



A.C.N. 004 247 214

**Lakes Oil N.L.**

www.lakesoil.com.au

# Quarterly Activities Report

For the three months ended  
30 June 2012

## Highlights:

- PEP169 (Otway Basin) - Moreys 1 wildcat well - tight gas and condensate discovery.
- PEP166 (Gippsland Basin) - Holdgate 1 wildcat well – potential tight gas discovery.
- PRL 2 forward program.
- Commonwealth Mining (100% owned by LKO) coal leases in Gippsland Basin with JORC exploration potential estimates.

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### **Auditors**

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### **Bankers**

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The company operates a web site which directors encourage you to access for the most recent information on the Lakes Oil Group.

For personal use only

## CORPORATE ACTIVITIES: HIGHLIGHTS FOR THE QUARTER

### PEP 166 and PEP 169 drilling operations

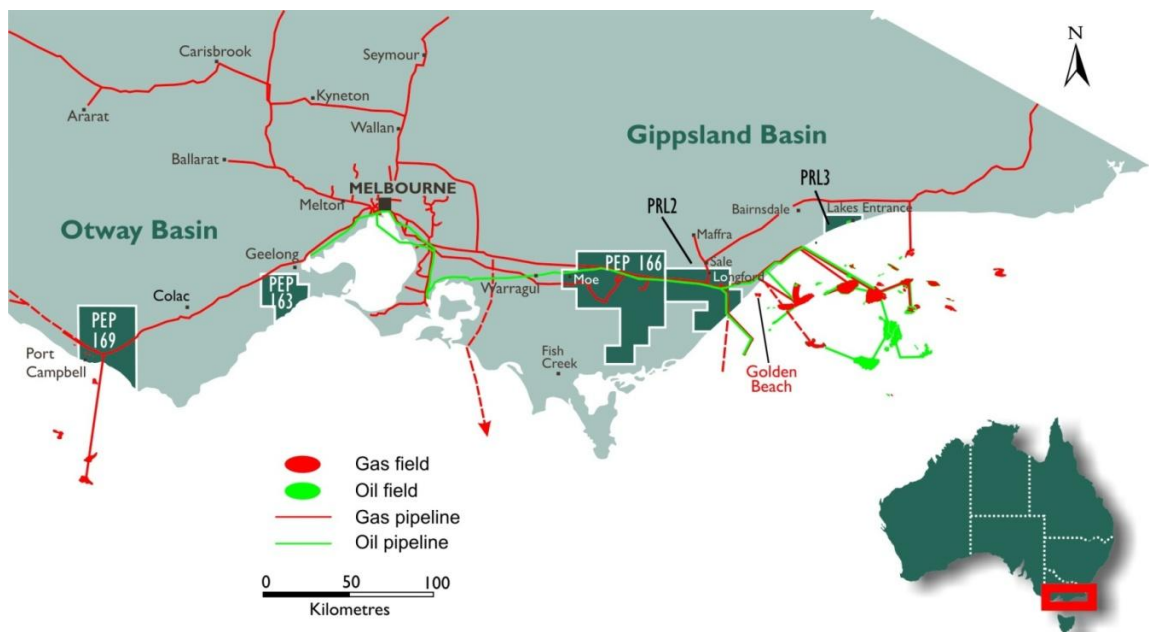
Two wildcat exploration wells were drilled by Lakes Oil (operator) and its partner Armour Energy Ltd during the period, one in the Otway and the second in the Gippsland Basin. Both wells encountered hydrocarbons in tight formations and are currently being further evaluated.

### Moreys 1 in PEP 169

Moreys 1 located in PEP 169, onshore Otway Basin, Victoria was spudded on 18 April 2012. Total depth was reached at 2300 metres. Armour Energy funded the drilling of this well to a cost of \$2.5M to earn a 51% interest in PEP 169. Moreys 1 encountered gas in several intervals during drilling and a DST conducted in the Eumeralla Formation flowed gas and condensate to the surface from a 10 m sand. This well is a tight gas wildcat discovery.

### Holdgate 1 in PEP 166

Holdgate 1 located in PEP 166, onshore Gippsland Basin, Victoria was spudded on 23 May 2012 and reached a total depth of 2752 metres. Armour Energy funded the drilling of this well to a cost of \$4.25M to earn a 25% interest in PEP 166. A number of tight gas intervals were encountered in the well and are being further evaluated.



Lakes Oil's Victorian permits map

## ONSHORE GIPPSLAND BASIN

### PRL 2

(Lakes Oil Group, 85%% interest in the overall permit, except for the Trifon and Gangell blocks where Lakes Oil Group has a 42.5% interest and Jarden Corporation Australia Pty Ltd has a 42.5% interest.)

Beach Energy Ltd (Beach) – 10% interest in overall permit subject to completing certain exploration expenditure

Somerton Energy Ltd, a wholly owned subsidiary of Cooper Energy Ltd – 5% interest in overall permit subject to completing certain exploration expenditure.

Beach Energy Ltd – Operator for overall Permit.

Under a Farmin Agreement, Beach can earn up to 33.3% interest in the overall permit and Somerton Energy Ltd can earn up to a 16.7% interest).

Armour Energy Ltd has been granted a 3 year option to acquire (subject to the terms of existing agreements with Beach Energy Ltd and Somerton Energy Ltd) 50 % of Lakes Oil Group's interests in the Trifon and Gangell blocks, and a direct 25% interest in the remainder of PRL2, for a total payment of \$30 million. Lakes Oil NL will receive option fees totalling \$0.6 million during the life of the option.

### ***Planned Future Activities***

#### **Wombat 4 and Boundary Creek 2 Fracture Stimulation**

As Operator, Beach intends to fracture stimulate Wombat 4 and Boundary Creek 2 in late 2012. Evaluation of results from drilling and logging indicates that the Strzelecki Group in both wells contains a number of potential tight gas zones suitable for fracture stimulation. The current plan for Wombat 4 is to initially fracture 4 of the deepest zones that are representative of the tight gas reservoirs encountered in the well before looking at shallower zones. In Boundary Creek 2, 3 fracs will be placed into the 200m thick sand package between 750-950 m.

Tenders have been awarded and it is expected that the work over and stimulation programs are scheduled for the second half of 2012.

### PRL 3

*(Lakes Oil Group, Operator: 100% interest)*

No further operational activities have taken place in this permit. The company is still working to resolve access issues to chosen drill hole sites. The matter is before the Victorian Civil and Administrative Tribunal.

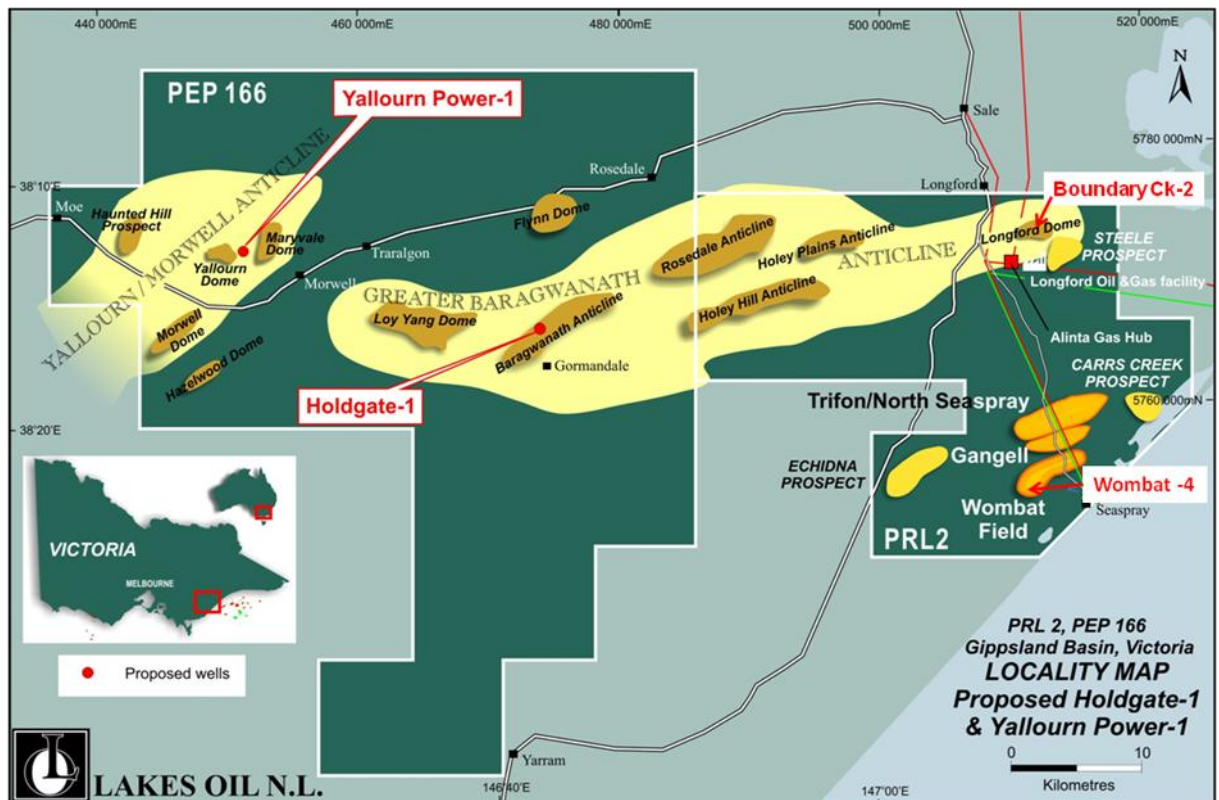
**PEP 166 (Onshore Gippsland Basin)**  
(Lakes Oil Group, Operator 75% interest)  
(Armour Energy Ltd (Armour) 25% interest)

Armour can earn up to a 51% interest in the Permit as follows:

- 1) drilling Holdgate 1 and the core hole Yallourn Power 1 by spending \$4.25 million (\$4.25m was met by the drilling of Holdgate1) and;
- 2) in the following 12 months, Armour may expend a further \$4.75 million to drill an additional open hole well complete with any necessary frac stimulation.

If Armour does not proceed with Phase 2 its interest will be capped at 25%.

**PEP 166**



Map of PEP 166 and PRL 2 showing the location of proposed wells, Holdgate 1 and Yallourn Power 1. Note that the Greater Baragwanath Anticline (shown in yellow shading) extends across both PRL 2 and PEP 166.

**Regional Studies**

Regional geological studies of the permit continued with re- evaluation of the tight gas and oil potential of the lower Strzelecki Group from old well data using new interpretative techniques. The studies indicate that there is additional potential for tight gas and oil to be present along the central part of the Latrobe Valley region within 3000m depths.



## PEP 166: Drilling Operations



**Holdgate 1: rig on site**

### **Holdgate 1 Exploration Wildcat**

The Lakes Oil joint venture with Armour Energy Ltd drilled Holdgate 1 in the second quarter of 2012. Armour Energy Ltd funded this well as part of its program to earn a 51% interest in PEP 166.

The overall objective of this well was to search for oil and gas plays on the Greater Baragwanath Anticline in PEP 166, which is part of a large surface anticline, stretching 60 kms long across PEP 166 and PRL 2.( refer to locality map above).

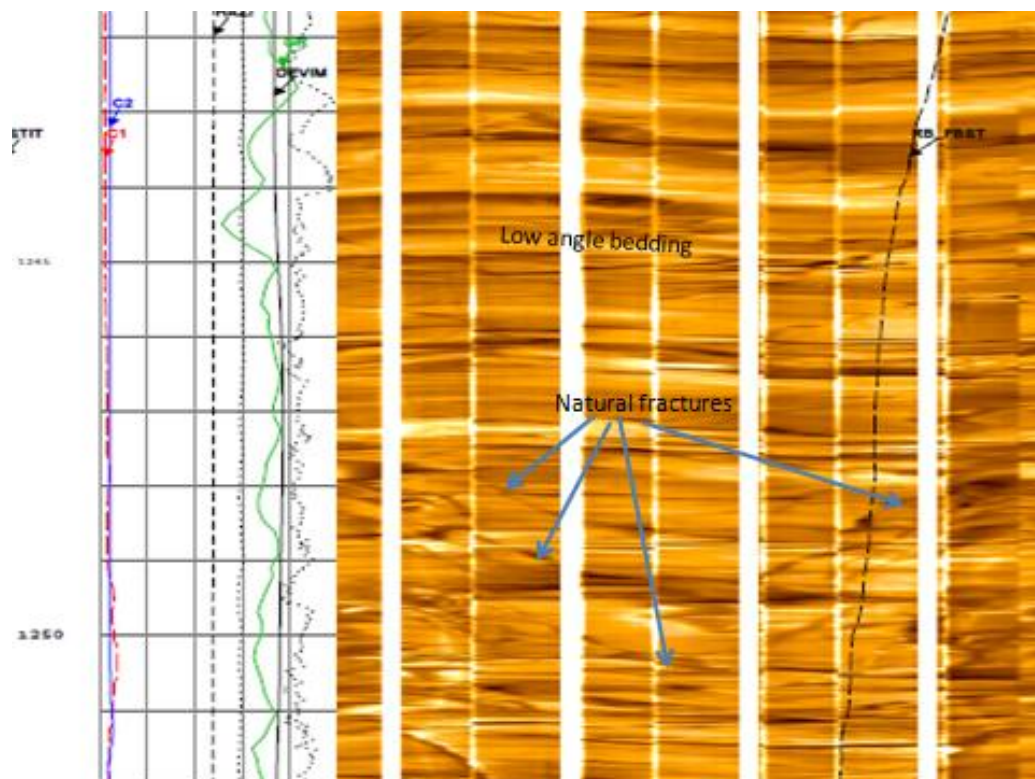
Holdgate-1 was drilled with two targets; the primary objective is the Strzelecki Group, in which LKO has encountered “tight gas” in wells drilled so far in the onshore Gippsland Basin, and the secondary objective is the Rintouls Creek Sandstone/Tyers Conglomerate.

Holdgate -1 well was spudded on 23rd May 2012. The drilling of the well was completed after reaching a total depth of 2752 metres on 2nd July 2012. A full logging program was run from 2280m up to the casing shoe at 427m including Formation Micro-Imaging/Sonic Scanner (FMI/SS) and Sidewall Coring Tool with the Gamma Ray (GR) run to surface.

### Preliminary Results:

The top of the Strzelecki Group was encountered at 126 m. and consisted of thick, inter-bedded felspathic and quartzose sandstones, claystones, shales and minor coals.

- From 787m-2752m, the Strzelecki Group in this well indicates sandstone lithologies that include quartzose and volcanogenic elements. This is a variation of the typical Strzelecki sandstone lithology which is dominantly volcanogenic (felspathic).
- Continuous C1 - C3 background gas readings (up to C5 across some intervals) were noted across large intervals within the Strzelecki Group, typical of a tight gas well.
- Residual oil was identified in shale cuttings from 1720m; additional analyses will be conducted from sidewall cores.
- A weak dull yellow bulk crush was noted across several intervals in recovered cuttings.
- The thermal maturation levels obtained from cuttings indicate that the top of the Strzelecki Group down to about 2700m is mature for gas generation.
- Preliminary evaluation of the drilling and log data by US tight gas specialists indicates that there are a number of zones of interest with tight gas potential. Overall the porosity ranged from 3-10%. This is still a preliminary analysis without the benefit of any of the core analysis to help calibrate this work better.
- The FMI imaging log indicates there are abundant natural fractures throughout the drilled section. See part of the imaging log below.



**Holdgate 1: part of FMI Log ( Formation Micro- Imaging Log) at 1250 metres.**

- From the interpreted index of brittleness, the shaley intervals in the well appear to be in the brittle range, indicating better fracture generation potential. This will need to be calibrated with core analysis.



The company is continuing to evaluate all data collected from this well.

The Holdgate 1 wildcat has been deemed a tight gas discovery well by the company based on the presence of continuous gas in the Strzelecki Group and the identification of numerous tight gas zones from preliminary log evaluation conducted by independent U.S. based tight gas specialists. However, confirmation of this will still require fracture stimulation at a later stage.

#### **Proposed Yallourn Power 1 corehole:**

Plans are also underway to drill an offset corehole, approximately 7 km south of Yallourn North 1A, and located downdip deeper into the basin (see locality map above). The objective of the Yallourn Power 1 corehole is to further determine the extent, thickness and prospectivity potential of the oil play identified in the Rintouls Creek Sandstone along the northern margin of the Gippsland Basin in our previous core hole, Yallourn North 1A, where these units are well developed. Oil shows were observed in cores cut and it is hoped that at the Yallourn Power 1 site, the Rintouls Creek Sandstone/Tyers Conglomerate thicken, providing the potential for oil to be present.

Drilling approval for this corehole has been granted and the wellsite has been constructed, but the timing is yet to be determined. It is estimated to be drilled in the next six months, pending rig availability and funding.

#### **ONSHORE OTWAY BASIN VICTORIA**

##### **PEP 163**

*(Lakes Oil Group, Operator: 100% interest)*

Further mapping has continued in the permit to identify Lower Cretaceous Eumeralla tight gas plays and Pretty Hill targets well from seismic and well data focussed on targeting one of the potential Pretty Hill prospects in the northern part of the permit. Evaluation of other potential drillable targets in the southern region is also being conducted using existing exploration data.

##### **PEP 169**

*(Lakes Oil Group, 49% interest)*

*(Armour Energy Ltd – 51% , Operator)*

Armour Energy Ltd earned a 51% interest in the Permit by funding the drilling and completion of Moreys 1.

#### **PEP 169 : Drilling Operations**



**Moreys 1 : drill pipe out of hole, preparing to test the well.**

## **Moreys 1 Exploration Wildcat**

The joint venture with Armour Energy Ltd drilled Moreys 1 well in the second quarter of 2012. The well was spudded on 20 April 2012 and reached a total depth of 2300 metres KB on 7 May 2012.

The primary objective, Waarre 'C' Sandstone, was intersected between 1833-1878 metres KB and was found to be a coarse-grained, strongly cemented sandstone with only a minor gas show C1-C5 at the top of the unit. The reservoir was not as expected when compared with nearby wells.

Eumeralla Formation – the secondary target was intersected between 1899-2300m with gas shows C<sub>1</sub> to C<sub>5</sub> throughout the interval drilled. The formation consists of tight interbedded felspathic sandstones and claystones.

### **Drill Stem Test #2 1985-1995m : gas and condensate flow**

Drill Stem Test #2 over a 10 metre sand interval within the Eumeralla Formation, flowed gas and condensate to the surface.

The sandstone unit was gas saturated and is a typical mid-range Eumeralla type sandstone, with cuttings porosity and permeability estimates within the poor range. The sandstone is encased top and bottom by claystones.

Gas composition: C<sub>1</sub>-C<sub>5</sub> + ; Condensate composition: C<sub>1</sub>-C<sub>28</sub> with 63.75° API gravity.

### **Preliminary Results:**

- Moreys 1 indicates that the Eumeralla Formation is hydrocarbon saturated, and where the porosity/permeability is enhanced, flows can be achieved. This has upgraded the Eumeralla reservoir target potential in PEP 169.
- Moreys 1 shows that an active petroleum system exists across the permit, and not just across the production areas.
- No CO<sub>2</sub> is present
- There is evidence of wet gas throughout the well from the shallow Mepunga Fm - Skull Creek Mudstone to the deep Eumeralla Formation at 2300 metres (T.D.).
- The Waarre "C" Sandstone in Moreys 1 was intersected and found to contain minor gas at the top of the unit due to strong silica cementation, probably due to fluid invasion along the north - bounding fault.

The company is continuing to assess the results of all logging and test results conducted and re-evaluate the seismic data.

Moreys 1 is considered a tight gas and condensate discovery well due to indications of tight gas during drilling and recovery of hydrocarbons during drill stem testing in the Eumeralla Formation. However, confirmation of this will still require fracture stimulation at a later stage.



**Moreys 1: DST#2: Gas and condensate flare from Eumeralla Formation**



**Moreys 1: DST#2 : Condensate collected from Eumeralla Formation**

### **Regional Studies**

Other drillable Waarre and Eumeralla prospects which are being considered for follow-up drilling have been mapped in the southern part of the permit.

In addition to the southern targets, several other targets across the central and northern permit have been mapped in the Tertiary Pebble Point Formation and Early Cretaceous Eumeralla Formation which occur at relatively shallow depths. Detailed investigations into the potential of Eumeralla and underlying Crayfish Group tight gas plays are also currently being assessed.

## EAGLE OIL DEVELOPMENT PROJECT, CALIFORNIA

Eagle Prospect - Onshore, California, U.S.A.

(Lakes Oil Group: 15% working interest; Operator: Strata-X, Inc.)

### **Proposed Shannon 1**

This permit contains the Mary Bellochi 1 well drilled in 1986 by Lakes Oil and its joint venture partners. The well flowed oil to surface for several weeks before withering out from, what was believed at the time to be, a mechanical problem rather than oil ceasing to be present. The permit at the time was operated by U.S company Royal Resources and is now operated by Strata-X, Inc.

The proposed Shannon 1 well is to be located close to the Mary Bellochi accumulation. The joint venture group proposes to drill Shannon1 vertically as a near-offset appraisal of the P90 reserves case of 1.2 MMB(oil) and 3.8 BCF(gas). Shannon 1 is to be located close to the Mary Bellochi accumulation.

Drilling is planned, but not confirmed, for the northern hemisphere summer of 2012, pending rig availability.



**Signed on behalf of Lakes Oil N.L.**

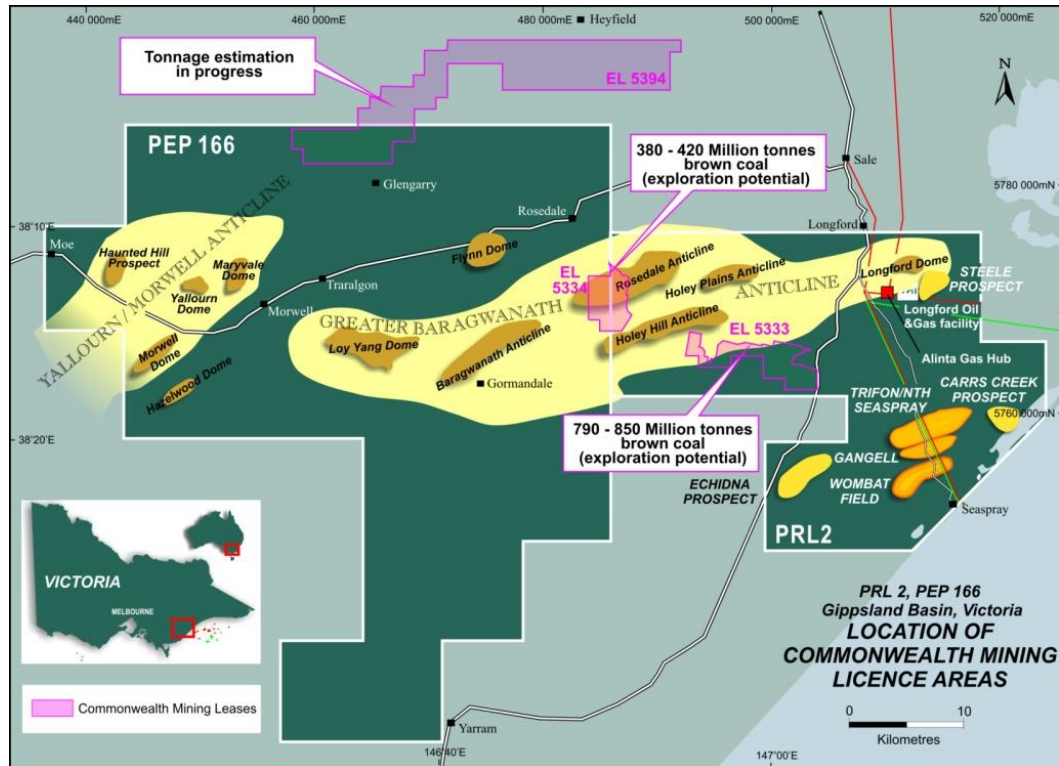
**Ingrid Campbell  
Chief Geologist**



## VICTORIAN COAL EXPLORATION LEASES

Commonwealth Mining Pty Ltd : a wholly owned subsidiary of Lakes Oil N.L.

Commonwealth Mining has acquired 3 coal exploration leases in the Gippsland Basin. The areas are : EL 5333, EL 5334 and ,EL 5394. Refer to the locality map below.



### Location map of Commonwealth Mining's EL's, Gippsland Basin

These areas have been acquired to investigate the resource potential of economically recoverable brown coal resources.

Two of the leases have JORC exploration potential coal tonnage estimates calculated by independent consultants and the third area is in the process of assessment.

*I. B. Campbell.*

Signed on behalf of Lakes Oil N.L.

Ingrid Campbell  
Chief Geologist



## Appendix 5B

### Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity

**LAKES OIL N.L.**

ABN

62 004 247 214

Quarter ended ("current quarter")

30 June 2012

#### 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	426	426
1.2	Receipts from Joint Venture Partners	3,759	3,759
	Payments for (a) exploration & evaluation	(2,992)	(3,697)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(741)	(2,650)
	(e) capital raising	-	-
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	5	8
1.5	Interest and other costs of finance paid	-	(60)
1.6	Income taxes (paid)/R&D Refund	312	312
1.7	Net movement in GST suspense account	(142)	(120)
	<b>Net Operating Cash Flows</b>	<b>627</b>	<b>(2,022)</b>
<b>Cash flows related to investing activities</b>			
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	(132)
	(d) other investments	-	(25)
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	90
	(c) other fixed assets	-	19
	(d) other investments	-	48
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>-</b>	<b>-</b>
1.13	Total operating and investing cash flows (carried forward)	<b>627</b>	<b>(2,022)</b>

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report - 30 June 2012**

1.13	Total operating and investing cash flows (brought forward)	627	(2,022)
<b>Cash flows related to financing activities</b>			
1.14	Proceeds from issues of shares, options, etc.	-	2,275
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	1,000
1.17	Repayment of borrowings	-	(1,000)
1.18	Dividends paid	-	-
1.19	Other (provide details if material)	-	-
	<b>Net financing cash flows</b>	-	2,275
	<b>Net increase (decrease) in cash held</b>	627	253
1.20	Cash at beginning of quarter/year to date	647	1,021
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	<b>Cash at end of quarter</b>	1,274	1,274

**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	\$273k
1.24	Aggregate amount of loans to the parties included in item 1.10	Nil
1.25	<b>Explanation necessary for an understanding of the transactions</b> Consulting Fees paid to a director related entity for the three months to 30 Jun 12- \$61K Directors' fees paid to directors for the 12 months to 31Mar12. \$212K(4 directors for full year and 2 directors for part year)	

**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	None
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	None

+ See chapter 19 for defined terms.

### Financing facilities available

Add notes as necessary for an understanding of the position.

	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(Net outflow after receiving joint venture funds)	1,000
4.2 Development	-
4.3 Production	-
4.4 Administration	750
<b>Total</b>	<b>1,750</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	1,274	647
5.2 Deposits at call	150	150
5.3 Bank overdraft	-	-
5.4 Other (provide details)Investments in Listed Companies – Market Value	552	827
<b>Total: cash at end of quarter (item 1.22)</b>	<b>1,976</b>	<b>1,624</b>

+ See chapter 19 for defined terms.

**Appendix 5B**  
**Mining exploration entity quarterly report - 30 June 2012**

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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	PEP169	Joint venture with Armour Energy Ltd(ASX Code: AJQ) whereby AJQ earned 51% interest and operatorship by funding the drilling of one well – Moreys-1	100%	49%
		PEP166	Joint venture with Armour Energy Ltd(ASX Code :AJQ) whereby AJQ earned 25% interest by funding exploration to a value of \$4.25M. Holdgate-1 was drilled with these funds	75%	25%
6.2	Interests in mining tenements acquired or increased				

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+ See chapter 19 for defined terms.

### 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> (description)	Nil	Nil		
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions	Nil	Nil		
7.3	<b>*Ordinary securities</b>	7,118,628,039	6,927,128,039		
7.4	Changes during quarter (a) Increases through issues  (b) Decreases through returns of capital, buy-backs	Nil	Nil		
7.5	<b>*Convertible debt securities</b> (description)	Nil	Nil		
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted	N/A	N/A		
7.7	<b>Options</b> (description and conversion factor)	9,850,000	Nil	Exercise price \$0.015	Expiry date 9 January 2013
7.8	Issued during quarter	Nil	Nil		
7.9	Exercised during quarter	Nil	Nil		
7.10	Expired during quarter	Nil	Nil		
7.11	<b>Debentures</b> (totals only)	Nil	Nil		
7.12	<b>Unsecured notes</b> (totals only)	Nil	Nil		

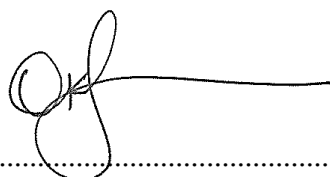
+ See chapter 19 for defined terms.



## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act 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:

  
.....  
Company secretary

Date: 31 July 2012

Print name: Leslie Smith

## 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.

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+ See chapter 19 for defined terms.