SIMON PETROLEUM TECHNOLOGY

WELL: 25/11-5

Print: 2140 D	Units: M (F)	Top	Bottom	Scale	TD
Length: 19 FT	Initials: JC	450	6095	1:500	6095

DIGITAL WIRELINE LOGS PACKAGE
1994
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SIMON PETROLEUM TECHNOLOGY SPT

COMPLETION LOG

2140 450 - 6095 COMPLETION - Ø D

PROPRIETARY **EXPLORESSO**

ESSO EXPLORATION NORWAY INC.

COMPLETION LOG
Scale 1:500

Well Name		Status	
25/11-3		Plugged and abandoned	
Area: North Sea offshore Norway	Well Classification: Extension Test	Total Depth: 6088' Driller, 6095' Wireline	Deepest Penetration: Danian
Location: Lat.: 59° 10' 36,189" N; Long.: 02° 26' 19,065" E	Date Spudded: 25. Sept. 1970	Elev. of Datum: 33 ft RKB	Water Depth: 417 ft
Prepared by: ESSO EXPLORATION NORWAY INC.	Date Total Depth Reached: 9. Oct. 1970	Casing Data: 30" at 528'; 13 3/8" at 1277'; 9 5/8" at 3109'	Rig: Glomar Grand Isle
Date: January, 1971; Revised:	Date Oper. Completed: 14. Oct. 1970		Contractor: Global Marine

LOGS RUN

I-ES	B.H.C. Sonic-Gamma	Formation Density		
3114 – 6094	3111 – 6083; Gamma Ray only 461 - 3111	3111 – 6093		

Seismic check shots: None

LITHOLOGIC SYMBOLS
(PROVISIONALLY APPROVED FOR FIELD TESTING)

- CLAY (NONFISSILE) - CLAYSTONE < 03mm
- CLAY (FISSILE) OR SHALE < 03mm
- MUDSTONE
- SILT, COARSE (03-06mm) AND SILSTONE
- SAND (06-2mm) AND SANDSTONE
- GRANULE BOULDER (> 2mm) AND CONGLOMERATE
- QUARTZ
- FELDSPAR
- LITHIC OR ROCK FRAGMENTS
- PYRITE
- SIDERITE
- CHERT
- COAL
- CARBONACEOUS MATTER
- GLAUCONITE
- PHOSPHATE
- VOLCANIC ASH OR BENTONITE
- MICA
- GYPSUM
- ANHYDRITE
- HALITE
- POTASSIUM OR MAGNESIUM SALTS
- LIMESTONE
- DOLOMITIC LIMESTONE — VERY DOLOMITIC
- CALCAREOUS DOLOMITE — VERY CALCAREOUS
- DOLOMITE
- MARL

SPECIFY TYPE OF CARBONATE BY ADDING TO BASIC LIMESTONE OR DOLOMITE SYMBOL THE APPROPRIATE ABBREVATION AS SHOWN BELOW

- M = MICRITIC LIMESTONE
- G = GRAIN LIMESTONE (FOR GENERAL USE)
- S = SKELETAL LIMESTONE (FRAGMENTED AND NONFRAGMENTED)
- P = PELLETAL LIMESTONE
- F = FRAMEBUILDER LIMESTONE
- O = OOLITIC LIMESTONE
- K = CHALK
- D = DETRITAL LIMESTONE
- L = LUMP LIMESTONE
- m = MICROCRYSTALLINE OR MICROGRAINED < 03mm

IGNEOUS ROCKS
- IGNEOUS ROCKS IN GENERAL (WRITE OUT THE NAME WHERE THE SPECIFIC TYPE IS KNOWN)

METAMORPHIC ROCKS
- METAMORPHIC ROCKS IN GENERAL (WRITE OUT THE NAME WHERE THE SPECIFIC TYPE IS KNOWN)

AGE / GROUP / FORMATION — CEMENT PLUG; SEA LEVEL 350'; 13 3/8" 1000 7000 SX; TOP OF CEMENT 2000'; NUMBER OF CORE C-1 50'; DIP ON CORE 12°; NO CORE RECOVERY 80'; STAGE COLLAR 3000; PRODUCTION PACKER; TUBING DEPTH 2 7/8" 3550'; OPEN PERFORATIONS 4200'-4300' 2 SPF; TROUGH PERFORATION DST; SWAB OR FLOW TEST; CEMENT RETAINER 4600'; PERFORATIONS SQUEEZED 4200'-4300' 2 JPF; 4 1/2" 4900; CASING DEPTH 9 5/8" 5000 300SX; LINER; SLOTTED LINER; FORMATION; FORMATION 5250 (-5000) 280'; 6000' 125 SX; UNCONFORMITY

- SHOW OR STAIN
- HYDROCARBON CUT
- FLUORESCENCE
- GAS SHOW
- ABOVE SYMBOLS MAY BE COMBINED
- DEVIATED OR SIDETRACKED HOLE
- OPEN HOLE DST; MISRUN
- OPEN HOLE SWAB OR FLOW TEST
- WIRE LINE TEST
- SWC w/ RECOVERY
- SWC w/ NO RECOVERY — SO = SHOT OFF, MF = MISFIRE, PO = PULLED OFF, DB DAMAGED BULLET
- SWC WITH SHOW
- BLOWOUT OF OIL
- BLOWOUT OF GAS
- WATER FLOW
- LOSS OF DRILLING FLUID AND PERCENTAGE
- LOST CIRCULATION COMPLETELY
- OEM 9,2-8% MUD TYPE WEIGHT & OIL CONTENT
- DEVIATION SURVEY 1°
- DIRECTIONAL SURVEY 3° N 50°E
- NORMAL FAULT WITH DISPLACEMENT 300'
- REVERSE FAULT WITH DISPLACEMENT 300'
- DIPMETER SURVEY WITH DIP DIRECTION AND ANGLE 10° Az 225°
- LOG RUNS WITH SCALES 10 mV R-1 20 OHMS 1000 MMHOS; 15 mV R-2 50 OHMS 2000 MMHOS
- OIL PRODUCTION
- GAS PRODUCTION
- CONDENSATE PRODUCTION
- WATER PRODUCTION
- INTERPRETED OIL PRODUCTIVE
- INTERPRETED GAS PRODUCTIVE
- INTERPRETED WATER BEARING
- INTERPRETED CONDENSATE PROD.

SCHLUMBERGER

COMPANY: Esso Exploration Norway Inc.
WELL: 25/11 - 3
FIELD: Wildcat
COUNTY: Norway STATE: North Sea
LOCATION: 59° 10' 36,189" N, 02° 26' 19,065" E
Other Services: BHC-GR, FDC, GR-FDC
Permanent Datum: MSL Elev. 0
Log Measured From: KB 31 Ft. Above Perm. Datum
Drilling Measured From: KB
Elev.: K.B. 32.5 D.F. 31.0 G.L. -461.0

Date: 10th October, 1970; Run No.: One; Depth—Driller: 6088; Depth—Logger: 6095; Btm. Log Interval: 6094; Top Log Interval: 3114; Casing—Driller: 9 5/8 @ 3109; Casing—Logger: 3111; Bit Size: 8 1/2; Type Fluid in Hole: Fresh water gel; Dens. / Visc.: 10.0 / 65; pH / Fluid Loss: 11.0 / 5.2 ml; Source of Sample: Circulated; R_m @ Meas. Temp.: 0.30 @ 72 °F; R_{mf} @ Meas. Temp.: 0.31 @ 72 °F; R_{mc} @ Meas. Temp.: 1.25 @ 72 °F; Source: R_{mf} / R_{mc}: Calc. / Calc.; R_m @ BHT: 0.12 @ 165 °F; Time Since Circ.: 6 hrs; Max. Rec. Temp.: 165 °F; Equip. / Location: 2070 / Stavanger; Recorded By: [illegible]; Witnessed By: [illegible]

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

REMARKS

Changes in Mud Type or Additional Samples			Scale Changes			
Date / Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth—Driller						
Type Fluid in Hole						
Dens. / Visc.						
ph / Fluid Loss	ml					
Source of Sample			Equipment Data			
R_m @ Meas. Temp.	@ °F	@ °F	Run No.	Tool Type	Tool Position	Other
R_{mf} @ Meas. Temp.	@ °F	@ °F	1	6FF40	1" Standoff	
R_{mc} @ Meas. Temp.	@ °F	@ °F				
Source: R_{mf} / R_{mc}						
R_m @ BHT	@ °F	@ °F				
R_{mf} @ BHT	@ °F	@ °F				
R_{mc} @ BHT	@ °F	@ °F				

Run No.: One; C.D.: -; S.O.: 1"; Equip. Used: PANEL No.: [illegible] 390; CART. No.: [illegible]; SONDE No.: [illegible]; IAP No.: [illegible]; S.B.R.: 1

Check one, filling in blanks where applicable:
- Surface determined sonde errors used for 6FF40.
- 6FF40 sonde error corrected for ____ inch borehole signal at Rm = ____
- 6FF40 zero set in hole at depth of ____ feet.

SPONTANEOUS POTENTIAL millivolts	DEPTHS	RESISTIVITY ohms - m²/m	CONDUCTIVITY millimhos/m = 1000 / ohms-m²/m
10 — ⊢⊣ +		A-16"-M. SHORT NORMAL 0 — 10; INDUCTION 0 — 10; AMP. SHORT NORMAL 0 — 0	6FF40 INDUCTION 1000 — 0; 2000 — 1000; 3000 — 2000

Sea floor 450' (-417')

GAMMA RAY to 3114
0 API units 120

30" at 528'

Plug #4 1300'- 950'

13 3/8 at 1277'

First samples at 1320'

Samples begin in PLIOCENE

1320 - 2040
Clay, med. lt gry v. soft, sticky occ macro- fossil frags v. sndy vf-crs grn., some gravel size, milky glassy qtz. Local sand stringers vf crs grn., some gravel size, milky glassy qtz. some qtsite frags.

Possible scattered Ls. fragments.

PLIOCENE / MIOCENE 2040' (-2007')

2040 - 2190
Coquina macro fossil frags, forams, probable sandy-clayey mtx.

2190 - 2534
Clay, med lt. gry med gry, silty, soft, sticky trc. Lignite

2534 - 2770
Sand crs-grn some gravel, some vf-med grn. poorly sorted, subrnd unconsolidated no show. Trc scattered lignite thin interbeds of Clay, as above.

2770 - 3030
Sand med grn vary from vf-crs subang., poorly sorted, thin interbeds of Clay, as above

Plug #3 3260'-2890'

3030 - 3185
Gravel v. crse sd chert & qtzite frags, subang subrnd, poorly sorted, unconsl.

9 5/8 at 3109'

3185 - 3675
Interbedded sequence of Clay med. gry, silty v. soft. Sand vf-crs, av. f-m gr., some gravel, subang- subrnd, poor sorting, unconsol. trc. lignite

MIOCENE / OLIGOCENE 3210' (-3177')

3675 - 3855
Clay, med gry, sli silty soft.

3855 - 3900
Poor samples. prob a clayey sandy Siltst.

Significant color change at 3900' from med. gray above grey-lt brn.below.
3900 - 4500
Shale, med gry calc., mica, soft. and Clay, med. gry lt brn. bent calc, soft thin stringers of Siltstone med brn calc., arg, soft thin stringers of Ls. buff mct.

OLIGOCENE / EOCENE 4330' (-4297')

Significant color change at 4327' from lt. brn. above to med. gray gray green below.
4330 - 4730
Clay buff-gry green sli. calc, bent, soft and Shale, med. gry, lt gry silty calc., soft-firm trc. thin stringers of Ls. white mct.

4730 - 4840
Clay, med lt gry, soft and Shale gry green some dull red brn, silty soft trc. thin stringers of Ls., white, chalky.

4840 - 4975
Clay, med lt gry, soft and Shale lt olive gray, some green gry, trc. thin stringers of Ls., white chalky.

4975 - 5350
Shale, med gry, wi some brn gry and green gry. sli silty, soft. trc. thin stringers Dol., microxl. buff.

Significant color change at 5350' from med. gray- gray green above to mottled pale red brn. below.
5350 - 5520
Shale, med gry wi some brn gry & grn gry occ. pale red brn- rust brn. Trc. thin stringers Ls. mct., white pale red brn.

Plug #2 5606'-5206'

5520 - 5610
Clay med gry- buff & silty soft, and Shale, med gry, gry green with red brn., soft pos. trc. Tuff?

5610 - 5650
Thinly inter- bedded Shale, brn and Tuff green.

5650 - 5730
Thinly inter bedded Shale med gry, mic- rol-sinted, and Tuff, greenish gry.

5730 - 5895
Shale, mot- tled lt gry green-pale red brn & gry brn.

Sidewall cores: 5500 Sh, med gray; 5535 Sh. aa; 5560 Sh. aa; 5570 Sh. aa; 5590 Sh. lt gry brn; 5600 Sh. med gry; 5620 Sh. brn; 5630 Sh. aa; 5650 Sh. med gry; 5670 Sh. gry brn; 5697 Sh. med gray, trc. tuff; 5705 Sh. blue gray, tuff; 5710 Sh. gray green ③; 5714 Sh. med gray; 5722 Sh. med gray, siltst. Ls. ①; 5724 Sh. med gray, tuff; 5730 Sh. lt; 5770 Sh. gray green wi red brn; 5785 Sh. gray green wi red brn; 5820 Sh. brn; 5840 Sh. gray brn; 5848 Sd. vf-f, very calc.; 5850 No Show ④; 5852 Sh. lt red brn; 5860 Sh. gry brn; 5890 Sh. gry brn; 5900 Sh. med; 5915 Sh. med gray mottled wi brn; 5945 Sh. med gy; 5963 Sh. lt gray green, v calc. ②; 5971 Sh. lt gray green, waxy; 5977 Sh. lt gy, green, v calc.; 5980 Sh. med gray, v calc.; 6020 Sd. vf-f, No Show; 6036 Sd. vf-med, No Show; 6053 Sh. lt gy green; 6060 Sh. aa; 6062 Sand, vf-med, no show; 6069 Sh. lt gray green; 6072 Sh. aa; 6077 chalk white chalky; 6081 chalk white; 6085 chalk white; 6092 chalk white

Plug #1 6088'-5606'

Local sand stringer vf-f, subang, poorly sorted, v.calc., sli clay mtx. sli mica., trc. glauc. friable No show.

EOCENE / PALEOCENE 5852' (-5819')

5895 - 5956
Shale, med gry occ mottled wi brn.

5956 - 5963
Shale lt gry green v.calc.

5963 - 6048
Sand vf med grnd subang subrnd. fair sorting, qtz sli. calc, v. friable, No show.

6048 - 6075
Shale lt gry green and Sand vf med grn qtz. v. calc. no show

6075 - 6095
Chalk white dense, trc. stylolites

PALEOCENE / DANIAN 6075' (-6042')

T.D. 6095'

KB = 33'

		A-16"-M SHORT NORMAL 0 — 0; 0 — 10; INDUCTION 0 — 10	6 FF40 INDUCTION 1000 — 0; 2000 — 1000; 3000 — 2000
10 — ⊢⊣ +			
SPONTANEOUS-POTENTIAL millivolts	DEPTHS	RESISTIVITY ohms - m²/m	CONDUCTIVITY millimhos/m = 1000 / ohms-m²/m

COMPANY: Esso Exploration Norway Inc.
WELL: 25/11 - 3
FIELD: Wildcat
COUNTY: Norway STATE: North Sea
SCHL. FR: 6094; SCHL. TD: 6095; DRLR TD: 6088
Elev: KB 32.5; DF 31.0; GL -461.0

Formation Interval Test Results

NOTE: No Conventional Cores cut. Only recovered Sidewall Cores shown.

Fit No.	Depth (feet)	Results
1.	5722	Reverse fire. Seal failure after 3 minutes. Recovered 300 cc mud. Sampling pressure ± 50 - 80 psi. Hydrostatic pressure 3500 psi.
2.	5962	Reverse fire. Immediate seal failure but tool open 25 minutes. Recovered 8800 cc mud. Sampling pressure 3250-3450 psi, hydrostatic pressure 3500 psi.
3.	5710	Reverse fire. Recovered 300 cc mud. Sampling time 14 minutes. Sampling pressure 0-50 psi, hydrostatic pressure 3500 psi. Valid test, very tight formation.
4.	5850	Reverse fire. Tool plugged immediately. No recovery.