BUREAU OF MINERAL RESOURCES
GEOLOGY AND GEOPHYSICS

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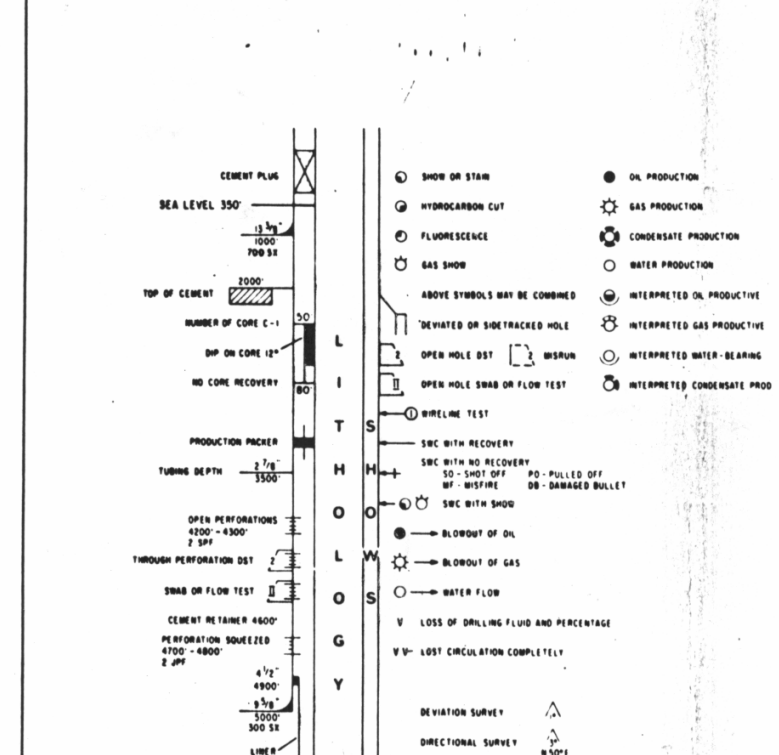
1884/OP/3

ESSO EXPLORATION AND PRODUCTION AUSTRALIA INC.

WELL COMPOSITE LOG

NARIMBA - 1

5 cm



CEMENT PLUG
SEA LEVEL 350'
13 3/8" 1000' 700 SX
2000'
TOP OF CEMENT
NUMBER OF CORE C-1
DIP ON CORE 12°
NO CORE RECOVERY
50
80
PRODUCTION PACKER
TUBING DEPTH 2 7/8" 3500'
OPEN PERFORATIONS 4200'-4300' 2 SPF
THROUGH PERFORATION DST
SWAB OR FLOW TEST
CEMENT RETAINER 4600'
PERFORATION SQUEEZED 4700'-4800' 2 JPF
4 1/2" 4900'
9 5/8" 5000' 300 SX
LINER
SLOTTED LINER
FORMATION
FORMATION 5250'(-5000) 280'
6000' 125 SX
UNCONFORMITY
LITHOLOGY
SHOWS
SHOW OR STAIN
HYDROCARBON CUT
FLUORESCENCE
GAS SHOW
ABOVE SYMBOLS MAY BE COMBINED
DEVIATED OR SIDETRACKED HOLE
OPEN HOLE DST
MISRUN
OPEN HOLE SWAB OR FLOW TEST
WIRELINE TEST
SWC WITH RECOVERY
SWC WITH NO RECOVERY
SO - SHOT OFF
PO - PULLED OFF
MF - MISFIRE
DB - DAMAGED BULLET
SWC WITH SHOW
BLOWOUT OF OIL
BLOWOUT OF GAS
WATER FLOW
LOSS OF DRILLING FLUID AND PERCENTAGE
LOST CIRCULATION COMPLETELY
OIL PRODUCTION
GAS PRODUCTION
CONDENSATE PRODUCTION
WATER PRODUCTION
INTERPRETED OIL PRODUCTIVE
INTERPRETED GAS PRODUCTIVE
INTERPRETED WATER-BEARING
INTERPRETED CONDENSATE PROD
DEVIATION SURVEY
DIRECTIONAL SURVEY
3° N30°E
NORMAL FAULT WITH DISPLACEMENT 300'
REVERSE FAULT WITH DISPLACEMENT 300

LITHOLOGIC SYMBOLS

- CLAYSTONE (nonfissile)
- CLAY (fissile) or SHALE
- MUDSTONE
- SILT and SILTSTONE
- SAND and SANDSTONE
- LIMESTONE
- DOLOMITE
- CALCAREOUS
- M = MICRITIC LIMESTONE
- G = GRANULAR LIMESTONE
- S = SKELETAL LIMESTONE
- MARL
- DOLOMITIC
- GRANULE - BOULDER, CONGLOMERATE
- OOLITES
- QUARTZ
- LITHIC or ROCK FRAGMENTS
- PYRITE
- CHERT
- COAL
- CARBONACEOUS MATTER
- GLAUCONITE
- VOLCANICS
- CORALS
- BRYOZOANS
- BRACHIOPODS
- GASTROPODS
- CEPHALOPODS
- PELECYPODS
- ECHINOIDS
- FISH REMAINS
- ALGAE
- PLANT REMAINS
- SPORES
- LEAVES
- FORAM GENERAL
- FOSSILS, MICROFOSSILS

CONCESSION: T/5P STATE: TASMANIA BASIN: BASS
LOCATION: Lat. 40°16'18.080"S X 392,154 mE
Long. 145°43'53.518"E Y 5,541,300 mN
ELEVATION: G.L. -253' K.B. +32' WATER DEPTH: 253'
SPUDDED: AUGUST 31, 1973 RIG RELEASED OCTOBER 4, 1973 I.P. ESTABLISHED: DRILLED BY: GLOBAL MARINE
CLASSIFICATION: WILDCAT STATUS: PLUGGED and ABANDONED
TOTAL DEPTH: 11,003' PLUGGED BACK T.D. 454'

CASING AND TUBING				PLUGS			PERFORATIONS		
SIZE	SET AT	SX. CMT.	FORMATION	FROM	TO	SX. CMT.	FROM	TO	No/FT.
20"	676'	1450	PLIOCENE ?	454'	654'	70			
13 3/8"	2747'	525	MIOCENE	2250'	2747'	160			
9"	8809'	375	EOCENE	8115'	8500'	135			

WIRE LINE LOGGING SERVICES by SCHLUMBERGER

LOG	INTERVAL	LOG	INTERVAL
ISF / SLK (2" and 5")	10,986' - 2770'	F.I.T. 1	9440'
FDC / CNL / GR (2" and 5")	10,992' - 5700'	F.I.T. 2	9842'
	(GR 10,992' - 285')	F.I.T. 3	9578'
VELOCITY SURVEY	8771' - 2830'	F.I.T. 4	10,251'
HDT	10,989' - 5700'	F.I.T. 5	10,049'

Date	SEPT 15, 1973	SEPT 21, 1973	SEPT 24, 1973	SEPT 27, 1973	OCT 1, 1973
Run No.	ONE	TWO	THREE	FOUR	FIVE
Depth - Driller	8813'	9561	9904	10,400	11,003
Depth - Logger	8809	9542	9904	10,402	10,993
First Reading	8802'	9535	9897	10,395	10,982
Last Reading	2770'	8789	9350	9700	10,200
Casing - Driller	13 3/8" at 2747	9 5/8" at 8808	9 5/8" at 8808	9 5/8" at 8808	9 5/8" at 8808
Casing - Logger		8789	8789	8789	8789
Bit Size	12 1/4	8 1/2	8 1/2	8 1/2	8 1/2
Type Fluid in Hole	LIGNOSULFONATE	LIGNOSULFONATE	LIGNOSULFONATE	LIGNOSULFONATE	LIGNOSULFONATE
Density / Viscosity	9.7 / 46	10.1 / 43	11.0 / 45	11.0 / 47	11.0 / 44
pH / Fluid Loss	9.5 / 6.2 ml	9.8 / 4.4 ml	9.8 / 4.8 ml	9.8 / 5.2 ml	9.8 / 4.4 ml
Source of Sample	FLOWLINE	FLOWLINE	FLOWLINE	FLOWLINE	FLOWLINE
Rm at Meas. Temp.	1.22 at 60 °F	1.02 at 79 °F	0.89 at 68 °F	0.89 at 67 °F	0.80 at 69 °F
Rmf at Meas. Temp.	0.94 at 60 °F	0.73 at 68 °F	0.62 at 68 °F	0.62 at 66 °F	0.56 at 68 °F
Rmc at Meas. Temp.	1.44 at 61 °F	1.42 at 73 °F	1.30 at 68 °F	1.30 at 67 °F	1.17 at 68 °F
Source: Rmf Rmc	PRESS	PRESS	PRESS	PRESS	PRESS
Rm at BHT	0.44 at 185 °F	0.36 at 237 °F	0.26 at 244 °F	0.23 at 262 °F	0.21 at 266 °F
Time Since Circ.	5 Hrs	7 Hrs	6 Hrs	13 Hrs	9 1/2 Hrs
Max. Rec. Temp.	184/186 °F	236/237 °F	243/244 °F	260/264 °F	266/266 °F
Equip. / Location	2080 / SAL	2080 / SAL	2080 / SAL	2080 / SAL	2080 / SAL
Recorded By	CHAFFE/CLARKE	CHAFFE/CLARKE	CHAFFE/CLARKE	CHAFFE/CLARKE	CHAFFE/CLARKE
Witnessed By	STEAD	BLACK	BLACK	SVALBE	SVALBE

REMARKS:

LOGGING DATA		EQUIPMENT DATA	
Run No.	1,2,3,4,5	Run No.	1,2,3,4,5
Type of Sonde	IRT	Panel	IRP - UA53
Stand-off	1 1/2	Cartridge	IRC - MA123
S.B.R.	1	Sonde	IRS - S124
		Test Loop	

DRILLING RIG: GLOMAR CONCEPTION
DRILLING CONTRACTOR: GLOBAL MARINE (A/ASIA) PTY. LTD.
SURVEYING: OFFSHORE NAVIGATION INCORPORATION
DIVERS: BROMAN INTERNATIONAL
CORING: CHRISTENSEN
MUD LOGGING SERVICES: BAROID
WIRELINE LOGGING SERVICES: SCHLUMBERGER
PRESSURE RECORDING: AGNEW-GO-WESTERN
CEMENTING: HALLIBURTON
WELL VELOCITY SURVEY: AUSTRAL-UNITED GEOPHYSICAL

INTERPRETED BY: V.A. ROBINSON / L.J. BROOKS
R. WILSON
DATE: JANUARY 14, 1974

MUD LOGGING SERVICES: by: BAROID

INTERVAL LOGGED 770 FT TO 11,000 FT
DATE LOGGED SEPTEMBER 1, 1973 TO SEPTEMBER 30, 1973
DEPTH MEASURED FROM K.B. (+32' above Sea Level)
SUPERVISING ENGINEER W. DUNCAN UNIT No. 8809
TYPE MUDS SEAWATER/NATIVE TO 5000 FT
LIGNOSULFONATE TO 11,000 FT

GENERAL		MUD CHARACTERISTICS	
NB	NEW BIT	W	WEIGHT, LB/GAL
NCB	NEW CORE BIT	V	VISCOSITY, API, SECONDS
CO	CIRCULATED OUT	F	FILTRATE, API, CC'S
DST	DRILL STEM TEST	CK	FILTER CAKE
LAT	LOGGED AFTER TRIP	S	SALINITY, PPM Cl⁻
TG	TRIP GAS	Rm	MUD-RESISTIVITY, OHM-METER
NR	NO RETURNS	Rmc	MUD-CAKE RESISTIVITY, OHM-MTR
DS	DIRECTIONAL SURVEY	Rmf	MUD-FILTRATE RESISTIVITY, OHM-METER
DC	DEPTH CORRECTION		

- SAND
- SHALE
- CLAY
- CHERT
- SALT
- SILTSTONE
- CONGLOMERATE
- LIMESTONE
- OOLITIC LIMESTONE
- DOLOMITE
- GYPSUM, ANHYDRITE
- COAL OR LIGNITE
- GRANITE WASH
- MARL

MUD LOG

ELECTRIC LOGS

☒ FT/HR
☐ MIN/HR
1500 1000 500 GST
VISUAL POROSITY
LITHOLOGY
DEPTH
HOT WIRE AND CHROMATOGRAPH READINGS M=1000
C1 C2 C3 C4 C5+
K.B. (+32')
SEA FLOOR -253' (285' K.B.)
SEA LEVEL
MEAN
LOGGING AT 11:00 PM, SEPTEMBER 1, 1973. WATER DEPTH 253'. DRILLED 26" HOLE TO 772', SET 20" CASING AT 675'. DRILLING W/SEAWATER, 17 1/2" BIT W/26" UNDERREAMER. HOT WIRE, 30 UNITS = 1% TOTAL GAS IN AIR
NO BACKGROUND GAS
NO H2S
13-3/8" CSG SHOE AT 2747'
RAN 13-3/8" CSG AT 2827'
SCALE CHANGE
DEPTH LINE BROKEN, DRILL RATES 30' AVG OVER SINGLE
DEPTH LINE REPAIRED
BREAK OVER TO LIGNOSULFONATE MUD AT 5000'
POH FOR 3 1/2 HRS - ROUGH SEA CIRC WITH 1 PUMP
9 5/8" CSG SHOE AT 8808'
PRESSURE TEST FORM. TO 18.5 PPG EQUIV.
CORE NO.1 9278'-9307' CUT & REC 29'
CIRC W/ONE PUMP
CORE NO.2 9542'-61' CUT & REC 19'
CORE NO.3 9750'-56' CUT & REC 6'
WASH-OUT IN BI-SUBE
INDUCTION - SPHERICALLY FOCUSSED RESISTIVITY LOG
SPONTANEOUS-POTENTIAL millivolts
INTERPRETED LITHOLOGY
RESISTIVITY ohms-m²/m
SFL
INDUCTION
AMPLIFIED SFL
CONDUCTIVITY millimhos/m
6FF40 induction
COMBINATION FORMATION DENSITY/NEUTRON LOG
CALIPER inches
Bit Size
GAMMA RAY API units
BULK DENSITY grams/cc
Correction
NEUTRON POROSITY Limestone Matrix
SCALE CHANGE
ENGINEERING & DRILLING DATA (CASING, CORES, TESTS ETC.)
FORMATION TOPS
AGE
454' 70 SX 654'
9 JOINTS + FLOAT SHOE 20" 675' 1450 SX
2250' 160 SX 2450'
64 JOINTS + FLOAT COLLAR and SHOE 13 3/8" 2747' 525 SX
MID-MIOCENE (SEISMIC) 2862' (-2870')
OLIGOCENE (SEISMIC) 4512' (-4480')
"UPPER EOCENE SHALE" (SEISMIC and LOG) 5416' (-5384')
TOP EASTERN VIEW (SEISMIC and LOG) 5884' (-5852')
P. asperopolus (SEISMIC) 6720' (-6688')
U. M. diversus (SEISMIC) 7334' (-7302')
8125' 135 SX 8500'
L. M. diversus (SEISMIC) 8302' (-8270')
208 JOINTS + FLOAT COLLAR and SHOE 9 5/8" 8808' 375 SX
CUT 29' REC 29' CORE-1 9278' 9307'
INTRA L. M. diversus (SEISMIC) 9312' (-9280')
F.I.T. No 1 at 9440' RECOVERED (Segregator) 0.1 cf GAS 2,200 ccs WATER
NOTE ACCORDING TO PIPE TALLY POSITION OF CORE SHOULD BE ADJUSTED UPWARDS ABOUT 19'
CUT 19' REC 19' CORE-2 9542' 9561'
F.I.T. No 3 at 9578' RECOVERED (Segregator) 0.5 cf GAS 2,200 ccs WATER
CUT 6' REC 6' CORE-3 9750' 9756'
F.I.T. No 2 at 9842' RECOVERED (Segregator) 0.35 cf GAS 1,900 ccs WATER
F.I.T. No 5 at 10,049' NO RECOVERY (Tool plugged)
F.I.T. No 4 at 10,251' NO RECOVERY (100cc MUD)
TOTAL DEPTH 11,003' (-10,971')
MIOCENE
OLIGOCENE
"UPPER EOCENE SHALE"
LATE EOCENE
EASTERN VIEW GROUP
EARLY EOCENE

5 cm

Dwg 1884/OP/3.