

EXPLORATION AND DEVELOPMENT NORWAY

Dokid.no.			

REGION NORTH

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Report no.	Сору по.	No. of copies	14
Title COMPLETION REPO	RT, PERMANENT P&	EA WELL 6608/10-3 ₽	<u> </u>
Requested by PL 128	Org. unit	· · · · · · · · · · · · · · · · · · ·	, -
Project WELL 6608/10-3R	No. of pages	No. of encl.	Date 11.10.95
Key words PERMANENT P&A W Abstract - Permanent plug and ab			
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O.S			

1 Summary

Well 6608/10-3 was drilled in 1993 and temporary P&A in March 1993.

"Ross Isle" sailed from location 6608/10-5 and arrived location 6608/10-3R 7 August 1995 at 18:00 hrs to carry out permanent P&A. Anchor up rig, RIH and retrieved protector frame. RIH with retrievable guide base. Run BOP tested wellhead connector to 345 bar and function tested BOP. MU 8 1/2" BHA, RIH and drill cement plug from 604 m to 712 m and wash down to 1010 m. Displaced well to 1,60 SG mud and circulated BU, no gas indication. Start to plug according to plan.

2 Rigmove and anchorhandling:

Activity start

07.08.95 at 18:00 hrs.

Actual Duration:

1,1 Days

Planned Duration:

1,0 Days

"Ross Isle" left location 6608/10-5 and sailed to location 6608/10-3R. Supply vessels involved in towing and anchorhandling was "Mærsk Puncher" and "Aldoma".

All depths are in mMD and mTVD below RKB unless otherwise stated

3 Plug and abandonment

Activity start

08.08.95 at 18:00

Actual Duration

10,5 Days

Planned Duration

5,5 Days

The well was plugged and abandonment according to well schematic in chap. 2.1.

Lost time:

5,0 hrs.

Landed retrieving tool into funnel on protector frame. Attempted to engage retrieving tool into frame. Set down max. 3 tons (pipe started bending) POOH with protector frame retr. tool. MU and RIH with 3 stand 6 3/4" DC, 4 stand HWDP an 2 jnts 5" DP. Ran into 390 m (15 m above seabed) ROV lost main power oil supply. Pulled ROV to surface and repaired same. Ran in water with ROV. Entered funnel on protector frame with retr. tool. Sat down 5 tons, tool latched into funnel without problems. Made 4 1/2 LH turns and engaged dogs into frame. Pulled protector frame loose with 10 tons overpull.

10,0 hrs.

Repaired on acoustic system on BOP and function tested system.

6,0 hrs. Attempted to connect kill-/choke line. Negative, due to tight fit in kill-line box on slip joint. Had to disconnect kill line and install new pin assy.

Reconnected hose.

0,5 hrs. Attempted to pressure test wellhead connector. Checked system and found leak in BJ unit.

1,5 hrs. Repaired rig bulk air system.

12 hrs.

Cut 13 3/8" casing at 493 m. Attempted to pull casing free. Max. overpull 200 ton. RIH and cut 13 3/8" casing at 464,5 m. Attempted to pull casing free. Max. overpull 240 ton. Pressure tested 13 3/8" x 20" casing annulus to 56 bar with 1,34 SG mud through 13 3/8" casing cut. OK. RIH and cut 13 3/8" casing at 417 m. Attempted to pull casing free. Overpull 260 ton. Decide to continued with operation and cut 13 3/8" x 20" x 30" casing below seabed. While cementing 13 3/8" casing was it reported at 22 m³ cement contaminated mud when circulating after cement job. This indicated may be cement on wellhead.

2,0 hrs. Re-winded hose on blue POD reel.

30,0 hrs. Changing wellhead connector from Vetco to Cameron.

11,5. Cut 13 3/8" x 20" casing at 410 m. Pulled knives out of wellhead and inspected same with ROV. RIH and continued cutting casing. POOH an changed cutters to 30" casing. Continued cutting casing at 410m.

Connected most tool and attempted to pull wellhead with 130 ton overpull. Neg. POOH and changed cutters to 13 3/8" x 20" casing. RIH and continued to cut casing at 410 m. POOH and changed cutters to 30" casing. RIH and continued cut casing. Connected most tool and attempted to pull casing/whellhead free with 180 ton overpull. Neg.. Continued cutting casing and pulled free with 90 ton overpull.

Total lost time:

78,5 hrs./3,3 days

"Ross Isle" departed location 6608/10-3R on 19th of August 1995 at 08:30 hrs.

4 Total time distribution

Rigmove and anchorhandling

Plug and abandonment

Total time distribution

Total lost time
(incl. 30 hrs. changing wellhead connector for Saga well)

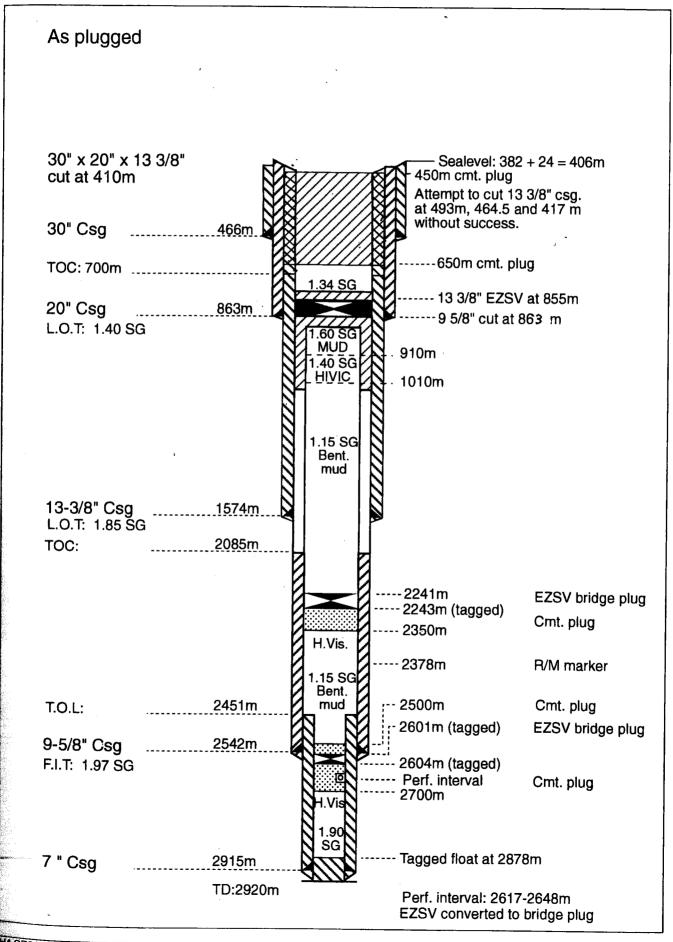
Planned time

1,1 days.

11,6 days.

3,3 days.

2.1 Wellbore schematic



2.2 List of operations data

Print date: 95/08/28

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Well: 6608/10-003R

	From	To	Dura	Depth	Act.	
Date	hrs	hrs	tion	mMD	code	Description
95/08/07	1800	2130	330	,	HNHU	RIG IN TRANSIT TO HELL 6608/10-3R.
	2130	2400	230		MARU	RIG ON CONTRACT 7. AUGUST AT 1800 HRS. ANCHORHANDLING.
95/08/08	0000	0600	600		MARU	ANCHORHANDLING.
	0600	1800	1200			ANCHORHANDLING.
	1800	2030	230			BALLASTED RIG TO DRILLING DRAFT. RAN IN WATER W/ ROV. LOCATED WELLHEAD/PROTECTOR FRAME. VERY POOR VISIBILITY. M/U AND RAN IN WATER W/PROTECTOR FRAME RETRIEVING TOOL ON DP. STOPP! 15 M ABOVE SEABED.
	2030	2130	100		PAHU	REMOVED 4 LOCKING PINS FROM PROTECTOR FRAME USING ROV. HAD PROBLEMS DUE TO POOR VISIBILITY. OBSERVED W/ ROV IN RETR. TOOL ENGAGING AREA AT TOP OF PROTECTOR FRAME: NO SIGN OF DEBRIS OR DAMAGE.
		2330	200		PAHU	LANDED RETRIEVING TOOL INTO FUNNEL ON PROTECTOR FRAME. USED ROV FOR GUIDING. ATTEMPTED TO ENGAGE RETR. TOOL INTO FRAME: SET DOWN MAX. 3 (PIPE STARTED BENDING), USED THRUSTERS TO IMPROVE RIG POS. ROTATED STRING TO RIGHT. NOT ABLE TO FULLY ENTER FRAME W/ RETR. TOOL. PULLER RETR. TOOL ABOVE FRAME. OBSERVED W/ ROV: TOP OF FRAME LOOKED CLEAN.
	2330		30			PULLED OUT M/ PROTECTOR FRAME RETR. TOOL.
95/08/09	0000	0230	230	390,0		PULLED OUT W/ PROTECTOR FRAME RETR. TOOL. INSPECTED SAME. NO DAMAGES ON TOOL. RAN IN WATER W/ RETR. TOOL ON 3 STD 6-3/4" DC, 4 STD AND 2 JNTS. HHDP AND DP. RAN IN TO 390 M (15 M ABOVE SEABED).
	0230	0500	230		PAOD	REPAIRED ROV. RAN IN WATER AT 0430 HRS.
	0500	0600	100		PAHU	
	0600	0830	230	÷	PAHU	RETRIEVED PROTECTOR FRAME. CUT OFF 4 LEGS TO ENABLE HANDELING. RELEASED RETRIEVING TOOL, BROKE AND L/D SAME.
	0830	1200	330		PAHU	
	1200	1500	300		PAHU	RAN IN WATER WITH RGB TO 15 M ABOVE SEABED.
	1500	1630	130			OBSERVED WELLHEAD W/ ROV. MOVED AND POSITIONED RIG. LANDED RGB AT 1545 HRS. LOCKED RGB TO 30" HSG BY APPLYING PRESSURE ON HOSES FROM MINI REEL. TOOK 5 T OP TEST. RELEASED RUNNING TOOL BY APPLYING 4-1/2 LH TURNS.
	1630		200		PAHU	PULLED OUT W/ RGB RUNNING TOOL AND HOSES ON MINI REEL. L/D RUNNING TOOL.
	1830 1930	1930 2130	100		PXXU	THE PARTY OF THE P
	2130		200 230		PAHU DERD	PREPARED TO AND RAN 2 RISER JOINTS. REPAIRED ON ACUSTIC SYSTEM ON BOP.
5/08/10	0000	0600	600		DERD	REPAIRED ON ACUSTIC SYSTEM ON BOP. FUNCTION TESTED SYSTEM.
	0600		130		DERD	CONLEPED WORKING ON ACUSTIC SYSTEM ON BOP. FUNCTION TESTED SYSTEM
	0730	2400	1630		PAHU	SKIDDED BOP TO MOON POOL. CHANGED VX RING, INSTALLED PODS AND GUIDE WIRES. RAN BOP AND RISER. BOP IN WATER AT 1248 HRS.
5/08/11	0000	0500	500		PAHU	CONT. RUNNING BOP AND RISER. TESTED KILL-/CHOKE LINES TO 35 BAR/345
	0500	0600	100		PAHU	BAR EACH 5 JOINT ON WAY IN. P/U RISER SLIP-JOINT AND M/U SAME. CONNECTED KILL-/CHOKE LINES TO
	0600	1200	600		PAOD	RISER. ATTEMPTED TO CONNECT KILL-/CHOKE LINE . NEGATIVE, DUE TO TIGHT FIT 1 KILL-LINE BOX ON SLIP JOINT. HAD TO DISCONNECT KILL LINE AND INSTAL
	1200	1330	130		PAHU	NEW PIN ASSY. RECONNECTED HOSE. CONNECTED KILL-/CHOKE LINES TO RISER. PLUGGED OFF BOOSTER LINE.
	1330	1600	230		PAHU	P/U AND CONNECTED SUPPORT RING. LANDED BOP AT 1415 HRS. PULL TESTED TO 35 T OP. P/U AND INSTALLED DIVERTER. CLEANED RIG FLOOR.
	1600	1800	200	405,0		M/U JET SUB BELOW BOP TEST TOOL. RIH. WASHED WELLHEAD.
	1800 1830	1830 2100	30 230		PAOD	ATTEMPTED TO PRESSURE TEST WELLHEAD CONNECTOR. NEGATIVE. CHECKED SYSTEM. FOUND LEAK IN BJ UNIT. REPAIRED SAME. PRESSURE TESTED WELLHEAD CONNECTOR TO 35 BAR / 345 BAR. FUNCTION
						TESTED BOP ON BLUE AND YELLOW POD. FUNCTION TESTED ACUSTIC SYSTEM.
						DANK II / DAN PROPERTY
	2100 2130	2130 2400	30 230	440 0	PAHU	POOH W/ BOP TEST TOOL. M/U 8-1/2" DRILLING ASSY. RIH TO 410 M.

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Date	From hrs	hrs	tion	Depth mMD	Act.	
95/08/12	0100	0600	500	750,0	_	DRILLED CEMENT INSIDE 9-5/8" CSG FROM 604 M TO 712 M. FIDM/HAPD CMT
	0600 0700	0700 0830	100 130	1010,0 910,0		WASHED DOWN W/ 8-1/2" BIT FROM 750 M TO 775 M. RAN IN HOLE TO 1010 M
	0830	1300	430		PTTU	POOH. L/D 18 JNTS 5" DP, JAR AND 19 JNTS 6-1/2" DC'S DISCONNECTED
	1300 1500	1500 1600	200 100		PTTU PAHU	M/U PACK-OFF RETRIEVING ASSY. AND RIH TO WH
	1600		500			ENGAGED PACK-OFF M/ RETRIEVING TOOL. RELEASED PACK-OFF M/ 23 000 FT-LBS LH TORQUE, UNDER PRESSURE CONTROL. FLONCHECKED. POOH M/ PACK-OFF. L/D 45 JOINTS LH RETRIEVING STRING ON MAY OUT.
	2400	0400				ON TOP DRIVE. M/U SAVER SUB .
	2100 2130	2130 2400	30 230	720,0	PTTU PTTU	INSTALLED TORQUE HRENCH ON TOP DRIVE. M/U 9-5/8" CUTTING ASSY. AND RIH TO 720 M.
95/08/13	0000 0030	0030 0100	30 30	863,0 863,0	PTTU PACU	CONT. RIH H/ 9-5/8" CSG CUTTING ASSY. FROM 720 H TO 863 H. LANDED ON MELLHEAD H/ 5 T . CLOSED UAP ON MARINE SHIVEL.
	0100	0130	30		PAOU	CUT 9-5/8" CSG AT 863 M WITH PRESSURE CONTROL (1-2 MIN.). F.C. THROUGH CHOKE-LINE ON TRIPTANK, OBS. FLOW CLOSED IN HELL HAD 40
						O BAR (INDICATING U-TUBING), OPENED WAP, CIRCULATED 1 60 SC MUD DOWN
	0130		200		PTTU	CSG CUTTER.
	0330	0400	30		PACU	M/U 10-3/4" SPEAR AND GRAPPLE.
	0400 0430		30 430	407,0	PTTU	RIH W/ 10-3/4" / 9-5/8" CSG RETRIEVING ASSY, TO 407 M
	0430	0000	130		PACU	ENGAGED GRAPPLE IN CASING. CLOSED UAP ON REDUCED PRESSURE (300 PSI). PULLED 10-3/4" X 9-5/8" CSG FREE WITHOUT OVERPULL. CIRCULATED 9-5/8"X13-3/8" ANN. VOLUM THROUGH KILL-/CHOKE LINE W/ 1,60 SG MUD UNTIL 1,60 SG MUD IN RETURN. DUMPED OLD MUD. OPENED UAP.
			_			POOH W/ 10-3/4" X 9-5/8" CSG'S.
	0600 1130	1300	530 130		PACU	The state of the s
	1300	1400	100	-	PTTU PCCU	TO AND RIH W/ 8-1/2" BIT AND 9-5/8" CSG SCRAPER DOWN TO 855 M
	1400	1630	230	555,0	PTTU	
	1630	1900	230	855,0		N/U AND RIH TO 855 H H/ 9-5/8" EZSV.
	1900 1930	1930 2000	30	855,0		SET 9-5/8" EZSV AT 855 M.
			30	000,0	PSQK	R/U CEMENT LINE. PRESS. TESTED SAME TO 345 BAR. STUNG INTO EZSV, SET DOWN 15 T. CLOSED UAP AND SET 15 BAR ON ANNULUS. PERFORM INJECTION TEST: FORM. BROKE DOWN AT 40 BAR, PRESSURE STEADY AT 40 BAR AT 500 LPM. PUMED TOTAL 850 L 1,60 SG MUD.STUNG OUT OF EZSV. OPENED UAP.
	2000		130		DERD	ALFAIRED ON KIG BULK AIK SYSTEM. PRESSURED UP SYSTEM
	2130 2230	2300	100 30	855,0	PSSU PSQK	BATCH-MIXED 10,7 M3 1,92 SG CEMENT SLURRY.
	2300	2330	30	955 A	Dany	MAX. SQUEEZE PRESSURE: 85 BAR. SQUEEZE PATE 700 - 950 FPM
		2400	30	855,0 650,0		STUNG OUT OF EZSV, BLEED OFF PRESSURE. OPENED UAP. PLACED A 50 M CEMENT PLUG ON TOP OF EZSV BY PUMPING 3 M3 1,60 SG MUD. POOH TO 650 M.
5/08/14	0000	0030	30	650,0		PUMPED 6 M3 1,60 SG MUD TO CLEAN OUT CMT STINGER. LINED UP FOR
1	0030	0100	30			FRESSURE 1ESI.
		0300	200	650,0	PCCU	CLOSED UAP. PRES. TESTED WELL AGAINST EZSV TO 110 BAR W/1,60 SG MUD. DISPLACED WELL FROM 1,60 SG TO 1,34 SG MUD.
		0530	230	,.	PTTU	POOH W/ CEMENT STINGER. L/D 21 JNTS 5" DP ON WAY OUT. L/D E2SV RT / STINGER.
		0600	30		PTPU	
		0700 0800	100		PTPU	L/D 4 STD 3-1/2" DP FROM DERRICK.
		0800 1200	100 400	493,0	DEOU	SLIP AND CUT 31 M DRILLING LINE. M/U AND RIH M/ 13-3/8" CSG CUTTING ASSY. CUT 13-3/8" CSG AT 493 M
•	1200	1430	230		PAOD	M/U AND RIH WITH 13-3/8" CSG GRAPPLE/SPEAR ASSY ATTEMPTED TO DULL
	_	1700 1900	230 200	464,5	PAOD PAOD	CSG FREE: NEGATIVE. MAX. OP: 200 T. M/U AND RIH W/ 13-3/8" CSG CUTTING ASSY. CUT CSG AT 464,5 M. POOH. M/U AND RIH W/ 13-3/8" GRAPPLE/SPEAR ASSY. ATTEMPTED TO PULL 13-3/8" CSG: NEGATIVE. MAX. 240 T OP. POOH. L/D RETR. ASSY. PRESSURE TESTED 13-3/8" X 20" CSG ANNULUS TO 56 BAR W/1,34 SG MUD

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Date	From	To hrs	Dura tion	Depth mMD	Act.	Description
95/08/14	1700	1900	200		PAOD	THROUGH 13-3/8" CSG CUT: OK.
	2130	2130 2400	230 230	417,0	PAOD	M/U 13-3/8" CSG CUTTING ASSY. RIH TO 417 M. CUT 13-3/8" CSG. POOH. M/U AND RIH M/13-3/8" GRAPPLE/SPEAR. ATTEMPED TO PULL 13-3/8" CSG FREE: NEGAIVE. MAX. OP: 260 T. POOH M/ CSG RETRIEVING ASSY. L/D SAME.
95/08/15	0000	0130	130	650,0	PTTU	RIH W/ CHT STINGER TO 650 M. FLUSHED STINGER W/ 1,34 SG MUD. LINED UP TO CHT UNIT.
	0130	0230	100	650,0	PSSU	TESTED CHT LINE TO 50 BAR. PUMED 5 H3 SH SPACER. MIXED AND PUMPED 15,9 H3 1,92 SG CHT SLURRY. DISPLACED CHT W/ 0,5 H3 SH AND 2,6 H3 1,34 SG MUD. BALANCED CHT PLUG: FROM 650 M TO 450 M.
	0230	0300	30	420,0	PTTU	POOH W/ CHT STINGER TO 420 M.
	0300	0330	30	420,0	PCCU	DISPLACED WELL TO SW. FLUSHED KILL AND CHOKE LINES W/ SW. DUMPED RETURNS.
	0330		200		PTTU	POOH W/ CMT STINGER. L/D 24 JNTS 5" DP AND 24 JNTS 3-1/2" DP ON WAY OUT.
	0530		30		PAHU	PREPARED TO PULL BOP AND RISER.
	0600 0800	0800 0930	200 130		PBBU PBBU	PREPARED TO PULL RISER AND BOP. HELD PRE-JOB SAFETY MEETING M/ CREW. L/D DIVERTER. DISCONNECTED BOP FROM WELLHEAD AT 0905 HRS. OBSERVED M/
	0550	1130	200		PBBU	ROV. HANG OFF SUPPORT RING. DISCONNECTED KILL-/CHOKE LINES.
		1330	200		DERD	RE-WINDED HOSE ON BLUE POD REEL.
		2300	930		PBBU	RETRIEVED SLIP-JOINT. L/D SAME AT 1445 HRS. PULLED RISER AND BOP. AVERAGE RETRIEVING SPEED: 3 JNTS/HR. SECURED BOP ON TROLLY IN MOON POOL AT 2300 HRS.
	2300	2400	100		PXXU	HORKED TO CHANGE WELLHEAD CONNECTOR.
95/08/16	0000	0600	600		PXXU	WORKED TO CHANGE WH CONNECTOR.
	0600	2300	1700		PXXU	CHANGING WELLHEAD CONNECTOR FROM VETCO TO CAMERON. HAD PROBLEMS W/ LEAKAGE WHEN TESTING SAME ON STUMP.
	2300		100		DERD	CHANGING WELLHEAD CONNECTOR FROM VETCO TO CAMERON.
95/08/17			500		DERD	CHANGING WELLHEAD CONNECTOR FROM VETCO TO CAMERON.
	0500	0600	100	•	PBBU	READY TO CONT. OPERATION AT 0500 HRS. L/D LAST THO RISER JOINTS. PARKED BOP.
	0700		230		PBBU PACU	L/D 2 RISER JOINTS. R/D BOP EQUIPMENT.
	0930		230		PACU	M/U 13 3/8"/20" CUTTING ASSY. RIH AND STABBED INTO WELLHEAD ASSISTED BY GUIDE FRAME AND ROV. CUT 13 3/8"/20" CSG AT 410 M. PULLED KNIVES OUT OF WELLHEAD AND
	1200		200		PACD	INSPECTED SAME WITH ROV. RIH AND CONTINUED CUTTING THE CASING.
						ASSISTED BY GUIDE FRAME/ROV.
	1400	1700	300			CONTINUED CUTTING CASING AT 410 M.
	1700		30			CONNECTED MOST TOOL AND ATTEMPTED TO PULL WELLHEAD WITH 130 TON OVERPULL. NOGO.
	1730		200			POOH. CHANGED CUTTERS TO 13 3/8"/20"CSG. RIH. STABBED BACK INTO WELLHEAD ASSISTED BY GUIDE FRAME/ROV.
	1930 2200		230		PACD	CONT. CUTTING CASING AT 410 M.
	2330	2330	130 30		PACU	POOH AND CHANGED CUTTERS TO 30"CSG. RIH. STABBED INTO WELLHEAD ASSISTED BY GUIDE FRAME/ROV. CONT CUTTING CASING AT 410 M.
	2000	2400	50		i aco	CONT COTTING CASING AT 410 N.
95/08/18	0000	0600	600		PACU	CONTINUED CUTTING CASING AT 410 M. CONNECTED MOST TOOL AND ATTEMPTED TO PULL CSG./WELLHEAD WITH 180 TON OVERPULL. NOGO. CONT CUTTING CASING PULLED CASING FREE WITH 90 TON OVERPULL. OK.
	0600	0700	100		PACU	PULLED PGB/WELLHEAD TO SURFACE.
		1300	600		PAHU	DISCONNECTED WELLHEAD FROM PGB AND L/D SAME.
	1300	1830	530		PXXU	DEBALLASTED RIG TO TRANSIT DRAFT WHILE L/D CUTTING EQUIPMENT FROM THE DERRICK. L/D 3 JTS 8"DC. REACHED TRANSIT DRAFT AT 1830 HRS.
95/08/19	1830		530		MARU	ANCHOR HANDLING: PULLED ANCHORS NO 2, 6 AND 3.
737 US/ 17	0000 0600	0600 0830	600 230		MARU MARU	ANCHOR HANDLING; PULLED ANCHORS NO 7,4,8,1. ANCHOR HANDLING, LAST ANCHOR NR 5 ON BOLSTER AT 0830 HRS, 190895.

2.3 OBS reports

Permanent P&A, Well 6608/10-3

OBS Rapportering - Observasjonsrapporter i utvalget

Utvalg: Emneord er valgt: BRØNN , Norge, 6608/10-003

Nr.	Art	Tittel	Status	Svarfrist	Beh.sted	Saksbehandler
4312	Erfaring	Problemer men kutting av 13 3/8" FR, P&A.	Utarbeidet	28.10.95	B&B/BOT/LBOR	Mysen, Bjørn
4071 4070 2001	Fravik Fravik Avvik	7" liner lap skal overlappes med sement. Trykksementering av DST-perforeringer Teleskoprør, BRUDD	Godkjent Godkjent Godkjent	18.07.95 18.07.95 01.08.93	B&B/OPS/POOL B&B/OPS/POOL B&B/BOT/ROB	Strand, Jan Osmund Strand, Jan Osmund Røiland, Sigbjørn