

CORE LABORATORIES AUSTRALIA (QLD.) LTD.

15th October, 1982.

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Attention: Mr. Kumar Kuttan,

Esso Australia Limited, Esso House, 127 Kent Street, Sydney.....N.S.W. 2000.

Subject:

Routine Core Analysis

Well:

Seahorse # 2

Our Job No:

QLD - CA - 122

Dear Mr Kuttan,

Enclosed are the results of the final Routine Core Analysis done on Seahorse # 2.

We appreciate the opportunity to be of service to Esso Australia Limited. Should you have any queries concerning the data, please do not hesitate to contact me in Brisbane on (07) 260 - 1722.

Best regards,

D.K. Manning

Manager - Eastern Australia, New Zealand, Papua New Guinea.

Encl:

DKM:vt.



DESCRIPTIONS:

The results for Seahorse # 2 were reached by the following manner:-

Bulk Volume:

Is measured by displacement, using mercury as the liquid pressure medium because of its high surface tension. The mercury pump is calibrated to 0.01 cubic centimeters.

Porosity:

Is measured by a Helium Porosimeter to determine the amount of grain volume in the sample. Porosity being determined by bulk volume - grain volume, helium is used because of the small molecule size, ability to diffuse rapidly, and adsorption of helium on the rock surface is minimal.

Permeability:

Is a measure of the ability of a porous material to transmit fluid. Samples are run on a Gas Permeameter, which is calibrated within plus or minus 5% each day. A complete check of the Permeameter, and orifice recalibration is conducted once a month.

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CORE ANALYSIS RESULTS

Comp	pany ESSO AUSTRALIA LIMITED			ormation			File <u>OLD - CA - 122</u>			
Well_	SEAHORSE # 2.		C	ore Type	CONVENTIONAL	1	Date Report 29.9.82			
Field				rilling Fluid			Analysts P. LANE			
Count		AUSTRALIAState OLD		Locatio	on					
	,		Litho	logical Abbre	viations					
SAND-S SHALE- LIME-L	SH CHERT CH	ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSI LIFEROUS - FOSS	SANDY - SDY SHALY - SHY LIMY - LMY	FINE - FN MEDIUM - MED COARSE - CSE	CRYSTALLINE - XLN Grain - Grn Granular - Grnl	BROWN - BRN GRAY - GY VUGGY - VGY	FRACTURED - FRAC LAMINATION - LAM STYLOLITIC - STY	SLIGHTLY-SL VERY-V/ WITH-W/		
SAMPLE NUMBER	DEPTH XXXX METRES	PERMEABILITY MILLIDARCYS K.A.	PER CENT	SITY RERECENIK FORE			SAMPLE DESCRIPTION AND REMARKS			
CORE	# 1.	,								
	1485.45	LT.01	2.9							
2	1485.90	LT.01	1.1							
3	1486.30	LT.Ol	2.8							
4	1486.70	LT.01	2.6							
5	1486.85	.02	3.0							
6*	1486.93	1760.	25.2				*			
7*	1487.00	3200.	31.2	•						
8*	1487.08	2870.	29.8							
9*	1487.19	3320.	32.4							
10*	1487.35	3320.	30.9							
11*	1487.50	2950.	29.7		•					
12*	1487.65	420.	26.6							
13*	1487.84	3680.	29.6							
14*	1488.02	30.	16.3							
15*	1488.13	20.	16.1							
16*	1488.25	9.5	16.0							

NOTE:

LT = LESS THAN

* = LEAD SLEEVE

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CORE ANALYSIS RESULTS

CompanyESSO AUSTRALIA LIMITED.			D	Formation File OLD - CA - 122						
Well SEAHORSE # 2.				Core Type CONVENTIONAL Date Report29.9.82.					2.	
Field GIPPSLAND BASIN			Drilling Fluid				Analysts P. LANE			
Coun		LIA State QLD.	Elev		Location					
Coun	.,			, .						
			Lith sandy.si		al Abbrevia	CRYSTALLINE-XLN	BROWN - BR	N	FRACTURED - FRAC	SLIGHTLY - SL
SAND S SHALE - LIME - L	SH CHERT-CH	ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSILIFEROUS - FOSS	SHALY - SI LIMY - LM	HY	MEDIUM - MED COARSE - CSE	GRAIN - GRN GRANULAR - GRNL	GRAY-GY VUGGY-VGY		LAMINATION - LAM STYLOLITIC - STY	VERY-V/ WITH-W/
	DEPTH		HE INJ	WRAW	mrrahranin		SA	MPLE	DESCRIPTION	
SAMPLE Number	XXXX METRES	PERMEABILITY MILLIDARCYS	PER CENT	 x ! /%	XSENT PRE XIXXXIX XXXXXXX	7			REMARKS	
	METRES			ΛΛΛ	SHOWNERS					
CORE	# 2.			y c						
*	1502.51	49.	16.4							
18	1502.58	22.	17.0							
19 *	1502.72	101.	12.8							
20 *	1502.78	31.	20.4							
21	1503.33	22.	14.6							
22 +	1503.63	90.	18.1							
23 +	1503.87	14.	14.4							
24	1503.91	LT.01	10.8							
25	1504.10	56.	16.8							
26 + 27	1504.27 1504.31	12. 0.15	15.1 10.9							
28	1504.46	295.	28.6							
29	1504.53	93.	24.1							
30	1504.66	104.	27.4							
31	1504.83	11.	4.5							
32	1504.91	4.7	13.6	-						-
33 *	1505.07	2.0	11.2							
34 *	1505.15	179.	19.6							
35 *	1505.39	394.	25.5							
3	1505.54	561.	28.2							
37 *	1505.82	2790.	30.3							
37A*	1505.85	2450.	29.9							
38 * 39 *	1505.95 1506.20	23800.	32.0							
39 * 40 *	1506.20	18300. 1810.	30.1							
41 *	1506.40	5340.	26.1 31.1							
42 *	1506.80	9210.	32.5							
43 *	1507.10	3710.	28.9							
44 *	1507.40	4700.	31.1							
45 *	1507.64	10300.	26.3							
46 *	1507.84	6790.	30.6							
47 *	1508.10	6450.	26.7							
48 *	1508.15	5790.	28.1							
49 *	1508.20	333.	23.4							
50 *	1508.25	39.	17.9							
51	1508.40	25.	18.0							
52 *	1508.54	1740.	24.8							
53	1509.11	1040	26.6							
54	1509.17	1610	27.3							

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

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CORE ANALYSIS RESULTS

Company_	ESSO AUSTRALIA LIMITED.			Formation File OLD - CA - 122					
Well	SEAHORSE # 2.			Core Type CONVENTIONAL			Date Report 29.9.82.		
Field	GIPPSLAND BASIN			Drilling Fluid			nalysts <u>P.L</u>	ANE	
County	AUSTRALI	A State QLD.	Elev	Location_					
			Lithe	ological Abbrevia	tions				
SAND·SD Shale·Sh Lime·Lm	DOLOMITE - DOL CHERT - CH GYPSUM - GYP	ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSILIFEROUS - FOSS	SANDY SD SHALY SH LIMY LMY	Y FINE-FN IY MEDIUM-MED	CRYSTALLINE - XLN GRAIN - GRN GRANULAR - GRNL	BROWN - BRN GRAY - GY VUGGY - VGY	FRACTURED - FRAC LAMINATION - LAM STYLOLITIC - STY	SLIGHTLY-SL/ VERY-V/ WITH-W/	
SAMPLE NUMBER	DEPTH XXXX METRES	PERMEABILITY MILLIDARCYS K.A.	HE INJ POROSITY PER CENT	MAICHAN MAGANAN XBOR YERVAN ANTON MARCAN MA			E DESCRIPTION D REMARKS		
		,							

NOTE:

0.18

LT = LESS THAN

7.9

* = LEAD SLEEVE

+ = 1½" PLUG SIZE