Resources Regulator
Department of Regional NSW

Friday 17 May 2024

Assessable Prospecting Operation Application Decision Briefing and Review of Environmental Factors

Koolaman PASS AC drilling | APO0001736

Decision Maker	Christine Fawcett
Prepared by	Stephen Clipperton
Title	AL 29 (1992)
Authorised Representative	[redacted]
Project name	Koolaman PASS AC drilling
Activity type	Non-Complying Exploration Activity

Issue

[redacted] has sought an activity approval in respect of Koolaman PASS AC drilling, within AL 29 (1992), at Euston (Koolaman).

Pursuant to section 2.8 of *State Environmental Planning Policy (Resources and Energy) 2021*, development for the purposes of exploration (i.e. prospecting) may be carried out without development consent.

An authority issued under the *Mining Act 1992* is subject to a condition that the authority holder must not carry out an assessable prospecting operation on land over which the authority is granted unless an activity approval has been obtained for the carrying out of the assessable prospecting operation.

As assessable prospecting operations require approval by the Minister under the *Mining Act 1992*, a duty is imposed on determining authorities under Part 5 of the *Environmental Planning and Assessment Act 1979* to:

- examine and take into account to the fullest extent possible all matters affecting or likely to affect the environmental by reason of the proposed activity; and
- if the activity is likely to significantly affect the environment, examine and consider an environmental impact statement in respect of the activity.

The Minister is the determining authority for all exploration activities subject to environmental assessment under Part 5 of the *Environmental Planning and Assessment Act 1979*.

The Decision Maker, under delegation from the Minister, is required to determine whether:

- the proposed activity is not likely to have a significant impact on the environment and is not likely to significantly affect threatened species, populations or ecological communities (or their habitats) or impact biodiversity values and can be approved,
- the proposed activity is likely to have a significant impact on the environment and therefore an Environmental Impact Statement (EIS) is required,

- the proposed activity will be carried out in a declared area of outstanding biodiversity value and is likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a Species Impact Statement (SIS) and/or Biodiversity Development and Assessment Report (BDAR) is required, or
- there is insufficient information to make a decision.

Background

This exploration activity approval is being sought under AL29 (1992) to undertake assessable prospecting operations. The current security deposit held for AL29 (1992) is $320,000.

Proposed exploration activity

The proposed exploration activity (including details of the site, the existing environment, impact thresholds and impact management) are described in *APPLICATION TO UNDERTAKE ASSESSABLE PROSPECTING OPERATIONS Koolaman PASS AC drilling* report and the information provided in support of the application.

The objective of the proposed exploration activity is to carry out works on, or to remove samples from, land for the purpose of testing the resource quality and/or quantity of the land. This is consistent with the objects of the *Mining Act 1992*, including to facilitate the discovery and development of resources in NSW.

No alternatives options to the proposed activity were considered.

Security

The application triggered a review of the assessed deposit to secure funding for the fulfilment of obligations if Koolaman PASS AC drilling is approved.

Refer to RCE Record RCE0001989

Assessment of Impacts (Non-complying exploration activity)

An assessment of the significance of environmental impacts associated with the proposed activity was undertaken in accordance with the Department of Planning and Environment's "*Guidelines for Division 5.1 assessments*". The results of this assessment are documented in the attached Review of Environmental Factors document.

The assessment undertaken pursuant to Division 5.1 of the EP&A Act 1979 has determined the proposed activity is not likely to have a significant impact on the environment and therefore an EIS is not required.

The proposed activity will not be carried out in a declared area of outstanding biodiversity value, and with the proposed mitigation measures in place, is not likely to significantly affect threatened species, populations or ecological communities, or their habitats or impact biodiversity values, meaning a SIS and/or BDAR is not required.

Additional terms (if approved)

No additional terms are required.

Summary

Based on the information provided in the *APPLICATION TO UNDERTAKE ASSESSABLE PROSPECTING OPERATIONS Koolaman PASS AC drilling* report, and the Review of Environmental Factors document, the proposed activity has been assessed as is not likely to have a significant impact on the environment and therefore an EIS is not required.

The application has been assessed and the recommendation is to Approve the activity.

Certification

I, Stephen Clipperton, certify that I have reviewed and endorsed the contents of the attached Review of Environmental Factors document and, to the best of my knowledge, it is in accordance with the *Environmental Planning and Assessment Act 1979,* the Environmental Planning and Assessment Regulation 2021 and the Guidelines approved under clause 170 of the EP&A Regulation, and the information it contains is neither false nor misleading.

Recommendation

The Decision Maker, under delegation from the Minister:

- Assesses the environmental impact of Koolaman PASS AC drilling and determines that the activity is is not likely to have a significant impact on the environment and therefore an EIS is not required under Part 5 of the *Environmental Planning and Assessment Act 1979*.
- Approve the activity pursuant to the *Mining Act 1992*.

Review of Environmental Factors document

Criteria	Air Impacts: Air quality impacts (including impacts on nearby sensitive receptors).		
Potential impacts	Dust production from track use and drilling.		
Proposed management controls	Heavy vehicle traffic will be minimised to essential rig and support truck movement. Maximum speed limits will be prescribed to minimise dust production and track conditions will be monitored daily. Water injection will be used when required to manage dust generated through drilling. All vehicles are fitted with exhaust mufflers engineered to manufacturers specifications. The vehicles will be inspected prior to commencing activities. Should dust creation from either drilling operations or track usage become a concern, the situation will be assessed and managed by amending procedures in consultation with the landowner.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low

Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Air Impacts: Greenhouse or ozone impacts.		
Potential impacts	Dust production from track use and drilling.		
Proposed management controls	Heavy vehicle traffic will be minimised to essential rig and support truck movement. Maximum speed limits will be prescribed to minimise dust production and track conditions will be monitored daily. Water injection will be used when required to manage dust generated through drilling. All vehicles are fitted with exhaust mufflers engineered to manufacturers specifications. The vehicles will be inspected prior to commencing activities. Should dust creation from either drilling operations or track usage become a concern, the situation will be assessed and managed by amending procedures in consultation with the landowner.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Air Impacts: Additional impacts on areas with degraded air quality.		
Potential impacts	Dust production from track use and drilling.		
Proposed management controls	Heavy vehicle traffic will be minimised to essential rig and support truck movement. Maximum speed limits will be prescribed to minimise dust production and track conditions will be monitored daily. Water injection will be used when required to manage dust generated through drilling. All vehicles are fitted with exhaust mufflers engineered to manufacturers specifications. The vehicles will be inspected prior to commencing activities. Should dust creation from either drilling operations or track usage become a concern, the situation will be assessed and managed by amending procedures in consultation with the landowner.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from the use of surface or groundwater.		
Potential impacts	There will be no impact to any water sources.		
Proposed management controls	Sumps will be used to contain all water return from drilling and will be buried as soon as all water has evaporated. Any water required for drilling activities will be sourced from a nearby town and stored in appropriate containers on the drilling and support vehicles. The anticipated average drill depth of each hole is approximately 70m with a maximum drill depth of 80m. These drill depths confine the planned activity to within the Loxton Parilla Sands formation and will not penetrate the underlying confined aquifer. If the drilling does intercept the Geera clay, drilling will cease immediately. No ground water is to be extracted, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from storage of water		
Potential impacts	There will be no impact to any water sources.		
Proposed management controls	Sumps will be used to contain all water return from drilling and will be buried as soon as all water has evaporated. Any water required for drilling activities will be sourced from a nearby town and stored in appropriate containers on the drilling and support vehicles. The anticipated average drill depth of each hole is approximately 70m with a maximum drill depth of 80m. These drill depths confine the planned activity to within the Loxton Parilla Sands formation and will not penetrate the underlying confined aquifer. If the drilling does intercept the Geera clay, drilling will cease immediately. No ground water is to be extracted, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from changes to natural water bodies, wetlands or runoff patterns.		
Potential impacts	There will be no impact to any water sources.		
Proposed management controls	Sumps will be used to contain all water return from drilling and will be buried as soon as all water has evaporated. Any water required for drilling activities will be sourced from a nearby town and stored in appropriate containers on the drilling and support vehicles. The anticipated average drill depth of each hole is approximately 70m with a maximum drill depth of 80m. These drill depths confine the planned activity to within the Loxton Parilla Sands formation and will not penetrate the underlying confined aquifer. If the drilling does intercept the Geera clay, drilling will cease immediately. No ground water is to be extracted, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from aquifer interference, including changes to inter-aquifer connectivity.		

Potential impacts	There will be no impact to any water sources.		
Proposed management controls	Sumps will be used to contain all water return from drilling and will be buried as soon as all water has evaporated. Any water required for drilling activities will be sourced from a nearby town and stored in appropriate containers on the drilling and support vehicles. The anticipated average drill depth of each hole is approximately 70m with a maximum drill depth of 80m. These drill depths confine the planned activity to within the Loxton Parilla Sands formation and will not penetrate the underlying confined aquifer. If the drilling does intercept the Geera clay, drilling will cease immediately. No ground water is to be extracted, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from changes to flooding or tidal regimes.		
Potential impacts	There will be no impact to any water sources.		
Proposed management controls	Sumps will be used to contain all water return from drilling and will be buried as soon as all water has evaporated. Any water required for drilling activities will be sourced from a nearby town and stored in appropriate containers on the drilling and support vehicles. The anticipated average drill depth of each hole is approximately 70m with a maximum drill depth of 80m. These drill depths confine the planned activity to within the Loxton Parilla Sands formation and will not penetrate the underlying confined aquifer. If the drilling does intercept the Geera clay, drilling will cease immediately. No ground water is to be extracted, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Water Impacts: Impacts from changes in surface or groundwater quality and quantity.		
Potential impacts	There will be no impact to any water sources.		
Proposed management controls	Sumps will be used to contain all water return from drilling and will be buried as soon as all water has evaporated. Any water required for drilling activities will be sourced from a nearby town and stored in appropriate containers on the drilling and support vehicles. The anticipated average drill depth of each hole is approximately 70m with a maximum drill depth of 80m. These drill depths confine the planned activity to within the Loxton Parilla Sands formation and will not penetrate the underlying confined aquifer. If the drilling does intercept the Geera clay, drilling will cease immediately. No ground water is to be extracted, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Degradation of soil quality (including contamination, salinisation or acidification).		
Potential impacts	Due to the short term nature of the exploration drilling, there are no impacts to soil quality or land stability.		
Proposed management controls	As the planned drill holes are on previously cleared pads or private access tracks, compaction of the ground from drill activities (incl. site set-up) will be negligible. However, ground compaction will be superficial and will not impose adverse effects on the overall ground quality. Erosion from drilling activities (incl. vehicle movement, site set-up and drilling of holes) will be negligible due to minor gradient (general surface slope has <1% gradient over 100m).		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Impacts on land with high agricultural capability.		
Potential impacts	Due to the short term nature of the exploration drilling, there are no impacts to soil quality or land stability.		
Proposed management controls	As the planned drill holes are on previously cleared pads or private access tracks, compaction of the ground from drill activities (incl. site set-up) will be negligible. However, ground compaction will be superficial and will not impose adverse effects on the overall ground quality. Erosion from drilling activities (incl. vehicle movement, site set-up and drilling of holes) will be negligible due to minor gradient (general surface slope has <1% gradient over 100m).		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Loss of soil from wind or water erosion.		
Potential impacts	Due to the short term nature of the exploration drilling, there are no impacts to soil quality or land stability.		
Proposed management controls	As the planned drill holes are on previously cleared pads or private access tracks, compaction of the ground from drill activities (incl. site set-up) will be negligible. However, ground compaction will be superficial and will not impose adverse effects on the overall ground quality. Erosion from drilling activities (incl. vehicle movement, site set-up and drilling of holes) will be negligible due to minor gradient (general surface slope has <1% gradient over 100m).		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Loss of structural integrity of the soil.		
Potential impacts	Due to the short term nature of the exploration drilling, there are no impacts to soil quality or land stability.		
Proposed management controls	As the planned drill holes are on previously cleared pads or private access tracks, compaction of the ground from drill activities (incl. site set-up) will be negligible. However, ground compaction will be superficial and will not impose adverse effects on the overall ground quality. Erosion from drilling activities (incl. vehicle movement, site set-up and drilling of holes) will be negligible due to minor gradient (general surface slope has <1% gradient over 100m).		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Soil & Stability Impacts: Increased land instability with high risks from land slides or subsidence.		
Potential impacts	Due to the short term nature of the exploration drilling, there are no impacts to soil quality or land stability.		
Proposed management controls	As the planned drill holes are on previously cleared pads or private access tracks, compaction of the ground from drill activities (incl. site set-up) will be negligible. However, ground compaction will be superficial and will not impose adverse effects on the overall ground quality. Erosion from drilling activities (incl. vehicle movement, site set-up and drilling of holes) will be negligible due to minor gradient (general surface slope has <1% gradient over 100m).		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Noise & Vibration Impacts: Results in increased noise or vibration.		
Potential impacts	Noise will occur from the air core rig and supporting vehicle movements.		
Proposed management controls	Local noise disturbance will be produced by the drill rig and support vehicles; however, levels will have typically reduced to 60-65 decibels (conversation level) within 50m from the rig. On site activities will occur seven days a week (including public holidays) but be limited to daylight hours only. All staff on the drill site will wear hearing protection when equipment is operating. Land holders will be informed prior to drilling. Noise is considered to have a negligible impact on the surrounding environment.		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Noise & Vibration Impacts: Affects sensitive receptors.		
Potential impacts	Noise will occur from the air core rig and supporting vehicle movements.		
Proposed management controls	Local noise disturbance will be produced by the drill rig and support vehicles; however, levels will have typically reduced to 60-65 decibels (conversation level) within 50m from the rig. On site activities will occur seven days a week (including public holidays) but be limited to daylight hours only. All staff on the drill site will wear hearing protection when equipment is operating. Land holders will be informed prior to drilling. Noise is considered to have a negligible impact on the surrounding environment.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Coastal Location & Processes: Affects coastal processes and coastal hazards, including those under projected climate change conditions.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	Low
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Hazardous substances or chemicals: Impacts associated with the use, generation, storage or transport of hazardous substances or chemicals.		
Potential impacts	Drilling polymers will be sparsely used, and they are non-toxic and biodegradable.		
Proposed management controls	All chemical and hazardous substances will be stored in sealed containers with appropriate signage in place. Safety Data Sheets will be available on site for all chemicals present and storage guidelines adhered to strictly. Regular inspection of chemical storage will be enacted prior to, during, and after active drilling operations. All vehicles are inspected daily for leaks. All chemical and hydrocarbon spillages, regardless of size, are reportable within Iluka's internal reporting system. Hydrocarbon spill kits are carried in each vehicle.		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts to the environment resulting from the generation or disposal of wastes.		
Potential impacts	Drilling polymers will be sparsely used, and they are non-toxic and biodegradable. All waste will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on drinking water catchments, wetlands, natural water bodies, riparian zones or flood prone areas.		
Potential impacts	No ground water is to be extracted or affected, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on groundwater recharge areas or areas with high water table.		
Potential impacts	No ground water is to be extracted or affected, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		

Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes and Emissions: Impacts on coastlines or dunes, alpine areas, karst features or other unique landforms.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Wastes & Emissions: Impacts on erosion prone areas, areas with slopes of greater than 18 degrees.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Wastes & Emissions: Impacts on subsidence or slip areas.		
Potential impacts	No ground water is to be extracted or affected, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with acid sulphate, sodic or highly permeable soils.		
Potential impacts	NA		
Proposed management controls	NA		
Duration	2 weeks		
Application ranking			
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Wastes & Emissions: Impacts on areas with salinity or potential salinity problems.		
Potential impacts	No ground water is to be extracted or affected, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with degraded or contaminated land.		
Potential impacts	No ground water is to be extracted or affected, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low

Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Wastes & Emissions: Impacts on areas with degraded or contaminated water (ground or surface).		
Potential impacts	No ground water is to be extracted or affected, and any unexpected ground water emerging from unconfined aquifers will be contained in sumps.		
Proposed management controls	Where possible, drill holes will be infilled with excess drill spoils, with any larger or excess material buried in the sump during site rehabilitation. Sump construction will be sufficient to contain all drill spoil and drill fluids. In the unlikely event that holes produce an excessive amount of water return from drilling, the sumps will be incrementally increased to contain drill fluids.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Vegetation: Any clearing or modification of vegetation (including impacts on wildlife corridors, remnant vegetation & habitat for species of conservation significance).		
Potential impacts	Drill sites have been chosen to remove the requirement for any vegetation clearing. This will eliminate the need to clear any areas of sensitive flora. Access will be conducted using existing tracks and drill sites have be moved to clear areas to reduce impacts to vegetation. No vegetation, native grasses or plant litter will be removed from site. Vegetation comprises Plant Community Type (PCT) 170: Chenopod sandplain mallee woodland/shrubland of the arid and semi-arid (warm) zones, PCT 171: Spinifex linear dune mallee mainly of the Murray Darling Depression Bioregion and PCT 58 Black Oak – Western Rosewood open woodland on deep sandy loams mainly in the Murray Darling Depression Bioregion. Vegetation condition is poor to moderate due to agricultural grazing.		
Proposed management controls	Drill sites and access tracks have been chosen to remove the requirement for any vegetation clearing. This will eliminate the need to clear any areas of sensitive flora. Access will be conducted using existing tracks and drill sites will be moved to clear areas to reduce impacts to vegetation. No vegetation, native grasses or plant litter will be removed from site. The impact of this activity on vegetation is negligible.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Threatened Fauna Species: Any adverse effect on the life cycle of any threatened species such that a viable local population of the species is likely to be placed at risk of extinction.		
Potential impacts	A BioNet search of threatened and endangered fauna for the proposed drill area was performed and a record is attached to the application. Endangered species identified near the project area include the Malleefowl, Western Pygmy possum and the Mallee-worm lizard. Where Malleefowl or Malleefowl nests are identified, the location will be recorded and no drilling will occur within a 200m radius.		

Proposed management controls	As drill holes are planned on existing tracks, disturbance is temporary in nature, and activities restricted to daylight hours, adverse effects on local flora and fauna are not expected. In addition, as rehabilitation will take place almost immediately after completion of activities, the short term nature of the activity is not expected to have any effect on flora or fauna.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Threatened Flora Species: Any adverse effect on the life cycle of any threatened species such that a viable local population of the species is likely to be placed at risk of extinction.		
Potential impacts	A BioNet search of threatened and endangered fauna for the proposed drill area was performed and a record is attached to the application. Endangered species identified near the project area include the Malleefowl, Western Pygmy possum and the Mallee-worm lizard. Where Malleefowl or Malleefowl nests are identified, the location will be recorded and no drilling will occur within a 200m radius.		
Proposed management controls	As drill holes are planned on existing tracks, disturbance is temporary in nature, and activities restricted to daylight hours, adverse effects on local flora and fauna are not expected. In addition, as rehabilitation will take place almost immediately after completion of activities, the short term nature of the activity is not expected to have any effect on flora or fauna.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Areas of outstanding biodiversity value/Critical habitat: This includes: a. declared areas of outstanding biodiversity value under the Biodiversity Conservation Act 2016 b. areas declared critical habitat under the Fisheries Management Act 1994.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking			
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		

Criteria	Endangered ecological community or critically endangered ecological community: Whether the activity: is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Habitat of a threatened species or ecological community		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Habitat of protected aquatic species or those with conservation status.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Key Threatening Processes: As outlined in Schedule 4 of Biodiversity Conservation Act 2016. Includes: a. alteration, removal, clearly or degradation of habitat and native vegetation b. loss of hollow bearing trees c. removal of dead wood and dead trees d. invasion and establishment of exotic species.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Barriers to movement of fauna: Any potential to endanger, displace or disturb fauna (including fauna of conservation significance) or create a barrier to their movement.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Ecological & Biosecurity Impacts: Any threat to the biological diversity or ecological integrity of an ecological community.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Ecological & Biosecurity Impacts: Creates a biosecurity risk or introduces genetically modified organisms into an area. Includes impacts from the introduction of: a. mobilisation of pollutants b. animal pests, c. plant pests and diseases, d. animal diseases, e. noxious weeds, or f. genetically modified organisms.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A

Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Ecological & Biosecurity Impacts: Likely to cause a significant bushfire risk.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Community Resources: Any degradation of infrastructure or significant increase in the demand for services and infrastructure resources.		
Potential impacts	The activity is not likely to degrade or increase the demand for services and infrastructure resources		
Proposed management controls			
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Community Resources: Any diversion of resources to the detriment of other communities or natural systems.		
Potential impacts	N/A		
Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking			
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Natural Resources: Any disruption, depletion or destruction of natural resources.		
Potential impacts	N/A		

Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Natural Resources: Any disruption of existing activities which rely on natural resources, including forestry, farming or extractive industries (or reduction of options for future activities).		
Potential impacts	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all rehabilitation requirements are fulfilled.		
Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Natural Resources: Any use which results in the degradation of any area reserved for conservation purposes.		
Potential impacts	N/A		
Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Sensitive Land Impacts: Impacts on National parks and other areas reserved or dedicated or acquired under the National Parks and Wildlife Act 1974.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		

Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Land subject to a 'conservation agreement' under the National Parks and Wildlife Act 1974 and/or the Biodiversity Conservation Act 2016. This includes: a. Biobanking agreement (established under the now repealed Threatened Species Conservation Act 1995) or a Biodiversity Stewardship agreement established under the Biodiversity Conservation Act 2016. b. Wildlife Refuge agreement established under the Biodiversity Conservation Act 2016. c. Existing conservation agreements that continue to have effect even where legislation has been repealed: Trust agreements under the now repealed Nature Conservation Trust Act 2001 Property vegetation plans made under the now-repealed Native Vegetation Act 2003 Registered property agreements under the repealed Native Vegetation Conservation Act 1997		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on aquatic reserves or marine parks declared under the Marine Estate Management Act 2014. Impacts on Coastal Zone as defined in the Coastal Management Act 2016.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Fishing grounds and commercial fish breeding or nursery areas.		
Potential impacts	N/A		
Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking	Negligible		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Sensitive Land Impacts: Impacts on other sensitive lands including: a. Land within a state forest set aside under the Forestry Act 2012 for conservation values. This includes flora reserves and special management (and other) zones. b. Drinking water catchment protection areas - land declared to be a 'controlled area' or a 'special area' under the Water NSW Act 2014, or a 'special area' under the Water Management Act 2000 or Hunter Water Act 1991. c. Waterfront land as defined under the Water Management Act 2000.		
Potential impacts	N/A		
Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Sensitive Land Impacts: Impacts on land reserved or dedicated within the meaning of the Crown Lands Act 1989/Crown Lands Management Act 2016 for preservation of the environment or other environmental protection purposes.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on land identified as wilderness or declared a wilderness area under the Wilderness Act 1987.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		

What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Lands: Impacts on wetlands of international significance designated under the Ramsar Convention on Wetlands and those designated as a nationally important wetland in the Directory of Important Wetlands of Australia.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on land identified in an environmental planning instrument as being of biodiversity / conservation significance or zoned for environmental conservation, protection and/or management. Includes Coastal Wetlands and Littoral rainforests under State Environmental Planning Policy (Resilience and Hazards) 2021.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on Aboriginal heritage protection areas: a. Aboriginal places and objects under the National Parks and Wildlife Act 1974 b. Areas of Aboriginal cultural significance identified in an environmental planning instrument.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A

How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on heritage protection areas (historic or natural): a. Nationally and internationally recognised heritage sites or areas (World Heritage List, National Heritage List of Commonwealth Heritage List) b. Items listed on State Heritage c. Heritage items and conservation areas identified in an environmental planning instrument		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on community land classified under the Local Government Act 1993 (for which a plan of management has been prepared).		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	N/A		
Application ranking	N/A		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	
Can the impacts be reversed?	N/A	**Ranking of potential significance**	N/A
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	N/A		
Criteria	Sensitive Land Impacts: Impacts on bushfire prone areas.		
Potential impacts	N/A		
Proposed management controls	As activities are planned for existing cleared areas and are temporary in nature, there is no disruption expected to farming activities. Iluka team members will communicate with the landholder to ensure that all requirements are fulfilled.		
Duration	2 weeks		
Application ranking	Negligible		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low

Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Social Impacts: Any impacts which result in a change in the demographic structure of the community, including changes to workforce or industry structure of the area/region. Including change in demand for community resources (eg community facilities, community services and labour force).		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Social Impacts: Any environmental impact that may cause substantial change or disruption to the community (including loss of facilities or loss of community identity).		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Social Impacts: Any impacts which result in some individuals or communities being significantly disadvantaged (e.g. change to community facilities, services or labour force).		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Social Impacts: Any impacts on the health, safety, privacy or welfare of individuals or communities caused by factors such as pollution, odour, noise, vibration, lighting, visual impacts, etc).		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		

Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Social Impacts: 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?		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Social Impacts: Impacts on communities with strong sense of identity.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Social Impacts: Impacts on disadvantaged communities.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A

Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Economic Impacts: Any impacts which may affect economic activity (positive or negative), including a decrease to net economic welfare.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Economic Impacts: Any impacts that result in a decrease in the economic stability of the community.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Economic Impacts: Any impacts which result in a change to the public sector revenue or expenditure base.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Heritage Impacts: Any impacts on a locality, place, landscape, building or archaeological relic of heritage significance.		
Potential impacts	There are no heritage items near to the planned exploration activity		
Proposed management controls	N/A		
Duration	2 weeks		

Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Aesthetic Impacts: Any impacts on the visual or scenic landscape, including lighting, venting or flaring of gas.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	N/A	**Are further studies required on impacts or mitigation?**	N/A
How resilient is the environment to cope with impacts?	N/A	**What is the level of public concern?**	N/A
Can the impacts be reversed?	N/A	**Ranking of potential significance**	Low
Can the impacts be mitigated?	N/A	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	No		
Criteria	Aesthetic Impacts: Areas or items of high aesthetic or scenic value.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Any disturbance of the ground surface or any culturally modified trees (e.g. a scar tree).		
Potential impacts	There will be no impacts to any culturally modified trees		
Proposed management controls	Additional due diligence surveys have been completed in consultation with Registered Aboriginal Parties (RAPs) to ensure no impacts to Aboriginal cultural heritage artefacts, sites or places. Several sites have been identified as part of these surveys but proposed drill hole locations do not affect any sites. Iluka have an established Aboriginal Heritage Protocol in the event that items of value are encountered during the exploration drilling program.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No

How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Any impacts on known Aboriginal objects or Aboriginal places.		
Potential impacts	The activity will no affect known Aboriginal objects or places.		
Proposed management controls	Additional due diligence surveys have been completed in consultation with Registered Aboriginal Parties (RAPs) to ensure no impacts to Aboriginal cultural heritage artefacts, sites or places. Several sites have been identified as part of these surveys but proposed drill hole locations do not affect any sites. Iluka have an established Aboriginal Heritage Protocol in the event that items of value are encountered during the exploration drilling program.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Affects areas where the landscape features indicate the likely presence of Aboriginal objects.		
Potential impacts	The activity is not located in areas where landscape features indicate the presence of Aboriginal objects.		
Proposed management controls	Additional due diligence surveys have been completed in consultation with Registered Aboriginal Parties (RAPs) to ensure no impacts to Aboriginal cultural heritage artefacts, sites or places. Several sites have been identified as part of these surveys but proposed drill hole locations do not affect any sites. Iluka have an established Aboriginal Heritage Protocol in the event that items of value are encountered during the exploration drilling program.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Affects areas subject to native title claims, indigenous land use agreements or joint management arrangements.		
Potential impacts	There are no native title claims over the area, with a determination for the Barkandji (Paakantyi) People #11 settled.		
Proposed management controls	Additional due diligence surveys have been completed in consultation with Registered Aboriginal Parties (RAPs) to ensure no impacts to Aboriginal cultural heritage artefacts, sites or places. Several sites have been identified as part of these surveys but proposed drill hole locations do not affect any sites. Iluka have an established Aboriginal Heritage Protocol in the event that items of value are encountered during the exploration drilling program.		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Impacts on Aboriginal communities or areas subject to land rights claims.		
Potential impacts	The activity will no affect known Aboriginal objects or places.		
Proposed management controls	Additional due diligence surveys have been completed in consultation with Registered Aboriginal Parties (RAPs) to ensure no impacts to Aboriginal cultural heritage artefacts, sites or places. Several sites have been identified as part of these surveys but proposed drill hole locations do not affect any sites. Iluka have an established Aboriginal Heritage Protocol in the event that items of value are encountered during the exploration drilling program.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cultural Impacts: Impacts on areas or items of high anthropological, archaeological, architectural, cultural, heritage, historical, recreational or scientific value.		
Potential impacts	There will be no impacts to any culturally modified trees		
Proposed management controls	Additional due diligence surveys have been completed in consultation with Registered Aboriginal Parties (RAPs) to ensure no impacts to Aboriginal cultural heritage artefacts, sites or places. Several sites have been identified as part of these surveys but proposed drill hole locations do not affect any sites. Iluka have an established Aboriginal Heritage Protocol in the event that items of value are encountered during the exploration drilling program.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Land Use Impacts: Any major changes in land use, including curtailment of other beneficial land uses.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		

What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Transportation Impacts: Substantial impacts on existing transportation systems (road, rail, pedestrian) which alter present patterns of circulation or movement.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Transportation Impacts: Impacts associated with direct or indirect additional traffic.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Consistency with applicable local strategic planning statements, regional strategic plans or district strategic plans.		
Potential impacts	N/A		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low

Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Matters of National Environmental Significance: Impacts on MNES under the Commonwealth Environmental Protection and Biodiversity Conservation Act 1999:		
Potential impacts	The activity is likely not to impact any matters of environmental significance under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999.		
Proposed management controls	N/A		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		
Criteria	Cumulative Impacts: Cumulative environmental effects with other existing or likely future activities.		
Potential impacts	Works under this approval are using existing areas cleared under previous approvals (eg APO0001418) to avoid cumulative impacts on the environment.		
Proposed management controls	Works under this approval are using existing areas cleared under previous approvals (eg APO0001418) to avoid cumulative impacts on the environment.		
Duration	2 weeks		
Application ranking	Positive		
What is the confidence in predicting impacts?	High	**Are further studies required on impacts or mitigation?**	No
How resilient is the environment to cope with impacts?	High Resilience	**What is the level of public concern?**	Low
Can the impacts be reversed?	Yes	**Ranking of potential significance**	Low
Can the impacts be mitigated?	Fully	**Justification for ranking**	
Do the operations comply with standards, plans, policies?	Yes		

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