

Well no : 1/ 3-05 Operator : SHELL

Coordinates : 56 46 16.02 N UTM coord. : 6292053 N
 02 53 38.85 E 493528 E

Licence no : 11 Permit no : 435

Rig : NEDDRILL TRIGON Rig type : JACK-UP

Contractor : NEDDRILL (NEDERLAND) B.V.

Bottom hole temperature : 166.7 deg.C Elev. KB : 35 M

Spud. date : 84.10.01 Water depth : 71 M

Compl. date : 85.02.11 Total depth : 4850 M

Spud. class : WILDCAT Form. at TD : PERMIAN

Compl. class : P&A. DRY HOLE Prod. form :

Seisloca : 79111 SP. 527

LICENSEES

 100.000000 A/S NORSKE SHELL

CASING AND LEAK-OFF TESTS

Type	Casing diam.	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
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CONDUCTOR	30	168.0	36	181.0	
SURF.COND.	20	1183.0	26	1195.0	1.77
INTERM.	13 3/8	2443.0	17 1/2	2470.0	1.91
INTERM.	9 5/8	4122.0	12 1/4	4138.0	2.12
LINER	7	4395.0	8 1/2	4395.0	2.32
OPEN HOLE			6	4850.0	

CONVENTIONAL CORES

Core no.	Intervals cored meters	Recovery		Series
		M	%	
1	4805.0 - 4814.0	10.0	100.0	LOWER PERMIAN

MUD PROPERTIES

Depth below KB meter	Mud weigh g/cm ³	Funnel viscosity s/qt	Mud type
157.000	1.03		WATER BASED
735.000	1.09	52.0	WATER BASED
1091.000	1.12		WATER BASED
1195.000	1.13		WATER BASED
1292.000	1.25		WATER BASED
1410.000	1.30		WATER BASED
1640.000	1.50	28.0	WATER BASED
1841.000	1.65	50.0	WATER BASED
2051.000	1.70	40.0	WATER BASED
2980.000	1.71	39.0	WATER BASED
3049.000	1.70	43.0	WATER BASED
4040.000	1.72	35.0	WATER BASED
4107.000	1.75	34.0	WATER BASED
4138.000	1.80	39.0	WATER BASED
4235.000	1.81	26.0	WATER BASED
4283.000	1.95	33.0	WATER BASED
4329.000	2.00	37.0	WATER BASED
4364.000	2.02	27.0	WATER BASED
4395.000	2.08	33.0	WATER BASED
4423.000	2.11	32.0	WATER BASED

DRILL STEM TEST

NO DST'S WERE PERFORMED IN THIS WELL

DRILL BIT CUTTINGS AND WET SAMPLES

<i>SAMPLE TYPE</i>	<i>INTERVAL BELOW KB</i>	<i>NUMBER OF SAMPLES</i>
<i>Cutting</i>	<i>180 - 4850</i>	<i>760</i>
<i>Wet Samples</i>	<i>180 - 4850</i>	<i>900</i>

SHALLOW GAS

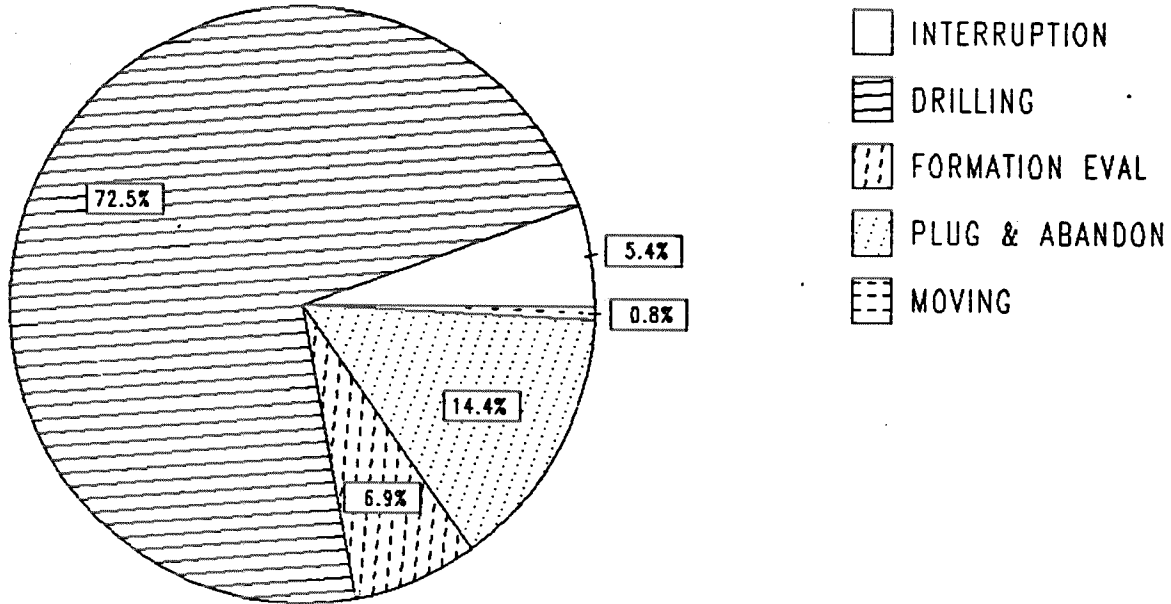
<i>Interval below KB</i>	<i>REMARKS</i>
	<i>NONE</i>

AVAILABLE LOGS

LOG TYPE	INTERVALS	1/200	1/500
DIFL BHC AC GR	100 - 1195	X	X
DIFL BHC AC	1175 - 2468	X	X
DIFL BHC AC	2443 - 4137	X	X
DIFL BHC AC	4020 - 4398	X	X
DIFL BHC AC	4397 - 4711	X	X
DIFL BHC AC	4397 - 4805	X	X
CDL CNL	4020 - 4397	X	X
CDL CNL	4397 - 4785	X	X
CDL	4550 - 4850	X	X
CDL	4550 - 5850	X	X
DLL MLL	4092 - 4398	X	X
DLL MLL	4397 - 4813	X	X
DLL MLL	4550 - 4851	X	X
CDM	4121 - 4396	X	
CDM	4395 - 5792	X	
CDM AP	4121 - 4396	X	X
CDM AP	4395 - 5792	X	X
TEMPERATURE	15 - 295		X
TEMPERATURE	0 - 4106		X
FMT	3165 - 3677		X
FMT	4289 - 4391	X	
FMT	4529 - 4836	X <==>	X
TEMPERATURE DATA	169 - 4850	1:5000	
WIRELINE DATA PRESSURE	169 - 4850	1:5000	
DRILLING DATA PRESSURE	169 - 4850	1:5000	
PRESSURE EVALUATION	169 - 4850	1:5000	
CBL VDL	70 - 2443	X	
CBL VDL	1225 - 4105	X	
MUD	169 - 4850		X
VELOCITY	169 - 4795	1:1000	X
(+ Synthetic Seismogram, Marine, 10 cm/s,			1 stk)
(+ Synthetic Seismogram, 10 cm/s,			2 stk)
(+ V.S.P., 10 cm/s,			7 stk)
(+ Airgun Well Velocity Survey and Calibr. log data,			1 stk)
(+ Two Way Travel Time, 10 cm/s,			1 stk)

DAILY DRILLING REPORT SYSTEM

Main operation: 01/03-05



Total : 3192 HRS

Main operation	Minutes	Hours	% of total
INTERRUPTION	10425	173.75	5.44
DRILLING	138855	2314.25	72.50
FORMATION EVAL	13290	221.50	6.94
PLUG & ABANDON	27510	458.50	14.36
MOVING	1440	24.00	0.75

MAIN OPERATIONS WELL : 01/03-05

MAIN OPERATION: DRILLING

Sub operations	Min	Hrs	% of total
TRIP	31473	524.55	22.67
DRILL	52415	873.58	37.75
CIRC/COND	12814	213.57	9.23
CASING	20640	344.00	14.86
DRIVE	660	11.00	0.48
REAM	1050	17.50	0.76
BOP/WELLHEAD EQ	7140	119.00	5.14
SURVEY	1860	31.00	1.34
HOLE OPEN	3690	61.50	2.66
OTHER	483	8.05	0.35
BOP ACTIVITIES	6330	105.50	4.56
WAIT	300	5.00	0.22
TOTAL	138855	2314.25	

MAIN OPERATION: MOVING

Sub operations	Min	Hrs	% of total
SKID	840	14.00	58.33
TRANSIT	600	10.00	41.67
TOTAL	1440	24.00	

MAIN OPERATION: FORMATION EVAL

Sub operations	Min	Hrs	% of total
LOG	10620	177.00	79.91
CIRC/COND	1080	18.00	8.13
TRIP	1320	22.00	9.93
CORE	270	4.50	2.03
TOTAL	13290	221.50	

MAIN OPERATION: INTERRUPTION

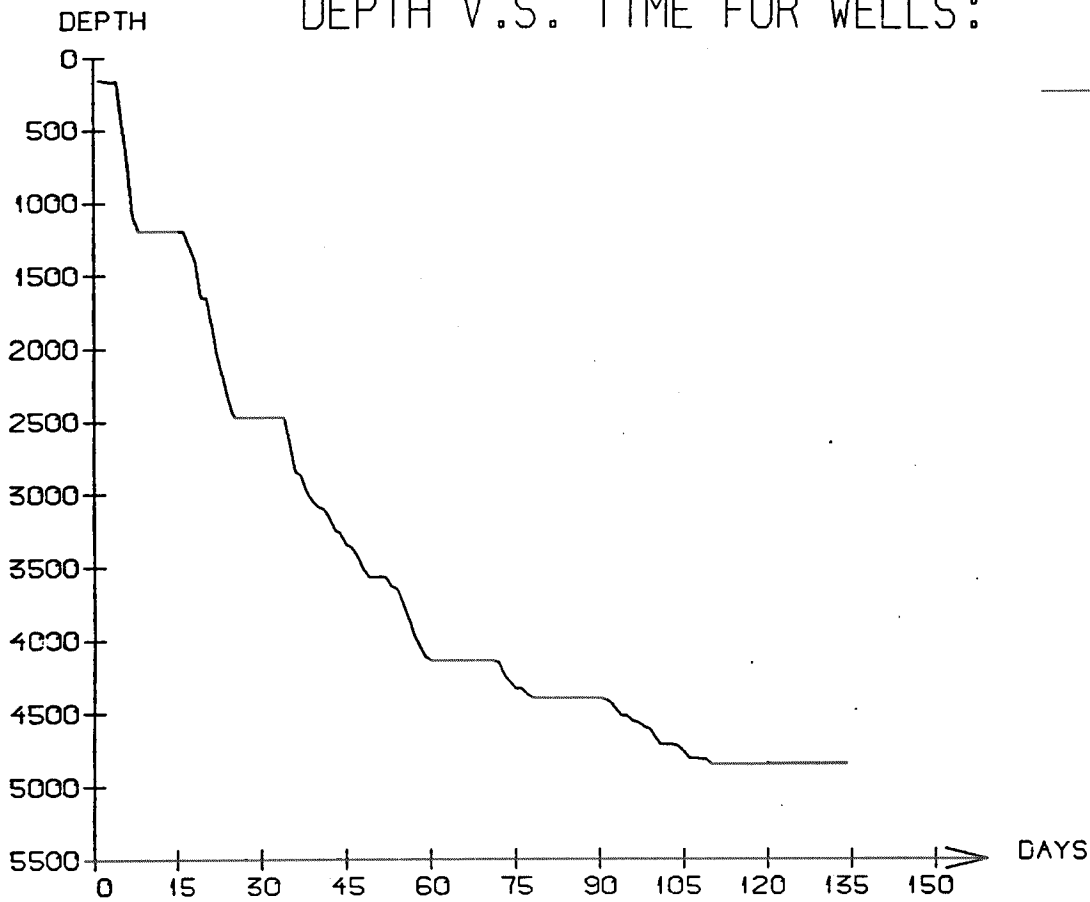
Sub operations	Min	Hrs	% of total
MAINTAIN/REP	2565	42.75	24.60
WAIT	1380	23.00	13.24
FISH	6480	108.00	62.16
TOTAL	10425	173.75	

MAIN OPERATION: PLUG & ABANDON

Sub operations	Min	Hrs	% of total
TRIP	10080	168.00	36.64
CEMENT PLUG	1710	28.50	6.22
CIRC/COND	2100	35.00	7.63
MECHANICAL PLUG	2010	33.50	7.31
OTHER	6420	107.00	23.34
CUT	390	6.50	1.42
SQUEEZE	720	12.00	2.62
PERFORATE	240	4.00	0.87
EQUIP RECOVERY	3480	58.00	12.65
WAIT	360	6.00	1.31
TOTAL	27510	458.50	

DEPTH V.S. TIME FOR WELLS:

— 0001/03- 05



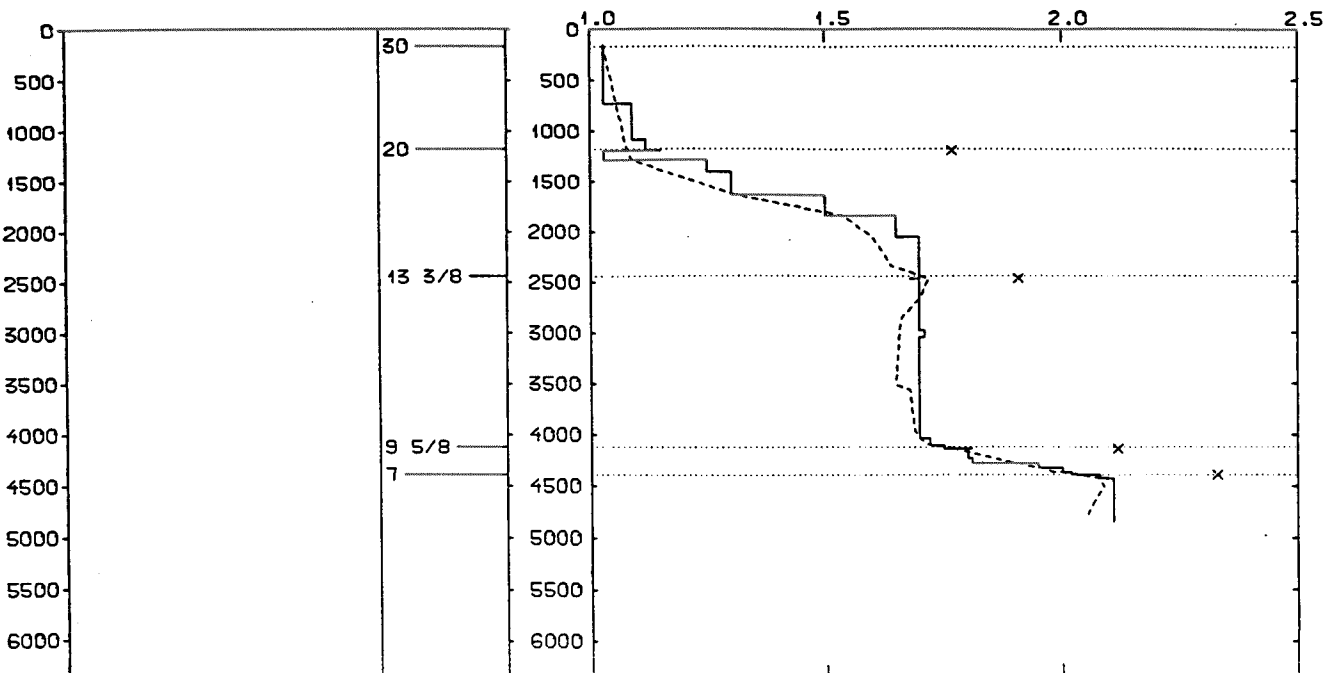
WELL: 000103 05 PRESSURE COMPOSITE PLOT

DEPTH
(RKB)
(METERS)

CASING

PRESSURE GRADIENTS
(g/ccm)

— MUDWEIGHT (REPORT)
- - - PORE PRESSURE (REPORT)
x LEAK-OFF (REPORT)



WELL HISTORY 1/3-5

GENERAL:

Wildcat well 1/3-5 was drilled on a northwest-southeast oriented faultblock tilted towards the northeast. The structure is located in the northern Permian basin, on the east side of Sentral Graben, extending into blocks 1/6, 2/1, and 2/4.

The purpose of the well is to evaluate the hydrocarbon potential of the Rothliegendes Group sandstones.

OPERATIONS:

The well was spudded 1 October 1984 by the jack-up rig Neddrill Trigon.

After setting the 30" conductor a 14 3/4" pilot hole was drilled to 1195 m, before opening the hole to 26".

Drilling to 2470 m the mudweight was raised from 1.33 g/cm³ to 1.70 g/cm³ due to high formation pressure.

This resulted in tight hole during wiper trips, and high weightstrain on the drillstring, and also caused the 13 3/8" casing to be set somewhat higher than prognosed.

Through the chalk sequence the hole seemed to be tight, and while tripping at a drilled depth of 3523 m, the drillstring got stuck with the bit at 3515 m. It was reasonable to assume that the tight interval was caused by one of the stabilators between 3247 and 3267 m. The string was freed by pumping acid.

A high pressure sand sequence in the interval 4363-4395 m, with pore pressure close to the last Leak-Off Test, resulted in the 7" liner being set 520 m higher than prognosed.

Rothliegendes sand came in at 4768 m.

Preliminary results from permeability measurements indicate that the sand is waterbearing and tight, although porosity readings from the core, cut in the interval 4805-4815 m, are surprisingly high.

GEOLOGICAL TOPS

WELL:1/03-05

	Depth m (RKB)
<i>Nordland Group</i>	106,0
<i>Hordaland Group</i>	1440,0
<i>Rogaland Group</i>	3062,0
<i>Balder Fm</i>	3062,0
<i>Sele Fm</i>	3070,0
<i>Lista Fm</i>	3078,0
<i>Maureen Fm</i>	3153,0
<i>Shetland Group</i>	3288,0
<i>Ekofisk Fm</i>	3288,0
<i>Tor Fm</i>	3384,0
<i>Hod Fm</i>	3858,0
<i>Blodøks Fm</i>	4563,0
<i>Hidra Fm</i>	4568,0
<i>Cromer Knoll Group</i>	4580,0
<i>Rødby Fm</i>	4580,0
<i>Sola Fm</i>	4604,0
<i>Åsgard Fm</i>	4623,0
<i>Zechstein</i>	4734,0
<i>Kupferschiefer Fm</i>	4768,0
<i>Rotliegendes</i>	4769,0
<i>T.D.</i>	4850,0