

Flow Data Summary, 6406/3-2, DST No. 1

Perforated interval: 4302 - 4336 m RKB, Aldra Formation

<u>Description</u>		<u>First Flow</u>
Production time		438 min
Total influx		4.5 sm ³
Fluid		water
Well head pressure		177 kpa
B.H. flowing pressure	1)	38100 kpa
Bottom hole temperature	2)	145.8 deg C
Build-up time		751 min
B.H. build-up pressure	1)	50100 kpa

1) Last recorded flowing/buildup pressure at 4192 m RKB

2) Last recorded temperature reading at 4192 m RKB

NB! Water produced into string was reversed circulated out.

DST No. 1, Formation Water Properties:

Density : 1.060 g/cc
Chloride, Cl- : 51000 mg/l
PH at 20 deg C : 6.0

LETK87202135R

Flow Data Summary, 6406/3-2, DST No. 2

Perforated interval: 3937 - 3995 m RKB, Tomma I Formation

<u>Description</u>	<u>Clean-up Flow</u>	<u>Main Flow</u>	<u>High Rate Flow</u>
Production time	1288 min	695 min	627 min
Flow rate	550 sm ³ /D	327 sm ³ /D	645 sm ³ /D
Fluid	oil	oil	oil
Well head pressure	4130 kpa	8550 kpa	2130 kpa
B.H.flowing pressure 1)	24100 kpa	30200 kpa	24600 kpa
Bottom hole temp. 2)	145 deg C	144 deg C	145 deg C
Build-up time	1455 min	1100 min	673 min
B.H.build-up pressure 1)	40000 kpa	40000 kpa	39600 kpa

1) Last recorded flowing/build-up pressure at 3785.4 m RKB

2) Last recorded temperature reading at 3785.4 m RKB

DST No. 2, Formation Oil/Gas Properties:

Density Oil : 825 - 830 kg/m³
GOR : 166 - 202 sm³/sm³ (increased during the test)
Spes.Density Gas: 0.79-0.85 (increased during the test)

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DST SUMMARY 6406/3-2

TEST NO	FORMATION	PERF. INT. MRKB	FLOW PERIOD	DURATION MIN	CHOKE MM	OIL RATE SM ³ /D	GAS RATE SM ³ /D	GOR SM ³ /SM ³	WATER RATE TOT. SM ³	OIL DENSITY KG/M ³	GAS REL. AIR	WELL HEAD PRESS. KPA	WELL HEAD TEMP. °C	BOTTOM HOLE PRESS. KPA	RESERVOIR PRESSURE KPA ****	
1	ALDRA	4302- 4336	1	438	12.7	0	0	-	4.5	-	-	177	9.7	*** 37500	50500	
2	UPPER TOMMA	3937 3995	1	* 95	VARIABLE	-	-	-	-	-	-	-	-	-	-	
				* 603	38.1	-	-	-	-	-	-	-	-	-	-	-
				590	22.225	550	91500	166	-	825	0.790	4130	50	*** 24000	40300	
			2	695	11.11	327	59000	180	-	830	0.814	8550	25	** 30150	40300	
			3	628	OPEN CHOKE MANIFOLD	645	130000	202	-	828	0.855	2130	53	** 24500	40300	

*) CLEAN UP FLOW

***) PRESS. DATA FROM MUST

****) PRESS. DATA FROM LASALLE GAUGES IN GAUGE CARRIER

*****) RESERVOIR PRESSURE FROM TESTANALYSIS

NB! WATER DATA FROM TEST NO 1: DENSITY: 1060 KG/M³, CHLORIDES: 51000 MG/L, PH: 6.0



total materials 6406/3-2

TOTAL MUD MATERIALS				
Well: 6406/3-2		Operator: Statoil		
Quantity:	Material:	Units:	Unit Price:	Total Cost:
2495	Barite	ton	\$100.30	\$250,248.50
121	Bentonite	ton	\$310.30	\$37,546.30
103	Bicarbonate	50 kg	\$23.91	\$2,462.73
170	Chemtrol-X	25 kg	\$91.26	\$15,514.20
130	Desco	25 lbs	\$36.85	\$4,790.50
5	Detergent	200 l	\$327.25	\$1,636.25
272	Drispac Reg	50 lbs	\$97.35	\$26,479.20
451	Drispac SL	50 lbs	\$97.35	\$43,904.85
1016	Gypsum	40 kg	\$10.70	\$10,871.20
515	Ligcon	25 kg	\$20.85	\$10,737.75
46	Lime	20 kg	\$20.50	\$943.00
13	Lubrisal	200 l	\$812.70	\$10,565.10
56	Milgard	25 kg	\$96.91	\$5,426.96
189	Milpolymer 302	25 kg	\$200.00	\$37,800.00
576	NaOH	25 kg	\$15.00	\$8,640.00
49	Nutplug	25 kg	\$19.35	\$948.15
13	Probio	200 l	\$675.00	\$8,775.00
84	Prodefoamer	25 l	\$108.00	\$9,072.00
1123	Prothin	25 kg	\$13.90	\$15,609.70
46	Soda Ash	50 kg	\$20.50	\$943.00
8	W.O. 21	25 kg	\$245.90	\$1,967.20
Total Cost:				\$504,881.59
Depth at TD [m] 4553		Average Cost pr Meter:		\$122.63



CASING INTERVAL

Well: 6406/3-2 Operator: Statoil
Casing: 30" From/to: 322.0 m 432.0 m
Bit: 36" From/to: 322.0 m 436.0 m

Quantity:	Material:	Units:	Unit Price:	Total Cost:
71	Barite	ton	\$100.30	\$7,121.30
32	Bentonite	ton	\$310.30	\$9,929.60
21	NaOH	25 kg	\$15.00	\$315.00
12	Nutplug	25 kg	\$19.35	\$232.20
24	Soda Ash	50 kg	\$20.50	\$492.00

Total Cost for Interval: \$18,090.10

Average Cost pr Meter \$158.69

Drilling days: 3 Average Cost pr Day \$6,030.03



CASING INTERVAL

Well: 6406/3-2 Operator: Statoil
Casing: 20" From/to: 322.0 m 951.0 m
Bit: 26" From/to: 432.0 m 965.0 m

Quantity:	Material:	Units:	Unit Price:	Total Cost:
167	Barite	ton	\$100.30	\$16,750.10
45	Bentonite	ton	\$310.30	\$13,963.50
20	Lime	20 kg	\$20.50	\$410.00
66	NaOH	25 kg	\$15.00	\$990.00
5	Prothin	25 kg	\$13.90	\$69.50
14	Soda Ash	50 kg	\$20.50	\$287.00

Total Cost for Interval: \$32,470.10

Average Cost pr Meter \$60.92

Drilling days: 8 Average Cost pr Day \$4,058.76



CASING INTERVAL

Well: 6406/3-2 Operator: Statoil
Casing: 13 3/8" From/to: 322.0 m 2283.0 m
Bit: 17 1/2" From/to: 950.0 m 2301.0 m

Quantity:	Material:	Units:	Unit Price:	Total Cost:
496	Barite	ton	\$100.30	\$49,748.80
1	Bentonite	ton	\$310.30	\$310.30
12	Bicarbonate	50 kg	\$23.91	\$286.92
176	Drispac Reg	50 lbs	\$97.35	\$17,133.60
193	Drispac SL	50 lbs	\$97.35	\$18,788.55
717	Gypsum	40 kg	\$10.70	\$7,671.90
25	Lime	20 kg	\$20.50	\$512.50
52	Milgard	25 kg	\$96.91	\$5,039.32
189	Milpolymer 302	25 kg	\$200.00	\$37,800.00
73	NaOH	25 kg	\$15.00	\$1,095.00
11	Probio	200 l	\$675.00	\$7,425.00
14	Prodefoamer	25 l	\$108.00	\$1,512.00
115	Prothin	25 kg	\$13.90	\$1,598.50

Total Cost for Interval: \$148,922.39

Average Cost pr Meter \$110.23

Drilling days: 13 Average Cost pr Day \$11,455.57



CASING INTERVAL

Well: 6406/3-2 Operator: Statoil
Casing: 9 5/8" From/to: 322.0 m 3913.0 m
Bit: 12 1/4" From/to: 2283.0 m 3930.0 m

Quantity:	Material:	Units:	Unit Price:	Total Cost:
1154	Barite	ton	\$100.30	\$115,746.20
5	Bentonite	ton	\$310.30	\$1,551.50
31	Bicarbonate	50 kg	\$23.91	\$741.21
130	Chemtrol-X	25 kg	\$91.26	\$11,863.80
120	Desco	25 lbs	\$36.85	\$4,422.00
5	Detergent	200 l	\$327.75	\$1,638.75
10	Drispac Reg	50 lbs	\$97.35	\$973.50
88	Drispac SL	50 lbs	\$97.35	\$8,566.80
299	Gypsum	40 kg	\$10.70	\$3,199.30
370	Ligcon	25 kg	\$20.85	\$7,714.50
318	NaOH	25 kg	\$15.00	\$4,770.00
26	Nutplug	25 kg	\$19.35	\$503.10
2	Probio	200 l	\$675.00	\$1,350.00
47	Prodefoamer	25 l	\$108.00	\$5,076.00
756	Prothin	25 kg	\$13.90	\$10,508.40
Total Cost for Interval:				\$178,625.06
Average Cost pr Meter				\$108.45
Drilling days: 36	Average Cost pr Day			\$4,961.81



CASING INTERVAL

Well: 6406/3-2 Operator: Statoil
Casing: 7" From/to: 322.0 m 4377.0 m
Bit: 8 1/2" From/to: 3919.0 m 4380.0 m

Quantity:	Material:	Units:	Unit Price:	Total Cost:
42	Barite	ton	\$100.30	\$4,212.60
26	Bentonite	ton	\$310.30	\$8,067.80
8	Bicarbonate	50 kg	\$23.91	\$191.28
20	Chemtrol-X	25 kg	\$91.26	\$1,825.20
10	Desco	25 lbs	\$36.85	\$368.50
47	Drispac Reg	50 lbs	\$97.35	\$4,575.45
95	Drispac SL	50 lbs	\$97.35	\$9,248.25
125	Ligcon	25 kg	\$20.85	\$2,606.25
13	Lubrisal	200 l	\$812.70	\$10,565.10
4	Milgard	25 kg	\$96.91	\$387.64
85	NaOH	25 kg	\$15.00	\$1,275.00
16	Prodefoamer	25 l	\$108.00	\$1,728.00
136	Prothin	25 kg	\$13.90	\$1,890.40

Total Cost for Interval: \$46,941.47

Average Cost pr Meter \$101.83

Drilling days: 29 Average Cost pr Day \$1,618.67



CASING INTERVAL

Well: 6406/3-2 Operator: Statoil
Casing: From/to:
Bit: 6" From/to: 4377.0 m 4553.0 m

Quantity:	Material:	Units:	Unit Price:	Total Cost:
565	Barite	ton	\$100.30	\$56,669.50
12	Bentonite	ton	\$310.30	\$3,723.60
52	Bicarbonate	50 kg	\$23.91	\$1,243.32
20	Chemtrol-X	25 kg	\$91.26	\$1,825.20
39	Drispac Reg	50 lbs	\$97.35	\$3,796.65
75	Drispac SL	50 lbs	\$97.35	\$7,301.25
20	Ligcon	25 kg	\$20.85	\$417.00
1	Lime	20 kg	\$20.50	\$20.50
13	NaOH	25 kg	\$15.00	\$195.00
11	Nutplug	25 kg	\$19.35	\$212.85
7	Prodefoamer	25 l	\$108.00	\$756.00
111	Prothin	25 kg	\$13.90	\$1,542.90
8	Soda Ash	50 kg	\$20.50	\$164.00
8	W.O. 21	25 kg	\$245.90	\$1,967.20
Total Cost for Interval:				\$79,834.97
Average Cost pr Meter				\$453.61
Drilling days: 58	Average Cost pr Day			\$1,376.47