

**Environmental Impact Classification
Pursuant to Section 98 of the *Petroleum Act 2000***

**Ahava Energy' Pty Ltd's Statement of Environmental Objectives for
Geophysical Exploration Activities in the Anangu Pitjantjatjara
Yankunytjatjara Lands Region of the Officer Basin**

INTRODUCTION

Pursuant to Section 98 of the *Petroleum Act 2000* (the Act) the Minister must classify the regulated activities covered by a prepared Environmental Impact Report (EIR) as either low, medium or high impact.

The classification must be made on the basis of:

- The prepared EIR;
- Comments received from the Department for Environment and Heritage (DEH) and Department Water Land and Biodiversity Conservation (DWLBC) in accordance with established Memorandum of Understandings; and
- Criteria established for classifying the level of impact of regulated activities; a copy of which is assessable on the PIRSA Petroleum Group website:

This document summarises the classification made by PIRSA of Ahava Energy Pty Ltd's Statement of Environmental Objectives for geophysical operations in the APY Lands region of the Officer Basin, South Australia. The classification is based on the information contained in the EIR prepared by Ahava Energy Pty Ltd which covers the activity.

SUMMARY OF CLASSIFICATION

1. From an analysis of the environmental significance of the various potential impacts associated with this operation against the classification as described in the EIR has been assessed and classified as **low impact**.
2. DEH, PlanningSA and DLWBC support the **low impact** classification. In addition, the comments and recommendations provided by these agencies have been addressed in the EIR and SEO.
3. Therefore pursuant to the delegated powers dated 28 March 2002 and gazetted 11 April 2002, I hereby classify this regulated activity as **low impact**.

Dated: 28th July 2009



B.A. GOLDSTEIN,
Director Petroleum and Geothermal
Minerals and Energy Resources
Primary Industries and Resources SA
Delegate of the Minister for Mineral Resources Development

CLASSIFICATION OF THE LEVEL OF IMPACT OF THE ACTIVITY OF GEOPHYSICAL OPERATIONS IN THE ANANGU PITJANTJATJARA YANKUNYTJATJARA LANDS REGION OF THE OFFICER BASIN																						
ASSESSORS: Allan Kane &; Rob Langley																						
COMPILED BY: Allan Kane & Rob Langley																						
Using the following criteria, the activity of geophysical operations, as described in the “Anangu Pitjantjatjara Yankunytjatjara Lands region of the Officer Basin Environmental Impact Report" (Coffey Natural Systems 2008) has been assessed as a LOW level impact activity.																						
				ABBREVIATIONS: H = High certainty; M = Medium certainty; L = Low certainty																		
				PREDICTABILITY						MANAGEABILITY												
REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance				
	Natural Environment Impacts																					
EIR 5.3.14	Soil Impacts	Line Surveying - vehicle movement	Soil erosion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; and - compacted areas ripped upon completion if in suitable terrain.	Low				
EIR 5.3.1		Line Surveying - vehicle movement	Wheel rutting & tracks	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the impacts of wheel tracks: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. To minimise the impacts of wheel ruts: - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; and - no vehicles are permitted on salt lakes and clay pans.	Low				
EIR 5.3.1		Line Surveying - vehicle movement	Disturbance and loss of vegetation and habitats	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.					
EIR 5.3.1		Line Surveying - vehicle movement	Introduction & spread of weeds	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low				
EIR 5.3.1		Line Surveying - spills & leaks	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low				
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Soil erosion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for impacts of soil erosion: - - blade work is banned in claypans and flat easy terrain; - only minimal bladework is permitted elsewhere; - windrows will be removed and respread on line; - dune side cuts will be minimised; - sand will be ramped to the side of dune cuts; - creek bank vegetation left intact and detoured around; and - creek and watercourse channel banks reinstated. To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; and - compacted areas ripped upon completion if in suitable terrain.	Low				

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REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Wheel rutting & tracks	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for impacts of wheel tracks: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. To minimise the potential or subsequent impacts of wheel rutting: - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and susceptible areas will be avoided when possible; - no vehicles permitted on salt lakes and clay pans; and - wheel rut material will be used to fill in ruts.	Low
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Low	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance and loss of vegetation and habitats	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.	
EIR 5.3.1		Line & access track preparation - spills and leaks	Contamination of soil (Pollution)	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - spill kits available	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Soil erosion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; all detours followed, no short cuts and - compacted areas ripped upon completion if in suitable terrain.	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Wheel rutting & tracks	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for or impacts of wheel tracks: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. To minimise the potential or subsequent impacts of wheel rutting: - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; - no vehicles are permitted on salt lakes and clay pans; and - wheel rut material will be used to fill in ruts.	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Disturbance and loss of vegetation and habitats	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.	
EIR 5.3.1		Recording - spills & leaks	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low

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				PREDICTABILITY						MANAGEABILITY								
REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
EIR 5.3.1		Campsites & associated supplies - site preparation	Soil inversion, erosion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	Campsites are selected in clear areas which are naturally devoid of vegetation. Site access impacts are reduced by locating camps adjacent to established tracks and using only these for access. On completion and where appropriate campsites are ripped	Low
EIR 5.3.1		Campsites & associated supplies - vehicle movement	Soil erosion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; and - compacted areas ripped upon completion if in suitable terrain.	Low
EIR 5.3.1		Campsites & associated supplies - vehicle movement	Wheel rutting & tracks	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for or impacts of wheel tracks: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. To minimise the potential or subsequent impacts of wheel rutting: - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; - no vehicles are permitted on salt lakes and clay pans; and - wheel rut material will be used to fill in ruts. - campsites are selected in clear areas which are naturally devoid of vegetation. - site access impacts are reduced by locating camps adjacent to established tracks; and - using only these for access	Low
EIR 5.3.1		Campsites & associated supplies - vehicle movement	Disturbance and loss of vegetation and habitats	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.	
EIR 5.3.1		Campsites & associated supplies - spills & leaks	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - management of sewage wastes in compliance with <i>Public and Environmental Health (Waste Control) Regulations 1995</i>	Low
EIR 5.3.1		Campsites & associated supplies - disposal of domestic & chemical waste	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - management of sewage wastes in compliance with <i>Public and Environmental Health (Waste Control) Regulations 1995</i>	Low
EIR 5.3.1		Uphole drilling & logging - vehicle movement	Disturbance and loss of vegetation and habitats	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.	
EIR 5.3.1		Uphole drilling & logging - vehicle movement	Soil erosion, inversion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; and - compacted areas ripped upon completion if in suitable terrain. - Any soil from drill holes is restored to as near as practical to its original position in the soil profile	Low

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EIR 5.3.1		Uphole drilling & logging - vehicle movement	Wheel rutting & tracks	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for or impacts of wheel tracks: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. To minimise the potential or subsequent impacts of wheel rutting: - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; - no vehicles are permitted on salt lakes and clay pans; and - wheel rut material will be used to fill in ruts.	Low
EIR 5.3.1		Uphole drilling & logging - uphold drilling activity & disposal of wastes	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low
EIR 5.3.4		Uphole drilling & logging - spills & leaks	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low
EIR 5.3.1.4		Line & access track & campsite restoration - earthworks & vehicle movements	Soil erosion, inversion, compaction & disruption	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of soil erosion: - - bladework is banned in claypans and flat easy terrain; - only minimal bladework is permitted elsewhere; - sand will be ramped to the side of dune cuts; - creek and watercourse channel banks reinstated. To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; and - compacted areas ripped upon completion if in suitable terrain. To minimise the potential for soil inversion - top soil will be separated and returned to the surface on restoration	Low
EIR 5.3.1.1 & 5.3.1.2		Line & access track & campsite restoration - earthworks & vehicle movements	Wheel rutting & tracks	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for or impacts of wheel tracks: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. To minimise the potential or subsequent impacts of wheel rutting: - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; - no vehicles are permitted on salt lakes and clay pans; and - wheel rut material will be used to fill in ruts.	Low
EIR 5.3.1		Line & access track & campsite restoration - earthworks & vehicle movements	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Line & access track & campsite restoration - earthworks & vehicle movements	Disturbance and loss of vegetation and habitats	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.	
EIR 5.3.4		Line & access track & campsite restoration - spills & leaks	Contamination of soil	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of soil contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low

[illegible]

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				PREDICTABILITY						MANAGEABILITY								
REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
	Surface Water Impacts	Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance to natural drainage patterns	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the impacts to natural drainage patterns: - creek bank vegetation is left intact and detoured around; - windrows will be removed from swales, and other areas of noted drainage; and - no blading in susceptible areas that may lead to erosion and silting of local watercourses.	Low
EIR 5.3.1		Line & access track preparation - spills and leaks	Contamination of surface water	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low
EIR 5.3.1		Line Surveying - spills & leaks	Contamination of surface water	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Disturbance to natural drainage patterns	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the impacts to natural drainage patterns: - creek bank vegetation is left intact and detoured around; - windrows will be removed from swales, and other areas of noted drainage; - no camps will be established near surface water features; and - no blading in susceptible areas that may lead to erosion and silting of local watercourses.	Low
EIR 5.3.1		Recording - spills & leaks	Contamination of surface water	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low
EIR 5.3.1		Campsites & associated supplies - site preparation	Disturbance to natural drainage patterns	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Low	1	To minimise the impacts to natural drainage patterns: - no camps will be established near surface water features; and - no blading in susceptible areas that may lead to erosion and silting of local watercourses.	Low
EIR 5.3.1		Campsites & associated supplies - spills & leaks	Contamination of surface water	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - all refueling points at campsites have spill containment facilities in place - minimise generation of waste - all waste managed effectively	Low
EIR 5.3.1		Campsites & associated supplies - disposal of domestic & chemical waste	Contamination of surface water	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low
EIR 5.3.1		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Contamination of surface water	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - drilling operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate.	Low

				ABBREVIATIONS: H = High certainty; M = Medium certainty; L = Low certainty														
				PREDICTABILITY						MANAGEABILITY								
REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
EIR 5.3.1		Uphole drilling & logging - spills & leaks	Contamination of surface water	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - spill clean up kits on site	Low
EIR 5.3.1		Line & access track & campsite restoration - spills & leaks	Contamination of surface water	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of surface water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - spill clean up kits are on site	Low
EIR 5.3.1	Groundwater Impacts	Campsites & associated supplies - spills & leaks	Contamination of ground water	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of ground water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate. - spill clean up kits on site	Low
EIR 5.3.1		Campsites & associated supplies - disposal of domestic & chemical waste	Contamination of ground water	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of ground water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate;	Low
EIR 5.3.1		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Contamination of ground water	H	H	H	H	H	1	No	Low	Short	Small	Small	Low	1	To minimise the potential for and impacts of ground water contamination: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - most operations will only be conducted in dry, conducive conditions, minimising contact with surface water; - spills and leaks reported, chemically treated or bio-remediated in dry areas; and - sites will be ripped where appropriate;	Low
		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Uncontrolled discharge of water from aquifers	M	H	H	H	H	2	Yes	Low	Long	Small	Small	Medium	2	To minimise the potential for and impacts on aquifers: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; - all artesian flows are immediately plugged and monitored for effectiveness	Medium
EIR 5.3.1	Flora Impacts	Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance or loss of vegetation and habitat	H	H	H	H	H	1	No	Low	Short	Small	Small	Medium	1	To minimise the loss of or damage to vegetation: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - significant plant species will be prioritised for avoidance; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; and - all vehicles will be thoroughly cleaned prior to commencing work.	Low
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Introduction & spread of weeds & diseases	H	H	H	H	M	2	No	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low

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REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Fire damage to vegetation	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Campsites are selected in clear areas which are naturally devoid of vegetation. Site access impacts are reduced by locating camps adjacent to established tracks and using only these for access. On completion and where appropriate campsites are ripped. - Standard fire prevention and fire fighting procedures in place	
EIR 5.3.1		Line Surveying - vehicle movement	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Campsites & associated supplies - site preparation	Disturbance or loss of vegetation and habitat	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Campsites are selected in clear areas which are naturally devoid of vegetation. Site access impacts are reduced by locating camps adjacent to established tracks and using only these for access. On completion and where appropriate campsites are ripped	Low
EIR 5.3.1		Campsites & associated supplies - fire	Fire damage to vegetation	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Campsites are selected in clear areas which are naturally devoid of vegetation. Site access impacts are reduced by locating camps adjacent to established tracks and using only these for access. On completion and where appropriate campsites are ripped. - Standard fire prevention and fire fighting procedures in place	Low
EIR 5.3.1		Uphole drilling & logging - vehicle movement	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Line & access track & campsite restoration - earthworks & vehicle movements	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Monitoring of selected locations - vehicle movements	Introduction & spread of weeds & diseases	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	2	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1	Fauna Impacts	Line & access track preparation - earthworks, vehicle movement & excavations	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of fauna: - - only minimal bladework is permitted; - windrows will be removed and respread on line; - dune side cuts will be minimised; - sand will be ramped to the side of dune cuts; - creek bank vegetation left intact and detoured around; and - creek and watercourse channel banks reinstated. - disturbance of faunal refuges such as hollow logs will be avoided	Low
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Provision of passage to invasive fauna species and predator species	H	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	To minimise the potential for introduction of invasive fauna and predator species: - - disturbance of faunal refuges such as hollow logs will be avoided - Areas with records of state and national listed flora and fauna species will be avoided where possible by providing contractors with maps and GPS coordinates of records. - The introduction of exotic species via survey activities will be reported as an incident. - Ongoing monitoring to assess the presence of invasive species, particularly weeds, pathogens and non-native predators such as foxes and cats will be conducted during rehabilitation	

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EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance, injury or death of native fauna and livestock	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of fauna: - - only minimal bladework is permitted; - windrows will be removed and respread on line; - dune side cuts will be minimised; - sand will be ramped to the side of dune cuts; - creek bank vegetation left intact and detoured around; and - creek and watercourse channel banks reinstated. - disturbance of faunal refuges such as hollow logs will be avoided. - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 5.3.1		Line & access track preparation - earthworks, vehicle movement & excavations	Introduction & spread of weeds & diseases	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; and - weed control measures will be implemented as directed by relevant authorities.	Low
EIR 5.3.1		Line Surveying - vehicle movement	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the disturbance or damage to fauna & habitat: - offline driving (bush bashing or short cuts) is prohibited; - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - rootstock, topsoil and seeds will be left on line during line preparation where appropriate; - dense creek bank vegetation will be left intact; and - all vehicles will be thoroughly cleaned prior to commencing work.	Low
EIR 5.3.1		Line Surveying - vehicle movement	Disturbance, injury or death of native fauna and livestock	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of fauna: - - only minimal bladework is permitted; - windrows will be removed and respread on line; - dune side cuts will be minimised; - sand will be ramped to the side of dune cuts; - creek bank vegetation left intact and detoured around; and - creek and watercourse channel banks reinstated. - disturbance of faunal refuges such as hollow logs will be avoided. - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 5.3.1		Line Surveying - vehicle movement	Introduction & spread of weeds & diseases	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; - weed control measures will be implemented as directed by relevant authorities; and - domestic wastes will be managed to prevent the encouragement of pest animals.	Low
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise potential for disturbance: - existing roads or seismic lines will be used for access; and - offline driving (bush-bashing) is prohibited. - vehicles will be thoroughly cleaned prior to entering the survey area	Low
EIR 5.3.1		Line Surveying - vehicle movement	Disturbance, injury or death of native fauna and livestock	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of fauna: - - only minimal bladework is permitted; - windrows will be removed and respread on line; - dune side cuts will be minimised; - sand will be ramped to the side of dune cuts; - creek bank vegetation left intact and detoured around; and - creek and watercourse channel banks reinstated. - disturbance of faunal refuges such as hollow logs will be avoided. - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 5.3.1		Recording - vehicle & vibrator movement & operations	Introduction & spread of weeds & diseases	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the survey area; - weed management strategies will be developed to ensure vehicles are washed down before moving to or from areas of known infestation; - weed control measures will be implemented as directed by relevant authorities; and - domestic wastes will be managed to prevent the encouragement of pest animals.	Low

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REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
EIR 5.3.1		Campsites & associated supplies - site preparation	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Campsites are selected in clear areas which are naturally devoid of vegetation. Site access impacts are reduced by locating camps adjacent to established tracks and using only these for access. On completion and where appropriate campsites are ripped. - Standard fire prevention and fire fighting procedures in place	Low
EIR 5.3.1		Uphole drilling & logging - vehicle movement	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise damage to fauna and faunal habitats - drill holes are restored on completion - vehicles are confined to current survey seismic lines - no bushbashing allowed	Low
EIR 5.3.1		Line Surveying - vehicle movement	Disturbance, injury or death of native fauna and livestock	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of fauna: - - only minimal bladework is permitted; - windrows will be removed and respread on line; - dune side cuts will be minimised; - sand will be ramped to the side of dune cuts; - creek bank vegetation left intact and detoured around; and - creek and watercourse channel banks reinstated. - disturbance of faunal refuges such as hollow logs will be avoided. - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 5.3.1		Line & access track & campsite restoration - earthworks & vehicle movements	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Campsites are selected in clear areas which are naturally devoid of vegetation. Site access impacts are reduced by locating camps adjacent to established tracks and using only these for access. On completion and where appropriate campsites are ripped. -If prepared as per standards very little restoration work is required	Low
	Social Environment																	
EIR 7.5 & SEO Attachment A (Ob. 5)	Community Resource Impacts	Line & access track preparation - earthworks, vehicle movement & excavations	Loss of visual amenity	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the visual impact of seismic line preparation: - lines will be prepared to a single blade width (4-5 metres); - lines will weave every 100 metres maximum, utilising vegetation stands as appropriate; - lines will be doglegged at public roads, utilising vegetation stands as appropriate - dozers will be walked with the blade up when appropriate; - dune crest, side and base cuts will be minimised; and - no cutting will be done on dunes adjacent to public roads.	Low
EIR 7.5 & SEO Attachment A (Ob. 1)		Line & access track preparation - earthworks, vehicle movement & excavations	Disruption of Anangu way of life	H	H	H	H	M	2	No	Low	Short	Small	Small	Medium	2	Lines will be planned to avoid Anangu infrastructure and other enterprises	
EIR 7.5 & SEO Attachment A (Ob. 1)		Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance to livestock	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of livestock: - - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 7.5 & SEO Attachment A (Ob. 1)		Line & access track preparation - earthworks, vehicle movement & excavations	Damage to Anangu infrastructure	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise risk of damage to Anangu infrastructure - lines will be planned to avoid Anangu infrastructure - safety precautions will be implemented - waste management policies will be enforced - landowners will be consulted	Low
EIR 7.5 & SEO Attachment A (Ob. 5)		Line Surveying - vehicle movement	Loss of visual amenity	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the loss of visual amenity attributed to vehicle movements: - existing roads or seismic lines will be used for access; - offline driving (bush-bashing) is prohibited; - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; and - no vehicles are permitted on salt lakes and clay pans.	Low
EIR 7.5 & SEO Attachment A (Ob. 1)		Line Surveying - vehicle movement	Disturbance to livestock	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of livestock: - - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 7.5 & SEO Attachment A (Ob. 1)		Line Surveying - vehicle movement	Disruption of Anangu way of life	H	H	H	H	M	2	No	Low	Short	Small	Small	Medium	2	Lines will be planned to avoid Anangu infrastructure and other enterprises	

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REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
EIR 7.5 & SEO Attachement A (Ob. 5)		Recording - vehicle & vibrator movement & operations	Loss of visual amenity	H	H	H	H	M	17	Yes	Low	Short	Small	Small	Medium	1	To minimise the loss of visual amenity attributed to vehicle movements: - existing roads or seismic lines will be used for access; - offline driving (bush-bashing) is prohibited; - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; and - no vehicles are permitted on salt lakes and clay pans.	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Recording - vehicle & vibrator movement & operations	Disturbance to livestock	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of livestock: - - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 7.5 & SEO Attachement A (Ob. 1)		Recording - vehicle & vibrator movement & operations	Damage to Anangu infrastructure	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise risk of damage to Anangu infrastructure - lines will be planned to avoid infrastructure - safety precautions will be implemented - waste management policies will be enforced - appropriate landowners will be consulted	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Recording - vehicle & vibrator movement & operations	Disruption of Anangu way of life	H	H	H	H	M	1	No	Low	Short	Small	Small	Medium	2	Lines will be planned to avoid Anangu infrastructure and other enterprises	
EIR 7.5 & SEO Attachement A (Ob. 5)		Campsites & associated supplies - site preparation	Loss of visual amenity	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the visual impacts of campsites: - a minimal number of campsites will be used; - campsites will be located in naturally clear areas where applicable. - no rubbish or man-made items left behind; - campsite tine-ripped to remove compaction and wheel tracks in areas other than those with a stony mantle; and - shoulders of adjacent tracks are reinstated.	Low
		Campsites & associated supplies - site preparation	Disruption of Anangu way of life	H	H	H	H	M	1	No	Low	Short	Small	Small	Medium	2	Lines will be planned to avoid Anangu infrastructure and other enterprises	
EIR 7.5 & SEO Attachement A (Ob. 5)		Uphole drilling & logging - vehicle movement	Loss of visual amenity	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the loss of visual amenity attributed to vehicle movements: - existing roads or seismic lines will be used for access; - offline driving (bush-bashing) is prohibited; - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; and - no vehicles are permitted on salt lakes and clay pans.	Low
EIR 7.5 & SEO Attachement A (Ob. 3)		Uphole drilling & logging - vehicle movement	Disturbance to livestock	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of livestock: - - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 7.5 & SEO Attachement A (Ob. 5)		Uphole drilling & logging - uphold drilling activity & disposal of wastes	Loss of visual amenity	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the loss of visual amenity attributed to uphole drilling: - drill cuttings are returned to the hole and the hole is capped; - surplus drill cuttings are dispersed around the hole or removed completely from sensitive areas; and - colourants may be used to colour any remaining drill cuttings.	Low
EIR 7.5 & SEO Attachement A (Ob. 3)		Uphole drilling & logging - uphold drilling activity & disposal of wastes	Disruption of Anangu way of life	H	H	H	H	M	1	No	Low	Short	Small	Small	Medium	2	Lines will be planned to avoid Anangu infrastructure and other enterprises	
EIR 7.5 & SEO Attachement A (Ob. 3)		Uphole drilling & logging - vehicle movement	Disturbance to livestock	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of livestock: - - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	
EIR 7.5 & SEO Attachement A (Ob. 5)		Line & access track & campsite restoration - earthworks & vehicle movements	Loss of visual amenity	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the loss of visual amenity attributed to vehicle movements: - existing roads or seismic lines will be used for access; - offline driving (bush-bashing) is prohibited; - operations will be shut down during wet weather or flooding events; - operations will only recommence once conditions are suitable; - unavoidable damage will be reported and reinstated; - areas of soft friable soils and soft susceptible areas will be avoided when possible; and - no vehicles are permitted on salt lakes and clay pans.	Low
EIR 7.5 & SEO Attachement A (Ob. 3)		Line & access track & campsite restoration - earthworks & vehicle movements	Disturbance to livestock	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for and impacts of livestock: - - All vehicles will move at slow speeds along seismic lines and other tracks (especially where threatened species and livestock are present)	

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EIR 7.5 & SEO Attachement A (Ob. 1)	Cultural & Heritage Impacts	Line & access track preparation - earthworks, vehicle movement & excavations	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid impacts to Anangu and other heritage sites: - lines will be cleared by Anangu cultural heritage personnel prior to preparation; - sites of Anangu cultural significance will be flagged and detoured around; - receiver lines may be laid out by foot only in some sensitive areas; - all crew and ancillary personnel given Anangu cultural heritage training prior to commencing operations; and - dozer operators are required to keep watch for any Anangu heritage sites which would be subsequently flagged and detoured around. To avoid impacts to heritage sites (non-indigenous and natural): - listed heritage sites will be identified and deviated around where possible; - in areas that can not be avoided, relevant authorities will be contacted and permission sought; and - specific management procedures will be developed	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Line Surveying - vehicle movement	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid the impacts to Anangu and other heritage sites: - all crew and ancillary personnel given appropriate cultural heritage training prior to commencing operations. - Work area clearances undertaken by Anangu prior to start of activity	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Recording - vehicle & vibrator movement & operations	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid impacts to Anangu and other heritage sites: - all crew and ancillary personnel given appropriate cultural heritage training prior to commencing operations. - Work area clearances undertaken by Anangu prior to start of activity	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Campsites & associated supplies - site preparation	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid impacts to Anangu and other heritage sites: - all crew and ancillary personnel given appropriate cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Uphole drilling & logging - vehicle movement	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid impacts to Anangu and other heritage sites: - all crew and ancillary personnel given appropriate cultural heritage training prior to commencing operations. - Work area clearances undertaken by Anangu prior to start of activity	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Line & access track & campsite restoration - earthworks & vehicle movements	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid the impacts to Anangu and other heritage sites: - all crew and ancillary personnel given appropriate cultural heritage training prior to commencing operations. - Work area clearances undertaken by Anangu prior to start of activity	Low
EIR 7.5 & SEO Attachement A (Ob. 1)		Monitoring of selected locations - vehicle movements	Impact or damage to cultural & heritage sites	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To avoid impacts to Anangu and other heritage sites: - all crew and ancillary personnel given appropriate cultural heritage training prior to commencing operations. - Work area clearances undertaken by Anangu prior to start of activity	Low
																1		Low
EIR 5.3.1	Community Health & Safety	Line & access track preparation - earthworks, vehicle movement & excavations	Facilitation of third party access	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the likelihood of third party access of seismic activities: - no line preparation will be carried out on dunes adjacent to public tracks; - lines that intersect a public track will be doglegged and vegetation stands used as a screen where appropriate; - windrows and shoulders will be reinstated; and - lines adjacent public roads may also be 'road blocked' with timber.	Low
EIR 7.5, 7.6 & SEO Attachment A (Ob. 3)		Line & access track preparation - earthworks, vehicle movement & excavations	Injury or death or persons	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for vehicle and other machinery impact on persons: - - All vehicles will move at slow speeds along seismic lines. - Persons using machinery will be experienced and inducted.	
SEO Attachment A (Ob. 3)		Line & access track preparation - earthworks, vehicle movement & excavations	Noise generation	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid Anangu infrastructure	Low
EIR 7.5, 7.6 & SEO Attachment A (Ob. 3)		Line Surveying - vehicle movement	Injury or death or persons	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for vehicle and other machinery impact on persons: - - All vehicles will move at slow speeds along seismic lines. - Persons using machinery will be experienced and inducted.	
SEO Attachment A (Ob. 3)		Recording - vehicle & vibrator movement & operations	Noise generation	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid Anangu infrastructure	Low
EIR 7.5, 7.6 & SEO Attachment A (Ob. 3)		Recording - vehicle & vibrator movement & operations	Injury or death or persons	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for vehicle and other machinery impact on persons: - - All vehicles will move at slow speeds along seismic lines. - Persons using machinery will be experienced and inducted.	

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REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS	SIGNIFICANCE	COMMENTS	Environmental significance
SEO Attachment A (Ob. 3)		Uphole drilling & logging - vehicle movement	Noise generation	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid Anangu infrastructure	Low
EIR 7.5, 7.6 & SEO Attachment A (Ob. 3)		Uphole drilling & logging - vehicle movement	Injury or death or persons	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for vehicle and other machinery impact on persons: - - All vehicles will move at slow speeds along seismic lines. - Persons using machinery will be experienced and inducted.	
SEO Attachment A (Ob. 3)		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Noise generation	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid Anangu infrastructure	Low
SEO Attachment A (Ob. 3)		Line & access track & campsite restoration - earthworks & vehicle movements	Noise generation	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid Anangu infrastructure	Low
EIR 7.5, 7.6 & SEO Attachment A (Ob. 3)		Line & access track & campsite restoration - earthworks & vehicle movements	Injury or death or persons	H	H	H	H	H	1	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for vehicle and other machinery impact on persons: - - All vehicles will move at slow speeds along seismic lines. - Persons using machinery will be experienced and inducted.	
	Economic Environment																	
EIR 7.5 & SEO Attachment A (Ob. 3)		Line & access track preparation - earthworks, vehicle movement & excavations	Damage to Anangu infrastructure	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to Anangu infrastructure: - Anangu landholders are consulted and notified prior to commencement of operations; - lines will deviate around Anangu infrastructure such buildings, airstrips, dams, bores and tanks; - fences will be laid down only with the permission of the landholder; - infrastructure such as pipelines, powerlines and roads will be crossed with the permission of the owner and under appropriate standards; and - signage and safety precautions will be implemented when operating near or on public roads.	Low
EIR 7.5 & SEO Attachment A (Ob. 3)		Recording - vehicle & vibrator movement & operations	Damage to Anangu infrastructure	H	H	H	H	M	1	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to M/T landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around buildings, airstrips, bores and tanks; - gates will be left as found; - fences will be laid down only with the permission of the M/T landholders; - water will only be sourced from authorised sources; - waste management policies will be enforced;	Low
EIR 7.5 & SEO Attachment A (Ob. 3)		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Damage to Anangu infrastructure	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to Anangu infrastructure: - Anangu landholders are consulted and notified prior to commencement of operations; - gates will be left as found; - fences will be laid down only with the permission of the landholder; - water will only be sourced from authorised sources; and - waste management policies will be enforced.	Low
EIR 7.5 & SEO Attachment A (Ob. 3)		Line & access track & campsite restoration - earthworks & vehicle movements	Damage to Anangu infrastructure	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to Anangu infrastructure: - landholders are consulted and notified prior to commencement of operations; - gates will be left as found; - fences will be laid down only with the permission of the Anangu andholder; - water will only be sourced from authorised sources; and - waste management policies will be enforced.	Low