussock grassland

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GEOCENTRIC DATUM OF AUSTRALIA 94
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Kilometres

- Existing Exploration Well Pads
- Gravel Pits
- Proposed Exploration Well Pads
- Proposed Seismic Lines
- Shenandoah Lease Pad Area
- Shenandoah South Well Pad Access Track
- Populated Place
- Tracks
- Highway
- Gathering Line
- Water Bodies
- Permit Areas
- Pastoral Lease Boundary

Data sources: SREBA 2023, Permit Area, Cadastre - NT Gov 2019. Places, Highways, Roads, Drainage - StreetPro 2019.

tamboran
RESOURCES

Shenandoah South Project Area Vegetation Groups

PROJECT ID	60623736
CREATED BY	stutta
LAST MODIFIED	20-Mar-2024
VERSION	1

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