

Section :
Page :
Report N° :

- WELL TESTING DATA SHEET -

Field: **WILKINSON**
Well: **31/2-3**

Base: **STAVANGER**

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				SEPARATOR				PROD. RATES AND FLUID PROPERTIES				GOR	
Time	Cumul	BOTTOM HOLE		WELL HEAD		Ig. temp	Pg. press	Cg. press	Temp	Press	OIL OR CONDENSATE		GAS		GOR
		Temp	Pressure	Ig. temp	Pg. press						Rate	Gravity	Rate	Gravity	
4-6-80									27	216	2000				
14:52			Schlumberger		per forsted										
14:53					135										
14:54					197										
14:55					230										
14:56					247										
14:57					255										
14:58					260										
14:59					263										
15:00					265										
15:01					266										
15:02					267										
15:03					268										
15:04					268										
15:05					269										

Nr.:
 UND - ARKIVET

TESTED INTERVAL :
DEPTH REFERENCE :
DEPTH OF B.H. MEASUREMENTS :

LIQUID FLOW RATE MEASURING CONDITIONS :

No. DOP 109

FLOPETROL

Base : **STAVANGER**

Client : **MARSKJE SHELL**

Field : **WILDCAT**

Well : **31/2-3**

- WELL TESTING DATA SHEET -

Section : **7**

Page : _____

Report N° : _____

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				SEPARATOR				PROD. RATES AND FLUID PROPERTIES				GOR
Time	Cumul	BOTTOM HOLE		WELL HEAD		Cg. press.	Temp.	Press.	Rate	OIL OR CONDENSATE		GAS		GOR
		Temp.	Pressure	Ig. temp.	Ig. press.					Rate	Gravity	Rate	Gravity	
4-6-80							275	2016						
14:52			Schlumberger		per forated									
14:53					135									
14:54					197									
14:55					230									
14:56					247									
14:57					255									
14:58					260									
14:59					263									
15:00					265									
15:01					266									
15:02					267									
15:03					268									
15:04					269									
15:05					279									

Nr. _____
 UND - ARKIVET

LIQUID FLOW RATE MEASURING CONDITIONS :

TESTED INTERVAL : _____
 DEPTH REFERENCE : _____
 DEPTH OF B.H. MEASUREMENTS : _____

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				PROD. RATES AND FLUID PROPERTIES				GOR			
Time	Cumul	BOTTOM HOLE		WELL HEAD		SEPARATOR		OIL OR CONDENSATE		GAS		GOR	TOTAL Production Bbls.
		Temp	Pressure	Tg temp °F	Tg press. PSIG	Cg press. PSIG	Temp.	Press.	Rate	Gravity	Rate		
5-6-80													
09:00		Changed to 1/64" Adj. Choke		57	151	200			8.66				25.49
09:15				57	136	200			60.69				26.49
09:30		Changed to 8/64" Fixed choke		58	125	200			72.24				27.24
09:45				58	126	200			72.24				27.99
10:00				58	127	200			43.34				28.44
10:15				60	127	200			46.23	Trace			28.92
10:30				60	125	200			66.46				29.62
10:45				61	125	200			37.56				30.00
11:00				62	126	200			34.67	Trace			30.37
11:15				62	126	200			40.45				30.79
11:30				63	126	200			28.80				31.09
11:45				63	125	200			57.80	Trace			31.70
12:00				63	125	210			26.00		0% CO2 0ppm-H2S		31.97
12:15				63	107	220			26.00				32.24
12:30				63	102	230			40.45				32.66
12:45				64	92	230			26.00				32.93

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°: _____

Section : **7**

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				SEPARATOR				PROD. RATES AND FLUID PROPERTIES				GOR	
Time	Cumul	BOTTOM HOLE		WELL HEAD		TEMP.		PRESS.		OIL OR CONDENSATE		GAS		Total Production	Units
		Temp	Pressure	Tg. temp	Fg. press.	Cg. press.	Temp.	Press.	Rate	Gravity	Rate	Rate	Gravity		
5/6/80															
		Flowing on 8/64" Fixed Choke													
13:00		64	87	230						17.5				33.11	
13:15		64	81	230						14.4				33.26	
13:30		64	77	240						23.1	Trace			33.50	
13:45		64	72	240						14.4				33.65	
14:00		64	69	240						14.4				33.80	
14:15		64	66	240						23.11				34.04	
14:		Total volume produced must be increased because of water in lower sight glass, by 8.1 Bbl's due to the difference in levels													
14:30		64	63	240						72.24				42.14	
14:45		64	62	240						49.1				42.89	
15:00		64	61	240						37.6				43.40	
15:15		64	60	240						23.1				43.76	
15:30		64	60	240						17.3	2%			44.00	
15:45		64	64	240						23.1				44.18	
16:00		64	65	240						28.9	2%			44.43	
16:15		64	65	240						31.8	2% solids			44.73	
16:30		64	69	240						0	2% H ₂ O			45.06	
														45.06	

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N^o:

Section : **7**

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				SEPARATOR				PROD. RATES AND FLUID PROPERTIES				GOR								
Time	Cumul	BOTTOM HOLE		WELL HEAD		TEMP.		PRESS.		OIL OR CONDENSATE		GAS		Rate Ctft/Day	Gravity 60°F	BSW	Rate Ctft/Day	Gravity Air=1	Ctft/Sbl	Total Production Bbls.	Units	
		Temp	Pressure	Tg temp °F	Tg press. PSIG	Cg. press. PSIG	Temp.	Press.	Rate Bbls/Day	Rate Ctft/Day	Rate Ctft/Day	Rate Ctft/Day	Rate Ctft/Day									
5-6-80																						
16:45				64	70	240				37.6											45.45	
17:00				64	73	240				101.1	32										46.50	
17:15				63	72	240				23.1											46.75	
17:30				63	74	240				26.0				5118				197			47.01	
17:45				63	76	240				0				5424							47.01	
18:00				63	76	240				20.2				4644				230			47.21	
18:15				62	77	240				37.6				5355				143			47.62	
18:30				62	78	240				37.4				5522				148			48.01	
18:45				62	75	240				31.7				5593				176			48.34	
19:00				62	76	240				28.9	15.8			5593	.664			193			48.64	
19:15				62	75	240				40.4				6373				158			49.06	
19:30				62	74	240				8.7				5762				662			49.15	
19:45				62	74	240				20.55				6373				311			49.36	
20:00				62	74	240				37.6				6305	.664			168			49.75	
20:15				61	72	240				23.1				5356				232			49.99	
20:30				60	74	240				28.9				5729				198			50.29	
20:45				60	71	240				34.7				5458				157			50.65	

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°: _____

Section : **7**

DATE - TIME	PRESSURE AND TEMPERATURE MEASUREMENTS			SEPARATOR			PROD. RATES AND FLUID PROPERTIES			GOR	Total Bbls.	Units		
	BOTTOM HOLE	WELL HEAD	SEPARATOR	OIL OR CONDENSATE	GAS	GOR	Rate	Gravity	Rate				Gravity	
Time	Temp °F	Pressure PSIG	Tg. temp °F	Ig. press. PSIG	Cg press. PSIG	Temp. °F	Press. PSIG	Rate Bbls/Day	*API	BSW	Rate Cu.ft/Day	Air=1	SecF/0bl	
2-6-80														
1:45	57	62	57	250	250			23.12	Very small traces of Sand		5085		220	56.19
2:00	57	62	57	250	250			28.90	240		4559	.665	158	56.49
02:15	57	60	57	250	250			60.68			5424		89	56.93
02:30	57	61	57	250	250			8.67			4746		547	57.36
02:45	57	62	57	250	250			5.78			4746		821	57.95
03:00	57	62	57	250	250			37.56	Traces of sand 517.40		5424		144	57.88
03:15	57	61	57	250	250			80.91			5085		63	57.90
03:30	57	62	57	250	250			26.01			4746		182	58.74
03:45	57	61	57	250	250			20.23			5085		251	59.22
04:00	57	61	57	250	250			78.90	240		5424		188	59.80
04:15	57	61	57	250	250			23.12			4746		205	59.84
04:30	57	57	57	250	250			31.78	Traces of Sand No. H ₂ O		4746		149	60.72
04:45	57	60	57	250	250			43.34			5085		117	60.72
05:00	57	60	57	250	250			37.56			5085		135	61.11
05:15	57	58	57	250	250			31.79			5424		171	61.44
05:30	58	56	58	250	250			20.23			4746		234.6	61.65
05:45	58	59	58	250	250			28.90			4746		164.2	61.95

(12)

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°: _____

Section : **7**

DATE - TIME	PRESSURE AND TEMPERATURE MEASUREMENTS			SEPARATOR			OIL OR CONDENSATE			GAS			GOR	Total Bbls.	Units
	Bottom Hole Temp	Pressure	Tg. Temp °F	WELL HEAD Ig. press. PSIG	Cg. press. PSIG	Temp.	Press.	Rate Bbls./Day	Gravity API	% BSW	Rate SCF/Day	Gravity Air=1			
5-6-80															
06:00			58	59	270			26.00			4746		182.5	62.22	
06:15			58	59	270			40.45	Traces of sand less than 1% H ₂ O		4746		109.3	62.64	
06:30			58	59	270			26.00			5424		208.6	62.91	
06:45			58	59	270			52.00			4745		91.3	63.5	
07:00			58	58	270			28.10			5084		220.1	63.74	
07:15			58	57	270			82.0			4745		56.6	64.61	
07:30			58	56	270			23.1			5763		—	64.61	
07:45			58	56	270			43.			4406		—	64.61	
08:00			58	55	270			—			5084	.672	—	64.61	
08:15			58	58	270			14.45			4068		282	64.73	
08:30			59	58	270			11.56			4406		381	64.85	
08:45			59	55	270			75.13			5085		67.7	65.63	
09:00			59	57	270			37.56			4068		108.3	66.02	
09:30			60	57	280			No readings while							
10:00			62	55	280			we were taking two							
10:30			58	64	300			55 gallon drum samples							
11:00			57	68	300			Rigged up wireline to pull bombs							

FLOPETROL

WELL TESTING DATA SHEET (Continuation)

Page Report N°:

Section : **7**

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				SEPARATOR				PROD. RATES AND FLUID PROPERTIES				GOR						
Time	Cumul	BOTTOM HOLE		WELL HEAD		TEMP.		PRESS.		OIL OR CONDENSATE		GAS		Rate	Gravity	Air=1	SCF/24h	SCF/24h	Units	
		Temp.	Pressure	Ig. temp	Ig. press.	Cg press.	PSIG	Temp.	Press.	Rate	BSW	Gravity	Rate							Gravity
6-6-80																				
11:30				66	54	300														
12:00				66	54	"														
12:30				66	54	"														
13:00				66	54	"														
13:15				67	55	"														
13:30				67	55	"														
14:00				67	54	"														
14:30				67	55	"														
15:00				67	56	"														
15:30				68	55	"														
16:00				68	56	310														
16:30				69	<50	320														
17:00				69	<50	320														
17:30				69	53	"														
18:00				68	48	"														
18:30				67	55	"														
19:00				66	59	300														

No reading taken due to flow into sample chambers = 2.66 bbls + level increase in tank

26.74 31.2 Trace 4447 1680 166.3 70.39

25.89 23.3 4915 1680 187.7 70.99

21.67 23.3 4915 1680 226.8 71.14

20.23 4915 243.0 71.56

46.23 4915 166.3 72.52

53.23 5254 158.1 73.21

23.81 5085 167.0 73.69

13.00 5085 391.0 73.96

24.56 25 145.0 74.20

43.34 3050 70.0 75.10

17.3 5085 294.0 75.45

21.67 2542 117.0 75.91

43.34 41106 102.0 76.81

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°: _____

Section : **7**

DATE - TIME	PRESSURE AND TEMPERATURE MEASUREMENTS			SEPARATOR			PROD. RATES AND FLUID PROPERTIES			GOR	Total Production Bbls.	Units		
	BOTTOM HOLE	WELL HEAD	SEPARATOR	OIL OR CONDENSATE	GAS	GOR								
Time	Cumul	Temp.	Pressure	Tg temp	Tg press	Cg press	Temp.	Press.	Rate	Gravity	Rate	Gravity	Rate	Gravity
		°F	PSIG	PSIG	PSIG	PSIG			Bbls./Day	% API	SCF/DAY	Air=1	SCF/DAY	Air=1
6-6-80														
19:30		66	64	300					53.46		4406		82	77.92
19:38	71:45	65	62	300	TAKE GASE SAMPLE at			gas outlet on			3898	Bottle nr		77.92
20:00									between		21:05			
21:05		64	63	300	Filled one sample drum - 1.31 bbls.				22.15		Gas not measured			79.23
22:00		63	61	"					22.47		2881		128	80.10
22:30		62	56	"					31.78		5932		167	80.76
23:00		62	48	"					17.30	240	5085	680	294	81.12
23:30		61	54	"					39.0		3051		78	81.93
24:00		60	57	"					33.2		3898		117	82.62
7-6-80					Well Flowing on 8" 64" fixed choke to surge tank									
00:35					Bottom hole sample taken at 4334				24.15	24.0	4590	10 bottles		nr. 13084/13
01:40		60	58	300					19.50		4330		158	84.64
02:00		59	70	"					46.23		6780		248	84.18
02:30		59	44	"					23.23		4068		147	86.14
03:00		59	49	"					31.79	87.5	3729	78	122	86.85
03:30		58	50	"	Bottom hole sample taken				31.79	24.1	4237	1690	117	87.44
04:00		58	50	"									133	88.15

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°:

Section : 7

DATE - TIME	PRESSURE AND TEMPERATURE MEASUREMENTS			SEPARATOR			PROD. RATES AND FLUID PROPERTIES				GOR	Total Production Bbls.		
	BOTTOM HOLE Temp.	Pressure	Well Head Tg temp	Tg press	Cg press	Temp.	Press.	OIL OR CONDENSATE Rate	Gravity	BSW %			RATE SCF/DAY	GRAVITY Air=1
7-6-80														
24:30			61	58	300			34.68			4746		137	88.87
25:00			61	58	"			31.79			4467		139	89.53
25:30								25.23			4915	.689	148	88.22
26:00								18.78			5224		280	90.61
26:30								20.23			7457		369	91.03
27:00			58	48	310			24.56			5085		207	91.54
27:30			58	52	"			32.23			3220		97	92.23
28:00			58	56	"			40.45	24.5		3729	.684	92	93.07
28:07			58	57	"			Started Filling 1.31 Bbl sample drum from Flowline						
29:10				60				29.93						
29:15								38.00						94.89
29:30			59	60	310			26.20			5085		196	95.16
0:00			60	58	330			33.22			4746	.691	143	95.85
0:30			61	53	310			7.22	24.5		4915		680	96.00
1:00			63	65	330			36.12			5254		145	96.75
1:30			67	57	330			26.01			6271		241	97.29

19

No: DOP 110

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°:

Section : 7

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS			SEPARATOR			PROD. RATES AND FLUID PROPERTIES			GOR	
Time	Cumul	BOTTOM HOLE		WELL HEAD		Temp.	Press.	OIL OR CONDENSATE		GAS		Units
		Temp	Pressure	Tg. temp	Ig. press.			Cg. press.	Temp.	Rate	Gravity	
7/6-80				OP	PSIG	PSIG		BOFP		SCFPD	Air=1	
0730				58	216							
0800			2248	58	216							
0830				59	215							
0900			2248	59	215							
0930				59	216							
1000			2248	59	216							
1030				60	216							
1100			2248	61	216							
1130				61	215							
1200				62	215							
1230				62	215							
1248			Open swab	valve								
1300				62	205							
1330				62	214							
1350			Open	well on	adj. choke							
1351				62	160							
1352				62	130							

to pull bombs
Due to difficulties in catching bombs, flowing well
slowly to clean fishing head

20

No. DOP 110

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°:

Section : 7

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				PROD. RATES AND FLUID PROPERTIES				GOR				
Time	Cumul	BOTTOM HOLE		WELL HEAD		SEPARATOR		OIL OR CONDENSATE		GAS		TOTAL	Units	
		Temp	Pressure	Tg temp	Tg press.	Cg. press.	Temp.	Press.	Rate	Gravity	Rate			Gravity
8/6-80				OF	PSIG	PSIG	PSIG	ROFIP			Sett/Day	Air=1		
1353				61	111									
1354				"	77	Change to 8 1/4" fixed choke								
1355				"	87									
1356				"	124									
1357				"	130									
1358				"	134									
1359				"	138									
1400				"	144			69.4					106.39	
1405				"	153									
1410				"	151									
1415				"	134									
1430				"	127			63.6					107.05	
1425				"	124									
1430				62	119			31.8			41068		128	107.38
1445				"	90			52.0			5085		98	107.92
1500				"	89			52.0			6440		124	108.46
1504								Banks det surface						

21

NO. DOP 110

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°: _____

Section : **7**

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS			PROD. RATES AND FLUID PROPERTIES				GOR			
Time	Cumul	BOTTOM HOLE		WELL HEAD		SEPARATOR		OIL OR CONDENSATE		GAS		TOTAL
		Temp	Pressure	Tg.temp	Tg.press	Cg.press	Temp.	Press.	Rate	Gravity	Rate	
				°F	PSIA			ROP's		Air=1		Units
1507												
1512												
1514								50			6390	130
1515												10875
1516												
1517												
1518												
1519												
1520												
1521												
1522												
1523												
1524												
1525												
1530												
1545												
1600												

Stages off
91
Shut in well
98
103
107
111
116
120
123
127
132
136
138
146
163
175

22

NO. DOP 110

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N: _____

Section : **7**

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS				PROD. RATES AND FLUID PROPERTIES				GOR					
Time	Cumul	BOTTOM HOLE		WELL HEAD		SEPARATOR		OIL OR CONDENSATE		GAS		Rate	Gravity	Air=1	Units
		Temp	Pressure	Tg temp	Ig press	Cg press	Temp	Press.	Rate	Gravity	Rate				
1615					183										
1630					189										
1645					189										
1700					189										
1725					194										
1730					204										
1800					207										
1830					208										
1831					208										
1842					208										
1843					197										
1844					199										
1846					201										
1851					202										
1856					203										
1901															
1906															

Pressure swab valve to R.H. well drifting tool (8-1 running tool)

Out of hole, close swab valve

Seals on Pressure recorder in lubricator

(1 Sperry - Sun 56hr clock)

(1 Ameralox 2hr clock)

(24)

No. D.P. 110

FLOPETROL

WELL TESTING DATA SHEET(Continuation)

Page Report N°: _____

Section : 7

DATE - TIME		PRESSURE AND TEMPERATURE MEASUREMENTS			SEPARATOR			PROD. RATES AND FLUID PROPERTIES			GOR	
Time	Cumul	BOTTOM HOLE Pressure	WELL HEAD Ig. temp	Cg. press.	Temp.	Press.	OIL OR CONDENSATE Rate	Gravity	BSW	Rate	Gravity	Units
8/10-80			OF PSIG									
2030			207									
2040			207									
2043			Pres									
2044			Pres									
2045			207									
2100			207									
2106			Pres									
2107			Pres									
2110			207									
2120			207									
2125			206									
2130			206									
2132			Pres.									
2145			Wireline									
2200			208									
2230			208									
2300			208									

Pres recorders to next stop
Pres recorders at 4777'

Pres recorders to next stop
Pres recorders at 4941'

Pres. recorders landed at 5105' P.O.C.H.
Wireline string out of hole. Close swab valve