



**AHAVA Energy Pty Ltd**

**and**

**Dawnpark Holdings Pty Ltd  
Standard Oil Pty Ltd**

Annual Report

Licence Year 2

13 April 2008 – 12 April 2009

**PEL 139  
(13 April 2008 to 30 March 2009)**

**PEL 499  
(31 March 2009 to 12 April 2009)**

Adelaide, 12 June 2009

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**Table 1 Current work commitments by licence year**

Licence Year	Licence dates	Minimum Work Program
Year 1	13 April 2007 – 12 April 2008	Geological and Geophysical studies
Year 2	13 April 2008 – 12 April 2009	Drill one well
Year 3	13 April 2009 – 12 April 2010	Data review
Year 4 & 5	13 April 2010 – 12 April 2011 13 April 2011 – 12 April 2012	Drill one well, or 200 kms seismic

The licensees applied to PIRSA to vary the minimum work program commitments for PEL 139. The approval was provided on 4 August 2008. Table 2 displays the minimum work program after consideration of the variation.

**Table 2 Current work commitments by licence year of PEL 499**

Licence Year	Licence dates	Minimum Work Program
Year 1	13 April 2007 – 12 April 2008	Geological and Geophysical studies
Year 2	13 April 2008 – 12 April 2009	1300 kms of 2D Seismic Acquisition
Year 3	13 April 2009 – 12 April 2010	Data Review
Year 4	13 April 2010 – 12 April 2011	Drill one well, or 200 kms of 2D Seismic Acquisition
Year 5	13 April 2011 – 12 April 2012	Drill one well, or 200 kms of 2D Seismic Acquisition

The final work program commitments, along with the work conducted for the first two licence years (to 12 April 2009), are displayed below.

**Table 3 Final work commitments and work completed by licence year**

Licence Year	Minimum Work Program	Actual Work
Year 1	Geological and Geophysical studies	- Geological and Geophysical studies - Review of available PIRSA seismic data - Preparation for seismic data acquisition
Year 2	1300 kms of 2D Seismic Acquisition;	- Geological and Geophysical studies - 1300 kms of seismic data acquisition - 1300 kms of seismic data processing commenced - Preparation for exploration drilling program commenced

Year 3	Data Review	
Year 4	Drill one well, or 200 kms of 2D Seismic Acquisition	
Year 5	Drill one well, or 200 kms of 2D Seismic Acquisition	

PEL 499 continues the same work program that was approved for PEL 139. A new work program has been approved for PEL 500 but will be reported separately.

### **3. REGULATED ACTIVITIES**

#### **Geological and Geophysical Studies**

Technical work conducted during Licence Year 2 comprised regional geological evaluation, well logs analysis, core inspection and studies. Seismic interpretation and mapping of existing data confirmed the existing leads and defined new leads. Based on this mapping, a new seismic program consisting of 1300 kilometers was designed and recorded during Licence Year 2.

#### **Drilling and Related Activities**

No drilling activities were carried out during the Licence Year 2.

Work began on well planning with a conceptual well design produced.

Work began on developing the AHAVA Drilling Management System and the writing of a new drilling operations manual.

The Drilling Department undertook a self assessment of its system and procedures.

Materials and services for drilling have been sourced but no contracts have been issued.

#### **Seismic Data Acquisition Program**

The seismic program was designed to confirm the existing leads and to upgrade them to drillable prospects.

- Survey Name : Welbourn Hill
- Contractor : Terrex Seismic
- Type of Survey : 2D Seismic
- Start Date : 9 January 2009
- Completion Date : April 13, 2009
- Line length : 1300 kilometers
- Number of lines : 39 Lines

### **Seismic Data Processing and Reprocessing Program**

Magnetic tapes of 1300 kilometers of 2D seismic data have been delivered for processing to Velseis in Brisbane.

- Survey Name : Welbourn Hill
- Contractor : Velseis
- Start Date : January 10, 2009\*
- Completion Date : expected in June 2009
- Line length : 1300 kilometers
- Current status : At time of reporting upholes and refraction statics were being tied-in. Meanwhile, brute stacks of all seismic lines are completed.

\* = including experimental data.

No seismic re-processing has been conducted in the licence reporting period.

### **Geochemical, Gravity, Magnetic and other surveys**

No Geochemical, Gravity or Magnetic surveys have been undertaken in the licence reporting period.

## **4. COMPLIANCE ISSUES**

### **Licence and Regulatory Compliance**

There were no compliance issues that Ahava and DPSO were aware of during the Licence Year 2.

### **Licence Non-Compliance**

Ahava Energy has demonstrated in section 2 that the licence is in compliance with the work program commitments. No non-compliances have been identified.

**Regulatory Non-Compliance**

To the best of their knowledge, the licensees were not aware of any non-compliances relating to requirements under the Petroleum Act 2000 or associated regulations.

## Compliance with Statement of Environmental Objectives

**Table 4 Arckaringa Basin Geophysical Operations, Statement of Environmental Objectives, July 2008**

Environmental Objective	Assessment Criteria	Compliant/Non-Compliant (incl. Compliance Statement)	Comments
1. Avoid disturbance to sites of cultural and heritage significance.	A cultural heritage survey (or Work Area Clearance - WAC) has been undertaken of the proposed survey line locations and access tracks prior to commencement of survey. No disturbance to sites of Aboriginal or non- indigenous heritage significance	<b>Compliant</b>	AHAVA Energy has an agreement with the Native Title Claimant group which specifies the requirements for scouting proposed seismic lines to identify and avoid areas of heritage value and archaeological significance. Joint site visits were carried out with representatives from the Native Title Claimant group. Proposed line locations and access routes were agreed and given heritage clearance. Areas of significance were recorded and marked as exclusion zones.
2. Minimise disturbance to native vegetation and native fauna	<u>Campsite and survey line preparation</u> The attainment of either 0, +1 or +2 GAS criteria for 'Impact on vegetation' objective listed in Appendix 2. No mature trees are removed. No off-line or off-access driving.	<b>Non Compliant</b>	GAS Audits were taken at 60 locations along the 1,300KMs of survey lines recorded in Welbourn Hill Seismic Survey. The graph in Appendix 2 shows that, the Impacts on Vegetation were greater than normally expected, resulting in a GAS score of "-1". Despite meeting the weaving requirements under the SEO, the removal of Mulga has been inevitable. This was due to the higher density and confined area of impact of survey lines and extremely dense woodland in the

	<p><u>Fuel and Chemical Storage and Management</u>  No spills/leaks outside areas designed to contain them.  Fire Danger Season restrictions and education</p> <p>Waste Management  Refer Objective 9.  Operations in Tallaringa Conservation Park  Impact on environmental values of Tallaringa Conservation Park is minimised.  DEH requirements for notification and operation in Tallaringa CP are met.</p>		<p>area. Vegetation clearance was minimized as much as possible.</p> <p>No spills were recorded</p> <p>Appropriate spill response equipment is available on site. Appropriate fire-fighting equipment is readily available. Appropriate personnel are readily available and suitably informed to action response.</p> <p>N/A  N/A  N/A</p> <p>N/A</p> <p>N/A</p>
<p>3. Avoid the introduction or spread of exotic species and implement control measures as necessary</p>	<p>Weeds or feral animals are not introduced into, or spread, in operational areas.</p>	<p><b>Compliant</b></p>	<p>Machinery and vehicles used for line preparation and survey recording were inspected and washed down prior to commencing the Welbourn Hill Survey.</p>
<p>4. Minimise disturbance and avoid contamination to soil resources</p>	<p><u>Campsite and survey line preparation</u>  Attainment of 0, +1 or +2 GAS criteria for 'Disturbance to land surface' objective, as listed in Appendix 2.</p>	<p><b>Compliant</b></p>	<p>GAS Audits were taken at 60 locations along the 1,300KMs of survey lines recorded in Welbourn Hill Seismic Survey. Although not recorded in the GAS assessment, it is recognized post-survey that on several lines, disturbance to soil resources is</p>

	<p><u>Fuel and Chemical Storage and Management</u> No spills/leaks outside areas designed to contain them.</p> <p><u>Waste Management</u> Refer to Objective 9.</p>		<p>higher than expected, with some rutting and minor windrows evident. The Disturbance to Land Surface is at GAS score of “-1”.</p> <p>There were no incidents of soil contamination arising from the survey activities Appropriate spill response equipment is available on site. N/A</p>
<p>5. Minimise disturbance to drainage patterns and avoid contamination of surface waters and shallow groundwater resources</p>	<p><u>Campsite and survey line preparation.</u> The attainment of 0, +1 or +2 GAS criteria for ‘disturbance to land surface’ objective listed in Appendix 2(*).</p> <p>No uncontrolled flows to surface from aquifers intersected in upholes/shallow boreholes. There is no unnecessary interference with natural drainage features.</p> <p><u>Fuel and Chemical Storage and Management</u> No spills occur outside of areas designed to contain them.</p>	<p><b>Compliant</b></p>	<p>Particular care was taken to ensure minimal disturbance of the banks of the channels at the points where the access lines entered and exited the channels.</p> <p>No upholes drilled</p> <p>No drainage channels blocked that would impede potential inflows.</p> <p>No spills were recorded. Appropriate spill response equipment is available on site.</p>
<p>6. Minimise risks to the safety of the public, employees and other third parties</p>	<p>No injuries to the public or third parties as a result of seismic activities.</p>	<p><b>Compliant</b></p>	<p>The main threat to the safety of the public, employees and third parties is associated with the movement of vehicles and the localized increase in traffic load</p>

			for the duration of the survey. All reasonable steps were taken to prevent unauthorized access to the survey area and warning signs were appropriately located.
7. Minimise disturbance to livestock, pastoral infrastructure and landholders	<p>The attainment of 0, +1 or +2 GAS criteria for 'Impact on infrastructure' objective listed in Appendix 2.</p> <p>No adverse impact on livestock as a result of activities.</p> <p>No reasonable concerns raised by stakeholders are left unresolved. Compliance with relevant sections of the <i>Petroleum Act 2000</i> in relation to notification of landholders.</p>	<b>Compliant</b>	<p>AHAVA Energy maintained regular contact with the Pastoral Lessees prior to and while undertaking survey operations. AHAVA Energy has established good working relationship with these 3 families. No objections have been raised by the Pastoralist Lessee in relation to these activities.</p> <p>Compliant, letters sent with more than 21 days.</p>
8. Minimise the visual impact of operations	<p>The attainment of 0, +1 or +2 GAS criteria for 'visual impact' objective listed in Appendix 2(*).</p> <p><u>Campsite and survey line preparation</u> Proposed survey lines and campsites have been appropriately located and prepared to minimise the visual impact.</p>	<b>Compliant</b>	<p>GAS Audits were taken at 60 locations along the 1,300KMs of survey lines recorded in Welbourn Hill Seismic Survey. In most cases the Visual Impact was GAS = 0.</p> <p>Doglegs applied, vegetation weaved to minimize visual impact from trafficked tourist roads.</p>
9. Minimise the impact on the environment of waste handling and disposal.	<p>0, +1 or +2 GAS criteria are attained for 'Pollution or litter' objective listed in Appendix 2. Wastewater disposal and spills have been managed appropriately.</p>	<b>Compliant</b>	<p>GAS Audits were taken at 60 locations along the 1,300KMs of survey lines recorded in Welbourn Hill Seismic Survey. Pollution or Litter on all lines were</p>

			recorded at GAS = 0. There was no evidence of pollution or litter were found.
10. Remediate and rehabilitate operational areas to agreed standards.	The attainment of 0, +1 or +2 GAS criteria for  - 'Visual impact' - 'Impact on infrastructure' - 'uphole site restoration' - 'disturbance to land surface' Measures/goals listed in Appendix 2(*)	<b>Compliant</b>	Refer to Objectives 4, 5, 7, 8, 9. Please refer to Appendix 2 – GAS Audit Chart of the Annual Report.

(\*) Ackaringa Basin - Statement of Environment Objectives (October 2007) Appendix 2

**Management System Audits**

There were no management system audits conducted during the reporting period.

## Report and Data Submissions

Pursuant to Regulation 33(2) (e) under the Act, an annual report must include: “a list of all reports and data relevant to the operation of the Act generated by the licensee during the licence year”.

**Table 5 List of Report and data submissions during current licence reporting year**

Description of Report/Data	Date Due	Date Submitted	Compliant / Non-Compliant
<b>Geophysics</b> 1. Activity Notification 2. Heritage Survey Report	N/A N/A	29 July 2008 16 Sept 2008	Compliant Compliant
<b>General</b> 1. Annual Report Year 2	12 June 2009	12 June 2009	Compliant

### Safety

No significant incidents occurred during seismic data acquisition.

### Threat Prevention

No perceived threats and no action taken during the reporting period.

### Future Work Program

- The minimum work program for PEL 499 Licence Year 3 is data review.
- Seismic data processing by Velseis in Brisbane is continuing into Licence Year 3. It is expected that the project will be completed by the end of June 2009.
- Following positive results of interpretation and mapping of new seismic data, a number of exploration wells will be proposed for drilling in Licence Year 3.
- All related documents and paperwork associated with the proposed drilling campaign are being prepared.

## 5. EXPENDITURE STATEMENT

Please refer to Appendix 1 for the expenditure statement for the current reporting period.

**CONFIDENTIAL ATTACHMENT TO PEL 139 Licence Year 2**  
**Annual Report**

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**APPENDIX 1**

**EXPENDITURE STATEMENT PEL 139 Licence Year 2**

Commercial in Confidence

Fig # 3: GAS Audit of Ahava Energy's 2008 Welbourn Hill 2D Seismic Survey, PEL 139, Officer Basin

