



PRESSURE TEST DATA SUMMARY

COMPANY: ESSO EXPLORATION NORWAY

DATE: 14 DECEMBER 198

FIELD: STEIPNER

WELL NO: 15/8-1

JOB NO: MRPG-1072-AB

TEST TYPE: DRILL STEM

TEST NO: 2

RUN NO: 1

MAX B.H.T. 270

PERFORATION INTERVAL: 3911 - 3926 METRES

ZONE: BOTTOM

GAUGE TYPE/NO. 4

4

0017

PRESSURE SENSING DEPTH

3899.74 M

3902.71 M

ELEMENT SIZE

12000 PSI

12000 PSI

TIME MODE

4 MIN.

4 MIN.

BATTERY TYPE

SILVER OXIDE

SILVER OXIDE

EVENT

PACKER SET

07:16 16/12-81

259

OPEN APR-N TOOL

10:52

257

WELL OPENED ON 20/64" ADJ.CHOKE

10:55

257

CLOSE CHOKE MANIFOLD

11:00

257

CLOSE APR-N TOOL

11:01

257

OPEN APR-N TOOL

12:25

259

WELL OPENED ON 20/64" ADJ.CHOKE

12:27

259

CHANGE TO 30/64" ADJ.CHOKE

12:36

259

GAS TO SURFACE

13:02

264

CHANGE TO 40/64" ADJ.CHOKE

13:10

265

CHANGE TO 32/64" ADJ.CHOKE

13:11

265

CHANGE TO 32/64" FIXED.CHOKE

13:18

265

FLOWING TO SEPARATOR

16:00

268

CHANGE TO 42/64" FIXED.CHOKE

19:46

268

CLOSE APR-N TOOL

02:11 17/12-81

269

CLOSE CHOKE MANIFOLD

02:13

269

OPEN CHOKE MANIFOLD TO BLEED OFF

23:11

WELLHEAD PRESSURE

23:40

START BULLHEADING

261

GAUGE NO. 4 FAILED WHILE UNDER DELAY AND GAVE NO DATA. GAUGE NO.0017 DEVELOPED AN ELECTRONICS FAULT AT 04:27 ON 17/12-81 AND GAVE NO RELIABLE DATA THEREAFTER.

M.R.P.G. PRESSURES ARE RELATIVE TO GAUGE CLOCK TIMES.

S.P.G. PRESSURES ARE RELATIVE TO TIME GRADIENT CALCULATED FROM SURFACE TIMES.

ESSO EXPLORATION

SLEIPNER

15/8-1

OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

INITIAL FLOW PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M

DELTA	TIME	Gauge	PRESSURE	TIME	DATE
-0.050	10:48	8165.604	10:48	16-12-81	OPEN APR-N TOOL
0.017	10:52	6837.663	10:52		OPEN WELL ON 20/64" ADJ. CHOKE
0.083	10:56	6713.186	10:56		END OF FLOW PERIOD

SPERRY-SUN INTERNATIONAL INC. MAGNETIC RECORDING PRESSURE GAUGE REPORT

ESSD EXPLORATION

SLEIPNER

15/8-1

OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

INITIAL BUILD-UP PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M T=0.083

DELTA TIME	T + DT	LOG(-----)	T + DT	GUAGE PRESSURE	P SQUARED	TIME	DATE
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0.017	5.98	.776701184	6821.958	0.465D	8	11: 0	16-12-81
0.083	2.00	.300160537	6836.499	0.467D	8	11: 4	
0.150	1.55	.191264662	6834.754	0.467D	8	11: 8	
0.217	1.38	.140846335	6837.663	0.468D	8	11:12	
0.283	1.29	.111578767	6837.081	0.467D	8	11:16	
0.350	1.24	.924198520D	6833.009	0.467D	8	11:20	
0.417	1.20	.788916198D	6837.081	0.467D	8	11:24	
0.483	1.17	.688253766D	6837.663	0.468D	8	11:28	
0.550	1.15	.610410205D	6837.081	0.467D	8	11:32	
0.617	1.13	.548407102D	6834.754	0.467D	8	11:36	
0.683	1.12	.497851102D	6835.918	0.467D	8	11:40	
0.750	1.11	.455837380D	6838.826	0.468D	8	11:44	
0.817	1.10	.420368002D	6836.499	0.467D	8	11:48	
0.883	1.09	.390023414D	6833.009	0.467D	8	11:52	
0.950	1.09	.363767162D	6839.408	0.468D	8	11:56	
1.017	1.08	.340824762D	6838.244	0.468D	8	12: 0	
1.083	1.08	.320605815D	6836.499	0.467D	8	12: 4	
1.150	1.07	.302652362D	6835.918	0.467D	8	12: 8	
1.217	1.07	.286603707D	6832.428	0.467D	8	12:12	
1.283	1.06	.272171888D	6839.408	0.468D	8	12:16	
1.350	1.06	.259124219D	6837.081	0.467D	8	12:20	
1.417	1.06	.247270631D	6834.754	0.467D	8	12:24	

SPERRY-SUN INTERNATIONAL INC.
MAGNETIC RECORDING PRESSURE GAUGE REPORT

ESSO EXPLORATION

SLEIPNER

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OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

FINAL FLOW PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M

DELTA TIME	Gauge	PRESSURE	TIME	DATE	Notes
-0.017	6834.754		12:24	16-12-81	OPEN APR-N TOOL AND CHOKE
0.050	6717.258		12:28		MANIFOLD ON 20/64" ADJ. CHOKE
0.117	6662.581		12:32		CHANGE TO 30/64" ADJ. CHOKE
0.183	6414.210		12:36		
0.250	6457.835		12:40		
0.317	6496.807		12:44		
0.383	6466.560		12:48		
0.450	6611.977		12:52		
0.517	6324.052		12:56		
0.583	6404.904		13:00		GAS TO SURFACE
0.650	6578.822		13:04		
0.717	6728.891		13:08		CHANGE TO 40/64" ADJ. CHOKE
0.783	6643.386		13:12		CHANGE TO 30/64" ADJ. CHOKE
0.850	6684.103		13:16		CHANGE TO 32/64" FIXED CHOKE
0.917	6326.379		13:20		
0.983	6342.084		13:24		
1.050	6377.566		13:28		
1.117	6412.465		13:32		
1.183	6411.884		13:36		
1.250	6418.282		13:40		
1.317	6420.609		13:44		
1.383	6422.354		13:48		
1.450	6429.915		13:52		
1.517	6428.752		13:56		
1.583	6428.170		14:00		
1.650	6438.059		14:04		
1.717	6440.385		14:08		
1.783	6441.549		14:12		
1.850	6441.549		14:16		
1.917	6441.549		14:20		
1.983	6449.110		14:24		
2.050	6449.110		14:28		
2.117	6445.039		14:32		
2.183	6453.764		14:36		
2.250	6451.437		14:40		
2.317	6450.274		14:44		
2.383	6454.927		14:48		
2.450	6450.274		14:52		
2.583	6458.999		15:00		
2.650	6454.927		15:04		
2.717	6463.652		15:08		
2.783	6461.325		15:12		
2.850	6465.397		15:16		
2.917	6465.979		15:20		
2.983	6465.397		15:24		
3.050	6472.377		15:28		

ESSO EXPLORATION

SLEIPNER

15/8-1

OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

FINAL FLOW PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M

FLOWING TO SEPARATOR

DELTA TIME	Gauge Pressure	TIME	DATE
3.117	6467.724	15:32	16-12-81
3.183	6465.397	15:36	
3.250	6472.377	15:40	
3.317	6470.050	15:44	
3.383	6470.050	15:48	
3.450	6472.959	15:52	
3.517	6471.795	15:56	
3.583	6478.194	16:00	
3.650	6473.540	16:04	
3.717	6471.214	16:08	
3.783	6477.612	16:12	
3.850	6475.867	16:16	
3.917	6476.449	16:20	
3.983	6478.775	16:24	
4.050	6476.449	16:28	
4.117	6484.592	16:32	
4.183	6480.520	16:36	
4.250	6479.939	16:40	
4.317	6485.174	16:44	
4.383	6482.847	16:48	
4.450	6482.265	16:52	
4.517	6484.592	16:56	
4.583	6483.429	17:00	
4.650	6489.827	17:04	
4.717	6486.919	17:08	
4.783	6484.592	17:12	
4.850	6491.572	17:16	
4.917	6487.500	17:20	
4.983	6487.500	17:24	
5.050	6488.664	17:28	
5.117	6489.827	17:32	
5.183	6495.062	17:36	
5.250	6491.572	17:40	
5.317	6488.664	17:44	
5.383	6493.899	17:48	
5.450	6492.735	17:52	
5.517	6490.990	17:56	
5.583	6495.062	18:00	
5.650	6493.317	18:04	
5.717	6495.644	18:08	
5.783	6494.480	18:12	
5.850	6492.735	18:16	
5.917	6498.552	18:20	
5.983	6496.225	18:24	
6.050	6495.062	18:28	
6.117	6497.970	18:32	
6.183	6498.552	18:36	

SPERRY-SUN INTERNATIONAL INC. MAGNETIC RECORDING PRESSURE GAUGE REPORT

ESSO EXPLORATION
SLEIPNER
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OFFSHORE NORWAY
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MRPG-1045-NOR

FINAL FLOW PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M

DELTA TIME	GUAGE PRESSURE	TIME	DATE
6.250	6503.787	18:40	16-12-81
6.317	6499.134	18:44	
6.383	6496.225	18:48	
6.450	6503.787	18:52	
6.517	6500.879	18:56	
6.583	6500.297	19: 0	
6.650	6502.624	19: 4	
6.717	6500.297	19: 8	
6.783	6507.859	19:12	
6.850	6503.787	19:16	
6.917	6500.297	19:20	
6.983	6507.859	19:24	
7.050	6503.787	19:28	
7.117	6504.369	19:32	
7.183	6507.277	19:36	
7.250	6505.532	19:40	
7.317	6511.349	19:44	
7.383	6499.715	19:48	
7.450	6502.624	19:52	
7.517	6520.655	19:56	
7.583	6517.165	20: 0	
7.650	6405.485	20: 4	
7.717	6418.864	20: 8	
7.783	6415.955	20:12	
7.850	6425.844	20:16	
7.917	6420.609	20:20	
7.983	6419.445	20:24	
8.050	6424.099	20:28	
8.117	6424.099	20:32	
8.183	6426.425	20:36	
8.250	6424.099	20:40	
8.317	6419.445	20:44	
8.383	6428.752	20:48	
8.450	6426.425	20:52	
8.517	6424.680	20:56	
8.583	6425.844	21: 0	
8.650	6427.589	21: 4	
8.717	6434.569	21: 8	
8.783	6429.915	21:12	
8.850	6425.262	21:16	
8.917	6433.405	21:20	
8.983	6429.334	21:24	
9.050	6428.752	21:28	
9.117	6432.242	21:32	
9.183	6429.915	21:36	
9.250	6438.640	21:40	
9.317	6433.987	21:44	

CHANGE TO 40/64" FIXED CHOKE

ESSO EXPLORATION

SLEIPNER

15/8-1

OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

FINAL FLOW PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M

DELTA TIME	PRESSURE GAUGE	TIME	DATE
9.383	6429.915	21:48	16-12-81
9.450	6435.732	21:52	
9.517	6436.314	21:56	
9.583	6439.804	22:00	
9.650	6436.895	22:04	
9.717	6433.405	22:08	
9.783	6442.130	22:12	
9.850	6437.477	22:16	
9.917	6436.895	22:20	
9.983	6439.222	22:24	
10.050	6438.059	22:28	
10.117	6445.039	22:32	
10.183	6440.385	22:36	
10.250	6434.569	22:40	
10.317	6442.712	22:44	
10.383	6441.549	22:48	
10.450	6442.130	22:52	
10.517	6441.549	22:56	
10.583	6436.895	23:00	
10.650	6446.784	23:04	
10.717	6445.620	23:08	
10.783	6440.967	23:12	
10.850	6443.875	23:16	
10.917	6444.457	23:20	
10.983	6449.110	23:24	
11.050	6444.457	23:28	
11.117	6440.967	23:32	
11.250	6446.784	23:40	
11.317	6446.784	23:44	
11.383	6445.039	23:48	
11.450	6440.385	23:52	
11.517	6449.110	23:56	
11.583	6446.202	0:00	17-12-81
11.650	6444.457	0:04	
11.717	6446.202	0:08	
11.783	6444.457	0:12	
11.850	6452.019	0:16	
11.917	6447.365	0:20	
11.983	6443.875	0:24	
12.050	6448.529	0:28	
12.117	6447.947	0:32	
12.183	6452.600	0:36	
12.250	6449.110	0:40	
12.317	6443.294	0:44	
12.383	6453.764	0:48	
12.450	6449.110	0:52	
12.517	6447.365	0:56	

ESSO EXPLORATION
SLEIPNER
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OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

FINAL FLOW PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M

DELTA TIME	Gauge	PRESSURE	TIME	DATE
12.583	6449.692	1: 0	17-12-81	
12.650	6446.784	1: 4		
12.717	6455.509	1: 8		
12.783	6449.692	1:12		
12.850	6447.365	1:16		
12.917	6450.855	1:20		
12.983	6450.274	1:24		
13.050	6452.019	1:28		
13.117	6450.274	1:32		
13.250	6453.764	1:40		
13.450	6451.437	1:52		
13.517	6447.365	1:56		
13.583	6456.672	2: 0		
13.650	6452.019	2: 4		
13.717	6449.692	2: 8		

END OF FLOW PERIOD

SPERRY-SUN INTERNATIONAL INC.
MAGNETIC RECORDING PRESSURE GAUGE REPORT

ESSO EXPLORATION

SLEIPNER

15/8-1

OFFSHORE NORWAY
14TH DECEMBER 1981
MRPG-1045-NOR

FINAL BUILD-UP PERIOD GAUGE NO.0017 SENSING DEPTH AT 3902.71M T=13.73

DELTA TIME	T + DT	LOG(----) DT	Gauge	P SQUARED	TIME	DATE
0.017	824.80	2.91634865	6739.361	0.454D	2:12	17-12-81
0.083	165.76	2.21947974	6763.791	0.457D	2:16	
0.150	92.53	1.96629821	6802.763	0.463D	2:20	
0.283	49.46	1.69424378	6798.109	0.462D	2:28	
0.350	40.23	1.60453461	6803.926	0.463D	2:32	
0.417	33.95	1.53086536	6803.926	0.463D	2:36	
0.483	29.41	1.46844919	6808.579	0.464D	2:40	
0.550	25.96	1.41436552	6804.508	0.463D	2:44	
0.617	23.26	1.36670053	6800.436	0.462D	2:48	
0.683	21.09	1.32413182	6807.416	0.463D	2:52	
0.750	19.31	1.28570730	6806.253	0.463D	2:56	
1.017	14.50	1.16151528	6814.396	0.464D	3:12	
1.083	13.67	1.13589069	6810.906	0.464D	3:16	
1.150	12.94	1.11190509	6977.262	0.487D	3:20	
1.217	12.28	1.08937274	6982.497	0.488D	3:24	
1.617	9.49	.977393576	6982.497	0.488D	3:48	
1.683	9.16	.961726447	6986.569	0.488D	3:52	
1.750	8.85	.946732908	6814.396	0.464D	3:56	
1.817	8.56	.932362039	6810.906	0.464D	4:00	
1.883	8.29	.918568439	6816.723	0.465D	4:04	
1.950	8.04	.905311447	6816.141	0.465D	4:08	
2.017	7.81	.892554514	6817.886	0.465D	4:12	