Date: 13/09/96

PB/SKR

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Well no:	Operator:
2/08-14	AMOCO

#### Well

Coordinates:

56° 15' 48.93" N

UTM coord.:

6235612.57 N

03° 21' 23.11" E

522078.6 E

License no:

Permit no:

647

Rig:

WEST VANGUARD

Rig type:

SEMI-SUB.

Contractor:

A/S SMEDVIG DRILLING

Elev. KB:

22 M

Bottom hole temp: Spud. date:

152 °C

67 M

Compl. date:

90.08.14 91.01.22 Water depth:

Spud. class:

WILDCAT

Total depth:

4392 M

Compl. class:

P&A. DRY HOLE

Form. at TD: Prod.form.;

Seisloca:

ANO83-14, SP. 270

#### Licensees

28.333000 AMOCO NORWAY OIL COMPANY

28.333000 ENTERPRISE OIL NORWEGIAN AS

15.000000 NORWEGIAN OIL CONSORTIUM A/S & CO

28.333000 AMERADA HESS NORGE AS

## **Casing and Leak-off Tests**

Туре	Casing diam	Depth below KB	Hole diam.	Hole depth below KB	Lot mud eqv. g/cm3
CONDUCTOR	30	185.0	36	193.0	A CONTRACTOR OF THE PROPERTY O
INTERM.	20	945.0	26	952.0	1.74
INTERM.	13 3/8	2549.0	17 1/2	2560.0	1.90
LINER	11 3/4	3062.0	15	3068.0	2.05
INTERM.	9 5/8	3234.0	10 5/8	3248.0	2.07
LINER	7	4202.0	8 1/2	4274.0	2.23
OPEN HOLE	5	4392.0	5 7/8	4392.0	entroposocious de vanora constituire que de departament per de convention de constituire de la constituire de c

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Well no:	Operator:
2/08-14	AMOCO

# **Conventional Cores**

Core no.	Intervals cored	Recovery	%
	meters	m	

### Mud

Depth	Mud	Visc.	Mud type
•	weight		••
190.0	1.09	8.0	WATER BASED
190.0	1.20	9.0	WATER BASED
330.0	1.42		WATER BASED
545.0	1.04	45.0	WATER BASED
687.0	1.06	40.0	WATER BASED
956.0	1.04	41.0	WATER BASED
959.0	1.20	10.0	
1157.0	1.22	13.0	WATER BASED
1288.0	1.70	16.0	WATER BASED
1410.0	1.49	21.0	WATER BASED
1639.0	1.69	24.0	WATER BASED
2340.0	1.70	18.0	WATER BASED
2469.0	1.94	10.0	WATER BASED
2469.0	2.08	20.0	WATER BASED
2490.0	1.70	11.0	WATER BASED
2560.0	1.73	11.0	WATER BASED
2560.0	1.70	12.0	WATER BASED
2560.0	1.73	19.0	WATER BASED
2759.0	1.68	14.0	WATER BASED
2898.0	1.70	16.0	WATER BASED
3044.0	1.73	19.0	WATER BASED
3070.0	1.75	16.0	WATER BASED
3126.0	1.78	16.0	WATER BASED
3170.0	2.08	21.0	WATER BASED
3176.0	1.88	26.0	WATER BASED
3176.0	1.82	18.0	WATER BASED
3176.0	1.86	21.0	WATER BASED
3181.0	1.92	18.0	WATER BASED
3263.0	1.94	21.0	WATER BASED
3374.0	1.93	24.0	WATER BASED
3403.0	1.96	21.0	WATER BASED
3468.0	1.93	21.0	WATER BASED
3721.0	1.96	24.0	WATER BASED
3784.0	2.02	21.0	WATER BASED

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Well no:	Operator:
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3810.0	1.96	26.0	WATER BASED
3851.0	2.02	26.0	WATER BASED
3875.0	1.98	24.0	WATER BASED
3882.0	2.02	26.0	WATER BASED
3905.0	1.98	25.0	WATER BASED
3911.0	2.02	25.0	WATER BASED
3987.0	1.98	24.0	WATER BASED
4026.0	2.02	25.0	WATER BASED
4084.0	1.98	27.0	WATER BASED
4134.0	2.02	24.0	WATER BASED
4166.0	1.98	26.0	WATER BASED
4180.0	2.18	21.0	WATER BASED
4205.0	2.02	19.0	WATER BASED
4249.0	2.09	20.0	WATER BASED
4258.0	1.98	24.0	WATER BASED
4270.0	2.01	22.0	WATER BASED
4274.0	2.04	21.0	WATER BASED
4274.0	2.02	24.0	WATER BASED
4274.0	2.05	24.0	WATER BASED
4314.0	2.01	20.0	WATER BASED
4326.0	2.12	22.0	WATER BASED
4339.0	2.17	22.0	WATER BASED
4392.0	2.16	20.0	WATER BASED
4392.0	2.18	20.0	WATER BASED

# **Drill Stem Test (intervals and pressures)**

				CHOCKAGO ANALOS ANA	A CHICAGO CONTRACTOR C
Test	Test interval	Choke	Pressure (psi)	BTHP	FFP
no.	meter	size	WHP		Nected with the control of the contr

## **Drill Stem Test (recovery)**

1	Test	Oil	Gas	Oil gray.	Gas grav.	GOR
	no.	Sm3/d	Sm3/d	g/cm3	rel. air	m3/m3

### **Drill Bit Cuttings and Wet Samples**

l	Sample type Interval Number of		Number of
	Sample 1, pe	below KB	samples
	WET SAMPLES	960 - 4392	600

### WDSS Report

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Well no:	Operator:
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### **Shallow Gas**

Interval	Remarks
below KB	

# Available Logs

3107.0 - 4207.0			
2555.0 - 2910.0			
3234.0 - 4500.0			
4130.0 - 4397.0			Andread and a second a second and a second a
450 0 - 2549 0			
2414.0 - 3064.0			
2549.0 - 3255.0			
3234.0 - 4289.0			Total Control
3102.0 - 4395.0			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
3250.0 - 4375.0			
2549.0 - 3075.0			*****
2977.0 - 3248.2			
2977.0 - 3248.0	***************************************		
3152.0 - 4208.0			
2549 0 - 3255 0			
4207.0 - 4397.0			
100.0 - 4250.0			
93.0 - 4274.0			
2615.0 - 3238.0			
940.0 - 4392.0			Andrew Control of the
	3234.0 - 4500.0 4130.0 - 4397.0 450.0 - 2549.0 2414.0 - 3064.0 2549.0 - 3255.0 3234.0 - 4289.0 3102.0 - 4395.0 2550.0 - 2900.0 3250.0 - 4375.0 2977.0 - 3248.2 2977.0 - 3248.0 3152.0 - 4208.0 2549.0 - 3255.0 4207.0 - 4397.0 100.0 - 4250.0 93.0 - 4274.0 2615.0 - 3238.0	3234.0 - 4500.0  4130.0 - 4397.0  450.0 - 2549.0  2414.0 - 3064.0  2549.0 - 3255.0  3234.0 - 4289.0  3102.0 - 4395.0  2550.0 - 2900.0  3250.0 - 4375.0  2977.0 - 3248.2  2977.0 - 3248.0  3152.0 - 4208.0  2549.0 - 3255.0  4207.0 - 4397.0  100.0 - 4250.0  93.0 - 4274.0	3234.0 - 4500.0  4130.0 - 4397.0  450.0 - 2549.0  2414.0 - 3064.0  2549.0 - 3255.0  3234.0 - 4289.0  3102.0 - 4395.0  2550.0 - 2900.0  3250.0 - 4375.0  2549.0 - 3075.0  2977.0 - 3248.2  2977.0 - 3248.0  3152.0 - 4208.0  2549.0 - 3255.0  4207.0 - 4397.0  100.0 - 4250.0  93.0 - 4274.0

### WDSS Report

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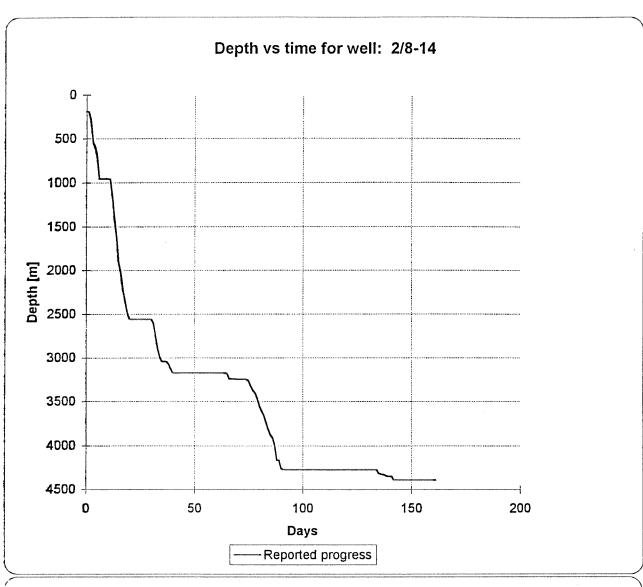
Well no:	Operator:
2/08-14	AMOCO

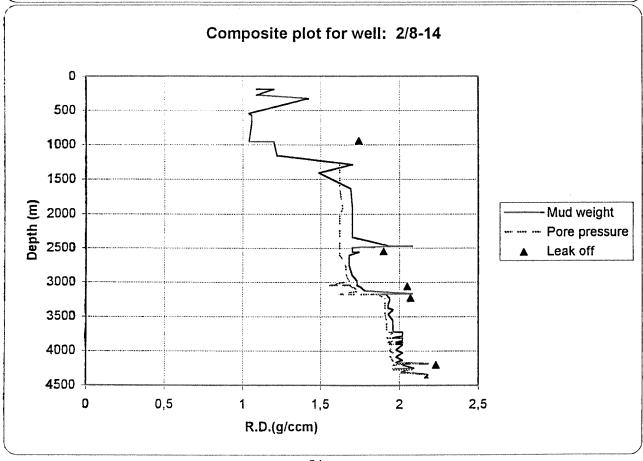
MWD	193.0 - 4202.0	
SYNTHETIC SEISMOGRAM	2487.0 - 4400.0	
TWO-WAY TRAVEL TIME	0000.0 - 4392.0	
VSP		
ZDL CN CAL GR	3152.0 - 4208.0	
ZDL CN GR	2549.0 - 3075.0	
ZDL CN GR	3060.0 - 3248.0	
ZDL CN GR X-Y-CALIP	4153.0 - 4396.0	

Main operations for well: 2/8-14

Main operation: DRILLING

Main operation: DR	ILLING			
Sub operation:	Minutes:	Hours:	% of total:	
BOP ACTIVITIES	1260	21,0	0,93	
BOP/WELLHEAD EQ	6420	107,0	4,73	
CASING	21270	354,5	15,67	
CIRC/COND	22680	378,0	16,70	
DRILL	45240	754,0	33,32	
HOLE OPEN	1950	32,5	1,44	
OTHER	1410	23,5	1,04	
PRESS DETECTION	1110	18,5	0,82	
REAM	4680	78,0	3,45	
SURVEY	330	5,5	0,24	
TRIP	25740	429,0	18,96	
WAIT	3690	61,5	2,72	
Total	135780	2263,0	100,00	
Main operation: FO	RMATION EVAL		en fedel firm den	
Sub operation:	Minutes:	Hours:	% of total:	
CIRC/COND	390	6,5	3,62	
LOG	8340	139,0	77,44	
TRIP	2040	34,0	18,94	
Total	10770			
		179,5	100,00	
Main operation: INT				
Sub operation:	Minutes:	Hours:	% of total:	
FISH	720	12,0	1,00	
LOST CIRC	12180	203,0	16,94	
MAINTAIN/REP	4380	73,0	6,09	
OTHER	360	6,0	0,50	
SIDETRACK	42930	715,5	59,72	
WAIT	7050	117,5	9,81	
WELL CONTROL	4260	71,0	5,93	
Total	71880	1198,0	100,00	
Main operation: MO	VING		and the second s	
Sub operation:	Minutes:	Hours:	% of total:	
ANCHOR	870	14,5	29,00	
SKID	690	11,5	23,00	
TRANSIT	1440	24,0	48,00	
Total	3000	50,0	100,00	
Main operation: PLUG & ABANDON				
Sub operation:	Minutes:	Hours:	% of total:	
CEMENT PLUG	330	5,5	2,48	
CIRC/COND	1170	19,5	8,80	
CUT	330	5,5	2,48	
EQUIP RECOVERY	930	15,5	7,00	
OTHER	60	1,0	0,45	
PERFORATE	570	9,5	4,29	
SQUEEZE	120	2,0	0,90	
TRIP	8070	134,5	60,72	
WAIT	1710	28,5	12,87	
Total	13290	221,5	100,00	
Total time used: 3912,0 Hours				





# Well History 2/8-14.

#### General:

Well 2/8-14 was designed to drill on a broad complex faulted and tilted elongated nort-west southeast faulted anticlinal structure at the Vest Valhall Field, which is located within the Central Trough.

Well control in the area indicates that there is no significant concern about thermal cracking of reservoired oil at the objective resevoir depth. The prospect is east of the Lindesnes Fault, and the eastern margin is partially beneath the Cretaceous chalk in the Valhall Field. Structural closure is mapped at both the base Cretaceous level and at the top of the seismically mapped wedge. Upside potential exists in stratigraphic trapping associated with lateral facies changes of the submarine fan.

The primary drilling targets of the well was the Late Jurassic "wedge" sands and the Late Jurassic Volgian sands. The objectives of the well were to:

- 1) discover any possible hydrocarbon accumulations within the predicted Late Jurassic sands.
- 2) determine the reservoir quality of any Late Jurassic sands.
- 3) determine the reservoir quality of the Shetland Group chalks.
- 4) determine the Jurassic stratigraphy in this portion of the Central Trough.

Recent Jurassic discoveries made from the 2/7-20 and 21, 2/12-1 and 2/4 14 wells have proven that Jurassic sands in the Central Trough are attractive reservoirs.

#### **Operations:**

Wildcat well 2/8-14 was spudded on the southern lobe of the Vest Valhall structure by the semi-submersible rig West Vanguard 14 August 1990, and completed 22 January 1991 at a depth of 4392 m RKB in rocks of the Late Jurassic, Farsund Formation clays. The primary objective Late Jurassic "wedge" sandstones were not encountered in the well, neither was any significant Volgian sandstones penetrated. The well penetrated high pressure at 3176 m RKB in the Early Cretaceous that required plugging back and setting an 11 3/4" liner. When drilling out of the liner an unintentional sidetrack was drilled below approximately 3997 m RKB. In addition the well suffered from stuck pipe, equipment failures and bad weather conditions. High pore pressure, encountered at 4274 m RKB in the Late Jurassic, forced the well to end prematurely at 4392 m RKB instead of as prognosed at 5622 m RKB. No shallow gas was encountered in the well. No conventional cores were cut. 140 sidewall cores in four runs were attempted, and 48 were recovered. The well was plugged and abandoned as a dry hole with hydrocarbon shows.

#### **Testing:**

No DST tests were performed in this well.

# Geological Tops.

# Well:.2/8-14.

	Depth m (RKB).
Nordland Group	89.0
Hordaland Group	1522.0
Rogaland Group	2566.5
Balder Fm	2566.5
Sele Fm	2576.0
Lista Fm	2592.0
Shetland Group	2614.2
Tor Fm	2614.2
Hod Fm	2617.0
Blodoks Fm	2841.7
Hidra Fm	2847.0
Cromer Knoll Group	2874.0
Rodby Fm	2874.0
Sola Fm	2901.0
Ran Sst Unit	2935.0
Åsgard Fm	2984.0
Tyne Group	3188.5
Mandal Fm	3188.5
Farsund Fm	3256.5
T.D.	4392.0
1. <i>D</i> .	4394.0