3.1 Petrophysical results

3.2 FMT summary

Seven runs were done using Atlas Wireline FMT, HP and strain gauges. Several samples were taken.

Table 3.2.1 FMT Run 3A

FMT Run 3A			
Depth (mRKB)	**Hydrostatic pressure (HP,Bar)**	**Initial shut-in pressure (HP,Bar)**	**Comments**
3339.0	553.47		Tight
3377.0	558.66	487.90	
3377.5	558.65	487.90	
3377.7	557.38	484.61	Segregated sample
3378.5	558.84	484.13	
3384.0	559.74		Tight
3384.5	558.87	484.97	
3386.0	559.96		Tight
3387.0	559.19	494.06	
3390.0	560.33		Tight
3396.5	560.75	485.36	
3405.0	562.55		Tight

Table 3.2.2 FMT Run 4B

FMT Run 4B			
Depth (mRKB)	**Hydrostatic pressure (HP,Bar)**	**Initial shut-in pressure (HP,Bar)**	**Comments**
4007.7	683.92	671.08	
4016.7	685.25		Tight
4027.8	686.87		Tight
4028.7	686.32		Tight
4032.2	686.77	668.54	
4038.9	687.09		Tight
4043.7	687.74		Tight
4045.7	687.96	664.44	
4045.9	687.16	664.54	Sample 1
4050.2	683.92	671.08	
4054.7	689.30		Tight
4071.7	692.80		Tight
4082.7	694.85		Tight

Table 3.2.3 FMT run 5C

FMT Run 5C			
Depth (mRKB)	Hydrostatic pressure (HP,Bar)	Initial shut-in pressure (HP,Bar)	Comments
4274.0	504.07	497.9	
4280.0	504.82	491.60	
4290.0	505.83	493.86	
4301.0	506.54	499.07	
4307.0	506.71	493.06	
4375.7	514.42	477.03	
4378.2	514.59		Tight
4378.4	514.21	477.04	Segregated sample
4395.5	515.86	478.12	
4570.8	535.08		Tight
4597.0	536.90		Tight
4604.7	537.46		Tight
4609.0	538.14		Tight
4690.0	547.70	489.22	
4696.7	548.40	489.75	
4721.5	551.80	496.56	
4741.5	553.78		Tight
4749.1	554.17		Tight

Table 3.2.4 FMT run 5D & 5F

FMT Run 5D&5F			
Depth (mRKB)	**Hydrostatic pressure (HP,Bar)**	**Initial shut-in pressure (HP,Bar)**	**Recovery 10000cc chamber**
4690.1	545.45	489.61	Mud
4690.0	543.75	489.83	Mud
4749.2	552.75		Tight
4721.5	551.13	497.09	Gas 3 Cu.Ft. 1850cc Distillate 8800cc Mud Filtrate

Table 3.2.5 FMT run 5E

FMT Run 5E			
Depth (mRKB)	Hydrostatic pressure (HP,Bar)	Initial shut-in pressure (HP,Bar)	Comments
4269.5	498.44		Tight
4271.5	498.20	491.72	
4274.0	497.41	489.30	
4274.5	496.86	489.30	
4276.0	496.72	492.34	
4279.0	497.00		Tight
4280.0	497.61		Tight
4281.0	497.90	490.38	
4285.5	489.60	490.50	
4287.5	489.81	490.65	
4290.0	499.13	491.00	
4293.5	499.60		Tight
4300.0	500.54		Tight
4301.0	500.54	494.52	
4301.5	500.16	490.70	
4303.5	500.76	492.30	
4306.0	501.13	492.56	
4307.0	501.29		Tight
4308.0	501.33		Tight
4309.5	501.53	497.43	
4574.0	531.44	529.17	
4575.5	531.50		Tight
4578.0	532.00		Tight
4585.0	533.20		Tight
4586.0	532.70		Tight
4588.0	533.00		Tight

FMT Run 5E, continues			
Depth (mRKB)	Hydrostatic pressure (HP,Bar)	Initial shut-in pressure (HP,Bar)	Comments
4595.0	534.00		Tight
4597.0	534.00		Tight

Table 3.2.6 FMT run 5G

FMT Run 5G			
Depth (mRKB)	Hydrostatic pressure (HP,Bar)	Initial shut-in pressure (HP,Bar)	Comments
4242.0	496.92	493.62	
4246.0	495.80		Tight
4247.0	495.40		Tight
4248.0	495.07		Tight
4250.0	494.62	490.29	
4251.0	494.78		Tight
4252.5	495.00		Tight
4254.0	495.15		Tight
4254.5	495.28	487.84	
4256.4	495.50	491.00	
4257.0	495.51		Tight
4258.0	495.67	491.90	
4260.5	496.04		Tight
4264.5	496.65	493.05	
4265.5	496.78	495.01	
4266.0	496.62	489.46	
4271.0	497.52		Tight

WELL 6506/11-2

PRODUCTION TEST SUMMARY

TEST No FLOW No	PERF. INTERV. (mRKB)	DURATION (HRS)	CHOKE MAX. (1/64")	GAS RATE (SM3/D)	OIL/ COND. RATE (SM3/D)	WATER RATE (BSW) %	GOR (SM3/D)	OIL/ COND. DENS. (Kg/M3)	GAS GRAVITY (AIR=1)	WHP (kPa)	BHP (kPa)	WHT (DEG.C)	BHT (DEG.C)
1 A	4668-4704	20.8	80	770733	554	0	1392	807	0.765	10500	48965	54	160
1 B	NOT PERF.	-	-	-	-	-	-	-	-	-	-	-	-
2	4553.2-4597.2	22.3	80	440000	481	-	915	-	-	6800	48023	24	157
3	4486-4510 NO FLOW		-	-	-	-	-	-	-	-	-	-	-
4	4371-4420	10	64	1028000	714	~3	1440	0.783	0.734	14521	47706	38	153
5	4005-4048	47.4	36	69845	136	1.5	513	0.82	0.783	3500	66454	16	138
6	3373.5-3398.5	12.0	24	6825	40	129Sm3/d	170	0.826	0.775	5000	48478	12	113

STATOIL

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	**STATOIL**	**RIG:**	**ROSS RIG**
WELL NO:	**6506/11-2**	**AREA:**	**HALTENBANKEN**
SECTION:	**36"**		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	61	43005,00
BENTONITE	M.T.	2075,00	19	39425,00
BENTONITE	KG	2,22	8250	18315,00
CMC EHV	KG	14,63	2725	39866,75
SECTION COST				140611,75
SECTION DAYS				3
COST PR. DAY				46870.58
SECTION LENGTH				65
COST PR.METER				2163,26
VOLUME MIXED				550
COST PR. CU. MTR				255,66
DILUTION RATE				
CU. MTR. PR. MTR				8,46

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	STATOIL	RIG:	ROSS RIG
WELL NO:	6506/11-2	AREA:	HALTENBANKEN
SECTION:	26"		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	202	142410,00
BENTONITE	M.T.	2075,00	13	26975,00
CMC EHV	KG	14,63	9400	137522,00
SECTION COST				306907,00
SECTION DAYS				4
COST PR. DAY				76726,75
SECTION LENGTH				446
COST PR.METER				688,13
VOLUME MIXED				1295
COST PR. CU. MTR				236,99
DILUTION RATE				
CU. MTR. PR. MTR				2,90

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	**STATOIL**	**RIG:**	**ROSS RIG**
WELL NO:	**6506/11-2**	**AREA:**	**HALTENBANKEN**
SECTION:	**17 1/2"**		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	989	697245,00
ANCOCIDE	LTR	16,52	475	7847,00
CELPOL LOVIS	KG	32,35	19825	641338,75
CELPOL REG	KG	32,35	2100	67935,00
GYPSUM	KG	1,92	12925	24816,00
DEFOAMER	LTR	15,83	25	395,75
DESCO CF	KG	19,98	182	3636,36
ANCO FREEPIPE W	LTR	29,25	6400	187200,00
PIPELAX	LTR	29,54	1600	47264,00
IMCOSPOT	KG	35,78	4540	162441,20
BICARBONATE	KG	3,61	200	722,00
SECTION COST				1840841,06
SECTION DAYS				16
COST PR. DAY				115052,57
SECTION LENGTH				1477
COST PR.METER				1246,34
VOLUME MIXED				1727
COST PR. CU. MTR				1065,92
DILUTION RATE				
CU. MTR. PR. MTR				1,17

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	**STATOIL**	**RIG:**	**ROSS RIG**
WELL NO:	**6505/11-2**	**AREA:**	**HALTENBANKEN**
SECTION:	**17 1/2" SIDETRACK**		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	494	348270,00
CELPOL LOVIS	KG	32,35	7550	244242,50
BICARBONATE	KG	3,61	675	2436,75
DESCO CF	KG	19,98	205	4095,90
GYPSUM	KG	1,92	2625	5040,00
ANCOCIDE	LTR	16,52	200	3304,00
SECTION COST				607389,15
SECTION DAYS				6
COST PR. DAY				101231,53
SECTION LENGTH				998
COST PR.METER				608,61
VOLUME MIXED				532
COST PR. CU. MTR				1141,71
DILUTION RATE				
CU. MTR. PR. MTR				0,53

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	STATOIL	RIG:	ROSS RIG
WELL NO:	6506/11-2	AREA:	HALTENBANKEN
SECTION:	12 1/4"		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	2340	1649700,00
CELPOL LOVIS	KG	32,35	5725	185203,75
CELPOL REG	KG	32,35	525	16983,75
BICARBONATE	KG	3,61	300	1083,00
GYPSUM	KG	1,92	8250	15840,00
ANCOCIDE	LTR	16,52	775	12803,00
STAFLO EXLO	KG	33,41	18450	616414,50
THERMOPOL	KG	148,00	3800	562400,00
LIME	KG	1,56	1380	2152,80
DESCO CF	KG	19,98	1065	21278,70
ANCOTEMP	KG	90,44	3300	298452,00
DEFOAMER	LTR	15,83	245	3878.35
SODA ASH	KG	2,38	1575	3748,50
SECTION COST				3389938,35
SECTION DAYS				39
COST PR. DAY				86921,50
SECTION LENGTH				1983
COST PR.METER				1709,50
VOLUME MIXED				1939
COST PR. CU. MTR				1748,29
DILUTION RATE				
CU. MTR. PR. MTR				0,98

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	STATOIL	RIG:	ROSS RIG
WELL NO:	6506/11-2	AREA:	HALTENBANKEN
SECTION:	8 1/2"		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	211	148755,00
BENTONITE	M.T.	2075,00	68	141100,00
LIME	KG	1,56	980	1528,80
SODA ASH	KG	2,38	1250	2975,00
ANCOTEMP	KG	90,44	5061	457716,84
THERMOPOL	KG	148,00	3825	566100,00
ANCORESIN	KG	12,56	6350	79756,00
BENTONITE	KG	2,22	600	1332,00
DEFOAMER	LTR	15,83	325	5144,75
ANCOCIDE	KG	16,52	225	3717,00
SOD. BICARB.	KG	3,61	125	451,25
DESCO CF	KG	19,98	69	1378,62

SECTION COST	1409955,26
SECTION DAYS	32
COST PR. DAY	44061,10
SECTION LENGTH	575
COST PR.METER	2452,10
VOLUME MIXED	920
COST PR. CU. MTR	1532,56
DILUTION RATE	
CU. MTR. PR. MTR	1,60

STATOIL

MATERIAL COST AND CONSUMPTION

OPERATOR:	**STATOIL**	**RIG:**	**ROSS RIG**
WELL NO:	**6506/11-2**	**AREA:**	**HALTENBANKEN**
SECTION:	**TEST, P & A**		

PRODUCTS	UNIT SIZE	UNIT PRICE NOK	USED	TOTAL COST NOK
BARITE	M.T.	705,00	862	607710,00
BENTONITE	M.T.	2075,00	65	134875,00
ANCOCIDE	LTR	16,52	225	3717,00
STAFLO EXLO	KG	33,41	150	5011,50
SODA ASH	KG	2,38	1100	2618,00
ANCOTEMP	KG	90,44	3709	335441,96
THERMOPOL	KG	148,00	3375	499500,00
DEFOAMER	KG	15,83	100	1583,00
BENTONITE (sx)	KG	2,22	650	1443,00
ANCORESIN	KG	12,56	900	11304,00
LIME	KG	1,56	60	93,60
SODIUM BICARB.	KG	3,61	700	2527,00
DESCO CF	KG	19,98	113	2257,74

SECTION COST		1608081,80
SECTION DAYS		72
COST PR. DAY		22334,47
SECTION LENGTH		
COST PR.METER		N/A
VOLUME MIXED		661
COST PR. CU. MTR		2432,80
DILUTION RATE		
CU. MTR. PR. MTR		N/A

WELL NO: 6506/11-2 | **RIG : ROSS RIG** | **AREA: HALTENBANKEN**

Mud volume distribution summary

Hole size	Hole From-to	Hole Length	Mud/brine Built	Dumped	Influx	Lost to Formation	Lost over solids control equipment	Mud left between csg/csg plus left in hole	cuttings volume drilled	Mud transf. to next section	Mud type used for interval
inch	*m*	*m*	*m3*	*m3*		*m3*	*m3*	*m3*	*m3*	*m3*	
36	319-384	65	550	228					43	550	BENT./CMC EHV
26	384-830	446	1295	1647					153	198	CMC EHV
17 1/2	830-2307	1477	1727	574			591	120	229	640	GYP/POLYMER
17 1/2 S/T	1257-2255	998	532	200		218	233	146	155	375	GYP/POLYMER
12 1/4	2255-4238	1983	1939	599	82	15	1382	50	151	350	GYP/POLYMER
8 1/2	4238-4813	575	920	706			247		21	317	BENT./ANCOTEMP
TEST, P & A	-	-	661	603		7	150	39		179	BENT./ANCOTEMP

TOTALS:					
Startvolume(left from prev.well)	228	m3		Total mud/brine left/lost in hole	595	m3
Influx	82	m3		Total mud/brine to sea	7160	m3
Mud/Brine built	7624	m3		Total cuttings volume drilled	752	m3
Mud/Brine dumped	4557	m3				
Mud/Brine lost to formation	240	m3	COMMENTS:	36" section: Returns to seabed(i.e. 228 m3 dumped)		
Mud/Brine lost over solids				26" section: Returns to seabed(i.e.1647 m3 dumped)		
control equipment	2603	m3		17 1/2" section: 120 m3 left in hole		
Mud/Brine left between csg/csg				17 1/2" S/T: 146 m3 left behind csg		
plus mud/Brine left in hole	355	m3		12 1/4" section: 82 m3 influx(water), 50 m3 left behind csg.		
Final volume	179	m3				