NALANGIL-1 OT.4415

DEPT. NAT. RES & ENV
PE600864

ENCLOSURE-1

GAS AND FUEL EXPLORATION N.L.

COMPOSITE WELL LOG

NALANGIL No.1

PERMIT : PEP 100 **BASIN :** OTWAY **STATE :** VICTORIA

LOCATION : **LATITUDE :** 38°21'40.4"S
LONGITUDE : 143°26'17.9"E
SEISMIC : **STATION :** 255 **LINE :** OHG86A-107
ELEVATION : **G.L.** 143.0m **K.B.**146.05m **REF.** A.M.S.L.
TOTAL DEPTH : DRILLER : 363.0m
LOGGER : 352.0m
STATUS : PLUGGED AND ABANDONED
WELLSITE GEOLOGIST : A.TABASSI
WELLSITE ENGINEER : K.SMITH
LOGGED BY : B.P.B.
MUD LOGGING BY : HELLIBURTON GEODATA
CEMENTING AND TESTING BY : HELLIBURTON

DATE SPUDDED : 4th August 1990 at 0200 hrs
DATE REACHED T.D. : 7th August 1990 at 1545 hrs
DATE RIG RELEASED : 10th August 1990 at 1500 hrs
DRILLING CONTRACTOR : FLETCHER DRILLING SERVICES PTY.LTD.
RIG No. : 1

HOLE SIZE	FROM	TO
20"	SURFACE	6.0m
$12^1/_4$"	6.0m	68.78m
$8^1/_2$"	68.78m	363.0m

CASING SIZE	GRADE	WEIGHT	SHOE	CEMENTED TO
16"	"CONDUCTOR"		6.0m	SURFACE
$9^5/_8$"	J55-8rd STC	36 lb/ft	64.24m	SURFACE

FORMATION TESTING :

DST No.	INTERVAL	RECOVERY

The attempted conventional bottom hole drill stem test was aborted due to contractual disputation by the drilling contractor.

CEMENT PLUG	FROM	TO	SACKS
PLUG No.1	363.0m	255.0m	95
PLUG No.2	80.0m	30.0m	60
PLUG No.3	SURFACE		10

CORE
C – (No.) Core Number
CORE ANALYSIS
Interval
Kav – Average Permiability (Millidarcys)
Øav – Average Porosity (%)
Soav – Average Oil Saturation (%)
No Recovery

SIDEWALL CORE (No.)
(No Recovery)

D.S.T. – DRILL STEM TEST
Number and Interval

LOG ANALYSIS
Av.Ø – Average weighted Porosity (%)
Av.Sw. – Average weighted Water Saturation (%)

N.P. – NET PAY
Ø – Average weighted Porosity (%)
Sw – Average weighted Water Saturation (%)

R.F.T. TEST POINT

PERFORATED INTERVAL

PLUG (No.)

CASING SHOE

BIT

SYMBOLS

☼	GAS
☼	GAS SHOW
●	OIL
◒	OIL SHOW
〰	UNCONFORMITY
◷	DIP
⟋	DEVIATION
G	GLAUCONITE
M	MICA
Fe	IRON OXIDE
L	LITHICS
♦	PYRITE
▬	CARBONACEOUS MATERIAL
⚘	PLANT REMAINS
⊛	FOSSILS
∞	MICROFOSSIL
‖‖	FELDSPAR
⬯	GARNET

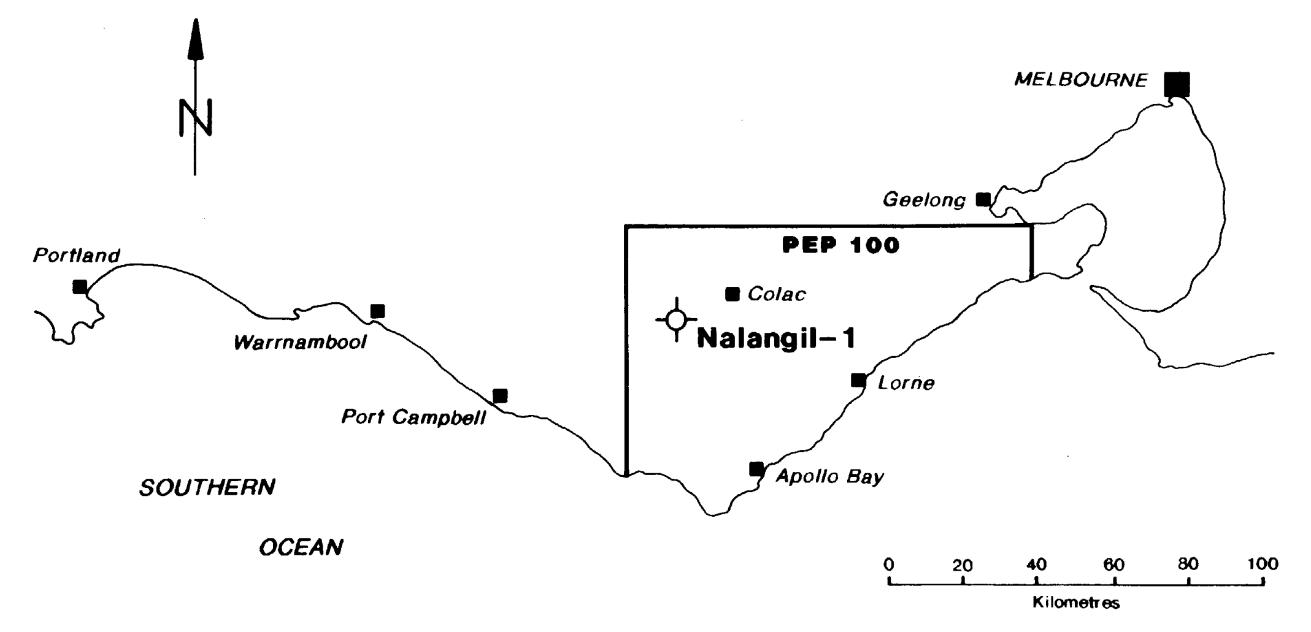
ABBREVIATIONS

MW	– Muddy water
GCM	– Gas cut mud
GCMW	– Gas cut muddy water
SGCWTS	– Slightly gas cut water to surface
GTS	– Gas to surface
NFTS	– No fluid to surface
WTS	– Water to surface
OTS	– Oil to surface
BOPD	– Barrels of oil per day
PBTD	– Plug back total depth
BCPD	– Barrels of condensate per day
BWPD	– Barrels of water per day
MMCFD	– Millions of cubic feet per day
RTSTM	– Rate to small to measure
POOH	– Pulled out of hole
TG	– Trip gas
CG	– Connection gas
NB	– New bit
RRB	– Re run bit
CB	– Core bit
RRCB	– Re run core bit

LITHOLOGY

- GRANULES & larger : asp. SMALL PEBBLES (larger)
- OOLITH, PISOLITH
- SANDSTONE, very coarse grained
- SANDSTONE, coarse grained
- SANDSTONE, medium grained
- SANDSTONE, fine grained
- CALCAREOUS SANDSTONE
- SILTY SANDSTONE
- SILTSTONE
- SILTY CLAYSTONE
- CLAYSTONE / SHALE
- DOLOMITE
- LIMESTONE
- CALCILUTITE
- CALCARENITE
- MARL
- COAL
- BASEMENT

LOCATION MAP



CONSORTIUM

GAS AND FUEL EXPLORATION N.L. 100 %

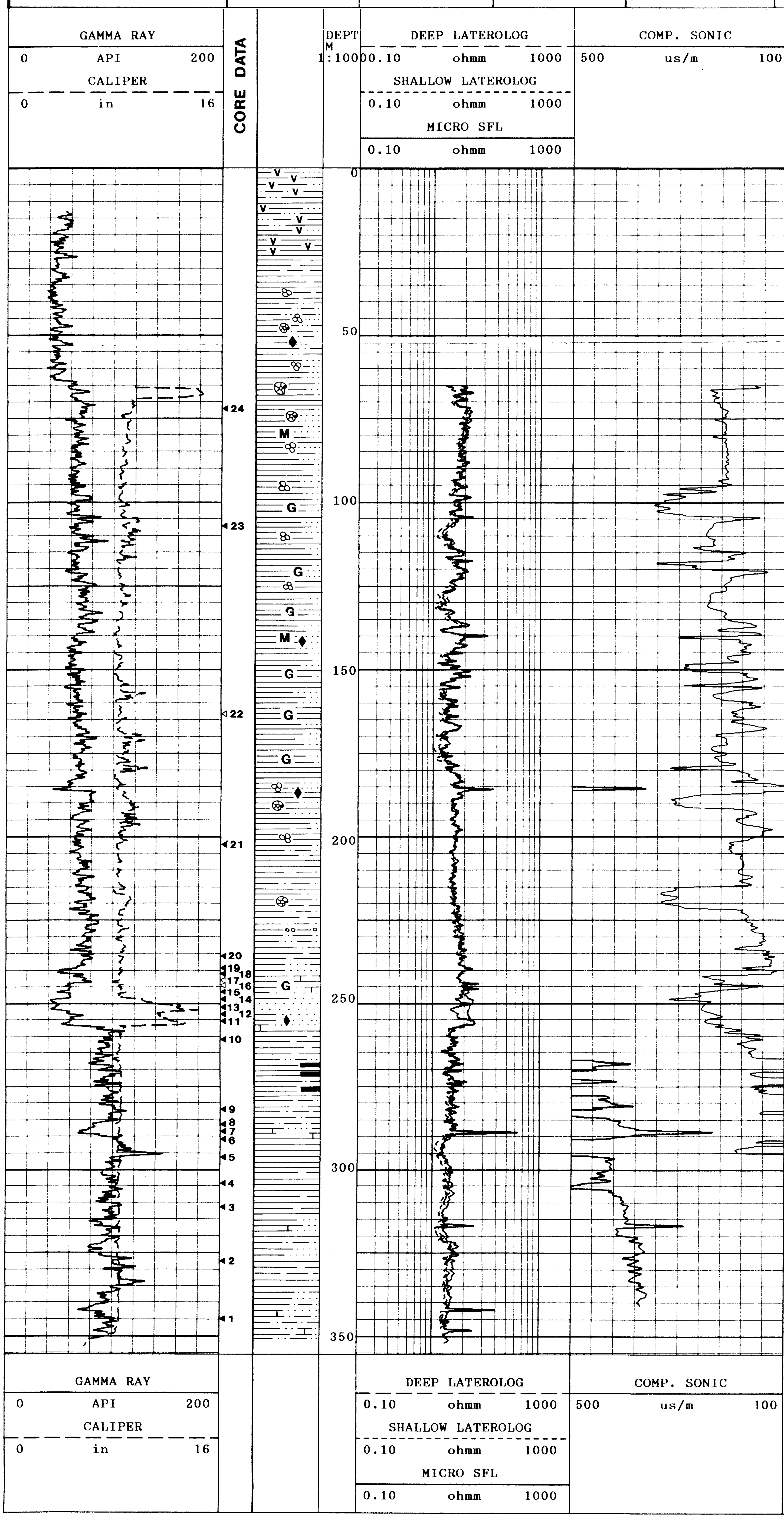
Author : A.TABASSI **Date :** September,1991
Draftsman : S.CLARK **Drg No.** OT.4415

M.13

WIRELINE LOG DATA

DATE	7th,August,1990				
RUN No.	1				
Rm at Measured Temp.	2.88 at 25°C		at		at
Rmf at Measured Temp.	3.02 at 25°C		at		at
Rmc at Measured Temp.	4.04 at 25°C		at		at
Source Rmf Rmc	Press	Press			
Rm at BHT	2.88 at 25°C		at		at
Time since Circ. stopped.	4 hrs				
Max. recorded Temp.	25°C				

LOG	RUN No.	DATE	INTERVAL	SCALE
SDL-MRS-GR-SP-CAL (Resistivity)	1	7th,August,1990	352.0m - 64.0m	1:200 & 1:500
NCS-GR-CAL (Density-Neutron)	1	7th,August,1990	352.0m - 64.0m	1:200 & 1:500
CSS-GR-CAL (Sonic)	1	7th,August,1990	352.0m - 64.0m	1:200 & 1:500
CIS (Velocity Survey)	1	8th,August,1990	—	20 Levels
SCG-GR (Sidewall Core)	1	8th,August,1990	—	1 Gun-24 Cores



LITHOLOGICAL DESCRIPTION

DECOMPOSED VOLCANICS
Thickness : 23.0m

HEYTESBURY GROUP
(Undifferentiated)
Thickness : 160.0m

CLAYSTONE, medium to dark grey, becoming dominantly medium brown grey with depth, light to dark, dominantly medium green grey in part, very soft to occasionally firm, sticky, becoming dispersive with depth, becoming moderately silty with depth, rare to common lithics, common fossil fragments, rare glauconite and/or chlorite, interbedded with minor ; SANDSTONE, light grey to light green grey, light brown grey in part, becoming dominantly medium brown grey with depth, loose, becoming friable to firm with depth, very fine to fine, subangular to subrounded, moderately to well sorted quartz with abundant lithics, common medium grey to light green grey argillaceous matrix, rare pyrite, glauconite and mica, poor-none visual porosity.

NIRRANDA GROUP
Thickness : 52.5m

CLAYSTONE, medium-dark brown grey, soft, sticky to dispersive, moderately silty, slightly glauconitic, calcareous and carbonaceous, common fossil fragments, interbedded with ; SANDSTONE, light to medium brown grey, loose, friable to hard in part, very fine to fine quartz with minor lithics, poor to none visual porosity, interlam with SILTSTONE, med-dark brown, soft, argillaceous.

WANGERRIP GROUP
Thickness : 51.5m

SANDSTONE, clear to off white, light to medium brown, loose to friable, coarse to very coarse. dom coarse, subangular to subrounded, moderately sorted quartz, common clay matrix, rare calcite and/or pyrite cement, rare glauconite. good visual porosity, interbedded with CLAYSTONE and minor SILTSTONE as before and minor ; COAL, dark brown-black, firm, brittle, dull in part, argillaceous in part, rarely subfissile.

EUMERALLA FORMATION
Thickness : 73.0m +

CLAYSTONE, off white to very light grey, pale green grey with depth, soft, sticky, dispersive in part, silty in part, trace-common lithics, trace partially altered feldspar, trace coally particles, interbedded/interlaminated with ; SILTSTONE, medium grey and green grey, firm, moderately argillaceous, trace lithics, strong calcite cement in part, with minor ;
SANDSTONE, light medium grey and green grey, firm, fine, well sorted quartz and abundant volcano-lithics, trace clay matrix, rare calcite cement, rare chloritic matrix, rare biotite and altered feldspar, poor to none visual porosity.

T.D.363.0m

DAILY PROGRESS
4 – 8 – 1990
5–8–1990
6 – 8 – 1990
7 – 8 – 1990

BIT RECORD
$12^1/_4$" – L3A – W.O.BIT 2–5K, RPM:120
$8^1/_2$" – L114 – W.O.BIT 2–4K, RPM:120

FLUORESCENCE
NONE DETECTED
NONE DETECTED

Rv Max.
0.19
0.26
ND
0.34
0.42
0.37

PALYNOLOGY
T.bellus
P.tuberculatus
Mid N.asperus
Lower N.asperus
C.striatus zone

AGE
Q
26.0
HEYTESBURY GROUP
TERTIARY
186.0
NIRRANDA GROUP
238.5
WANGERRIP GROUP
290.0
EUMERALLA FORMATION
LOWER CRETACEOUS