Elf Aquitaine Norge A/S
311E-R 79/87/PK/bs

Stavanger, April 3rd 1979

FRIGG NORTH EAST

Well 25/1-4. Log Evaluation

March 1979

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ABSTRACT

The Frigg North East gas accumulation is divided between block 25/1 (EAN operator) and block 30/10 (ESSO operator).

On this structure only one well is drilled, well 25/1-4 with EAN as operator.

Up till now EAN and ESSO had carried out three log interpretations to determine the reservoir parameters :

- 1974 : Originally computer processed interpretation by Schlumberger (EAN)
- 1976 : Recomputation of all Frigg area wells by Schlumberger CPI (EAN)
- 1978 : Handevaluation (ESSO)

after having agreed on common input parameters, it was decided to run a new CPI (Schlumberger) in order to present a set of reservoir parameters common to both EAN and ESSO. The result of this last CPI are shown in the table together with the results of earlier interpretations.

	CPI 1974 EAN	CPI 1976 EAN	Handevaluation 1978 ESSO	CPI 1979 EAN/ESSO
Gross pay (m)	37.8	37.8	37.6	38.0
Net pay (m)	34.5	30.5	31.3	27.58
α = Net/Gross	0.9127	0.807	0.83	0.7258
$\overline{\phi}$ = Average Porosity(%)	28.73	27.70	30	26.08
$\overline{S_w}$ = Average Water Satur.(%)	22.35	20.83	21	20.03
β = Hc-meter/meter	0.2036	0.177	0.1967	0.1514

The results listed in the table are obtained by applying the following "cut off" :

$$S_w \geq 55\%,\ \phi \leq 13\%,\ \Delta t \leq 77\ \mu s/ft \text{ and } V_{cl} \geq 33\%$$

Both EAN and ESSO feel that the last CPI (1979) is too pessimistic regarding net pay and porosity.

The input parameters for CPI 1976 and CPI 1979 are basically the same. The important difference in the results for the two CPI's leads to the following question : Has Schlumberger changed their interpretation programme between 1976 and 1979 ?

For the moment neithers EAN nor ESSO were willing to accept the results of CPI 1979.

ESSO would like to try a log-evaluation with their own computer processing programme, with the same input parameters as agreed upon between EAN and ESSO.

EAN will also do an interpretation on their own computer processing programme PICARDIA, with the input parameters agreed upon.

During discussions between ESSO and EAN of the different log interpretation results (05/04-79) it was agreed that the most reasonable values for the petrophysical parameters in the gas zone were:

$$\alpha = 0.82$$
$$\underline{\phi} = 28\%$$
$$\overline{S_w} = 21\%$$
$$\beta = \overline{\phi}\ (1 - \overline{S_w}) = 0.1814$$

These values could be revised when ESSO and EAN have carried out their computer processed log interpretations.

For the pressure, temperature, Z and B_g EAN and ESSO applies the following values:

	ESSO	EAN
Datum	- 1980.1 m MSL	- 1965 m MSL
Temp ^oF (at datum)	142 ^oF	142.7 ^oF
Pressure psig (at datum)	2919	2905
Z	0.866	0.876
B_g	5.023×10^{-3}	5.13×10^{-3}

The main difference is due to that ESSO uses the Odin and Frigg gas analysis for determining Z and B_g. EAN uses the gas analysis from the test in the gas zone from well 25/1-4.

INTRODUCTION

On the Frigg North East structure only one well is drilled, well 25/1-4 with EAN as operator.

It was found that the gasbearing structure extended into block 30/10 also.

The most recent isobath-maps (unmigrated) gave 61.4% of the rock volume in block 25/1 and 38.6% in block 30/10.

In autumn 1978 EAN and ESSO started discussions to present a common value for the hydrocarbon accumulation in this structure. Before the end of 1978 they had almost reached and agreement on a common isobath-map.

At the same time negotiations started to reach an agreement on the 25/1-4 reservoir parameters : Top of sand, GOC, WOC, Gross Pay, Net Pay, Ø, Sw and Bg.

EAN had previously estimated the reservoir parameters by means of a computer processed log interpretation in 1974 and then done a new interpretation in 1976 when all the Frigg area wells were recomputed.

RESERVOIR PARAMETERS

1. Depths of : Top of sand, GOC and WOC.

On the first meeting with ESSO 11.12.78 it was agreed to use as common depths (see composite log app.16) :

Top of Frigg Sand	: 1967.6m RKB	(-1942.1m MSL)
GOC	: 2005.6m RKB	(-1980.1m MSL)
WOC	: 2009.0m RKB	(-1983.5m MSL)

2. Temperature.

In appendix 1 is shown the downhole temperature for different stabilisation times.

The temperature gradient after the testing gives the static reservoir temperature, which is stabilised.

- Static reservoir temperature : 61.5°C at -1965m MSL

  (142.7° F at 1990.5m RKB)
  (ESSO 142 °F at -1980.1 m MSL)

The temperatures given by the open hole logs are not stabilized, as can be seen in app.1.
Since the wellbore and its vicinity has been cooled during the circulation, it was agreed upon that 130°F (see app.1) was a realistic temperature to use in the log interpretations.

- Bottom hole temperature in log interpretation : 130°F

3. Pressure

From the pressure gradient after the test the static reservoir pressure have been determined (see app.2).

- Static reservoir pressure : 200.3 bars rel at -1965m MSL

  (2905 psig at 1990.5m RKB)
  (ESSO 2919 psig at -1980.1 m MSL)

4. Formation Volume Factor (Bg)

Compressibility factor is derived from PVT study no. 2051-4/4 -195-Js

- Resrevoir conditions : Tr = 61.5°C = 334.5°K
  Pr = 200.3 bars rel = 201.3 bars abs.
  Zr = 0.8760 at 201.3 bars abs. and 61.5°C.

- Standard conditions : To = 15°C = 288°K
  Po = 1 atm. = 1.013 bars abs
  Zo = 0.998

$$Bg = \frac{Zr}{Zo} \cdot \frac{Po}{Pr} \cdot \frac{Tr}{To} = \underline{\underline{5.13 \times 10^{-3}}}$$

(ESSO 5.203×10^{-3})

5. Formation Water Resistivity

The formation water is the same under the Frigg North East gas accumulation as under the main Frigg gas accumulation.

From the tests in 25/1-3 water samples were obtained :

a) $R_w = 0.12 \Omega$-m at 22°C (Measured on water settled in the stock-tank

b) $R_w = 0.11 \Omega$-m at 22°C (Measured on water settled in the stock-tank

By using the Arps formula these resistivities can be transferred to downhole temperature (130°F)

a) $R_{w130°F} = R_{w\ 72°F} \times \frac{72 + 6.77}{130 + 6.77} = \underline{0.069\ \Omega\text{-m}}$

b) $R_{w130°F} = R_{w72°F} \times \frac{72 + 6.77}{130 + 6.77} = \underline{0.063\ \Omega\text{-m}}$

Average R_w at 130°F = 0.066 Ω -m

It was agreed to use 0.066 Ω -m as the formation water resistivity at 130°F.

6. Mud filtrate resistivity

From the MLL : $R_{mf} = 0.215\,\Omega$-m at 56°F

From the DLL : $R_{mf} = 0.222\,\Omega$-m at 56°F

From MLL : $R_{mf_{130°F}} = 0.215 \times \frac{56 + 6.77}{130 + 6.77} = \underline{0.0987\,\Omega\text{-m}}$

From DLL : $R_{mf130°F} = 0.222 \times \frac{56 + 6.77}{130 + 6.77} = \underline{0.102\,\Omega\text{-m}}$

Average R_{mf} at 130°F = $0.100\,\Omega$-m

Decided to use R_{mf} 130°F = $0.100\,\Omega$-m in the log interpretations.

7. Hydrocarbon density

From PVT study : 2051 - 4/4 - 195 - Js

- Gas: at the dew point : P = 200.7 bars rel
  T = 58.2°C
  Z = 0.8700
  ρ_g = 142.963 kg/m^3

Gas density at reservoir conditions (61.5°C and 200.3 bars rel):

$$\rho_g = 142.963 \times \frac{201.3}{201.7} \times \frac{331.2}{334.5} \times \frac{0.8700}{0.8760} = 140.304 \text{ kg/m}^3$$

- Oil: oil was measured at 58.6°C and 201.9 bars abs

$\rho_{oil} = 820.791$ kg/m^3

For the log interpretation the following values were then agreed upon

ρ_g = 0.14	g/cm^3
ρ_{oil} = 0.82	g/cm^3

8. Clay parameters in the log interpretation

From the composite log (app.16) the following clay parameters were choosen :

- ρ_{bclay} : 2.34 g/cm^3
- ØNclay : 40%
- Δt_{clay} : 130 μs/ft
- RTclay : 1.5 Ω-m
- GRsand : 23° API
- GRshale : 73° API

After discussion with Schlumberger it was decided to let the CPI pick out the clay parameters itself from a representative clay section. The list with clay parameters above should then only be considered as a guide.

As there were no representative shale section inside the Frigg sand, no agreement was obtained on where to find the most representative shale section. ESSO did not agree to that the shales under the Frigg sand more representative than the overlaying shales. It was therefore decided to run the CPI with two different sets of clay parameters :

- Processings 4 - 6
  - = Computed interval 2165 - 1950m RKB
  - = Shale parameters to be found below the Frigg sand in interval 2125 - 2065m RKB
  - = Clean sand to be found in interval 2055 - 2015m RKB.

- Processings 5 - 7
  - = Computed interval 2070 - 1950m RKB

= Shale parameters to be found above the Frigg sand in interval 1967.6 - 1950m RKB

= Clean sand to be found in interval 2055 - 2015m RKB

A comparison of the different clay parameters used in the CPI 1974, CPI 1976, ESSO handevaluation 1978 and CPI 1979 (processing 4 - 6 and 5 - 7) is shown in appendix 3.

9. Log interpretations (CPI 1979 processings 4 - 6 and 5 - 7)

It was decided to use the Frigg procedure for the computations with :

$\rho_{ma_1} = \rho_{ma_2} = 2.67$ g/cm^3

Two different "cut-offs" should be used for the calculations of the petrophysical parameters

a) Normal Frigg "cut-off" :

$S_w \geq 55\%$

$\emptyset \leq 13\%$

$\Delta t \leq 77\ \mu$s/ft

$Vcl \geq 33\%$

b) $S_w \geq 55\%$

$\emptyset \leq 13\%$

$\Delta t \leq 77\ \mu$ s/ft

$Vcl \geq 40\%$

Results of the processings :

- Gas zone : 2005.6 - 1967.6m RKB

	CPI 1979 (Processing 4)		CPI 1979 (Processing 5)	
"Cut off"	$S_w \geq 55$ $\phi \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 33$	$S_w \geq 55$ $\phi \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 40$	$S_w \geq 55$ $\phi \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 33$	$S_w \geq 55$ $\phi \leq 1$ $\Delta t \leq 77$ $V_{cl} \geq 4$
Gross pay (m)	38.0	38.0	38.0	38.0
Net Pay (m)	26.82	29.41	23.77	24.69
α = Net/Gross	0.7058	0.7740	0.6255	0.6497
$\bar{\phi}$ = Porosity (%)	26.42	25.61	23.55	23.19
$\bar{S_w}$ = Water Saturation (%)	19.01	20.46	18.17	18.45
β = HC meter/meter	0.1510 * (0.1516) **	0.1577 * (0.1592) **	0.1205 * (0.1216) **	0.1229 * (0.1240) **

* These β's are found by : $\beta = \alpha \phi (1-S_w)$

** These β's are found by : β = Cum HC-meter/Gross Pay

By comparing the result of these last computations with the earlier (shown below), a marked decrease in the β -values is seen.

	CPI 1974	CPI 1976	1978 ESSO handevaluation
"Cut off"	?	$S_w \geq 55$ $\emptyset \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 33$	?
Gross Pay (m)	37.8	37.8	37.6
Net Pay (m)	34.5	30.5	31.3
α = Net/Gross	0.9127	0.807	0.83
$\overline{\emptyset}$ = Porosity (%)	28.73	27.70	30
$\overline{S_w}$=Water saturation (%)	22.35	20.83	21
β = HC-meter/meter	0.2036	0.177	0.1967

In the 1979 CPI computations the clay content was markedly higher than in the 1974 and 1976 CPI's. By checking the corrected GR readings, that were entered in the computations it was seen that all the GR values were shifted 3 - 6 API units towards higher values.

This was explained by Schlumberger to be caused by a new programme to correct the GR logs for hole effects. But since our GR-sand and GR-clay values were basically the same as in CPI 1974 and 1976, the Vclay-GR had to increase. (In the interpretation Schlumberger kept our recommended values in appendix 3).

It was therefore decided to try a new run and shift the GR-sand from 23 to 26 API to be in accordance with the GR-readings corrected for hole-effects.

Another thing that was noticed was that the matrix line on the ρ_b - ØN plot in the water zone gave a ρ ma = 2.65 g/cm^3.
On the Frigg wells a ρ ma = 2.67 g/cm^3 had been used. It was therefore decided to shift the ρ_b readings with +0.04 g/cm^3 to obtain a matrix line of about 2.67 g/cm^3.

A new set interpretations were then made (processing 6 & 7) with these two changes

- GR sand increased from 23 to 26 API
- ρ_b readings increased with 0.04 g/cm^3.

The new results are shown below

	CPI 1979 Processing 6		CPI 1979 Processing 7	
"Cut off"	$S_w \geq 55$ $\emptyset \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 33$	$S_w \geq 55$ $\emptyset \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 40$	$S_w \geq 55$ $\emptyset \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 33$	$S_w \geq 55$ $\emptyset \leq 13$ $\Delta t \leq 77$ $V_{cl} \geq 40$
Gross Pay (m)	38.0	38.0	38.0	38.0
Net Pay (m)	27.58	30.33	26.06	26.67
α = Net/Gross	0.7258	0.7982	0.6858	0.7018
$\overline{\emptyset}$ = Porosity (%)	26.08	25.22	23.97	23.76
$\overline{Sw}$=Water Saturation (%)	20.03	21.89	20.18	20.44
β = HC-meter/meter	0.1514 (0.1526)	0.1572 (0.1597)	0.1312 (0.1321)	0.1327 (0.1337)

The net pay has increased compared to processings 4 and 5, but the porosities have decreased, so the β values are basically the same from processing 4 to 6, but have increased from processing 5 to 7.

For high GR values the last interpretations are still a little pessimistic. The higher the GR values the bigger the difference in corrected GR. The table below taking some examples should show this :

Depth m RKB	Corrected GR 1974	Corrected GR 1976	Corrected GR 1979
1968.1	38	38	43
1969.9	23	23	26
1974.5	36	36	40
1979.1	38	38	43
1984.6	28	28	32
1990.0	46	45	52
1994.6	27	26	30
2000.1	28	27	31

The clay content has decreased from processing 4 - 5 to processing 6 - 7, but at the same time the porosity has also decreased.

The questions are :

- has the correction of ρ_b with +0.04 g/cm^3 in order to get ρ_{ma} = 2.67 g/cm^3, been too important ?

- are the GR sand and GR clay still too low so that Vclay is still too high ?

- has Schlumberger changed the CPI programme between 1976 and 1979 so that the results between CPI 1976 and CPI 1979 are not comparable ?

The cases where the clay parameters are picked above the Frigg sand gives too low β -values. It was therefore concluded that these clay parameters were not representative for the Frigg North East sand.

This leaves us with processing no.6 as the best approach to find the reservoir parameters. But still on this processing the β -values are too small compared with earlier CPI processings.

For the moment therefore neither EAN nor ESSO were willing to accept the reservoir data obtained from CPI 1979.

APPENDIXES

1. 25/1-4. Down-hole temperatures versus depths for different stabilization times.

2. 25/1-4. Static pressure versus depth.

3. Comparison of input parameters for log evaluations between CPI 1974, CPI 1976, ESSO handevaluation 1978 and CPI 1979 (processings 4 - 6 and 5 - 7).

4. Results of CPI 1979 processing no.4 with "cut off" Vclay $\geq$ 33%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

5. Results of CPI 1979 processing no.4 with "cut off" Vclay $\geq$ 40%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

6. Results of CPI 1979 processing no.5 with "cut off" Vclay $\geq$ 33%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

7. Results of CPI 1979 processing no.5 with "cut off" Vclay $\geq$ 40%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

8. Results of CPI 1979 processing no.6 with "cut off" Vclay $\geq$ 33%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

9. Results of CPI 1979 processing no.6 with "cut off" Vclay $\geq$ 40%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

10. Results of CPI 1979 processing no.7 with "cut off" Vclay $\geq$ 33%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

11. Results of CPI 1979 processing no.7 with "cut off" Vclay $\geq$ 40%, $\phi \leq$ 13%, $S_w \geq$ 55% and $\Delta t \leq 77 \mu$s/ft

12. CPI log 1979 processing no.4

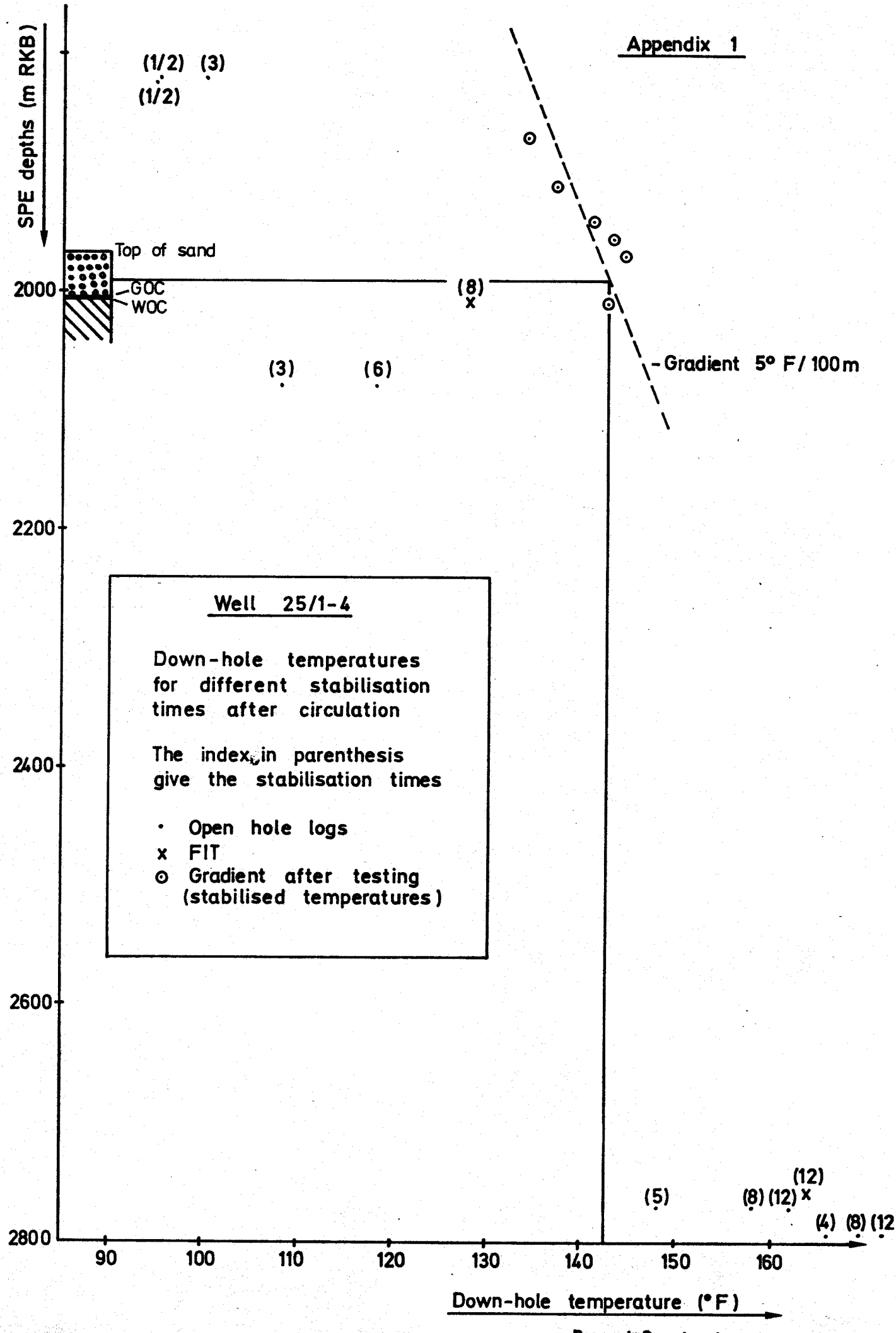
13. CPI log 1979 processing no.5

14. CPI log 1979 processing no.6

15. CPI log 1979 processing no.7

16. Composite log well 25/1-4.

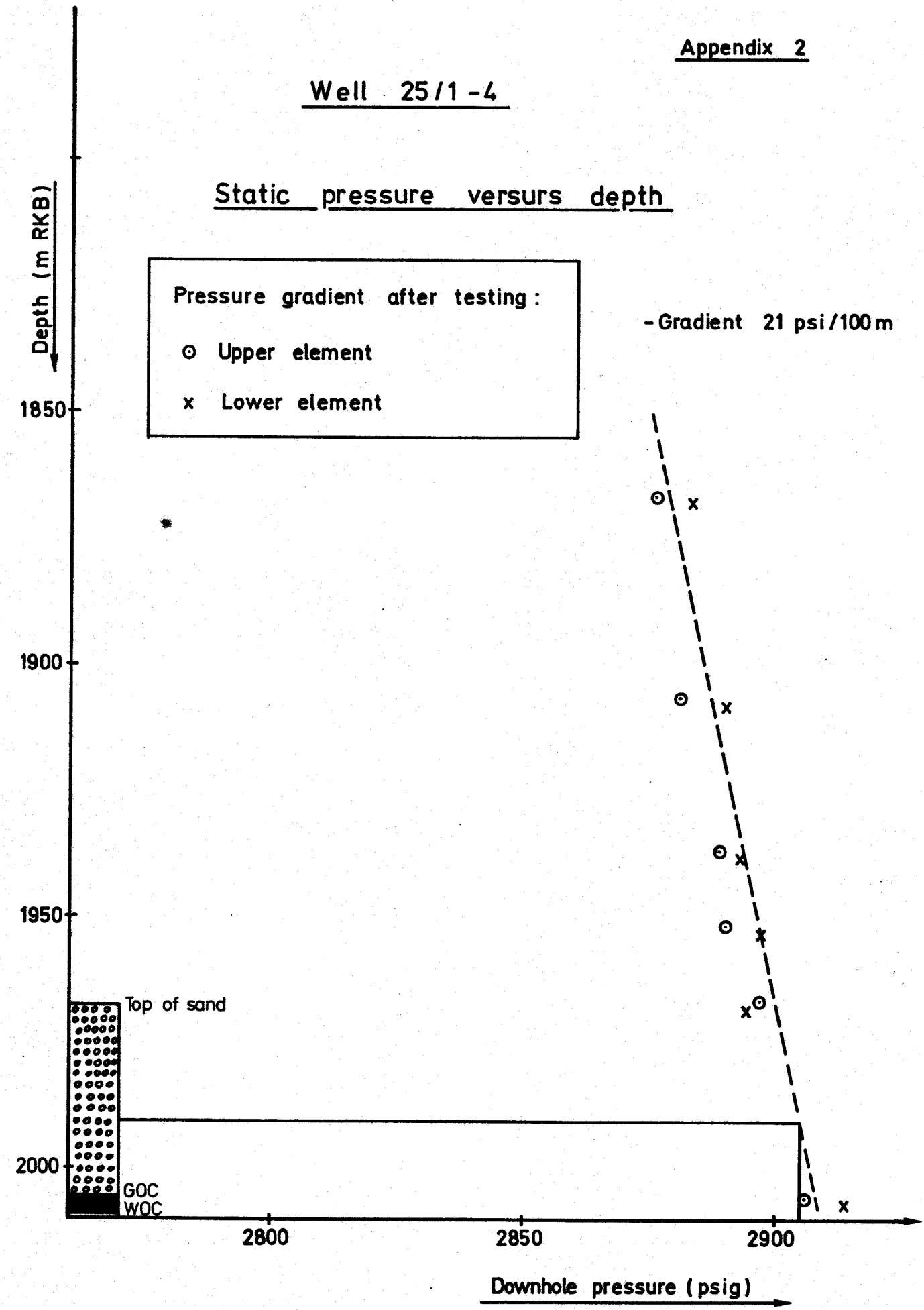
Appendix 1


SPE depths (m RKB)
(1/2) (3)
(1/2)
Top of sand
GOC
WOC
(8)
(3) (6)
Gradient 5° F/100m
2000
2200
2400
2600
2800
Well 25/1-4
Down-hole temperatures for different stabilisation times after circulation
The index in parenthesis give the stabilisation times
· Open hole logs
x FIT
⊙ Gradient after testing (stabilised temperatures)
(5)
(8) (12)
(12)
(4) (8) (12
90
100
110
120
130
140
150
160
Down-hole temperature (°F)

Appendix 2

Well 25/1-4

Static pressure versurs depth



APPENDIX 3

Comparison of input parameters in CPI 1979 (processings 4 - 6 and 5 - 7)
ESSO handevaluation 1978, CPI 1976 and CPI 1974.

	CPI 1974	CPI 1976	Esso handevalu. 1978	CPI 1979(Proc. 4&6)	CPI 1979 (Proc. 5&7)
Interval	2005.8 - 1946.0m RKB				
R_w (Ω-m)	0.066	0.066	0.062	0.066	0.066
R_{mf} (Ω-m)	0.1	0.083	0.086	0.1	0.1
Rclay (Ω-m)	0.8	2.0	1.0	1.5	0.7
Δtclay (μs/ft)	125	130		130	140
ØN clay (%)	40	40	40	40	47
ρ_b clay (g/cm^3)	2.34	2.34	2.34	2.34	2.00
ρ_h (g/cm^3)	0.18 (gas) 0.8 oil	0.17 (gas)		0.14 gas 0.82 oil	0.14 gas 0.82 oil
T (^oF)	132	130	148	130	130
GR sand (API)	24	22	24	23 (processing 4) 26 (Processing 6)	23 (Processing 5) 26 (Processing 7)
GR clay (API)	63	75	96	73 (Processing 4) 73 (Processing 6)	70 (Processing 5) 73 (Processing 7)

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N

****
* SCHLUMBERGER *
****

COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	04-JAN-1979
REFERENCE	613,2077

App. 4

Processing no.4

"Cut off" : Vcl $\geq$ 33%

$\emptyset$ $\leq$ 13%

S_w $\geq$ 55%

Δt $\leq$ 77 s/ft

INTERVAL	RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
				RESISTIVITY	DELTA-T	NEUTRON INDEX	DENSITY	
2058.0 TO 2005.6	0.066	0.10	0.82	1.50	130.0	40.0	2.34	130.
2005.6 TO 1967.6	0.066	0.10	0.14	1.50	130.0	40.0	2.34	130.

POROSITY	CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTACT)
SW	CUT-OFFS	NONE	NONE	55.0 %
DELTA-T	CUT-OFFS	NONE	77.0	77.0
CLAY	CUT-OFFS	NONE	33.0 %	33.0 %

1967.6 TO 2058.0 METER

	TOTAL	NET	NET PAY	
	*****	***	*******	
THICKNESS	90.37	77.57	26.82	METER
AVERAGE POROSITY	24.22	26.09	26.42	%
VOID VOLUME	21.89	20.24	7.09	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	4.59			MILLIDARCY
SUM OF PERMEABILITY	1471.11	1464.43	1185.90	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	30.87	29.15	80.99	%
HYDROCARBON VOID VOLUME	6.77	6.01	5.78	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	3.57	3.32	3.20	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		2.02		HYDROCARBON-METER
RESIDUAL DIFFERENCE		1.30		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
U = DELTA-T SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 33.0 %

DEPTH	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT	
7.8	50.5	2.71	96.7	99.7	9.9	0.0	0.1	0.3	0.3	0.03	0.00	P
8.1	41.7	2.73	46.0	75.6	14.9	0.0	0.4	8.1	4.4	0.07	0.00	
8.4	48.5	2.75	45.8	79.6	10.1	0.0	0.1	5.5	3.4	0.10	0.00	P
8.7	51.1	2.76	38.1	82.4	12.6	0.0	0.2	7.8	5.6	0.14	0.00	P
9.0	34.5	2.72	26.8	72.1	15.8	0.0	0.7	11.6	7.2	0.18	0.00	
9.3	20.7	2.71	20.0	74.6	22.9	0.0	6.6	18.3	12.5	0.24	0.04	
9.6	17.3	2.70	12.0	52.7	27.4	0.0	40.7	24.1	11.1	0.32	0.11	
9.9	7.1	2.67	6.5	36.7	30.9	0.0	237.6	28.9	9.3	0.42	0.20	
0.2	7.2	2.66	11.2	44.2	28.0	0.0	52.6	24.9	9.3	0.51	0.28	
0.5	12.6	2.69	13.3	60.7	26.3	0.0	27.8	22.8	12.5	0.59	0.35	
0.8	11.8	2.69	11.3	52.5	28.3	0.0	53.3	25.1	11.7	0.67	0.43	
1.1	12.0	2.69	8.7	43.9	27.7	0.0	82.8	25.3	9.8	0.76	0.51	
1.4	8.8	2.69	6.8	42.3	29.2	0.0	169.7	27.2	10.4	0.85	0.59	
1.7	6.2	2.68	7.0	42.2	29.8	0.0	177.9	27.7	10.5	0.94	0.67	
2.0	6.0	2.68	8.3	44.5	28.5	0.0	104.1	26.2	10.3	1.03	0.76	
2.3	6.4	2.68	12.6	48.6	27.2	0.0	36.2	23.8	9.8	1.12	0.83	
2.6	3.6	2.68	14.0	56.6	27.3	0.0	29.8	23.5	11.7	1.20	0.91	
2.9	1.8	2.67	12.7	52.5	30.1	0.0	56.3	26.3	12.0	1.29	0.99	
3.2	7.0	2.68	9.7	43.9	28.1	0.0	70.8	25.4	9.6	1.38	1.06	
3.5	13.0	2.69	8.0	45.8	25.0	0.0	61.8	23.0	9.5	1.46	1.14	
3.9	16.3	2.70	12.4	60.1	22.0	0.0	14.5	19.3	10.5	1.52	1.20	
4.2	23.8	2.72	31.3	79.5	19.0	0.0	1.3	13.0	9.2	1.58	1.24	
4.5	36.0	2.74	42.9	84.2	17.1	0.0	0.8	9.8	7.1	1.64	1.26	
4.8	49.7	2.76	51.6	86.9	13.7	0.0	0.3	6.6	4.8	1.69	1.26	
5.1	52.7	2.75	69.6	96.4	8.9	0.0	0.0	2.7	2.4	1.72	1.26	P
5.4	38.3	2.72	47.2	92.8	13.5	0.0	0.3	7.1	6.1	1.75	1.26	
5.7	25.9	2.73	25.6	68.8	20.0	0.0	2.2	14.9	8.7	1.81	1.30	
6.0	22.5	2.72	17.3	46.2	25.6	0.0	14.4	21.2	7.4	1.89	1.36	
6.3	19.4	2.71	26.2	54.3	27.1	0.0	8.2	20.0	7.8	1.97	1.42	
6.6	19.3	2.71	31.5	70.7	25.3	0.0	4.6	17.3	9.9	2.05	1.48	
6.9	32.2	2.73	49.3	86.2	17.6	0.0	0.9	8.9	6.5	2.11	1.51	
7.2	46.2	2.76	60.3	89.2	13.7	0.0	0.3	5.4	4.0	2.15	1.51	
7.5	40.9	2.73	57.5	89.2	15.1	0.0	0.4	6.4	4.8	2.19	1.51	
7.8	24.9	2.70	28.7	67.4	22.5	0.0	5.0	16.1	8.7	2.26	1.55	
8.1	21.7	2.71	26.9	57.4	24.9	0.0	5.3	18.2	7.6	2.33	1.61	
8.4	20.5	2.71	37.7	82.1	22.7	0.0	2.8	14.1	10.1	2.40	1.66	
8.7	29.5	2.73	47.4	85.7	18.1	0.0	1.0	9.5	6.9	2.46	1.69	
9.0	37.1	2.75	46.1	85.3	16.9	0.0	0.7	9.1	6.6	2.51	1.69	
9.3	20.7	2.71	29.7	83.7	22.2	0.0	2.6	15.6	12.0	2.58	1.73	
9.6	4.7	2.68	20.5	66.1	29.0	0.0	18.0	23.0	13.2	2.66	1.80	
9.9	17.7	2.70	32.5	64.5	23.9	0.0	3.6	16.2	7.7	2.74	1.85	
0.3	43.2	2.75	47.9	78.5	15.7	0.0	0.5	8.2	4.8	2.80	1.87	
0.6	48.8	2.76	54.7	87.8	13.3	0.0	0.3	6.0	4.4	2.84	1.87	
0.9	47.7	2.76	56.9	88.6	13.9	0.0	0.3	6.0	4.4	2.88	1.87	

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
81.2	40.5	2.75	56.4	89.5	15.5	0.0	0.5	6.8	5.1	2.93	1.87
81.5	48.7	2.76	65.8	90.5	12.9	0.0	0.2	4.4	3.2	2.97	1.87
81.8	43.6	2.75	57.6	94.6	16.5	0.0	0.7	7.0	6.1	3.01	1.87
82.1	43.9	2.76	55.9	88.6	16.2	0.0	0.6	7.2	5.3	3.06	1.87
82.4	44.9	2.76	52.0	87.4	15.9	0.0	0.6	7.7	5.7	3.11	1.87
82.7	54.2	2.72	21.6	65.8	20.1	0.0	3.1	15.7	8.9	3.17	1.87
83.0	13.3	2.70	9.2	43.1	31.4	0.0	130.4	28.6	10.7	3.25	1.95
83.3	11.1	2.69	10.3	46.0	29.4	0.0	77.5	26.4	10.5	3.35	2.03
83.6	15.5	2.70	10.8	49.1	28.4	0.0	60.0	25.4	10.9	3.44	2.11
83.9	9.9	2.69	10.3	42.6	32.7	0.0	123.7	29.4	10.6	3.53	2.20
84.2	10.3	2.69	15.4	43.5	29.7	0.0	35.7	25.1	8.3	3.65	2.28
84.5	18.4	2.71	25.9	48.8	26.7	0.0	7.8	19.8	6.1	3.71	2.35
84.8	20.6	2.71	37.8	70.7	23.7	0.0	3.4	14.7	7.8	3.79	2.40
85.1	38.4	2.74	52.3	87.2	16.3	0.0	0.6	7.8	5.7	3.85	2.41
85.4	61.2	2.77	98.0	98.0	4.5	0.0	0.0	0.1	0.0	3.86	2.41
85.7	57.2	2.76	71.5	91.5	8.2	0.0	0.0	2.3	1.6	3.88	2.41
86.0	43.3	2.76	35.7	85.8	15.1	0.0	0.4	9.7	7.6	3.92	2.41
86.3	20.5	2.71	9.7	46.6	23.7	0.0	32.3	21.4	8.7	3.98	2.47
86.7	18.9	2.71	10.2	58.3	24.8	0.0	36.2	22.3	11.9	4.06	2.54
87.0	23.9	2.73	17.1	60.4	23.6	0.0	10.3	19.6	10.2	4.13	2.60
87.3	29.9	2.73	27.6	68.5	20.1	0.0	1.9	14.5	8.2	4.19	2.65
87.6	46.2	2.76	32.8	80.1	14.9	0.0	0.4	10.0	7.1	4.25	2.65
87.9	51.8	2.75	55.4	77.3	6.1	0.0	0.0	2.8	1.5	4.26	2.65
88.2	41.6	2.75	27.4	78.3	16.0	0.0	0.7	11.6	8.2	4.31	2.65
88.5	32.8	2.74	16.4	75.1	19.6	0.0	4.9	16.4	11.5	4.37	2.68
88.8	26.8	2.72	18.5	65.3	21.0	0.0	5.2	17.1	9.8	4.43	2.73
89.1	28.0	2.73	19.9	74.3	19.7	0.0	3.4	15.8	10.7	4.49	2.78
89.4	38.5	2.74	27.4	77.8	17.5	0.0	1.0	12.7	8.8	4.55	2.80
89.7	47.6	2.76	40.9	85.4	14.8	0.0	0.4	8.8	6.3	4.59	2.80
90.0	57.7	2.76	72.0	81.2	5.2	0.0	0.0	1.5	0.5	4.61	2.80
90.3	69.5	2.78	83.6	83.6	2.4	0.0	0.0	0.4	0.0	4.62	2.80
90.6	65.1	2.78	64.7	84.8	6.1	0.0	0.0	2.2	1.2	4.65	2.80
90.9	59.7	2.75	24.0	82.7	18.3	0.0	1.0	13.9	10.7	4.68	2.80
91.2	25.5	2.72	15.1	73.2	22.1	0.0	9.9	18.8	12.9	4.74	2.86
91.5	17.1	2.70	7.6	44.9	28.0	0.0	114.3	25.9	10.5	4.83	2.93
91.8	12.8	2.69	7.8	40.4	27.7	0.0	101.0	25.5	9.0	4.91	3.01
92.1	8.3	2.69	8.1	40.9	29.7	0.0	128.5	27.3	9.7	5.00	3.09
92.4	4.6	2.68	9.1	39.5	31.9	0.0	140.5	29.0	9.7	5.10	3.18
92.7	1.3	2.67	10.4	40.6	33.1	0.0	127.4	29.7	10.1	5.20	3.27
93.1	0.3	2.67	10.7	40.4	33.4	0.0	126.8	29.8	9.9	5.30	3.36
93.4	0.9	2.67	10.3	35.8	34.5	0.0	158.1	31.0	8.8	5.40	3.45
93.7	4.2	2.68	10.0	38.3	30.5	0.0	96.8	27.5	8.7	5.50	3.54
94.0	9.4	2.69	8.6	40.3	28.7	0.0	98.4	26.2	9.1	5.59	3.62
94.3	12.8	2.69	8.1	42.1	27.2	0.0	86.6	25.0	9.3	5.67	3.70

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
4.6	12.3	2.69	8.8	42.4	27.4	0.0	75.2	24.9	9.2	5.76	3.78
4.9	13.5	2.70	9.3	41.6	27.4	0.0	68.5	24.8	8.9	5.84	3.85
5.2	12.1	2.69	10.7	42.1	28.4	0.0	60.1	25.3	8.9	5.93	3.93
5.5	21.0	2.72	19.0	48.0	23.7	0.0	8.5	19.2	6.9	6.00	4.00
5.8	28.7	2.72	31.0	66.1	21.2	0.0	2.1	14.6	7.5	6.07	4.04
6.1	42.0	2.75	39.9	83.0	15.5	0.0	0.5	9.3	6.7	6.12	4.04
6.4	40.3	2.75	28.0	73.8	17.4	0.0	1.0	12.5	8.0	6.17	4.04
6.7	22.1	2.72	11.1	46.6	26.5	0.0	41.5	23.6	9.4	6.24	4.08
7.0	13.8	2.70	10.7	47.2	29.5	0.0	72.3	26.4	10.8	6.33	4.16
7.3	19.8	2.71	10.5	49.7	27.7	0.0	56.2	24.8	10.9	6.42	4.24
7.6	16.7	2.70	9.5	45.3	28.1	0.0	72.9	25.4	10.1	6.50	4.31
7.9	13.0	2.69	18.1	57.6	28.1	0.0	20.1	23.0	11.1	6.59	4.38
8.2	18.6	2.71	22.3	74.4	26.2	0.0	9.8	20.4	13.7	6.67	4.45
8.5	20.9	2.72	26.4	63.7	24.2	0.0	4.8	17.8	9.0	6.74	4.50
8.8	5.2	2.68	22.8	62.8	31.9	0.0	22.4	24.6	12.7	6.83	4.57
9.2	4.3	2.68	27.6	68.1	32.5	0.0	16.8	23.6	13.2	6.93	4.65
9.5	18.4	2.71	23.9	62.7	27.4	0.0	10.4	20.9	10.7	7.02	4.71
9.8	22.8	2.72	16.5	50.1	25.4	0.0	15.5	21.2	8.5	7.10	4.77
0.1	17.8	2.70	13.1	43.3	28.8	0.0	43.4	25.1	8.7	7.18	4.85
0.4	13.8	2.70	12.3	45.1	28.8	0.0	49.4	25.3	9.5	7.27	4.93
0.7	17.1	2.70	13.7	45.9	27.2	0.0	30.5	23.5	8.8	7.36	5.00
1.0	16.1	2.70	13.4	46.9	26.8	0.0	29.8	23.2	9.0	7.44	5.07
1.3	13.8	2.70	22.5	62.3	26.0	0.0	9.3	20.2	10.4	7.52	5.13
1.6	18.8	2.70	32.6	71.0	24.2	0.0	3.7	16.3	9.3	7.59	5.19
1.9	28.0	2.73	43.4	70.6	19.7	0.0	1.5	11.2	5.4	7.66	5.22
2.2	34.7	2.74	46.4	69.7	17.4	0.0	0.8	9.3	4.1	7.71	5.24
2.5	34.7	2.74	36.2	60.5	17.3	0.0	0.8	11.0	4.2	7.76	5.24
2.8	20.7	2.71	26.7	55.1	24.5	0.0	5.0	17.9	7.0	7.83	5.29
3.1	17.6	2.70	26.5	60.2	25.7	0.0	6.4	18.9	8.7	7.91	5.35
3.4	17.6	2.70	25.3	62.2	25.6	0.0	7.9	19.6	9.9	7.99	5.41
3.7	11.8	2.69	22.8	51.3	27.6	0.0	11.8	21.3	7.9	8.07	5.47
4.0	9.5	2.69	23.3	50.5	29.7	0.0	15.6	22.8	8.1	8.16	5.54
4.3	12.6	2.69	25.9	57.1	27.7	0.0	9.2	20.5	8.6	8.24	5.60
4.6	12.2	2.69	31.6	72.5	26.6	0.0	5.7	18.2	10.9	8.33	5.66
4.9	8.0	2.68	37.9	82.3	25.5	0.0	4.7	15.8	11.3	8.40	5.71
5.2	15.5	2.70	45.2	80.2	24.4	0.0	3.9	13.4	8.5	8.48	5.75
5.6	24.5	2.72	57.6	75.7	19.8	0.0	1.5	8.4	3.6	8.54	5.76
5.9	20.5	2.72	59.2	73.9	22.3	0.0	2.6	9.1	3.3	8.60	5.76
6.2	10.7	2.67	55.9	73.2	27.4	0.0	6.6	12.1	4.7	8.68	5.78
6.5	12.5	2.68	62.7	76.0	26.3	0.0	5.5	9.8	3.5	8.77	5.78
6.8	16.8	2.68	67.7	84.2	24.2	0.0	3.7	7.8	4.0	8.84	5.76
7.1	8.6	2.67	66.6	82.9	27.3	0.0	6.5	9.1	4.5	8.92	5.78
7.4	7.2	2.68	75.1	90.7	26.2	0.0	5.4	6.5	4.1	9.00	5.78
7.7	2.0	2.67	74.3	90.7	27.8	0.0	7.0	7.1	4.6	9.09	5.78

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
08.0	1.8	2.66	77.0	91.9	28.0	0.0	7.3	6.4	4.2	9.17	5.78
08.3	3.3	2.66	87.4	93.2	27.9	0.0	7.1	3.5	1.6	9.26	5.78
08.6	4.3	2.66	98.6	98.9	27.3	0.0	6.5	0.4	0.1	9.34	5.78
08.9	4.9	2.70	99.3	99.9	29.2	0.0	8.8	0.2	0.2	9.43	5.78
09.2	5.9	2.66	100.0	100.0	28.3	0.0	7.5	0.0	0.0	9.52	5.78
09.5	9.3	2.70	100.0	100.0	27.2	0.0	6.4	0.0	0.0	9.60	5.78
09.8	9.5	2.70	100.0	100.0	27.9	0.0	7.1	0.0	0.0	9.66	5.78
10.1	4.9	2.69	100.0	100.0	29.7	0.0	9.5	0.0	0.0	9.77	5.78
10.4	6.8	2.69	100.0	100.0	28.3	0.0	7.6	0.0	0.0	9.86	5.78
10.7	9.5	2.70	100.0	100.0	26.7	0.0	5.9	0.0	0.0	9.95	5.78
11.0	9.4	2.69	99.9	100.0	27.2	0.0	6.3	0.0	0.0	10.03	5.78
11.3	7.6	2.67	98.2	98.2	26.8	0.0	6.0	0.5	0.0	10.11	5.78
11.6	4.7	2.66	97.9	97.9	27.3	0.0	6.5	0.6	0.0	10.19	5.78
12.0	5.5	2.66	99.4	99.8	28.5	0.0	7.8	0.2	0.1	10.28	5.78
12.3	9.1	2.70	99.6	100.0	29.1	0.0	8.6	0.1	0.1	10.37	5.78
12.6	8.3	2.70	100.0	100.0	29.1	0.0	8.6	0.0	0.0	10.46	5.78
12.9	9.1	2.70	100.0	100.0	29.3	0.0	8.9	0.0	0.0	10.55	5.78
13.2	10.9	2.70	100.0	100.0	28.3	0.0	7.6	0.0	0.0	10.63	5.78
13.5	17.2	2.71	100.0	100.0	23.2	0.0	3.1	0.0	0.0	10.71	5.78
13.8	21.2	2.72	100.0	100.0	20.5	0.0	1.8	0.0	0.0	10.77	5.78
14.1	21.7	2.72	100.0	100.0	21.0	0.0	2.0	0.0	0.0	10.84	5.78
14.4	14.3	2.71	100.0	100.0	26.1	0.0	5.3	0.0	0.0	10.91	5.78
14.7	10.8	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	10.99	5.78
15.0	9.5	2.70	100.0	100.0	27.0	0.0	6.1	0.0	0.0	11.07	5.78
15.3	11.8	2.69	100.0	100.0	26.5	0.0	5.7	0.0	0.0	11.16	5.78
15.6	24.2	2.72	100.0	100.0	20.2	0.0	1.7	0.0	0.0	11.22	5.78
15.9	28.4	2.73	100.0	100.0	18.8	0.0	0.7	0.0	0.0	11.28	5.78
16.2	17.2	2.71	100.0	100.0	22.3	0.0	2.6	0.0	0.0	11.34	5.78
16.5	8.9	2.69	100.0	100.0	28.0	0.0	7.3	0.0	0.0	11.42	5.78
16.8	4.9	2.68	100.0	100.0	29.0	0.0	8.5	0.0	0.0	11.51	5.78
17.1	6.4	2.69	100.0	100.0	28.5	0.0	7.9	0.0	0.0	11.60	5.78
17.4	5.1	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	11.68	5.78
17.7	6.1	2.68	100.0	100.0	26.7	0.0	5.8	0.0	0.0	11.77	5.78
18.0	4.5	2.69	100.0	100.0	28.6	0.0	7.9	0.0	0.0	11.85	5.78
18.4	5.5	2.69	100.0	100.0	29.0	0.0	8.4	0.0	0.0	11.94	5.78
18.7	6.1	2.69	100.0	100.0	28.6	0.0	8.0	0.0	0.0	12.03	5.78
19.0	8.4	2.70	100.0	100.0	27.7	0.0	6.9	0.0	0.0	12.11	5.78
19.3	8.6	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	12.19	5.78
19.6	10.1	2.70	100.0	100.0	25.6	0.0	4.9	0.0	0.0	12.27	5.78
19.9	7.0	2.70	100.0	100.0	28.1	0.0	7.4	0.0	0.0	12.36	5.78
20.2	8.4	2.69	100.0	100.0	27.4	0.0	6.6	0.0	0.0	12.44	5.78
20.5	7.8	2.70	100.0	100.0	27.1	0.0	6.2	0.0	0.0	12.52	5.78
20.8	8.4	2.70	100.0	100.0	25.6	0.0	4.8	0.0	0.0	12.60	5.78
21.1	11.1	2.69	100.0	100.0	22.3	0.0	2.6	0.0	0.0	12.67	5.78

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
21.4	7.4	2.67	100.0	100.0	12.5	0.0	0.2	0.0	0.0	12.72	5.78
21.7	1.4	2.67	100.0	100.0	1.3	0.0	0.0	0.0	0.0	12.74	5.78
22.0	0.6	2.66	100.0	100.0	5.2	0.0	0.0	0.0	0.0	12.75	5.78
22.3	4.2	2.66	100.0	100.0	16.3	0.0	0.6	0.0	0.0	12.79	5.78
22.6	9.5	2.70	100.0	100.0	23.3	0.0	3.2	0.0	0.0	12.86	5.78
22.9	10.0	2.70	100.0	100.0	25.3	0.0	4.6	0.0	0.0	12.93	5.78
23.2	11.3	2.70	100.0	100.0	24.8	0.0	4.2	0.0	0.0	13.01	5.78
23.5	11.2	2.70	100.0	100.0	24.8	0.0	4.2	0.0	0.0	13.08	5.78
23.8	9.8	2.69	100.0	100.0	26.2	0.0	5.4	0.0	0.0	13.16	5.78
24.1	9.3	2.70	100.0	100.0	26.7	0.0	5.9	0.0	0.0	13.24	5.78
24.4	10.1	2.70	100.0	100.0	26.6	0.0	5.7	0.0	0.0	13.32	5.78
24.8	9.6	2.69	100.0	100.0	27.0	0.0	6.2	0.0	0.0	13.41	5.78
25.1	7.5	2.69	100.0	100.0	28.1	0.0	7.3	0.0	0.0	13.49	5.78
25.4	6.7	2.69	100.0	100.0	28.3	0.0	7.6	0.0	0.0	13.58	5.78
25.7	4.8	2.68	100.0	100.0	27.9	0.0	7.1	0.0	0.0	13.66	5.78
26.0	5.3	2.68	100.0	100.0	27.5	0.0	6.6	0.0	0.0	13.75	5.78
26.3	7.3	2.70	100.0	100.0	26.0	0.0	5.2	0.0	0.0	13.83	5.78
26.6	6.2	2.70	100.0	100.0	26.7	0.0	5.8	0.0	0.0	13.91	5.78
26.9	1.1	2.67	100.0	100.0	28.7	0.0	8.0	0.0	0.0	13.99	5.78
27.2	0.6	2.68	100.0	100.0	29.1	0.0	8.6	0.0	0.0	14.06	5.78
27.5	4.1	2.69	100.0	100.0	28.3	0.0	7.5	0.0	0.0	14.17	5.78
27.8	6.5	2.69	100.0	100.0	26.9	0.0	6.0	0.0	0.0	14.25	5.78
28.1	7.3	2.70	100.0	100.0	26.2	0.0	5.3	0.0	0.0	14.33	5.78
28.4	12.5	2.69	100.0	100.0	22.2	0.0	2.6	0.0	0.0	14.41	5.78
28.7	15.1	2.69	100.0	100.0	20.6	0.0	1.8	0.0	0.0	14.47	5.78
29.0	15.9	2.69	100.0	100.0	21.0	0.0	2.0	0.0	0.0	14.53	5.78
29.3	12.5	2.70	100.0	100.0	23.2	0.0	3.1	0.0	0.0	14.60	5.78
29.6	10.8	2.69	100.0	100.0	24.3	0.0	3.8	0.0	0.0	14.67	5.78
29.9	4.9	2.69	100.0	100.0	28.7	0.0	8.1	0.0	0.0	14.76	5.78
30.2	4.3	2.68	100.0	100.0	28.6	0.0	7.9	0.0	0.0	14.85	5.78
30.5	5.1	2.69	100.0	100.0	27.3	0.0	6.5	0.0	0.0	14.93	5.78
30.8	6.8	2.70	100.0	100.0	26.8	0.0	6.0	0.0	0.0	15.02	5.78
31.2	3.3	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	15.10	5.78
31.5	3.5	2.68	100.0	100.0	27.8	0.0	7.0	0.0	0.0	15.18	5.78
31.8	9.4	2.69	100.0	100.0	25.0	0.0	4.3	0.0	0.0	15.26	5.78
32.1	9.1	2.70	100.0	100.0	25.4	0.0	4.6	0.0	0.0	15.34	5.78
32.4	5.9	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	15.42	5.78
32.7	1.3	2.67	100.0	100.0	29.7	0.0	9.4	0.0	0.0	15.51	5.78
33.0	10.3	2.68	100.0	100.0	29.7	0.0	9.4	0.0	0.0	15.60	5.78
33.3	00.0	2.68	100.0	100.0	29.0	0.0	8.5	0.0	0.0	15.69	5.78
33.6	00.0	2.67	100.0	100.0	25.0	0.0	4.4	0.0	0.0	15.77	5.78
33.9	00.0	2.68	100.0	100.0	24.9	0.0	4.3	0.0	0.0	15.85	5.78
34.2	00.0	2.68	100.0	100.0	28.0	0.0	7.2	0.0	0.0	15.93	5.78
34.5	0.7	2.69	99.8	99.9	28.8	0.0	8.2	0.0	0.0	16.02	5.78

PIH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
4.8	3.5	2.69	100.0	100.0	27.9	0.0	7.1	0.0	0.0	16.11	5.78
5.1	6.0	2.70	100.0	100.0	26.2	0.0	5.3	0.0	0.0	16.19	5.78
5.4	7.0	2.69	100.0	100.0	26.6	0.0	5.8	0.0	0.0	16.27	5.78
5.7	4.9	2.66	100.0	100.0	23.9	0.0	3.5	0.0	0.0	16.34	5.78
6.0	1.1	2.66	100.0	100.0	14.2	0.0	0.3	0.0	0.0	16.39	5.78
6.3	0.0	2.67	100.0	100.0	19.9	0.0	1.5	0.0	0.0	16.44	5.78
6.6	0.0	2.69	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.52	5.78
6.9	1.7	2.68	99.8	100.0	28.6	0.0	7.9	0.1	0.1	16.61	5.78
7.2	3.9	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	16.69	5.78
7.6	6.2	2.68	100.0	100.0	26.0	0.0	5.2	0.0	0.0	16.77	5.78
7.9	6.3	2.69	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.85	5.78
8.2	7.3	2.69	100.0	100.0	26.8	0.0	5.9	0.0	0.0	16.93	5.78
8.5	11.8	2.70	100.0	100.0	24.0	0.0	3.6	0.0	0.0	17.01	5.78
8.8	13.6	2.71	100.0	100.0	22.5	0.0	2.7	0.0	0.0	17.08	5.78
9.1	9.0	2.69	100.0	100.0	26.3	0.0	5.5	0.0	0.0	17.16	5.78
9.4	5.7	2.69	100.0	100.0	27.4	0.0	6.5	0.0	0.0	17.24	5.78
9.7	9.1	2.69	100.0	100.0	25.5	0.0	4.6	0.0	0.0	17.32	5.78
10.0	11.4	2.70	100.0	100.0	23.1	0.0	3.0	0.0	0.0	17.39	5.78
10.3	8.9	2.70	100.0	100.0	25.0	0.0	4.4	0.0	0.0	17.47	5.78
10.6	12.0	2.70	100.0	100.0	21.9	0.0	2.4	0.0	0.0	17.53	5.78
10.9	12.4	2.70	100.0	100.0	21.8	0.0	2.3	0.0	0.0	17.60	5.78
11.2	8.7	2.69	100.0	100.0	25.2	0.0	4.5	0.0	0.0	17.67	5.78
11.5	7.4	2.69	100.0	100.0	26.5	0.0	5.6	0.0	0.0	17.75	5.78
11.8	8.7	2.70	100.0	100.0	25.2	0.0	4.5	0.0	0.0	17.83	5.78
12.1	5.5	2.69	100.0	100.0	27.7	0.0	6.9	0.0	0.0	17.92	5.78
12.4	5.3	2.69	100.0	100.0	27.8	0.0	7.0	0.0	0.0	18.00	5.78
12.7	10.3	2.69	100.0	100.0	23.8	0.0	3.5	0.0	0.0	18.08	5.78
13.0	12.4	2.70	100.0	100.0	21.6	0.0	2.3	0.0	0.0	18.14	5.78
13.3	12.8	2.70	100.0	100.0	22.0	0.0	2.5	0.0	0.0	18.21	5.78
13.7	10.5	2.69	100.0	100.0	24.4	0.0	3.9	0.0	0.0	18.28	5.78
14.0	9.9	2.69	100.0	100.0	23.5	0.0	3.3	0.0	0.0	18.36	5.78
14.3	8.6	2.70	100.0	100.0	25.1	0.0	4.4	0.0	0.0	18.43	5.78
14.6	7.9	2.69	100.0	100.0	27.0	0.0	6.1	0.0	0.0	18.51	5.78
14.9	10.0	2.70	100.0	100.0	24.3	0.0	3.9	0.0	0.0	18.59	5.78
15.2	10.1	2.70	100.0	100.0	23.8	0.0	3.5	0.0	0.0	18.66	5.78
15.5	9.1	2.69	100.0	100.0	24.6	0.0	4.1	0.0	0.0	18.73	5.78
15.8	11.1	2.70	100.0	100.0	22.6	0.0	2.8	0.0	0.0	18.80	5.78
16.1	9.9	2.71	100.0	100.0	23.6	0.0	3.4	0.0	0.0	18.88	5.78
16.4	8.9	2.69	100.0	100.0	24.6	0.0	4.0	0.0	0.0	18.95	5.78
16.7	5.3	2.69	99.9	99.9	28.5	0.0	7.9	0.0	0.0	19.03	5.78
17.0	5.3	2.68	99.8	99.8	29.0	0.0	8.5	0.1	0.0	19.12	5.78
17.3	6.4	2.69	100.0	100.0	26.1	0.0	7.4	0.0	0.0	19.21	5.78
17.6	8.1	2.70	100.0	100.0	26.3	0.0	5.4	0.0	0.0	19.29	5.78
17.9	9.5	2.69	100.0	100.0	24.2	0.0	3.7	0.0	0.0	19.36	5.78

:PTH :TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
18.2	9.4	2.70	100.0	100.0	23.9	0.0	3.6	0.0	0.0	19.44	5.78
18.5	9.0	2.70	100.0	100.0	24.0	0.0	3.8	0.0	0.0	19.51	5.78
18.8	8.1	2.70	100.0	100.0	25.1	0.0	4.4	0.0	0.0	19.59	5.78
19.1	6.7	2.69	100.0	100.0	26.2	0.0	5.4	0.0	0.0	19.67	5.78
19.4	7.7	2.69	100.0	100.0	25.2	0.0	4.5	0.0	0.0	19.74	5.78
19.7	8.4	2.69	100.0	100.0	24.9	0.0	4.3	0.0	0.0	19.82	5.78
20.1	10.5	2.70	100.0	100.0	23.4	0.0	3.2	0.0	0.0	19.89	5.78
20.4	8.7	2.70	100.0	100.0	26.1	0.0	5.3	0.0	0.0	19.97	5.78
20.7	8.9	2.69	100.0	100.0	26.1	0.0	5.2	0.0	0.0	20.05	5.78
21.0	10.5	2.69	100.0	100.0	24.5	0.0	3.9	0.0	0.0	20.12	5.78
21.3	11.1	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	20.20	5.78
21.6	15.8	2.71	100.0	100.0	21.4	0.0	2.2	0.0	0.0	20.27	5.78
21.9	10.8	2.70	100.0	100.0	24.6	0.0	4.0	0.0	0.0	20.34	5.78
22.2	7.1	2.69	100.0	100.0	26.7	0.0	5.8	0.0	0.0	20.42	5.78
22.5	7.7	2.69	100.0	100.0	26.9	0.0	6.0	0.0	0.0	20.50	5.78
22.8	7.1	2.69	100.0	100.0	26.6	0.0	5.7	0.0	0.0	20.58	5.78
23.1	5.2	2.69	100.0	100.0	26.5	0.0	5.7	0.0	0.0	20.67	5.78
23.4	5.9	2.69	100.0	100.0	26.9	0.0	6.1	0.0	0.0	20.75	5.78
23.7	6.0	2.70	100.0	100.0	27.1	0.0	6.3	0.0	0.0	20.83	5.78
24.0	8.1	2.69	100.0	100.0	26.9	0.0	6.0	0.0	0.0	20.91	5.78
24.3	5.1	2.68	100.0	100.0	28.2	0.0	7.5	0.0	0.0	20.99	5.78
24.6	2.5	2.69	100.0	100.0	29.9	0.0	9.8	0.0	0.0	21.08	5.78
24.9	4.4	2.69	100.0	100.0	28.8	0.0	8.2	0.0	0.0	21.17	5.78
25.2	6.8	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	21.26	5.78
25.5	6.9	2.69	100.0	100.0	27.5	0.0	6.7	0.0	0.0	21.34	5.78
25.8	8.4	2.70	100.0	100.0	27.1	0.0	6.2	0.0	0.0	21.42	5.78
26.1	8.1	2.69	100.0	100.0	27.5	0.0	6.7	0.0	0.0	21.51	5.78
26.5	9.9	2.70	100.0	100.0	25.9	0.0	5.5	0.0	0.0	21.58	5.78
26.8	10.5	2.70	100.0	100.0	25.4	0.0	5.2	0.0	0.0	21.66	5.78
27.1	14.6	2.71	100.0	100.0	22.2	0.0	2.6	0.0	0.0	21.72	5.78
27.4	20.1	2.69	100.0	100.0	20.0	0.0	1.6	0.0	0.0	21.79	5.78
27.7	28.5	2.71	100.0	100.0	17.1	0.0	0.8	0.0	0.0	21.84	5.78
28.0	30.3	2.72	100.0	100.0	16.5	0.0	0.7	0.0	0.0	21.89	5.78

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N

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* SCHLUMBERGER *
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COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	04-JAN-1979
REFERENCE	613,2077

App. 5

Processing no.4

"Cut off" : Vcl $\geq$ 40%

$\phi \leq$ 13%

$S_w \geq$ 55%

$\Delta t \leq$ 77 s/ft

INTERVAL	RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
				RESISTIVITY	DELTA-T	NEUTRON INDEX	DENSITY	
2058.0 TO 2005.6	0.066	0.10	0.82	1.50	130.0	40.0	2.34	130.
2005.6 TO 1967.6	0.066	0.10	0.14	1.50	130.0	40.0	2.34	130.

POROSITY CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTACT
SW CUT-OFFS	NONE	NONE	55.0 %
DELTA-T CUT-OFFS	NONE	77.0	77.0
CLAY CUT-OFFS	NONE	40.0 %	40.0 %

1967.6 TO 2058.0 METER

	TOTAL	NET	NET PAY	
	*****	***	*******	
THICKNESS	90.37	80.16	29.41	METER
AVERAGE POROSITY	24.22	25.80	25.61	%
VOID VOLUME	21.89	20.68	7.53	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	4.59			MILLIDARCY
SUM OF PERMEABILITY	1471.11	1467.89	1189.37	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	30.87	30.29	79.54	%
HYDROCARBON VOID VOLUME	6.77	6.30	6.07	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	3.57	3.43	3.31	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		2.07		HYDROCARBON-METER
RESIDUAL DIFFERENCE		1.36		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
U = DELTA-T SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 40.0 %

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
967.8	30.5	2.71	96.7	99.7	9.9	0.0	0.1	0.3	0.3	0.03	0.00
968.1	41.7	2.73	46.0	75.6	14.9	0.0	0.4	8.1	4.4	0.07	0.01
968.4	48.5	2.75	45.8	79.6	10.1	0.0	0.1	5.5	3.4	0.10	0.01
968.7	51.1	2.76	38.1	82.4	12.6	0.0	0.2	7.8	5.6	0.14	0.01
969.0	34.5	2.72	26.8	72.1	15.8	0.0	0.7	11.6	7.2	0.18	0.03
969.3	20.7	2.71	20.0	74.6	22.9	0.0	6.6	18.3	12.5	0.24	0.07
969.6	17.3	2.70	12.0	52.7	27.4	0.0	40.7	24.1	11.1	0.32	0.14
969.9	7.1	2.67	6.5	36.7	30.9	0.0	237.6	28.9	9.3	0.42	0.23
970.2	7.2	2.68	11.2	44.2	28.0	0.0	52.6	24.9	9.3	0.51	0.31
970.5	12.6	2.69	13.3	60.7	26.3	0.0	27.8	22.8	12.5	0.59	0.38
970.8	11.8	2.69	11.3	52.5	28.3	0.0	53.3	25.1	11.7	0.67	0.46
971.1	12.0	2.69	8.7	43.9	27.7	0.0	82.8	25.3	9.8	0.76	0.54
971.4	8.8	2.69	6.8	42.3	29.2	0.0	169.7	27.2	10.4	0.85	0.62
971.7	6.2	2.68	7.0	42.2	29.8	0.0	177.9	27.7	10.5	0.94	0.70
972.0	6.0	2.68	8.3	44.5	28.5	0.0	104.1	26.2	10.3	1.03	0.79
972.3	6.4	2.68	12.6	48.6	27.2	0.0	36.2	23.8	9.8	1.12	0.86
972.6	3.6	2.68	14.0	56.6	27.3	0.0	29.8	23.5	11.7	1.20	0.94
972.9	1.8	2.67	12.7	52.5	30.1	0.0	56.3	26.3	12.0	1.29	1.02
973.2	7.0	2.68	9.7	43.9	28.1	0.0	70.8	25.4	9.6	1.38	1.09
973.5	13.0	2.69	8.0	45.8	25.0	0.0	61.8	23.0	9.5	1.46	1.17
973.9	16.3	2.70	12.4	60.1	22.0	0.0	14.5	19.3	10.5	1.52	1.23
974.2	23.8	2.72	31.3	79.5	19.0	0.0	1.3	13.0	9.2	1.58	1.27
974.5	36.0	2.74	42.9	84.2	17.1	0.0	0.8	9.8	7.1	1.64	1.30
974.8	49.7	2.76	51.6	86.9	13.7	0.0	0.3	6.6	4.8	1.69	1.33
975.1	52.7	2.75	69.6	96.4	8.9	0.0	0.0	2.7	2.4	1.72	1.35
975.4	38.3	2.72	47.2	92.8	13.5	0.0	0.3	7.1	6.1	1.75	1.31
975.7	25.9	2.73	25.6	68.8	20.0	0.0	2.2	14.9	8.7	1.81	1.35
976.0	22.5	2.72	17.3	46.2	25.6	0.0	14.4	21.2	7.4	1.89	1.42
976.3	19.4	2.71	26.2	54.3	27.1	0.0	8.2	20.3	7.6	1.97	1.48
976.6	19.3	2.71	31.5	70.7	25.3	0.0	4.6	17.3	9.9	2.05	1.53
976.9	32.2	2.73	49.3	86.2	17.6	0.0	0.9	8.9	6.5	2.11	1.57
977.2	46.2	2.76	60.3	89.2	13.7	0.0	0.3	5.4	4.0	2.15	1.57
977.5	40.9	2.73	57.5	89.2	15.1	0.0	0.4	6.4	4.8	2.19	1.57
977.8	24.9	2.70	28.7	67.4	22.5	0.0	3.0	16.1	8.7	2.26	1.61
978.1	21.7	2.71	26.9	57.4	24.9	0.0	5.3	18.2	7.6	2.33	1.66
978.4	20.5	2.71	37.7	82.1	22.7	0.0	2.8	14.1	10.1	2.40	1.71
978.7	29.5	2.73	47.4	85.7	18.1	0.0	1.0	9.5	6.9	2.46	1.74
979.0	37.1	2.75	46.1	85.3	16.9	0.0	0.7	9.1	6.6	2.51	1.77
979.3	20.7	2.71	29.7	83.7	22.2	0.0	2.6	15.6	12.0	2.58	1.81
979.6	4.7	2.68	20.5	66.1	29.0	0.0	18.0	23.0	13.2	2.66	1.88
979.9	17.7	2.70	32.5	64.5	23.9	0.0	3.6	16.2	7.7	2.74	1.94
980.3	43.2	2.75	47.9	78.3	15.7	0.0	0.5	8.2	4.8	2.80	1.96
980.6	48.8	2.76	54.7	87.8	13.3	0.0	0.3	6.0	4.4	2.84	1.98
980.9	47.7	2.76	56.9	88.6	13.9	0.0	0.3	6.0	4.4	2.88	1.96

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
981.2	40.5	2.75	56.4	89.5	15.5	0.0	0.5	6.8	5.1	2.93	1.96
981.5	48.7	2.76	65.8	90.5	12.9	0.0	0.2	4.4	3.2	2.97	1.96
981.8	43.6	2.75	57.6	94.6	16.5	0.0	0.7	7.0	6.1	3.01	1.96
982.1	43.9	2.76	55.9	88.6	16.2	0.0	0.6	7.2	5.3	3.06	1.96
982.4	44.9	2.76	52.0	87.4	15.9	0.0	0.6	7.7	5.7	3.11	1.96
982.7	34.2	2.72	21.6	65.8	20.1	0.0	3.1	15.7	8.9	3.17	1.98
983.0	13.3	2.70	9.2	43.1	31.4	0.0	130.4	28.6	10.7	3.25	2.06
983.3	11.1	2.69	10.3	46.0	29.4	0.0	77.5	26.4	10.5	3.35	2.14
983.6	15.5	2.70	10.8	49.1	28.4	0.0	60.0	25.4	10.9	3.44	2.22
983.9	9.9	2.69	10.5	42.6	32.7	0.0	123.7	29.4	10.6	3.53	2.30
984.2	10.3	2.69	15.4	43.5	29.7	0.0	35.7	25.1	8.3	3.63	2.39
984.5	18.4	2.71	25.9	48.8	26.7	0.0	7.8	19.8	6.1	3.71	2.45
984.8	20.6	2.71	37.8	70.7	23.7	0.0	3.4	14.7	7.8	3.79	2.50
985.1	38.4	2.74	52.3	87.2	16.3	0.0	0.6	7.8	5.7	3.85	2.53
985.4	61.2	2.77	96.0	98.0	4.5	0.0	0.0	0.1	0.0	3.86	2.53
985.7	57.2	2.76	71.5	91.5	8.2	0.0	0.0	2.3	1.6	3.88	2.53
986.0	43.3	2.76	35.7	85.8	15.1	0.0	0.4	9.7	7.6	3.92	2.53
986.3	20.5	2.71	9.7	46.6	23.7	0.0	32.3	21.4	8.7	3.98	2.54
986.7	18.9	2.71	10.2	58.3	24.8	0.0	36.2	22.3	11.9	4.06	2.60
987.0	23.9	2.73	17.1	60.4	23.6	0.0	10.3	19.6	10.2	4.13	2.72
987.3	29.9	2.73	27.6	68.5	20.1	0.0	1.9	14.5	8.2	4.19	2.77
987.6	46.2	2.76	32.8	80.1	14.9	0.0	0.4	10.0	7.1	4.25	2.79
987.9	51.8	2.75	53.4	77.3	6.1	0.0	0.0	2.8	1.5	4.28	2.79
988.2	41.6	2.75	27.4	78.3	16.0	0.0	0.7	11.6	8.2	4.31	2.79
988.5	32.8	2.74	16.4	75.1	19.6	0.0	4.9	16.4	11.5	4.37	2.84
988.8	26.8	2.72	18.5	65.3	21.0	0.0	5.2	17.1	9.8	4.43	2.89
989.1	28.0	2.73	19.9	74.3	19.7	0.0	3.4	15.8	10.7	4.49	2.94
989.4	38.5	2.74	27.4	77.8	17.5	0.0	1.0	12.7	8.8	4.55	2.98
989.7	47.5	2.76	40.9	83.4	14.8	0.0	0.4	8.8	6.5	4.59	2.98
990.0	57.7	2.76	72.0	81.2	5.2	0.0	0.0	1.5	0.5	4.61	2.98
990.3	69.5	2.78	83.6	83.6	2.4	0.0	0.0	0.4	0.0	4.62	2.98
990.6	65.1	2.78	64.7	84.8	6.1	0.0	0.0	2.2	1.2	4.63	2.98
990.9	39.7	2.75	24.0	82.7	18.3	0.0	1.6	13.9	10.7	4.68	3.00
991.2	25.5	2.72	15.1	73.2	22.1	0.0	9.9	18.8	12.9	4.74	3.06
991.5	17.1	2.70	7.6	44.9	28.0	0.0	114.3	25.9	10.5	4.83	3.13
991.8	12.8	2.69	7.8	40.4	27.7	0.0	101.0	25.5	9.0	4.91	3.21
992.1	8.3	2.69	8.1	40.9	29.7	0.0	128.5	27.3	9.7	5.00	3.29
992.4	4.6	2.68	9.1	39.5	31.9	0.0	140.5	29.0	9.7	5.10	3.38
992.7	1.3	2.67	10.4	40.8	33.1	0.0	127.4	29.7	10.1	5.20	3.47
993.1	0.3	2.67	10.7	40.4	33.4	0.0	126.8	29.8	9.9	5.30	3.56
993.4	0.9	2.67	10.5	35.8	34.5	0.0	158.1	31.0	8.8	5.40	3.66
993.7	4.2	2.68	10.0	38.3	30.5	0.0	96.8	27.5	8.7	5.50	3.74
994.0	9.4	2.69	8.6	40.3	28.7	0.0	98.4	26.2	9.1	5.59	3.82
994.3	12.8	2.69	8.1	42.1	27.2	0.0	86.6	25.0	9.3	5.67	3.90

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
994.6	12.3	2.69	8.8	42.4	27.4	0.0	75.2	24.9	9.2	5.76	3.96
994.9	13.5	2.70	9.3	41.6	27.4	0.0	68.5	24.8	8.9	5.84	4.05
995.2	12.1	2.69	10.7	42.1	28.4	0.0	60.1	25.3	8.9	5.93	4.13
995.5	21.0	2.72	19.0	48.0	23.7	0.0	8.5	19.2	6.9	6.00	4.20
995.8	28.7	2.72	31.0	66.1	21.2	0.0	2.1	14.6	7.5	6.07	4.25
996.1	42.0	2.75	39.9	83.0	15.5	0.0	0.5	9.3	6.7	6.12	4.28
996.4	40.3	2.75	28.0	73.8	17.4	0.0	1.0	12.5	8.0	6.17	4.32
996.7	22.1	2.72	11.1	46.6	26.5	0.0	41.5	23.6	9.4	6.24	4.38
997.0	13.8	2.70	10.7	47.2	29.5	0.0	72.3	26.4	10.8	6.33	4.46
997.3	19.8	2.71	10.5	49.7	27.7	0.0	56.2	24.8	10.9	6.42	4.52
997.6	16.7	2.70	9.5	45.3	28.1	0.0	72.9	25.4	10.1	6.50	4.58
997.9	13.0	2.69	18.1	57.6	28.1	0.0	20.1	23.0	11.1	6.59	4.63
998.2	18.6	2.71	22.3	74.4	26.2	0.0	9.8	20.4	13.7	6.67	4.69
998.5	20.9	2.72	26.4	63.7	24.2	0.0	4.8	17.8	9.0	6.74	4.75
998.8	5.2	2.68	22.8	62.8	31.9	0.0	22.4	24.6	12.7	6.83	4.82
999.2	4.3	2.68	27.6	68.1	32.5	0.0	16.8	23.6	13.2	6.93	4.89
999.5	18.4	2.71	23.9	62.7	27.4	0.0	10.4	20.9	10.7	7.02	4.96
999.8	22.8	2.72	16.5	50.1	25.4	0.0	15.3	21.2	8.5	7.10	5.02
000.1	17.8	2.70	13.1	43.3	28.8	0.0	43.4	25.1	8.7	7.18	5.09
000.4	13.8	2.70	12.3	45.1	28.8	0.0	49.4	25.3	9.5	7.27	5.17
000.7	17.1	2.70	13.7	45.9	27.2	0.0	30.5	23.5	8.8	7.36	5.24
001.0	16.1	2.70	13.4	46.9	26.8	0.0	29.8	23.2	9.0	7.44	5.31
001.3	13.8	2.70	22.5	62.3	26.0	0.0	9.3	20.2	10.4	7.52	5.38
001.6	18.8	2.70	32.6	71.0	24.2	0.0	3.7	16.3	9.3	7.59	5.43
001.9	28.0	2.73	43.4	70.6	19.7	0.0	1.5	11.2	5.4	7.66	5.47
002.2	34.7	2.74	46.4	69.7	17.4	0.0	0.8	9.3	4.1	7.71	5.50
002.5	34.7	2.74	36.2	60.5	17.3	0.0	0.8	11.0	4.2	7.76	5.53
002.8	20.7	2.71	20.7	55.1	24.5	0.0	5.0	17.9	7.0	7.83	5.58
003.1	17.6	2.70	26.5	60.2	25.7	0.0	6.4	18.9	8.7	7.91	5.64
003.4	17.6	2.70	23.3	62.2	25.6	0.0	7.9	19.6	9.9	7.99	5.70
003.7	11.8	2.69	22.8	51.3	27.6	0.0	11.8	21.3	7.9	8.07	5.76
004.0	9.5	2.69	23.3	50.5	29.7	0.0	15.6	22.8	8.1	8.16	5.82
004.3	12.6	2.69	25.9	57.1	27.7	0.0	9.2	20.5	8.6	8.24	5.88
004.6	12.2	2.69	31.6	72.5	26.6	0.0	5.7	18.2	10.9	8.33	5.95
004.9	8.0	2.68	37.9	82.3	25.5	0.0	4.7	15.8	11.3	8.40	6.00
005.2	15.5	2.70	45.2	80.2	24.4	0.0	3.9	13.4	8.5	8.48	6.05
005.6	24.5	2.72	57.6	75.7	19.8	0.0	1.5	8.4	3.6	8.54	6.09
005.9	20.5	2.72	59.2	73.9	22.3	0.0	2.6	9.1	3.3	8.60	6.13
006.2	10.7	2.67	55.9	73.2	27.4	0.0	6.6	12.1	4.7	8.68	6.19
006.5	12.5	2.68	62.7	76.0	26.3	0.0	5.5	9.8	3.5	8.77	6.25
006.8	16.8	2.68	67.7	84.2	24.2	0.0	3.7	7.8	4.0	8.84	6.30
007.1	8.6	2.67	66.6	82.9	27.3	0.0	6.5	9.1	4.5	8.92	6.36
007.4	7.2	2.68	75.1	90.7	26.2	0.0	5.4	6.5	4.1	9.00	6.41
007.7	2.0	2.67	74.3	90.7	27.8	0.0	7.0	7.1	4.6	9.09	6.47

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
008.0	1.8	2.66	77.0	91.9	28.0	0.0	7.3	6.4	4.2	9.17	6.07
008.3	3.3	2.66	87.4	93.2	27.9	0.0	7.1	3.5	1.6	9.26	6.07
008.6	4.3	2.66	98.6	98.9	27.3	0.0	6.5	0.4	0.1	9.34	6.07
008.9	4.9	2.70	99.3	99.9	29.2	0.0	8.8	0.2	0.2	9.43	6.07
009.2	5.9	2.68	100.0	100.0	28.3	0.0	7.5	0.0	0.0	9.52	6.07
009.5	9.3	2.70	100.0	100.0	27.6	0.0	6.4	0.0	0.0	9.60	6.07
009.8	9.5	2.70	100.0	100.0	27.9	0.0	7.1	0.0	0.0	9.68	6.07
010.1	4.9	2.69	100.0	100.0	29.7	0.0	9.5	0.0	0.0	9.77	6.07
010.4	6.8	2.69	100.0	100.0	28.3	0.0	7.6	0.0	0.0	9.86	6.07
010.7	9.5	2.70	100.0	100.0	26.7	0.0	5.9	0.0	0.0	9.95	6.07
011.0	9.4	2.69	99.9	100.0	27.2	0.0	6.3	0.0	0.0	10.03	6.07
011.3	7.6	2.67	98.2	98.2	26.8	0.0	6.0	0.5	0.0	10.11	6.07
011.6	4.7	2.66	97.9	97.9	27.3	0.0	6.5	0.6	0.0	10.19	6.07
012.0	5.5	2.66	99.4	99.6	28.5	0.0	7.8	0.2	0.1	10.28	6.07
012.3	9.1	2.70	99.6	100.0	29.1	0.0	8.6	0.1	0.1	10.37	6.07
012.6	8.3	2.70	100.0	100.0	29.1	0.0	8.6	0.0	0.0	10.46	6.07
012.9	9.1	2.70	100.0	100.0	29.3	0.0	8.9	0.0	0.0	10.55	6.07
013.2	10.9	2.70	100.0	100.0	28.3	0.0	7.6	0.0	0.0	10.63	6.07
013.5	17.2	2.71	100.0	100.0	25.2	0.0	5.1	0.0	0.0	10.71	6.07
013.8	21.2	2.72	100.0	100.0	23.5	0.0	4.0	0.0	0.0	10.77	6.07
014.1	21.7	2.72	100.0	100.0	24.0	0.0	4.4	0.0	0.0	10.84	6.07
014.4	14.3	2.71	100.0	100.0	26.1	0.0	5.3	0.0	0.0	10.91	6.07
014.7	10.8	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	10.99	6.07
015.0	9.5	2.70	100.0	100.0	27.0	0.0	6.1	0.0	0.0	11.07	6.07
015.3	11.8	2.69	100.0	100.0	26.5	0.0	5.7	0.0	0.0	11.16	6.07
015.6	24.2	2.72	100.0	100.0	24.2	0.0	3.7	0.0	0.0	11.22	6.07
015.9	28.4	2.73	100.0	100.0	22.8	0.0	3.0	0.0	0.0	11.28	6.07
016.2	17.2	2.71	100.0	100.0	25.3	0.0	4.6	0.0	0.0	11.34	6.07
016.5	8.9	2.69	100.0	100.0	28.0	0.0	7.3	0.0	0.0	11.42	6.07
016.8	4.9	2.68	100.0	100.0	28.5	0.0	7.9	0.0	0.0	11.51	6.07
017.1	6.4	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	11.60	6.07
017.4	5.1	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	11.68	6.07
017.7	6.1	2.68	100.0	100.0	26.7	0.0	5.9	0.0	0.0	11.77	6.07
018.0	4.5	2.69	100.0	100.0	28.6	0.0	7.9	0.0	0.0	11.85	6.07
018.4	5.5	2.69	100.0	100.0	29.0	0.0	8.4	0.0	0.0	11.94	6.07
018.7	6.1	2.69	100.0	100.0	28.6	0.0	8.0	0.0	0.0	12.03	6.07
019.0	8.4	2.70	100.0	100.0	27.7	0.0	6.9	0.0	0.0	12.11	6.07
019.3	8.6	2.69	100.0	100.0	27.5	0.0	6.9	0.0	0.0	12.19	6.07
019.6	10.1	2.70	100.0	100.0	25.6	0.0	4.9	0.0	0.0	12.27	6.07
019.9	7.0	2.70	100.0	100.0	28.1	0.0	7.4	0.0	0.0	12.36	6.07
020.2	8.4	2.69	100.0	100.0	27.4	0.0	6.6	0.0	0.0	12.44	6.07
020.5	7.8	2.70	100.0	100.0	27.1	0.0	6.2	0.0	0.0	12.52	6.07
020.8	8.4	2.70	100.0	100.0	25.6	0.0	4.8	0.0	0.0	12.60	6.07
021.1	11.1	2.69	100.0	100.0	22.3	0.0	2.6	0.0	0.0	12.67	6.07

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	INVADED ZONE	POROSITY TOTAL %	SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	HC-MT
21.4	7.4	2.67	100.0	100.0	12.5	0.0	0.2	0.0	0.0	12.72	6.07
21.7	1.4	2.67	100.0	100.0	1.3	0.0	0.0	0.0	0.0	12.74	6.07
22.0	0.6	2.66	100.0	100.0	5.2	0.0	0.0	0.0	0.0	12.75	6.07
22.3	4.2	2.66	100.0	100.0	16.3	0.0	0.6	0.0	0.0	12.79	6.07
22.6	9.5	2.70	100.0	100.0	23.3	0.0	3.2	0.0	0.0	12.86	6.07
22.9	10.0	2.70	100.0	100.0	25.5	0.0	4.6	0.0	0.0	12.93	6.07
23.2	11.3	2.70	100.0	100.0	24.8	0.0	4.2	0.0	0.0	13.01	6.07
23.5	11.2	2.70	100.0	100.0	24.8	0.0	4.2	0.0	0.0	13.08	6.07
23.8	9.8	2.69	100.0	100.0	26.2	0.0	5.4	0.0	0.0	13.16	6.07
24.1	9.3	2.70	100.0	100.0	26.7	0.0	5.9	0.0	0.0	13.24	6.07
24.4	10.1	2.70	100.0	100.0	26.6	0.0	5.7	0.0	0.0	13.32	6.07
24.8	9.6	2.69	100.0	100.0	27.0	0.0	6.2	0.0	0.0	13.41	6.07
25.1	7.5	2.69	100.0	100.0	28.1	0.0	7.3	0.0	0.0	13.49	6.07
25.4	6.7	2.69	100.0	100.0	28.3	0.0	7.6	0.0	0.0	13.58	6.07
25.7	4.8	2.68	100.0	100.0	27.9	0.0	7.1	0.0	0.0	13.66	6.07
26.0	5.3	2.68	100.0	100.0	27.5	0.0	6.6	0.0	0.0	13.75	6.07
26.3	7.3	2.70	100.0	100.0	26.0	0.0	5.2	0.0	0.0	13.83	6.07
26.6	6.2	2.70	100.0	100.0	26.7	0.0	5.8	0.0	0.0	13.91	6.07
26.9	1.1	2.67	100.0	100.0	28.7	0.0	8.0	0.0	0.0	13.99	6.07
27.2	0.6	2.68	100.0	100.0	29.1	0.0	8.6	0.0	0.0	14.08	6.07
27.5	4.1	2.69	100.0	100.0	28.3	0.0	7.5	0.0	0.0	14.17	6.07
27.8	6.5	2.69	100.0	100.0	26.9	0.0	6.0	0.0	0.0	14.25	6.07
28.1	7.3	2.70	100.0	100.0	26.2	0.0	5.3	0.0	0.0	14.33	6.07
28.4	12.5	2.69	100.0	100.0	22.2	0.0	2.6	0.0	0.0	14.41	6.07
28.7	15.1	2.69	100.0	100.0	20.6	0.0	1.8	0.0	0.0	14.47	6.07
29.0	15.9	2.69	100.0	100.0	21.0	0.0	2.0	0.0	0.0	14.53	6.07
29.3	12.5	2.70	100.0	100.0	23.2	0.0	3.1	0.0	0.0	14.60	6.07
29.6	10.8	2.69	100.0	100.0	24.3	0.0	3.8	0.0	0.0	14.67	6.07
29.9	4.9	2.69	100.0	100.0	28.7	0.0	8.1	0.0	0.0	14.76	6.07
30.2	4.3	2.68	100.0	100.0	28.6	0.0	7.9	0.0	0.0	14.85	6.07
30.5	5.1	2.69	100.0	100.0	27.3	0.0	6.5	0.0	0.0	14.93	6.07
30.8	6.8	2.70	100.0	100.0	26.8	0.0	6.0	0.0	0.0	15.02	6.07
31.2	3.3	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	15.10	6.07
31.5	3.5	2.68	100.0	100.0	27.8	0.0	7.0	0.0	0.0	15.18	6.07
31.8	9.4	2.69	100.0	100.0	25.0	0.0	4.3	0.0	0.0	15.26	6.07
32.1	9.1	2.70	100.0	100.0	25.4	0.0	4.6	0.0	0.0	15.34	6.07
32.4	5.9	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	15.42	6.07
32.7	1.3	2.67	100.0	100.0	29.7	0.0	9.4	0.0	0.0	15.51	6.07
33.0	0.0	2.68	100.0	100.0	29.7	0.0	9.4	0.0	0.0	15.60	6.07
33.3	0.0	2.68	100.0	100.0	29.0	0.0	8.5	0.0	0.0	15.69	6.07
33.6	0.0	2.67	100.0	100.0	25.0	0.0	4.4	0.0	0.0	15.77	6.07
33.9	0.0	2.68	100.0	100.0	24.9	0.0	4.3	0.0	0.0	15.85	6.07
34.2	0.0	2.68	100.0	100.0	28.0	0.0	7.2	0.0	0.0	15.93	6.07
34.5	0.7	2.69	99.8	99.9	28.8	0.0	8.2	0.0	0.0	16.02	6.07

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
934.8	3.5	2.69	100.0	100.0	27.9	0.0	7.1	0.0	0.0	16.11	6.07
935.1	6.0	2.70	100.0	100.0	26.2	0.0	5.3	0.0	0.0	16.19	6.07
935.4	7.0	2.69	100.0	100.0	26.6	0.0	5.8	0.0	0.0	16.27	6.07
935.7	4.9	2.68	100.0	100.0	25.9	0.0	5.5	0.0	0.0	16.34	6.07
936.0	1.1	2.68	100.0	100.0	14.2	0.0	0.3	0.0	0.0	16.39	6.07
936.3	0.0	2.67	100.0	100.0	19.9	0.0	1.5	0.0	0.0	16.44	6.07
936.6	0.0	2.69	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.52	6.07
936.9	1.7	2.68	99.8	100.0	28.6	0.0	7.9	0.1	0.1	16.61	6.07
937.2	3.9	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	16.69	6.07
937.6	6.2	2.68	100.0	100.0	26.0	0.0	5.2	0.0	0.0	16.77	6.07
937.9	6.9	2.69	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.85	6.07
938.2	7.3	2.69	100.0	100.0	28.8	0.0	7.9	0.0	0.0	16.93	6.07
938.5	11.8	2.70	100.0	100.0	24.0	0.0	3.6	0.0	0.0	17.01	6.07
938.8	13.6	2.71	100.0	100.0	22.5	0.0	2.7	0.0	0.0	17.08	6.07
939.1	9.0	2.69	100.0	100.0	26.3	0.0	5.5	0.0	0.0	17.16	6.07
939.4	5.7	2.69	100.0	100.0	27.4	0.0	6.5	0.0	0.0	17.24	6.07
939.7	9.1	2.69	100.0	100.0	25.3	0.0	4.6	0.0	0.0	17.32	6.07
940.0	11.4	2.70	100.0	100.0	23.1	0.0	3.0	0.0	0.0	17.39	6.07
940.3	8.9	2.70	100.0	100.0	25.0	0.0	4.4	0.0	0.0	17.47	6.07
940.6	12.0	2.70	100.0	100.0	21.9	0.0	2.4	0.0	0.0	17.53	6.07
940.9	12.4	2.70	100.0	100.0	21.8	0.0	2.3	0.0	0.0	17.60	6.07
941.2	8.7	2.69	100.0	100.0	25.2	0.0	4.5	0.0	0.0	17.67	6.07
941.5	7.4	2.69	100.0	100.0	26.5	0.0	5.6	0.0	0.0	17.75	6.07
941.8	8.7	2.70	100.0	100.0	25.2	0.0	4.5	0.0	0.0	17.83	6.07
942.1	5.5	2.69	100.0	100.0	27.7	0.0	6.9	0.0	0.0	17.92	6.07
942.4	5.3	2.69	100.0	100.0	27.8	0.0	7.0	0.0	0.0	18.00	6.07
942.7	10.3	2.69	100.0	100.0	23.8	0.0	3.5	0.0	0.0	18.08	6.07
943.0	12.4	2.70	100.0	100.0	21.8	0.0	2.3	0.0	0.0	18.14	6.07
943.3	12.8	2.70	100.0	100.0	22.0	0.0	2.5	0.0	0.0	18.21	6.07
943.7	10.5	2.69	100.0	100.0	24.4	0.0	3.9	0.0	0.0	18.28	6.07
944.0	9.9	2.69	100.0	100.0	23.5	0.0	3.3	0.0	0.0	18.36	6.07
944.3	8.6	2.70	100.0	100.0	25.1	0.0	4.4	0.0	0.0	18.43	6.07
944.6	7.9	2.69	100.0	100.0	27.0	0.0	6.1	0.0	0.0	18.51	6.07
944.9	10.0	2.70	100.0	100.0	24.3	0.0	3.9	0.0	0.0	18.59	6.07
945.2	10.1	2.70	100.0	100.0	23.8	0.0	3.5	0.0	0.0	18.66	6.07
945.5	9.0	2.69	100.0	100.0	24.6	0.0	4.1	0.0	0.0	18.73	6.07
945.8	11.1	2.70	100.0	100.0	22.6	0.0	2.8	0.0	0.0	18.80	6.07
946.1	9.9	2.71	100.0	100.0	23.6	0.0	3.4	0.0	0.0	18.88	6.07
946.4	8.9	2.69	100.0	100.0	24.6	0.0	4.0	0.0	0.0	18.95	6.07
946.7	5.3	2.69	99.9	99.9	28.5	0.0	7.9	0.0	0.0	19.03	6.07
947.0	5.3	2.68	99.8	99.8	29.0	0.0	8.5	0.1	0.0	19.12	6.07
947.3	6.4	2.69	100.0	100.0	28.1	0.0	7.4	0.0	0.0	19.21	6.07
947.6	8.1	2.70	100.0	100.0	26.5	0.0	5.4	0.0	0.0	19.29	6.07
947.9	9.5	2.69	100.0	100.0	24.2	0.0	3.7	0.0	0.0	19.36	6.07

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
048.2	9.4	2.70	100.0	100.0	23.9	0.0	3.6	0.0	0.0	19.44	6.07
048.5	9.0	2.70	100.0	100.0	24.0	0.0	3.6	0.0	0.0	19.51	6.07
048.8	8.1	2.70	100.0	100.0	25.1	0.0	4.4	0.0	0.0	19.59	6.07
049.1	6.7	2.69	100.0	100.0	26.2	0.0	5.4	0.0	0.0	19.67	6.07
049.4	7.7	2.69	100.0	100.0	25.2	0.0	4.5	0.0	0.0	19.74	6.07
049.7	8.4	2.69	100.0	100.0	24.9	0.0	4.3	0.0	0.0	19.82	6.07
050.1	10.5	2.70	100.0	100.0	23.4	0.0	3.2	0.0	0.0	19.89	6.07
050.4	8.7	2.70	100.0	100.0	26.1	0.0	5.3	0.0	0.0	19.97	6.07
050.7	8.9	2.69	100.0	100.0	26.1	0.0	5.2	0.0	0.0	20.05	6.07
051.0	10.5	2.69	100.0	100.0	24.5	0.0	3.9	0.0	0.0	20.12	6.07
051.3	11.1	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	20.20	6.07
051.6	15.8	2.71	100.0	100.0	21.4	0.0	2.2	0.0	0.0	20.27	6.07
051.9	10.8	2.70	100.0	100.0	24.6	0.0	4.0	0.0	0.0	20.34	6.07
052.2	7.1	2.69	100.0	100.0	26.7	0.0	5.8	0.0	0.0	20.42	6.07
052.5	7.7	2.69	100.0	100.0	26.9	0.0	6.0	0.0	0.0	20.50	6.07
052.8	7.1	2.69	100.0	100.0	26.6	0.0	5.7	0.0	0.0	20.58	6.07
053.1	5.2	2.69	100.0	100.0	26.5	0.0	5.7	0.0	0.0	20.67	6.07
053.4	5.9	2.69	100.0	100.0	26.9	0.0	6.1	0.0	0.0	20.75	6.07
053.7	6.0	2.70	100.0	100.0	27.1	0.0	6.3	0.0	0.0	20.83	6.07
054.0	8.1	2.69	100.0	100.0	26.9	0.0	6.0	0.0	0.0	20.91	6.07
054.3	5.1	2.68	100.0	100.0	28.2	0.0	7.5	0.0	0.0	20.99	6.07
054.6	2.5	2.69	100.0	100.0	29.9	0.0	9.8	0.0	0.0	21.08	6.07
054.9	4.4	2.69	100.0	100.0	28.8	0.0	8.2	0.0	0.0	21.17	6.07
055.2	6.8	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	21.26	6.07
055.5	6.9	2.69	100.0	100.0	27.5	0.0	6.7	0.0	0.0	21.34	6.07
055.8	8.4	2.70	100.0	100.0	27.1	0.0	6.2	0.0	0.0	21.42	6.07
056.1	8.1	2.69	100.0	100.0	27.5	0.0	6.7	0.0	0.0	21.51	6.07
056.5	9.9	2.70	100.0	100.0	23.9	0.0	3.5	0.0	0.0	21.58	6.07
056.8	10.5	2.70	100.0	100.0	23.4	0.0	3.2	0.0	0.0	21.66	6.07
057.1	14.6	2.71	100.0	100.0	22.2	0.0	2.6	0.0	0.0	21.72	6.07
057.4	20.1	2.69	100.0	100.0	20.0	0.0	1.6	0.0	0.0	21.79	6.07
057.7	28.5	2.71	100.0	100.0	17.1	0.0	0.8	0.0	0.0	21.84	6.07
058.0	50.3	2.72	100.0	100.0	16.5	0.0	0.7	0.0	0.0	21.89	6.07

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N

****
* SCHLUMBERGER *
****

COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	04-JAN-1979
REFERENCE	613,2101

App. 6

Processing no.5

"Cut off" : $V_{cl} \geq 33\%$

$\phi \leq 13\%$

$S_w \geq 55\%$

$\Delta t \leq 77$ s/ft

INTERVAL	RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
				RESISTIVITY	DELTA-T	NEUTRON INDEX	DENSITY	
2058.0 TO 2005.6	0.066	0.10	0.82	0.70	140.0	47.0	2.00	130.
2005.6 TO 1967.6	0.066	0.10	0.14	0.70	140.0	47.0	2.00	130.

POROSITY	CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTAC
SW	CUT-OFFS	NONE	NONE	55.0 %
DELTA-T	CUT-OFFS	NONE	77.0	77.0
CLAY	CUT-OFFS	NONE	33.0 %	33.0 %

1967.6 TO 2058.0 METER

	TOTAL *****	NET ***	NET PAY *******	
THICKNESS	90.37	74.83	23.77	METER
AVERAGE POROSITY	21.99	25.02	23.55	%
VOID VOLUME	19.87	18.72	5.60	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	2.47			MILLIDARCY
SUM OF PERMEABILITY	991.11	988.66	711.55	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	28.55	27.26	81.83	%
HYDROCARBON VOID VOLUME	5.33	4.82	4.61	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	2.82	2.66	2.54	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		1.87		HYDROCARBON-METER
RESIDUAL DIFFERENCE		0.79		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
D = DELTA-T SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 33.0 %

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
167.8	30.6	2.70	89.3	98.9	8.1	0.0	0.0	0.9	0.8	0.02	0.00
168.1	44.3	2.72	47.9	76.0	9.5	0.0	0.1	5.0	2.7	0.05	0.00
168.4	51.6	2.73	48.9	80.6	3.9	0.0	0.0	2.0	1.2	0.06	0.00
168.7	54.4	2.74	39.5	88.9	6.6	0.0	0.0	4.0	3.2	0.08	0.00
169.0	36.7	2.71	28.3	77.0	10.9	0.0	0.1	7.8	5.3	0.11	0.00
169.3	22.0	2.71	21.4	79.0	18.9	0.0	2.4	14.8	10.8	0.16	0.02
169.6	18.4	2.70	12.4	54.1	24.0	0.0	21.1	21.0	10.0	0.23	0.08
169.9	7.5	2.67	6.6	37.2	29.5	0.0	191.4	27.6	9.0	0.32	0.17
170.2	7.6	2.68	11.3	44.8	26.7	0.0	40.6	23.6	8.9	0.40	0.24
170.5	13.4	2.69	15.7	62.1	23.8	0.0	16.9	20.6	11.5	0.48	0.31
170.8	12.5	2.69	11.6	53.6	26.1	0.0	34.9	23.0	10.9	0.55	0.38
171.1	12.7	2.69	8.9	44.9	25.4	0.0	53.7	23.2	9.2	0.63	0.45
171.4	12.4	2.69	6.9	43.2	26.1	0.0	99.4	24.3	9.5	0.71	0.52
171.7	8.7	2.68	7.1	44.1	26.8	0.0	105.5	24.9	9.9	0.79	0.59
172.0	8.4	2.68	8.4	45.2	26.5	0.0	72.3	24.3	9.7	0.87	0.67
172.3	9.1	2.68	12.9	49.5	25.0	0.0	23.6	21.8	9.1	0.95	0.74
172.6	5.0	2.68	14.2	57.2	26.1	0.0	23.6	22.4	11.2	1.03	0.81
172.9	2.5	2.67	12.8	52.7	29.5	0.0	50.8	25.8	11.8	1.12	0.88
173.2	9.9	2.68	9.9	44.7	25.7	0.0	45.5	23.2	9.0	1.20	0.96
173.5	15.2	2.69	8.8	52.4	19.3	0.0	15.7	17.6	8.4	1.26	1.01
173.9	21.8	2.71	14.1	67.2	15.5	0.0	2.3	13.3	8.2	1.32	1.07
174.2	25.3	2.71	34.4	80.9	14.3	0.0	0.3	9.4	6.6	1.37	1.10
174.5	38.3	2.72	49.4	86.3	10.2	0.0	0.1	5.2	3.8	1.40	1.10
174.8	55.1	2.73	61.8	89.5	4.4	0.0	0.0	1.7	1.2	1.42	1.10
175.1	64.2	2.75	100.0	100.0	0.1	0.0	0.0	0.0	0.0	1.42	1.10
175.4	50.8	2.74	67.9	96.2	4.6	0.0	0.0	1.5	1.3	1.43	1.10
175.7	36.5	2.73	28.8	71.8	12.1	0.0	0.2	8.6	5.2	1.47	1.10
176.0	31.7	2.72	19.2	49.2	17.5	0.0	2.1	14.1	5.2	1.52	1.12
176.3	27.3	2.71	29.3	58.3	19.6	0.0	1.5	13.8	5.7	1.57	1.16
176.6	27.2	2.72	35.4	76.4	17.9	0.0	1.0	11.5	7.3	1.63	1.20
176.9	41.3	2.71	54.1	87.6	10.0	0.0	0.1	4.6	3.3	1.67	1.20
177.2	51.5	2.73	67.9	96.2	5.8	0.0	0.0	1.9	1.7	1.69	1.20
177.5	43.5	2.72	61.6	95.3	9.8	0.0	0.1	3.7	3.3	1.71	1.20
177.8	26.5	2.72	30.2	68.3	16.6	0.0	1.1	13.0	7.1	1.76	1.22
178.1	23.8	2.72	28.9	59.8	20.3	0.0	1.8	14.4	6.3	1.83	1.26
178.4	28.9	2.72	42.0	85.5	15.6	0.0	0.5	9.0	6.8	1.88	1.29
178.7	36.7	2.73	52.7	87.3	11.0	0.0	0.1	5.2	3.8	1.91	1.30
179.0	43.8	2.74	55.3	88.0	7.9	0.0	0.0	3.5	2.6	1.94	1.30
179.3	29.2	2.71	33.0	85.2	15.3	0.0	0.5	10.2	8.0	1.96	1.32
179.6	6.6	2.68	21.4	68.4	26.7	0.0	11.5	21.0	12.6	2.05	1.38
179.9	24.9	2.70	36.5	69.1	17.3	0.0	0.8	11.0	5.6	2.12	1.42
180.3	48.5	2.74	59.2	88.9	6.1	0.0	0.0	2.5	1.8	2.14	1.42
180.6	60.7	2.74	100.0	100.0	0.0	0.0	0.0	0.0	0.0	2.14	1.42
180.9	53.6	2.75	75.2	92.1	3.2	0.0	0.0	0.8	0.5	2.15	1.42

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
981.2	43.1	2.74	71.9	91.7	7.9	0.0	0.0	2.2	1.6	2.17	1.42
981.5	51.8	2.73	91.5	93.8	3.2	0.0	0.0	0.3	0.1	.16	1.42
981.8	46.4	2.73	64.0	95.6	9.5	0.0	0.1	3.4	3.0	.21	1.42
982.1	46.7	2.73	61.9	95.3	9.5	0.0	0.1	3.6	3.2	.24	1.42
982.4	47.8	2.74	60.0	89.3	8.2	0.0	0.0	3.3	2.4	.26	1.42
982.7	42.2	2.74	32.6	68.7	12.1	0.0	0.2	8.1	4.4	.30	1.42
983.0	14.1	2.69	9.2	42.9	29.7	0.0	100.0	27.0	10.0	.37	1.49
983.3	11.9	2.69	10.5	46.8	27.3	0.0	52.9	24.4	9.9	.46	1.57
983.6	16.5	2.69	11.1	50.3	25.4	0.0	34.1	22.6	10.0	.54	1.64
983.9	10.5	2.69	11.1	46.6	28.3	0.0	55.2	25.2	10.1	.62	1.71
984.2	11.0	2.69	15.8	44.2	27.7	0.0	25.0	23.3	7.9	.72	1.80
984.5	19.6	2.70	27.2	50.3	23.2	0.0	3.8	16.9	5.4	.79	1.85
984.8	21.9	2.71	40.3	73.5	19.6	0.0	1.5	11.7	6.5	.85	1.89
985.1	40.8	2.73	61.3	89.4	8.9	0.0	0.0	3.5	2.5	.89	1.91
985.4	59.0	2.75	100.0	100.0	0.0	0.0	0.0	0.0	0.0	.89	1.91
985.7	60.9	2.74	91.0	99.1	0.5	0.0	0.0	0.0	0.0	.89	1.91
986.0	46.0	2.73	48.2	88.4	6.9	0.0	0.0	3.6	2.8	.91	1.91
986.3	21.8	2.71	10.2	48.7	19.5	0.0	12.2	17.5	7.5	.96	1.93
986.7	20.1	2.71	11.0	62.9	20.0	0.0	11.9	17.8	10.4	1.02	1.94
987.0	28.3	2.72	18.7	64.1	17.5	0.0	2.3	14.2	7.9	.07	1.95
987.3	31.8	2.72	30.9	73.7	14.0	0.0	0.3	9.7	6.0	.12	1.96
987.6	49.2	2.75	39.9	85.1	6.1	0.0	0.0	3.6	2.6	.15	1.97
987.9	55.7	2.75	100.0	100.0	0.0	0.0	0.0	0.0	0.0	.15	1.97
988.2	44.3	2.74	34.8	82.3	6.0	0.0	0.0	5.2	3.8	.16	1.97
988.5	34.9	2.73	18.2	77.0	13.3	0.0	0.7	10.8	7.8	.19	1.97
988.8	28.5	2.71	20.3	69.6	15.8	0.0	1.1	12.4	7.7	.24	1.98
989.1	29.8	2.72	22.1	75.5	14.2	0.0	0.6	11.1	7.6	.28	1.98
989.4	40.9	2.74	31.7	79.7	10.1	0.0	0.1	6.9	4.8	.32	1.98
989.7	49.8	2.74	45.1	84.9	7.9	0.0	0.0	4.3	3.1	.34	1.98
990.0	59.8	2.76	100.0	100.0	0.0	0.0	0.0	0.0	0.0	.34	1.98
990.3	65.5	2.77	100.0	100.0	0.0	0.0	0.0	0.0	0.0	.34	1.98
990.6	67.3	2.77	100.0	100.0	0.0	0.0	0.0	0.0	0.0	.34	1.98
990.9	42.2	2.73	33.5	83.2	13.0	0.0	0.2	8.6	6.5	.37	1.98
991.2	27.2	2.72	16.2	77.3	17.1	0.0	2.7	14.4	10.5	.42	1.99
991.5	18.1	2.70	7.9	47.5	23.8	0.0	51.1	22.0	9.5	.49	2.03
991.8	17.9	2.69	8.4	44.5	21.5	0.0	27.6	19.6	7.7	.55	2.09
992.1	11.6	2.69	8.3	41.7	26.9	0.0	79.0	24.6	9.0	.63	2.16
992.4	6.4	2.68	9.6	42.1	28.7	0.0	78.5	25.9	9.3	.72	2.24
992.7	1.8	2.67	10.5	40.9	32.7	0.0	114.2	29.3	10.0	.81	2.32
993.1	0.4	2.67	10.7	40.4	33.3	0.0	125.0	29.8	9.9	.91	2.41
993.4	1.3	2.67	10.3	35.9	34.2	0.0	151.2	30.7	8.8	4.02	2.51
993.7	5.9	2.68	10.1	38.8	29.1	0.0	76.1	26.2	8.3	4.11	2.59
994.0	13.3	2.69	8.8	41.2	25.5	0.0	54.7	23.2	6.3	4.19	2.66
994.3	18.0	2.69	8.8	46.5	20.9	0.0	22.8	19.1	7.9	4.26	2.92

EPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
94.6	16.4	2.69	9.1	43.6	23.5	0.0	35.5	21.3	8.1	4.32	2.98
94.9	14.4	2.69	9.5	42.6	24.8	0.0	41.6	22.4	8.2	4.40	3.05
95.2	12.8	2.69	11.0	42.9	26.0	0.0	39.1	23.2	8.3	4.48	3.12
95.5	22.4	2.71	20.4	50.3	19.5	0.0	3.1	15.5	5.8	4.54	3.18
95.8	30.5	2.71	34.3	70.6	15.4	0.0	0.5	10.1	5.6	4.59	3.21
96.1	49.1	2.75	50.1	86.5	5.3	0.0	0.0	2.7	1.9	4.62	3.21
96.4	51.6	2.74	100.0	100.0	0.0	0.0	0.0	0.0	0.0	4.62	3.21
96.7	23.5	2.72	11.6	48.5	22.1	0.0	16.6	19.5	8.2	4.67	3.24
97.0	14.7	2.69	11.0	48.2	26.8	0.0	44.8	23.9	10.0	4.75	3.31
97.3	21.1	2.71	11.2	53.3	22.7	0.0	20.1	20.2	9.5	4.82	3.36
97.6	17.8	2.70	9.8	46.5	24.9	0.0	39.7	22.5	9.1	4.90	3.44
97.9	13.8	2.69	16.6	58.9	25.6	0.0	12.4	20.8	10.3	4.97	3.51
98.2	19.8	2.70	27.5	77.8	18.5	0.0	1.3	13.4	9.3	5.04	3.56
98.5	22.2	2.71	28.2	66.3	20.1	0.0	1.8	14.4	7.7	5.10	3.60
98.8	7.3	2.68	23.5	64.1	29.8	0.0	15.6	22.8	12.1	5.18	3.66
99.2	6.1	2.68	30.4	74.4	28.6	0.0	7.9	19.9	12.6	5.28	3.73
99.5	25.9	2.71	28.9	72.7	18.1	0.0	1.1	12.8	7.9	5.34	3.78
99.8	30.3	2.72	18.1	53.2	18.0	0.0	2.7	14.7	6.3	5.39	3.82
00.1	18.9	2.70	13.5	44.4	25.4	0.0	22.9	22.0	7.8	5.47	3.88
00.4	14.7	2.69	12.6	46.1	26.2	0.0	30.2	22.9	8.8	5.55	3.95
00.7	18.2	2.70	14.3	47.3	23.9	0.0	15.5	20.5	7.9	5.62	4.02
01.0	17.1	2.69	13.9	48.2	23.7	0.0	15.8	20.4	8.1	5.69	4.08
01.3	14.7	2.69	23.4	63.9	23.4	0.0	5.3	17.9	9.5	5.76	4.13
01.6	20.0	2.70	34.6	73.8	20.4	0.0	1.7	13.4	8.0	5.83	4.18
01.9	32.1	2.71	49.3	77.0	13.0	0.0	0.2	6.6	3.6	5.87	4.19
02.2	45.0	2.73	59.7	84.8	6.6	0.0	0.0	2.7	1.7	5.90	4.19
02.5	46.3	2.74	57.5	71.5	5.8	0.0	0.0	2.4	0.8	5.91	4.19
02.8	22.0	2.70	28.5	57.5	20.3	0.0	1.9	14.5	5.9	5.96	4.21
03.1	18.7	2.70	27.9	62.2	22.3	0.0	3.0	16.1	7.7	6.03	4.26
03.4	18.7	2.70	24.5	64.2	22.1	0.0	3.7	16.7	8.8	6.10	4.31
03.7	12.5	2.69	23.5	52.4	25.4	0.0	7.5	19.4	7.3	6.17	4.37
04.0	10.1	2.68	23.9	51.2	27.9	0.0	11.2	21.2	7.6	6.26	4.43
04.3	13.4	2.69	26.8	58.3	25.2	0.0	5.7	18.5	8.0	6.33	4.49
04.6	13.0	2.69	32.8	74.2	24.2	0.0	3.8	16.3	10.0	6.41	4.54
04.9	8.5	2.68	38.9	82.7	24.0	0.0	3.6	14.6	10.5	6.48	4.58
05.2	16.5	2.69	50.6	86.6	19.8	0.0	1.5	9.8	7.2	6.54	4.62
05.6	26.1	2.72	62.7	82.3	15.2	0.0	0.5	5.7	3.0	6.59	4.62
05.9	28.7	2.70	62.4	74.5	16.5	0.0	0.7	6.2	2.0	6.64	4.62
06.2	16.1	2.68	58.0	74.0	23.8	0.0	3.5	10.0	3.8	6.71	4.62
06.5	16.5	2.68	63.7	75.6	23.4	0.0	3.2	8.5	2.8	6.78	4.62
06.8	17.8	2.68	66.9	80.3	22.6	0.0	2.7	7.5	3.0	6.85	4.62
07.1	9.2	2.67	66.1	80.9	26.5	0.0	5.7	9.0	5.9	6.93	4.62
07.4	11.9	2.67	77.6	92.2	23.4	0.0	3.2	5.2	3.4	7.00	4.62
07.7	11.0	2.68	80.6	92.7	23.3	0.0	3.1	4.5	2.8	7.07	4.62

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
008.0	7.4	2.66	81.0	92.7	25.3	0.0	4.6	4.8	3.0	7.15	4.62
008.3	8.3	2.66	91.3	93.5	25.2	0.0	4.5	2.2	0.6	7.22	4.62
008.6	4.5	2.66	97.7	97.8	27.3	0.0	6.5	0.6	0.0	7.30	4.62
008.9	5.2	2.68	99.6	100.0	28.4	0.0	7.7	0.1	0.1	7.39	4.62
009.2	6.3	2.69	100.0	100.0	27.2	0.0	6.5	0.0	0.0	7.47	4.62
009.5	1.8	2.68	100.0	100.0	29.1	0.0	8.6	0.0	0.0	7.56	4.62
009.8	3.0	2.68	100.0	100.0	29.3	0.0	8.9	0.0	0.0	7.65	4.62
010.1	5.2	2.70	100.0	100.0	28.9	0.0	8.5	0.0	0.0	7.74	4.62
010.4	7.2	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	7.82	4.62
010.7	11.6	2.69	100.0	100.0	24.0	0.0	3.6	0.0	0.0	7.90	4.62
011.0	13.9	2.70	100.0	100.0	22.4	0.0	2.7	0.0	0.0	7.97	4.62
011.3	8.1	2.69	98.1	99.5	27.0	0.0	6.1	0.5	0.4	8.05	4.62
011.6	5.0	2.67	96.6	98.6	26.5	0.0	5.6	0.4	0.0	8.13	4.62
012.0	5.9	2.70	98.2	99.8	28.2	0.0	7.5	0.5	0.5	8.21	4.62
012.3	9.6	2.69	99.9	100.0	27.4	0.0	6.6	0.0	0.0	8.30	4.62
012.6	11.0	2.69	100.0	100.0	26.7	0.0	5.8	0.0	0.0	8.38	4.62
012.9	9.6	2.69	100.0	100.0	27.7	0.0	6.8	0.0	0.0	8.46	4.62
013.2	11.6	2.67	100.0	100.0	26.8	0.0	5.9	0.0	0.0	8.55	4.62
013.5	13.0	2.69	100.0	100.0	25.4	0.0	4.6	0.0	0.0	8.62	4.62
013.8	10.3	2.68	100.0	100.0	25.8	0.0	5.0	0.0	0.0	8.70	4.62
014.1	13.8	2.68	100.0	100.0	24.6	0.0	4.1	0.0	0.0	8.76	4.62
014.4	15.2	2.70	100.0	100.0	24.3	0.0	3.8	0.0	0.0	8.85	4.62
014.7	5.5	2.68	100.0	100.0	27.8	0.0	7.0	0.0	0.0	8.93	4.62
015.0	0.2	2.68	100.0	100.0	29.6	0.0	9.3	0.0	0.0	9.02	4.62
015.3	5.0	2.68	100.0	100.0	27.7	0.0	6.9	0.0	0.0	9.11	4.62
015.6	1.1	2.65	100.0	100.0	27.9	0.0	7.1	0.0	0.0	9.19	4.62
015.9	11.8	2.68	100.0	100.0	24.5	0.0	4.0	0.0	0.0	9.27	4.62
016.2	18.3	2.71	100.0	100.0	20.3	0.0	1.7	0.0	0.0	9.33	4.62
016.5	9.4	2.70	100.0	100.0	26.8	0.0	6.0	0.0	0.0	9.41	4.62
016.8	6.5	2.69	100.0	100.0	27.6	0.0	6.7	0.0	0.0	9.49	4.62
017.1	7.5	2.70	100.0	100.0	27.1	0.0	6.2	0.0	0.0	9.57	4.62
017.4	1.2	2.68	100.0	100.0	29.0	0.0	8.4	0.0	0.0	9.66	4.62
017.7	10.2	2.69	100.0	100.0	28.4	0.0	7.8	0.0	0.0	9.75	4.62
018.0	3.9	2.68	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.83	4.62
018.4	5.8	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	9.92	4.62
018.7	4.8	2.70	100.0	100.0	28.3	0.0	7.6	0.0	0.0	10.01	4.62
019.0	4.0	2.69	100.0	100.0	28.5	0.0	7.8	0.0	0.0	10.09	4.62
019.3	6.6	2.68	100.0	100.0	27.5	0.0	6.7	0.0	0.0	10.18	4.62
019.6	7.3	2.68	100.0	100.0	28.4	0.0	7.7	0.0	0.0	10.26	4.62
019.9	7.9	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	10.35	4.62
020.2	6.9	2.70	100.0	100.0	26.8	0.0	6.0	0.0	0.0	10.43	4.62
020.5	3.0	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	10.51	4.62
020.8	0.0	2.68	100.0	100.0	28.0	0.0	7.3	0.0	0.0	10.60	4.62
021.1	0.0	2.67	100.0	100.0	25.5	0.0	4.8	0.0	0.0	10.68	4.62

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
2121.4	0.0	2.67	100.0	100.0	17.0	0.0	0.8	0.0	0.0	10.74	4.62
2121.7	0.0	2.67	100.0	100.0	2.2	0.0	0.0	0.0	0.0	10.76	4.62
2122.0	0.0	2.66	100.0	100.0	5.6	0.0	0.0	0.0	0.0	10.77	4.62
2122.3	0.0	2.66	100.0	100.0	18.5	0.0	1.1	0.0	0.0	10.82	4.62
2122.6	8.3	2.69	100.0	100.0	23.8	0.0	3.5	0.0	0.0	10.89	4.62
2122.9	7.2	2.68	100.0	100.0	26.5	0.0	5.6	0.0	0.0	10.97	4.62
2123.2	6.5	2.69	100.0	100.0	27.1	0.0	6.3	0.0	0.0	11.06	4.62
2123.5	10.5	2.69	100.0	100.0	24.7	0.0	4.1	0.0	0.0	11.13	4.62
2123.8	10.9	2.70	100.0	100.0	24.9	0.0	4.3	0.0	0.0	11.21	4.62
2124.1	7.9	2.68	100.0	100.0	26.0	0.0	5.1	0.0	0.0	11.29	4.62
2124.4	8.0	2.69	100.0	100.0	26.0	0.0	5.2	0.0	0.0	11.37	4.62
2124.8	10.4	2.70	100.0	100.0	25.4	0.0	4.6	0.0	0.0	11.44	4.62
2125.1	8.4	2.70	100.0	100.0	26.5	0.0	5.7	0.0	0.0	11.52	4.62
2125.4	7.1	2.68	100.0	100.0	27.1	0.0	6.3	0.0	0.0	11.61	4.62
2125.7	5.1	2.68	100.0	100.0	27.0	0.0	6.2	0.0	0.0	11.69	4.62
2126.0	4.6	2.69	100.0	100.0	27.0	0.0	6.1	0.0	0.0	11.77	4.62
2126.3	0.0	2.68	100.0	100.0	28.1	0.0	7.4	0.0	0.0	11.86	4.62
2126.6	2.0	2.68	100.0	100.0	27.6	0.0	6.8	0.0	0.0	11.94	4.62
2126.9	4.8	2.68	100.0	100.0	26.8	0.0	6.0	0.0	0.0	12.02	4.62
2127.2	5.5	2.70	100.0	100.0	26.9	0.0	6.0	0.0	0.0	12.11	4.62
2127.5	5.2	2.69	100.0	100.0	27.1	0.0	6.3	0.0	0.0	12.19	4.62
2127.8	0.6	2.68	100.0	100.0	28.5	0.0	7.8	0.0	0.0	12.27	4.62
2128.1	2.2	2.68	100.0	100.0	27.3	0.0	6.4	0.0	0.0	12.36	4.62
2128.4	17.0	2.70	100.0	100.0	17.7	0.0	0.9	0.0	0.0	12.42	4.62
2128.7	14.1	2.68	100.0	100.0	20.4	0.0	1.7	0.0	0.0	12.48	4.62
2129.0	18.0	2.68	100.0	100.0	18.3	0.0	1.1	0.0	0.0	12.53	4.62
2129.3	17.0	2.70	100.0	100.0	18.7	0.0	1.2	0.0	0.0	12.59	4.62
2129.6	11.5	2.70	100.0	100.0	22.9	0.0	2.9	0.0	0.0	12.65	4.62
2129.9	5.2	2.69	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.74	4.62
2130.2	4.5	2.69	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.82	4.62
2130.5	0.0	2.65	100.0	100.0	28.8	0.0	8.2	0.0	0.0	12.91	4.62
2130.8	0.0	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	13.00	4.62
2131.2	0.0	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	13.09	4.62
2131.5	0.0	2.68	100.0	100.0	28.9	0.0	8.3	0.0	0.0	13.17	4.62
2131.8	7.8	2.70	100.0	100.0	26.0	0.0	5.1	0.0	0.0	13.26	4.62
2132.1	8.4	2.69	100.0	100.0	25.5	0.0	4.7	0.0	0.0	13.33	4.62
2132.4	7.6	2.68	100.0	100.0	25.7	0.0	4.9	0.0	0.0	13.41	4.62
2132.7	10.8	2.67	100.0	100.0	29.3	0.0	8.9	0.0	0.0	13.50	4.62
2133.0	10.0	2.68	100.0	100.0	29.7	0.0	9.4	0.0	0.0	13.59	4.62
2133.3	0.0	2.68	100.0	100.0	29.1	0.0	8.6	0.0	0.0	13.68	4.62
2133.6	0.0	2.67	100.0	100.0	25.0	0.0	4.4	0.0	0.0	13.76	4.62
2133.9	0.0	2.68	100.0	100.0	24.9	0.0	4.3	0.0	0.0	13.83	4.62
2134.2	0.0	2.68	100.0	100.0	28.0	0.0	7.2	0.0	0.0	13.92	4.62
2134.5	1.0	2.69	99.9	99.9	28.6	0.0	7.9	0.0	0.0	14.01	4.62

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
034.8	4.8	2.69	100.0	100.0	26.5	0.0	5.6	0.0	0.0	14.09	4.62
035.1	7.9	2.69	100.0	100.0	23.7	0.0	3.4	0.0	0.0	14.16	4.62
035.4	6.2	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	14.24	4.62
035.7	0.0	2.66	100.0	100.0	25.3	0.0	4.6	0.0	0.0	14.32	4.62
036.0	0.0	2.66	100.0	100.0	15.3	0.0	0.5	0.0	0.0	14.37	4.62
036.3	0.0	2.67	100.0	100.0	19.9	0.0	1.5	0.0	0.0	14.43	4.62
036.6	0.0	2.69	100.0	100.0	27.7	0.0	6.9	0.0	0.0	14.51	4.62
036.9	2.3	2.69	99.8	100.0	28.1	0.0	7.3	0.0	0.0	14.59	4.62
037.2	5.3	2.69	100.0	100.0	25.6	0.0	4.8	0.0	0.0	14.67	4.62
037.6	8.5	2.69	100.0	100.0	23.3	0.0	3.2	0.0	0.0	14.74	4.62
037.9	12.2	2.70	100.0	100.0	22.0	0.0	2.4	0.0	0.0	14.81	4.62
038.2	10.8	2.70	100.0	100.0	23.8	0.0	3.5	0.0	0.0	14.88	4.62
038.5	7.8	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	14.96	4.62
038.8	8.5	2.66	100.0	100.0	24.7	0.0	4.1	0.0	0.0	15.03	4.62
039.1	11.7	2.69	100.0	100.0	23.1	0.0	3.0	0.0	0.0	15.10	4.62
039.4	6.1	2.68	100.0	100.0	26.4	0.0	5.5	0.0	0.0	15.17	4.62
039.7	5.8	2.68	100.0	100.0	26.6	0.0	5.7	0.0	0.0	15.25	4.62
040.0	3.3	2.69	100.0	100.0	27.7	0.0	6.8	0.0	0.0	15.34	4.62
040.3	0.0	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	15.42	4.62
040.6	1.6	2.69	100.0	100.0	27.7	0.0	6.9	0.0	0.0	15.51	4.62
040.9	2.6	2.66	100.0	100.0	27.2	0.0	6.4	0.0	0.0	15.59	4.62
041.2	3.4	2.66	100.0	100.0	26.8	0.0	6.0	0.0	0.0	15.67	4.62
041.5	6.0	2.70	100.0	100.0	26.0	0.0	5.2	0.0	0.0	15.75	4.62
041.8	8.2	2.69	100.0	100.0	25.0	0.0	4.4	0.0	0.0	15.83	4.62
042.1	10.7	2.69	100.0	100.0	22.3	0.0	2.6	0.0	0.0	15.90	4.62
042.4	11.8	2.69	100.0	100.0	21.6	0.0	2.2	0.0	0.0	15.97	4.62
042.7	8.7	2.70	100.0	100.0	24.6	0.0	4.0	0.0	0.0	16.04	4.62
043.0	12.2	2.68	100.0	100.0	21.0	0.0	2.0	0.0	0.0	16.11	4.62
043.3	17.4	2.68	100.0	100.0	17.5	0.0	0.9	0.0	0.0	16.16	4.62
043.7	11.1	2.70	100.0	100.0	23.0	0.0	3.0	0.0	0.0	16.23	4.62
044.0	13.5	2.70	100.0	100.0	19.6	0.0	1.5	0.0	0.0	16.29	4.62
044.3	14.2	2.70	100.0	100.0	19.4	0.0	1.4	0.0	0.0	16.35	4.62
044.6	14.9	2.70	100.0	100.0	20.0	0.0	1.6	0.0	0.0	16.41	4.62
044.9	9.3	2.69	100.0	100.0	24.2	0.0	3.8	0.0	0.0	16.48	4.62
045.2	5.7	2.69	100.0	100.0	26.1	0.0	5.3	0.0	0.0	16.56	4.62
045.5	6.8	2.70	100.0	100.0	26.0	0.0	5.1	0.0	0.0	16.64	4.62
045.8	4.2	2.69	100.0	100.0	26.6	0.0	5.7	0.0	0.0	16.72	4.62
046.1	9.7	2.70	100.0	100.0	23.1	0.0	3.1	0.0	0.0	16.80	4.62
046.4	12.0	2.70	100.0	100.0	21.0	0.0	2.0	0.0	0.0	16.86	4.62
046.7	5.7	2.68	100.0	100.0	27.6	0.0	6.7	0.0	0.0	16.94	4.62
047.0	5.7	2.69	99.9	99.9	28.1	0.0	7.4	0.0	0.0	17.03	4.62
047.3	6.8	2.69	100.0	100.0	27.2	0.0	6.3	0.0	0.0	17.11	4.62
047.6	8.6	2.67	100.0	100.0	25.2	0.0	4.5	0.0	0.0	17.19	4.62
047.9	2.4	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	17.27	4.62

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
3648.2	4.1	2.68	100.0	100.0	27.4	0.0	6.5	0.0	0.0	17.35	4.62
3648.5	0.0	2.69	100.0	100.0	28.2	0.0	7.5	0.0	0.0	17.44	4.62
3648.8	0.0	2.68	100.0	100.0	27.7	0.0	6.9	0.0	0.0	17.52	4.62
3649.1	1.5	2.67	100.0	100.0	27.5	0.0	6.7	0.0	0.0	17.61	4.62
3649.4	1.9	2.68	100.0	100.0	27.0	0.0	6.2	0.0	0.0	17.69	4.62
3649.7	4.7	2.68	100.0	100.0	25.8	0.0	5.0	0.0	0.0	17.77	4.62
3650.1	4.7	2.69	100.0	100.0	25.6	0.0	4.9	0.0	0.0	17.85	4.62
3650.4	9.2	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	17.93	4.62
3650.7	9.5	2.70	100.0	100.0	24.9	0.0	4.2	0.0	0.0	18.00	4.62
3651.0	10.8	2.70	100.0	100.0	23.5	0.0	3.3	0.0	0.0	18.07	4.62
3651.3	6.2	2.68	100.0	100.0	26.9	0.0	6.0	0.0	0.0	18.15	4.62
3651.6	7.2	2.67	100.0	100.0	26.4	0.0	5.5	0.0	0.0	18.23	4.62
3651.9	5.0	2.66	100.0	100.0	27.0	0.0	6.1	0.0	0.0	18.31	4.62
3652.2	2.1	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	18.40	4.62
3652.5	5.1	2.66	100.0	100.0	27.0	0.0	6.1	0.0	0.0	18.48	4.62
3652.8	0.0	2.69	100.0	100.0	28.6	0.0	8.0	0.0	0.0	18.57	4.62
3653.1	0.0	2.65	100.0	100.0	28.1	0.0	7.3	0.0	0.0	18.65	4.62
3653.4	0.0	2.65	100.0	100.0	28.6	0.0	8.0	0.0	0.0	18.74	4.62
3653.7	0.4	2.68	100.0	100.0	28.7	0.0	8.0	0.0	0.0	18.83	4.62
3654.0	4.0	2.68	100.0	100.0	27.4	0.0	6.6	0.0	0.0	18.91	4.62
3654.3	5.4	2.68	100.0	100.0	27.3	0.0	6.5	0.0	0.0	18.99	4.62
3654.6	11.3	2.70	100.0	100.0	24.7	0.0	4.1	0.0	0.0	19.07	4.62
3654.9	7.3	2.69	100.0	100.0	27.0	0.0	6.2	0.0	0.0	19.15	4.62
3655.2	0.8	2.68	100.0	100.0	29.1	0.0	8.5	0.0	0.0	19.24	4.62
3655.5	0.0	2.67	100.0	100.0	29.5	0.0	9.1	0.0	0.0	19.33	4.62
3655.8	0.0	2.68	100.0	100.0	29.5	0.0	9.2	0.0	0.0	19.42	4.62
3656.1	0.9	2.67	100.0	100.0	29.5	0.0	9.1	0.0	0.0	19.51	4.62
3656.5	2.9	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	19.60	4.62
3656.8	9.3	2.69	100.0	100.0	23.7	0.0	3.4	0.0	0.0	19.67	4.62
3657.1	19.3	2.70	100.0	100.0	17.7	0.0	0.9	0.0	0.0	19.73	4.62
3657.4	27.4	2.70	100.0	100.0	15.9	0.0	0.3	0.0	0.0	19.78	4.62
3657.7	27.2	2.70	100.0	100.0	16.1	0.0	0.6	0.0	0.0	19.82	4.62
3658.0	26.5	2.69	100.0	100.0	17.0	0.0	0.8	0.0	0.0	19.87	4.62

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N

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* SCHLUMBERGER *
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COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	04-JAN-1979
REFERENCE	013,2101

App. 7

Processing no.7

"Cut off" : Vcl $\geq$ 40%

$\phi \leq$ 13%

Sw $\geq$ 55%

$\Delta t \leq$ 77 s/ft

INTERVAL	RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
				RESISTIVITY	DELTA-T	NEUTRON INDEX	DENSITY	
2058.0 TO 2005.6	0.066	0.10	0.82	0.70	140.0	47.0	2.00	130.
2005.6 TO 1967.6	0.066	0.10	0.14	0.70	140.0	47.0	2.00	130.

POROSITY	CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTAC
SW	CUT-OFFS	NONE	NONE	55.0 %
DELTA-T	CUT-OFFS	NONE	77.0	77.0
CLAY	CUT-OFFS	NONE	40.0 %	40.0 %

1967.6 TO 2058.0 METER

	TOTAL	NET	NET PAY	
	*****	***	*******	
THICKNESS	90.37	75.74	24.69	METER
AVERAGE POROSITY	21.99	24.88	23.19	%
VOID VOLUME	19.87	18.85	5.73	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	2.47			MILLIDARCY
SUM OF PERMEABILITY	991.11	989.39	712.29	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	28.55	27.83	81.55	%
HYDROCARBON VOID VOLUME	5.33	4.92	4.71	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	2.82	2.69	2.58	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		1.88		HYDROCARBON-METER
RESIDUAL DIFFERENCE		0.81		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
D = DELTA-T SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 40.0 %

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
967.8	30.6	2.70	89.3	98.9	8.1	0.0	0.0	0.9	0.8	0.02	0.00
968.1	44.3	2.72	47.9	76.0	9.5	0.0	0.1	5.0	2.7	0.05	0.00
968.4	51.6	2.73	48.9	80.6	3.9	0.0	0.0	2.0	1.2	0.06	0.00
968.7	54.4	2.74	39.5	88.9	6.6	0.0	0.0	4.0	3.2	0.08	0.00
969.0	36.7	2.71	28.3	77.0	10.9	0.0	0.1	7.8	5.3	0.11	0.00
969.3	22.0	2.71	21.4	79.0	18.9	0.0	2.4	14.8	10.8	0.16	0.02
969.6	18.4	2.70	12.4	54.1	24.0	0.0	21.1	21.0	10.0	0.23	0.06
969.9	7.5	2.67	6.6	37.2	29.5	0.0	191.4	27.6	9.0	0.32	0.17
970.2	7.6	2.68	11.3	44.8	26.7	0.0	40.6	23.6	8.9	0.40	0.24
970.5	13.4	2.69	13.7	62.1	23.8	0.0	16.9	20.6	11.5	0.48	0.31
970.8	12.5	2.69	11.6	53.6	26.1	0.0	34.9	23.0	10.9	0.55	0.38
971.1	12.7	2.69	8.9	44.9	25.4	0.0	53.7	23.2	9.2	0.63	0.45
971.4	12.4	2.69	6.9	43.2	26.1	0.0	99.4	24.3	9.5	0.71	0.52
971.7	8.7	2.68	7.1	44.1	26.8	0.0	105.5	24.9	9.9	0.79	0.59
972.0	8.4	2.68	6.4	45.2	26.5	0.0	72.3	24.3	9.7	0.87	0.67
972.3	9.1	2.68	12.9	49.5	25.0	0.0	23.6	21.8	9.1	0.95	0.74
972.6	5.0	2.68	14.2	57.2	26.1	0.0	23.6	22.4	11.2	1.03	0.81
972.9	2.5	2.67	12.8	52.7	29.5	0.0	50.8	25.8	11.8	1.12	0.86
973.2	9.9	2.68	9.9	44.7	25.7	0.0	45.5	23.2	9.0	1.20	0.90
973.5	15.2	2.69	8.8	52.4	19.3	0.0	15.7	17.6	8.4	1.26	1.01
973.9	21.8	2.71	14.1	67.2	15.5	0.0	2.5	13.3	8.2	1.32	1.07
974.2	25.3	2.71	34.4	80.9	14.3	0.0	0.3	9.4	6.6	1.37	1.10
974.5	38.3	2.72	49.4	86.3	10.2	0.0	0.1	5.2	3.8	1.40	1.10
974.8	55.1	2.73	61.8	89.5	4.4	0.0	0.0	1.7	1.2	1.42	1.10
975.1	64.2	2.75	100.0	100.0	0.1	0.0	0.0	0.0	0.0	1.42	1.10
975.4	50.8	2.74	67.9	96.2	4.6	0.0	0.0	1.5	1.3	1.43	1.10
975.7	36.5	2.73	28.8	71.8	12.1	0.0	0.2	8.6	5.2	1.47	1.10
976.0	31.7	2.72	19.2	49.2	17.5	0.0	2.1	14.1	5.2	1.52	1.14
976.3	27.3	2.71	29.3	58.3	19.6	0.0	1.5	13.8	5.7	1.57	1.18
976.6	27.2	2.72	35.4	76.4	17.9	0.0	1.0	11.5	7.3	1.63	1.22
976.9	41.3	2.71	54.1	87.6	10.0	0.0	0.1	4.6	3.3	1.67	1.25
977.2	51.5	2.73	67.9	96.2	5.8	0.0	0.0	1.9	1.7	1.69	1.25
977.5	43.5	2.72	61.6	95.3	9.8	0.0	0.1	3.7	3.3	1.71	1.25
977.8	26.5	2.72	30.2	68.3	18.6	0.0	1.1	13.0	7.1	1.76	1.28
978.1	23.8	2.72	28.9	59.8	20.3	0.0	1.8	14.4	6.3	1.83	1.31
978.4	28.9	2.72	42.0	85.5	15.6	0.0	0.5	9.0	6.8	1.88	1.34
978.7	36.7	2.73	52.7	87.3	11.0	0.0	0.1	5.2	3.8	1.91	1.35
979.0	43.8	2.74	55.3	88.0	7.9	0.0	0.0	3.5	2.6	1.94	1.35
979.3	29.2	2.71	33.0	85.2	15.3	0.0	0.5	10.2	8.0	1.98	1.38
979.6	6.6	2.68	21.4	68.4	26.7	0.0	11.5	21.0	12.6	2.05	1.42
979.9	24.9	2.70	36.5	69.1	17.3	0.0	0.8	11.0	5.6	2.12	1.47
980.3	48.5	2.74	59.2	88.9	6.1	0.0	0.0	2.5	1.8	2.14	1.47
980.6	60.7	2.74	100.0	100.0	0.0	0.0	0.0	0.0	0.0	2.14	1.47
980.9	53.6	2.75	75.2	92.1	3.2	0.0	0.0	0.8	0.5	2.15	1.47

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
961.2	43.1	2.74	71.9	91.7	7.9	0.0	0.0	2.2	1.6	2.17	1.47
961.5	51.8	2.73	91.5	93.6	3.2	0.0	0.0	0.3	0.1	2.18	1.47
961.8	46.4	2.73	64.0	95.6	9.5	0.0	0.1	3.4	3.0	2.21	1.47
962.1	46.7	2.73	61.9	95.3	9.5	0.0	0.1	3.6	3.2	2.24	1.47
962.4	47.8	2.74	60.0	89.3	8.2	0.0	0.0	3.3	2.4	2.26	1.47
962.7	42.2	2.74	32.6	68.7	12.1	0.0	0.2	8.1	4.4	2.30	1.47
963.0	14.1	2.69	9.2	42.9	29.7	0.0	100.0	27.0	10.0	2.37	1.53
963.3	11.9	2.69	10.5	46.8	27.3	0.0	52.9	24.4	9.9	2.46	1.61
963.6	16.5	2.69	11.1	50.3	25.4	0.0	34.1	22.6	10.0	2.54	1.68
963.9	10.5	2.69	11.1	46.6	28.3	0.0	55.2	25.2	10.1	2.62	1.76
964.2	11.0	2.69	15.8	44.2	27.7	0.0	25.0	25.3	7.9	2.72	1.84
964.5	19.6	2.70	27.2	50.3	23.2	0.0	3.8	16.9	5.4	2.79	1.89
964.8	21.9	2.71	40.3	73.5	19.6	0.0	1.5	11.7	6.5	2.85	1.94
965.1	40.8	2.73	61.3	89.4	8.9	0.0	0.0	3.5	2.5	2.89	1.95
965.4	59.0	2.75	100.0	100.0	0.0	0.0	0.0	0.0	0.0	2.89	1.95
965.7	60.9	2.74	91.0	99.1	0.5	0.0	0.0	0.0	0.0	2.89	1.95
966.0	46.0	2.73	48.2	86.4	6.9	0.0	0.0	3.6	2.8	2.91	1.95
966.3	21.8	2.71	10.2	48.7	19.5	0.0	12.2	17.5	7.5	2.96	1.99
966.7	20.1	2.71	11.0	62.9	20.0	0.0	11.9	17.8	10.4	3.02	2.05
967.0	28.3	2.72	18.7	64.1	17.5	0.0	2.2	14.2	7.9	3.07	2.09
967.3	31.8	2.72	30.9	73.7	14.0	0.0	0.3	9.7	6.0	3.12	2.13
967.6	49.2	2.75	39.9	83.1	6.1	0.0	0.0	3.6	2.6	3.15	2.13
967.9	55.7	2.75	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.15	2.13
968.2	44.3	2.74	34.8	82.3	6.0	0.0	0.0	5.2	3.8	3.16	2.13
968.5	34.9	2.73	18.2	77.0	13.3	0.0	0.7	10.8	7.8	3.19	2.14
968.8	28.5	2.71	20.3	69.6	15.6	0.0	1.1	12.4	7.7	3.24	2.16
969.1	29.8	2.72	22.1	75.5	14.2	0.0	0.6	11.1	7.6	3.28	2.20
969.4	40.9	2.74	31.7	79.7	10.1	0.0	0.1	6.9	4.8	3.32	2.20
969.7	49.8	2.74	45.1	84.9	7.9	0.0	0.0	4.3	3.1	3.34	2.20
970.0	54.8	2.76	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.34	2.20
970.3	65.5	2.77	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.34	2.20
970.6	67.3	2.77	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.34	2.20
970.9	42.2	2.73	35.5	83.2	13.0	0.0	0.2	8.6	6.5	3.37	2.20
971.2	27.2	2.72	16.2	77.5	17.1	0.0	2.7	14.4	10.5	3.42	2.24
971.5	18.1	2.70	7.9	47.5	23.8	0.0	51.1	22.0	9.5	3.49	2.30
971.8	17.9	2.69	8.4	44.5	21.5	0.0	27.6	19.6	7.7	3.55	2.36
972.1	11.6	2.69	8.3	41.7	26.9	0.0	79.0	24.6	9.0	3.63	2.44
972.4	6.4	2.68	9.6	42.1	28.7	0.0	78.5	25.9	9.3	3.72	2.52
972.7	1.8	2.67	10.5	40.9	32.7	0.0	119.2	29.3	10.0	3.81	2.60
973.1	0.4	2.67	10.7	40.4	33.3	0.0	125.0	29.8	9.9	3.91	2.69
973.4	1.3	2.67	10.3	35.9	34.2	0.0	151.2	30.7	8.8	4.02	2.78
973.7	5.9	2.68	10.1	38.8	29.1	0.0	76.1	26.2	8.5	4.11	2.87
974.0	13.3	2.69	8.8	41.2	25.5	0.0	54.7	23.2	8.3	4.19	2.94
974.3	18.0	2.69	8.8	46.5	20.9	0.0	22.8	19.1	7.9	4.26	3.00

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
994.6	16.4	2.69	9.1	43.6	23.5	0.0	35.5	21.3	8.1	4.32	3.00
994.9	14.4	2.69	9.5	42.6	24.8	0.0	41.6	22.4	8.2	4.40	3.13
995.2	12.8	2.69	11.0	42.9	26.0	0.0	39.1	23.2	8.3	4.48	3.20
995.5	22.4	2.71	20.4	50.3	19.5	0.0	5.1	15.5	5.8	4.54	3.28
995.8	30.5	2.71	34.3	70.6	15.4	0.0	0.5	10.1	5.6	4.59	3.29
996.1	49.1	2.75	50.1	86.5	5.3	0.0	0.0	2.7	1.9	4.62	3.29
996.4	51.6	2.74	100.0	100.0	0.0	0.0	0.0	0.0	0.0	4.62	3.29
996.7	23.5	2.72	11.6	48.5	22.1	0.0	16.6	19.5	8.2	4.67	3.34
997.0	14.7	2.69	11.0	48.2	26.8	0.0	44.8	23.9	10.0	4.75	3.41
997.3	21.1	2.71	11.2	53.3	22.7	0.0	20.1	20.2	9.5	4.82	3.47
997.6	17.8	2.70	9.8	46.5	24.9	0.0	39.7	22.5	9.1	4.90	3.54
997.9	13.8	2.69	18.6	58.9	25.6	0.0	12.4	20.8	10.3	4.97	3.60
998.2	19.8	2.70	27.5	77.8	18.5	0.0	1.3	13.4	9.3	5.04	3.65
998.5	22.2	2.71	28.2	66.3	20.1	0.0	1.8	14.4	7.7	5.10	3.70
998.8	7.3	2.68	25.5	64.1	29.8	0.0	15.6	22.8	12.1	5.18	3.76
999.2	6.1	2.68	30.4	74.4	28.6	0.0	7.9	19.9	12.6	5.28	3.83
999.5	25.9	2.71	28.9	72.7	18.1	0.0	1.1	12.8	7.9	5.34	3.87
999.8	30.3	2.72	18.1	53.2	18.0	0.0	2.7	14.7	6.3	5.39	3.91
000.1	18.9	2.70	13.5	44.4	25.4	0.0	22.9	22.0	7.8	5.47	3.98
000.4	14.7	2.69	12.6	46.1	26.2	0.0	30.2	22.9	8.8	5.55	4.05
000.7	18.2	2.70	14.3	47.3	23.9	0.0	15.5	20.5	7.9	5.62	4.11
001.0	17.1	2.69	13.9	48.2	23.7	0.0	15.8	20.4	8.1	5.69	4.17
001.3	14.7	2.69	23.4	63.9	23.4	0.0	5.3	17.9	9.5	5.76	4.23
001.6	20.0	2.70	34.6	73.8	20.4	0.0	1.7	13.4	8.0	5.83	4.27
001.9	32.1	2.71	49.3	77.0	13.0	0.0	0.2	6.6	3.6	5.87	4.29
002.2	45.0	2.73	59.7	84.8	6.6	0.0	0.0	2.7	1.7	5.90	4.29
002.5	46.3	2.74	57.5	71.5	5.8	0.0	0.0	2.4	0.8	5.91	4.29
002.8	22.0	2.70	28.5	57.5	20.3	0.0	1.9	14.5	5.9	5.96	4.31
003.1	18.7	2.70	27.9	62.2	22.3	0.0	3.0	16.1	7.7	6.03	4.36
003.4	18.7	2.70	24.5	64.2	22.1	0.0	3.7	16.7	8.8	6.10	4.40
003.7	12.5	2.69	23.5	52.4	25.4	0.0	7.5	19.4	7.3	6.17	4.46
004.0	10.1	2.68	23.9	51.2	27.9	0.0	11.2	21.2	7.6	6.26	4.53
004.3	13.4	2.69	26.8	58.3	25.2	0.0	5.7	18.5	8.0	6.33	4.58
004.6	13.0	2.69	32.8	74.2	24.2	0.0	5.8	16.3	10.0	6.41	4.64
004.9	8.5	2.68	38.9	82.7	24.0	0.0	3.6	14.6	10.5	6.48	4.68
005.2	16.5	2.69	50.6	86.6	19.8	0.0	1.5	9.8	7.2	6.54	4.71
005.6	26.1	2.72	62.7	82.3	15.2	0.0	0.5	5.7	3.0	6.59	4.71
005.9	28.7	2.70	62.4	74.5	16.5	0.0	0.7	6.2	2.0	6.64	4.71
006.2	16.1	2.68	58.0	74.0	23.8	0.0	3.5	10.0	3.8	6.71	4.71
006.5	16.5	2.68	63.7	75.6	23.4	0.0	3.2	8.5	2.8	6.78	4.71
006.8	17.8	2.68	66.9	80.3	22.6	0.0	2.7	7.5	3.0	6.85	4.71
007.1	9.2	2.67	66.1	80.9	26.5	0.0	5.7	9.0	5.9	6.93	4.71
007.4	11.9	2.67	77.6	92.2	23.4	0.0	3.2	5.2	3.4	7.00	4.71
007.7	11.0	2.68	80.6	92.7	23.3	0.0	3.1	4.5	2.8	7.07	4.71

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
008.0	7.4	2.66	81.0	92.7	25.3	0.0	4.6	4.8	3.0	7.15	4.71
008.3	8.3	2.66	91.5	93.5	25.2	0.0	4.5	2.2	0.6	7.22	4.71
008.6	4.5	2.66	97.7	97.8	27.3	0.0	6.5	0.6	0.0	7.30	4.71
008.9	5.2	2.68	99.6	100.0	26.4	0.0	7.7	0.1	0.1	7.39	4.71
009.2	6.3	2.69	100.0	100.0	27.2	0.0	6.3	0.0	0.0	7.47	4.71
009.5	1.8	2.68	100.0	100.0	29.1	0.0	8.6	0.0	0.0	7.56	4.71
009.8	3.0	2.68	100.0	100.0	29.3	0.0	8.9	0.0	0.0	7.65	4.71
010.1	5.2	2.70	100.0	100.0	28.9	0.0	8.3	0.0	0.0	7.74	4.71
010.4	7.2	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	7.82	4.71
010.7	11.6	2.69	100.0	100.0	24.0	0.0	3.6	0.0	0.0	7.90	4.71
011.0	13.9	2.70	100.0	100.0	22.4	0.0	2.7	0.0	0.0	7.97	4.71
011.3	8.1	2.69	98.1	99.5	27.0	0.0	6.1	0.5	0.4	8.05	4.71
011.6	5.9	2.67	98.8	98.8	26.5	0.0	5.6	0.4	0.0	8.13	4.71
012.0	5.9	2.70	98.2	99.8	28.2	0.0	7.5	0.5	0.5	8.21	4.71
012.3	9.6	2.69	99.9	100.0	27.4	0.0	6.6	0.0	0.0	8.30	4.71
012.6	11.0	2.69	100.0	100.0	26.7	0.0	5.8	0.0	0.0	8.38	4.71
012.9	9.6	2.69	100.0	100.0	27.7	0.0	6.8	0.0	0.0	8.46	4.71
013.2	11.6	2.67	100.0	100.0	26.8	0.0	5.9	0.0	0.0	8.55	4.71
013.5	13.0	2.69	100.0	100.0	25.4	0.0	4.6	0.0	0.0	8.62	4.71
013.8	10.3	2.68	100.0	100.0	25.8	0.0	5.0	0.0	0.0	8.70	4.71
014.1	13.8	2.68	100.0	100.0	24.6	0.0	4.1	0.0	0.0	8.78	4.71
014.4	15.2	2.70	100.0	100.0	24.3	0.0	3.8	0.0	0.0	8.85	4.71
014.7	5.5	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	8.93	4.71
015.0	0.2	2.68	100.0	100.0	29.6	0.0	9.5	0.0	0.0	9.02	4.71
015.3	5.0	2.68	100.0	100.0	27.7	0.0	6.9	0.0	0.0	9.11	4.71
015.6	1.1	2.65	100.0	100.0	27.9	0.0	7.1	0.0	0.0	9.19	4.71
015.9	11.8	2.68	100.0	100.0	24.5	0.0	4.0	0.0	0.0	9.27	4.71
016.2	18.3	2.71	100.0	100.0	20.3	0.0	1.7	0.0	0.0	9.33	4.71
016.5	9.4	2.70	100.0	100.0	26.8	0.0	6.0	0.0	0.0	9.41	4.71
016.8	6.5	2.69	100.0	100.0	27.6	0.0	6.7	0.0	0.0	9.49	4.71
017.1	7.5	2.70	100.0	100.0	27.1	0.0	6.2	0.0	0.0	9.57	4.71
017.4	1.2	2.68	100.0	100.0	29.0	0.0	8.4	0.0	0.0	9.66	4.71
017.7	0.0	2.69	100.0	100.0	28.4	0.0	7.8	0.0	0.0	9.75	4.71
018.0	3.2	2.68	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.83	4.71
018.4	5.9	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	9.92	4.71
018.7	4.8	2.70	100.0	100.0	28.3	0.0	7.6	0.0	0.0	10.01	4.71
019.0	4.0	2.69	100.0	100.0	28.5	0.0	7.8	0.0	0.0	10.09	4.71
019.3	6.6	2.68	100.0	100.0	27.5	0.0	6.7	0.0	0.0	10.18	4.71
019.6	2.3	2.68	100.0	100.0	28.4	0.0	7.7	0.0	0.0	10.26	4.71
019.9	7.4	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	10.35	4.71
020.2	6.9	2.70	100.0	100.0	26.8	0.0	6.0	0.0	0.0	10.43	4.71
020.5	3.0	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	10.51	4.71
020.8	0.0	2.66	100.0	100.0	28.0	0.0	7.3	0.0	0.0	10.60	4.71
021.1	0.0	2.67	100.0	100.0	25.5	0.0	4.8	0.0	0.0	10.68	4.71

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
3121.4	0.0	2.67	100.0	100.0	17.0	0.0	0.8	0.0	0.0	10.74	4.71
3121.7	0.0	2.67	100.0	100.0	2.2	0.0	0.0	0.0	0.0	10.76	4.71
3122.0	0.0	2.66	100.0	100.0	5.6	0.0	0.0	0.0	0.0	10.77	4.71
3122.3	0.0	2.66	100.0	100.0	18.5	0.0	1.1	0.0	0.0	10.82	4.71
3122.6	8.3	2.69	100.0	100.0	23.8	0.0	3.5	0.0	0.0	10.89	4.71
3122.9	7.2	2.68	100.0	100.0	26.5	0.0	5.6	0.0	0.0	10.97	4.71
3123.2	6.5	2.69	100.0	100.0	27.1	0.0	6.3	0.0	0.0	11.06	4.71
3123.5	10.5	2.69	100.0	100.0	24.7	0.0	4.1	0.0	0.0	11.13	4.71
3123.8	10.4	2.70	100.0	100.0	24.9	0.0	4.3	0.0	0.0	11.21	4.71
3124.1	7.9	2.68	100.0	100.0	26.0	0.0	5.1	0.0	0.0	11.29	4.71
3124.4	8.0	2.69	100.0	100.0	26.0	0.0	5.2	0.0	0.0	11.37	4.71
3124.8	10.4	2.70	100.0	100.0	25.4	0.0	4.6	0.0	0.0	11.44	4.71
3125.1	8.1	2.70	100.0	100.0	26.5	0.0	5.7	0.0	0.0	11.52	4.71
3125.4	7.1	2.68	100.0	100.0	27.1	0.0	6.3	0.0	0.0	11.61	4.71
3125.7	5.1	2.68	100.0	100.0	27.0	0.0	6.2	0.0	0.0	11.69	4.71
3126.0	4.6	2.69	100.0	100.0	27.0	0.0	6.1	0.0	0.0	11.77	4.71
3126.3	0.0	2.68	100.0	100.0	28.1	0.0	7.4	0.0	0.0	11.86	4.71
3126.6	2.0	2.68	100.0	100.0	27.6	0.0	6.8	0.0	0.0	11.94	4.71
3126.9	4.8	2.68	100.0	100.0	26.8	0.0	6.0	0.0	0.0	12.02	4.71
3127.2	5.5	2.70	100.0	100.0	26.9	0.0	6.0	0.0	0.0	12.11	4.71
3127.5	5.2	2.69	100.0	100.0	27.1	0.0	6.3	0.0	0.0	12.19	4.71
3127.8	0.2	2.68	100.0	100.0	28.5	0.0	7.8	0.0	0.0	12.27	4.71
3128.1	2.2	2.68	100.0	100.0	27.3	0.0	6.4	0.0	0.0	12.36	4.71
3128.4	17.0	2.70	100.0	100.0	17.7	0.0	0.9	0.0	0.0	12.42	4.71
3128.7	14.1	2.68	100.0	100.0	20.4	0.0	1.7	0.0	0.0	12.48	4.71
3129.0	18.0	2.68	100.0	100.0	18.3	0.0	1.1	0.0	0.0	12.53	4.71
3129.3	17.0	2.70	100.0	100.0	18.7	0.0	1.2	0.0	0.0	12.59	4.71
3129.6	11.5	2.70	100.0	100.0	22.9	0.0	2.9	0.0	0.0	12.65	4.71
3129.9	5.2	2.69	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.74	4.71
3130.2	5.2	2.69	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.82	4.71
3130.5	0.0	2.65	100.0	100.0	28.8	0.0	8.2	0.0	0.0	12.91	4.71
3130.8	0.0	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	13.00	4.71
3131.2	0.0	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	13.09	4.71
3131.5	0.0	2.68	100.0	100.0	28.9	0.0	8.3	0.0	0.0	13.17	4.71
3131.8	7.8	2.70	100.0	100.0	26.0	0.0	5.1	0.0	0.0	13.26	4.71
3132.1	8.4	2.69	100.0	100.0	25.5	0.0	4.7	0.0	0.0	13.33	4.71
3132.4	7.6	2.68	100.0	100.0	25.7	0.0	4.9	0.0	0.0	13.41	4.71
3132.7	1.8	2.67	100.0	100.0	29.3	0.0	8.9	0.0	0.0	13.50	4.71
3133.0	0.0	2.68	100.0	100.0	29.7	0.0	9.4	0.0	0.0	13.59	4.71
3133.3	0.0	2.68	100.0	100.0	29.1	0.0	8.6	0.0	0.0	13.68	4.71
3133.6	0.0	2.67	100.0	100.0	25.0	0.0	4.4	0.0	0.0	13.76	4.71
3133.9	0.0	2.68	100.0	100.0	24.9	0.0	4.3	0.0	0.0	13.83	4.71
3134.2	0.0	2.68	100.0	100.0	28.0	0.0	7.2	0.0	0.0	13.92	4.71
3134.5	1.0	2.69	99.9	99.9	28.6	0.0	7.9	0.0	0.0	14.01	4.71

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
3534.8	4.8	2.69	100.0	100.0	26.5	0.0	5.6	0.0	0.0	14.09	4.71
3535.1	7.9	2.69	100.0	100.0	25.7	0.0	3.4	0.0	0.0	14.16	4.71
3535.4	6.2	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	14.24	4.71
3535.7	0.0	2.66	100.0	100.0	25.3	0.0	4.6	0.0	0.0	14.32	4.71
3536.0	0.0	2.66	100.0	100.0	15.3	0.0	0.5	0.0	0.0	14.37	4.71
3536.3	0.0	2.67	100.0	100.0	19.9	0.0	1.5	0.0	0.0	14.43	4.71
3536.6	0.0	2.69	100.0	100.0	27.7	0.0	6.9	0.0	0.0	14.51	4.71
3536.9	2.3	2.69	99.8	100.0	28.1	0.0	7.3	0.0	0.0	14.59	4.71
3537.2	5.3	2.69	100.0	100.0	25.6	0.0	4.8	0.0	0.0	14.67	4.71
3537.6	8.5	2.69	100.0	100.0	23.3	0.0	3.2	0.0	0.0	14.74	4.71
3537.9	12.2	2.70	100.0	100.0	22.0	0.0	2.4	0.0	0.0	14.81	4.71
3538.2	10.9	2.70	100.0	100.0	23.8	0.0	3.5	0.0	0.0	14.88	4.71
3538.5	7.8	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	14.96	4.71
3538.8	8.5	2.66	100.0	100.0	24.7	0.0	4.1	0.0	0.0	15.03	4.71
3539.1	11.7	2.69	100.0	100.0	23.1	0.0	3.0	0.0	0.0	15.10	4.71
3539.4	6.1	2.68	100.0	100.0	26.4	0.0	5.5	0.0	0.0	15.17	4.71
3539.7	5.8	2.68	100.0	100.0	26.6	0.0	5.7	0.0	0.0	15.25	4.71
3540.0	3.3	2.69	100.0	100.0	27.7	0.0	6.8	0.0	0.0	15.34	4.71
3540.3	0.0	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	15.42	4.71
3540.6	1.6	2.69	100.0	100.0	27.7	0.0	6.9	0.0	0.0	15.51	4.71
3540.9	2.6	2.66	100.0	100.0	27.2	0.0	6.4	0.0	0.0	15.59	4.71
3541.2	3.4	2.66	100.0	100.0	26.8	0.0	6.0	0.0	0.0	15.67	4.71
3541.5	6.0	2.70	100.0	100.0	26.0	0.0	5.2	0.0	0.0	15.75	4.71
3541.8	8.2	2.69	100.0	100.0	25.0	0.0	4.4	0.0	0.0	15.83	4.71
3542.1	10.7	2.69	100.0	100.0	22.3	0.0	2.6	0.0	0.0	15.90	4.71
3542.4	11.8	2.69	100.0	100.0	21.6	0.0	2.2	0.0	0.0	15.97	4.71
3542.7	8.7	2.70	100.0	100.0	24.6	0.0	4.0	0.0	0.0	16.04	4.71
3543.0	12.2	2.68	100.0	100.0	21.0	0.0	2.0	0.0	0.0	16.11	4.71
3543.3	17.4	2.68	100.0	100.0	17.5	0.0	0.9	0.0	0.0	16.16	4.71
3543.7	11.1	2.70	100.0	100.0	23.0	0.0	3.0	0.0	0.0	16.23	4.71
3544.0	13.5	2.70	100.0	100.0	19.6	0.0	1.5	0.0	0.0	16.29	4.71
3544.3	14.2	2.70	100.0	100.0	19.4	0.0	1.4	0.0	0.0	16.35	4.71
3544.6	14.9	2.70	100.0	100.0	20.0	0.0	1.6	0.0	0.0	16.41	4.71
3544.9	9.3	2.69	100.0	100.0	24.2	0.0	3.8	0.0	0.0	16.48	4.71
3545.2	5.7	2.69	100.0	100.0	26.1	0.0	5.3	0.0	0.0	16.56	4.71
3545.5	6.8	2.70	100.0	100.0	26.0	0.0	5.1	0.0	0.0	16.64	4.71
3545.8	4.2	2.69	100.0	100.0	26.6	0.0	5.7	0.0	0.0	16.72	4.71
3546.1	9.7	2.70	100.0	100.0	25.1	0.0	5.1	0.0	0.0	16.80	4.71
3546.4	12.0	2.70	100.0	100.0	21.0	0.0	2.0	0.0	0.0	16.86	4.71
3546.7	5.7	2.68	100.0	100.0	27.6	0.0	6.7	0.0	0.0	16.94	4.71
3547.0	5.7	2.69	99.9	99.9	28.1	0.0	7.4	0.0	0.0	17.03	4.71
3547.3	6.8	2.69	100.0	100.0	27.2	0.0	6.3	0.0	0.0	17.11	4.71
3547.6	8.6	2.67	100.0	100.0	25.2	0.0	4.5	0.0	0.0	17.19	4.71
3547.9	2.4	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	17.27	4.71

EPTH IETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
48.2	4.1	2.68	100.0	100.0	27.4	0.0	6.5	0.0	0.0	17.35	4.71
48.5	0.0	2.69	100.0	100.0	28.2	0.0	7.5	0.0	0.0	17.44	4.71
48.8	0.0	2.68	100.0	100.0	27.7	0.0	6.9	0.0	0.0	17.52	4.71
49.1	1.5	2.67	100.0	100.0	27.5	0.0	6.7	0.0	0.0	17.61	4.71
49.4	1.9	2.68	100.0	100.0	27.0	0.0	6.2	0.0	0.0	17.69	4.71
49.7	4.7	2.68	100.0	100.0	25.8	0.0	5.0	0.0	0.0	17.77	4.71
50.1	4.7	2.69	100.0	100.0	25.6	0.0	4.9	0.0	0.0	17.85	4.71
50.4	9.2	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	17.93	4.71
50.7	9.5	2.70	100.0	100.0	24.9	0.0	4.2	0.0	0.0	18.00	4.71
51.0	10.8	2.70	100.0	100.0	23.5	0.0	3.3	0.0	0.0	18.07	4.71
51.3	6.2	2.68	100.0	100.0	26.9	0.0	6.0	0.0	0.0	18.15	4.71
51.6	7.2	2.67	100.0	100.0	26.4	0.0	5.5	0.0	0.0	18.23	4.71
51.9	5.0	2.66	100.0	100.0	27.0	0.0	6.1	0.0	0.0	18.31	4.71
52.2	2.1	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	18.40	4.71
52.5	5.5	2.66	100.0	100.0	27.0	0.0	6.1	0.0	0.0	18.48	4.71
52.8	0.0	2.69	100.0	100.0	28.6	0.0	8.0	0.0	0.0	18.57	4.71
53.1	0.0	2.65	100.0	100.0	28.1	0.0	7.3	0.0	0.0	18.65	4.71
53.4	0.0	2.65	100.0	100.0	28.6	0.0	8.0	0.0	0.0	18.74	4.71
53.7	0.4	2.68	100.0	100.0	28.7	0.0	8.0	0.0	0.0	18.83	4.71
54.0	4.0	2.68	100.0	100.0	27.4	0.0	6.6	0.0	0.0	18.91	4.71
54.3	5.4	2.68	100.0	100.0	27.3	0.0	6.5	0.0	0.0	18.99	4.71
54.6	11.3	2.70	100.0	100.0	24.7	0.0	4.1	0.0	0.0	19.07	4.71
54.9	7.0	2.69	100.0	100.0	27.0	0.0	6.2	0.0	0.0	19.15	4.71
55.2	0.8	2.68	100.0	100.0	29.1	0.0	8.5	0.0	0.0	19.24	4.71
55.5	0.0	2.67	100.0	100.0	29.5	0.0	9.1	0.0	0.0	19.33	4.71
55.8	0.0	2.68	100.0	100.0	29.5	0.0	9.2	0.0	0.0	19.42	4.71
56.1	0.9	2.67	100.0	100.0	29.5	0.0	9.1	0.0	0.0	19.51	4.71
56.5	2.9	2.69	100.0	100.0	28.0	0.0	7.2	0.0	0.0	19.60	4.71
56.8	9.3	2.69	100.0	100.0	23.7	0.0	3.4	0.0	0.0	19.67	4.71
57.1	19.3	2.70	100.0	100.0	17.7	0.0	0.9	0.0	0.0	19.73	4.71
57.4	27.4	2.70	100.0	100.0	13.9	0.0	0.3	0.0	0.0	19.78	4.71
57.7	27.2	2.70	100.0	100.0	16.1	0.0	0.6	0.0	0.0	19.82	4.71
58.0	26.5	2.69	100.0	100.0	17.0	0.0	0.8	0.0	0.0	19.87	4.71

COMPUTER PROCESSED INTERPRETATION

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* SCHLUMBERGER *
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COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	14-FEB-1979
REFERENCE	613,2357

App. 8

Processing no.6

"Cut off" :

Vcl	$\geq$	33%
Ø	$\leq$	13%
S_w	$\geq$	55%
Δt	$\leq$	77 s/ft

INTERVAL			RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
						RESISTIVITY	DELTA-T	NEUTRON INDEX	DENSITY	
2058.0	TO	2005.6	0.066	0.10	0.82	1.50	150.0	40.0	2.54	150.
2005.6	TO	1967.6	0.066	0.10	0.14	1.50	150.0	40.0	2.54	150.

POROSITY	CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTACT)
Sw	CUT-OFFS	NONE	NONE	55.0 %
DELTA-1	CUT-OFFS	NONE	77.0	77.0
CLAY	CUT-OFFS	NONE	33.0 %	33.0 %

1967.6 TO 2056.0 METER

	TOTAL	NET	NET PAY	
	*****	***	*******	
THICKNESS	90.37	77.72	27.58	METER
AVERAGE POROSITY	24.18	26.04	26.08	%
VOID VOLUME	21.85	20.24	7.19	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	4.49			MILLIDARCY
SUM OF PERMEABILITY	1496.24	1492.96	1214.07	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	30.67	29.44	19.97	%
HYDROCARBON VOID VOLUME	8.70	8.05	5.82	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	3.42	3.22	3.12	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		2.02		HYDROCARBON-METER
RESIDUAL DIFFERENCE		1.20		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
D = DELTA-1 SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 33.0 %

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
7.8	28.2	2.71	92.5	99.2	11.0	0.0	0.1	0.8	0.1	0.05	0.00
8.1	38.0	2.73	42.7	75.5	17.4	0.0	0.8	9.9	5.1	0.08	0.00
8.4	45.2	2.75	44.6	79.3	11.2	0.0	0.1	6.2	3.9	0.11	0.00
8.7	48.0	2.75	35.8	81.4	14.6	0.0	0.4	9.4	6.7	0.15	0.00
9.0	30.3	2.71	22.6	66.1	20.3	0.0	3.0	15.7	8.8	0.21	0.02
9.3	15.6	2.70	18.9	70.8	25.7	0.0	12.5	20.9	13.4	0.27	0.07
9.6	12.1	2.68	12.5	55.7	27.1	0.0	35.9	23.7	11.7	0.36	0.14
9.9	1.2	2.66	8.8	38.4	31.0	0.0	233.7	28.9	9.8	0.45	0.23
0.2	1.3	2.67	10.8	42.8	30.5	0.0	81.5	27.2	9.7	0.54	0.31
0.5	7.0	2.68	12.8	58.9	28.6	0.0	43.6	24.9	13.2	0.63	0.39
0.8	6.1	2.68	11.7	55.5	28.1	0.0	48.1	24.8	12.3	0.72	0.47
1.1	6.4	2.68	8.5	42.7	30.1	0.0	124.8	27.5	10.3	0.81	0.55
1.4	6.7	2.68	6.7	41.1	30.6	0.0	215.2	28.5	10.5	0.90	0.64
1.7	4.1	2.68	7.0	42.2	30.4	0.0	193.8	28.3	10.7	1.00	0.72
2.0	4.1	2.68	8.1	43.2	29.9	0.0	132.8	27.5	10.5	1.09	0.81
2.3	4.9	2.68	13.2	51.7	25.9	0.0	26.3	22.5	10.0	1.17	0.88
2.6	2.6	2.67	13.6	54.9	28.5	0.0	37.7	24.6	11.7	1.25	0.95
2.9	1.1	2.67	13.3	55.5	28.6	0.0	40.7	24.8	12.1	1.34	1.03
3.2	6.3	2.68	10.1	46.6	26.6	0.0	50.8	23.9	9.7	1.42	1.10
3.5	8.8	2.69	8.2	48.7	24.5	0.0	52.2	22.4	9.9	1.50	1.17
3.9	15.4	2.70	13.1	64.5	20.6	0.0	9.4	17.9	10.6	1.56	1.23
4.2	18.9	2.70	38.8	82.6	15.7	0.0	0.5	9.6	0.9	1.61	1.26
4.5	31.9	2.74	45.4	85.0	16.1	0.0	0.7	9.1	6.6	1.66	1.29
4.8	48.7	2.76	51.8	87.0	13.8	0.0	0.3	6.6	4.8	1.71	1.33
5.1	53.8	2.75	71.0	96.8	8.4	0.0	0.0	2.4	2.2	1.74	1.34
5.4	39.8	2.73	49.1	93.1	12.7	0.0	0.2	6.5	5.6	1.77	1.36
5.7	26.6	2.70	25.9	69.4	19.6	0.0	2.0	14.6	8.8	1.83	1.39
6.0	21.9	2.72	18.5	48.8	24.1	0.0	9.9	19.7	7.3	1.90	1.43
6.3	18.3	2.70	27.7	57.4	25.7	0.0	5.7	18.6	7.0	1.98	1.48
6.6	19.0	2.70	33.5	75.1	23.7	0.0	3.4	15.7	9.8	2.06	1.50
6.9	33.5	2.72	50.2	86.5	18.9	0.0	0.7	8.4	6.1	2.11	1.52
7.2	45.2	2.74	61.4	94.4	13.5	0.0	0.3	5.2	4.4	2.16	1.52
7.5	37.1	2.73	53.6	94.0	16.1	0.0	0.6	7.5	6.5	2.20	1.53
7.8	20.2	2.70	28.3	67.2	23.9	0.0	4.0	17.1	9.3	2.27	1.56
8.1	17.4	2.70	25.7	55.4	27.1	0.0	8.4	20.1	8.0	2.35	1.60
8.4	20.8	2.71	40.3	84.8	21.0	0.0	2.0	12.5	9.4	2.42	1.64
8.7	30.3	2.74	49.2	86.2	17.1	0.0	0.8	8.7	6.3	2.48	1.67
9.0	37.4	2.74	49.6	86.3	15.2	0.0	0.5	7.7	5.6	2.53	1.70
9.3	21.2	2.71	31.1	84.4	21.0	0.0	2.0	14.5	11.2	2.58	1.74
9.6	4.4	2.68	20.7	66.9	28.7	0.0	16.9	22.7	13.2	2.67	1.80
9.9	17.9	2.70	34.9	68.7	22.2	0.0	2.5	14.4	7.5	2.74	1.85
0.3	42.1	2.75	51.4	86.9	14.4	0.0	0.4	7.0	5.1	2.79	1.87
0.6	51.0	2.75	63.6	90.0	10.0	0.0	0.1	3.6	2.6	2.82	1.89
0.9	47.2	2.76	60.2	89.4	12.8	0.0	0.2	5.1	3.7	2.86	1.91

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
3151.2	36.7	2.74	57.4	90.3	15.1	0.0	0.4	6.4	5.0	2.90	1.87
3151.5	45.4	2.76	69.9	91.3	12.3	0.0	0.2	3.7	2.6	2.94	1.87
3151.8	40.0	2.74	56.7	94.5	16.9	0.0	0.7	7.3	5.4	2.99	1.87
3152.1	40.3	2.74	53.3	95.9	16.4	0.0	0.7	7.7	5.7	3.04	1.87
3152.4	41.4	2.75	51.3	87.7	16.2	0.0	0.8	7.9	5.9	3.09	1.87
3152.7	34.6	2.73	21.8	66.2	19.8	0.0	2.9	15.5	8.8	3.15	1.87
3153.0	7.7	2.67	9.3	44.2	22.1	0.0	139.3	29.1	11.2	3.24	1.95
3153.3	5.5	2.66	10.0	44.8	21.8	0.0	115.3	28.6	11.1	3.34	2.04
3153.6	10.1	2.69	11.2	51.8	20.2	0.0	53.8	25.8	11.3	3.42	2.12
3153.9	4.1	2.68	10.8	44.7	22.0	0.0	114.2	29.1	11.1	3.52	2.21
3154.2	4.6	2.68	14.9	42.3	22.1	0.0	53.8	27.3	8.8	3.63	2.30
3154.5	13.2	2.69	27.2	51.7	20.4	0.0	8.7	19.2	6.5	3.71	2.36
3154.8	15.5	2.70	39.2	73.8	20.8	0.0	5.5	14.5	5.2	3.79	2.41
3155.1	14.4	2.70	55.4	88.0	15.9	0.0	1.2	7.1	2.2	3.84	2.43
3155.4	18.9	2.71	99.4	99.4	4.4	0.0	0.0	0.0	0.0	3.87	2.43
3155.7	14.5	2.70	68.0	95.6	9.3	0.0	0.1	2.9	2.2	3.89	2.43
3156.0	19.6	2.70	23.0	80.0	14.6	0.0	0.0	11.2	9.2	3.93	2.43
3156.3	15.5	2.70	99.9	44.3	20.5	0.0	50.0	24.0	9.5	4.00	2.49
3156.6	13.7	2.70	99.9	56.0	20.5	0.0	56.5	24.4	12.6	4.08	2.56
3156.9	21.9	2.72	18.1	64.2	22.5	0.0	7.4	18.4	10.3	4.15	2.62
3157.2	25.4	2.72	29.2	72.9	19.7	0.0	1.0	13.9	8.0	4.21	2.67
3157.5	33.6	2.75	34.8	81.0	14.1	0.0	0.3	9.2	5.5	4.26	2.69
3157.8	33.7	2.75	56.8	78.0	12.0	0.0	0.2	2.2	1.1	4.28	2.69
3158.1	37.9	2.74	23.4	80.0	15.5	0.0	0.8	11.9	8.9	4.32	2.69
3158.4	28.6	2.72	17.2	70.3	19.3	0.0	4.1	16.0	11.4	4.37	2.75
3158.7	22.1	2.72	19.0	69.3	20.0	0.0	4.3	16.6	10.3	4.43	2.78
3159.0	23.4	2.71	21.1	75.1	19.4	0.0	2.0	15.3	10.5	4.50	2.83
3159.3	34.5	2.74	20.9	78.4	17.1	0.0	0.8	12.2	8.5	4.55	2.85
3159.6	48.6	2.77	41.3	83.0	14.4	0.0	0.4	8.4	0.1	4.60	2.85
3159.9	55.6	2.78	99.9	80.7	8.0	0.0	0.0	1.8	0.7	4.61	2.85
3160.2	58.7	2.78	82.8	82.0	8.0	0.0	0.0	0.5	0.0	4.63	2.85
3160.5	64.1	2.77	64.3	84.7	6.0	0.0	0.0	2.3	1.3	4.64	2.85
3160.8	55.8	2.74	23.1	82.1	10.9	0.0	2.7	15.4	11.8	4.69	2.85
3161.1	20.8	2.72	15.8	77.0	21.9	0.0	0.8	18.4	13.8	4.76	2.91
3161.4	11.8	2.69	7.5	45.0	29.4	0.0	143.4	27.2	11.0	4.84	2.99
3161.7	10.9	2.69	8.1	42.8	30.5	0.0	77.8	24.4	9.2	4.92	3.00
3162.0	6.1	2.68	9.0	39.8	31.1	0.0	164.4	28.6	9.9	5.02	3.15
3162.3	2.6	2.67	9.3	40.5	31.0	0.0	136.5	28.7	9.9	5.11	3.23
3162.6	0.5	2.67	10.0	42.9	31.0	0.0	93.9	28.2	10.2	5.21	3.32
3162.9	0.0	2.67	11.1	42.3	31.0	0.0	93.8	28.3	10.2	5.31	3.41
3163.2	0.2	2.67	10.6	37.8	33.0	0.0	120.3	29.5	8.9	5.41	3.50
3163.5	2.0	2.67	9.8	37.3	31.0	0.0	121.8	28.7	8.8	5.50	3.58
3163.8	7.5	2.68	8.9	42.7	27.5	0.0	78.3	25.1	9.3	5.59	3.66
3164.1	11.1	2.69	8.4	44.1	26.0	0.0	65.4	23.8	9.4	5.67	3.74

EPTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
94.6	10.0	2.69	8.6	41.2	28.8	0.0	99.0	26.3	9.4	5.76	3.81
94.9	8.0	2.69	9.0	40.5	29.7	0.0	104.0	27.0	9.3	5.85	3.90
95.2	6.5	2.66	10.4	40.9	30.7	0.0	90.9	27.5	9.4	5.94	3.98
95.5	16.0	2.70	19.6	49.8	24.1	0.0	8.6	19.4	7.3	6.02	4.05
95.8	24.2	2.73	32.7	70.2	20.8	0.0	1.9	14.0	7.8	6.08	4.09
96.1	42.8	2.75	43.1	84.2	15.7	0.0	0.3	7.8	5.6	6.13	4.09
96.4	41.3	2.75	35.5	81.3	15.4	0.0	0.5	10.3	7.4	6.17	4.09
96.7	17.1	2.70	10.7	44.8	29.2	0.0	69.2	26.1	10.0	6.25	4.18
97.0	8.3	2.69	11.1	49.7	29.3	0.0	65.2	26.1	11.3	6.34	4.27
97.3	14.7	2.70	10.9	52.6	27.3	0.0	49.3	24.4	11.4	6.42	4.31
97.6	11.4	2.69	9.4	44.2	30.4	0.0	106.0	27.5	10.6	6.51	4.39
97.9	7.4	2.68	18.9	60.9	27.9	0.0	17.9	22.6	11.7	6.60	4.47
98.2	13.4	2.69	25.9	77.1	25.2	0.0	4.2	17.2	11.9	6.67	4.52
98.5	15.8	2.70	23.1	61.0	26.9	0.0	8.0	20.1	9.7	6.75	4.58
98.8	5.0	2.66	24.1	66.2	30.2	0.0	15.9	23.0	12.7	6.84	4.64
99.2	4.1	2.68	29.1	71.6	30.9	0.0	12.0	21.9	13.2	6.93	4.71
99.5	18.0	2.70	25.3	66.3	25.6	0.0	7.1	19.3	10.6	7.01	4.77
99.8	21.9	2.71	17.4	53.0	23.9	0.0	10.6	19.8	8.5	7.09	4.83
100.1	12.5	2.69	15.6	45.6	28.5	0.0	38.3	24.6	9.1	7.17	4.91
100.4	8.3	2.69	12.7	47.6	28.6	0.0	44.1	25.0	10.0	7.26	4.98
100.7	11.8	2.69	14.3	48.6	26.9	0.0	26.7	23.1	9.2	7.34	5.06
101.0	10.7	2.69	13.9	49.7	26.5	0.0	26.2	22.8	9.5	7.43	5.13
101.3	8.3	2.69	23.6	66.1	25.8	0.0	8.1	19.7	11.0	7.50	5.19
101.6	13.6	2.69	38.9	82.6	20.9	0.0	1.9	12.8	9.2	7.57	5.23
101.9	25.8	2.72	46.3	75.5	18.7	0.0	1.2	10.0	5.4	7.63	5.28
102.2	35.8	2.74	50.4	75.1	15.4	0.0	0.5	7.6	3.8	7.68	5.30
102.5	35.6	2.74	39.6	65.1	15.3	0.0	0.5	9.3	3.9	7.73	5.33
102.8	15.6	2.70	27.4	57.1	24.8	0.0	5.1	18.0	7.4	7.79	5.38
103.1	12.4	2.69	27.8	63.8	25.5	0.0	5.5	18.4	9.2	7.87	5.44
103.4	12.4	2.69	24.5	66.0	25.3	0.0	8.8	19.1	10.5	7.95	5.49
103.7	6.1	2.66	25.9	54.3	27.4	0.0	10.4	20.9	8.3	8.03	5.55
104.0	3.7	2.66	24.3	53.2	29.5	0.0	14.0	22.4	8.5	8.12	5.61
104.3	7.0	2.66	27.2	60.4	27.4	0.0	8.0	20.0	9.1	8.20	5.67
104.6	6.6	2.68	36.5	81.7	24.0	0.0	3.6	15.2	10.8	8.28	5.72
104.9	2.1	2.67	38.6	82.5	26.2	0.0	3.4	16.1	11.5	8.36	5.78
105.2	10.1	2.69	49.3	86.3	25.3	0.0	3.2	11.8	8.0	8.43	5.77
105.6	19.7	2.69	54.9	72.9	22.0	0.0	2.5	9.9	4.0	8.50	5.80
105.9	21.4	2.69	60.5	75.2	21.5	0.0	2.2	8.5	3.2	8.56	5.80
106.2	9.7	2.67	55.5	72.8	27.8	0.0	7.0	12.4	4.8	8.64	5.82
106.5	10.1	2.66	62.2	75.7	27.0	0.0	6.2	10.2	3.7	8.73	5.82
106.8	11.5	2.66	67.0	85.7	25.7	0.0	4.9	8.5	4.3	8.81	5.82
107.1	2.8	2.66	67.8	85.8	26.2	0.0	7.5	9.1	5.1	8.89	5.82
107.4	5.5	2.66	73.8	89.2	27.0	0.0	6.1	7.1	4.1	8.97	5.82
107.7	2.2	2.66	76.0	93.1	27.2	0.0	6.4	6.5	4.7	9.06	5.82

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
3830.0	1.0	2.66	76.6	91.7	26.3	0.0	7.5	6.6	4.2	9.14	5.82
3831.0	1.9	2.66	86.9	94.9	26.3	0.0	7.6	3.7	2.3	9.23	5.82
3832.0	0.0	2.65	96.3	99.5	26.3	0.0	8.9	1.1	1.1	9.32	5.82
3833.0	0.0	2.66	100.0	100.0	26.1	0.0	8.6	0.0	0.0	9.41	5.82
3834.0	0.0	2.66	100.0	100.0	26.4	0.0	7.7	0.0	0.0	9.49	5.82
3835.0	3.5	2.66	100.0	100.0	27.3	0.0	8.3	0.0	0.0	9.58	5.82
3836.0	4.4	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	9.66	5.82
3837.0	0.0	2.66	100.0	100.0	29.0	0.0	9.5	0.0	0.0	9.75	5.82
3838.0	0.3	2.65	100.0	100.0	28.0	0.0	7.8	0.0	0.0	9.84	5.82
3839.0	5.3	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	9.93	5.82
3840.0	7.5	2.70	99.9	100.0	27.7	0.0	6.9	0.0	0.0	10.01	5.82
3841.0	1.7	2.66	97.2	99.7	29.3	0.0	8.8	0.8	0.7	10.10	5.82
3842.0	0.0	2.65	97.1	99.7	29.4	0.0	9.0	0.9	0.8	10.19	5.82
3843.0	3.3	2.65	99.6	100.0	29.3	0.0	8.8	0.1	0.1	10.28	5.82
3844.0	4.8	2.69	100.0	100.0	28.2	0.0	8.7	0.0	0.0	10.37	5.82
3845.0	3.3	2.67	100.0	100.0	28.4	0.0	9.0	0.0	0.0	10.46	5.82
3846.0	5.3	2.66	100.0	100.0	28.4	0.0	8.3	0.0	0.0	10.54	5.82
3847.0	13.0	2.70	100.0	100.0	25.8	0.0	5.5	0.0	0.0	10.63	5.82
3848.0	16.6	2.69	100.0	100.0	25.7	0.0	5.4	0.0	0.0	10.71	5.82
3849.0	17.7	2.69	100.0	100.0	25.7	0.0	5.4	0.0	0.0	10.78	5.82
3850.0	8.1	2.68	100.0	100.0	26.2	0.0	7.3	0.0	0.0	10.86	5.82
3851.0	5.9	2.70	100.0	100.0	26.9	0.0	6.0	0.0	0.0	10.94	5.82
3852.0	12.9	2.70	100.0	100.0	24.7	0.0	4.0	0.0	0.0	11.02	5.82
3853.0	8.3	2.72	100.0	100.0	24.7	0.0	4.1	0.0	0.0	11.10	5.82
3854.0	3.3	2.71	100.0	100.0	24.7	0.0	4.1	0.0	0.0	11.18	5.82
3855.0	11.9	2.68	100.0	100.0	25.9	0.0	5.1	0.0	0.0	11.24	5.82
3856.0	3.3	2.68	100.0	100.0	26.7	0.0	6.1	0.0	0.0	11.30	5.82
3857.0	0.0	2.68	100.0	100.0	26.8	0.0	6.3	0.0	0.0	11.37	5.82
3858.0	1.3	2.68	100.0	100.0	26.8	0.0	7.0	0.0	0.0	11.46	5.82
3859.0	0.0	2.68	100.0	100.0	27.1	0.0	7.1	0.0	0.0	11.55	5.82
3860.0	0.0	2.68	100.0	100.0	26.9	0.0	6.0	0.0	0.0	11.63	5.82
3861.0	0.0	2.67	100.0	100.0	26.6	0.0	6.0	0.0	0.0	11.72	5.82
3862.0	0.0	2.68	100.0	100.0	26.5	0.0	6.0	0.0	0.0	11.80	5.82
3863.0	0.0	2.67	100.0	100.0	26.5	0.0	6.5	0.0	0.0	11.89	5.82
3864.0	0.0	2.68	100.0	100.0	26.6	0.0	6.2	0.0	0.0	11.98	5.82
3865.0	0.0	2.67	100.0	100.0	27.0	0.0	7.2	0.0	0.0	12.06	5.82
3866.0	0.0	2.68	100.0	100.0	26.8	0.0	7.3	0.0	0.0	12.15	5.82
3867.0	0.0	2.68	100.0	100.0	26.8	0.0	5.8	0.0	0.0	12.23	5.82
3868.0	0.0	2.68	100.0	100.0	26.8	0.0	7.0	0.0	0.0	12.32	5.82
3869.0	0.0	2.67	100.0	100.0	27.0	0.0	6.7	0.0	0.0	12.40	5.82
3870.0	1.9	2.66	100.0	100.0	27.2	0.0	6.4	0.0	0.0	12.49	5.82
3871.0	5.5	2.67	100.0	100.0	25.8	0.0	2.7	0.0	0.0	12.57	5.82
										12.65	5.82
										12.72	5.82

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
1.4	1.5	2.67	100.0	100.0	15.2	0.0	0.5	0.0	0.0	12.78	5.82
1.7	0.0	2.67	100.0	100.0	2.2	0.0	0.0	0.0	0.0	12.80	5.82
2.0	0.0	2.66	100.0	100.0	5.0	0.0	0.0	0.0	0.0	12.81	5.82
2.3	1.5	2.66	100.0	100.0	16.6	0.0	0.7	0.0	0.0	12.85	5.82
2.6	5.9	2.67	100.0	100.0	25.2	0.0	4.5	0.0	0.0	12.92	5.82
2.9	9.9	2.70	100.0	100.0	25.2	0.0	4.5	0.0	0.0	13.00	5.82
3.2	12.4	2.70	100.0	100.0	25.9	0.0	5.0	0.0	0.0	13.07	5.82
3.5	6.7	2.66	100.0	100.0	26.8	0.0	5.9	0.0	0.0	13.15	5.82
3.8	4.0	2.66	100.0	100.0	27.5	0.0	6.7	0.0	0.0	13.24	5.82
4.1	10.1	2.70	100.0	100.0	25.0	0.0	4.3	0.0	0.0	13.31	5.82
4.4	10.7	2.70	100.0	100.0	24.9	0.0	4.3	0.0	0.0	13.39	5.82
4.8	4.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	13.47	5.82
5.1	2.0	2.66	100.0	100.0	28.1	0.0	7.4	0.0	0.0	13.56	5.82
5.4	0.7	2.66	100.0	100.0	28.5	0.0	7.8	0.0	0.0	13.64	5.82
5.7	0.0	2.66	100.0	100.0	27.7	0.0	6.9	0.0	0.0	13.73	5.82
6.0	1.2	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	13.81	5.82
6.3	1.4	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	13.89	5.82
6.6	2.0	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	13.97	5.82
6.9	1.2	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	14.05	5.82
7.2	0.7	2.68	100.0	100.0	27.6	0.0	6.7	0.0	0.0	14.14	5.82
7.5	4.5	2.69	100.0	100.0	26.6	0.0	5.8	0.0	0.0	14.22	5.82
7.8	0.5	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	14.30	5.82
8.1	6.0	2.70	100.0	100.0	25.0	0.0	4.3	0.0	0.0	14.38	5.82
8.4	13.8	2.70	100.0	100.0	21.2	0.0	2.0	0.0	0.0	14.45	5.82
8.7	20.0	2.69	100.0	100.0	17.2	0.0	0.8	0.0	0.0	14.50	5.82
9.0	20.8	2.69	100.0	100.0	17.6	0.0	0.9	0.0	0.0	14.56	5.82
9.3	17.3	2.70	100.0	100.0	19.6	0.0	1.5	0.0	0.0	14.62	5.82
9.6	5.1	2.70	100.0	100.0	27.0	0.0	6.2	0.0	0.0	14.69	5.82
9.9	0.0	2.67	100.0	100.0	28.6	0.0	7.9	0.0	0.0	14.78	5.82
10.2	0.0	2.66	100.0	100.0	28.3	0.0	7.5	0.0	0.0	14.87	5.82
10.5	0.0	2.65	100.0	100.0	27.3	0.0	6.4	0.0	0.0	14.95	5.82
10.8	0.8	2.66	100.0	100.0	27.0	0.0	6.2	0.0	0.0	15.03	5.82
11.2	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	15.12	5.82
11.5	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	15.20	5.82
11.8	3.7	2.66	100.0	100.0	27.8	0.0	6.7	0.0	0.0	15.28	5.82
12.1	4.9	2.67	100.0	100.0	27.1	0.0	6.3	0.0	0.0	15.36	5.82
12.4	1.2	2.66	100.0	100.0	28.5	0.0	7.8	0.0	0.0	15.45	5.82
12.7	0.0	2.65	100.0	100.0	28.5	0.0	7.9	0.0	0.0	15.54	5.82
13.0	0.7	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	15.62	5.82
13.3	0.9	2.66	100.0	100.0	27.5	0.0	6.4	0.0	0.0	15.71	5.82
13.6	0.1	2.65	100.0	100.0	24.9	0.0	4.3	0.0	0.0	15.79	5.82
13.9	0.0	2.66	100.0	100.0	24.9	0.0	4.3	0.0	0.0	15.86	5.82
14.2	0.4	2.66	100.0	100.0	27.1	0.0	6.3	0.0	0.0	15.94	5.82
14.5	1.1	2.67	100.0	100.0	27.2	0.0	6.3	0.0	0.0	16.03	5.82

PTH	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
4.8	1.3	2.67	100.0	100.0	27.0	0.0	6.2	0.0	0.0	16.11	5.82
5.1	1.5	2.66	100.0	100.0	27.5	0.0	6.6	0.0	0.0	16.19	5.82
5.4	1.1	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	16.27	5.82
5.7	0.0	2.66	100.0	100.0	23.8	0.0	3.5	0.0	0.0	16.35	5.82
6.0	0.0	2.66	100.0	100.0	19.3	0.0	1.5	0.0	0.0	16.40	5.82
6.3	0.0	2.67	100.0	100.0	19.0	0.0	1.5	0.0	0.0	16.45	5.82
6.6	1.4	2.67	100.0	100.0	25.7	0.0	4.9	0.0	0.0	16.53	5.82
6.9	4.8	2.67	100.0	100.0	25.7	0.0	4.9	0.0	0.0	16.61	5.82
7.2	6.1	2.67	100.0	100.0	26.1	0.0	5.1	0.0	0.0	16.68	5.82
7.5	6.6	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	16.75	5.82
7.8	5.6	2.66	100.0	100.0	26.5	0.0	5.7	0.0	0.0	16.83	5.82
8.1	7.6	2.66	100.0	100.0	26.2	0.0	5.5	0.0	0.0	16.91	5.82
8.4	12.3	2.70	100.0	100.0	26.0	0.0	5.6	0.0	0.0	16.98	5.82
8.7	12.3	2.68	100.0	100.0	26.4	0.0	5.2	0.0	0.0	17.05	5.82
9.0	5.3	2.66	100.0	100.0	26.5	0.0	5.6	0.0	0.0	17.13	5.82
9.3	0.0	2.66	100.0	100.0	26.5	0.0	5.7	0.0	0.0	17.21	5.82
9.6	3.3	2.66	100.0	100.0	26.6	0.0	5.8	0.0	0.0	17.30	5.82
9.9	5.8	2.67	100.0	100.0	26.6	0.0	5.1	0.0	0.0	17.38	5.82
10.2	3.1	2.66	100.0	100.0	26.4	0.0	5.2	0.0	0.0	17.45	5.82
10.5	8.2	2.67	100.0	100.0	26.5	0.0	5.3	0.0	0.0	17.53	5.82
10.8	10.2	2.68	100.0	100.0	26.6	0.0	5.3	0.0	0.0	17.60	5.82
11.1	2.9	2.68	100.0	100.0	26.7	0.0	5.8	0.0	0.0	17.68	5.82
11.4	1.5	2.65	100.0	100.0	26.8	0.0	5.8	0.0	0.0	17.76	5.82
11.7	2.9	2.67	100.0	100.0	26.6	0.0	5.7	0.0	0.0	17.84	5.82
12.0	6.8	2.69	100.0	100.0	26.5	0.0	5.2	0.0	0.0	17.92	5.82
12.3	5.4	2.69	100.0	100.0	26.5	0.0	5.42	0.0	0.0	18.00	5.82
12.6	11.0	2.69	100.0	100.0	26.2	0.0	5.1	0.0	0.0	18.08	5.82
12.9	11.6	2.69	100.0	100.0	26.3	0.0	5.0	0.0	0.0	18.14	5.82
13.2	14.1	2.69	100.0	100.0	26.1	0.0	4.8	0.0	0.0	18.21	5.82
13.5	4.7	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	18.29	5.82
13.8	8.5	2.70	100.0	100.0	26.4	0.0	5.2	0.0	0.0	18.37	5.82
14.1	8.9	2.70	100.0	100.0	26.4	0.0	5.2	0.0	0.0	18.44	5.82
14.4	8.7	2.69	100.0	100.0	26.5	0.0	5.2	0.0	0.0	18.51	5.82
14.7	10.9	2.70	100.0	100.0	26.5	0.0	5.5	0.0	0.0	18.59	5.82
15.0	11.1	2.70	100.0	100.0	26.5	0.0	5.5	0.0	0.0	18.66	5.82
15.3	9.9	2.69	100.0	100.0	26.5	0.0	5.5	0.0	0.0	18.73	5.82
15.6	12.1	2.70	100.0	100.0	26.3	0.0	5.2	0.0	0.0	18.80	5.82
15.9	12.7	2.71	100.0	100.0	26.3	0.0	5.1	0.0	0.0	18.86	5.82
16.2	5.2	2.69	100.0	100.0	26.5	0.0	5.3	0.0	0.0	18.94	5.82
16.5	0.0	2.66	100.0	100.0	26.7	0.0	5.6	0.0	0.0	19.02	5.82
16.8	0.0	2.67	100.0	100.0	26.9	0.0	6.0	0.0	0.0	19.11	5.82
17.1	0.4	2.65	100.0	100.0	26.9	0.0	6.3	0.0	0.0	19.20	5.82
17.4	2.2	2.66	100.0	100.0	27.0	0.0	7.2	0.0	0.0	19.29	5.82
17.7	3.8	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	19.37	5.82

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
4[illegible].2	3.8	2.66	100.0	100.0	26.6	0.0	3.7	0.0	0.0	19.45	5.82
4[illegible].5	3.2	2.67	100.0	100.0	25.6	0.0	5.0	0.0	0.0	19.55	5.82
4[illegible].8	6.6	2.70	100.0	100.0	24.3	0.0	3.8	0.0	0.0	19.60	5.82
4[illegible].1	7.4	2.69	100.0	100.0	24.5	0.0	4.0	0.0	0.0	19.68	5.82
4[illegible].4	8.4	2.70	100.0	100.0	23.9	0.0	3.6	0.0	0.0	19.75	5.82
4[illegible].7	8.2	2.70	100.0	100.0	24.0	0.0	3.6	0.0	0.0	19.83	5.82
5[illegible].1	5.8	2.67	100.0	100.0	24.5	0.0	4.0	0.0	0.0	19.90	5.82
5[illegible].4	2.9	2.67	100.0	100.0	26.5	0.0	5.0	0.0	0.0	19.98	5.82
5[illegible].7	3.1	2.66	100.0	100.0	27.7	0.0	6.9	0.0	0.0	20.06	5.82
5[illegible].0	11.5	2.70	100.0	100.0	23.0	0.0	3.4	0.0	0.0	20.14	5.82
5[illegible].3	12.1	2.70	100.0	100.0	23.9	0.0	3.5	0.0	0.0	20.21	5.82
5[illegible].5	17.5	2.72	100.0	100.0	20.2	0.0	1.7	0.0	0.0	20.28	5.82
5[illegible].8	5.1	2.66	100.0	100.0	26.2	0.0	5.5	0.0	0.0	20.35	5.82
6[illegible].2	1.2	2.65	100.0	100.0	26.9	0.0	6.0	0.0	0.0	20.44	5.82
6[illegible].5	1.9	2.66	100.0	100.0	27.3	0.0	6.0	0.0	0.0	20.52	5.82
6[illegible].8	1.2	2.67	100.0	100.0	26.8	0.0	5.9	0.0	0.0	20.60	5.82
7[illegible].1	0.0	2.65	100.0	100.0	26.5	0.0	5.7	0.0	0.0	20.66	5.82
7[illegible].4	0.0	2.65	100.0	100.0	27.1	0.0	6.2	0.0	0.0	20.70	5.82
7[illegible].7	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	20.85	5.82
8[illegible].0	2.2	2.66	100.0	100.0	27.2	0.0	6.2	0.0	0.0	20.93	5.82
8[illegible].3	0.0	2.66	100.0	100.0	26.2	0.0	7.4	0.0	0.0	21.01	5.82
8[illegible].6	2.7	2.69	100.0	100.0	26.3	0.0	7.0	0.0	0.0	21.10	5.82
8[illegible].9	4.8	2.69	100.0	100.0	27.0	0.0	6.3	0.0	0.0	21.18	5.82
9[illegible].2	7.4	2.69	100.0	100.0	25.8	0.0	5.0	0.0	0.0	21.26	5.82
9[illegible].5	7.5	2.69	100.0	100.0	25.8	0.0	5.0	0.0	0.0	21.34	5.82
9[illegible].8	6.9	2.70	100.0	100.0	26.0	0.0	5.2	0.0	0.0	21.42	5.82
0[illegible].1	7.7	2.69	100.0	100.0	26.1	0.0	5.3	0.0	0.0	21.50	5.82
0[illegible].5	6.1	2.67	100.0	100.0	26.6	0.0	5.2	0.0	0.0	21.58	5.82
0[illegible].8	12.7	2.70	100.0	100.0	21.0	0.0	2.2	0.0	0.0	21.65	5.82
1[illegible].1	19.3	2.71	100.0	100.0	18.9	0.0	1.2	0.0	0.0	21.71	5.82
1[illegible].4	25.0	2.70	100.0	100.0	16.9	0.0	0.8	0.0	0.0	21.76	5.82
1[illegible].7	33.4	2.72	100.0	100.0	14.4	0.0	0.4	0.0	0.0	21.81	5.82
2[illegible].0	35.2	2.73	100.0	100.0	13.9	0.0	0.3	0.0	0.0	21.85	5.82

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N

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****
* SCHLUMBERGER *
****

COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	14-FEB-1979
REFERENCE	615,2357

App. 9

Processing no.6

"Cut off" : Vcl $\geq$ 40%

$\phi \leq$ 13%

Sw $\geq$ 55%

$\Delta t \leq$ 77 s/ft

INTERVAL			RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
						RESISTIVITY	DELTA-T	NEUTRON INDEX	DENSITY	
2058.0	TO	2005.6	0.066	0.10	0.82	1.50	150.0	40.0	2.54	150.
2005.6	TO	1967.6	0.066	0.10	0.14	1.50	150.0	40.0	2.54	150.

POROSITY CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTACT)
SW CUT-OFFS	NONE	NONE	55.0 %
DELTA-I CUT-OFFS	NONE	77.0	77.0
CLAY CUT-OFFS	NONE	40.0 %	40.0 %

1967.6 TO 2056.0 METER

	TOTAL *****	NET ***	NET PAY *******	
THICKNESS	90.57	81.58	30.36	METER
AVERAGE POROSITY	24.18	25.59	25.22	%
VOID VOLUME	21.65	20.63	7.65	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	4.49			MILLIDARCY
SUM OF PERMEABILITY	1496.24	1495.78	1216.54	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	30.67	30.55	78.11	%
HYDROCARBON VOID VOLUME	6.70	6.33	6.09	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	3.42	3.32	3.21	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		2.08		HYDROCARBON-METER
RESIDUAL DIFFERENCE		1.23		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
D = DELTA-I SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 40.0 %

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
7.8	28.2	2.71	92.5	99.2	11.0	0.0	0.1	0.8	0.7	0.05	0.00
8.1	38.0	2.73	42.7	75.5	17.4	0.0	0.8	9.9	5.7	0.08	0.03
8.4	45.2	2.75	44.6	79.3	11.2	0.0	0.1	6.2	3.9	0.11	0.05
8.7	48.0	2.75	35.8	81.4	14.6	0.0	0.4	9.4	6.7	0.15	0.05
9.0	30.3	2.71	22.0	66.1	20.3	0.0	3.0	15.7	8.8	0.21	0.05
9.3	15.6	2.70	18.9	70.8	25.7	0.0	12.5	20.9	13.4	0.27	0.10
9.6	12.1	2.68	12.5	55.7	27.1	0.0	35.9	23.7	11.7	0.36	0.17
9.9	1.2	2.66	6.6	38.4	31.0	0.0	235.7	28.9	9.8	0.45	0.20
0.2	1.3	2.67	10.8	42.8	30.5	0.0	81.5	27.2	9.7	0.54	0.34
0.5	7.0	2.66	12.8	58.9	28.6	0.0	43.6	24.9	13.2	0.63	0.42
0.8	6.1	2.66	11.7	55.5	28.1	0.0	48.1	24.8	12.3	0.72	0.50
1.1	6.4	2.68	8.5	42.7	30.1	0.0	124.8	27.5	10.3	0.81	0.58
1.4	6.7	2.68	6.7	41.1	30.6	0.0	215.2	28.5	10.5	0.90	0.67
1.7	4.1	2.68	7.0	42.2	30.4	0.0	193.8	28.3	10.7	1.00	0.75
2.0	4.1	2.68	8.1	43.2	29.9	0.0	132.8	27.5	10.5	1.09	0.84
2.3	4.9	2.68	13.2	51.7	25.9	0.0	26.5	22.5	10.0	1.17	0.91
2.6	2.6	2.67	13.6	54.9	28.5	0.0	37.7	24.6	11.7	1.25	0.98
2.9	1.1	2.67	13.5	55.5	28.6	0.0	40.7	24.8	12.1	1.34	1.06
3.2	6.3	2.68	10.1	46.6	28.6	0.0	50.8	23.9	9.7	1.42	1.13
3.5	8.8	2.69	8.2	48.7	24.5	0.0	52.2	22.4	9.9	1.50	1.20
3.9	15.4	2.70	13.1	64.5	20.6	0.0	9.4	17.9	10.6	1.56	1.26
4.2	18.9	2.70	38.6	82.6	15.7	0.0	0.5	9.6	6.9	1.61	1.29
4.5	31.9	2.74	45.4	85.0	16.7	0.0	0.7	9.1	6.6	1.66	1.32
4.8	48.7	2.76	51.8	87.0	15.8	0.0	0.5	6.6	4.8	1.71	1.35
5.1	53.8	2.75	71.0	96.6	8.4	0.0	0.0	2.4	2.2	1.74	1.35
5.4	39.8	2.73	49.1	93.1	12.7	0.0	0.2	6.5	5.6	1.77	1.35
5.7	26.6	2.70	25.9	69.4	19.6	0.0	2.0	14.6	8.6	1.83	1.37
6.0	21.9	2.72	18.3	48.8	24.1	0.0	9.9	19.7	7.3	1.90	1.43
6.3	18.3	2.70	27.7	57.4	25.7	0.0	5.7	18.6	7.6	1.96	1.49
6.6	19.0	2.70	33.5	75.1	23.7	0.0	3.4	15.7	9.8	2.06	1.54
6.9	33.5	2.72	50.2	86.5	16.9	0.0	0.7	8.4	6.1	2.11	1.57
7.2	45.2	2.74	61.4	94.4	13.5	0.0	0.3	5.2	4.4	2.16	1.57
7.5	37.1	2.73	53.6	94.0	16.1	0.0	0.6	7.5	6.5	2.20	1.58
7.8	20.2	2.70	26.3	67.2	23.9	0.0	4.0	17.1	9.3	2.27	1.63
8.1	17.4	2.70	25.7	55.4	27.1	0.0	8.4	20.1	8.0	2.35	1.69
8.4	20.8	2.71	40.3	84.8	21.0	0.0	2.0	12.5	9.4	2.42	1.74
8.7	30.3	2.74	49.2	86.2	17.1	0.0	0.8	8.7	6.3	2.46	1.77
9.0	37.4	2.74	49.6	86.3	15.2	0.0	0.5	7.7	5.6	2.53	1.79
9.3	21.2	2.71	31.1	84.4	21.0	0.0	2.0	14.5	11.2	2.58	1.83
9.6	4.4	2.68	20.7	66.9	28.7	0.0	10.9	22.7	13.2	2.67	1.90
9.9	17.9	2.70	34.9	68.7	22.2	0.0	2.5	14.4	7.5	2.74	1.95
0.3	42.1	2.75	51.4	86.9	14.4	0.0	0.4	7.0	5.1	2.79	1.98
0.6	51.0	2.75	63.6	90.0	10.0	0.0	0.1	3.6	2.6	2.82	1.98
0.9	47.2	2.76	60.2	89.4	12.8	0.0	0.2	5.1	3.7	2.86	1.98

PIN TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
1.2	56.7	2.74	57.4	90.3	15.1	0.0	0.4	6.4	5.0	2.90	1.98
1.5	45.4	2.76	69.9	91.3	12.3	0.0	0.2	3.7	2.6	2.94	1.98
1.8	40.0	2.74	58.7	94.5	16.9	0.0	0.7	7.3	6.4	2.99	1.98
2.1	40.5	2.74	53.5	95.9	16.4	0.0	0.7	7.7	6.7	3.04	1.99
2.4	41.4	2.73	51.5	87.7	16.2	0.0	0.8	7.9	6.9	3.09	1.99
2.7	54.6	2.73	21.8	66.2	19.8	2.9	2.9	15.5	8.8	3.15	2.01
3.0	7.7	2.67	9.5	44.2	22.1	13.3	139.3	29.1	11.2	3.24	2.09
3.3	5.5	2.68	10.0	44.8	21.8	0.0	115.3	28.6	11.1	3.34	2.18
3.6	10.1	2.69	11.2	51.8	20.2	0.0	53.6	25.0	11.5	3.42	2.26
3.9	4.1	2.66	10.6	44.7	22.0	0.0	114.2	29.1	11.1	3.52	2.35
4.2	4.0	2.68	14.9	42.3	22.1	0.0	55.8	27.3	8.8	3.63	2.44
4.5	13.2	2.69	27.2	51.7	20.4	0.0	0.7	19.2	6.5	3.71	2.50
4.8	15.5	2.70	39.2	73.8	20.0	0.0	3.5	14.5	5.2	3.79	2.55
5.1	54.4	2.74	55.4	80.0	15.9	0.0	0.6	7.1	5.2	3.84	2.57
5.4	58.9	2.77	99.4	99.4	4.4	0.0	0.0	0.0	0.0	3.87	2.57
5.7	54.5	2.76	68.6	95.6	9.3	0.0	0.1	2.9	2.2	3.89	2.57
6.0	59.6	2.74	23.6	86.6	14.6	0.0	0.0	11.2	9.3	3.93	2.59
6.3	15.5	2.70	9.5	44.3	22.6	0.0	58.0	24.0	9.3	4.00	2.65
6.6	13.7	2.70	9.9	56.6	22.7	0.0	56.5	24.4	12.8	4.08	2.72
6.9	21.9	2.72	18.1	64.2	22.3	0.0	7.4	18.4	10.3	4.15	2.78
7.2	25.4	2.72	29.2	72.9	19.7	0.0	1.6	13.9	8.0	4.21	2.82
7.5	43.6	2.75	34.8	81.0	14.1	0.0	0.3	9.2	5.2	4.26	2.84
7.8	55.7	2.75	56.8	78.0	15.0	0.0	0.6	2.2	1.1	4.28	2.84
8.1	57.9	2.74	23.4	80.0	15.3	0.0	0.6	11.9	8.9	4.32	2.86
8.4	28.6	2.72	17.2	76.3	19.3	0.0	4.1	16.0	11.4	4.37	2.91
8.7	22.1	2.72	19.5	69.3	20.0	0.0	4.3	16.6	10.3	4.43	2.96
9.0	23.4	2.71	21.1	75.1	19.4	0.0	2.8	15.3	10.3	4.50	3.01
9.3	34.5	2.74	20.9	76.4	17.1	0.0	0.8	12.2	8.3	4.55	3.05
9.6	48.6	2.77	41.3	83.0	14.4	0.0	0.4	8.4	6.1	4.60	3.08
9.9	55.6	2.76	69.5	80.7	6.0	0.0	0.0	1.8	0.7	4.61	3.09
10.2	68.7	2.76	82.8	82.8	2.6	0.0	0.0	0.5	0.0	4.63	3.09
10.5	64.1	2.77	64.3	84.7	4.6	0.0	0.0	2.3	1.5	4.64	3.09
10.8	35.8	2.74	23.1	82.1	20.0	0.0	2.7	15.4	11.8	4.69	3.07
11.1	20.8	2.72	15.6	77.0	21.9	0.0	8.6	18.4	13.4	4.76	3.12
11.4	11.8	2.69	7.5	45.0	22.4	0.0	145.4	27.2	11.0	4.84	3.20
11.7	10.9	2.69	8.1	42.8	20.5	0.0	77.0	24.4	9.2	4.92	3.26
12.0	8.1	2.68	8.0	39.3	21.1	0.0	164.4	28.6	9.9	5.02	3.36
12.3	2.6	2.67	9.3	40.5	21.0	0.0	130.5	28.7	9.9	5.11	3.45
12.6	0.5	2.67	10.8	42.9	21.0	0.0	90.9	28.2	10.2	5.21	3.54
12.9	0.0	2.67	11.1	42.5	21.0	0.0	95.0	28.3	10.2	5.31	3.62
13.2	0.2	2.67	10.6	37.6	20.0	0.0	120.5	29.5	8.9	5.41	3.71
13.5	2.6	2.67	9.6	37.3	21.0	0.0	121.6	28.7	8.8	5.50	3.80
13.8	7.5	2.66	8.9	42.7	22.0	0.0	76.3	25.1	9.3	5.59	3.88
14.1	11.1	2.69	8.4	44.7	26.0	0.0	65.4	23.8	9.4	5.67	3.96

EPTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
94.6	10.0	2.69	8.6	41.2	28.8	0.0	99.0	26.3	9.4	5.76	4.03
94.9	8.0	2.69	9.0	40.5	29.7	0.0	104.0	27.0	9.3	5.85	4.11
95.2	6.5	2.68	10.4	40.9	30.7	0.0	90.9	27.5	9.4	5.94	4.20
95.5	16.0	2.70	19.6	49.8	24.1	0.0	8.6	19.4	7.3	6.02	4.26
95.8	24.2	2.73	32.7	70.2	20.8	0.0	1.9	14.0	7.8	6.08	4.31
96.1	42.8	2.75	43.1	84.2	15.7	0.0	0.3	7.8	5.6	6.13	4.35
96.4	41.3	2.75	33.5	81.3	15.4	0.0	0.5	10.3	7.4	6.17	4.35
96.7	17.1	2.70	10.7	44.8	29.2	0.0	69.2	26.1	10.0	6.25	4.39
97.0	8.3	2.69	11.1	49.7	29.3	0.0	65.2	26.1	11.3	6.34	4.47
97.3	14.7	2.70	10.9	52.6	27.3	0.0	49.3	24.4	11.4	6.42	4.54
97.6	11.4	2.69	9.4	44.2	30.4	0.0	106.8	27.5	10.6	6.51	4.62
97.9	7.4	2.68	18.9	60.9	27.9	0.0	17.9	22.6	11.7	6.60	4.70
98.2	13.4	2.69	25.9	77.1	23.2	0.0	4.2	17.2	11.9	6.67	4.75
98.5	15.8	2.70	25.1	61.0	26.9	0.0	8.6	20.1	9.7	6.75	4.81
98.8	5.0	2.68	24.1	66.2	30.2	0.0	15.9	23.0	12.7	6.84	4.86
99.2	4.1	2.68	29.1	71.6	30.9	0.0	12.0	21.9	13.2	6.93	4.93
99.5	18.0	2.70	25.3	66.3	25.8	0.0	7.1	19.3	10.6	7.01	5.01
99.8	21.9	2.71	17.4	55.0	23.9	0.0	10.6	19.8	8.5	7.09	5.06
00.1	12.5	2.69	15.6	45.6	28.5	0.0	38.3	24.6	9.1	7.17	5.14
00.4	8.3	2.69	12.7	47.6	28.6	0.0	44.1	25.0	10.0	7.26	5.22
00.7	11.8	2.69	14.3	48.6	26.9	0.0	26.7	23.1	9.2	7.34	5.29
01.0	10.7	2.69	13.9	49.7	26.5	0.0	26.2	22.8	9.5	7.43	5.36
01.3	8.3	2.69	23.6	66.1	25.8	0.0	8.1	19.7	11.0	7.50	5.42
01.6	13.6	2.69	38.9	82.6	20.9	0.0	1.9	12.8	9.2	7.57	5.48
01.9	25.8	2.72	46.3	75.5	18.7	0.0	1.2	10.0	5.4	7.63	5.50
02.2	35.8	2.74	50.4	75.1	15.4	0.0	0.5	7.6	3.8	7.68	5.52
02.5	35.6	2.74	39.6	65.1	15.3	0.0	0.5	9.3	3.9	7.73	5.55
02.8	15.6	2.70	27.4	57.1	24.8	0.0	5.1	18.0	7.4	7.79	5.60
03.1	12.4	2.69	27.8	63.0	25.5	0.0	5.5	18.4	9.2	7.87	5.65
03.4	12.4	2.69	24.5	60.0	25.3	0.0	6.8	19.1	10.5	7.95	5.71
03.7	6.1	2.68	23.9	54.3	27.4	0.0	10.4	20.9	8.3	8.03	5.77
04.0	3.7	2.68	24.3	53.2	29.5	0.0	14.0	22.4	8.5	8.12	5.84
04.3	7.0	2.68	27.2	60.4	27.4	0.0	8.0	20.0	9.1	8.20	5.90
04.6	6.6	2.68	36.5	81.7	24.0	0.0	3.6	15.2	10.8	8.28	5.95
04.9	2.1	2.67	38.6	82.3	26.2	0.0	5.4	16.1	11.3	8.36	6.00
05.2	10.1	2.69	49.3	86.3	23.3	0.0	3.2	11.8	8.6	8.43	6.04
05.6	19.7	2.69	54.9	72.9	22.0	0.0	2.5	9.9	4.0	8.50	6.07
05.9	21.4	2.69	60.5	75.2	21.5	0.0	2.2	8.5	3.2	8.56	6.07
06.2	9.7	2.67	55.5	72.8	27.8	0.0	7.0	12.4	4.8	8.64	6.09
06.5	10.1	2.68	62.2	75.7	27.0	0.0	6.2	10.2	3.7	8.73	6.09
06.8	11.5	2.68	67.0	83.7	25.7	0.0	4.9	8.5	4.3	8.81	6.09
07.1	2.8	2.66	67.8	85.8	28.2	0.0	7.5	9.1	5.1	8.89	6.09
07.4	5.5	2.66	73.8	89.2	27.0	0.0	6.1	7.1	4.1	8.97	6.09
07.7	2.2	2.66	76.0	93.1	27.2	0.0	6.4	6.5	4.7	9.06	6.09

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
08.0	1.0	2.66	76.8	91.7	28.3	0.0	1.5	6.6	4.2	9.14	6.09
08.3	1.9	2.66	86.9	94.9	28.3	0.0	1.6	3.7	2.3	9.23	6.09
08.6	0.0	2.65	96.3	99.5	29.3	0.0	8.9	1.1	1.0	9.32	6.09
08.9	0.0	2.66	100.0	100.0	29.1	0.0	8.0	0.0	0.0	9.41	6.09
09.2	0.0	2.66	100.0	100.0	28.4	0.0	1.7	0.0	0.0	9.49	6.09
09.5	3.5	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	9.58	6.09
09.8	4.4	2.66	100.0	100.0	27.9	0.0	1.1	0.0	0.0	9.66	6.09
10.1	0.0	2.66	100.0	100.0	29.0	0.0	9.3	0.0	0.0	9.75	6.09
10.4	0.8	2.65	100.0	100.0	28.5	0.0	1.0	0.0	0.0	9.84	6.09
10.7	5.3	2.66	100.0	100.0	27.9	0.0	1.1	0.0	0.0	9.93	6.09
11.0	7.5	2.70	99.9	100.0	27.1	0.0	0.9	0.0	0.0	10.01	6.09
11.3	1.7	2.66	97.2	99.7	29.3	0.0	8.8	0.8	0.7	10.10	6.09
11.6	0.0	2.65	97.1	99.7	29.4	0.0	9.0	0.9	0.8	10.19	6.09
12.0	0.0	2.65	99.6	100.0	29.3	0.0	8.8	0.1	0.1	10.28	6.09
12.3	3.3	2.66	100.0	100.0	28.2	0.0	8.7	0.0	0.0	10.37	6.09
12.6	4.6	2.69	100.0	100.0	28.0	0.0	8.6	0.0	0.0	10.46	6.09
12.9	5.3	2.67	100.0	100.0	28.4	0.0	9.0	0.0	0.0	10.54	6.09
13.2	5.3	2.66	100.0	100.0	28.9	0.0	8.3	0.0	0.0	10.63	6.09
13.5	13.0	2.70	100.0	100.0	25.8	0.0	5.0	0.0	0.0	10.71	6.09
13.8	16.6	2.69	100.0	100.0	25.7	0.0	5.4	0.0	0.0	10.78	6.09
14.1	17.7	2.69	100.0	100.0	25.7	0.0	5.4	0.0	0.0	10.86	6.09
14.4	8.8	2.66	100.0	100.0	26.2	0.0	7.5	0.0	0.0	10.94	6.09
14.7	9.1	2.70	100.0	100.0	26.9	0.0	8.0	0.0	0.0	11.02	6.09
15.0	5.9	2.66	100.0	100.0	26.5	0.0	5.6	0.0	0.0	11.10	6.09
15.3	12.9	2.70	100.0	100.0	24.7	0.0	4.1	0.0	0.0	11.18	6.09
15.6	26.3	2.72	100.0	100.0	19.0	0.0	1.2	0.0	0.0	11.24	6.09
15.9	23.3	2.71	100.0	100.0	19.5	0.0	1.4	0.0	0.0	11.30	6.09
16.2	11.9	2.68	100.0	100.0	25.9	0.0	5.1	0.0	0.0	11.37	6.09
16.5	3.0	2.66	100.0	100.0	28.7	0.0	8.1	0.0	0.0	11.46	6.09
16.8	0.2	2.68	100.0	100.0	28.6	0.0	8.3	0.0	0.0	11.55	6.09
17.1	1.3	2.66	100.0	100.0	28.5	0.0	1.8	0.0	0.0	11.63	6.09
17.4	0.0	2.66	100.0	100.0	27.9	0.0	1.1	0.0	0.0	11.72	6.09
17.7	0.2	2.67	100.0	100.0	26.9	0.0	6.0	0.0	0.0	11.80	6.09
18.0	0.0	2.66	100.0	100.0	28.3	0.0	1.6	0.0	0.0	11.89	6.09
18.4	0.0	2.67	100.0	100.0	29.0	0.0	8.5	0.0	0.0	11.98	6.09
18.7	0.2	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	12.06	6.09
19.0	2.6	2.67	100.0	100.0	27.9	0.0	7.2	0.0	0.0	12.15	6.09
19.3	2.8	2.66	100.0	100.0	28.0	0.0	1.5	0.0	0.0	12.23	6.09
19.6	4.4	2.66	100.0	100.0	28.6	0.0	8.8	0.0	0.0	12.32	6.09
19.9	1.0	2.66	100.0	100.0	28.5	0.0	7.8	0.0	0.0	12.40	6.09
20.2	2.6	2.67	100.0	100.0	27.6	0.0	6.7	0.0	0.0	12.49	6.09
20.5	1.9	2.66	100.0	100.0	27.2	0.0	6.4	0.0	0.0	12.57	6.09
20.8	2.6	2.66	100.0	100.0	25.8	0.0	5.0	0.0	0.0	12.65	6.09
21.1	5.5	2.67	100.0	100.0	22.5	0.0	2.7	0.0	0.0	12.72	6.09

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
121.4	1.5	2.67	100.0	100.0	15.2	0.0	0.5	0.0	0.0	12.78	6.09
121.7	0.0	2.67	100.0	100.0	2.2	0.0	0.0	0.0	0.0	12.80	6.09
122.0	0.0	2.66	100.0	100.0	5.6	0.0	0.0	0.0	0.0	12.81	6.09
122.3	1.5	2.66	100.0	100.0	16.6	0.0	0.7	0.0	0.0	12.85	6.09
122.6	5.9	2.67	100.0	100.0	25.2	0.0	4.5	0.0	0.0	12.92	6.09
122.9	9.9	2.70	100.0	100.0	25.2	0.0	4.5	0.0	0.0	13.00	6.09
123.2	12.4	2.70	100.0	100.0	23.9	0.0	3.6	0.0	0.0	13.07	6.09
123.5	6.7	2.66	100.0	100.0	26.8	0.0	5.9	0.0	0.0	13.15	6.09
123.8	4.0	2.66	100.0	100.0	27.5	0.0	6.7	0.0	0.0	13.24	6.09
124.1	10.1	2.70	100.0	100.0	25.0	0.0	4.3	0.0	0.0	13.31	6.09
124.4	10.7	2.70	100.0	100.0	24.9	0.0	4.3	0.0	0.0	13.39	6.09
124.8	4.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	13.47	6.09
125.1	2.0	2.66	100.0	100.0	26.1	0.0	7.4	0.0	0.0	13.56	6.09
125.4	0.7	2.66	100.0	100.0	28.5	0.0	7.8	0.0	0.0	13.64	6.09
125.7	0.0	2.66	100.0	100.0	27.7	0.0	6.9	0.0	0.0	13.73	6.09
126.0	1.2	2.69	100.0	100.0	27.1	0.0	6.2	0.0	0.0	13.81	6.09
126.3	1.4	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	13.89	6.09
126.6	2.0	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	13.97	6.09
126.9	1.2	2.68	100.0	100.0	27.1	0.0	6.2	0.0	0.0	14.05	6.09
127.2	0.7	2.68	100.0	100.0	27.6	0.0	6.7	0.0	0.0	14.14	6.09
127.5	4.5	2.69	100.0	100.0	26.6	0.0	5.8	0.0	0.0	14.22	6.09
127.8	0.5	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	14.30	6.09
128.1	6.0	2.70	100.0	100.0	25.0	0.0	4.3	0.0	0.0	14.38	6.09
128.4	13.8	2.70	100.0	100.0	21.2	0.0	2.0	0.0	0.0	14.45	6.09
128.7	20.0	2.69	100.0	100.0	17.2	0.0	0.8	0.0	0.0	14.50	6.09
129.0	20.8	2.69	100.0	100.0	17.6	0.0	0.9	0.0	0.0	14.56	6.09
129.3	17.3	2.70	100.0	100.0	19.6	0.0	1.5	0.0	0.0	14.62	6.09
129.6	5.1	2.70	100.0	100.0	27.0	0.0	6.2	0.0	0.0	14.69	6.09
129.9	0.0	2.67	100.0	100.0	28.6	0.0	7.9	0.0	0.0	14.76	6.09
130.2	0.0	2.66	100.0	100.0	28.3	0.0	7.5	0.0	0.0	14.87	6.09
130.5	0.0	2.65	100.0	100.0	27.3	0.0	6.4	0.0	0.0	14.95	6.09
130.8	0.8	2.66	100.0	100.0	27.0	0.0	6.2	0.0	0.0	15.03	6.09
131.2	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	15.12	6.09
131.5	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	15.20	6.09
131.8	3.7	2.66	100.0	100.0	27.6	0.0	6.7	0.0	0.0	15.28	6.09
132.1	4.9	2.67	100.0	100.0	27.1	0.0	6.3	0.0	0.0	15.36	6.09
132.4	1.2	2.66	100.0	100.0	28.3	0.0	7.8	0.0	0.0	15.45	6.09
132.7	0.0	2.65	100.0	100.0	28.5	0.0	7.9	0.0	0.0	15.54	6.09
133.0	0.7	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	15.62	6.09
133.3	0.9	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	15.71	6.09
133.6	0.1	2.65	100.0	100.0	24.9	0.0	4.3	0.0	0.0	15.79	6.09
133.9	0.0	2.66	100.0	100.0	24.9	0.0	4.3	0.0	0.0	15.86	6.09
134.2	0.4	2.66	100.0	100.0	27.1	0.0	6.3	0.0	0.0	15.94	6.09
134.5	1.1	2.67	100.0	100.0	27.2	0.0	6.3	0.0	0.0	16.03	6.09

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
14.8	1.3	2.67	100.0	100.0	27.0	0.0	6.2	0.0	0.0	16.11	6.09
15.1	1.5	2.66	100.0	100.0	27.5	0.0	6.6	0.0	0.0	16.19	6.09
15.4	1.1	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	16.27	6.09
15.7	0.0	2.66	100.0	100.0	25.0	0.0	5.2	0.0	0.0	16.35	6.09
16.0	0.0	2.66	100.0	100.0	15.5	0.0	1.5	0.0	0.0	16.40	6.09
16.3	0.0	2.67	100.0	100.0	14.0	0.0	1.5	0.0	0.0	16.45	6.09
16.6	1.4	2.67	100.0	100.0	25.7	0.0	4.4	0.0	0.0	16.53	6.09
16.9	4.3	2.67	100.0	100.0	25.7	0.0	4.9	0.0	0.0	16.61	6.09
17.2	8.1	2.67	100.0	100.0	25.1	0.0	3.1	0.0	0.0	16.66	6.09
17.5	5.3	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	16.75	6.09
17.9	5.3	2.69	100.0	100.0	26.5	0.0	5.7	0.0	0.0	16.83	6.09
18.2	7.6	2.69	100.0	100.0	25.2	0.0	4.5	0.0	0.0	16.91	6.09
18.5	12.9	2.70	100.0	100.0	25.2	0.0	5.5	0.0	0.0	16.98	6.09
18.8	12.3	2.66	100.0	100.0	25.4	0.0	5.2	0.0	0.0	17.05	6.09
19.1	5.3	2.69	100.0	100.0	26.5	0.0	5.2	0.0	0.0	17.13	6.09
19.4	5.3	2.66	100.0	100.0	27.5	0.0	6.7	0.0	0.0	17.21	6.09
19.7	5.3	2.66	100.0	100.0	26.0	0.0	5.8	0.0	0.0	17.30	6.09
20.0	5.8	2.67	100.0	100.0	26.9	0.0	6.1	0.0	0.0	17.38	6.09
20.3	3.1	2.66	100.0	100.0	26.4	0.0	5.2	0.0	0.0	17.45	6.09
20.6	2.2	2.67	100.0	100.0	24.5	0.0	4.0	0.0	0.0	17.53	6.09
20.9	10.8	2.66	100.0	100.0	25.5	0.0	5.5	0.0	0.0	17.60	6.09
21.2	12.9	2.66	100.0	100.0	26.7	0.0	5.8	0.0	0.0	17.68	6.09
21.5	15.1	2.65	100.0	100.0	26.0	0.0	5.7	0.0	0.0	17.76	6.09
21.8	22.9	2.67	100.0	100.0	26.0	0.0	5.4	0.0	0.0	17.84	6.09
22.1	5.4	2.69	100.0	100.0	25.5	0.0	5.2	0.0	0.0	17.92	6.09
22.4	11.0	2.69	100.0	100.0	25.5	0.0	5.1	0.0	0.0	18.00	6.09
22.7	11.6	2.69	100.0	100.0	25.5	0.0	5.0	0.0	0.0	18.08	6.09
23.0	14.1	2.69	100.0	100.0	25.5	0.0	5.0	0.0	0.0	18.14	6.09
23.3	4.7	2.68	100.0	100.0	26.2	0.0	5.4	0.0	0.0	18.21	6.09
23.6	8.5	2.70	100.0	100.0	26.0	0.0	5.4	0.0	0.0	18.29	6.09
23.9	8.7	2.70	100.0	100.0	24.8	0.0	4.2	0.0	0.0	18.37	6.09
24.2	8.7	2.69	100.0	100.0	24.8	0.0	4.2	0.0	0.0	18.44	6.09
24.5	10.9	2.70	100.0	100.0	25.5	0.0	4.8	0.0	0.0	18.51	6.09
24.8	11.1	2.70	100.0	100.0	25.5	0.0	5.0	0.0	0.0	18.59	6.09
25.1	9.9	2.69	100.0	100.0	25.5	0.0	5.5	0.0	0.0	18.66	6.09
25.4	12.1	2.70	100.0	100.0	25.5	0.0	5.5	0.0	0.0	18.73	6.09
25.7	12.7	2.71	100.0	100.0	24.1	0.0	4.1	0.0	0.0	18.80	6.09
26.0	8.2	2.69	100.0	100.0	25.2	0.0	4.9	0.0	0.0	18.86	6.09
26.3	4.0	2.68	100.0	100.0	25.5	0.0	7.9	0.0	0.0	18.94	6.09
26.6	0.0	2.67	100.0	100.0	25.1	0.0	8.0	0.0	0.0	19.02	6.09
26.9	0.4	2.65	100.0	100.0	25.9	0.0	8.5	0.0	0.0	19.11	6.09
27.2	2.2	2.66	100.0	100.0	27.9	0.0	7.5	0.0	0.0	19.20	6.09
27.5	5.8	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	19.37	6.09

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
8.2	3.8	2.66	100.0	100.0	26.6	0.0	5.7	0.0	0.0	19.45	6.09
8.5	3.2	2.67	100.0	100.0	25.8	0.0	5.0	0.0	0.0	19.53	6.09
8.8	6.6	2.70	100.0	100.0	24.3	0.0	3.8	0.0	0.0	19.60	6.09
9.1	7.4	2.69	100.0	100.0	24.5	0.0	4.0	0.0	0.0	19.68	6.09
9.4	8.4	2.70	100.0	100.0	23.9	0.0	3.6	0.0	0.0	19.75	6.09
9.7	8.2	2.70	100.0	100.0	24.0	0.0	3.6	0.0	0.0	19.83	6.09
10.1	5.8	2.67	100.0	100.0	24.5	0.0	4.0	0.0	0.0	19.90	6.09
10.4	2.9	2.67	100.0	100.0	26.5	0.0	5.8	0.0	0.0	19.98	6.09
10.7	3.1	2.66	100.0	100.0	27.7	0.0	6.9	0.0	0.0	20.06	6.09
11.0	11.5	2.70	100.0	100.0	25.6	0.0	3.4	0.0	0.0	20.14	6.09
11.3	12.1	2.70	100.0	100.0	25.9	0.0	3.5	0.0	0.0	20.21	6.09
11.6	17.5	2.72	100.0	100.0	20.2	0.0	1.7	0.0	0.0	20.28	6.09
11.9	5.1	2.66	100.0	100.0	26.2	0.0	5.3	0.0	0.0	20.35	6.09
12.2	1.2	2.65	100.0	100.0	26.9	0.0	6.0	0.0	0.0	20.44	6.09
12.5	1.9	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	20.52	6.09
12.8	1.2	2.67	100.0	100.0	26.8	0.0	5.9	0.0	0.0	20.60	6.09
13.1	0.0	2.65	100.0	100.0	26.5	0.0	5.7	0.0	0.0	20.68	6.09
13.4	0.0	2.65	100.0	100.0	27.1	0.0	6.2	0.0	0.0	20.76	6.09
13.7	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	20.85	6.09
14.0	2.2	2.66	100.0	100.0	27.0	0.0	6.2	0.0	0.0	20.93	6.09
14.3	0.0	2.66	100.0	100.0	28.2	0.0	7.4	0.0	0.0	21.01	6.09
14.6	2.7	2.69	100.0	100.0	28.3	0.0	7.6	0.0	0.0	21.10	6.09
14.9	4.8	2.69	100.0	100.0	27.2	0.0	6.3	0.0	0.0	21.18	6.09
15.2	7.4	2.69	100.0	100.0	25.8	0.0	5.0	0.0	0.0	21.26	6.09
15.5	7.5	2.69	100.0	100.0	25.8	0.0	5.0	0.0	0.0	21.34	6.09
15.8	6.9	2.70	100.0	100.0	26.0	0.0	5.2	0.0	0.0	21.42	6.09
16.1	7.7	2.69	100.0	100.0	26.1	0.0	5.3	0.0	0.0	21.50	6.09
16.5	6.1	2.67	100.0	100.0	26.0	0.0	5.2	0.0	0.0	21.58	6.09
16.8	12.7	2.70	100.0	100.0	21.5	0.0	2.2	0.0	0.0	21.65	6.09
17.1	19.3	2.71	100.0	100.0	18.9	0.0	1.2	0.0	0.0	21.71	6.09
17.4	25.0	2.70	100.0	100.0	16.9	0.0	0.8	0.0	0.0	21.76	6.09
17.7	33.4	2.72	100.0	100.0	14.4	0.0	0.4	0.0	0.0	21.81	6.09
18.0	35.2	2.73	100.0	100.0	13.9	0.0	0.3	0.0	0.0	21.85	6.09

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N

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* SCHLUMBERGER *
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COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	14-FEB-1979
REFERENCE	015,2301

App. 10

Processing no.7

"Cut off" : Vcl $\geq$ 33%

ϕ $\leq$ 13%

Sw $\geq$ 55%

Δt $\leq$ 77 s/ft

INTERVAL	RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS: RESISTIVITY	CLAY PARAMETERS: DELTA-T	CLAY PARAMETERS: NEUTRON INDEX	CLAY PARAMETERS: DENSITY	TEMPERATURE FAHRENHEIT
2058.0 TO 2005.6	0.066	0.10	0.82	0.70	140.0	47.0	2.00	130.
2005.6 TO 1967.6	0.066	0.10	0.14	0.70	140.0	47.0	2.00	130.

POROSITY	CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTACT)
SW	CUT-OFFS	NONE	NONE	55.0 %
DELTA-T	CUT-OFFS	NONE	77.0	77.0
CLAY	CUT-OFFS	NONE	40.0 %	40.0 %

1967.6 TO 2058.0 METER

	TOTAL *****	NET ***	NET PAY *******	
THICKNESS	90.37	77.27	26.67	METER
AVERAGE POROSITY	23.25	25.89	23.76	%
VOID VOLUME	21.01	20.00	6.34	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	3.22			MILLIDARCY
SUM OF PERMEABILITY	1196.08	1194.63	872.11	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	29.18	28.51	79.56	%
HYDROCARBON VOID VOLUME	5.69	5.32	5.11	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	2.90	2.81	2.72	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		2.00		HYDROCARBON-METER
RESIDUAL DIFFERENCE		0.81		HYDROCARBON-METER

LISTING FLAGS :
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P = POROSITY SMALLER THAN	13.0	%
S = WATER SATURATION HIGHER THAN	55.0	%
D = DELTA-T SMALLER THAN	77.0	
C = CLAY CONTENT GREATER THAN	40.0	%

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
7.8	28.2	2.70	84.0	98.1	9.4	0.0	0.1	1.5	1.5	0.03	0.00
8.1	38.0	2.71	40.7	69.8	15.0	0.0	0.4	8.9	4.4	0.07	0.03
8.4	45.2	2.73	44.0	84.5	7.3	0.0	0.0	4.1	3.0	0.09	0.05
8.7	48.0	2.73	37.3	90.6	9.3	0.0	0.1	5.8	5.0	0.11	0.03
9.0	30.3	2.71	24.8	69.7	15.4	0.0	0.7	11.6	6.9	0.16	0.04
9.3	15.6	2.69	19.6	72.6	23.2	0.0	1.3	18.6	12.3	0.21	0.09
9.6	12.1	2.67	12.8	56.8	25.1	0.0	24.3	21.9	11.1	0.29	0.15
9.9	1.2	2.66	6.6	38.4	30.8	0.0	227.0	28.7	9.8	0.38	0.24
0.2	1.3	2.67	10.8	42.8	30.3	0.0	78.7	27.0	9.7	0.47	0.32
0.5	7.0	2.68	13.0	59.6	27.5	0.0	35.2	23.9	12.8	0.56	0.40
0.8	6.1	2.68	11.9	56.1	27.1	0.0	39.7	23.9	12.0	0.64	0.47
1.1	6.4	2.68	8.6	43.2	29.0	0.0	104.5	26.5	10.0	0.73	0.55
1.4	8.8	2.68	7.0	45.4	26.0	0.0	94.5	24.2	10.0	0.81	0.63
1.7	6.2	2.68	7.3	46.5	26.2	0.0	90.9	24.3	10.3	0.89	0.70
2.0	6.2	2.68	8.7	47.8	25.8	0.0	59.6	23.5	10.1	0.98	0.78
2.3	7.4	2.68	13.5	52.5	24.0	0.0	17.9	20.8	9.4	1.05	0.84
2.6	4.0	2.68	14.5	58.9	25.7	0.0	21.1	22.0	11.4	1.13	0.91
2.9	1.7	2.67	13.3	55.7	28.2	0.0	37.6	24.4	11.9	1.21	0.98
3.2	9.6	2.68	10.3	47.5	24.2	0.0	31.4	21.7	9.0	1.29	1.05
3.5	8.8	2.68	8.4	49.6	23.0	0.0	38.4	21.1	9.5	1.36	1.12
3.9	15.4	2.69	13.9	67.7	17.7	0.0	4.3	15.3	9.5	1.42	1.17
4.2	18.9	2.69	43.3	84.3	12.1	0.0	0.2	6.9	5.0	1.45	1.17
4.5	31.9	2.72	50.6	86.6	11.6	0.0	0.1	5.7	4.2	1.49	1.18
4.8	48.7	2.73	57.2	94.6	7.4	0.0	0.0	3.2	2.8	1.52	1.18
5.1	63.3	2.75	89.2	98.9	0.5	0.0	0.0	0.1	0.0	1.53	1.18
5.4	53.9	2.74	71.4	96.7	3.0	0.0	0.0	0.9	0.8	1.53	1.18
5.7	40.3	2.73	37.5	79.5	8.9	0.0	0.0	5.6	3.7	1.56	1.18
6.0	29.2	2.72	20.2	51.9	17.0	0.0	1.7	13.5	5.4	1.60	1.20
6.3	22.1	2.70	30.3	61.1	20.3	0.0	1.7	14.1	6.2	1.66	1.24
6.6	27.2	2.71	37.9	82.3	16.2	0.0	0.6	10.1	7.2	1.72	1.28
6.9	35.0	2.71	51.5	93.6	12.8	0.0	0.2	6.2	5.4	1.76	1.29
7.2	45.2	2.72	66.5	96.0	7.9	0.0	0.0	2.6	2.3	1.78	1.29
7.5	37.1	2.72	59.0	94.9	11.1	0.0	0.1	4.6	4.0	1.81	1.29
7.8	20.2	2.70	30.1	69.5	20.6	0.0	1.8	14.4	8.1	1.87	1.32
8.1	17.4	2.69	26.8	56.9	24.2	0.0	4.7	17.7	7.3	1.94	1.38
8.4	22.9	2.71	43.3	85.9	16.8	0.0	0.7	9.5	7.1	2.00	1.41
8.7	30.3	2.70	52.2	92.6	15.1	0.0	0.2	6.2	5.3	2.04	1.43
9.0	37.4	2.71	56.3	88.2	9.3	0.0	0.1	4.1	3.0	2.07	1.43
9.3	28.7	2.71	35.1	86.0	14.3	0.0	0.3	9.3	7.3	2.11	1.45
9.6	6.7	2.68	21.5	68.7	26.5	0.0	11.0	20.8	12.5	2.18	1.50
9.9	27.0	2.72	40.4	74.9	14.6	0.0	0.4	8.7	5.0	2.24	1.54
0.3	42.1	2.73	60.1	89.1	7.6	0.0	0.0	3.0	2.2	2.27	1.54
0.6	54.3	2.74	67.5	96.2	3.6	0.0	0.0	1.2	1.0	2.28	1.54
0.9	47.2	2.72	70.3	95.8	5.9	0.0	0.0	1.8	1.5	2.29	1.54

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
81.2	36.7	2.73	66.6	95.8	10.0	0.0	0.1	3.3	2.9	2.32	1.54
81.5	45.4	2.72	77.2	97.4	6.6	0.0	0.0	1.5	1.3	2.34	1.54
81.8	40.0	2.72	63.8	95.6	10.9	0.0	0.1	3.9	3.5	2.37	1.54
82.1	40.3	2.72	57.1	94.5	11.5	0.0	0.1	4.9	4.3	2.41	1.54
82.4	41.4	2.71	59.1	89.5	9.7	0.0	0.1	4.0	2.9	2.44	1.54
82.7	35.8	2.72	22.1	65.0	15.8	0.0	1.0	12.3	6.8	2.48	1.56
83.0	7.7	2.67	9.4	44.7	30.8	0.0	113.5	27.9	10.9	2.56	1.63
83.3	5.5	2.66	10.1	45.1	30.9	0.0	99.6	27.8	10.8	2.66	1.72
83.6	10.1	2.68	11.4	52.7	28.5	0.0	39.2	23.5	10.9	2.74	1.79
83.9	4.1	2.68	10.7	44.9	31.9	0.0	102.4	28.5	10.9	2.84	1.88
84.2	4.6	2.66	15.0	42.6	31.3	0.0	47.5	26.6	8.6	2.94	1.97
84.5	13.2	2.69	28.1	52.8	24.2	0.0	4.3	17.4	6.0	3.02	2.03
84.8	15.5	2.69	40.9	76.1	21.3	0.0	2.1	12.6	7.5	3.09	2.07
85.1	34.4	2.73	62.5	89.7	10.3	0.0	0.1	3.9	2.8	3.13	2.08
85.4	58.9	2.76	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.13	2.08
85.7	54.5	2.74	75.9	97.3	2.8	0.0	0.0	0.7	0.6	3.14	2.08
86.0	39.6	2.73	29.0	88.4	8.4	0.0	0.0	5.9	5.0	3.16	2.08
86.3	15.5	2.69	10.0	46.2	22.3	0.0	23.1	20.0	8.5	3.22	2.13
86.7	13.7	2.69	10.2	57.4	24.8	0.0	36.4	22.3	11.8	3.29	2.20
87.0	21.9	2.72	14.3	67.1	18.7	0.0	2.9	15.1	9.0	3.34	2.24
87.3	25.4	2.72	31.8	77.9	15.4	0.0	0.5	10.5	7.1	3.39	2.28
87.6	43.6	2.74	41.2	83.5	7.0	0.0	0.0	4.1	3.0	3.42	2.29
87.9	54.1	2.75	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.43	2.29
88.2	37.9	2.73	26.9	82.6	9.4	0.0	0.1	6.9	5.2	3.45	2.29
88.5	28.6	2.72	18.7	77.3	14.6	0.0	1.0	11.8	8.8	3.49	2.31
88.8	22.1	2.70	21.0	73.0	16.9	0.0	1.5	13.3	8.8	3.53	2.35
89.1	23.4	2.70	22.8	75.7	15.5	0.0	0.9	12.0	8.2	3.59	2.39
89.4	34.5	2.73	32.6	80.1	11.4	0.0	0.1	7.7	5.4	3.63	2.41
89.7	49.6	2.74	49.1	86.2	6.3	0.0	0.0	3.2	2.3	3.65	2.41
90.0	55.6	2.74	71.4	83.3	0.9	0.0	0.0	0.2	0.1	3.65	2.41
90.3	65.5	2.77	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.65	2.41
90.6	64.1	2.76	85.7	95.6	0.5	0.0	0.0	0.1	0.1	3.65	2.41
90.9	35.8	2.73	25.5	83.5	14.3	0.0	0.5	10.7	8.3	3.68	2.42
91.2	20.8	2.71	16.6	77.7	18.5	0.0	3.6	15.4	11.3	3.75	2.47
91.5	11.8	2.69	7.6	45.8	27.5	0.0	102.7	25.4	10.5	3.82	2.54
91.8	11.5	2.69	6.2	43.7	24.4	0.0	52.0	22.4	8.7	3.89	2.61
92.1	9.3	2.68	8.5	44.0	26.2	0.0	66.4	24.0	9.3	3.97	2.68
92.4	3.9	2.66	9.3	40.8	30.6	0.0	111.0	27.7	9.6	4.06	2.76
92.7	0.8	2.67	10.9	43.0	31.4	0.0	92.7	28.0	10.1	4.15	2.85
93.1	0.0	2.67	11.1	42.5	31.8	0.0	93.9	28.3	10.0	4.25	2.93
93.4	0.3	2.67	10.6	37.6	32.9	0.0	119.2	29.4	8.9	4.35	3.02
93.7	3.9	2.68	10.5	40.8	28.3	0.0	62.4	25.3	8.6	4.44	3.10
94.0	11.1	2.69	9.1	43.6	24.7	0.0	44.8	22.5	8.5	4.52	3.17
94.3	13.3	2.69	6.6	45.8	23.2	0.0	37.2	21.2	8.6	4.59	3.24

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
94.6	10.0	2.68	9.3	45.7	24.6	0.0	42.1	22.3	9.0	4.66	3.31
94.9	8.0	2.68	9.2	41.0	28.4	0.0	82.7	25.8	9.0	4.75	3.38
95.2	6.5	2.68	10.5	41.3	29.7	0.0	76.0	26.5	9.1	4.84	3.47
95.5	16.0	2.69	20.4	51.3	21.4	0.0	4.7	17.0	6.6	4.91	3.52
95.8	24.2	2.71	35.3	74.0	16.7	0.0	0.7	10.8	6.4	4.97	3.56
96.1	42.8	2.73	51.1	86.8	6.7	0.0	0.0	3.3	2.4	4.99	3.56
96.4	45.2	2.73	45.6	86.4	7.0	0.0	0.0	3.8	2.8	5.00	3.56
96.7	17.1	2.70	11.0	45.8	26.4	0.0	41.4	23.5	9.2	5.07	3.62
97.0	8.3	2.68	11.2	50.4	27.9	0.0	51.0	24.8	10.9	5.15	3.69
97.3	14.7	2.69	11.2	53.8	24.9	0.0	30.7	22.1	10.6	5.23	3.76
97.6	11.4	2.69	9.6	44.9	28.5	0.0	77.4	25.8	10.1	5.31	3.83
97.9	7.4	2.68	19.2	61.7	26.6	0.0	14.1	21.5	11.3	5.39	3.90
98.2	13.4	2.69	27.0	77.6	21.0	0.0	2.4	15.3	10.6	5.46	3.95
98.5	15.8	2.69	26.0	62.5	24.3	0.0	5.0	18.0	8.9	5.53	4.00
98.8	7.5	2.68	24.6	67.0	28.3	0.0	11.3	21.3	12.0	5.61	4.06
99.2	6.3	2.68	30.5	74.4	28.5	0.0	7.8	19.8	12.5	5.70	4.13
99.5	27.4	2.71	31.4	79.6	15.7	0.0	0.5	10.8	7.6	5.76	4.17
99.8	23.9	2.71	18.6	55.4	19.3	0.0	3.5	15.7	7.1	5.81	4.21
00.1	12.5	2.69	13.9	46.5	26.5	0.0	26.0	22.8	8.6	5.90	4.28
00.4	8.3	2.68	12.9	48.3	27.2	0.0	34.2	23.7	9.6	5.98	4.35
00.7	11.8	2.69	14.7	49.6	25.0	0.0	18.1	21.3	8.7	6.06	4.42
01.0	10.7	2.68	14.3	50.7	24.7	0.0	18.2	21.2	9.0	6.13	4.49
01.3	8.3	2.68	24.2	67.1	24.4	0.0	6.0	18.5	10.5	6.21	4.54
01.6	13.6	2.69	40.7	83.4	18.6	0.0	1.2	11.0	7.9	6.26	4.58
01.9	25.8	2.71	50.8	83.5	14.3	0.0	0.4	7.0	4.7	6.32	4.61
02.2	41.2	2.73	62.5	89.8	6.8	0.0	0.0	2.6	1.9	6.34	4.61
02.5	39.9	2.74	50.3	73.8	7.3	0.0	0.0	3.6	1.7	6.36	4.61
02.8	15.6	2.69	28.6	58.7	22.3	0.0	2.8	15.9	6.7	6.42	4.65
03.1	12.4	2.69	28.8	65.3	23.4	0.0	3.5	16.7	6.5	6.49	4.70
03.4	12.4	2.69	25.4	67.5	23.2	0.0	4.4	17.3	9.8	6.56	4.75
03.7	6.1	2.68	24.3	54.9	26.4	0.0	8.5	20.0	8.1	6.64	4.81
04.0	3.7	2.68	24.6	53.5	28.9	0.0	12.5	21.8	8.4	6.72	4.87
04.3	7.0	2.68	27.7	61.2	26.3	0.0	6.4	19.0	8.8	6.80	4.93
04.6	6.6	2.68	37.2	82.0	22.9	0.0	2.9	14.4	10.3	6.88	4.98
04.9	2.1	2.67	38.8	82.6	25.9	0.0	5.1	15.9	11.4	6.95	5.03
05.2	10.1	2.68	50.6	86.6	21.8	0.0	2.3	10.8	7.9	7.02	5.07
05.6	19.7	2.69	58.0	75.5	18.9	0.0	1.2	7.9	3.3	7.08	5.08
05.9	22.3	2.69	60.1	73.3	19.4	0.0	1.4	7.7	2.5	7.14	5.08
06.2	9.7	2.67	54.9	71.6	27.2	0.0	6.4	12.3	4.5	7.22	5.12
06.5	10.1	2.67	61.9	74.7	26.2	0.0	5.4	10.0	3.4	7.30	5.12
06.8	11.5	2.67	68.9	86.0	24.0	0.0	3.6	7.5	4.1	7.37	5.12
07.1	2.8	2.66	68.4	86.4	27.6	0.0	7.0	8.8	5.0	7.46	5.12
07.4	5.5	2.67	75.1	90.2	26.2	0.0	5.3	6.5	4.0	7.54	5.12
07.7	4.6	2.66	75.5	91.8	26.4	0.0	5.6	6.5	4.3	7.62	5.12

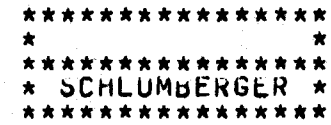
DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
18.0	1.0	2.66	77.0	91.8	28.1	0.0	7.4	6.5	4.2	7.70	5.12
18.3	1.9	2.66	87.4	95.1	28.0	0.0	7.3	3.5	2.1	7.79	5.12
18.6	0.0	2.65	96.2	99.5	29.3	0.0	8.9	1.1	1.0	7.88	5.12
18.9	0.0	2.66	100.0	100.0	29.1	0.0	8.6	0.0	0.0	7.97	5.12
19.2	0.0	2.67	100.0	100.0	28.4	0.0	7.8	0.0	0.0	8.05	5.12
19.5	0.0	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	8.14	5.12
19.8	0.0	2.66	100.0	100.0	29.1	0.0	8.6	0.0	0.0	8.23	5.12
20.1	0.0	2.66	100.0	100.0	29.6	0.0	9.3	0.0	0.0	8.32	5.12
20.4	0.0	2.65	100.0	100.0	28.7	0.0	8.1	0.0	0.0	8.41	5.12
20.7	5.3	2.67	100.0	100.0	27.1	0.0	6.2	0.0	0.0	8.49	5.12
21.0	7.5	2.66	100.0	100.0	26.6	0.0	5.7	0.0	0.0	8.57	5.12
21.3	1.7	2.66	97.5	99.7	29.0	0.0	8.5	0.7	0.7	8.66	5.12
21.6	0.0	2.65	97.0	99.7	29.4	0.0	9.1	0.9	0.8	8.75	5.12
21.9	0.0	2.66	99.5	100.0	29.3	0.0	8.9	0.1	0.1	8.84	5.12
22.2	3.3	2.67	100.0	100.0	28.7	0.0	8.1	0.0	0.0	8.93	5.12
22.5	4.6	2.69	100.0	100.0	27.9	0.0	7.2	0.0	0.0	9.01	5.12
22.8	3.3	2.67	100.0	100.0	28.9	0.0	8.4	0.0	0.0	9.10	5.12
23.2	4.6	2.67	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.19	5.12
23.5	3.5	2.67	100.0	100.0	28.0	0.0	7.3	0.0	0.0	9.27	5.12
23.8	0.9	2.65	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.36	5.12
24.1	4.4	2.67	100.0	100.0	27.3	0.0	6.4	0.0	0.0	9.44	5.12
24.4	8.8	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	9.52	5.12
24.7	0.0	2.66	100.0	100.0	28.7	0.0	8.0	0.0	0.0	9.61	5.12
25.0	0.0	2.66	100.0	100.0	28.2	0.0	7.4	0.0	0.0	9.69	5.12
25.3	0.0	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.78	5.12
25.6	0.0	2.65	100.0	100.0	26.9	0.0	6.1	0.0	0.0	9.86	5.12
25.9	2.5	2.67	100.0	100.0	27.1	0.0	6.2	0.0	0.0	9.95	5.12
26.2	11.0	2.67	100.0	100.0	24.4	0.0	3.9	0.0	0.0	10.02	5.12
26.5	3.0	2.66	100.0	100.0	28.3	0.0	7.5	0.0	0.0	10.10	5.12
26.8	0.2	2.68	100.0	100.0	28.8	0.0	8.3	0.0	0.0	10.19	5.12
27.1	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	10.28	5.12
27.4	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	10.37	5.12
27.7	0.0	2.67	100.0	100.0	26.9	0.0	6.1	0.0	0.0	10.45	5.12
28.0	0.0	2.66	100.0	100.0	28.3	0.0	7.6	0.0	0.0	10.53	5.12
28.4	0.0	2.65	100.0	100.0	29.0	0.0	8.5	0.0	0.0	10.62	5.12
28.7	0.0	2.66	100.0	100.0	28.9	0.0	8.3	0.0	0.0	10.71	5.12
29.0	0.0	2.67	100.0	100.0	28.7	0.0	8.1	0.0	0.0	10.80	5.12
29.3	0.0	2.66	100.0	100.0	28.9	0.0	8.3	0.0	0.0	10.88	5.12
29.6	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	10.97	5.12
29.9	0.0	2.67	100.0	100.0	28.8	0.0	8.2	0.0	0.0	11.06	5.12
30.2	0.0	2.65	100.0	100.0	28.3	0.0	7.6	0.0	0.0	11.14	5.12
30.5	0.0	2.67	100.0	100.0	27.8	0.0	7.0	0.0	0.0	11.23	5.12
30.8	0.0	2.66	100.0	100.0	26.5	0.0	5.7	0.0	0.0	11.31	5.12
31.1	0.0	2.67	100.0	100.0	24.1	0.0	3.7	0.0	0.0	11.39	5.12

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
21.4	0.0	2.67	100.0	100.0	15.6	0.0	0.5	0.0	0.0	11.44	5.12
21.7	0.0	2.67	100.0	100.0	2.2	0.0	0.0	0.0	0.0	11.46	5.12
22.0	0.0	2.66	100.0	100.0	5.6	0.0	0.0	0.0	0.0	11.47	5.12
22.3	0.0	2.66	100.0	100.0	17.1	0.0	0.8	0.0	0.0	11.52	5.12
22.6	0.0	2.67	100.0	100.0	26.9	0.0	6.0	0.0	0.0	11.60	5.12
22.9	0.0	2.66	100.0	100.0	28.1	0.0	7.3	0.0	0.0	11.68	5.12
23.2	0.0	2.67	100.0	100.0	28.5	0.0	7.8	0.0	0.0	11.77	5.12
23.5	1.1	2.67	100.0	100.0	28.3	0.0	7.5	0.0	0.0	11.85	5.12
23.8	3.2	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	11.94	5.12
24.1	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	12.02	5.12
24.4	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	12.11	5.12
24.8	0.9	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	12.19	5.12
25.1	2.0	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.28	5.12
25.4	0.7	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	12.36	5.12
25.7	0.0	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.45	5.12
26.0	0.0	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	12.53	5.12
26.3	0.0	2.66	100.0	100.0	26.8	0.0	5.8	0.0	0.0	12.62	5.12
26.6	0.0	2.66	100.0	100.0	27.0	0.0	6.1	0.0	0.0	12.70	5.12
26.9	0.0	2.68	100.0	100.0	27.5	0.0	6.6	0.0	0.0	12.78	5.12
27.2	0.0	2.68	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.86	5.12
27.5	0.0	2.65	100.0	100.0	27.9	0.0	7.1	0.0	0.0	12.95	5.12
27.8	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	13.03	5.12
28.1	0.0	2.66	100.0	100.0	26.7	0.0	5.9	0.0	0.0	13.11	5.12
28.4	9.9	2.67	100.0	100.0	23.6	0.0	3.4	0.0	0.0	13.19	5.12
28.7	4.8	2.67	100.0	100.0	24.7	0.0	4.1	0.0	0.0	13.26	5.12
29.0	8.7	2.68	100.0	100.0	25.5	0.0	5.3	0.0	0.0	13.34	5.12
29.3	16.7	2.68	100.0	100.0	18.9	0.0	1.2	0.0	0.0	13.40	5.12
29.6	5.1	2.66	100.0	100.0	26.3	0.0	5.4	0.0	0.0	13.47	5.12
29.9	0.0	2.67	100.0	100.0	28.6	0.0	8.0	0.0	0.0	13.56	5.12
30.2	0.0	2.66	100.0	100.0	28.3	0.0	7.6	0.0	0.0	13.64	5.12
30.5	0.0	2.65	100.0	100.0	27.3	0.0	6.5	0.0	0.0	13.73	5.12
30.8	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	13.81	5.12
31.2	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	13.89	5.12
31.5	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	13.98	5.12
31.8	0.0	2.66	100.0	100.0	28.6	0.0	8.0	0.0	0.0	14.06	5.12
32.1	0.0	2.65	100.0	100.0	28.5	0.0	7.9	0.0	0.0	14.15	5.12
32.4	0.1	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	14.24	5.12
32.7	0.0	2.66	100.0	100.0	28.6	0.0	7.9	0.0	0.0	14.32	5.12
33.0	0.0	2.66	100.0	100.0	28.2	0.0	7.5	0.0	0.0	14.41	5.12
33.3	0.0	2.66	100.0	100.0	27.6	0.0	6.7	0.0	0.0	14.49	5.12
33.6	0.1	2.65	100.0	100.0	24.9	0.0	4.3	0.0	0.0	14.57	5.12
33.9	0.0	2.66	100.0	100.0	24.9	0.0	4.3	0.0	0.0	14.65	5.12
34.2	0.5	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	14.73	5.12
34.5	1.1	2.67	100.0	100.0	27.0	0.0	6.2	0.0	0.0	14.81	5.12

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
34.8	1.3	2.65	100.0	100.0	26.9	0.0	6.0	0.0	0.0	14.90	5.12
35.1	1.5	2.67	100.0	100.0	27.3	0.0	6.4	0.0	0.0	14.98	5.12
35.4	0.0	2.66	100.0	100.0	27.4	0.0	6.6	0.0	0.0	15.06	5.12
35.7	0.0	2.66	100.0	100.0	23.8	0.0	3.5	0.0	0.0	15.14	5.12
36.0	0.0	2.66	100.0	100.0	15.3	0.0	0.5	0.0	0.0	15.19	5.12
36.3	0.0	2.67	100.0	100.0	19.0	0.0	1.3	0.0	0.0	15.24	5.12
36.6	0.0	2.65	100.0	100.0	26.2	0.0	5.3	0.0	0.0	15.32	5.12
36.9	4.8	2.67	100.0	100.0	25.5	0.0	4.6	0.0	0.0	15.40	5.12
37.2	3.8	2.67	100.0	100.0	25.7	0.0	4.9	0.0	0.0	15.47	5.12
37.6	3.4	2.67	100.0	100.0	26.2	0.0	5.4	0.0	0.0	15.55	5.12
37.9	5.8	2.66	100.0	100.0	25.7	0.0	4.9	0.0	0.0	15.63	5.12
38.2	1.4	2.66	100.0	100.0	26.7	0.0	5.9	0.0	0.0	15.71	5.12
38.5	0.0	2.67	100.0	100.0	26.7	0.0	5.8	0.0	0.0	15.80	5.12
38.8	0.0	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	15.88	5.12
39.1	4.5	2.69	100.0	100.0	26.1	0.0	5.2	0.0	0.0	15.96	5.12
39.4	0.0	2.66	100.0	100.0	27.5	0.0	6.7	0.0	0.0	16.04	5.12
39.7	0.0	2.66	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.12	5.12
40.0	0.0	2.67	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.21	5.12
40.3	0.0	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	16.29	5.12
40.6	0.0	2.65	100.0	100.0	26.9	0.0	6.0	0.0	0.0	16.37	5.12
40.9	0.0	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	16.45	5.12
41.2	0.0	2.66	100.0	100.0	26.8	0.0	6.0	0.0	0.0	16.53	5.12
41.5	0.0	2.65	100.0	100.0	27.2	0.0	6.3	0.0	0.0	16.62	5.12
41.8	0.0	2.67	100.0	100.0	27.5	0.0	6.6	0.0	0.0	16.70	5.12
42.1	1.3	2.69	100.0	100.0	27.2	0.0	6.4	0.0	0.0	16.78	5.12
42.4	2.4	2.65	100.0	100.0	26.8	0.0	5.9	0.0	0.0	16.87	5.12
42.7	0.0	2.66	100.0	100.0	27.0	0.0	6.2	0.0	0.0	16.95	5.12
43.0	2.9	2.67	100.0	100.0	25.8	0.0	5.0	0.0	0.0	17.03	5.12
43.3	3.5	2.68	100.0	100.0	25.7	0.0	4.9	0.0	0.0	17.10	5.12
43.7	4.7	2.66	100.0	100.0	25.5	0.0	4.7	0.0	0.0	17.18	5.12
44.0	8.5	2.67	100.0	100.0	25.8	0.0	5.0	0.0	0.0	17.25	5.12
44.3	6.2	2.67	100.0	100.0	24.7	0.0	4.1	0.0	0.0	17.32	5.12
44.6	5.5	2.66	100.0	100.0	25.4	0.0	4.7	0.0	0.0	17.40	5.12
44.9	0.0	2.66	100.0	100.0	27.4	0.0	6.6	0.0	0.0	17.48	5.12
45.2	0.0	2.67	100.0	100.0	27.1	0.0	6.3	0.0	0.0	17.57	5.12
45.5	0.0	2.66	100.0	100.0	27.5	0.0	6.6	0.0	0.0	17.65	5.12
45.8	0.0	2.67	100.0	100.0	26.9	0.0	6.1	0.0	0.0	17.73	5.12
46.1	0.3	2.65	100.0	100.0	27.3	0.0	6.5	0.0	0.0	17.81	5.12
46.4	5.2	2.66	100.0	100.0	25.7	0.0	4.9	0.0	0.0	17.89	5.12
46.7	0.0	2.66	100.0	100.0	28.5	0.0	7.9	0.0	0.0	17.98	5.12
47.0	0.0	2.67	100.0	100.0	29.1	0.0	8.6	0.0	0.0	18.07	5.12
47.3	0.4	2.65	100.0	100.0	29.0	0.0	8.4	0.0	0.0	18.15	5.12
47.6	1.4	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	18.24	5.12
47.9	0.0	2.66	100.0	100.0	27.5	0.0	6.6	0.0	0.0	18.33	5.12

:PTH :TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
18.2	0.0	2.66	100.0	100.0	27.7	0.0	6.8	0.0	0.0	18.41	5.12
18.5	0.0	2.67	100.0	100.0	26.7	0.0	5.9	0.0	0.0	18.49	5.12
18.8	0.0	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	18.57	5.12
19.1	0.0	2.65	100.0	100.0	26.7	0.0	5.8	0.0	0.0	18.65	5.12
19.4	0.0	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	18.73	5.12
19.7	0.0	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	18.81	5.12
20.1	0.0	2.67	100.0	100.0	26.2	0.0	5.4	0.0	0.0	18.89	5.12
20.4	0.6	2.67	100.0	100.0	27.1	0.0	6.2	0.0	0.0	18.98	5.12
20.7	3.1	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	19.06	5.12
21.0	1.4	2.66	100.0	100.0	28.0	0.0	7.3	0.0	0.0	19.14	5.12
21.3	0.0	2.66	100.0	100.0	28.0	0.0	7.3	0.0	0.0	19.23	5.12
21.6	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	19.31	5.12
21.9	0.0	2.66	100.0	100.0	27.6	0.0	6.8	0.0	0.0	19.40	5.12
22.2	0.0	2.65	100.0	100.0	27.2	0.0	6.4	0.0	0.0	19.48	5.12
22.5	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	19.57	5.12
22.8	0.0	2.67	100.0	100.0	27.1	0.0	6.3	0.0	0.0	19.65	5.12
23.1	0.0	2.65	100.0	100.0	26.6	0.0	5.7	0.0	0.0	19.73	5.12
23.4	0.0	2.65	100.0	100.0	27.1	0.0	6.2	0.0	0.0	19.81	5.12
23.7	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	19.90	5.12
24.0	0.0	2.66	100.0	100.0	27.7	0.0	6.9	0.0	0.0	19.98	5.12
24.3	0.0	2.66	100.0	100.0	28.2	0.0	7.5	0.0	0.0	20.06	5.12
24.6	2.5	2.68	100.0	100.0	28.0	0.0	7.3	0.0	0.0	20.15	5.12
24.9	0.0	2.65	100.0	100.0	28.6	0.0	7.9	0.0	0.0	20.24	5.12
25.2	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	20.32	5.12
25.5	0.0	2.65	100.0	100.0	27.9	0.0	7.2	0.0	0.0	20.41	5.12
25.8	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	20.49	5.12
26.1	0.0	2.66	100.0	100.0	28.3	0.0	7.6	0.0	0.0	20.58	5.12
26.5	0.0	2.67	100.0	100.0	27.8	0.0	7.0	0.0	0.0	20.66	5.12
26.8	0.0	2.67	100.0	100.0	27.5	0.0	6.7	0.0	0.0	20.75	5.12
27.1	10.0	2.68	100.0	100.0	23.9	0.0	3.6	0.0	0.0	20.82	5.12
27.4	21.7	2.68	100.0	100.0	17.6	0.0	0.9	0.0	0.0	20.88	5.12
27.7	18.1	2.69	100.0	100.0	20.2	0.0	1.6	0.0	0.0	20.95	5.12
28.0	17.4	2.68	100.0	100.0	19.8	0.0	1.5	0.0	0.0	21.01	5.12

C O M P U T E R P R O C E S S E D I N T E R P R E T A T I O N



COMPANY	ELF NORGE A.S
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
DATE	14-FEB-1979
REFERENCE	613,2361

App. 11

Processing no. 7

"Cut off" : Vcl $\geq$ 40%

ϕ $\leq$ 13%

S_w $\geq$ 55%

Δt $\leq$ 77 s/ft

INTERVAL	RW	RMF	HYDRO-CARBON DENSITY	CLAY PARAMETERS				TEMPERATURE FAHRENHEIT
				RESISTIVITY	DELTA-I	NEUTRON INDEX	DENSITY	
2058.0 TO 2005.6	0.066	0.10	0.82	0.70	140.0	47.0	2.00	130.
2005.6 TO 1967.6	0.066	0.10	0.14	0.70	140.0	47.0	2.00	130.

POROSITY CUT-OFFS	NONE	13.0 %	13.0 % (ONLY LEVELS ABOVE O/W CONTACT)
SW CUT-OFFS	NONE	NONE	55.0 %
DELTA-T CUT-OFFS	NONE	77.0	77.0
CLAY CUT-OFFS	NONE	33.0 %	33.0 %

1967.6 TO 2058.0 METER

	TOTAL *****	NET ***	NET PAY *******	
THICKNESS	90.37	76.66	26.06	METER
AVERAGE POROSITY	23.25	25.98	23.97	%
VOID VOLUME	21.01	19.91	6.25	POROSITY-METER
AVER.PERMEABILITY(LOGARITHMIC)	5.22			MILLIDARCY
SUM OF PERMEABILITY	1196.08	1194.30	871.77	MILLIDARCY-METER
HYDROCARBON PERCENTAGE	29.18	28.19	79.82	%
HYDROCARBON VOID VOLUME	5.69	5.25	5.05	HYDROCARBON-METER
RESIDUAL HYDROCARBON VOLUME	2.90	2.79	2.69	HYDROCARBON-METER
IRREDUCIBLE HYDROCARBON VOLUME		1.99		HYDROCARBON-METER
RESIDUAL DIFFERENCE		0.79		HYDROCARBON-METER

LISTING FLAGS :

P = POROSITY SMALLER THAN 13.0 %
S = WATER SATURATION HIGHER THAN 55.0 %
D = DELTA-T SMALLER THAN 77.0
C = CLAY CONTENT GREATER THAN 33.0 %

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT	
7.8	28.2	2.70	84.0	98.1	9.4	0.0	0.1	1.5	1.5	0.03	0.00	
8.1	38.0	2.71	40.7	69.8	15.0	0.0	0.4	8.9	4.4	0.07	0.00	
8.4	45.2	2.73	44.0	84.5	7.3	0.0	0.0	4.1	3.0	0.09	0.00	
8.7	48.0	2.73	37.3	90.6	9.3	0.0	0.1	5.8	5.0	0.11	0.00	
9.0	30.3	2.71	24.8	69.7	15.4	0.0	0.7	11.6	6.9	0.16	0.02	
9.3	15.6	2.69	19.6	72.6	23.2	0.0	7.3	18.6	12.3	0.21	0.06	
9.6	12.1	2.67	12.8	56.8	25.1	0.0	24.3	21.9	11.1	0.29	0.13	
9.9	1.2	2.66	6.6	38.4	30.8	0.0	227.0	28.7	9.8	0.38	0.21	
0.2	1.3	2.67	10.8	42.8	30.3	0.0	78.7	27.0	9.7	0.47	0.30	
0.5	7.0	2.68	13.0	59.6	27.5	0.0	35.2	23.9	12.8	0.56	0.37	
0.8	6.1	2.68	11.9	56.1	27.1	0.0	39.7	23.9	12.0	0.64	0.44	
1.1	6.4	2.68	8.6	43.2	29.0	0.0	104.5	26.5	10.0	0.73	0.52	
1.4	8.8	2.68	7.0	45.4	26.0	0.0	94.5	24.2	10.0	0.81	0.60	
1.7	6.2	2.68	7.3	46.5	26.2	0.0	90.9	24.3	10.3	0.89	0.68	
2.0	6.2	2.68	8.7	47.8	25.8	0.0	59.6	23.5	10.1	0.96	0.75	
2.3	7.4	2.68	13.5	52.5	24.0	0.0	17.9	20.8	9.4	1.05	0.82	
2.6	4.0	2.68	14.5	58.9	25.7	0.0	21.1	22.0	11.4	1.13	0.88	
2.9	1.7	2.67	13.3	55.7	28.2	0.0	37.6	24.4	11.9	1.21	0.96	
3.2	9.6	2.68	10.5	47.5	24.2	0.0	31.4	21.7	9.0	1.29	1.03	
3.5	8.8	2.68	8.4	49.6	23.0	0.0	38.4	21.1	9.5	1.36	1.09	
3.9	15.4	2.69	13.9	67.7	17.7	0.0	4.3	15.3	9.5	1.42	1.14	
4.2	18.9	2.69	45.3	84.3	12.1	0.0	0.2	6.9	5.0	1.45	1.14	F
4.5	31.9	2.72	50.6	86.6	11.6	0.0	0.1	5.7	4.2	1.49	1.15	F
4.8	48.7	2.73	57.2	94.8	7.4	0.0	0.0	3.2	2.8	1.52	1.15	F
5.1	63.3	2.75	89.2	98.9	0.5	0.0	0.0	0.1	0.0	1.53	1.15	F
5.4	53.9	2.74	71.4	96.7	3.0	0.0	0.0	0.9	0.8	1.55	1.15	F
5.7	40.3	2.73	37.5	79.5	8.9	0.0	0.0	5.6	3.7	1.56	1.15	F
6.0	29.2	2.72	20.2	51.9	17.0	0.0	1.7	13.5	5.4	1.60	1.17	
6.3	22.1	2.70	30.3	61.1	20.3	0.0	1.7	14.1	6.2	1.66	1.22	
6.6	27.2	2.71	37.9	82.3	16.2	0.0	0.6	10.1	7.2	1.72	1.25	
6.9	35.0	2.71	51.5	93.6	12.8	0.0	0.2	6.2	5.4	1.76	1.28	F
7.2	45.2	2.72	66.5	96.0	7.9	0.0	0.0	2.6	2.3	1.78	1.28	F
7.5	37.1	2.72	59.0	94.9	11.1	0.0	0.1	4.6	4.0	1.81	1.28	F
7.8	20.2	2.70	30.1	69.5	20.6	0.0	1.8	14.4	8.1	1.87	1.30	
8.1	17.4	2.69	26.8	56.9	24.2	0.0	4.7	17.7	7.3	1.94	1.35	
8.4	22.9	2.71	43.5	85.9	16.8	0.0	0.7	9.5	7.1	2.00	1.38	
8.7	30.3	2.70	52.2	92.6	15.1	0.0	0.2	6.2	5.3	2.04	1.41	
9.0	37.4	2.71	56.3	88.2	9.3	0.0	0.1	4.1	3.0	2.07	1.41	F
9.3	28.7	2.71	35.1	86.0	14.3	0.0	0.3	9.3	7.3	2.11	1.42	
9.6	6.7	2.68	21.5	68.7	26.5	0.0	11.0	20.8	12.5	2.18	1.48	
9.9	27.0	2.72	40.4	74.9	14.6	0.0	0.4	8.7	5.0	2.24	1.51	
0.3	42.1	2.73	60.1	89.1	7.6	0.0	0.0	3.0	2.2	2.27	1.51	F
0.6	54.3	2.74	67.5	96.2	5.6	0.0	0.0	1.2	1.0	2.28	1.51	F
0.9	47.2	2.72	70.3	95.8	5.9	0.0	0.0	1.8	1.5	2.29	1.51	F

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
81.2	36.7	2.73	66.6	95.8	10.0	0.0	0.1	3.3	2.4	2.32	1.51
81.5	45.4	2.72	77.2	97.4	6.6	0.0	0.0	1.5	1.3	2.34	1.51
81.8	40.0	2.72	65.8	95.8	10.9	0.0	0.1	3.9	3.5	2.37	1.51
82.1	40.3	2.72	57.1	94.5	11.5	0.0	0.1	4.9	4.3	2.41	1.51
82.4	41.4	2.71	59.1	89.5	9.7	0.0	0.1	4.0	2.9	2.44	1.51
82.7	55.8	2.72	22.1	65.0	15.8	0.0	1.0	12.3	6.8	2.48	1.51
83.0	7.7	2.67	9.4	44.7	30.8	0.0	113.5	27.9	10.9	2.56	1.59
83.3	5.5	2.68	10.1	45.1	30.9	0.0	99.6	27.8	10.8	2.66	1.67
83.6	10.1	2.68	11.4	52.7	26.5	0.0	39.2	23.5	10.9	2.74	1.75
83.9	4.1	2.68	10.7	44.9	31.9	0.0	102.4	28.5	10.9	2.84	1.83
84.2	4.6	2.68	15.0	42.6	31.3	0.0	47.5	26.6	8.6	2.94	1.92
84.5	13.2	2.69	28.1	52.8	24.2	0.0	4.3	17.4	6.0	3.02	1.98
84.8	15.5	2.69	40.9	76.1	21.3	0.0	2.1	12.6	7.5	3.09	2.02
85.1	34.4	2.73	62.5	89.7	10.3	0.0	0.1	3.9	2.8	3.13	2.04
85.4	58.9	2.76	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.13	2.04
85.7	54.5	2.74	75.9	97.3	2.8	0.0	0.0	0.7	0.6	3.14	2.04
86.0	39.6	2.73	29.0	88.4	8.4	0.0	0.0	5.9	5.0	3.16	2.04
86.3	15.5	2.69	10.0	48.2	22.3	0.0	25.1	20.0	8.5	3.22	2.09
86.7	13.7	2.69	10.2	57.9	24.8	0.0	36.4	22.3	11.8	3.29	2.15
87.0	21.9	2.72	19.3	67.1	18.7	0.0	2.9	15.1	9.0	3.34	2.20
87.3	25.4	2.72	31.8	77.9	15.4	0.0	0.5	10.5	7.1	3.39	2.23
87.6	43.6	2.74	41.2	85.3	7.0	0.0	0.0	4.1	3.0	3.42	2.25
87.9	54.1	2.75	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.43	2.25
88.2	37.9	2.73	20.9	82.0	9.4	0.0	0.1	6.9	5.2	3.45	2.25
88.5	28.6	2.72	18.7	77.3	14.0	0.0	1.0	11.8	8.5	3.49	2.27
88.8	22.1	2.70	21.0	73.0	16.9	0.0	1.5	13.3	8.8	3.53	2.30
89.1	23.4	2.70	22.8	75.7	15.5	0.0	0.9	12.0	8.2	3.59	2.35
89.4	34.5	2.73	32.6	80.1	11.4	0.0	0.1	7.7	5.4	3.63	2.36
89.7	49.6	2.74	49.1	86.2	6.3	0.0	0.0	3.2	2.3	3.65	2.36
90.0	55.6	2.74	71.4	83.3	0.9	0.0	0.0	0.2	0.1	3.65	2.36
90.3	65.5	2.77	100.0	100.0	0.0	0.0	0.0	0.0	0.0	3.65	2.36
90.6	64.1	2.76	85.7	95.6	0.5	0.0	0.0	0.1	0.1	3.65	2.36
90.9	35.8	2.73	25.5	85.3	14.3	0.0	0.5	10.7	8.3	3.68	2.36
91.2	20.8	2.71	16.6	77.7	18.5	0.0	3.6	15.4	11.3	3.75	2.40
91.5	11.8	2.69	7.0	45.6	27.5	0.0	102.7	25.4	10.5	3.82	2.48
91.8	11.5	2.69	8.2	43.7	24.4	0.0	52.0	22.4	8.7	3.89	2.55
92.1	9.3	2.68	8.5	44.0	26.2	0.0	66.4	24.0	9.3	3.97	2.62
92.4	3.9	2.68	9.3	40.8	30.6	0.0	111.0	27.7	9.6	4.06	2.70
92.7	0.8	2.67	10.9	43.0	31.4	0.0	92.7	28.0	10.1	4.15	2.78
93.1	0.0	2.67	11.1	42.5	31.8	0.0	93.9	28.3	10.0	4.25	2.87
93.4	0.3	2.67	10.6	37.6	32.9	0.0	119.2	29.4	8.9	4.35	2.96
93.7	3.9	2.68	10.5	40.8	28.3	0.0	62.4	25.3	8.6	4.44	3.04
94.0	11.1	2.69	9.1	45.6	24.7	0.0	44.8	22.5	8.5	4.52	3.11
94.3	13.3	2.69	8.6	45.8	23.2	0.0	37.2	21.2	8.6	4.59	3.16

PTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
94.6	10.0	2.68	9.3	45.7	24.6	0.0	42.1	22.3	9.0	4.66	3.25
94.9	8.0	2.68	9.2	41.0	26.4	0.0	82.7	25.8	9.0	4.75	3.32
95.2	6.5	2.68	10.5	41.3	29.7	0.0	76.0	26.5	9.1	4.84	3.40
95.5	16.0	2.69	20.4	51.3	21.4	0.0	4.7	17.0	6.6	4.91	3.46
95.8	24.2	2.71	35.3	74.0	16.7	0.0	0.7	10.8	6.4	4.97	3.50
96.1	42.8	2.73	51.1	86.8	6.7	0.0	0.0	3.3	2.4	4.99	3.50
96.4	45.2	2.73	45.6	86.4	7.0	0.0	0.0	3.8	2.8	5.00	3.50
96.7	17.1	2.70	11.0	45.8	26.4	0.0	41.4	23.5	9.2	5.07	3.56
97.0	8.3	2.68	11.2	50.4	27.9	0.0	51.0	24.8	10.9	5.15	3.63
97.3	14.7	2.69	11.2	53.8	24.9	0.0	30.7	22.1	10.6	5.23	3.70
97.6	11.4	2.69	9.6	44.9	28.5	0.0	77.4	25.8	10.1	5.31	3.77
97.9	7.4	2.68	19.2	61.7	26.6	0.0	14.1	21.5	11.3	5.39	3.84
98.2	13.4	2.69	27.0	77.6	21.0	0.0	2.4	15.3	10.6	5.46	3.89
98.5	15.8	2.69	26.0	62.5	24.3	0.0	5.0	18.0	8.9	5.53	3.94
98.8	7.5	2.68	24.6	67.0	28.3	0.0	11.3	21.3	12.0	5.61	4.00
99.2	6.3	2.68	30.5	74.4	28.5	0.0	7.8	19.8	12.5	5.70	4.07
99.5	27.4	2.71	31.4	79.6	15.7	0.0	0.5	10.8	7.6	5.76	4.11
99.8	23.9	2.71	18.6	55.4	19.3	0.0	3.5	15.7	7.1	5.81	4.15
00.1	12.5	2.69	13.9	46.5	26.5	0.0	26.0	22.8	8.6	5.90	4.22
00.4	8.3	2.68	12.9	48.3	27.2	0.0	34.2	23.7	9.6	5.98	4.29
00.7	11.8	2.69	14.7	49.6	25.0	0.0	18.1	21.3	8.7	6.06	4.36
01.0	10.7	2.68	14.3	50.7	24.7	0.0	18.2	21.2	9.0	6.15	4.42
01.3	8.3	2.68	24.2	67.1	24.4	0.0	6.0	18.5	10.5	6.21	4.46
01.6	13.6	2.69	40.7	83.4	18.6	0.0	1.2	11.0	7.9	6.28	4.52
01.9	25.8	2.71	50.8	83.5	14.3	0.0	0.4	7.0	4.7	6.32	4.55
02.2	41.2	2.73	62.5	89.8	6.8	0.0	0.0	2.6	1.9	6.34	4.55
02.5	59.9	2.74	50.3	73.8	7.3	0.0	0.0	3.6	1.7	6.36	4.55
02.8	15.6	2.69	28.6	58.7	22.3	0.0	2.8	15.9	6.7	6.42	4.59
03.1	12.4	2.69	28.8	65.3	23.4	0.0	3.5	16.7	8.5	6.49	4.64
03.4	12.4	2.69	25.4	67.5	23.2	0.0	4.4	17.3	9.8	6.56	4.69
03.7	6.1	2.68	24.3	54.9	26.4	0.0	8.5	20.0	8.1	6.64	4.75
04.0	3.7	2.68	24.6	53.5	28.9	0.0	12.5	21.8	8.4	6.72	4.81
04.3	7.0	2.68	27.7	61.2	26.3	0.0	6.4	19.0	8.8	6.80	4.87
04.6	6.6	2.68	37.2	82.0	22.9	0.0	2.9	14.4	10.3	6.88	4.92
04.9	2.1	2.67	36.8	82.6	25.9	0.0	5.1	15.9	11.4	6.95	4.97
05.2	10.1	2.68	50.6	86.6	21.8	0.0	2.3	10.8	7.9	7.02	5.01
05.6	19.7	2.69	58.0	75.5	18.9	0.0	1.2	7.9	5.5	7.08	5.06
05.9	22.3	2.69	60.1	73.3	19.4	0.0	1.4	7.7	2.5	7.14	5.02
06.2	9.7	2.67	54.9	71.6	27.2	0.0	6.4	12.3	4.5	7.22	5.06
06.5	10.1	2.67	61.9	74.7	26.2	0.0	5.4	10.0	3.4	7.30	5.06
06.8	11.5	2.67	68.9	86.0	24.0	0.0	3.6	7.5	4.1	7.37	5.06
07.1	2.8	2.66	68.4	86.4	27.8	0.0	7.0	8.8	5.0	7.46	5.06
07.4	5.5	2.67	75.1	90.2	26.2	0.0	5.3	6.5	4.0	7.54	5.06
07.7	4.6	2.66	75.5	91.8	26.4	0.0	5.6	6.5	4.3	7.62	5.06

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
08.0	1.0	2.66	77.0	91.8	28.1	0.0	1.4	6.5	4.2	7.70	5.06
08.3	1.9	2.66	87.4	95.1	28.0	0.0	7.3	3.5	2.1	7.79	5.06
08.6	0.0	2.65	96.2	99.5	29.3	0.0	8.9	1.1	1.0	7.88	5.06
08.9	0.0	2.66	100.0	100.0	29.1	0.0	8.6	0.0	0.0	7.97	5.06
09.2	0.0	2.67	100.0	100.0	28.4	0.0	7.8	0.0	0.0	8.05	5.06
09.5	0.0	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	8.14	5.06
09.8	0.0	2.66	100.0	100.0	29.1	0.0	8.6	0.0	0.0	8.23	5.06
10.1	0.0	2.66	100.0	100.0	29.6	0.0	9.3	0.0	0.0	8.32	5.06
10.4	0.0	2.65	100.0	100.0	28.7	0.0	8.1	0.0	0.0	8.41	5.06
10.7	5.3	2.67	100.0	100.0	27.1	0.0	6.2	0.0	0.0	8.49	5.06
11.0	7.5	2.66	100.0	100.0	26.6	0.0	5.7	0.0	0.0	8.57	5.06
11.3	1.7	2.66	97.5	99.7	29.0	0.0	8.5	0.7	0.7	8.66	5.06
11.6	0.0	2.65	97.0	99.7	29.4	0.0	9.1	0.9	0.8	8.75	5.06
12.0	0.0	2.66	99.5	100.0	29.5	0.0	8.9	0.1	0.1	8.84	5.06
12.3	3.3	2.67	100.0	100.0	28.7	0.0	8.1	0.0	0.0	8.93	5.06
12.6	4.6	2.69	100.0	100.0	27.9	0.0	7.2	0.0	0.0	9.01	5.06
12.9	3.3	2.67	100.0	100.0	28.9	0.0	8.4	0.0	0.0	9.10	5.06
13.2	4.6	2.67	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.19	5.06
13.5	3.5	2.67	100.0	100.0	28.0	0.0	7.3	0.0	0.0	9.27	5.06
13.8	0.9	2.65	100.0	100.0	26.4	0.0	7.7	0.0	0.0	9.36	5.06
14.1	4.4	2.67	100.0	100.0	27.3	0.0	6.4	0.0	0.0	9.44	5.06
14.4	8.8	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	9.52	5.06
14.7	0.0	2.66	100.0	100.0	28.7	0.0	8.0	0.0	0.0	9.61	5.06
15.0	0.0	2.66	100.0	100.0	28.2	0.0	7.4	0.0	0.0	9.69	5.06
15.3	0.0	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	9.78	5.06
15.6	0.0	2.65	100.0	100.0	26.9	0.0	6.1	0.0	0.0	9.86	5.06
15.9	2.5	2.67	100.0	100.0	27.1	0.0	6.2	0.0	0.0	9.95	5.06
16.2	11.0	2.67	100.0	100.0	24.4	0.0	3.9	0.0	0.0	10.02	5.06
16.5	3.0	2.66	100.0	100.0	28.3	0.0	7.5	0.0	0.0	10.10	5.06
16.8	0.2	2.66	100.0	100.0	28.8	0.0	8.3	0.0	0.0	10.19	5.06
17.1	0.0	2.66	100.0	100.0	28.8	0.0	8.3	0.0	0.0	10.28	5.06
17.4	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	10.37	5.06
17.7	0.0	2.67	100.0	100.0	26.9	0.0	6.1	0.0	0.0	10.45	5.06
18.0	0.0	2.66	100.0	100.0	28.3	0.0	7.6	0.0	0.0	10.53	5.06
18.4	0.0	2.65	100.0	100.0	29.0	0.0	8.5	0.0	0.0	10.62	5.06
18.7	0.0	2.66	100.0	100.0	28.9	0.0	8.3	0.0	0.0	10.71	5.06
19.0	0.0	2.67	100.0	100.0	28.7	0.0	8.1	0.0	0.0	10.80	5.06
19.3	0.0	2.66	100.0	100.0	28.9	0.0	8.3	0.0	0.0	10.88	5.06
19.6	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	10.97	5.06
19.9	0.0	2.67	100.0	100.0	28.8	0.0	8.2	0.0	0.0	11.06	5.06
20.2	0.0	2.65	100.0	100.0	28.3	0.0	7.6	0.0	0.0	11.14	5.06
20.5	0.0	2.67	100.0	100.0	27.8	0.0	7.0	0.0	0.0	11.23	5.06
20.8	0.0	2.66	100.0	100.0	26.5	0.0	5.7	0.0	0.0	11.31	5.06
21.1	0.0	2.67	100.0	100.0	24.1	0.0	3.7	0.0	0.0	11.39	5.06

PTH TER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
1.4	0.0	2.67	100.0	100.0	15.6	0.0	0.5	0.0	0.0	11.44	5.00
1.7	0.0	2.67	100.0	100.0	2.2	0.0	0.0	0.0	0.0	11.46	5.00
2.0	0.0	2.66	100.0	100.0	5.6	0.0	0.0	0.0	0.0	11.47	5.00
2.3	0.0	2.66	100.0	100.0	17.1	0.0	0.8	0.0	0.0	11.52	5.00
2.6	0.0	2.67	100.0	100.0	26.9	0.0	6.0	0.0	0.0	11.60	5.00
2.9	0.0	2.66	100.0	100.0	28.1	0.0	7.3	0.0	0.0	11.68	5.00
3.2	0.0	2.67	100.0	100.0	28.5	0.0	7.8	0.0	0.0	11.77	5.00
3.5	1.1	2.67	100.0	100.0	28.3	0.0	7.5	0.0	0.0	11.85	5.00
3.8	3.2	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	11.94	5.00
4.1	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	12.02	5.00
4.4	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	12.11	5.00
4.8	0.9	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	12.19	5.00
5.1	2.0	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.28	5.00
5.4	0.7	2.66	100.0	100.0	28.4	0.0	7.7	0.0	0.0	12.36	5.00
5.7	0.0	2.66	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.45	5.00
6.0	0.0	2.69	100.0	100.0	27.5	0.0	6.6	0.0	0.0	12.53	5.00
6.3	0.0	2.66	100.0	100.0	26.6	0.0	5.8	0.0	0.0	12.62	5.00
6.6	0.0	2.66	100.0	100.0	27.0	0.0	6.1	0.0	0.0	12.70	5.00
6.9	0.0	2.68	100.0	100.0	27.5	0.0	6.6	0.0	0.0	12.78	5.00
7.2	0.0	2.68	100.0	100.0	27.8	0.0	7.0	0.0	0.0	12.86	5.00
7.5	0.0	2.65	100.0	100.0	27.9	0.0	7.1	0.0	0.0	12.95	5.00
7.8	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	13.03	5.00
8.1	0.0	2.66	100.0	100.0	26.7	0.0	5.9	0.0	0.0	13.11	5.00
8.4	9.9	2.67	100.0	100.0	23.6	0.0	3.4	0.0	0.0	13.19	5.00
8.7	4.8	2.67	100.0	100.0	24.7	0.0	4.1	0.0	0.0	13.26	5.00
9.0	8.7	2.68	100.0	100.0	23.5	0.0	3.3	0.0	0.0	13.34	5.00
9.3	16.7	2.68	100.0	100.0	18.9	0.0	1.2	0.0	0.0	13.40	5.00
9.6	5.1	2.66	100.0	100.0	26.3	0.0	5.4	0.0	0.0	13.47	5.00
9.9	0.0	2.67	100.0	100.0	28.6	0.0	8.0	0.0	0.0	13.56	5.00
0.2	0.0	2.66	100.0	100.0	28.3	0.0	7.6	0.0	0.0	13.64	5.00
0.5	0.0	2.65	100.0	100.0	27.3	0.0	6.5	0.0	0.0	13.73	5.00
0.8	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	13.81	5.00
1.2	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	13.89	5.00
1.5	0.0	2.66	100.0	100.0	27.3	0.0	6.5	0.0	0.0	13.98	5.00
1.8	0.0	2.66	100.0	100.0	28.6	0.0	8.0	0.0	0.0	14.06	5.00
2.1	0.0	2.65	100.0	100.0	28.5	0.0	7.9	0.0	0.0	14.15	5.00
2.4	0.1	2.66	100.0	100.0	28.8	0.0	8.2	0.0	0.0	14.24	5.00
2.7	0.0	2.66	100.0	100.0	28.6	0.0	7.9	0.0	0.0	14.32	5.00
3.0	0.0	2.66	100.0	100.0	28.2	0.0	7.5	0.0	0.0	14.41	5.00
3.3	0.0	2.66	100.0	100.0	27.6	0.0	6.7	0.0	0.0	14.49	5.00
3.6	0.1	2.65	100.0	100.0	24.4	0.0	4.3	0.0	0.0	14.57	5.00
3.9	0.0	2.66	100.0	100.0	24.9	0.0	4.3	0.0	0.0	14.65	5.00
4.2	0.5	2.66	100.0	100.0	27.1	0.0	6.2	0.0	0.0	14.73	5.00
4.5	1.1	2.67	100.0	100.0	27.0	0.0	6.2	0.0	0.0	14.81	5.00

EPTH ETER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
34.8	1.3	2.65	100.0	100.0	26.9	0.0	6.0	0.0	0.0	14.90	5.06
35.1	1.5	2.67	100.0	100.0	27.3	0.0	6.4	0.0	0.0	14.98	5.06
35.4	0.0	2.66	100.0	100.0	27.4	0.0	6.6	0.0	0.0	15.06	5.06
35.7	0.0	2.66	100.0	100.0	23.8	0.0	3.5	0.0	0.0	15.14	5.06
36.0	0.0	2.66	100.0	100.0	15.3	0.0	0.5	0.0	0.0	15.19	5.06
36.3	0.0	2.67	100.0	100.0	19.0	0.0	1.3	0.0	0.0	15.24	5.06
36.6	0.0	2.65	100.0	100.0	26.2	0.0	5.3	0.0	0.0	15.32	5.06
36.9	4.8	2.67	100.0	100.0	25.3	0.0	4.6	0.0	0.0	15.40	5.06
37.2	3.8	2.67	100.0	100.0	25.7	0.0	4.9	0.0	0.0	15.47	5.06
37.6	3.4	2.67	100.0	100.0	26.2	0.0	5.4	0.0	0.0	15.55	5.06
37.9	5.8	2.66	100.0	100.0	25.7	0.0	4.9	0.0	0.0	15.63	5.06
38.2	1.4	2.66	100.0	100.0	26.7	0.0	5.9	0.0	0.0	15.71	5.06
38.5	0.0	2.67	100.0	100.0	26.7	0.0	5.8	0.0	0.0	15.80	5.06
38.8	0.0	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	15.88	5.06
39.1	4.5	2.69	100.0	100.0	26.1	0.0	5.2	0.0	0.0	15.96	5.06
39.4	0.0	2.66	100.0	100.0	27.5	0.0	6.7	0.0	0.0	16.04	5.06
39.7	0.0	2.66	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.12	5.06
40.0	0.0	2.67	100.0	100.0	27.6	0.0	6.8	0.0	0.0	16.21	5.06
40.3	0.0	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	16.29	5.06
40.6	0.0	2.65	100.0	100.0	26.9	0.0	6.0	0.0	0.0	16.37	5.06
40.9	0.0	2.66	100.0	100.0	26.9	0.0	6.0	0.0	0.0	16.45	5.06
41.2	0.0	2.66	100.0	100.0	26.8	0.0	6.0	0.0	0.0	16.53	5.06
41.5	0.0	2.65	100.0	100.0	27.2	0.0	6.3	0.0	0.0	16.62	5.06
41.8	0.0	2.67	100.0	100.0	27.5	0.0	6.6	0.0	0.0	16.70	5.06
42.1	1.3	2.69	100.0	100.0	27.2	0.0	6.4	0.0	0.0	16.78	5.06
42.4	2.4	2.65	100.0	100.0	26.8	0.0	5.9	0.0	0.0	16.87	5.06
42.7	0.0	2.66	100.0	100.0	27.0	0.0	6.2	0.0	0.0	16.95	5.06
43.0	2.9	2.67	100.0	100.0	25.8	0.0	5.0	0.0	0.0	17.03	5.06
43.3	8.5	2.68	100.0	100.0	23.7	0.0	3.4	0.0	0.0	17.10	5.06
43.7	4.7	2.66	100.0	100.0	25.5	0.0	4.7	0.0	0.0	17.18	5.06
44.0	8.5	2.67	100.0	100.0	23.8	0.0	3.5	0.0	0.0	17.25	5.06
44.3	6.2	2.67	100.0	100.0	24.7	0.0	4.1	0.0	0.0	17.32	5.06
44.6	5.5	2.66	100.0	100.0	25.4	0.0	4.7	0.0	0.0	17.40	5.06
44.9	0.0	2.66	100.0	100.0	27.4	0.0	6.6	0.0	0.0	17.48	5.06
45.2	0.0	2.67	100.0	100.0	27.1	0.0	6.3	0.0	0.0	17.57	5.06
45.5	0.0	2.66	100.0	100.0	27.5	0.0	6.6	0.0	0.0	17.65	5.06
45.8	0.0	2.67	100.0	100.0	26.9	0.0	6.1	0.0	0.0	17.73	5.06
46.1	0.3	2.65	100.0	100.0	27.3	0.0	6.5	0.0	0.0	17.81	5.06
46.4	5.2	2.66	100.0	100.0	25.7	0.0	4.9	0.0	0.0	17.89	5.06
46.7	0.0	2.66	100.0	100.0	26.5	0.0	7.9	0.0	0.0	17.98	5.06
47.0	0.0	2.67	100.0	100.0	29.1	0.0	8.6	0.0	0.0	18.07	5.06
47.3	0.4	2.65	100.0	100.0	29.0	0.0	8.4	0.0	0.0	18.15	5.06
47.6	1.4	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	18.24	5.06
47.9	0.0	2.66	100.0	100.0	27.5	0.0	6.6	0.0	0.0	18.33	5.06

LL 25/1-4 RESERVOIR FRIGG

DEPTH METER	CLAY CONTENT %	AVERAGE MATRIX DENSITY GMS/CC	WATER SATURATIONS VIRGIN ZONE (%)	WATER SATURATIONS INVADED ZONE	POROSITY TOTAL %	POROSITY SECONDARY %	PERM MD	HYDROCARBONS TOTAL %	HYDROCARBONS MOVABLE %	CUMULATIVE INTEGRATIONS POR-MT	CUMULATIVE INTEGRATIONS HC-MT
48.2	0.0	2.66	100.0	100.0	27.7	0.0	6.8	0.0	0.0	18.41	5.06
48.5	0.0	2.67	100.0	100.0	26.7	0.0	5.9	0.0	0.0	18.49	5.06
48.8	0.0	2.66	100.0	100.0	26.2	0.0	5.4	0.0	0.0	18.57	5.06
49.1	0.0	2.65	100.0	100.0	26.7	0.0	5.8	0.0	0.0	18.65	5.06
49.4	0.0	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	18.73	5.06
49.7	0.0	2.66	100.0	100.0	26.4	0.0	5.5	0.0	0.0	18.81	5.06
50.1	0.0	2.67	100.0	100.0	26.2	0.0	5.4	0.0	0.0	18.89	5.06
50.4	0.6	2.67	100.0	100.0	27.1	0.0	6.2	0.0	0.0	18.96	5.06
50.7	3.1	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	19.06	5.06
51.0	1.4	2.66	100.0	100.0	28.0	0.0	7.3	0.0	0.0	19.14	5.06
51.3	0.0	2.66	100.0	100.0	28.0	0.0	7.3	0.0	0.0	19.23	5.06
51.6	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	19.31	5.06
51.9	0.0	2.66	100.0	100.0	27.6	0.0	6.8	0.0	0.0	19.40	5.06
52.2	0.0	2.65	100.0	100.0	27.2	0.0	6.4	0.0	0.0	19.48	5.06
52.5	0.0	2.66	100.0	100.0	27.9	0.0	7.1	0.0	0.0	19.57	5.06
52.8	0.0	2.67	100.0	100.0	27.1	0.0	6.3	0.0	0.0	19.65	5.06
53.1	0.0	2.65	100.0	100.0	26.6	0.0	5.7	0.0	0.0	19.73	5.06
53.4	0.0	2.65	100.0	100.0	27.1	0.0	6.2	0.0	0.0	19.81	5.06
53.7	0.0	2.66	100.0	100.0	27.3	0.0	6.4	0.0	0.0	19.90	5.06
54.0	0.0	2.66	100.0	100.0	27.7	0.0	6.9	0.0	0.0	19.98	5.06
54.3	0.0	2.66	100.0	100.0	28.2	0.0	7.3	0.0	0.0	20.06	5.06
54.6	2.5	2.66	100.0	100.0	28.0	0.0	7.3	0.0	0.0	20.15	5.06
54.9	0.0	2.65	100.0	100.0	28.0	0.0	7.3	0.0	0.0	20.24	5.06
55.2	0.0	2.66	100.0	100.0	28.0	0.0	7.9	0.0	0.0	20.32	5.06
55.5	0.0	2.65	100.0	100.0	27.9	0.0	7.1	0.0	0.0	20.41	5.06
55.8	0.0	2.66	100.0	100.0	27.9	0.0	7.2	0.0	0.0	20.49	5.06
56.1	0.0	2.66	100.0	100.0	28.0	0.0	7.2	0.0	0.0	20.58	5.06
56.5	0.0	2.67	100.0	100.0	28.3	0.0	7.6	0.0	0.0	20.66	5.06
56.8	0.0	2.67	100.0	100.0	27.6	0.0	7.0	0.0	0.0	20.75	5.06
57.1	10.0	2.66	100.0	100.0	27.5	0.0	6.7	0.0	0.0	20.82	5.06
57.4	21.7	2.68	100.0	100.0	25.9	0.0	5.6	0.0	0.0	20.88	5.06
57.7	18.1	2.69	100.0	100.0	17.6	0.0	0.9	0.0	0.0	20.95	5.06
58.0	17.4	2.68	100.0	100.0	20.2	0.0	1.6	0.0	0.0	21.01	5.06
					19.8	0.0	1.5				

Schlumberger

Synergetic Log Systems

Computer Processed Interpretation

CORIBAND

Using the following logs : FDC/CNL, IES, ML/MLL, DLL, BHC.

COMPANY	ELF NORGE A.S.
WELL	25/1-4
FIELD	FRIGG
COUNTRY	NORWAY OFFSHORE
REFERENCE N°	613,2076 PROCESSING N° 4
DATE LOGGED	12 MAY 1974 DATE PROCESSED 4 JAN. 1979
LOCATION	02°15'54.8"E 59°59'52"S
ELEV	KB 25.50 DF 25.00 GL -107.00

FOLD HERE

The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

Computation Center : ABJ | Programs used : PRE 023, COR 013 | Analyst : FRH

PARAMETERS

Depth Interval From	Depth Interval To	Rw	Rmf	Rcl	Δtcl	Ø Ncl	ρbcl	ρh	T°		
2150	2058	0.066	0.10	1.5	130	40	2.34	-	130		
2058	2009	0.066	0.10	1.5	130	40	2.34	-	130		
2009	2005.6	0.066	0.10	1.5	130	40	2.34	0.82	130		
2005.6	1967.6	0.066	0.10	1.5	130	40	2.34	0.14	130		
1967.6	1950	0.066	0.10	1.5	130	40	2.34	-	130		

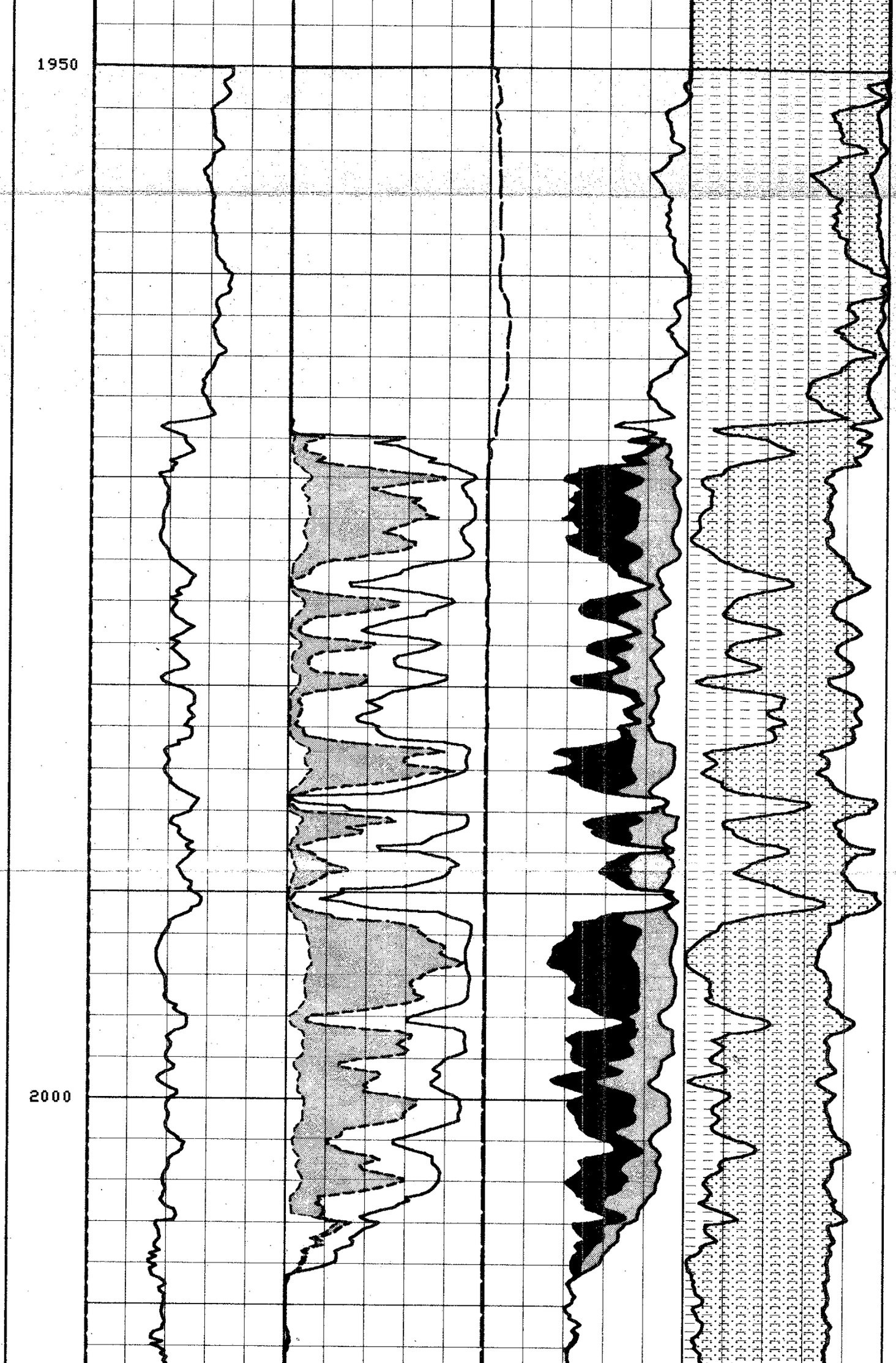
Remarks

STANDARD FRIGG PROCEDURES USED, WITH ZONING, AND CLAY PARAMETERS SUPPLIED BY CLIENT.

REF:-613,2076

DEPTH	FORMATION CHARACTERISTICS	HYDROCARBON ANALYSIS	POROSITY AND FLUIDS ANALYSIS BY VOLUME	FORMATION ANALYSIS BY VOLUME
M_e	Average Grain Density 2.5 gm/cc 3.0	Water Saturation 100 % 0 Hydrocarbon Volume 0 ϕS_{hr} .25 Hydrocarbon Weight 0 $\phi S_{hr} \rho h$ .25	Hydrocarbon Water 50 % 0	Clay % Matrix Porosity 100 % 0

DIFFERENTIAL CALIPER
−4 0 inches 12
(Caliper − Bit Size)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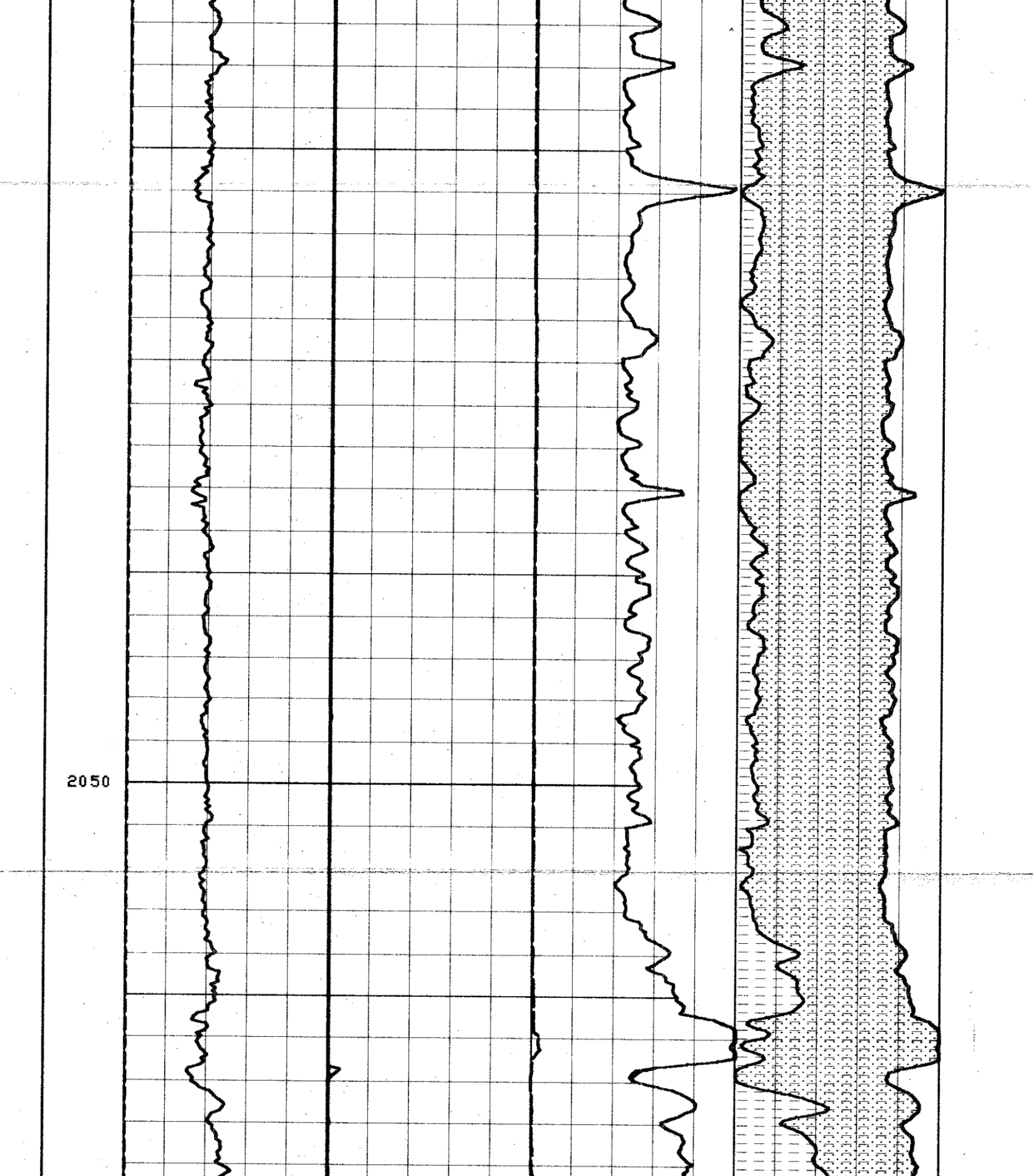
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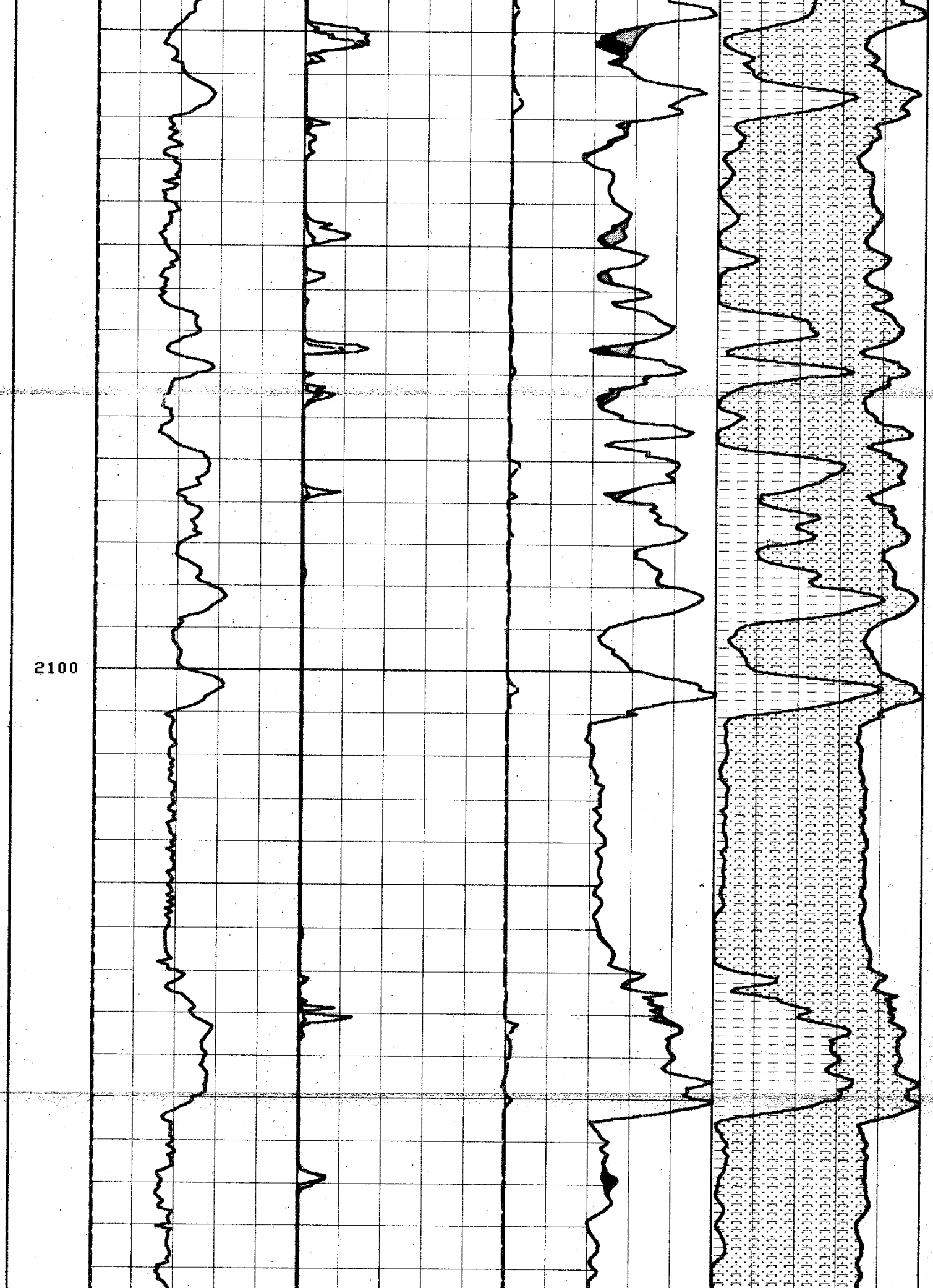
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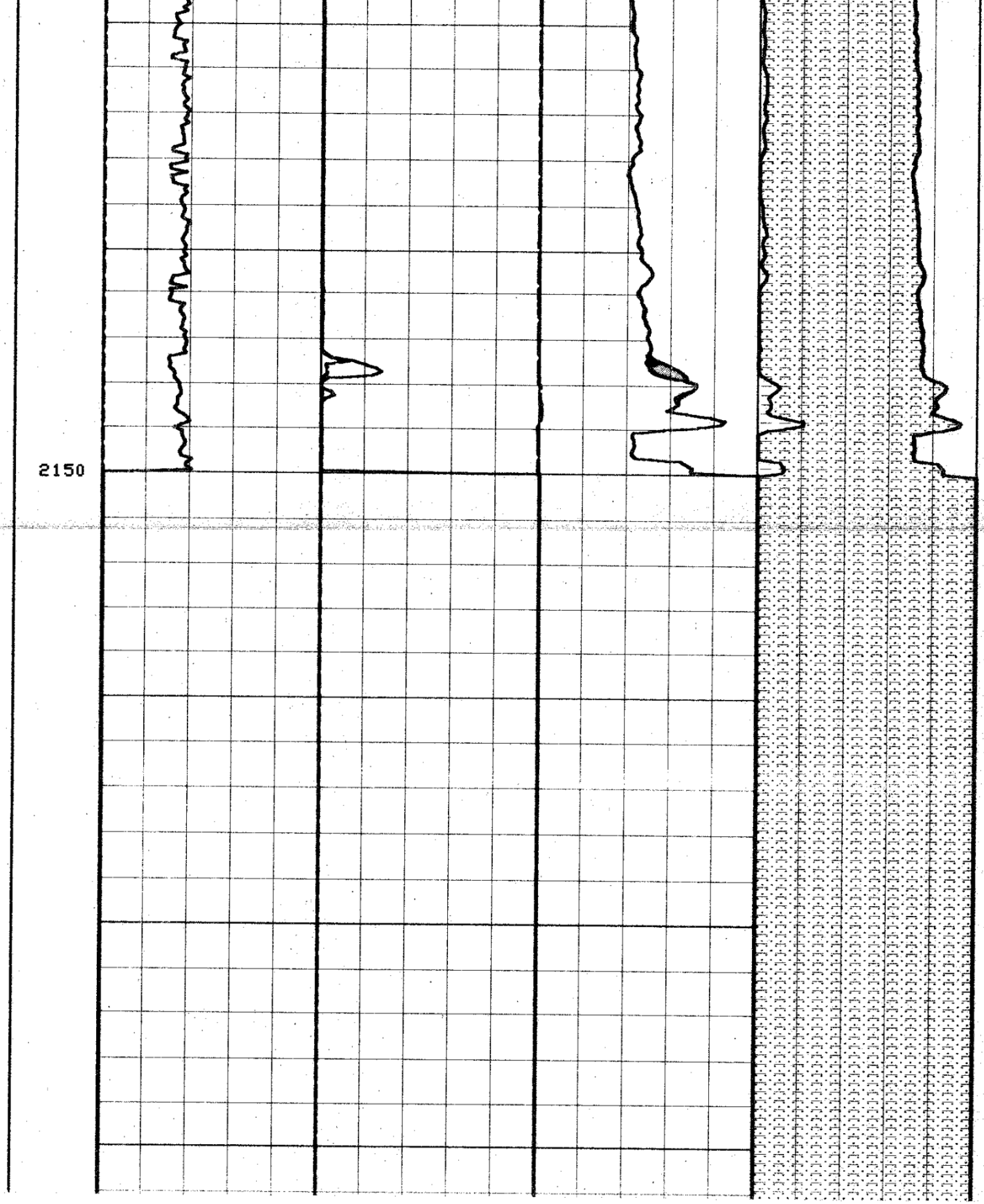

2150

Schlumberger
Synergetic Log Systems

Computer Processed Interpretation

CORIBAND

Using the following logs : FDC/CNL, IES, DLL, MLL, BHC.

COMPANY ELF NORGE A.S.
WELL 25/1-4
FIELD FRIGG
COUNTRY NORWAY OFFSHORE
REFERENCE Nº 613,2100 PROCESSING Nº 5
DATE LOGGED 12 MAY 1974 DATE PROCESSED 04 JAN. 1979
LOCATION N 59°59'52.5" E 02°15'54.8"
ELEV KB 25.5m DF 25.0m GL -107.0m

FOLD HERE

The well name, location and borehole reference data were furnished by the customer

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 7 of our General Terms and Conditions as set out in our current Price Schedule.

Computation Center : ABJ | Programs used : PRE 023, COR 013 | Analyst : FRH

PARAMETERS

Depth Interval From	Depth Interval To	Rw	Rmf	Rcl	Δtcl	Ø Ncl	ρbcl	ρh	T°
2070	2058=	0.066	0.10	0.70	140	47.0	2.0	-	130
2058	2009	0.066	0.10	0.70	140	47.0	2.0	-	130
2009	2005.6	0.066	0.10	0.70	140	47.0	2.0	0.82	130
2005.6	1967.60	0.066	0.10	0.70	140	47.0	2.0	0.14	130
1967.60	1950.0	0.066	0.10	0.70	140	47.0	2.0	-	130

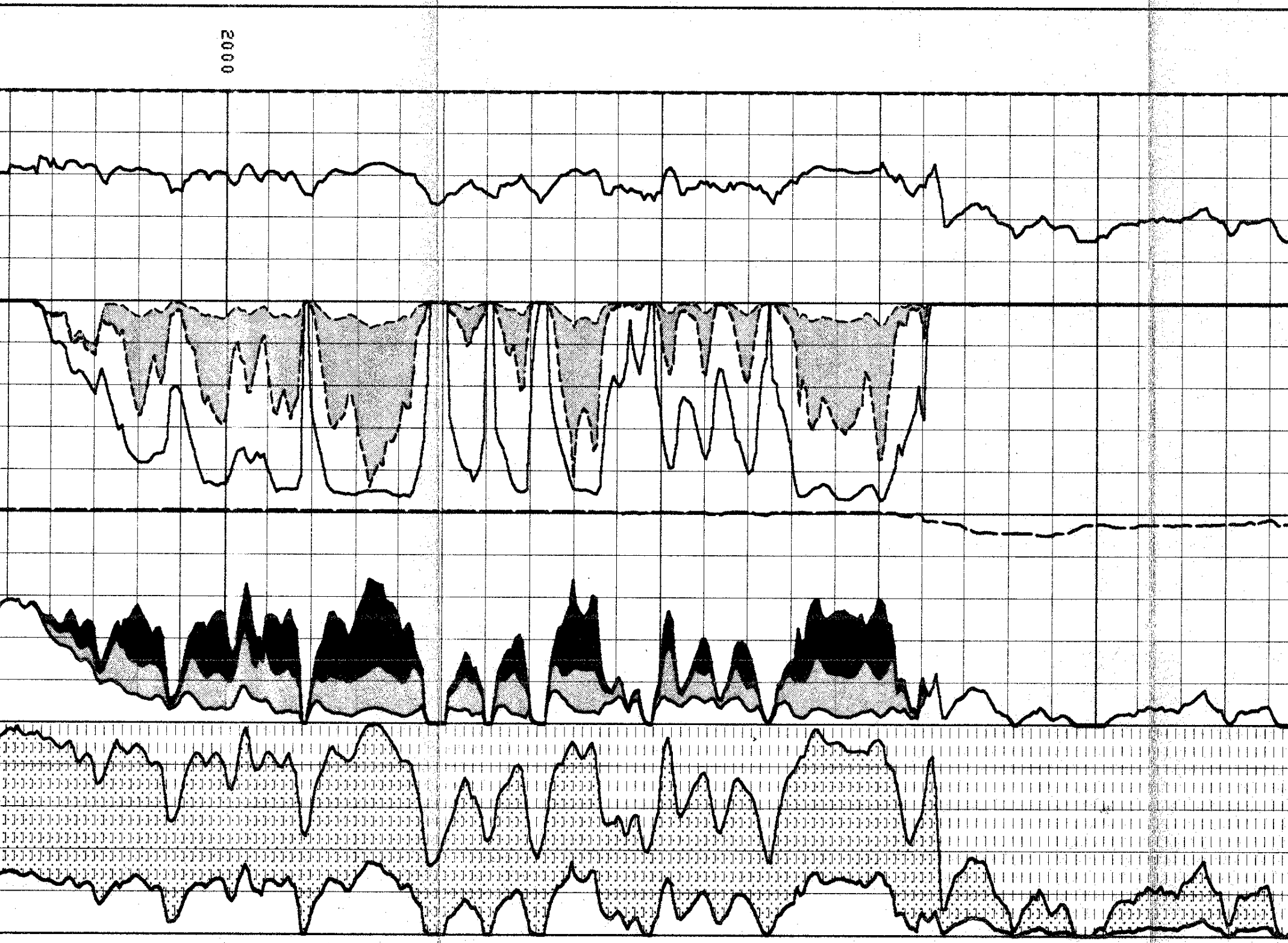
Remarks

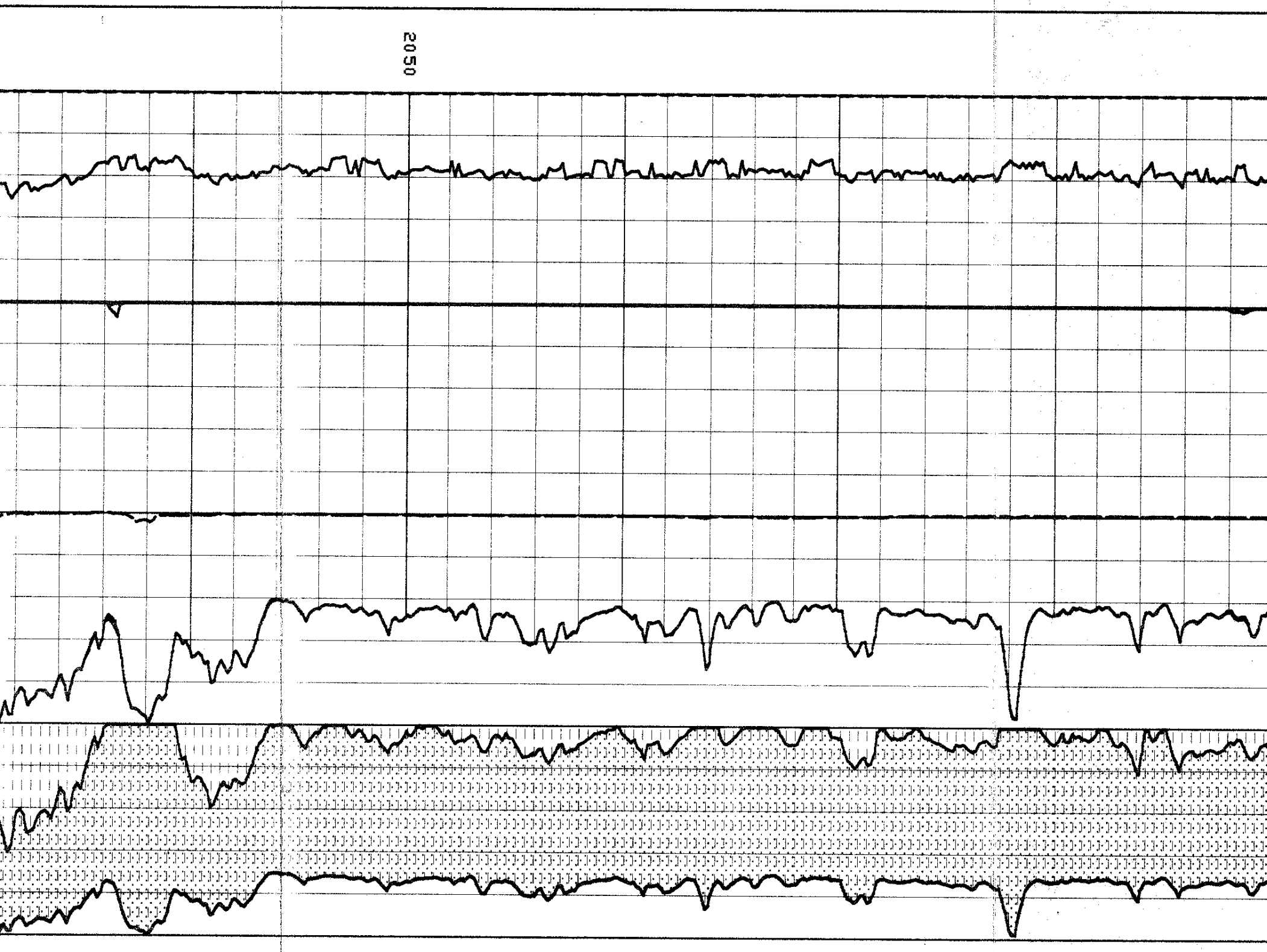
PROCESSING No.5 USING SHALE PARAMETERS CHOSEN FROM ZONE

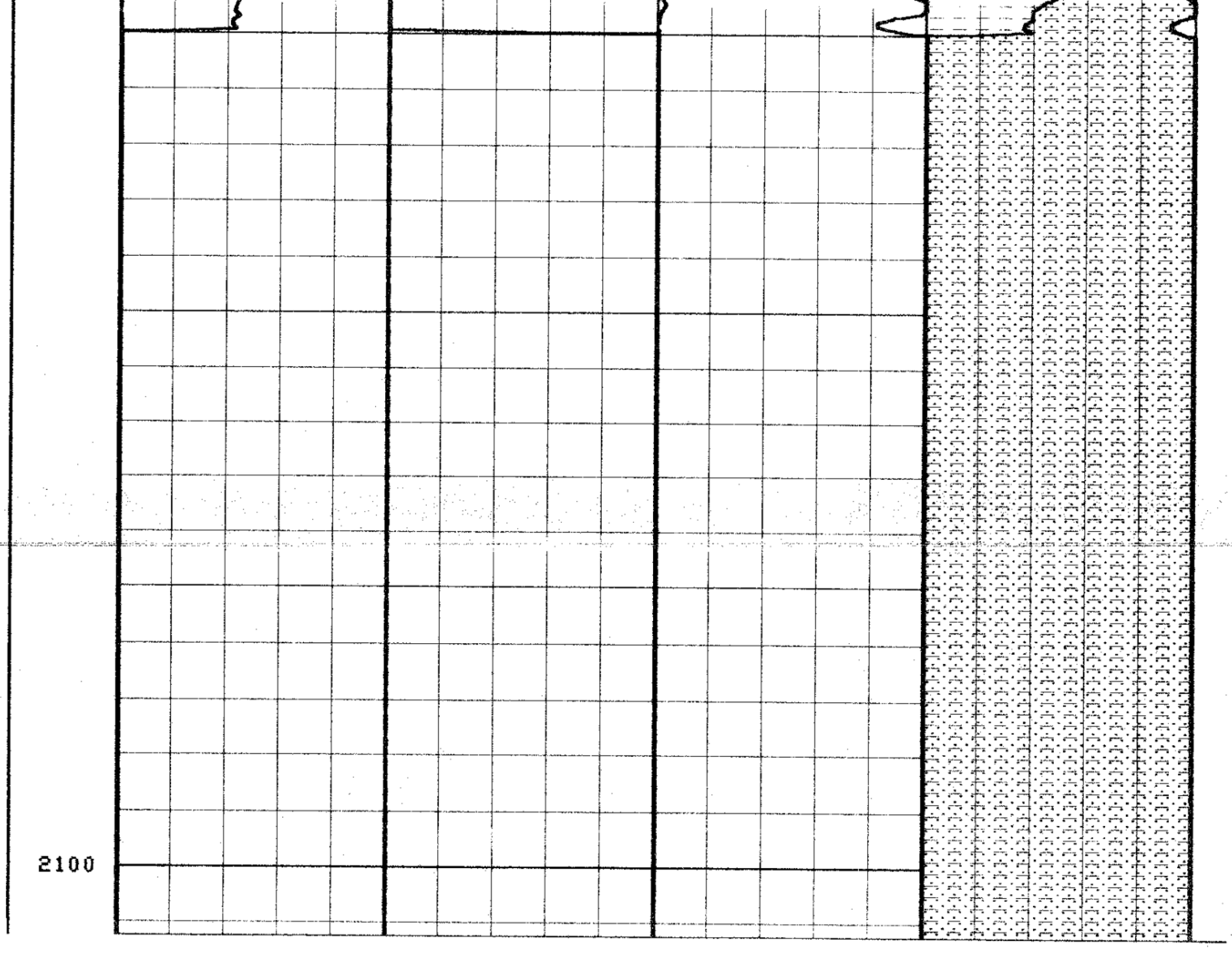
1950 - 1967.60m OTHERWISE STANDARD FRIGG PROCEDURES FOLLOWED.

REF:- 613,2100

DEPTH	FORMATION CHARACTERISTICS	HYDROCARBON ANALYSIS	POROSITY AND FLUIDS ANALYSIS BY VOLUME	FORMATION ANALYSIS BY VOLUME
M.		Water Saturation 100 % 0	Hydrocarbon | Water 50 % 0	Clay | Matrix | Porosity 100 % 0
	Average Grain Density 2.5 gm/cc 3.0	DIFFERENTIAL CALIPER −4 0 inches 12 (Caliper − Bit Size)		
		Hydrocarbon Volume 0 ϕS_{hr} .25		
		Hydrocarbon Weight 0 $\phi S_{hr} \rho h$ .25		
1950				


2000


2050


2100

Schlumberger

Synergetic Log Systems

Computer Processed Interpretation

CORIBAND

Using the following logs : FDC/CNL, IES, DIL, MLL, BHC.

COMPANY ELF NORGE A.S.

WELL 25/1-4

FIELD FRIGG

COUNTRY NORWAY OFFSHORE

REFERENCE N° 613, 2360 PROCESSING N° 7

DATE LOGGED MAY 12 1974 DATE PROCESSED JANUARY 4 1979

LOCATION N. 59° 59' 32.5" E. 02° 15' 34.8"

ELEV. KB 25.5m DF 25.0m GL -107.0m

FOLD HERE

The well name, location and borehole reference data were furnished by the customer

Computation Center ABJ Programs used : PRE 023, COR 013 Analyst : FRH

PARAMETERS

Depth Interval From	To	Rw	Rmf	Rcl	Δtcl	Ø Ncl	ρbcl	ρh	T°	GR MIN	GR MAX
2070	2058	0.066	0.10	0.70	140	47.0	2.0	-	130	26	73
2058	2009	0.066	0.10	0.70	140	47.0	2.0	-	130	26	73
2009	2005.6	0.066	0.10	0.70	140	47.0	2.0	0.82	130	26	73
2005.6	1967.6	0.066	0.10	0.70	140	47.0	2.0	0.14	130	26	73
1967.6	1950.0	0.066	0.10	0.70	140	47.0	2.0	-	130	26	73

Remarks

PROCESSING No.7 USING SHALE PARAMETERS CHOSEN FROM ZONE

1950 - 1967.60m OTHERWISE STANDARD FRIGG PROCEDURES FOLLOWED.

REF:-613,2360 SIMILAR TO PROCESSING No5 , BUT WITH +0.04g/cc SHIFT TO FDC