

APO0001756

# Approval to undertake assessable prospecting operations

Spur Project

6 June 2024

## Application summary

Detail	Application
Reference	APO0001756
Date of approval	6 June 2024
Title	EL 5238 (1992)
Contact	[REDACTED]
Project name	Spur Project
Project location	2km south west of Cargo, approximately 30km south west of Orange NSW (see Figure 1.)
Activity type	Non-complying exploration activity

## Important note

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## Project

### Project details

Application APO0001756 relates to the proposed Spur Project at 2km south west of Cargo, approximately 30km south west of Orange NSW (see Figure 1.).

The application proposes the following characteristics.

Detail	Proposal
Activity description	Up to 9 RC holes, with provisions for diamond tails, are planned within one project area. No drill pads or new tracks will be needed as access will be via existing farm tracks and across paddocks. The potential impacts associated with this drilling program have been determined across the entire project area. Surface disturbance activities associated with the drilling program will be undertaken in accordance with the Drilling Rehabilitation Objectives and Completion Criteria attached to this application. Drilling program stages: Stage 1: Access routes and drill sites pegged and photographed before any works take place. Stage 2: Drill rig and equipment brought onto site. Stage 3: Drilling - Reverse circulation drilling to maximum depth of about 180 m with the potential of diamond (DDH) tails. RC cuttings will be collected in large plastic bags on a meter by meter basis. Proposed equipment: Track/ truck mounted diamond / RC rig with onboard silenced compressor (900cfm/350psi or similar). A separate silenced compressor / booster may be used. Water truck. Support / Rod truck. Rod Sloop with rod feeder mounted on a trailer (or similar). Above-ground containment tanks. Core tray racks and sample bags & equipment. Support vehicles for drillers / geologists. Handheld equipment (shovels, rakes) and hydrocarbon spill kit for emergency cleanup. Water for drilling undertaken will be taken to the site or may be sourced from local farm dams where approved to do so by a landholder. No in-ground sumps are required as the drilling will use above-ground, portable containment tanks. During the drilling program all vehicles will be cleaned prior to entering the area to control dispersal of weeds and non native species. Stage 4: Demobilization and Rehabilitation - will

Detail	Proposal
	commence following receipt of final assay results and interpretation, generally within 6 months of completion of the program.
<b>Earthworks or vegetation clearing</b>	No drill pads will need to be constructed for the program. Access to the drill sites will be mostly via existing farm tracks and across paddocks under the direction of the landholder. The drill sites will be located in cleared, open gently sloping grazing land. No trees will be removed or cleared although some trimming of tree branches may be required for safe access for the rig and personnel. Excessive compaction of soil is not expected from vehicle movements, however if compaction does occur then those areas will be monitored and scarified if required. No in ground sumps are required for this drilling program. Surface disturbance activities associated with the drilling program will be undertaken in accordance with the Drilling Rehabilitation Objectives and Completion Criteria attached to this application.
<b>Access to exploration activities</b>	The project area will be accessed using existing public roads and farm access gates / tracks, following the specific directions of the landholders (see Figure 2.)
<b>Ancillary activities</b>	No water will be required for the RC drilling. Water for diamond drilling will be carted in by water truck from existing dams where approved to do so by landholders or sourced nearby. Water will be stored in above ground tanks during the DDH drilling process if diamond tails are used. If required, disposal of drilling muds will be undertaken by the drilling company, and will be removed from site and disposed of in accordance with environmental regulations. All accommodation will be off-site
<b>Anticipated start date</b>	20 May 2024
<b>Expected duration (weeks)</b>	48
<b>Expected rehabilitation completion date</b>	19 May 2025
<b>Proposed hours of operation</b>	Continuous work hours (24 hours a day, 7 days a week).
<b>On-site employee or contractor numbers</b>	6

## Exempted areas

The Spur Project has not proposed prospecting in an exempted area.

## State conservation areas

The Spur Project has not proposed prospecting in a State Conservation Area.

## Site description and existing environment

### The project comprises the following existing land uses:

The drilling project area is located approximately 2 km south west of Cargo, approximately 30km south west of Orange NSW (see Figure 1 & 2). The drilling project area is in mostly open grazing land, vegetated with grasses and improved pasture with scattered remnant native trees. The area is Crown Land under a grazing permit.

### The project is located near the following sensitive receptors:

There are no residences located within the project area. The nearest residences are approximately 1km from the drilling area. There are no other sensitive receptors close to the proposed drilling.

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

The soil types within the project area is Land and Soil Capability classes 3 and 4 (see Figure 5). Class 3 land is classified as having moderate limitations and capable of sustaining high-impact land uses. Class 4 land is classified as having moderate to high limitations for high impact land uses. The project area is relatively well vegetated with native and introduced grass species and improved pasture species with no apparent erosion across the project area. There is no strategic Agricultural Land in the vicinity of the project area with the closest sections approximately 4km away to the north and north-east (see Figure 3.)

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

The closest name water course is Cargo Creek- located to the south-west of the project area. Drillhole. SP021 lies within 4 m of a dry tier 1 category drainage gully. If during the drill program this drainage gully is not dry the hole will be moved or not drilled . This hole may be defined as being on waterfront land according to the Water Management Act 2000. In accordance with Natural Resources Access Regulator (NRAR) guidelines, the proposed exploration activity is exempt and a controlled activity approval is not required. The proposed drilling program will not adversely impact any surface water sources and no ground water will be extracted for the drilling program. Any rain water will disperse quickly absorbed into the ground cover or moving as sheet wash into the local drainage. Water for drilling will be carted to the site using the drillers water truck using water from landholder dams or sourced off site and water recycling will be optimized.

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

There are no registered boreholes within the project area. There are 2 registered boreholes to the north of the project area both over 700 m away. As the maximum drill depth is 300 m, significant groundwater is unlikely to be intercepted during the drilling and it will not be extracted for the drilling program.

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

The drilling project area is in mostly gently to moderately sloping grazing country, comprised of grasses and improved pasture with some scattered native trees. The project area is relatively well vegetated with native and introduced grass species (see Figure 2.)

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

Using the Commonwealth Government's Protected Matters Search Tool, there were no matters of National Environmental Significance within the drilling project area.

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

The Commonwealth Government's Protected Matters Search Tool notes 4 endangered or critically endangered threatened ecological communities may occur within the search area (in the vicinity of the project area). However, only Grey Box Grassy Woodlands and White Box Yellow Box-Blakely's Red Gum Grassy Woodland communities are likely to occur in the vicinity of the project area. No trees will be cleared and the surface disturbance associated with this drilling program is minor and of a temporary nature. 32 threatened species or species habitat may occur within the search area. Of these, 17 species are listed as critically endangered or endangered. No trees will be cleared and the surface disturbance associated with this drilling program is minor and of a temporary nature. Only grass sward / pasture and shallow soil will be cleared to enable construction of level drill pads. No water courses or wetlands will be impacted by the drilling program. All drill pads will be rehabilitated at the completion of the drilling program. No threatened species sightings are recorded on the BioNet database in the vicinity of the project area. Critically endangered or endangered species are unlikely to be adversely impacted by the proposed drilling program. No potential habitat areas have been noted across the project area during drill site planning. Should any potential habitat(s) be noted during the drilling program, the area would be cordoned off to exclude access until checked by a suitably qualified person. A small area of terrestrial biodiversity land is noted in the north eastern corner of the project area (Cabonne Council Terrestrial

Biodiversity Values Dataset). There is no land which is likely affected by the NSW DPI's Fisheries Management Act 1994.

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

There are no historic cultural or natural heritage items within the project area.

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

The drilling project area is not located in an area of any critical habitat or area of outstanding biodiversity value. The north eastern corner of the drilling project area is located in an area of biodiversity sensitivity as noted in the Cabonne Council Terrestrial Biodiversity dataset.

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

An AHIMS search has recorded no Aboriginal heritage sites within the project area. Three modified (carved or scarred) tree sites are recorded to the north of the project area (see Appendix 2). The following safeguards will be implemented to protect potential Aboriginal objects: • Should any Aboriginal objects or places be discovered during exploration, work must stop in that area and the area must be left untouched and access limited to avoid any disturbance. The NSW Department of Planning, Industry and Environment is to be notified. • If human remains are found, work must stop and the site must be secured (taped off with a 20m buffer zone) and the NSW Police and the NSW Department of Planning, Industry and Environment are to be notified.

## Exploration activities

The following exploration activities have been approved.

### Drill holes

Id/ Regulator no.	Type	Surface disturbance (m <sup>2</sup> )	Veg. Clearing (m <sup>2</sup> )	Excavation s (m <sup>3</sup> )	Produced water (ml)	Depth (m)	Block number	Unit letters
SP014 EDH0015 300	RC drill hole	1	1			150	CAN1282	h
SP016 EDH0015 302	RC drill hole	1	1			180	CAN1282	h
SP018 EDH0015 304	RC drill hole	1	1			138	CAN1282	h
SP013 EDH0015 299	RC drill hole	1	1			150	CAN1282	h
SP020 EDH0015 306	RC drill hole	1	1			180	CAN1282	h
SP019 EDH0015 305	RC drill hole	1	1			180	CAN1282	h
SP021 EDH0015 307	RC drill hole	1	1			180	CAN1282	h
SP015	RC drill hole	1	1			150	CAN1282	h

Id/ Regulator no.	Type	Surface disturbance (m <sup>2</sup> )	Veg. Clearing (m <sup>2</sup> )	Excavation s (m <sup>3</sup> )	Produced water (ml)	Depth (m)	Block number	Unit letters
EDH0015 301								
SP017 EDH0015 303	RC drill hole	1	1			150	CAN1282	h

## Other exploration activities

Id/ Regulator no.	Type	Surface disturbance (m <sup>2</sup> )	Veg. Clearing (m <sup>2</sup> )	Excavations (m <sup>3</sup> )	Produced water (ml)	Block number	Unit letters
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## Impact management

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

The closest name water course is Cargo Creek- located to the south-west of the project area. Drillhole SP021 lies within 4 m of a dry tier 1 category drainage gully. SP021 will be moved or not drilled if rain is expected or the gully has flowing water during the program. This hole may be defined as being on waterfront land according to the Water Management Act 2000. In accordance with Natural Resources Access Regulator (NRAR) guidelines, the proposed exploration activity is exempt and a controlled activity approval is not required. The proposed drilling program will not adversely impact any surface water sources and no ground water will be extracted for the drilling program. Any rain water will disperse quickly absorbed into the ground cover or moving as sheet wash into the local drainage. Water for drilling will be carted to the site using the drillers water truck using water from landholder dams or sourced off site and water recycling will be optimized.

### The project includes the following measures to manage groundwater impacts:

It is not expected that significant ground water will be intercepted during drilling. Any intercepted groundwater and liquid wastes would be managed in accordance with the Exploration Code of Practice: Produced Water Management, Storage and Transfer. If groundwater is intercepted during drilling, it will be contained at site in the above-ground containment tanks. In RC drilling any additional flow of groundwater would be managed with the creation of small bunds to direct and contain any flows, these could include hay bales and temporary silt-stop fencing. This drainage will be managed by the driller and drilling supervisor and will be maintained using hand held equipment to ensure minimal surface disturbance, yet providing effective control of any water that may be encountered.

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

The proposed activities will produce minimal waste. All general waste will be contained in large heavy-duty bags and removed from site immediately following drill hole completion and disposed of at the local land-fill site. Material from any hydrocarbon spill-kit used will be disposed off site in heavy-duty bags. Any contaminated soil will be shoveled into the bags for disposal at the local land-fill site. Water used for drilling will be retained by above-ground containment tanks and a contractor with slurry pump capability will be engaged to remove the material and water. All reverse circulation drill cuttings will be collected in heavy-duty plastic sample bags, the openings folded over to prevent escape of material, and stored on site. After about six weeks when the rehabilitation work is completed the drill cuttings will be tipped from the bags down the drill hole in reverse order drilled and bags disposed off. No hazardous or special wastes are produced. No waste/equipment left.

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

The drilling may require hole conditioning fluids, including AMC Rod Grease, Super Foam Biodegradable Drilling Foam, Biodegradable Hammer Oil, AUS-GRIP (ECO) A and B Rigid Foam, Biodegradable lubricants and cutting oils. All these conditioning fluids are biodegradable. No dangerous chemicals will

be present on site. An approved spill kit/oil matting will be on site for use with hydrocarbons such as diesel or oil spills. All chemicals and hydrocarbons will be stored and transported in sealed containers or storage boxes in the vehicles. The drilling contractor will have safety data sheets for all chemicals and hydrocarbons used on site, as well as work method statements as part of the contractor's WH&S policy for the use of these chemicals.

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

There are no nearby occupied residences close to the proposed drilling program. Land access agreements are currently in place with affected landholders. Drilling will be limited to daylight hours only for RC drilling (Diamond Drilling as well unless longer hours are approved by the landholder) is not expected to adversely impact on any nearby residences. There are no sensitive receptors close to the project area. Earplugs will be used at all times by the drillers, field staff and visitors to site to prevent hearing damage as per the contractors Drilling Health and Safety Procedures.

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

Vehicles will be driven at no more than 40 km/hr on local dirt roads and access tracks as a part of WHS requirements for the drilling program. Minor dust is expected as a part of the drilling process, but will only be of a relatively short duration, at the start of diamond drilling. The drill rig also has dust suppression capability to reduce dust from RC drilling. It is not expected that the dust will have an impact on the environment nor will it impact surrounding landholders. Staff will have access to dust masks and appropriate PPE as necessary.

## Sensitivity of the land to be disturbed

Question	Yes/no
<b>Conservation areas</b>	
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?	Yes
Land identified as wilderness or declared a wilderness area under the <i>Wilderness Act 1987</i> ?	Yes
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
<b>Drinking water catchment protection areas</b>	
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

Question	Yes/no
<b>Sensitive areas</b>	
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
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> ?	Yes
Land with a slope greater than 18 degrees measured from the horizontal?	No
<b>Land with potential for soil and water contamination</b>	
Land mapped as Actual Acid Sulfate Soils (AASS) or Potential Acid Sulfate Soils (PASS) on the Acid Sulfate Soils Risk Maps for NSW?	No
<b>Aboriginal protection areas</b>	
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
<b>Historic or natural heritage protection areas</b>	
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
<b>Critical industry clusters</b>	
Land identified as Critical Industry Cluster under <i>State Environmental Planning Policy (Resources and Energy) 2021</i> ?	No
<b>Community land</b>	
Public land classified as community land under the <i>Local Government Act 1993</i> ?	No
<b>Other areas</b>	
Land identified on the authority (e.g., exploration licence or assessment lease) as environmentally sensitive land?	No
<b>Ecology</b>	
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
<b>Aboriginal and European heritage</b>	
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
<b>Activity type</b>	<p>Exploration activity comprising:</p> <ul style="list-style-type: none"> <li>• 0 diamond drill holes</li> <li>• 9 reverse circulation drill holes</li> <li>• 0 other drill holes</li> <li>• 0 cubic metres of bulk sampling</li> <li>• 0 square metres of new access tracks</li> <li>• 0 lines of seismic testing</li> <li>• 0 square metres of air core drilling</li> <li>• 0 square metres of other drilling</li> </ul>
<b>Activity location</b>	2km south west of Cargo, approximately 30km south west of Orange NSW (see Figure 1.), within EL 5238 (1992).
<b>Activity scope (including any ancillary activities)</b>	<p>Up to 9 RC holes, with provisions for diamond tails, are planned within one project area. No drill pads or new tracks will be needed as access will be via existing farm tracks and across paddocks. The potential impacts associated with this drilling program have been determined across the entire project area. Surface disturbance activities associated with the drilling program will be undertaken in accordance with the Drilling Rehabilitation Objectives and Completion Criteria attached to this application. Drilling program stages: Stage 1: Access routes and drill sites pegged and photographed before any works take place. Stage 2: Drill rig and equipment brought onto site. Stage 3: Drilling - Reverse circulation drilling to maximum depth of about 180 m with the potential of diamond (DDH) tails. RC cuttings will be collected in large plastic bags on a meter by meter basis. Proposed equipment: Track/ truck mounted diamond / RC rig with onboard silenced compressor (900cfm/350psi or similar). A separate silenced compressor / booster may be used. Water truck. Support / Rod truck. Rod Sloop with rod feeder mounted on a trailer (or similar). Above-ground containment tanks. Core tray racks and sample bags &amp; equipment. Support vehicles for drillers / geologists. Handheld equipment (shovels, rakes) and hydrocarbon spill kit for emergency cleanup. Water for drilling undertaken will be taken to the site or may be sourced from local farm dams where approved to do so by a landholder. No in-ground sumps are required as the drilling will use above-ground, portable containment tanks. During the drilling program all vehicles will be cleaned prior to entering the area to control dispersal of weeds and non native species. Stage 4: Demobilization and Rehabilitation - will commence following receipt of final assay results and interpretation, generally within 6 months of completion of the program.</p> <p>No water will be required for the RC drilling. Water for diamond drilling will be carted in by water truck from existing dams where approved to do so by landholders or sourced nearby. Water will be stored in above ground tanks during the DDH drilling process if diamond tails are used. If required, disposal of drilling muds will be undertaken by the drilling company, and will be removed from site and disposed of in accordance with environmental regulations. All accommodation will be off-site</p>
<b>Hours of operation</b>	Continuous work hours (24 hours a day, 7 days a week).
<b>Expected duration (weeks)</b>	48
<b>Anticipated start date</b>	20 May 2024
<b>Expected rehabilitation completion date</b>	Estimated 19 May 2025

Item	Commitment
<b>Maximum area of disturbance</b>	9 square metres
<b>Agricultural impact</b>	The activity will be undertaken in accordance with EL5238 Level 2 Agricultural Impact Statement_RC-DDH Drilling_2024.pdf (13680779 bytes)
<b>Air quality</b>	Vehicles will be driven at no more than 40 km/hr on local dirt roads and access tracks as a part of WHS requirements for the drilling program. Minor dust is expected as a part of the drilling process, but will only be of a relatively short duration, at the start of diamond drilling. The drill rig also has dust suppression capability to reduce dust from RC drilling. It is not expected that the dust will have an impact on the environment nor will it impact surrounding landholders. Staff will have access to dust masks and appropriate PPE as necessary.
<b>Protection of water sources</b>	<p>The closest name water course is Cargo Creek- located to the south-west of the project area. Drillhole SP021 lies within 4 m of a dry tier 1 category drainage gully. SP021 will be moved or not drilled if rain is expected or the gully has flowing water during the program. This hole may be defined as being on waterfront land according to the Water Management Act 2000. In accordance with Natural Resources Access Regulator (NRAR) guidelines, the proposed exploration activity is exempt and a controlled activity approval is not required. The proposed drilling program will not adversely impact any surface water sources and no ground water will be extracted for the drilling program. Any rain water will disperse quickly absorbed into the ground cover or moving as sheet wash into the local drainage. Water for drilling will be carted to the site using the drillers water truck using water from landholder dams or sourced off site and water recycling will be optimized.</p> <p>It is not expected that significant ground water will be intercepted during drilling. Any intercepted groundwater and liquid wastes would be managed in accordance with the Exploration Code of Practice: Produced Water Management, Storage and Transfer. If groundwater is intercepted during drilling, it will be contained at site in the above-ground containment tanks. In RC drilling any additional flow of groundwater would be managed with the creation of small bunds to direct and contain any flows, these could include hay bales and temporary silt-stop fencing. This drainage will be managed by the driller and drilling supervisor and will be maintained using hand held equipment to ensure minimal surface disturbance, yet providing effective control of any water that may be encountered.</p>
<b>Soil and land stability</b>	<p>The drill rig and vehicles will be at each drill site for only 2 to 6 days. This is not expected to cause any significant impact on the soil. At the completion of rehabilitation, the land will be left to naturally regenerate. If monitoring (as per the Drilling Rehabilitation Objectives and Completion Criteria attached to this document) shows natural re-vegetation to be ineffective then seeding with local pasture species and/or weed control measures will be undertaken. Any minor drips or spills of hydrocarbons will be dealt with efficiently with a spill kit that is a requirement at all drill sites.</p>
<b>Noise and vibration</b>	<p>There are no nearby occupied residences close to the proposed drilling program. Land access agreements are currently in place with affected landholders. Drilling will be limited to daylight hours only for RC drilling (Diamond Drilling as well unless longer hours are approved by the landholder)is not expected to adversely impact on any nearby residences. There are no sensitive receptors close to the project area. Earplugs will be used at all times by the drillers, field staff and visitors to site to prevent hearing damage as per the contractors Drilling Health and Safety Procedures.</p>
<b>Coastal processes and hazards</b>	N/A

Item	Commitment
<b>Hazardous substances or chemicals</b>	The drilling may require hole conditioning fluids, including AMC Rod Grease, Super Foam Biodegradable Drilling Foam, Biodegradable Hammer Oil, AUS-GRIP (ECO) A and B Rigid Foam, Biodegradable lubricants and cutting oils. All these conditioning fluids are biodegradable. No dangerous chemicals will be present on site. An approved spill kit/oil matting will be on site for use with hydrocarbons such as diesel or oil spills. All chemicals and hydrocarbons will be stored and transported in sealed containers or storage boxes in the vehicles. The drilling contractor will have safety data sheets for all chemicals and hydrocarbons used on site, as well as work method statements as part of the contractor's WH&S policy for the use of these chemicals.
<b>Wastes and emissions</b>	The proposed activities will produce minimal waste. All general waste will be contained in large heavy-duty bags and removed from site immediately following drill hole completion and disposed of at the local land-fill site. Material from any hydrocarbon spill-kit used will be disposed off site in heavy-duty bags. Any contaminated soil will be shoveled into the bags for disposal at the local land-fill site. Water used for drilling will be retained by above-ground containment tanks and a contractor with slurry pump capability will be engaged to remove the material and water. All reverse circulation drill cuttings will be collected in heavy-duty plastic sample bags, the openings folded over to prevent escape of material, and stored on site. After about six weeks when the rehabilitation work is completed the drill cuttings will be tipped from the bags down the drill hole in reverse order drilled and bags disposed off. No hazardous or special wastes are produced. No waste/equipment left.
<b>Vegetation</b>	Any topsoil or vegetative material removed at drillsites (collars) will be set aside and replaced following drilling. Any damage to existing access tracks will be repaired. At the completion of exploration rehabilitation, the land will be left to naturally regenerate. If monitoring shows natural re-vegetation to be ineffective then seeding with local pasture species and/or weed control measures will be undertaken.
<b>Threatened fauna and flora species</b>	Where possible, topsoil and grass sward / vegetation at each drill site will be replaced following drilling. The work program will be completed as soon as possible mitigating time of disturbance to any fauna in the area.
<b>Areas of outstanding biodiversity value/critical habitat</b>	No trees will be cleared for this program, there may be some pruning for the safety of personal and rig access. The proposed drilling will not impact any surface water sources. No surface water or ground water will be extracted for the drilling program.
<b>Endangered ecological community or critically endangered ecological community</b>	N/A
<b>Habitat of a threatened species or ecological community</b>	N/A
<b>Key threatening processes</b>	Vehicles will be cleaned before use on site and regularly inspected before they enter and after they leave the project areas to ensure that there is no adhering weed matter. This will mitigate the spread of any noxious weeds either to or from the project areas. Also, moving dead trees/wood will be avoided, unless absolutely necessary (as mentioned above).
<b>Barriers to movement of fauna</b>	N/A
<b>Ecological and biosecurity impacts</b>	No trees will be cleared for this program, there may be some pruning for the safety of personal and rig access. The proposed drilling will not impact any surface water sources. No surface water or ground water will be extracted for the drilling program.
<b>Community resources</b>	N/A

Item	Commitment
<b>Natural resources</b>	N/A
<b>Social impacts</b>	N/A
<b>Economic impacts</b>	Compensation will be paid in a timely manner to ensure a good relationship is maintained between explorer and LLS.
<b>Heritage impacts</b>	N/A
<b>Aesthetic impacts</b>	N/A
<b>Aboriginal cultural heritage</b>	If Aboriginal artifacts are discovered, appropriate measures will be taken to ensure the artifact and area is preserved.
<b>Land use impacts</b>	Drilling program will be undertaken to minimize any impacts on the grazing land and the cleared forested areas.
<b>Transportation impacts</b>	The amount of journeys and limited number of vehicles involved in the drilling program will not cause significant impact to the local transport system. Vehicle movements will be limited to only what is necessary.
<b>Matters of national environmental significance</b>	N/A
<b>Cumulative impacts</b>	N/A
<b>Rehabilitation commitments</b>	The activity will be undertaken in accordance with the rehabilitation objectives and targets provided for this project.
<b>Risk assessments</b>	The titleholder must monitor the risks associated with activities and, if the risk associated with an activity changes, implement revised environmental management controls.
<b>Incident management</b>	The NSW Resources Regulator will be notified of all incidents in accordance with the requirements of EL 5238 (1992).
<b>Reporting</b>	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 5238 (1992).
<b>Codes of Practice</b>	Spur Project will be operated in accordance with: <ul style="list-style-type: none"> <li>• Exploration Code of Practice: Environmental Management</li> <li>• Exploration Code of Practice: Rehabilitation</li> <li>• Exploration Code of Practice: Produced Water Management, Storage and Transfer</li> </ul>
<b>Other (as applicable)</b>	1. No additional terms specified.

## Attachment 2 – Definitions

To search for NSW legislation, visit [www.legislation.nsw.gov.au](http://www.legislation.nsw.gov.au). Commonwealth legislation can be found at [www.legislation.gov.au](http://www.legislation.gov.au).

Word	Definition
<b>Aboriginal object</b>	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
<b>Aboriginal place</b>	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
<b>Acid Sulfate Soils</b>	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).
<b>Activity</b>	Any activity carried out in connection with exploration, including: <ul style="list-style-type: none"> <li>the use of land</li> <li>means of accessing land</li> <li>the carrying out of a work.</li> </ul>
<b>Activity approval</b>	An approval to carry out assessable prospecting operations granted under the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
<b>Actual Acid Sulfate Soils (AASS)</b>	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.
<b>Applicant</b>	In relation to an exploration activity, the person proposing to carry out the exploration activity.
<b>Aquatic reserve</b>	Has the same meaning as it has in the <i>Marine Estate Management Act 2014</i> .
<b>Areas of Outstanding Biodiversity Value (AOBVs)</b>	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> .
<b>Assessable prospecting operation</b>	Any prospecting operation that is not exempt development within the meaning of <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
<b>Clearing of vegetation</b>	Any one or more of the following: <ul style="list-style-type: none"> <li>cutting down, felling, thinning, lopping, logging or removing vegetation, or</li> <li>killing, destroying, poisoning, ringbarking, uprooting or burning vegetation.</li> </ul>
<b>Complying exploration activities (CEA)</b>	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> .
<b>Critical habitat</b>	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> .
<b>Drill hole</b>	A hole made by drilling or boring, but excludes: <ul style="list-style-type: none"> <li>sampling and coring using handheld equipment,</li> <li>petroleum wells.</li> </ul>
<b>Drilling</b>	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
<b>Environment</b>	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
<b>Environmentally sensitive area of State significance</b>	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
<b>Excavation</b>	The removal of the surface layer to a depth greater than 500 mm from the natural surface level.
<b>Exempt development</b>	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
<b>Exploration</b>	Has the same meaning as it has in <i>State Environmental Planning Policy (Resources and Energy) 2021</i> .
<b>Fauna</b>	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
<b>Groundwater</b>	Water that occurs beneath the ground surface in the saturated zone.
<b>Habitat</b>	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).
<b>Harm</b>	<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"> <li>• 'harm an animal' in the <i>National Parks and Wildlife Act 1974</i></li> <li>• 'pick a native plant' in the <i>National Parks and Wildlife Act 1974</i></li> <li>• 'harm' in the <i>Fisheries Management Act 1994</i>.</li> </ul> <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>
<b>Items of heritage significance</b>	<p>Means:</p> <ul style="list-style-type: none"> <li>• any heritage items listed in one or more of the following: <ul style="list-style-type: none"> <li>— the Commonwealth Heritage List</li> <li>— the World Heritage List</li> <li>— the National Heritage List</li> <li>— the State Heritage Register</li> <li>— an Environmental Planning Instrument</li> </ul> </li> <li>• 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</li> </ul>

Word	Definition
	<ul style="list-style-type: none"> <li>• within State Conservation Areas: <ul style="list-style-type: none"> <li>— items that are listed on the DECC Historic Heritage Information Management System, or</li> <li>— 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.</li> </ul> </li> </ul>
<b>Land</b>	<p>Includes:</p> <ul style="list-style-type: none"> <li>• the sea or an arm of the sea</li> <li>• a bay, inlet, lagoon, lake or body of water, whether inland or not and whether tidal or non-tidal</li> <li>• a river, stream or watercourse, whether tidal or non-tidal, and</li> <li>• a building erected on the land</li> </ul>
<b>Marine vegetation</b>	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
<b>Matters of national environmental significance</b>	'Matters of national environmental significance' protected under the <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> .
<b>Minister</b>	The Minister administering the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
<b>Native vegetation</b>	Has the same meaning as it has in the <i>Local Land Services Act 2013</i> .
<b>Potential acid sulphate soils (PASS)</b>	Sediments and soils that contain iron sulfides or sulfidic material which have not been exposed to air and oxidised
<b>Produced water</b>	Any form of groundwater that is actively extracted from a borehole or excavation, excluding incidental groundwater mixed with drilling fluids.
<b>Rehabilitation</b>	Has the same meaning as it has in the <i>Mining Act 1992 / Petroleum (Onshore) Act 1991</i> – as relevant.
<b>Seismic survey</b>	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.
<b>Sensitive receiver</b>	<p>Includes:</p> <ul style="list-style-type: none"> <li>• dwellings</li> <li>• libraries</li> <li>• educational and research institutions (including schools, colleges and universities)</li> <li>• childcare centres</li> <li>• kindergartens</li> <li>• hospitals, surgeries and other medical institutions</li> <li>• places of worship</li> <li>• milking sheds and holding yards associated with dairies</li> <li>• animal boarding or training establishments</li> <li>• aquaculture</li> </ul>

Word	Definition
	<ul style="list-style-type: none"> <li>intensive livestock agriculture</li> </ul>
<b>Site</b>	The land on which an activity is located.
<b>State Conservation Area</b>	Has the same meaning as it has in the <i>National Parks and Wildlife Act 1974</i> .
<b>Surface disturbance</b>	Means: <ul style="list-style-type: none"> <li>disturbance or exposure of the soil or surface rock layer, or</li> <li>degradation or deterioration in any manner of the physical surface of land.</li> </ul>
<b>Terms</b>	In relation to activity approvals, the terms imposed by the decision-maker on the grant of an activity approval.
<b>Threatened species or ecological communities</b>	Has the same meaning as it has in the <i>Biodiversity Conservation Act 2016</i> or <i>Fisheries Management Act 1994</i> (as relevant).
<b>Title</b>	An authority under the <i>Mining Act 1992</i> / a title under the <i>Petroleum (Onshore) Act 1991</i> – as relevant.
<b>Titleholder</b>	A person or company to whom a title has been issued.
<b>Track</b>	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.
<b>Waste</b>	Has the same meaning as it has in the <i>Protection of the Environment Operations Act 1997</i> .
<b>Water source</b>	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
<b>Water land</b>	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
<b>Waterfront land</b>	Has the same meaning as it has in the <i>Water Management Act 2000</i> .
<b>Wetlands</b>	Has the same meaning as it has in the <i>Fisheries Management Act 1994</i> .
<b>Wilderness</b>	Lands identified as wilderness under the <i>Wilderness Act 1987</i> .
<b>Wilderness area</b>	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.**

No nearby sensitive receivers. Small amount of localized dust during drilling. Exhaust fumes from the running of the drilling rig will be dispersed quickly. It is not expected that the dust will have an impact on the environment nor will it impact surrounding landholders.

**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.**

Vehicles will be driven at no more than 40 km/hr on local dirt roads and access tracks as a part of WHS. Minor dust is expected as a part of drilling process. It is not expected that the dust will have an impact on the environment nor will it impact surrounding landholders. If significant dust is generated by the drilling process the use of dust suppression equipment supplied by the drill contractor will be used. The drilling will not release any gases and/or vapours. Staff will have access to dust masks and appropriate PPE as necessary. Visitors to the site will not be allowed within 25m of the rig.

### Water impacts

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

The proposed drilling will not impact any surface water sources and no water (surface or groundwater) will be extracted for the drilling program. Should significant amounts of groundwater be intercepted, the drillers are certified and experienced to appropriately limit the flow.

**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?**

Negligible

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

Negligible

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

Negligible

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

Negligible

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

Negligible

**What is the likely level of any water impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

All drillholes will be located more than 40m from the top bank of any water source including watercourses and dams. SP021 is within 4 m of a dry tier 1 category gully . This hole will not be drilled if the gully is in flow. Any wetland, swamps or other potential habitat areas will also be avoided. No surface water or ground water will be extracted for the drilling program. If groundwater is intercepted during the drilling process and expelled it will be

### Water impacts

controlled by small bunds constructed from geo-fabric and/or straw bales. This drainage will be managed by the driller and drilling supervisor and will be maintained using hand held equipment to ensure minimal surface disturbance, yet providing effective control of any water that may be encountered. The drilling contractor has well established procedures to mitigate and resolve any issues if any water is intercepted.

### Soil and stability impacts

#### Provide a brief description of the likely impacts to soil quality or land stability.

No vegetation or soil (other than a maximum of 1sqm of grass / soil around each drillhole itself) will be cleared. No established trees will be removed or cleared. No other earthworks or site preparation will be required to access the drill sites. The environmental impacts associated with this drilling program are minimal and are only of a temporary nature. No acid sulfate soils are present in the region.

#### 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.

The drill rig and vehicles will be at each drill site for only 2 to 6 days. This is not expected to cause any significant impact on the soil. At the completion of rehabilitation, the land will be left to naturally regenerate. If monitoring (as per the Drilling Rehabilitation Objectives and Completion Criteria attached to this document) shows natural re-vegetation to be ineffective then seeding with local pasture species and/or weed control measures will be undertaken. Any minor drips or spills of hydrocarbons will be dealt with efficiently with a spill kit that is a requirement at all drill sites.

### Noise and vibration impacts

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

Noise and vibration will be limited to the drill sites only and will not significantly impact surrounding landholders or residences. There are no nearby sensitive receptors.

#### What is the likely level of any impacts?

Negligible

#### Outline any proposed management controls and/or mitigation measures.

### Noise and vibration impacts

Vehicle speeds will be limited to a maximum of 40km/hr. Use of a silenced compressor will minimise any noise impacts from the drilling. RC drilling will only take place during daylight hours. The times of operation will be discussed with the closest sensitive receptor before operations commence. DDH drilling, if done, will be over a 24 hours any noise impacts will not impact houses as closest house is outside of 700 m away

### 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.**

Use of fuel and oil in drill rig and support vehicles may potentially result in localised impact if spillage occurs. All drilling consumables are non hazardous and non toxic.

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

Low adverse

**Outline any proposed management controls and/or mitigation measures.**

Diesel stored only in truck tanks. All chemicals and hydrocarbons will be stored and transported in sealed containers or storage boxes in the vehicles. All chemicals used are biodegradable and approved for drilling. No dangerous chemicals will be used on site. Appropriate chemical spill kits / oil matting will be available on site for use with hydrocarbons such as diesel or oil spills and any waste will be disposed of in the nearest appropriate waste facility. The drilling contractor will have safety data sheets for all chemicals and hydrocarbons used on site, as well as safe work method statements as part of the contractor's WH&S policy for the use of these chemicals.

### 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.**

Drilling fines will be collected and then used to backfill the holes. Fugitive emissions from diesel powered equipment will be negligible and of short duration.

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

Negligible

**What is the likely level of the impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

N/A

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

Access to the drill sites will be via existing farm tracks and access across paddocks. Most of the drill sites will be located along existing tracks or a short distance away in either open cleared grazing land. No trees will be removed or cleared. Mild site preparation will be required for the drill sites. Although compaction of soil is not expected from vehicle movements, if it does occur then those areas will be monitored and scarified if required.

**What is the likely level of the impacts?**

Low adverse

**Outline any proposed management controls and/or mitigation measures.**

Any topsoil or vegetative material removed at drillsites (collars) will be set aside and replaced following drilling. Any damage to existing access tracks will be repaired. At the completion of exploration rehabilitation, the land will be left to naturally regenerate. If monitoring shows natural re-vegetation to be ineffective then seeding with local pasture species and/or weed control measures will be undertaken.

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

The proposed drilling program will not impact any potential habitat of vulnerable animal species that may use the area. The drilling program will not impact any water courses and will therefore not impact threatened aquatic species.

**What is the likely level of the impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

Where possible, topsoil and grass sward / vegetation at each drill site will be replaced following drilling. The work program will be completed as soon as possible mitigating time of disturbance to any fauna in the area.

**Area of outstanding biodiversity value (AOBV) / Critical habitat****Provide a brief description of any likely impacts to AOBV/critical habitat.**

The project area is not located in an area of any critical habitat or area of outstanding biodiversity value. Some drillholes are located in an area of terrestrial biodiversity value.

**What is the likely level of the impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

No trees will be cleared for this program, there may be some pruning for the safety of personal and rig access. The proposed drilling will not impact any surface water sources. No surface water or ground water will be extracted for the drilling program.

**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.**

N/A

**What is the likely level of the impacts?**

Nil/Not applicable

**Endangered ecological community or critically endangered ecological community**

Outline any proposed management controls and/or mitigation measures.

N/A

**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.

N/A

What is the likely level of the impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

N/A

**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.

The drilling will be undertaken within a relatively small region. If weeds are present, the dispersal due to vehicle movements within the small area will be minimal. Hollow bearing trees will be unaffected by drilling and vehicle movements. Dead wood and trees will not be removed from the region. They may be moved (<10m) if needed for drilling or restricting access on existing tracks, but will not be moved otherwise.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Vehicles will be cleaned before use on site and regularly inspected before they enter and after they leave the project areas to ensure that there is no adhering weed matter. This will mitigate the spread of any noxious weeds either to or from the project areas. Also, moving dead trees/wood will be avoided, unless absolutely necessary (as mentioned above).

**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.

N/A

What is the likely level of any impacts?

Nil/Not applicable

Outline any proposed management controls and/or mitigation measures.

N/A

**Ecological and biosecurity impacts**

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

The activity is likely to cause a bushfire risk.

**Ecological and biosecurity impacts**

**Provide a brief description of any impacts.**

Very low possibility of starting in dry grass

**What is the likely level of any impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

No trees will be cleared for this program, there may be some pruning for the safety of personal and rig access. The proposed drilling will not impact any surface water sources. No surface water or ground water will be extracted for the drilling program.

**Community resources**

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

N/A

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

N/A

**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.**

Temporary disturbance at drillsites.

**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).**

Very minimal farming in Project Area. Existing activities will not be adversely impacted by the drilling as no tree removal or additional tracks will be required with only limited tree pruning where necessary.

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

N/A

**What is the likely level of the impact?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

N/A

**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.**

N/A

### Social impacts

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.

N/A

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).

N/A

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.

No. The drilling activities will be a significant distance from homesteads and the residential lots in Cargo.

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.

N/A

What is the likely level of any social impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

N/A

### Economic impacts

Provide a brief description of any likely economic impacts.

LLS will receive compensation payment in accordance with the land access agreement.

What is the likely level of any impacts?

Negligible

Outline any proposed management controls and/or mitigation measures.

Compensation will be paid in a timely manner to ensure a good relationship is maintained between explorer and LLS.

### Heritage impacts

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

N/A

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.**

N/A

**What is the likely level of any impacts?**

Nil/Not applicable

**Outline any proposed management controls and/or mitigation measures.**

N/A

**Cultural impacts**

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

An AHIMS search has shown that no Aboriginal heritage sites are recorded within the project areas. 3 Aboriginal sites were found outside the project area and will not be affected by the drilling operations.

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

No Aboriginal objects or places are within or near to the project areas.

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

N/A

**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.**

N/A

**What is the likely level of any cultural impacts?**

Nil/Not applicable

**Outline any proposed management controls and/or mitigation measures.**

If Aboriginal artifacts are discovered, appropriate measures will be taken to ensure the artifact and area is preserved.

**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.**

Temporary disturbance of grazing land and cleared forested areas.

**What is the likely level of any impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

Drilling program will be undertaken to minimize any impacts on the grazing land and the cleared forested areas.

**Transportation impacts**

**Provide a brief description of any significant impacts on transportation.**

Additional traffic will be on the local roads as site personnel will be travelling to and from the site each day.



**Transportation impacts****What is the likely level of any impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

The amount of journeys and limited number of vehicles involved in the drilling program will not cause significant impact to the local transport system. Vehicle movements will be limited to only what is necessary.

**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.**

N/A

**What is the likely level of any impacts?**

Nil/Not applicable

**Outline any proposed management controls and/or mitigation measures.**

N/A

**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.**

N/A

**What is the likely level of any impacts?**

Negligible

**Outline any proposed management controls and/or mitigation measures.**

N/A

**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):**

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

- !Final Figures.zip
  - APO0001756\_Submission Report\_6 May 2024 527pm.pdf
  - APO0001756\_Submission Report\_6 May 2024 5:27pm.pdf
  - Appendix I Photos.pdf
  - Appendix II Bionet Search.pdf
  - Appendix II Bionet Search.pdf
  - Appendix III AHIMS Search.pdf
  - EL5238 Level 2 Agricultural Impact Statement\_RC-DDH Drilling\_2024.pdf
  - EL5238\_Drilling Rehabilitation Objectives and Completion Criteria\_May 2024.xlsx
  - EL5238\_EPBC MNES Search.pdf
  - FW: EL 5238 (1992) | Spur Project | APO Application | APO0001756.eml
  - image005.png
  - RE: EL 5238 (1992) | Spur Project | APO Application | APO0001756.eml
  - Seed Heritage Items.pdf

FORM: APO\_NC\_Apvl v3.3