



Report

Integrated Gas

BEETALOO BASIN VELKERRI 76 S2 DRILLING, STIMULATION AND WELL TESTING

Annual Environmental Performance Report

THE THREE WHATS

**What can go wrong?
What could cause it to go
wrong?
What can I do to prevent it?**

Beetaloo Basin Velkerri 76 S2 drilling, stimulation and well testing AEPR


Document Details

Document title	Beetaloo Basin Velkerri 76 S2 Drilling, Stimulation and Well testing Annual Environmental Performance Report
EMPs Covered	Beetaloo Basin Velkerri 76 S2 Drilling, Stimulation and Well testing Program
Exploration Permit	EP 76
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Signature and certification

I hereby declare that the information provided in this annual environment performance report and accompanying documents is to the best of my/our knowledge, true and correct.	
Signature	
Name	Matt Kernke
Position	Approvals Manager Beetaloo and Growth Assets
Date	23/03/2022

Beetaloo Basin Velkerri 76 S2 drilling, stimulation and well testing AEPR

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1. Introduction

The Petroleum (Environment) Regulations 2016 (NT) include a requirement¹ for the interest holder to provide a report to the Minister on an annual basis that outlines the environmental performance of regulated activities. The Annual Environment 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). The report is to consider information required to be recorded, monitored or reported under the Petroleum (Environment) Regulations 2016 (the Regulations) and any other law in force in the Northern Territory related to conduct of the regulated activity.

This AEPR covers the regulated activities approved under the Beetaloo Basin Velkerri 76 S2 Drilling, Stimulation and Well Testing Program EMP approved 23/12/2019.

The AEPR covers the reporting period from the 23/12/2020 to the 24/12/2021.

1.1 Acronyms and abbreviations

Table 1 Acronyms and abbreviations

Acronym	Definition
AAPA	Aboriginal Area Protection Authority
CMS	Compliance management system
COP	Code of Practice: Onshore Petroleum Activities in the Northern Territory
DEPWS	Department of Environment, Parks and Water Security
DITT	Department of Industry, Innovation and Trade
FTP	File Transfer Protocol
ha	Hectare
OCIS	Origins Collective Intelligence System used for managing incident data
Regulations	Petroleum (Environment) Regulations 2016
WBIV	Well barrier integrity verification

1.2 Background

During the reporting period, regulated activities under the Velkerri 76 S2 drilling, stimulation and well testing EMP were restricted to the drilling of 1 vertical exploration well. Stimulation of the Velkerri 76 S2-1 well is not anticipated to commence until 2023.

An overview of the location of the Velkerri 76 S2 is provided in Figure 1.

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

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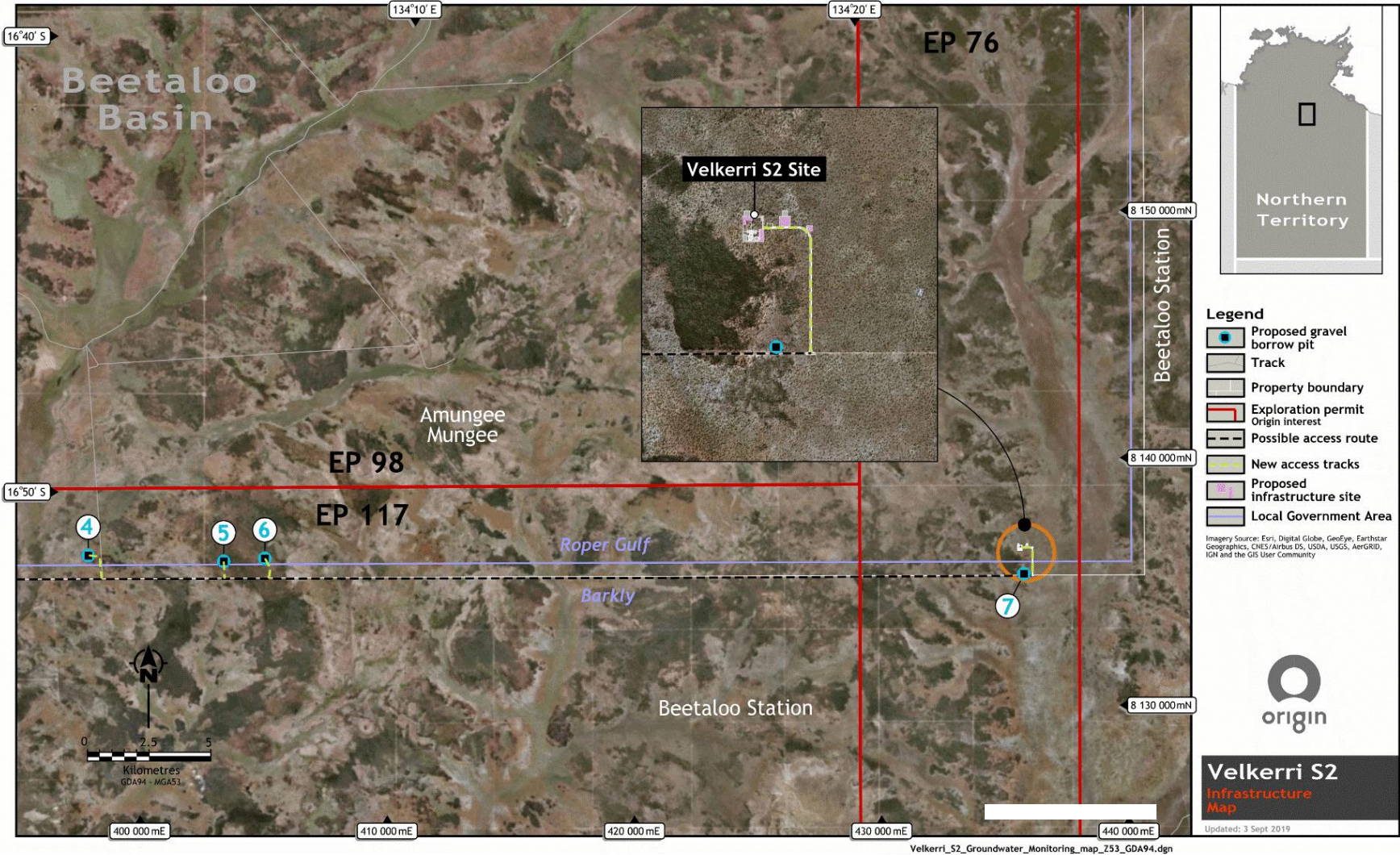


Figure 1 Beetaloo Velkerri 76 S2 drilling, stimulation and well testing location

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1.3 Contents of Performance Report

This AEPR describes the environmental performance of Origin by evaluation of the following:

1. compliance with Ministerial approval conditions, for each EMP
2. compliance with each environmental outcome and environmental performance standard within the approved EMPs
3. compliance with reporting requirements in accordance with the Code of Practice: Onshore Petroleum Activities in the Northern Territory (COP) and the Regulations
4. all recordable and reportable incidents, including root cause analysis and related corrective actions to prevent re-occurrence
5. findings of all regulatory inspections and audits and related actions to address any findings.

1.4 Assessment of compliance

Table 2 shows the compliance status indicators used in this AEPR which have been defined by the Department of Environment, Parks and Water Security (DEPWS).

Table 2 Compliance descriptors

Indicator	Description
Compliant	Compliant with requirement for entire 12-month reporting period
Not Compliant	Interest holder did not comply with the requirement during the reporting period
Not Applicable	Requirement not applicable during the reporting period

1.5 Evidence of compliance

The following sources of evidence are used to demonstrate compliance:

1. internal monitoring of compliance by Origin through internal assurance audits, observations and incident reporting
2. outcomes from regulatory inspection/s conducted by DEPWS, Petroleum Operations
3. recordable and reportable incident reports submitted to DEPWS Petroleum Operations
4. reports provided to DEPWS, the Department of Industry, Tourism and Trade (DITT) and other government agencies.

2. Demonstration of Compliance

2.1 Ministerial Condition compliance

Table 3 demonstrates Origin's compliance with Ministerial EMP approval conditions.

Table 3 Ministerial condition summary table

No	Ministerial condition	Compliance Status	Evidence
1	The interest holder must submit to DEPWS, an updated timetable for the regulated activity prior to the commencement of the activity and provide an updated timetable to DEPWS each month. The timetable must include dates for the implementation of commitments, development of key documents and associated hold points.	Compliant	Monthly reports were provided to DEPWS on the following dates: <ul style="list-style-type: none">• 15/01/2021• 17/02/2021• 19/03/2021• 16/04/2021• 19/05/2021

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No	Ministerial condition	Compliance Status	Evidence
			<ul style="list-style-type: none"> • 17/06/2021 • 17/07/2021 • 18/08/2021 • 19/09/2021 • 20/10/2021 • 22/11/2021 • 17/12/2021
2	In addition to the minimum methane leak detection inspection frequencies required by the Code, the interest holder must undertake methane leak detection within seven (7) days of commissioning equipment that is in hydrocarbon service and under pressure and record to an auditable standard	Not applicable	The Velkerri 76 S2 vertical well is not in hydrocarbon service.
3	The Interest Holder must provide to DEPWS an analysis of offsite disposal and beneficial use options, other than flaring, for liquid hydrocarbons if the combustion of liquid hydrocarbons at the flare exceeds an average of 5000 litres per day during the first month or following months of flaring.	Not applicable	The Velkerri 76 S2 well has not been stimulated or tested during the reporting time frame.
4	In the event of any accidental release (overflow, failure, spill or leak) to ground of flowback fluid wastewater that exceeds 200 Litres, the interest holder must provide a written report to DENR within 24 hours after the incident was detected. The report must contain: <ol style="list-style-type: none"> 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 correction actions proposed to be taken to prevent recurrence of an incident of a similar nature. 	Not applicable	No stimulation activities were completed during the reporting time frame.

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No	Ministerial condition	Compliance Status	Evidence
5	The interest holder must provide DEPWS a fortnightly weather forecast for the risk of onset of wet weather for the duration of the regulated activity	Compliant	Origin submits a weather forecast as a part of its monthly activity status. This was agreed between Origin and DEPWS on 21/01/2021
6	The interest holder must provide to DEPWS a cementing report for the surface casing (13 3/8") through the aquifers, as soon as practicable but not more than 14 days after completion of the cementing job for the Velkerri exploration well EP76 S2-1	Compliant	The cement job on the Velkerri 76 S2-1 surface casing section was completed on the 29/08/21. The cementing report was provided to DEPWS on the 10/09/2021.

2.2 Environmental outcomes and performance standards

Table 4 provides a systematic overview of Origin's compliance with the environmental outcomes and environmental performance standards within the approved EMP.

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Table 4 Environmental outcome and performance standard compliance summary

NO#	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
1	<ul style="list-style-type: none"> Avoid, minimise and control soil erosion and discharge of sediment or soil into waterways or established drainage systems Minimise disturbance of soil, vegetation and drainage during site activities Minimise the creation of dust Prevent the contamination of soil to maintain the viability of soil resources 	<ul style="list-style-type: none"> No vegetation clearing to be undertaken under EMP. 	Compliant	<ul style="list-style-type: none"> No clearing was undertaken as a part of this EMP.
2		<ul style="list-style-type: none"> No incidence of erosion and sedimentation causing material environmental harm. 'Material environmental harm' is defined in section 117AAB(1) of the Petroleum Act and in section 7.7.1 of the EMP. 	Compliant	<ul style="list-style-type: none"> Routine inspections have not identified any material erosion and sediment control that would be classified as causing material environmental harm, as evidenced through the Origin incident management system.
3		<ul style="list-style-type: none"> Areas left safe, stable and non-polluting. 	Compliant	<ul style="list-style-type: none"> De-mobilisation checklist completed indicating the site was left in a clean and stable state prior to demobilising before the onset of the wet season.
4		<ul style="list-style-type: none"> No spills of chemicals or wastewater that have resulted in material environmental harm. 	Compliant	<ul style="list-style-type: none"> Routine inspections have not identified any spills that would be classified as causing material environmental harm, as evidenced through the Origin incident management system.
5		<ul style="list-style-type: none"> Return disturbed areas to a stable condition such that they are returned to a condition as close as practicable to the surrounding area (or pre-disturbance state) within an acceptable time frame. 	Not Applicable	<ul style="list-style-type: none"> Not applicable as the activity is underway and no rehabilitation has been initiated.
6		<ul style="list-style-type: none"> No offsite releases of wastewater. 	Compliant	<ul style="list-style-type: none"> Routine inspections have not identified any offsite releases of wastewater as evidenced through the Origin incident management system. Onsite wastewater storage is restricted to fluids within the drilling sump.

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N0#	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
7		<ul style="list-style-type: none"> Zero onsite spills of wastewater >2,500L. 	Compliant	<ul style="list-style-type: none"> Routine inspections have not identified any offsite releases of wastewater as evidenced through the Origin incident management system. Onsite wastewater storage is restricted to fluids within the drilling sump.
8		<ul style="list-style-type: none"> Zero wastewater transport spills. 	Not Applicable	<ul style="list-style-type: none"> No wastewater trucking off site has been undertaken.
9		<ul style="list-style-type: none"> Zero wastewater tank overtopping events. 	Compliant	<ul style="list-style-type: none"> No wastewater storage is onsite.
10	<ul style="list-style-type: none"> Avoid and minimise the potential contamination caused by the discharge of sediment or contaminated storm water to waterways or established drainage systems. Contain any potential contaminants for treatment or disposal. 	<ul style="list-style-type: none"> No use of surface water. 	Compliant	<ul style="list-style-type: none"> No use of surface water as no watering points located within the vicinity (~20km) of the site.
11		<ul style="list-style-type: none"> No release of drilling and stimulation wastewater to watercourses or areas surrounding the lease pad. 	Compliant	<ul style="list-style-type: none"> Routine inspections have not identified any offsite releases of wastewater as evidenced through the Origin incident management system. Onsite wastewater storage is restricted to fluids within the drilling sump.
12		<ul style="list-style-type: none"> No spills or releases of sediment to watercourses causing material environmental harm. 'Material environmental harm' is defined in section 117AAB(1) of the Petroleum Act and in section 7.7.1 of the EMP. 	Compliant	<ul style="list-style-type: none"> No regulated activities were undertaken during the reporting time frame.
13		<ul style="list-style-type: none"> No offsite releases of wastewater. 	Not Applicable	<ul style="list-style-type: none"> No regulated activities were undertaken during the reporting time frame.
14		<ul style="list-style-type: none"> Zero onsite spills of wastewater >2,500L. 	Not Applicable	<ul style="list-style-type: none"> No regulated activities were undertaken during the reporting time frame.
15		<ul style="list-style-type: none"> Zero wastewater transport spills Environment Management Plan NT-2050-15-MP-032 121. 	Not Applicable	<ul style="list-style-type: none"> No regulated activities were undertaken during the reporting time frame.

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NO#	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
16		<ul style="list-style-type: none"> Zero wastewater tank overtopping events. 	Not Applicable	<ul style="list-style-type: none"> No flowback was stored onsite during the reporting time frame.
17	<ul style="list-style-type: none"> To manage exploration activities to prevent over-extraction of groundwater Preserve groundwater quantity for livestock supplies (the surrounding water use) 	<ul style="list-style-type: none"> Groundwater take less than maximum permitted volume of 38ML for the activity. 	Compliant	<ul style="list-style-type: none"> Cumulative groundwater extraction at the Velkerri 76 S2 site is 28.6.
18		<ul style="list-style-type: none"> No material impairment of any surrounding pastoralist extraction bores associated with Origin's activities. Impairment is defined as a 1m drawdown in the static water level of the bore attributable to Origin's activities. 	Compliant	<ul style="list-style-type: none"> Groundwater monitoring data at the site confirms no observed drawdown. The observed data.
19		<ul style="list-style-type: none"> No material change in quality attributed to Origin's stimulation activities at the surrounding impact monitoring bore. Material change is defined as a (>1 year) reduction of groundwater quality exceeding the ANZECC Guidelines for Livestock use. 	Not Applicable	<ul style="list-style-type: none"> No stimulation activities were undertaken during the reporting time frame.
20	<ul style="list-style-type: none"> Minimise additional disturbance to flora and fauna 	<ul style="list-style-type: none"> No unauthorised clearing of vegetation. 	Not Applicable	<ul style="list-style-type: none"> No clearing was undertaken as a part of this EMP.
21	<ul style="list-style-type: none"> No disturbance to high conservation areas 	<ul style="list-style-type: none"> No native flora or fauna impacts due to wastewater or chemical exposure. 	Not Applicable	<ul style="list-style-type: none"> No fauna deaths have been identified associated with drilling wastewater storage during routine inspections.
22	<ul style="list-style-type: none"> Avoid the introduction of weeds Avoid the spread of existing weeds 	<ul style="list-style-type: none"> No introduction or spread of declared weeds resulting from Origin's activities 	Compliant	<ul style="list-style-type: none"> No declared weeds have been spread as a part of the drilling program. <i>Hyptis</i> sp. has been identified in the location, however this was potentially introduced as a part of a different regulated activity and is under active management and control.

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N0#	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
23		<ul style="list-style-type: none"> Six-monthly weed inspections completed on all activity areas- including camp and drill pads, access tracks, borrow pits 	Compliant	<ul style="list-style-type: none"> 6 monthly weed inspections completed on 28 May and October/ November 2021.
24	<ul style="list-style-type: none"> Minimise impacts on soil, surface water, groundwater, sensitive habitat and air quality Minimise creation of food sources or habitat for pest species Minimise waste generation through reduce, reuse, recycle programs 	<ul style="list-style-type: none"> All waste volumes tracked whilst on-site and in transport 	Compliant	<ul style="list-style-type: none"> Drilling sump wastewater volumes tracked weekly, evidenced by weekly reports to DEPWS. No wastewater transportation undertaken.
25		<ul style="list-style-type: none"> Waste transport certificates available for all wastes generated 	Compliant	<ul style="list-style-type: none"> Waste transport certificates and tracking data recorded by drilling contractor.
26		<ul style="list-style-type: none"> No off-site releases of wastewater or waste products 	Compliant	<ul style="list-style-type: none"> No offsite releases of wastewater identified during routine inspections evidenced by lack of incidents within incident management system
27		<ul style="list-style-type: none"> Zero wastewater tank overtopping events 	Compliant	<ul style="list-style-type: none"> No sump overtopping incidents evidenced by water level monitoring.
28		<ul style="list-style-type: none"> Zero onsite spills of wastewater >2,500L to grade (compacted lease pad surface) 	Compliant	<ul style="list-style-type: none"> No wastewater spills >2,500L reported/ observed as evidenced by lack of incidents within incident management system.
29		<ul style="list-style-type: none"> Zero wastewater transport spills 	Not Applicable	<ul style="list-style-type: none"> Not applicable as no wastewater transport activities have been completed.
30		<ul style="list-style-type: none"> No material environmental harm resulting from spills. Material environmental harm' is defined in section 117AAB(1) of the Petroleum Act 	Compliant	<ul style="list-style-type: none"> No material environmental harm resulting from any spills as evidenced by lack of incidents within incident management system.
31		<ul style="list-style-type: none"> Minimise environmental nuisance at sensitive receptors Minimise greenhouse gas emissions 	<ul style="list-style-type: none"> No valid complaints regarding dust / air quality resulting from Origin's activities 	Compliant

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NO#	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
32		<ul style="list-style-type: none"> All complaints responded to and, where appropriate, corrective action taken 	Not Applicable	<ul style="list-style-type: none"> No air quality complaints received.
33	<ul style="list-style-type: none"> Manage activities in accordance with occupational health and safety guidelines for noise, vibration and light exposure 	<ul style="list-style-type: none"> No valid nuisance-related complaints received from sensitive receptors. 	Complaint	<ul style="list-style-type: none"> No nuisance related complaints received One complaint regarding cattle escaping due to an open gate was received during period; not associated with nuisance.
34	<ul style="list-style-type: none"> Minimise nuisance noise and vibration impacts on surrounding communities or exploration workers Minimise disruption to fauna and stock 	<ul style="list-style-type: none"> All complaints responded to and, where appropriate, corrective action taken 	Compliant	<ul style="list-style-type: none"> Complaint responded to and rectified with Pastoralist
35	<ul style="list-style-type: none"> Minimise the risk of causing bushfires from Origin's activities Minimise impacts on environmental habitat and fauna, impacts on stakeholders, impacts on culturally significant sites, public infrastructure and community lands Ensure proper health and safety plan for activities Prevent accidental fire risk and ensure safe storage of chemicals to prevent fire damage 	<ul style="list-style-type: none"> No uncontrolled fires occurring as a result of exploration works 	Compliant	<ul style="list-style-type: none"> No fires identified resulting from the regulated activities.
36	<ul style="list-style-type: none"> Avoid disturbance or damage to Aboriginal cultural heritage artefacts or sacred sites 	<ul style="list-style-type: none"> No unauthorised activities within or access to a Restricted Work Area 	Compliant	<ul style="list-style-type: none"> No unauthorised access to sacred sites reported in Origin's incident management system.
37	<ul style="list-style-type: none"> Minimise impacts and disruption to activities of Indigenous stakeholders in culturally significant areas Ensure adequate background information and training is provided to employees and contractors working in culturally significant areas 	<ul style="list-style-type: none"> No non-compliances with AAPA certificate conditions 	Compliant	<ul style="list-style-type: none"> No non-compliances with AAPA certificate requirements; only listed activities within certificate completed

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NO#	Environmental outcomes	Environmental Performance Standard	Compliance	Evidence
	<ul style="list-style-type: none"> Ensure that the health and safety of employees, contractors and the community is not compromised through management of cultural and environmental awareness 			
38	<ul style="list-style-type: none"> Minimise impacts on the local community and services 	<ul style="list-style-type: none"> All complaints are responded to and closed out 	Compliant	<ul style="list-style-type: none"> No complaints received
39	<ul style="list-style-type: none"> Minimise safety risks to the public and other third parties Maintain and enhance partnerships with the local community, including using local contractors and maximising opportunities for local employment and training 	<ul style="list-style-type: none"> >60% of addressable spend provided to NT businesses (addressable spend is defined as material and services where an NT service provider exists and is capable of providing the goods and services required). 	Compliant	<ul style="list-style-type: none"> Approximately 80% of addressable spend (addressable spend is defined as material and services where an NT service provider exists and is capable of providing the goods and services required) was delivered by NT providers.

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2.3 Mandatory reporting requirements

Table 5 demonstrates Origin's compliance with reporting requirements in the COP and compliance with reporting requirements under the Regulations, schedule 1, item 11(2), which requires all information required to be recorded, monitored or reported has been provided. Where relevant, Origin has also confirmed that all records, monitoring or required reporting under the Regulations² have been provided to DEPWS or the relevant NTG agency.

Table 5 summary of mandatory reporting requirements

No#	Reference	Requirement	Compliance Status	Evidence
1	COP A.3.5	Geospatial information depicting areas cleared is to be provided to the Minister.	Not Applicable	<ul style="list-style-type: none"> Not Applicable for Velkerri 76 S2 Drilling, stimulation and well testing EMP as no clearing has occurred under this EMP
2	COP A.3.6 (b)	Weed management plan developed as part of the EMP must provide for ongoing weed monitoring.	Compliant	<ul style="list-style-type: none"> Weed management plan developed, with 6 monthly weed monitoring completed. Weed management plan submitted to DEPWS 15/11/2018 6 monthly weed monitoring completed May and November 2021
3	COP A.3.7(a)vi	The fire management plan developed as part of the EMP must provide for annual fire mapping to monitor changes to fire frequency in the relevant areas.	Compliant	<ul style="list-style-type: none"> Fire management plan implemented. Annual fire mapping has been provided to DEPWS on the 17/12/2021
4	COP A.3.9(c) COP A.3.9(e)	The rehabilitation plan developed as part of the EMP 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.	Compliant	<ul style="list-style-type: none"> Rehabilitation management plan developed and submitted to DEPWS 17/04/2020 The rehabilitation requirements are not applicable as all sites remain operational, with rehabilitation activities not undertaken to date.
5	COP 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	Not Applicable	<ul style="list-style-type: none"> Velkerri 76 S2 Drilling stimulation and Well testing EMP: Not Applicable as no well hydraulic fracturing activities were completed

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

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No#	Reference	Requirement	Compliance Status	Evidence
		<p>at a particular depth interval):</p> <p>a) total volume of hydraulic fracturing fluid pumped,</p> <p>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</p> <p>typical and maximum concentrations of chemicals or other substances used.</p>		during the reporting period.
6	COP B.4.13.2(k)iv	Where venting is the only technically feasible option for managing produced gas, the technical considerations preventing the use of the recovered gas must be recorded and included in the operator's annual report.	Not Applicable	<ul style="list-style-type: none"> Velkerri 76 S2 Drilling stimulation and Well testing EMP: Not Applicable as no stimulation or well testing activities were completed during the reporting period.
7	COP 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 DPIR.	Compliant	<ul style="list-style-type: none"> WBIV report submitted to DITT on the December 01 2021
8	COP 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.	Not Applicable	<ul style="list-style-type: none"> Velkerri 76 S2 Drilling stimulation and Well testing EMP Not Applicable as decommissioning activities have not commenced.
9	COP 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.	Compliant	<ul style="list-style-type: none"> All water monitoring bore completion reports have been submitted to DEPWS, including initial water quality data post completion. Baseline groundwater monitoring has been completed in accordance with the Preliminary guidelines for groundwater monitoring bore for

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No#	Reference	Requirement	Compliance Status	Evidence
				<p>exploration petroleum wells in the Beetaloo sub-basin</p> <ul style="list-style-type: none"> Groundwater monitoring data provided to DEPWS for bores where access is permitted (including other sites outside the scope of the EMP) on: <ul style="list-style-type: none"> 08/12/2020 12/01/2021 12/02/2021 16/04/2021 17/05/2021 06/08/2021 11/11/2021
10	COP 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.	Compliant	<ul style="list-style-type: none"> Velkerri 76 S2 Drilling stimulation and Well testing EMP: Monitoring requirements of wastewater management outline the routine inspections on wastewater tanks, secondary containment and wastewater storage levels and volumes to be implemented onsite. Routine monitoring of the wastewater levels in the sump have been completed and reported to DEPWS weekly.
11	COP C.6.1(d)	Wastewater tracking documentation must be reported to the Minister at least annually in accordance with the framework provided in the EMP.	Not Applicable	<ul style="list-style-type: none"> Not applicable as no wastewater transportation activities have been completed.
12	COP 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.	Compliant	<ul style="list-style-type: none"> Waste management plan includes a monitoring program to detect impacts from wastewater storages on fauna and human receptors.
13	COP D.4.3.2(f)	A written report detailing the levels of methane	Not Applicable	<ul style="list-style-type: none"> Not Applicable to the scope of the AEPR- this

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No#	Reference	Requirement	Compliance Status	Evidence
		measured, the duration of the unusual readings and the results of the investigation (including remedial actions) must be submitted within one month of the significantly higher-level methane event being detected.		condition is associated with production and not exploration.
14	COP D.5.9.2(c)	Emissions from exploration, well construction (including during flowback) and workovers must be measured and reports submitted.	Compliant	<ul style="list-style-type: none"> The regulated activities associated with the Velkerri 76 S2 Drilling, stimulation and well testing EMP were restricted to drilling during the reporting period. Data was retained on fuel usage, drilling duration and core gas content which will be utilised to calculate emissions. Report due 30 Sept 2022
15	COP 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.	Not Applicable	<ul style="list-style-type: none"> Not Applicable to the scope of the AEPR as the regulated activities within the EMP's do not include downstream operations.
16	COP D.6.2(a)	Reports of baseline assessments must be submitted at the conclusion of each field campaign.	Not Applicable	<ul style="list-style-type: none"> Not Applicable to the scope of the AEPR. CSIRO completed baseline assessments through DITT.
17	COP 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.	Not Applicable	<ul style="list-style-type: none"> Not applicable to the Velkerri 76 S2 Drilling, stimulation and well testing EMP as no venting or flaring has occurred during the reporting period.
18	Regulation 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	Compliant	<ul style="list-style-type: none"> The EMP has approximately 2.5 years remaining before the next review.

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No#	Reference	Requirement	Compliance Status	Evidence
		is accepted and the plan ceases to be in force.		
19	Regulation 33	DEPWS is 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.	Not Applicable	<ul style="list-style-type: none"> No reportable incidents have been recorded during the reporting period.
20	Regulation34	Reports on reportable incidents are to 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/clean-up of the affected area.	Not Applicable	<ul style="list-style-type: none"> No reportable incidents have been recorded for the Velkerri 76 S2 Drilling stimulation and Well testing EMP.
21	Regulation 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).	Compliant	<p>Quarterly recordable incidents reports were provided as follows:</p> <ul style="list-style-type: none"> Q4 2020 report provided 14/12/2020 Q1 2021 report provided 14/04/2021 Q2 2021 report provided 01/07/2021 Q3 2021 report provided 14/10/2021
22	Regulation 37A	A report about flowback fluid from hydraulic fracturing must be provided to the Minister within 6 months of the flowback occurring.	Not Applicable	<ul style="list-style-type: none"> Velkerri 76 S2 Drilling stimulation and Well testing EMP: Not Applicable as no hydraulic fracturing or flowback activities were completed during the reporting period.
23	Regulation 37B	A report about produced water from hydraulic fracturing must be provided to the Minister within 6 months of the produced water being extracted.	Not Applicable	<ul style="list-style-type: none"> Velkerri 76 S2 Drilling stimulation and Well testing EMP: Not Applicable as no hydraulic fracturing or flowback activities were completed during the reporting period.
24	Regulations, Schedule 1, item 9(2)	Interest holders are required to conduct future engagement with stakeholders, in	Compliant	<ul style="list-style-type: none"> Land access agreements are in place covering all

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No#	Reference	Requirement	Compliance Status	Evidence
		accordance with the description in the EMP.		<p>current and future activities.</p> <ul style="list-style-type: none"> 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.
25	Regulations, 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 activity.	Compliant	<ul style="list-style-type: none"> Origin notified the Minister and Pastoralist on the 02/07/2021 regarding the commencement of activities.
26	<i>Environment Protection Act 2019 (NT) div 8</i>	Duty to notify the NT EPA as soon as practicable but within 24 hours of any incident which occurs which causes or threatens to cause material or significant environmental harm	Not applicable	<ul style="list-style-type: none"> Not applicable as no incidents threaten to cause environmental harm were identified during the reporting period.
27	<i>Waste Management and Pollution Control Act 1998 (NT) s 14</i>	Duty to notify the NT EPA as soon as practicable but within 24 hours of any incident which occurs which causes or threatens to cause pollution resulting in material or significant environmental harm	Not applicable	<ul style="list-style-type: none"> Not applicable as no incidents threaten to cause pollution were identified during the reporting period.

3. Summary of Compliance

3.1 Overview of Compliance

Table 6 provides a summary of the results of the compliance assessment against the relevant EMP.

Table 6 Velkerri 76 S2 Drilling, stimulation and well testing EMP compliance summary

Compliance Indicator	Number	Percentage
Compliant	42	100%
Not Compliant	0	0%
Not Applicable	30	

3.2 Overview of Items Found Not Compliant

The following sections describe:

- 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.

3.2.1 Ministerial Approval conditions

Not applicable: no non-compliances with Ministerial conditions were recorded.

3.2.2 Environmental Performance Standards

Not applicable: no non-compliances with environmental performance standards were recorded.

3.2.3 Regulatory Reporting

Not applicable: no non-compliances with regulatory reporting standards were recorded.

3.3 Application of Lessons Learned Across Origin's Onshore Interests

There were no environmental incidents relating to the regulated activities undertaken in the reporting period under the EMP covered in this AEPR. No applicable lessons learnt were recorded.