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CORE, MUD AND CUTTINGS ANALYSIS  
FOR  
ESSO STANDARD OIL (AUSTRALIA) LTD.

BASS NO. 3 WELL (OFFSHORE)

WILDCAT

TASMANIA, AUSTRALIA

BY

CORE LABORATORIES AUSTRALIA (VIC) LTD.

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OR-0332A

**CORE LABORATORIES AUSTRALIA (VIC) LTD.***Petroleum Reservoir Engineering*

BRISBANE, AUSTRALIA

14 April, 1967.

G.P.O. BOX 664K  
CABLE: CORELAB  
PHONE: ~~5-1017~~ 5-3222ESSO STANDARD OIL (AUSTRALIA) LTD.,  
G. P. O. Box 4249,  
SYDNEY, NEW SOUTH WALES.ATTENTION: MR. A. A. PHILLIPS.SUBJECT: CORE, MUD AND CUTTINGS ANALYSIS,  
ESSO BASS NO. 3 WELL,  
WILDCAT,  
TASMANIA.

GENTLEMEN:

A CORE LABORATORIES AUSTRALIA combination drill cuttings and core analysis unit was present at the site of the subject well during drilling operations from 721 feet to the total depth of 7978 feet.

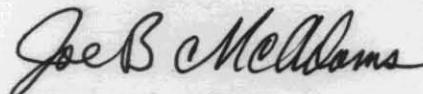
Using standard equipment plus a Programmed Hydrocarbon Detector (Rapid sampling gas Chromatograph), and a Beckman GC-1 (H<sub>2</sub>S and CO<sub>2</sub> Detector), the drilling fluid was monitored continuously and the drill cuttings were checked at regular intervals for gas and oil content and lithology. All core analysis was performed by conventional procedures. The results of these operations are shown on the accompanying Grapholog and Core Analysis Results Sheet.

Hydrocarbon Shows. There were no indications of liquid hydrocarbons in this well. Oil fluorescence was not noted in any samples or cores.

The gas increases detected between 6390' and 6460' apparently come from carbonaceous material and are probably not of commercial significance.

Other increases were noted and reported to the wellsite geologist at the time they occurred. These zones were: 6740 - 6760, 6980 - 7020, and 7030 - 7060. We understand that careful examination of the logs indicated that these zones were not commercially significant.

We sincerely appreciate the opportunity to have been of service, and trust that the information furnished in this report and during drilling operations has assisted the evaluation of this well.

Yours very truly,  
CORE LABORATORIES AUSTRALIA (VIC) LTD.JOE B. MC ADAMS,  
RESIDENT MANAGER.

## CORE LABORATORIES AUSTRALIA LTD.

Petroleum Reservoir Engineering

BRISBANE, AUSTRALIA

Company ESSO STANDARD OIL (AUST.) LTD. Formation \_\_\_\_\_ Page 1 of 1  
 Well BASS NO. 3 Cores \_\_\_\_\_ File FL-115-9L  
 Field WILDCAT Drilling Fluid \_\_\_\_\_ Date Report 14 APRIL 1967  
 County TASMANIA State AUSTRALIA Elevation \_\_\_\_\_ Analysts P. C.  
 Location \_\_\_\_\_ Remarks \_\_\_\_\_

## CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS		POROSITY PERCENT	RESIDUAL SATURATION			PROBABLE PRODUCTION	REMARKS
		HORIZONTAL	VERTICAL		OIL % VOLUME	% PORE	TOTAL WATER % PORE		
1	5316	159		27.4	0.0	0.0	72.3	WATER	SS, TAN, V/FN GRN, SL/DOLIC
2	5638	4.4		27.8	0.0	0.0	94.0	WATER	SS, GRY, V/FN GRN, S1/MIC, LIG.
3	5919	10.5		17.6	0.0	0.0	84.6	WATER	SS, GRY, F-C GRN, CLY MTX, LIG.
4	6432	328		27.0	0.0	0.0	93.1	WATER	SS, WH, M-C GRN, CLY MTX.
5	6921	10.3		22.2	0.0	0.0	78.0	WATER	SS, GRY, M-C GRN, CLY MTX.
6	6922	0.5		16.3	0.0	0.0	70.0	**	SS, GRY, V/FN GRN, SLTY, MIC, LIG.
7	6925	28		16.0	0.0	0.0	71.1	WATER	SS, GRY, M-C GRN, CLY MTX, LIG.
8	6926	18		22.3	0.0	0.0	85.0	WATER	SS, GRY, M-C GRN, CLY MTX, LIG.
9	6928	42		18.9	0.0	0.0	83.8	WATER	SS, GRY, FN-M GRN, CLY MTX, LIG.
10	6929	0.5		25.8	0.0	0.0	81.0	**	SS, GRY, V/FN GRN, MIC.
11	6930	2.3		15.5	0.0	0.0	73.5	**	SS, GRY, FN-C GRN, WH CLY MTX.
12	6932	1.3		15.4	0.0	0.0	69.5	**	SS, GRY, FN-C GRN, WH CLY MTX.
13	7433	28		19.3	0.0	0.0	76.0	WATER	SS, GRY, C GRN, CLY MTX, MIC.
14	7438	26		19.5	0.0	0.0	67.6	WATER	SS, GRY, M-C GRN, CLY MTX, MIC.
15	7439	24		20.0	0.0	0.0	67.0	WATER	SS, BUFF, M-C GRN, CLY MTX.
16	7441	5.0		18.9	0.0	0.0	71.5	WATER	SS, GRY, M-C GRN, CLY MTX, MIC.

\*\* INSUFFICIENT PERMEABILITY.

## NOTE:

(\*) REFER TO ATTACHED LETTER.  
 (1) INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.

(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.

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 operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



SLI MICA, SLI PYR.  
CARBN, SOFT-FRIABLE

5720-6230'  
SHALE & SILTSTONE, A/A  
COAL, BLK, BRITTLE,  
HD.  
SANDSTONE, LOOSE,  
CLEAR-MILKY, V CRSE  
GR-PEBBLY, SUB-RD  
TO RD.  
SANDSTONE, WH-BUFF,  
VF GR, ARGILL, WH  
CLAY MATRIX IN PART

CORE No. 8  
5905-5920' REC. 14'  
SILTSTONE, LT GY-  
BUFF, ARGILL, SDY IN  
PART, SLI MICA, THIN  
BANDS OF DK BRN -  
BLK SHALE, CARB,  
MICA, SILTY.  
SANDSTONE, WH-LT GY  
F-V CRSE GR, PEBBLY  
SUB-ANG TO RND,ED,  
CARB, WH CLAY  
MATRIX.

CARBIDE CHECK:  
DEPTH = 6030'  
CARBIDE = 5 OZS.  
HOT WIRE = 24 UNITS  
P.H.D. = 58 UNITS  
LAG = 4622 STRK.

6230-6750'  
SHALE, DK BRN-BRN,  
SILTY, MICA, CARBN,  
SLI CALC, PYRITIC.  
SANDSTONE, WH-LT GY  
VF-F GR, ANG-SUBANG  
WH CLAY MATRIX, SLI  
DOLOM.  
SANDSTONE, WH-CLEAR  
UNCONS, CRSE-MED GR  
SUBANG-SUBRND,ED.  
COAL, BLK, BRITTLE,  
HD.  
DOLOMITE, BRN,  
ARGILL, MICRITIC,  
HD, DENSE.

CORE No. 9  
6420-6442' REC. 14'  
RUN 1 cut 9' REC. 2.8  
RUN 2 cut 13' REC. 11'  
INTERBEDDED SHALE  
AND SANDSTONE.  
SANDSTONE, LT GY-  
BRN, VF GR, SUBANG-  
SUBRND,ED, CARB, WH  
CLAY MATRIX. AT  
6433.5' SANDSTONE,  
LT GY-BRN, F-CRSE  
GR, SUBANG-SUBRND,ED  
SHALE, DK GY-BRN,  
CARB, W/OCC. THIN  
LAMINEA OF LT GY  
SILTSTONE. DOLOMITE  
AT 6421, BRN, MICRIT-  
IC. No APP. DIP.

MUD DATA:  
1645 Hrs - 6740'  
W = 10.8 APV = 27  
V = 46 PV = 23  
WL = 9.1 YD = 8  
CK = 2 GEL = 5/13  
PH = 9.3 ALK = 0.08  
CA = 200 NAACL = 2700  
SD = 1.5% RMF = 1.21  
AT 78°F  
NAACL DRILLING WATER = 900 PPM.

6750-7040'  
SANDSTONE, LT GY,  
WH-CLEAR, UNCONS  
QUARTZ, MED-CRSE GR  
SUBANG-SUBRND,ED,  
FAIRLY WELL SORT,ED,  
SLI CALC. IN PART.  
SLI ODOR AT TOP.  
SHALE, BRN, SLI SILTY  
CARBN.  
COAL, BLK.

CORE No. 10  
6903-6933' REC. 30'  
T 6920' SHALE, LT  
GY-BRN, CARBN, SLI  
DOLOM, OCC. THIN  
BANDS OF COAL, SOME  
SLICKENSIDES.  
TO 6930' SANDSTONE,  
LT GY, F-MED, OCC  
CRSE GR, SUBANG-SUB  
RND,ED, WH CLAY MTX.  
TO 6933' INTERBD  
SHALE AND SANDST.  
A/A.

7040-7320'  
SANDSTONE, WH-CLEAR,  
CRSE GR, UNCONS, OCC  
F-MED GR, ANG-SUB-  
ANG, MOD SORT,ED, WH  
CLAY MATRIX, MED HD-  
FRIABLE, DOLOM IN  
PART.  
SHALE, BRN-MED GY,  
CARBN, SILTY.  
SILTSTONE, BRN, SLI  
SANDY, W/FEW CLAY  
NODULES, DOLOM, HD.  
TR DOLOMITE, SANDY-  
SILTY, MICRITIC, HD.

CARBIDE-CHECK  
DEPTH = 7143'  
CARBIDE = 3 ONZ.  
HOT WIRE = 23 UNITS.  
P.H.D. = 17 UNITS.  
LAG = 5440 STKS.

7320-7390'  
SHALE, GY-BRN, SILTY  
CARB, PYRITIC, MICA.  
SANDSTONE, GY-WH,  
FN-MED, GRN, ANG-SUB  
RND, MOD. BRNG, CLAY  
MTX.

SILTSTONE, LT. GY,  
BUFF, SANDY IN PART

SANDSTONE, A/A, W/  
GY-WH, CRSE, GRN,  
SUB ANG-RND, QTZOSE

CORE No. 11  
7433-7453' REC. 20'  
THINLY LAM. SHALE &  
SANDSTONE.  
SHALE, MED GY, SILTY  
IN PART, VF SDY,  
MICA, CARBN.  
SANDSTONE, WH GY-  
BUFF, CRSE-GRAN &  
F-MED GR, SUBANG-  
RND,ED, MICA, WH CLAY  
MATRIX, MED HD.  
7442-50'  
CONGLOMERATE, SDY  
W/QUARTZ, FELDSPAR &  
MINOR SHALE PEBBLES

7430-7520'  
SANDSTONE & SILTST.  
A/A. SHALE A/A W/  
OCC TR DK GY LITH.  
GR (VOLCANIC)?

7520-7760'  
SHALE, DK BRN-GY BRN  
OCC BUFF, SILTY-SDY,  
CALC, FOSSIL.  
SANDSTONE, WH-LT GY  
VF-MED GR, SUBANG-  
SUBRND,ED, POOR SRTD  
SANDSTONE, UNCONS.  
CRSE-GRAN, SUBANG-  
RND,ED, TR WH CLAY  
MATRIX, OCC DK GY  
CHERT PEBBLES.

7760-7850'  
SANDSTONE, A/A. W/  
MINOR DK GY MOTTLED  
ANG-RND,ED META-  
QUARTZITE GR, V HD  
DENSE.  
SHALE, A/A.

7850-  
QUARTZITE, DK GY-LT  
GY MOTTLED, ANG  
SPLINTERS, DENSE, HD  
FINE-CRYSTALLINE.

CORE No. 12  
7877-7892' REC. NIL.

CORE No. 13  
7903-7914' REC. 5'  
THINLY BANDED AND  
LAMINATED QUARTZITE  
SHALE, SILTICIFIED  
BLK, SANDSTONE, BLK  
AND SANDSTONE, BLK,  
VF GR, SILTY.  
WEAKLY METAMORPHO-  
SED (CONTACT), VERY  
MUCGY SEQUENCE.

MUD DATA:  
0300 Hrs - 5920'  
W = 10.7 APV = 22  
V = 44 PV = 17  
WL = 8.4 YD = 10  
CK = 2 GEL = 2/4  
PH = 9.5 ALK = 0.2  
CA = 240 NAACL = 2900  
SD = 1% RMF = 1.26  
AT 76°F  
NAACL DRILL. WATER =  
910 PPM

MUD DATA:  
0400 Hrs - 6230'  
W = 10.8 APV = 15.5  
V = 45 PV = 13  
WL = 9.3 YD = 5  
CK = 2 GEL = 1/7  
PH = 9.6 ALK = 0.15  
CA = 200 NAACL = 2800  
SD = 1% RMF = 1.62  
AT 72°F  
NAACL DRILL. WATER =  
600 PPM.

MUD DATA:  
1115 Hrs - 6580'  
W = 10.9 APV = 21  
V = 49 PV = 13  
WL = 7.7 YD = 6  
CK = 2 GEL = 1/5  
PH = 9.7 ALK = 0.3  
CA = 200 NAACL = 3747  
SD = 0.75% RMF = 1.22  
AT 75°F  
NAACL DRILL. WATER =  
900 PPM.

MUD DATA:  
2200 Hrs - 7207'  
W = 10.8 APV = 16  
V = 44 PV = 15  
WL = 7.0 YD = 2  
CK = 2 GEL = 1/4  
PH = 9.3 ALK = 0.17  
CA = 120 NAACL = 2225  
SD = 0.25% RMF = 1.42  
AT 80°F  
NAACL DRILL. WATER =  
820 PPM.

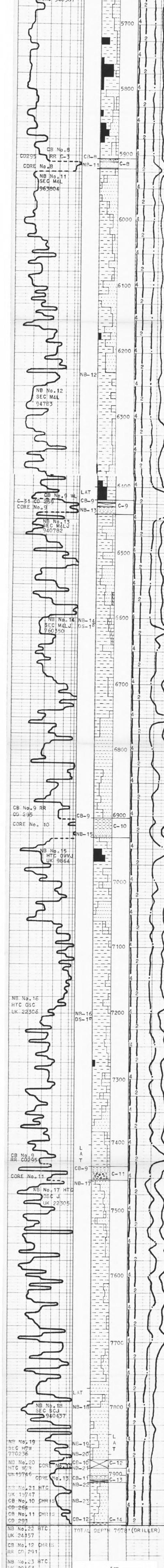
MUD DATA:  
1940 Hrs - 7434'  
W = 10.8 APV = 12  
V = 45 PV = 13  
WL = 6.5 YD = 0  
CK = 2 GEL = 0/1  
PH = 9.5 ALK = 0.24  
CA = 120 NAACL = 2342  
SD = 1% RMF = 1.17  
AT 78°F

MUD DATA:  
2230 Hrs - 7780'  
W = 10.9 APV = 28.5  
V = 46 PV = 19  
WL = 7.8 YD = 7  
CK = 2 GEL = 3/11  
PH = 9.7 ALK = 0.4  
CA = 120 NAACL = 2342  
SD = 1% RMF = 1.25  
AT 81°F  
NAACL DRILL. WATER =  
900 PPM.

MUD DATA:  
0500 Hrs - 7976'  
W = 10.8 APV = 18.5  
V = 53 PV = 17  
WL = 7.8 YD = 3  
CK = 2 GEL = 1/3  
PH = 9.4 ALK = 0.30  
CA = 600 NAACL = 2107  
SD = 0.5% RMF = 1.36  
AT 77°F  
NAACL DRILL. WATER =  
1050 PPM.

7900-7978'  
QUARTZITE, A/A  
SANDSTONE, DK GY-  
BLK, SILTY-VF GR,  
SET IN SECONDARY  
CEMENT.  
SHALE, BLK, CARBN?

CORE No. 14  
7974-7978' REC. 4'  
SHALE, BLK, DENSE, HD, METAMORPHO-  
SED. QUARTZITE, TR DK GY, VF GR,  
V HD. TR CALCITE, TR PYRITE.  
DIP 40°.



TOTAL DEPTH 7978' (DRILLER)

5cm