



Rodinia Oil (Australia) Pty Ltd

Officer Basin, South Australia

Annual Report

Licence Year 5

25 June 2012 – 24 June 2013

Petroleum Exploration Licences

81 & 253

Contents

1. INTRODUCTION..... 1

2. PERMIT SUMMARY 1

3. REGULATED ACTIVITIES 4

4. COMPLIANCE ISSUES 4

 1. Compliance 5

 2. Actions to Rectify Non-compliance 6

 3. Management System Audits 33

 4. Reports and Data Submission 33

 5. Incidents..... 33

 6. Threat Prevention..... 33

 7. Future Work Program..... 33

EXPENDITURE STATEMENT..... 34

APPENDIX 1 Expenditure Statement

1. INTRODUCTION

Petroleum Exploration Licences, PEL 81 and PEL 253 were granted on 25 June 2007. The licences are located in the Officer Basin, South Australia. This report details the work conducted during Licence Year 5 (25 June 2011 – 24 June 2012), in accordance with Regulation 33 of the *Petroleum and Geothermal Energy Act 2000* („the Act”).

2. PERMIT SUMMARY

Rodinia Oil (Australia) Pty Ltd („Rodinia”) was previously named Officer Basin Energy Pty Ltd („OBEPL”).

Rodinia was the licensee and operator for the duration of the licence year for both PEL 81 and PEL 253.

For the duration of the licence year, the licensees for PEL 81 were:

Rodinia Oil (Australia) Pty Ltd	80%
EnSearch Petroleum (Block 81) Pty Ltd	20%

For the duration of the licence year, the licensees for PEL 253 were:

Rodinia Oil (Australia) Pty Ltd	80%
EnSearch Petroleum (Block 253) Pty Ltd	20%

Current work commitments associated with PEL 81 and PEL 253, as stated in the licence, are shown in Table 1A and 1B on the following page.

TABLE 1A
CURRENT WORK COMMITMENTS BY LICENCE YEAR FOR PEL 81

Licence Year	Licence Year Period	Minimum Work Program
Year 1	25/06/2007 – 24/06/2008	<input type="checkbox"/> Acquire 250 km 2D seismic <input type="checkbox"/> Reprocess existing data <input type="checkbox"/> Geological and geophysical studies
Year 2	25/06/2008 – 24/06/2009	<input type="checkbox"/> Acquire 250 km 2D seismic
Year 3	25/06/2009 – 24/06/2011 *	<input type="checkbox"/> Geological and geophysical studies

Year 4	25/06/2010 – 24/06/2013 *	<input type="checkbox"/> Drill one well <input type="checkbox"/> Acquire 250 km 2D seismic
Year 5	25/06/2011 – 24/06/2014	<input type="checkbox"/> Drill one or two wells

*12 month suspension and extension dated 29 October 2009 approved under s. 76A of the Act

*12 month suspension and extension dated 27 June 2012 approved under s. 76A of the Act

TABLE 1B
CURRENT WORK COMMITMENTS BY LICENCE YEAR FOR PEL 253

Licence Year	Licence Year Period	Minimum Work Program
Year 1	25/06/2007 – 24/06/2008	<input type="checkbox"/> Acquire 100 km 2D seismic <input type="checkbox"/> geological and geophysical studies
Year 2	25/06/2008 – 24/06/2009	<input type="checkbox"/> Acquire 100 km 2D seismic <input type="checkbox"/> geological and geophysical studies
Year 3	25/06/2009 – 24/06/2011 *	<input type="checkbox"/> Geological and geophysical studies
Year 4	25/06/2010 – 24/06/2012	<input type="checkbox"/> Drill one well <input type="checkbox"/> Geological and geophysical studies
Year 5	25/06/2011 – 24/06/2013	<input type="checkbox"/> Acquire 200 km 2D seismic

*12 month suspension and extension dated 29 October 2009 approved under s. 76A of the Act

Licence Year 5 concluded on 24 June 2012. The following table displays the minimum work program and the actual work completed up until the end of the current licence period.

TABLE 2
FINAL WORK PROGRAM AND WORK COMPLETED –
(AS OF END OF CURRENT REPORTING PERIOD) BY LICENCE YEAR

Licence Year	Minimum Work Program	Actual Work
Year 1 (PEL 81)	Acquire 250 km 2D seismic, reprocess existing data, geological and geophysical studies	<ul style="list-style-type: none"> • 985 km 2D seismic (~635 km in PEL 81 and 350 km in PEL 253. • Mapping of at least 5 horizons across the area and definition of several large structures that require further seismic to delineate their crests • Reprocessed 93 BMR-03 • Potential field modelling
Year 1 (PEL 253)	Acquire 100 km 2D seismic, geological and geophysical studies	
Year 2 (PEL 81)	Acquire 250 km 2D seismic	<ul style="list-style-type: none"> • 518 km 2D seismic • Mapping of at least 5 horizons across the area and definition of several Large structures. • Reprocessed 93 BMR-04, 05, 06 • Potential field modelling
Year 2 (PEL 253)	Acquire 100 km 2D seismic, geological and geophysical studies	
Year 3 (PEL 81)	Geological and geophysical studies	<ul style="list-style-type: none"> • 2536km 2D seismic acquisition and processing (~1373 km in PEL 81 and 1163 km in PEL 253) • Continued interpretation and mapping of 2D data □ Specialised processing of 749 km of 2D data (~55 km in PEL 81 and 694 in PEL 253) with detailed velocity analysis
Year 3 (PEL 253)	Geological and geophysical studies	
Year 4 (PEL 81)	Drill one well Acquire 250 km 2D seismic	<ul style="list-style-type: none"> □ Drilled Mulyawara-1 reached a total measured depth (TD) of 2691.3 metres and was plugged and abandoned on 13 October 2011 □ Drilled Kutjara-1 reached a total measured depth of 2,453.7 metres plugged and abandoned on 12 December 2011
Year 4 (PEL 253)	Drill one well Geological and geophysical studies	
Year 5 (PEL 81)	Drill one or two wells	Clean up rehabilitation planning and costing were undertaken in conjunction with discussions with all stakeholders.
Year 5 (PEL 253)	Acquire 200 km 2D seismic	

NOTE: Year 3 comprises a 12 month suspension and extension of both licences dated 29 October 2009.

NOTE: Year 5 comprises a 12 month suspension and extension for PEL 81 dated 27 June 2012.

3. REGULATED ACTIVITIES

This section provides a summary of regulated activities (as defined under Regulation 33 (2) (a) of the Act):

Seismic Data Acquisition

No seismic acquisition was undertaken.

Seismic Data Processing, Reprocessing and Interpretation

No seismic data processing reprocessing and interpretation was undertaken

Drilling and Related Activities

No drilling and associated activities were carried out on PEL 253.

Geochemical, Gravity, Magnetic and other surveys

No geochemical, gravity, magnetic or other surveys were conducted.

Production and Processing

N/A

Pipeline/Flowline Construction and Operation

N/A

Preliminary Survey Activities

No preliminary survey activities were undertaken

Rehabilitation Programs

A rehabilitation program has commenced in 2013.

A meeting was held in Oak Valley on the 9th of May between Rodinia and MT with representation from DMITRE's Designated Authority along with Anthropological and Legal Representatives of MT. Parameters for all aspects of the proposed clean-up program were presented, discussed, modified and ratified.

4. COMPLIANCE ISSUES

Licence and Regulatory Compliance

1. Compliance

As per Regulations 33(2) (b), the annual report must include information on compliance with the Act, Regulations, the Licences and any relevant Statement/s of Environmental Objectives.

Licence

To the best of our knowledge, Rodinia has complied with all of the licence conditions during the Licence Year 5.

LICENCE NON-COMPLIANCE – YEAR 5

Below is the list of regulatory non-compliances for the current reporting year.

TABLE 3

Licence Year	Stated Commitment	Reason for Noncompliance	Rectification of Noncompliance
Year 5 (PEL 81)	Drill one well Acquire 250 km 2D seismic	Suspension and extension granted	Noncompliance issue of the late submission of the annual report is rectified by this report. Noncompliance issue of late submission of a time frame for the various components of the proposed and planned remediation has been rectified. However it must be emphasised that this time frame remains dependent of MT input and approval.
Year 5 (PEL 253)	Drill one well Geological and geophysical studies		Noncompliance issue of the late submission of the annual report is rectified by this report. Noncompliance issue of late submission of a time frame for the various components of the proposed and planned remediation has been rectified. However it must be emphasised that this time frame remains dependent of MT input and approval.

Act and Regulations

During the reporting year Rodinia complied with the requirements under the *Act*. These included:

- Activity notification requirements to undertake a high level supervision regulated activity and the conditions imposed by the Minister in that approval
- Entry to Land requirements under Part 10 of the Act to enter the land to undertake a regulated activity
- All mandatory conditions under the Act

- Payment of Annual Fees
- Record keeping and reporting obligations; and

Statement of Environmental Objectives (SEO)

Table 4A provides a summary of Rodinia's compliance record against the January 2009 *Geophysical Operations* SEO.

Table 4B provides a summary of Rodinia's compliance record against the September 2010 *Drilling Activities* SEO.

Any non-compliance is accompanied by a statement as to why compliance did not occur, the measures taken to rectify the non-compliance and procedures implemented to ensure future compliance.

Rodinia are currently awaiting direction from the Maralinga Tjarutja advising of which civil works require rehabilitation.

Once the Maralinga Tjarutja have confirmed which seismic lines they want to remain, Rodinia will consult with DMITRE and any other relevant stakeholders.

Rodinia will then commission the environmental audit report, as required under the *Geophysical Operations* SEO, will submit the report within two months.

Pursuant to the Maralinga Land Rights Act 1984 the "Land Access and Production Agreement for Petroleum Exploration and Production" was entered into between the Maralinga Tjarutja and Rodinia on 19 June 2007 („the Agreement"). The Agreement provides for the grant of the PELs and the terms upon which Rodinia may enter the land to undertake petroleum exploration and production. Rodinia confirms that it has complied with all requirements under the Agreement.

2. Actions to Rectify Non-compliance

Regulations 33(2) (c) requires a statement concerning any actions taken to rectify any non-compliance and how recurrence of any such non-compliances is minimised in the future.

For issues relevant to the Geophysical Operations SEO refer to **Table 4A**. For issues relevant to Drilling Operations SEO refer to **Table 4B**. The Tables are on the following pages.

TABLE 4A: Statement of Environmental Objectives - Geophysical Operations in the Officer Basin, South Australia - January 2009 –

Compliance Licence Year 5

Objective	Assessment Criteria	Assessment	Comment
1. OBEPL and its contractors will avoid disturbance to sites of MT cultural and heritage significance	No disturbance to aboriginal heritage sites or other sites of cultural significance	Compliant	Full heritage survey proceeded geophysical operations.
	As per the OBE/MT agreement, appropriately trained and experienced cultural / heritage advisors have scouted proposed survey line locations and access tracks. Identified sites are flagged off.	Compliant	Proposed lines were agreed and given heritage clearance.
	As per the OBE/MT agreement, the crew is appropriately trained to identify, respond to and report unmarked heritage sites.	Compliant	All land clearance crews were inducted by MT. Where possible DMITRE representatives were similarly inducted. Efforts will be made to ensure all future DMITRE representatives in the field are inducted. Where possible all contractors were provided with cultural training during induction and prior to commencing activities.
2. OBEPL and its contractors will minimise disturbance to the MT and any infrastructure	No reasonable concerns raised by the MT are left unresolved.	Compliant	MT was appropriately notified prior to commencement of survey activities.
	No MT facilities have been disturbed during field operations without prior written permission	Compliant	Contractors and employees were inducted in cultural heritage and environmental protection legislation requirements.
	If any of the conditions of the OBE/MT agreement are breached, it will also be deemed to be a breach of this SEO provided those conditions relate to environmental matters.	Compliant	Periodic meetings were organised with MT representatives to discuss Rodinia operations and community requirements.

The attainment of „0“, „+1“ or „+2“ GAS score for „Disturbance to infrastructure“ as listed in Appendix 2.	To be assessed after rehabilitation*	All MT facilities were avoided during operations. Rodinia minimised wheel ruts through implementation of a policy in relation to driving and wet weather
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TABLE 4A: Statement of Environmental Objectives - Geophysical Operations in the Officer Basin, South Australia - January 2009 –

Compliance Licence Year 5

Objective	Assessment Criteria	Assessment	Comment
			Conditions and more effective training in relation to this policy relates to both established roads and tracks, and seismic lines.
3. OBEPL and its contractors will minimise disturbance to native vegetation and native fauna	Removal of mature trees should occur when unavoidable, and when weaving, detours or other mitigation strategies do not afford practical access	No mature trees were unnecessarily removed and substantial effort was maintained in order to achieve this objective.	Lines had undergone heritage clearance surveys prior to clearance and clearance was undertaken by MT people as sub-contractors.
	OBEPL shall ensure that any MT requirements are met regarding any trees of cultural significance	Compliant	Rodinia ensured that comprehensive training in respect of native vegetation preservation was undertaken.
	Weaving to avoid vegetation impact is used throughout the survey where it is practical to do so (see comment)	Compliant	Rodinia is not aware of the introduction or spread of introduced plants, animals or pathogens. Rodinia will aim to remain highly vigilant and to

Campsites are located, wherever possible, in naturally clear or previously disturbed areas, and are prepared to the minimum standard and size required for the survey camp in consultation with the camp Compliant provider.	Compliant	continuously implement strategies to achieve this. The rehabilitation program is still in the planning stage in consultation with MT and DMITRE. Once rehabilitation has been conducted, the environmental audit report, as required under the SEO, will be
No offline driving is evident (see comments)	Compliant	

TABLE 4A: Statement of Environmental Objectives - Geophysical Operations in the Officer Basin, South Australia - January 2009 – Compliance Licence Year 5

Objective	Assessment Criteria	Assessment	Comment
	No domestic camp animals are permitted	Compliant	Submitted within two months.
	Weeds, pathogens or feral animals are not introduced into, or spread in, operational areas	Compliant	
	As a minimum, all vehicles are inspected and assessed for the risk of transferring any new species into the survey area	Compliant	
	Firefighting equipment is readily available and sufficient personal trained	Compliant	
	The attainment of „0“, „+1“ or „+2“ GAS score for „impact on vegetation“ as listed in Appendix 2.	To be assessed after rehabilitation*	
	When applicable the attainment of „0“, „+1“ or „+2“ GAS score for „campsites“ as listed in Appendix 2.	To be assessed after rehabilitation*	

4. OBEPL and its contractors will minimise land disturbance	The MT are consulted on line placement by OBEPL	Compliant	Campsites were located in culturally cleared corridors.
	No survey line or access track preparation is carried out on salt lakes, clay pans or in wetland areas	Compliant	No sensitive land areas or inundated areas were traversed.
	Campsites are located, wherever possible, in naturally clear or previously disturbed areas, and are prepared to the minimum standard size required for the survey camp in consultation with the camp	Compliant	Bunding was used to contain hazardous materials. No refuelling occurred outside designated areas. Terrain, land system type and conduciveness for

**TABLE 4A: Statement of Environmental Objectives - Geophysical Operations in the Officer Basin, South Australia - January 2009 –
Compliance Licence Year 5**

Objective	Assessment Criteria	Assessment	Comment
	provider		Support were considered during planning stage, as were survey line preparation techniques. This involved extensive discussions with DMITRE who have documented this.
	No spills are left untreated	Compliant	
	There is no off-road driving or creation of short cuts (see objective 3 comments)	Compliant	
	Whenever practicable, width of line is reduced by line clearance equipment operating with raised blade	Some early dune cuts exceeded prescribed 1 metre cut depth. Some lines exceeded 5 metres in width	
	Blading will occur only where necessary so to minimise vehicle and tyre damage and to ensure safety of all personnel	Compliant	

	The attainment of „0“, „+1“ or „+2“ GAS score for „Disturbance to land surface (dune, inter-dune corridors, limestone plains, gypcrete formations, salt lakes as appropriate)“ as listed in Appendix 2.	To be assessed after rehabilitation*	
	When applicable the attainment of „0“, „+1“ or „+2“ GAS score for „campsites“ as listed in Appendix 2.	To be assessed after rehabilitation*	
5. OBEPL and its contractors	MT consulted on location of activities	Compliant	See comments to objective 1.

TABLE 4A: Statement of Environmental Objectives - Geophysical Operations in the Officer Basin, South Australia - January 2009 –

Compliance Licence Year 5

Objective	Assessment Criteria	Assessment	Comment
will minimise the visual impact of operations	No „gun barrel straight“ lines prepared. Lines should weave at least every 200 metres through the vegetation and other topographic features	Compliant	Line clearance was undertaken by MT under the direction of Terrex. Terrex procedure (industry best practice, in compliance with SEO) were used. Impacts of waste and spills on visual amenity were mitigated as described in section 4 and Table 5.
	The attainment of „0“, „+1“ or „+2“ GAS score for „visual impact“ as listed in Appendix 2	To be assessed after rehabilitation*	
6. OBEPL and its contractors will minimise litter and pollution	No survey or camp litter remains	To be assessed after rehabilitation*	All domestic waste was regularly taken to Oak Valley and then onto Ceduna. Covered bins provided. Rodinia acknowledges that waste disposal requires continual monitoring. Management of sewerage at campsites must be dealt with in accordance with Public
	Maximum of 2 pins per km	Final inspection to be done at rehabilitation	
	No spills are left untreated	Compliant	

The attainment of „0“, „+1“ or „+2“ GAS score for „pollution or litter“ as listed in Appendix 2.	To be assessed after rehabilitation*	<p>Environmental Health (Waste Control) Regulations 1995. Chemically degraded toilet waste may be disposed of on-site (not near watercourses) when in remote areas.</p> <p>Most pins and stakes removed. A special run was made to collect any oversights. Final inspection to be done at rehabilitation.</p> <p>Bundling was used to contain hazardous materials.</p> <p>No refuelling occurred outside designated areas.</p>
When applicable the attainment of „0“, „+1“ or „+2“ GAS score for „uphole sites“ as listed in Appendix 2	To be assessed after rehabilitation*	

TABLE 4A: Statement of Environmental Objectives - Geophysical Operations in the Officer Basin, South Australia - January 2009 – Compliance Licence Year 5

Objective	Assessment Criteria	Assessment	Comment
			<p>Appropriate spill response equipment was available on site.</p> <p>Records of any spill events and corrective actions are maintained, based on Terrex company procedure, and are available for audit.</p>

7. OBEPL and its contractors will remediate and rehabilitate operation areas to be agreed standards	All areas are rehabilitated as soon as practical, either during or after the conclusion of survey operations	The status of a rehabilitation program is still to be determined, in consultation with MT, DMITRE and other relevant stakeholders. Once rehabilitation has been conducted, the environmental audit report, as required under the SEO, will be submitted within 2 months.	Rehabilitation procedures are subject to ongoing discussions between Rodinia, MT and DMITRE
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A number of seismic lines will be left open for use by MT, some lines will be used for access for new seismic program and the remaining 2007/8 lines will be rehabilitated subject to requirements of MT people and DMITRE in compliance with the *Native Vegetation Act 1991* and the Native Vegetation Regulations 2003.

GAS: Goal Attainment Scaling – method of assessing the attainment of environmental objectives for geophysical operations in the Officer Basin, South Australia as specified in PEL 81 & 253 Objectives: Geophysical Operations OBEPL – revision January 2009

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin – Compliance Licence Year 5				
Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment

¹ This column is provided for information only

1. Avoid damage or disturbance to sites of Aboriginal and non-indigenous heritage significance.	<p>A cultural heritage clearance survey has been undertaken for the proposed areas of disturbance (well leases, access Tracks, borrow pits, airstrip) prior to commencement of site preparation, in accordance with the land access and production agreement between OBEPL and Maralinga Tjarutja.</p> <p>No impact to sites of Aboriginal or non-indigenous heritage significance.</p>	<p>Documents and/or reports of scouting for cultural/heritage are available for review. Known heritage sites have been identified and protected from operations (e.g. temporary flagging).</p> <p>A procedure is in place for the appropriate response to any sites discovered during drilling activities.</p> <p>Reports of any accidental discoveries during drilling activities are available for review.</p> <p>Records of sites forwarded to the Aboriginal Heritage Branch in compliance with the Aboriginal Heritage Act.</p> <p>Consult with Heritage Branch, DEH where appropriate regarding location of nonindigenous heritage sites.</p>	Compliant	<p>Cultural heritage clearance survey undertaken.</p> <p>Consultation with Maralinga Tjarutja to avoid impacting sites of Aboriginal significance.</p>
2. Minimise disturbance to native vegetation and native fauna.	<p><u>Well Lease, Access Track and Airstrip Construction and Restoration</u></p> <p>Any sites of rare, vulnerable and endangered flora and fauna have been identified and subsequently avoided.</p> <p>Maralinga Tjarutja requirements</p>	<p><u>Well Lease, Access Track, Airstrip and Camp Site Construction and Restoration</u></p> <p>Appropriately trained and experienced personnel have scouted proposed wellsite (including sump and flare pit), access tracks, airstrip and campsites for the purpose of identifying and flagging/recording significant (or rare, vulnerable and endangered) flora and</p>	Compliant / To be assessed after rehabilitation	<p>The Mulyawara-1 and Kutjara-1 wellsites and Airstrip were located to minimise the clearing of native vegetation.</p> <p>Assessment criteria regarding restoration will be assessed after rehabilitation.</p>

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
	<p>Regarding any trees of cultural significance are met.</p> <p>Attainment of 0, +1 or +2 GAS criteria for vegetation-related objectives for wellsite and borrow pit restoration, as listed in Appendix 2.</p> <p><u>Drilling and Production Testing Activities</u></p> <p>No fires during drilling and production testing activities.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>Refer to Assessment Criteria for Objective 4.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 10.</p>	<p>fauna.</p> <p>If avoidance of known locations of significant species is not possible, an onsite assessment of the potential to impact listed species has been undertaken, based on available species information, vegetation mapping and where appropriate, consultation with relevant experts.</p> <p>Vegetation clearance has been minimised and the conservation needs of specific species have been considered.</p> <p>The clearing of mature trees has been minimised.</p> <p>Campsites are located as far as possible in naturally sparse or clear areas in which campsite establishment does not require significant disturbance to vegetation.</p> <p>Documents and/or reports of assessment or scouting for flora/fauna are available for review.</p> <p>Facilities (e.g. borrow pits, well cellars) are designed and constructed as far as practicable to minimise fauna entrapment.</p> <p>Water storages are contained or fenced to minimise access by fauna (e.g. camels). Sumps and mud pits are fenced as appropriate to minimise wildlife access.</p> <p>Borrow pits are restored to minimise water holding capacity where agreements are not in</p>		

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin – Compliance Licence Year 5				
Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved¹	Assessment	Comment

		<p>place with stakeholders.</p> <p>Impacts in adjacent Mamungari Conservation Park and Tallaringa Conservation Park are avoided.</p> <p>Appropriate buffers to adjacent conservation parks are maintained to ensure that inadvertent impacts are avoided.</p> <p><u>Drilling and Production Testing Activities</u></p> <p>Confinement of flammable sources, restrictions on certain procedures and ready access to suitable fire fighting equipment.</p> <p>Wellsite is adequately sized to maintain appropriate firebreak protection.</p> <p>Response to fire included in Emergency Response Plan.</p> <p>All personnel are fully informed on the fire danger season and associated restrictions</p> <p>Fire risk included in induction.</p> <p>Fire equipment maintained at wellsite and camp.</p> <p><u>Fuel and Chemical Storage and Handling</u> Refer to Objective 4.</p> <p><u>Waste Management</u></p> <p>Refer to Objective 10.</p> <p><u>Fauna Management</u></p>		
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Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
		<p>No domestic pets allowed at camps or worksites.</p> <p>Feeding of wildlife (e.g. dingoes) is not permitted.</p>		
3. Prevent the introduction or spread of weeds and undertake control measures where required.	Weeds are not introduced into, or spread in, operational areas as a consequence of activities	<p>All vehicles and equipment inspected and assessed for the risk of spreading weed material and, if required, cleaned prior to entering the licence areas.</p> <p>Vehicles and equipment are to be cleaned when moving from areas where weeds are present to non-affected areas.</p> <p>Cleaning to be carried out in accordance with relevant procedures and accepted practices.</p> <p>Records of vehicle and equipment cleaning are kept and available for review.</p> <p>The site and access will be monitored on a regular basis for new weed species and treated as necessary following discussions with Maralinga Tjarutja and regional NRM Board where appropriate.</p> <p>Records of detection, monitoring or eradication of exotic weeds or noxious species introduced by industry activities are kept and are available for review.</p>	Compliant	Vehicles and equipment from other regions were cleaned to prevent weed introductions.
4. Minimise impacts to soil.	<u>Wellsite, Access Track and Airstrip Construction</u>	Planning has been undertaken to minimise impacts of operations and records are available	Compliant	

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin – Compliance Licence Year 5				
Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved¹	Assessment	Comment

	<p>Attainment of 0, +1 or +2 GAS criteria for soil-related objectives as listed in the SEO Appendix 2.</p> <p>No construction activities are carried out on salt lakes or steep stony slopes.</p> <p>Gibber pavement is rolled rather than graded.</p> <p><u>Drilling and Production Testing</u></p> <p>No soil contamination as a result of drilling and production testing activities.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>Soil in areas affected by any spill is removed and/or bioremediated.</p> <p>No soil contamination as a result of fuel and chemical storage and handling.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 10.</p>	<p>for review.</p> <p>There is no evidence of off-road driving or creation of shortcuts.</p> <p><u>Wellsite, Access Track and Airstrip Construction and Restoration</u></p> <p>Orientate site constructions to minimise soil removal.</p> <p>Separate topsoil and sump spoil stockpiles.</p> <p>Soil removed in construction to be stored on site and returned to its original stratigraphic level upon restoration of the drill site.</p> <p>Oil spill areas have been ripped to an appropriate depth.</p> <p><u>Drilling and Production Testing Sump</u> to have sufficient capacity.</p> <p>Camp and drill rig generators to be located in polyethylene lined bunded areas to contain any spills.</p> <p>Production storage tanks to be stored in claylined bunded areas.</p> <p>Bunded areas must have sufficient freeboard (e.g. to hold a 1:100 year, 24hr rainfall event).</p> <p>All bunded areas will be in accordance with EPA guidelines <i>080/07 Bunding and Spill Management</i>.</p>		
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Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
		<p>Initial production lines and tanks to be inspected prior to use.</p> <p>MSDS information readily available on the wellsite.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>Hazardous material stored, used and disposed of in accordance with relevant legislation on dangerous substances.</p> <p>All hazardous materials including fuels, oils and chemicals are to be stored appropriately e.g. in approved containers in polythene lined bunded pits or on bunded pallets. No refuelling outside designated refuelling/servicing areas.</p> <p>Appropriate spill response equipment is available on site.</p> <p>Staff and contractors receive adequate training in the use of spill response equipment.</p> <p>Spills or leaks are immediately reported and clean up actions initiated.</p> <p>All contaminated soil will either be treated insitu or removed.</p> <p>Records of spill events and corrective actions are maintained.</p> <p><u>Waste Management</u></p> <p>Refer to Objective 10.</p>		

**Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –
Compliance Licence Year 5**

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
5. Minimise loss of reservoir and aquifer pressures and avoid aquifer contamination.	<p>No aquifer contamination as a result of drilling, completion or production testing activities.</p> <p><u>Drilling and Completion Activities</u></p> <p>No uncontrolled flow to surface (i.e. blow out).</p> <p>Sufficient barriers exist in casing annulus to prevent crossflow between separate aquifers or hydrocarbon reservoirs.</p> <p><u>Production Testing and Well Abandonment Activities</u></p> <p>No crossflow behind casing between aquifers, and between aquifers and hydrocarbon reservoirs unless approved by the Department of Water, Land and Biodiversity Conservation.</p>	<p><u>Drilling and Completion Activities</u></p> <p>Observed volumes of cement return to surface match calculations.</p> <p>Where there is evidence of insufficient isolation, remedial action to be conducted.</p> <p><u>Well Abandonment Activities</u></p> <p>Isolation barriers to be set in place to ensure that crossflow, contamination or pressure reduction does not occur.</p> <p>Records of plug depths and intervals are kept.</p>	Compliant	<p>Mulyawara-1 and Kutjara-1 cement volumes matched calculations.</p> <p>Mulyawara-1 and Kutjara-1 both plugged and abandoned in accordance with DMITRE approved program</p>

6. Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow groundwater resources.	<u>Well Lease, Access Track and Airstrip Construction and Restoration</u> Wellsites and access tracks are located to maintain pre-existing water flows (i.e. channel contours are maintained on floodplains and at creek crossings).	<u>Wellsite, Access Track and Airstrip Construction and Restoration</u> All access through watercourse areas carefully assessed to determine the locations of least impact to channels and creek banks. Minor flows diverted around well lease if required. Any soil removed during the construction of the	Compliant	
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Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved¹	Assessment	Comment
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	<p><u>Drilling and Production Testing Activities</u></p> <p>No contamination of surface waters and shallow groundwater resources as a result of drilling or production testing activities.</p> <p><u>Fuel and Chemical Storage and Handling</u></p> <p>No contamination of surface waters and shallow groundwater resources as a result of fuel or chemical storage and handling.</p> <p><u>Waste Management</u></p> <p>Refer to Assessment Criteria for Objective 10.</p>	<p>drill pad will be respread over the disturbed area during restoration.</p> <p>Any required remediation work carried out as soon as possible after completion of all activities.</p> <p>If any contamination from spillage of oils or fuel occurs, immediate effective clean-up procedures must be employed.</p> <p><u>Drilling and Completion Activities</u></p> <p>Information on muds and chemicals to be readily available on the rig.</p> <p>All drill cuttings, muds and non-toxic drill fluids are to be contained within a designated sump with adequate freeboard at completion of operations to allow for a 1m cover of clean fill at remediation.</p> <p>On completion of drilling the sump will be allowed to dry out and then backfilled level with the surrounding landscape.</p> <p>Fluid losses will be controlled during drilling.</p> <p>Where shallow aquifers are present mud pits will be lined with impervious material e.g. polyethylene.</p> <p><u>Drilling and Production Testing Sump</u></p> <p>to have sufficient capacity.</p> <p>Camp and drill rig generators to be located in</p>		
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Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
		<p>polyethylene lined bunded areas to contain any spills.</p> <p>Production storage tanks to be stored in claylined bunded areas.</p> <p>Initial production lines and tanks to be inspected prior to use.</p> <p><u>Fuel and Chemical Storage and Handling</u> Appropriate spill response equipment is available on site. Refer to Objective 4.</p> <p><u>Waste Management</u></p> <p>Refer to Objective 10.</p>		
7. Minimise risks to the safety of the public, employees and other third parties.	No injuries to the public, employees or third parties as a result of drilling, completion and production testing activities.	<p><u>Unauthorised Access by Third Parties</u></p> <p>“No Entry” signs warning of dangers associated with drilling operations placed at the entry to the site access track.</p> <p><u>Drilling and Completion Activities</u></p> <p>Drill rig, ancillary and any testing equipment to comply with Regulations, meet relevant industry standards and be “Fit for Purpose”.</p> <p>Casing design carried out to meet worst case expected loads and environmental conditions determined for the specific geology intercepted by the well. Details of work to be performed are set out in the Drilling Program. Casing set in accordance with design</p>	Compliant	

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin – Compliance Licence Year 5				
Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved¹	Assessment	Comment

		<p>parameters.</p> <p>Casing cemented to surface with visible return.</p> <p>Blow out prevention precautions / well control equipment in place in accordance with defined procedures and appropriate to the expected downhole conditions.</p> <p>Satisfactory kick tolerance in casing program design.</p> <p>Emergency Response Procedures in place.</p> <p>Confinement of flammable sources, restrictions on certain procedures and ready access to suitable fire fighting equipment.</p> <p><u>Well Abandonment Activities</u></p> <p>Downhole abandonment is carried out to meet worst case expected loads and downhole environmental conditions.</p> <p>Effective isolation maintained between any potential aquifers to prevent crossflow.</p> <p><u>Vehicle Movement</u></p> <p>Control production and dispersion of dust on unsealed roads and drilling lease areas.</p> <p>Compliance with relevant speed restrictions on access roads and tracks.</p> <p><u>Wellsite Restoration Activities</u></p> <p>Assessment of the threat to third parties from well completion / downhole abandonment.</p>		<p>Wellsite restoration included in the Rehabilitation Plan to commence in 2013.</p>
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Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
		<p>Necessary measures (e.g. fencing, signage) taken to prevent the public accessing the wellhead equipment or waste relating to the well.</p> <p>Effective rehabilitation of the wellsite so that potentially dangerous perturbations in ground level do not remain.</p> <p><u>Woomera Prohibited Area</u></p> <p>Appropriate, necessary authorisations are obtained for access to the Woomera Prohibited Area.</p>		<p>Appropriate authority for Woomera Prohibited Area obtained.</p>

8. Minimise disturbance to Maralinga Tjarutja and any infrastructure.	<p>No reasonable concerns raised by the Maralinga Tjarutja are left unresolved.</p> <p>No Maralinga Tjarutja facilities have been disturbed during operations without prior written consent.</p> <p>Any breaches of the land access and production agreement between Maralinga Tjarutja and OBEPL will also be deemed a breach of this SEO (provided those conditions relate to environmental matters).</p>	<p>Maralinga Tjarutja are consulted during the planning phase and notified prior to the commencement of activities.</p> <p>Periodic meetings with the Maralinga Tjarutja community are organised to identify any potential or unresolved issues and other community land uses.</p> <p>Induction for all employees and contractors to cover cultural, conservation, infrastructure and legislation issues.</p> <p>Induction to cover requirements of the land access and production agreement between Maralinga Tjarutja and OBEPL, including prohibition on alcohol, firearms and hunting for Rodinia (OBE) personnel.</p> <p>Damage to tracks is avoided or tracks are</p>	Compliant	Continuing consultation with the Maralinga Tjarutja
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Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
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		<p>repaired if damage related to drilling activities occurs.</p> <p>All vehicles will travel at safe speeds to avoid collisions.</p> <p>All gates left in the condition in which they were found (i.e. open/closed).</p> <p>System is in place for logging complaints to ensure that issues are addressed as appropriate.</p> <p>Noise levels are to remain within appropriate acceptable limits.</p>		
9. Minimise visual impact.	The attainment of 0, +1 or +2 GAS criteria for visual impact objectives for wellsite and borrow pit restoration as listed in Appendix 2.	<p>Compacted soil areas ripped (except in gibber pavement) and soil profile and contours are reinstated following completion of operations.</p> <p>Soil removed in construction to be stored on site and returned to its original stratigraphic level upon restoration of the drill site.</p> <p>DMITRE (2009) Field Guide contains photographic examples of GAS criteria.</p>	Not Applicable	To be assessed after rehabilitation
10. Minimise the impact on the environment of waste storage, handling and disposal.	No soil, surface water or ground water contamination as a result of waste storage and disposal. All wastes to be disposed of at an EPA licensed facility in accordance with EPA Licence conditions, with the exception of	<p>Covered bins are provided for the collection and storage of wastes. All loads of rubbish are covered during transport to an approved waste facility.</p> <p>Waste management practices will be guided by the principles of the waste hierarchy (i.e. avoid, reduce, reuse, recycle, recover, treat, dispose).</p>	Compliant	

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin –

Compliance Licence Year 5

Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved ¹	Assessment	Comment
	<p>drilling fluids, drill cuttings and other fluids disposed during well clean-up.</p> <p>Wastewater (sewage and grey water) disposed of in accordance with the <i>Public and Environmental Health (Waste Control) Regulations 1995</i> or to the Department of Health's satisfaction.</p>	<p>All wastewater disposed in accordance with the <i>Public and Environmental Health (Waste Control) Regulations 1995</i> (i.e. the waste water disposal system must either comply with the <i>Standard for the Construction, Installation and Operation of Septic Tank Systems in SA</i> or be operated to the satisfaction of the Department of Health).</p> <p>Treated sewage wastewater disposed of onto land, well away from any place from which it is reasonably likely to enter any waters, in accordance with clause 11 of the <i>Environment Protection (Water Quality) Policy 2003</i>.</p> <p>Production of waste is minimised by purchasing reusable, biodegradable or recyclable materials where practical.</p>		
11. Remediate and rehabilitate operational areas to agreed standards	<p><u>Well Lease, Access Track, Airstrip and Borrow Pit Restoration</u></p> <p>The attainment of 0, +1 or +2 GAS criteria as listed in Appendix 2.</p> <p>Cellar backfilled and marker erected</p> <p>No evidence of litter on site.</p> <p>All areas are to be rehabilitated as soon as practical.</p>	<p>Refer to Objectives 2, 4, 5, 6, 7, 8, 9, 10.</p> <p>Compacted soil areas have been ripped (except on gibber pavement) and soil profile and contours are reinstated following completion of operations.</p> <p>Rehabilitation will meet the environmental and rehabilitation requirements of the land access and production agreement between Maralinga Tjarutja and OBEPL.</p> <p>Rehabilitation/abandonment plans for surface activities will be developed in consultation with</p>		<p>Rehabilitation procedures are subject to ongoing discussions between Rodinia, MT and DMITRE</p> <p>To be assessed after rehabilitation</p>

Table 4B: Statement of Environmental Objectives - Drilling Activities in PELs 81 and 253, Officer Basin – Compliance Licence Year 5				
Objective	Assessment Criteria	Guide to How Objectives Can Be Achieved¹	Assessment	Comment
	No sites are left contaminated or without treatment.	relevant stakeholders.		

3. Management System Audits

As per Regulations 33(2) (d), this annual report must include a summary of any management system audits undertaken during the relevant licence year, including information on any failure or deficiency identified by the audit and any corrective action that has or will be taken.

No management system audits undertaken during Licence Year 5.

4. Reports and Data Submission

As per Regulation 33(2) (e), this annual report must provide a list of any relevant reports or data generated by the licensee during the licence year. A list of all relevant reports and data for the current permit year is provided in **Table 5** on the following pages.

A series of posters for presentation at the Oak Valley was provided to DMITRE in pdf format

Various GIS remediation work maps were produced and copies were provided to DMITRE.

Preliminary spread sheets listing equipment and personnel for all proposed aspects of remediation components.

A number of Meetings were held at DMITRE to discuss planning and implementation of the remediation proposal.

5. Incidents

As per Regulation 33(2) (f), this annual report must include information regarding any reportable incidents.

☐ There are no reportable incidents during the reportable year.

6. Threat Prevention

As per Regulation 33(2) (g) under the Act, this annual report must include a report of any threats to facilities or activities in the licence area and any corrective action.

- There are no facilities in the two licence areas
- No threats to activities have been identified that are not already listed in the Environmental Impact Report.

7. Future Work Program

As per Regulation 33(2) (h) under the Act, this annual report must include a statement outlining proposed operations for the ensuing year.

Rodinia's future work program is currently under review. However the remediation work will begin as soon as practicable