Well no : 2/12-01 Operator : HYDRO

Coordinates	: 56 14 04.07 N 03 42 27.50 E	UTM coord.	: 6232538 N 543868 E
Licence no	: 113	Permit no	: 530
Rig	: TREASURE SCOUT	Rig type	: SEMI-SUB.
Contractor	: WILHELMSEN OFFSHORE SERVICES		
Bottom hole temperature	: deg.C	Elev. KB	: 23 M
Spud. date	: 86.10.14	Water depth	: 70 M
Compl. date	: 87.03.12	Total depth	: 4795 M
Spud. class	: WILDCAT	Form. at TD	: PERMIAN
Compl. class	: P&A. OIL/GAS DISC.	Prod. form	: M.JURASSIC
Seisloca	: NP 85C - 81 SP. 2293		

LICENSEES

25.000000	AMERADA HESS NORGE A/S
25.000000	NORSK HYDRO PRODUKSJON A.S
50.000000	DEN NORSKE STATS OLJESELSKAP A.S

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	178.0	36	178.0	.
SURF.COND.	20	998.0	26	1015.0	1.70
INTERM.	13 3/8	2500.0	17 1/2	2515.0	2.02
INTERM.	9 5/8	3978.0	12 1/4	3986.0	2.21
LINER	7	4714.0	8 1/2	4716.0	2.42
OPEN HOLE		4795.0	6	4795.0	.

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery M	Recovery %	Series
1	4633.0 - 4651.0	18.3	100.0	
2	4651.0 - 4661.0	9.5	95.0	
3	4662.0 - 4672.5	10.5	100.0	

MUD PROPERTIES

Depth below KB meter	Mud weigth g/cm3	Viscosity	Mud type
123.000	1.03	21.0	WATER BASED
178.000	1.25	0.0	WATER
319.000	1.05	0.0	WATER
895.000	1.82	21.0	WATER BASED
944.000	1.05	0.0	WATER
1015.000	1.03	0.0	WATER
1348.000	1.21	26.0	WATER
3678.000	1.60	31.0	WATER BASED

3750.000	1.82	23.0	WATER
3780.000	2.14	35.0	WATER
3960.000	1.60	28.0	WATER BASED
3986.000	1.66	33.0	WATER BASED
3986.000	1.82	37.0	WATER BASED
4050.000	1.98	40.0	WATER BASED
4065.000	2.02	39.0	WATER BASED
4229.000	2.05	35.0	WATER BASED
4305.000	2.23	43.0	WATER
4308.000	2.05	36.0	WATER BASED
4420.000	2.23	43.0	WATER
4557.000	2.07	33.0	WATER BASED
4567.000	2.14	33.0	WATER
4609.000	2.12	33.0	WATER BASED
4618.000	2.14	29.0	WATER
4633.000	2.12	26.0	WATER BASED
4677.000	2.14	32.0	WATER
4714.000	2.25	30.0	WATER BASED
4714.000	2.14	33.0	WATER BASED

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	interval meter	Choke size	Pressure (PSI) WHP	BTHP	FFP
1.0	4630.000 - 4647.000	9.5	6319.0	13557.3	12330.5
	Test temperature: 147.5 °C				
2.0	4600.000 - 4612.000	14.3	4118.9	13479.4	12155.0
	Test temperature: 148.1 °C				

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1.0	1051	176400	0.828	0.835	168
2.0	1629	213600	0.828	0.828	131

DRILL BIT CUTTINGS AND WET SAMPLES

SAMPLE TYPE	INTERVAL BELOW KB	NUMBER OF SAMPLES
Cutting	1015-4795	775
Wet Samples	1020-4795	690

SHALLOW GAS

Interval below KB	REMARKS

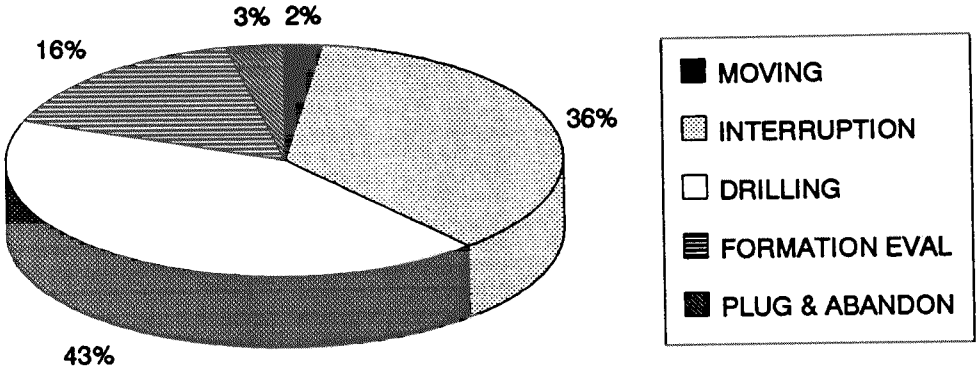
AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500	Div.
DIL LSS GR SP	2885.000 - 3985.000	X	X	

DIL BHC GR SP	*3976.000 - 4714.500*	X	X
DIL BHC GR	*4717.500 - 4797.000*	X	X
LDL GR	*2867.000 - 3971.000*	X	X
LDL CNL GR	*3976.000 - 4716.000*	X	X
DLL MSFL GR SP	*3976.000 - 4713.000*	X	X
SHDT GR	*3976.000 - 4717.000*	X	
CDM AP/SHDT MSD	*3976.000 - 4717.000*	X	X
RFT	*4528.000 - 4651.000*	X	
RFT	*4599.000 - 4707.000*	X	
CBL VDL GR	*1623.000 - 3976.000*	X	
CBL VDL	*3830.000 - 4656.000*	X	
MUD	*92.500 - 4795.000*		X
VELOCITY	*2867.000 - 4714.000*	*1:1000*	X
(Velocity, airgun, survey and calibrated,		*1 stk.)*	
(Velocity, well velocity survey records		*3 stk.)*	
(VSP,display 1-7, intepr.comp. 10-20 cm/s		*18 stk.)*	
(Two-way travel time, 10 cm/s		*1 stk.)*	
(synthetic seismogram, 10-20 cm/s		*9 stk.)*	

DAILY DRILLING REPORT SYSTEM

MAIN OPERATION FOR WELL: 02/12-01



Main operation	Minutes	Hrs	% of total
MOVING	5430	90,5	2,46
INTERRUPTION	80220	1337,0	36,41
DRILLING	92790	1546,5	42,12
FORMATION EVA	35130	585,5	15,94
PLUG & ABANDO	6750	112,5	3,06
Total	220320	3672,0	100,00

SUB OPERATIONS FOR WELL: 02/12-01

MAIN OPERATION:MOVING

Sub operation	Minutes	Hrs	% of total
ANCHOR	2983	49,7	54,94
TRANSIT	2447	40,8	45,06
Total	5430	90,5	100,00

MAIN OPERATION: INTERRUPTION

Sub operation	Minutes	Hrs	% of total
WAIT	4230	70,5	5,27
MAINTAIN/REP	20250	337,5	25,24
OTHER	20430	340,5	25,47
FISH	15660	261,0	19,52
WELL CONTROL	19230	320,5	23,97
LOST CIRC	420	7,0	0,52
Total	80220	1337,0	100,00

MAIN OPERATION: DRILLING

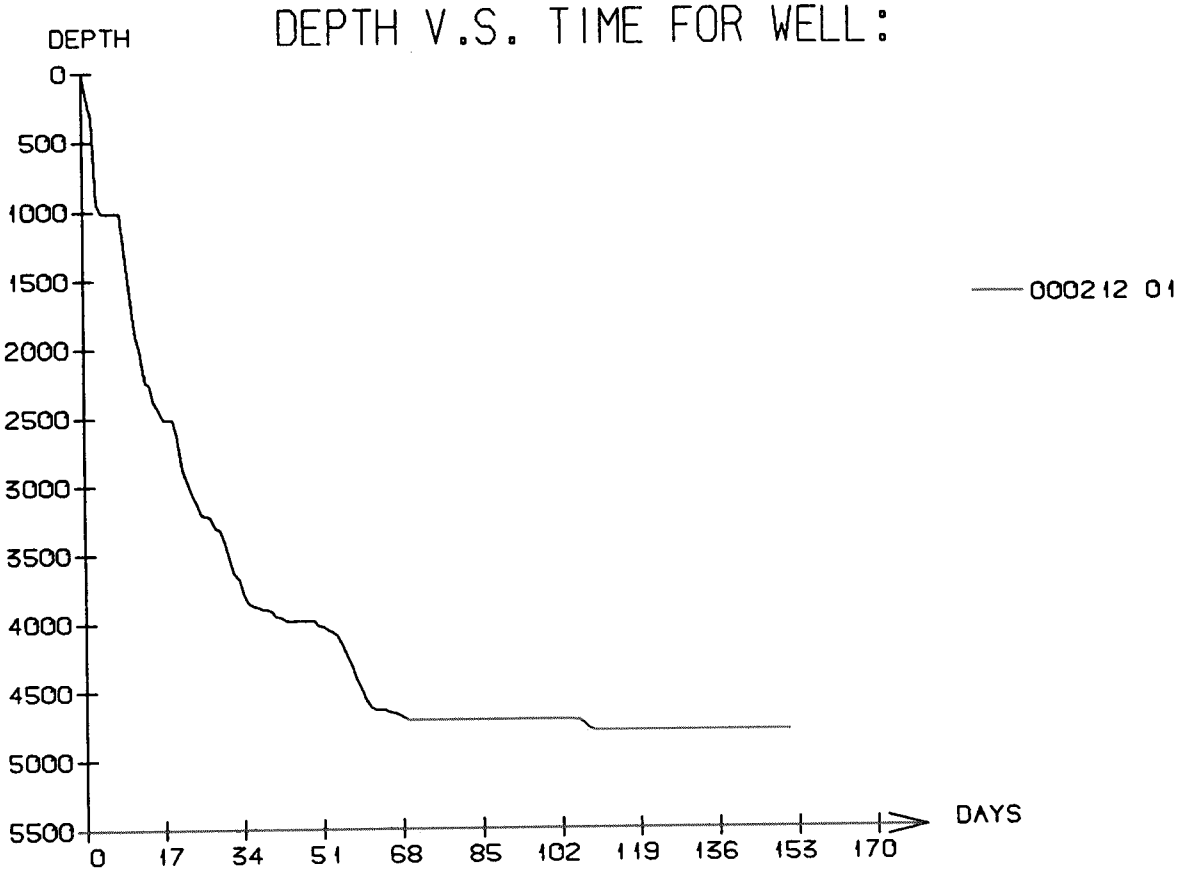
Sub operation	Minutes	Hrs	% of total
DRILL	42000	700,0	45,26
TRIP	19980	333,0	21,53
SURVEY	420	7,0	0,45
CIRC/COND	3600	60,0	3,88
CASING	16200	270,0	17,46
BOP/WELLHEAD EQ	1740	29,0	1,88
HOLE OPEN	2250	37,5	2,42
BOP ACTIVITIES	4260	71,0	4,59
REAM	2010	33,5	2,17
WAIT	240	4,0	0,26
OTHER	90	1,5	0,10
Total	92790	1546,5	100,00

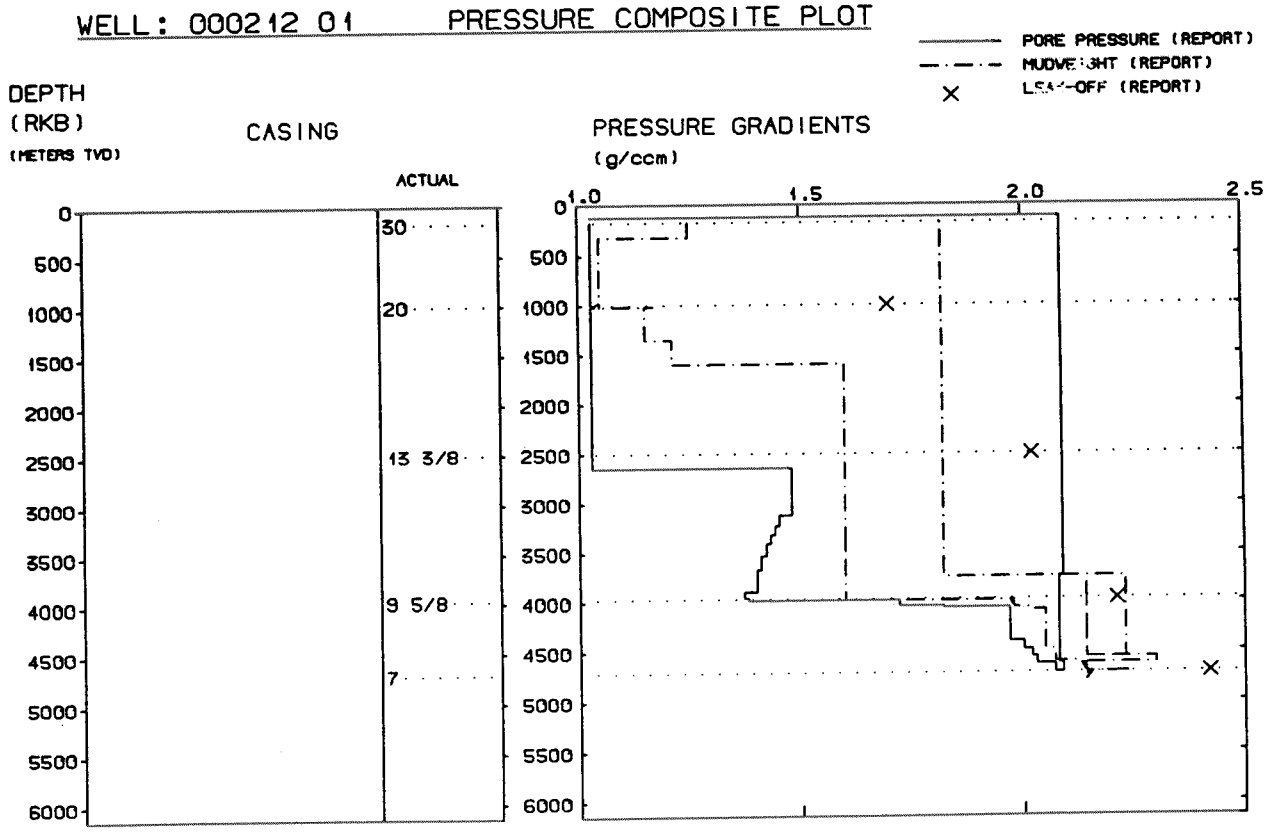
MAIN OPERATION: FORMATION EVAL

Sub operation	Minutes	Hrs	% of total
LOG	6270	104,5	17,85
CIRC SAMPLES	750	12,5	2,13
CIRC/COND	1650	27,5	4,70
TRIP	2490	41,5	7,09
CORE	1110	18,5	3,16
DST	22860	381,0	65,07
Total	35130	585,5	100,00

MAIN OPERATION: PLUG & ABANDON

Sub operation	Minutes	Hrs	% of total
TRIP	3180	53,0	47,11
CIRC/COND	360	6,0	5,33
OTHER	660	11,0	9,78
CEMENT PLUG	540	9,0	8,00
MECHANICAL PLUG	360	6,0	5,33
WAIT	90	1,5	1,33
PERFORATE	210	3,5	3,11
SQUEEZE	330	5,5	4,89
EQUIP RECOVERY	630	10,5	9,33
CUT	390	6,5	5,78
Total	6750	112,5	100,00


DEPTH V.S. TIME FOR WELL:
DEPTH
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
0
17
34
51
68
85
102
119
136
153
170
DAYS
000212 01


WELL: 000212 01 PRESSURE COMPOSITE PLOT
PORE PRESSURE (REPORT)
MUDWEIGHT (REPORT)
LEAK-OFF (REPORT)
DEPTH
(RKB)
(METERS TVD)
CASING
ACTUAL
30
20
13 3/8
9 5/8
7
PRESSURE GRADIENTS
(g/ccm)
1.0
1.5
2.0
2.5
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
6000

Well History 2/12-1

GENERAL:

Well 2/12-1 was drilled on the main structure of the block. The primary target was Middle Jurassic sandstones whose top was prognosed to be at 4826 m. Possible secondary targets were Early Jurassic and Triassic sandstones. Structural closure was not defined at Top Shetland or Base Cretaceous levels, but minor stratigraphic trapping was considered possible in this area.

The main objectives of the well were to:

- *prove the extension of the "Gert" discovery into block 2/12*
- *establish a confident estimate for hydrocarbon reserves in the structure*
- *establish a confident stratigraphic and sedimentological facies model*
- *obtain reservoir data from the Middle Jurassic sandstones*
- *confirm the structural modeling of the area*
- *verify the fluid character in the Gert-1 discovery by production testing.*

Prognosed TD was 5125 m.

OPERATIONS:

Wildcat well 2/12-1 was spudded 14 October 1986 by Wilh. Wilhelmsen semi-submersible rig Treasure Scout and was completed 12 March 1987 at a depth of 4795 m in Permian rocks. Drilling proceeded without significant problems down to 3970 m where gas problems were experienced. The hole was cleaned up, and dual induction/sonic log was run. Due to increasing gas recordings 9 5/8" casing was set at 3978 m. The remaining logging program was therefore not run, and sidewall cores were not taken. At 4705 m a drill-break was experienced. The hole was circulated, tested, and drilled to 4714 m. During logging the tool got stuck and the string was cut. The fish was stuck at 3842 m, and loosening was unsuccessful. 7" liner was set at 3826 m and cemented. During circulation hydrocarbons started to flow in between 9 5/8" shoe and 7" liner. The well was closed and heavy mud was squeezed into the formation. After 3 weeks the fish was pulled out of the hole.

3 cores were cut in the interval 4633 - 4674 m. Top reservoir was defined from the logs to be at 4597 m and oil/water contact at 4668 m. The oil gradient is the same as for the Gert-1 well.

The well was plugged and abandoned as an oil and gas discovery.

TESTING:

2 DST tests were performed in the intervals 4630 - 4647 m and 4600 - 4647 m.

GEOLOGICAL TOPS

WELL: 2/12-1

	Depth m (RKB)
Nordland Group	*92.5*
Hordaland Group	*1594.0*
Rogaland Group	*2985.0*
Balder Fm.	*2985.0*
Sele Fm.	*2994.0*
Lista Fm.	*3045.0*
Våle Fm.	*3084.0*
Shetland Group	*3107.0*
Ekofisk Fm.	*3107.0*
Tor Fm.	*3125.0*
Hod Fm.	*3358.0*
Blodøks Fm.	*3698.0*
Hidra Fm.	*3709.0*
Cromer Knoll Group	*3917.0*
Rødby Fm.	*3917.0*
Tuxen Fm.	*3955.0*
Tyne Group	*3988.0*
Farsund Fm.	*3988.0*
Haugesund Fm.	*4365.0*
Vestland Group	*4597.0*
Ula Fm.	*4597.0*
Smith Bank Fm.	*4672.0*
Zechstein Group	*4674.5*
Rotliegendes Group	*4684.5*
T.D.	*4795.0*