Well no :	30/9-8 & 30/9-8 R	Operator :	HYDRO

Coordinates :	60° 25' 26.10" N 02° 47' 58.38" E	UTM coord. :	669879768 N 48896217 E
Licence no :	104	Permit no :	615
Rig :	POLAR PIONEER	Rig type :	SEMI-SUB.
Contractor :	POLAR FRONTIER DRILLING A/S		
Bottom hole temp:	95°C	Elev. KB :	23 M
Spud. date :	89.07.29	Water depth :	104 M
Compl. date :	89.09.25	Total depth :	3200 M
Spud. class :	WILDCAT	Form. at TD	E.JURASSIC
Compl. class :	SUSP.	Prod.form. :	
Seisloca :	NH 8831 - 105 COL 774		

LICENSEES

5,000000	CONOCO PETROLEUM NORGE A/S
5,000000	DNO OLJE A/S
30,000000	NORSK HYDRO PRODUKSJON A.S
5,000000	SAGA PETROLEUM A.S.
50,000000	DEN NORSKE STATS OLJESELSKAP A.S
5,000000	NORSK AGIP 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	215,0	36	216,0	
INTERM.	13 3/8	1044,0	17 1/2	1060,0	1,67
INTERM.	9 5/8	2651,0	12 1/4	2669,0	1,78
LINER	7	3198,0	8 1/2	3200,0	

CONVENTIONAL CORES

Core no.	Intervals cored meters			Recovery M	%
1	2800,0	-	2836,5	36,5	100,0
2	2836,5	-	2892,2	55,7	100,0
3	2892,2	-	2934,3	42,1	100,0

DRILL STEM TEST

INTERVALS AND PRESSURES

Test no.	Interval meter			Choke size	Pressure (PSI) WHP	BTHP	FFP
1,0	2904,400	-	2913,400	19,5	126,9		
2,0	2837,000	-	2848,000	25,4	22,3		
3,0	2825,000	-	2848,000	12,7	675,8		

Test temperature: N/A

RECOVERY

Test no.	Oil Sm3/d	Gas Sm3/d	Oil grav. g/cm3	Gas grav. rel. air	GOR m3/m3
1,0		1100		0,700	
2,0	35		0,879		
3,0	263	28667	0,867	0,750	109

MUD

Depth	Mud weight	Visc.	Mud type
127,000	1,05		WATER BASED
1418,000	1,20	11,0	WATER BASED
1760,000	1,35	17,0	WATER BASED
2151,000	1,45	13,0	WATER BASED
3200,000	1,22	10,0	WATER BASED

DRILL BIT CUTTINGS AND WET SAMPLES

Sample type	Interval below KB	Number of samples
WET SAMPLES	1070 - 3200	270
CUTTING	1060 - 3200	240

SHALLOW GAS

Interval below KB	Remarks

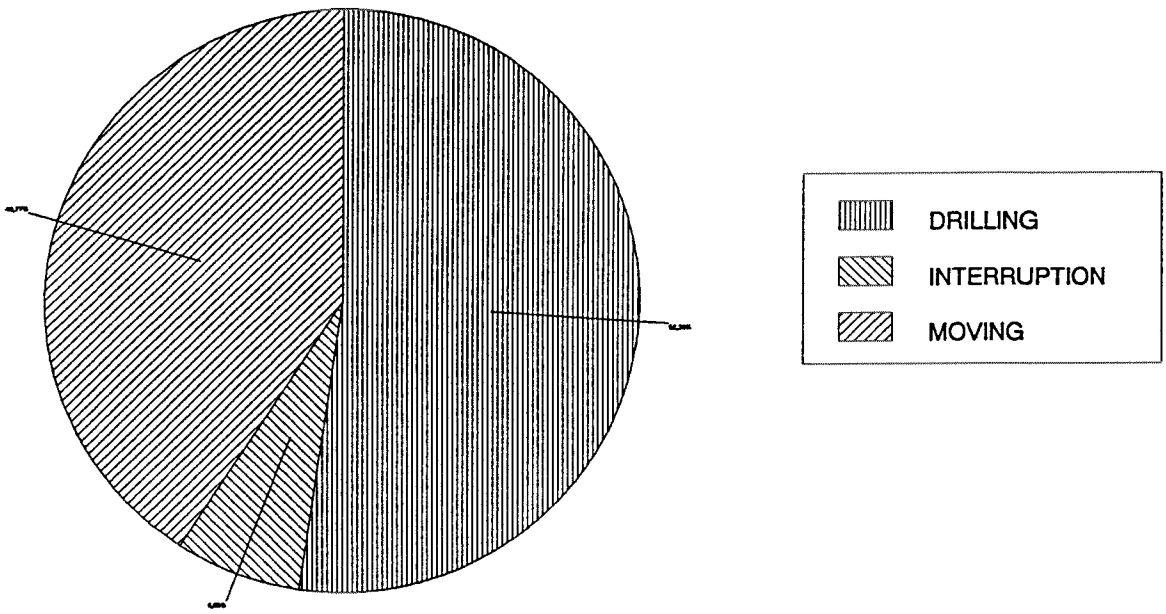
AVAILABLE LOGS

Log type	Intervals			1/200	1/500	Div.
AMS	1044,0	-	2639,0	X	X	1:1000
AMS	2654,0	-	3166,0	X	X	1:1000
AMS TEMP. LOG	2503,0	-	2974,5		X	
CBL VDL GR CCL JB	2165,0	-	2961,0	X		
CBL VDL GR CCL JB	2504,0	-	2954,0	X		
CDM AP	2650,0	-	3001,0	X	X	
SHDT GR	2654,0	-	2838,0	X		
SHDT GR	2763,0	-	3001,0	X		
DIL LSS GR	1043,5	-	2639,0	X	X	
DIL SLS GR	2654,0	-	3197,0	X	X	
DLL MSFL GR	2750,0	-	3095,0			

Log type	Intervals		1/200	1/500	Div.
LDL CNL GR	1043,5	- 2639,0	X	X	
LDL CNL NGS	2654,0	- 3178,0	X	X	
MWD	127,0	- 2800,0		X	
NGS RATIOS	2654,0	- 3169,0	X		
DRILLING DATA PRESS.	127,0	- 3200,0			1:5000
WIRELINE DATA PRESS.	1070,0	- 3200,0			1:5000
RFT HP	2818,0	- 3132,0		X	
MUD LOG	1060,0	- 3200,0		X	
VELOCITY LOG	1044,0	- 3197,0		X	
FREQUENCY TEST	10 cm/s				4
SYNTHETIC SEISMOGRAM		20 cm/s			1
VSP - ZERO OFFSET	10 cm/s				1
VSP-COMPOSITE VSP	10 cm/s	20 cm/s			3

Daily Drilling Report System (DDRS)

Operations for well: 30/9-8



Main operations	Minutes	Hours	% of total
DRILLING	5280	88,00	52,38
INTERRUPTION	690	11,50	6,85
MOVING	4110	68,50	40,77
Total	**10080**	**168,00**	**100,00**

Operations for well: 30/9-8

Main operation: DRILLING

Sub operations	Minutes	Hours	% of total
CASING	2040	34,00	38,64
CIRC/COND	210	3,50	3,98
DRILL	2040	34,00	38,64
REAM	90	1,50	1,70
TRIP	750	12,50	14,20
WAIT	150	2,50	2,84
Total	**5280**	**88,00**	**100,00**

Main operation: INTERRUPTION

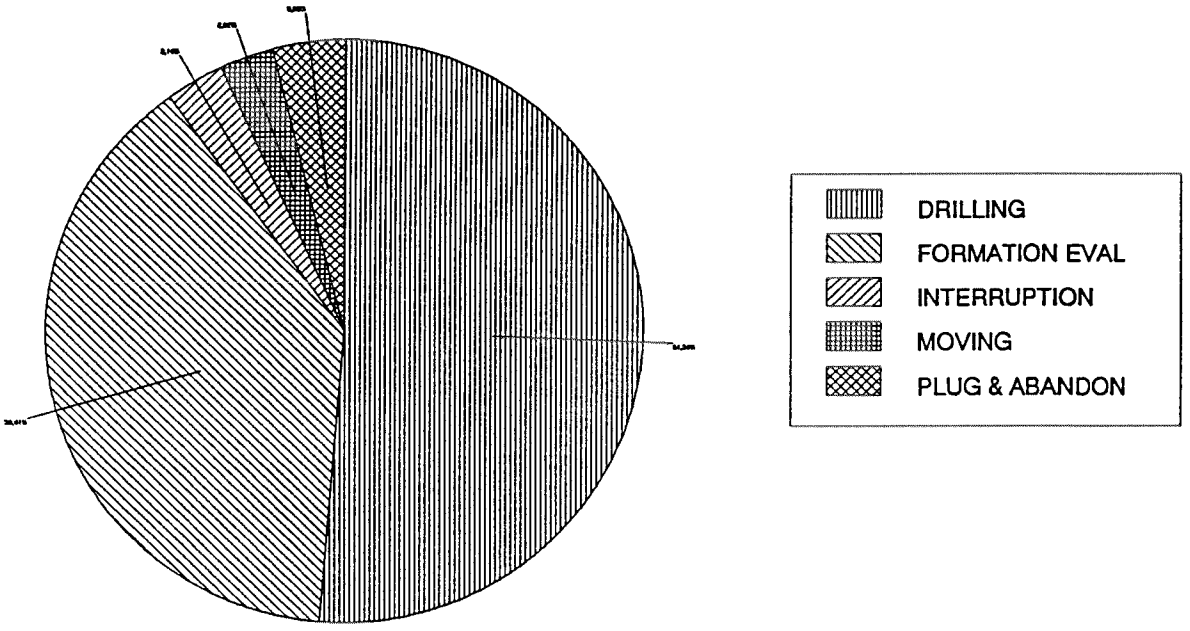
Sub operations	Minutes	Hours	% of total
MAINTAIN/REP	690	11,50	100,00
Total	**690**	**11,50**	**100,00**

Main operation: MOVING

Sub operations	Minutes	Hours	% of total
ANCHOR	1560	26,00	37,96
TRANSIT	2550	42,50	62,04
Total	**4110**	**68,50**	**100,00**

Daily Drilling Report System (DDRS)

Operations for well: 30/9-8 R



Main operations	Minutes	Hours	% of total
DRILLING	31170	519,50	51,36
FORMATION EVAL	23430	390,50	38,61
INTERRUPTION	1920	32,00	3,16
MOVING	1770	29,50	2,92
PLUG & ABANDON	2400	40,00	3,95
Total	**60690**	**1011,50**	**100,00**

Operations for well: 30/9-8 R

Main operation: DRILLING

Sub operations	Minutes	Hours	% of total
BOP ACTIVITIES	750	12,50	2,41
BOP/WELLHEAD EQ	720	12,00	2,31
CASING	10410	173,50	33,40
CIRC/COND	540	9,00	1,73
DRILL	13140	219,00	42,16
OTHER	30	0,50	0,10
REAM	570	9,50	1,83
SURVEY	90	1,50	0,29
TRIP	4920	82,00	15,78
Total	**31170**	**519,50**	**100,00**

Main operation: FORMATION EVAL

Sub operations	Minutes	Hours	% of total
CIRC SAMPLES	240	4,00	1,02
CORE	2340	39,00	9,99
DST	15810	263,50	67,48
LOG	3480	58,00	14,85
TRIP	1140	19,00	4,87
WAIT	420	7,00	1,79
Total	**23430**	**390,50**	**100,00**

Main operation: INTERRUPTION

Sub operations	Minutes	Hours	% of total
MAINTAIN/REP	1230	20,50	64,06
OTHER	120	2,00	6,25
WAIT	570	9,50	29,69
Total	**1920**	**32,00**	**100,00**

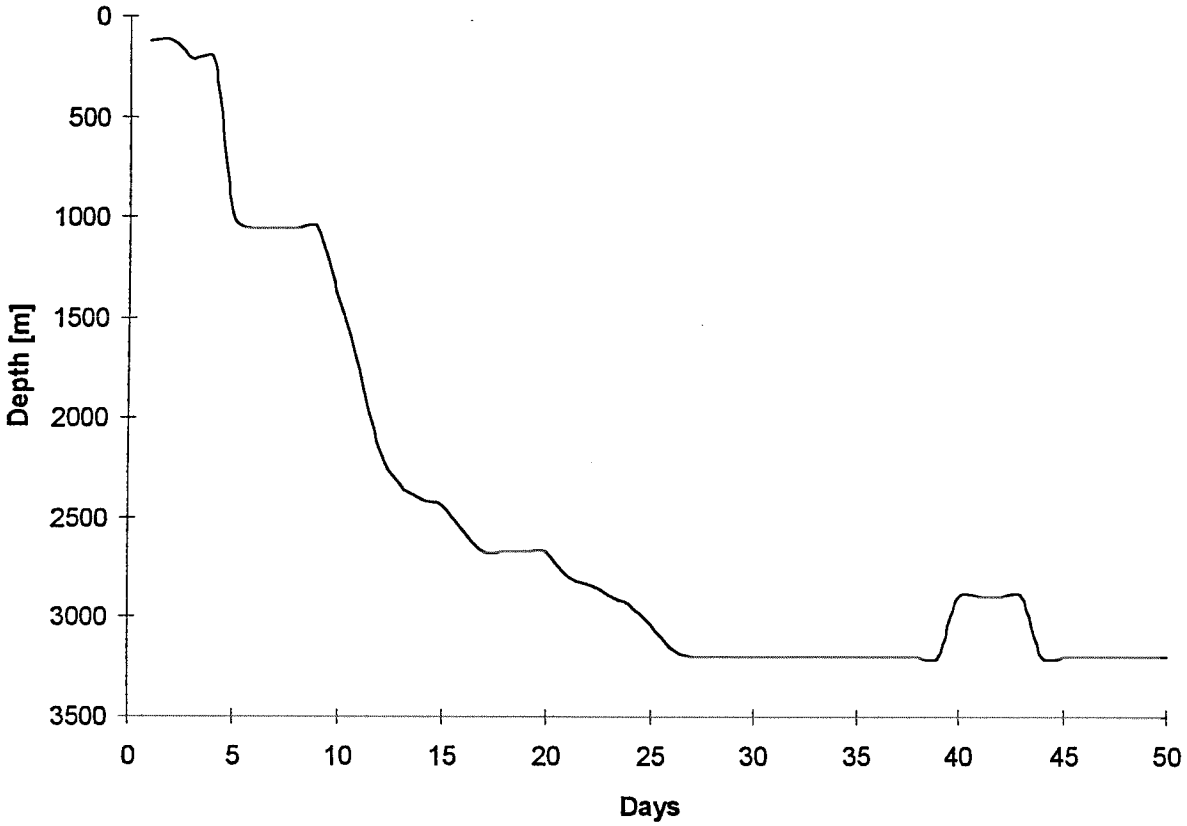
Main operation: MOVING

Sub operations	Minutes	Hours	% of total
ANCHOR	690	11,50	38,98
TRANSIT	1080	18,00	61,02
Total	**1770**	**29,50**	**100,00**

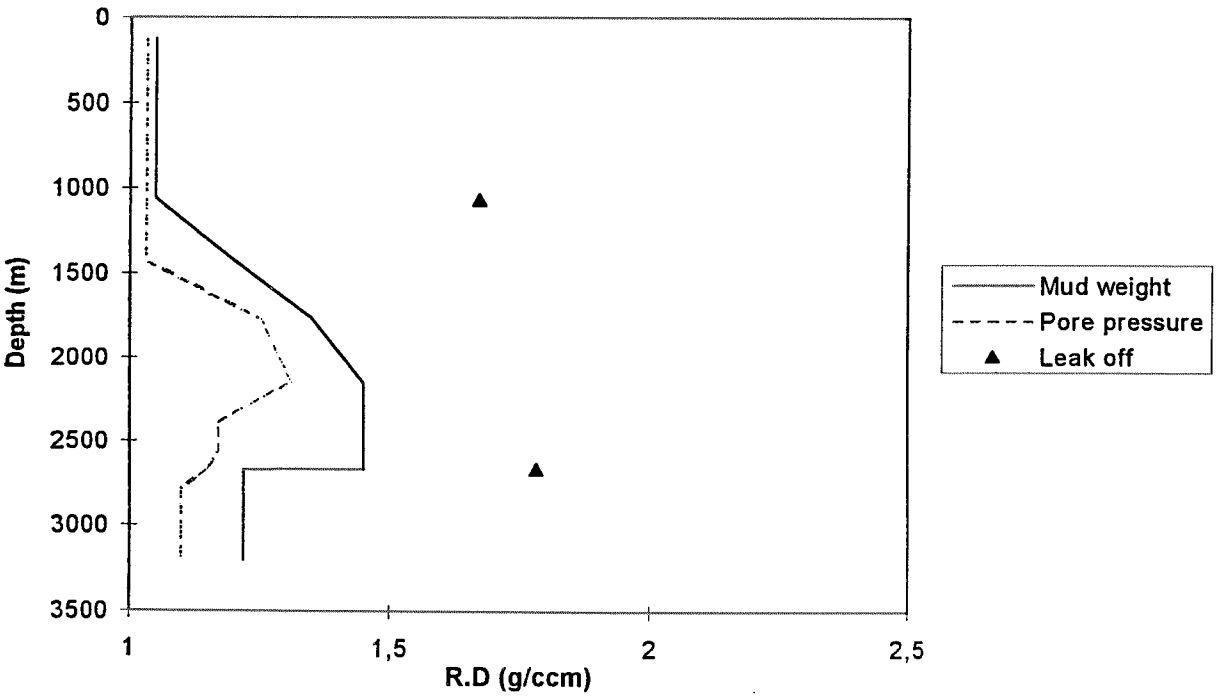
Main operation: PLUG & ABANDON

Sub operations	Minutes	Hours	% of total
CEMENT PLUG	300	5,00	12,50
CIRC/COND	90	1,50	3,75
EQUIP RECOVERY	660	11,00	27,50
MECHANICAL PLUG	210	3,50	8,75
OTHER	120	2,00	5,00
SQUEEZE	30	0,50	1,25
TRIP	990	16,50	41,25
Total	**2400**	**40,00**	**100,00**

Depth vs time for well: 30/9-8 & 30/9-8 R



Composite plot for well: 30/9-8 & 30/9-8 R



Well History 30/9-8 & 8 R.

General:

Well 30/9-8 was designed to drill in the central part of the Omega structure which is located between the the Gamma structure to the east and the B structure to the west,and extends northwards into 079 licens area.The main target of the well was the sandstones in the Middle Jurassic Brent Group. The primary objectives were to:

- prove the extension of the Omega oil column into licens 104.
- prove the fluid contacts.
- define the extent of reservoir units, properties and pressure.
- test communication and reservoir relationship with the Omega North and B prospects.
- verify the structural mapping and geological model.

The well was planned to drill approximately 50 m into the Dunlin Group at a final depth of approximately 3182 m RKB.

Operations:

Wildcat well 30/9-8 was spudded 29 July 1989 by the semi-submersibel rig Polar Pioneer. The well was drilled to 1060 m when the rig left location in the period from 2- to 15 August 1989 to work on another contract. Well 30/9-8 R was re-entered 15 August 1989 by the same rig, and completed 25 September1989 at a depth of 3200 m in rocks of Early Jurassic age. Drilling proceeded without any significant problems. There was no indication of shallow gas.
Top reservoir came in at 2814 m RKB, approximately 30 m deeper than prognosed. RFT data indicated oil/water contact at 2858 m RKB, approximately 30 m deeper than the oil/water contact in well 30/9-7 on the B structure to the west. Hydro expected the oil/water contact to be at the same level as in well 30/9-7. A total of 6 cores were cut in the interval 2800- to 2934.2 m RKB. The well was suspended as an oil and gas discovery, and will later be converted to a water injector.

Testing:

Two DST tests were performed in the well.
DST 1 was performed in the interval 2904.4 to 2913.4 m RKB.
DST 2 A in the interval 2837 to 2848 m RKB, and DST 2 B in the interval 2825 to 2384 m RKB.
In occordance with the tests, the oil/water contact was set to 2856 m RKB.

Geological Tops.

Well: 30/9-8 R.

	Depth m (RKB).
Nordland Group	127.0
Utsira Fm	602.0
Hordaland Group	890.0
Grid Fm	1238.0
Undefined	1444.0
Rogaland Group	2065.0
Balder Fm	2065.0
Sele Fm	2137.0
Lista Fm	2212.0
Våle Fm	2372.0
Shetland Group	2382.0
Hardråde Fm	2382.0
Kyrre Fm.	2660.5
Tryggvason Fm	2704.0
Cromer Knoll Group	2725.0
Rødby Fm	
Tuxen Fm	
Viking Group	2763.0
Draupne Fm	2763.0
Heather Fm	2771.0
Brent Group	2824.5
Tarbert Fm	2824.5
Ness Fm	2921.0
Rannoch - Etive Fm	3120.0
Oseberg Fm	3136.0.
Dunlin Group	3149.0
Drake Fm	3149.0
T.D.	3200.0