

1.5

Summary of RFT, Well 6506/12-8

DEPTH M RKB	FORMATION PRESSURE		REMARKS
	HP psia	SG psig	
<u>RUN 2A</u>			
3161.4		6737	OK
3165.4			Tight
3165.0			Tight
3174.4		6739	OK
3179.0		6745	OK
<u>RUN 3B</u>			
3948.0			Gr tie in
3882.0			No seal
3882.0	5946.6	5945	
3885.4			Lost seal
3885.0			Lost seal
3887.0			No seal
3892.1			No seal
3904.0	5848.8	5867	
3910.0			Break seal
3912.4	5841.4	5866	
3921.0	5845.6	5870	First sample
3926.4	5859.6	5877	
3931.4	5859.3	5875	
3939.0	5876.3	5891	
3947.0			Break seal
3948.0	5873.3	5887	
3952.0	5875.4	5889	
3955.0	5878.6	5892	
3975.0			Depth check
3998.0	5986.1	6005	
4004.0	6016.3	6036	
4013.0	5993.1	6012	
4022.0			Plugging
4022.0			Lost seal
4025.4			Plugging
4025.4			Lost seal
4032.0			Lost seal
4034.4			Lost seal
4037.4			Lost seal



DEPTH M RKB	FORMATION PRESSURE		REMARKS
	HP psia	SG psig	
<u>RUN 3C</u>			
3944.0			Gr tie-in
3915.0	5860.6	5888	
3918.0	5854.6	5878	
3921.0	5857.1	5877	Repeat
3926.4	5859.6	5875	Repeat
3935.0	5864.8	5877	
3940.0	5872.6	5884	
3945.0	5871.6	5882	
4022.0			Break seak
4034.0			Depth check
4025.4			No seal
4025.4			No seal
4032.0	6044.6	6051	No seal
4034.4	6055.1	6059	
4037.4			Break seal
4041.4			Break seal
4229.0			Depth check
4187.0			No seal
4187.0			Lost seal
4187.0			Lost seal
4189.4			Break seal
4194.4			Break seal
4205.0			No seal
4211.4			Lost seal
4211.4			Lost seal
4217.4	6478.3	6472	
4222.8			Break seal
4245.0			Break seal
4251.4			Break seal
4258.0			Break seal
3946.0			Depth check
3948.3	5877.1		Second sample
<u>RUN 3D</u>			
4030.0			Gr tie-in
4027.0	6002.8		
4040.0	6019.3		
4052.0			Lost seal
4053.0			No seal
4053.0			Break seal
4057.0			No seal
4056.4			Break seal
4044.0	6047.1		
3925.0	5892.6		Third sample

DEPTH M RKB	FORMATION PRESSURE		REMARKS
	HP psia	SG psig	
<u>RUN 3E</u>			
4232.0			Gr tie-in
4217.4	6519.0	6525	Repeat
4239.0			Break seal
4245.4			Break seal
4248.0	6655.8	6670	
4251.1			Break seal
4252.0			Break seal
4258.4	6403.3	6426	
4263.4	6349.1	6378	
4268.3			Break seal
4277.0	6363.1	6396	
4281.0			No seal
4281.4	6367.3	6405	
4287.8			Break seal
4292.3			No seal
4300.4			Break seal
4312.0	6426.0	6469	
4318.4	6440.1	6482	
4306.4	6414.4	6459	
4224.0			Depth check
4211.4			Break seal
4214.0			Break seal
4219.0			Break seal
4204.4			Break seal
4261.0			Break seal
4264.0	6350.0	6400	Fourth sample

WELL 6506/12-8
 PRODUCTION TEST SUMMARY
 (PRELIMINARY)

TEST/ FLOW NO	FORMATION	PERF. INT. MRKB	DURATION HOURS	CHOKE 1/64"	GAS RATE SM ³ /D	OIL RATE SM ³ /D	WATER RATE (BSW) %	GOR SM ³ /SM ³	OIL DENS. KG/M ³	GAS. GRAV. AIR=1	WELL HEAD PRESS. KPA	BOTTOM HOLE PRESS. KPA	WELL HEAD TEMP. C ^o	BOTTOM HOLE TEMP. C ^o
1.1	TILJE	4205- 4221 and 4237 4277	24	VARIOUS (56)	300000	1100	0-18	273	810	0.827	11700	35500	87	4241m 147
1.2			19	28	115000	460	8-10	250	820	0.820	15400	38800	43	148
2.1	GARN I	3915- 3923 and 3934- 3955	24	32	75000	256	0	293	823	0.769	6700	38500	18	3935m 135
2.2			16	VARIOUS (80)	550000	1475	0	373	834	0.875	9200	33300	88	137
2.3.1			8	32	180000	610	0	295	829	0.756	17600	38000	48	137
2.3.2			8	44	257000	920	0	280	830	0.745	16300	37000	67	137
2.3.3			8	64	460000	1420	0	324	830	0.775	12000	34700	85	138

Remarks: Started to produce formation water on DST no. 1 after 19.5 hours.
 Water production stabilized during flow periods (8-10 %).
 Max. H₂S during DST no. 2; 12 ppm.

PRODUCT	UNIT	UNIT	36"	COST	26"	COST	17.5"	COST	12.25"	COST	8.5"	COST	6"	COST	TEST	COST	TOTAL	TOTAL	
	SIZE	PRICE \$	SECTION	\$	SECTION	\$	SECTION	\$	SECTION	\$	SECTION	\$	SECTION	\$	P & A	\$	USED	COST \$	
BARITE	M.T.		86.00	46	3956.00	158	13588.00	190	16340.00	2370	203820.00	122	10492.00		.00	103	8858.00	2989	257054.00
BENTONITE	M.T.		219.00	23	5037.00	25	5475.00		.00	6	1314.00	81	17739.00		.00	22	4818.00	157	34383.00
CAUSTIC SODA	25 KG		11.50	6	69.00	3	34.50	10	115.00	135	1552.50	91	1046.50		.00	39	448.50	284	3266.00
BICARBONATE	50 KG		17.92		.00		.00		.00	27	483.84	4	71.68		.00	6	107.52	37	663.04
SODA ASH	30 KG.		9.60	3	28.80	2	19.20		.00	2	19.20	8	76.80		.00	6	57.60	21	201.60
GYPSUM	40 KG.		8.50		.00		.00	220	1870.00		.00		.00		.00		.00	220	1870.00
BENTONITE	50 KG.		14.08		.00		.00		.00		.00	7	98.56		.00		.00	7	98.56
SODA ASH	50 KG.		16.00		.00		.00		.00		.00		.00		.00		.00	0	.00
XC-POLYMER	50 LBS.		216.00		.00		.00		.00		.00		.00		.00		.00	0	.00
DRISPAC REG.	50 LBS.		80.50		.00		.00	115	9257.50	97	7808.50		.00		.00	19	1529.50	231	18595.50
DRISPAC SLO.	50 LBS.		80.50		.00		.00	219	17629.50	1012	81466.00		.00		.00		.00	1231	99095.50
GYPSUM	25 KG.		5.31		.00		.00	254	1348.74	1089	5782.59		.00		.00		.00	1343	7131.33
LIME	25 KG.		6.40		.00		.00		.00	122	780.80		.00		.00		.00	122	780.80
SPERCELL C	25 KG		12.00		.00		.00		.00	209	2508.00	396	4752.00		.00	26	312.00	631	7572.00
DESCO	25 LBS.		35.84	2	71.68		.00	5	179.20	192	6881.28		.00		.00	79	2831.36	278	9963.52
CMC HIVIS	25 KG.		30.00		.00		.00		.00		.00		.00		.00		.00	0	.00
ANCOLIG C	25 KG.		20.48		.00		.00		.00		.00	235	4812.80		.00	70	1433.60	305	6246.40
NICA C	25 KG.		10.00		.00		.00		.00	15	150.00		.00		.00		.00	15	150.00
NICA F	25 KG.		10.00		.00		.00		.00	15	150.00		.00		.00		.00	15	150.00
NUT PLUG C	25 KG.		14.08		.00		.00		.00	15	211.20		.00		.00		.00	15	211.20
NUT PLUG F	25 KG.		14.08		.00		.00		.00	15	211.20		.00		.00		.00	15	211.20
ANCO RESIN	25 KG		89.60		.00		.00		.00		.00	101	9049.60		.00		.00	101	9049.60
IMCSPOT	50 LBS		90.00		.00		.00		.00		.00		.00		.00		.00	0	.00
ZINCCARBONATE	25 KG.		57.60		.00		.00	18	1036.80		.00		.00		.00		.00	18	1036.80
DEFOAMER	25 LIT.		75.52		.00		.00		.00	7	528.64	1	75.52		.00		.00	8	604.16
ANCOIDE	25 KG.		69.12		.00		.00	12	829.44	29	2004.48		.00		.00		.00	41	2833.92
PIPELAX	200 L		160.00		.00		.00		.00		.00		.00		.00		.00	0	.00
TOTALS					9162.48		19116.70		48606.18		315672.23		48214.46		.00		20396.08		461168.13
HOLE DRILLED (METRES)					65		169		1314		2004		458						4010
COST PR.METRE					140.96		113.12		36.99		157.52		105.27						115.00
TOTAL DAYS					2		3		7		35		18				22		87
COST PR. DAY					4581.24		6372.23		6943.74		9019.21		2678.58				927.09		5300.78
MUD MIXED (CU.M)					380		293		870		2704		866				186		5299
COST PR.CU.M					24.11		.00		55.87		116.74		55.67				109.66		87.03

DRILLING MUD PROPERTIES RECORD

AREA: HALTENBANKEN

MUD SYSTEM: GYP/POLYMER

RIG: WEST DELTA

SHEET 1 OF 3

DAY No.	DATE	DEPTH metre	HOLE SIZE (M)	M.W. S.g	F.V. s/qt	600	300	A.V cps	P.V cps	Y.P	GEL 0	GEL 10	API ml.	Chl. mg/1	CaCl2 mg/1	pH	%Sol.	%Sand	CEC ppb	Ex. Gypsum ppb
5	8/ 6		1,20	56	35	20	18	15	5	1	1	10,2	20000	5400	9,9	6,0				2,5
6	9/ 6	551	17,50	1,20	44	20	12	10	8	4	1	1	12,0	20000	5400	9,7	6,0			2,5
7	10/ 6	982	17,50	1,20	45	27	16	14	11	5	1	1	4,2	20000	4560	9,7	6,0	1,00	5,0	1,8
8	11/ 6	1406	17,50	1,30	47	35	21	18	14	7	1	9	4,6	21000	4300	8,9	11,0	1,00	9,0	1,8
9	12/ 6	1579	17,50	1,30	48	36	22	18	14	8	1	17	4,4	21000	4600	8,4	13,0	,75	9,5	3,0
10	13/ 6	1873	17,50	1,35	51	46	29	23	17	12	2	36	5,1	20000	4000	8,1	13,0	,75	14,0	3,5
11	14/ 6	1873	17,50	1,35	53	45	28	23	17	11	4	37	5,4	20000	4480	8,2	13,5	,50	14,0	3,0
12	15/ 6	1973	17,50	1,35	52	43	27	22	16	11	4	36	5,5	20000	4400	8,2	13,5	,50	14,0	3,0
13	16/ 6	1873	1,35	52	35	23	18	12	11	12	54	14,0	19500	4000	10,1	13,5	1,00	13,0	2,3	
14	17/ 6	1876	12,25	1,70	50	41	23	21	18	5	1	2	9,1	19000	5120	8,5	21,5	1,00	,0	1,9
15	18/ 6	1876	12,25	1,70	58	62	34	31	28	6	1	1	7,4	19500	5000	8,5	22,0	1,00	,0	1,7
16	19/ 6	1876	12,25	1,70	32	23	15	12	8	7	2	21	NC	20500	1740	12,0	22,0	1,00	,0	6,2
17	20/ 6	1941	12,25	1,70	34	45	37	23	8	29	15	25	NC	18200	1760	11,9	23,0	2,00	4,5	4,0
18	21/ 6	1941	12,25	1,70	36	49	40	25	9	31	15	22	NC	17500	1900	12,0	23,0	1,50	5,0	4,5
19	22/ 6	1891	12,25	1,60	67	74	44	37	30	14	1	1	12,0	18000	5000	8,0	19,0	1,50	,0	3,2
20	23/ 6	2311	12,25	1,60	60	62	34	31	28	6	2	4	5,9	21000	3840	9,9	19,0	1,50	4,0	3,4
21	24/ 6	2330	12,25	1,62	58	54	30	27	24	6	1	2	5,7	20500	3900	9,7	20,0	2,00	6,0	2,6
22	25/ 6	2786	12,25	1,63	69	86	51	43	35	16	2	24	4,5	20500	4000	9,8	21,0	1,50	14,0	2,0
23	26/ 6	2792	12,25	1,63	65	62	39	31	23	16	2	28	4,6	20500	4000	8,8	21,0	2,00	16,0	2,0
24	27/ 6	2919	12,25	1,63	56	72	46	36	26	20	8	44	5,6	20000	4040	8,1	21,5	,75	16,5	2,0
25	28/ 6	3015	12,25	1,64	60	74	46	37	28	18	7	32	5,4	20000	4080	8,6	22,0	1,00	15,0	2,0
26	29/ 6	3125	12,25	1,65	56	69	44	35	25	19	8	35	5,0	20500	4100	8,4	21,5	1,00	15,0	2,2
27	30/ 6	3180	12,25	1,65	50	66	42	33	24	18	10	40	5,4	20000	4000	8,8	20,0	1,25	14,0	2,3
28	1/ 7	3212	12,25	1,65	55	67	43	34	24	19	14	55	5,9	20500	3900	8,9	21,5	,50	15,0	2,2
29	2/ 7	3307	12,25	1,65	57	66	42	33	24	18	20	58	5,8	20000	3600	8,8	21,5	,50	13,0	2,0
30	3/ 7	3398	12,25	1,65	60	65	42	33	23	19	28	56	5,8	20000	3400	8,9	21,0	,50	13,5	1,6
31	4/ 7	3447	12,25	1,65	57	65	43	33	22	21	30	60	6,0	20000	3200	8,8	21,5	,75	16,0	1,6
32	5/ 7	3547	12,25	1,65	55	68	45	34	23	22	28	60	6,2	19500	2700	9,0	22,0	,50	15,0	1,2
33	6/ 7	3621	12,25	1,65	55	59	40	30	19	21	19	47	6,1	19500	3650	8,3	22,0	,50	14,5	1,0
34	7/ 7	3651	12,25	1,65	55	66	42	33	24	18	19	62	5,6	20000	2450	8,6	22,5	,50	15,0	1,0
35	8/ 7	3713	12,25	1,65	55	71	45	36	26	19	11	51	5,6	20000	2120	8,5	23,0	,50	15,5	1,0
36	9/ 7	3789	12,25	1,65	53	70	45	35	25	20	9	42	5,4	20000	1780	9,0	23,5	,50	15,5	1,0
37	10/ 7	3844	12,25	1,65	50	65	40	33	25	15	4	36	5,4	20000	1640	8,8	24,0	,50	15,0	1,0
38	11/ 7	3850	12,25	1,65	64	72	45	36	27	18	8	52	5,6	21000	1780	8,5	25,0	1,00	18,0	1,0

DRILLING MUD PROPERTIES RECORD

AREA: HALTENBANKEN

MUD SYSTEM: GYP/POLYMER

RIG: WEST DELTA

SHEET 2 OF 3

DAY DATE	DEPTH HOLE	M.W.	F.V.	600	300	A.V	P.V	Y.P	GEL	GEL	API	Chl.	CaCl2	pH	%Sol.	%Sand	CEC	Ex.Gypsum	
No. 1986	metre	SIZE	S.g	s/qt		cps	cps		0	10	ml.	mg/l	mg/l				ppb	ppb	
	(M)																		
39 12/ 7	3853	12,25	1,65	55	62	39	31	23	16	7	46	5,8	21000	1840	8,5	24,0	,75	18,0	1,0
40 13/ 7	3866	12,25	1,65	58	65	41	33	24	17	6	46	6,7	21000	1800	8,6	23,0	,75	17,0	,8
41 14/ 7	3878	12,25	1,67	48	63	38	32	25	13	2	32	6,4	21000	1680	8,5	24,0	,50	16,0	,5
42 15/ 7	3877	12,25	1,67	50	62	42	31	20	22	2	32	6,5	21000	1440	8,8	23,0	,75	16,5	,5
43 16/ 7	3877	12,25	1,67	53	57	34	29	23	11	2	28	6,5	21000	1440	8,5	23,0	,75	16,5	,5
44 17/ 7	3877	12,25	1,67	48	55	33	28	22	11	2	28	6,7	21000	1400	8,9	23,0	,50	16,0	,5
45 18/ 7	3877	12,25	1,67	53	52	31	26	21	10	2	29	6,2	21000	1360	8,8	24,0	,50	15,0	,4
46 19/ 7	3877	12,25	1,67	58	55	34	28	21	13	2	28	6,1	21000	1440	8,5	23,0	,50	15,0	,3
47 20/ 7	3878	8,50	1,15	46	29	17	15	12	5	0	10	6,0	4500	320	9,0	4,0		12,5	
48 21/ 7	3905	8,50	1,15	48	35	20	18	15	5	0	1	6,4	4000	260	9,4	6,0	,25	20,0	
49 22/ 7	3964	8,50	1,15	65	57	31	29	26	5	0	2	6,9	4000	240	9,7	7,0	,25	20,0	
50 23/ 7	3983	8,50	1,15	73	62	35	31	27	8	0	1	6,8	4000	200	9,8	7,0	,25	22,0	
51 24/ 7	4003	8,50	1,15	79	78	44	39	34	10	0	4	6,9	4000	180	10,3	7,0	,25	24,0	
52 25/ 7	4039	8,50	1,15	84	80	46	40	34	12	0	2	6,4	4000	140	9,9	7,0	,50	25,0	
53 26/ 7	4230	8,50	1,15	85	84	47	42	37	10	1	3	6,2	4000	140	10,2	6,0	,50	22,0	
54 27/ 7	4258	8,50	1,15	83	75	42	38	33	9	1	2	6,5	3500	80	9,8	7,0	,50	26,0	
55 28/ 7	4297	8,50	1,15	83	75	42	38	33	9	1	2	6,5	3500	80	9,8	7,0	,50	26,0	
56 29/ 7	4335	8,50	1,15	82	90	50	45	40	10	1	2	6,5	3500	90	9,5	7,0	,50	25,0	
57 30/ 7	4335	8,50	1,15	84	84	46	42	38	8	1	2	6,2	3500	80	8,9	7,0	,50	25,0	
58 31/ 7	4335	8,50	1,15	100	108	60	54	48	12	1	6	5,6	3500	130	9,5	7,0	,50	25,0	
59 1/ 8	4335	8,50	1,15	85	76	43	38	33	10	1	3	6,4	4000	190	9,2	7,0	,50	24,0	
60 2/ 8	4335	8,50	1,15	85	76	43	38	33	10	1	3	6,4	3800	200	9,1	7,0	,50	24,0	
61 3/ 8	4335	8,50	1,15	90	85	47	43	38	9	0	2	5,9	4200	210	8,9	7,0	,50	23,0	
62 4/ 8	4335	8,50	1,15	95	78	43	39	35	8	1	9	6,5	4000	240	9,7	7,0	,50	24,0	
63 5/ 8	4335	8,50	1,15	105	72	39	36	33	6	1	4	6,9	4000	200	9,0	7,0	,50	23,0	
64 6/ 8	4335	8,50	1,15	400	101	66	51	35	31	31	47	9,6	4200	240	13,0	7,0	,50	21,0	
65 7/ 8	4335	6,00	1,15	120	90	55	45	35	20	1	44	9,5	4100	200	12,0	7,0	,50	21,0	
66 8/ 8	4288	7"LIN	1,15	110	125	75	63	50	25	14	52	9,5	4100	200	12,0	7,0	,50	19,0	
67 9/ 8	4288	7"LIN	1,15	59	48	24	24	24	0	0	4	9,0	4100	200	11,5	7,0	,25	19,0	
68 10/ 8	4288	7"LIN	1,15	57	50	27	25	23	4	0	4	9,2	4100	200	11,5	7,0	,25	19,0	
69 11/ 8	4288	7"LIN	1,15	58	39	22	20	17	5	1	4	9,0	3500	220	11,9	7,0	,50	19,0	
70 12/ 8	4288	7"LIN	1,15	57	39	22	20	17	5	1	4	8,8	3500	200	11,9	7,0	,50	19,0	
71 13/ 8	4288	7"LIN	1,15	59	44	25	22	19	6	1	4	8,5	3100	220	11,7	7,0	,50	19,0	
72 14/ 8	4288	7"LIN	1,15	53	34	20	17	14	6	1	4	8,2	3000	200	11,7	7,0	,25	18,5	

