

APO0001742

Approval to undertake assessable prospecting operations

Nyngan

24 April 2024

Application summary

Detail	Application
Reference	APO0001742
Date of approval	24 April 2024
Title	EL 8911 (1992)
Contact	[REDACTED]
Project name	Nyngan
Project location	3km north from Nyngan
Activity type	Non-complying exploration activity

Important note

While every effort is being made to ensure that documents hosted by the NSW Resources Regulator are WCAG 2.0 Level AA compliant, we acknowledge that not all resources have achieved this. If you require this document in an alternative format, please email industry.engagement@regional.nsw.gov.au

The Regulator may make the information in your application and any supporting information (including this approval) available for inspection by members of the public, including by publication on its website or by displaying the information at any of its offices. If you consider any part of your application to be confidential, please communicate this to the Regulator via the message function on this application within the Portal.

Project

Project details

Application APO0001742 relates to the proposed Nyngan at 3km north from Nyngan.

The application proposes the following characteristics.

Detail	Proposal
Activity description	Proposed exploration is to drill up to 3 rotary mud drillholes with diamond tails to approximately 250m depth within the requested polygon area on the maps. Equipment will comprise a diamond drilling rig and support vehicles. A light vehicle will also be used by the field technician and geologist. Drilling is expected to take approximately 3-5 weeks to complete, or 1-2 weeks per drillhole. Not all collars may be drilled. The drill site will be made safe prior to leaving site, and rehabilitation fully completed as soon as practicable. Drilling contractors will utilise above ground sumps and so no excavations are required. The drillhole will be backfilled and rehabilitated in accordance with the requirements of the Exploration Code of Practice – Rehabilitation. The top of the hole will be backfilled with surface soil and topsoil. Above ground sumps will be emptied, and contents disposed of at a suitable facility. All costs associated with emptying above ground sumps and disposal to a licensed facility are borne by the drilling contractor and do not form part of the tenement holders rehabilitation cost estimates for waste removal.
Earthworks or vegetation clearing	Equipment will comprise a diamond drilling rig and support vehicles. A light vehicle will also be used by the field technician and geologist. Earthworks and vegetation clearance is not required for this drilling program. Sites are relatively flat and open. Drill pad areas, affecting approximately 10 x 20m may require minor clearing of grass from the surface, should this be necessary care will be taken to ensure to leave root stock to enable existing vegetation regrowth.
Access to exploration activities	Access to proposed drilling locations will be along station tracks and along the edges of paddocks if necessary, in line with relevant landholder specifications. No new tracks are required to be constructed.

Detail	Proposal
Ancillary activities	No ancillary infrastructure or water storage is required for this program. Accommodation will be in nearby shearers quarters or the nearest hotel/motel.
Anticipated start date	29 April 2024
Expected duration (weeks)	3-5
Expected rehabilitation completion date	8 November 2025
Proposed hours of operation	Other 12hr shifts 6am-6pm, 7 days a week
On-site employee or contractor numbers	6

Exempted areas

The Nyngan has not proposed prospecting in an exempted area.

State conservation areas

The Nyngan has not proposed prospecting in a State Conservation Area.

Site description and existing environment

The project comprises the following existing land uses:

The land is currently utilised for agricultural grazing purposes. The land use will not be changed during or after the proposed drilling works.

The project is located near the following sensitive receptors:

There is one homestead, River Ridge Homestead, located within the proposed drilling area. The relevant landholders in this area are fully informed with the proposed drilling and appropriate access agreements will be in place prior to any works. There are no further sensitive receptors nearby. The town of Nyngan is located approximately 2km south of the proposed drilling area, however tentatively proposed holes are towards the centre and north of this approval area and as such not considered to be of much concern as works have occurred in this area previously.

The project is located with the following soil types and properties:

There are no acid sulfate soils within this area. The proposed drilling area covers predominantly soil type 4 from the Land and Soil Capability Classification, which is moderate to severe limitations. Three drillholes are proposed and this is likely to take one to two weeks per hole. Due to the sensitivity of the soil, access will be restricted to only vital personnel and vehicle movement will be restricted where possible. Should compaction occur of the temporary access routes, this will likely be scarified after use by the landholder. Close consultation with the landholder will be maintained throughout this program. Wind erosion will be assessed in consultation with the landholder prior to site access and mitigation measures considered.

The project has the following existing surface water sources in the area that are likely to be affected by the activity:

Surface water should not be affected by the proposed activities. The nearest watercourses, the Box Cowal and the Bogan River are located on the eastern and western peripheries of this approval area. Actual collar locations will be drilled more than 100m away from any watercourse. Drillholes will not be advanced within 40m of any existing drainages. Specific access to sites will be undertaken in close consultation with the landholder who knows the ground conditions the best.

The project has the following existing groundwater sources that occur in the area that are likely to be affected by the activity:

Groundwater sources should not be adversely affected by the proposed drilling. Groundwater from the nearby bore is recorded as siting around 15m below existing ground level across this area. Suitable drilling methods will be utilised to ensure that water is contained in the same strata and not cross to different water bearing strata.

The project is in an area with the following topography, vegetation cover type, density and condition:

The area is predominantly lightly vegetated and relatively open grazing land. Any areas of vegetation will be avoided and do not need to be disturbed for this drilling program. Topography is typically flat and access to proposed collar locations will be undertaken in close consultation with the landholders.

The project will impact the following matters of national environmental significance:

On the MNES search there are 27 listed Threatened species, 4 listed Threatened Ecological Communities and 7 Listed Migratory Species. Of the 27 threatened species the Curlew Sandpiper, Swift Parrot, Plains Wanderer and the Silver Perch are considered to be critically endangered (the link in the MNES states the Curlew Sandpiper, Swift Parrot and Plains Wanderer to be endangered and not critical specifically for NSW, and the Silver Perch is recorded as Vulnerable). There are no critically endangered listings in the threatened ecological communities category, all four are classified as endangered; Coolibah, Grey Box, Poplar Box Grassy Woodland and Weeping Myall Woodlands. The 7 listed migratory species has the Curlew Sandpiper listed as critically endangered – however the link to this species differs stating for NSW this is endangered. The temporary proposed drilling activities will be undertaken with due care within cropping and/or grazing paddocks, will not be undertaken in periods of wet ground conditions, do not need to affect any vegetation and as such adverse affects to the flora and fauna are not anticipated. The BioNet Search has listed threatened species in the areas around the proposed drilling location and these should not be adversely impacted with the proposed works. Major Mitchells Cockatoo is listed as vulnerable and protected and was sighted in 2001 with no accurate location details.

The project is in an area with the following threatened species, ecological communities (or habitats):

There are several flora and fauna records that come up on the BioNet search as being of protected or vulnerable status – the majority of which are outside of the proposed drilling area around the named watercourses. Areas where the majority of these BioNet sightings occur, are the more vegetated areas around the waterways. Drillholes are planned in consultation with landholders, mapped information and vegetation is avoided, once on the ground drill collars will be moved should vegetation be nearby. Collars may be moved slightly within the approval polygon, however all sensitivities noted in this application will be considered and further advice sought from the RR should any of the more sensitive areas be encroached. There are several freshwater fish threatened species recorded within the Bogan River – Olive Perchlet, Eel Tailed Catfish and Darling River Snail. The Bogan River will not be within 200m of any drilling, likely much further away, and so no adverse effects to these species is envisaged.

The project is in an area with the following historic cultural or natural heritage items:

There are no items of historic cultural or natural heritage listed within the searches performed for this proposed drilling program and as such no impact envisaged.

The project is in an area with the following critical habitat/area of outstanding biodiversity value:

There are no areas of critical habitat/area of outstanding biodiversity within the proposed drilling area. Register of Critical Habitat (environment.gov.au) The majority of the drilling area is recorded within the Bogan LEP 2011 as terrestrial biodiversity – of moderate, high sensitivity and also unclassified (see Map2). The high sensitivity areas align quite well with the lightly wooded/ vegetated areas around the watercourses. The moderate sensitivity and unclassified areas are predominantly the paddocks where proposed drilling will take place. The temporary drilling program is proposed within the paddocks and no

vegetation to be damaged, therefore is not anticipated to have adverse impacts on the flora and fauna. Further information relating to the Bogan area Terrestrial Biodiversity is attached.

The project is located in an area with the following location, type and distance to the nearest Aboriginal heritage sites:

A search of the online Aboriginal Heritage Information Management System database revealed there are no aboriginal sites or objects in the vicinity of the proposed drilling. There is one tentatively proposed collar located 110m from the Box Cowal.

Exploration activities

The following exploration activities have been approved.

Drill holes

Id/ Regulator no.	Type	Surface disturbance (m ²)	Veg. Clearing (m ²)	Excavations (m ³)	Produced water (ml)	Depth (m)	Block number	Unit letters
Nyngan 3 EDH0014 893	DDH drill hole	200				250	BOU3063	b
Nyngan 4 EDH0014 894	DDH drill hole	200				250	BOU3063	c
Nyngan 2 EDH0014 892	DDH drill hole	200				250	BOU3063	g

Other exploration activities

Id/ Regulator no.	Type	Surface disturbance (m ²)	Veg. Clearing (m ²)	Excavations (m ³)	Produced water (ml)	Block number	Unit letters
-------------------	------	---------------------------------------	---------------------------------	-------------------------------	---------------------	--------------	--------------

Impact management

The project includes the following measures to manage surface water impacts:

Surface water should not be affected by the proposed activities. There is one small drainage within the proposed drilling area in the west leading to Bogan River. There are two named watercourses – Bogan River and Box Cowal – located on the eastern and western extents of the proposed area. Box Cowal does not have water flowing year round and is more of a drainage. Access to this location will be done in close consultation with the landholder and will utilise existing tracks as much as possible. There will be no storage of surface water nor disposal of water to surface.

The project includes the following measures to manage groundwater impacts:

Groundwater encountered during drilling will be managed and contained by the drilling methods. The Company have drilled several holes in this area and have not encountered any difficulties with water. There are several water bores located around the area, the closest being; GW801615 – located at a homestead in the south of the area, drilled in 2002 as a stock and domestic bore to 36.0m, standing water level recorded at 15m and yield recorded 2.5L/s. GW805502 – drilled in 2010 as a monitoring bore to 20.5m, standing water level recorded at 16.7m and yield recorded 0.1L/s.

The project includes the following measures to manage waste and excess materials:

Drill core will be removed from site to a Company storage facility. Once drilling is complete, all materials will be removed from site. The collar will be capped and area made safe with all rubbish and drilling equipment removed from site at end of drilling program.

The project includes the following measures regarding the handling, use, storage and transportation of any chemicals and hydrocarbons:

No chemicals anticipated to be used in this drilling program. Diesel will be kept in a bunded storage area. Bio-degradable drilling muds to be utilised with the diamond drilling.

The project includes the following measures of how noise impacts will be managed to minimise impacts on nearby sensitive receptors:

Noise is not anticipated to be of concern with the proposed diamond drilling as this style of drilling does not generate excessive noise.

The project includes the following measures to manage air quality impacts:

Air quality is not anticipated to be of concern with the drilling methods proposed.

Sensitivity of the land to be disturbed

Question	Yes/no
Conservation areas	
Land reserved under the <i>National Parks and Wildlife Act 1974</i> ?	No
Land acquired by the Minister under Part 11 of the <i>National Parks and Wildlife Act 1974</i> ?	No
Land subject to a 'conservation agreement' under the <i>National Parks and Wildlife Act 1974</i> and/or the <i>Biodiversity Conservation Act 2016</i> ?	No
Land declared as an aquatic reserve under the <i>Marine Estate Management Act 2014</i> ?	No
Land declared as a marine park under the <i>Marine Estate Management Act 2014</i> ?	No
Land within State Forests set aside under the <i>Forestry Act 2012</i> for conservation values, including Flora Reserves or Special Management (and other) Zones?	No
Land reserved or dedicated under the <i>Crown Lands Act 1989/Crown Lands Management Act 2016</i> (as applicable) for the preservation of flora, fauna, geological formations or other environmental protection purposes?	No
Land identified as wilderness or declared a wilderness area under the <i>Wilderness Act 1987</i> ?	No
Land subject to a Biobanking agreement (established under the now repealed <i>Threatened Species Conservation Act 1995</i>) or a Biodiversity Stewardship agreement established under the <i>Biodiversity Conservation Act 2016</i> ?	No
Land subject to a Wildlife Refuge agreement under the <i>Biodiversity Conservation Act 2016</i> ?	No
Land subject to existing conservation agreements on private land under repealed legislation that continue to have effect (e.g., trust agreements under <i>Native Conservation Trust Act 2001</i> , Property vegetation plans under <i>Native Vegetation Act 2003</i> , Registered property agreements under <i>Native Vegetation Conservation Act 1997</i>)?	No
Drinking water catchment protection areas	
Land declared to be a 'controlled area' or a 'special area' under the <i>Water NSW Act 2014</i> ?	No
Land declared to be a 'special area' under the <i>Water Management Act 2000</i> or <i>Hunter Water Act 1991</i> ?	No
Sensitive areas	
Land declared as area of outstanding biodiversity value under the <i>Biodiversity Conservation Act 2016</i> or critical habitat under Part 7A of the <i>Fisheries Management Act 1994</i> ?	No
Wetlands of international significance listed under the Ramsar Wetlands Convention?	No
Land designated as a nationally important wetland in the Directory of Important Wetlands?	No

Question	Yes/no
Coastal wetlands mapped under <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> ?	No
Littoral rainforests mapped under <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> ?	No
Coastal zone as defined in the <i>Coastal Management Act 2016</i> ?	No
Land identified in an environmental planning instrument as being of biodiversity/conservation significance or zoned for environmental conservation, protection and/or management?	Yes
Waterfront land defined under the <i>Water Management Act 2000</i> ?	No
Land with a slope greater than 18 degrees measured from the horizontal?	No
Land with potential for soil and water contamination	
Land mapped as Actual Acid Sulfate Soils (AASS) or Potential Acid Sulfate Soils (PASS) on the Acid Sulfate Soils Risk Maps for NSW?	No
Aboriginal protection areas	
Land identified in an environmental planning instrument (such as a State Environmental Planning Policy or Local Environment Plan) as being of Aboriginal cultural significance?	No
Land declared as an Aboriginal place under the <i>National Parks and Wildlife Act 1974</i> ?	No
Historic or natural heritage protection areas	
Land listed on the World Heritage List, National Heritage List or Commonwealth Heritage List?	No
Land, places, buildings or structures listed on the NSW State Heritage Register?	No
Land identified in an environmental planning instrument (such as a State Environmental Planning Policy or Local Environment Plan) as being of heritage significance or a heritage conservation area?	No
Critical industry clusters	
Land identified as Critical Industry Cluster under <i>State Environmental Planning Policy (Resources and Energy) 2021</i> ?	No
Community land	
Public land classified as community land under the <i>Local Government Act 1993</i> ?	No
Other areas	
Land identified on the authority (e.g., exploration licence or assessment lease) as environmentally sensitive land?	No
Ecology	
Will the activity have a significant effect on threatened species or their habitats?	No
Will the activity have a significant effect on threatened ecological communities or their habitats?	No
Will vegetation be removed as part of access track upgrade works in waterfront land?	No
Aboriginal and European heritage	
Will the activity harm Aboriginal objects as defined under the <i>National Parks and Wildlife Act 1974</i> ?	No
Will the activity damage any listed heritage items?	No

Attachment 1 – Statement of commitments

Item	Commitment
Activity type	<p>Exploration activity comprising:</p> <ul style="list-style-type: none"> • 3 diamond drill holes • 0 reverse circulation drill holes • 0 other drill holes • 0 cubic metres of bulk sampling • 0 square metres of new access tracks • 0 lines of seismic testing • 0 square metres of air core drilling • 0 square metres of other drilling
Activity location	3km north from Nyngan, within EL 8911 (1992).
Activity scope (including any ancillary activities)	<p>Proposed exploration is to drill up to 3 rotary mud drillholes with diamond tails to approximately 250m depth within the requested polygon area on the maps. Equipment will comprise a diamond drilling rig and support vehicles. A light vehicle will also be used by the field technician and geologist. Drilling is expected to take approximately 3-5 weeks to complete, or 1-2 weeks per drillhole. Not all collars may be drilled. The drill site will be made safe prior to leaving site, and rehabilitation fully completed as soon as practicable. Drilling contractors will utilise above ground sumps and so no excavations are required. The drillhole will be backfilled and rehabilitated in accordance with the requirements of the Exploration Code of Practice – Rehabilitation. The top of the hole will be backfilled with surface soil and topsoil. Above ground sumps will be emptied, and contents disposed of at a suitable facility. All costs associated with emptying above ground sumps and disposal to a licensed facility are borne by the drilling contractor and do not form part of the tenement holders rehabilitation cost estimates for waste removal.</p> <p>No ancillary infrastructure or water storage is required for this program. Accommodation will be in nearby shearers quarters or the nearest hotel/motel.</p>
Hours of operation	Other 12hr shifts 6am-6pm, 7 days a week
Expected duration (weeks)	3-5
Anticipated start date	29 April 2024
Expected rehabilitation completion date	Estimated 8 November 2025
Maximum area of disturbance	600 square metres
Agricultural impact	The activity will be undertaken in accordance with APO0001742 Level 1 AIS.pdf (736602 bytes)
Air quality	Air quality is not anticipated to be of concern with the drilling methods proposed.
Protection of water sources	Surface water should not be affected by the proposed activities. There is one small drainage within the proposed drilling area in the west leading to Bogan River. There are two named watercourses – Bogan River and Box Cowal – located on the eastern and western extents of the proposed area. Box Cowal does not have water flowing year round and is more of a drainage. Access to this location will be done in close consultation with the landholder and will utilise existing tracks as much as possible. There will be no storage of surface water nor disposal of water to surface.

Item	Commitment
	Groundwater encountered during drilling will be managed and contained by the drilling methods. The Company have drilled several holes in this area and have not encountered any difficulties with water. There are several water bores located around the area, the closest being; GW801615 – located at a homestead in the south of the area, drilled in 2002 as a stock and domestic bore to 36.0m, standing water level recorded at 15m and yield recorded 2.5L/s. GW805502 – drilled in 2010 as a monitoring bore to 20.5m, standing water level recorded at 16.7m and yield recorded 0.1L/s.
Soil and land stability	There will be no vegetation clearing for this drill program. Minor clearing of grass may be required to make sites safe, should this be necessary care will be taken to ensure to leave root stock to enable existing vegetation regrowth. Minimal surface disturbance to ensure minimal impact to the soil. Utilising existing tracks where possible, should soil compaction require scarification then the landholder will manage and ensure all ground is returned to existing state.
Noise and vibration	Noise is not anticipated to be of concern with the proposed diamond drilling as this style of drilling does not generate excessive noise.
Coastal processes and hazards	n/a
Hazardous substances or chemicals	No chemicals anticipated to be used in this drilling program. Diesel will be kept in a bunded storage area. Bio-degradable drilling muds to be utilised with the diamond drilling.
Wastes and emissions	Drill core will be removed from site to a Company storage facility. Once drilling is complete, all materials will be removed from site. The collar will be capped and area made safe with all rubbish and drilling equipment removed from site at end of drilling program.
Vegetation	Any areas of vegetation will be avoided.
Threatened fauna and flora species	Drilling during dry conditions only, the sites will not be accessed during times of flood. Close consultation with the landholders will continue regularly prior to proposed drilling to ensure that access conditions are favourable. Works are proposed within the paddocks and no vegetation damage therefore limiting the affects to threatened species in this area.
Areas of outstanding biodiversity value/critical habitat	
Endangered ecological community or critically endangered ecological community	All proposed drilling is within open paddocks. Drillholes can be moved to avoid any and all vegetation.
Habitat of a threatened species or ecological community	All proposed drilling is within open paddocks. Drillholes can be moved to avoid any and all vegetation.
Key threatening processes	All proposed drilling is within open paddocks. Drillholes can be moved to avoid any and all vegetation. Vehicles are washed down prior to entering site for the first time, to avoid spreading of weeds and seeds.
Barriers to movement of fauna	Drill site locations are determined based on area of least impact to the environment. Rehabilitation will be undertaken as soon as is reasonably practicable but within the timeframe of this drilling approval application.
Ecological and biosecurity impacts	Extreme care will be taken on this site to avoid uncontrolled fires. Weather conditions and bush fire alert levels will be monitored. Local emergency services contact details will be readily available for the duration of the activity. All equipment will be maintained to high standards and processes will be in place to minimise risk. All vehicles are appropriately prepared and equipped to minimise fire risk.

Item	Commitment
Community resources	n/a
Natural resources	Work will be undertaken in dry conditions and not during wet weather. Vehicle movement will be kept to a minimum to minimise vehicle damage as much as possible.
Social impacts	Exploration has been conducted in this area by ACGH during recent years with no issues raised to date. Community consultation has been initiated with affected landholders and the community. A regular flow of information will be provided, and any concerns will be addressed immediately.
Economic impacts	n/a
Heritage impacts	n/a
Aesthetic impacts	No drilling within 400m of homestead.
Aboriginal cultural heritage	Even though no recorded Aboriginal Sites are within the area, should any new Aboriginal sites be discovered staff will inform the management team who will record the information on the AHIMS Mobile APP (which is Heritage NSW preferred method of recording). This site would then be avoided by placing a 30m buffer around it. Any concerns regarding new sites and working in the area will be raised directly with Heritage NSW on 02 9873 8500.
Land use impacts	n/a
Transportation impacts	n/a
Matters of national environmental significance	Agricultural properties that have already been cleared were selected for this drilling program to significantly reduce the risk of impacting threatened ecological communities, threatened species, and threatened migratory species. Vegetation is not to be cleared as part of the program therefore not damaging threatened ecological communities and the habitats of threatened species and threatened migratory species. Crews are instructed to not interact with wildlife or vegetation during the drilling activities.
Cumulative impacts	n/a
Rehabilitation commitments	The activity will be undertaken in accordance with the rehabilitation objectives and targets provided for this project.
Risk assessments	The titleholder must monitor the risks associated with activities and, if the risk associated with an activity changes, implement revised environmental management controls.
Incident management	The NSW Resources Regulator will be notified of all incidents in accordance with the requirements of EL 8911 (1992).
Reporting	Reporting to the NSW Resources Regulator and Mining, Exploration and Geoscience – Department of Regional NSW will be in accordance with the legislation and conditions of EL 8911 (1992).
Codes of Practice	Nyngan will be operated in accordance with: <ul style="list-style-type: none"> • Exploration Code of Practice: Environmental Management • Exploration Code of Practice: Rehabilitation
Other (as applicable)	1. No additional terms specified.

Attachment 2 – Definitions

To search for NSW legislation, visit www.legislation.nsw.gov.au. Commonwealth legislation can be found at www.legislation.gov.au.

Word	Definition
Aboriginal object	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Aboriginal place	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Acid Sulfate Soils	Sediments and soils containing iron sulfides which, when exposed to oxygen, generate sulfuric acid. Acid sulfate soils include actual acid sulfate soils (AASS) or potential acid sulfate soils (PASS).
Activity	Any activity carried out in connection with exploration, including: <ul style="list-style-type: none"> • the use of land • means of accessing land • the carrying out of a work.
Activity approval	An approval to carry out assessable prospecting operations granted under the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Actual Acid Sulfate Soils (AASS)	Sediments and soils containing highly acidic soil horizons or layers resulting from the aeration of sediments and soils that are rich in iron sulfides, primarily sulphide.
Applicant	In relation to an exploration activity, the person proposing to carry out the exploration activity.
Aquatic reserve	Has the same meaning as it has in the <i>Marine Estate Management Act 2014</i> .
Areas of Outstanding Biodiversity Value (AOBVs)	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> . Note: Areas of declared critical habitat under the now repealed <i>Threatened Species Conservation Act 1995</i> have become Areas of Outstanding Biodiversity Value (AOBVs) under the <i>Biodiversity Conservation Act 2016</i> .
Assessable prospecting operation	Any prospecting operation that is not exempt development within the meaning of <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Clearing of vegetation	Any one or more of the following: <ul style="list-style-type: none"> • cutting down, felling, thinning, lopping, logging or removing vegetation, or • killing, destroying, poisoning, ringbarking, uprooting or burning vegetation.
Complying exploration activities (CEA)	Exploration activities that are considered unlikely to significantly affect the environment as set out in <i>Exploration guideline: Application and assessment process for exploration activities</i> .
Critical habitat	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> . Areas of declared critical habitat under the now repealed <i>Threatened Species Conservation Act 1995</i> have become Areas of Outstanding Biodiversity Value (AOBVs) under the <i>Biodiversity Conservation Act 2016</i> .
Drill hole	A hole made by drilling or boring, but excludes: <ul style="list-style-type: none"> • sampling and coring using handheld equipment, • petroleum wells.
Drilling	The perforation of the earth's surface crust by mechanical means to form a hole, whether the hole caused by the perforation is vertical, inclined or horizontal, and includes all operations for preventing collapse of the sides of

Word	Definition
	such hole or for preventing it from being filled with extraneous materials including water
Environment	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Environmentally sensitive area of State significance	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Excavation	The removal of the surface layer to a depth greater than 500 mm from the natural surface level.
Exempt development	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Exploration	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
Fauna	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Groundwater	Water that occurs beneath the ground surface in the saturated zone.
Habitat	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> or the <i>Fisheries Management Act 1994</i> (as relevant).
Harm	<p>In relation to matters of national environmental significance, has the same meaning as 'significant impact' as provided by the 'Significant Impact Guidelines' used to determine whether assessment and approval is required under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>.</p> <p>In relation to the environment, has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i>.</p> <p>In relation to threatened species or ecological communities, has the same meaning as:</p> <ul style="list-style-type: none"> • 'harm an animal' in the <i>National Parks and Wildlife Act 1974</i> • 'pick a native plant' in the <i>National Parks and Wildlife Act 1974</i> • 'harm' in the <i>Fisheries Management Act 1994</i>. <p>In relation to an aquifer or waterfront land, has the same meaning as it has in the <i>Water Management Act 2000</i>.</p> <p>In relation to Aboriginal places or Aboriginal objects has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i>.</p> <p>In relation to items of heritage significance, has the same meaning as it has in the <i>Heritage Act 1977</i>.</p> <p>In relation to protected marine vegetation, has the same meaning as it has in the <i>Fisheries Management Act 1994</i>.</p>
Items of heritage significance	<p>Means:</p> <ul style="list-style-type: none"> • any heritage items listed in one or more of the following: <ul style="list-style-type: none"> — the Commonwealth Heritage List — the World Heritage List — the National Heritage List — the State Heritage Register — an Environmental Planning Instrument • any relic (being any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and which is 50 or more years old), or

Word	Definition
	<ul style="list-style-type: none"> • within State Conservation Areas: <ul style="list-style-type: none"> — items that are listed on the DECC Historic Heritage Information Management System, or — any deposit, object or material evidence relating to the settlement or occupation of New South Wales or a part of New South Wales (not being Aboriginal settlement or occupation) if the deposit, object or material evidence is more than 25 years old at the date of the interference or removal.
Land	Includes: <ul style="list-style-type: none"> • the sea or an arm of the sea • a bay, inlet, lagoon, lake or body of water, whether inland or not and whether tidal or non-tidal • a river, stream or watercourse, whether tidal or non-tidal, and • a building erected on the land
Marine vegetation	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Matters of national environmental significance	'Matters of national environmental significance' protected under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .
Minister	The Minister administering the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Native vegetation	Has the same meaning as it has in the <i>Local Land Services Act 2013</i> .
Potential acid sulphate soils (PASS)	Sediments and soils that contain iron sulfides or sulfidic material which have not been exposed to air and oxidised
Produced water	Any form of groundwater that is actively extracted from a borehole or excavation, excluding incidental groundwater mixed with drilling fluids.
Rehabilitation	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
Seismic survey	The use of shock waves (generated in the ground using either small explosive charges detonated below the surface, hand-held mechanical hammers or vehicle-mounted hammers) and an array of geophones, which are connected to measuring instruments, to differentiate the geophysical properties of the subsurface of the earth.
Sensitive receiver	Includes: <ul style="list-style-type: none"> • dwellings • libraries • educational and research institutions (including schools, colleges and universities) • childcare centres • kindergartens • hospitals, surgeries and other medical institutions • places of worship • milking sheds and holding yards associated with dairies • animal boarding or training establishments • aquaculture

Word	Definition
	<ul style="list-style-type: none"> intensive livestock agriculture
Site	The land on which an activity is located.
State Conservation Area	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
Surface disturbance	Means: <ul style="list-style-type: none"> disturbance or exposure of the soil or surface rock layer, or degradation or deterioration in any manner of the physical surface of land.
Terms	In relation to activity approvals, the terms imposed by the decision-maker on the grant of an activity approval.
Threatened species or ecological communities	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> or <i>Fisheries Management Act 1994</i> (as relevant).
Title	An authority under the <i>Mining Act 1992</i> / a title under the <i>Petroleum (Onshore) Act 1991</i> – as relevant.
Titleholder	A person or company to whom a title has been issued.
Track	All unsealed routes that will be traversed multiple times, but does not include single pass (ingress and egress) routes or seismic shot and receiver lines.
Waste	Has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i> .
Water source	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
Water land	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Waterfront land	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
Wetlands	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
Wilderness	Lands identified as wilderness under the <i>Wilderness Act 1987</i> .
Wilderness area	Lands (including subterranean lands) declared to be a wilderness area under the <i>Wilderness Act 1987</i> or the <i>National Parks and Wildlife Act 1974</i> .

Attachment 3 – Review of environmental factors

Air impacts

Provide a brief description of likely impacts to air quality, including the distance to, and impacts on, nearby sensitive receivers.

Air impacts from the proposed program are negligible.

There is one homestead, River Ridge Homestead, located within the proposed drilling area. The relevant landholders in this area are fully informed with the proposed drilling and appropriate access agreements will be in place prior to any works. There are no further sensitive receptors nearby. The town of Nyngan is located approximately 2km south of the proposed drilling area, however tentatively proposed holes are towards the centre and north of this approval area and as such not considered to be of much concern as works have occurred in this area previously.

As mud rotary and diamond drilling does not produce significant dust the impact to the receptor is predicted to be negligible.

All vehicles will be in good working order and not releasing excess exhaust fumes.

No new tracks are being created.

What is the activity's likely impact due to generation of greenhouse gases emissions or release of chemicals which affect the ozone layer or produce photo-chemical smog?

Negligible

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Drilling will not occur within 400m of sensitive receptors.

Vehicles will travel slowly along all farm tracks to minimise travelling dust.

Vehicles will be well maintained to minimise excessive exhaust fumes.

Landholder consultation will occur throughout the whole program to ensure best and appropriate practices are being maintained.

Water impacts

Provide a brief description of the likely impacts to water quality and/quantity.

Water obtained for this drilling will be from farm dams in consultation with landholders or trucked in from the nearby town of Nyngan. There will be no impact to surface or groundwater, and no change to natural waterbodies or runoff patterns.

Any groundwater encountered during drilling will be managed and contained by the drilling methods to ensure that water is contained in the same strata and not cross to different water bearing strata. The Company have drilled many holes in this area and have not encountered any difficulties with water.

The program is not expected to have an impact on surface water.

What is the activity's impact due to the storage of water?

Negligible

What is the activity's impact to natural water bodies, wetlands or runoff patterns?

Nil/Not applicable

What is the activity's impact due to aquifer interference, including changes to inter-aquifer connectivity?

Nil/Not applicable

What is the activity's impact due to changes to flooding or tidal regimes?

Nil/Not applicable

What are the impacts from any hydraulic fracturing (well stimulation), including through gas and fluid migration?

Nil/Not applicable

What is the activity's impact due to changes in surface or groundwater quality and quantity?

Water impacts
Nil/Not applicable
What is the likely level of any water impacts?
Nil/Not applicable
Outline any proposed management controls and/or mitigation measures.
Drilling will not be undertaken during extreme weather events and so surface water will not be affected. Groundwater is not expected to cause concern as this area has been drilled previously with no concerns.

Soil and stability impacts
Provide a brief description of the likely impacts to soil quality or land stability.
There are no acid sulfate soils within this area. The proposed drilling area is covered with soil type 4 from the Land and Soil Capability Classification, which is moderate to severe limitations. A maximum of three drillholes are proposed and this drilling is likely to take approximately 7-10 days per hole. Due to the sensitivity of the soil, access will be restricted to only vital personnel and vehicle movement will be restricted where possible. Should compaction occur of the temporary access routes, this will likely be scarified after use by the landholder. Close consultation with the landholder will be maintained throughout this program. Wind erosion will be assessed in consultation with the landholder prior to site access and mitigation measures considered. The watercourses with vegetation on the eastern and western sides of this proposed drilling area host increased vegetation which will assist to reduce any wind erosion. Salinity of groundwater will be considered, however with the proposed drilling methods groundwater will remain in the ground and any drilling waters will be contained in above ground sumps and not affect the surrounding surface.
What is the activity's impact on the degradation of soil quality including contamination, salinisation or acidification?
Negligible
What is the activity's impact on land with high agricultural capability?
Negligible
What is the activity's impact due to loss of soil from wind or water erosion?
Negligible
What is the activity's impact due to the loss of structural integrity of the soil?
Negligible
What is the activity's impact due to increased land instability with high risks from landslides or subsidence?
Nil/Not applicable
What is the activity's impact due to any induced seismicity or ground movements associated with fracture stimulation or injection or extraction of groundwater?
Nil/Not applicable
What is the likely level of any impacts?
Negligible
Outline any proposed management controls and/or mitigation measures.
There will be no vegetation clearing for this drill program. Minor clearing of grass may be required to make sites safe, should this be necessary care will be taken to ensure to leave root stock to enable existing vegetation regrowth. Minimal surface disturbance to ensure minimal impact to the soil. Utilising existing tracks where possible, should soil compaction require scarification then the landholder will manage and ensure all ground is returned to existing state.

Noise and vibration impacts

Provide a brief description of the likely noise and/or vibration impacts.

River Ridge Homestead is located within the drilling approved area. Actual proposed collar locations have not been finalised, however will be more than 400m from the homestead. Drilling will be undertaken in daylight hours only and the mud rotary and diamond drilling method selected has relatively low noise outputs compared to other drilling methods. Any relevant stakeholders will be notified of works.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Drilling will not occur within 400m of sensitive receptors. Drilling works will be undertaken in daylight hours only.

Coastal locations and processes

Provide a brief description of likely impacts on coastal environments, coastal processes and coastal hazards.

n/a

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

n/a

Hazardous substances and chemicals

Provide a brief description of likely impacts associated with the use, generation, storage or transport of hazardous substances or chemicals.

Diesel fuel is the only anticipated hydrocarbon to be used on site. It will be transported to site in a dedicated diesel tank mounted on an auxiliary drill vehicle. A spill kit will always be on site and minor spills will be cleaned up and waste material removed from site and disposed of at the nearest appropriately licensed waste facility.

What is the likely level of the impact associated with the use, generation, storage or transport of hazardous substances or chemicals?

Negligible

Outline any proposed management controls and/or mitigation measures.

Maintain regular checks of all fuel and lubricants, provide bunded areas where required. A spill kit will be at the site at all times.

Wastes and emissions

Provide a brief description of likely impacts to the environment from the generation or disposal of gaseous, liquid or solid wastes or emissions.

There should be minimal impact to the environment from the proposed short drilling program. Fuels maintained in appropriately bunded storage tanks. There will be no disposal of drilling waste at site – all waste removed from site and disposed of at appropriately licenced waste facility.

Provide a brief description of likely impacts on areas sensitive to this type of impact.

There will be no impact on any of the above during this proposed short drilling program.

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Wastes and emissions

Clean up any minor spills immediately and dispose of any contaminated materials to an appropriately managed licenced facility.

Vegetation

Provide a brief description of any vegetation clearing or modification and the likely impacts to the environment.

The area is predominantly open grazing land with sparse vegetation. Any areas of vegetation will be avoided and do not need to be disturbed for this drilling program.

What is the likely level of the impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Any areas of vegetation will be avoided.

Threatened species

Provide a brief description of any likely impacts to threatened fauna and flora species.

On the MNES search there are 27 listed Threatened species, 4 listed Threatened Ecological Communities and 7 Listed Migratory Species.

Of the 27 threatened species the Curlew Sandpiper, Swift Parrot, Plains Wanderer and the Silver Perch are considered to be critically endangered (the link in the MNES states the Curlew Sandpiper, Swift Parrot and Plains Wanderer to be endangered and not critical specifically for NSW, and the Silver Perch is recorded as Vulnerable).

There are no critically endangered listings in the threatened ecological communities category, all four are classified as endangered; Coolibah, Grey Box, Poplar Box Grassy Woodland and Weeping Myall Woodlands.

The 7 listed migratory species has the Curlew Sandpiper listed as critically endangered – however the link to this species differs stating for NSW this is endangered.

The temporary proposed drilling activities will be undertaken with due care within cropping and/or grazing paddocks, will not be undertaken in periods of wet ground conditions, do not need to affect any vegetation and as such adverse affects to the flora and fauna are not anticipated.

The BioNet Search has listed threatened species in the areas around the proposed drilling location and these should not be adversely impacted with the proposed works. Major Mitchells Cockatoo is listed as vulnerable and protected and was sighted in 2001 with no accurate location details.

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Drilling during dry conditions only, the sites will not be accessed during times of flood. Close consultation with the landholders will continue regularly prior to proposed drilling to ensure that access conditions are favourable.

Works are proposed within the paddocks and no vegetation damage therefore limiting the affects to threatened species in this area.

Area of outstanding biodiversity value (AOBV) / Critical habitat

Provide a brief description of any likely impacts to AOBV/critical habitat.

There are no areas of critical habitat/area of outstanding biodiversity within the approval area.

What is the likely level of the impacts?

Outline any proposed management controls and/or mitigation measures.

Endangered ecological community or critically endangered ecological community

Is the activity likely to have an adverse effect on an endangered ecological community or critically endangered ecological community? Select as relevant:

N/A

Provide a brief description of any impacts.

There will be no impact to any of the four potentially occurring endangered communities listed as likely to occur within the proposed drilling area on the MNES search; Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions, Poplar Box Grassy Woodland on Alluvial Plains and Weeping Myall Woodlands.

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

All proposed drilling is within open paddocks. Drillholes can be moved to avoid any and all vegetation.

Habitat of a threatened species or ecological community

Is the activity likely to have an adverse effect on the habitat of a threatened species or ecological community (including protected aquatic species)? Select as relevant:

N/A

Describe the impacts.

There will be no impact to any threatened species or ecological community as all drilling will be progressed in open grazing paddocks.

What is the likely level of the impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

All proposed drilling is within open paddocks. Drillholes can be moved to avoid any and all vegetation.

Key threatening process

Provide a brief description of whether the activity will constitute, or form part of, a key threatening process - or is likely to increase the impact of a key threatening process.

There are a couple of protected and vulnerable species noted on the Bionet Search and associated map. The majority of these sightings are outside of the proposed drilling area, within the vegetation along Canonba Road. There will be no damage or clearing of native vegetation, no removal of dead wood or trees and no loss of hollow bearing trees to the area. Drillholes can and will be moved to avoid damaging or impacting any vegetation in the area.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

All proposed drilling is within open paddocks. Drillholes can be moved to avoid any and all vegetation. Vehicles are washed down prior to entering site for the first time, to avoid spreading of weeds and seeds.

Barriers to movement of fauna

Provide a brief description regarding the potential of the activity to endanger, displace or disturb fauna or create a barrier to their movement.

Barriers to movement of fauna

The small drilling program does not require vegetation clearance. Minor areas of disturbance will be rehabilitated within a couple of months and so minimal impact is envisaged.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Drill site locations are determined based on area of least impact to the environment. Rehabilitation will be undertaken as soon as is reasonably practicable but within the timeframe of this drilling approval application.

Ecological and biosecurity impacts**Is the activity likely to have any adverse ecological or biosecurity impacts? Select as relevant:**

N/A

Provide a brief description of any impacts.

No impact envisaged

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Extreme care will be taken on this site to avoid uncontrolled fires. Weather conditions and bush fire alert levels will be monitored. Local emergency services contact details will be readily available for the duration of the activity. All equipment will be maintained to high standards and processes will be in place to minimise risk. All vehicles are appropriately prepared and equipped to minimise fire risk.

Community resources**Describe whether the activity is likely to degrade or significantly increase the demand for services and infrastructure resources.**

There will be no impact to the demand or use of local services and resources for this drill program

Describe whether the activity is likely to result in any diversion of resources to the detriment of other communities or natural systems.

No diversion of resources required

What is the likely level of the impact?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

n/a

Natural resources**Describe any likely impacts that would disrupt, deplete or destroy natural resources.**

The proposed drilling program is not anticipated to disrupt, deplete, or destroy any natural resources

Describe whether the activity is likely to disrupt existing activities which rely upon natural resources, including forestry, farming or extractive industries (or will reduce options for future activities).

The proposed program will be undertaken at a time appropriate to landholders and so will not disrupt any existing activities. The drill holes are to be collared in paddocks which are used for grazing purposes

Describe whether the activity is likely to result in the degradation of any area reserved for conservation purposes.

Natural resources

The area is identified of moderate and high sensitivity for Terrestrial Biodiversity in the Bogan Local Environmental Plan 2011. The low impact nature of the drilling and small footprint will not result in the degradation of the sensitive areas. Mineral exploration drilling is not declared as designated development in the Bogan LEP. The proposed works will only be conducted in dry conditions, and access will be discussed in close consultation with affected landholders.

What is the likely level of the impact?

Negligible

Outline any proposed management controls and/or mitigation measures.

Work will be undertaken in dry conditions and not during wet weather. Vehicle movement will be kept to a minimum to minimise vehicle damage as much as possible.

Social impacts

Describe whether the activity is likely to result in a change to the demographic structure of the community, including changes to the workforce or industry structure of the area/region.

The proposed program is small and will not affect the demographics of the local communities

Describe whether the activity is likely to have an environmental impact that may cause substantial change or disruption to the community, including loss of facilities, reduced links to other communities or loss of community identity.

There will be no impact or change to the community following the proposed drilling program

Describe whether the activity is likely to result in some individuals or communities being significantly disadvantaged, including a change in the level of demand for community resources (e.g. community facilities / services, and labour force).

The small program will not disadvantage the community or individuals in the area

Describe whether the activity likely to result in any impacts on the health, safety, privacy or welfare of individuals or communities because of factors such as pollution, odour, noise, vibration, lighting, visual impacts, etc.

The impacts are minimal and not within proximity to sensitive receptors or communities

Describe if the activity is likely to have any effect on a locality, place or building having aesthetic, anthropological, archaeological, architectural, cultural, historical, scientific or social significance or other special value for present or future generations.

There will be no detrimental effect on the aesthetics, or any other special value

What is the likely level of any social impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Exploration has been conducted in this area by ACGH during recent years with no issues raised to date. Community consultation has been initiated with affected landholders and the community. A regular flow of information will be provided, and any concerns will be addressed immediately.

Economic impacts

Provide a brief description of any likely economic impacts.

n/a

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Economic impacts

n/a

Heritage impacts

Describe whether the activity is likely to cause impacts on localities, places, landscapes, buildings or archaeological relics of heritage significance.

There are no listed heritage items, places, or areas in this proposed drilling area

What is the likely level of the impact?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

n/a

Aesthetic impacts

Describe whether the activity is likely to cause impacts on the visual or scenic landscape, including any lighting, venting or flaring of gas.

The proposed drilling will be of short duration and no night works are proposed so no disturbance from lights. One homestead within the approval area, no drilling will be undertaken within 400m of the property.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

No drilling within 400m of homestead.

Cultural impacts

Describe the likely impacts associated with any disturbance of the ground surface or any culturally modified trees.

There are no recorded aboriginal objects or places within the proposed drilling area as per the AHIMS search conducted

Describe whether the activity will affect known Aboriginal objects or Aboriginal places.

There are no recorded aboriginal objects or places within the proposed drilling area as per the AHIMS search conducted

Describe whether the activity is located in areas where landscape features indicate the presence of Aboriginal objects.

There are two named watercourses on the eastern and western periphery of this drilling area, the Bogan River and Box Cowal. No drilling will be conducted within 200m of this river. There is one collar tentatively proposed 110m from Box Cowal which only hosts running water in times of excessive rainfall / flood in the region. There are no other landscape features as listed above.

Describe whether the activity will affect areas where native title exists or land subject to native title claims, indigenous land use agreements or joint management agreements.

The proposed drilling area is not within an area where native title may exist. All drilling is proposed on Freehold land and not within parcels of Crown Land.

What is the likely level of any cultural impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

Cultural impacts

Even though no recorded Aboriginal Sites are within the area, should any new Aboriginal sites be discovered staff will inform the management team who will record the information on the AHIMS Mobile APP (which is Heritage NSW preferred method of recording). This site would then be avoided by placing a 30m buffer around it. Any concerns regarding new sites and working in the area will be raised directly with Heritage NSW on 02 9873 8500.

Land use impacts

Provide a brief description of any impacts on land use including any major changes to land use and/or curtailment of other beneficial land uses.

n/a

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

n/a

Transportation impacts

Provide a brief description of any significant impacts on transportation.

There will be no significant impact on transportation from a small temporary drilling program

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

n/a

Consistency with applicable local strategic planning statements, regional strategic plans or district strategic plans

Provide a brief description of any relevant local strategic planning statements, regional strategic plans or district strategic plans and whether the proposed activity is consistent with these.

The drilling area is classified as terrestrial biodiversity under the Bogan LEP 2011. The temporary drilling program is not anticipated to have adverse impacts on the flora and fauna in this area. Map and further information relating to the Bogan area Terrestrial Biodiversity are attached to the APO.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Works occur only during dry season. Limit vehicle movement and stick to tracks where possible. Drive slowly on tracks. Undertake rehabilitation as soon as practicable, most likely as soon as drill rig has moved from site, but otherwise prior to APO expiry. Strong knowledge of the area and good relationships with landholders will ensure rehabilitation methods are undertaken efficiently and effectively.

Ensure all staff and contractors maintain high standards of work and care for the environment.

All rubbish and equipment removed from site as soon as practicable.

Matters of national environmental significance

Is the activity likely to impact on any of the following matters of national environmental significance under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*? Select as relevant:

N/A

Provide further details relating to any impacts on matters of national environmental significance.

On the MNES search there are 27 listed Threatened species, 4 listed Threatened Ecological Communities and 7 Listed Migratory Species.

Of the 27 threatened species the Curlew Sandpiper, Swift Parrot, Plains Wanderer and the Silver Perch are considered to be critically endangered (the link in the MNES states the Curlew Sandpiper, Swift Parrot and Plains Wanderer to be endangered and not critical specifically for NSW, and the Silver Perch is recorded as Vulnerable).

There are no critically endangered listings in the threatened ecological communities category, all four are classified as endangered; Coolibah, Grey Box, Poplar Box Grassy Woodland and Weeping Myall Woodlands.

The 7 listed migratory species has the Curlew Sandpiper listed as critically endangered – however the link to this species differs stating for NSW this is endangered.

The temporary proposed drilling activities will be undertaken with due care within cropping and/or grazing paddocks, will not be undertaken in periods of wet ground conditions, do not need to affect any vegetation and as such adverse affects to the flora and fauna are not anticipated.

The BioNet Search has listed threatened species in the areas around the proposed drilling location and these should not be adversely impacted with the proposed works. Major Mitchells Cockatoo is listed as vulnerable and protected and was sighted in 2001 with no accurate location details.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Agricultural properties that have already been cleared were selected for this drilling program to significantly reduce the risk of impacting threatened ecological communities, threatened species, and threatened migratory species.

Vegetation is not to be cleared as part of the program therefore not damaging threatened ecological communities and the habitats of threatened species and threatened migratory species.

Crews are instructed to not interact with wildlife or vegetation during the drilling activities.

Cumulative impacts

Is the activity likely to result in cumulative environmental effects with other existing or likely future activities?

No

Describe the impact.

n/a

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

n/a

Environmental assessment conclusions

Having regard to the potential significance of the individual impacts of the proposed activity (as well as the aggregation of all the impacts of the activity) determine whether (select as relevant):

Environmental assessment conclusions

the activity is not likely to significantly affect the environment, including threatened species or ecological communities (or their habitats), or declared areas of outstanding biodiversity value/critical habitat.

Provide any further details as relevant.

n/a

Attachment 4 – List of supporting documents

- Aboriginal Heritage.zip
 - APO0001742 Level 1 AIS.pdf
 - APO0001742_Map5_ Historic cultural or natural heritage items.png
 - APO0001742_Submission Report_27 Mar 2024 2:34pm.pdf
 - Critical Habitat.zip
 - EL8911 ACGH APO0001742 Sat image of area.pdf
 - Protected Matters - MNES layers - March 26th 2024.pdf
 - Site Plan and Location.zip
 - Threatened Species.zip

FORM: APO_NC_Apvl v3.3