



CORELABORATORIES AUSTRALIA PTY LTD

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A Routine Core Analysis Study Of Selected Samples From Well: Wombat #1

Australia

Prepared for LAKES OIL N.L.

March 2004

File: PRP-04002

Rock Properties
Core Laboratories Australia Pty. Ltd.
Perth
Australia

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CORE LABORATORIES AUSTRALIA PTY LTD

15th March, 2004

Lakes Oil NL PO Box 300 Collins St West **MELBOURNE VIC 8007**

Attention: Mr. J. Mulready

Subject

Routine Core Analysis

Well

Wombat #1

File

PRP-04002

Dear Sir,

Presented herein is the final report of a routine core analysis study conducted on the plug samples from the above well that arrived at our Perth laboratory in mid January, 2004.

We appreciate the opportunity to present this service to you. Please contact us should you require any further information or assistance.

Yours sincerely,

Core Laboratories Australia Pty Ltd

James/Brown

Senior Core Analyst

: LAKES OIL NL : Wombat #1

INTRODUCTION

Core Laboratories Australia Pty Ltd (Core Lab) conducted a routine core analysis study on thirty-six plug samples taken from the well Wombat #1 on behalf of Lakes Oil NL (Lakes Oil). Services performed and presented in the report include:

- Permeability, porosity and grain density measurements

LABORATORY PROCEDURES

Sample Preparation

Thirty-six horizontal 1.5" diameter plugs were received and logged in. The samples were trimmed, then dried in a convection oven for twenty-four hours at 90°C. prior to analysis.

Grain Volume and Grain Density

The weight, diameter and length of all samples were measured before they were processed through the Ultrapore™ porosimeter to determine grain volume. As a standard quality control measure, a calibration check plug was run after every tenth sample. Grain density data was calculated from grain volume and sample weight data.

Permeability and Porosity

Permeability and pore volume measurements were made on all samples at ambient pressure in the CMSTM300 automated core measurement system. A standard check plug was run after fifth sample.

Klinkenberg permeability (Kinf) values are obtained directly from the CMS-300, since it operates by unsteady-state principles. Porosity data was obtained by combining pore volumes from the CMS-300 data with grain volumes from the Ultrapore porosimeter. Two samples were also run at a net confining stress of 1830psig as requested.

