



**ESSENTIAL PETROLEUM RESOURCES LIMITED  
QUARTERLY EXPLORATION REPORT  
FOR THE THREE MONTH PERIOD ENDED 31 MARCH 2004**

Plans are underway to drill two wells in the second quarter of 2004. Prospects have been selected and landowner agreements negotiated. Tenders for drilling rigs and associated third party contracts are currently in negotiation and it is planned to drill in June 2004, subject to successful completion of the tender process.

In PEP 152 Port Fairy No 1 proved the existence of wet gas and light oil in the permit and Koroit West No 1 proved the existence of reservoir and seal. Essential Petroleum has undertaken a thorough review of the results of Port Fairy No 1 and identified the Killarney prospect to the east of the Port Fairy structure as suitable for drilling. Planning for a well has commenced and it is anticipated drilling should take place in June 2004.

In PEP 159 the Findra prospect has been matured for drilling. Planning for the drilling of the Findra prospect has commenced. Present indications are that the Findra prospect is prospective primarily at the Pebble Point and Paaratte Fm horizons with secondary targets in the Flaxman/Waarre horizon. It is anticipated that the drilling should take place in June 2004 "back to back" with the drilling of Killarney No 1.

In PEP 151 processing of both the 2D lines and the 3D grid from the Nelson Seismic Survey acquired in June 2003 has been completed and preliminary interpretation of the 2D lines has commenced. The preliminary review has identified the presence of several structures and planning for at least one exploration well will follow completion of the interpretation of the new seismic.

In PEL 72 the Company completed the Harris Flat seismic survey and processing is nearing completion. Preliminary interpretation has commenced. The survey, totalling 65 km of 2D seismic acquisition, was designed to provide seismic infill over the leads identified from the existing seismic data. Depending on the results of the survey, feasibility studies for the drilling of a well will commence in the mid year.

The farming out of VIC/P46 remains a priority with several interested parties undergoing their evaluation of the farm out package.

During the quarter no drilling took place and as a consequence no commercial hydrocarbons were discovered. No hydrocarbon reserves were acquired by the Company during the quarter.

**PEP 151 - 100% Onshore Otway Basin Victoria**

Processing of the Nelson seismic survey 3D phase of the data was completed. Interpretation of the data has commenced with several promising structures identified. Negotiations on the Production Agreement with the Native Title Claimants have progressed and finalisation of the document can now proceed.

**PEP 150 - 25% Onshore Otway Basin Victoria**

Essential Petroleum will increase its interest in PEP 150 to 50 percent following agreement to acquire half of Origin's interest in the permit. Beach Petroleum will hold the remaining 50 percent. Beach (Mawson) is operator for the period of finalising the Native Title negotiations and the assignment of Origin's interest.

**PEP 152 - 33.9% Onshore Otway Basin Victoria**

During the quarter Essential Petroleum agreed to acquire Origin Energy's interest in PEP 152. On completion of this acquisition, Essential will have an 84.41% interest in the permit and Lakes Oil will retain its 15.59% interest.

The permit will enter the fourth year in August with a commitment to drill one well. The Company has carried out a review and remap of the area around Port Fairy No 1. The review has indicated an area on the adjacent fault block to the east where a significant amplitude anomaly corresponds to a thickening of Flaxman/Waarre section into a trough. This may indicate a development of sand and hence increased permeability. An appraisal of the Port Fairy structure at this location would test the already discovered hydrocarbons and is considered the best candidate for drilling in PEP 152. The Killarney Prospect has been selected for drilling. Consultants have been engaged to provide drilling engineering and well supervision services. A location has been chosen and a compensation agreement with the landowner has been signed. Tenders for a drilling rig have been sent to several drilling contractors.

**PEP 159 - 50% Onshore Otway Basin Victoria**

During the quarter, Essential Petroleum reached agreement with Origin to acquire its interest in the permit. On completion of this acquisition Essential Petroleum will have a 100% interest in PEP 159. The Findra Prospect is considered to be ready to drill. A well location has been chosen and the landowner compensation agreement reached. Following selection of a drilling rig it is planned that drilling will take place in June "back to back" with the Killarney prospect.

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

The Harris Flat seismic survey has been completed and has met the second year work program commitment. Processing of the data by Velseis is continuing and preliminary brute stacks indicate very good data has been achieved. Post stack time migration will complete the processing. A three-month extension to the permit year has been applied for and accepted by PIRSA. The extension was sought to give time to interpret the new seismic prior to entering the next permit year, which has a drilling commitment.

**VIC/P46 - 67.5% Offshore Otway Basin**

The Company has commenced a farmout campaign and has approached selected companies with a view to sharing the cost of exploration drilling. Evaluation of the data by the selected companies is currently being undertaken.

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

Essential Petroleum has recently entered the second year of exploration in this block. Geological and Geophysical studies are currently being undertaken in order to prepare for acquisition of seismic data. Reprocessing up to 600km of the older seismic data has commenced. The purpose of the reprocessing is to attempt to remove multiples by pre stack migration which should then allow a much better analysis of AVO and amplitude data. Planning for the year 2 seismic survey will commence in the second quarter 2004 and will focus on the tilted fault block prospects developed along the shelf break. The survey is anticipated for fourth quarter 2004. The tilted fault blocks underlie the highly prospective Descartes and Henty turbidite plays of Late Eocene Early Oligocene age. The turbidite plays are partly within VIC/P50 and partly within permit VIC/P46. Essential Petroleum is focussing on these plays in VIC/P50.

**ESSENTIAL PETROLEUM RESOURCES LIMITED**  
**PERMIT EXPENDITURE SUMMARY FOR THE QUARTER ENDED 31 MARCH 2004\***

Permit Number	Essential Petroleum Interest	Seismic Survey Expenditure	Geological & Geophysical Studies	Environment, Native Title & Permit Maint.	Drilling Expenditure	Total
PEP 151	100.00%	\$ 25,614.50	\$ 19,353.26	\$ 11,216.36	\$ 38,329.56	<b>\$ 94,513.68</b>
PEP 150	25.00%	\$ -	\$ -	\$ 650.00	\$ 21,088.12	<b>\$ 21,738.12</b>
PEP 152	33.90%	\$ -	\$ 38,547.74	\$ -	\$ 24,048.35	<b>\$ 62,596.09</b>
PEP 159	50.00%	\$ -	\$ 23,186.50	\$ 6,319.77	\$ 27,571.00	<b>\$ 57,077.27</b>
PEL 72	50.00%	\$ 210,000.00	\$ 29,555.50	\$ -	\$ -	<b>\$ 239,555.50</b>
VIC/P46	67.50%	\$ -	\$ 36,785.48	\$ -	\$ -	<b>\$ 36,785.48</b>
VIC/P50	100.00%	\$ -	\$ 1,950.00	\$ 3,173.52	\$ -	<b>\$ 5,123.52</b>
		<b>\$ 235,614.50</b>	<b>\$ 149,378.48</b>	<b>\$ 21,359.65</b>	<b>\$ 111,037.03</b>	<b>\$ 517,389.66</b>

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

*Roger Blake MSc, Exploration Director, 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")

March 31, 2004

### Consolidated statement of cash flows

Cash flows related to operating activities		Current quarter \$A'000	Year to date ( 9 months) \$A'000
1.1	Receipts from product sales and related debtors	68	423
1.2	Payments for		
	[a] exploration and evaluation	(584)	(1,260)
	[b] development		
	[c] production		
	[d] administration	(179)	(872)
1.3	Dividends received		
1.4	Interest and other items of a similar nature received	44	102
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>(651)</b>	<b>(1,607)</b>
<b>Cash flows related to investing activities</b>			
1.8	Payment for purchases of:		
	[a] prospects	-	-
	[b] equity investments	-	-
	[c] other fixed assets	(6)	(50)
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>	(6)	(50)
1.13	Total operating and investing cash flows (carried forward)	(657)	(1,657)

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## Appendix 5B

### Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(657)	(1,657)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	-	1,816
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)	(12)	(20)
	<b>Net financing cash flows</b>	(12)	1,796
	<b>Net increase (decrease) in cash held</b>	(669)	139
1.20	Cash at beginning of quarter/year to date	3,397	2,589
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	2,728	2,728

### 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	119
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

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**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

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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.

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**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	541
4.2 Development	-
<b>Total</b>	<b>541</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	255	37
5.2 Deposits at call	2,473	3,360
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
<b>Total: cash at end of quarter</b> (item 1.22)	<b>2,728</b>	<b>3,397</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			
6.2	Interests in mining tenements acquired or increased			

## Appendix 5B Mining exploration entity quarterly report

### 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)
7.1 <b>Preference securities</b> <i>(description)</i>				
7.2 Changes during quarter:				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs, redemptions				
7.3 <b>Ordinary securities</b>	104,800,440	104,800,440		
7.4 Changes during quarter:				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs, redemptions				
7.5 <b>Convertible debt securities</b> <i>(description)</i>				
7.6 Changes during quarter:				
(a) Increases through issues				
(b) Decreases through returns of capital, buy-backs, redemptions				
7.7 <b>Options</b> <i>(description and conversion factor)</i>			<i>Exercise price</i>	<i>Expiry date</i>
Founder Options	3,500,000	-	\$0.35	30/06/2004
Employee Options	40,000	-	\$0.25	30/06/2004
	40,000	-	\$0.25	30/06/2005
Unlisted Options	600,000	-	\$0.35	30/06/2004
	100,000	-	\$0.25	30/06/2005
7.8 Issued during quarter				
- Employee Options	40,000	-	\$0.25	30/06/2005

- Unlisted Options				
7.9 Exercised during quarter				
7.10 Expired during quarter				
7.11 <b>Debentures</b> (total only)				
7.12 <b>Unsecured notes</b> (totals only)				

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## 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:



Date: 29 April 2004

\_\_\_\_\_  
(Director/Company secretary)

Print Name:

### 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.