

19 August 2014

The Manager  
The Australian Securities Exchange  
The Announcements Officer  
Level 4/20 Bridge Street  
SYDNEY NSW 2000

Dear Sir

**DRILLING REPORT NO. 6 FOR DUNNART-2 IN EP437, PERTH BASIN, WESTERN AUSTRALIA  
FOR THE PERIOD 0600 HOURS 18 AUGUST 2014 TO 1630 HOURS 19 AUGUST 2014**

We attach herewith ASX Announcement for Investors regarding the drilling activities at Dunnart-2, EP437, Onshore Perth Basin.

Joint Venture participants in EP437 are:

<i>Key Petroleum Limited (Key Petroleum (Australia) Pty Ltd) (Operator)</i>	<i>43.47%</i>
<i>Rey Resources Limited (Rey Oil and Gas Perth Pty Ltd)</i>	<i>43.47%</i>
<i>Caracal Exploration Pty Limited</i>	<i>13.06%</i>

Regards



**IAN GREGORY**  
Company Secretary  
**KEY PETROLEUM LIMITED**

## ASX RELEASE

### **DRILLING REPORT NO. 6 FOR DUNNART-2 IN EP437, PERTH BASIN, WESTERN AUSTRALIA FOR THE PERIOD 0600 HOURS 18 AUGUST 2014 TO 1630 HOURS 19 AUGUST 2014**

Key Petroleum Limited ("Key") advises that during the period since the issue of Drilling Report No. 5 the Operator drilled ahead in 8 ½" hole from 495m in the Woodada Formation to 612.0m in the Kockatea Shale. Two significant and encouraging gas shows were recorded within the Kockatea Shale.

These significant gas shows were 33.70 units of total gas at 528.9m and 27.3 units of total gas at 530.5m. Sandstones intersected with gas peaks are interpreted to be the Arranoo Sandstone within the Lower Triassic aged Kockatea Shale and are approximately ten times the background gas recorded in this section of the Kockatea Shale. These gas peaks will be evaluated by electric wireline logs.

The Woodada Formation was intersected at 482.5m RT and was high to prognosis as was the Kockatea Shale at 503m RT.

Current depth at 1630 today was 612.0m RT drilling ahead within the Kockatea Shale towards the primary objective Bookara Sandstone expected to be intersected with a top predicted at 616m RT.

Daily drilling reports to the ASX will continue until all drilling and formation evaluation of Dunnart-2 has been completed.

For more information please contact:

**Key Petroleum Limited**  
+61 8 6389 0322

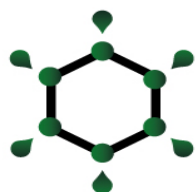
**Ian Gregory**  
Company Secretary

19 August 2014



**DUNNART-2 PETROLEUM EXPLORATION WELL**  
**EP437 – PERTH BASIN**

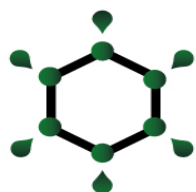
1.	Well Name/Permit:	Dunnart-2 EP437, Perth Basin, Western Australia			
2.	The Report is for the Period:	0600 – 18 August 2014 to 1630 – 19 August 2014			
3.	This ASX Release Time and Date:	1700 WST – 19 August 2014			
4.	Report No:	Six			
5.	Start Date/DCA Rig #7:	13 July 2014			
6.	Days since commencement of drilling operations:	Thirty Seven			
7.	Locations of the Well:	North Perth Basin			
8.	Elevation:	GL	40.96m		
		RT from GL (MSL)	3.5m		
		RT to MSL	44.46m		
9.	Proposed Total Depth:	670 metres TVD RT			
10.	Targets:	Primary: Bookara Sandstone Formation			
		Secondary: Basement			
11.	Present Depth:	612.0m RT at 1630 hours 19 August 2014			
12.	Geological Summary:		Formation Tops (m RT):		
			Prognosed	Actual	Difference
		Yarragadee Sandstone	82m	82m	-
		Cadda Formation	280m	281m	-1
		Cattamarra Formation	325m	324m	+1
		Woodada Formation	484m	482.5m	+1.5
		Kockatea Shale	504m	503m	+1.0
		Bookara Sandstone Formation	617m		
		Basement	670m		



13.	<b>Hydrocarbon Indications:</b>	<p>Oil Shows: None, none expected.</p> <p>Gas Shows: Two gas shows recorded within the Kockatea Shale. These were recorded as 33.70 units at 528.9m and 27.3 units at 530.5m interpreted to be the Arranoo Sandstone within the Lower Triassic Kockatea Shale and are approximately ten times the background gas recorded in the Kockatea Shale.</p>
-----	---------------------------------	--

GAS PEAKS		
Depth in RT	Background Units	Total Gas Units
528.9m	3	33.7
530.5	3	27.3

14.	<b>Operations since last Report:</b>	Drilling ahead in 8 ½" hole from 495m in the Woodada Formation to 612.0m in the Kockatea Shale at 1630 hours, 19 August 2014. The Kockatea is the regional seal.	
15.	<b>Current Operations:</b>	Drilling ahead in 8 ½" hole in the Kockatea Shale to the primary reservoir objective, Bookara Sandstone predicted at 616m.	
16.	<b>Future Operations:</b>	Drill 8 ½" hole to the primary objective Bookara Sandstones and evaluate. Testing personnel are on site.	
17.	<b>Prospect Description:</b>	<p>The Dunnart prospect is a well-defined moderate relief fault closed structure with the top seal provided by the proven regional seal, the Kockatea Shale which is the source rock for oil discovered to date in the North Perth Basin.</p> <p>The Bookara Sandstone is middle to upper shoreface sand which laps the south-western margin of the Northampton Block. Dunnart-1 encountered good oil shows in Bookara sands but was never tested or cored. Estimated prospective resources in the best case estimate are 2 million barrels under SPE-PRMS guidelines.</p>	
18.	<b>Participants in the Well:</b>	Key Petroleum (Australia) Pty Ltd (Operator)	43.47%
		Rey Oil and Gas Perth Pty Ltd	43.47%
		Caracal Exploration Pty Ltd	13.06%



# KEY

PETROLEUM LIMITED

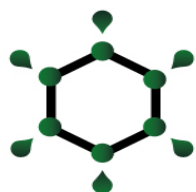
Ground Floor  
39 Stirling Highway  
Nedlands WA 6009

T: + 61 (08) 6389 0322  
F: + 61 (08) 6389 0697



Baker Hughes mud logging team monitoring hydrocarbon readings within the mud logging unit (above and bottom right) and overseeing mud samples (bottom left).





# KEY

PETROLEUM LIMITED

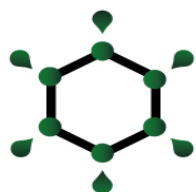
Ground Floor  
39 Stirling Highway  
Nedlands WA 6009

T: + 61 (08) 6389 0322

F: + 61 (08) 6389 0697



DCA personnel making a connection as they drill an 8 ½" hole toward the primary objective.



**KEY**  
PETROLEUM LIMITED

Ground Floor  
39 Stirling Highway  
Nedlands WA 6009

T: + 61 (08) 6389 0322

F: + 61 (08) 6389 0697



DCA Rig 7 night shift drilling ahead in the Kockatea Shale.