

Well no :	7228/2-1 S	Operator :	MOBIL
Coordinates :	72° 51' 09.75" N 28° 26' 29.61" E	UTM coord. :	808484165 N 54743690 E
Licence no :	160	Permit no :	616
Rig :	ROSS RIG	Rig type :	SEMI-SUB.
Contractor :	TRANSNOR RIG AS		
Bottom hole temp:	117 °C	Elev. KB :	25 M
Spud. date :	89.08.21	Water depth :	373 M
Compl. date :	89.12.20	Total depth :	4300 M
Spud. class :	WILDCAT	Form. at TD	TRIASSIC
Compl. class :	P&A. SHOWS	Prod.form. :	
Seisloca :	MN 89 - 609 SP 548		

LICENSEES

10,000000	SAGA PETROLEUM A.S.
50,000000	DEN NORSKE STATS OLJESELSKAP A.S
20,000000	TOTAL NORGE A.S
20,000000	NORSK HYDRO PRODUKSJON A.S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm ³
CONDUCTOR	30	473,0	36	476,0	
SURF.COND.	20	997,0	26	1013,0	1,36
INTERM.	13 3/8	2186,0	17 1/2	2206,0	1,58
INTERM.	9 5/8	3633,0	12 1/4	3663,0	1,86
OPEN HOLE			8 1/2	4300,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery	
		M	%
2	1286,3 - 1295,0	9,4	94,0
3	1384,0 - 1387,5	3,5	100,0
5	4189,0 - 4198,6	9,6	100,0

MUD

Depth	Mud weight	Visc.	Mud type
659,000	1,38		WATER BASED
1005,000	1,03		WATER BASED
1171,800	1,20	16,0	WATER BASED
1237,000	1,02	16,0	WATER BASED
1363,000	1,20	12,0	WATER BASED
1384,000	1,27	60,0	WATER BASED
1384,000	1,22	19,0	WATER BASED
1990,000	1,27	18,0	WATER BASED

Depth	Mud weight	Visc.	Mud type
2034,000	1,26	18,0	WATER BASED
2135,000	1,25	16,0	WATER BASED
2206,000	1,18	15,0	WATER BASED
2206,000	1,26	16,0	WATER BASED
2237,000	1,15	18,0	WATER BASED
2321,000	1,18	18,0	WATER BASED
2461,000	1,19	12,0	WATER BASED
3277,000	1,20	15,0	WATER BASED
3419,000	1,24	15,0	WATER BASED
3515,000	1,32	15,0	WATER BASED
3587,000	1,34	15,0	WATER BASED
3605,000	1,33	14,0	WATER BASED
3654,000	1,38	15,0	WATER BASED
3663,000	1,39	16,0	WATER BASED
3964,000	1,44	16,0	WATER BASED
4002,000	1,45	20,0	WATER BASED
4131,000	1,44	22,0	WATER BASED
4300,000	1,46	26,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	1080 - 4300	570

SHALLOW GAS

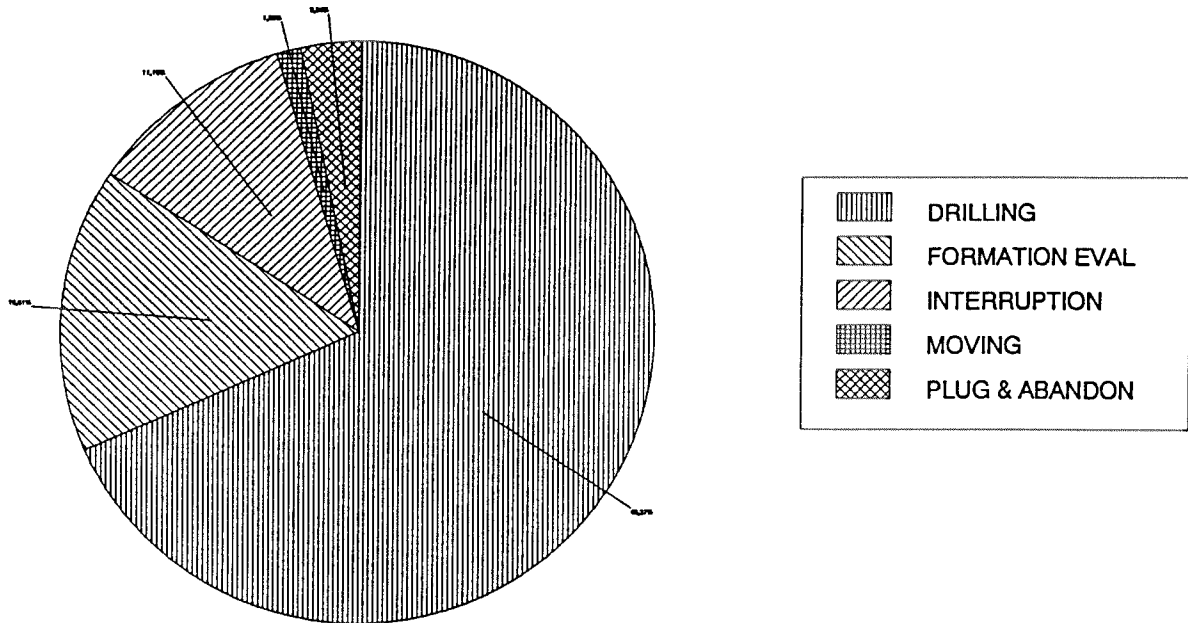
Interval below KB	Remarks
-------------------	---------

AVAILABLE LOGS

Log type	Intervals	1/200	1/500	Div.
AMS	3636,0 - 4309,0		X	
AMS	2190,0 - 3639,0		X	
CBL VDL GR	1750,0 - 3550,0	X		
CDM AP / SHDT	1000,0 - 2210,0	X	X	
CDM AP / SHDT	2190,0 - 3636,0	X	X	
CDM AP / SHDT	3636,0 - 4310,0	X	X	
SHDT AMS	998,0 - 2211,0	X		
SHDT AMS	2190,0 - 3639,0,	X		
DIL BHC GR	374,0 - 1002,0	X	X	
DIL BHC GR	997,5 - 2209,0	X	X	
DIL BHC GR	2190,0 - 3636,0	X	X	
DIL BHC GR	3636,0 - 4122,0	X	X	
DIL BHC GR	3636,0 - 4310,0	X	X	
FMS AMS	3636,0 - 4300,0	X		

Log type	Intervals		1/200	1/500	Div.
LDL CNL GR	997,5	- 2211,2	X	X	
LDL CNL GR AMS	2190,0	- 3639,0	X	X	
LDL CNL GR AMS	3636,0	- 4309,0	X	X	
MWD	373,0	- 4300,0		X	
PRESS. EVALUATION	373,0	- 4300,0			1:1000
RFT HP GR AMS	1290,0	- 1922,5			
RFT SEGREGATED SAMPL	1310,0	- 1310,0			
RFTB HP GR	3887,3	- 3892,0			
MUD	373,0	- 4300,0		X	
VELOCITY	374,0	- 4300,0		X	
FREQUENCY TEST	5 cm/s	10 cm/s			8
SYNTHETIC SEISMOGRAM	5 cm/s	10 cm/s			4

Daily Drilling Report System (DDRS)
Operations for well: 7228/2-1 S



Main operations	Minutes	Hours	% of total
DRILLING	120120	2002,00	68,37
FORMATION EVAL	27780	463,00	15,81
INTERRUPTION	19590	326,50	11,15
MOVING	2280	38,00	1,30
PLUG & ABANDON	5910	98,50	3,36
Total	175680	2928,00	100,00

Operations for well: 7228/2-1 S**Main operation: DRILLING**

Sub operations	Minutes	Hours	% of total
BOP ACTIVITIES	5100	85,00	4,25
BOP/WELLHEAD EQ	1980	33,00	1,65
CASING	9600	160,00	7,99
CIRC/COND	870	14,50	0,72
DRILL	60570	1009,50	50,42
HOLE OPEN	4950	82,50	4,12
PRESS DETECTION	510	8,50	0,42
REAM	5730	95,50	4,77
SURVEY	240	4,00	0,20
TRIP	30570	509,50	25,45
Total	120120	2002,00	100,00

Main operation: FORMATION EVAL

Sub operations	Minutes	Hours	% of total
CIRC SAMPLES	1050	17,50	3,78
CIRC/COND	2700	45,00	9,72
CORE	1800	30,00	6,48
LOG	10770	179,50	38,77
RFT/FIT	720	12,00	2,59
TRIP	10740	179,00	38,66
Total	27780	463,00	100,00

Main operation: INTERRUPTION

Sub operations	Minutes	Hours	% of total
FISH	6630	110,50	33,84
MAINTAIN/REP	6660	111,00	34,00
SIDETRACK	4920	82,00	25,11
WAIT	1380	23,00	7,04
Total	19590	326,50	100,00

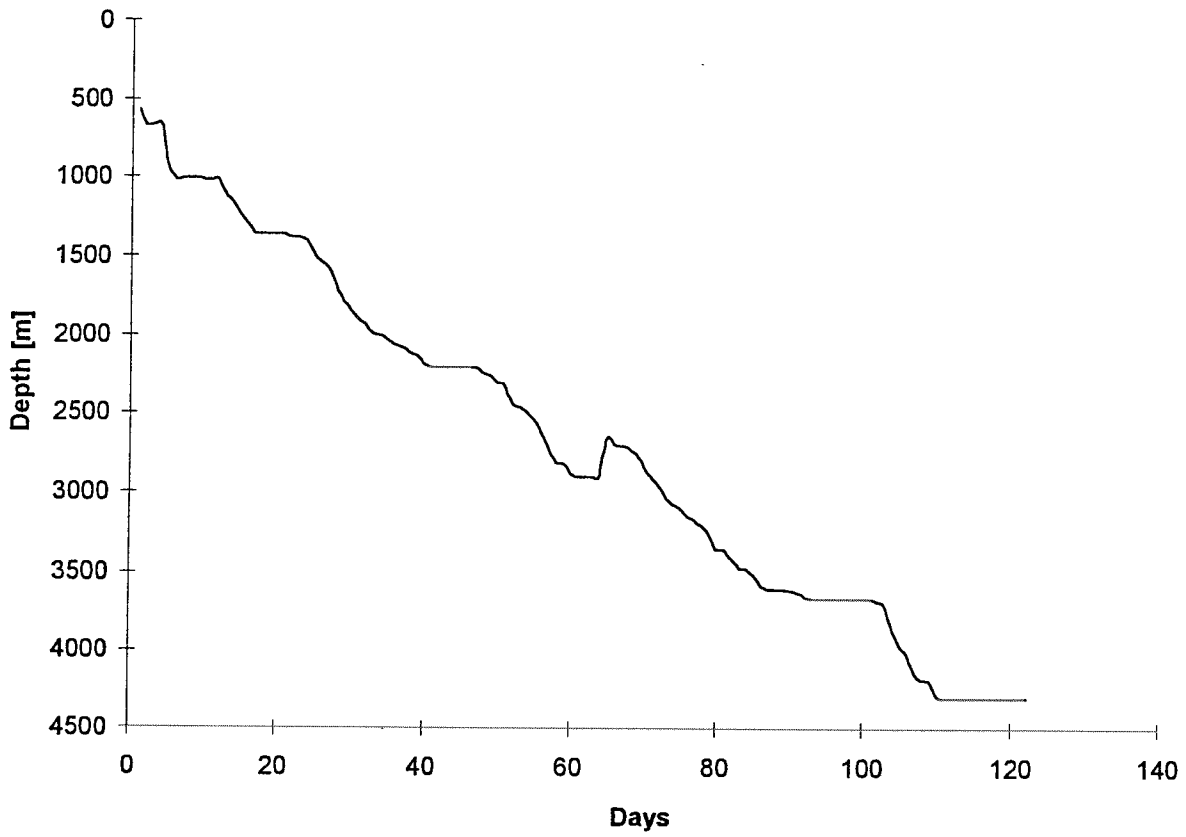
Main operation: MOVING

Sub operations	Minutes	Hours	% of total
ANCHOR	1860	31,00	81,58
TRANSIT	420	7,00	18,42
Total	2280	38,00	100,00

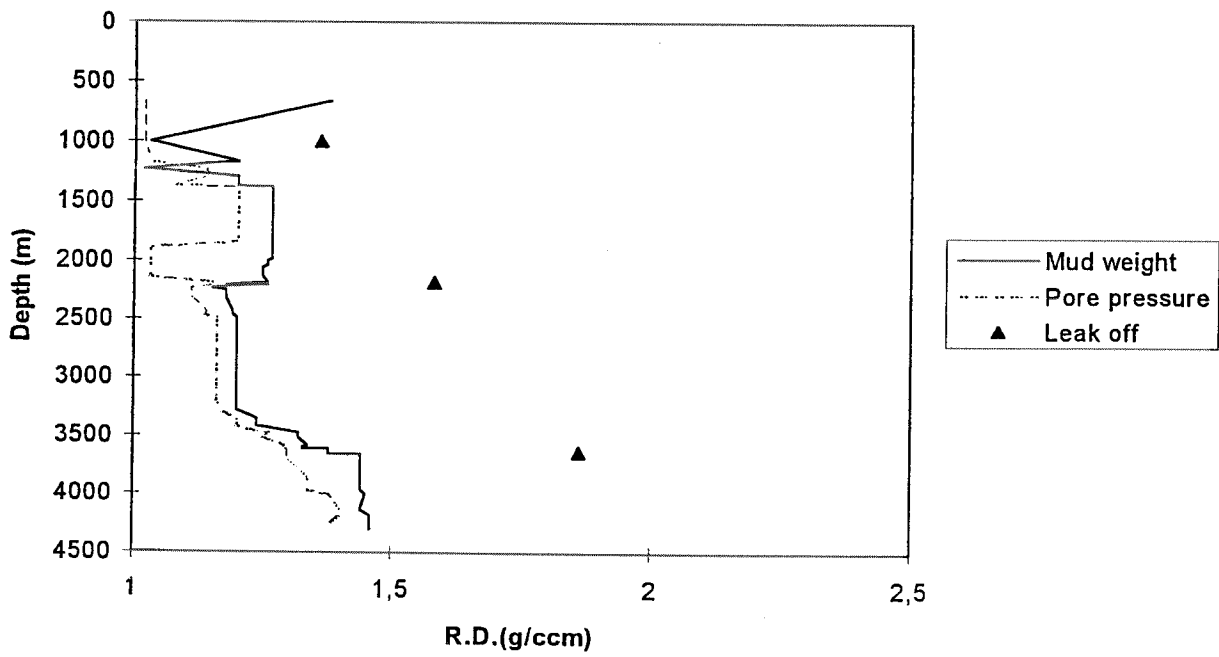
Main operation: PLUG & ABANDON

Sub operations	Minutes	Hours	% of total
CEMENT PLUG	660	11,00	11,17
CIRC/COND	120	2,00	2,03
CUT	690	11,50	11,68
EQUIP RECOVERY	1230	20,50	20,81
MECHANICAL PLUG	180	3,00	3,05
PERFORATE	150	2,50	2,54
SQUEEZE	270	4,50	4,57
TRIP	2610	43,50	44,16
Total	5910	98,50	100,00

Depth vs time for well: 7228/2-1



Composite plot for well: 7228/2-1



Well History 7228/2-1 S.

General:

Well 7228/2-1 S was designed to drill a structure which is a large salt induced anticline that is bisected by a major north - south trending fault. Due to the large Triassic throw on the fault, the upthrown and downthrown parts of the structure were thought to represent separate prospects. The downthrown prospect seem to have the thickest accumulation of Triassic Anisian/Early Ladinian deposits, and was the primary objective of the well. Secondary objectives were other Middle/Upper Triassic and Jurassic sandstones. Several reflectors in the interval 397 - 593 m RKB were thought to represent sandlayers. The strongest amplitude anomaly was at 435 m RKB, indicating a possibility for shallow gas.

Operations:

Wildcat well 7228/2-1 S was spudded 21 August 1989 by the semi-submersibel rig Ross Rig and completed 20 Desember 1989 at a depth of 4300 m RKB MD in the Havert Formation of Middle Triassic age. The well was deviated from 1475 m RKB, and sidetracked from 2700 m RKB due to technical problems. Good reservoir sands were encountered in the Jurassic and uppermost Triassic Stø,- Nordmela-, Tubåen-, Fruholmen,- and Snadd Formations with occasionally patchy traces of residual oil. Five conventional cores were cut in the well, and 334 sidewall cores were attempted whereof 238 were recovered. No shallow gas was encountered in the well. 7228/2-1 S was plugged and abandoned as a dry well.

Testing:

No DST tests were performed in this well.

Geological Tops.

Well: 7228/2-1 S.

	Depth m (RKB).
Nordvestbanken Group	373.0
Kolmule Fm	373.0
Knurr Fm	1110.0
Teistengrunnen Group	1168.0
Hekkingen Fm	1168.0
Fuglen Fm	1236.0
Realgrunnen Group	1275.5
Stø Fm	1275.5
Nordmela Fm	1300.0
Tubåen Fm	1345.0
Fruholmen Fm	1404.0
Ingøydjupet Group	1523.0
Snadd Fm	1523.0
Kobbe Fm.	2438.0
Klappmyss Fm	3584.0
Havert Fm	3984.0
T.D.	4311.0