Annual Environmental Performance Report

EMP title	SEISIC EXPLORATION PROGRAM EP 136 (SWP1-4)
Unique EMP ID	SWP1-4
EMP approval date	02 November 2020
AEPR period	03 November 2023 – 02 November 2024
Petroleum title number/s	EP 136

The information to be included in this template may be used by the Minister for Environment, Climate Change and Water Security to assess whether an interest holder is meeting the environmental outcomes, environmental performance standards and obligations and commitments made in an approved Environment Management Plan (EMP).

This form must be completed in accordance with the instruction and guidance provided in the Onshore Petroleum Annual Environmental Performance Reporting Guideline available on the Onshore Gas website.

Document title	Annual Environmental Performance Report

Version Control *(to be completed by interest holder)*

Date	Rev	Reason for Amendment	Author	Checked	Approved
31/01/2025	0	Issued for approval	A Court	L Pugh	M Kernke

Declaration

A person with legal authority to sign on behalf of the interest holder, or all interest holders (if more than one), must sign the declaration.

I hereby declare that I:

- am authorised to make this declaration.
- confirm that, to the best of my knowledge all information provided addresses the relevant matters and is true, correct, complete, and does not contain misleading information.
- am aware that it is an offence under section 107 of the *Petroleum Act 1984* to give an authorised person information that I know, or ought to reasonably know, to be false or misleading in a material manner particular.
- understand that all information supplied as part of this form, including attachments, may be disclosed publicly in accordance with section 62A of the *Petroleum Act 1984*, and consistent with the requirements of the Information Privacy Principles (IPPs) in the *Information Act 2002*.

Signature	
Name of person signing on behalf of interest holder/s	**Alana Court**
Position	Senior Approvals Manager
Company	Sweetpea Petroleum Pty Ltd ABN 42 074 570 879 (a wholly owned subsidiary of Tamboran Resources Ltd, ABN 28 135 299 062)
Address	C/- Tower One, International Towers Suite 1, Level 39 100 Barangaroo Avenue Barangaroo NSW 2000

Acronyms / Terms	Definition
AEPR	Annual Environmental Performance Report
Code	Code of Practice: Onshore Petroleum Activities in the Northern Territory
DEPWS	Department of Environment, Parks and Water Security (NT)
DITT	Department of Industry, Tourism and Trade (NT)
EMP	Environment Management Plan
EP	Exploration Permit
Interest Holder	Means a person who holds a petroleum interest for a regulated activity.
Minister	Minister for Environment, Climate Change and Water Security
NT	Northern Territory
Operator	Means a person designated as operator under section 16(3)(g) of the *Petroleum Act 1984*
Regulations	Petroleum (Environment) Regulations 2016 (NT)

Contents

Figures

Tables

1. Introduction

The Petroleum (Environment) Regulations 2016 (NT) (the Regulations) require an interest holder to provide a report to the Minister for Environment, Climate Change and Water Security (the Minister) on no less than an annual basis that outlines the environmental performance of the interest holder.[1] The report, termed the Annual Environmental Performance Report (AEPR), must include sufficient information to allow the Minister to assess whether the interest holder has met the environmental outcomes and environmental performance standards included in the approved Environment Management Plan (EMP) with reference to information required to be recorded, monitored or reported under the Regulations and any other law in force in the NT related to the conduct of the regulated activity.

Approved Environment Management Plan Details	
EMP title	SEISIC EXPLORATION PROGRAM Environment Management Plan EP 136 (SWP1-4)
Unique EMP ID	SWP1-4
EMP approval date	02 November 2020
AEPR period	03 November 2023 – 02 November 2024
Petroleum title number/s	EP 136
Regulation 22 Notices (insert more rows if needed)	
Date Acknowledged	**Scope**
14 October 2021	Regulation 22 Seismic EMP EP136 (SWP1-4.1), submitted 2 September 2021, for the following: • Construction of two additional monitoring bores on Beetaloo Station with maximum of four bores per well site • Alternate access to monitoring bore well sites using existing pastoral tracks on Beetaloo Station.
Regulation 23 Notices (insert more rows if needed)	
Date Acknowledged	N/A
Location of Regulated Activity	
☒	Figure attached showing location of regulated activity (Figure 1)
Regulated activities conducted during the reporting period (list regulated activities conducted, add or remove rows as required)	
1	Monitoring of progressive rehabilitation of seismic lines after data recording, carried out between 6 – 7 September 2023
☒	Gantt chart attached showing the period each regulated activity listed above was conducted (Figure 2)

[1] Petroleum (Environment) Regulations 2016 (NT) sch 1, item 11.

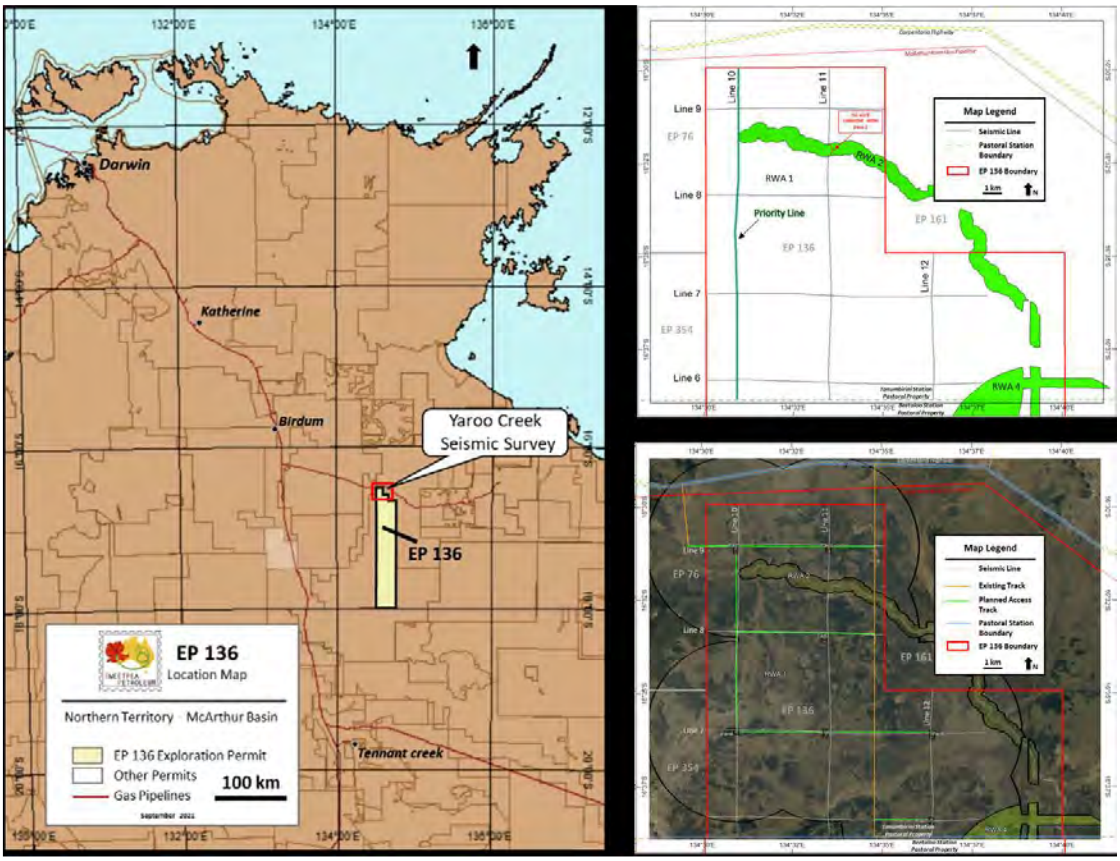


Figure 1 EP136 2D Seismic Exploration Program EMP Location

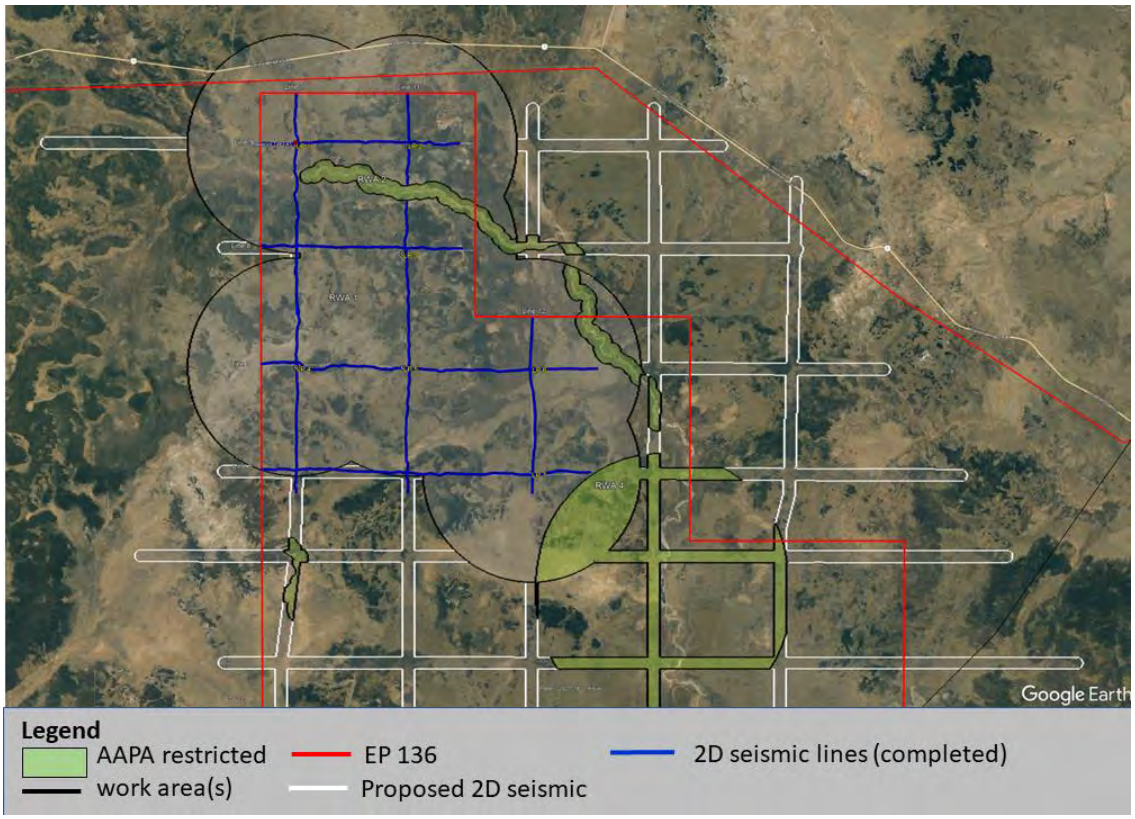


Figure 2 EP136 Completed 2D Seismic Program (Blue)

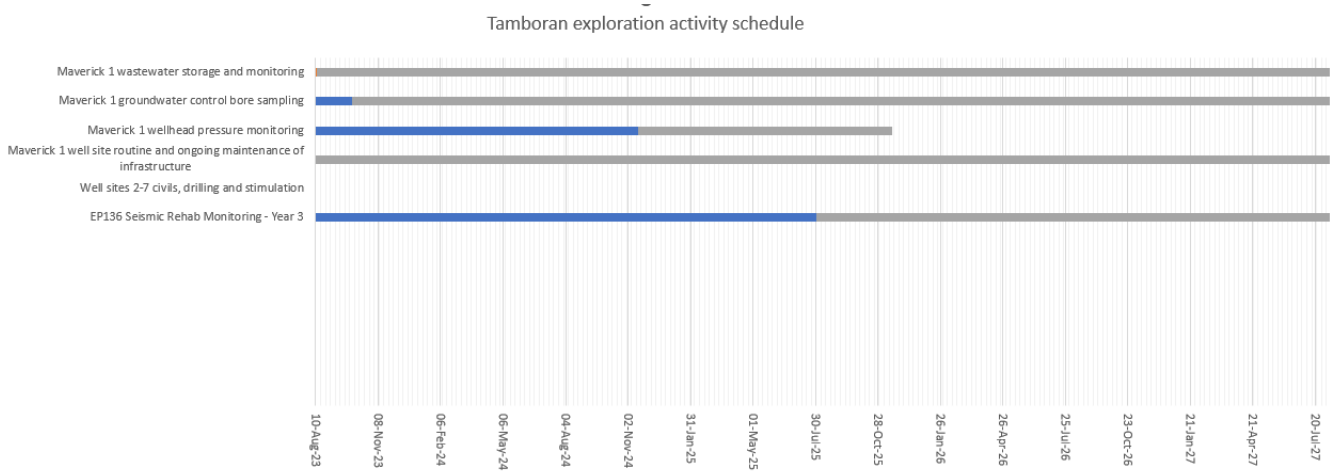


Figure 3 Exploration activities completed during the reporting period – EP136

1.1. Sources of information to inform performance

Information evaluated to inform compliance status (check applicable sources)	
☒	Compliance with Ministerial approval conditions
☒	Compliance with each environmental outcome and environmental performance standard within the approved EMP
☒	Compliance with reporting requirements in accordance with the Code and Regulations
☒	Recordable and reportable incidents within the reporting period, including root cause analysis and related corrective actions to prevent re-occurrence
☒	Findings of regulatory inspections and audits within the reporting period and related actions to address any findings
Other	

1.2. Performance indicators

Table 1 shows the performance status indicators used in this AEPR.

Table 1: Performance descriptors

Performance Status	Description
Compliant	Compliant with requirement for entire 12 month reporting period
Not Compliant	Interest holder did not comply with the requirement fully or at all during the reporting period
Not Applicable	Requirement not applicable during the reporting period

1.3. Evidence used to assess performance

Please indicate which sources of evidence have been used to demonstrate compliance.

Evidence used to inform compliance status (check applicable evidence)	
☒	Interest holder self-assessments of compliance, through daily and weekly inspections, as committed to in the EMP
☒	Interest holder self-assessments of compliance, through internal audits, as committed to in the EMP
☐	Interest holder self-assessments of compliance, through external audits conducted by third parties
☒	Outcomes of inspections and/or audits conducted by the regulator
☒	Spill register entries
☒	Monitoring or other reports provided to DEPWS, the Department of Industry, Tourism and Trade (DITT) and other government agencies as required by the EMP
☒	Outcomes of monitoring programs
☒	Measurement criteria identified in the approved EMP
Other	Recordable and reportable incident reports submitted to DEPWS Petroleum Operations.

2. Demonstration of performance

Table 2 demonstrates interest holder compliance with Ministerial EMP approval conditions.

Table 2: Compliance with Ministerial approval conditions

No	Ministerial Condition	Compliant	Evidence
1.	The interest holder must submit to Department of Environment, Parks and Water Security (DEPWS): i an updated timetable (including time-bound commitments) for the regulated activity prior to commencement of the activity and each month thereafter, ii daily on-site reports indicating the status and progress of the groundwater bore installation and seismic surveys, kilometres of clearing per seismic line; and progressive iii rehabilitation completed, iv a five-day activity forecast for the duration of the activity during the wet season (1 October - 30 April), v written notification of any halt to the activity due to early onset of the wet season, within 24 hours of the halt, and vi immediate notification of any fires potentially threatening the works.	☒ Yes ☐ No ☐ N/A	i No regulated activities were completed during this reporting period. ii Monthly reports were provided to DEPWS on the following dates: • 23 November 2023 • 22 December 2023 • 30 January 2024 • 28 February 2024 • 28 March 2024 • 29 April 2024 • 31 May 2024 • 20 June 2024 • 31 July 2024 • 31 August 2024 • 30 September 2024 iii No clearing completed during the reporting period. Broader seismic plan in EP136 currently on hold. Rehabilitation activities from the 2D seismic program completed with rehabilitation monitoring underway in accordance with the approved Seismic Rehabilitation Plan. iv 83 km of 2D seismic program was completed in dry season June-August 2022 on Tanumbirini Station. v No fires were recorded as potentially threatening works during the reporting period.

No	Ministerial Condition	Compliant	Evidence
2.	In the event of any accidental release (overflow, failure, spill or leak), to ground of contaminants that exceeds 200 litres, the interest holder must provide a written report to DEPWS Petroleum Operations within 24 hours of the incident being detected. The report must include: i details of the incident specifying material facts, actions taken to avoid or mitigate environmental harm, ii the corrective actions taken including the volume and depth of impacted soil removed for appropriate disposal if required, and iii any corrective actions proposed to be taken to prevent recurrence of an incident of a similar nature.	☐ Yes ☐ No ☒ N/A	Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period. No recordable or reportable incidents were recorded during this activity from spills, that resulted in ground contaminants.
3.	The interest holder must provide an annual report to DEPWS on its environmental performance, in accordance with item 11 (1)(b) in schedule 1 of the Petroleum (Environment) Regulations 2016. The first report must cover the 12-month period from the date of the approval, and be provided within three calendar months of the end of the reporting period. The annual environment performance report must align with the template prepared by DEPWS for this purpose and must include a signed declaration by the interest holder.	☒ Yes ☐ No ☐ N/A	The interest holder has prepared this AEPR for the reporting period 3 November 2023 – 2 November 2024, inclusive.
4.	The rehabilitation plan forms part of the EMP. The interest holder must provide a status update to DEPWS, concurrent with submission of the annual environment performance report. The status update must include:	☒ Yes ☐ No ☐ N/A	i Auditable success criteria have not changed from those provided in the approved EMP, Appendix F. The rehabilitation plan submitted to DEPWS with the 2022 AEPR on 1 February 2023, titled: *Northern Exploration Area – EP136 Rehabilitation Plan 2022/23* (Rev 1.0) remains current.

No	Ministerial Condition	Compliant	Evidence
	i auditable success criteria for rehabilitation and corrective actions in the event rehabilitation monitoring shows success criteria are not achieved, ii an annual summary of progressive rehabilitation outcomes, and iii be accompanied by geospatial files of all surface disturbance areas, including those under rehabilitation.		ii A progress report on the rehabilitation of seismic lines 6 – 12, inclusive is provided with this AEPR. This report covered the annual survey completed on 16 and 17 July 2024. The next survey is scheduled for May-July 2025. iii Geospatial files were provided to DEPWS on 9 February 2024. The KMZ file contained the polygons of the seismic lines disturbance area that is currently under rehabilitation.
5.	For the avoidance of doubt, the interest holder must not undertake any regulated activity described in this EMP on land outside of EP136.	☒ Yes ☐ No ☐ N/A	No regulated activities were conducted outside EP136 during the reporting period.

Table 3 provides a systematic overview of interest holder performance against the environmental outcomes and environmental performance standards within the approved EMP.

Table 3: Compliance with environmental outcomes and environmental performance standards

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
LAND MANAGEMENT				
1.	• No soil erosion and discharge of sediment or soil into waterways or established drainage systems. • No new instances of erosion and sedimentation. • No instances of residual soil contamination resulting from the regulated activity.	Vegetation disturbance and clearing minimised through planning of seismic line to use existing tracks where possible and avoiding large trees and shrubs.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.
2.		Spatial data before and after to be used to confirm program stayed within survey parameters.	☒ Yes ☐ No ☐ N/A	• GIS data of disturbance was resubmitted to DEPWS on 09 February 2024. The KMZ file contained polygon of the seismic lines. • An updated KMZ file is included with this submission to DEPWS from the July 2024 seismic survey.
3.		No evidence of active erosion within 12 months of works completion.	☒ Yes ☐ No ☐ N/A	• Refer the annual seismic rehabilitation report (Attachment A). • There was no evidence of erosion along the seismic line alignment.
4.		No contaminated soil as a result of the project upon works completion.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
WEED MANAGEMENT				
5.	• The risk of exotic species and plant diseases being imported into or exported from the exploration permit area is avoided. • The risk of spreading weeds within the seismic survey area is avoided. • Where weeds are identified they are treated in accordance with Appendix I.	No exotic species and plant diseases imported into or exported from the exploration area.	☒ Yes ☐ No ☐ N/A	• No recordable or reportable incidents were recorded during this reporting period. • Weed survey was completed at time of rehabilitation survey. No weeds were identified. Refer to Attachment A. • No visible evidence of weeds or weed patches along the seismic line alignment, with majority of vegetation cover trending towards the vegetation adjacent to the seismic alignments.
6.		No further spreading of declared weeds within the exploration area.	☒ Yes ☐ No ☐ N/A	• No recordable or reportable incidents were recorded during this activity that resulted in the spread of declared weeds within EP 136.
7.		No introduction or spread of declared weeds resulting from Sweetpea's activities	☒ Yes ☐ No ☐ N/A	
BUSHFIRE MANAGEMENT				
8.	• No risk of bushfires as result of regulated activity. • No impact to environmental habitat and fauna, culturally significant sites, public	No uncontrolled fires occurring because of exploration activities.	☒ Yes ☐ No ☐ N/A	• No uncontrolled fires occurred or were reported during the reporting period. • Annual fire frequency report submitted to DEPWS on 09 September 2024. According to the NAFI website, no fires

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
	infrastructure and pastoral activities. • Prevent accidental fire risk and ensure safe storage of chemicals to prevent fire damage			were recorded in the vicinity of EP 136 between 2023 – 2024.
WASTE AND WASTEWATER MANAGEMENT				
9.	• No adverse impacts on soil, surface water, groundwater, sensitive habitats and air quality • No attraction to site by pest species from waste storage (i.e. food scraps) • Waste generation to be reduced, reused through implementation of recycling efforts.	All waste volumes tracked whilst on-site and in transport.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period. • No waste or wastewater generated under this EMP during this reporting period.
		No off-site releases of wastewater or waste products.	☐ Yes ☐ No ☒ N/A	
		Zero wastewater tank overtopping events.	☐ Yes ☐ No ☒ N/A	
		Zero onsite spills of wastewater.	☐ Yes ☐ No ☒ N/A	
		Zero wastewater transport spills.	☐ Yes ☐ No ☒ N/A	

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
NOISE, VIBRATION AND LIGHTING EMISSIONS				
10.	• Manage activities in accordance with occupational health and safety guidelines for noise, vibration and light exposure • Minimise nuisance noise and vibration impact on surrounding communities or exploration workers. • Minimise disruption to fauna and stock.	Nuisance-related complaints investigated immediately.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period. • No complaints or corrective actions recorded.
11.		Corrective action(s) will be recorded and taken when appropriate.	☐ Yes ☐ No ☒ N/A	
AIR QUALITY AND EMISSIONS				
12.	• Minimise environmental nuisance at sensitive receptors. • Minimise greenhouse gas emissions.	Nuisance-related complaints investigated immediately.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period. • No complaints or corrective actions recorded. • The annual emissions report was submitted to DEPWS on 30 September 2024.
		Corrective action(s) will be recorded and taken when appropriate.	☐ Yes ☐ No ☒ N/A	
BIODIVERSITY MANAGEMENT - Vegetation, flora, fauna and habitat				
13.	• No clearing outside the proposed seismic survey area and water bore drilling extent as result of activities.	No unauthorised clearing of vegetation within exploration area.	☐ Yes ☐ No ☒ N/A	• No clearing activities during this reporting period.

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
	• No disturbance to high conservation areas. • No significant impact to flora and fauna, including stock as result of the activities.	No riparian vegetation impacted when access creek and stream crossings.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.
14.		No introduction of weed species as result of exploration activities.	☒ Yes ☐ No ☐ N/A	• Refer the annual seismic rehabilitation survey report (Attachment A). • No visible evidence of weeds or weed patches along the seismic line alignment, with majority of vegetation cover being consistent with the vegetation adjacent to the seismic alignments.
15.		No native fauna or stock impacts (injury or fatality) reported.	☒ Yes ☐ No ☐ N/A	• No recordable or reportable incidents were recorded during this reporting period that resulted in native fauna or stock impacts.
16.		Weekly inspection of temporary camp area does not indicate presence pest species.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.
17.		Meet rehabilitation success criteria as detailed in Appendix F.	☒ Yes ☐ No ☐ N/A	• Refer the annual seismic rehabilitation survey report (Attachment A). • Overall observations indicate while some seismic lines remain visible, the ground cover along the lines were generally consistent to the vegetation adjacent to the seismic lines.

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
FERAL ANIMAL AND OTHER PEST SPECIES				
18.	• No increase in the spread of existing feral animal and pest species as result of exploration activity. • Prevent introduction of feral animals and pest species.	No introduction of pest species detected.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.
		No observed pest presence (live or dead individuals, scat traces, nesting sites).	☐ Yes ☐ No ☒ N/A	
19.		Weekly inspection of camp for pest presence.	☐ Yes ☐ No ☒ N/A	
20.		No instances of putrescible waste found to be accessible by animals.	☐ Yes ☐ No ☒ N/A	
21.		Rehabilitation efforts not hindered by feral animal or pest species using line for access.	☒ Yes ☐ No ☐ N/A	• Refer the annual seismic rehabilitation survey report (Attachment A). • Minor evidence of cattle tracks along some seismic lines consistent with cattle tracks more broadly across the landscape.
SOCIAL ENVIRONMENT AND ACCESS MANAGEMENT				
22.	• Ensure ongoing stakeholder and other regional	All complaints are responded to immediately and closed out.	☒ Yes ☐ No	• No complaints were received during the activity from pastoralist.

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
	engagement indicate no concerns regarding access to pastoral properties or impact on pastoral leaseholders' activities. • No formal complaint from local businesses or community resulting from the regulated activity. • Aboriginal employment records show commitments made to the NLC for Aboriginal employment have been met. • No reports of trespass as a result of the works. • No safety incidents occurring involving the public and other third parties. • No impact on drawdown from neighbouring production bores.		☐ N/A	• Pastoralist was notified of the rehabilitation survey prior to undertaking the activity.
23.		Attendance records of members present at training workshops.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.
24.		Employee register	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period.
25.		Records of service hiring and goods purchases.	☒ Yes ☐ No ☐ N/A	• All records held by accounts payable. • All services (weed inspections, site inspections, scouting, etc.) completed by local businesses.
26.		Metered groundwater take for Q4 2020 is within estimated volumes of 630,000 L or 0.63 ML, well within the 5 ML allowance per year under the exemption.	☐ Yes ☐ No ☒ N/A	• No groundwater extraction from DIPL approved road reserve bore RN039693 during the reporting period.
CULTURAL HERITAGE AND SACRED SITE MANAGEMENT				
27.	• No prohibited access to, or disturbance of, cultural heritage, inclusive of Sacred	No unauthorised activities within or access to a Restricted Work Area or Sacred Site.	☒ Yes ☐ No ☐ N/A	• Apart from the annual rehabilitation survey, no regulated activities were

No	Environmental Outcome	Environmental Performance Standard	Compliant	Evidence
	• Sites, and Indigenous and non-Indigenous heritage sites. • No impact or disruption to activities of Indigenous stakeholders in culturally significant areas. • Adequate background information and training provided to employees and contractors working in culturally significant areas. • The health and safety of employees, contractors and the community is not compromised through management of cultural and environmental awareness.	No non-compliance with AAPA certificate conditions.	☒ Yes ☐ No ☐ N/A	undertaken under this EMP during the reporting period. • No non-compliance with restricted work areas, sacred sites AAPA certificate conditions or impacts to known archaeological sites were recorded. • Cultural Managers attended the seismic rehabilitation survey.
		No unapproved impact to known archaeological sites.	☒ Yes ☐ No ☐ N/A	

Table 4 demonstrates interest holder compliance with reporting requirements in the *Code of Practice: Onshore Petroleum Activities in the Northern Territory* (Code) and interest holder's compliance with reporting and monitoring requirements under the Petroleum (Environment) Regulations 2016 (NT) schedule 1, item 11(2), which requires the EMP to include all information required to be recorded, monitored or reported. Where relevant, Table 4 confirms that all records, monitoring or required reporting under the Petroleum (Environment) Regulations 2016 (NT),[2] or under a commitment made in the EMP, has been provided to DEPWS or the relevant NTG agency.

Table 4: Compliance with mandatory monitoring and reporting requirements

No	Reference	Requirement	Compliant	Evidence
1.	Code cl A.3.5	Geospatial information depicting areas cleared is to be provided to the Minister.	☒ Yes ☐ No ☐ N/A	• GIS data of disturbance submitted to DEPWS with the 2022 AEPR on 1-Feb-23. • The KMZ file contained planned lines and surveyed points. • An updated KMZ file was submitted to DEPWS on 16-Nov-23 with the annual seismic rehabilitation survey and report. • Additional polygon of seismic line provided to DEPWS on 9 February 2024.
2.	Code cl A.3.6 (b)	Weed management plan developed as part of the EMP must provide for ongoing weed monitoring.	☒ Yes ☐ No ☐ N/A	• Weed management plan implemented. • Weed survey completed as part of the 2024 Rehabilitation survey (refer Attachment A). • Overall, the weed management plan has continued to be implemented across all the site in accordance with the relevant conditions of the environmental approvals. • Weed survey did not identify any declared weeds.
3.	Code cl A.3.7(a)vi	The fire management plan must provide for annual fire mapping.	☒ Yes	• Fire management plan implemented.

[2] Petroleum (Environment) Regulations 2016 (NT) sch 1, item 11(2).

No	Reference	Requirement	Compliant	Evidence
			☐ No ☐ N/A	• No uncontrolled fires occurred or were reported during the reporting period. • Annual fire frequency report submitted to DEPWS on 09 September 2024. According to the NAFI website no fires in vicinity to EP136 between 2023 and 2024 (Attachment B).
4.	Code cl A.3.9(c) Code cl A.3.9(e)	The rehabilitation plan requires progressive rehabilitation of significantly disturbed land which is required to commence no longer than 12 months following the cessation of activities on the land. It also requires regular maintenance and annual monitoring of rehabilitated areas.	☐ Yes ☐ No ☒ N/A	• Refer the annual seismic rehabilitation report (Attachment A).
5.	Code cl B.4.13.2(c)	As a minimum, the following must be recorded and reported for each stage (where a stage in this context means all fluids pumped at a particular depth interval): a) total volume of hydraulic fracturing fluid pumped, b) quality of water used (tested for analytes in section C.8 of this Code. Analyses do not need to be repeated if the same water source is used for multiple stages), and c) typical and maximum concentrations of chemicals or other substances used.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.
6.	Code cl B.4.13.2(k)iv	Where venting is the only technically feasible option for managing produced gas, the technical considerations preventing the	☐ Yes ☐ No	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.

No	Reference	Requirement	Compliant	Evidence
		use of the recovered gas must be recorded and included in the operator's annual report.	☒ N/A	
7.	Code cl B.4.14.2(c)	All new barriers or new well operating envelopes must be verified and clearly documented and reported by submission of an updated well barrier integrity validation (WBIV) report to DITT.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.
8.	Code cl B.4.15.2(j)	Complete and accurate records of the entire decommissioning procedure must be kept, with these records submitted as part of the legislative reporting requirements for the decommissioning of petroleum wells.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.
9.	Code B.4.17.2(d)	Any guidelines published by the Northern Territory Government from time to time relating to reporting and data submission, and groundwater monitoring data standards must be followed.	☒ Yes ☐ No ☐ N/A	• Stimulation is not an approved activity under this EMP. • Water extraction levels reported and submitted to DEPWS at least monthly via WALAPs.
10.	Code C.3(e)	The components of the wastewater management framework, include: Monitor, manage and report in accordance with the Wastewater Management Plan and Spill Management Plan.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.
11.	Code cl C.6.1(d)	Wastewater tracking documentation must be reported to the Minister at least annually in accordance with the framework (Spill Management Plan and Wastewater Management Plan) outlined in the EMP	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.

No	Reference	Requirement	Compliant	Evidence
12.	Code cl C.7.1(d)ii	Wastewater Management Plan must include a program for monitoring and reporting against the effectiveness of the measures for the mitigation of interaction with wildlife, stock and human receptors with wastewater.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.
13.	Code cl D.5.9.2(c)	Emissions from exploration, well construction (including during flowback) and workovers must be measured, and reports submitted.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP. • The Annual Emissions Management Report for the period 1 July 2023 to 30 June 2024 (referred to as FY 23), was submitted by 30 September 2024.
14.	Code cl D.5.9.3(a)	Where natural gas is vented or flared at a gas processing or other downstream facility, emissions must be estimated and reported.	☐ Yes ☐ No ☒ N/A	• No natural gas vented for flared during the reporting period.
15.	Code D.6.2(b)	Emissions reporting must be in accordance with Section D.5.6. Emissions associated with venting and flaring as described in Section D.5.9 must be provided separately to the Northern Territory Government in accordance with this Code.	☒ Yes ☐ No ☐ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP. • Emission reporting, as per section 5.6 was provided on the 30 September 2024.
16.	Reg 14	A current EMP remains in force until the interest holder notifies the Minister the activity is no longer being carried out and all of the environmental outcomes and obligations under the plan have been met, and the Minister advises the interest holder the notice is accepted and the plan ceases to be in force.	☒ Yes ☐ No ☐ N/A	• The EMP is currently in force. It is due for revision on 2 November 2025.

No	Reference	Requirement	Compliant	Evidence
17.	Reg 33	DEPWS must be notified of reportable incidents within 2 hours of the interest holder becoming aware of the incident, or within 2 hours of the incident occurring. A written report must be provided within 24 hours if the initial report was made orally.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period. • No reportable incidents have been recorded during the reporting period under this EMP.
18.	Reg 34	Reports on reportable incidents must be provided to DEPWS as soon as practicable and within 72 hours of the event occurring. A final report must be provided to DEPWS within 30 days after remediation/cleanup of the affected area.	☐ Yes ☐ No ☒ N/A	• Apart from the annual rehabilitation survey, no regulated activities were undertaken under this EMP during the reporting period. • No reportable incidents have been recorded during the reporting period under this EMP.

19.	Reg 35	A written report of all recordable incidents must be provided to DEPWS not later than 15 days after the 90 day reporting period (unless otherwise agreed).	☒ Yes
			☐ No
			☐ N/A
				• Quarterly recordable incident reports were provided to DEPWS by email as follows:
				  • Q4-2023 – 15 Dec 2024
				  • Q1-2024 - 24 Apr 2024
				  • Q2-2024 - 15 Jul 2024
				  • Q3-2024 – 15 Oct 2024.

20.	Reg 37A	A report about flowback fluid from hydraulic fracturing must be provided to the Minister within 6 months of the flowback occurring.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.
21.	Reg 37B	A report about produced water from hydraulic fracturing must be provided to the Minister within 6 months of the produced water being extracted.	☐ Yes ☐ No ☒ N/A	• No exploration well drilling, hydraulic fracturing or well testing activities are approved under this EMP.

No	Reference	Requirement	Compliant	Evidence
22.	Schedule 1, item 9(2)	Interest holders are required to conduct future engagement with stakeholders, in accordance with the description in the EMP.	☒ Yes ☐ No ☐ N/A	• Pastoralist was notified of the rehabilitation survey prior to undertaking the activity. • Land access agreements are in place covering all current and future activities. • Stakeholder engagement with immediately affected parties is ongoing, with the frequency of the engagement dependent on the level of activity being completed onsite at a given point of time.
23.	Schedule 1, item 12	Interest holder must notify the Minister, occupier of the land and owner of the land on which the activity is to be carried out **before** commencement of construction,[3] drilling, or seismic surveys.	☒ Yes ☐ No ☐ N/A	• No regulated activities were undertaken during the reporting period that required notification. Except for the rehabilitation survey in July 2024. • Pastoralist was notified of the rehabilitation survey prior to undertaking the activity.

[3] Note, civil works are also considered 'construction' activities.

3. Overall performance

3.1. Overview of performance

Table 5 provides a summary of the results of the performance assessment.

Table 5: Performance summary

Performance Status	Number	Percentage
Compliant	28	100%[a]
Not Compliant	0	0%
Not Applicable	36	N/A

[a] Excludes regulatory requirements that are not applicable.

3.2. Overview of non-compliant items

Table 6 describes:

- the specific compliance requirements not met for the reporting period
- an analysis of the possible potential environmental harm or impact to environmental values resulting from non-compliance, using multiple lines of evidence
- a summary of the corrective actions already implemented, and further actions still required, as applicable, to ensure compliance is fully achieved in the future.

Table 6: Overview of non-compliance

Overview of non-compliance		
1. Ministerial approval conditions		
1	☐ Yes ☒ No	*Non-compliance with ministerial approval conditions recorded during this reporting period?* *If yes, complete the sections below. If more than one instance, copy the rows below for each condition not met.* *If no, proceed to 2. Environmental Outcomes*
2	Condition # and requirement	-
3	Summary of non-compliance	-
4	Evidence used to detect non-compliance	-
5	☐ Yes ☒ No	*Environmental harm arising from non-compliance* *If yes, complete section below.* *If no, proceed to row 7.*

Overview of non-compliance		
6	If yes, describe nature and scale of impact and actions to remediate and rehabilitate	-
7	If no, describe how determined no impact	-
8	☐ Yes	*Administrative non-compliance*
9	If yes, describe nature of non-compliance	-
10	Immediate corrective actions implemented	-
11	Future corrective actions to prevent reoccurrence	-
2. Environmental outcomes		
12	☐ Yes ☒ No	*Non-compliance with environmental outcome?* *If yes, complete the sections below. If more than one instance, copy the rows below for each outcome not complied with.* *If no, proceed to 3. Environmental Performance Standards*
13	Outcome	-
14	Summary of non-compliance	-
15	Evidence used to detect non-compliance	-
16	☐ Yes ☒ No	*Environmental harm arising from non-compliance* *If yes, complete section below.* *If no, proceed to row 18.*
17	If yes, describe nature and scale of impact and actions to remediate and rehabilitate	-
18	If no, describe how determined no impact	-
19	☒ Yes	
20	If yes, describe nature of non-compliance	
21	Immediate corrective actions implemented	
22	Future corrective actions to prevent reoccurrence	

Overview of non-compliance		
3. Environmental performance standards		
23	☐ Yes ☒ No	*Non-compliance with environmental performance standard?* *If yes, complete the sections below. If more than one instance, copy the rows below for each environmental performance standard not complied with.* *If no, proceed to 4. Regulatory Reporting or Record Keeping*
24	Environmental performance standard	-
25	Summary of non-compliance	
26	Evidence used to detect non-compliance	-
27	☐ Yes ☒ No	*Environmental harm arising from non-compliance* *If yes, complete section below.* *If no, proceed to row 29.*
28	If yes, describe nature and scale of impact and actions to remediate and rehabilitate	-
29	If no, describe how determined no impact	-
30	☐ Yes	*Administrative non-compliance*
31	If yes, describe nature of non-compliance	-
32	Immediate corrective actions implemented	-
33	Future corrective actions to prevent reoccurrence	-
4. Regulatory reporting or record keeping		
34	☐ Yes ☒ No	*Non-compliance with regulatory reporting or record keeping?* *If yes, complete the sections below. If more than one instance, copy the rows below for each regulatory reporting or record keeping regulatory requirement not met.* *If no, proceed to 5. Monitoring*
35	Reporting or recording requirement	
36	Summary of non-compliance	

Overview of non-compliance		
37	Evidence used to detect non-compliance	
38	Corrective actions implemented to improve reporting and record keeping	
5. Monitoring		
39	☐ Yes ☒ No	*Non-compliance with monitoring requirements?* *If yes, complete the sections below. If more than one instance, copy the rows below for each monitoring requirement not met.*
40	Monitoring requirement	-
41	Summary of non-compliance	-
42	Evidence used to detect non-compliance	-
43	Corrective actions implemented to ensure compliance with monitoring requirements	-

ATTACHMENT A: Rehabilitation Monitoring Report – July 2024

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

Rehabilitation Monitoring Report
Year 2
EP 136 Beetaloo Sub-basin, NT
2D SEISMIC EMP (SWP1-4)

‘

REV	DATE	REASON FOR ISSUE	COMPILER	APPROVER
0	02/10/2024	SWP1-4 EMP Compliance – Rehabilitation Year 2	AC	LP

Table of Contents

Figures

Tables

Appendices

Glossary of Terms and Codes

Variable	Code	Description
Stratum	1	Upper Stratum
Stratum	2	Middle Stratum
Stratum	3	Lower Stratum
Stratum_3_Life_Form	T	Tree - woody plant more than 2 m tall with a single stem or branches well above the base
Stratum_3_Life_Form	S	Shrub - woody plant, single or multi-stemmed at the base or within 2 m of the ground level
Stratum_3_Life_Form	G	Tussock grass - forms discrete but open tussocks usually with distinct individual shoots
Stratum_3_Life_Form	H	Hummock grass - Course xeromorphic grass with a mound like for, often dead in the middle; genera are Triodia and Plectrachne
Stratum_3_Life_Form	V	Sedge - herbaceous, usually perennial, erect plant generally with a tufted habit and of families Restionaceae and Cyperaceae
Stratum_3_Life_Form	F	Forb - herbaceous or slightly woody, annual or perennial plant, not a grass
Stratum_3_Life_Form	E	Fern - characterised by large and usually branched leaves (fronds), herbaceous to arbores cent and terrestrial to aquatic, spores in sporangia on leaves
Stratum_3_Life_Form	L	Vine - climbing, twining, winding and sprawling plant usually with a woody stem.
Stratum_3_Life_Form	N	Lichen - a complex community having a fungus and a photobiont as its main components
Stratum_3_Life_Form	B	Bulb - any plant that stores its complete life cycle in an underground storage structure
Stratum_3_Life_Form	P	Palm - any plant of the family Palmae having an unbranched trunk crowned by large pinnate or palmate leaves
Stratum_3_Growth_Form	A	Annual growth form
Stratum_3_Growth_Form	P	Perennial growth form
Woody_Species_Height_Class	3	0.51 - 1 m
Woody_Species_Height_Class	2	1.1 - 3 m
Woody_Species_Height_Class	1	>3 m
Canopy_Cover	1	Present
Canopy_Cover	0	Absent

Executive Summary

Sweetpea Petroleum Pty Ltd (Sweetpea), which is a wholly owned subsidiary of Tamboran Resources Ltd (Tamboran) completed year 2 rehabilitation monitoring survey, on 16 and 17 July 2024 of the 83 km 2D (two dimensional) seismic lines within the northern survey area of Exploration Permit 136 (EP136) on Tanumbirini Station.

The objective of the rehabilitation survey is to document the status of the seismic line progressive rehabilitation in accordance with Sweetpea's Seismic Rehabilitation Plan and Ministerial Condition 4 for the *Seismic Exploration Program Environment Management Plan (EMP) EP136 SWP1-4*, approved by the Minister on the 2 November 2020. Referenced as SWP1-4 Seismic EMP here on in.

The year 2 rehabilitation monitoring scope of works completed 16 and 17 July 2024, consisted of:

- an aerial survey via helicopter platform, recording video imagery of the entire length of the seismic lines; and
- ground truthing three locations of the seismic lines and comparing with three neighbouring analogue sites. It is noted that due to helicopter landing constraints at the 2023 site GS 1-2 located on seismic line 12, a fourth site was added for ground truthing (GS 7-8) located on seismic line 9 near the Maverick 1 well site.

The findings of the year 2 assessment of the rehabilitated seismic lines 23 months post remediation works determined the rehabilitation and remediation works completed by Sweetpea's contractor Terrex Seismic (Terrex) have been completed in accordance with the methods described in the SWP1-4 Seismic EMP. Specifically:

- The vegetation and topsoil removed during establishment of the seismic lines had been respread over the disturbed area to assist with rehabilitation process.
- Any windrows and whoa boys formed by the seismic program were not visible and line was ripped and scarified to promote vegetation growth.
- The seven seismic lines were visible across the landscape after 13 months of regrowth, however native vegetation growth was seen to be occurring consistent with the vegetation community surrounding the disturbance.
- Only six drainage line/creek crossings were intersected with the seismic program. All crossings were trafficable during the seismic survey and did not require woody species vegetation clearance to carry out the program.
- Some areas of the seismic lines have been used by cattle, although this impact is not inconsistent with the broader area where cattle tracks are noted across the landscape.
- Stratum 3 layer is showing recruitment of woody species such as the *Melaleuca, Eucalyptus* and *Acacia* species across the impact sites.
- There was no evidence of weeds or weed patches.
- There was no evidence of erosion (rill, sheet or gully).
- There was no evidence of bushfire impact on the seismic lines or more broadly in EP136 northern survey area.

Based on the rainfall received in the region (1,241.8 mm recorded on Tanumbirini Station), the seismic lines assessed all showed good signs of plant regrowth and are considered achieving the goals committed to in the site-specific rehabilitation plan. Timing of the rehabilitation survey in July 2024 Stratum 3 cover was still in generally good condition to enable identification.

At this stage of the rehabilitation program, it is recommended that no additional input is required. The evidence presented in this report indicates that the natural vegetation is recovering consistent with the surrounding vegetation communities. A number of the seismic lines are still visible in the landscape due to cattle movement along the lines and the slow growth of woody species.

Year 3 survey is recommended to be conducted in the early dry season 2025, to capture the peak growing period.

It is noted that there are still risks to the success of rehabilitation progress within the area where impacts from fire, cattle or pastoral activities may influence seismic line recovery.

1 Introduction

1.1 Background

Sweetpea Petroleum Pty Ltd (Sweetpea), a wholly owned subsidiary of Tamboran Resources Limited (Tamboran), conducted a 2D (two dimensional) seismic exploration program within exploration permit area EP136 within the Beetaloo Sub-basin, Northern Territory.

Sweetpea's subcontractor Terrex Seismic (Terrex) conducted the survey in July 2022. The area is described as the northern survey area of EP136 on Tanumbirini Station (NT Portion (Por) 701) in the *Seismic Exploration Program Environment Management Plan (EMP) EP136* SWP1-4 (SWP1-4 Seismic EMP), approved by the Minister on 2 November 2020. Referenced as SWP1-4 Seismic EMP here on in.

The original seismic activity described in SWP1-4 Seismic EMP for the northern survey area was 14 seismic lines covering at total of 480.29 km or 242.15 ha based on a 5 m wide seismic line. The actual delivered seismic survey consisted of seven seismic lines covering a total of 83.31 km or 41.65 ha, or 17% of the approved survey area. All activities for the seismic program were completed within EP136 boundary and all within Tanumbirini Station.

The location of the seismic program delivered is summarised in Table 1 and presented in Figure 1.

Table 1: Sweetpea July 2022 2D Seismic Program – Seismic line length and disturbance area

Seismic line		Coordinate (Zone 53)		Total length (km)^	Total disturbance area (ha)^
		Easting (m E)	Northing (m S)		
Line 6	Start	446866	8160347	8.4	4.2
	End	455172	8160192		
	Seismic line break to avoid large stand of Lancewood/Bullwaddy vegetation community				
	Start	456069	8160164	4.4	2.2
	End	460435	8160275		
Line 7	Start	446849	8164612	14.2	7.1
	End	460741	8164531		
Line 8	Start	446838	8169549	8.4	4.2
	End	455121	8169445		
Line 9	Start	446822	8173762	8.3	4.2
	End	454987	8173794		
Line 10	Start	448236	8175797	16.7	8.4
	End	448305	8159392		
Line 11	Start	452883	8175813	3.7	1.9
	End	452861	8172068		
	Seismic line break to avoid Newcastle Creek RWA*				
	Start	452843	8171415	12.1	6.1
	End	452926	8159402		
Line 12	Start	458071	8166606	7.2	3.6
	End	458054	8159412		
Total				**83.4**	**41.9**
% of original seismic program delivered					**17%**

*RWA – Aboriginal Area Protection Authority (AAPA) Restricted Work Area.
^ updated based on land clearing spatial extent review completed June 2024 following prescribed record request from DEPWS.

Following completion of seismic data acquisition, line rehabilitation commenced on 1 August 2022 and was completed by 10 August 2022.

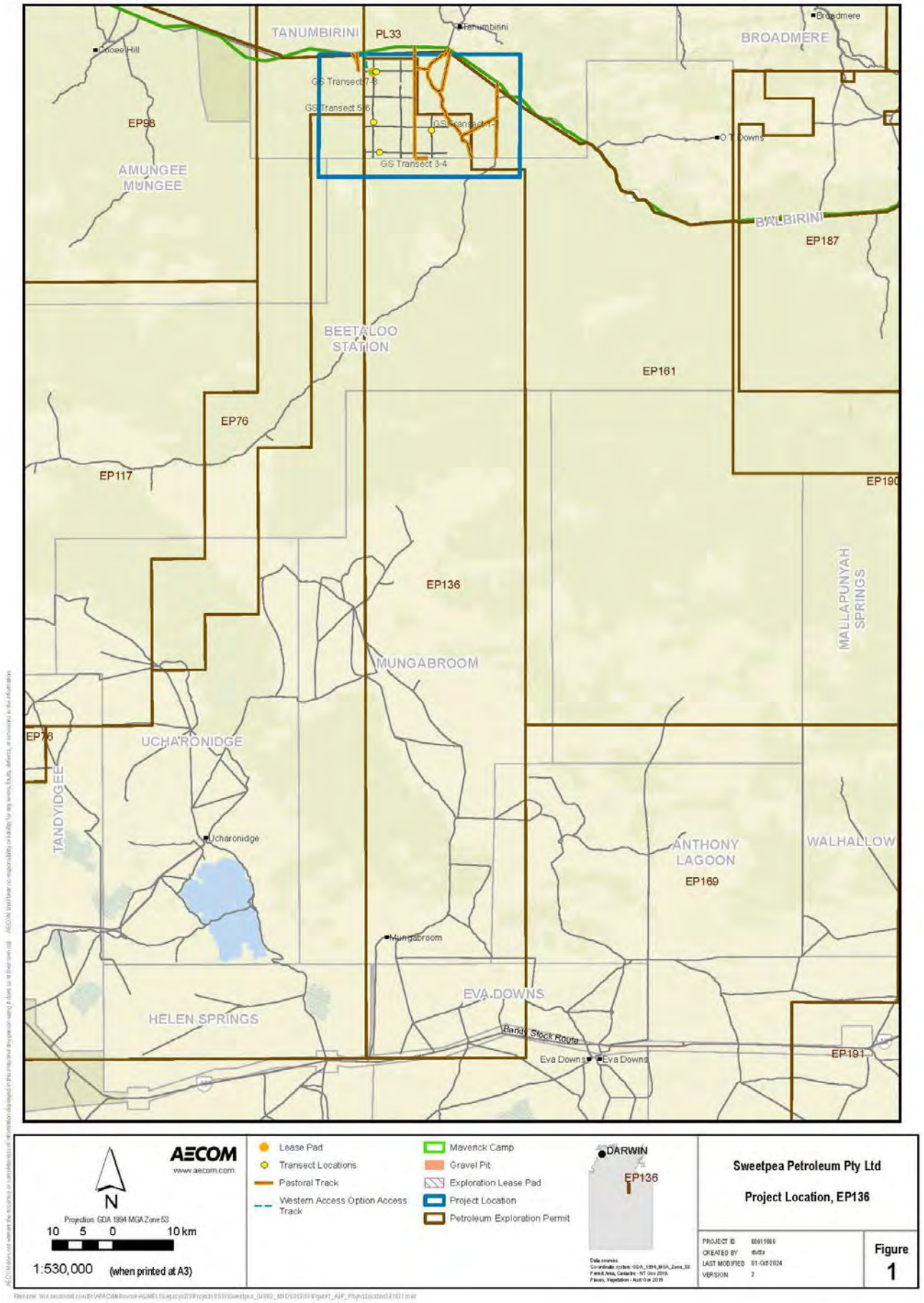


Figure 1: Location of Sweetpea 2D Seismic Program, July 2022

1.2 Objectives of report

This report has been prepared to document the status of the seismic line progressive rehabilitation in accordance with the rehabilitation plan and Ministerial Condition 4 of SWP1-4 Seismic EMP approval:

> *Condition 4: To support clause A.3.9 of the Code and the EMP rehabilitation plan, the interest holder is to provide an updated rehabilitation plan to DEPWS, concurrent with submission of the annual environment performance report. The amended rehabilitation plan must include:*
>
> *i auditable success criteria for rehabilitation and corrective actions in the event rehabilitation monitoring shows success criteria are not achieved,*
>
> *ii an annual summary of progressive rehabilitation outcomes, and*
>
> *iii be accompanied by geospatial files of all surface disturbance areas, including those under rehabilitation.*
>
> *The rehabilitation plan must be implemented until a successful outcome is achieved and documented.*

This report presents Year 2 rehabilitation assessment of the seismic lines, 23 months post rehabilitation works, to determine:

- The extent and effectiveness of the rehabilitation and remediation undertaken pursuant to the SWP1-4 Seismic EMP and Appendix F Rehabilitation Plan.
- Whether the progress of rehabilitation is on track to achieve the final success criteria detailed in Appendix F, specifically:
    - Is their evidence of woody species regrowth following rehabilitation?
    - Is the seismic lines on track to achieving 10-20% canopy cover for open woodland communities (based on woody species regrowth)?
    - Do the seismic lines have a minimum of 20% ground foliage cover and 30% ground cover species diversity?
    - Is there any ongoing disturbance of creek crossings from the seismic program?
    - Is there evidence of erosion or subsidence from the seismic program?
    - Is there evidence of weed species establishing along seismic lines?
    - Is there evidence of the occurrence of fire that may impact on success of seismic line recovery?
    - Are there any hazardous materials left onsite from the seismic program?
    - Are the rehabilitated seismic lines consistent with surrounding landform and vegetation community?
    - Is there a need for additional native seed mix from the area to be respread to speed up rehabilitation process?

1.3 Scope of works

The rehabilitation monitoring scope of works undertaken in July 2024 consisted of:

- an aerial survey via helicopter platform, recording video imagery of the entire length of the seismic lines; and
- ground truthing three locations of the seismic lines and comparing with three neighbouring analogue sites. It is noted that due to helicopter landing constraints at the 2023 site GS 1-2 located on seismic line 12, a fourth site was added for ground truthing (GS 7-8) located on seismic line 9 near the Maverick 1 well site.

The aim of the survey was to capture status of the seismic lines recovery and directly compare with the baseline data captured pre-disturbance in 2019 (AECOM 2020), as well as the post rehabilitation survey that was undertaken in November 2022 (AECOM 2022) and September 2023 (AECOM 2023).

1.4 Report structure

The report is structured as follows:

- Section 1: Introduction – this section
- Section 2: Method – a description of the methods used for data collection
- Section 3: Description of the environmental setting specific to the 83 km seismic line rehabilitation area
- Section 4: Results and Discussion – a summary of the data collected during the field survey
- Section 5: Conclusion – a summary of Rehabilitation success 13 months post stabilisation and provision of recommendations (if any)
- Section 6: References
- Appendices.

2 Methodology

The rehabilitation survey was conducted by an experienced environmental scientist, Alana Court, with support from cultural manager, Jeremy Jackson.

The year 2 seismic rehabilitation survey was conducted on 16 and 17 July 2024 following notification to the land holder under Regulation 52 to conduct low impact activities.

The method of the rehabilitation survey consisted of the following:

- aerial inspection of the seismic lines under rehabilitation via a helicopter platform
- ground-truthing at up to three locations along the seismic lines.

A summary of each survey method is presented below. The location of the rehabilitation survey is presented in Figure 2.

It is noted that access to the permit area was via a helicopter platform travelling from Daly Waters Airstrip to site each day of the survey. No other vehicles were used to conduct survey.

2.1 Aerial inspection

The aerial inspection completed during July 2024 involved flying the entire 83 km seismic line route at an average height of 45 m. The speed of the helicopter during imagery capture was approximately 60 to 80 km/hr (45 to 60 knots).

During the flight, spatially located digital images along the seismic line route were captured within each mapped vegetation boundary, land condition assessment sites and creek crossing (where applicable).

Spatially referenced video footage was captured continuously using a dashcam (Kapture KPT-2000). The data collected was used for playback to assist with report preparation.

Recording the seismic line alignment with video and taking photographs were used to compare with the baseline *Seismic Exploration Program Land Condition Assessment* (AECOM 2020a), the *Rehabilitation and Remediation Report concerning Seismic Rehabilitation on Tanumbirini Station* letter report (AECOM 2022) and last year's *Rehabilitation Monitoring Report EP136 Beetaloo Sub-basin, NT* report (AECOM 2023).

Observations were collected on the seismic line disturbance during the survey including:

- details on how lines flowed across the landscape (i.e. did the operator weave around trees and shrubs etc.)
- details on vegetation growth along the seismic line post rehabilitation works
- details on any visible evidence of erosion, cattle disturbance and weed occurrence.

The results of the aerial inspection is summarised in Section 4.1.

2.2 Ground-truthing survey

The on-ground rehabilitation survey was completed in accordance with Sweetpea site specific Rehabilitation Plan, Appendix F of SWP1-4 Seismic EMP. The on-ground rehabilitation survey comprised of:

1. Relocation and survey of the 3 x 100 m transects along the seismic lines that demonstrated best coverage of multiple vegetation types using pre-existing imagery and data obtained during baseline assessments (AECOM 2020).
2. Relocation and survey of 3 x 100 m analogue transects in the nearby undisturbed vegetation type for direct comparison to the seismic line (approximately 50-100 m parallel to the seismic line).
3. Capture photo from the established permanent photo monitoring point on each transect.

It is noted that due to access constraints with the helicopter landing at the 2023 site GS 1-2 located on seismic line 12, a fourth site has been added for ground truthing (GS 7-8) located on seismic line 9 near the Maverick 1 well site as a replacement for this year's survey.

At each transect the following information was collected:

- 100 m x 4 m woody species transects
- percent (%) canopy cover for each transect
- 1x1 m ground species quadrats every 10 m of the 100 m transect.
- Summary of land condition (erosion, weeds, ground cover and habitat quality)
- Disturbance attributes (animal/cattle, vehicular and fire disturbance)
- Any incidental observations.

Results of the on-ground survey is presented in Section 4.2.

2.3 Equipment

The equipment used to carry out the rehabilitation survey included:

- x1 Garmin GPSMAP65
- x1 KAPTURE KPT-2000 dashcam to capture video footage from Helicopter Platform
- x1 100 m tape measure
- x1 densiometer to assess canopy cover along the 100 m long transects
- x1 collapsible 1 m x 1 m quadrat to assess ground cover
- x1 camera to take photos of vegetation condition/recovery along transect for ongoing annual comparisons.

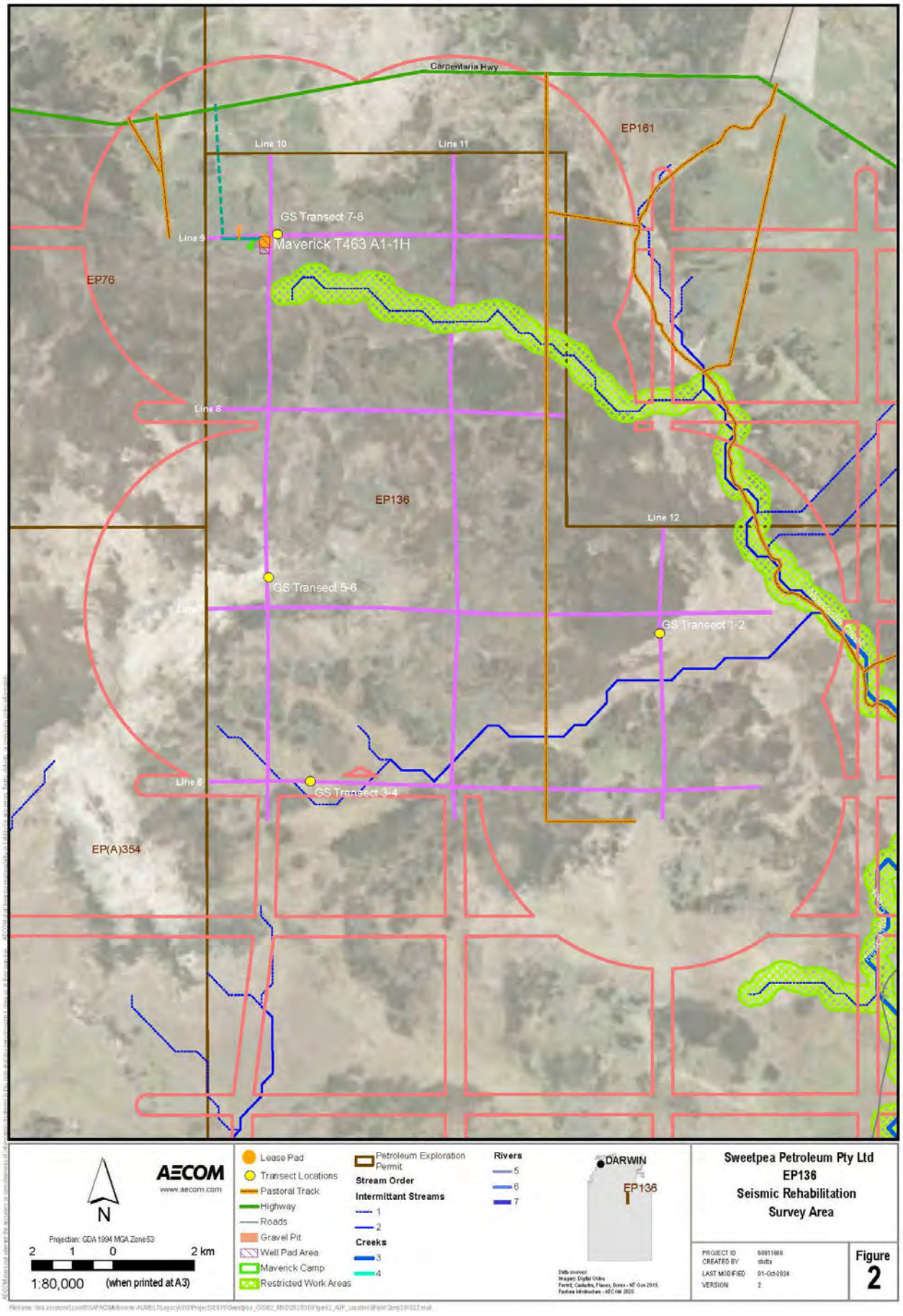


Figure 2: Seismic Rehabilitation Survey Area

3 Description of environment

3.1.1 Rainfall

The EP136 seismic program was located within an area that is described as arid to semi-arid. The area has a distinct wet and dry season, with 90% of rain occurring during the wet season, which can be variable from year to year (AECOM 2020).

The seismic program, which involved line preparation, data recording and line rehabilitation, was undertaken during July and August 2022 which is considered the dry season. No rainfall was recorded during the seismic program.

The 2023-2024 wet season in the Daly Waters region was reported to have received high rainfall, late into the season, with water still present across the region during the rehabilitation survey. A review of the Bureau of Meteorology (BoM) online climate data for Tanumbirini (Station No. 14628) shows monthly rainfall for the 2023-2024 wet season (October 2023 to April 2024) recorded a total of 1,241.8 mm. This is 510 mm more than the reported average wet season rainfall for the area (BoM 2024).

This is the second year in a row where good rainfall has fallen in the area post line rehabilitation and remediation works. The rainfall experienced has contributed to the observed plant growth across the 2D seismic area.

3.1.2 Vegetation communities

The baseline Seismic Land Condition Assessment (AECOM 2020a) describes the northern survey area as dominated by *Corymbia* spp. and *Eucalyptus* spp. open woodlands and tall shrublands and woodlands of Bullwaddy (*Macropteranthes kekwickii*) and Lancewood (*Acacia shirleyi*) with open grassland understorey. On the alluvial plains and drainage areas, *Eucalyptus chlorophylla*, E. *microtheca* and E. *pruinosa* low woodlands predominate, while the plains *Corymbia dichromophloia* and E. *leucophloia* woodlands are more dominant.

Seven of the eight vegetation communities identified in the northern survey area were impacted by the 83 km seismic survey. A summary of the vegetation communities intersected by the seismic program is provided Table 2 and shown in Figure 3.

Table 2: Vegetation communities (northern survey area sites)

Vegetation Community	Description	Photo ref.
Acacia shirleyi forest / open forest	*Acacia shirleyi* forest/ open forest with *A. shirleyi* and *Macropteranthes kekwickii* open shrubland over *Chrysopogon fallax* (mixed) low open tussock grassland.	 **Plate 1 *Acacia shirleyi* forest / open forest**

Vegetation Community	Description	Photo ref.
Macropteranthes kekwickii shrubland / open shrubland	*Macropteranthes kekwickii* shrubland/ open shrubland (mixed) over *Chrysopogon fallax* and *Dichanthium fecundum* low open tussock grassland.	 **Plate 2 *Macropteranthes kekwickii* shrubland / open shrubland**
Corymbia dichromophloia open woodland	*Corymbia dichromophloia* &/or *Corymbia terminalis* and *Erythrophleum chlorostachys* with mixed open shrubland over *Triodia sp.* low open hummock grassland and mixed tussock grassland.	 **Plate 3 *Corymbia* (mixed) open woodland**
Eucalyptus leucophloia open woodland	*Eucalyptus leucophloia* subsp. *euroa* low open woodland + - *Corymbia dichromophloia* with *Acacia* sp. (mixed) open shrubland over *Triodia bitextura* hummock grassland	 **Plate 4 *E. leucophloia* open woodland**
Eucalyptus chlorophylla low open woodland	*Eucalyptus chlorophylla* low open woodland over +- *Melaleuca* sp. shrubs over *Dichanthium* sp and *Chrysopogon fallax* tussock grassland.	 **Plate 5 *E. chlorophylla* low open woodland**

Vegetation Community	Description	Photo ref.
Eucalyptus microtheca woodland/ isolated trees	*Eucalyptus microtheca* woodland/isolated trees +- *Eucalyptus camaldulensis* var *obtusa* (near creek lines) over *Dichanthium fecundum*, *Chrysopogon fallax* (mixed) low open tussock grassland.	 **Plate 6 *E. microtheca* woodland/isolated trees**
Eucalyptus pruinosa open woodland	*Eucalyptus pruinosa* open woodland over *Dichanthium* sp. (mixed) low open tussock grassland.	 **Plate 7 *E. pruinosa* open woodland**

Source: AECOM 2022

3.1.3 Creek crossings

A total of 41 ephemeral creeks and drainage lines were proposed to be crossed during the delivery of the seismic program. The actual number of creeks and drainage lines crossed were substantially reduced to only six crossings made during the seismic program.

A summary of creek crossings and drainage lines intersected by the program is summarised in Table 3 and shown in Figure 3.

Table 3: Creek and drainage line crossings for 2022 seismic survey

Seismic line	Creek crossing reference	Stream order/condition description
Line 6	NC18	Intermittent Stream (1) - Shallow channel with shallow depression that can hold water following wet season. Trafficable with no vegetation clearance necessary.
Line 7	No crossings	-
Line 8	No crossings	-
Line 9	No crossings	-
Line 10	NC3	No Stream Order - Shallow depression that can hold water following wet season. Generally considered an overland flow path following rainfall. No clearing of vegetation necessary for vehicle access during seismic survey.
	NC17	Intermittent Stream (1) - Shallow channel with shallow depression that can hold water following wet season. Trafficable with no vegetation clearance necessary.
Line 11	NC4	Intermittent Stream (1) - Avoided, Sweetpea allowed break in line data acquisition to avoid crossing Newcastle Creek (RWA)
	NC19	Intermittent Stream (2) - Shallow channel with shallow depression that can hold water following wet season. Trafficable with no vegetation clearance necessary.
Line 12	NC16	Intermittent Stream (2) - Shallow channel with shallow depression that can hold water following wet season. Trafficable with no vegetation clearance necessary.

Source: AECOM 2022

Based on the data, all drainage lines and creek crossings were trafficable during the seismic survey and did not require woody species vegetation clearance to carry out the program.

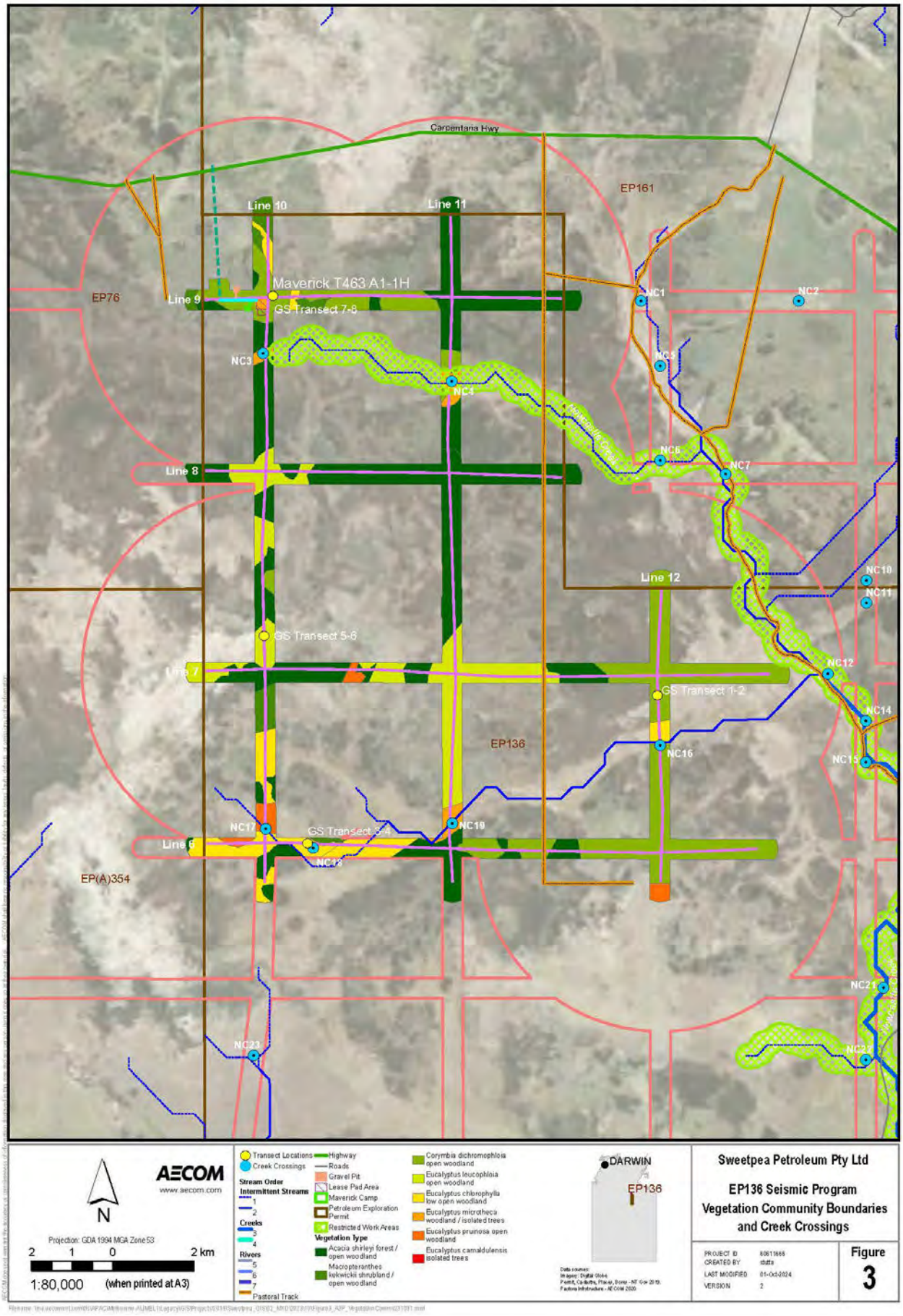


Figure 3: EP136 Seismic Program Vegetation Community Boundaries and Creek Crossings

4 Results and discussion

4.1 Aerial inspection

As detailed in Section 2.1, an aerial survey of the 83 km of rehabilitated seismic lines (Lines 6 to 12) was completed on day 1 of the survey (16 July 2024) (refer Figure 2).

Photo observation points were collected along each of the seven seismic lines during the survey and compared with the photos taken during the initial baseline survey (25 to 30 May 2020), the post remediation survey (November 2022) and year 1 rehabilitation survey (6 and 7 September 2023). A photo log from the aerial survey and comparison to previous photos are presented in Appendix A.

The 2023 rehabilitation survey had confirmed the following:

- Seismic lines meandered around the more heavily wooded areas and trees as described in the SWP1-4 Seismic EMP. The aim of this measure was to minimise the impact on the native flora and fauna and improve rehabilitation success.
- Seismic lines avoided large trees and shrubs, particularly in the *Eucalyptus* woodland vegetation communities.
- Patches of Bullwaddy were avoided by the weaving methodology as much as possible.
- No windrows or whoa boys were remaining along the seismic line alignment.
- No visible evidence of stockpiled vegetation or soil was observed along the seismic line alignment.
- No hazardous waste was visible across the survey area.

Observations noted during the 2024 aerial inspection of the seismic lines included:

- The seismic line alignment was visible in the landscape, although ground cover along the lines was consistent to the ground cover in the adjacent vegetation areas to the seismic lines.
- It was noted that some of the seismic line tracks were visible because cattle were using the lines to walk across the landscape (Plate 9). It is also noted that cattle tracks were also noted more broadly across the landscape consistent with the seismic line tracks that were being seen (Plate 10).
- It does not appear that any vehicles (both pastoralist or oil and gas) have travelled along the seismic lines since remediation.
- There was no visible evidence of weeds or weed patches along the seismic line alignment, with majority of vegetation cover being consistent with the vegetation adjacent to the seismic alignments (Plate 8 to Plate 11).
- There was no evidence of any bushfire occurrence within the seismic line area since seismic acquisition completion. North Australian Fire Index (NAFI) report indicated that the majority of the 2D seismic area has not encountered fire pre-2014. The most recent fire in the near the survey area was recorded in 2021 (NAFI 2024).
- There was no evidence of erosion along the seismic line alignment. All creek crossings and drainage lines appear to be consistent with pre-disturbance imagery (Plate 10).

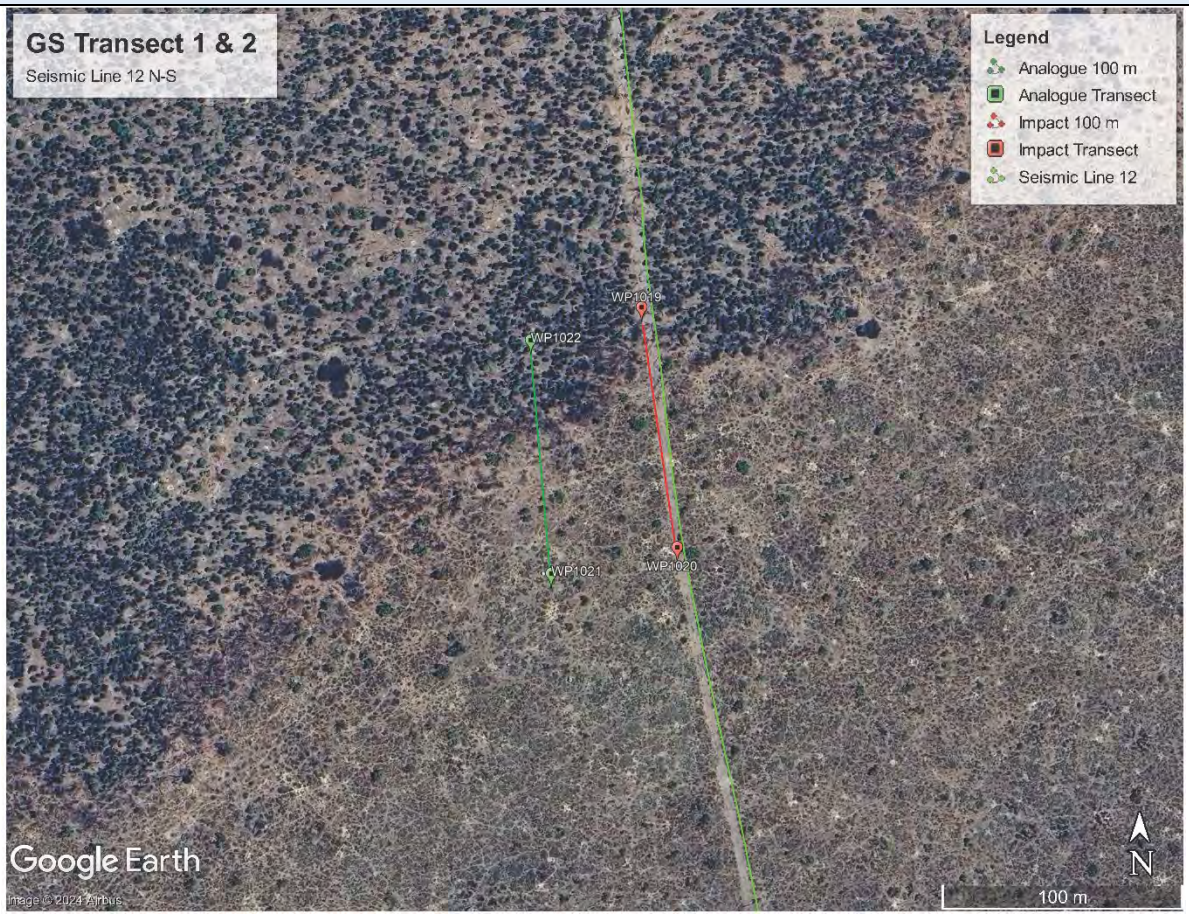
4.2 On-ground rehabilitation survey

The on-ground rehabilitation survey was completed over 2 days on 16 and 17 July 2024. The survey was completed in accordance with the Sweetpea Rehabilitation Plan, Appendix F of SWP1-4 Seismic EMP.

The on-ground survey consisted of three impact 100 m transects and three analogue 100 m transects as presented in Table 4 to Table 7 below and in Figure 3. An additional ground survey site was established to replace GS Transect 1-2 due to access constraints with the helicopter to land in the area (i.e. the shrub layer height along the edge of seismic line had increased that meant unable to safely land. A replacement site GS Transect 7-8 was identified and surveyed instead for the year 2 survey.

Table 4: On-Ground Rehabilitation Survey Site GS 1-2 Description

Transect		Field Id	Coordinates (Zone 53)	
			Easting	Northing
Seismic line 12 (north-south) Ground Survey				
GS Transect 1	Impact	1019	457986	8164067
		1020	457989	8163966
GS Transect 2	Analogue	1022	457939	8164053
		1021	457948	8163955
Note – During 2024 rehabilitation survey, helicopter access constraints at GS Transect 1 & 2 as result of the regrowth encountered was not ground truthed. An alternate location, GS Transect 8-9, was surveyd instead to replace GS Transect 1-2.				
Location				



Imagery Date 24/11/2023

GS Transect 1-2 site photos (aerial)	
	
Plate 8 Seismic Line 12 showing *Acacia lysiphloia* and *Melaleuca viridiflora* growth along seismic line restricting helicopter landing access. Cattle tracks evident along one side of seismic line.	**Plate 9** Transition between the two vegetation communities shows good ground cover with some *Acacia shirleyi regrowth visible.*

Table 5: On-Ground Rehabilitation Survey Site GS 3-4 Description

Transect		Field Id	Coordinates (Zone 53)	
			Easting	Northing
Seismic Line 6 (East-West) Ground Survey				
GS Transect 3	Impact	1025	449404	8160378
		1024	449305	8160379
GS Transect 4	Analogue	1030	449396	8160340
		1031	449298	8160320

Location

Imagery Date 24/11/2023

GS Transect 3-4 site photos

Plate 10 Seismic Line 6 showing regrowth across the line.

Plate 11 Shallow drainage depression near Seismic Line 6 where the analogue ground survey line commences.

Table 6: On-Ground Rehabilitation Survey Site GS 5-6 Description

Transect		Field Id	Coordinates (Zone 53)	
			Easting	Northing
Seismic Line 10 (North-South) Ground Survey				
GS Transect 5	Impact	1026	448313	8165432
		1027	448314	8165332
GS Transect 6	Analogue	1028	448344	8165431
		1029	448343	8165332

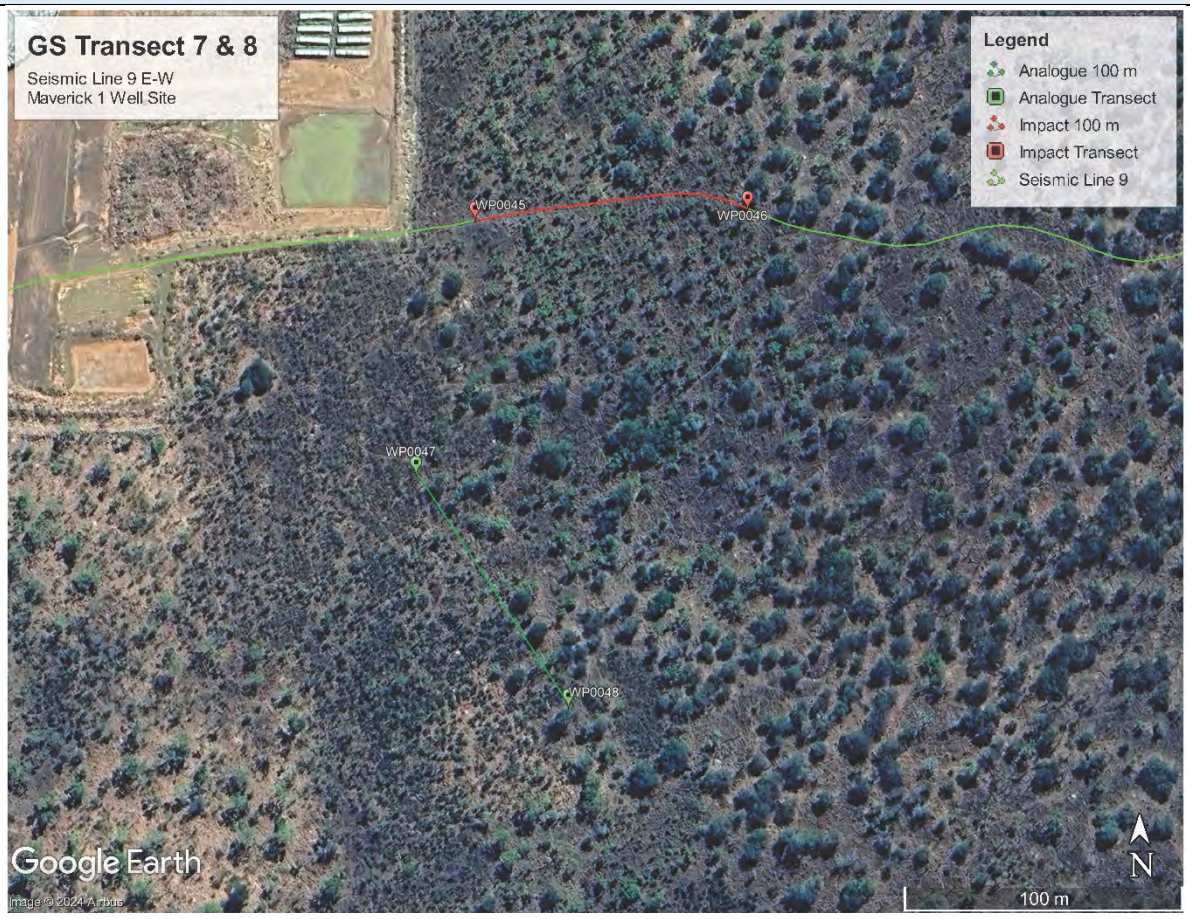
Location

Imagery Date 24/11/2023

GS Transect 5-6 site photos	
	
Plate 12 Seismic Line 10 impact site with evidence of cattle tracks along one side, although good ground cover species are consistent with surround vegetation.	**Plate 13** Seismic Line 10 analogue site also showing some cattle track impact.

Table 7: On-Ground Rehabilitation Survey Site GS 7-8 Description

Transect		Field Id	Coordinates (Zone 53)	
			Easting	Northing
Seismic Line 9 (East-West) Ground Survey				
GS Transect 7	Impact	0045	448576	8173806
		0046	448675	8173811
GS Transect 8	Analogue	0047	448556	8173716
		0048	448611	8173633
Location				



Imagery Date 18/08/2024

GS Transect 7-8 site photos	

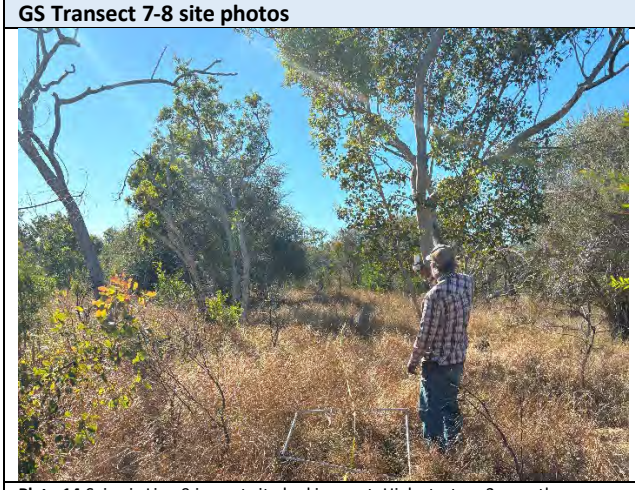



Plate 14 Seismic Line 9 impact site looking east. High stratum 3 growth across section of seismic line. Noted minimal woody species were required to be cleared in this section due to ability of the seismic survey program to weave around trees and shrubs.	**Plate 15** Seismic Line 9 analogue site looking south-west

4.2.1 Seismic line status

The on-ground survey confirmed that the disturbance from the seismic line preparation, acquisition and rehabilitation achieved the mitigation controls described in SWP1-04 EMP documents.

In particular, the following was noted:

- no seismic lines appeared to be greater than 4-5 m wide
- no evidence of windrows or whoa boys
- no vegetated material stockpiled along sides of seismic line
- effort was made to bring all topsoil, windrows and vegetative matter across the lines where it was available
- some areas show evidence of compaction from survey, although large sections of compaction on the lines are attributed to cattle traversing along the line
- cattle disturbance was evident at all three sites
- it doesn't appear that any new vehicle disturbance has occurred in the seismic survey area
- where seismic line tracks are visible, there is evidence of stratum 3 plant growth
- no erosion (either sheet, rill or gully) was evident across the area as result of the seismic program
- no evidence of recent fire within the rehabilitation area (section 4.2.2).

4.2.2 Disturbance

Bushfire disturbance

No bushfire disturbance was recorded in any of the ground survey sites. No bushfire impacts were observed along the full length 83 km seismic line or within EP136 northern survey area at time of the rehabilitation survey.

Based on the available North Australia Fire Information website (https://www.firenorth.org.au/nafi3/), no fire has occurred in the seismic survey are since pre-2014.

Cattle disturbance

Cattle disturbance was evident at all the ground survey sites. Evidence of recent cattle movement was in the form of dried cow dung, cattle tracks and pig disturbance (Plate 16 to Plate 19). Some of these tracks were along the existing seismic lines. It is also noted that even without seismic line disturbance, cattle tracks are observable across the permit area. The recent aerial imagery available on Google Earth Maps taken in November 2023, as presented in Table 5 and Table 6 in section 4.2, clearly show the cattle tracks traversing across the landscape.

Plate 16 Seismic line 10 impact GS Transect 5 with evidence of cattle using the old line for moving through landscape.

Plate 17 Seismic line 10 analogue GS Transect 6 also presented with cattle tracks. Noted that this track was new from the September 2023 rehabilitation survey.

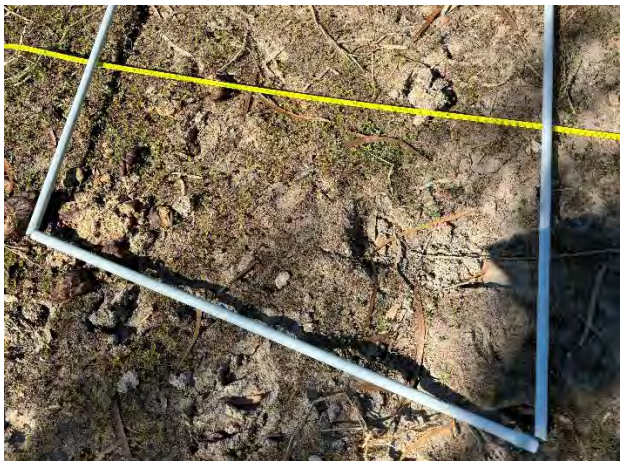


Plate 18 GS Transect 4 analogue site with cattle footprints in the mud. This site is located in a drainage depression and likely to have held water late in the season attracting cattle to the area.

Plate 19 Seismic Line 9 cattle/pig disturbance.

Erosion

All areas surveyed on the ground did not show visible signs of erosion. All areas assessed were flat in nature, with only some compaction attributed from the seismic program and more recently cattle movement in the area (Plate 20 and Plate 21).

Plate 20 Seismic Line 5 impact site showing compaction which can be attributed to cattle traversing old line.

Plate 21 Seismic Line 6 impact site showing some remnant compaction.

Weeds

No evidence of weeds was recorded at any of the ground survey sites, nor were large patches of potential weed species visible from the helicopter platform.

4.2.3 Seed germination and plant establishment

Based on the rainfall received in the region, the seismic lines assessed all showed good signs of plant growth. Timing of the rehabilitation survey in July and after extended wet season meant many species were viable to enable identification of the dominant species.

Stratum 3 species richness encountered during the July 2024 survey indicated:

- 50 stratum 3 species recorded across the six transects, up by 50% from 2023 survey which recorded 25 stratum 3 species.
- Stratum 3 species richness across the ground survey sites identified:
  - 14 species at GS Transect 3
  - 10 species at GS Transect 4
  - 7 species at GS Transect 5
  - 5 species at GS Transect 6
  - 10 species at GS Transect 7
  - 14 species at GS Transect 8.
- Of the sites that were surveyed in 2023, all transects, both impact and analogue sites reported more species in the 2024 survey. This is likely the result of the extended wet season and access to the sites earlier in the dry season before the flora species die off.
- Except for the more recent addition GS Transect 7-8, the impact sites (Transect 3 and 5) reported slightly more species then at the analogue sites.
- GS Transect 3 and GS Transect 9 recorded the highest species richness with 14 species counted. Both GS Transect 3 and GS Transect 9 are located near the boundary of a drainage line and alluvial plains which may have contributed to the higher species richness.

- The lowest species richness was recorded at GS Transect 6 with five species counted.
- GS Transect 4 increased from 4 species in 2023, to 10 species in 2024.
- Woody species regrowth attributed to some of the Stratum 3 density, however for the July 2024 survey grasses and sedges were also higher.
- Stratum 3 woody species regrowth was noted throughout all the impact survey sites.

4.2.4 Ground cover

The ground cover quadrats were collected at every 10 m of the 100 m transect. Photo logs of each quadrat is presented in Appendix B. The average percent (%) cover for stratum 3, % litter cover and % bare ground is presented in Table 8 and is compared with the 2023 survey results.

Table 8: Mean Stratum 3 Cover, July 2024

Site name	Type	Mean % Cover		Mean % Litter		Mean % Bare Ground	
		2023	2024	2023	2024	2023	2024
Seismic Line 12 (North-South)							
GS Transect 1	Impact	36.5%	-	18.5%	-	45.5%	-
GS Transect 2	Analogue	43.0%	-	37.5%	-	19.5%	-
Seismic Line 6 (East-West)							
GS Transect 3	Impact	52.5%	20.2%	14.0%	19.5%	33.5%	60.3%
GS Transect 4	Analogue	55.0%	40.0%	24.5%	27.5	23.5%	32.5%
Seismic Line 10 (North-South)							
GS Transect 5	Impact	29.5%	49.0%	23.5%	20.5%	47.0%	30.5%
GS Transect 6	Analogue	54.5%	83.0%	18.5%	5.5%	27.0%	21.5%
Seismic Line 9 (East-West)							
GS Transect 7	Impact	-	50.0%	-	20.5%	-	29.5
GS Transect 8	Analogue	-	91.0%	-	2.5%	-	16.5

Orange – Impact, Green Analogue

The % vegetation cover across the impact sites, following the 2023-2024 wet season, ranged from 20.2% cover at GS Transect 3 to 50% cover at GS Transect 7. This compares with the analogue sites which reported % vegetation cover between 40% and 91%.

GS Transect 3 and GS Transect 4 are located near a drainage channel and the lower cover is likely result of the extended wet season and inundation rather than impacts from the seismic lines. Litter was slightly higher during the July 2024 then recorded in the September 2023 rehabilitation survey.

The more woodland area (GS Transect 5&6 and GS Transect 7&8) had substantially more ground vegetation cover, compared to GS Transects 1 - 4.

As to be expected, the seismic impact transects still reported the highest percentage of bare ground, particularly where cattle are using some of the lines for corridors.

Overall, the ground cover at each of the transect lines is within the range encountered during the baseline studies (AECOM 2020a).

4.2.1 Density of woody species

The overall density of woody species (ignoring the height classes) and total % canopy cover for each transect was captured. The results are presented in Table 9 along with the 2023 survey results.

Table 9: Woody species density and total % canopy cover, July 2024

Site name	Type	Dominant Vegetation Community	Woody Species Density (total individual/ha)		Total % Canopy Cover	
			2023	2024	2023	2024
Seismic Line 12 (North-South)						
GS Transect 1	Impact	*Eucalyptus chlorophylla* low open woodland	6,312	-	0%	-
GS Transect 2	Analogue		5,851	-	24%	-
Seismic Line 6 (East-West)						
GS Transect 3	Impact	*Eucalyptus chlorophylla low open woodland mixed with Eucalyptus microtheca low woodland*	2,517	3,635	0%	5%
GS Transect 4	Analogue		993	692	31%	41%
Seismic Line 10 (North-South)						
GS Transect 5	Impact	*Eucalyptus leucophloia low open woodland*	780	638	0%	0%
GS Transect 6	Analogue		1,950	70.9	9%	14%
Seismic Line 9 (East-West)						
GS Transect 7	Impact	*Eucalyptus microtheca woodland/isolated trees*	-	3,351	-	14%
GS Transect 8	Analogue		-	2,092	-	24%

The woody species results (overall density of woody species and % canopy cover) collected across the three on-ground survey areas has been summarised below:

- The overall density of woody species indicated:
  - An increase of 1,118 woody species at GS Transect 3 impact site (3,635 total individuals/ha) when compared to the 2023 survey data (2,517 total individual/ha), while a decrease of 301 individuals/ha was reported for the GS Transect 4 analogue site.
  - Comparison of impact and analogue sites for Seismic Line 10 showed an overall decrease at both GS Transect 5 and GS Transect 6 when compared with the 2023 survey data. This decrease may be result of increased grazing in the area, which is seen clearly in Section 4.2.2 and Table 6.

It is noted that the collection of height class data and woody species density is important during future years' monitoring programs because Stratum 3 (0.5-1 m) species are more likely to be impacted by cattle movement and fire than Stratum 2 (1-3 m) and Stratum 1 (>3 m) species. Changes in the upper height classes over the course of the rehabilitation program denotes recruitment from lower height classes or mortality of plants.

The results collected for % canopy cover compared between the impact and analogue sites and the 2023 survey are summarised as follows:

- Seismic Line 6 GS Transect 3 impact site reported 5% canopy cover compared to no canopy cover in 2023.
- Seismic Line 10 GS Transect 5 impact site did not report canopy cover which is more likely because of the sparse nature of low open woodlands.
- The highest % canopy cover recorded for the analogue sites was GS Transect 4 (41%) followed by GS Transect 8 (24%):
  - GS Transect 4 canopy was up by 10% compared to the 2023 survey results and consisted of 13% *Eucalyptus chlorophylla* (Glossy-leaved Box) and 28% of *Acacia colei* (Candelabra Wattle).

- GS Transect 8 canopy recorded the second highest % canopy cover of 24%. The species in the canopy consisted of 7% *Eucalyptus leucophloia* (Snappy Gum), 8% Melaleuca nervosa (Yellow-barked Paperbark) and 9% *Macropteranthes kekwichkii* (Bullwaddy).

5 Conclusions

Tamboran conducted the Year 2 rehabilitation monitoring of the 83 km 2D (two dimensional) seismic line within the northern survey area of Exploration Permit 136 (EP136) on Tanumbirini Station.

The objective of the rehabilitation survey is to document the status of the seismic line rehabilitation in accordance with Sweetpea's Seismic Rehabilitation Plan and Ministerial Condition 4 of SWP1-4 Seismic EMP approval.

The findings of the year 2 assessment of the rehabilitated seismic lines 23 months post remediation works determined the rehabilitation and remediation works completed by Terrex Seismic (Terrex) have been completed in accordance with the methods described in Sweetpea's SWP1-4 EMP. Specifically:

- The vegetation and topsoil removed during establishment of the seismic lines had been respread over the disturbed area to assist with rehabilitation process.
- Any windrows and whoa boys formed by the seismic program were not visible and line was ripped and scarified to promote vegetation growth.
- The seven seismic lines were visible across the landscape after 13 months of regrowth, however native vegetation growth was seen to be occurring consistent with the vegetation community surrounding the disturbance.
- Only six drainage line/creek crossings were intersected with the seismic program. All crossings were trafficable during the seismic survey and did not require woody species vegetation clearance to carry out the program.
- Some areas of the seismic lines have been used by cattle, although this impact is not inconsistent with the broader area where cattle tracks are noted across the landscape.
- Stratum 3 layer is showing recruitment of woody species such as the *Melaleuca, Eucalyptus* and *Acacia* species across the impact sites.
- There was no evidence of weeds or weed patches.
- There was no evidence of erosion (rill, sheet or gully).
- There was no evidence of bushfire impact on the seismic lines or more broadly in EP136 northern survey area.

Based on the rainfall received in the region (1,241.8 mm recorded on Tanumbirini Station), the seismic lines assessed all showed good signs of plant regrowth and are considered achieving the goals committed to in the site-specific Seismic Rehabilitation Plan. Timing of the rehabilitation survey in July 2024 Stratum 3 cover was still in generally good condition to enable identification.

At this stage of the rehabilitation program, it is recommended that no additional input are required. The evidence presented in this report indicates that the natural vegetation is recovering consistent with the surrounding vegetation communities. A number of the seismic lines are still visible in the landscape due to cattle movement along the lines and the slow growth of woody species.

Year 3 survey is recommended to be conducted in the early dry season, 2025 to capture the peak growing period.

It is noted that there are still risks to the success of rehabilitation progress within the area where impacts from fire, cattle or pastoral activities may influence seismic line recovery.

6 References

AECOM (2020). *Seismic Environment Management Plan - EP136 - Beetaloo Sub-Basin, NT. Darwin.* published on DEPWS Environment management plan decisions site https://depws.nt.gov.au/onshore-gas/environment-management-plan/approved-emps.

AECOM (2020a). *Seismic Exploration Program Land Condition Assessment*, published as Appendix A to SWP1-04 Seismic EMP on DEPWS Environment management plan decisions site https://depws.nt.gov.au/onshore-gas/environment-management-plan/approved-emps.

AECOM (2022). *Rehabilitation and Remediation Report concerning Seismic Rehabilitation on Tanumbirini Station letter report*, November 2022. Unpublished report prepared for Sweetpea Petroleum Pty Ltd.

AECOM (2023). *Rehabilitation Monitoring Report EP136 Beetaloo Sub-basin, NT,* November 2023. Unpublished report prepared for Sweetpea Petroleum Pty Ltd.

BoM (2024). Daily Rainfall Tanumbirini. Retrieved from Climate Data Online: Climate Data Online - Map search (bom.gov.au)

NAFI (2024). *Fire History*. https://www.firenorth.org.au/nafi3/ accessed 12/09/2024.

Sweetpea Petroleum Pty Ltd (2022). Progressive Rehabilitation Plan for 2D Seismic Survey - EP136 - Beetaloo Sub-Basin, NT, V 2.0.

Terrex Seismic (2022, August 9). *Tamboran - Yaroo Creek 2D - Rehabilitation Report*

APPENDIX A

Aerial Survey Photo Log

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 13 - Seismic Line 6 (East-West)			

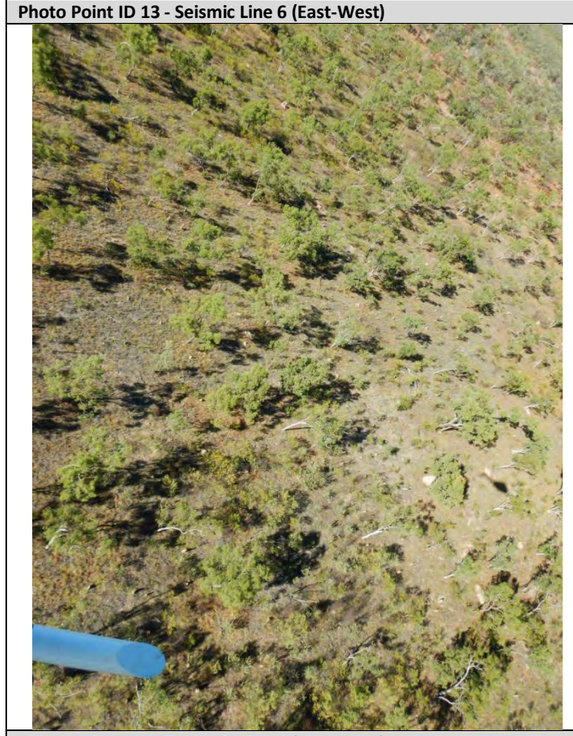
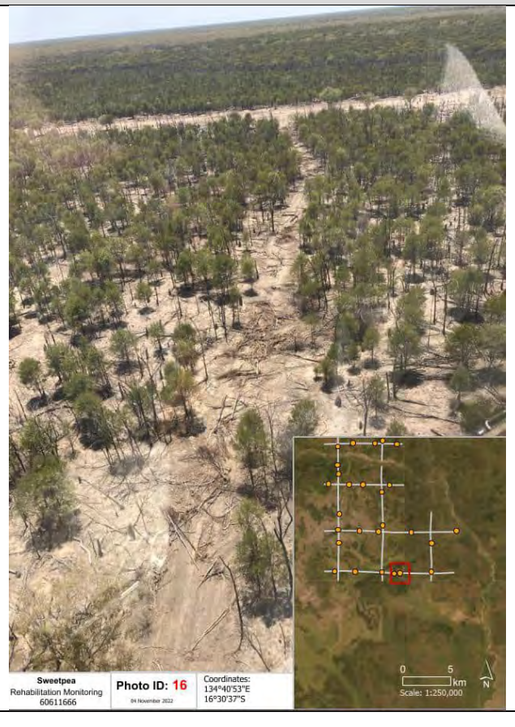
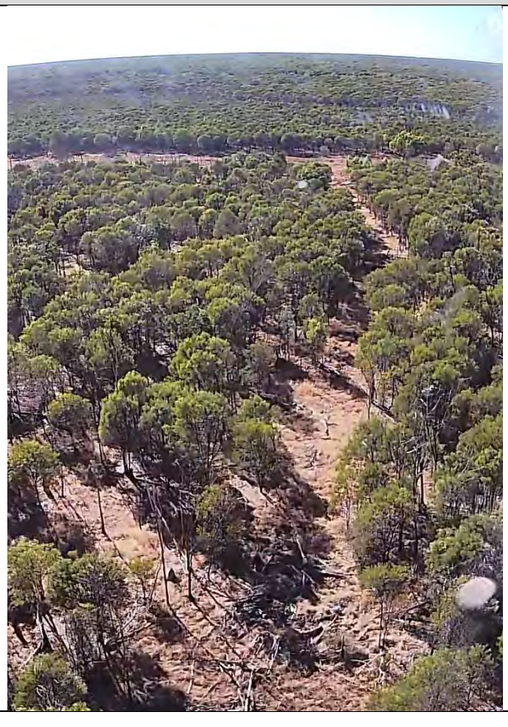



Photo Point ID 14 - Seismic Line 6 (East-West)			
			

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 15 - Seismic Line 6 (East-West)			
No Photo in Close Proximity to Area			
Photo Point ID 16 - Seismic Line 6 (East-West)			
			

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ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
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		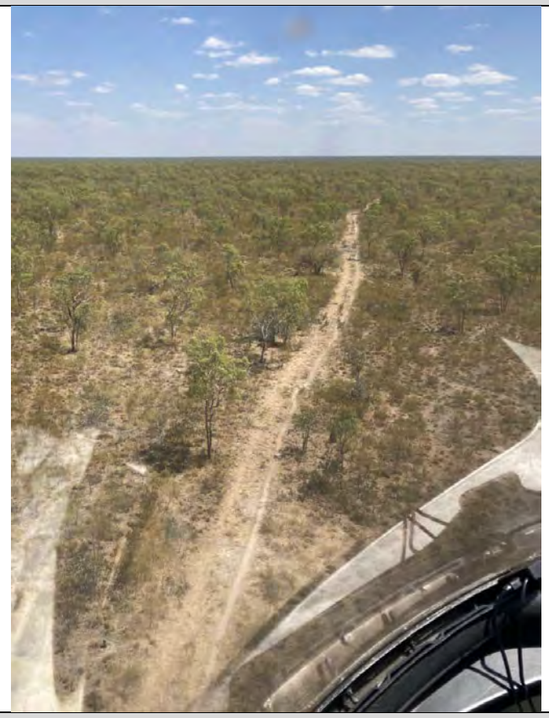	
Photo Point ID 18 - Seismic Line 7 (East-West)			
			

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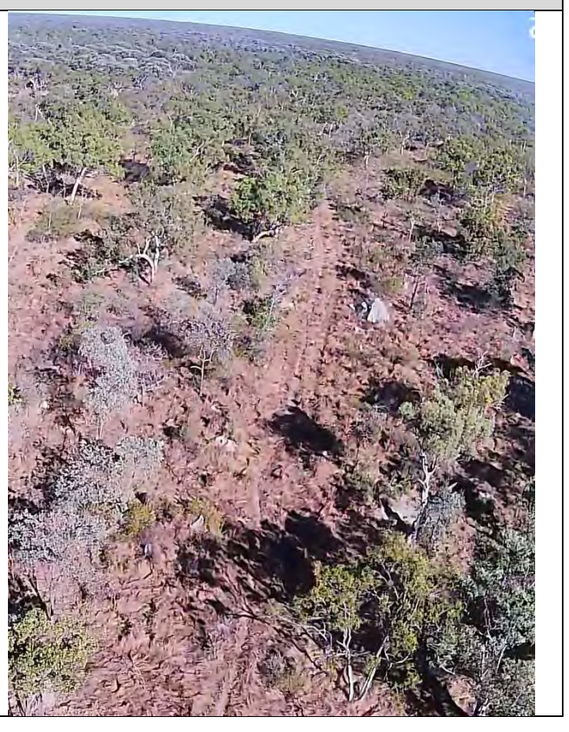
May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 19 - Seismic Line 7 (East-West)			
			
Photo Point ID 20 - Seismic Line 7 (East-West)			
			

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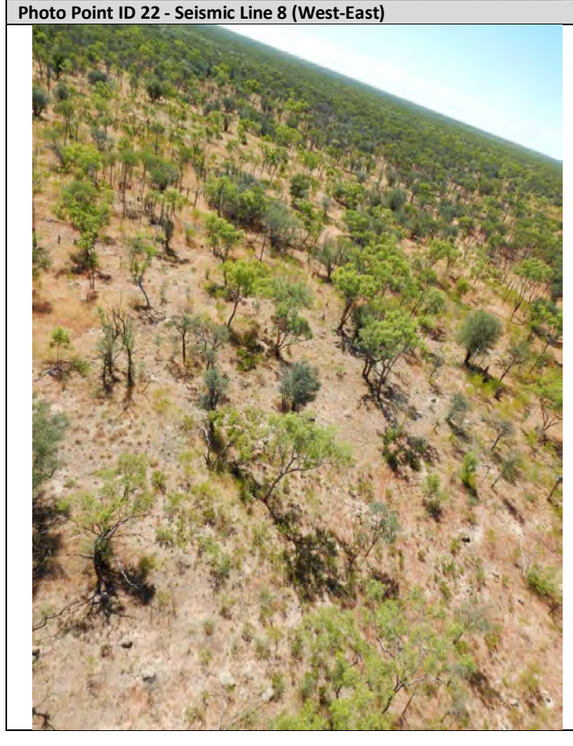
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 21 - Seismic Line 7 (East-West)			
			
Photo Point ID 22 - Seismic Line 8 (West-East)			
			

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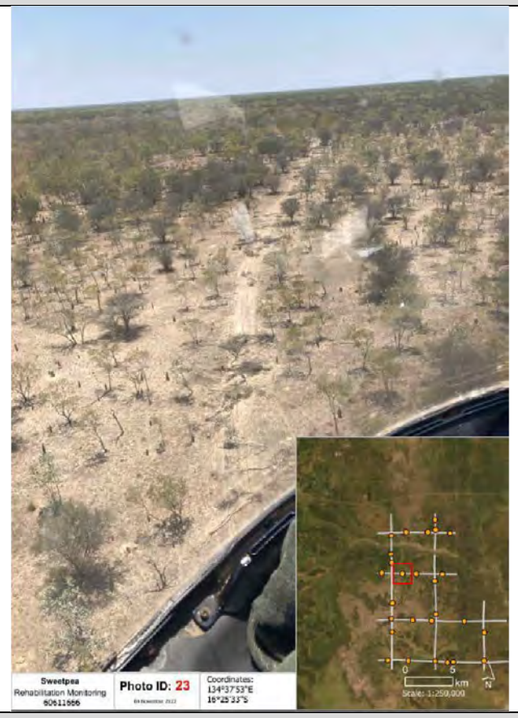
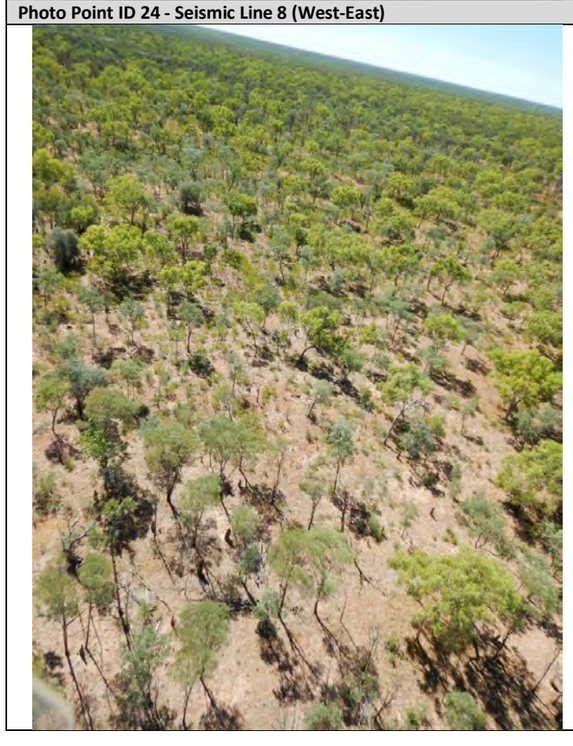
May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 23 - Seismic Line 8 (West-East)			
			
Photo Point ID 24 - Seismic Line 8 (West-East)			
			

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
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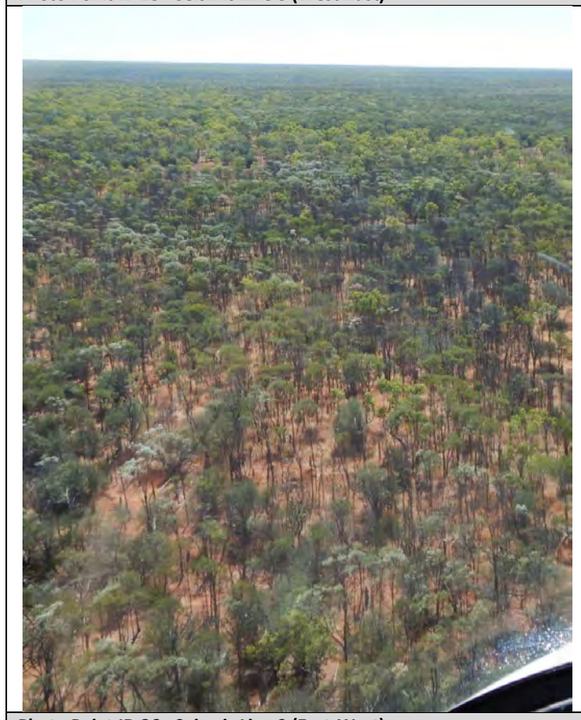


Photo Point ID 26 - Seismic Line 9 (East-West)			
			

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 27 - Seismic Line 9 (East-West)			

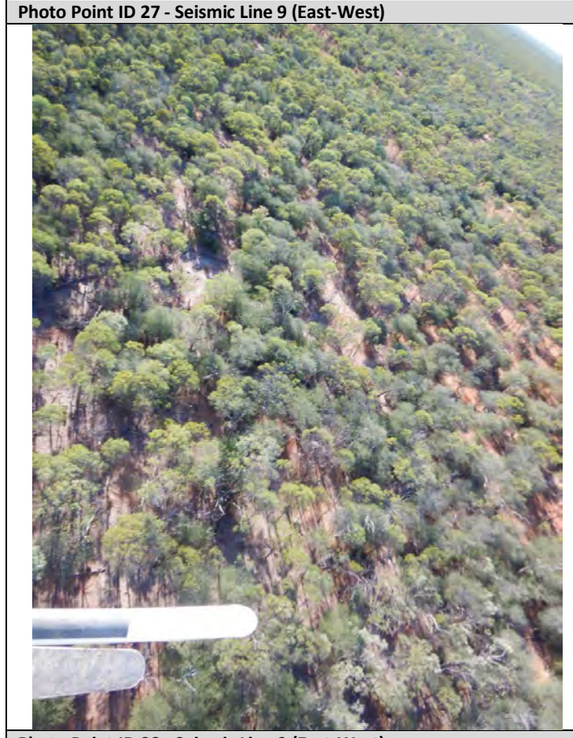
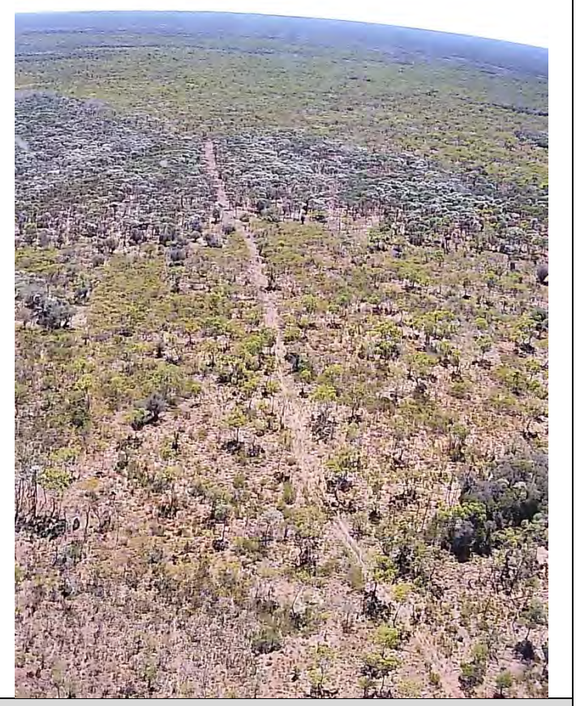
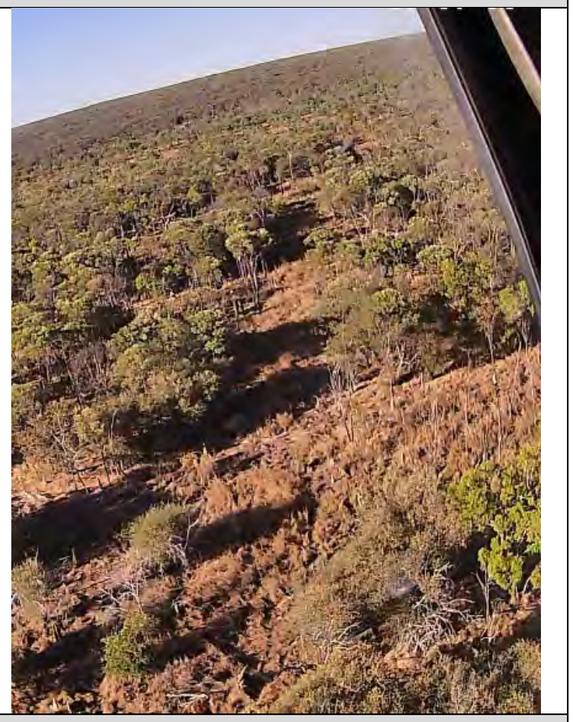
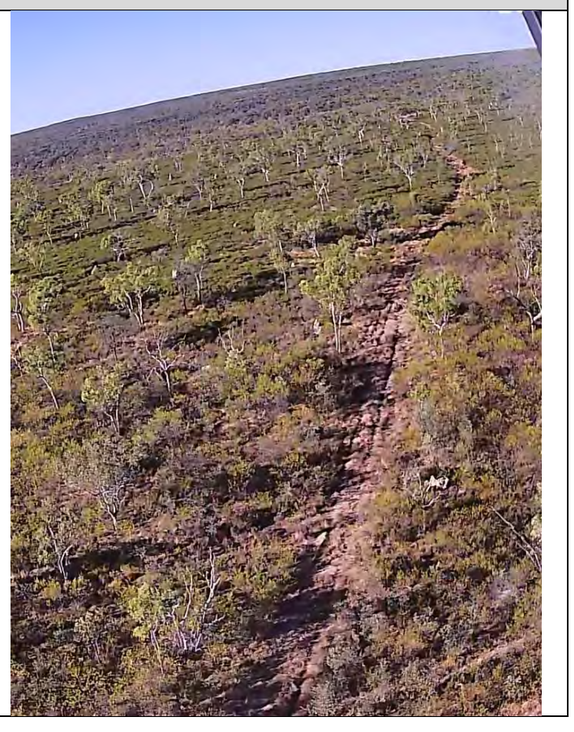



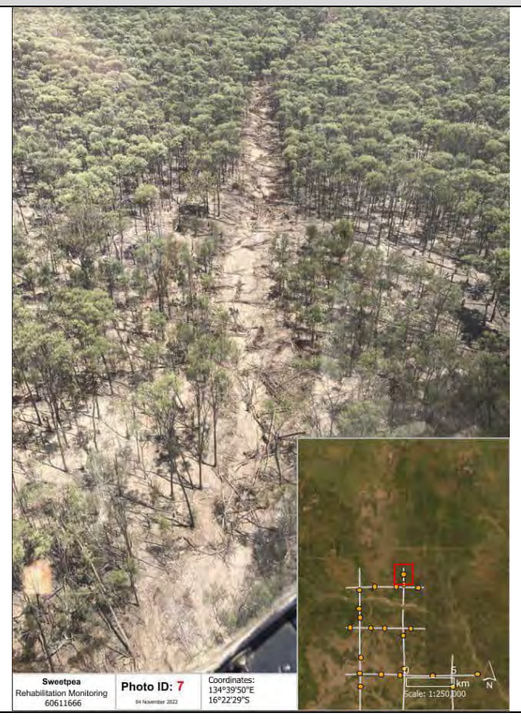
Photo Point ID 28 - Seismic Line 9 (East-West)			
			

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

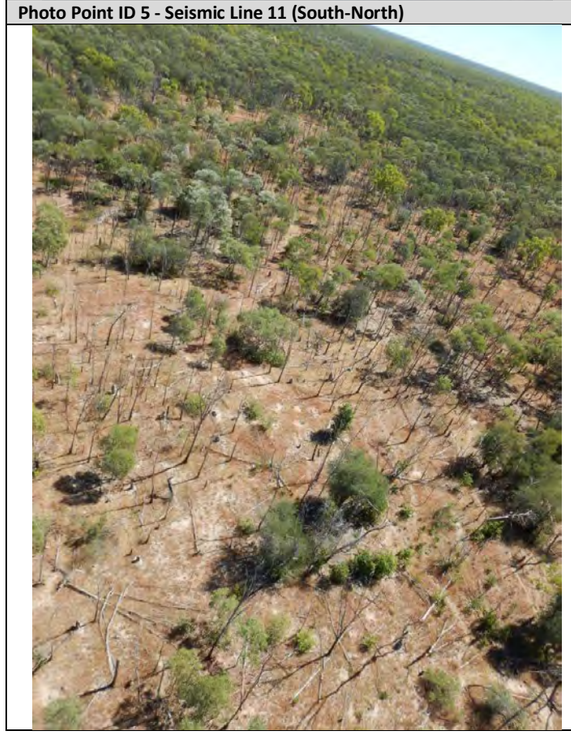
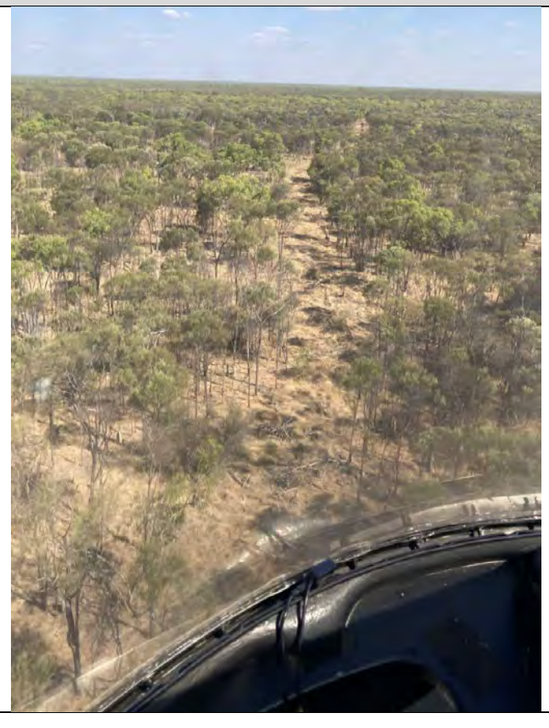
May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 8 - Seismic Line 10 (North-South)			
			
Photo Point ID 9 - Seismic Line 10 (North-South)			
			

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 10 - Seismic Line 10 (North-South)			
			
Photo Point ID 11 - Seismic Line 10 (North-South)			
			

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 12 - Seismic Line 10 (North-South)			
No Photo in Close Proximity to Area			
Photo Point ID 7 - Seismic Line 11 (South-North)			
			

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 6 - Seismic Line 11 (South-North)			
			
Photo Point ID 5 - Seismic Line 11 (South-North)			
			

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 4 - Seismic Line 11 (South-North)			
			
Photo Point ID 3 - Seismic Line 11 (South-North)			
		No Photo in Close Proximity to Area	

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

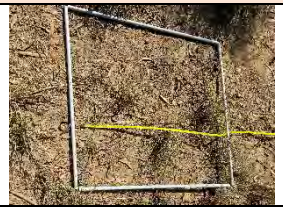
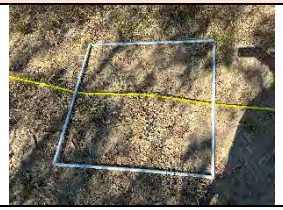
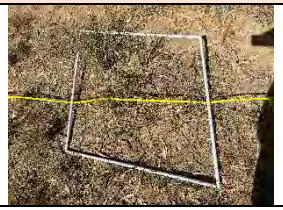
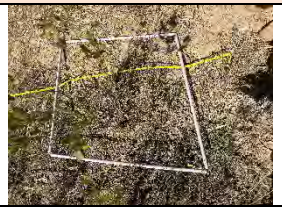
May 2020 Baseline Survey Baseline (AECOM 2020)	November 2022 Rehab Survey ~1 month post remediation (AECOM 2022)	September 2023 Rehab Survey 13 months post remediation (AECOM 2023)	July 2024 Rehab Survey 23 months post remediation (Tamboran 2024)
Photo Point ID 1 - Seismic Line 12 (South-North)			
			
Photo Point ID 2 - Seismic Line 12 (South-North)			
			

APPENDIX B

Quadrat Photo Log

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

Appendix B Quadrat Photo Log

GS Transect 3 –Seismic Line 6 E-W – Impact Site (16/07/2024)				
				
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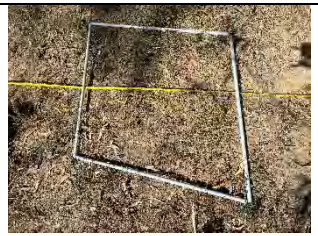
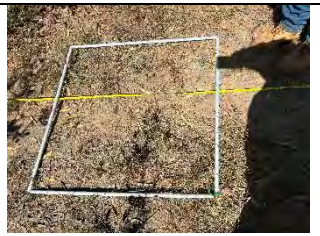
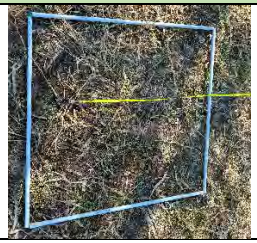
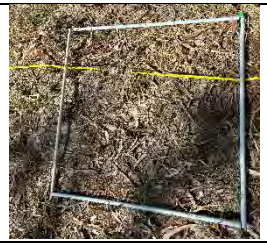
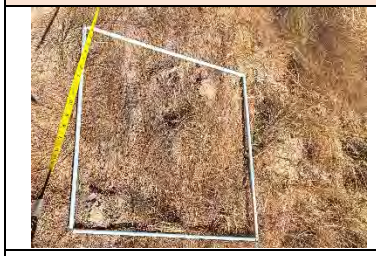
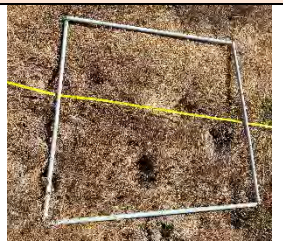
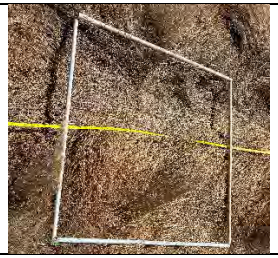
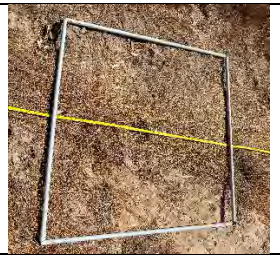
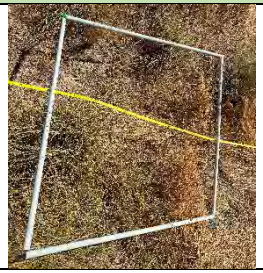
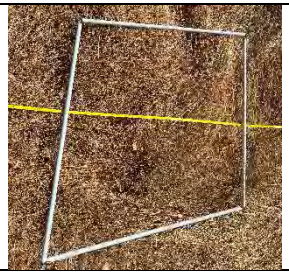
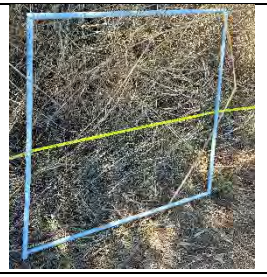
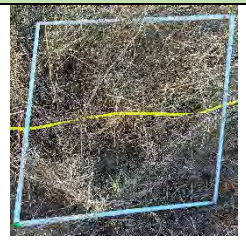
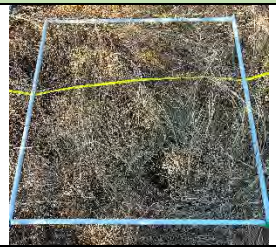
				
Quadrat 6	Quadrat 7	Quadrat 8	Quadrat 9	Quadrat 10
GS Transect 4 –Seismic Line 6 E-W – Analogue Site (16/07/2024)				
				
Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5
				
Quadrat 6	Quadrat 7	Quadrat 8	Quadrat 9	Quadrat 10

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

GS Transect 5 –Seismic Line 10 N-S – Impact Site (17/07/2024)				
				
Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5
				
Quadrat 6	Quadrat 7	Quadrat 8	Quadrat 9	Quadrat 10
GS Transect 6 –Seismic Line 10 N-S – Analogue Site (17/07/2024)				
				
Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5
				
Quadrat 6	Quadrat 7	Quadrat 8	Quadrat 9	Quadrat 10

Sweetpea Petroleum Pty Ltd
ABN: 472 074 750 879

GS Transect 7 –Seismic Line 9 E-W – Impact Site (17/07/2024)				
				
Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5
				
Quadrat 6	Quadrat 7	Quadrat 8	Quadrat 9	Quadrat 10
GS Transect 8 –Seismic Line 9 E-W – Analogue Site (17/07/2024)				
				
Quadrat 1	Quadrat 2	Quadrat 3	Quadrat 4	Quadrat 5
				
Quadrat 6	Quadrat 7	Quadrat 8	Quadrat 9	Quadrat 10

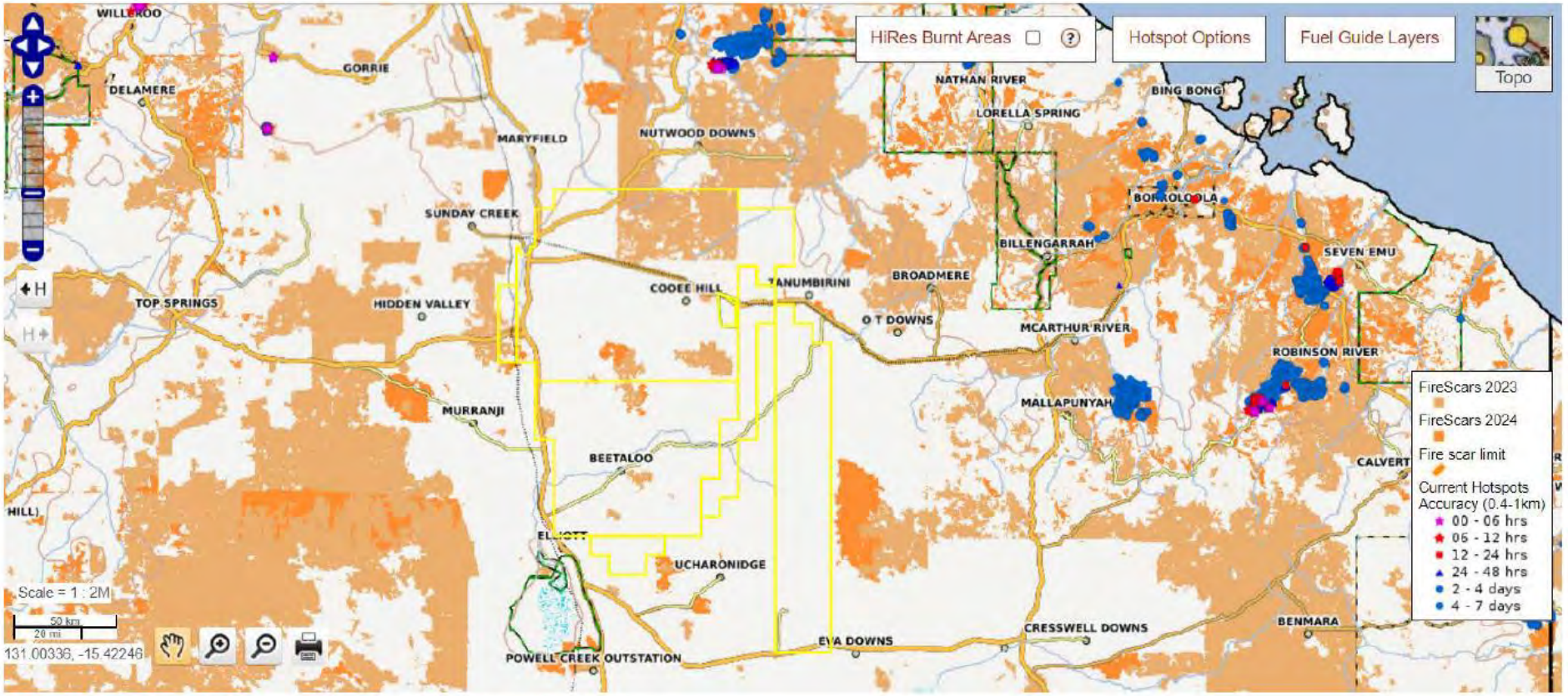
ATTACHMENT B: Incidents for reporting period – 3 November 2023 to 2 November 2024

Incident Date	Incident Number	Actual Consequence	Potential Consequence	Consequences	Department Responsible	Location	Lat	Long	Summary	Source	Volume/Quantity Spilled/Leaked	Volume Soil Removed	Action Taken	Status
NIL														

ATTACHMENT C: 2023 - 2024 NAFI fire scars in the vicinity of EMP well sites

Maverick 1 Well Site

Tamboran Permit Areas - Fire scars for 2023 and 2024



Sourced from NAFI Fire History - Fire Scars by Year

Last fire near Maverick 1 (LP1) well site was recorded in 2020