

U-466



WELL 25/1-8 R
RE-ENTRY No 2.
REPORT

Prepared by: B. Frank *Bone Frank* date: 07.06.88

Reviewed by: J.L. Idelovici *[Signature]* date: 15-6-88

Approved by: *P/p J. L. Idelovici*
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SUMMARY

1. Dispatch list
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1. DISPATCH LIST

<u>Distribution</u>	<u>Comments</u>	<u>Number</u>
* AUTHORITIES	Dispatch by Drilling & Compl.	2pcs
* PARTNERS	Dispatch by Explo. Division or Res. Dept.	3
* SNEA(P)	= DPFE/EUROPE	1(Paris)
EP/S/PRO/FIC	DIV.FORAGE INTERVENTION-CONTROLE	1(Paris)
EP/S/PRO/FIP	DIV.FORAGE	
EP/S/PRO/EXP	DIV.EXPLORATION	1(Pau)
EP/S/PRO/EXP	DIV.GISEMENT	1(Paris)
	SID	2(Paris)
	DIR.EXPLORATION	1(Paris)
	DEPT. PUIITS	1(Paris)
* EAN	= FIELDS OPERATION DIVISION	1
	EXPLORATION DIV.	2
	RESERVOIR DEPT.	1
	DRILLING AND COMPLETION DEPT.	
	- Well File 14.2.2	1 (+ORIGINAL)
	- File 5.5	1
	- Drilling Engineer	1
	- Rig Superintendent	1
	- Mud Superintendent	1

2. GENERAL WELL DATA AND POSITION MAP

GENERAL WELL DATA

1/2	IDENTIFICATION/NAME	: 25/1-8
3	GEOGRAPHICAL AREA	: NORWEGIAN CONTINENTAL SHELF
4	GEOLOGICAL BASIN	: VIKING GRABEN
5	FIELD STRUCTURE	: FRIGG FIELD
6	BLOCK	: 25/1
7	LICENCE	: 024
		ELF AQUITAINE NORGE A/S 41.42 %
		NORSK HYDRO PROD A/S 32.87 %
		TOTAL MARINE NORSK A/S 20.71 %
		STATOIL 5.00 %
9	OPERATOR	: ELF AQUITAINE NORGE A/S
10	REFERENCE WELLS	: 10/1-4, 10/1-5, 25/-1-1
11	STATUS	: REMOTE CONTROL WELL
12	COORDINATES	: X = 449800.9
		: Y = 6640871.3
		Lat= 59°54'03.29"N
		Long = 02°06'09.80"E
13	.WATER DEPTH	: 102 m
	.RKB/MSL	: 25 m
	.RKB/ML	: 127 m



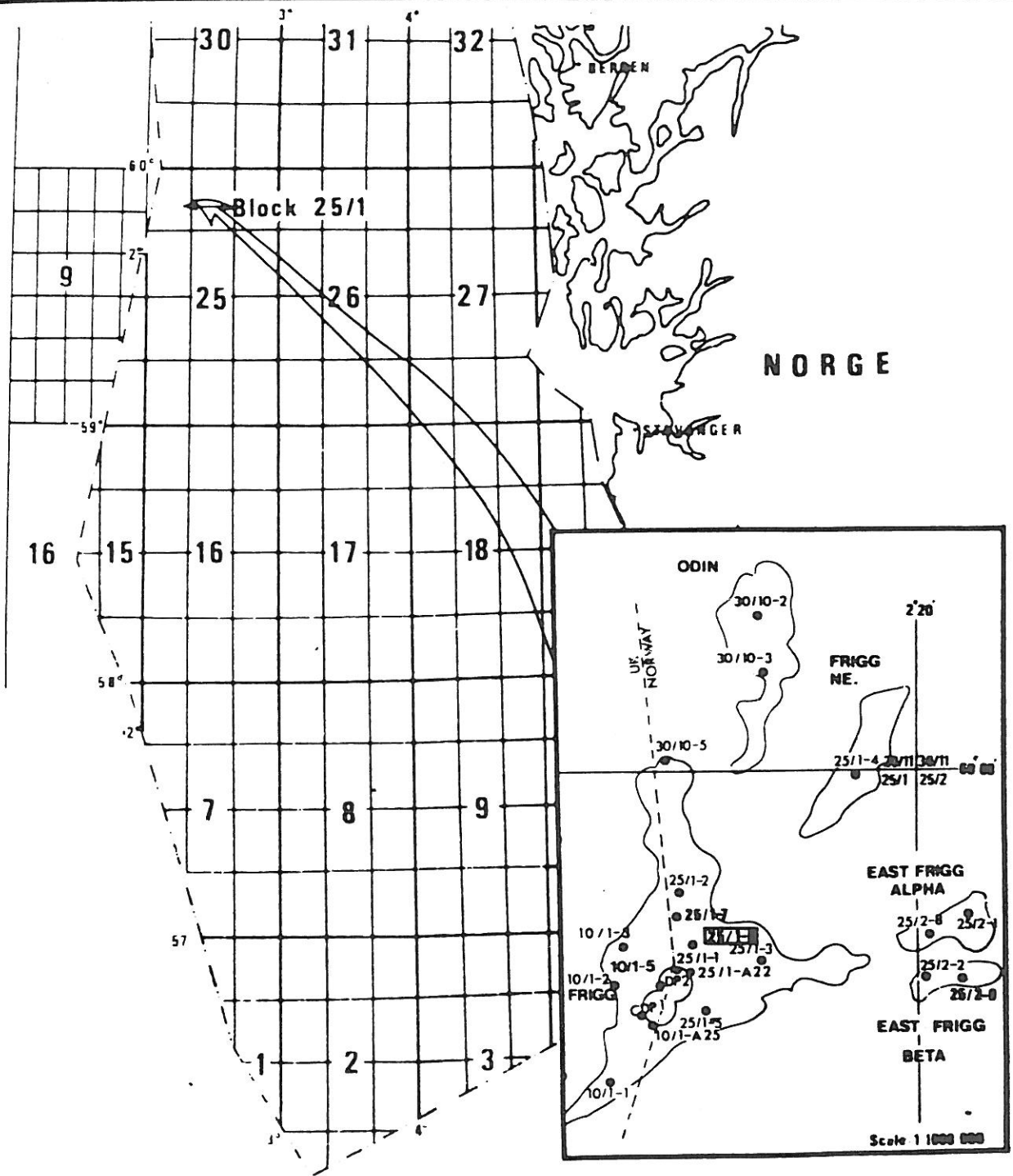
POSITION MAP



BLOCK 25/1
 WELL 25/1-8
 OWNER FRIGG UNIT

Scale 1 2500 000

Date



EXPLORATION DIVISION

Fig.1

3. WELL HISTORIC AND STATUS BEFORE RE-ENTRY No. 2.

Well historic and status:

Well 25/1-8 is a deviated control well drilled to 2650 m RKB on the Frigg Field from the semi-submersible "Byford Dolphin".
This well was spudded at 16.00 hrs the 28.05.85 and the drilling was finished at 18.00 hrs the 21.07.85.

Casing status:

30" Casing - 309.7 lb/ft - X52 - Vetco ST2 shoe at 187.5 m, Incl = 0.40°.
13 3/8" Casing - 68 lb/ft - K55 - BTC at 190.03 m.
13 3/8" Casing - 72 lb/ft - N80 - BTC shoe at 1015 m, Incl = 19.10°.
9 5/8" Casing - 53.5 lb/ft - P110 - Vam shoe at 1910 m, Incl = 13.10°.
7" Casing - 29 lb/ft - L80 - Vam shoe at 2201.5 m, Incl = 19.30°

Abandonment status:

After final logging, three cement plugs filled open hole from 2650 to 2215.5 m. The 7" casing was set at 2201.5 m and cemented in turbulent flow with neat cement up to 1805 m. (Top cement inside 7" casing at 2145.5 m).
A 7" bridge plug was set at 383 m.
A 13 5/8" diverless corrosion cap (Vetco design 112.784) was installed on the 13 5/8 SG1 housing.
A special protection structure with SIMRAD transponder has been run onto P.G.B. The four guide posts were recovered.
No wear- bushing in the well-head.

Well status after re-entry No. 1

The re-entry operations was performed with S/S NORTRYM from 03:00 hrs the 14.02.87 to 16:30 hrs the 18.02.87. The well was temporary abandoned by means of a 7" bridge plug Baker N1 set at 371m RKB. Casing status was unchanged.

A 13 5/8" diverless corrosion cap (Vetco design No. 112784) was re-installed on the 13 5/8" SG1 housing. (No wearbushing in the wellhead)

The protection cage was re-run and locked on the PGB.

The four guide posts were recovered.

A Simrad transponder Frequency code "X" 25188 HZ was installed on the protection cage.

4. PURPOSE OF THE RE-ENTRY

4.1 Objectives:

The main objective to re-entry the remote control well 25/1-8 was to monitor the water rise at some distance from the platform areas.

5. CHRONOLOGY OF RE-ENTRY OPERATIONS

DATE	NO	DEPTH	DESCRIPTION
09.05.88	10		<p>ON TOP FROM LOCATION 2510-0R WITH MAERSK LOGGER.</p> <p>ANCHOR HANDLING. DROPPED ANCHOR NO 1 ON BOTTOM 19H20, BENGORITA. ANCHOR NO 4 ON BOTTOM 19H17, BENGORITA. ANCHOR NO 6 ON BOTTOM 19H20, BENGORITA. ANCHOR NO 5 ON BOTTOM 20H07, SOLFOFN. BLIPPED ANCHOR NO 3 ON BOTTOM 20H30, BENGORITA. ANCHOR NO 2 ON BOTTOM 21H30, BENGORITA. ANCHOR NO 2 ON BOTTOM 21H50, SOLFOFN. ANCHOR NO 7 ON BOTTOM 23H05, SOLFOFN. PEGGY BACK ON ANCHOR NO 5, 23H05, MAERSK LOGGER.</p> <p>BALLAST RIG SEABED SURVEY WITH ROV.</p>
11.05.88	10		<p>BALLAST RIG, SEABED SURVEY W/ ROV.</p> <p>PULL OUT SIMRAD TRANSPONDER, TRACK EQUIPMENTS INSTALLED ON D.P.</p> <p>M/U FOUR ARM UTILITY FRAME AND RUN GUIDE POST TO 120M.</p> <p>POSITION RIG.</p> <p>CONNECT 4 GUIDE POSTS. INSTALL LOCK RINGS. ST PICK UP TEST ON GUIDE LINE</p> <p>PULL OUT FOUR ARM UTILITY FRAME.</p> <p>UNLOCK AND RECOVER PROTECTION CAGE.</p> <p>M/U WEARBUSHING R/T, ATTEMPT TO RECOVER CORROSION CAP, NO SUCCESS.</p> <p>R/T SLIP.</p> <p>ATTEMPT TO RECOVER CORROSION CAP W/ ROV, INSTALLED HOOKS.</p> <p>ROV UNABLE TO ATTACH HOOKS.</p> <p>WASH CORROSION CAP W/ WASH TOOL.</p> <p>RECOVER CORROSION CAP W/ WEARBUSHING RUNNING TOOL.</p> <p>R/U FOR RUNNING BOP. INSTALLED 13"5/8 x 18"3/4 ADAPTER BELOW BOP AND TESTED TO 35 BARS AND 345 BARS 10MN OK.</p> <p>RUN BOP TO 50M, TEST KILL AND CHOKER LINES EVERY TWO JOINTS TO 345 BARS.</p>
12.05.88	20		<p>RUN BOP. LANDED 03H10. PICK UP TEST 15 T, OK. TESTED GOOSENECKS TO 345 BAR 10 MN, OK. TESTED BRIDGE PLUG, WELLHEAD CONNECTOR AND SHEAR RAMS TO 35 BAR 5 MN, 206 BAR 10 MN, OK. R/D BOP HANDLING EQUIPMENT.</p> <p>SET 13 5/8 INCH X 7 INCH WEARBUSHING.</p> <p>M/U JUNK MILL 5 7/8 INCH WITH 2 JUNK SUBS 5 INCH. PICKED UP 4 3/4 INCH DC (2 OFF) 4 3/4 INCH JAR AND 3 1/2 INCH DC. RIH TO 300 M.</p> <p>SERVICED RACKING ARM.</p> <p>PICKED UP 3 1/2 INCH DP AND RIH TO 371 M. TAGGED BRIDGE PLUG.</p> <p>TESTED BOP ON YELLOW POD TO 35 BAR 5 MN, 206 BAR 10 MN. FUNCTION TEST ON BLUE POD. FUNCTION TEST ON ACOUSTIC SYSTEM.</p> <p>MILLED BRIDGE PLUG AT 371 M, (DEPTH CORRECTED TO RKB/HSL 25 M).</p> <p>PICKED UP 3 1/2 INCH DP AND RIH FROM 371 M TO 1600 M. BREAK CIRCULATION AT 1000 M AND 1600 M.</p>
13.05.88	30		<p>P/U 3 1/2" DP AND RIH FROM 1600 M TO 2142 M - TAGGED BOTTOM CIRC.</p> <p>POOH - FLUSHED WELLHEAD/BOP</p> <p>R/U FOR LOGGING</p> <p>REPAIRED HEAVE COMPENSATOR</p> <p>LOGGING : RUN # 1 TDT FROM 2100 M TO 1920 M , SCALE 1/200,1/500 - FOUND WATER CONTACT AT 1975 M</p> <p>LOGGING W/ EVA TOOL : RUN # 2 SONIC FROM 2116 M TO 1923 M</p> <p>SET BRIDGE PLUG AT 366 M - TESTED TO 70 BARS 10 MIN. OK</p> <p>L/D 20 * 4 3/4"DC + 4 3/4" JAR + 15 * 3 1/2" DP</p>
14.05.88	40		<p>L/D 3 1/2" DP, 3 1/2" TUBING, 6 1/2" DC, 6 1/2" JAR, HOT</p> <p>RETRIEVED WEAR BUSHING</p> <p>PULLED BOP STACK - DISCONNECTED 18 3/4 x 13 5/8 ADAPTER IN MOON POOL</p> <p>SET CORROSION CAP - FILLED UP W/ OIL</p> <p>INSTALLED PROTECTION CAGE - LOCKED SAME W/ ROV - STARTED DEBALLASTING RIG</p>
15.05.88	50		<p>LOCKED PROTECTION CAGE. UNLOCKED AND RELEASED 4 GUIDEPOSTS.</p> <p>ANCHOR HANDLING. ANCHOR NO 5 ON BOLSTER 03H00, SENDRITA. ANCHOR NO 2 ON BOLSTER 03H57, MAERSK LOGGER, ANCHOR NO 7 ON BOLSTER 04H45, SENDRITA.</p>

DATE DD MM YY	NO	DEPTH M	DESCRIPTION
			ANCHOR NO 2 ON BOLSTER 1645. MAERSK LOGGER. ANCHOR NO 4 ON BOLSTER 1650. GENCRIITA. ANCHOR NO 3 ON BOLSTER 19-25. BOLDFORN. ANCHOR NO 1 ON BOLSTER 0415. MAERSK LOGGER. ANCHOR NO 1 ON BOLSTER 10430 FROM RIG ON TRANSIT TO STAVANGER WITH GENCRIITA ON TUG BOAT. POSITION 00400 N 59 DEG 20 MN. E 4 DEG. 56 MN.
18.05 89	60		TOWED RIG TO STAVANGER - TUG BOAT : GENCRIITA DISCONNECTED ANCHORS # 1,2,3 W/ BOLDFORN ANCHOR HANDLING : ANCHOR # 6 DROPPED AT 6HR45 , # 2 ON QUAI 7 HR 50 , #8 ON BOTTOM 8 HR 40 , # 1 ON QUAI 8 HR 20 , # 5 ON BOTTOM 10 HR 25 , # 3 ON QUAI 11 HR 50 DEMOBILIZED RIG AND SERVICE CONTRACTORS - TERMINATION OF CONTRACT AT 24 00

6. TIME DISTRIBUTION AND UNPRODUCTIVE TIME SUMMARY

DATE 12/15/88

WELL

WELL NO. 000700001

DATE 12/15/88

ITEM	DURATION							TOTAL
	ITEM	ITEM	ITEM	ITEM	ITEM	ITEM	ITEM	
D1: RIGG UP+TRIP+TEAR DOWN	54.							54.
D2: WAITING ON WEATHER								
D3: WAITING OTHER								
F1: NEW HOLE DRILLING								
F2: DRILLING TRIPS								
F3: MISC. DRILLING OPER.								
F4: CASING AND CEMENTING								
G1: CORING								
G2: CORING TRIPS & MISC.								
G3: TEST & RELATED OPER.								
G4: ELECTRICAL LOGGING								
A1: STICKING-FISHING								
A2: LOSS-WELL FLOW. MUD. T								
A3: WAITING ON WEATHER								
A4: WAITING: OTHER								
C1: COMPLET. & PRODT. TESTS	95.5							95.5
C2: ABANDON								
C3: WAITING ON WEATHER								
C4: WAITING: OTHER	1.							1.
DURATION/INTERVAL	150.5							150.5

WELL

NO. 151-31

OPERATIONS IN PROGRESS	DURATION	STICKING / PLUGGING		ACCESS / KICKS / WLD. TREATMENT		WAITING ON WEATHER		WAITING OTHER	
		NB	DURATION	NB	DURATION	NB	DURATION	NB	DURATION
MOVING (B2 - B3)	LESS THAN 24H								
	FROM 1 TO 5 DAYS								
	MORE THAN 5 DAYS								
	TOTAL----->								
DRILLING, CASING FORMATION SURVEYS (A1 - A2 - A3 - A4)	LESS THAN 24H								
	FROM 1 TO 5 DAYS								
	MORE THAN 5 DAYS								
	TOTAL----->								
COMPLETION (C3 - CA)	LESS THAN 24H							2	1.
	FROM 1 TO 5 DAYS								
	MORE THAN 5 DAYS								
	TOTAL----->								1.
TOTAL----->									1.
TOTAL DURATION OF INTERRUPTIONS--->		DURING MOVING		DURING DRILLING, CASING OR FORMATION SURVEYS				1.	
		DURING COMPLETION AND PLUGGING							
				TOTAL IN HOURS----->				1.	
				TOTAL IN DAYS----->				.04	

7. RESERVOIR REPORT6.1 Introduction

This report summarizes the main results from the logging in the re-entry well 25/1-8.

6.2 Main results:

Date	gas liquid m RKB	contract (GLC) m MSL	GLC rise (m)	water riser (m)
23.07.85	1980	1902,3	45,7	54,5
17.02.87	1976,7	1899,1	48,9	57,7
13.05.88	1975,0	1897,5	50,5	59,3

Comments

For this well the oil ring was already swept when the well was logged the 23.07.85. The gas/liquid contact therefore corresponds to the gas/water contact.

In February 1987 (TDT No. 2), the water rise since open hole logging was 3.2 m during 19 months. A thin shaly layer at 1979 m RKB had probably stopped the water movement for some time.

In May 1988 (TDT No. 3) the homogeneous sandstone above this shaly layer has been completely swept (1,6 m vertical water rise since TDT No. 2), but the water is now stopped by another shaly layer at 1975,0 m RKB.

8. WELL STATUS AFTER RE-ENTRY OPERATIONS

The re-entry operations have been performed with the S/S WEST VANGUARD from 17:30 hrs the 10.05.88 to 24:00 hrs the 16.05.88.

The 25/1-8 R remote control well is temporary abandonment by means of a 7" bridge plug Baker N1 set at 366 m RKB.*

Casing status is unchanged.

A 13 5/8" diverless corrosion cap (Vetco design No 112784) is installed on the 13 5/8" SG1 housing. (No wear bushing in the wellhead).

The protection cage has been re-run and locked on the PGB.

The four guide posts were recovered.

A Simrad transponder Frequency code "X" 25188 HZ is installed on the protection cage.

*Bridge plug setting depth 366 m is corrected to RKB/MSL = 25 m
(WEST VANGUARD RKB/MSL = 22 m.)

Note: The site was left with a marking buoy (with spring buoy) installed 100 meters East from well location 25/1-8R.

WELL COMPLETION STATUS AFTER RE-ENTRY No. 2.

WELL: 25/1-8 R

