

OPERATOR A/S NORSKE SHELL

WELL NO. 31/2-6

MATERIAL CONSUMPTION & COST ANALYSIS

36" HOLE DRILLED TO 462 Meters
~~feet~~ 30" CASING SET AT 448 Meters
~~feet~~
 ACTUAL AMOUNT OF HOLE DRILLED 94 Meters
~~feet~~ DAYS ON INTERVAL 5
 DRILLING FLUID SYSTEM PRE-HYDRATED BENTONITE SPUD MUD

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	COST
BENTONITE	M/T	17	15	- 2	US\$ 4.920,-
BENTONITE	50 kg		20	+ 20	" 324,-
CAUSTIC	25 kg	20	10	- 10	" 190,-
SODA ASH	50 kg	3	10	+ 7	" 185,00
LIME	40 kg	6	6		" 30,-
BARITE	50 kg		150	+ 150	" 945,-

COST/DAY US\$ 1.318,80 TOTAL COST FOR INTERVAL US\$ 6.594,-
 COST/Mt. on ~~ft.~~ US\$ 70,14 PROG. COST FOR INTERVAL US\$ 6.041,50
 ENGR. COST US\$ 2.475,- COST VARIANCE FOR INTERVAL US\$+ 552,50

OPERATOR A/S NORSKE SHELL

WELL NO. 31/2-6

MATERIAL CONSUMPTION & COST ANALYSIS

26" HOLE DRILLED TO 820 ^{Meters}~~feet~~ 20" CASING SET AT 800 ^{Meters}~~feet~~

ACTUAL AMOUNT OF HOLE DRILLED 358 ^{Meters}~~feet~~ DAYS ON INTERVAL 12

DRILLING FLUID SYSTEM GEL/SEAWATER

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	COST
BARITE	M/T		321	+ 321	US\$ 43.014 -
BENTONITE	M/T	27	66	+ 29	" 21.648 -
DRISPAC REG	50 lbs		79	+ 79	" 13.374 70
XC-POLYMER	50 ls		33	+ 33	" 10.956 -
CAUSTIC	25 kg	45	61	+ 16	" 1.159 -
SODA ASH	50 kg	8	20	+ 12	" 370 -
SAPP	25 kg		1	+ 1	" 105 -
LIGNOSULPHONATE	25 kg		3	+ 3	" 51 60
LF-5	25 kg	44		- 44	
NUT PLUG	25 kg		17	+ 17	" 290 70
MICA F	25 kg		17	+ 17	" 290 70

COST/DAY US\$ 7.604,98 TOTAL COST FOR INTERVAL US\$ 91.259,70

COST/Mt. ~~xxx~~ US\$ 254,92 PROG. COST FOR INTERVAL US\$ 11.971,-

ENGR. COST US\$ 5.940,- COST VARIANCE FOR INTERVAL US\$ +79.288,70

OPERATOR A/S NORSKE SHELL

WELL NO. 31/2-6

MATERIAL CONSUMPTION & COST ANALYSIS

17 1/2" HOLE DRILLED TO 1485 Meters Feet XXX CASING SET AT 1475 Meters Feet XX
 ACTUAL AMOUNT OF HOLE DRILLED 665 Meters Feet DAYS ON INTERVAL 8

DRILLING FLUID SYSTEM KCl/POLYMER

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	COST
BARITE	M/T	205	205	-	US\$ 27.470,-
BENTONITE	50 kg		1	+ 1	" 16,20
KCl	bb1		920	+ 920	" 14.803,63
KCl	50 kg	954	570	- 384	" 10.203,-
DRISPAC R	50 lbs	90	95	+ 5	" 16.083,-
LF-5	25 kg	164	184	+ 20	" 8.832,-
CMC Lo-Vis	25 kg	81	92	+ 11	" 5.428,-
CAUSTIC	25 kg	109	114	+ 5	" 2.166,-
SODA ASH	50 kg	10	43	+ 33	" 795,50
ANCOPOL	50 lbs	85	74	- 11	" 9.768,-
DRILLING DETERGENT	200 ltr	15	4	- 11	" 1.400,-
MICA F	25 kg		90	+ 90	" 1.539,-
MICA C	25 kg		40	+ 40	" 684,-
NUT PLUG	25 kg		13	+ 13	" 222,30
ALUMINUM STEARATE	25 kg		1		" 80,-

COST/DAY US\$ 12.436,91 TOTAL COST FOR INTERVAL US\$ 99.491,13
 COST/Mt. XXX US\$ 149,61 PROG. COST FOR INTERVAL US\$ 91.160,-
 ENGR. COST US\$ 3.960,- COST VARIANCE FOR INTERVAL US\$ + 8.331,13

OPERATOR A/S NORSKE SHELL

WELL NO. 31/2-6

MATERIAL CONSUMPTION & COST ANALYSIS

12 1/4" HOLE DRILLED TO 1760 ^{Meters} ~~Feet~~ 9 5/8" CASING SET AT 1752 ^{Meters} ~~Feet~~

ACTUAL AMOUNT OF HOLE DRILLED 275 ^{Meters} ~~Feet~~ DAYS ON INTERVAL 23

DRILLING FLUID SYSTEM KCl/POLYMER

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	COST
BARITE	M/T	112	67	- 45	US\$ 8.978,-
BENTONITE	M/T	13.5	9	- 4.5	" 2.952,-
DRISPAC R	50 lbs	60	73	+ 13	" 12.358,90
LF-5	25 kg	50	39	- 8	" 1.872,-
XC-POLYMER	50 lbs	15	34	+ 19	" 11.288,-
CAUSTIC	25 kg	80	39	- 41	" 741,-
SODA ASH	50 kg	4	27	+ 18	" 407,-
CMC LV	25 kg	25		- 25	-
DRILLING DETERGENT	200 ltr	10		- 10	-
SPERCELL C	25 kg	200		- 200	-
BICARBONATE	50 kg		5	+ 5	" 96,25

COST/DAY US\$ 1.682,31 TOTAL COST FOR INTERVAL US\$ 38.693,15

COST/Mt. or ~~kg~~ US\$ 140,70 PROG. COST FOR INTERVAL US\$ 47.334,-

ENGR. COST US\$ 11.385,- COST VARIANCE FOR INTERVAL US\$ - 8.640,85

OPERATOR A/S NORSKE SHELL

WELL NO. 31/2-6

TOTAL CONSUMPTION & COST ANALYSIS

TOTAL DEPTH 1760 Meters
 TOTAL HOLE DRILLED 1392 Meters
 TOTAL DAYS 48

MATERIAL	UNIT SIZE	PROG.	USED	VARIANCE ±	COST
BARITE BULK	M/T	317	593	+ 276	US\$ 79.462 -
BARITE SXS	50 kg	0	150	+ 150	" 945 -
BENTONITE	M/T	57,5	90	+ 32,5	" 29.520 -
BENTONITE	50 kg	0	21	+ 21	" 340 20
CAUSTIC	25 kg	254	224	- 30	" 4.256 -
SODA ASH	50 kg	25	95	+ 53	" 1.757 50
LIME	40 kg	6	6	-	" 30 -
DRISPAC R	50 lbs	150	247	+ 97	" 41.817 10
XC POLYMER	50 lbs	15	67	+ 50	" 22.244 -
SAPP	25 kg	-	1	+ 1	" 105 -
LIGNOSULFONATE	25 kg	200	3	- 197	" 51 60
LF 5	25 kg	258	223	66	" 10.704 -
NUT PLUG	25 kg	-	30	+ 13	" 513,70
MICA F/C	25 kg		107/40	+ 107/40	" 2.513,70
KCl	Bbls		920	+ 920	" 14.803,63
KCl	50 kg	954	570	- 384	" 10.203,-
CMC Lovis	25 kg	81	92	+ 11	" 5.428,-
ANCOPOL	50 lbs	85	74	- 11	" 9.768,-
DRILLING DETERGENT	200 ltr	15	4	- 11	" 1.400,-
ALUMINUM STEARATE			1	+ 1	" 80,-
BICARBONATE	50 kg		5	+ 5	" 96,25

COST/DAY US\$ 4.917,46 TOTAL COST FOR INTERVAL US\$ 236.037,98
 COST/Mt. US\$ 169,57 PROG. COST FOR INTERVAL US\$ 156.506,50
 ENGR. COST US\$ 23.760,- COST VARIANCE FOR INTERVAL US\$ + 79.531,48

8. Production Test

8.1 Wireline Formation Tests

Objectives

Prior to the production tests, a run was made with the Schlumberger Repeat Formation Tester (RFT). The objectives were as follows:

- Confirm formation fluid pressures and gradients obtained from RFT's in previous wells in block 31/2.
- Confirm fluid contacts as obtained from electric logs.
- Obtain preliminary fluid samples.

8.1.2 Summary and Results

A total of 12 good pressure readings were obtained. These indicate gas and water gradients of 0.050 and 0.435 psi/ft respectively which are in reasonable agreement with RFT results from previous 31/2 wells (See Fig. I/8.1). The data were insufficient to accurately define fluid contacts and the oil gradient. However, a line between the gas gradient point at the GOC and the water gradient point at OWC indicates an oil gradient of 0.38 psi/ft which is only slightly different from the expected value of some 0.35 psi/ft. (The GOC = 1571.4 m BDF and the OWC = 1582.2 m BDF are as indicated by electric logs).

The reservoir gradient pressure at GOC, as defined by the gas line, is some 2775 psig as compared to a value of 2280 psig estimated from pressure buildups in previous wells.

On the way out of the hole an RFT gas sample was taken at 1518 m BDF. This sample was intended as a backup until samples could be obtained from the subsequent production test. No sample was attempted in the oil zone because of the badly washed out hole.

8.2 Oil Zone Production Test

8.2.1 Objectives

The production test was carried out over the perforated interval 1576 - 1579 m with the following objectives:

- To evaluate well inflow and coning performance.
- To evaluate gravel pack performance.
- To obtain representative fluid samples for PVT analyses.

8.2.2 Testing History

A bridge plug was set at 1584 m and the well was displaced to 3 micron filtered 1.15 SG CaCl_2 brine. A 30 bbl HEC viscosified pill was spotted at the bottom of the well to control fluid losses to the formation. The oil zone test interval was perforated with 5 inch "Hyperpack" casing guns with extended ports, 90 degrees phasing and 4 spf. 3 runs were carried out to give a total perforation density of 12 spf.

The interval was backsurgured with a 5.6 bbl chamber. Oil and sand were reversed out and a total of 1 m fill was tagged. Subsequent losses (15 bbl) to the formation were cured by spotting a 20 bbl HEC viscosified brine pill across the perforations.

The 5-1/2" wire wrapped GP assembly was run and landed on the bridge plug at 1584 m and the SC-1 packer was set at 1551 m. In order to reduce impairment caused by completion fluids a pre gravel pack acidization was carried out as follows:

- 13 bbls of 15% HCl containing 10% U66 (mutual solvent) and 1% A-200 (inhibitor)
- 26 bbls of 7.5% HCl containing 1.5% HF

- 10 bbls of 3.0% NH₄Cl
- 26 bbls of HBF₄
- 10 bbls of 3.0% NH₄Cl

The gravel pack was then carried out as follows:

- 15 bbls "water pack" pre-pad (9.6 ppg)
- 17 bbls "water pack" slurry with 7 lbs/gallon fluid of Baker "Low Fines", 12-20 mesh gravel (12.15 ppg)
- 5 bbls "water pack" after pad (9.6 ppg)

The gravel pack was squeezed to 1050 psi and approximately 10 bbls of gravel pack slurry were reversed out prior to pulling the gravel pack wash pipe assembly.

The 5" production test string was run with 3 m of seals in the SC-1 packer seal bore and satisfactorily pressure tested to 3000 psi. A post gravel pack acidization was carried out with:

- 5 bbls diesel containing 10% U66
- 35 bbls 15% HCl containing 10% U66 and 1% A-200

These fluids were overdisplaced with 20 bbls diesel prior to opening the well to flow. The well died four times whilst attempting to initiate natural flow. In each case contents were reverse circulated out and the string displaced to diesel prior to opening. During the last half of the 23 hrs clean up period FTHP and GOR rose rapidly to some 110 psig and 1300 scf/bbl, respectively. Subsequently the well was closed in and one Sperry Sun, one Amerada and one Flopetrol (SSDR) pressure gauge were run and the well was opened for the main flow period. The well performance data for the full duration of the test are plotted in Enclosure 9. Two bottom hole PVT samples were collected while the well flowed at a low rate through a 8/64 inch choke.

Flow periods can be summarised as follows:

<u>Choke</u> <u>64th inch</u>	<u>FTHP</u> <u>psig</u>	<u>Oil</u> <u>bb1/day</u>	<u>GOR</u> <u>scf/bb1</u>	<u>Period</u> <u>hrs</u>
8	ca 570*	ca 150*	ca 300*	21
16	640	575	300-350	32
8+16	640-700	700-795	300-350	17
8+16	700-1070	800	350-900	28
8+16	1070-1180	800	900-1025	37

(*flow unstable)

At this stage the test had to be terminated, due to deteriorating weather conditions, and the well was killed with viscous brine. Several attempts were made before the pressure gauges were retrieved due to wax deposition in the production tubing.

After 54 hrs the well was again opened for clean up and this time without difficulty. The well flowed for 18 hrs prior to running pressure gauges which were lost on the lubricator valve. The gauges were retrieved and the well flowed on 16/64 inch choke while preparing new gauges. Subsequently the well was closed in again, the pressure gauges rerun and the well flowed as follows:

<u>Choke</u> <u>64ths inch</u>	<u>FTHP</u> <u>psig</u>	<u>Oil</u> <u>bb1/day</u>	<u>GOR</u> <u>scf/bb1</u>	<u>Period</u> <u>hrs</u>
8+16	500-540	600	300-350	28
20	540-1215	950-820	350-1500	33
8+16	1215-1100	600	1500-1100	17
16	1100-975	550	1100-750	8

The well was closed in for a two hours build up period to retrieve the pressure gauges and kill the well with viscosified brine.

A sand bailer was run to HUD of 1580 m and a small volume of sand was retrieved. No sand production was observed during the test.

The EZ-tree and production tubing were pulled and the oil zone was squeeze cemented off through a cement retainer at 1540 m.

8.3 Gas Zone Production Test

8.3.1 Objectives

The objectives of the test which was carried out over the perforated interval 1518-1536 m were:

- To assess well inflow performance of a long gravel pack completion.
- To obtain gas samples and accurate well stream composition using the Thornton minilab.

8.3.2 Testing History

Following the squeeze cementation of the oilzone, the well was circulated to 3 micron filtered CaCl_2 brine and a 25 bbl, 1.15 SG, HEC viscosified brine pill was spotted on bottom. The gas zone test interval was perforated with 5 inch "Hyperpack" casing guns with extended ports, 90 degrees phasing and 4 spf. No misfires were observed and 18 runs were carried out to give a total perforation density of 12 spf.

The test interval was backsurged with a 25 bbl chamber. Gas and perforation debris were reversed out, but no fill was tagged at the bottom of the well. No severe losses to the formation were observed after the backsurge.

The 5-1/2" inch wire wrapped GP assembly was run and the SC-1 packer was set at 1489 m. In order to reduce impairment caused by completion fluids a pre gravel pack acidization was carried out as follows:

- 80 bbl of 15% HCl containing 10% U66 (mutual solvent), 1% A-200 (inhibitor) and 504 lb L-41 (sequestering agent).

- 270 bbl of 7.5% HCl containing 1.5% HF
- 20 bbl of 3% NH₄Cl

These acids were displaced with brine prior to pumping the gravel as follows:

- 15 bbl "water pack" pre-pad
- 24 bbl "water pack" slurry with 7800 lb of Baker "Low Fines" 12-20 mesh gravel
- 5 bbl "water pack" after pad

The gravel was squeezed to 1050 psi and approximately 5 bbl of gravel pack slurry were reversed out. Losses to the formation were observed after the gravel packing and a 20 bbl viscous brine pill containing 10 ppb CaCO₃ powder was spotted on bottom prior to pulling the gravel pack setting assembly.

The 5" production test string was run into the SC-1 packer seal bore and satisfactorily pressure tested prior to the post gravel pack acidization which was carried out with:

- 5 bbl diesel containing 10% U66
- 30 bbl 15% HCl containing 10% U66, 1% A-200 and 189 lb L-41.

These fluids were overdisplaced with 20 bbl diesel and the well was opened up for a 35 hours clean-up period. The choke size was slowly increased to unload the well. After about 4-3/4 hours the choke was opened to 64/64 inch. The well was choked back to 44/64 inch and subsequently 42/64 inch chokes for Thornton sampling prior to gradually increasing the choke size to 4 x 2 inch. A maximum gas rate of 57.4 MM scf/day was measured at the end of the clean-up period. The test sequence is given in Figure I/8.2.

One Sperry Sun, one Amerada and one Flopetrol (SSDR) pressure gauge were run and the well was flowed for the main flow period as follows:

<u>Choke</u> <u>64ths inch</u>	<u>FTHP</u> <u>psig</u>	<u>Gas Rate</u> <u>MM scf/day</u>	<u>CGR</u> <u>bb1/MM scf</u>	<u>Period</u> <u>hrs</u>
32	1945	12.4		3
48	1783	22.1	1.9 - 4.9	9*
80	1403	43.1	1.4 - 4.9	2
4x2"	699	60.0	4.2 - 5.0	2.5

*Thornton sampling and hydrate problems in Thornton mainfold.

A 2 hours shut in period gave a final tubing head shut in pressure of 2010 psig. The pressure gauges were retrieved and a sand bailer was run indicating no sand production. The well was subsequently killed and the test string retrieved.

31/2-6 OIL TEST

<u>Date</u>	<u>Time</u>	<u>Rate</u> <u>STB/D</u>	<u>Pwf</u> <u>psia</u>	<u>PI</u> <u>B/D/psi</u>	<u>Sep. GOR</u> <u>SCF/STB</u>
15/9	1700-1900	112	2270	7.47	N.A.
16/9	1000-1100	563	2225	9.38	359
17/9	0600-0800	592	2226	10.03	329
17/9	2100-2300	748	2212	10.25	314
18/9	1200-1300	820	2209	10.79	439
19/9	0700-0800	790	2209	10.39	859
20/9	2200-2300	773	2209	10.17	1041
Well killed and reopened.					
24/9	0900-1000	550	2014	1.95	333
25/9	0600-0700	420	2044	1.67	349
25/9	1200-1300	959	1989	3.12	446
26/9	1200-1300	838	2011	2.94	1459
27/9	1700-1800	577	2111	3.01	780

Static Pressure:

15/9-20/9 $\bar{p} = 2285$ psia at 1562 m BDF (run 1)

24/9-27/9 $\bar{p} = 2296$ psia at 1562 m BDG (run 2)

Table I/8.1

FLOPETROL

Client : Norske Shell

Section : **2**

Base : Stavanger

Field : Block 31/2

Page : 5

Well : 31/2-6

Report N°: 81/2301/28

- MAIN RESULTS -

Tested interval: Oil zone Perforations: 1576 - 1579 M

OPERATION	DURATION	BOTTOM HOLE PRESSURE	WELL HEAD PRESSURE	OIL PROD. RATE	GAS PROD. RATE	G. O. R
Units	Hr/Min	P.S.I.A	P.S.I.G	S.T.B./DAY	MM.SCF/DAY	S.C.F/BBL
<u>First main flow period:-</u>						
8/64" fixed choke	20.32	2271	569	122 (Average)	N/A	N/A
16/64" fixed choke	32.20	2222	645	578 (Average)	0.195	337 (Average)
8/64"+16/64" Fixed chokes	<u>Cumulative Time</u>					
"	24.28	2210	860	801	0.413	516
"	48.28	2211	1090	772	0.682	883
"	72.28	2211	1138	756	0.693	917
"	82.19	2210	1180	783	0.803	1026

Depth of bottom hole measurements : 1568 M Reference : R.K.B. (Borgny Dolphin)

Temperature : 147.6 °F at : 1568 M depth

Separator gas gravity (air : 1) at choke size : .625 at 8/64"; .600 at 8/64"+16/64"

STO gravity at choke size : .888 at 8/64" + 16/64"

BSW : 1% Water cut : 1%

REMARKS AND OTHER OPERATIONS

Results of 8/64" fixed choke flow are final results

Results of 16/64" fixed choke flow are final results

FLOPETROL

Client : Norske ShellSection : 2Base : StavangerField : Block 31/2Page : 6Well : 31/2-6Report N°: 81/2301/28

- MAIN RESULTS -

Tested interval: Oil zone Perforations: 1576 - 1579 m

OPERATION	DURATION	BOTTOM HOLE PRESSURE	WELL HEAD PRESSURE	OIL PROD. RATE	GAS PROD. RATE	G.O.R
Units	Hr/Min	P.S.I.A.	P.S.I.G.	S.T.B/DAY	MMSCF/DAY	SCF/BBL
<u>Second main flow period</u>						
8/64"+16/64" fixed chokes	Cumulative time					
"	12.34	2034	514	608	0.200	329
"	24.34	2044	537	591	0.209	354
"	27.24	2040	540	607	0.205	338
20/64" fixed choke	39.34	1993	1045	904	0.887	981
"	51.34	2005	1171	845	1.114	1318
"	61.05	2018	1215	823	1.235	1501
8/64"+16/64" fixed chokes	77.25	2079	1110	657	0.758	1158
16/64" fixed choke	83.25	2113	1001	567	0.458	808
P.B.U	Duration 2.00HRS	2295	1142	N/A	N/A	N/A

Depth of bottom hole measurements : 1568 m Reference : RKB (Borgny Dolphin)Temperature : 150°F at : 1568 m depthSeparator gas gravity (air : 1) at choke size : .622 at 8/64"+16/64"; .605 at 20/64"; .614 at 16/64"STO gravity at choke size : .889 at 8/64"+16/64"; .888 at 20/64" .885 at 16/64"BSW : 1.5% (Average) Water cut : 1.5% (Average)REMARKS AND OTHER OPERATIONS

FLOPETROL

Client : Norske Shell

Section :

2Base : StavangerField : "Block 31/2"Page : 3Well : 31/2-6Report No: 81/2301/33

— MAIN RESULTS —

Tested interval : "Clean sand" gas zone Perforations : 1518 - 1537 m

Operation	Duration	Bottom hole pressure	Well head pressure	Oil prod. rate	Gas prod. rate	C.G.R
Units	MINS	P.S.I.A	P.S.I.G	S.T.B/DAY	MMSCF/DAY	BBLs / MMSCF
<u>CLEAN-UP FLOW</u>						
64/64" ADJ. heater choke	982	N/A	1647	106	26.32	4.03
42/64" ADJ heater choke	447	N/A	1862	67 (average)	19.85 (average)	3.38 (average)
96/64" ADJ. heater choke	67	N/A	1183	155 (average)	45.91	3.38 (average)
84/64" ADJ heater choke	75	N/A	1360	144 (average)	41.46	3.47 (average)
2 x 96/64" fixed chokes	62	N/A	762	169	55.22	3.06
4 x 2" fixed chokes	63	N/A	661	254	56.67	4.48

Depth of bottom hole measurements : 1506.5 m Reference : R.K.B. (Borqny Dolphin)Temperature : N/A at : _____ depthSeparator gas gravity (air : 1) at choke size : .601 at 96/64" ADJ. chokeSTO gravity at choke size : .780 at 96/64" ADJ. chokeBSW : N/A Water cut : 11% at 96/64" ADJ choke

REMARKS AND OTHER OPERATIONS

Results are final results of each operation

Results of 42/64" ADJ. choke flow are affected by use of
"Thornton" sampling manifold

FLOPETROL

Client : Norske ShellSection : 2Base : StavangerField : "Block 31/2"Page : 4Well : 31/2-6Report N°: 81/2301/33

- MAIN RESULTS -

Tested interval: "Clean sand" Gas Zone Perforations: 1518 - 1537 m

OPERATION	DURATION	BOTTOM HOLE PRESSURE	WELL HEAD PRESSURE	OIL PROD. RATE	GAS PROD. RATE	C.G.R
Units	MINS	PSIA	PSIG	Condensate STB/DAY	MMSCF/DAY	BBLS / MMSCF
<u>MULTI-RATE TEST:-</u>						
32/64" fixed heater choke	215	2248	1945	30 (average)	12.37	2.44 (average)
48/64" fixed heater choke	578	2182	1795	84	21.31	3.94
80/64" fixed heater choke	127	2020	1403	169	43.10	3.92
4 x 2" fixed chokes	141	1865	699	254	60.01	4.23
P.B.U.	126	2284	2003	-	-	-

Depth of bottom hole measurements : 1506.5 m Reference : R.K.B (Borgny Dolphir)Temperature : 145° F at 48/64" : 1506.5m depthSeparator gas gravity (air : 1) at choke size : .602 at 48/64" fixed chokeSTO gravity at choke size : .781 at 48/64" fixed chokeBSW : N/A Water cut : 12% at 48/64" fixed choke

REMARKS AND OTHER OPERATIONS

Results are final results of each operation
Results of 48/64" fixed flow are affected by use
of "Thornton" sampling manifold.