SIMON PETROLEUM TECHNOLOGY

WELL: 16/1-2

Print: 1879 N	**Units:** [✓ M] F	**Top**	**Bottom**	**Scale**	**TD**
Length: 22 FT	**Initials:** JPK	315	2930	1/500	2918.5

DIGITAL WIRELINE LOGS PACKAGE
1993
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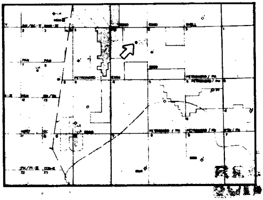
SIMON PETROLEUM TECHNOLOGY
SPT

COMPLETION LOG

fb.101.1

Esso Exploration and Production Norway Inc.

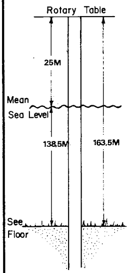
16/1-2 COMPLETION LOG



9 JUN 1981

COUNTRY: Norway
CONCESSION: 001
COORDINATES:
Long.: 58°56 9.223N
Lat.: 02°13'20.063E
Well Classification: Wildcat
STATUS: P + A - Dry Hole
Elev. KB: 25M
Water Depth: 138.5M
Total Depth: 2918.5M
Deepest Form. Penetrated: Basement
Date Spudded: 4/7/76
Date Compl.: 31/8/76
RIG: Ross Rig
Contractor: Rosshavet
MUD-Logging: Bariod
Electric Logging: Schlumberger
Remarks: DJB/JDH

ELEVATION
(not to scale)



RUN Nº	DATE	MEAS. INTERVAL	BIT SIZE	BHT °F	SPACINGS	MUD					MUD FILTR.
						Type	Grad psi/1000	API WtrL	Resistivity in Ohm m/temp °F		Resistivity in Ohm m/temp °F
									Schl surf	Schl BHT	Schl surf
1 BHC	6/7/76	136-340	17½	100		SW	480	NC	.45/60	.30/100	
ISF/S-1	11/7/76	324-1286	17½	119		GEL	470	18	.42/66	.24/119	.31/66
CBL-1						GEL					
ISF/S-2	18/7/76	1264-2485	12¼	176		GEL	510	19	.36/66	.13/176	.27/66
ISF/S-3	22/7/76	2050-2713-	12¼	176		Lign GEL	470	15	.44/60	.16/176	.40/60
CST-1	23/7/76	200-1193				"	"				
HDT-1	24/7/76	1800-2705	12¼	176		"	"		.44/60	.16/176	.40/60
CBL-2	30/7/76	1714-2578									
ISF/S-4	2/8/76	2662-292	18½	186		Lign GEL	470	14	.54/68	.19/186	.47/62
FDC-CNL	2/8/76	2662-292	18½	200		"	"	"	"	"	"
HDT-2	2/8/76	2662-292	18½	206		"	"	"	"	.19/206	.47/62
CST2+3	2/8/76					"	"	"			
Velocity Survey											

LITHOLOGIC SYMBOLS

?	CLAY (NONFISSILE) - CLAYSTONE < 03mm
- - -	CLAY (FISSILE) OR SHALE < 03mm
∧∧∧∧	MUDSTONE
∧∧∧∧	SILT, COARSE (03-06mm) AND SILSTONE
·	SAND (06-2 mm) AND SANDSTONE
o	GRANULE BOULDER (> 2mm) AND CONGLOMERATE
Q	QUARTZ
▭	FELDSPAR
>	LITHIC OR ROCK FRAGMENTS
◆	PYRITE
ϕ	SIDERITE
Δ	CHERT
■	COAL
▬	CARBONACEOUS MATTER
~	GLAUCONITE
•	PHOSPHATE
V	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

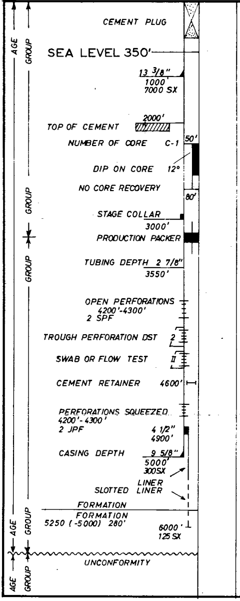
M	M = MICRITIC LIMESTONE
G	G = GRAIN LIMESTONE (FOR GENERAL USE)
S	S = SKELETAL LIMESTONE (FRAGMENTED AND NONFRAGMENTED)
P	P = PELLETAL LIMESTONE
F	F = FRAMEBUILDER LIMESTONE
O	O = OOLITIC LIMESTONE
K	K = CHALK
D	D = DETRITAL LIMESTONE
L	L = LUMP LIMESTONE
m	m = MICROCRYSTALLINE OR MICROGRAINED < 03mm

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)



◒ SHOW OR STAIN

◓ HYDROCARBON CUT

◐ FLUORESCENCE

☼ GAS SHOW

ABOVE SYMBOLS MAY BE COMBINED

DEVIATED OR SIDETRACKED HOLE

2 OPEN HOLE DST — 2 MISRUN

II OPEN HOLE SWAB OR FLOW TEST

—○ WIRE LINE TEST

— SWC w/ RECOVERY

SWC w/ NO RECOVERY

—+ PO SO = SHOT OFF PO = PULLED OFF

MF = MISFIRE DB DAMAGED BULLET

— ◐☼ SWC WITH SHOW

●→ BLOWOUT OF OIL

☼→ BLOWOUT OF GAS

○→ WATER FLOW

v LOSS OF DRILLING FLUID AND PERCENTAGE

v v LOST CIRCULATION COMPLETELY

OEM MUD TYPE WEIGHT & OIL CONTENT
9,2 - 8%

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 PRODUCTION

COUNTRY NORWAY
FIELD or LOCATION WILDCAT
WELL 16/1-2
COMPANY Esso Exploration

1/500 meters
Schlumberger

SIMULTANEOUS
INDUCTION RESISTIVITY SONIC
ISF - SONIC

COMPANY ESSO EXPLORATION NORWAY INC.

WELL 16/1-2
FIELD WILDCAT
COUNTRY NORWAY, NORTH SEA.

LOCATION
58° 56' 9.223" N
2° 13' 20.063" E
Sec. Twp. Rge.

Other Services:
CIS, CST, HDT.
FDC/CNL,
ST-GR. (run 3,4)

Permanent Datum: MSL Elev. 0
Log Measured From RKB 25 m Ft. Above Perm. Datum
Drilling Measured From RKB

Elev. K.B. 25
D.F. 24.6
G.L. 136.5

Date	11 July 1976	18 July 1976	22 July 1976	2 August 1976
Run No.	1	2	3	4
Depth - Driller	1285.7	2482	2731	2918.5
Depth - Logger	1286.3	2485	2713.5	2921.0
Btm. Log Interval	1286	2484.7	2713	2921.0
Top Log Interval	324.5	1263.5	2050	2662.0
Casing - Driller	20" @ 324.5	13.4" @ 1264	13.4" @ 1264	9⅝" @ 2655.2
Casing - Logger	324.5	1263.5	1263.5	2662.0
Bit Size	17.5"	12¼"	12¼"	8½"
Type Fluid in Hole	Seawater Gel	Gel-Lignosulphonate	Gel-Lignosulphonate	p/c Hydrated Gel. - Caustic
Dens. | Visc.	9.1 | 44	9.8 | 46	9.0 | 42	9.1 | 45
pH | Fluid Loss	10.0 | 18. ml	10.0 | 18.8 ml	11.0 | 14.7 ml	11.5 | 14 ml
Source of Sample	Circulation	Flowline	Flowline	Flowline
Rm @ Meas. Temp.	.42 @ 66 °F	.36 @ 66 °F	.44 @ 60 °F	0.538 @ 68 °F
Rmf @ Meas. Temp.	.31 @ 66 °F	.27 @ 66 °F	.40 @ 60 °F	0.471 @ 62 °F
Rmc @ Meas. Temp.	.50 @ 66 °F	.48 @ 66 °F	.54 @ 60 °F	1.001 @ 60 °F
Source: Rmf | Rmc	Press | Press	Press | Press	Press | Press	M | M
Rm @ BHT	.24 @ 119 °F	.13 @ 176 °F	@ °F	0.190 @ 186 °F
Time Since Circ.	3 Hrs	5 Hrs	6 Hrs	7 Hrs
Max. Rec. Temp.	119 °F	176 °F	Lost in Hole °F	186 °F
Equip. | Location	4512 | NRT	4512 | NRT	4512 | NRT	4512 | NRT
Recorded By	Mc Laughlin	Mc Laughlin	Mc Laughlin	M. Ryan
Witnessed By	B. Smith/Powell	S. Hanstien	Jess Hulsey	J. Parmenter

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

EQUIPMENT DATA

Run No	Induction Panel	Induction Cartridge	Induction Sonde	Sonic Panel	Sonic Oscil	Sonic Cartridge	Sonic Sonde	Aux and Memory Panel SRP	Aux and Memory Panel MDU	Aux and Memory Panel ILD	G R Cartridge	Tape Recorder	Caliper
1	UD-148	MIH744	VA 720	JH 48	B 1038	H 687	1091	1707	826	-	KG681	1876	-
2	UD-148	MIH744	VA 720	JH 48	B 1038	SLH687	NA1091	C1707	9	-	ECH681	E 1876	None
3	UD-148	MIH744	VA 720	JH 48	B 1038	SLH687	NA1091	C1707	AB896	-	ECH681	E1876	None
4	UD-148	MIH744	VA 720	JH 48	B 1038	SLH687	SLS1091	-cc1707	ABB896		KG681	-E1876	None

LOGGING DATA

Run No	Gamma Ray Time Constant	Gamma Ray Speed	Stand-off inches	Centering Device	Induction zero at Surface	Induction zero at Depth	RSFL averaged Yes	RSFL averaged No
1	1	3600	1.5	EX-CENT	x		-	x
2	1	3600'/h	4	V CME-H	Yes	-	-	No
3	1	3600'/h	½	None	Ok	-	No	Yes
4	1	60' Min	1.5	None				x

CALIBRATION DATA

Run No	Gamma Ray API Scale	Gamma Ray Background CPS	Total CPS
1	0 165	-	-
2	0 150	-	-
3	0 150	-	-
4	0 150	-	-

REMARKS:
Sonic Signal noisy below Csg and at T.D. Probably due to bad contact with wall of large hole. 30 mV. S.P. shift. @ 1122 m. (run 1)

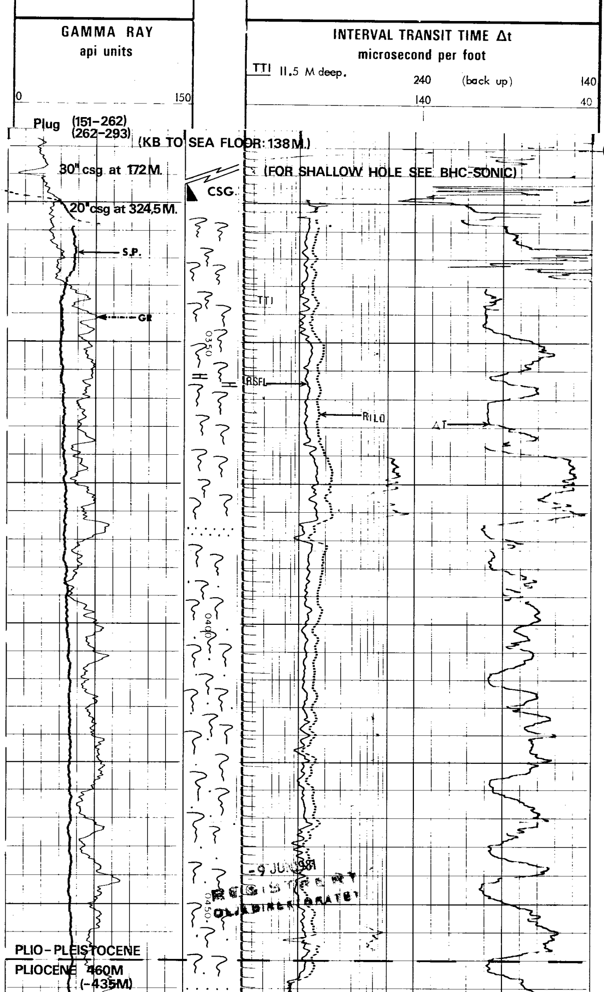
Note position check Gamma Ray Cal. f=60. Tool at limit of calibration. (run 2) TTI is unmemoresed, recorded 11.5 M too deep. (run 4)

REMARKS
ΔT saturation below casing probably due to large caves, unable to improve signal on repeat run. (run 2)
TTI 'Pips' not memorized, recorded N 11.5 m too deep. GR scale change to 0 - 50 at casing.

TTI 'Pips' not memorized, recorded N 11.5 M Too deep. Unable to pass 1490 M at first attempt. Removed 9" fins and spring Centralizers. Ran tool with 2x1½" standoffs. 4,000 LBS+ pull at 1680. Bothfins stripped off, also thermometers. (run 3)

SPONTANEOUS POTENTIAL millivolts	Depths	RESISTIVITY ohms - m²/m
10		DEEP INDUCTION RILD 0.2 1.0 10 100 1000 2000
	1/500	FOCUSED RESITIVITY RSFL 0.2 1.0 10 100 1000 2000

-9 JUNI 1981
REGISTRERT
OLJEDIREKTORATET



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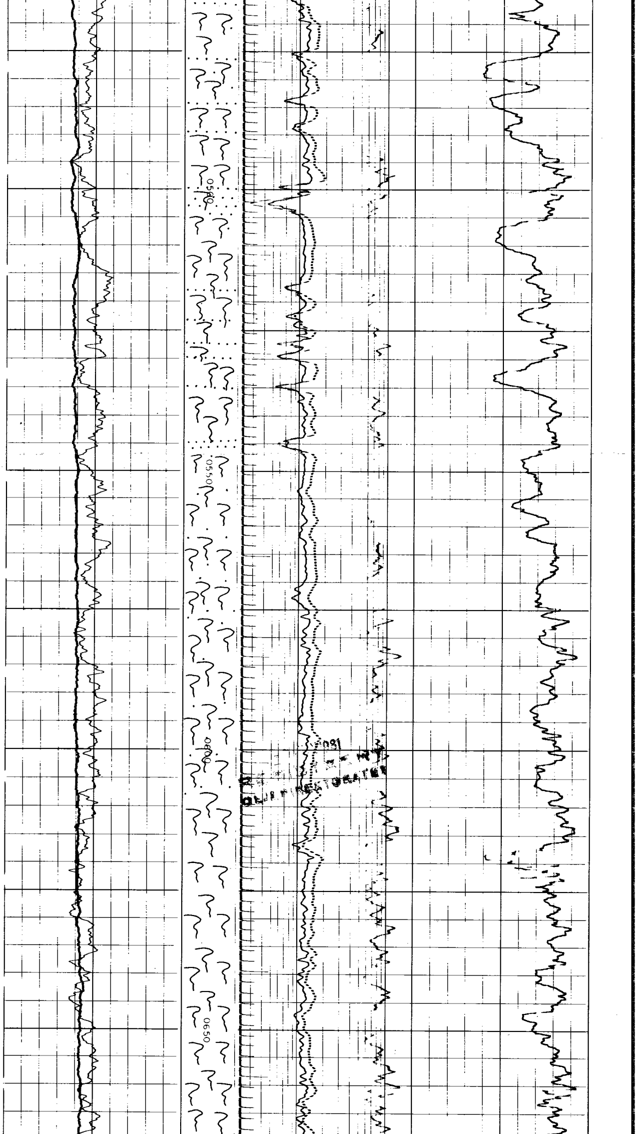

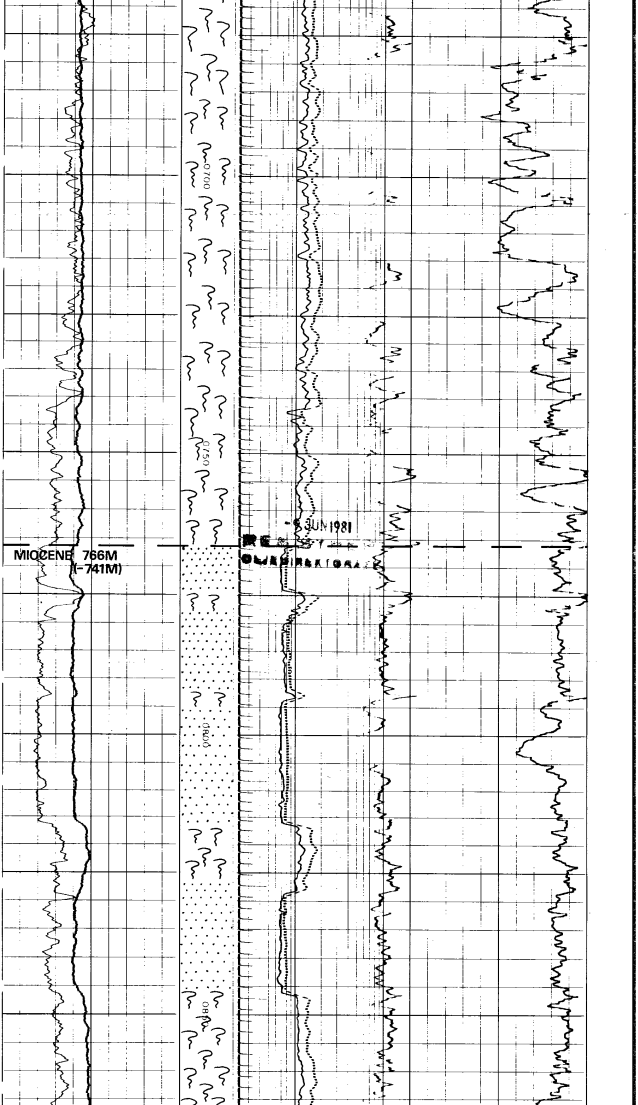

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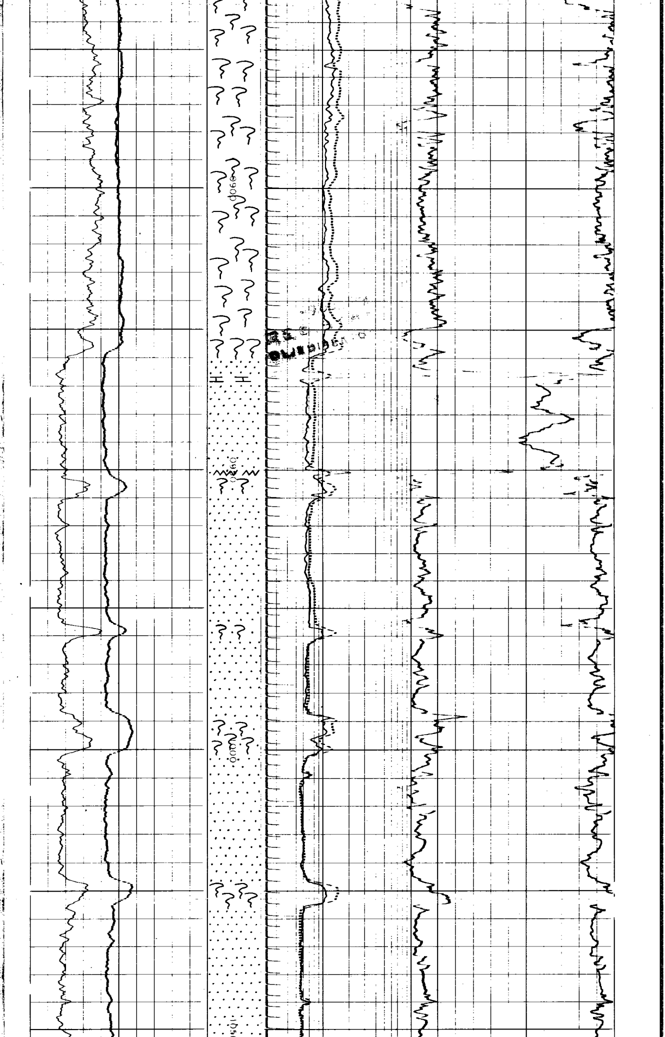

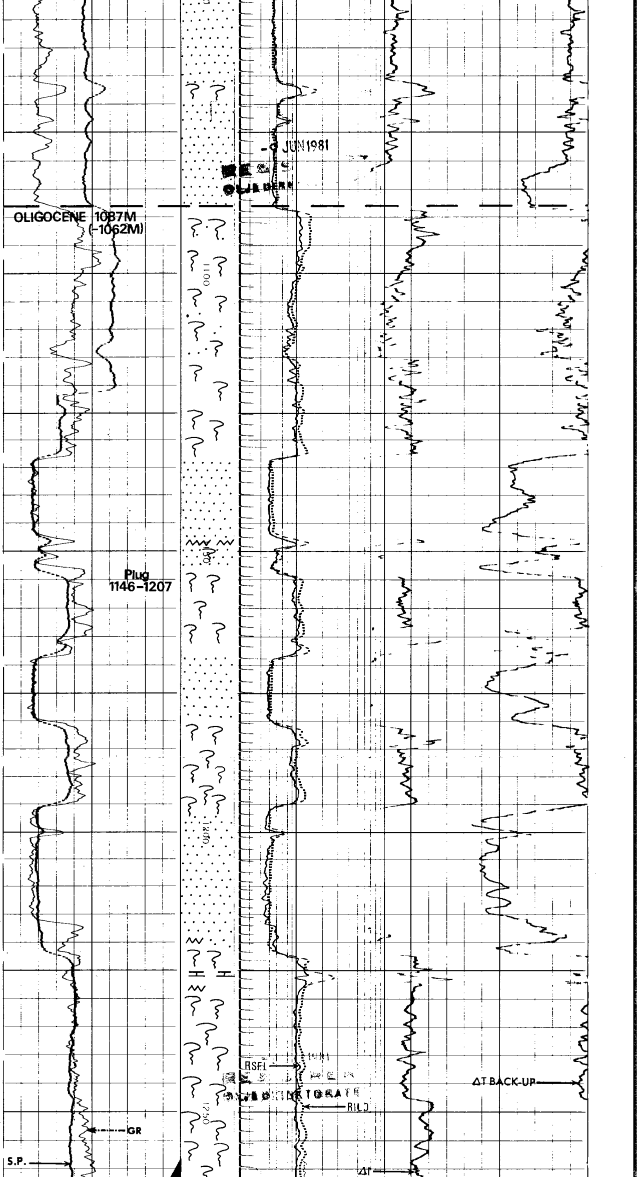

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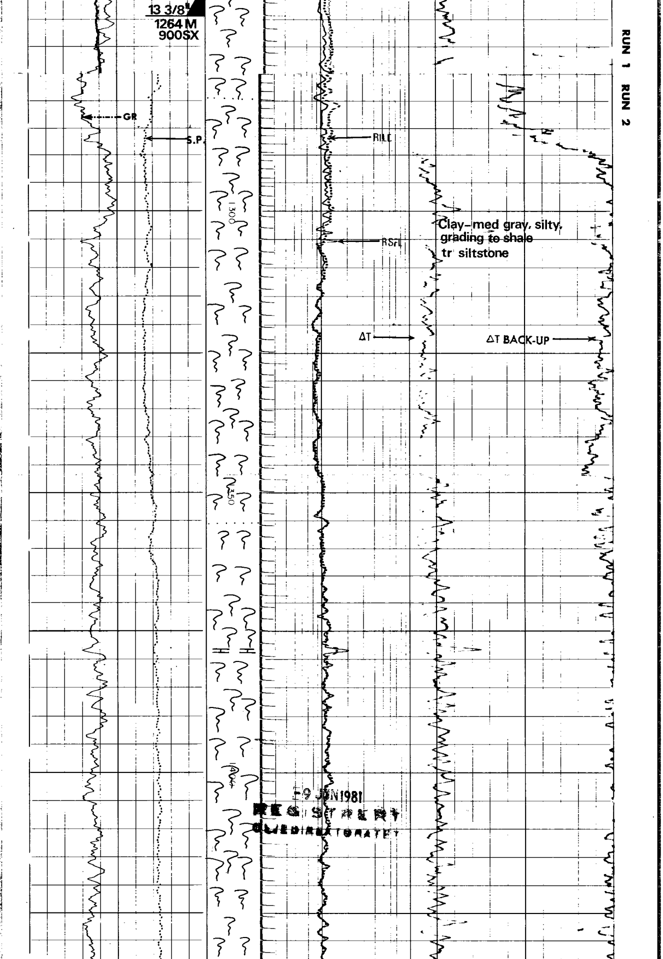

Clay–med gray, silty, grading to shale tr siltstone

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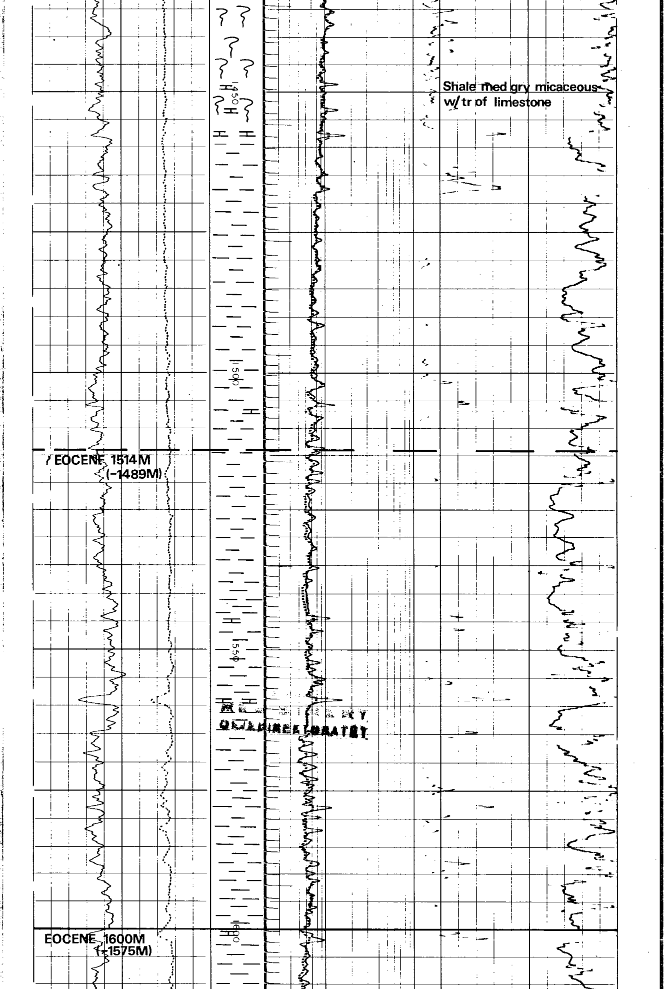

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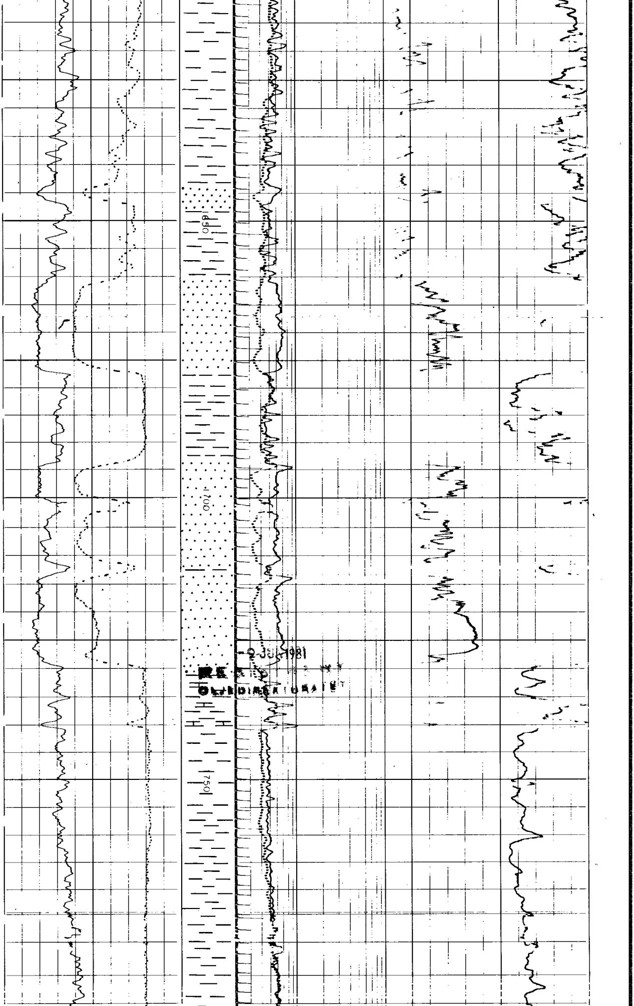

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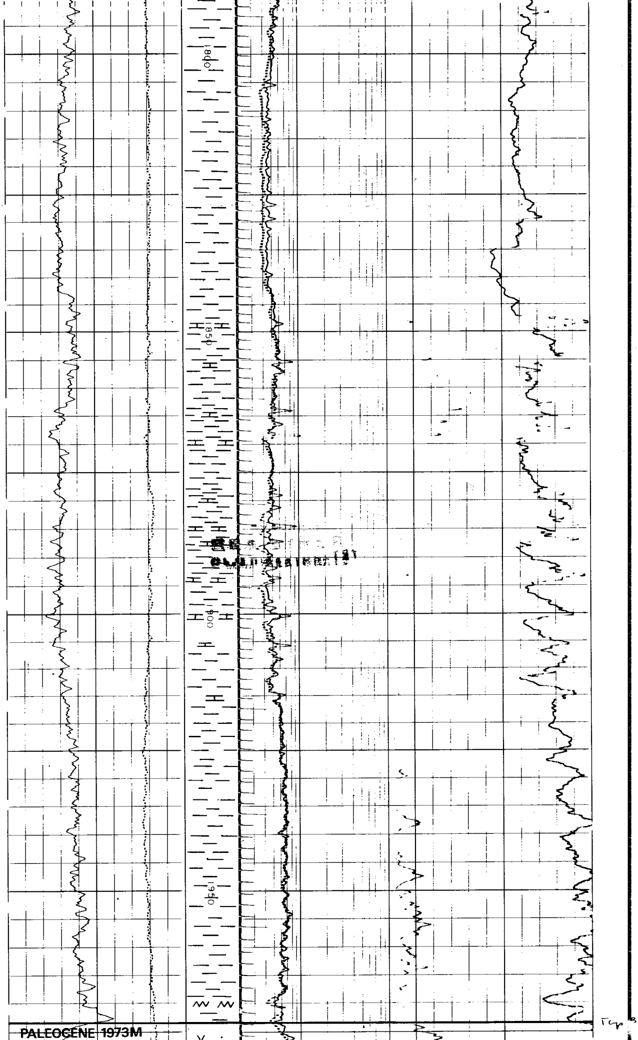
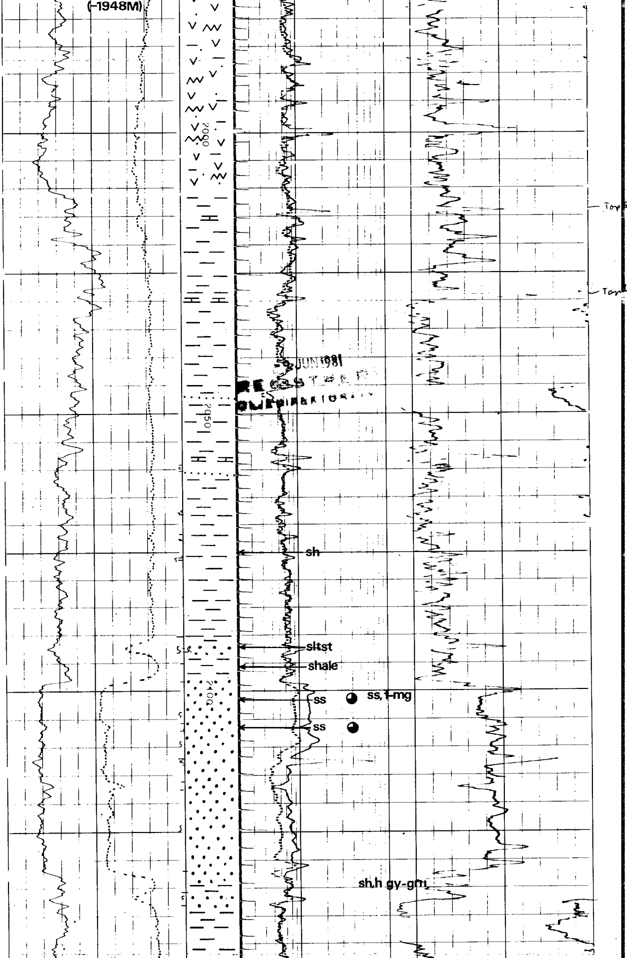


Top Balder



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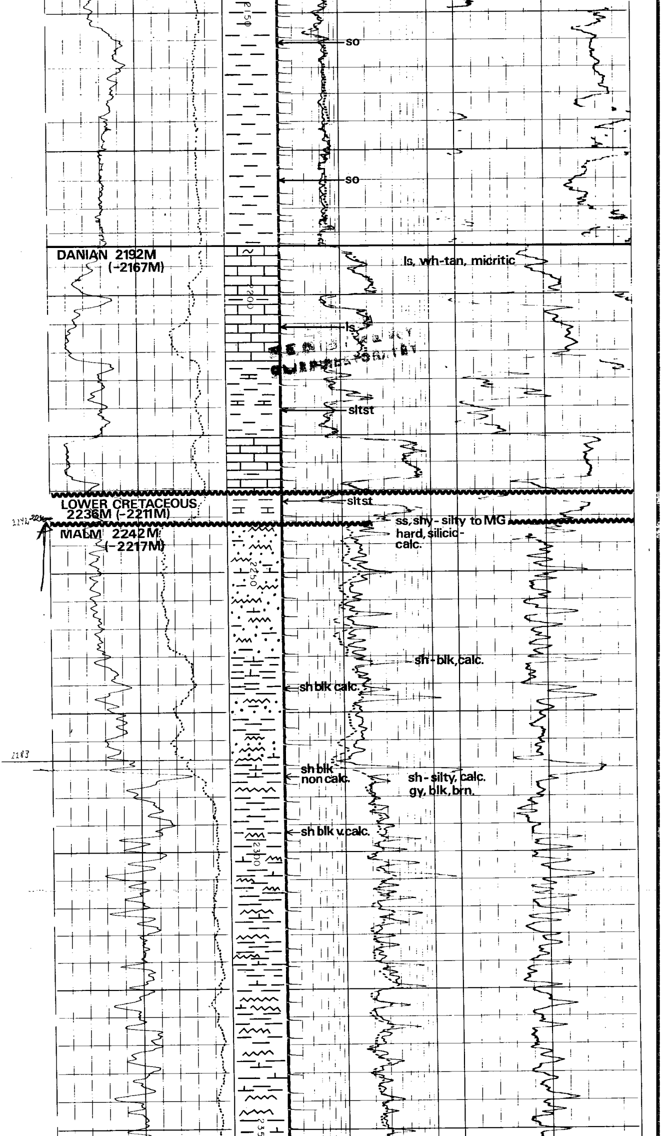

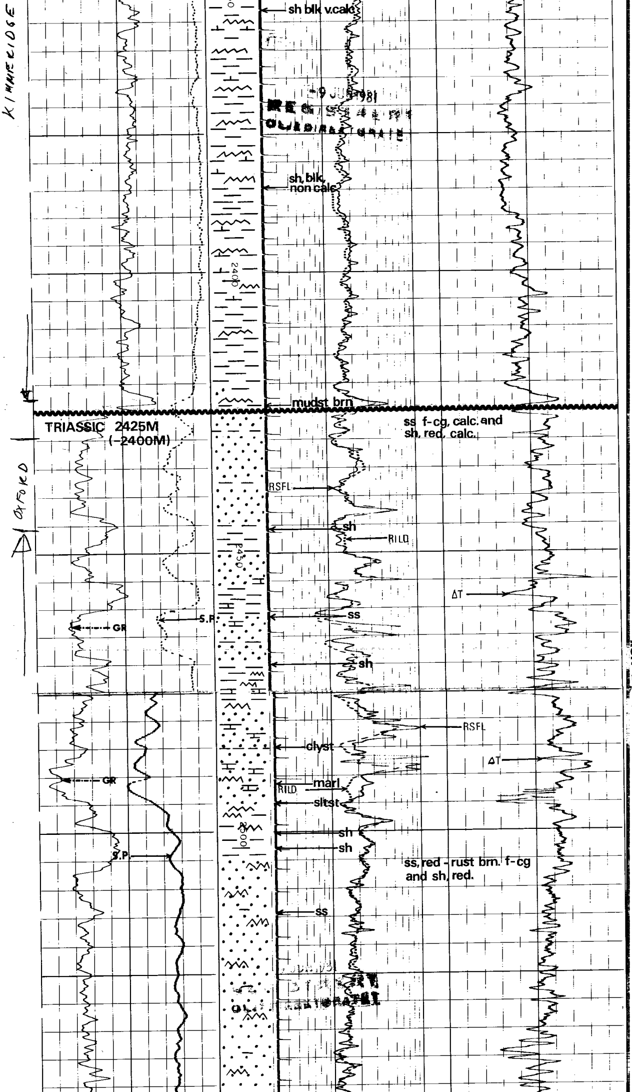

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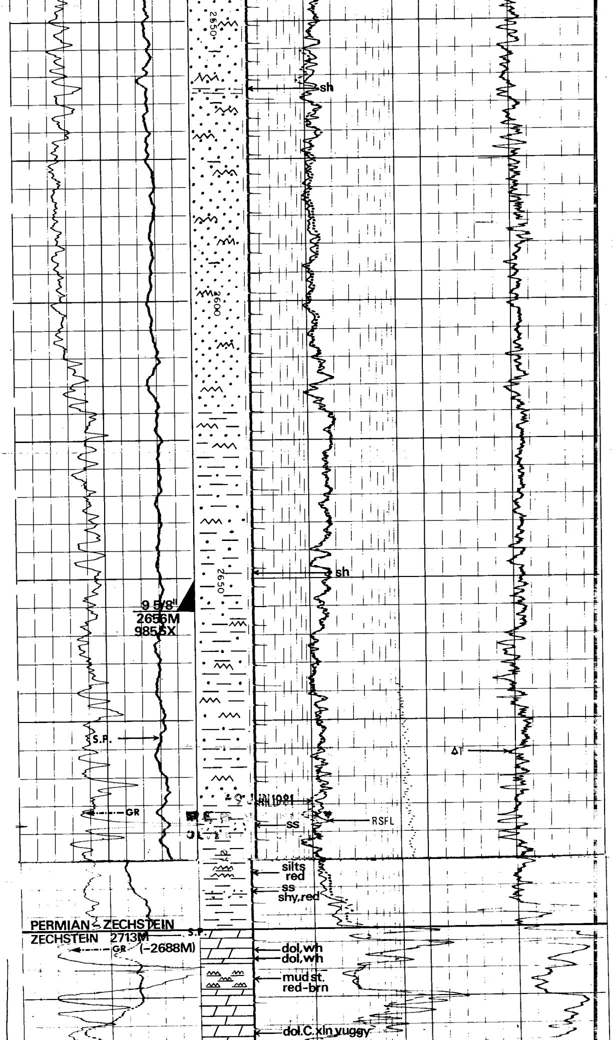
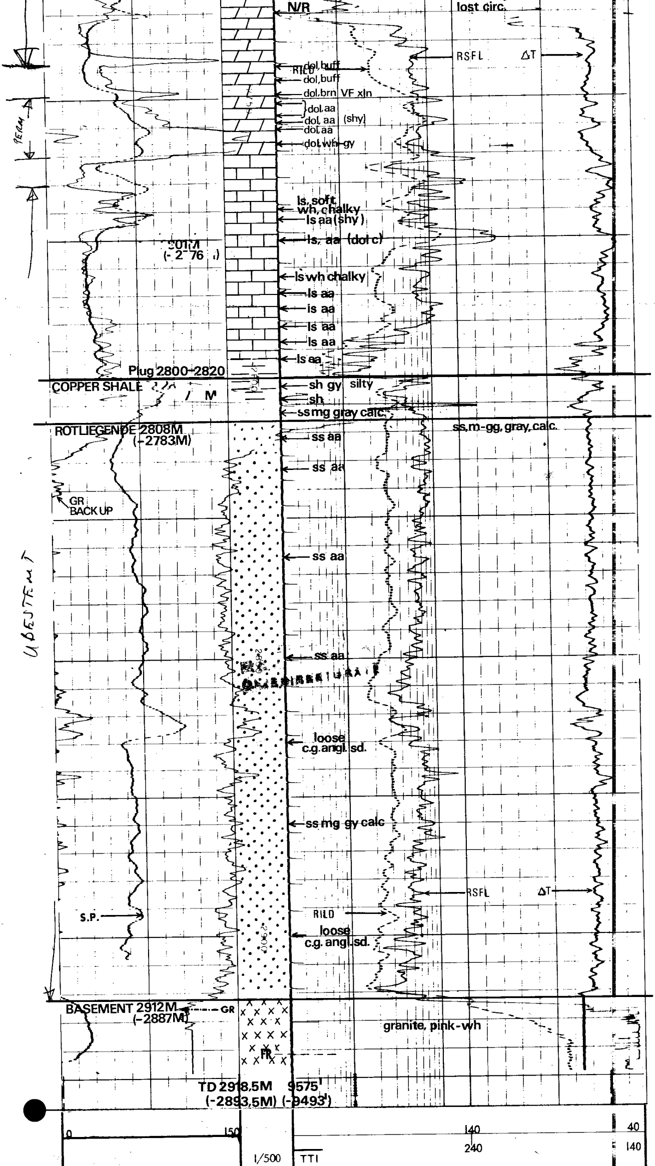
REGISTRY
OIL DIRECTORATE

UBESTEMT





GAMMA RAY
api units

10

SPONTANEOUS POTENTIAL
millivolts

Depths

INTERVAL TRANSIT TIME Δt
microsecond per foot

0.2 1.0 10 100 1000 2000

FOCUSED RESITIVITY RSFL

0.2 1.0 10 100 1000 2000

DEEP INDUCTION RILD

RESISTIVITY
ohms - m^2/m

SIMULTANEOUS

INDUCTION RESISTIVITY
SONIC

ISF - SONIC

Schlumberger

ESSO 16/1-2