

APPENDIX 3

CORE ANALYSIS

ROUTINE CORE ANALYSIS

OILMIN N.L.

WEST MEREENIE #7



CORE LABORATORIES AUSTRALIA (QLD) LTD



WARREN FARLEY
Regional Manager

Our Ref: QLD-CA-190

7th June, 1985

Oilmin N.L.
Level 23
12 Creek Street
Brisbane Qld 4000

Attention: Mr M. King

Dear Sir,

Presented here are the results of analyses performed on three samples from West Mereenie #7. This report contains final data, a description of analysis procedures, a porosity/permeability plot and lithology descriptions.

Three core samples from West Mereenie #7 were delivered to our Brisbane laboratory on 28th May 1985, analysis proceeded as requested by accompanying purchase order number A19429.

1½" plugs were drilled for helium injection porosity and horizontal permeability determinations. The plugs were drilled with kerosene, then cleaned of hydrocarbons in a centrifuge using cool xylene as the solvent. After cleaning, the plugs were dried in a controlled humidity oven for three days. When the plugs had cooled porosity and permeability were determined.

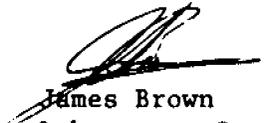
After analysis the core and plugs were resealed, except for plug, sample no. 3 which was forwarded to Mr M. King on 4th June 1985.

Preliminary results were telexed for Oilmin on 4th June 1985.

Should you have any queries concerning this report, please contact me in Brisbane on (07) 260-1722.

I thank you for the opportunity to provide our routine core analysis services and trust that we may be of service in the future.

Yours faithfully,
CORE LABORATORIES AUSTRALIA (QLD) LTD


James Brown
Laboratory Supervisor,
Brisbane, Australia
Enc:
JB:lg:190

ROUTINE CORE ANALYSIS PROCEDURES

The data contained in the report has been derived by the following methods:

1. Helium Injection Porosity - measured by a Helium Porosimeter to determine grain volume and, consequently, pore volume. The Porosimeter is based on the Boyles Law equation of gas expansion and uses helium because of its small molecular composition and inert properties.
2. Permeability - measured by a gas permeameter to determine fluid "transmissibility". The permeameter is based on Darcy's equation for compressible fluids (gas) assuming laminar flow with air being the gas used (API RP.40).
3. Residual Fluid Content and Porosity by Summation of Fluids - measured by the conventional retort method. This involves distilling off liquids contained in samples at controlled temperatures. The gas volume of the sample is measured by mercury injection. Saturated Oil (So) and Saturated Water (Stw) are calculated as a percentage of pore space. Porosity is derived by summing the fluid volumes (oil, water and gas).

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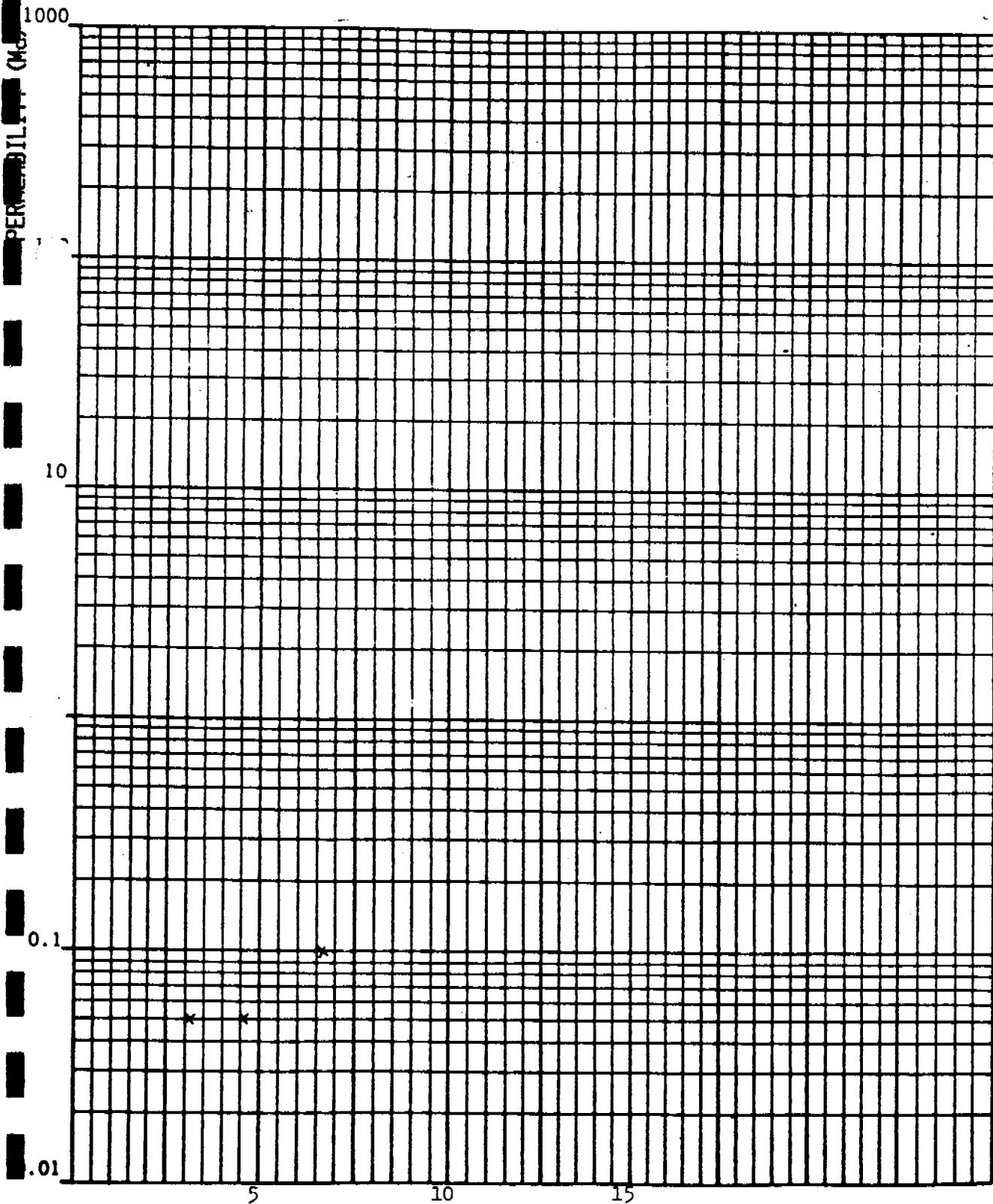
COMPANY: OILMIN N.L.	FORMATION:	FILE: QLD-CA-190
WELL: WEST MEREENIE #7	CORE TYPE:	DATE REPORT: 7/6/85
FIELD:	BASIN:	ANALYSTS: JB/RT
COUNTRY: AUSTRALIA	STATE:	DRILLING FLUID:

SAMPLE NO.	DEPTH FEET	HOR KA-md	SUMMATION OF FLUIDS			HE INJ ϕ %	GRAIN DENSITY
			ϕ %	SO	STW		
1	4248.5	0.05	4.4	8.6	5.7	4.6	
2	4264.5	0.05				3.0	
3	4270.0	0.1				6.6	

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Company OILMIN N.L. Formation _____
Well WEST MEREMIE No. 7 Country _____
Field _____



POROSITY (%)

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FILE: QLD-CA-190

LITHOLOGICAL DESCRIPTION

SAMPLE NO.

- | | |
|---|---|
| 1 | SST, lt gy, vf-f grained, subang-subrnd, w srted, hd, tr pry. |
| 2 | SST, gy-dk gy, vf-f grained, ang-subang, w srted, hd, abundant carbonaceous material in matrix. |
| 3 | SST, gr-lt gy, f grained, subang-rnd, mod-w srted, hd, carbonaceous matrix i/p. |