



## **ESSENTIAL PETROLEUM RESOURCES LIMITED QUARTERLY EXPLORATION REPORT FOR THE THREE MONTH PERIOD ENDED 30 SEPTEMBER 2006**

### **Highlights**

- Engineering studies of the suspended Killanoola DW-1 oil discovery are encouraging. An application for a retention licence over this resource will be lodged by the Operator of PEL 27. An extended oil production test is planned.
- Palaeo-geographic reconstruction of the Descartes Prospect using seismic facies mapping has increased confidence that reservoir sands are present in the Oligocene fan complex.

### **Summary**

Inland Oil Resources Pty Ltd (IOR) and Bass Strait Oil Company Limited (BAS) have farmed into PEP 151 for a 25% interest each. In addition IOR and BAS have elected to earn a 15% interest each in PEP 150.

In PEP 151 work has commenced to define leads in the Early and Late Cretaceous section to add to the existing portfolio of Tertiary Pebble Point leads identified in EPR's 2003 Nelson Seismic Survey.

A 3D interpretation of 2D seismic data over the Harris Flat structure has confirmed that fault throws do not exceed the anticipated thickness of shales so cross-fault seals appear to be robust. Further seismic acquisition is required to confirm the extent of strike rollover.

In PEL 27 preliminary engineering studies of the suspended Killanoola DW-1 oil discovery are encouraging and a retention licence over this resource and production opportunity will be lodged by Beach Petroleum Limited as Operator.

Processing of the OEP06 2D Marine Seismic Survey, comprising 345 kilometres in VIC/P50, is near completion. Interpretation will commence on receipt of all processed seismic lines.

Detailed seismic facies mapping of the Descartes Prospect in VIC/P46 and VIC/P50 has led to the recognition of three depositional cycles within the Oligocene fan complex. Seismic features characteristic of sandy turbidite sequences were recognised in the uppermost cycle providing encouragement that reservoir sands are present.

During the quarter no commercial hydrocarbons were discovered or acquired by the Company.

### **PEP 151            50%            Onshore Otway Basin Victoria**

During July 2006 IOR and BAS elected to farm into PEP 151. IOR and BAS have earned the right to farm-in through their participation in the drilling of the Pritchard-1 well. IOR and BAS will each be assigned a 25% interest. The participants in the PEP 151 Joint Venture will be:

Essential Petroleum Resources Limited	50% (Operator)
Inland Oil Resources Pty Ltd	25%
Bass Strait Oil Company Limited	25%

Work has commenced to define leads in the Early and Late Cretaceous section to add to the existing portfolio of Tertiary Pebble Point leads identified in EPR's 2003 Nelson Seismic Survey.



Open file seismic data over the Tantanoola Trough in the northern part of the permit has been acquired and interpretation has commenced. The Tantanoola Trough comprises a thick Early Cretaceous sequence that includes the prospective Pretty Hill Sandstone. The Pretty Hill Sandstone hosts the gas fields and oil accumulations of the productive Penola Trough in South Australia. Beach Petroleum's Glenaire-1 well is currently being drilled in the Victorian part of the Penola Trough immediately to the north of PEP 151 and may shed new light on the Early Cretaceous plays.

**PEP 150          20%          Onshore Otway Basin Victoria**

During July 2006, Inland Oil Resources Pty Ltd (IOR) and Bass Strait Oil Company Limited (BAS) elected to farm into PEP 150. IOR and BAS will each earn a 15% interest in PEP 150 by contributing to the drilling of a well on promoted terms. Following the execution of farmout agreements, the participants in the PEP 150 Joint Venture will be:

Beach Petroleum Limited	50% (Operator)
Essential Petroleum Resources Limited	20%
Inland Oil Resources Pty Ltd	15%
Bass Strait Oil Company Limited	15%

Native Title negotiations led by Beach Petroleum Limited as Operator are continuing.

**PEL 72          50%          Onshore Otway Basin South Australia**

A 3D interpretation of 2D seismic data over the Harris Flat structure using specialist structural mapping software has been carried out. The work was undertaken to increase confidence in the fault correlation and improve the understanding of cross fault seal geometries.

The new 3D interpretation of the 2D seismic data over the Harris Flat structure has confirmed that fault throws do not exceed the anticipated thickness of shales so cross-fault seals appear to be robust. Further seismic acquisition is required to confirm the extent of strike rollover.

The Harris Flat location provides an onshore opportunity to test an offshore equivalent Late Cretaceous section, where shale seals are better developed than in onshore wells drilled proximal to the Late Cretaceous basin margin. In addition Harris Flat is proximal to the offshore Morum Sub-basin where researchers from Primary Industries and Resources South Australia (PIRSA) and others present a case for oil generation from marine source rocks at the top of the Early Cretaceous section.

Essential Petroleum plans to farm down its interest in PEL 72 to fund the seismic and drilling of a well.

**PEL 27          20%          Onshore Otway Basin South Australia**

Operator Beach Petroleum Limited has advised that preliminary engineering studies of the suspended Killanoola DW-1 oil discovery are encouraging and that an application for a retention licence over this resource will be lodged. Plans for an extended oil production test (EPT) are in preparation.

The Killanoola DW-1 well flowed 25-30 BOPD with 10 to 15% water cut during an extended production test carried out by a previous operator in 1999.

**VIC/P46          25%          Offshore Otway Basin**

Planning for a 3D seismic survey over the Bernoulli Prospect is underway. It is currently anticipated that the survey will be acquired in the second quarter 2007.

**VIC/P50      100%      Offshore Otway Basin**

Processing of the OEP06 2D Marine Seismic Survey, comprising 345 line kilometres to detail the northeast permit area, is near completion. Interpretation of the data will be undertaken during the fourth quarter 2006.

Palaeo-geographic reconstruction of the Descartes Prospect using seismic facies mapping was carried out during the third quarter 2006. The work led to the recognition of three depositional cycles within the Oligocene fan complex. Seismic features characteristic of sandy turbidite sequences were recognised in the uppermost cycle providing encouragement that reservoir sands are present.

The seismic facies mapping at Descartes has resulted in a revised unrisks possible recoverable resource estimate of 800 MMbbls oil (200 MMbbls in VIC/P50).

Essential Petroleum is currently seeking a six month suspension and extension of VIC/P50 to allow interpretation of the OEP06 survey and technical appraisal of the Amrit-1 basic well data that is expected to be released in the near future.

The Company will seek to farm out a substantial interest in VIC/P50 in return for a carried interest in the drilling of a well.

**ESSENTIAL PETROLEUM RESOURCES LIMITED  
PERMIT EXPENDITURE SUMMARY FOR THE QUARTER ENDED 30 SEPTEMBER 2006\***

Permit Number	Essential Petroleum Interest	Seismic Survey Expenditure	Geological & Geophysical Studies	Environment, Native Title & Permit Maint.	Drilling Expenditure	Total
PEP 151	50.00%	\$0.00	\$0.00	\$0.00	\$22,385.00	<b>\$22,385.00</b>
PEP 150	20.00%	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$0.00</b>
PEP 152	84.41%	\$0.00	\$0.00	\$599.72	\$0.00	<b>\$599.72</b>
PEP 159	100.00%	\$0.00	\$170.59	\$154.72	\$0.00	<b>\$325.31</b>
PEL 72	50.00%	\$4,604.00	\$11,787.00	\$9,651.95	\$0.00	<b>\$26,042.95</b>
VIC/P46	25.00%	\$7,540.00	\$604.75	\$2,863.86	\$0.00	<b>\$11,008.61</b>
VIC/P50	100.00%	\$56,061.00	\$49,849.89	\$12,895.56	\$0.00	<b>\$118,806.45</b>
PEL27	20.00%	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$0.00</b>
Non Specific	100.00%	\$0.00	\$21,761.39	\$6,328.82	\$0.00	<b>\$28,090.21</b>
		<b>\$68,205.00</b>	<b>\$84,173.62</b>	<b>\$32,494.63</b>	<b>\$22,385.00</b>	<b>\$207,258.25</b>

*\*This statement has been prepared based on accrual accounting principles*

*John W Cornelius, Chairman, Essential Petroleum Resources Limited has prepared this Quarterly Exploration Report.*

# Appendix 5B

## Mining exploration entity quarterly report

Name of entity:

Essential Petroleum Resources Limited

ACN or ARBN

089 956 150

Quarter ended ("current  
quarter")

September 30, 2006

### Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date ( 12 months) \$A'000
1.1 Receipts from product sales and related debtors	121	121
1.2 Payments for		
[a] exploration and evaluation	(330)	(330)
[b] development		
[c] production		
[d] administration	(215)	(215)
1.3 Dividends received		
1.4 Interest and other items of a similar nature received	31	31
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Other (provide details if material)		
<b>Net Operating Cash Flows</b>	<b>(393)</b>	<b>(393)</b>
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of:		
[a] prospects	-	-
[b] equity investments	-	-
[c] other fixed assets	(1)	(1)
1.9 Proceeds from sale of:		
[a] prospects	-	-
[b] equity investments	-	-
[c] other fixed assets	-	-
1.10 Loans to other entities		
1.11 Loans repaid by other entities		
1.12 Other (provide details if material)		
<b>Net Investing Cash Flows</b>	<b>(1)</b>	<b>(1)</b>
1.13 Total operating and investing cash flows (carried forward)	<b>(394)</b>	<b>(394)</b>

**Appendix 5B**

**Mining exploration entity quarterly report**

1.13	Total operating and investing cash flows (brought forward)	(394)	(394)
<b>Cash flows related to financing activities</b>			
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (payment in relation to capital raising)	(6)	(6)
<b>Net financing cash flows</b>		(6)	(6)
<b>Net increase (decrease) in cash held</b>		(400)	(400)
1.20	Cash at beginning of quarter/year to date	2,385	2,385
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	1,985	1,985

**Payments to directors of the entity and associates of the directors**

**Payments to related entities of the entity and associates of the related entities**

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	95
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

**Non-cash financing and investing activities**

2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest.

**Appendix 5B**

**Mining exploration entity quarterly report**

**Financing facilities available**

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities		
3.2 Credit standby arrangements		

**Estimated cash outflows for next quarter**

	\$A'000
4.1 Exploration and evaluation	300
4.2 Development	-
<b>Total</b>	<b>300</b>

**Reconciliation of cash**

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows:

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	229	375
5.2 Deposits at call	1,756	2,010
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>	<b>1,985</b>	<b>2,385</b>

**Changes in interests in mining tenements**

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed	PEP 151 PEP 150	Participating Interest Participating Interest	100% 50%	50% 20%
6.2 Interests in mining tenements acquired or increased				

## Issued and quoted securities at end of current quarter

Description includes rate of interest and any redemption or conversion rights together with prices and dates.

	Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
<b>7.1 Preference securities (description)</b>				
<b>7.2 Changes during quarter:</b>				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs, redemptions				
<b>7.3 Ordinary securities</b>	180,700,656	180,700,656		
<b>7.4 Changes during quarter:</b>				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs, redemptions				
<b>7.5 Convertible debt securities (description)</b>				
<b>7.6 Changes during quarter:</b>				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs, redemptions				
<b>7.7 Options (description and conversion factor)</b>			<i>Exercise price</i>	<i>Expiry date</i>
Employee Options		-		
Unlisted Options		-		
<b>7.8 Issued during quarter</b>				
- Employee Options				
- Unlisted Options				
<b>7.9 Exercised during quarter</b>				
<b>7.10 Expired during quarter</b>				
<b>7.11 Debentures (total only)</b>				
<b>7.12 Unsecured notes (totals only)</b>				

## Compliance Statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act, 2001 or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign  
here:



\_\_\_\_\_  
(Chairman)

Date: 13 October 2006

Print Name: **J W Cornelius**

### Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.

- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.

- 3 **Issued and quoted securities:** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.

- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.

- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.