



W864 WYRALLAH-1 ATTACHMENT 11 to WCR

## ATTACHMENT 11

OPEN FILE

RESISTIVITY OF PORE WATER
WYRALLAH NO. 1
VIC/P17
W.C.R.

2 6 FEB 1985

BY: AMDEL

OIL and GAS DIVISION



## The Australian Mineral Development Laboratories

Flemington Street, Frewville South Australia 5063 Phone Adelaide 79 1662 Telex AA82520

> Please address all correspondence to P.O. Box 114 Eastwood SA 5063 In reply quote:

Tuck are proceeded

## amdel

8 June 1984

F3/422/0 . 6789/84 - Part 2

Australian Aquitaine Petroleum Ltd., 99 Mount Street, NORTH SYDNEY NSW 2060

Attention: Claude Lambert

REPORT F6789/84 - Part 2

**CLIENT REFERENCE:** 

Transmittal 014464

SAMPLE IDENTIFICATION:

SWC 12, 18, 20

LOCALITY:

WRYALLAH-1

DATE RECEIVED:

8 May 1984

WORK REQUIRED:

Resistivity of pore water

Investigation and Report by: Analytical Chemistry Division

Chief - Fuels Section: Dr Brian G. Steveson

bran Blevera

for Dr William G. Spencer

Manager,

Mineral and Materials Sciences Division

Head Office:
Flemington Street, Frewville
South Australia 5063
Telephone (08) 79 1662
Telex: Amdel AA82520
Pilot Plant:
Osman Place
Thebarton, S.A.
Telephone (08) 43 5733
Branch Laborator (is:

Melbourne, Vic. Telephone (03) 645 3093 Perth, W.A. Telephone (09) 325 7311 Telex: Amdel AA94893 Townsville Queensland 4814

Telephone (077) 75 1377

cah

Damp sidewall cores were received and the client requested that 3 of the samples be examined for the resistivity of the water in the pores.

There is insufficient water present for this to be recovered from the cores uncontaminated nor would there have been sufficient for a resistivity analysis directly on the water.

The samples were therefore analysed indirectly. Each was dried at 105°C overnight and weighed before and afterwards - this gives the amount of moisture present. The samples were then analysed for water-soluble chlorine. From these analyses a chlorine content of the pore water can be calculated.

The results are as follows:

SWC	% Moisture	% Water-soluble chlorine	Calculated Cl (%)
12	17.8	0.23	1.05
18	12.2	0.106	1.0
20	22.0	0.15	0.77

These rather high values for Cl<sup>-</sup> possibly indicate that the samples have partially dried in transit from the well to AMDEL. Water in the damp tissue paper enclosed with each sample was included in the moisture determination.