WO 6506/12-5

DATE 12.12.85

RUN NO. 3A1, SFT

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1.1

Max. recorded temp.: 82 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	°C	bar	bar	bar	sec	bar	bar	bar	bar	
1	3158.0	NA	553.6	553.6					553.6	553.6	No seal, no drawdown
2	3158.5	"	553.6	553.6					553.6	553.6	No flow
3	3176.0	"	556.9	556.8	247.4	240	471.0	470.9	556.9	556.9	Fair perm.
4	3176.9	"	557.1	557.0	452.1	240	471.2	471.1	557.2	557.1	Good perm.
5	3177.5	"	557.4	557.3	469.3	60	471.3	471.2	557.3	557.2	Lost seal twice
6	3178.9	"	557.4	557.4	460.6	30	471.4	471.3	557.5	557.4	Very high perm.
7	3180.0	"	557.6	557.6	441.0	15	471.4	471.3	557.6	557.6	Very high perm.
8	3182.0	"	557.9	557.8	415.9	30	471.6	471.5	557.9	557.9	Very high perm.
9	3183.0	"	558.5	558.4	464.1	10	471.6	471.5	558.4	558.3	Very high perm.
10	3165.5	"	554.9	554.7	453.3	15	469.9	469.6	555.2	555.0	Very high perm.
11	3164.4	"	554.8	554.6					554.9	554.7	No flow
12	3160.0	"	554.2	554.0					554.3	554.0	No flow, lost seal
13	3158.5	"	554.0	553.8					554.0	553.8	No flow, lost seal
14	3176.0	"	557.0	556.9	465.4	60	471.0	470.9	557.1	557.1	Sample
15											
16											
17											
18											
19											
20											

WELL 6506/12-5

DATE 12.12.85

RUN NO. 3A2, SFT

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1. cont.

Max. recorded temp.: 82 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	3165.5	NA	554.5	554.3	440.7	30	469.7	469.4	554.1	553.9	Sample
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

WELL 6506/12-5

DATE 12.01.86

RUN NO. 4B, RFT

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1.2

Max. recorded temp.: 115.6 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	3983.5	101.5	459.6	458.2					459.6	458.2	Tight
2	3984.0	101.5	459.7	458.3					459.8	458.4	Tight
3	3988.5	105.1	460.1	458.8	2.7	180	410.3	409.0	460.1	458.8	Supercharged
4	3992.0	105.8	460.5	459.2	2.2	240	412.6	411.3	460.3	459.0	Supercharged
5	3992.0	105.8	460.5	459.2					460.5	459.2	Tight
6	3998.4	107.7	461.0	459.7	5.8	270	410.1	408.8	461.0	459.7	Low perm.
7	4003.9	108.3	461.8	460.5	369.7	12	409.3	408.1	461.7	460.3	High perm.
8	4007.9	108.9	462.2	460.9	324.4	48	409.6	408.4	462.1	460.8	Good perm.
9	4011.4	109.2	462.6	461.3	350.9	12	409.9	408.6	462.5	461.2	High perm.
10	4014.0	109.8	462.8	461.6	204.5	30	410.2	409.0	462.8	461.6	Good perm.
11	4018.9	110.0	463.5	462.3					463.4	462.1	Tight
12	4018.7	110.0	463.3	462.1	328.0	12	410.6	409.4	463.3	462.1	Good perm.
13	4025.9	110.6	464.3	463.0	317.1	6	411.3	410.0	464.1	462.9	Good perm.
14	4029.9	110.8	464.7	463.5	148.4	54	411.8	410.6	464.7	463.4	Low perm.
15	4034.0	111.0	464.9	463.7	384.2	6	412.1	410.8	464.8	463.5	High perm.
16	4038.4	111.2	465.6	464.3					465.5	464.3	Tight
17	4038.3	111.2	465.4	464.2	331.7	18	412.4	411.2	465.4	464.1	High perm.
18	4069.5	110.6	468.9	467.7					468.6	467.4	Tight
19	4069.3	110.8	468.6	467.4					468.5	467.2	Tight
20	4080.0	111.1	469.9	468.6	54.6	48	418.6	417.3	469.6	468.3	Supercharged

WELL 6506/12-5

DATE 12.01.86

RUN NO. 4B , RFT cont.

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1.2 ...nt.

Max. recorded temp.: 115.6 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	4094.4	112.2	471.5	470.3	2.7	120	421.7	420.5	471.4	470.1	Supercharged
2	4099.5	113.8	472.3	471.1					472.2	471.0	Tight
3	4099.7	113.8	472.2	471.0	288.3	36	419.3	418.0	472.2	471.0	Good perm.
4	4109.0	114.3	473.3	472.1					473.2	471.9	Tight
5	4109.3	114.3	473.2	472.0	131.9	36	420.4	419.2	473.0	471.8	Low perm.
6	4112.5	114.7	473.6	472.3	36.7	60	420.9	419.7	473.6	472.3	Low perm.
7	4118.5	114.8	474.3	473.0					474.2	473.0	Tight
8	4120.0	115.0	474.3	473.1	84.6	90	421.8	420.6	474.3	473.0	Low perm.
9	4123.0	115.3	474.8	473.6					474.7	473.4	Tight
10	4122.7	115.3	474.7	473.4					474.7	473.4	Tight
11	4137.0	115.3	476.3	475.1					476.1	474.8	Tight
12	4161.0	115.6	478.8	477.5					478.6	477.4	Tight
13	4004.0	113.1	461.2	459.9	349.6	18	408.9	407.7	460.8	459.6	Sampling attempt
14	4004.0	115.3	461.0	459.8	338.6	18	408.9	407.7	460.6	459.3	Sampling
15	4004.0	112.0	461.3	460.1	223.3	60	409.8	408.6	461.6	460.3	Fair perm.
16	4006.4	112.7	461.3	460.1	233.0	60	409.6	408.4	461.4	460.2	Fair perm.
17	4010.0	113.2	461.9	460.6	290.5	42	409.9	408.6	461.7	460.5	Good perm.
18	4012.0	113.8	462.1	460.9	268.9	18	410.0	408.8	462.1	460.9	Good perm.
19	4013.4	114.2	462.0	460.8	235.2	30	409.9	408.7	461.9	460.7	Good perm.
20											

WEI 6506/12-5

DATE 27.01.86

RUN NO. 5C1, RFT

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1.3

Max. recorded temp.: 135.4 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	3988.0	114.5	462.1	461.2	3.4	540	410.4	409.4	461.4	460.6	Supercharged
2	3993.0	115.2	463.0	462.1	2.9	360	416.1	415.1	463.0	462.1	Supercharged
3	3998.0	116.4	463.6	462.7					463.5	462.6	Tight
4	4004.0	116.8	464.3	463.4	253.0	18	409.9	409.0	463.3	463.3	Good perm.
5	4007.0	116.8	464.6	463.7	261.2	120	410.6	409.7	464.5	463.6	Bad pt.
6	4009.0	118.2	465.0	464.2	358.3	480	410.2	409.3	464.8	463.9	Good perm.
7	4011.5	119.1	465.2	464.3	249.4	540	410.4	409.4	464.9	464.0	Good perm.
8	4006.0	119.5	464.5	463.6	1.8	180	410.4	409.4	464.2	463.3	Low perm.
9	4007.5	119.8	464.6	463.7	213.6	24	410.2	409.2	464.5	463.6	Good perm.
10	4013.5	120.0	465.2	464.3	22.3	420	410.6	409.6	465.1	464.2	Good perm.
11	4018.5	120.5	465.9	465.1	300.0	90	411.4	410.5	465.9	465.1	Good perm
12	4025.0	120.9	466.7	465.8	3.0	500	412.2	411.3	466.6	465.8	Good perm.
13	4038.0	121.0	468.1	467.3	2.2	150	413.2	412.3	467.9	467.1	Low perm.
14	4037.5	121.4	467.9	467.0	288.6	300	412.8	411.8	467.9	467.1	Good perm.
15	4029.5	122.0	467.1	466.2	347.7	150	412.4	411.4	467.2	466.3	Good perm.
16	4034.0	122.2	467.7	466.8	49.6	420	413.3	412.4	467.6	466.7	Fair perm.
17	4033.5	122.5	467.7	466.8	75.8	180	412.6	411.7	467.4	466.5	Good perm.
18	4069.0	123.3	471.8	471.0	1.8	250	419.7	418.8	472.0	471.2	Low perm.
19	4094.2	123.9	474.6	473.8	1.8	360	423.4	422.5	474.5	473.7	Low perm.
20	4109.0	123.9	476.3	475.4	2.9	60	421.7	420.7	476.1	475.3	Sampling attempt

WEI 6506/12-5

DATE 27.01.86

RUN NO. 5C1, RFT cont.

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1.3 cont.

Max. recorded temp.: 135.4 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	4289.0	128.5	495.6	494.9	3.0	125	443.7	442.8	495.4	494.7	Low perm.
2	4347.8	132.4	502.1	501.5					502.0	501.4	Tight
3	4352.5	132.8	502.8	502.3	136.6	330	455.1	454.4	500.6	500.0	Fair perm.
4	4427.0	133.5	511.5	511.0	437.9	60	455.9	455.2	511.1	510.5	Very good perm.
5	4453.0	134.2	514.2	513.6	449.0	45	458.8	458.1	513.9	513.4	Very good perm.
6	4483.0	134.7	517.8	517.3					517.4	516.8	Tight
7	4484.2	135.4	517.4	516.9	444.3	12	462.2	461.5	517.4	516.9	Very good perm.
8	3977.1	121.5	460.8	459.9					461.0	460.2	Tight
9	3976.6	121.5	461.2	460.4					461.4	460.5	Tight
10	3976.8	123.0	460.8	459.9					460.7	459.8	Tight
11	3979.5	122.8	460.4	459.6					460.3	459.5	Tight
12	3968.0	122.8	459.2	458.4					458.8	458.0	Seal failure
13	3967.5	121.7	459.3	458.4					459.4	458.5	Tight
14											
15											
16											
17											
18											
19											
20											

WL 6506/12-5

DATE 27.01.86

RUN NO. 5C2, RFT

PRETEST RECORDED DATA

STRAIN GAUGE

TAB 2.1.3 cont.

Max. recorded temp.: 135.4 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	4029.5	126.0	466.8	466.0	320.3	120	411.5	410.6	466.2	465.4	Sampling
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

WE 6506/12-5

DATE 27.01.86

RUN NO. 5C1 , RFT

PRETEST RECORDED DATA

HP-GAUGE

TAB 2.1.4

Max. recorded temp.: 135.4 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	3988.0	114.5		461.36	3.66	540		410.13		461.37	Supercharged
2	3993.0	115.2		461.91	3.60	420		415.38		461.94	Supercharged
3	3998.0	116.4		462.46						462.70	Tight
4	4004.0	116.8		463.30	281.97	150		408.85		463.18	Good perm.
5	4007.0	116.8		463.52	289.53	540		409.22		463.63	Bad pt.
6	4009.0	118.2		463.88	371.06	540		409.22		463.92	Good perm.
7	4011.5	119.1		464.17	370.37	600		409.40		464.20	Good perm.
8	4006.0	119.5		463.54	1.60	270		409.51		463.58	Supercharged
9	4007.5	119.8		463.71	213.48	120		409.08		463.77	Good perm.
10	4013.5	120.0		464.41	265.55	420		409.59		464.29	Good perm.
11	4018.5	120.5		464.91	325.92	180		410.05		464.87	Good perm.
12	4025.0	120.9		465.59	4.64	420		411.11		465.72	Good perm.
13	4038.0	121.0		467.28	1.82	420		412.20		467.15	Low perm.
14	4037.5	121.4		467.04	287.82	420		411.96		467.06	Good perm.
15	4029.5	122.0		466.21	393.74	210		411.09		466.29	Good perm.
16	4034.0	122.2		466.87	136.06	810		412.32		466.91	Supercharged
17	4033.5	122.5		466.78	80.68	480		411.62		466.86	Good perm.
18											
19											
20											

WELL 6506/12-5

DATE 27.01.86

RUN NO. 5C2, RFT

PRETEST RECORDED DATA

HP-GAUGE

TAB 2.1.4 cont.

Max. recorded temp.: 135.4 °C

Test No.	Depth	Tem	Log hydr. before t.	Corr. hydr. before t.	Draw down	Build up time	Log Pretest pressure	Cor. Pretest pressure	Log hydr. after t.	Cor. hydr. after t.	Remarks
	m	C	bar	bar	bar	sec	bar	bar	bar	bar	
1	4029.5	125.1		465.2	390.4	60		410.8		NA	Sampling
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
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18											
19											
20											

FLOW DATA 6506/12-5

Test no.	Formation	Perf. int. (mRKB)	Flow period no.	Duration (min)	Choke diam. (mm)	Liquid rate (Sm^3/d)	Gas rate ($1000\ Sm^3/d$)	GOR (Sm^3/Sm^3)	Water rate (Sm^3/d)	Oil dens (kg/m^3)	Gas Sp.g. (air=1)	Pwh (bar)	Pwf (bar)	Res. Temp. (°C)	Res. Press. (bar)
1B	Tomma fm. I	4025-4040	1	1090	19.1	-	-	-	250	-	-	10	260	141	411.5
			2	558	(9.5)	-	-	-	180	-	-	20	325		
2	Tomma fm. I	4004-4009.5	1	1443	11.1	140	41	293	40	835	.895	50	220	140	409
			2	588	12.7	150	38	253	40	827	.795	50	210		
			3	275	19.1	200	55	275	70			25	-		
3	Tomma fm. I	3983-3996	1	363	(bubble hose)	2.4	-	-	-	-	-	1.5	330	139	408
4	Finnvær	3174-3177.5	1	473	11.1	440	75	170	0	800	.718	110	295	112	471
			2	628	9.5	390	62	160	0	798	.710	130	313		
			3	331	15.9	610	98	160	0	-	-	81	240		
			4	344	6.4	72	11	153	207	817	.690	164			
			5	345	7.9	120	22	180	325		.715	158	-		

STATOIL WELL NO.6506/12-5

MATERIAL COST AND CONSUMPTION ANALYSIS

PRODUCT	UNIT SIZE	UNIT PRICE $	36" SECTION	COST $	26" SECTION	COST $	17.5" SECTION	COST $	12.25" SECTION	COST $	8.5" SECTION	COST $	TEST P&A	COST $	TOTAL USED	TOTAL COST
BARITE	M.T.	148.00		.00	193	28564.00	685	101380.00	904	133792.00	173	25604.00	540	79920.00	2495	369260.00
BENTONITE	M.T.	380.00	15	5700.00	46	17480.00	2	760.00	13	4940.00	94	35720.00	24	9120.00	194	73720.00
CAUSTIC SODA	25 KG	20.00	7	140.00	120	2400.00	99	1980.00	404	8080.00	157	3140.00	19	380.00	806	16120.00
BICARBONATE	50 KG	24.00		.00		.00	19	456.00		.00	62	1488.00	71	1704.00	152	3648.00
SODA ASH	50 KG	21.00	2	42.00	7	147.00		.00	14	294.00	30	630.00	1	21.00	54	1134.00
GYPSUM	40 KG	10.50		.00	446	4683.00	866	9093.00	132	1386.00		.00			1444	15162.00
ANCOMEL	25 KG	52.00		.00	293	15236.00	410	21320.00	28	1456.00		.00			731	38012.00
BENTONITE	50 KG.	20.00	28	560.00	68	1360.00	40	800.00		.00	94	1880.00	48	960.00	278	5560.00
XC-POLYMER	50 LBS.	480.00		.00	66	31680.00	67	32160.00	8	3840.00		.00			141	67680.00
DRISPAC REG	50 LBS.	154.00		.00		.00	51	7854.00	4	616.00	59	9086.00			114	17556.00
DRISPAC SL	50 LBS.	165.00		.00		.00		.00		.00	53	8745.00	11	1815.00	64	10560.00
MICA F	25 KG.	22.00		.00	65	1430.00		.00		.00		.00			65	1430.00
CMC HV	25 KG	67.00		.00	69	4623.00	71	4757.00	32	2144.00	62	4154.00			234	15678.00
CMC LV	25 KG	65.00		.00		.00	163	10595.00	147	9555.00	75	4875.00			385	25025.00
STAFLO	25 KG.	185.00		.00	54	9990.00		.00		.00		.00			54	9990.00
DETERGENT	200 LIT	495.00		.00		.00		.00	7	3465.00		.00			7	3465.00
AL.STEARATE	25 KG	89.00		.00		.00	2	178.00		.00	2	178.00			4	356.00
DEFOAMER	25 LIT	118.00		.00	9	1062.00		.00		.00	30	3540.00			39	4602.00
ANCO LIG C	25 KG	32.00		.00		.00	2	64.00	315	10080.00	456	14592.00	97	3104.00	870	27840.00
SPERCELL C	25 KG.	19.50		.00		.00	1	.00	782	15249.00	303	5908.50	99	1930.50	1185	23107.50
DESCO	25 LBS.	51.00		.00		.00	80	4080.00	89	4539.00		.00	55	2805.00	224	11424.00
ANCO RESIN	25 KG.	81.25		.00		.00	58	4712.50	300	24375.00	444	36075.00			802	65162.50
TOTALS				6442.00		118655.00		200189.50		223811.00		155615.50		101759.50		806492.00
HOLE DRILLED				63		677		1213		1617		690				
COST PR. METRE				102.25		175.27		165.04		138.41		225.53				
TOTAL DAYS				2		12		15		30		49		46		
COST PR. DAY				3221.00		9887.92		13345.97		7460.37		3175.83		2212.16		