

CLASSIFICATION OF THE LEVEL OF IMPACT OF THE ACTIVITY OF GEOPHYSICAL OPERATIONS IN THE ARCKARINGA BASIN, SOUTH AUSTRALIA

ASSESSORS: Allan Kane; Rob Langley  
 COMPILED BY: Allan Kane; Rob Langley

Using the following criteria, geophysical operations, as described in the "Arckaringa Basin Geophysical Operations Environmental Impact Report" (RPS Ecos 2007) has been assessed as a LOW level impact activity.

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						Environmental significance			
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS	STAKEHOLDERS		SIGNIFICANCE	COMMENTS	
<p>ABBREVIATIONS:                      H = High certainty;                      M = Medium certainty;                      L = Low certainty</p>																		
<p>Natural Environment Impacts</p>																		
EIR 3.1.4 & 3.1.9 & Part 6	Soil Impacts	Line & access track preparation - earthworks, vehicle movement & excavations	Soil erosion, compaction & disruption	H	M	H	M	M	2	No	Medium	Short	Small	Small	Medium	2	To minimise the potential for and impacts of soil erosion: - blade work is banned in gibber, tablelands, 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
EIR 6.1.3		Line & access track preparation - earthworks, vehicle movement & excavations	Wheel rutting & tracks	H	M	H	M	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes; and - wheel rut material will be used to fill in ruts.	Low
		Line & access track preparation - earthworks, vehicle movement & excavations	Soil inversion	M	M	M	M	M	3	No	Low	Short	Small	Small	Low	1	Soil inversion is not an impact generally associated with seismic line preparation. No deep excavation or inversion of soil horizons occurs during line preparation. If upholes are drilled the hole is backfilled with the topsoil replaced at the surface. Soil disturbance occurs when vehicle access is required over sand dunes. Minimum amount of sand is disturbed to enable this access. The sand is stock piled each side of the dune crossing and subsequently the dune re-profiles	Low
EIR 6.4		Line & access track preparation - earthworks, vehicle movement & excavations	Introduction & spread of weeds & diseases	M	H	H	H	L	4	No	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 basin; - 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 6.5		Line & access track preparation - spills and leaks	Contamination of soil (pollution)	H	H	H	H	M	2	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; - sites will be ripped where appropriate; and - spill kits are available.	Low
EIR Part 6		Line Surveying - vehicle movement	Soil erosion, compaction & disruption	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 6.1.3		Line Surveying - vehicle movement	Wheel rutting & tracks	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; and - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes.	Low
EIR Table 4,6.2 and 6.4		Line Surveying - vehicle movement	Introduction & spread of weeds	M	H	H	H	L	4	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 basin; - 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 6.5		Line Surveying - spills & leaks	Contamination of soil	H	H	H	H	M	2	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; - sites will be ripped where appropriate; and - spill kits are available.	Low
EIR Part 6		Recording - vehicle & vibrator movement & operations	Soil erosion, compaction & disruption	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; - all detours followed and no short cuts permitted; and - compacted areas ripped upon completion if in suitable terrain.	Low
EIR 6.1.3		Recording - vehicle & vibrator movement & operations	Wheel rutting & tracks	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes or purpose designed vehicles (e.g. Hovercraft); and - wheel rut material will be used to fill in ruts.	Low
EIR Table 4, 6.2 and 6.4		Recording - vehicle & vibrator movement & operations	Introduction & spread of weeds & diseases	M	H	H	H	L	4	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 basin; - 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 6.5		Recording - spills & leaks	Contamination of soil	H	H	H	H	M	2	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; - sites will be ripped where appropriate; and - spill kits are available.	Low
EIR 3.1.7		Campsites & associated supplies - site preparation	Soil inversion, erosion, compaction & disruption	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 3.1.7		Campsites & associated supplies - vehicle movement	Soil erosion, compaction & disruption	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						COMMENTS	Environmental significance		
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS			STAKEHOLDERS	SIGNIFICANCE
EIR 6.1.2 & 6.1.3		Campsites & associated supplies - vehicle movement	Wheel rutting & tracks	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes; - 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 5.3.3		Campsites & associated supplies - spills & leaks	Contamination of soil	H	H	H	H	M	2	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; - sites will be ripped where appropriate; and - management of sewage wastes in compliance with <i>Public and Environmental Health (Waste Control) Regulations 1995</i> .	Low
EIR 5.3.3		Campsites & associated supplies - disposal of domestic & chemical waste	Contamination of soil	M	H	H	H	L	4	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; - sites will be ripped where appropriate; and - management of sewage wastes in compliance with <i>Public and Environmental Health (Waste Control) Regulations 1995</i> .	Low
EIR 3.1.8		Uphole drilling & logging - vehicle movement	Soil erosion, inversion, compaction & disruption	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the potential for and impacts of soil compaction: - following previous offline wheel tracks is prohibited; - unavoidable compaction reported; - compacted areas ripped upon completion if in suitable terrain; and - Any soil from drill holes is restored to as near as practical to its original position in the soil profile.	Low
EIR 6.1.2 & 6.1.3		Uphole drilling & logging - vehicle movement	Wheel rutting & tracks	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes; and - wheel rut material will be used to fill in ruts.	Low
EIR 6.5		Uphole drilling & logging - uphold drilling activity & disposal of wastes	Contamination of soil	M	H	H	H	M	2	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 6.5		Uphole drilling & logging - spills & leaks	Contamination of soil	H	H	H	H	M	2	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 6		Line & access track & campsite restoration - earthworks & vehicle movements	Soil erosion, inversion, compaction & disruption	M	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	To minimise the potential for and impacts of soil erosion: - bladework is banned in gibber, tablelands, 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 - topsoil will be separated and returned to the surface on restoration.	Low
EIR 6.1.2 & 6.1.3		Line & access track & campsite restoration - earthworks & vehicle movements	Wheel rutting & tracks	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes; and - wheel rut material will be used to fill in ruts.	Low
EIR 6.4		Line & access track & campsite restoration - earthworks & vehicle movements	Introduction & spread of weeds & diseases	M	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 basin; - 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 6.5		Line & access track & campsite restoration - spills & leaks	Contamination of soil	H	H	H	H	M	2	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 6.1.2, 6.1.4		Monitoring of selected locations - vehicle movements	Soil erosion, compaction & disruption	H	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	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 6.1.2 & 6.1.3		Monitoring of selected locations - vehicle movements	Wheel rutting & tracks	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	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 gibber will be avoided when possible; - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes; and - wheel rut material will be used to fill in ruts.	Low
SEO A.1.4	<b>Air Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Dust generation	M	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - vehicles will pass homesteads at slow speeds	Low
SEO A.1.4		Line Surveying - vehicle movement	Dust generation	M	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low
SEO A.1.4		Recording - vehicle & vibrator movement & operations	Dust generation	M	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low
SEO A.1.4		Campsites & associated supplies - site preparation	Dust generation	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low
SEO A.1.4		Campsites & associated supplies - vehicle movement	Dust generation	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						COMMENTS	Environmental significance		
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS			STAKEHOLDERS	SIGNIFICANCE
SEO A.1.4		Uphole drilling & logging vehicle movement	Dust generation	M	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low
SEO A.1.4		Line & access track & campsite restoration - earthworks & vehicle movements	Dust generation	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low
SEO A.1.4		Monitoring of selected locations - vehicle movements	Dust generation	H	H	H	H	M	2	No	Medium	Short	Small	Small	Low	2	To minimise the generation of bulldust: - susceptible tracks and soils will be avoided where possible; and - relevant tracks will be reinstated after rains.	Low
EIR 6.1.8	<b>Surface Water Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance to natural drainage patterns	M	M	M	M	L	4	No	Low	Medium	Small	Small	Medium	1	To minimise the impacts to natural drainage patterns: - creek bank vegetation is left intact and detoured around; - creek crossings boxed and filled to original level when required; - windrows will be removed from creek beds and swales, and other areas of noted drainage; and - no blading in gibber areas that may lead to erosion and silting of local watercourses.	Low
SEO A.1.4		Line & access track preparation - spills and leaks	Contamination of surface water	M	M	M	M	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4		Line Surveying - spills & leaks	Contamination of surface water	M	H	H	H	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4		Recording - vehicle & vibrator movement & operations	Disturbance to natural drainage patterns	H	H	H	H	M	2	No	Low	Medium	Small	Small	Medium	1	To minimise the impacts to natural drainage patterns: - creek bank vegetation is left intact and detoured around; - creek crossings boxed and filled to original level when required; - windrows will be removed from creek beds and swales, and other areas of noted drainage; - no camps will be established near surface water features; and - no blading in gibber areas that may lead to erosion and silting of local watercourses.	Low
SEO A.1.4		Recording - spills & leaks	Contamination of surface water	H	H	H	H	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4		Campsites & associated supplies - site preparation	Disturbance to natural drainage patterns	H	H	H	H	M	2	No	Low	Medium	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 gibber areas that may lead to erosion and silting of local watercourses.	Low
SEO A.1.4		Campsites & associated supplies - spills & leaks	Contamination of surface water	H	H	H	H	L	4	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; - sites will be ripped where appropriate; - all refuelling points at campsites have spill containment facilities in place; - minimise generation of waste; and - all waste managed effectively.	Low
SEO A.1.4		Campsites & associated supplies - disposal of domestic & chemical waste	Contamination of surface water	H	H	H	H	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4		Uphole drilling & logging uphole drilling activity & disposal of wastes	Contamination of surface water	M	M	M	M	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4		Uphole drilling & logging spills & leaks	Contamination of surface water	H	H	H	H	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4		Line & access track & campsite restoration - spills & leaks	Contamination of surface water	H	H	H	H	L	4	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; - sites will be ripped where appropriate; and - spill clean up kits available on site.	Low
SEO A.1.4	<b>Groundwater Impacts</b>	Campsites & associated supplies - spills & leaks	Contamination of ground water	M	H	H	H	L	4	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
SEO A.1.4		Campsites & associated supplies - disposal of domestic & chemical waste	Contamination of ground water	H	H	H	H	L	4	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
SEO A.1.4		Uphole drilling & logging uphole drilling activity & disposal of wastes	Contamination of ground water	M	M	M	M	L	4	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

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						COMMENTS	Environmental significance		
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS			STAKEHOLDERS	SIGNIFICANCE
EIR 3.1.8		Uphole drilling & logging uphole drilling activity & disposal of wastes	-Uncontrolled discharge of water from aquifers	M	M	M	M	L	4	Yes	Low	Long	Small	Small	Medium	1	To minimise the potential for impacts on aquifers: - all operational equipment is inspected and maintained in accordance with industry standards and operational requirements; and - all artesian flows are immediately plugged and monitored for effectiveness	Low
SEO A.1.3	<b>Flora Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Loss of or damage to vegetation	M	M	M	M	M	3	No	Medium	Medium	Small	Small	Medium	3	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; - dense creek bank vegetation will be left intact; and - all vehicles will be thoroughly cleaned prior to commencing work.	Medium
EIR 6.2		Line & access track preparation - earthworks, vehicle movement & excavations	Introduction & spread of weeds & diseases	M	M	M	M	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 6.2		Line Surveying - vehicle movement	Introduction & spread of weeds & diseases	H	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 6.2		Recording - vehicle & vibrator movement & operations	Introduction & spread of weeds & diseases	H	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 3.1.7		Campsites & associated supplies - site preparation	Loss of or 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.	Low
EIR 3.1.7		Campsites & associated supplies - fire	Fire damage to vegetation	M	M	M	M	M	3	No	Low	Medium	Medium	Medium	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 6.2		Uphole drilling & logging vehicle movement	-Introduction & spread of weeds & diseases	H	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 6.2		Line & access track & campsite restoration - earthworks & vehicle movements	Introduction & spread of weeds & diseases	M	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 6.2		Monitoring of selected locations - vehicle movements	Introduction & spread of weeds & diseases	M	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 6.3	<b>Fauna Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Loss of & damage or disturbance to fauna & habitats	M	M	M	M	M	3	No	Medium	Short	Small	Small	Medium	2	To minimise the potential for and impacts of fauna: - only minimal bladed work 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; - creek and watercourse channel banks reinstated; and - disturbance of faunal refuges such as hollow logs will be avoided.	Medium
EIR 6.2		Line & access track preparation - earthworks, vehicle movement & excavations	Introduction & spread of weeds & diseases	M	M	M	M	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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 6.3		Line Surveying - vehicle movement	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	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 6.2		Line Surveying - vehicle movement	Introduction & spread of weeds & diseases	M	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	2	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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; and - domestic wastes will be managed to prevent the encouragement of pest animals.	Medium
EIR 6.3		Recording - vehicle & vibrator movement & operations	Loss of & damage or disturbance to fauna & habitats	M	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	To minimise potential for disturbance: - existing roads or seismic lines will be used for access; - offline driving (bush-bashing) is prohibited; and - vehicles will be thoroughly cleaned prior to entering the survey area.	Low
EIR 6.2		Recording - vehicle & vibrator movement & operations	Introduction & spread of weeds & diseases	H	H	H	H	L	4	No	Low	Medium	Small	Medium	Medium	1	To minimise the introduction and spread of weeds and diseases: - all vehicles will be thoroughly cleaned prior to commencing work in the basin; - 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; and - domestic wastes will be managed to prevent the encouragement of pest animals.	Low
EIR 3.1.7 & 6.9.2		Campsites & associated supplies - site preparation	Loss of & damage or disturbance to fauna & habitats	H	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	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 6.9.2		Campsites & associated supplies - fire	Fire damage to fauna & habitats	M	H	H	H	M	2	No	Low	Long	Medium	Medium	Medium	2	Standard fire prevention and fire fighting procedures in place.	Low
EIR 3.1.8		Uphole drilling & logging vehicle movement	-Loss of & damage or disturbance to fauna & habitats	M	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	To minimise damage to fauna and faunal habitats - drill holes are restored on completion; - vehicles are confined to current survey seismic lines; and - no bushbashing allowed.	Low
EIR 3.1.9		Line & access track & campsite restoration - earthworks & vehicle movements	Loss of & damage or disturbance to fauna & habitats	M	H	H	H	M	2	No	Medium	Short	Small	Small	Medium	2	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 adequately (as per standards) very little restoration work is required.	Low
EIR 3.1.4 & 3.1.9	<b>Sensitive Area Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Various impacts on mound springs, including loss of high ecological value	M	M	M	M	M	3	Yes	Low	Long	Small	Small	Medium	1	This highly sensitive land system can be easily damaged by vegetation clearance, alteration to drainage patterns, spills & fire. Mound springs will be totally avoided where possible. If the springs can not be avoided: - specific consultation will be sought on best practice operations; - specific management procedures will be developed (i.e. hand carrying); and - seismic personnel will be educated accordingly.	Low

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						COMMENTS	Environmental significance		
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS			STAKEHOLDERS	SIGNIFICANCE
EIR 6.1.1		Line & access track preparation - earthworks, vehicle movement & excavations	Erosion impacts in highly prone parts of Breakaways, Stony Hills and Stony Plains	M	M	M	M	M	3	Yes	Low	Short	Small	Small	Medium	1	This highly sensitive land system can be easily damaged by vegetation clearance, alteration to drainage patterns, spills & fire. Areas of friable soils will be totally avoided where possible. If the springs can not be avoided: - specific consultation will be sought on best practice operations; - specific management procedures will be developed (i.e. hand carrying of equipment); and - seismic personnel will be educated accordingly.	Low
EIR 6.1.7	<b>Social Environment Community Resource Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Loss of visual amenity	M	M	M	M	L	4	No	Medium	Medium	Small	Small	Medium	3	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.	Medium
EIR 6.6		Line & access track preparation - earthworks, vehicle movement & excavations	Damage to infrastructure	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise risk of damage to infrastructure: - lines will be planned to avoid infrastructure; - safety precautions will be implemented; - waste management policies will be enforced; and - landowners consulted with as per Petroleum Act 2000.	Low
EIR 6.1.7		Line Surveying - vehicle movement	Loss of visual amenity	M	M	M	M	M	3	No	Medium	Medium	Small	Small	Medium	3	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 gibber will be avoided when possible; and - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes.	Medium
EIR 6.1.7		Recording - vehicle & vibrator movement & operations	Loss of visual amenity	M	H	H	H	M	2	No	Medium	Medium	Small	Small	Medium	3	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 gibber will be avoided when possible; and - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes.	Low
EIR 6.6		Recording - vehicle & vibrator movement & operations	Damage to infrastructure	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise risk of damage to infrastructure: - lines will be planned to avoid infrastructure; - safety precautions will be implemented; - waste management policies will be enforced; and - landowners consulted with as per Petroleum Act 2000.	Low
EIR 5.3.3		Campsites & associated supplies - site preparation	Loss of visual amenity	H	H	H	H	M	2	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
EIR 6.1.7		Uphole drilling & logging - vehicle movement	Loss of visual amenity	H	H	H	H	M	2	No	Medium	Medium	Small	Small	Medium	3	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 gibber will be avoided when possible; and - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes.	Low
EIR 6.1.7		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Loss of visual amenity	M	H	H	H	M	2	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 6.1.7		Line & access track & campsite restoration - earthworks & vehicle movements	Loss of visual amenity	M	H	H	H	M	2	No	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 gibber will be avoided when possible; and - only vehicles with specialised low-pressure, wide profile tyres are permitted on salt lakes.	Low
EIR 6.8	<b>Cultural &amp; Heritage Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Impact or damage to cultural & heritage sites	M	M	M	M	M	3	No	Low	Long	Small	Small	Medium	1	To minimise the impacts to heritage sites (aboriginal): - lines will be cleared by appropriate cultural heritage personnel prior to preparation; - sites of 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 cultural heritage training prior to commencing operations; and - dozer operators are required to keep watch for any cultural heritage sites which would be subsequently flagged and detoured around. To minimise the 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 6.8		Line Surveying - vehicle movement	Impact or damage to cultural & heritage sites	M	M	M	M	M	3	No	Low	Short	Small	Small	Medium	1	To minimise the impacts to heritage sites (all): - all crew and ancillary personnel given cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low
EIR 6.8		Recording - vehicle & vibrator movement & operations	Impact or damage to cultural & heritage sites	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the impacts to heritage sites (all): - all crew and ancillary personnel given cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low
EIR 6.8		Campsites & associated supplies - site preparation	Impact or damage to cultural & heritage sites	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the impacts to heritage sites (all): - all crew and ancillary personnel given cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low
EIR 6.8		Uphole drilling & logging - vehicle movement	Impact or damage to cultural & heritage sites	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the impacts to heritage sites (all): - all crew and ancillary personnel given cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low
EIR 6.8		Line & access track & campsite restoration - earthworks & vehicle movements	Impact or damage to cultural & heritage sites	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the impacts to heritage sites (all): - all crew and ancillary personnel given cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low
EIR 6.8		Monitoring of selected locations - vehicle movements	Impact or damage to cultural & heritage sites	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the impacts to heritage sites (all): - all crew and ancillary personnel given cultural heritage training prior to commencing operations. - Work area clearances undertaken by appropriate heritage Group prior to start of activity	Low

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						COMMENTS	Environmental significance		
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS			STAKEHOLDERS	SIGNIFICANCE
EIR 6.7	<b>Community Health &amp; Safety</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Facilitation of third party access	M	H	H	H	L	4	No	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 6.6		Line & access track preparation - earthworks, vehicle movement & excavations	Noise generation	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid homesteads	Low
EIR 6.6		Recording - vehicle & vibrator movement & operations	Noise generation	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid homesteads	Low
EIR 6.6		Uphole drilling & logging - vehicle movement	Noise generation	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid homesteads	Low
EIR 6.6		Uphole drilling & logging - uphole drilling activity & disposal of wastes	Noise generation	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid homesteads	Low
EIR 6.6		Line & access track & campsite restoration - earthworks & vehicle movements	Noise generation	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	Lines will be planned to avoid homesteads	Low
<b>Economic Environment</b>																		
EIR 6.6	<b>Existing Land Use Impacts</b>	Line & access track preparation - earthworks, vehicle movement & excavations	Disturbance to stock	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, airstrips, dams, bores and tanks; - 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; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced;	Low
EIR 6.6		Line & access track preparation - earthworks, vehicle movement & excavations	Damage to infrastructure	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to infrastructure: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, 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. To minimise disturbance to current and future mining and petroleum production facilities: - below ground pipelines are crossed at existing or authorised crossing points; - above ground pipelines will be detoured around and not ramped; - lines will deviate around wellheads by 30 m; - no seismic energy source will operated within 30 m of pipelines or wellheads; and - any production facilities will be avoided and operations discussed with the plant manager.	Low
Company EMS		Line & access track preparation - spills and leaks	Loss of organic beef certification	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low
EIR 6.6		Line Surveying - vehicle movement	Disturbance to stock	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, airstrips, dams, bores and tanks; - 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; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low
Company EMS		Line Surveying - spills & leaks	Loss of organic beef certification	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low
EIR 6.6		Recording - vehicle & vibrator movement & operations	Disturbance to stock	M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, airstrips, dams, bores and tanks; - 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; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low
EIR 6.6		Recording - vehicle & vibrator movement & operations	Damage to infrastructure	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, airstrips, dams, bores and tanks; - 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; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low
EIR 6.6		Recording - spills & leaks	Loss of organic beef certification	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low
EIR 6.6		Campsites & associated supplies - spills & leaks	Loss of organic beef certification	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low
EIR 6.6		Campsites & associated supplies - disposal of domestic & chemical waste	Loss of organic beef certification	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low

REFERENCE	TYPE OF IMPACT	EVENT(S)	POTENTIAL CONSEQUENCES	PREDICTABILITY					MANAGEABILITY						COMMENTS	Environmental significance		
				SIZE	SCOPE	DURATION	FREQUENCY	STAKEHOLDERS	SIGNIFICANCE	AVOIDANCE	PROBABILITY	DURATION	SIZE AND SCOPE	CUMULATIVE EFFECTS			STAKEHOLDERS	SIGNIFICANCE
EIR 6.6		Uphole drilling & logging - Disturbance to stock vehicle movement		H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, airstrips, dams, bores and tanks; - 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; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low
EIR 6.6		Uphole drilling & logging - Disturbance to stock uphole drilling activity & disposal of wastes		H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to landholders: - landholders are consulted and notified prior to commencement of operations; - lines will deviate around infrastructure such as homesteads, other buildings, stockyards, airstrips, dams, bores and tanks; - 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; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low
EIR 6.6		Uphole drilling & logging - Damage to infrastructure uphole drilling activity & disposal of wastes		H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to 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 landholder; - water will only be sourced from authorised sources; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low
EIR 6.6		Uphole drilling & logging - Loss of organic beef uphole drilling activity & disposal of wastes		M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	2	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low
EIR 6.6		Uphole drilling & logging - Loss of organic beef spills & leaks		M	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	2	To minimise the potential for loss of organic beef certification: - 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; - minimise generation of waste; - all waste managed effectively; and - any polluted soil is removed.	Low
EIR 6.6		Line & access track & campsite restoration - earthworks & vehicle movements	Damage to infrastructure	H	H	H	H	M	2	Yes	Low	Short	Small	Small	Medium	1	To minimise disturbance to 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 landholder; - water will only be sourced from authorised sources; - stock locations and mustering will be considered in the planning and operation of activities; and - waste management policies will be enforced.	Low