OTIS

WELLTEST REPORT

WELL 31/6-2

DST 1

PRE GRAVEL PACK

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	15-08-84	1	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	X 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 10.13		Sub Sea Test Tree stabbed on.													1
2 11.27		Sub Sea Test Tree through rotary.													2
3 13.20		Pressuretest string below lubricator valve.													3
4 13.33		Test O.K. Bled off pressure.													4
5 13.50		Lubricator valve stabbed on.													5
6 14.50		Changed to long beilers.													6
7 14.53		Surface Test Tree in elevator. Torque up connections.													7
8 15.30		Flow and killine connected to Surface Test Tree.													8
9 15.40		Surface Test Tree Stabbed on to string.													9
10 16.05		Flowline connected to choke manifold.													10
11 16.10		Sub Sea Test Tree in wear bushing.													11
12 16.30		Master and failsafe valve open. Kill and swab closed.													12
13 16.35		Start to reverse out tubing volume with brine.													13
14 16.55		68 BBLS reversed out. Stopped pumping.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	15-08-84	2	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.00		Open kill valve. Commence flushing lines.													1
2 17.05		Close kill valve. Pressuretest to 4000 PSI.													2
3 17.25		Test O.K.													3
4 17.30		Open kill valve.													4
5 17.32		Pressuretest string to 4000 PSI.													5
6 17.45		Test good.													6
7 17.46		Close Sub Sea Test Tree.													7
8 17.48		Bleed down pressure above Sub Sea Test Tree to 500 PSI for bleed back test.													8
9 17.55		Leak on Sub Sea Test Tree. Equalize pressure across ball valve.													9
10 17.57		Open Sub Sea Test Tree.													10
11 18.00		Pressure string to 4000 PSI.													11
12 18.02		Close Sub Sea Test Tree.													12
13 18.04		Bleed down pressure above Sub Sea Test Tree to 500 PSI for bleed back test.													13
14 18.09		Open Sub Sea Test Tree.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	15-08-84	3	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.14		Function Sub Sea Test Tree valve to clear ball.													1
2 18.20		Bleed down pressure on string to 500 PSI for bleed back test.													2
3 18.25		Open Sub Sea Test Tree.													3
4 18.33		Pressure up string to 3500 PSI.													4
5 18.36		Close Sub Sea Test Tree.													5
6 18.37		Open Sub Sea Test Tree to check returns in string to prove valve is functioning.													6
7 18.40		Bleed of string pressure and check returns.													7
8 18.47		Close kill valve.													8
9 18.47		Open safety valve.													9
10 18.54		Commence circulating.													10
11 18.57		Stop circulating.													11
12 19.00		Open kill valve.													12
13 19.04		Close safety valve. Pressure up string to 4000 PSI.													13
14 19.08		Close Sub Sea Test Tree.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	15-08-84	4	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.09		Bleed down pressure above Sub Sea Test Tree to 500 PSI for bleed back test.													1
2 19.17		Open Sub Sea Test Tree.													2
3 19.18		Close Sub Sea Test Tree.													3
4 19.23		Open Sub Sea Test Tree. Pressure string up to 4000 PSI.													4
5 19.33		Close lubricator valve. Bleed down pressure above Sub Sea Test Tree to 500 PSI for bleed back test.													5
6 19.39		Test good. Open lubricator valve.													6
7 19.44		Close kill valve.													7
8 19.50		Commence circulating.													8
9 19.58		Close safety valve and open kill valve.													9
10 20.03		Pressure up string to 4000 PSI.													10
11 20.05		Sub Sea Test Tree closed.													11
12 20.06		Bleed down pressure above Sub Sea Test Tree to 500 PSI for bleed back test. Test good.													12
13 20.24		Equalize pressure Sub Sea Test Tree ball.													13
14 20.25		Open Sub Sea Test Tree.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	15-08-84	5	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.30		Pressure up string to 4000 PSI.													1
2 20.34		Close Sub Sea Test Tree.													2
3 20.37		Bleed down pressure above Sub Sea Test Tree to 500 PSI for bleed back test.													3
4 20.40		Equalize pressure across ball valve.													4
5 20.43		Open Sub Sea Test Tree.													5
6 20.49		Open swab valve.													6
7 20.51		Commence Run in hole with wireline to check Sub Sea Test Tree is open.													7
8 21.05		Wireline through Sub Sea Test Tree.													8
9 21.20		Commence Pull out of hole with tubing test plug.													9
10 21.30		Swab valve closed.													10
11 21.31		Disconnect wireline lubricator.													11
12 21.33		Wireline tools on rig floor.													12
13 21.44		Wireline plug in lubricator.													13
14 21.45		Wireline lubricator stabbed on to Surface Test Tree. Commence pump down tubing, up annulus.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	15-08-84	6	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.20		Open swab valve & run in hole with wireline to set plug.													1
2 22.38		Plug landed.													2
3 22.40		Wireline commence Pull out of hole.													3
4 22.45		Wireline in lubricator.													4
5 22.50		Swab valve closed.													5
6 22.55		Pressure up on tubing to 4000 PSI.													6
7 23.16		Close Sub Sea Test Tree & bleed off tubing pressure to 500 PSI.													7
8 23.49		Bleed off pressure.													8
9 23.50		Open Sub Sea Test Tree.													9
10 23.54		Pressure up tubing to 4000 PSI.													10
11 23.55		Close Sub Surface Lubricator Valve & bleed off pressure to 500 PSI.													11
12 16-08 00.04		Open Sub Surface Lubricator Valve Test good.													12
13 00.20		Break out wireline tools and redress.													13
14 00.30		Stab on wireline lubricator.													14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	16-08-84	7	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.33		Open swab valve.													1
2 00.34		Wireline commence run in hole to retrieve plug.													2
3 00.54		Wireline in lubricator.													3
4 01.00		Break out wireline lubricator.													4
5 02.11		Surface Test Tree laid down on deck.													5
6		Started Pull out of hole with Sub Sea Test Tree.													6
7		Break out Sub Sea Test Tree laid down on cat walk.													7
8		Redress equipment and pressure test. Ready for running back in hole.													8
9		Cleaning up well circulating brine through filters.													9
10															10
11															11
12															12
13															13
14															14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 P.G. Pack	No 1	Norway	31/6-2	18-08-84	8	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.55		Sub Sea Test Tree made up to test string.													1
2 08.15		Pressure testing control lines, leak on latch line.													2
3 09.38		Pressured up on control lines test good.													3
4 09.42		Sub Sea Test Tree through rotary table.													4
5 11.08		Flopetrols Sub Sea Lubricator Valve stabbed on to test string.													5
6 11.20		Flopetrols Sub Sea Lubricator Valve through rotary table.													6
7 11.46		Surface Test Tree on rig floor.													7
8 12.07		Flowline connected to Surface Test Tree.													8
9 12.19		Surface Test Tree connected to test string.													9
10 12.39		Flowline connected to choke manifold.													10
11 12.44		Sub Sea Test Tree landed off in wellhead.													11
12 12.50		Flow valve open, master valve open, kill open, swab open.													12
13 12.52		Flow valve closed.													13
14 12.53		Fill test string with brine.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 P.G. Pack	No 1	Norway	31/6-2	18-08-84	9	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.54		Close kill valve and swab valve.													1
2 12.55		Pressure test kill valve to 4000 PSI.													2
3 13.04		Leak at Dowell 2" Lo-Torc valve, pressure bled off, valve changed out.													3
4 13.11		Pressure test kill valve to 4000 PSI.													4
5 13.22		Leaks detected, pressure bled off, kill valve opened and closed.													5
6 13.27		Pressure test kill valve to 4000 PSI.													6
7 13.40		Test good, kill valve opened.													7
8 13.48		Pressure test tubing to 4000 PSI.													8
9 14.00		Test good.													9
10 14.01		Close in Sub Sea Test Tree, bleed back pressure above ball to 500 PSI for bleed back test.													10
11 14.17		Equalize pressure across ball, open Sub Sea Test Tree.													11
12 14.20		Flowpetrols lubricator valve closed.													12
13 14.21		Bleed off pressure above lubricator valve to 500 PSI for bleed back test.													13
14 14.36		Test good. Equalize pressure above lubricator valve, open lubricator valve.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	18-08-84	10	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 14.38		Bleed off pressure in string.													1
2 14.40		Sub Sea Lubricator Valve closed, test above ball to 4000 PSI.													2
3 14.52		Close master valve, test to 4000 PSI.													3
4 15.08		Equalize across master valve and open.													4
5 15.11		Bleed back pressure and close master valve, open lubricator valve.													5
6 15.12		Pressure test Surface Test Tree internally.													6
7 15.29		Test good, open failsafe valve, flush thru lines to oil guns.													7
8 15.34		Close oil guns on both booms.													8
9 15.35		Test oil guns to 1000 PSI.													9
10 15.52		Test good, bleed off pressure.													10
11 15.53		Close in at heater by-pass, close upstream and downstream valves on left hand side of choke manifold.													11
12 15.56		Pressure test to 4000 PSI.													12
13 16.10		Test good, pressure bled off.													13
14 16.13		Close upstream and downstream valves on right hand side of choke manifold.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	18-08-84	11	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.14		Pressure test to 4000 PSI.													1
2 16.27		Test good, bleed pressure off, open choke manifold, open heater by-pass.													2
3 16.29		Close failsafe valve, close lubricator valve.													3
4 16.32		Open master valve and swab valve.													4
5 16.40		Commence rigging up wireline.													5
6 16.55		Wireline tools in lubricator.													6
7 17.00		Wireline lubricator stabbed onto Surface Test Tree.													7
8 17.02		Pressuretest wireline lubricator to 4000 PSI.													8
9 17.13		Test good, bleed off pressure.													9
10 17.14		Open lubricator valve.													10
11 17.15		Commence run in hole with wireline to pull plug.													11
12 17.30		Commence pull out of hole with plug.													12
13 17.37		Wireline tools in lubricator. Close Flopetrols lubricator valve.													13
14 17.40		Disconnect wireline lubricator valve and close swab valve.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	18-08-84	12	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.45		Tools on rig floor.													1
2 17.46		Open Flopetrol lubricator valve.													2
3 17.48		Commence circulating through flow head.													3
4 19-08 01.50		Close choke manifold, open failsafe valve.													4
5 01.53		Open kill and master valves.													5
6 02.40		Commence displacing string with diesel.													6
7 03.08		Close Flopetrol Sub Sea Lubricator Valve.													7
8 03.10		Bleed off tubing pressure thru choke manifold, close choke.													8
9 03.12		Open swab valve.													9
10 03.18		Wireline zeroed.													10
11 03.24		Wireline lubricator stabbed on.													11
12 03.43		Test wireline lubricator to 4000 PSI.													12
13 04.05		Open Flopetrol lubricator valve.													13
14 04.07		Wireline commence run in hole to pull plug.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19.08.84	13	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 04.40		Test packer to 4000 PSI.													1
2 05.15		Wireline back in lubricator.													2
3 05.16		Close Sub Sea Lubricator.													3
4 05.20		Break off wireline lubricator.													4
5 05.25		Make up firing pin onto wireline.													5
6 05.28		Wireline lubricator stabbed on.													6
7 05.33		Pressuretest wireline lubricator to 4000 PSI.													7
8 05.55		Test good, bleed off pressure.													8
9 06.02		Close kill valve.													9
10 06.05		Open Sub Sea Lubricator.													10
11 06.06		Run in hole to perforate.													11
12 06.20		Attempt to burst perforating disc.													12
13 06.27		Re-attempt to burst perforating disc.													13
14 06.38		Pull out of hole to inspect wireline firing bar.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19-08-84	14	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.45		Wireline tools in lubricator.													1
2 06.46		Close Flowpetrols Sub Sea Lubricator Valve.													2
3 06.50		Disconnect Wireline Lubricator.													3
4 06.54		Wireline tools on rig floor.													4
5 07.00		Add more stem to wireline tools.													5
6 07.05		Wireline tools in lubricator.													6
7 07.14		Lubricator stabbed onto Surface Test Tree.													7
8 07.15		Kill valve opened.													8
9 07.17		Pressuretest wireline lubricator to 4000 PSI.													9
10 07.20		Needle valve on lubricator open, bleed off pressure.													10
11 07.21		Pressuretest wireline lubricator to 4000 PSI.													11
12 07.34		Test good. Bleed off pressure.													12
13 07.35		Sub Sea Lubricator opened.													13
14 07.36		Kill valve closed													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19-08-84	15	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.37		Commence run in hole with wireline.													1
2 07.47		Attempt to burst perforating disc.													2
3 08.01		Commence pull out of hole with wireline.													3
4 08.08		Wireline tools in lubricator.													4
5 08.10		Close Flopetrol lubricator.													5
6 08.11		Open choke manifold to bleed off flowline fluid.													6
7 08.18		Disconnect lubricator.													7
8 08.34		Wireline tools on rig floor.													8
9 08.35		Connect sand bailer to wireline.													9
10 08.40		Stab on wireline lubricator.													10
11 08.45		Open kill valve.													11
12 08.55		Pressuretest wireline lubricator 4000 PSI.													12
13 09.15		Test good. Bleed off pressure.													13
14 09.16		Close kill valve, open Sub Sea Lubricator.													14

FIELD READING

OTIS O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19-08-84	16	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 09.16		Run in hole with bailer.													1
2 09.38		Wireline pull out of hole.													2
3 09.45		Close Sub Sea Lubricator Valve.													3
4 09.50		Break out wireline lubricator, check bailer, glass and grit inside.													4
5 10.09		Open choke on 128/64 fixed 16/64 adjustable.													5
6 10.10		Open Sub Sea Lubricator Valve.													6
7 10.13		Open swab valve and drop detonating bar, close swab vavle.													7
8 10.20		No flow, close Sub Sea Lubricator Valve.													8
9 10.33		Stab on wireline lubricator.													9
10 10.36		Open kill and swab valves.													10
11 10.40		Test lubricator to 4000 PSI.													11
12 10.55		Close kill valve, run in hole with pulling tool.													12
13 11.07		Pull out of hole with detonation bar.													13
14 11.15		Wireline in lubricator, Close Sub Sea Lubricator valve. Detonation bar fell onto Sub Sea Lubricator valve													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. PACK	NO 1	NORWAY	31/6-2	19.08.84	17	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 11.25		Break out tools on wireline and redress.													1
2 11.40		Stab lubricator on to string.													2
3 11.45		Open kill valve and test above Sub Sea Lubricator Valve to 4000 PSI.													3
4 11.58		Tighten up stuffing box. Small leak.													4
5 12.11		Close kill valve.													5
6 12.12		Open lubricator valve. Drop detonating bar.													6
7 12.19		Run in with wireline to fish detonating bar.													7
8 12.57		Did not succeed to fish detonating bar. Pulled out of hole.													8
9 13.05		Fishing tool in lubricator. Close lubricator valve.													9
10 13.10		Pull out tool to put on skirt.													10
11 13.20		Lubricator stabbed on. Kill valve open. Pressuretest to 4000 PSI.													11
12 13.40		Test O.K Bled off pressure. Close kill valve.													12
13 13.42		Open lubricator valve. Run in hole to fish detonating bar.													13
14 14.06		Pull out of hole with wireline.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19-08-84	18	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 14.18		Close lubricator valve.													1
2 14.19		Disconnect wireline lubricator.													2
3 15.39		Connect wireline lubricator.													3
4 15.40		Open kill valve.													4
5 15.45		Start pressuretesting lubricator to 4000 PSI.													5
6 16.01		Test good. Bleed down pressure.													6
7 16.02		Open Sub Sea Lubricator Valve.													7
8 16.03		Run in hole with wireline.													8
9 16.16		Wireline at depth.													9
10 16.18		Bleed off annulus pressure to zero to ensure L.P.R. valve is wide open													10
11 16.25		Attempt to pull firing bar out of hole.													11
12 16.37		Pull out of hole with wireline.													12
13 16.43		Wireline tools in lubricator.													13
14 16.45		Close Sub Sea Lubricator.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19-08-84	19	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.47		Choke manifold opened.													1
2 16.48		Close kill valve.													2
3 16.49		Disconnect wireline lubricator.													3
4 16.51		Wireline tools on rig floor.													4
5 16.55		Wireline rigged down.													5
6 16.56		Close swab valve.													6
7 17.07		Close choke manifold.													7
8 17.23		M.P.R. valve sheared.													8
9 17.27		Commence reverse circulating to stock tank.													9
10 17.32		Direct flow to burner.													10
11 17.48		Dowell stopped reversing.													11
12 18.06		Open kill valve.													12
13 18.07		Close failsafe valve.													13
14 18.10		Unseat packer.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	19-08-84	20 | 34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1															1
18.48		Commence reverse circulating to shakers.													
2															2
19.11		Stop circulating.													
3															3
19.15		Commence breaking out surface lines.													
4															4
19.16		Close failsafe valve and put cap on.													
5															5
19.38		Surface Test Tree to rig floor.													
6															6
22.03		Sub Sea Test Tree broken off string and laid on deck.													
7															7
8															8
9															9
10															10
11															11
12															12
13															13
14															14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	21	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 08.45		Sub Sea Test Tree made up on test string.													1
2 08.50		Test latch sleeve, test O.K.													2
3 08.53		Test balance line to 1500 PSI, test O.K.													3
4 08.58		Open ball valve.													4
5 09.06		Sub Sea Test Tree through rotary.													5
6 10.37		Sub Sea Lubricator Valve made up on test string.													6
7 10.40		Surface Test Tree on rig floor.													7
8 10.45		Swab, master and kill valves open.													8
9 11.00		Sub Sea Lubricator Valve open.													9
10 11.06		Sub Sea Lubricator Valve through rotary.													10
11 12.00		Surface Test Tree stabbed on.													11
12 12.10		Coflex hose connected to choke manifold.													12
13 12.15		Sub Sea Test Tree landed in wear bushing.													13
14 12.20		Killine connected.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	22 | 34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.30		Start to flush.													1
2 12.32		Stopped flushing, closed kill valve and swab valve.													2
3 12.35		Pressuretest to 4000 PSI against kill valve.													3
4 12.40		Leak. Bled off pressure. Open and closed kill valve. Pressure up to 4000 PSI.													4
5 12.42		Stabbed on wireline B.O.P.													5
6 12.50		Test O.K. Bled off pressure. Open kill. Pressure up string to 4000 PSI.													6
7 13.05		Test O.K. Closed Sub Sea Test Tree. Bled down pressure to 500 PSI above.													7
8 13.20		Test O.K. Equalize across Sub Sea Test Tree. Open Sub Sea Test Tree.													8
9 13.21		Close lubricator valve.													9
10 13.31		Test O.K. Equalize across lubricator valve. Open lubricator valve. Bled off pressure.													10
11		Close lubricator valve. Pressure up to 4000 PSI on top off lubricator.													11
12 13.45		Test O.K. Close master valve. Bled down to 500 PSI above.													12
13 14.00		Test O.K. Equalize pressure across master valve. Open master valve. Bled off pressure													13
14		Open lubricator valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	23	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 14.02		Close master valve. Pressure up to 4000 PSI against master, flow and swab valve.													1
2 14.15		Test O.K. Bled off pressure. Open failsafe valve. Start to flush lines to both burners.													2
3 14.20		Stopped flushing. Closed gas valves and valves on burner head.													3
4 14.30		Pressuretest to 1000 PSI.													4
5 14.31		Wireline lubricator stabbed on.													5
6 14.35		Test O.K. Bled off pressure. Close inlet and bypass on heater.													6
7		Right side on choke manifold closed. Pressure up to 4000 PSI.													7
8 14.55		Test O.K. Bled off pressure. Open right side off choke. Close left side. Pressure													8
9		up to 4000 PSI.													9
10 15.03		Test O.K. Bled off pressure. Bypass heater.													10
11 15.10		Failsafe valve and lubricator valve closed. Master and swab valve open.													11
12 15.18		Start flushing.													12
13 15.20		Stopped flushing. Closed needle valve on lubricator. Pressure up to 4000 PSI.													13
14 15.30		Test O.K. Bled off pressure and open lubricator valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	24	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
15.35		Run in hole with wireline to pull plug.													1
16.00		Wireline in lubricator. Start to rig down tool.													2
16.02		Close swab valve. Open lubricator valve and start to circulate.													3
16.41		Stop circulating.													4
16.46		Close choke and open failsafe valve.													5
16.50		Commence displacing with diesel.													6
17.10		String displaced with diesel.													7
17.15		Start to rig up wireline to run in with plug.													8
17.25		Lubricator stabbed on, start to flush lines.													9
17.28		Stopped flushing, closed needle valve, pressure up to 4000 PSI.													10
17.45		Test good, pressure bled off.													11
17.47		Commence run in hole with wireline to set plug.													12
18.02		Test against wireline plug to set packer.													13
18.25		Wireline commence to pull out of hole.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	25	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.30							Wireline in lubricator. Close Sub Surface Lubricator valve.								1
2 18.45							Rig up detonating bar to wireline.								2
3 18.46							Stab on wireline lubricator.								3
4 18.50							Commence pressuretesting lubricator to 4000 PSI.								4
5 19.05							Test good. Bleed off pressure.								5
6 19.06							Close kill valve.								6
7 19.08							Open Sub Surface Lubricator Valve, run in hole with detonating gun on wireline								7
8 19.20							Guns fired.								8
9 19.23	20A	1440 / 100.3	58 / 15				Open choke flow well thru 20/64 Adjustable.								9
10 19.24	"	1540 / 107.2	58 / 15												10
11 19.25	"	1620 / 112.7	58 / 15												11
12 19.26	"	1690 / 117.5	60 / 15.5												12
13 19.27	"	1725 / 119.9	60 / 16				Switch flow to oil guns on burner.								13
14 19.28	"	1750 / 121.6	60 / 16												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	26	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.29	20A	1790 124.4	61 16												1
2 19.30	"	1835 127.5	62 16.5				Reduced 2.4 M^3 Diesel into tank.								2
3 19.31	"	1900 132.0	62 16.5				Gas to surface. Switch flow to gas flare.								3
4 19.32	"	1930 134.1	62 16.5												4
5 19.33	"	1931 134.1	62 16.5												5
6 19.34	"	1932 134.2	62 16.5				Shut in at choke manifold.								6
7 19.35	"	1960 136.2	62 16.5				Wireline commence to pulled out of hole.								7
8 19.36		1960 136.2	62 16.5												8
9 19.37		1960 136.2	62 16.5												9
10 19.38		1960 136.2	62 16.75												10
11 19.39		1960 136.2	62 16.75												11
12 19.40		1960 136.2	62 16.75												12
13 19.41		1950 135.5	62 16.75												13
14 19.42		1950 135.5	62 16.75												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No. 1	Norway	31/6-2	20-08-84	27	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.43		1945 135.1	62 16.75				Close Sub Surface Lubricator Valve.								1
2 19.44							Bleed off pressure in lubricator thru choke.								2
3 19.46							Break out wireline lubricator.								3
4 19.47							Close swab valve and master valve. Commence rig down wireline tools.								4
5 20.05							Stab on wireline lubricator.								5
6 20.08							Open master valve.								6
7 20.10							Open kill valve.								7
8 20.13							Equalize pressure above Sub Surface Lubricator Valve.								8
9 20.15							Close kill valve. Open Sub Surface Lubricator Valve.								9
10 20.19		1928 133.9	63 17.5												10
11 20.20	20A	1928 133.9	63 17.5				Open up well thru 20/64 Adjustable choke.								11
12 20.21	"	1900 132	63 17.5												12
13 20.22	"	1875 130.3	63 17.5												13
14 20.23	"	1867 129.7	63 17.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	28	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.24	20A	1865 129.6	62 17				Flow thru 20/64 Adjustable heater choke. Open up choke on floor to 128/64 fixed								1
2 20.25	"	1840 127.9	62 16.5												2
3 20.26	"	1900 132	62 16.5												3
4 20.27	"	1909 132.6	62 16.75												4
5 20.28	"	1909 132.6	62 16.75												5
6 20.29	"	1909 132.6	62 16.75												6
7 20.30	"	1909 132.6	62 16.75	0.3			trace sand								7
8 20.31	"	1910 132.7	62 16.75												8
9 20.32	"	1910 132.7	62 16.75												9
10 20.33	"	1909 132.6	62 16.75												10
11 20.34	"	1909 132.6	62 16.75												11
12 20.36	"	1910 132.7	62 16.5												12
13 20.38	"	1920 133.4	62 16.5												13
14 20.40	"	1925 133.7	62 16.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	29 | 34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] SCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.42	20A	1925 133.7	62 16.5												1
2 20.45	"	1923 133.6	62 16.5	0.3			trace solids								Direct flow into separator for pre gravel flow rate. 2
3 20.46	"	1920 133.4	62 16.5												3
4 20.48	"	1916 133.1	62 16.5												4
5 20.50	"	1915 133	62 16.5												5
6 20.55	"	1925 133.7	61 16.25												6
7 21.00	24A	1921 133.5	61 16.25	0.3			trace solids			.598		6,460,684 183,013			Changed choke to 24/64 Adjustable at heater. 7
8 21.05	"	1916 133.1	60 15.5												8
9 21.10	"	1905 132.4	60 15.5												9
10 21.15	"	1921 133.5	60 15.25	0.3			16%meth. 84%cond.					6,362,780 180,240			10
11 21.30	"	1933 134.3	60 15.25	0.3			0.4%meth. 99.6%cond.			.598		6,617,194 187,447			11
12 21.35	"														Increase heater choke to 28/64 Adjustable. 12
13 21.36	28A	1895 131.7	57 14												13
14 21.37	"	1891 131.4	57 14												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	30	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] SCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 21.38	28A	1886 131.0	57 14												1
2 21.39	"	1891 131.4	57 14												2
3 21.40	"	1896 131.7	57 14												3
4 21.41	"	1898 131.9	57 14												4
5 21.42	"	1901 132.1	57 14												5
6 21.43	"	1901 132.1	57 14												6
7 21.44	"	1901 132.1	57 14												7
8 21.45	"	1905 132.4	57 14	0.3			1%meth. 99%cond.			.598		9,759,214 276,452			8
9 21.50	"	1907 132.5	57 14												9
10 21.55	"	1912 132.8	57 14												10
11 22.00		1912 132.8	57 14												11 Shut in well at choke manifold for pre gravel pack build up.
12 22.01		1992 138.4	57 14												12
13 22.02		1992 138.4	57 14												13
14 22.03		1992 138.4	58 14.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	31	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.04		1989 138.1	58 14.5												1
2 22.05	28A	1988 138.1	58 14.5												2
3 22.06	"	1987 138.0	59 14.75												3
4 22.07	"	1985 137.9	59 14.75												4
5 22.08	"	1985 137.9	59 14.75												5
6 22.09	"	1985 137.9	59 14.75												6
7 22.10	"	1985 137.9	59 14.75												7
8 22.11	"	1985 137.9	59 14.75												8
9 22.12	"	1985 137.9	59 14.75												9
10 22.13	"	1985 137.9	59 14.75												10
11 22.14	"	1985 137.9	60 15												11
12 22.15	"	1985 137.9	60 15												12
13 22.30	"	1985 137.9	60 15												13
14 22.45	"	1985 137.9	60 15												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST 1 P.G. Pack	No 1	Norway	31/6-2	20-08-84	32	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 23.00	28A	1985 137.9	60 15												1
2 23.15	"	1985 137.9	60 15												2
3 23.30	"	1985 137.9	60 15												3
4 23.45	"	1985 137.9	60 15												4
5 24.00	"	1985 137.9	60 15												5
6															6
7															7
8															8
9									END OF PRE GRAVEL PACK BUILD UP.						9
10															10
11															11
12															12
13															13
14															14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 P.G. Pack	No 1	Norway	31/6-2	21-08-84	33	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.03		Shut in L.P.R. n valve.													1
2 00.05		Open choke to bleed off pressure.													2
3 00.17		Shut in at choke.													3
4 00.19		Open kill valve.													4
5 00.31		Commence killing well, pumping pill to L.P.R. n valve.													5
6 00.44		Stop pumping, open L.P.R. n valve.													6
7 00.48		Gravitate pill to perforations.													7
8 01.15		Close master valve.													8
9 01.18		Flush through flow lines to both booms.													9
10 01.30		Open master valve.													10
11 01.31		Close failsafe valve.													11
12 01æ32		Commence reverse circulating.													12
13 01.33		Rig down wireline equipment.													13
14 02.48		Stop circulating, 10 minute flow check.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

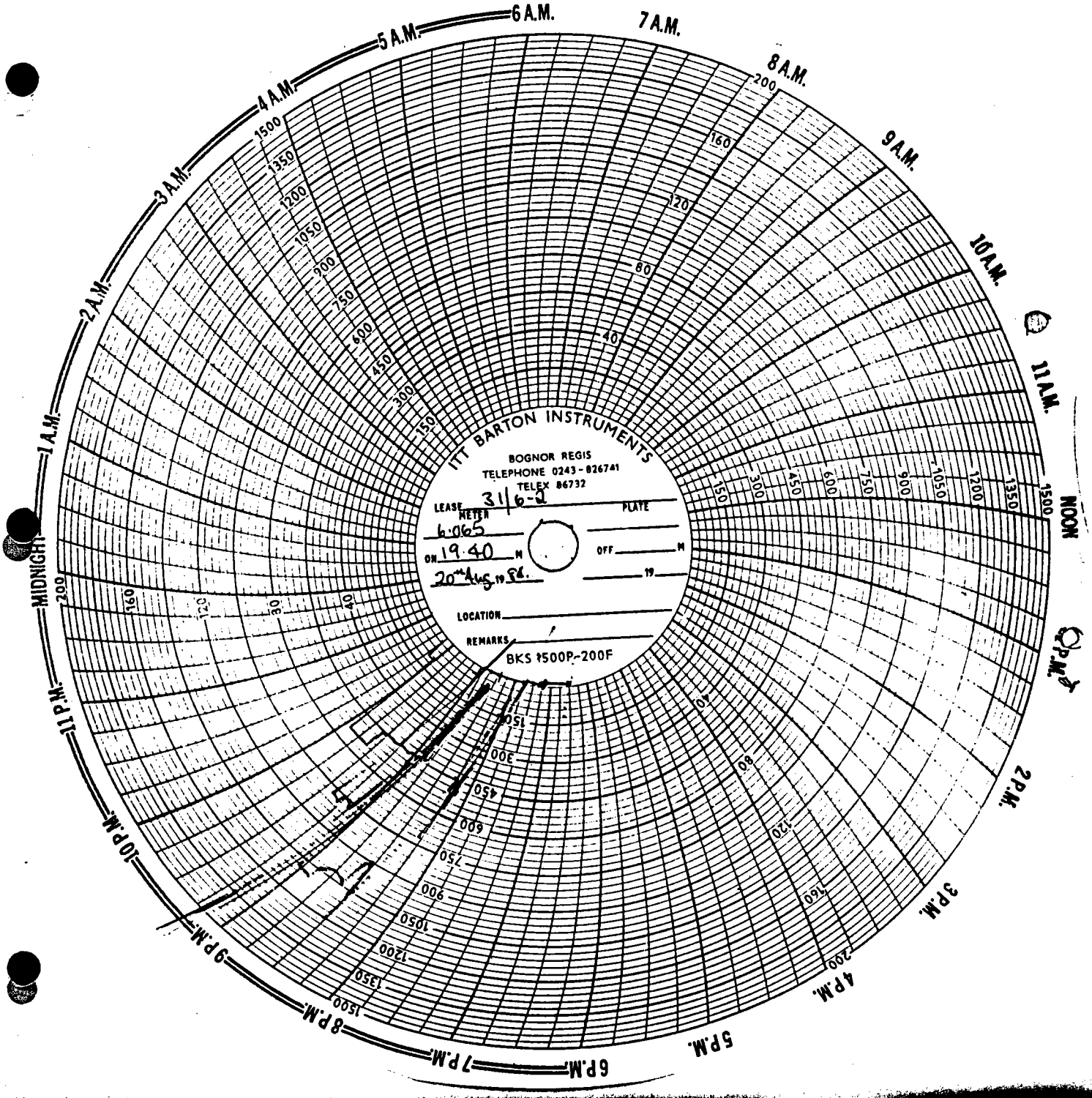
TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 P.G. Pack	No 1	Norway	31/6-2	21-08-84	34	34

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [X] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 03.00		Pressure annulus to shear A.P.R.-M bypass valve.													1
2 03.05		Open middle pipe rams.													2
3 03.17		Pull out of packer.													3
4 03.35		Observe for one hour.													4
5 04.37		Circulate over shakers.													5
6 06.10		Stop circulating.													6
7 06.40		Surface Test Tree broken out.													7
8 07.00		Surface Test Tree laid down.													8
9 07.30		Sub Surface Lubricator Valve broken out.													9
10 07.36		Sub Surface Lubricator Valve laid down.													10
11 08.35		Sub Sea Test Tree through rotary.													11
12 08.45		Sub Sea Test Tree laid down.													12
13															13
14															14

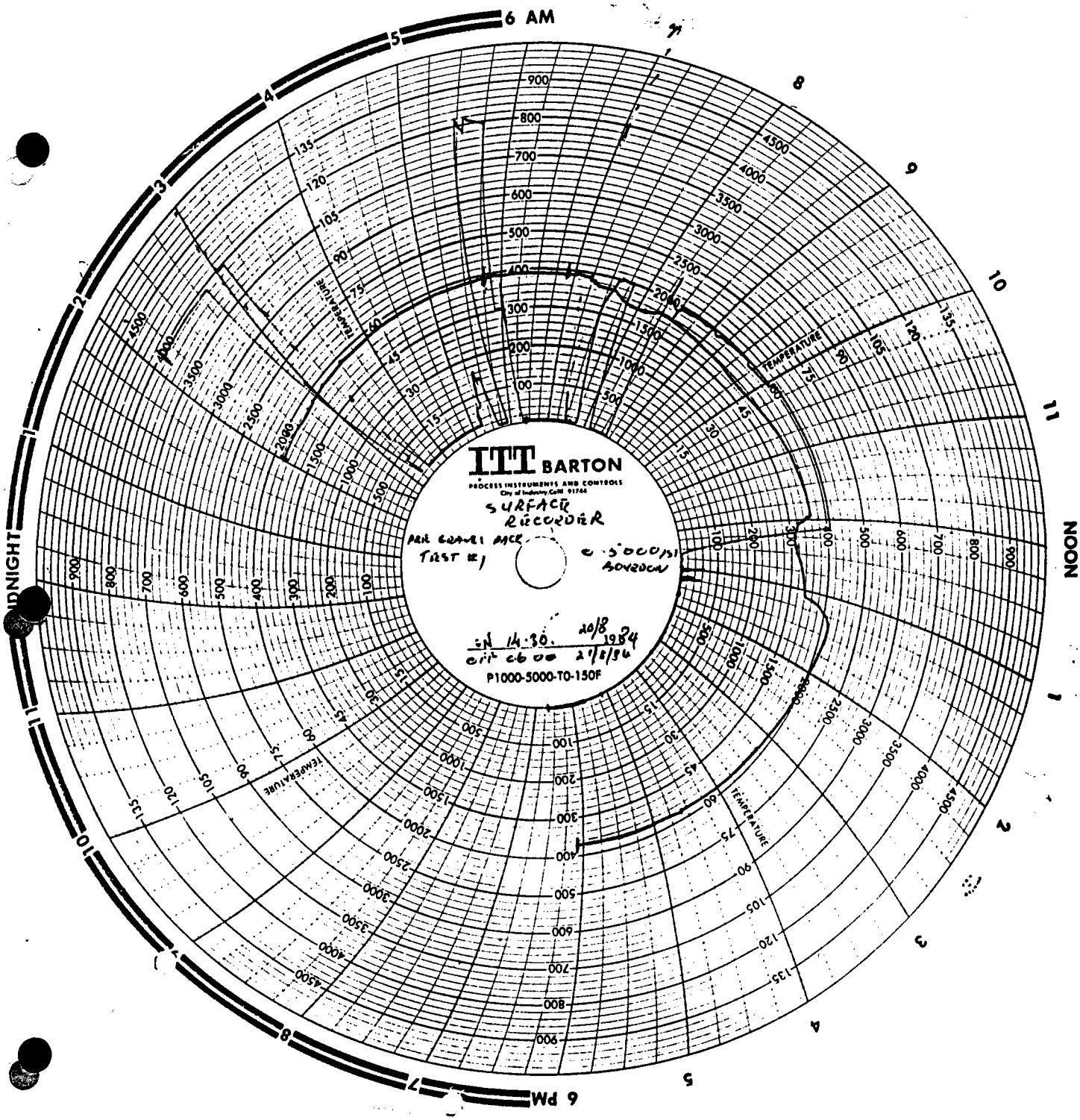
Well 31/6-2.

Barton meter chart.
Static 0-1500 psi, diff. 0-200" H_2O.
Time put on 19.40 20th Aug. 1984.
Time taken off 22.00 20th Aug. 1984.



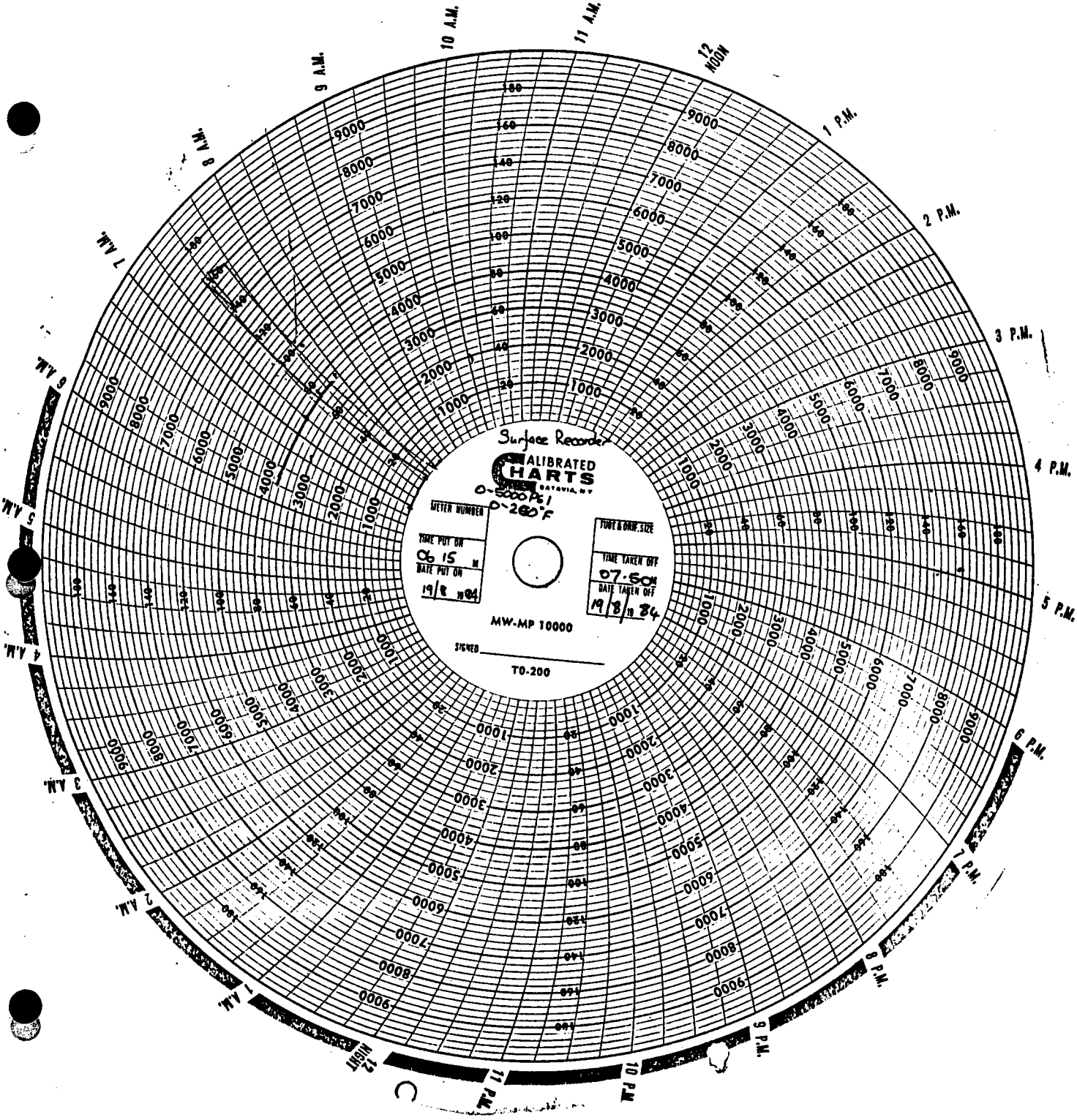
Well 31/6-2.

Press. temp. recorder chart.
0-5000 psi, 0-150 psi.
Time put on 14.30 20th Aug. 1984.
Time taken off. 06.00 21st Aug. 1984.



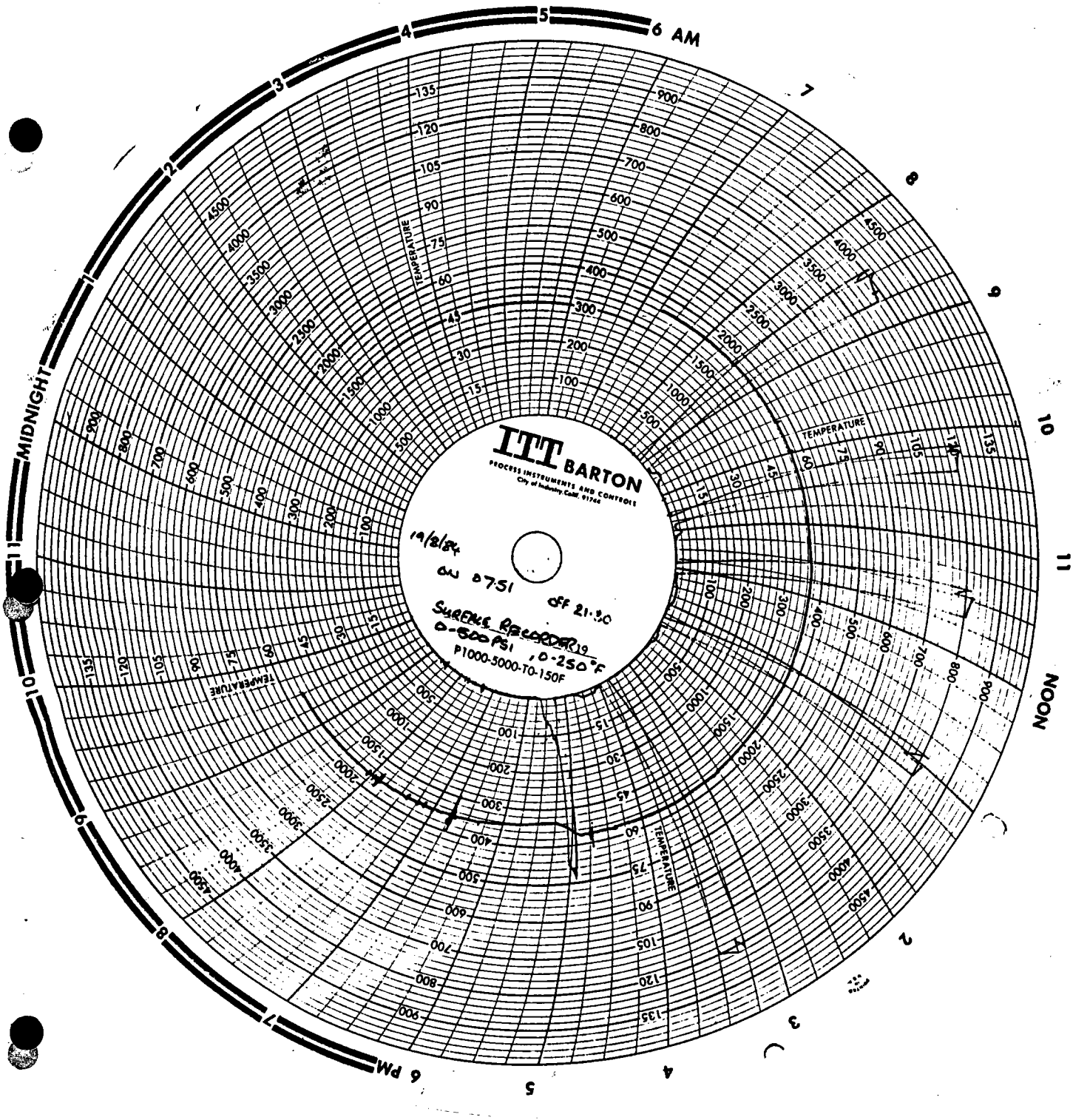
Well 31/6-2

Press. temp. recorder chart.
0-5000 psi, 0.150^{0}F
Time put on 06.15 19th Aug. 1984
Time taken off. 07.50 19th Aug. 1984



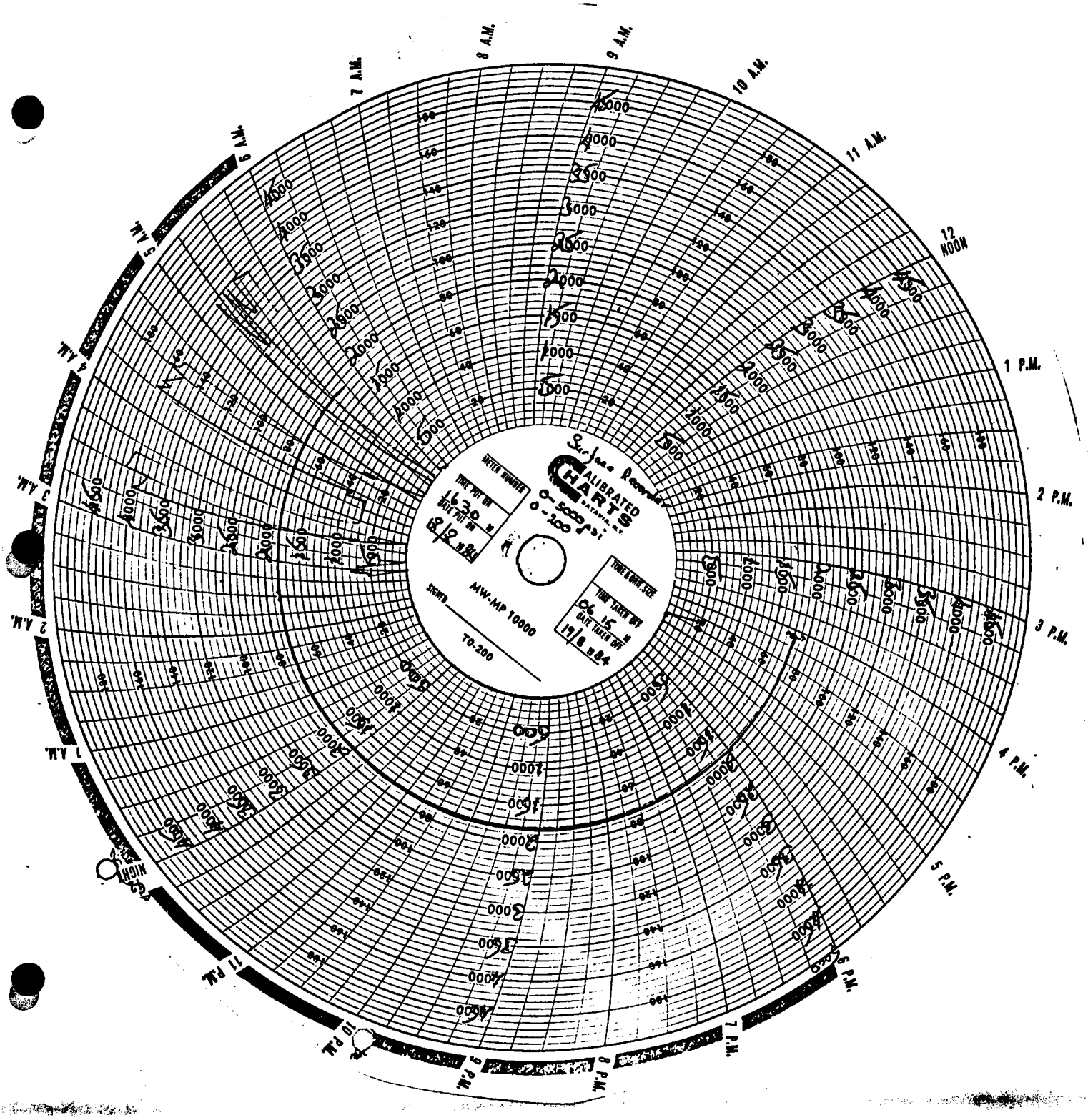
Well 31/6-2.

Pressure temp recorder chart.
0-5000 psi, 0-150°F.
Time put on 07.50 19th Aug. 1984.
Time taken off 21.30 19th Aug. 1984.



Well 31/6-2.

Press. temp. recorder chart.
0-5000 psi, 0-150°F.
Time put on 16.30 18th Aug. 1984.
Time taken off 06.15 19th Aug. 1984.



GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 Pre Gravel Pack	No 1	Norway	31/6-2	20-08-84	1	1

CUSTOMER: STATOIL

UNITS: ☐ OIL FIELD ☐ METRIC

hw: ☐ INCHES H_2O ☐ M BAR

Tg: ☐ °F ☐ °C

Pf: ☐ PSIA ☐ BAR

CONDITIONS: [X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS	6.065	BARTON	0-200	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	SCF/DAY	SCM/DAY
1	21.00	.598	100	465	142	2	-	.3	-	1.0303	814.408	1.0019	1.2932	.9636	6.460.684	183.013
2	21.15	.598	89	460	136	2	-	.3	-	1.0323	814.408	1.0018	1.2932	.9732	6.362.780	180.240
3	21.30	.598	94	465	147	2	-	.3	-	1.0315	814.408	1.0018	1.2932	.9688	6.617.194	187.447
4		Change choke to 28/64".														
5	21.45	.598	90	555	105	2.5	-	.3	-	1.0388	1.288.1514	1.0011	1.2932	.9723	9.759.214	276.452
6	22.00	.598	88	555	104	2.5	-	.3	-	1.039	1.288.1514	1.0011	1.2932	.9741	9.735.224	275.772
7																
8		END OF FLOW RATE														
9																
10																
11																
12																
13																
14																

DST 1

POST GRAVEL PACK

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	1	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.48		Sub Sea Test Tree made up on test string.													1
2 08.11		Sub Sea Test Tree unlatched and relatched.													2
3 08.15		Open Sub Sea Test Tree ball valve, check open, O.K.													3
4 08.22		Close Sub Sea Test Tree ball valve, check closed, O.K.													4
5 08.23		Open Sub Sea Test Tree ball valve, check open, O.K.													5
6 08.24		Sub Sea Test Tree through rotary.													6
7 09.55		Sub Surface Lubricator valve made up on test string.													7
8 10.45		Test tubing to 4000 PSI.													8
9 11.05		Test O.K.													9
10 11.07		Close Sub Sea Test Tree, bleed off above to 35 bar.													10
11 11.27		Test O.K., open Sub Sea Test Tree after equalizing.													11
12 11.28		Close Sub Surface Lubricator Valve, bleed off above to 35 bar.													12
13 11.38		Test O.K., open Sub Surface Lubricator Valve after equalizing.													13
14 12.08		Wireline B.O.P. stabbed on.													14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	2	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.32		Wireline tools in lubricator.													1
2		Wireline lubricator stabbed on.													2
3 12.40		Pressuretest wireline lubricator to 1000 PSI.													3
4 13.00		Wireline run in hole.													4
5 13.15		Wireline pulling out of hole with H.F.T. 2 check valve.													5
6 13.35		Wireline tools in lubricator.													6
7 13.40		Wireline lubricator disconnected and laid on drill floor.													7
8 14.00		Surface Test Tree on drill floor.													8
9 14.02		Surface Test Tree in elevators.													9
10 14.06		Making up coflexip and chiksan lines to Surface Test Tree.													10
11 15.03		Open master, swab and kill valves.													11
12 15.04		Hydraulic hose connected to actuator cap taken off.													12
13 15.07		Close failsafe valve.													13
14 15.14		Close swab valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	3	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.17		Close kill valve.													1
2 15.20		Pressuretest against kill valve, leak.													2
3 15.26		Bleed off pressure, operate kill valve (open - close).													3
4 13.35		Pressuretest against kill valve, O.K.													4
5 15.50		Open kill valve. Master valve open.													5
6 15.52		Test against Flopetrol lubricator valve.													6
7 16.04		Test good.													7
8 16.09		Close master valve. Bleed off to 35 bar for differential test.													8
9 16.10		Leak on Dowell test line. Pressure up to 3000 PSI. Open master valve for observation of perssure.													9
10 16.20		Close master valve. Bleed off to 35 bar and observe pressure.													10
11 16.35		Test good.													11
12 16.40		Open master valve.													12
13 16.41		Open Flopetrol lubricator valve.													13
14 16.44		Close master valve. Pressuretest to 275 bar.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	4	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.00		Test good.													1
2 17.03		Open master valve.													2
3 17.09		Displacing string with 45 BBL diesel.													3
4 17.30		Finish displacing tubing with diesel.													4
5 17.35		Stabbing into packer.													5
6 17.41		Landed on wellhead with fluted hanger.													6
7 17.50		Close master valve. Connect up coflexip to choke.													7
8 18.12		Open failsafe valve.													8
9 18.17		Flush through to both burners.													9
10 18.29		Test burner heads to 70 bar.													10
11 18.52		Leak on Dowell line on rig floor.													11
12 18.54		Pressuretest burners to 70 bar.													12
13 19.05		Test good.													13
14 19.08		Close heater inlet.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	5	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.12							Pressuretest heater inlet and fixed side of choke manifold.								1
2							Leak on test line.								2
3 19.24							Pressuretest heater inlet and fixed side of choke manifold.								3
4 19.41							Test good.								4
5 19.41							Pressuretest adjustable side on choke manifold.								5
6 19.54							Test good. Rigging up wireline B.O.P. and lubricator.								6
7 20.15							Pressure up above master valve and front valves on choke.								7
8							Open master valve, close kill valve.								8
9 20.15							Flow lined up through 64/64 Adjustable choke, valves closed on choke.								9
10 21.17							Well opened on 64/64 Adjustable choke for Pre Acid Flow.								10
11 21.18	64A	100 / 7.9	59 / 15												11
12 21.19	40A	350 / 25.15	59 / 15				Changed choke to 40/64 Adjustable.								12
13 21.21	32A						Changed to 32/64 Adjustable. Start chemical injection.								13
14 21.23	"	700 / 48.3	59 / 15												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	6	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=I					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 21.24	28A	1050 72.4	59 15				Changed choke to 28/64 Adjustable.								1
2 21.25	"	1225 84.5	60 16												2
3 21.26	"	1298 89.5	60 16												3
4 21.27	"	1400 96.5	60 16												4
5 21.28	"	1535 105.8	60 16												5
6 21.30	"	1655 114.1	61 17				Choke vibrated. Closed. Stopped at 12/64 Adjustable.								6
7 21.30							Gas to surface. Change choke to 28/64. Trace solid, 90% Brine 8% meth. 2% emul								7
8 21.35	36A	1650 113.8	61 17												8
9 21.39	"						Change choke to 64/64 Adjustable.								9
10 21.40	64A	1350 93.1	59 14												10
11 21.40	"						Flow directed through positive choke 128/64. Choke at heater 28/64 Adjustable								11
12 21.41	"	1430 98.6	59 15												12
13 21:42	28A	1440 99.3	59 15												13
14 21.43	"	1450 100	59 15												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	7	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 21.44	28A	1462 100.8	60 16												1
2 21.45	"	1465 101	60 16	0.5	0		95% brine. 4% meth. 1% emul.								2
3 22.00	"	1460 100.7	60 16	0.6	0		96% brine. 4% meth. trace solids								3
4 22.15	"	1435 98.9	59 15				98% brine. 2% meth. trace solids								4
5 22.30	"	1440 99.3	59 15	0.3	0		98% brine. 1.5% meth. 0.5% solids.								5
6 22.34	32A														Change choke at heater to 32/64 6
7 22.35	"	1305 90	58 14												7
8 22.40	"	1259 86.8	58 14												8
9 22.45	"	1235 85.2	58 14				98% brine. 2% meth. trace solids								9
10 22.50	"	1230 84.8	58 14												10
11 22.55	"	1217 83.9	58 14												11
12 23.00	"	1212 83.6	58 14												12
13 23.03	36A														Increase choke to 36/64 Adjustable. 13
14 23.05	"	1125 77.6	58 14				98% brine 2% meth. trace solids								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	23-08-84	8	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 23.10	36A	1083 74.7	58 14												1
2 23.15	"	980 67.6	58 14												2
3 23.15	40A														Increase to 40/64 Adjustable. 3
4 23.20	"	920 63.4	58 14	0.3			80%brine 20% meth. trace solids								4
5 23.25	"	896 61.8	58 14												5
6 23.30	44A	807 55.6	58 14				90%brine 10% meth. trace solids								Increase choke to 44/64 Adjustable. 6
7 23.35	"	770 54.1	58 14	0.3											7
8 23.40	"	738 51.9	58 14												8
9 23.45	48A	683 48.1	58 14												Increase choke to 48/64 Adjustable. 9
10 23.50	"	666 46.9	58 14												10
11 23.55	"	655 46.2	58 14												11
12 24.00	52A	600 42.4	58 14	0.3											Increase choke to 52/64 Adjustable. 12
13 24-08 00.05	"	577 40.8	57 13.8				65%brine. 34% cond. 1% meth.								13
14 00.10	"	577 40.8	57 13.8												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	9	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.15	52A	574 / 40.6	57 / 13.8				72%brine. 27%cond. 1% meth.								1
2 00.20	"	574 / 40.6	57 / 13.8												2
3 00.25	"	572 / 40.4	57 / 13.8	0.3											3
4 00.30	"	572 / 40.4	57 / 13.8				80%brine 19%cond. 1% meth.								4
5 00.40	"	572 / 40.4	57 / 13.8												5
6 00.50	"	571 / 40.3	57 / 13.8				80%brine. 19%cond. 1% meth.								6
7 01.00	"v	571 / 40.3	57 / 13.8	0.3			80%brine 19%cond. 1%meth. trace solids.								7
8 01.15	"	572 / 40.4	57 / 13.8												8
9 01.16	"														Stopped pumping meth. at Sub Sea Test Tree, Change drums. 9
10 01.18	"														Started pumping meth. at Sub Sea Test Tree. 10
11 01.30	"	568 / 40.2	57 / 13.8	0.3			80%brine 19%cond. 1%meth. trace solids.								11
12 01.45	"	574 / 40.6	57 / 13.8					5.0							12
13 01.45	"						80%brine. 19%cond. 1%meth. trace solids.								13
14 02.00	"	575 / 40.65	57 / 13.8					5.0							14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	10	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.00	52A						85%brine, 14%cond. 1% meth. trace solids.								1
2 02.15	"	578 39.9	57 13.8					5.0							2
3 02.15	"						80%brine. 19%cond. 1%meth. trace solids.								3
4 02.30	"	579 39.9	57 13.5	0.3			60%brine. 39%cond. 1%meth.								4
5 02.43	64A	580 40	57 13.5												5
6 02.46	"	470 32.4	55 13												6 Bypass heater 1" Adjustable choke.
7 02.48	"	400 27.6	54 12.5												7
8 02.49	"	380 27.2	54 12.5												8
9 02.50	"	370 25.5	54 12.5												9
10 02.52	"	367 25.3	55 12.8												10
11 02.54	"	367 25.3	55 13												11
12 02.56	"	367 25.3	56 13												12
13 02.58	"	368 25.4	56 13												13
14 03.00	"	367 25.3	56 13	0.3			72%brine. 27%cond. 1%meth. trace solids.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	11	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 03.05	64A	369 / 25.4	56 / 13												1
2 03.10	"	370 / 25.5	56 / 13												2
3 03.15	"	370 / 25.5	56 / 13												3
4 03.20	"	370 / 25.5	56 / 13												4
5 03.25	"	370 / 25.5	56 / 13												5
6 03.30	"	370 / 25.5	56 / 13	0.3			60%brine. 40%cond. trace meth.								6
7 03.45	"	372 / 26.7	56 / 13												Changed methanol drum on Sub Sea Test Tree. 7
8 04.00	"	372 / 26.7	56 / 13	0.3			70%brine. 29%cond. 1%meth. trace solids.								8
9 04.03	68A														Adjustable choke increased to 68/64. 9
10 04.04	"	340 / 23.4	56 / 13												10
11 04.05	"	335 / 23.1	56 / 13												11
12 04.06	72A	330 / 22.8	56 / 13												Adjustable choke increased to 72/64. 12
13 04.07	"	315 / 21.7	56 / 13												13
14 04.08	"	300 / 20.7	56 / 13												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	12	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 04.09	80A	297 20.5	56 13												Adjustable choke increased to 80/64. 1
2 04.10	"	260 17.9	56 13												2
3 04.11	"	250 17.2	56 13												3
4 04.12	"	242 16.7	55 12.5												4
5 04.13	"	242 16.7	55 12.5												5
6 04.14	"	242 16.7	55 12.5												6
7 04.15	"	242 16.7	55 12.5	0.3											7
8 04.20	"	241 16.6	56 13												8
9 04.25	"	240 16.6	56 13												9
10 04.30	"	240 16.6	56 13	0.3			70%brine. 29%cond. 1%meth. trace solids.								10
11 04.35	"	240 16.6	56 13												11
12 04.40	"	240 16.6	56 13												12
13 04.45	"	240 16.6	56 13												13
14 05.00	"	241 16.6	56 13	0.3				5.0							14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	13	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 05.00	80A						55%brine. 45%cond. trace meth.								1
2 05.15	"	240 16.6	56 13												2
3 05.30	"	244 16.8	56 13	0.3			55%brine. 44%cond. 1% meth.								3
4 05.45	"	244 16.8	56 13												4
5 05.48	64A	310 21.4	56 13	0.3											Change to 64/64 Adjustable choke. 5
6 05.49	"	345 23.8	56 13												6
7 05.50	"	365 25.2	56 13												7
8 05.52	"	372 25.7	56 13												8
9 05.54	"	375 25.9	56 13												9
10 05.56	"	375 25.9	56 13												10
11 05.58	"	375 25.9	56 13												11
12 06.00	"	375 25.9	56 13	0.3			60%brine. 39%cond. 1%meth.								12
13 06.03	48A														Through heater 48/64 Adjustable. 13
14 06.06	"														Open on fixed side off choke 128/64. 14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	14	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.07	48A														Direct flow through separator.
2 06.08	"	658 / 46.3	57 / 13.5												
3 06.10	"	675 / 47.5	56 / 13												
4 06.12	"	676 / 47.5	56 / 13												
5 06.14	"	680 / 47.8	56 / 13	0.3				5.0		.598		8,566 / 242,678			Flow rate at 06.15
6 06.16	"	681 / 47.9	56 / 13												
7 06.18	"	681 / 47.9	56 / 13												
8 06.20	"	682 / 48	56 / 13												
9 06.25	"	682 / 48	56 / 13												
10 06.30	"	682 / 48	56 / 13							.598		8,608 / 243,854			
11 06.35	"	682 / 48	56 / 13												
12 06.40	"	682 / 48	56 / 13												
13 06.45	"	683 / 48.1	56 / 13	0.3								8,608 / 243,854			
14 07.00	"	685 / 48.2	56 / 13				45%brine 54%cond. 1%meth.					8,569 / 242,744			

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	15 | 64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.15	48A	684 / 48.2	56 / 13									8,629 / 244,440			1
2 07.30	"	684 / 48.2	56 / 13							.598		8,599 / 243,611			2
3 07.45	"	685 / 48.2	56 / 13	0.3								8,599 / 243,611			3
4 08.00	"	685 / 48.2	56 / 13				50%brine. 48%cond. 2%meth.					8,608 / 243,854			4
5 08.15	"	682 / 48	56 / 13									8,587 / 243,266			5
6 08.30	"	682 / 48	56 / 13							.598		8,599 / 243,611			6
7 08.45	"	682 / 48	56 / 13	0.3								8,599 / 243,596			7
8 09.00	"	685 / 48.2	56 / 13				45%brine. 53%cond. 2%meth.			.598		8,599 / 243,596			8
9 09.15	"	685 / 48.2	56 / 13									8,620 / 244,181			9
10 09.27	"														Stop injecting methanol at choke. 10
11 09.30	"	685 / 48.2	56 / 13	0.4						.598		8,620 / 244,181			11
12 09.45	"	685 / 48.2	56 / 13									8,570 / 242,767			12
13 10.00	"	685 / 48.2	56 / 13				11%brine. 87%cond. 2%meth.					8,590 / 243,354			13
14 10.15	"	684 / 48.1	56 / 13							.598		8,599 / 243,596			14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	16	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 10.30	48A	684 / 48.1	56 / 13	0.3								8,599 / 243,596			1
2 10.45	"	684 / 48.1	56 / 13									8,590 / 243,354			2
3 11.00	"	684 / 48.1	57 / 13.5				50%brine. 48%cond. 2%meth.					8,599 / 243,611			3
4 11.15	"	684 / 48.1	57 / 13.5							.598		8,640 / 244,750			4
5 11.30	"	688 / 48.4	57 / 13.5				32%brine. 66%cond. 2%meth.					8,630 / 244,471			5
6 11.45	"	685 / 48.2	57 / 13.5									8,652 / 245,091			6
7 12.00	"	681 / 47.9	57 / 13.5	0.25			27%brine. 71%cond. 2%meth.					8,591 / 243,368			7
8 12.15	"	681 / 47.9	57 / 13.5									8,652 / 245,091			8
9 12.30	"	681 / 47.9	57 / 13.5									8,650 / 245,058			9
10 12.42	"														10 By-passed separator.
11 12.45	"	681 / 47.9	57 / 13.5												11
12 12.55	"														12 Well closed in at choke.
13 13.00	"	1430 / 49.6													13 End of Pre Acid Flow.
14 13.02	"	1670 / 116.1													14 Close L.P.R.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	17 | 64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.02	48A														1 Total fluid produced= 8BBLS.
2 13.04	"	1870 129.9													2 5.3 BBLS Acid & Brine.
3 13.08	"	1980 137.5													3 2.7 BBLS Condensate.
4 13.10	"	1980 137.5													4
5 13.12	"	1982 137.6													5
6 13.14	"	1982 137.6													6 Bleed off tubing pressure to 320 PSI.
7 13.22															7 Bleed off to zero at choke manifold.
8 13.26															8 Close choke manifold.
9 13.27															9 Stop chemical injection at Sub Sea Test Tree.
10 13.28															10 Close failsafe. Open kill valve.
11 13.34															11 Pump 10BBL of acid with 3.5 BBL spacer.
12 13.48															12 Start pumping diesel 33.5 BBL
13 13.59															13 Open failsafe.
14 14.08															14 Open LPR and start pumping diesel 8.5 BBL and 1.5 BBL D.W.

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	18	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.00															1 Close LPR valve.
2 15.02															2 Close kill valve.
3 16.00															3 Open LPR valve and choke manifold on 28/64 Adjustable.
4 16.01	28A	234 / 17.1	59 / 15												4 For Post Acid Flow No 1.
5 16.02	"	256 / 18.6	59 / 15												5
6 16.03	"	290 / 21	59 / 15												6
7 16.04	"	348 / 25	59 / 15												7
8 16.05	"	420 / 29.9	59 / 15												8
9 16.06	"	525 / 37.2	59 / 15												9
10 16.07	"	617 / 43.5	59 / 15												10 Start injecting methanol at Sub Sea Test Tree and Choke
11 16.07	"														11 Manifold. 1.5 M^3 back to tank.
12 16.08	"	647 / 45.6	59 / 15												12 2.3 M^3 Cushion back to tank.
13 16.09	"	865 / 60.6	59 / 15												13 Switch flow to oil guns.
14															14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	19	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.10	28A	1178 / 82.2	59 / 15				Flow through heater choke 28/64				Adjustable and		open choke up to 128/64"		1
2							fixed at choke manifold.								2
3 16.12	"	1230 / 85.8	59 / 15												3
4 16.13	"	1277 / 89	59 / 15												4
5 16.14	"	1326 / 92.4	59 / 15												5
6 16.15	"	1370 / 95.4	59 / 15												6
7 16.20	"	1528 / 106.3	59 / 15												7
8 16.25	"	1539 / 107.1	59 / 15												8
9 16.30	"	1560 / 108.5	59 / 15												9
10 16.35	"	1564 / 108.8	59 / 15												10
11 16.40	"	1567 / 109	59 / 15												11
12 16.42	36A						Heater choke changed to 36/64.								12
13 16.42	"	1410 / 98.2	58 / 14.5												13
14 16.43	"	1327 / 92.5	58 / 14.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	20	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.44	36A	1170 / 81.6	55 / 13												1
2 16.45	48A														2 Heater choke changed to 48/64.
3 16.46	"	985 / 68.9	55 / 13												3 Gas flare lit.
4 16.47	"	962 / 67.3	55 / 13												4
5 16.48	44A	935 / 65.4	55 / 13												5 Reduce to 44/64" on heater choke.
6 16.49	32A	1025 / 71.6	56 / 13.5												6 Heater choke changed to 32/64.
7 16.50	"	1105 / 77.2	57 / 14												7
8 16.51	"	1147 / 80	57 / 14												8
9 16.52	"	1172 / 81.8	57 / 14												9
10 16.53	"	1190 / 83	57 / 14												10
11 16.54	"	1209 / 84.3	57 / 14												11
12 16.55	"	1218 / 84.9	57 / 14				2%meth. 98%water/acid trace solids.								12
13 17.00	"	1255 / 87.5	57 / 14												13
14 17.05	"	1255 / 87.5	58 / 14												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	21	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.10	32A	1265 88.2	58 15												1
2 17.15	"	1274 88.8	58 15												2
3 17.20	"	1275 88.9	58 15	0.1											3
4 17.25	"	1290 89.9	58 15												4
5 17.30	"	1297 90.4	57 14	0.25			85%water/acid 13%cond. 2%meth.								5
6 17.45	"	1317 91.8	57 14												6
7 18.00	"	1322 92.1	57 14				65%brine. 35%cond. trace solids.								7
8 18.15	"	1340 92.4	57 14												8
9 18.30	"	1345 92.7	57 14	0.1			65%brine. 33%cond.. 2%emul.								9
10 18.45	"	1345 92.7	57 14												10
11 18.46	"	1300 89.6	56 13.5												11
12 18.47	"	1270 87.6	56 13.5												12
13 18.48	38A	1220 84.1	56 13.5												Change choke size to 38/64. 13
14 18.49	"	1180 81.4	56 13.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	22	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.51	38A	1127 77.7	56 13.5												1
2 18.53	"	1110 76.5	56 13												2
3 18.55	"	1100 75.8	56 13												3
4 18.57	"	1095 75.5	56 13												4
5 18.59	"	1092 75.3	56 13												5
6 19.00	"	1095 75.5	56 13	0.5			60%brine. 38%cond. 2%emul.	trace solids							6
7 19.05	"	1105 76.2	57 13.5												7
8 19.10	"	1105 76.2	57 13.5												8
9 19.15	"	1112 76.7	57 13.5												9
10 19.30	"	1130 77.9	57 13.5	0.1			60%brine. 37%cond. 3% emul.	trace solids.							10
11 19.45	"	1140 78.6	57 13.5												11
12 20.00	"	1145 78.9	57 13.5		0.0		60%brine. 38%cond. 2%emul.	trace solids.							12
13 20.15	"	1147 79.1	57 13.5												13
14 20.30	"	1157 79.8	57 13.5				55%brine. 43%cond. 2% emul.	trace solids.							14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	23	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.41	38A	1160 80	56 13												1 Flow thru separator.
2 20.45	"	1150 79.3	56 13	0.2						.598		10,778 305,014			2
3 20.50	"	1140 78.6	56 13												3
4 20.55	"	1142 78.7	56 13												4
5 21.00	"	1142 78.7	56 13	0.2			50%brine. 49%cond. 1% emul.			.598		10,767 305,014			5
6 21.15	"	1145 78.9	56 13	0.2						.598		10,844 307,197			6
7 21.30	"	1150 79.3	56 13	0.2			50%brine. 49%cond. 1%emul.			.598		10,991 311,347			7
8 21.45	"	1157 79.8	56 13									10,991 311,347			8
9 22.00	"	1157 79.8	56 13	0.2			50%brine. 48%cond. 2% emul.			.598		11,078 313,827			9
10 22.15	"	1157 79.8	56 13	0.2						.598		11,060 313,322			10
11 22.30	"	1155 79.6	56 13	0.2						.598		11,148 315,818			11
12 22.30	"						37%brine. 60%cond. 3%emul. trace solids.								12
13 22.31	44A														13 Change choke to 44/64.
14 22.34	"	1035 71.4	56 13												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	24	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.35	44A	1015 / 70	56 / 13												1
2 22.36	"	1010 / 69.6	56 / 13												2
3 22.38	"	1012 / 69.8	56 / 13												3
4 22.41	48A														Change choke to 48/64. 4
5 22.42	"	910 / 62.7	55 / 12.5												5
6 22.43	"	900 / 62.1	55 / 12.5												6
7 22.44	"	895 / 61.7	55 / 12.5												7
8 22.45	"	892 / 61.5	55 / 12.5	0.2						.598		12,850 / 364,029			8
9 22.50	"	894 / 61.6	56 / 13												9
10 22.55	"	897 / 61.8	56 / 13												Stop injecting methanol at choke. 10
11 23.00	"	902 / 62.2	56 / 13	0.2			40%brine. 60%cond.			.598		12,790 / 362,327			11
12 23.15	"	907 / 62.5	56 / 13	0.2						.598		12,850 / 364,029			12
13 23.30	"	910 / 62.7	56 / 13	0.2			45%H2O/brine. 55%cond.			.598		12,850 / 364,029			13
14 23.45	"	913 / 62.9	56 / 13	0.2						.598		12,878 / 364,809			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	25	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 24.00	48A	918 63.3	56 13	0.2						.598		12,895 365,281			1
2 25-08 00.07	28A	1340 92.4	58 14												Change choke to 28/64. 2
3 00.10	"	1450 100	58 14												3
4 00.12	"	1540 106.2	59 14.5												4
5 00.14	"	1605 110.7	58 14												5
6 00.15	"	1615 111.4	57 14	0.2			8%brine. 92%cond.			.598		7,700 218,126			6
7 00.17	"	1628 112.3	57 14												7
8 00.20	"	1630 112.4	57 14												8
9 00.25	"	1632 112.5	57 14												9
10 00.30	"	1638 112.9	57 13.5	0.2						.598		8,094 229,298			10
11 00.30	"						53% brine 46%cond. 1%emul. trace solids.								11
12 00.45	"	1640 113.1	56 13.5	0.2			55%brine 44%cond. 1%emul.			.598		8.111 229,775			12
13 01.00	"	1640 113.1	56 13.5	0.2						.598		8,094 229,298			13
14 01.15	"	1638 112.9	56 13.5	0.2						.598		8,094 229,298			14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	26	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 01.30	28A	1640 / 113.1	56 / 13.5	0.2			70%brine 30%cond.			.598		8,069 / 228,588			1
2 01.42	"														2 By-pass separator.
3 01.45	"	1640 / 113.1	56 / 13.5												3 Stop injecting methanol.
4 01.47	"														4 Shut in well at choke manifold
5															5 END OF POST ACID FLOW NO 1.
6 01.48		1850 / 127.6	58 / 14.5												6 Total Fluid Produced= 7BBLS, 4BBLS Acid&Brine-
7															7 3BBLS Condensate.
8 01.49		1930 / 133.1	59 / 15												8
9 01.50		1990 / 137.2	60 / 15.5												9
10 01.51		2000 / 137.9	60 / 15.5												10
11 01.52		2000 / 137.9	60 / 15.5												11
12 01.53		1997 / 137.7	60 / 15.5												12
13 01.54		1997 / 137.7	60 / 15.5												13
14 01.55		1997 / 137.7	59 / 15												14

FIELD READING

OTIS O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	27	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.00															Close LPR-n. Bleed down surface pressure. 1
2 02.05		340 / 23.4	54 / 12												Watching for decrease in pressure. 2
3 02.08															Bleed of to zero. 3
4 02.15															Close choke valves. Close failsafe valve. 4
5 02.19															Open kill line valve. 5
6 02.25															Commence pumping acid. 6
7 04.29															Close kill valve, open failsafe. 7
8 05.48															Open LPR-n valve. 8
9 05.50		385 / 27.5	62 / 16.5												9
10 05.52		390 / 27.9	62 / 16.5												10
11 05.52	28A														Open choke manifold on 28/64 Adjustable. 11
12 05.55	"	290 / 21	60 / 15.5												FOR POST ACID FLOW NO2- 12
13 05.56	"	395 / 28.2	60 / 15.5												13
14 05.57	"	550 / 38.9	60 / 15.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	28 64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 05.58	28A	630 / 44.5	60 / 15.5												1
2 05.59	"	688 / 48.4	61 / 16												1.5 M^3 cushion back to tank. 2
3 06.00	"	720 / 50.6	61 / 16												3
4 06.01	"	940 / 65.8	61 / 16												4
5 06.02	"	1050 / 73.4	61 / 16												$3M^3$ cushion back to tank. Flow to burner. 5
6 06.03	"	1270 / 88.5	61 / 16												Change to fixed side of choke manifold 64/64 6
7 06.03	"														Heater choke on 28/64 and open choke to 128/64 7
8															fixed. 8
9 06.05	"	1380 / 96.1	59 / 14.5												9
10 06.06	"	1395 / 97.1	59 / 14.5												10
11 06.07	"	1448 / 100.8	59 / 14.5												11
12 06.08	"	1457 / 101.4	59 / 14.5												12
13 06.09	"	1469 / 102.2	59 / 14.5												13
14 06.10	"	1480 / 103	59 / 14.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	29	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.12	28A	1495 104	59 14.5												1
2 06.14	"	1520 105.8	59 14.5												2
3 06.16	"	1540 107.1	59 14.5												3
4 06.18	"	1570 109.2	59 14.5												4
5 06.20	"	1578 109.8	60 15												5
6 06.22	"	1583 110.1	60 15												6
7 06.24	"	1585 110.2	60 15												7
8 06.26	"	1594 110.9	60 15												8
9 06.28	"	1597 111.1	60 15												9
10 06.30	"	1600 111.3	60 15												10
11 06.35	"	1610 112	60 15												11
12 06.40	"	1612 112.1	60 15												12 Heater choke plugging.
13 06.45	"	1612 112.1	60 15												13
14 06.50	32A	1380 96.1	58 14												14 Heater choke changed to 32/64.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	35-08-84	30	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.51	32A														Flow through gas flare. 1
2 06.52	"	1353 / 94.2	58 / 14"												2
3 06.53	"	1356 / 94.5	58 / 14												3
4 06.54	"	1359 / 94.7	58 / 14												4
5 06.55	"	1360 / 94.7	58 / 14												5
6 07.00	"	1360 / 94.7	58 / 14												6
7 07.05	"	1550 / 107.8	59 / 14.5												7
8 07.06	"	1550 / 107.8	59 / 14.5												Stop injecting methanol at choke. 8
9															Decrease methanol rate at Sub Sea 9
10															Test Tree. 10
11 07.10	28A	1550 / 107.8	57 / 13.5												Heater choke changed to 28/64. 11
12 07.15	"	1550 / 107.8	57 / 13.5				98%acid/brine 2%meth. trace solids.								12
13 07.20	"	1550 / 107.8	57 / 13.5												13
14 07.25	"	1550 / 107.8	57 / 13.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	31	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.30	28A	1555 / 108.2	57 / 13.5												1
2 07.45	"	1575 / 109.6	57 / 13.5	0.5			97%brine/acid 1%meth. 2%cond.								2
3 08.00	"	1605 / 111.6	57 / 13.5												3 Decrease rate on methanol pump to
4															4 Sub Sea Test Tree.
5 08.10	"														5 Heater choke changed to 38/64.
6 08.11	38A	1560 / 108.5	56 / 13												6
7 08.12	"	1500 / 104.4	54 / 12.5												7
8 08.13	"	1475 / 102.7	54 / 12.5												8
9 08.14	"	1436 / 100	54 / 12.5												9
10 08.15	"	1430 / 99.6	54 / 12.5												10
11 08.16	"	1433 / 99.8	54 / 12.5												11
12 08.17	"	1433 / 99.8	54 / 12.5												12
13 08.18	"	1430 / 99.6	54 / 12.5												13
14 08.19	"	1432 / 99.7	54 / 12.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	32	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 08.20	38A	1430 / 99.6	54 / 12.5												1
2 08.25	"	1440 / 100.2	55 / 12.5												2
3 08.30	"	1445 / 100.6	55 / 12.5				90%brine/acid 9%cond. 1%meth.								3
4 08.35	"	1445 / 100.6	55 / 12.5												4
5 08.40	"	1455 / 101.3	55 / 12.5												5
6 08.45	"	1455 / 101.3	55 / 12.5				90%brine/acid 9%cond. 1%meth.								6
7 08.50	"	1460 / 101.6	55 / 12.5												7
8 08.55	"	1460 / 101.6	55 / 12.5												8
9 09.00	"														Flow through separator. 9
10 09.01	"	1462 / 101.8	55 / 12.5												10
11 09.02	"	1465 / 102	55 / 12.5												3 Inch Orifice plate installed at Daniels Box. 11
12 09.03	"	1461 / 101.7	55 / 12.5												12
13 09.04	"	1462 / 101.8	55 / 12.5												13
14 09.05	"	1463 / 101.8	55 / 12.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	33	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 09.10	38A	1469 / 102.2	55 / 12.5												1
2 09.15	"	1474 / 102.6	55 / 12.5	0.5			75%water 24%cond. 1%meth.			.598		13,754 / 389,614			2
3 09.20	"	1474 / 102.6	55 / 12.5												3
4 09.25	"	1474 / 102.6	55 / 12.5												4
5 09.30	"	1484 / 103.3	55 / 12.5	0.5						.598		13,841 / 392,090			5
6 09.45	"	1484 / 103.3	55 / 12.5	0.5						.598		13,857 / 392,533			6
7 10.00	"	1489 / 103.6	55 / 12.5	0.4			75%water 24%cond. 1%meth.			.598		14,074 / 398,679			7
8 10.15	"	1497 / 104.2	55 / 12.5	0.4						.598		14,162 / 401,196			8
9 10.30	44A			0.4						.598		14,231 / 403,147			Increased heater choke to 44/64. 9
10 10.32	"	1335 / 93.0	55 / 12.5												10
11 10.34	"	1340 / 93.4	55 / 12.5												11
12 10.36	"	1342 / 93.5	55 / 12.5												12
13 10.38	"	1337 / 93.2	55 / 12.5												13
14 10.40	"	1345 / 93.7	55 / 12.5												14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	34	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 10.45	44A	1342 93.5	55 12.5	0.4						.598		16,573 469,493			1
2 10.50	"	1342 93.5	55 12.5												2
3 10.55	"	1344 93.6	55 12.5												3
4 10.58	48A														Increased heater choke to 48/64. 4
5 11.00	"	1260 87.8	54 12	0.4			60%water. 39%cond. 1%meth.			.598		16,453 466,072			5
6 11.02	"	1250 87.1	54 12												6
7 11.04	"	1235 86.1	54 12												7
8 11.06	"	1240 86.5	54 12												8
9 11.08	"	1238 86.3	54 12												9
10 11.10	"	1240 86.5	55 12.5												10
11 11.15	"	1245 86.8	55 12.5	0.4						.596		17,946 508,379			11
12 11.20	"	1245 86.8	55 12.5												12
13 11.25	"	1245 86.8	55 12.5												13
14 11.30	"	1247 87.0	55 12.5	0.4						.596		17,946 508,379			14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	35	64

CUSTOMER: STATOIL

RIG NAME: DEEP SEA BERGEN

UNITS: ☐ OIL FIELD ☐ METRIC

CONDITIONS: ☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 11.35	48A	1247 87.0	55 12.5												1
2 11.40	"	1248 87.05	55 12.5												2
3 11.45	"	1248 87.05	55 12.5	0.4			40%cond.			.596		18,002 509,974			9BBLS dumped separator. 3
4 12.00	"	1248 87	55 12.5	0.4			50%water 49%cond. 1%meth.			.596		18,285 517,968			4
5 12.15	"	1251 87.2	55 12.5	0.4						.596		18,285 517,968			5
6 12.30	"	1253 87.4	55 12.5	0.4						.596		18,285 517,968			6
7 12.45	"	1257 87.6	55 12.5	0.4						.596		18,323 519,066			7
8 12.49	56A														Heater choke changed to 56/64. 8
9 12.51	"	1140 79.6	55 12.5												9
10 12.52	"	1100 76.8	55 12.5												10
11 12.53	"	1072 74.9	55 12.5												11
12 12.54	"	1043 72.9	55 12.5												12
13 12.55	"	1049 73.3	55 12.5												13
14 12.56	"	1055 73.7	55 12.5												14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	36 | 64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.57	56A	1057 73.8	55 12.5												1
2 12.58	"	1057 73.8	55 12.5												2
3 12.54	"	1056 73.8	55 12.5												3
4 13.00	"	1059 74	55 12.5				55%acid/water. 44%cond. 1%meth.					20,188 571,890			4
5 13.05	"	1062 74.2	55 12.5												5
6 13.10	"	1063 74.3	55 12.5												6
7 13.15	"	1063 74.3	55 12.5									20,289 574,736			7
8 13.30	"	1062 74.2	55 12.5									20,331 575,947			8
9 13.38	64A														Heater choke changed to 64/64. 9
10 13.40	"	930 65.1	55 12.5												10
11 13.41	"	910 63.7	55 12.5												11
12 13.42	"	895 62.7	55 12.5												12
13 13.43	"	900 63	55 12.5												13
14 13.44	"	903 63.2	55 12.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	37	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.45	64A	900 63	55 12.5	0.4						.596		21,200 600,561			1
2 13.50	"	905 63.4	55 12.5												2
3 13.55	"	910 63.7	55 12.5												3
4 14.00	"	915 64.1	55 12.5	0.4			60%acid/water. 39%cond. 1%meth.			.596		21,651 613,340			4
5 14.15	"	914 64	55 12.5	0.4						.596		21,835 618,541			5
6 14.30	"	914 64	55 12.5	0.4						.596		22,062 624,965			6
7 14.45	"	914 64	55 12.5	0.4						.596		22,110 626,318			7
8 15.00	"	918 64.3	55 12.5	0.4			60%acid/water. 39%cond. 1%meth.			.596		22,241 630,053			8
9 15.10	48A														Heater choke changed to 48/64. 9
10 15.11	"	1160 80.9	55 12.5												10
11 15.12	"	1240 86.5	56 13												11
12 15.13	"	1245 86.8	56 13												12
13 15.14	"	1265 88.2	57 13.5												13
14 15.15	"	1266 88.3	57 13.5	0.4						.596		18,845 533,853			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	38	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.16	48A	1272 / 88.7	57 / 13.5												1
2 15.17	"	1272 / 88.7	57 / 13.5												2
3 15.18	"	1268 / 88.4	56 / 13												3
4 15.19	"	1265 / 88.2	56 / 13												4
5 15.20	"	1269 / 88.5	56 / 13												5
6 15.25	"	1270 / 88.5	56 / 13												6
7 15.30	"	1270 / 88.5	56 / 13	0.4						.596		18,907 / 535,590			7
8 15.33	28A														Heater choke changed to 28/64. 8
9 15.35	"	1680 / 116.8	60 / 15												9
10 15.36	"	1790 / 124.4	60 / 15												10
11 15.37	"	1795 / 124.7	60 / 15												11
12 15.38	"	1817 / 126.2	59 / 14.5												12
13 15.39	"	1822 / 126.6	58 / 14												13
14 15.40	"	1825 / 126.8	58 / 14												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	39	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.45	28A	1814 126	57 13.5	0.4						.596		9,685 274,360			1
2 16.00	"	1814 126	57 13.5	0.4			50%acid/water. 49%cond. 1%meth.			.596		9,706 274,952			2
3 16.15	"	1814 126	57 13.5	0.4						.596		9,685 274,360			3
4 16.30	"	1814 126	57 13.5	0.4						.596		9,677 274,121			4
5 16.45	"	1814 126	57 13.5	0.4						.596		9,687 274,424			5
6 17.00	"	1814 126	57 13.5	0.4			50%acid/water. 49%cond. 1%meth.			.596		9,625 272,660			6
7 17.15	"	1814 126	57 13.5	0.4						.596		9,645 273,244			7
8 17.30	"	1815 125.1	57 13.5	0.4						.596		9,645 273,244			8
9 17.35	"														9 By-pass separator.
10															10 END OF POST ACID FLOW NO 2.
11															11 TOTAL FUID PRODUCED= 15.5BBLS. 10.3BBLS
12															12 ACID&WATER. 5.2BBLS CONDENSATE.
13 17.38															13 Close choke manifold.
14 17.40		1990 137.2	58 14												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	40	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.42		2005 / 138.2	58 / 14												1
2 17.44		2005 / 138.2	58 / 14												2
3 17.46		2005 / 138.2	58 / 14												3 Close LPR-n valve.
4 17.48		2000 / 137.9	58 / 14												4
5 17.52		2000 / 137.9	58 / 14												5 Bleed down pressure at choke manifold.
6 17.54		422 / 29.1	58 / 14												6 Monitor pressure.
7 17.55															7 Bleed off to zero.
8 18.00															8 Shut in at choke.
9 18.02															9 Open kill line valve.
10 18.10															10 Start pumping acid.
11 18.33															11 Stop pumping acid.
12 18.34															12 Open LPR-n valve.
13 18.35															13 Pump another 5 BBLS acid.
14 18.48															14 Change manifold to Halliburton pumps.

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	41	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.49															1 Start pumping diesel.
2 18.50															2 Transfer 6 BBLS of fluid from separator
3															3 to tank.
4 19.15															4 Open failsafe valve.
5 19.16															5 Close kill line valve.
6 [illegible]															6 POST ACID RATE NO 3.
7 20.17	28A														7 Open choke on 28/64 Adjustable.
8 20.20	"	300 / 30.7	58 / 15												8
9 20.22	"	420 / 29	58 / 15												9
10 20.24	"	540 / 37.2	60 / 16												10
11 20.26	"	730 / 50.3	60 / 16												11
12 20.28	"	1050 / 72.4	59 / 15.5												12 Changed to fixed choke at wellhead 128/64.
13															13 Heater choke 28/64.
14 20.30	"	1240 / 85.5	59 / 15.5												14 Start injecting methanol.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	42	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.32	28A	1380 95.2	59 15.5												1
2 20.34	"														2 Acid to surface.
3 20.35	"	1485 102.4	59 15.5												3
4 20.37	"	1520 104.8	59 15.5												4
5 20.38	"	1545 106.5	59 15.5												5
6 20.40	"	1575 108.6	59 15.5												6
7 20.45	"	1625 112	59 15.5												7
8 20.50	"	1670 115.1	59 15.5												8
9 20.54	"														9 Light gas flare. Gas to surface.
10 20.55	32A	1671 115.2	59 15.5												10 Change choke to 32/64.
11 21.00	"	1673 115.4	58 15												11
12 21.10	"	1705 118.5	57 14.5												12
13 21.15	38A	1708 118.7	54 12	0.4											13 Increase choke to 38/64 on heater.
14 21.17	"	1610 112.0	54 12												14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	43	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 21.20	38A	1602 111.4	54 12												1
2 21.25	"	1610 112.0	54 12												2
3 21.30	48A	1620 111.7	54 12												3 Change choke to 48/64.
4 21.32	"	1460 100.7	54 12												4
5 21.34	"	1400 96.5	54 12												5
6 21.35	"	1385 95.5	54 12												6
7 21.40	"	1377 94.9	54 12												7
8 21.43	"														8 Flow thru separator.
9 21.45	"	1375 94.9	55 12.5	0.3						.596		19,260 545,592			9
10 21.50	"	1377 94.9	55 12.5												10
11 21.55	"	1377 94.9	55 12.5												11 Stop injecting methanol at choke
12															12 manifold.
13 22.00	"	1377 94.9	55 12.5	0.3			90%acid/water. 9%cond. 1%emul.			.596		19,317 547,220			13
14 22.15	"	1383 95.4	55 12.5	0.3						.596		19,659 556,904			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	44	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.30	48A	1382 95.3	55 12.5	0.3			84%acid/water. 15%cond. 1%emul.			.596		19,859 562,567			1
2 22.45	"	1380 95.2	55 12.5	0.3						.596		19,974 565,817			2
3 23.00	"	1382 95.3	53 11.5				65%acid/water. 34%cond. 1%emul.					19,931 564,615			3
4 23.15	"	1378 95	53 11.5									19,995 566,421			4
5 23.30	"	1375 94.8	53 11.5				70%acid/water. 30%cond.					20,109 569,642			5
6 23.45	"	1375 94.8	53 11.5									20,152 570,861			6
7 24.00	"	1383 95.4	53 11.5							.596		20,087 569,035			7
8 24.00	"			0.3			65%acid/water. 34%cond. 1%emul. trace solids.								8
9 26-08 00.11	64A														9 Change choke to 64/64.
10 00.13	"	1145 79	52 11												10
11 00.15	"	1040 71.7	52 11	0.3						.596		24,734 700,655			11
12 00.17	"	1030 71	52 11												12
13 00.20	"	1032 71.2	53 11.5				60%acid/water. 39%cond. 1%emul.								13
14 00.25	"	1035 71.4	54 12												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	45	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.30	64A	1042 71.8	54 12	0.3			60%acid/water. 40%cond. trace emul.			.596		24,813 702,903			1
2 00.34	80A														2 Change choke to 80/64.
3 00.36	"	825 56.9	54 12												3 Dum 4 BBLS of water from separator.
4 00.38	"	820 56.5	54 12												4
5 00.40	"	818 56.4	54 12												5
6 00.45	"	817 56.3	54 12	0.3						.596		27,017 765,333			6
7 00.45	"						60%acid/water. 39%cond. 1%emul. trace solids.								7
8 01.00	"	820 56.5	54 12	0.3			55%acid/water. 44%cond. 1%emul.			.596		27,024 765,518			8
9 01.15	"	819 56.5	54 12	0.3						.596		27,233 771,453			9
10 01.30	"	820 56.5	54 12	0.3			47%water. 52%cond. 1%emul.			.596		27,066 766,713			10
11 01.36	"														11 Change choke to 96/64.
12 01.37	"	730 50.3	54 12												12
13 01.38	"	700 48.3	54 12												13
14 01.39	"	690 47.6	54 12												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	46	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 01.40	80A	692 / 47.7	54 / 12												1
2 01.45	"	692 / 47.7	54 / 12	0.3						.596		28,288 / 801,346			2
3 01.45							70%water. 29%cond. 1%emul. trace solids.								3
4 01.50	"	692 / 47.7	54 / 12												4
5 01.55	"	693 / 47.8	54 / 12				70%water. 29%cond. 1%emul. trace solids.								5
6 02.00	"	693 / 47.8	54 / 12	0.3						.596		28,129 / 796,823			6
7 02.04	96A														Changed to 96/64 Adjustable on choke 7
8															manifold. 8
9 02.06	"	718 / 49.5	54 / 12												9
10 02.10	"	722 / 49.8	54 / 12												10
11 02.15	"	722 / 49.8	54 / 12	0.3						.596		28,129 / 796,823			11
12 02.20	"	722 / 49.8	54 / 12												12
13 02.25	"	722 / 49.8	54 / 12				52%water. 47%cond. 1%emul. 0.1%solids.								13
14 02.28	"														By-pass heater. 96/64 Adjustable choke at choke manifold. 14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	47	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.30	96A	555 / 38.3	54 / 12	0.3						.596		29,023 / 822,152			1
2 02.34	"														2 Start injecting methanol at choke
3															3 manifold.
4 02.35	"	552 / 38.1	54 / 12												4
5 02.37							70%water 29%cond. 1%emul. trace solids								5
6 02.40	"	550 / 37.9	53 / 11.5												6
7 02.44	100A														7 Change coke to 100/64.
8 02.45	"	530 / 36.5	53 / 11.5	0.3						.596		29,142 / 825,525			8
9 02.47	"	530 / 36.5	53 / 11.5												9
10 02.49	104A														10 Change choke to 104/64 Adjustable at choke
11															11 manifold.
12 02.50	"	517 / 35.7	53 / 11.5												12
13 02.52	"	516 / 35.6	53 / 11.5				65%water 34%cond. 1%emul. trace solids.								13
14 02.55	96A	517 / 36.7	53 / 11.5												14 Change choke to 96/64 Adjustable at choke.

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	48	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.57	96A														Flow through heater on 96/64. 1
2 02.58															Change to 128/64 fixed choke at manifold. 2
3 03.00	"	700 / 48.3	54 / 12	0.3						.596		28,283 / 801,182			3
4 03.01	"														Stop injecting methanol at choke manifold. 4
5 03.03															Stop injecting methanol at Sub Sea Test Tree 5
6															Initial tank reading 16 BBLS. 6
7 03.05	"	698 / 48.1	54 / 12				43%water 50%cond. 7%emul. trace solids.							Tank reading 27BBLS	Dumped 11BBLS condensate from separator. 7
8 03.15	"	697 / 48.1	54 / 12	0.3						.596		28,283 / 801,182			8
9 03.20	"						45%water 53%cond. 2%emul. trace solids.								9
10 03.30	"	698 / 49.1	54 / 12	0.3	0					.596		28,329 / 802,490			10
11 03.40	"						44%water 55%cond. 1%emul. trace solids								11
12 03.45	"	699 / 49.2	54 / 12	0.3						.596		28,395 / 804,375			12
13 04.00	"	700 / 49.2	54 / 12	0.3			50%water 49%cond. 1%emul.			.596		28,374 / 803,784			13
14 04.15	"	702 / 49.4	54 / 12	0.3						.596		28,462 / 806,254			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	= 26-08-84	49	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 04.15	96A						49%water 50%cond. 1%meth. trace solids.								1
2 04.30	"	702 49.4	54 12	0.3						.596		28,433 805,428			2
3 04.30	"						51%water 48%cond. 1%meth. trace solids.								3
4 04.45	"	680 47.9	54 12	0.3						.596		28,869 817,794			4 Open adjustable choke 128/64, flow thru both
5 04.45	"						37%water 62%cond. 1%emul. trace solids								5 sides of choke manifold.
6 04.50	"	681 48	54 12												6
7 04.55	"	682 48	54 12												7
8 05.00	"	681 48	54 12	0.3			39%water 60%cond. 1%emul.			.596		28,898 818,627			8
9 05.15	"	683 48.1	54 12	0.3			40%water 60%cond. trace solids.			.596		28,928 819,462			9 Dump 4.5 BBLS water from separator.
10 05.30	"	684 48.1	54 12	0.3			36%water 63%cond. 1%emul.			.596		28,869 817,794			10
11 05.45	"	685 48.2	54 12	0.3			39%water 60%cond. 1%emul.			.596		28,928 819,462			11
12 06.00	"	686 48.3	54 12	0.3			60%water 39%cond. 1%emul.			.596		28,958 820,301			12
13 06.15	"	686 48.3	54 12	0.3			45%water 54%cond. 1%emul.			.596		28,998 821,460			13
14 06.30	"	687 48.3	55 12.5	0.3			50%water 49%cond. 1%emul.			.596		29,337 831,055			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	50	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	X MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	X SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.45	96A	687 48.3	55 12.5	0.3			40%water 59%cond. 1%emul.			.596		29,402 832,903			1
2 07.00	"	688 48.4	55 12.5	0.3			39%water 60%cond. 1%emul.			.596		29,152 825,811			2
3 07.15	"	688 48.4	55 12.5	0.3			39%water 60%cond. 1%emul.			.596		29,122 824,967			3
4 07.30	"	690 48.5	55 12.5	0.3			39%water 60%cond. 1%emul.			.596		29,152 825,811			4
5 07.45	"	690 48.5	55 12.5	0.3			45%water 54%cond. 1%emul.			.596		29,117 824,824		Tank reading 30 BBLS	0738 hrs. 4½BBLS water-3BBLS cond. dumped from separator. 5
6 08.00	"	690 48.5	55 12.5	0.3			65%water 34%cond. 1%emul.			.596		29,433 833,759			6
7 08.15	"	691 48.6	55 12.5	0.3			55%water 44%cond. 1%emul.			.596		29,468 834,747			7
8 08.30	"	692 48.7	55 12.5	0.3			47%water 52%cond. 1%emul.			.596		29,532 836,587			P.H. test on water = 0 8
9 08.45	"	693 48.7	55 12.5	0.3			52%water 47%cond. 1%emul			.596		29,563 837,447			9
10 09.00	"	694 48.8	55 12.5	0.3			50%water 49%cond. 1%emul.			.596		29,442 834,025			10
11 09.15	"	693 48.7	55 12.5	0.3			47%water 52%cond. 1%emul.			.596		29,597 838,424			11
12 09.30	"	693 48.7	55 12.5	0.3			49%water 50%cond. 1%emul.			.596		29,597 838,424			12
13 09.45	"	693 48.7	55 12.5	0.3			46%water 52%cond. 1%emul.			.596		29,628 839,286			13
14 10.00	"	693 48.7	55 12.5				44%water 55%cond. 1%emul.			.596		29,537 836,709			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	51	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 10.15	96A	694 / 48.8	55 / 12.5	0.3			53%water 46%cond. 1%emul.			.596		29,597 / 838,424			1
2 10.30	"	694 / 48.8	55 / 12.5	0.3			60%water 39%cond. 1%emul.			.596		29,692 / 841,120			2
3 10.45	"	695 / 48.9	55 / 12.5	0.3			60%water 39%cond. 1%emul.			.596		29,567 / 837,565		Tank reading 38.5BBLS	8.5 BBLS condensate dumped from separator. 3
4 11.00	"	695 / 48.9	55 / 12.5	0.3						.596		29,597 / 838,424			4
5 11.00	"						35%water 64%cond. 1%emul. trace solids								5
6 11.15	"	695 / 48.9	55 / 12.5	0.3						.596		29,597 / 838,424			6
7 11.15	"						48%water 51%cond. 1%emul. trace solids.								7
8 11.30	"	695 / 48.9	55 / 12.5	0.3						.596		29,567 / 837,565			8
9 11.30	"						40%water 59%cond. 1%emul. trace solids.								9
10 11.45	"	695 / 48.9	55 / 12.5	0.3						.596		29,597 / 838,424			10
11 11.45	"						40%water 59%cond. 1%emul. trace solids.								11
12 12.00	"	695 / 48.9	55 / 12.5	0.3						.596		29,727 / 842,085			12
13 12.00	"						48%water 51%cond. 1%emul. trace solids.								13
14 12.15	"	696 / 49	55 / 12.5	0.3						.596		29,757 / 842,950			14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	52	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.30	96A	696 49	55 12.5	0.3			50%water 49%cond. 1%emul.			.596		29,727 842,085			1
2 12.45	"	697 49	55 12.5	0.3						.596		29,757 842,950			2
3 13.00	"	697 49	55 12.5	0.3			39%water 60%cond. 1%emul.			.596		29,757 842,950			3
4 13.15	"	697 49	55 12.5	0.3						.596		29,855 845,730			4
5 13.30	"	698 49.1	55 12.5	0.3			50%water 50%cond. trace emul.			.596		29,855 845,730			5
6 13.45	"	698 49.1	55 12.5	0.3						.596		29,727 842,085			45API at 65°F taken at separator. 6
7 14.00	"	699 49.2	55 12.5	0.3			30%water 70%cond. trace emul.			.596		29,727 842,085			Dumped 3BBL water from separator. 7
8 14.15	"	699 49.2	55 12.5	0.3						.596		29,919 847,547			8
9 14.30	"	699 49.2	55 12.5	0.3			30%water 70%cond. trace emul.			.596		29,886 846,600			9
10 14.45	"	699 49.2	55 12.5	0.3						.596		29,858 845,814			10
11 15.00	"	699 49.2	55 12.5	0.3			34%water 66%cond. trace emul.			.596		29,983 849,361			11
12 15.15	"	699 49.2	55 12.5	0.3						.596		29,950 848,419			Stop taking BS&W at choke due to sampling at separator. 12
13 15.30	"	699 49.2	55 12.5	0.3						.596		29,981 849,293			13
14 15.45	"	699 49.2	55 12.5	0.3						.596		30,201 855,524			14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	53 64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☒ MMSCF/D / ☒ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.00	96A	699 / 49.2	55 / 12.5	0.3						.596		30,297 / 858,252			1
2 16.15	"	699 / 49.2	55 / 12.5	0.3						.596		30,615 / 867,253			2
3 16.30	"	699 / 49.2	55 / 12.5	0.3			35%water 65%cond. trace emul.			.596		30,552 / 865,454		Tank reading 42.5BBLS	4 BBLS condensate dumped to tank. 3
4 16.30	"														P.H. on water taken at choke manifold =1 4
5 16.45	"	699 / 49.2	55 / 12.5	0.3						.596		30,682 / 869,137			5
6 17.00	"	701 / 49.3	55 / 12.5	0.3			30%water 70%cond. trace emul.			.596		30,713 / 870,039			6
7 17.15	"	701 / 49.3	55 / 12.5	0.3						.596		30,682 / 869,137		Tank reading 45BBLS	2.5BBLS condensate dumped to tank. 7
8 17.30	"	701 / 49.3	55 / 12.5	0.3			30%water 70%cond. trace emul.			.596		30,682 / 869,137			8
9 17.45	"	701 / 49.3	55 / 12.5	0.3						.596		30,713 / 870,039			9
10 18.00	"	704 / 49.6	55 / 12.5	0.3				1		.596		30,683 / 869,174			10
11 18.00	"						30%water 70%cond. trace emul.								11
12 18.15	"	703 / 49.5	55 / 12.5	0.3						.596		30,747 / 871,003			12
13 18.30	"	703 / 49.5	55 / 12.5	0.3				1		.596		30,747 / 871,003			13
14 18.30	"						35%water 64%cond. 1%emul.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	54	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.45	96A	704 / 49.6	55 / 12.5	0.3						.596		30,811 / 872,805		Tank reading 47BBLS	Dump condensate to tank 2BBL 1
2 19.00	"	705 / 49.6	55 / 12.5	0.3				1		.596		30,747 / 871,003			Total 20 BBLS cond. 12 BBLS H2O 2
3 19.00	"						33%water 65%cond. 2%emul.								3
4 19.15	"	705 / 49.6	55 / 12.5	0.3						.596		30,779 / 871,902			4
5 19.30	"	707 / 49.8	55 / 12.5	0.3			20%water 79%cond. 1%emul.			.596		30,811 / 872,805			5
6 19.45	"	705 / 49.6	55 / 12.5	0.3						.596		30,716 / 870,107			6
7 20.00	"	705 / 49.6	55 / 12.5	0.3						.596		30,747 / 871,003			7
8 20.15	"	707 / 49.8	55 / 12.5	0.3						.596		30,779 / 871,902			8
9 20.30	"	707 / 49.8	55 / 12.5	0.3						.596					9
10 20.45	"	707 / 49.8	56 / 13	0.3						.596					Dump condensate to tank 3.5 BBL 10
11 21.00	"	708 / 49.8		0.3						.596				Tank reading 50.5BBLS	Temperature reading unreliable at this point due to testing 11
12															of thermometer by Statoil eng. 12
13 21.15	"	708 / 49.8		0.3						.596					13
14 21.30	"	708 / 49.8	60 / 15.5	0.3						.596					Start flow cond./ water to tank. 14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	55	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☒ MMSCF/D ☒ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 21.45	96A	708 49.8	60 15.5	0.3						.596					1
2 22.00	"	708 49.8	59 15	0.3				1		.596			Tank reading 52BBLS		2
3 22.15	"	708 49.8	59 15	0.3						.596		30,779 871,902			3
4 22.30	"	709 49.9	59 15	0.3						.596		30,716 870,107	Tank reading 53BBLS		4
5 22.45	"	709 49.9	59 15	0.3						.596		30,716 870,107			5
6 23.00	"	708 49.8	59 15	0.3			15%water 84%cond. 1%emul.			.596		30,779 871,902	Tank reading 54BBLS		6
7 23.15	"	708 49.8	59 15	0.3						.596		30,747 871,003			7
8 23.30	"	709 49.9	59 15	0.3			18%water 80%cond. 2%emul.			.596		30,844 873,748	Tank reading 54.75BBLS		8
9 23.45	"	709 49.9	59 15	0.3				1		.596		30,876 874,684			9
10 24.00	"	709 49.9	59 15	0.3						.596		30,908 875,564	Tank reading 55.5BBLS		10
11 24.00	"						27%water 71%cond. 2%emul. trace solids.								11
12 27-08 00.15	"	709 49.9	59 15	0.3						.596		30,876 874,648			12
13 00.30		709 49.9	59 15	0.3						.596		30,876 874,648	Tank reading 56.5BBLS		13
14 00.30							29%water 69%cond. 2%emul. trace solids.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	56	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.45		709 / 49.9	59 / 15									30,876 / 874,648			1
2 01.00		709 / 49.9	58 / 14.5					1.5				30,876 / 874,648		Tank reading 57.25BBLS	2
3 01.00							23%water 75%cond. 2%emul.								Pumped out tank to 19BBLS. 3
4 01.15		709 / 49.9	58 / 14.5									30,972 / 877,370			4
5 01.30		710 / 50	58 / 14				20%water 78%cond. 2%emul.					30,940 / 876,465			5
6 01.45		710 / 50	58 / 14									30,940 / 876,465		Initial reading 20BBLS	tank 6
7 02.00		710 / 50	57 / 14	0.3				2		.596		30,940 / 876,465			7
8 02.00							25%water 73%cond. 2%emul.								8
9 02.15		710 / 50	57 / 14	0.3						.596		30,972 / 877,375		Tank reading 21.5BBLS	9
10 02.30		711 / 50	57 / 14	0.3			19%water 80%cond. 1%emul.			.596		31,004 / 878,279			10
11 02.45		711 / 50	57 / 14	0.3						.596		30,972 / 877,370		Tank reading 22.5BBLS	11
12 03.00		711 / 50	57 / 14	0.3				1		.596		30,908 / 875,564			12
13 03.00							22%water 78%cond.								13
14 03.15		711 / 50	57 / 14	0.3						.596		31,004 / 878.279		Tank reading 23.5BBLS	14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	57	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 03.30		710 / 49.9	57 / 14	0.3			22%water 78%cond.			.596		31,004 / 878,279			1
2 03.45		711 / 50	57 / 14	0.3						.596		31,004 / 878,279		Tank reading 24.5BBLS	2
3 04.00		712 / 50.1	57 / 14	0.3				1		.596		31,004 / 878,279			3
4 04.00							25%water 75%cond.								4
5 04.15	96A	712 / 50.1	57 / 14	0.3						.596				Tank reading 25.5BBLS	5
6 04.30	"	712 / 50.1	57 / 14	0.3			20%water 79%cond. 1%emul.			.596				Tank reading (½hr. readings)	6
7 04.45	"	712 / 50.1	56 / 13.5	0.3											7
8 05.00	"	713 / 50.2	56 / 13.5	0.3				1		.596				Tank reading 27.0BBLS	8
9 05.00	"						21%water 78%cond. 1%emul. very small trace solids.								9
10 05.15	"	713 / 50.2	57 / 14	0.3											10
11 05.30	"	713 / 50.2	57 / 14	0.3			17%water 82%cond. 1%emul.			.596				Tank reading 28BBLS	11
12 05.45	"	713 / 50.2	57 / 14	0.3											12
13 06.00	"	713 / 50.2	57 / 14	0.3				1		.596		31,036 / 879,183		Tank reading 29BBLS	13
14 06.00	"						19%water 80%cond. 1%emul. very small trace solids.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	58	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.15	96A	713 / 50.2	57 / 14	0.3											1
2 06.30	"	713 / 50.2	57 / 14	0.3						.596		31,068 / 880,089		Tank reading 30BBLS	2
3 06.45	"	714 / 50.2	57 / 14												3
4 07.00	"	714 / 50.2	57 / 14	0.3				1.0		.596		31,132 / 881,895		Tank reading 31BBLS	4
5 07.00	"	"					25%water 74%cond. 1%emul.	very small trace solids.							5
6 07.30	"	714 / 50.2	57 / 14	0.3						.596		31,132 / 881,895		Tank reading 32BBLS	6
7 08.00	"	715 / 50.3	57 / 14	0.3				1.0		.596		31,100 / 880,988		Tank reading 33BBLS	7
8 08.00	"						20%water 79%cond. 1%emul.	very small trace solids.							8
9 08.30	"	715 / 50.3	57 / 14	0.3						.596		31,132 / 881,895		Tank reading 34.25BBLS	9
10 09.00	"	716 / 50.3	57 / 14	0.3				1.0		.596		31,100 / 880,988		Tank reading 35.25BBLS	10
11 09.00	"						20%water 79%cond. 1%emul.								11
12 09.30	"	717 / 50.4	57 / 14	0.3						.596		31,196 / 885,497		Tank reading 36.5BBLS	12
13 10.00	"	717 / 50.4	57 / 14	0.3				1.0		.596		31,259 / 885,497		Tank reading 37.5BBLS	13
14 10.00	"						19%water 80%cond. 1%emul.	small trace solids.							14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1	Post Gravel Pack Clean Up	Norway	31/6-2	27-08-84	59	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 10.30	96A	717 / 50.4	58 / 14.5	0.3						.596		31,227 / 884,586		Tank reading 38.5BBLS	1
2 11.00	"	717 / 50.4	58 / 14.5	0.3				1.0		.596		31,195 / 883,678		Tank reading 39.5BBLS	2
3 11.00	"						18%water 81%cond. 1%emul.								3
4 11.30	"	717 / 50.4	58 / 14.5	0.3						.596		31,259 / 885,497		Tank reading 40.5BBLS	4
5 11.46															5 Close adjustable side of choke manifold.
6 11.57	80A														6 Heater choke changed to 80/64 adjustable.
7 11.58	"	860 / 60.3	58 / 14.5												7
8 12.00	"	875 / 61.3	58 / 14.5	0.3						.596		30,127 / 853,428			8
9 12.02	"	882 / 61.8	58 / 14.5												9
10 12.04	"	882 / 61.8	58 / 14.5												10
11 12.07	64A	881 / 61	58 / 14.5												11
12 12.08	64A	1080 / 75.4	59 / 15												12 Heater choke changed to 64/64 adjustable.
13 12.10	"	1115 / 77.8	59 / 15												13
14 12.12	"	1119 / 78.1	59 / 15												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	60	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.14	64A	1116 77.9	59 15												1
2 12.15	"	1120 78.2	59 15	0.3						.596		27,821 788,102			2
3 12.18	"	1118 78	59 15												3
4 12.20	"	1119 78	59 15												4
5 12.22	58A	1250 87.1	59 15												Heater choke changed to 52/64 adjustable. 5
6 12.24	"	1380 96.1	60 15.5												6
7 12.26	"	1385 96.5	60 15.5												7
8 12.28	"	1385 96.5	60 15.5												8
9 12.30	"	1386 96.5	60 15.5	0.3						.596		23,899 676,999			9
10 12.32	"	1386 96.5	60 15.5												10
11 12.33	52A		60 15.5												Heater choke changed to 48/64 adjustable. 11
12 12.34	"	1450 100.9	60 15.5												12
13 12.36	"	1470 102.3	60 15.5												13
14 12.38	"	1477 102.8	60 15.5												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	61	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☒ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☒ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.40	52A	1478 102.8	60 15.5												1
2 12.42	"	1477 102.8	60 15.5												2
3 12.43	38A														Heater choke changed to 38/64 adjustable. 3
4 12.45	"	1580 109.9	60 15.5	0.3						.596		17,255 488,800			4
5 12.46	"	1700 118.2	60 15.5												5
6 12.48	"	1712 119	60 15.5												6
7 12.50	"	1714 119.1	60 15.5												7
8 12.52	"	1710 118.9	60 15.5												8
9 12.53	32A														Heater choke changed to 32/64 adjustable. 9
10 12.54	"	1820 126.4	60 15.5												10
11 12.56	"	1830 127.1	60 15.5												11
12 12.58	"	1832 127.2	60 15.5												12
13 13.00	"	1833 127.2	60 15.5	0.3						.596		13,298 376,721			13
14 13.02	"	1830 127.1	60 15.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	62	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D / ☐ m^3/D	☐ MMSCF/D / ☐ SCM/D	☐ BBL/D / ☐ m^3/D	☐ SCF/BBL / ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.03	28A		60 15.5												Heater choke changed to 28/64 Adjustable. 1
2 13.04	"	1890 131.3	59 15												2
3 13.06	"	1895 131.6	59 15												3
4 13.08	"	1900 132	59 15												4
5 13.10	"	1895 131.6	59 15												5
6 13.12	"	1898 131.8	59 15												6
7 13.15	"	1895 131.6	59 15	0.3						.596					7
8 13.16	"	1897 131.8	59 15												8
9 13.18	"	1893 131.5	59 15												9
10 13.20	24A	1895 131.6	59 15												Heater choke changed to 24/64 Adjustable. 10
11 13.22	"	1925 133.7	59 15												11
12 13.24	"	1945 135.1	59 15												12
13 13.26	"	1940 134.7	59 15												13
14 13.28	"	1941 134.8	59 15												14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	63	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.30	24A	1937 / 134.5	59 / 15	0.3						.596					1
2 13.32	"	1941 / 134.8	59 / 15												2 Bypass separator.
3 13.34		1938 / 134.6	59 / 15												3
4 13.36		1940 / 134.7	59 / 15											Tank reading 54BBLS	4 Close in well at choke manifold.
5 13.37		2010 / 139.6	58 / 14.5												5 END OF ACID FLOW NO 3.
6 13.38		2009 / 139.5	59 / 15												6 TOTAL FLUID PRODUCED= 50.25BBLS condensate-
7 13.39		2009 / 139.5	59 / 15												7 22BBLS Acid&brine in a 25 Hr. period.
8 13.40		2007 / 139.4	59 / 15												8
9 13.42															9 Close lubricator and bleed off above to
10															10 447 PSI. 31.8 bar.
11 13.50		467 / 33.2													11
12 13.55		478 / 33.9													12
13 14.00		483 / 34.3													13 Bleed off pressure above lubricator to
14															14 150 PSI.

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

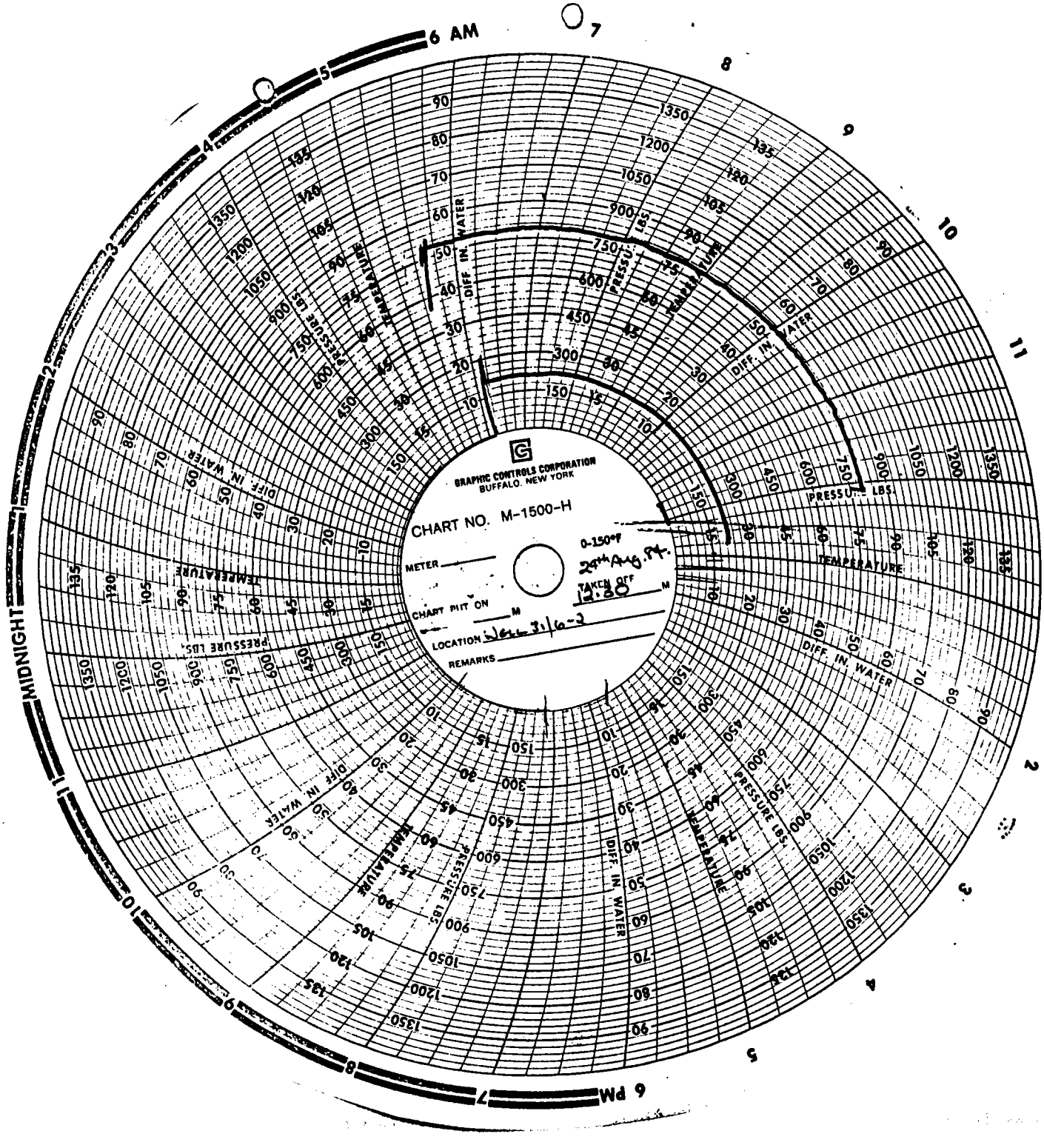
TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	64	64

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	☐ OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 14.07		Bleed off pressure to 0 and close choke manifold.													1
2 14.11		Disconnect wireline lubricator.													2
3 14.12		Start make up wireline tool and gauges.													3
4 14.42		Open swab valve.													4
5															5
6															6
7															7
8															8
9															9
10															10
11															11
12															12
13															13
14															14

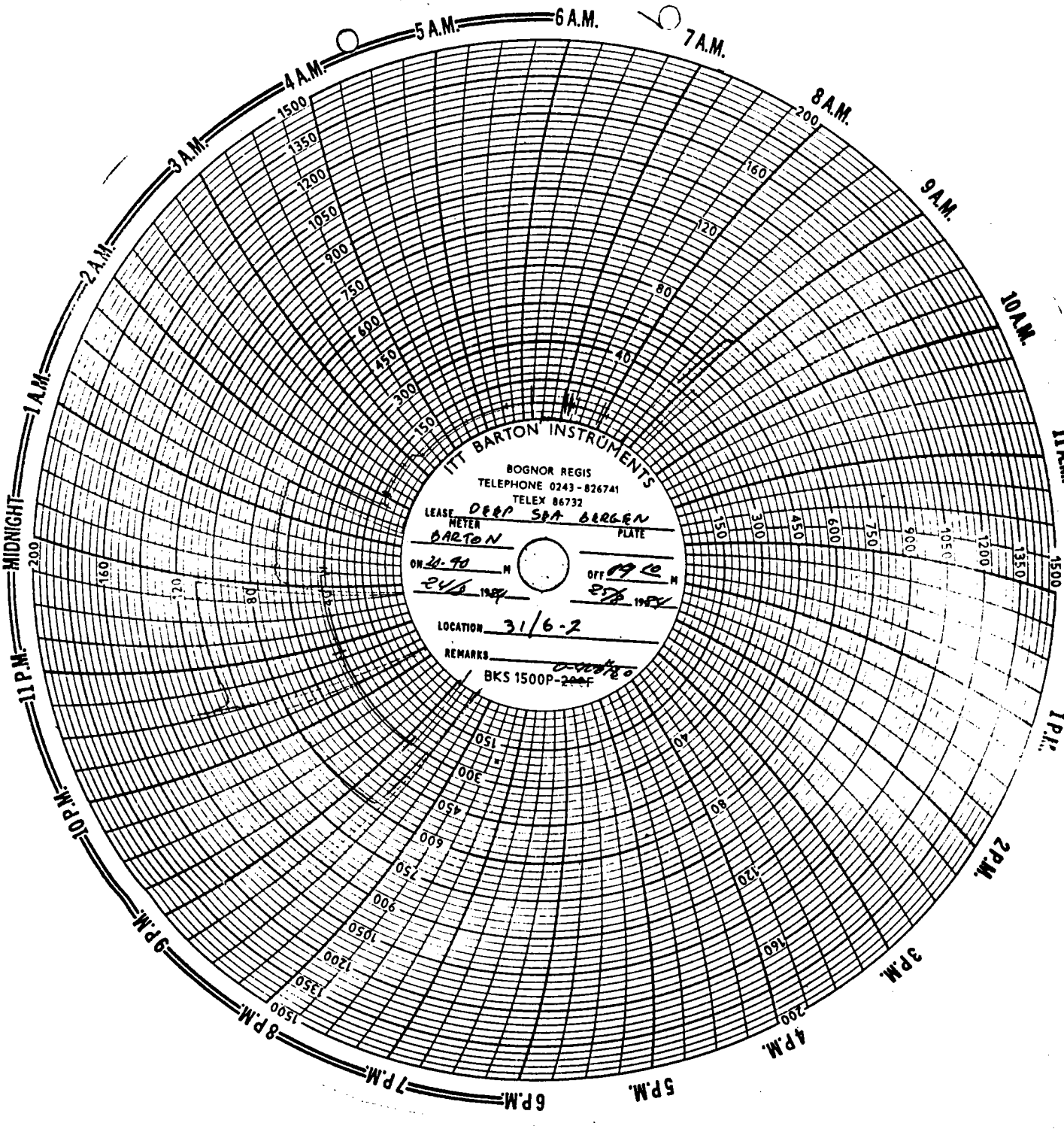
Well 31/6-2.

Barton meter chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 06.00 24th Aug. 1984
Time taken off 12.30 24th Aug. 1984.



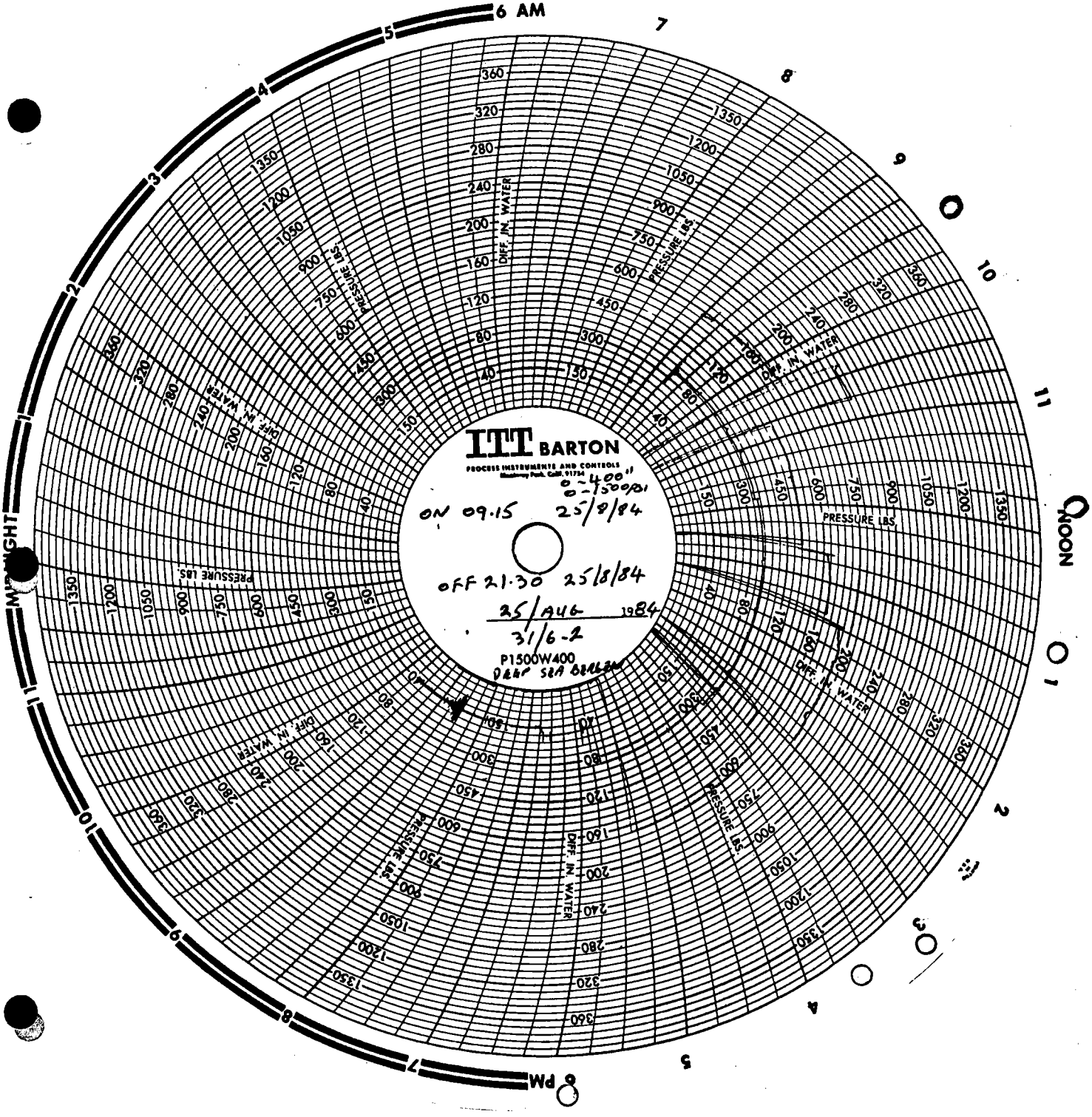
Well 31/6-2

Barton Meter chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 20.40 24th Aug. 1984.
Time taken off. 09.10 25th Aug. 1984.



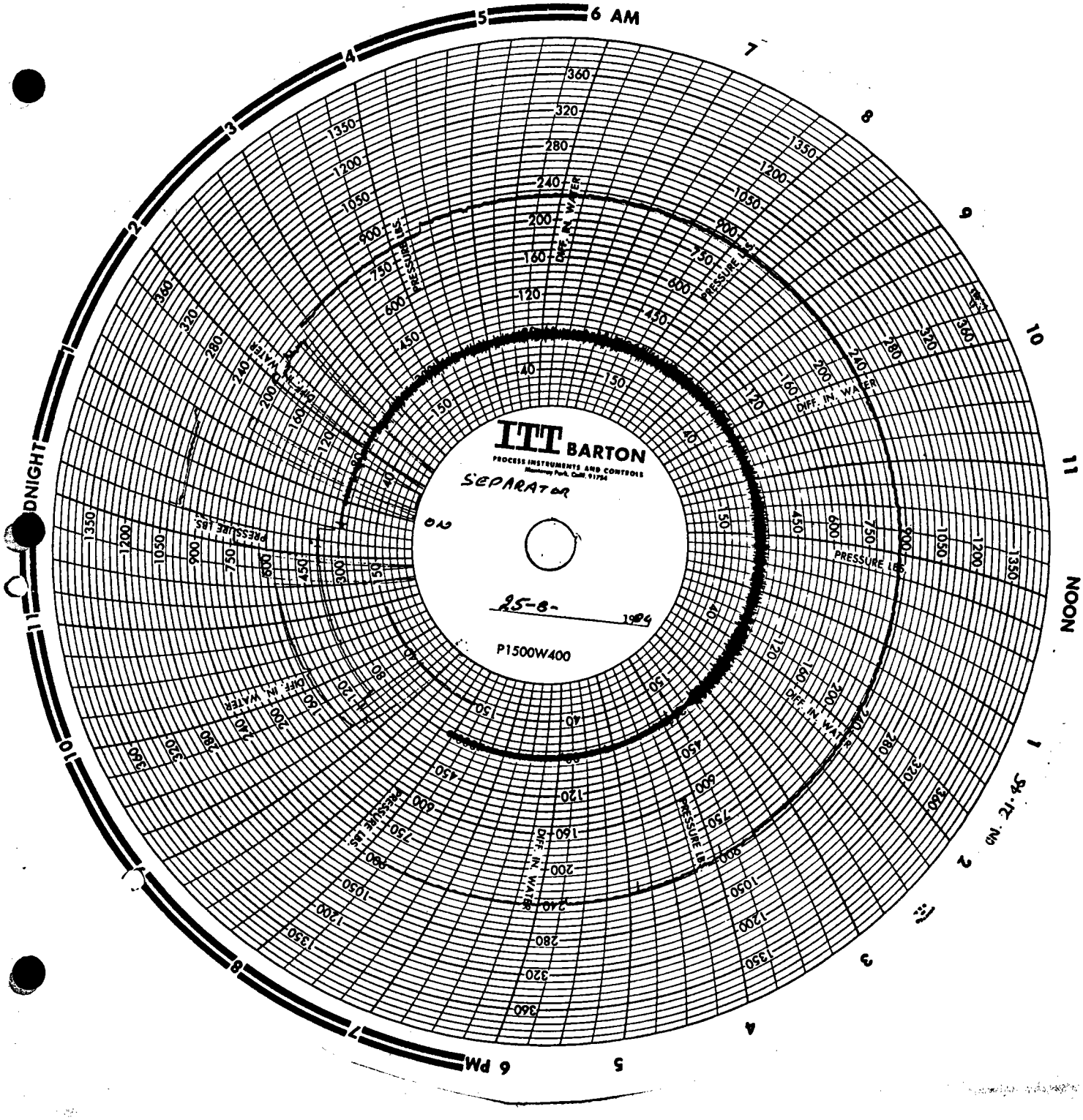
Well 31/6-2.

Barton meter chart.
Static 0-1500, diff. 0-400" H_2O.
Time put on 09.15 25th Aug. 1984.
Time taken off 21.30 25th Aug. 1984.



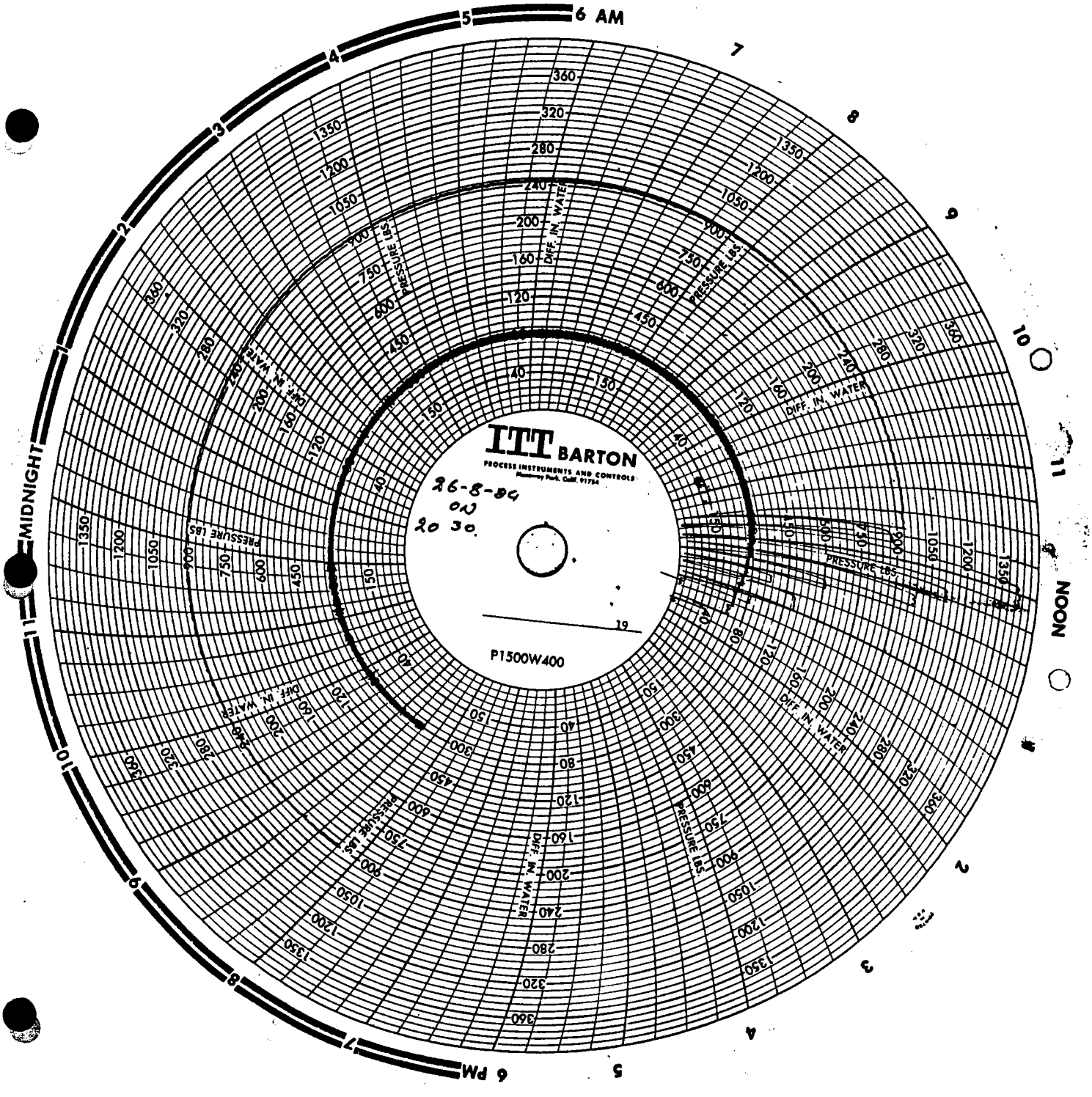
Well 31/6-2.

Barton meter chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 21.00 25th Aug. 1984.
Time taken off 08.00 26th Aug. 1984.



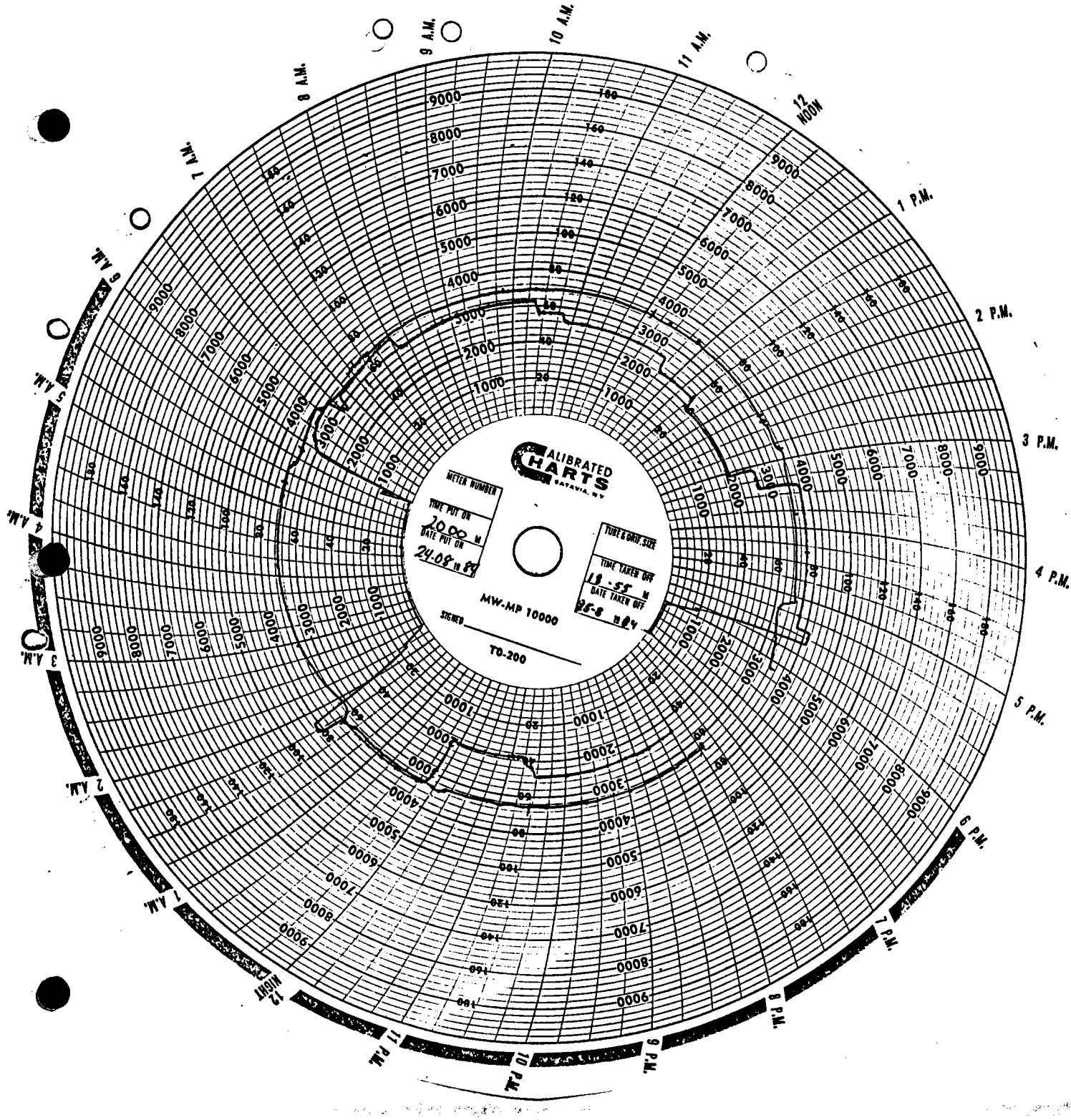
Well 31/6-2.

Barton meter chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 20.30 26th Aug. 1984.
Time taken off. 01.00 27th Aug. 1984.



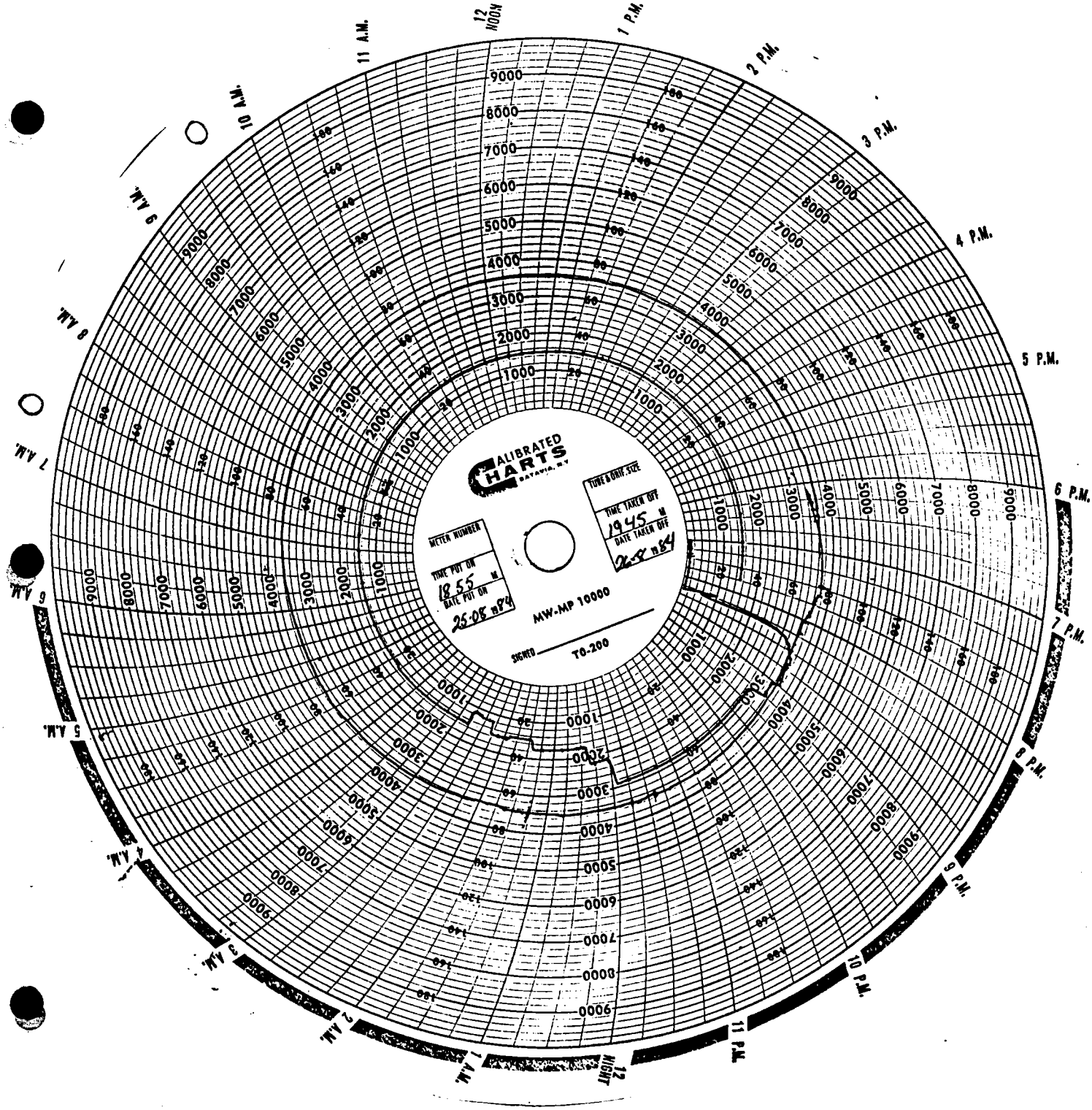
Well 31/6-2.

Press. temp recorder chart.
0-5000 psi, 0-150°F.
Time put on 2000 24th Aug. 1984.
Time taken off 18.55 25th Aug. 1984.



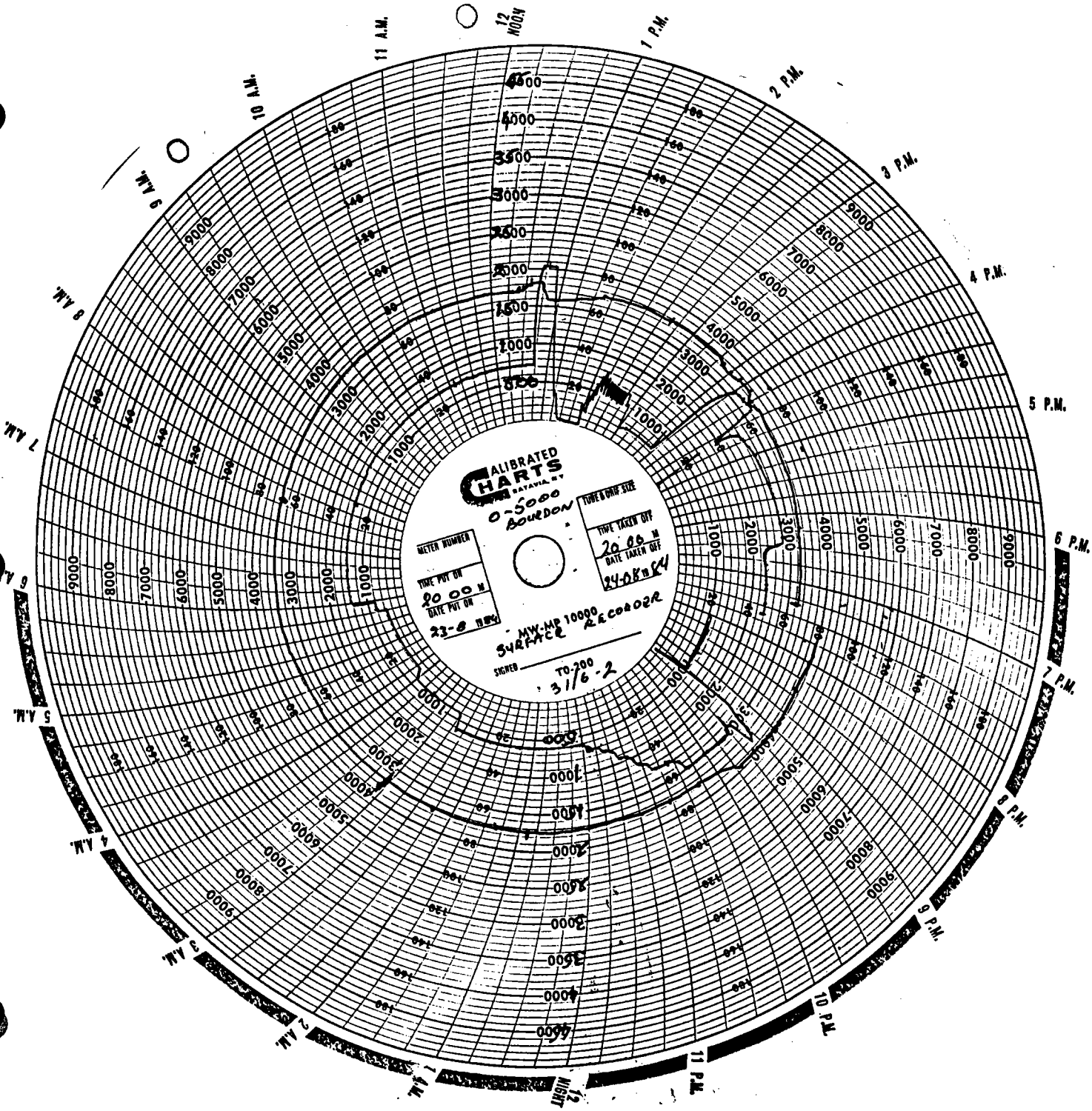
Well 31/6-2.

Press. temp. recorder chart.
0-5000 psi, 0-150°F.
Time put on 18.55 25th Aug. 1984.
Time taken off. 1945. 26th Aug. 1984.



Well 31/6-2

Press. Temp. recorder chart.
0-5000 psi, 0-150°F.
Time put on. 2000 23rd. Aug. 1984.
Time taken off. 20.00 24th Aug. 1984.



GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	1	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [X] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1		PRE ACID FLOW														1
2	06.15	.598	92	225	208	2.5	0	0.3	0	0.0153	1288.2	1.0052	1.2932	0.9706	8.566	242.678
3	06.30	.598	92	225	210	2.5	0	0.3	0	1.0153	1288.2	1.0052	1.2932	0.9706	8.608	243.854
4	06.45	.598	92	225	210	2.5	0	0.3	0	1.0153	1288.2	1.0052	1.2932	0.9706	8.608	243.854
5	07.00	.598	92	223	210	2.5	0	0.3	0	1.0152	1288.2	1.0053	1.2932	0.9706	8.569	242.744
6	07.15	.598	92	225	211	2.5	0	0.3	0	1.0153	1288.2	1.0053	1.2932	0.9706	8.629	244.440
7	07.30	.598	93	225	210	2.5	0	0.3	0	1.0152	1288.2	1.0052	1.2932	0.9697	8.599	243.611
8	07.45	.598	93	225	210	2.5	0	0.3	0	1.0152	1288.2	1.0052	1.2932	0.9697	8.599	243.611
9	08.00	.598	92	225	210	2.5	0	0.3	0	1.0153	1288.2	1.0052	1.2932	0.9706	8.608	243.854
10	08.15	.598	92	225	209	2.5	0	0.3	0	1.0153	1288.2	1.0052	1.2932	0.9706	8.587	243.266
11	08.30	.598	93	225	210	2.5	0	0.3	0	1.0152	1288.2	1.0052	1.2932	0.9697	8.599	243.611
12	08.45	.598	93	225	210	2.5	0	0.4	0	1.0151	1288.2	1.0052	1.2932	0.9697	8.599	243.596
13	09.00	.598	93	225	210	2.5	0	0.4	0	1.0151	1288.2	1.0052	1.2932	0.9697	8.599	243.596
14	09.15	.598	93	225	211	2.5	0	0.4	0	1.0151	1288.2	1.0053	1.2932	0.9697	8.620	244.181

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	2	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [X] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	09.30	.598	93	225	211	2.5	0	0.4	0	1.0151	1288.2	1.0053	1.2932	0.9697	8.620	244.181
2	09.45	.598	94	225	209	2.5	0	0.4	0	1.0150	1288.2	1.0052	1.2932	0.9688	8.570	242.767
3	10.00	.598	94	225	210	2.5	0	0.4	0	1.0150	1288.2	1.0052	1.2932	0.9688	8.590	243.354
4	10.15	.598	93	225	210	2.5	0	0.4	0	1.0151	1288.2	1.0052	1.2932	0.9697	8.599	243.596
5	10.30	.598	93	225	210	2.5	0	0.4	0	1.0151	1288.2	1.0052	1.2932	0.9697	8.599	243.596
6	10.45	.598	94	225	210	2.5	0	0.4	0	1.0150	1288.2	1.0052	1.2932	0.9688	8.590	243.354
7	11.00	.598	93	225	210	2.5	0	0.3	0	1.0152	1288.2	1.0052	1.2932	0.9697	8.599	243.611
8	11.15	.598	93	226	211	2.5	0	0.3	0	1.0153	1288.2	1.0053	1.2932	0.9697	8.640	244.750
9	11.30	.598	94	227	210	2.5	0	0.3	0	1.0152	1288.2	1.0052	1.2932	0.9688	8.630	244.471
10	11.45	.598	94	226	212	2.5	0	0.3	0	1.0152	1288.2	1.0053	1.2932	0.9688	8.652	245.091
11	12.00	.598	94	225	210	2.5	0	0.3	0	1.0151	1288.2	1.0052	1.2932	0.9688	8.591	243.368
12	12.15	.598	94	226	212	2.5	0	0.3	0	1.0152	1288.2	1.0053	1.2932	0.9688	8.652	245.091
13	12.30	.598	94	227	211	2.5	0	0.3	0	1.0152	1288.2	1.0052	1.2932	0.9688	8.650	245.058
14	END PRE ACID FLOW.															

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	3	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☒ INCHES H_2O ☐ M BAR	☒ °F ☐ °C	☒ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1		POST ACID FLOW NO 1.														
2	20.45	.598	90	315	156	2.75	0	0.2	0	1.0219	1572.3	1.0028	1.2932	0.9723	10.778	305.332
3	21.00	.598	91	315	156	2.75	0	0.2	0	1.0217	1572.3	1.0028	1.2932	0.9715	10.767	305.014
4	21.15	.598	92	320	156	2.75	0	0.2	0	1.0220	1572.3	1.0028	1.2932	0.9706	10.844	307.197
5	21.30	.598	93	325	158	2.75	0	0.2	0	1.0222	1572.3	1.0028	1.2932	0.9697	10.991	311.347
6	21.45	.598	93	325	158	2.75	0	0.2	0	1.0222	1572.3	1.0028	1.2932	0.9697	10.991	311.347
7	22.00	.598	93	330	158	2.75	0	0.2	0	1.0225	1572.3	1.0027	1.2932	0.9697	11.078	313.827
8	22.15	.598	93	325	160	2.75	0	0.2	0	1.0222	1572.3	1.0028	1.2932	0.9697	11.060	313.322
9	22.30	.598	93	330	160	2.75	0	0.2	0	1.0225	1572.3	1.0028	1.2932	0.9697	11.148	315.818
10	22.45	.598	94	325	216	2.75	0	0.2	0	1.0220	1572.3	1.0038	1.2932	0.9688	12.850	364.029
11	23.00	.598	94	325	214	2.75	0	0.2	0	1.0220	1572.3	1.0038	1.2932	0.9688	12.790	362.327
12	23.15	.598	94	325	216	2.75	0	0.2	0	1.0220	1572.3	1.0038	1.2932	0.9688	12.850	364.029
13	23.30	.598	94	325	216	2.75	0	0.2	0	1.0220	1572.3	1.0038	1.2932	0.9688	12.850	364.029
14	23.45	.598	95	327	216	2.75	0	0.2	0	1.0220	1572.3	1.0038	1.2932	0.9680	12.878	364.809

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	24-08-84	4	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	24.00	.598	96	327	217	2.75	0	0.2	0	1.0219	1572.3	1.0038	1.2932	0.9671	12.895	365.281
2	25-08															
3	00.15	.598	95	315	120	2.5	0	0.2	0	1.0212	1288.2	1.0022	1.2932	0.9680	7.700	218.126
4	00.30	.598	93	315	132	2.5	0	0.2	0	1.0215	1288.2	1.0024	1.2932	0.9697	8.094	229.298
5	00.45	.598	91	315	132	2.5	0	0.2	0	1.0217	1288.2	1.0024	1.2932	0.9715	8.111	229.775
6	01.00	.598	93	315	132	2.5	0	0.2	0	1.0215	1288.2	1.0024	1.2932	0.9697	8.094	229.298
7	01.15	.598	93	315	132	2.5	0	0.2	0	1.0215	1288.2	1.0024	1.2932	0.9697	8.094	229.298
8	01.30	.598	96	315	132	2.5	0	0.2	0	1.0211	1288.2	1.0024	1.2932	0.9671	8.069	228.588
9																
10		END POST ACID FLOW NO 1.														
11																
12																
13																
14																

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
	Clean Up	Norway	31/6-2	25-08-84	5	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400" H2O	0-1500	RANAREX

TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
	G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	POST ACID FLOW NO 2.														1
2 09.15	.598	89	350	157	3.0	0	.5	0	1.0242	1891.9	1.0025	1.2932	0.9732	13.754	389.614 2
3 09.30	.598	92	350	160	3.0	0	.5	0	1.0237	1891.9	1.0026	1.2932	0.9706	13.841	392.090 3
4 09.45	.598	101	355	161	3.0	0	.5	0	1.0228	1891.9	1.0025	1.2932	0.9628	13.857	392.533 4
5 10.00	.598	98	355	165	3.0	0	.4	0	1.0233	1891.9	1.0026	1.2932	0.9653	14.074	298.679 5
6 10.15	.598	92	355	165	3.0	0	.4	0	1.0242	1891.9	1.0026	1.2932	0.9706	14.162	401.196 6
7 10.30	.598	96	355	168	3.0	0	.4	0	1.0236	1891.9	1.0026	1.2932	0.9671	14.231	403.147 7
8 10.45	.598	93	355	226	3.0	0	.4	0	1.0240	1891.9	1.0036	1.2932	0.9697	16.573	469.493 8
9 11.00	.598	100	355	226	3.0	0	.4	0	1.0230	1891.9	1.0036	1.2932	0.9636	16.453	466.072 9
10 11.15	.596	98	355	136	3.5	0	.4	0	1.0231	2654.9	1.0019	1.2953	0.9653	17.946	508.379 10
11 11.30	.596	98	355	136	3.5	0	.4	0	1.0231	2654.9	1.0019	1.2953	0.9653	17.946	508.379 11
12 11.45	.596	95	355	136	3.5	0	.4	0	1.0236	2654.9	1.0019	1.2953	0.9680	18.002	509.974 12
13 12.00	.596	94	365	136	3.5	0	.4	0	1.0244	2654.9	1.0019	1.2953	0.9688	18.285	517.968 13
14 12.15	.596	94	365	136	3.5	0	.4	0	1.0244	2654.9	1.0019	1.2953	0.9688	18.285	517.968 14

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
	Clean Up	Norway	31/6-2	25-08-84	6	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400 H2O	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	12.30	.596	94	365	136	3.5	0	.4	0	1.0244	2654.9	1.0019	1.2953	0.9688	18.285	517.968
2	12.45	.596	92	365	136	3.5	0	.4	0	1.0247	2654.9	1.0019	1.2953	0.9706	18.323	519.066
3	13.00	.596	95	365	166	3.5	0	.4	0	1.0243	2654.9	1.0023	1.2953	0.9680	20.188	571.890
4	13.15	.596	96	365	168	3.5	0	.4	0	1.0241	2654.9	1.0023	1.2953	0.9671	20.289	574.736
5	13.30	.596	94	365	168	3.5	0	.4	0	1.0244	2654.9	1.0023	1.2953	0.9688	20.331	575.947
6	13.45	.596	96	360	186	3.5	0	.4	0	1.0238	2654.9	1.0026	1.2953	0.9671	21.200	600.561
7	14.00	.596	98	365	192	3.5	0	.4	0	1.0238	2654.9	1.0027	1.2953	0.9653	21.651	613.340
8	14.15	.596	90	365	192	3.5	0	.4	0	1.0251	2654.9	1.0027	1.2953	0.9723	21.835	618.541
9	14.30	.596	87	370	192	3.5	0	.4	0	1.0259	2654.9	1.0026	1.2953	0.9750	22.062	624.965
10	14.45	.596	85	370	192	3.5	0	.4	0	1.0262	2654.9	1.0026	1.2953	0.9768	22.110	626.318
11	15.00	.596	86	375	192	3.5	0	.4	0	1.0264	2654.9	1.0026	1.2953	0.9759	22.241	630.053
12	15.15	.596	86	365	142	3.5	0	.4	0	1.0257	2654.9	1.0020	1.2953	0.9759	18.845	533.853
13	15.30	.596	83	365	142	3.5	0	.4	0	1.0262	2654.9	1.0020	1.2953	0.9786	18.907	535.590
14	15.45	.596	84	345	168	2.5	0	.4	0	1.0246	1288.2	1.0029	1.2953	0.9777	9.685	274.360

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GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
	Clean Up	Norway	31/6-2	25-08-84	7	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400 H2O	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	16.00	.596	82	345	168	2.5	0	.4	0	1.0249	1288.2	1.0029	1.2953	0.9795	9.706	274.952
2	16.15	.596	84	345	168	2.5	0	.4	0	1.0246	1288.2	1.0029	1.2953	0.9777	9.685	274.360
3	16.30	.596	82	345	167	2.5	0	.4	0	1.0249	1288.2	1.0029	1.2953	0.9795	9.677	274.127
4	16.45	.596	81	345	167	2.5	0	.4	0	1.0251	1288.2	1.0029	1.2953	0.9804	9.687	274.424
5	17.00	.596	87	345	167	2.5	0	.4	0	1.0241	1288.2	1.0029	1.2953	0.9750	9.625	272.660
6	17.15	.596	85	345	167	2.5	0	.4	0	1.0244	1288.2	1.0029	1.2953	0.9768	9.645	273.244
7	17.30	.596	85	345	167	2.5	0	.4	0	1.0244	1288.2	1.0029	1.2953	0.9768	9.645	273.244
8																
9		END OF POST ACID		RATE	NO 2.											
10																
11																
12																
13																
14																

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	25-08-84	8	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1		POST ACID FLOW NO 3.														1
2	21.45	.596	92	435	125	3.5	0	.4	0	1.0296	2654.9	1.0015	1.2953	0.9706	19.260	545.592
3	22.00	.596	95	395	140	3.5	0	.3	0	1.0264	2654.	1.0018	1.2953	0.9680	19.317	547.220
4	22.15	.596	98	400	144	3.5	0	.3	0	1.0262	2654.9	1.0018	1.2953	0.9653	19.659	556.904
5	22.30	.596	95	400	146	3.5	0	.3	0	1.0267	2654.	1.0019	1.2953	0.9680	19.859	562.567
6	22.45	.596	96	400	148	3.5	0	.3	0	1.0266	2654.9	1.0019	1.2953	0.9671	19.974	565.817
7	23.00	.596	98	400	148	3.5	0	.3	0	1.0262	2654.9	1.0019	1.2953	0.9653	19.931	564.615
8	23.15	.596	95	400	148	3.5	0	.3	0	1.0267	2654.9	1.0019	1.2953	0.9680	19.995	566.421
9	23.30	.596	96	400	150	3.5	0	.3	0	1.0266	2654.9	1.0019	1.2953	0.9671	20.109	569.642
10	23.45	.596	94	400	150	3.5	0	.3	0	1.0269	2654.9	1.0019	1.2953	0.9688	20.152	570.861
11	24.00	.596	97	400	150	3.5	0	.3	0	1.0264	2654.9	1.0019	1.2953	0.9662	20.087	569.035
12	26-08															12
13	00.15	.596	92	395	166	3.75	0	.3	0	1.0269	3111.2	1.0020	1.2953	0.9706	24.734	700.655
14	00.30	.596	98	400	167	3.75	0	.3	0	1.0262	3111.2	1.0020	1.2953	0.9653	24.813	702.903

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	9	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	00.45	.596	96	400	197	3.75	0	.3	0	1.0266	3111.2	1.0024	1.2953	0.9671	27.017	765.333
2	01.00	.596	93	310	255	3.75	0	.3	0	1.0209	3111.2	1.0038	1.2953	0.9697	27.024	765.518
3	01.15	.596	95	310	260	3.75	0	.3	0	1.0206	3111.2	1.0039	1.2953	0.9680	27.233	771.453
4	01.30	.596	92	300	264	3.75	0	.3	0	1.0203	3111.2	1.0041	1.2953	0.9706	27.066	766.713
5	01.45	.596	98	310	208	4.00	0	.3	0	1.0203	3628.2	1.0028	1.2953	0.9653	28.288	801.346
6	02.15	.596	94	210	204	4.00	0	.3	0	1.0208	3628.2	1.0028	1.2953	0.9688	28.129	796.823
7	02.30	.596	56	310	200	4.00	0	.3	0	1.0266	3628.2	1.0027	1.2953	1.0039	29.023	822.152
8	02.45	.596	42	300	202	4.00	0	.3	0	1.0283	3628.2	1.0028	1.2953	1.0078	29.142	825.525
9	03.00	.596	91	300	212	4.00	0	.3	0	1.0205	3628.2	1.0030	1.2953	0.9715	28.283	801.182
10	03.15	.596	91	300	212	4.00	0	.3	0	1.0205	3628.2	1.0030	1.2953	0.9715	28.283	801.182
11	03.30	.596	94	300	214	4.00	0	.3	0	1.0201	3628.2	1.0030	1.2953	0.9688	28.329	802.490
12	03.45	.596	94	300	215	4.00	0	.3	0	1.0201	3628.2	1.0030	1.2953	0.9688	28.395	804.375
13	04.00	.596	97	300	216	4.00	0	.3	0	1.0197	3628.2	1.0030	1.2953	0.9662	28.374	803.784
14	04.15	.596	94	300	216	4.00	0	.3	0	1.0201	3628.2	1.0030	1.2953	0.9688	28.462	806.254

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1	Clean Up	Norway	31/6-2	26-08-84	10	18
Post Gravel Pack						

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
	G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1 04.30	.596	95	300	216	4.00	0	.3	0	1.0206	3628.2	1.0030	1.2953	0.9680	28.433	805.428
2 04.45	.596	98	300	224	4.00	0	.3	0	1.0196	3628.2	1.0031	1.2953	0.9653	28.869	817.794
3 05.00	.596	97	300	224	4.00	0	.3	0	1.0197	3628.2	1.0031	1.2953	0.9662	28.898	818.627
4 05.15	.596	96	300	224	4.00	0	.3	0	1.0198	3628.2	1.0031	1.2953	0.9671	28.928	819.462
5 05.30	.596	98	300	224	4.00	0	.3	0	1.0196	3628.2	1.0031	1.2953	0.9653	28.869	817.794
6 05.45	.596	96	300	224	4.00	0	.3	0	1.0198	3628.2	1.0031	1.2953	0.9671	28.928	819.462
7 06.00	.596	95	300	224	4.00	0	.3	0	1.0200	3628.2	1.0031	1.2953	0.9680	28.958	820.301
8 06.15	.596	98	300	226	4.00	0	.3	0	1.0196	3628.2	1.0032	1.2953	0.9653	28.998	821.460
9 06.30	.596	95	305	226	4.00	0	.3	0	1.0203	3628.2	1.0031	1.2953	0.9680	29.337	831.055
10 06.45	.596	95	305	227	4.00	0	.3	0	1.0203	3628.2	1.0031	1.2953	0.9680	29.402	832.903
11 07.00	.596	95	300	227	4.00	0	.3	0	1.0200	3628.2	1.0032	1.2953	0.9680	29.152	825.811
12 07.15	.596	96	300	227	4.00	0	.3	0	1.0198	3628.2	1.0032	1.2953	0.9671	29.122	824.967
13 07.30	.596	95	300	227	4.00	0	.3	0	1.0200	3628.2	1.0032	1.2953	0.9680	29.152	825.811
14 07.45	.596	94	300	226	4.00	0	.3	0	1.0201	3628.2	1.0032	1.2953	0.9688	29.117	824.824

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GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1	Clean Up	Norway	31/6-2	26-08-84	11	18
Post Gravel Pack						

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
	G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1 08.00	.596	94	305	227	4.00	0	.3	0	1.0204	3628.2	1.0031	1.2953	0.9688	29.433	833.759 1
2 08.15	.596	95	305	228	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.468	834.747 2
3 08.30	.596	95	305	229	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.532	836.587 3
4 08.45	.596	94	305	229	4.00	0	.3	0	1.0204	3628.2	1.0032	1.2953	0.9688	29.563	837.447 4
5 09.00	.596	98	305	229	4.00	0	.3	0	1.0199	3628.2	1.0032	1.2953	0.9653	29.442	834.025 5
6 09.15	.596	95	305	230	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.597	838.424 6
7 09.30	.596	95	305	230	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.597	838.424 7
8 09.45	.596	94	305	230	4.00	0	.3	0	1.0204	3682.2	1.0032	1.2953	0.9688	29.628	839.286 8
9 10.00	.596	97	305	230	4.00	0	.3	0	1.0201	3628.2	1.0032	1.2953	0.9662	29.537	836.709 9
10 10.15	.596	95	305	230	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.597	838.424 10
11 10.30	.596	94	305	231	4.00	0	.3	0	1.0204	3628.2	1.0032	1.2953	0.9688	29.692	841.120 11
12 10.45	.596	96	305	230	4.00	0	.3	0	1.0202	3628.2	1.0032	1.2953	0.9671	29.567	837.565 12
13 11.00	.596	95	305	230	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.597	838.424 13
14 11.15	.596	95	305	230	4.00	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.597	838.424 14

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	12	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[ ] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
	G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1 11.30	.596	96	305	230	4.00	0	.3	0	1.0202	3628.2	1.0032	1.2953	0.9671	29.567	837.565 1
2 11.45	.596	95	305	230	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.597	838.424 2
3 12.00	.596	95	305	232	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.727	842.085 3
4 12.15	.596	94	305	232	4.0	0	.3	0	1.0204	3628.2	1.0032	1.2953	0.9688	29.757	842.950 4
5 12.30	.596	95	305	232	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.727	842.085 5
6 12.45	.596	94	305	232	4.0	0	.3	0	1.0204	3628.2	1.0032	1.2953	0.9688	29.757	842.950 6
7 13.00	.596	94	305	232	4.0	0	.3	0	1.0204	3628.2	1.0032	1.2953	0.9688	29.757	842.950 7
8 13.15	.596	95	305	234	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.855	845.730 8
9 13.30	.596	95	305	234	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.855	845.730 9
10 13.45	.596	95	305	232	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.727	842.085 10
11 14.00	.596	95	305	232	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9680	29.727	842.085 11
12 14.15	.596	95	305	235	4.0	0	.3	0	1.0203	3628.2	1.0033	1.2953	0.9680	29.919	847.547 12
13 14.30	.596	94	305	234	4.0	0	.3	0	1.0203	3628.2	1.0032	1.2953	0.9688	29.886	846.600 13
14 14.45	.596	97	305	235	4.0	0	.3	0	1.0201	3628.2	1.0033	1.2953	0.9662	29.858	845.814 14

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	13	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	15.00	.596	95	305	236	4.0	0	.3	0	1.0203	3628.2	1.0033	1.2953	0.9680	29.983	849.361
2	15.15	.596	94	305	235	4.0	0	.3	0	1.0204	3628.2	1.0033	1.2953	0.9688	29.950	848.419
3	15.30	.596	93	305	235	4.0	0	.3	0	1.0206	3628.2	1.0033	1.2953	0.9697	29.981	849.293
4	15.45	.596	92	310	234	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9706	30.201	855.524
5	16.00	.596	91	310	235	4.0	0	.3	0	1.0212	3628.2	1.0032	1.2953	0.9715	30.297	858.252
6	16.15	.596	91	315	236	4.0	0	.3	0	1.0215	3628.2	1.0032	1.2953	0.9715	30.615	867.253
7	16.30	.596	93	315	236	4.0	0	.3	0	1.0212	3628.2	1.0032	1.2953	0.9697	30.552	865.454
8	16.45	.596	93	315	238	4.0	0	.3	0	1.0212	3628.2	1.0032	1.2953	0.9697	30.682	869.137
9	17.00	.596	92	315	238	4.0	0	.3	0	1.0214	3628.2	1.0032	1.2953	0.9706	30.713	870.039
10	17.15	.596	93	315	238	4.0	0	.3	0	1.0212	3628.2	1.0032	1.2953	0.9697	30.682	869.137
11	17.30	.596	93	315	238	4.0	0	.3	0	1.0212	3628.2	1.0032	1.2953	0.9697	30.682	869.137
12	17.45	.596	92	315	238	4.0	0	.3	0	1.0214	3628.2	1.0032	1.2953	0.9706	30.713	870.039
13	18.00	.596	95	315	239	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9680	30.683	869.174
14	18.15	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9680	30.747	871.003

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	14	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR.	6.065	BARTON	0-400	0-1500 PSI	RANAREX

TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
	G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1															1
18.30	.596	95	315	240	4.0	0	.3	0	1.0210	3682.2	1.0032	1.2953	0.9680	30.747	871.003
2															2
18.45	.596	93	315	240	4.0	0	.3	0	1.0212	3682.2	1.0032	1.2953	0.9697	30.811	872.805
3															3
19.00	.596	95	315	240	4.0	0	.3	0	1.0210	3682.2	1.0032	1.2953	0.9680	30.747	871.003
4															4
19.15	.596	94	315	240	4.0	0	.3	0	1.0211	3682.2	1.0032	1.2953	0.9688	30.779	871.902
5															5
19.30	.596	93	315	240	4.0	0	.3	0	1.0212	3682.2	1.0032	1.2953	0.9697	30.811	872.805
6															6
19.45	.596	96	315	240	4.0	0	.3	0	1.0208	3628.2	1.0032	1.2953	0.9671	30.716	870.107
7															7
20.00	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9680	30.747	871.003
8															8
20.15	.596	94	315	240	4.0	0	.3	0	1.0211	3628.2	1.0032	1.2953	0.9688	30.779	871.902
9															9
20.30	.596	94	315	240	4.0	0	.3	0	1.0211	3628.2	1.0032	1.2953	0.9688	30.779	871.902
10															10
20.45	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9680	30.747	871.003
11															11
21.00	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9680	30.747	871.003
12															12
21.15	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0035	1.2953	0.9680	30.747	871.003
13															13
21.30	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0035	1.2953	0.9680	30.747	871.003
14															14
21.45	.596	96	315	240	4.0	0	.3	0	1.0208	3628.2	1.0032	1.2953	0.9671	30.716	870.107

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	26-08-84	15	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	22.00	.596	96	315	240	4.0	0	.3	0	1.0208	3628.2	1.0032	1.2953	0.9671	30.716	870.107
2	22.15	.596	94	315	240	4.0	0	.3	0	1.0211	3628.2	1.0032	1.2953	0.9688	30.779	871.902
3	22.30	.596	96	315	240	4.0	0	.3	0	1.0208	3628.2	1.0032	1.2953	0.9671	30.716	870.107
4	22.45	.596	96	315	240	4.0	0	.3	0	1.0208	3628.2	1.0032	1.2953	0.9671	30.716	870.107
5	23.00	.596	94	315	240	4.0	0	.3	0	1.0211	3628.2	1.0032	1.2953	0.9688	30.779	871.902
6	23.15	.596	95	315	240	4.0	0	.3	0	1.0210	3628.2	1.0032	1.2953	0.9680	30.747	871.003
7	23.30	.596	96	315	242	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	30.844	873.748
8	23.45	.596	95	315	242	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.876	874.684
9	24.00	.596	96	315	243	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	30.908	875.564
10	27-08 00.15	.596	95	315	242	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.876	874.648
11	00.30	.596	95	315	242	4.0	0	.3	0	1.0210	3682.2	1.0033	1.2953	0.9680	30.876	874.648
12	00.45	.596	95	315	242	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.876	874.648
13	01.00	.596	95	315	242	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.876	874.648
14	01.15	.596	94	315	243	4.0	0	.3	0	1.0211	3628.2	1.0033	1.2953	0.9688	30.972	877.370

Randaberg Trykk A/S 003

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	16	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	01.30	.596	95	315	243	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.940	876.465
2	01.45	.596	95	315	243	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.940	876.465
3	02.00	.596	95	315	243	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	30.940	876.465
4	02.15	.596	96	315	244	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	30.972	877.375
5	02.30	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
6	02.45	.596	94	315	243	4.0	0	.3	0	1.0211	3682.2	1.0033	1.2953	0.9688	30.972	877.370
7	03.00	.596	96	315	243	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	30.908	875.564
8	03.15	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
9	03.30	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
10	03.45	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
11	04.00	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
12	04.15	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
13	04.30	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
14	05.00	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-84	17	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	05.30	.596	95	315	244	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.004	878.279
2	06.00	.596	96	315	245	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	31.036	879.183
3	06.30	.596	95	315	245	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.068	880.089
4	07.00	.596	95	315	246	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.132	881.895
5	07.30	.596	95	315	246	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.132	881.895
6	08.00	.596	96	315	246	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	31.100	880.988
7	08.30	.596	95	315	246	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.132	881.895
8	09.00	.596	96	315	246	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	31.100	880.988
9	09.30	.596	95	315	247	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.196	883.698
10	10.00	.596	95	315	248	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.259	885.497
11	10.30	.596	96	315	248	4.0	0	.3	0	1.0208	3628.2	1.0033	1.2953	0.9671	31.227	884.586
12	11.00	.596	97	315	248	4.0	0	.3	0	1.0207	3628.2	1.0033	1.2953	0.9662	31.195	883.678
13	11.30	.596	95	315	248	4.0	0	.3	0	1.0210	3628.2	1.0033	1.2953	0.9680	31.259	885.497
14	12.00	.596	94	315	230	4.0	0	.3	0	1.0211	3628.2	1.0031	1.2953	0.9688	30.127	853.428

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	27-08-83	18	18

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	12.15	.596	96	305	378	3.5	0	.3	0	1.0202	2654.9	1.0062	1.2953	0.9671	27.821	788.102
2	12.30	.596	100	290	297	3.5	0	.3	0	1.0187	2654.9	1.0051	1.2953	0.9636	23.899	676.999
3	12.35	.596	98	285	264	3.5	0	.3	0	1.0186	2654.9	1.0046	1.2953	0.9653	22.363	633.509
4	12.45	.596	96	280	160	3.5	0	.3	0	1.0185	2654.9	1.0028	1.2953	0.9671	17.255	488.800
5	13.00	.596	92	270	102	3.5	0	.3	0	1.0183	2654.9	1.0018	1.2953	0.9706	13.562	384.175
6	13.15	.596	102	255	132	3.0	0	.3	0	1.0162	1891.9	1.0028	1.2953	0.9619	10.577	299.622
7	13.30	.596	92	245	82	3.0	0	.3	0	1.0166	1891.9	1.0018	1.2953	0.9706	8.239	233.411
8																
9	END OF POST ACID FLOW NO 3.															
10																
11																
12																
13																
14																

OTIS SURFACE SAMPLING DATA

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY, MON, YR)	PAGE	OF
POST GRAVEL PACL	CLEAN UP	NORWAY	31/6-2	26-08-84	1	5

CUSTOMER	UNITS	PRESSURE	TEMPERATURE	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☒ PSI ☐ BAR	☒ °F ☐ °C	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

SAMPLE # 1

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
15.31 15.56	25	CONDENSATE	84063509	654	MERCURY	SEPARATOR	295 PSI	80°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD	WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP.	DENSITY	BS. W. (%)									
699	55	96ADJ Heater	295	80°F	45& 65°F							30.20 855.524			

SAMPLE # 2

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR (LITRE)	INITIALLY FILLED WITH	JAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
15.34 15.56	22	GAS	A14604	20 LITRE	VACUUM	SEPARATOR	295 PSI	93°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD	WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP.	DENSITY	BS. W. (%)									
699	55	96ADJ Heater	295	93°F								30.20 855.524			

SAMPLE BY

OTIS SURFACE SAMPLING DATA

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY, MON, YR)	PAGE	OF
POST GRAVEL PACK	CLEAN UP	NORWAY	31/6-2	26-08-84	2	5

CUSTOMER	UNITS	PRESSURE	TEMPERATURE	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☒ PSI ☐ BAR	☒ °F ☐ °C	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

SAMPLE # 3

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (LITRE)	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
15.34 15.56	22	GAS	A14561	20 LITRE	VACUUM	SEPARATOR	295 PSI	93°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD		WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64ᵀʰINCH	PRESS.	TEMP. °F	DENSITY	BS. W. (%)										
699	55	96ADJ Heater	295	93								30.20 855.524				

SAMPLE # 4

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
19.41 20.12	31	CONDENSATE	84063512	680	MERCURY	SEPARATOR	300 PSI	81°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD		WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64ᵀʰINCH	PRESS.	TEMP. °F	DENSITY	BS. W. (%)										
705	55	96ADJ Heater	300	81	45& 65°F							30.747 871.003				

SAMPLE BY

OTIS SURFACE SAMPLING DATA

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY, MON, YR)	PAGE	OF
POST GRAVEL PACK	CLEAN UP	NORWAY	31/6-2	26-08-84	3	5

CUSTOMER	UNITS	PRESSURE	TEMPERATURE	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☒ PSI ☐ BAR	☒ °F ☐ °C	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

SAMPLE # 5

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR (LITRE)	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
19.43 20.07	24	GAS	A14574	20LITRE	VACUUM	SEPARATOR	300 PSI	95°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD	WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP.	DENSITY	BS. W. (%)									
705	55	96ADJ Heater	300	95								30.747 871.003			

SAMPLE # 6

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR (LITRE)	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
19.43 20.07	24	GAS	A14568	20LITRE	VACUUM	SEPARATOR	300 PSI	95°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD	WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP.	DENSITY	BS. W. (%)									
705	55	96ADJ Heater	300	95								30.747 871.003			

SAMPLE BY

OTIS SURFACE SAMPLING DATA

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY, MON, YR)	PAGE	OF
POST GRAVEL PACK	CLEAN UP	NORWAY	31/6-2	26-08-84	4	5

CUSTOMER	UNITS	PRESSURE	TEMPERATURE	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☒ PSI ☐ BAR	☒ °F ☐ °C	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

SAMPLE # 7

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC)	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
21.01 21.30	29	CONDENSATE	84064001	685	MERCURY	SEPARATOR	300	81°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD		WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP. °F	DENSITY	BS. W. (%)										
708	56	96ADJ Heater	300	81	45& 65°F							30.747 871.003				

SAMPLE # 8

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR (LITRE)	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
21.00 21.21	21	GAS	A14580	20 LITRE	VACUUM	SEPARATOR	300 PSI	95°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☒ MMSCF/D ☒ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD		WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP. °F	DENSITY	BS. W. (%)										
708	56	96ADJ Heater	300	95								30.747 871.003				

SAMPLE BY

SURFACE SAMPLING DATA

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY, MON, YR)	PAGE	OF
POST GRAVEL PACK	CLEAN UP	NORWAY	31/6-2	26-08-84	5	5

CUSTOMER	UNITS	PRESSURE	TEMPERATURE	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	[X] PSI ☐ BAR	[X] °F ☐ °C	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

SAMPLE # 9

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR (LITRE)	INITIALLY FILLED WITH	SAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.
21.00 21.21	21	GAS	A14609	20 LITRE	VACUUM	SEPARATOR	300 PSI	95°F	

FIELD READINGS AND FACTORS USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE [X] MMSCF/D [X] SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD		WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP. °F	SIZE 64TH INCH	PRESS.	TEMP. °F	DENSITY	BS. W. (%)										
708	56	96ADJ Heater	300	95								30.747 871.003				

SAMPLE # _____

TIME TAKEN	TIME TO TAKE SAMPLE (min)	SAMPLE TYPE	CONTAINER #	CONTAINER (CC) OR (LITRE)	INITIALLY FILLED WITH	JAMPLE TAKEN AT	SAMPLING PRESSURE	SAMPLING TEMP.	ATMOS. TEMP.

FIELD READINGS AND FACTOES USED

WELLHEAD		CHOKE	SEPARATOR		CONTAINER # OIL				GAS			GAS RATE ☐ MMSCF/D ☐ SCM²/D	OIL FLOW RATE ☐ BBL/D ☐ m³/D SEP. STD		WATER RATE ☐ BBLS/D ☐ m³/D	G.D.R. ☐ SCF/BBL ☐ SCM/m³
PRESS.	TEMP.	SIZE 64TH INCH	PRESS.	TEMP.	DENSITY	BS. W. (%)										

SAMPLE BY

DST 1

POST GRAVEL PACK

MULTI RATE

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	1	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 14.44		Gauges in lubricator.													1
2 14.45		Wireline stem and jar in wireline lubricator.													2
3 14.48		Wireline tool and gauges connected.													3
4 14.53		Wireline lubricator stabbed on wireline B.O.P.													4
5 14.55		Open kill valve.													5
6 15.10		Close kill valve. Pressure test to 4000 PSI. 275 bar.													6
7 15.25		Test good. Open kill valve.													7
8 15.27		Pressure test wireline lubricator to 4000 PSI.													8
9 15.35		Test good. Close kill valve.													9
10 15.45		Open Sub Sea Lubricator valve. Start run in hole with wireline.													10
11 16.20		Wireline at depth with first set of gauges.													11
12 16.23		Wireline pulled out of hole.													12
13 16.29		Wireline in lubricator.													13
14 16.34		Flopetrol close Sub Sea Lubricator valve.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	2	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.36		Bleed of at choke manifold to 320 PSI.													1
2 16.45		Bleed of at choke manifold to 0 PSI.													2
3 16.46		Close choke manifold.													3
4 16.48		Break of wireline lubricator.													4
5 16.50		Close swab valve.													5
6 16.52		Break of wireline tool.													6
7 17.05		Make up new tool string.													7
8 17.08		Open swab valve.													8
9 17.17		Tool string in wireline lubricator.													9
10 17.19		Stab on wireline lubricator.													10
11 17.21		Open kill valve.													11
12 17.26		Pressure test wireline lubricator to 4000 PSI.													12
13 17.38		Bleed of at choke manifold to 2000 PSI.													13
14 17.40		Close kill valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	3	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.42		Open Flopetrol lubricator valve.													1
2 17.42		Wireline run in hole.													2
3 18.15		Gauges on depth.													3
4 18.17		Start pull out of hole with wireline tool.													4
5 18.32		Gauges in wireline lubricator.													5
6 18.45		Wireline tool out of lubricator.													6
7 18.50		Swab valve closed.													7
8 18.51		Kill valve opened.													8
9 18.54		Wireline tool back in lubricator.													9
10 18.58		Wireline lubricator stabbed on.													10
11 19.09		Pressure test Sub Sea Lubricator valve and choke manifold to 4000 PSI.													11
12 19.21		Test good. Bleed of pressure at choke to 1975.													12
13 19.23		Close kill valve.													13
14 19.25		Open Flopetrol Sub Sea Lubricator valve.													14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	4	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.28															1 Start injecting methanol at Sub Sea
2															2 Test Tree and choke manifold.
3 19.29	24A														3 Open choke manifold on fixed side of
4															4 heater on 24/64 Adjustable.
5 19.30	"	1830 127.2	59 15												5
6 19.32	"	1855 128.9	59 15												6
7 19.34	"	1855 128.9	59 15												7
8 19.35	"	1853 128.8	59 15												8
9 19.38	"														9 Flow diverted thru separator.
10 19.40	"	1848 128.4	59 15												10
11 19.45	"	1845 128.2	59 15	0.3						.596		5.860 165.998			11
12 19.50	"	1847 128.4	59 15												12
13 19.55	"	1851 128.6	59 15												13
14 20.00	"			0.3						.596		6.435 182.304			14 By-pass separator.

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	5	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.04	48A														Slowly increase heater choke to 48/64. 1
2 20.05	"	1690 117.5	56 13				90%water 5%cond. 5%emul.								2
3 20.06	"	1550 107.9	56 13												3
4 20.08	64A	1350 ----	56 13												Increase choke size to 64/64. 4
5 20.10	"	1080 94.1	55 12.5				80%water 18%cond. 2%emul.								5
6 20.12	96A	1007 70.4	55 12.5												Change choke to 96/64. 6
7 20.14	"	790 55.5	54 12												7
8 20.15							70%water 30%cond. trace emul.								8
9 20.16	"	695 48.9	54 12												9
10 20.18	"	692 48.7	54 12												10
11 20.20	"	694 48.9	54 12				50%water 50%cond. trace emul.								11
12 20.30	"	699 49.2	55 12.5				38%water 62%cond. trace emul.								12
13 20.35	"	699 49.2	55 12.5												13
14 20.40	"	700 49.3	55 12.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	6	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.45	96A	704 49.6	55 12.5				30%water 70%cond. trace emul.								1
2 21.00	"	706 49.7	55 12.5					1							2
3 21.00	"						25%water 75%cond. trace emul.								3
4 21.15	"	709 49.9	55 12.5				25%water 75%cond. trace emul.								4
5 21.30	"	711 50.0	55 12.5				20%water 80%cond. trace emul.								5
6 21.32	"														6 Flow thru separator for clean up flow
7															7 prior to multi rate.
8 21.43	"														8 Flow thru both sides choke manifold.
9 21.45	"	687 —	56 13				15%water 85%cond. trace emul.								9
10 22.00	"	688 48.5	56 13.5	0.3				1.5		.596		29.980 849.268			10
11 22.00	"						28%water 71%cond. 1%emul.								11
12 22.15	"	688 48.5	56 13.5	0.3						.596		29.980 849.268			12
13 22.30	"	690 48.6	56 13.5	0.3			26%water 74%cond. 1%emul.			.596		30.181 854.950			13
14 22.45	"	690 48.6	56 13.5	0.3						.596		30.350 859.744			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	7	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 23.00	96A	691 48.7	56 13.5	0.3				1.5		.596		30.318 858.849			1
2 23.00	"						24%water 76%cond. trace emul.								2
3 23.15	"	691 48.7	57 14	0.3						.596		30.392 860.944			3
4 23.30	"	692 48.7	57 14	0.3			20%water 80%cond. trace emul.			.596		30.392 860.944			4
5 23.45	"	693 48.8	57 14	0.3						.596		30.455 862.732			5
6 24.00	"	693 48.8	57 14	0.3				1.0		.596		30.287 857.958			6
7 24.00	"						19%water 80%cond. 1%emul.								7
8 28-08 00.15	"	693 48.8	57 14	0.3						.596		30.392 860.944			8
9 00.30	"	693 48.8	57 14	0.3			17%water 82%cond. 1%emul.			.596		30.324 859.008			9
10 00.45	"	693 48.8	57 14	0.3											10
11 00.57	"	695 48.9	57 14				21%water 78%cond. 1% emul.								11
12 00.59	"			0.3				1.0		.596		30.293 858.121			12 By-pass separator.
13 01.00															13 Close adjustable choke.
14															14 END CLEAN UP FLOW

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	8	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 01.00															Close positive choke. Well shut in at choke
2															manifold.
3 01.01		1950 135.4	58 15												
4 01.02		2000 138.9	59 15.5												
5 01.03		2005 139.2	59 15.5												
6 01.04		2005 139.2	59 15.5												
7 01.05		2005 139.2	59 15.5												
8 01.10		2002 139.0	74 24												
9 01.15	24A														Open well at choke manifold 128/64
10															positive to heater choke at 24/64
11 01.18	"	1950 135.5	64 17											Tank reading 36BBLS	FLOW RATE NO. 1.
12 01.20	"	1955 135.8	63 17												
13 01.30	"	1952 135.6	63 16	0.3						.596		7.188 203.634			
14 01.45	"	1948 135.5	62 16	0.3						.596		7.188 203.634			

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	9	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.00	24A	1950 / 135.5	62 / 16	0.3				1.0		.596		7.197 / 203.884			1
2 02.00	"						4%water 95%cond. 1%emul.								2
3 02.15	"	1950 / 135.5	62 / 16	0.3						.596		7.181 / 203.426			3
4 02.30	"	1943 / 135.0	60 / 15	0.3						.596		7.188 / 203.634			4
5 02.45	"	1943 / 135.0	60 / 15	0.3						.596		7.096 / 201.025			5
6 03.00	"	1944 / 135.0	58 / 14	0.3			0.25%water 99.75%cond.			.596		7.188 / 203.634			6
7 03.15	"	1945 / 135.1	58 / 14	0.3						.596		7.181 / 203.426			7
8 03.30	"	1940 / 134.7	57 / 14	0.3			100%cond.			.596		7.181 / 203.426			8
9 03.45	"	1940 / 134.7	57 / 14	0.3						.596		7.175 / 203.264			9
10 04.00	"	1941 / 134.8	57 / 14	0.3			100%cond. trace	water		.596		7.181 / 203.426			10
11 04.15	"	1942 / 134.9	56 / 13.5	0.3						.596		7.181 / 203.426			11
12 04.30	"	1942 / 134.9	56 / 13.5	0.3			100%cond. trace	water		.596		7.166 / 203.013			12
13 04.45	"	1942 / 134.9	56 / 13.5	0.3						.596		7.197 / 203.884			13
14 05.00	"	1940 / 134.7	56 / 13.5	0.3			99.9%cond 0.1%water			.596		7.198 / 203.926			14 END FLOW RATE NO. 1.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	10	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 05.16	32A	1940 / 134.7	56 / 13.5									7.213 / 204.341			Choke changed at heater 32/64 Adjustable 1
2 05.17	"	1830 / 127.1	56 / 13												FLOW RATE NO. 2. 2
3 05.19	"	1815 / 126.1	56 / 13												3
4 05.21	"	1822 / 126.6	56 / 13												4
5 05.23	"	1815 / 126.1	56 / 13												5
6 05.25	"	1817 / 126.2	56 / 13												6
7 05.30	"	1820 / 126.4	56 / 13.5	0.3						.596		12.540 / 355.250			7
8 05.35	"	1824 / 126.7	56 / 13.5												8
9 05.40	"	1826 / 126.7	56 / 13.5												9
10 05.45	"	1830 / 127.1	56 / 13.5	0.3						.596		12.770 / 361.735			10
11 05.50	"	1829 / 127.1	57 / 14												11
12 05.55	"	1829 / 127.1	57 / 14												12
13 06.00	"	1829 / 127.1	57 / 14	0.3			100%cond. trace water			.596		12.520 / 354.698			13
14 06.15	"	1825 / 126.8	57 / 14	0.3						.596		12.662 / 358.699			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	11	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.30	32A	1825 / 126.8	57 / 14	0.3			100% cond. trace water			.596		12.534 / 355.055			1
2 06.45	"	1825 / 126.8	57 / 14	0.3						.596		12.771 / 361.784			2
3 07.00	"	1825 / 126.8	57 / 14	0.3			100%cond. trace water			.596		12.758 / 361.408			3
4 07.15	"	1825 / 126.8	57 / 14	0.3						.596		12.654 / 358.453			4
5 07.30	"	1825 / 126.8	57 / 14	0.3			100% cond. trace water			.596		12.677 / 359.127		Tank reading 36BBLS	5
6 07.45	"	1825 / 126.6	57 / 14	0.3						.596		12.677 / 359.127			6
7 08.00	"	1829 / 127.1	57 / 14	0.3			100%cond. trace water			.596		12.584 / 356.497		Tank reading 37BBLS	7
8 08.15	"	1826 / 126.9	57 / 14	0.3						.596		12.651 / 358.391			8
9 08.30	"	1823 / 126.7	57 / 14	0.3			100%cond. trace water			.596		12.638 / 358.758		Tank reading 37BBLS	9
10 08.45	"	1822 / 126.6	57 / 14	0.3						.596		12.664 / 358.758			10
11 09.00	"	1822 / 126.6	57 / 14	0.3			100%cond. trace water			.596		12.664 / 358.758		Tank reading 37,5 BBLS	11
12 09.15	"	1823 / 126.6	57 / 14	0.3						.596		12.638 / 358.024			12 END FLOW RATE NO.2.
13 09.19	"""	1700 / 118.2	57 / 14												13 Heater choke changed to 48/64 Adjustable
14 09.20	48A	1500 / 104.3	57 / 14												14 FLOW RATE NO.3.

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Flow	Norway	31/6-2	28-08-84	12	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 09.23	48A	1466 / 102	57 / 14												1
2 09.25	"	1468 / 102.2	57 / 14												2
3 09.30	"	1470 / 102.3	57 / 14											Tank reading 38.5BBLS	3
4 09.35	"	1470 / 102.3	57 / 14												4
5 09.40	"	1471 / 102.4	57 / 14					5							5
6 09.40	"						55%water 45%cond. trace emul.								6
7 09.45	"	1469 / 102.2	57 / 14												7
8 10.00	"	1469 / 102.2	57 / 14				50%water 50%cond. trace emul.							Tank reading 39.5BBLS	8
9 10.15	"	1469 / 102.2	57 / 14									21.590 / 611.609			9
10 10.30	"	1469 / 102.2	58 / 14.5					5				21.646 / 613.193		Tank reading 40.5BBLS	10
11 10.30	"						51%water 49%cond. trace emul.								11
12 10.45	"	1471 / 102.4	59 / 15									21.535 / 610.046			12
13 11.00	"	1472 / 102.5	59 / 15									21.602 / 611.928			13
14 11.15	"	1470 / 102.3	59 / 15									21.701 / 614.468			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Flow	Norway	31/6-2	28-08-84	13	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 11.30	48A	1470 102.3	59 15				54%water 46%cond.	 trace emul.				21.724 615.382		Tank reading 41 BBLS	1
2 11.45	"	1470 102.3	59 15									21.691 614.468			2
3 12.00	"	1475 102.7	59 15					 5				21.469 608.185			3
4 12.00	"						72%water 28%cond.	 trace emul.							4
5 12.15	"	1477 102.8	59 15									21.558 610.671			5
6 12.30	"	1478 102.9	59 15	0.3			47%water 53%cond.	 trace emul.		.596		21.602 611.928			6
7 12.45	"	1479 103	59 15	0.3						.596		21.657 613.486			7
8 13.00	"	1480 103.1	59 15	0.3				 5		.596		21.558 610.671		Tank reading 42BBLS	8
9 13.00	"						63%water 37%cond.	 trace emul.							9
10 13.15	96A	1482 103.2	59 15	0.3						.596		21.458 607.844			10 END FLOW RATE NO. 3.
11 13.16	"	1465 102	59 15												11 Change choke to 96/64 Adjustable heater.
12 13.18	"	1165 81.3	59 15												12 FLOW RATE NO. 4.
13 13.20	"	860 60.3	59 15												13
14 13.22	"	780 54.8	59 15												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	14	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.24	96A	763 53.6	59 15												1
2 13.26	"	756 53.1	59 15												2
3 13.30	"	754 52.9	59 15	0.3			33%water 67%cond. trace emul.			.596		30.768 871.581		Tank reading 45BBLS	3
4 13.35	"	751 52.7	59 15												4
5 13.40	"	748 52.5	59 15												5
6 13.45	"	740 52	59 15									30.937 876.361			6
7 14.00	"	738 51.8	59 15	0.3				2		.596		30.696 869.542			7
8 14.00	"						18%water 82%cond. trace emul.								8
9 14.15	"	736 51.7	60 15.5	0.3						.596		31.030 870.009			9
10 14.30	"	739 51.9	60 15.5	0.3			6%water 94%cond. trace emul.			.596		30.927 876.104		Tank reading 46.5BBLS	10
11 14.45	"	740 52	60 15.5	0.3						.596		30.927 876.104			11
12 15.00	"	744 53.3	59 15	0.3				3		.596		31.069 880.126		Tank reading 47.5BBLS	12
13 15.00	"						8%water 92%cond. trace emul.								13
14 15.15	"	749 52.7	59 15	0.3						.596		31.008 878.399			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	15	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[X] MMSCF/D [X] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.30	96A	755 / 53	59 / 15	0.3			7%water 93%cond. trace emul.			.596		30.873 / 874.548			1
2 15.45	"	779 / 54.7	59 / 15	0.3						.596		30.599 / 866.798		Tank reading 49BBLS	2
3 16.00	"	808 / 56.7	59 / 15	0.3				3		.596		30.530 / 864.850			3
4 16.00	"						11%water 89%cond. trace emul.								4
5 16.15	"	920 / 64.4	59 / 15	0.3						.596		29.856 / 845.759		Tank reading 50BBLS	5
6 16.18	"														Start inject methanol on Sub Sea Test Tree 6
7															and on dataheader. 7
8 16.20	"	742 / 52.2	59 / 15	0.3						.596					8
9 16.30	"	740 / 52	59 / 15	0.3				3		.596		30.969 / 877.274			9
10 16.30	"						21%water 79%cond. trace emul.								10
11 16.45	"	740 / 52	59 / 15	0.3						.596		30.937 / 876.361			11
12 17.00	"	740 / 52	59 / 15	0.3			14%water 86%cond. trace emul.			.596		31.105 / 881.136			12
13 17.15	"	741 / 52.1	59 / 15	0.3						.596		31.138 / 882.056		Tank reading 50.5BBLS	13
14 17.19	"														Close LPR and choke manifold. Observe for leak. 14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	16 | 75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.20	96A	860 60.3	59 15											Tank reading 60.5BBLS	1 END FLOW RATE NO. 4.
2 17.22	"	860 60.3	59 15												2 Total Fluid produced= 24.5BBLS/18BBLS cond.
3															3 & 6.5 BBLS Acid Brine
4 17.24															4 Stop injection of methanol on Sub Sea
5															5 Test Tree and data-header.
6 17.30		852 59.7	59 15												6
7 17.35		852 59.7	59 15												7
8 17.36															8 Close lubricator valve.
9 17.41															9 Bleed off pressure above lubricator valve
10															10 to 230 PSI.
11 17.45															11 Bleed off to 0 and close choke manifold
12 17.51															12 Disconnect wireline lubricator from
13															13 wireline B.O.P.
14 17.52															14 Stem out of wireline lubricator

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	17	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.54		Jar and pulling tool connected up to stem.													1
2 17.56		Wireline tool in wireline lubricator.													2
3 17.58		Open swab valve.													3
4 17.59		Wireline lubricator stabbed on B.O.P.													4
5 18.01		Open kill valve.													5
6 19.04		Close kill valve.													6
7 19.05		Pressure test kill valve to 4000 PSI. Test good.													7
8 19.28		Open kill valve.													8
9 19.30		Flush thru lines.													9
10 19.38		Close diverter valve on gas line. Pressure test to 1200 PSI (83.7 bar).													10
11 19.55		Close by-pass separator and open diverter valve and bleed off.													11
12 19.57		Pressure test against by-pass valve 1200 PSI (83.7 bar).													12
13 20.15		Close choke manifold and bleed off below.													13
14 20.18		Close kill valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	18	75

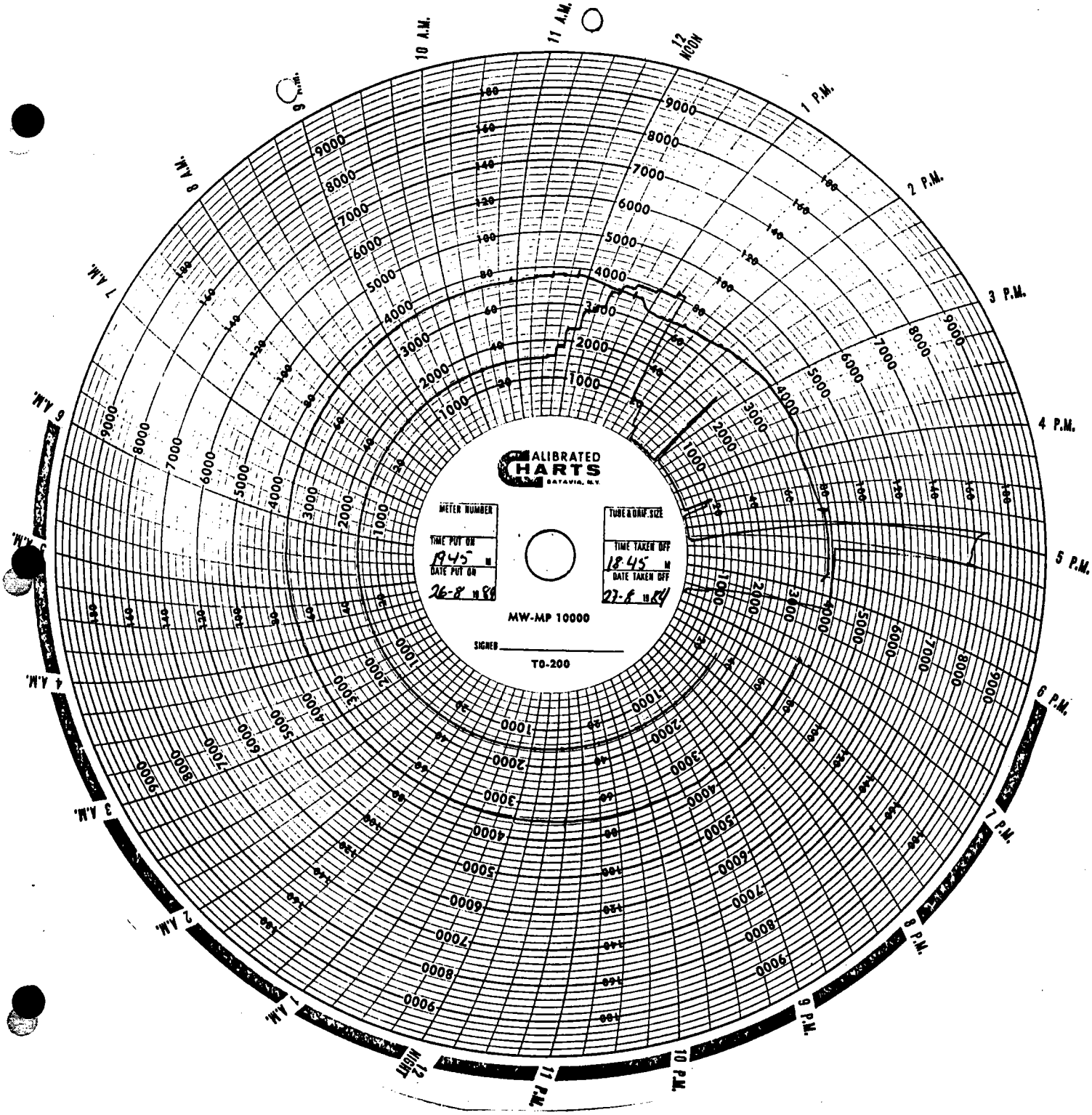
CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	BBL/D	MMSCF/D	BBL/D	SCF/BBL	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	m³/D	SCM/D	m³/D	SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.20		Pressure test kill valve to 4000 PSI (275 bar). Test good.													1
2 21.03		Bleed off pressure and open kill valve.													2
3 21.10		Pressure test against choke manifold. Test good.													3
4 21.29		Close kill valve.													4
5 21.31		Bleed off to 1300 PSI thru choke manifold.													5
6 21.41		Bleed off to 850 PSI on choke manifold, to equalize across lubricator valve. Open lubricator valve.													6
7 21.42		Open LPR.													7
8 21.44		Start run in hole with wireline tool.													8
9 22.06		Wireline pulling tool on depth.													9
10 22.07		Start pull out of hole with gauges.													10
11 22.39		Gauges in lubricator. Close lubricator valve.													11
12 22.46		Bleed off pressure above lubricator to 225 PSI thru adjustable choke.													12
13 22.53		Bleed off to 0 thru adjustable choke.													13
14 22.58		Wireline lubricator disconnected from wireline B.O.P.													14

Randaberg Trykk A/S 001

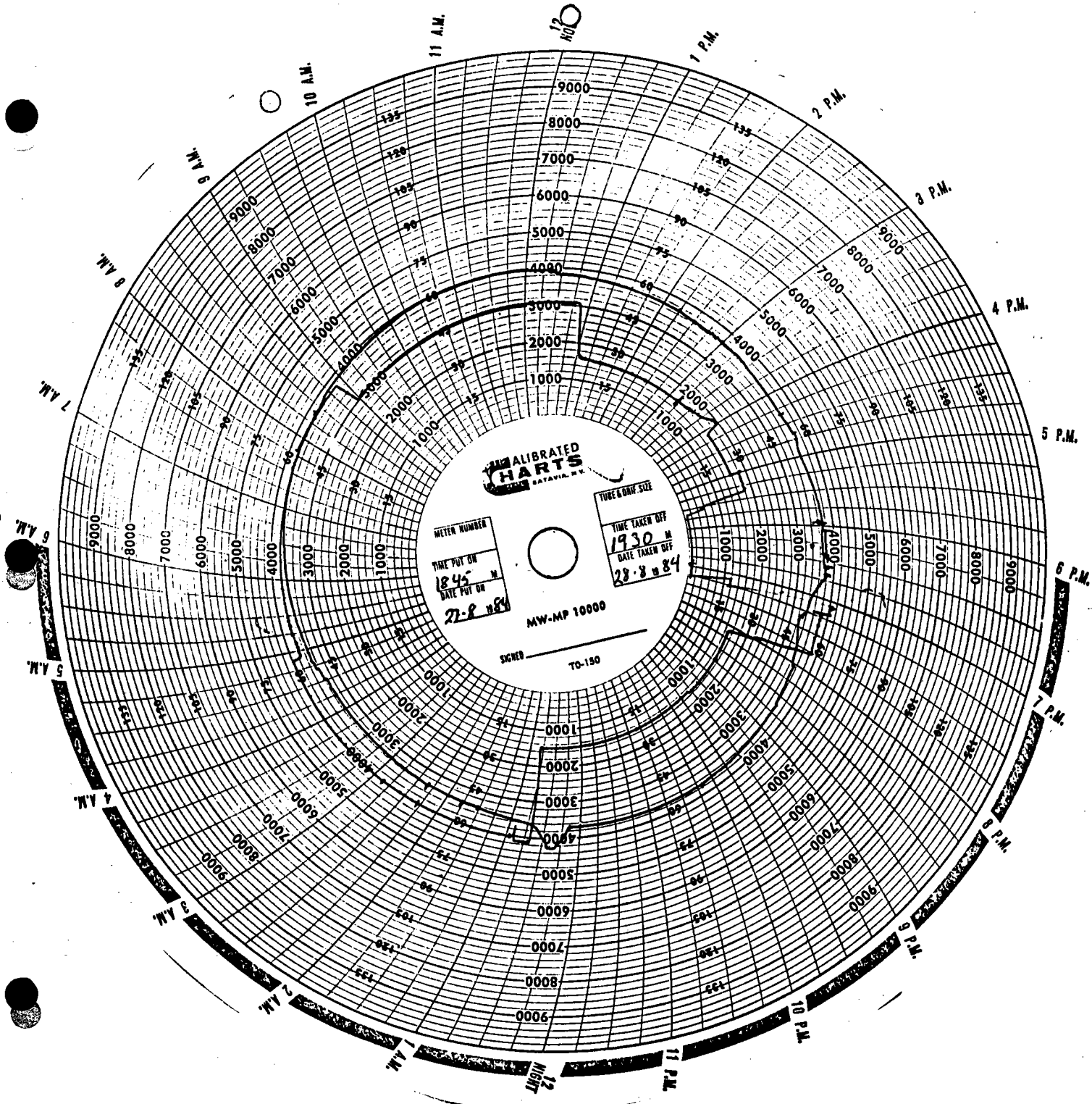
Well 31/6-2.

Press. temp. recorder chart.
0-1500 psi, 0-150°F.
Time put on 19.45 26th Aug. 1984.
Time taken off 18.45 27th Aug. 1984.



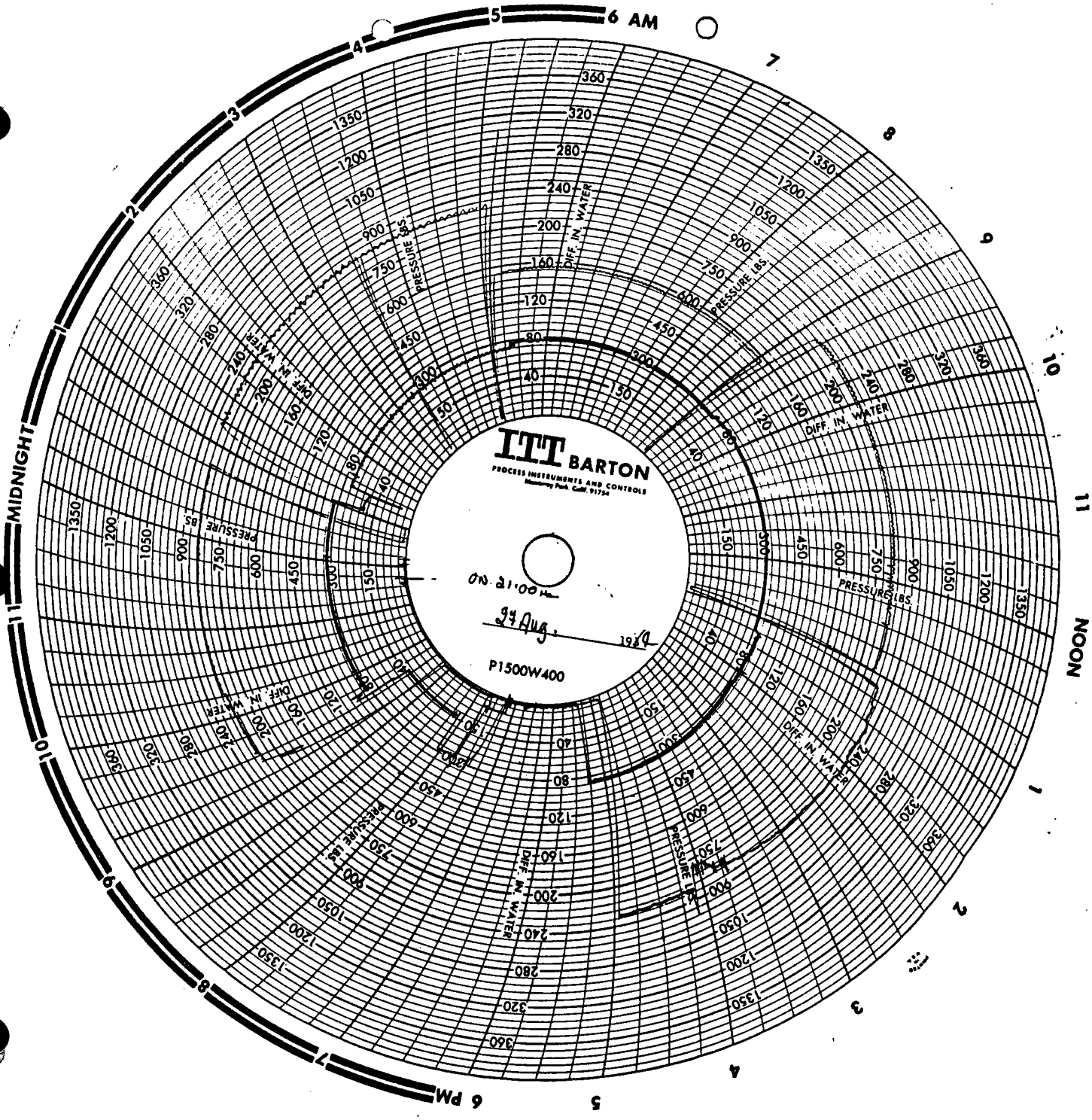
Well 31/6-2.

Press. temp. recorder chart.
0-5000 psi, 0-150^{0}F.
Time put on 18.45 27th Aug. 1984.
Time taken off 19.30 28th Aug. 1984.



Well 31/6-2.

Barton recorder chart.
Static 0-1500 psi diff. 0-400" H_2O.
Time put on 21.00 27th Aug. 1984.
Time taken off 17.15 28th Aug. 1984.



GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	1	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
	G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1 19.45	.596	93	295	74	2.5	0	.3	0	1.0119	1288.2	1.0015	1.2953	0.9697	5.860	165.998
2 20.00	.596	92	305	86	2.5	0	.3	0	1.0207	1288.2	1.0016	1.2953	0.9706	6.435	182.304
3	BY-PASS SEPARATOR TO														
4	CLEAN UP PRIOR TO MULTI RATE.														
5 21.30	.596	96	330	216	4.0	0	.3	0	1.0219	3628.2	1.0028	1.2953	0.9671	29.842	845.342
6 21.45	.596	92	330	216	4.0	0	.3	0	1.0244	3628.2	1.0028	1.2953	0.9706	29.966	848.866
7 22.00	.596	96	330	218	4.0	0	.3	0	1.0219	3628.2	1.0028	1.2953	0.9671	29.980	849.268
8 22.15	.596	96	330	218	4.0	0	.3	0	1.0219	3628.2	1.0028	1.2953	0.9671	29.980	849.268
9 22.39	.596	94	330	220	4.0	0	.3	0	1.0221	3628.2	1.0028	1.2953	0.9688	30.181	854.950
10 22.45	.596	93	330	222	4.0	0	.3	0	1.0223	3628.2	1.0029	1.2953	0.9797	30.350	859.744
11 23.00	.596	94	330	222	4.0	0	.3	0	1.0221	3628.2	1.0029	1.2953	0.9688	30.318	858.849
12 23.15	.596	96	330	224	4.0	0	.3	0	1.0219	3628.2	1.0029	1.2953	0.9671	30.392	860.944
13 23.30	.596	96	330	224	4.0	0	.3	0	1.0219	3628.2	1.0029	1.2953	0.9671	30.392	860.944
14 23.45	.596	94	330	224	4.0	0	.3	0	1.0221	3628.2	1.0029	1.2953	0.9688	30.455	862.732

Randaberg Trykk A/S 003

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	27-08-84	2	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	24.00	.596	95	330	222	4.0	0	.3	0	1.0220	3628.2	1.0029	1.2953	0.9680	30.287	857.958
2	28-08 00.15	.596	96	330	224	4.0	0	.3	0	1.0219	3628.2	1.0029	1.2953	0.9671	30.392	860.944
3	003.0	.596	96	330	223	4.0	0	.3	0	1.0219	3628.2	1.0029	1.2953	0.9671	30.324	859.008
4	00.45	.596	96	330	223	4.0	0	.3	0	1.0219	3628.2	1.0029	1.2953	0.9671	30.324	859.008
5	01.00	.596	97	330	223	4.0	0	.3	0	1.0217	3628.2	1.0029	1.2953	0.9662	30.293	858.121
6		FLOW ON 24/64 ADJUSTABLE CHOKE AT HEATER FLOW RATE NO 1.														
7	01.30	.596	93	285	224	2.125	0	.3	0	1.0192	921.71	1.0047	1.2953	0.9697	7.188	203.634
8	01.45	.596	93	285	224	2.125	0	.3	0	1.0192	921.71	1.0047	1.2953	0.9697	7.188	203.634
9	02.00	.596	94	285	225	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.197	203.884
10	02.15	.596	94	285	224	2.125	0	.3	0	1.0191	921.71	1.0046	1.2953	0.9688	7.181	203.426
11	02.30	.596	93	285	224	2.125	0	.3	0	1.0192	921.71	1.0047	1.2953	0.9697	7.188	203.634
12	02.45	.596	99	285	221	2.125	0	.3	0	1.0185	921.71	1.0046	1.2953	0.9645	7.096	201.025
13	03.00	.596	93	285	224	2.125	0	.3	0	1.0192	921.71	1.0047	1.2953	0.9697	7.188	203.634
14	03.15	.596	94	285	224	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.181	203.426

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	3	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	03.30	.596	94	285	224	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.181	203.426
2	03.45	.596	97	285	225	2.125	0	.3	0	1.0187	921.71	1.0047	1.2953	0.9662	7.175	203.264
3	04.00	.596	94	285	224	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.181	203.426
4	04.15	.596	94	285	224	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.181	203.426
5	04.30	.596	96	285	224	2.125	0	.3	0	1.0188	921.71	1.0047	1.2953	0.9671	7.166	203.013
6	04.45	.596	94	285	225	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.197	203.884
7	05.00	.596	96	285	226	2.125	0	.3	0	1.0188	921.71	1.0047	1.2953	0.9671	7.198	203.926
8	05.15	.596	94	285	226	2.125	0	.3	0	1.0191	921.71	1.0047	1.2953	0.9688	7.123	204.341
9	END OF FLOW RATE NO 1.															
10	FLOW RATE NO 2.															
11	05.30	.596	95	305	152	3.0	0	.3	0	1.0203	1891.88	1.0027	1.2953	0.9680	12.540	355.250
12	05.45	.596	92	310	154	3.0	0	.3	0	1.0210	1891.88	1.0027	1.2953	0.9706	12.770	361.735
13	06.00	.596	103	305	154	3.0	0	.3	0	1.0193	1891.88	1.0028	1.2953	0.9611	12.520	354.698
14	06.15	.596	92	305	154	3.0	0	.3	0	1.0207	1891.88	1.0028	1.2953	0.9706	12.662	358.699

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	4	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	06.30	.596	102	305	154	3.0	0	.3	0	1.0194	1891.88	1.0028	1.2953	0.9619	12.534	355.055
2	06.45	.596	90	305	156	3.0	0	.3	0	1.0210	1891.88	1.0028	1.2953	0.9723	12.771	361.784
3	07.00	.596	91	305	156	3.0	0	.3	0	1.0208	1891.88	1.0028	1.2953	0.9715	12.758	361.408
4	07.15	.596	99	305	156	3.0	0	.3	0	1.0198	1891.88	1.0028	1.2953	0.9645	12.654	358.453
5	07.30	.596	94	305	155	3.0	0	.3	0	1.0204	1891.88	1.0028	1.2953	0.9688	12.677	359.127
6	07.45	.596	94	305	155	3.0	0	.3	0	1.0204	1891.88	1.0028	1.2953	0.9688	12.677	359.127
7	08.00	.596	98	305	154	3.0	0	.3	0	1.0199	1891.88	1.0028	1.2953	0.9653	12.584	356.497
8	08.15	.596	96	305	155	3.0	0	.3	0	1.0202	1891.88	1.0028	1.2953	0.9671	12.651	358.391
9	08.30	.596	97	305	155	3.0	0	.3	0	1.0201	1891.88	1.0028	1.2953	0.9662	12.638	358.024
10	08.45	.596	95	305	155	3.0	0	.3	0	1.0203	1891.88	1.0028	1.2953	0.9680	12.664	358.758
11	09.00	.596	95	305	155	3.0	0	.3	0	1.0203	1891.88	1.0028	1.2953	0.9680	12.664	358.758
12	09.15	.596	97	305	155	3.0	0	.3	0	1.0201	1891.88	1.0028	1.2953	0.9662	12.638	358.024
13	END FLOW RATE NO 2.															
14	FLOW RATE NO 3.															

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	5	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	09.30	.596	94	320	216	3.5	0	.3	0	1.0215	2654.90	1.0034	1.2953	0.9688	21.546	610.355
2	09.45	.596	95	320	220	3.5	0	.3	0	1.0213	2654.90	1.0035	1.2953	0.9680	21.724	615.382
3	10.00	.596	99	320	220	3.5	0	.3	0	1.0208	2654.90	1.0035	1.2953	0.9645	21.634	612.858
4	10.15	.596	101	320	220	3.5	0	.3	0	1.0205	2654.90	1.0035	1.2953	0.9628	21.590	611.609
5	10.30	.596	94	320	218	3.5	0	.3	0	1.0215	2654.90	1.0034	1.2953	0.9688	21.646	613.193
6	10.45	.596	99	320	218	3.5	0	.3	0	1.0208	2654.90	1.0034	1.2953	0.9645	21.535	610.046
7	11.00	.596	96	320	218	3.5	0	.3	0	1.0212	2654.90	1.0034	1.2953	0.9671	21.602	611.928
8	11.15	.596	96	320	220	3.5	0	.3	0	1.0212	2654.90	1.0035	1.2953	0.9671	21.701	614.748
9	11.30	.596	95	320	220	3.5	0	.3	0	1.0213	2654.90	1.0035	1.2953	0.9680	21.724	615.382
10	11.45	.596	92	320	218	3.5	0	.3	0	1.0217	2654.90	1.0034	1.2953	0.9706	21.691	614.468
11	12.00	.596	102	320	218	3.5	0	.3	0	1.0204	2654.90	1.0034	1.2953	0.9619	21.469	608.185
12	12.15	.596	98	320	218	3.5	0	.3	0	1.0209	2654.90	1.0034	1.2953	0.9653	21.558	610.671
13	12.30	.596	96	320	218	3.5	0	.3	0	1.0212	2654.90	1.0034	1.2953	0.9671	21.602	611.928
14	12.45	.596	98	320	220	3.5	0	.3	0	1.0209	2654.90	1.0035	1.2953	0.9653	21.657	613.486

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	6	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	13.00	.596	98	320	218	3.5	0	.3	0	1.0209	2654.90	1.0034	1.2953	0.9653	21.558	610.671
2	13.15	.596	98	320	216	3.5	0	.3	0	1.0209	2654.90	1.0034	1.2953	0.9653	21.458	607.844
3		END OF FLOW RATE NO 3.														
4		FLOW RATE NO 4.														
5	13.30	.596	96	335	226	4.0	0	.3	0	1.0222	3628.2	1.0029	1.2953	0.9671	30.768	871.581
6	13.45	.596	95	335	228	4.0	0	.3	0	1.0223	3628.2	1.0029	1.2953	0.9680	30.937	876.361
7	14.00	.596	95	330	228	4.0	0	.3	0	1.0220	3628.2	1.0029	1.2953	0.9680	30.696	869.542
8	14.15	.596	93	330	232	4.0	0	.3	0	1.0223	3628.2	1.0030	1.2953	0.9697	31.030	879.009
9	14.30	.596	92	330	230	4.0	0	.3	0	1.0224	3628.2	1.0030	1.2953	0.9706	30.927	876.104
10	14.45	.596	92	330	230	4.0	0	.3	0	1.0224	3628.2	1.0030	1.2953	0.9706	30.927	876.104
11	15.00	.596	93	335	229	4.0	0	.3	0	1.0226	3628.2	1.0029	1.2953	0.9697	21.069	880.126
12	15.15	.596	94	333	230	4.0	0	.3	0	1.0223	3628.2	1.0030	1.2953	0.9688	31.008	878.399
13	15.20	.596	94	333	228	4.0	0	.3	0	1.0223	3628.2	1.0029	1.2953	0.9688	30.873	874.548
14	15.45	.596	94	333	224	4.0	0	.3	0	1.0223	3628.2	1.0029	1.2953	0.9688	30.599	866.798

Randaberg Trykk A/S 003

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Multi Rate	Norway	31/6-2	28-08-84	7	7

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	16.00	.596	94	333	223	4.0	0	.3	0	1.0223	3628.2	1.0029	1.2953	0.9688	30.530	864.850
2	16.15	.596	94	335	212	4.0	0	.3	0	1.0225	3628.2	1.0027	1.2953	0.9688	29.856	845.759
3	16.30	.596	94	335	228	4.0	0	.3	0	1.0225	3628.2	1.0029	1.2953	0.9688	30.969	877.274
4	16.45	.596	95	335	228	4.0	0	.3	0	1.0223	3628.2	1.0029	1.2953	0.9680	30.937	876.361
5	17.00	.596	94	335	230	4.0	0	.3	0	1.0025	3628.2	1.0029	1.2953	0.9688	31.105	881.136
6	17.15	.596	93	335	230	4.0	0	.3	0	1.0026	3628.2	1.0029	1.2953	0.9697	31.138	882.056
7		END FLOW RATE NO 4.														
8																
9																
10																
11																
12																
13																
14																

Randaberg Trykk A/S 003

DST 1

POST GRAVEL PACK

CLEAN UP

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	28-08-84	19	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 23.08		Gauges disconnected from toolstring.													1
2 23.10		Tugger-line on gauges.													2
3 23.14		Gauges out of lubricator.													3
4 23.15		Gauges in mouse-hole.													4
5 23.16		Close swab valve.													5
6 23.25		toolstring out of wireline lubricator. GS pulling tool made up.													6
7 23.28		Toolstring in wireline lubricator.													7
8 23.32		Open swab valve. Wireline lubricator stabbed on wireline B.O.P.													8
9 23.35		Close choke manifold.													9
10 23.38		Pressure test against kill valve.													10
11 23.49		Open kill valve.													11
12 24.00		Test lubricator to 4000 PSI.													12
13 29-08 00.08		Test good. Close kill valve.													13
14 00.10		Bleed pressure down to 2000 PSI through choke.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	20	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.11		Open Sub Sea Lubricator valve.													1
2 00.12		Commence run in hole to pull bottom gauges.													2
3 01.00		Tools in lubricator.													3
4 01.05		Bleed off pressure to 1000 approx.													4
5 01.10		Bleed off pressure to 210 approx.													5
6 01.15		Bleed off pressure to zero.													6
7 01.30		Break off lubricator.													7
8 01.31		Break off tool string.													8
9 01.33		Lower gauges to rig floor.													9
10 01.40		Stab on lubricator.													10
11 01.45		Bleed off air.													11
12 01.50		Close needle valve.													12
13 01.55		Close swab valve.													13
14 02.00		Pressure test to choke manifold.													14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	21	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.18															Close kill line valve. 1
2 02.22															Bleed off pressure to 2000 PSI approx. 2
3 02.25															Start injecting methanol. 3
4 02.30	28A														Open well to heater choke for clean up 4
5 02.32	28A														after wireline work. 5
6 02.33	"	1940 / 133.4	60 / 16												6
7 02.35	"	1840 / 127.9	61 / 16												7
8 02.36	48A	1860 / 129.3	61 / 16												8
9 02.38	48A	1450 / 101	61 / 16												9
10 02.38	56A														Open choke to 56/64". 10
11 02.40	"	1250 / 87.2	61 / 16												11
12 02.41	64A														Open choke to 64/64". 12
13 02.42	"	1120 / 78.2	61 / 16												13
14 02.44	"	1100 / 77.5	61 / 16												14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	22	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 02.46	64A	1090 / 76.2	61 / 16												1
2 02.48	"	1085 / 75.8	58 / 14												2
3 02.50	"	1085 / 75.8	58 / 14				55%water 43%cond. 2%emul. trace solids.								3
4 02.55	80A	1090 / 76.2	57 / 14												4
5 02.56	80A														5 Open choke to 80/64".
6 02.57	"	870 / 61	58 / 14												6
7 02.59	"	860 / 60.3	58 / 14												7
8 03.00	"						35%water 63%cond. 2%emul. trace solids.								8
9 03.01	"	860 / 60.3	58 / 14												9
10 03.03	"	860 / 60.3	57 / 14												10
11 03.04	96A														11 Open choke to 96/64".
12 03.06	"	730 / 51.3	57 / 14												12
13 03.08	"	725 / 51	57 / 14												13
14 03.10	"	725 / 51	56 / 13												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	23	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 03.15	96A	725 / 51	56 / 13				25%water 74%cond. 1%emul.								1
2 03.20	"	725 / 51	56 / 13												2
3 03.25	"	725 / 51	56 / 13												3
4 03.30	"	725 / 51	56 / 13				23%water 77%cond. trace emul.								4
5 03.45	"	728 / 51.2	56 / 13				24%water 76%cond.								5
6 04.00	"	728 / 51.2	56 / 13				25%water 75%cond.								6
7 04.15	"	730 / 51.4	56 / 13												7
8 04.30	"	730 / 51.4	56												8
9 04.32	64A														9 Change choke to 64/64"
10 04.38															10 Close LPR-n valve.
11															11 END OF CLEAN AFTER WIRELINE WORK.
12 04.39															12 Close in at choke manifold.
13 04.40		1660 / 115.5	56 / 13												13
14 04.42															14 Bleed down pressure to 260 PSIG.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	24	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 04.48		262 / 19.1	57 / 13.5												1
2 04.51															2 Bleed off to zero.
3 04.55															3 Close choke manifold.
4 04.57															4 Close failsafe valve.
5 05.00															5 Close kill line valve.
6															6 Start acidizing.
7															7 Finished acidizing.
8 06.20															8 Start displacing with diesel.
9															9 Finished displacing with diesel.
10 07.04															10 Open failsafe valve.
11 07.06															11 Pressure up against choke to 250 PSI and
12															12 close kill valve.
13 08.37	28A														13 Open well at choke manifold on 28/64
14															14 adjustable into tank for Post Acid Clean UP

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	25	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 08.38	28A	220 / 16.1	57 / 14												1
2 08.40	"	250 / 18.2	57 / 14												2
3 08.42	"	295 / 21.3	57 / 14												3
4 08.43	32A														Increased choke to 32/64. 4
5 08.44	"	355 / 25.4	57 / 14												5
6 08.46	"	630 / 44.4	57 / 14												6
7 08.48	"	1252 / 87.3	57 / 14												Open fixed side of choke manifold using 7
8 08.50	"	1450 / 100.9	57 / 14												32/64 heater choke. 8
9 08.52	"	1510 / 105.1	57 / 14												9
10 08.54	48A	1514 / 105.3	57 / 14												Change to 48/64 adjustable choke on heater. 10
11 08.56	"	1375 / 95.8	57 / 14												11
12 08.58	"	1310 / 91.3	57 / 14												12
13 09.00	"	1287 / 89.7	57 / 14				95%acid/water trace	emul.							13
14 09.02	"	1286 / 89.6	57 / 14												Gas to surface. 14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	26	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 09.05	64A	1282 / 89.4	57 / 14												Changed to 64/64 heater choke. 1
2 09.06	"	982 / 68.7	56 / 14												2
3 09.08	"	970 / 67.8	56 / 14												3
4 09.10	"	965 / 67.5	55 / 13												4
5 09.12	"	967 / 67.6	55 / 13												5
6 09.14	"	967 / 67.6	55 / 13												6
7 09.15	"						80% acid/water 20%cond. trace emul.								7
8 09.16	"	965 / 67.5	54 / 12.5												8
9 09.18	"	969 / 67.8	54 / 12.5												9
10 09.20	"	970 / 67.8	54 / 12.5												10
11 09.25	"	975 / 68.2	54 / 12.5												11
12 09.30	80A	770 / 54.1	54 / 12.5												Heater choke changed to 80/64 adjustable. 12
13 09.33	"							1							13
14 09.33	"						20%cond. 80%acid/water								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	27 75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 09.34	80A	775 54.5	53 12												1
2 09.36	"	765 53.7	53 12												2
3 09.38	"	765 53.7	51 10.5												3
4 09.40	"	767 53.8	51 10.5												4
5 09.42	"	768 53.9	51 10.5												5
6 09.44	"	768 53.9	51 10.5												6
7 09.45	"	768 53.9	51 10.5												7
8 09.50	"	770 54.1	51 10.5												8
9 09.55	96A		51 10.5												Heater choke changed to 96/64 adjustable. 9
10 09.56	"	680 47.8	51 10.5												10
11 09.58	"	652 45.9	51 10.5												11
12 10.00	"	652 45.9	51 10.5				70%water/acid 30% cond.								12
13 10.02	"	652 45.9	51 10.5												13
14 10.04	"	652 45.9	51 10.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	28	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 10.06	96A	652 / 45.9	51 / 10.5												1
2 10.08	"	652 / 45.9	51 / 10.5												2
3 10.10	"	652 / 45.9	51 / 10.5												3
4 10.15	"	652 / 45.9	51 / 10.5				70%water/acid 30%cond. trace emul.								Stop injecting methanol at choke 4
5															manifold. 5
6 10.20	"	655 / 46.1	51 / 10.5												6
7 10.25	"	655 / 46.1	51 / 10.5												7
8 10.30	"	657 / 46.3	51 / 10.5				53%water/acid 47%cond. trace emul.								8
9 10.45	"	661 / 46.5	51 / 10.5												Slow down methanol pump to Sub Sea TestTree 9
10 11.00	"	665 / 46.1	52 / 11				50%water/acid 50%cond. trace emul.								10
11 11.15	"	670 / 47.2	52 / 11				45%acid/water 55%cond. trace emul.								11
12 11.30	"	675 / 47.6	52 / 11				55%acid/water 45% cond. trace emul.								12
13 11.45	"	680 / 47.9	53 / 11.5				[illegible]	1							13
14 11.45	"						55%cond. 45%water/acid trace emul.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	29	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.00	96A	681 / 47.9	53 / 11.5	0.2				1							1
2 12.00	"						54%cond. 46%water/acid trace emul.								2
3 12.15	"	687 / 48.3	53 / 11.5				45%cond. 55%water/acid trace emul.								3
4 12.30		689 / 48.5	53 / 11.5					1							4
5 12.30							40%cond. 60%water/acid. trace emul.								5
6 12.45		692 / 48.7	53 / 11.5				53%cond. 47%water/acid trace emul.								6
7 13.00		694 / 48.8	53 / 11.5					1							7
8 13.00							54%cond. 46%water/acid. trace emul.								8
9 13.15		696 / 49	53 / 11.5												9
10 13.30		698 / 49.1	53 / 11.5				52%cond 48%water trace emul.								10
11 13.45		699 / 49.2	53 / 11.5												11
12 13.51			51 / 10												12 Start injecting methanol at choke
13															13 manifold.
14 13.53			51 / 10												14 By-pass heater.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	30	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.54		440 31.3	51 10												1
2 13.56		440 31.3	51 10												2
3 13.58		440 31.3	52 10.5												3
4 14.00		440 31.3	52 10.5												4
5 14.02		440 31.3	52 11												5
6 14.04		440 31.3	52 11												6
7 14.06		440 31.3	52 11				50%cond. 50%water/acid trace solids emul.								7
8 14.08		440 31.3	52 11												8
9 14.10		442 31.4	51 10												9
10 14.15		441 31.4	51 10				52%cond. 48%water/acid trace solids emul.								10
11 14.30		442 31.4	51 10												11
12 14.45		442 31.4	51 10				55%cond. 45%water/acid. trace solids emul.								12
13 15.00		443 31.5	50 10	0.3				1							13
14 15.00							58%cond. 42%water/acid trace emul.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	31	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCD/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.15		443 / 31.5	50 / 10												1
2 15.30		445 / 31.6	50 / 10				55%cond. 45%water/acid small trace solids. Trace emul.								2
3 15.45		445 / 31.6	50 / 10												3
4 16.00		447 / 31.8	50 / 10					1							4
5 16.00							60%cond. 40%water/acid trace emul.								5
6 16.15	128F	447 / 31.8	50 / 10												6
7 16.20	"														Burn off contents from stock tank. 7
8 16.30	"	447 / 31.8	50 / 10				60%cond. 40%water/acid. trace emul								8
9 16.45	"	450 / 32	50 / 10												9
10 17.00	"	450 / 32	50 / 10					1							10
11 17.00							63%cond. 37%water/acid. trace emul.								11
12 17.15	"	451 / 32.1	50 / 10												12
13 17.30	"	451 / 32.1	50 / 10				63%cond. 37%water/acid trace emul.								13
14 17.45	"	455 /	50 / 10												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	32	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.00	128F	455 / 32.4	50 / 10				39%water 61%cond. trace emul.								1
2 18.15	"	450	50 / 10												2
3 18.30	"	450 / 32	50 / 10					1							3
4 18.30	"						33%water 66%cond. 1%emul. trace solids.								4
5 18.45	"	452 / 32.2	50 / 10												5
6 18.55	96A														Flow thru heater 96/64 choke. 6
7 18.56	"	720 / 50.6	50 / 10												7
8 18.57	"	725 / 51	50 / 10												8
9 18.58	"	720 / 50.6	50 / 10												9
10 18.59	"	730 / 51.3	50 / 10												10
11 19.00	"	730 / 51.3	50 / 10					1							11
12 19.00	"						75%cond. 25%water/acid trace emul.								12
13 19.07	"	750 / 52.7	51 / 10.5				75%cond. 25%water/acid.								Flow directed thru separator. 13
14 19.08	"	755 / 53	51 / 10.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	33	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[X] MMSCF/D [X] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.10	96A	757 53.2	51 10.5												1
2 19.20	"	730 51.3	51 10.5	0.3						.596		30.059 851.511			2
3 19.25	"	730 51.3	51 10.5												3
4 19.30	"	460 32.7	51 10.5												4 By-pass separator.
5 19.32	128F	520 36.8	51 10.5												5 By-pass heater. 128/64 fixed choke on choke
6															6 manifold.
7 19.34	"	522 37	51 10.5												7 Flow directed thru separator.
8 19.40	"	520 36.8	51 10.5	0.3						.596		30.793 872.295			8
9 19.43	"														9 By-pass separator.
10 19.45	"	452 32.2	50 10				50%cond. 50%water/acid trace emul.								10
11 19.47	"	454 32.3	50 10												11
12 19.50	"	454 32.3	50 10												12
13 19.55	"	454 32.3	50 10												13
14 20.00	"	454 32.3	50 10					1							14

FIELD READING

OTIS O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	34	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.00	128F	..					10%cond. 90%water/acid.								1
2 20.15	"	455 32.4	50 10												2
3 20.30	"	455 32.4	50 10				28%water 72%cond. trace emul.								3
4 20.45	"	454 32.3	50 10												4
5 21.00	"	455 32.4	50 10					1							5
6 21.00	"						31%water 69%cond. trace emul.								6
7 21.15	"	455 32.4	50 10												7
8 21.30	"	455 32.4	49 9.5				36%water 64%cond. trace emul.								8
9 21.45	"	455 32.4	49 9.5												9
10 22.00	"	457 32.5	49 9.5				34%water 66%cond.								10
11 22.15	"	457 32.5	49 9.5												11
12 22.30	"	457 32.5	49 9.5				29%water 71%cond. trace emul.								12
13 22.45	"	457 32.5	49 9.5												13
14 23.00	"	459 32.7	49 9.5					1.0							14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	35	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 23.00	128F						30%water 70%cond. trace emul.								1
2 23.15		459 32.7	50 10												2
3 23.30		459 32.7	50 10				30%water 70%cond. trace emul.								3
4 23.45		459 32.7	49 9.5												4
5 24.00		459 32.7	49 9.5					1.0							5
6 24.00							30%water 70%cond.								6
7 30-08 00.15		459 32.7	49 9.5												7
8 00.30		459 32.7	49 9.5					1.0							8
9 00.30							30%water 70%cond.								9
10 00.45		459 32.7	50 10												10
11 01.00		459 32.7	49 9.5					1.0							11
12 01.00							25%water 75%cond. trace emul.								12
13 01.15		459 32.7	49 9.5												13
14 01.30		459 32.7	49 9.5					1.0							14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	36	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 01.30							28%water 72%cond. trace emul.								1
2 01.45		459 32.7	49 9.5												2
3 02.00		459 32.7	49 9.5					1							3
4 02.00							23%water 77%cond. trace emul.								4
5 02.15		459 32.7	49 9.5												5
6 02.30		460 32.7	48 9				27%water 72%cond. 1%emul.								6
7 02.45		460 32.7	48 9												7
8 03.00		462 32.9	48 9					1.0							8
9 03.00							25%water 75%cond. trace emul.								9
10 03.15		462 32.9	48 9												10
11 03.30		462 32.9	48 9				25%water 75%cond.								11
12 03.45		462 32.9	48 9												12
13 04.00		462 32.9	48 9					1.0							13
14 04.00							23%water 77%cond.								14

Randaberg Trykk A/S 001

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30 -08-84	37	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[X] MMSCF/D [X] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 04.04		730 / 51.4	50 / 10												Flow thru heater. 1
2 04.05		750 / 52.7	50 / 10												2
3 04.07		750 / 52.7	50 / 10												3
4 04.10		745 / 52.4	50 / 10											Initial tank rd 37.5BBLS	Flow thru separator. 4
5 04.15		745 / 52.4	50 / 10	0.3			25%water 75%cond. trace emul.			.596		30.380 / 860.607			5
6 04.30		745 / 52.4	50 / 10	0.3			28%water 72%cond.			.596		31.256 / 885.421			6
7 04.45		745 / 52.4	50 / 10	0.3						.596		31.256 / 885.421			7
8 05.00		745 / 52.4	51 / 10.5	0.3				1.0		.596		31.256 / 885.421			8
9 05.00							29%water 71% cond.								9
10 05.15		747 / 52.5	52 / 11	0.3						.596		31.224 / 884.492			10
11 05.16															Stop injecting methanol at choke 11
12															manifold. 12
13 05.30		747 / 52.5	52 / 11	0.3			21%water 79%cond.			.596		31.256 / 885.421			13
14 05.45		747 / 52.5	52 / 11	0.3						.596		31.322 / 887.289			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	38	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.00		747 / 52.5	52 / 11	0.3				1.0		.596		31.289 / 886.353			1
2 06.00							22%water 78%cond. trace	emul.							2
3 06.15		747 / 52.5	52 / 11	0.3						.596		31.422 / 890.117			3
4 06.30		747 / 52.5	52 / 11	0.3			24%water 76%cond. trace	emul.		.596		31.342 / 887.860			4
5 06.45		747 / 52.5	52 / 11												5
6 07.00		747 / 52.5	51 / 10.5	0.3				1.0		.596		31.262 / 885.580			6
7 07.00							22%water 78%cond. trace	emul.							7
8 07.15		747 / 52.5	52 / 11												8
9 07.30		745 / 52.4	52 / 11	0.3			22%water 78%cond. trace	emul.		.596		31.330 / 887.495			9
10 07.45		745 / 52.4	52 / 11												10
11 08.00		744 / 52.3	52 / 11	0.3				1.0		.596		31.410 / 889.769			11
12 08.00							20%water 80%cond. trace	emul.							12
13 08.10															13 Stop injecting methanol in Sub Sea
14															14 Test Tree.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	39	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 08.15		744 / 52.3	52 / 11							.596					1
2 08.30		744 / 52.3	52 / 11	0.3			18%water 82%cond. trace emul.			.596		31.444 / 890.729			2
3 08.45		760 / 53.4	52 / 11							.596					3
4 08.50															Start injecting methanol before choke manifold. 4
5 09.00		747 / 52.5	52 / 11	0.3				1.0		.596		31.410 / 889.769		Tank reading 40BBLS	5
6 09.00							25%water 75%cond. trace emul.								6
7 09.15		745 / 52.4	52 / 11							.596					7
8 09.30		745 / 52.4	52 / 11				23%water 77%cond. trace emul.			.596		31.444 / 890.729			8
9 09.45		745 / 52.4	52 / 11							.596					9
10 10.00		745 / 52.4	52 / 11	0.3				1.0		.596		31.444 / 890.729			10
11 10.00							20%water 80%cond. trace emul.								11
12 10.30	96A	745 / 52.4	52 / 11				23%water/acid 77%cond. trace emul.			.596		31.296 / 886.536		Tank reading 46BBLS	12
13 11.00	"	745 / 52.4	52 / 11	0.3				1.0		.596		31.523 / 892.960			13
14 11.00	"						25%water/acid 75%cond. trace emul.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	40	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 11.30	96A	745 / 52.4	52 / 11	0.3			23%water/acid 77%cond. trace emul.			.596		31.523 / 892.960		Tank reading 48BBLS	1
2 12.00	"	745 / 52.4	52 / 11	0.3				2.0		.596		31.523 / 892.960			2
3 12.00	"						23%water/acid 77%cond. trace emul.								3
4 12.30	"	745 / 52.4	52 / 11	0.3			22%water/acid 78%cond. trace emul.			.596		31.523 / 892.960		Tank reading 50BBLS	4
5 13.00	"	745 / 52.4	52 / 11	0.3				2.0		.596		31.523 / 892.960		Tank reading 52BBLS	5
6 13.00	"						21%water/acid 79%cond. trace emul.								6
7 13.30	"	746 / 52.4	52 / 11	0.3			22%water/acid 78%cond. trace emul.			.596		31.523 / 892.960		Tank reading 54BBLS	7
8 14.00	"	746 / 52.4	52 / 11	0.3				2.0		.596		31.523 / 892.960		Tank reading 55.5BBLS	8
9 14.00	"						20%water/acid 80%cond. trace emul.								9
10 14.30	"	745 / 52.4	52 / 11	0.3				2.0		.596		31.523 / 892.960		Tank reading 57BBLS	10
11 14.30	"						20%water/acid 80%cond. trace emul.								11
12 15.00	"	745 / 52.4	52 / 11	0.3				2.0				31.523 / 892.960		Tank reading 58.5BBLS	12
13 15.00	"						20%water/acid 80%cond. trace emul.								13
14 15.20															14 By-pass separator.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	41	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.27															1 Stop injection of methanol on choke
2															2 manifold.
3 15.30															3 Close LPR and choke manifold.
4 15.32		970 / 67.8	55 / 12.5												4 TOTAL FLUID PRODUCED= 29 BBL - 23BBL cond.
5															5 6.5 BBL water/acid.
6 15.39															6 Bleed off on choke manifold to 305 PSI
7															7 (22 bar).
8 15.41		306 / 22.1	52 / 11												8 END OF 8thPOST GRAVEL PACK FLOW.
9 15.44															9 Bleed off to 0 PSI.
10 15.46															10 Open kill valve.
11 15.47															11 Close choke manifold and failsafe.
12 15.50															12 Start pump 46 BBL acid.
13 16.14															13 Flow 11 BBL to tank final reading 67 BBL
14 16.15															14 Open LPR.

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	42	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.16															1 Start pumping 5BBL diverter, 47BBL acid
2															2 and 5BBL spacer on Dowell.
3 16.37															3 Stop pumping on Dowell Start pumping 30BBL
4															4 diesel and 16BBL drillwater with
5															5 Halliburton.
6 17.00															6 Close Halliburton LPR valve.
7 17.01															7 Bleed of pressure thru Halliburton pump-
8 17.05															8 Open failsafe valve at Surface Test Tree
9															9 and close kill valve.
10 18.20															10 Open LPR-n valve.
11 18.21		370 / 26.5	50 / 10												11
12 18.22															12 Open well at choke manifold on 128/64
13															13 positive to heater choke of 32/64.
14 18.24		250 / 18.3	50 / 10												14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	43	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.26		395 28.3	51 10.5												1
2 18.27															2 Start injecting methanol at Sub Sea
3															3 Test Tree and choke manifold.
4 18.30		840 58.9	53 11.5												4
5 18.32		995 69.6	54" 12												5
6 18.34		1235 86.2	54 12												6
7 18.35															7 Acid to surface.
8 18.36		1310 91.3	54 12												8
9 18.38		1450 101	55 12.5												9
10 18.40		1475 102.7	54 12												10
11 18.45		1550 107.9	53 11.5												11 Gas to surface.
12 18.48		1350 94.1	51 10.5												12 Open choke to 48/64 adjustable heater
13 18.50		1360 94.8	51 10.5												13 choke.
14 18.52		1340 93.4	51 10.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	44	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.54		1330 / 92.7	51 / 10.5												1
2 19.00	64A	1010 / 70.7	51 / 10.5				98%water/acid 2%cond. trace solids								Open choke to 64/64. 2
3 19.05	"	1010 / 70.7	52 / 11												3
4 19.10	"	1010 / 70.7	52 / 11												4
5 19.15	"	1012 / 70.8	52 / 11												5
6 19.20	80A	1017 / 71.7	52 / 11												Increase choke to 80/64. 6
7 19.22	"	810 / 56.9	52 / 11												7
8 19.23	"	805 / 56.5	52 / 11												8
9 19.24	"	805 / 56.5	52 / 11												9
10 19.25	"	807 / 56.7	52 / 11												10
11 19.30	"	805 / 56.5	52 / 11				92%water/acid 8%cond.								11
12 19.35	"	808 / 56.7	52 / 11												12
13 19.40	"	810 / 56.9	52 / 11				88%water/acid 12%cond. trace emul.								13
14 19.45	96A	695 / 48.9	51 / 10.5												Increase choke to 96/64. 14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	45	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 19.47	96A	690 48.6	51 10.5												1
2 19.49	"	693 48.8	51 10.5												2
3 19.50	"	695 48.9	51 10.5												3
4 19.55	"	695 48.9	51 10.5												4
5 20.00	"	695 48.9	51 10.5					1.0							5
6 20.00	"						88%water/acid 12%cond.								6
7 20.15	"	695 48.9	50 10												7
8 20.30	"	697 49.1	50 10				79%water 21%cond.								8
9 20.45	"	699 49.2	50 10												9
10 21.00	"	699 49.2	50 10					1.0							10
11 21.00	"						75%water 25%cond.								11
12 21.15	"	699 49.2	50 10												12
13 21.30	"	702 49.4	50 10				63%water 36%cond. 1%emul.								13
14 21.45	"	703 49.5	50 10												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	46	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.00	96A	703 / 49.5	50 / 10					1.0							1
2 22.00	"						65%water/acid 35%cond. trace emul.								2
3 22.15	"	705 / 49.6	50 / 10												3
4 22.30	"	705 / 49.6	50 / 10					1.0							4
5 22.30	"						58%water/acid 42%cond.								5
6 22.45	"	705 / 49.6	50 / 10												6
7 23.00	"	702 / 49.4	50 / 10					1.0							7
8 23.00	"						50%water 50%cond.								8
9 23.15	"	702 / 49.4	50 / 10												9 Increase inj. rate at Sub Sea Test Tree.
10 23.30	"						50%water 50%cond.								10 Change over deadweight tester & flush lines
11 23.45	"	705 / 49.6	50 / 10												11
12 24.00	"	710 / 50	50 / 10					1.0							12
13 24.00	"						45%water 55%cond.								13
14 31-08 00.15	"	719 / 50.6	50 / 10												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	47	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	BBL/D m^3/D	MMSCF/D SCM/D	BBL/D m^3/D	SCF/BBL SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 00.30	96A	723 50.9	50 10				50%water 50%cond.								1
2 00.45	"	730 51.4	50 10												2
3 01.00	"	730 51.4	50 10					1.0							3
4 01.00	"						55%water 45%cond.								4
5 01.15	"	730 51.4	50 10												5
6 01.30	"	730 51.4	51 10.5				50%water 50%cond.								6
7 01.45	"	728 51.2	51 10.5												7
8 02.00	"	728 51.2	51 10.5					1.0							8
9 02.00	"						51%water 48%cond. 1%emul.								9
10 02.15	"	730 51.4	51 10.5												10
11 02.30	"	730 51.4	51 10.5					1.0							11
12 02.30	"						53%water 47%cond. trace emul.								12
13 02.45	"	730 51.4	51 10.5			-									13
14 03.00	"	730 51.4	51 10.5					1.0							14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	48	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 03.00	96A						52%water 48%cond.								1
2 03.15	"	730 / 51.4	51 / 10.5												2
3 03.30	"	732 / 51.5	51 / 10.5					1.0							3
4 03.30	"						50%water 50%cond. trace emul.								4
5 03.45	"	732 / 51.5	51 / 10.5												5
6 04.00	"	735 / 51.7	51 / 10.5					1.0							6
7 04.00	"						50%water 50%cond.								7
8 04.15	"	735 / 51.7	51 / 10.5												8
9 04.30	"	735 / 51.7	51 / 10.5				52%water 48%cond.								9
10 04.45	"	735 / 51.7	51 / 10.5												10
11 05.00	"	735 / 51.7	51 / 10.5					1.0							11
12 05.00	"						50%water 50%cond.								12
13 05.15	"	737 / 51.8	52 / 11												13
14 05.30	"	738 / 51.9	52 / 11					1.0							14

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O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	49 | 75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 05.30	96A						43%water 57%cond.								1
2 05.45	"	738 51.9	52 11												2
3 06.00	"	738 51.9	52 11					1.0							3
4 06.00	"						47%water 53%cond. trace emul.								4
5 06.15	"	738 51.9	52 11												5
6 06.19		1300 90.6	52 11												Close choke manifold- Leak on rig manifold. 6
7 06.21		1550 107.8	52 11												Stop injecting methanol at Sub Sea 7
8															Test Tree. 8
9 06.22		2010 139.5	74 23												9
10 06.24		2007 139.4	70 21												10
11 06.26		2007 139.4	64 18												11
12 06.28		2007 139.4	62 16.5												12
13 06.30		2007 139.4	60 15.5												13
14 06.35		2007 139.4	58 14.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	50	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.40		2007 / 139.4	57 / 14												1
2 06.45		2007 / 139.4	57 / 14												2
3 07.00		2007 / 139.4	55 / 12.5												3
4 07.05															Air supply to failsafe valve manifold off - 4
5															Valve closed. 5
6 07.38															Air supply back on to failsafe manifold. 6
7 11.18															Open failsafe valve. Rig manifold repaired 7
8															and tested. 8
9 11.19		2007 / 139.4	50 / 10												9
10 11.30															Start inject methanol on Sub Sea Test Tree. 10
11 11.31	32A														Open choke manifold heater choke on 32/64 11
12															Adjustable. 12
13 11.34	"														Start injection of methanol on choke 13
14															manifold. 14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	51	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 11.35	32A	1960 136.1	50 10												1
2 11.37	"	1835 127.5	50 10												2
3 11.38	"	1827 126.9	50 10												3
4 11.40	"	1827 126.9	50 10												4
5 11.43	48A														Increase heater choke to 48/64 Adjustable. 5
6 11.45	"	1510 105.1	49 10												6
7 11.50	64A	1510 105.1	49 9.5												7
8 11.51	64A														Increase heater choke to 64/64 Adjustable. 8
9 11.55	96A	1150 80.3	49 9.5												9
10 11.56	96A	785 55.1	48 9												Increase heater choke to 96/64 Adjustable. 10
11 11.58	"	783 55	48 9												11
12 12.00	"	765 53.7	48 9					1.0							12
13 12.00	"						55%water/acid 45%cond. trace emul.								13
14 12.05	"	762 53.5	49 9.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	52	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 12.10	96A	760 / 53.4	49 / 9.5												1
2 12.15	"	759 / 53.3	49 / 9.5												2
3 12.30	"	758 / 53.2	49 / 9.5				38%water/acid 62%cond. trace emul.								3
4 12.45	"	758 / 53.2	49 / 9.5												4
5 12.53	"														5 Stop injecting methanol at choke
6															6 manifold. Reduce rate at Sub Sea Test Tree.
7 13.00	"	758 / 53.2	50 / 10					1.0							7
8 13.00	"						40%water/acid 60%cond. trace emul.								8
9 13.15	"	758 / 53.2	50 / 10												9
10 13.30	"	758 / 53.2	50 / 10					1.0							10
11 13.30	"						35%water/acid 65%cond. trace emul.								11
12 13.45	"	758 / 53.2	50 / 10												12
13 14.00	"	758 / 53.2	50 / 10					1.0							13
14 14.00	"						35%water/acid 65%cond. trace emul.								14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	53	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 14.15	96A	759 53.3	50 10												1
2 14.30	"	759 53.3	50 10					1.0							2
3 14.30	"						35%water/acid 65%cond. trace emul.								3
4 14.37	"														Flow through separator. 4
5 14.45	"	755 53.0	50 10	0.3						.596		31.020 878.739			5
6 15.00	"	755 53.0	50 10	0.3				1.0		.596		30.863 874.280			6
7 15.00	"						35%water/acid 65%cond. trace emul.								7
8 15.15	"	755 53.0	50 10	0.3						.596		30.863 874.280			8
9 15.30	"	755 53	50 10	0.3				1.0		.596		30.896 875.217			9
10 15.30	"						35%water/acid 65%cond. trace emul.								10
11 15.45	"	755 53	50 10	0.3						.596		30.896 875.217			11
12 16.00	"	757 53.2	50 10	0.3				1.0		.596		30.797 872.417			12
13 16.00	"						35%water/acid 65%cond. trace emul.								13
14 16.15	"	757 53.2	50 10	0.3						.596		30.765 871.490			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	54	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 16.30	96A	757 / 53.2	50 / 10	0.3				1.0	-	.596		30.863 / 874.280			1
2 16.30	"						35%water/acid 65%cond. trace emul.								2
3 16.45	"	757 / 53.2	50 / 10	0.3						.596		30.929 / 876.157			3
4 17.00	"	757 / 53.2	50 / 10	0.3				1.0		.596		30.797 / 872.417			4
5 17.00	"						35%water/acid 65%cond. trace emul.					-			5
6 17.15	"	757 / 53.2	50 / 10	0.3						.596		30.797 / 872.417			6
7 17.20															By-pass separator. 7
8 17.23															Close choke manifold. 8
9 17.26															Close lubricator valve. 9
10 17.27															Open choke manifold to bleed off to 335PSI 10
11 17.28															Close choke manifold. 11
12 17.29															Stop injection of methanol on Sub Sea 12
13															Test Tree. 13
14 17.33		335 / 24.1	55 / 13												14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	55	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 17.34		Bleed off to 0 PSI on choke manifold.													1
2 17.35		Close choke manifold.													2
3 17.39		Disconnect wireline lubricator from wireline B.O.P. Start make up gauges.													3
4 17.58		Open choke manifold, fixed side.													4
5 18.00		Open swab valve.													5
6 18.02		Gauges in lubricator.													6
7 18.05		Gauges connected to wireline tool string.													7
8 18.08		Wireline lubricator stabbed on wireline B.O.P.													8
9 18.09		Close choke manifold.													9
10 18.11		Pressure test against kill valve 4000 PSI (275 bar).													10
11 18.24		Test good. Open kill valve.													11
12 18.30		Pressure test wireline lubricator to 4000 PSI (275 bar).													12
13 18.43		Bleed off to 2000 PSI to equalize across lubricator valve.													13
14 18.45		Close kill valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	56	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D ☐ m^3/D	☐ MMSCF/D ☐ SCM/D	☐ BBL/D ☐ m^3/D	☐ SCF/BBL ☐ SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 18.47		Open lubricator valve.													1
2 18.48		Start run in hole with gauges.													2
3 19.32		Gauges on depth.													3
4 19.34		Start to pull tool string out of hole.													4
5 19.46		Tool string in wireline lubricator.													5
6 19.47		Close lubricator valve.													6
7 19.49		Bleed off on choke manifold to 450 PSI (32 bar) observe for leak.													7
8 20.00		Bleed off to zero.													8
9 20.05		Wireline lubricator disconnected from wireline B.O.P.													9
10 20.06		Wireline tool string out of wireline lubricator.													10
11 20.08		Close swab valve and choke manifold.													11
12 20.13		Open swab valve. Gauges in lubricator.													12
13 20.17		Gauges connected to wireline tool string.													13
14 20.20		Wireline lubricator stabbed on wireline B.O.P.													14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	57	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.22		Open kill valve.													1
2 20.28		Start pressure test wireline lubricator 4000 PSI (275 bar).													2
3 20.39		Test good. Bleed off to 2000 PSI (138 bar).													3
4 20.41		Close kill valve.													4
5 20.42		Open lubricator valve.													5
6 20.50		Start run in hole with gauges.													6
7 21.28		Gauges on depth.													7
8 21.30		Start pull wireline tool string out of hole.													8
9 21.43		Wireline tool string in wireline lubricator. Close lubricator valve.													9
10 21.44		Bleed off above lubricator valve to 560 PSI, on choke manifold.													10
11 21.56		Bleed off pressure to zero.													11
12 21.58		Close choke manifold. Wireline lubricator disconnected from wireline B.O.P.													12
13 22.00		Wireline tool string out of wireline lubricator.													13
14 22.02		Close swab valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST NO 1 POST GRAVEL PACK	CLEAN UP	NORWAY	31/6-2	31.08.84	58	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.03											Wireline 8' stem in wireline lubricator.				1
2 22.04											Wireline lubricator stabbed on wireline B.O.P.				2
3 22.11											Open kill valve.				3
4 22.16											Close swab valve.				4
5 22.17											Pressure test against swab valve to 4000 PSI (275 bar).				5
6 22.32											Test good. Bleed off to 2000 PSI (138 bar) on Dowell unit to equalize across lubricator valve.				6
7											Close kill valve.				7
8 22.33											Open lubricator valve. Start injection of methanol on Sub Sea Test Tree.				8
9 22.36	32A										Open on choke manifold 128/64 fixed choke. Choke down on heater 32/64.				9
10 22.37	"	1985 / 137.9	52 / 11								Open on choke manifold 128/64 fixed choke. Choke down on heater 32/64.				10
11 22.38	"	1818 / 126.4	52 / 11												11
12 22.40	"	1753 / 121.9	52 / 11								Start injection on choke manifold.				12
13 22.42	"	1735 / 120.6	52 / 11												13
14 22.44	"	1725 / 120	52 / 11												14

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	59	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 22.46	48A	1550 / 107.9	51 / 10.5												Increase choke to 48/64 heater 1
2															Adjustable. 2
3 22.48	"	1395 / 97.2	51 / 10.5												3
4 22.50	"	1360 / 94.8	50 / 10												4
5 22.52	"	1425 / 99.3	50 / 10				92%water/acid 8%cond. trace emul.								5
6 22.55	64A														Increase choke to 64/64 Adjustable 6
7															heater. 7
8 22.56	"	1170 / 81.7	50 / 10												8
9 22.58	"	1100 / 76.9	50 / 10												9
10 23.00	"	1090 / 76.2	50 / 10				63%water 37%cond. trace emul.								10
11 23.01	96A														Increase choke to 96/64 Adjustable 11
12															heater. 12
13 23.02	"	900 / 63.1	50 / 10												13
14 23.04	"	730 / 51.4	49 / 9.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	60	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 23.06	96A	725 51	49 9.5												1
2 23.08	"	727 51.1	49 9.5												2
3 23.10	"	727 51.1	49 9.5												3
4 23.15	"	737 51.8	50 10				60%water 40%cond. trace emul.								4
5 23.30	"	740 52	50 10				46%water 54%cond. trace emul.								5
6 23.45	"	741 52.1	50 10				48%water 52%cond.								6
7 24.00	"	743 52.2	50 10					1.0							7
8 24.00	"						41%water 59%cond.								8
9 01-09 00.15	"	745 52.4	50 10				43%water 57%cond.								9
10 00.30	"	743 52.2	50 10				40%water 60%cond.								10
11 00.45	"	745 52.4	50 10				36%water 64%cond.								11
12 01.00	"	744 52.3	50 10					1.0							12
13 01.00	"						38%water 62%cond.								13
14 01.15	"	744 52.3	50 10				37%water 63%cond.								14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	61	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 01.30	96A	744 / 52.3	50 / 10				37%water 63%cond.								1
2 01.45	"	744 / 52.3	50 / 10				34%water 66%cond.								2 Flow thru separator.
3 02.00	"	744 / 52.3	50 / 10					1.0		0.596		30.993 / 877.950		Tank reading 28BBLS	3
4 02.00	"						32%water 68%cond.								4
5 02.15	"	744 / 52.3	51 / 10.5							0.596		30.785 / 872.073			5
6 02.30	"	742 / 52.2	51 / 10.5	0.3			31%water 69%cond.			0.596		30.752 / 871.143			6
7 02.45	"	744 / 52.3	51 / 10.5							0.596		30.752 / 871.143			7
8 03.00	80A	744 / 52.3	51 / 10.5				27%water 73%cond.			0.596		30.752 / 871.143			8 Change choke to 80/64 Adjustable heater.
9 03.01	"	800 / 56.1	51 / 10.5												9
10 03.04	"	885 / 62	51 / 10.5												10
11 03.05	"	884 / 62.1	52 / 11												11
12 03.06	"	884 / 62.1	52 / 11												12
13 03.08	"	889 / 62.3	52 / 11												13
14 03.10	"	887 / 62.1	52 / 11							0.596		29.855 / 845.737			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	62	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
03.15	80A	887 / 62.1	52 / 11				30%water 70%cond.			0.596		29.848 / 845.313			1
03.20	"	887 / 62.1	52 / 11												2
03.21	64A														Change choke to 64/64 Adjustable. 3
03.23	"	1095 / 76.5	52 / 11												4
03.24	"	1120 / 78.2	52 / 11												5
03.25	"	1130 / 78.9	52 / 11							0.596		27.460 / 777.869			6
03.26	"	1135 / 79.2	53 / 11.5												7
03.28	"	1132 / 79	53 / 11.5												8
03.30	"	1132 / 79	53 / 11.5							0.596		27.430 / 777.042			9
03.35	"	1132 / 79	53 / 11.5				28%water 72%cond.								10
03.40	"	1132 / 79	53 / 11.5							0.596		27.430 / 777.042			Increase Sub Sea Test Tree methanol 11
12															injection rate. 12
03.41	56A														Change choke to 56/64 Adjustable. 13
03.43	"	1250 / 87.1	53 / 11.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	63	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 03.45	56A	1300 90.6	53 11.5							0.596		25.263 715.637			1
2 03.50	"	1300 90.6	53 11.5												2
3 03.55	"	1305 90.9	53 11.5												3
4 04.00	48A	1305 90.9	53 11.5				23%water 77%cond.			0.596		25.263 715.637			4
5 04.02	48A	1450 100.9	53 11.5												Change choke to 48/64 Adjustable 5
6 04.04	"	1500 104.4	54 12												6
7 04.05	"	1495 104	54 12							0.596		21.890 620.106			7
8 04.08	"	1495 104	54 12												8
9 04.10	"	1495 104	54 12												9
10 04.15	"	1495 104	54 12				25%water/acid 75%cond.			0.596		21.913 620.763			10
11 04.20	40A	1495 104	54 12												Choke at heater change to 40/64 11
12															Adjustable. 12
13 04.22	"	1700 118.2	54 12												13
14 04.24	"	1690 117.5	54 12												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	64	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[X] MMSCF/D [X] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 04.25	40A	1680 116.8	54 12							0.596		17.520 496.320			1
2 04.30	"	1675 116.5	54 12				31% water/acid 69%cond.			0.596		17.459 494.571			2
3 04.35	"	1679 116.7	54 12												3
4 04.40	32A	1679 116.7	54 12												Choke at heater change to 32/64 4
5															Adjustable. 5
6 04.43	"	1850 128.5	54 12												6
7 04.45	"	1852 128.7	54 12							0.596		12.776 361.919			7
8 04.50	"	1850 128.5	54 12												8
9 04.55	"	1840 127.8	54 12												9
10 05.00	28A	1842 128	54 12							0.596		12.890 365.151			Choke at heater change to 28/64 10
11															Adjustable. 11
12 05.02	"	1915 133.3	54 12												12
13 05.04	"	1912 132.8	54 12												13
14 05.06	"	1912 132.8	54 12							0.596		9.624 272.636			14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	65	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 05.10	28A	1912 / 132.8	54 / 12												1
2 05.15	"	1910 / 132.7	53 / 11.5							0.596		9.551 / 270.571			2
3 05.21	24A	1910 / 132.7	53 / 11.5												Choke change at heater to 24/64 3
4															Adjustable. 4
5 05.23	"	1950 / 135.4	53 / 11.5												5
6 05.25	"	1955 / 135.8	53 / 11.5							0.596		7.025 / 199.010			6
7 05.30	"	1950 / 135.4	53 / 11.5				7%water 93%cond.								7
8 05.35	"	1950 / 135.4	53 / 11.5												8
9 05.40	"	1950 / 135.4	53 / 11.5												9
10 05.41															WELL CLOSED AT CHOKE MANIFOLD. 10
11															Dumped cond./water from separator to 11
12															tank. Final tank reading 36BBLS 12
13 05.43		2010 / 139.5	53 / 11.5												Total flow liquied 8 BBLS. 13
14 05.44		2010 / 139.5	53 / 11.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	66	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	REMARKS
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 05.45		2008 / 139.4	53 / 11.5												1
2 05.46		2007 / 139.3	53 / 11.5												2
3 05.47		2007 / 139.3	53 / 11.5												3
4 05.48		2006 / 139.2	53 / 11.5												4
5 05.50		2005 / 139.2	53 / 11.5												5
6 05.55		2005 / 139.2	53 / 11.5												6
7 06.00		2005 / 139.2	53 / 11.5												7
8 06.05		2005 / 139.2	53 / 11.5												8
9 06.10		2005 / 139.2	53 / 11.5												9
10 06.15		2005 / 139.2	53 / 11.5												10
11 06.31	32A														Open choke manifold heater choke 32/64 11
12															Adjustable. 12
13 06.32	"														Start methanol injection pumps at 13
14															choke and Sub Sea Test Tree. 14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	67	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.35	32A	1812 / 125.9	52 / 11												1
2 06.36	"	1750 / 121.6	52 / 11												2
3 06.37	"	1700 / 118.2	52 / 11												3
4 06.38	"	1570 / 109.2	52 / 11												4
5 06.39	"	1300 / 90.6	52 / 11												5
6 06.40	"	1220 / 85.1	52 / 11												6
7 06.41	96A	1070 / 74.7	52 / 11												7 Heater choke now at 96/64 Adjustable.
8 06.42	"	810 / 56.8	51 / 10.5												8
9 06.43	"	770 / 54.1	51 / 10.5												9
10 06.44	"														10 Flow through separator.
11 06.45	"	760 / 53.4	51 / 10.5							0.596		31.205 / 883.953			11
12 06.47	"	755 / 53	51 / 10.5												12
13 06.49	"	755 / 53	51 / 10.5												13
14 06.50	"	755 / 53	51 / 10.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	68	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[X] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[X] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 06.52	96A	755 / 53	51 / 10.5												1
2 06.54	"	755 / 53	51 / 10.5									31.205 / 883.953			2
3 06.56	"	755 / 53	51 / 10.5												3
4 06.58	"	755 / 53	51 / 10.5				31%water 69%cond.								4
5 07.00	"	755 / 53	51 / 10.5							0.596		31.205 / 883.953			5
6 07.02	"	755 / 53	51 / 10.5												6
7 07.04	"	755 / 53	51 / 10.5												7
8 07.06	"	755 / 53	51 / 10.5												8
9 07.08	"	755 / 53	51 / 10.5												9
10 07.10	"	755 / 53	51 / 10.5												10
11 07.12	"	755 / 53	51 / 10.5												11
12 07.14		755 / 53	51 / 10.5												12
13 07.15		755 / 53	51 / 10.5									31.205 / 883.953			13
14 07.16															14 Close Halliburton LPR-n valve.

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	69	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.16															Close choke manifold. 1
2 07.17		940 / 65.8	52 / 11												2
3 07.18		940 / 65.8	53 / 11.5												3
4 07.19		935 / 65.4	53 / 11.5												4
5 07.20		935 / 65.4	53 / 11.5												5
6 07.22		935 / 65.4	53 / 11.5												6
7 07.24		935 / 65.4	53 / 11.5												7
8 07.26		935 / 65.4	53 / 11.5												8
9 07.28		935 / 65.4	53 / 11.5												9
10 07.30		935 / 65.4	53 / 11.5												10
11 07.35		935 / 65.4	53 / 11.5												11
12 07.40		935 / 65.4	53 / 11.5												12
13 07.45		935 / 65.4	53 / 11.5												13
14 07.50		932 / 65.2	53 / 11.5												14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	70	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 07.55		932 / 65.2	53 / 11.5												1
2 08.00		932 / 65.2	53 / 11.5												2
3 08.15		932 / 65.2	53 / 11.5												3
4 08.30		930 / 65.1	53 / 11.5												4
5 08.45		930 / 65.1	53 / 11.5												5
6 09.00		925 / 64.7	53 / 11.5												6
7 09.07															7 Open LPR-n valve.
8 09.11															8 Close lubricator valve.
9 09.15															9 Bled off choke manifold to 360PSI.
10 09.16		364	53 / 11.5												10
11 09.18															11 Bled off choke manifold to zero.
12 09.19															12 Closed choke manifold.
13 09.20															13 Start wireline operation.
14 09.27															14 Open choke manifold, open swab valve.

OTIS

FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	71	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 09.30		Close choke manifold. Pressure test kill valve to 4000 PSI.													1
2 09.37		Open kill valve.													2
3 09.38		Flushed through lines.													3
4 09.48		Pressure test wireline lubricator to 4000 PSI.													4
5 09.58		Bleed off to 2000 PSI and closed kill valve.													5
6 10.00		Open lubricator valve.													6
7 10.01		Start run in hole with wireline.													7
8 10.13		Latch on the gauges.													8
9 10.45		Gauges in wireline lubricator.													9
10 10.48		Closed lubricator valve.													10
11 10.50		Bled down to 300 PSI at choke manifold to test lubricator valve.													11
12 10.58		Bled off to zero.													12
13 11.15		Gauges on drill floor.													13
14 11.16		Closed swab valve.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	72	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D / [ ] m^3/D	[ ] MMSCF/D / [ ] SCM/D	[ ] BBL/D / [ ] m^3/D	[ ] SCF/BBL / [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm^3)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 11.17		Open kill valve, closed choke manifold.													1
2 11.30		Pressure test swab valve to 4000 PSI.													2
3 11.55		Close kill valve.													3
4 11.58		Bleed off pressure to 2000 PSI.													4
5 12.02		Open kill valve and swab valve.													5
6 12.08		Break off wireline lubricator zero tools.													6
7 12.10		Connect wireline lubricator.													7
8 12.15		Pressure test lubricator to 4000 PSI.													8
9 12.25		Close kill valve.													9
10 12.26		Bleed pressure to 2000 PSI through choke manifold.													10
11 12.28		Open Flopetrol lubricator valve. Run in hole with wireline.													11
12 12.42		Pulled out of hole with gauges.													12
13 13.16		Gauges in lubricator. Close lubricator valve.													13
14 13.17		Bleed off pressure above lubricator valve thru choke manifold to 314PSI (22 bar).													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	73	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	X OIL FIELD ☐ METRIC	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	☐ BBL/D	☐ MMSCF/D	☐ BBL/D	☐ SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	☐ m³/D	☐ SCM/D	☐ m³/D	☐ SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 13.21		319 22	49 9.5												1
2 13.25							Bleed off pressure above lubricator to 0 PSI.								2
3 13.27							Take off wireline lubricator.								3
4 13.36							Close swab valve.								4
5 13.43							Open kill valve pressure up to 2000 to equalize across lubricator.								5
6 13.55							Close kill valve.								6
7 13.57							Open lubricator valve.								7
8 14.03							Start injection of methanol on choke manifold.								8
9 14.04							Open choke manifold adjustable side. Bleed off pressure above LPR.								9
10 14.08							Stop injection of methanol on choke manifold.								10
11 14.11							Close choke manifold.								11
12 14.15							Close failsafe.								12
13 14.17							Open kill valve.								13
14 14.38							Open LPR to displace LCM pill. Observe for 15 min.								14

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OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	74	75

CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE / pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D	[ ] MMSCF/D	[ ] BBL/D	[ ] SCF/BBL	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1	[ ] m³/D	[ ] SCM/D	[ ] m³/D	[ ] SCM/m³	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 15.00		Close master valve and LPR.													1
2 15.02		Open failsafe and choke manifold.							Start flush		lines to both burners.				2
3 15.20		Stop flush lines.													3
4 15.21		Close failsafe open LPR.													4
5 15.26		Open master valve.													5
6 15.27		Start reverse circulation.													6
7 15.52		Finish reverse circulation.													7
8 15.54		Start circulate long way.													8
9 16.34		Stop circulate long way.													9
10 16.49		Shear lower APR. Observe for ten minutes.													10
11 17.00		Pull seal assembly out of packer.													11
12 18.14		Commence circulating long way.													12
13 19.20		Commence rigging down wireline lubricator and									B.O.P.				13
14 20.12		Surface Test Tree disconnected from tubing.													14

OTIS FIELD READING

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	01-09-84	75	75

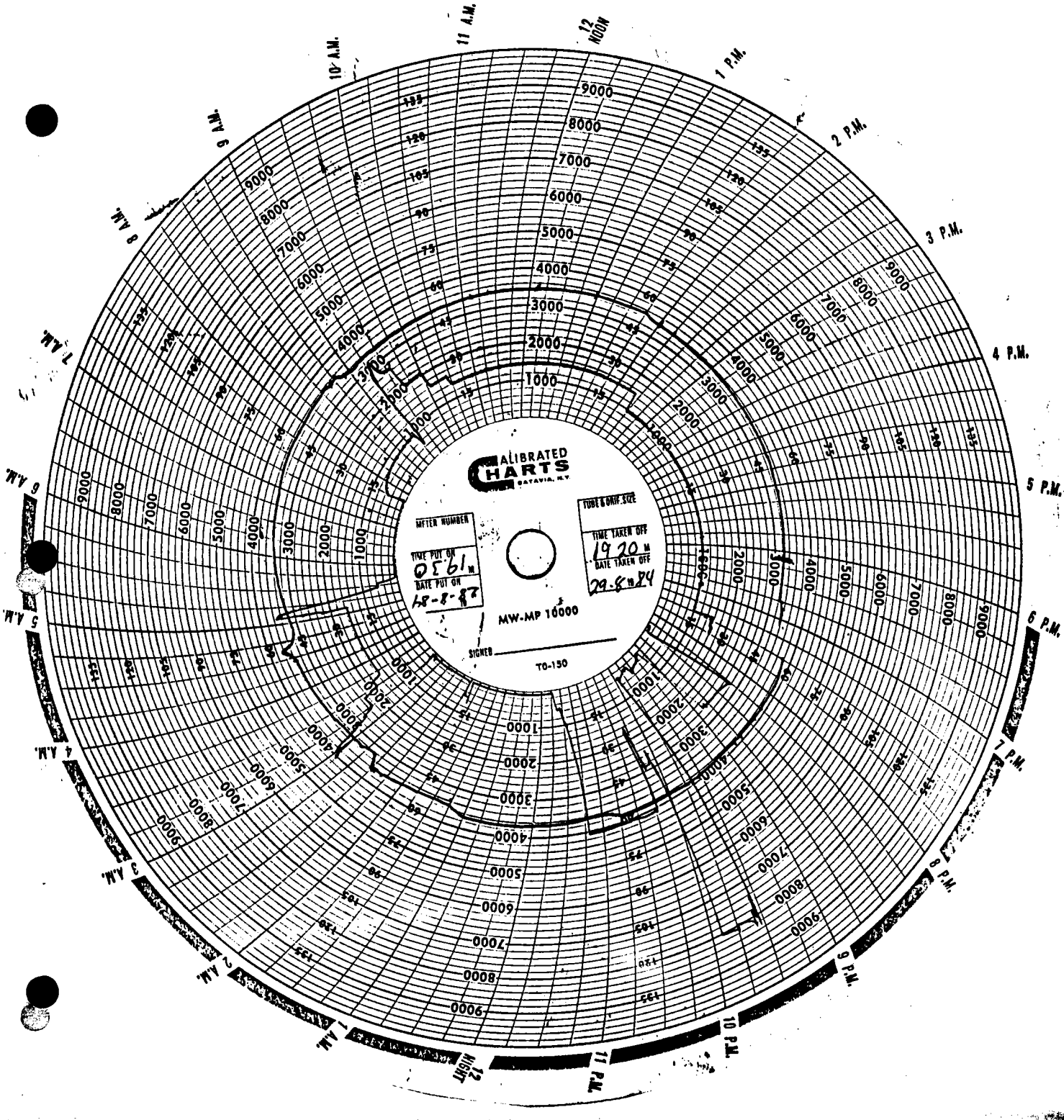
CUSTOMER	RIG NAME	UNITS	CONDITIONS
STATOIL	DEEP SEA BERGEN	[X] OIL FIELD [ ] METRIC	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

	WELLHEAD			SAMPLES							OIL	GAS	WATER	BOR	
TIME	CHOKE SIZE	PRESS	TEMP	CO_2	H_2S	MEC CAP TANS	B.S & W	CLORIDE pH	OIL DENSITY	GAS GRAVITY	[ ] BBL/D [ ] m^3/D	[ ] MMSCF/D [ ] SCM/D	[ ] BBL/D [ ] m^3/D	[ ] SCF/BBL [ ] SCM/m^3	REMARKS
HOURS	64th IN.	PSI/BAR	°F/°C	%	ppm	ppm	%	mg/l	(°API/(g/cm³)	AIR=1					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 20.47		Surface Test Tree laid down.													1
2 21.15		Flopetrol disconnected from tubing.													2
3 23.35		Sub Sea Test Tree in rotary.													3
4 23.45		Sub Sea Test Tree laid down.													4
5															5
6															6
7															7
8															8
9															9
10															10
11															11
12															12
13															13
14															14

Randaberg Trykk A/S 001

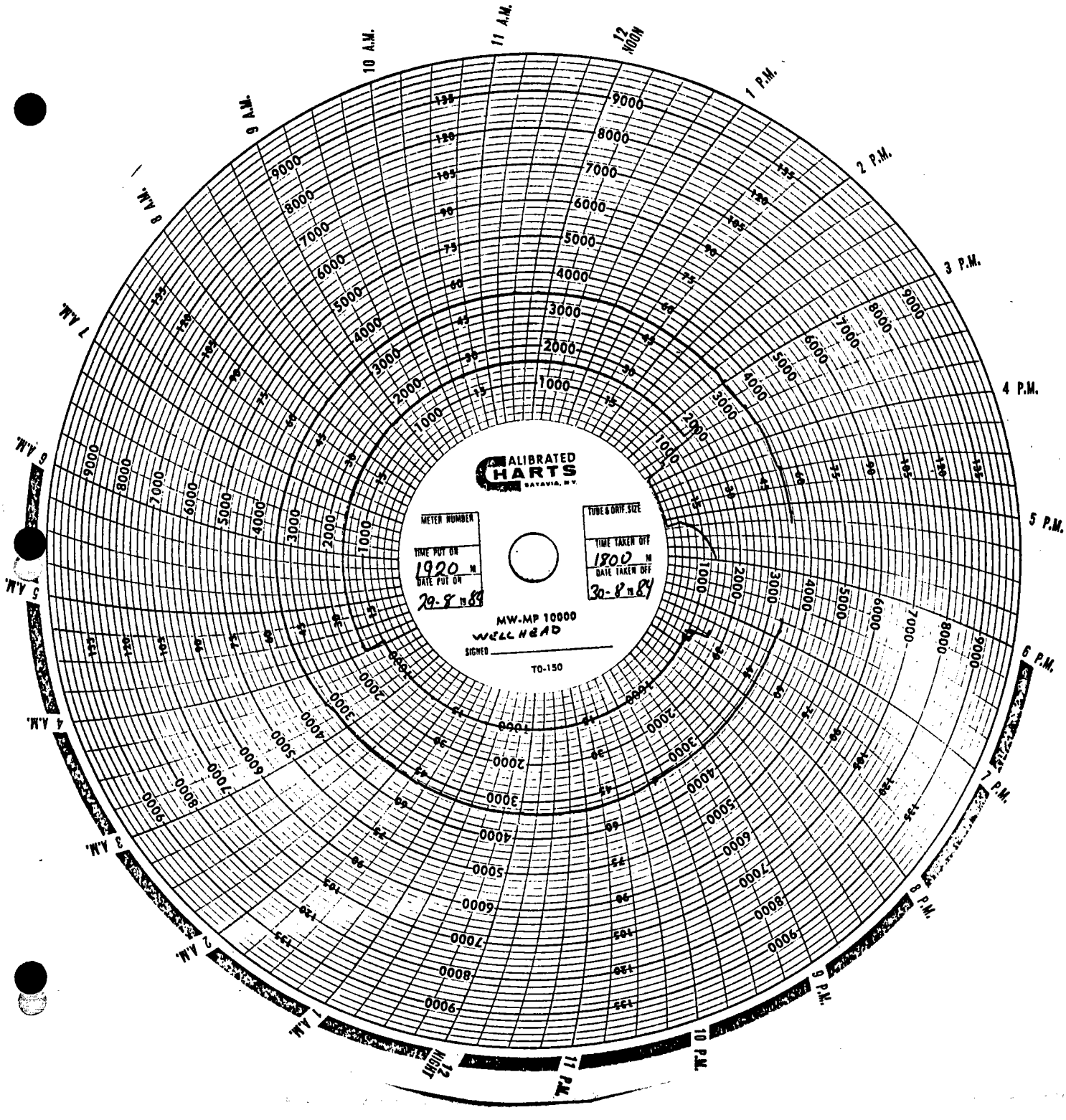
Well 31/6-2.

Barton recorder charts.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 19.30 28th Aug. 1984.
Time taken off 19.20 29th Aug. 1984.



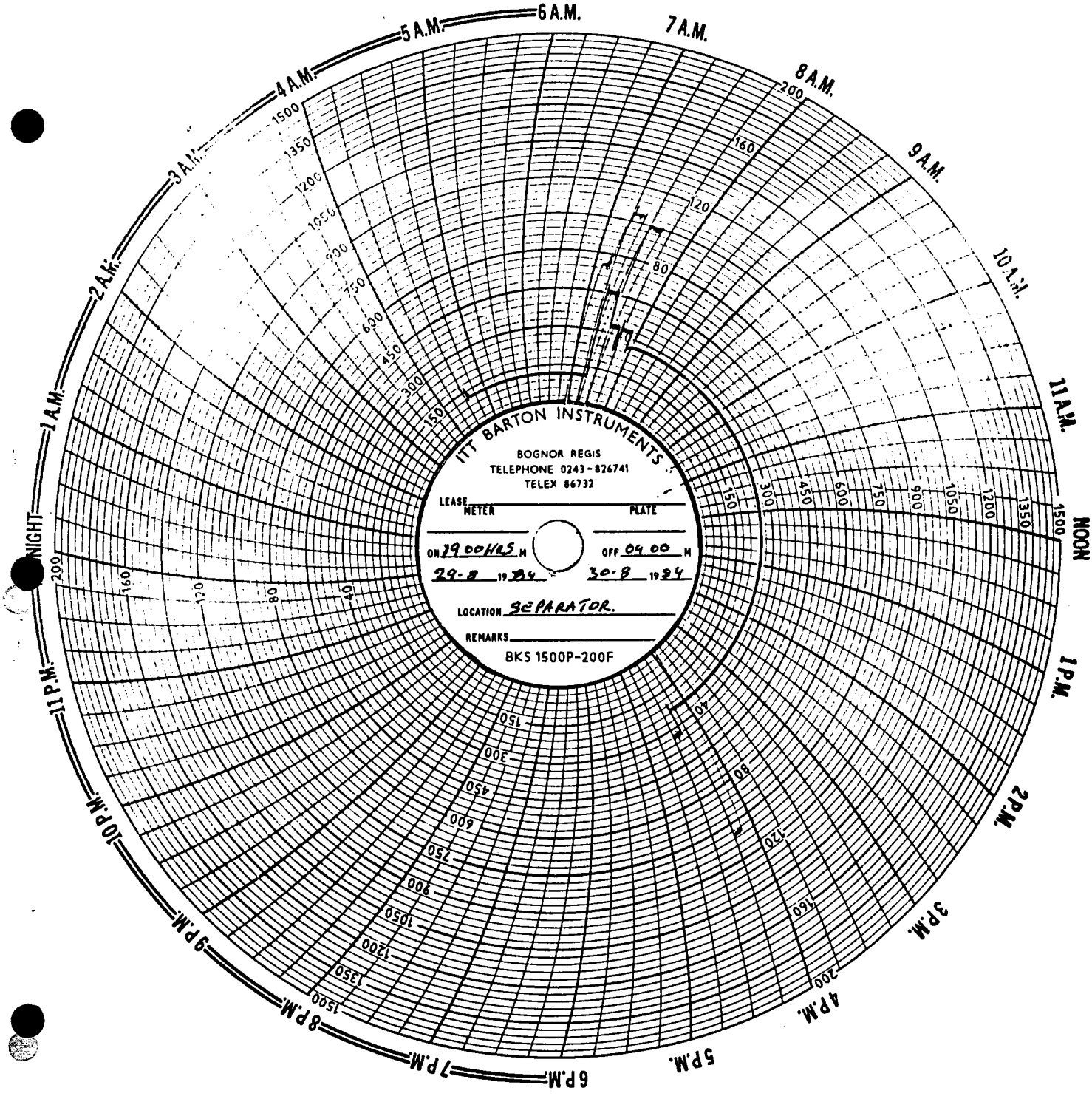
Well 31/6-2.

Press. temp. recorder chart.
0-5000 psi, o-150°F.
Time put on 19.20 29th Aug. 1984.
Time taken off 18.00 30th Aug. 1984.



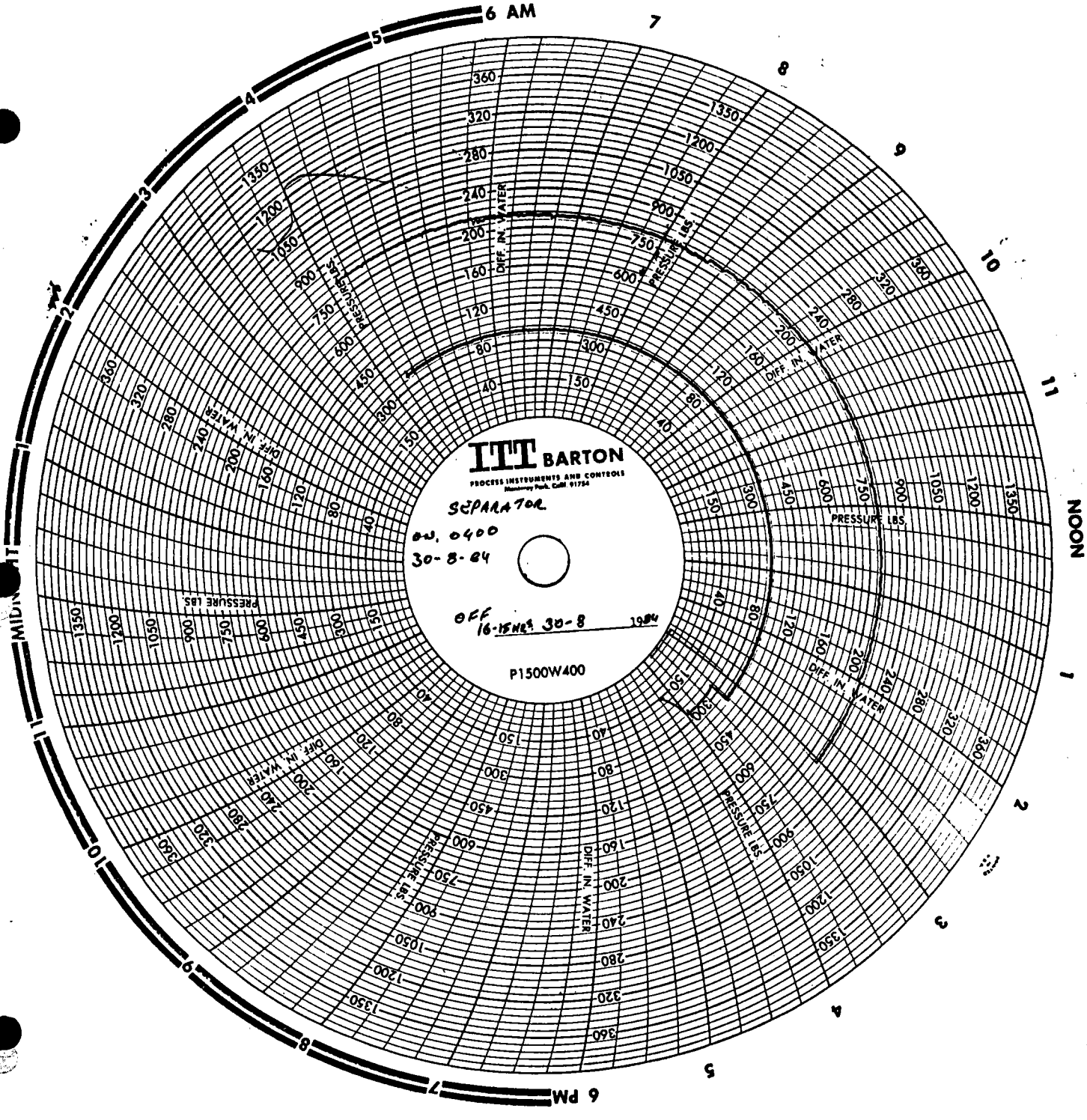
Well 31/6-2.

Barton recorder chart.
Static 0-500 psi, diff. 0-400" H_2O.
Time put on 19.00 29th Aug. 1984.
Time taken off 04.00 30th Aug. 1984.



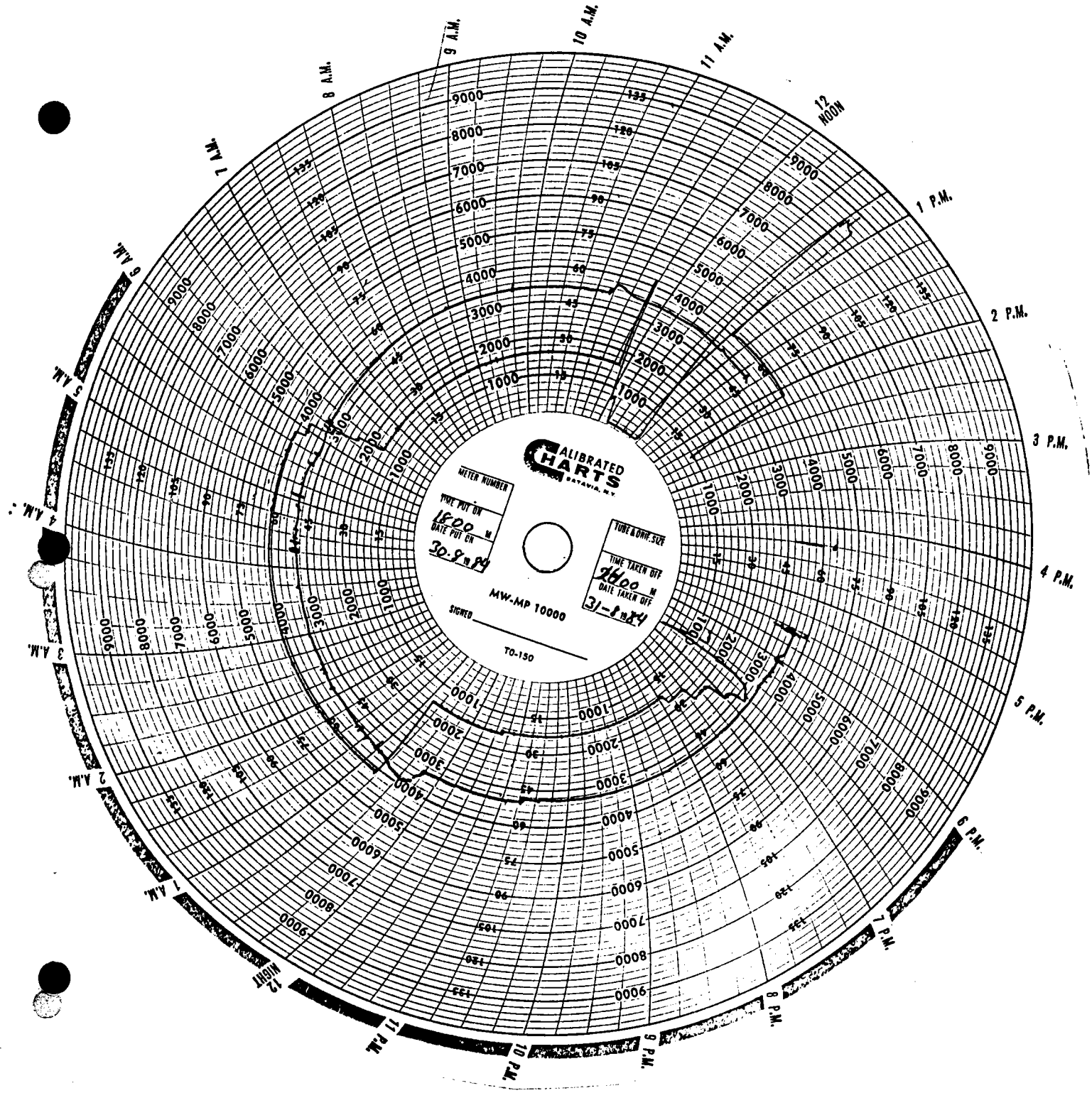
Well 31/6-2.

Barton recorder chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 04.00 30th Aug. 1984
Time taken off 16.15 30th Aug. 1984.



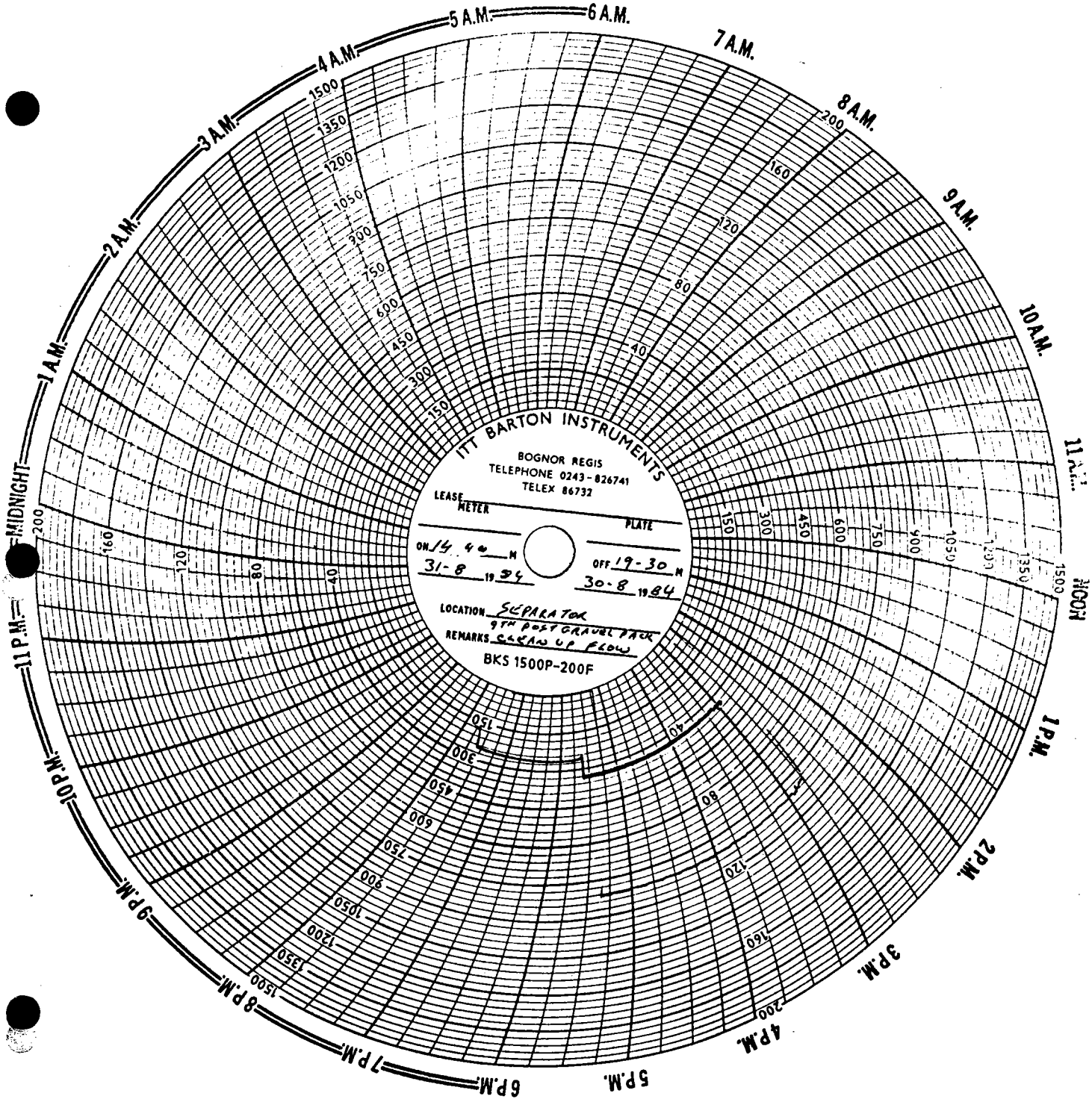
Well 31/6-2.

Press. temp. recorder chart.
0-5000 psi, 0-150°F.
Time put on 18.00 30th Aug. 1984.
Time taken off 14.00 31st Aug. 1984.



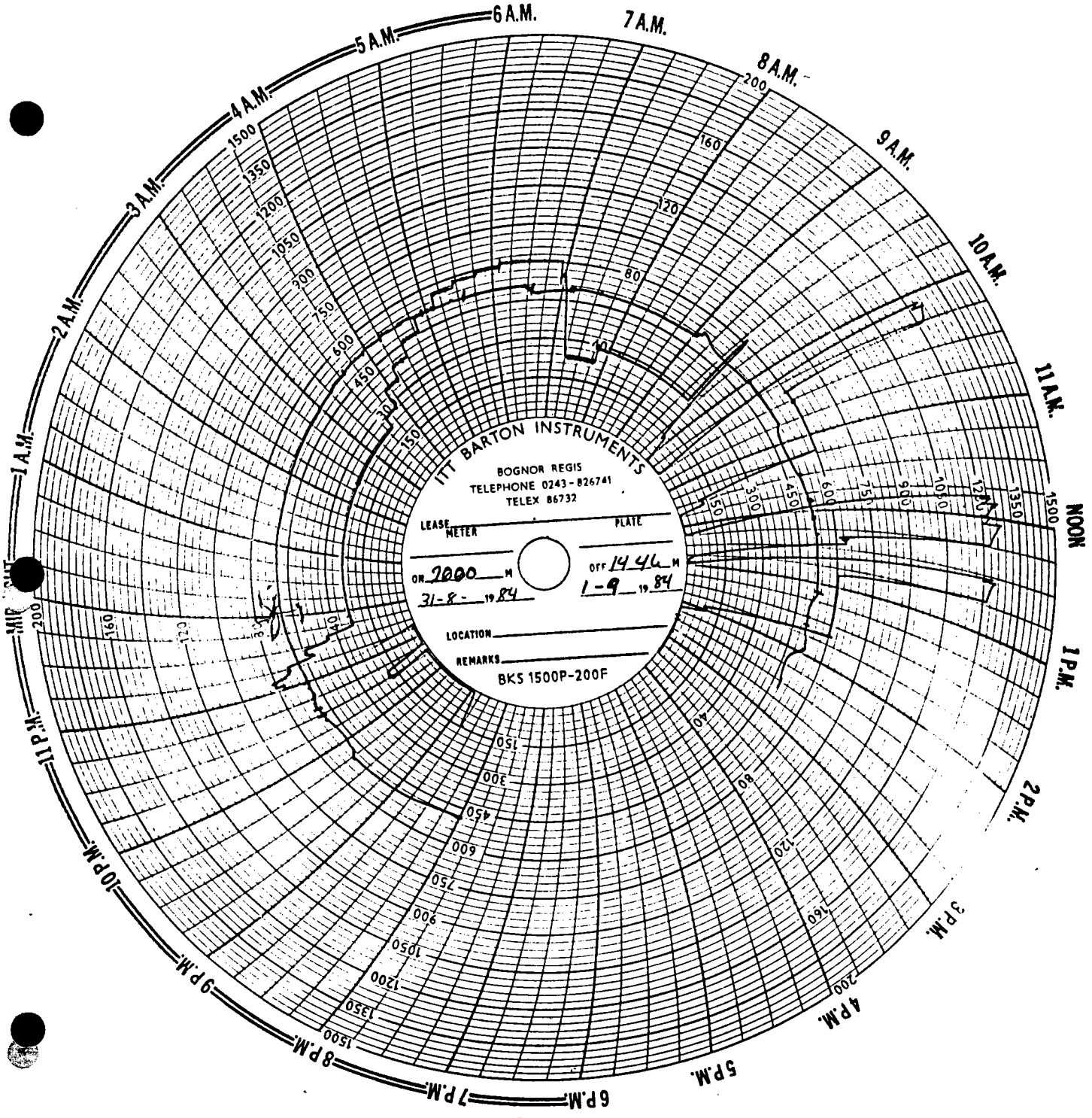
Well 31/6-2.

Barton recorder chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 14.40 31st Aug- 1984.
Time taken off 19.30 31st Aug. 1984.



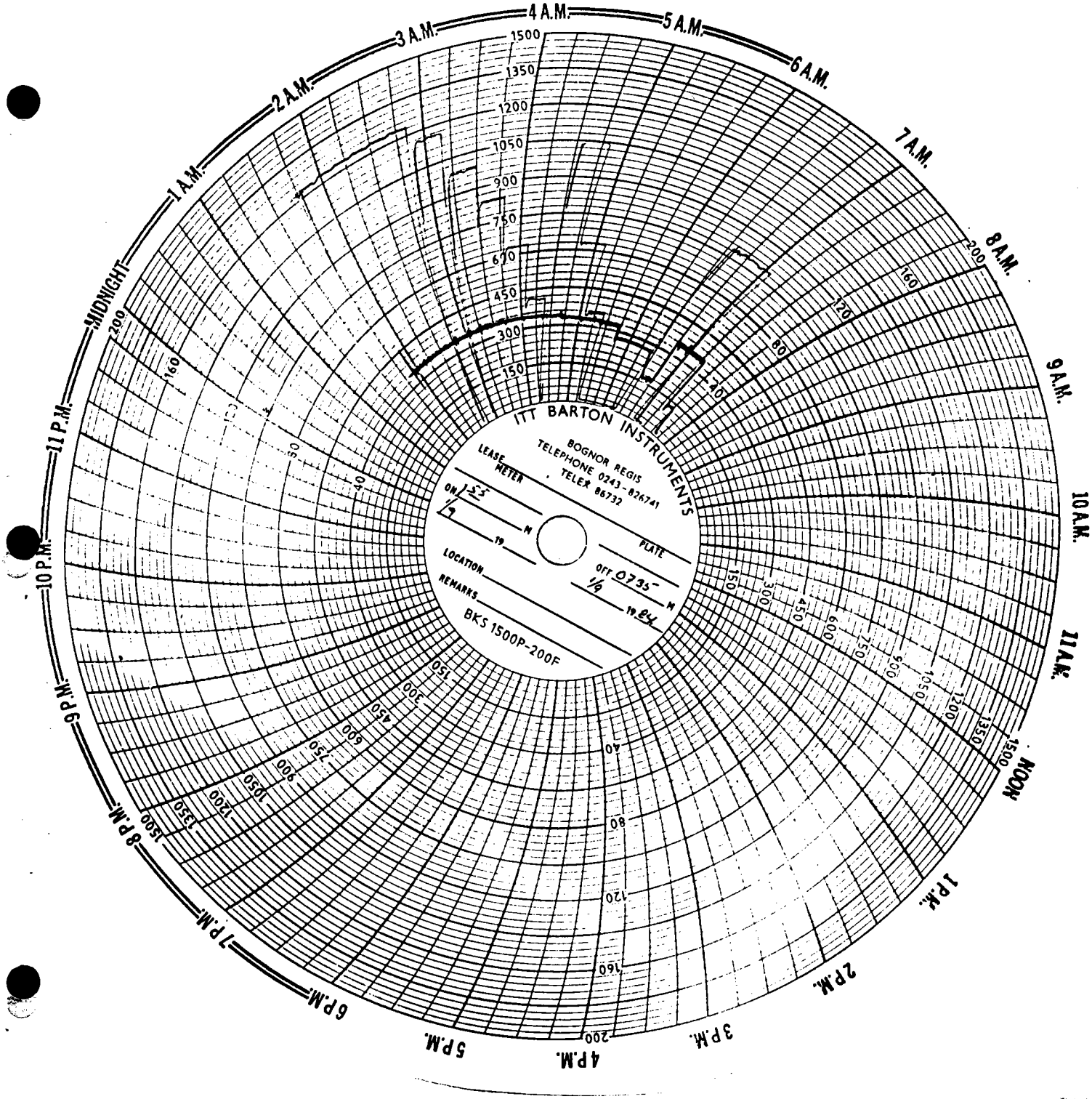
Well 31/6-2.

Barton Recorder chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 20.00 31st Aug. 1984.
Time taken off 14.46 1st Sept. 1984.



Well 31/6-2.

Barton recorder chart.
Static 0-1500 psi, diff. 0-400" H_2O.
Time put on 01.55 1st Sept. 1984.
Time put off. 07.35 1st. 1984.



GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	1	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☐ INCHES H_2O ☐ M BAR	☐ °F ☐ °C	☐ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1		POST	ACID	FLOW	NO 1.	96/64	HEATER	CHOKE.								
2	19.20	.596	93	345	208	4.0	0	.3	0	1.0233	3628.2	1.0026	1.2953	0.9697	30.059	851.511
3		POST	ACID	FLOW	NO 2.	128/64	CHOKE	AT	MANIFOLD.							
4	19.40	.596	45	345	196	4.0	0	.3	0	1.0321	3628.2	1.0024	1.2953	1.0147	30.793	872.295
5	30-08	POST	ACID	FLOW	NO 3.	96/64	HEATER	CHOKE.								
6	04.15	.596	92	345	212	4.0	0	.3	0	1.0235	3628.2	1.0026	1.2953	0.9706	30.380	860.607
7	04.30	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
8	04.45	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
9	05.00	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
10	05.15	.596	96	360	216	4.0	0	.3	0	1.0239	3628.2	1.0026	1.2953	0.9671	31.224	884.492
11	05.30	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
12	05.45	.596	93	360	216	4.0	0	.3	0	1.0243	3628.2	1.0026	1.2953	0.9697	31.322	887.289
13	06.00	.596	94	360	216	4.0	0	.3	0	1.0242	3628.2	1.0026	1.2953	0.9688	31.289	886.353
14	06.15	.596	90	360	216	4.0	0	.3	0	1.0248	3628.2	1.0026	1.2953	0.9723	31.422	890.117

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	2	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☐ INCHES H_2O ☐ M BAR	☐ °F ☐ °C	☐ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	06.30	.596	88	360	214	4.0	0	.3	0	1.0251	3628.2	1.0026	1.2953	0.9741	31.342	887.860
2	07.00	.596	86	360	212	4.0	0	.3	0	1.0255	3628.2	1.0025	1.2953	0.9759	31.262	885.580
3	07.30	.596	84	360	212	4.0	0	.3	0	1.0258	3628.2	1.0026	1.2953	0.9777	31.330	887.495
4	08.00	.596	86	360	214	4.0	0	.3	0	1.0255	3628.2	1.0026	1.2953	0.9759	31.410	889.769
5	08.30	.596	85	360	214	4.0	0	.3	0	1.0256	3628.2	1.0026	1.2953	0.9768	31.444	890.729
6	09.00	.596	86	360	214	4.0	0	.3	0	1.0255	3628.2	1.0026	1.2953	0.9759	31.410	889.769
7	09.30	.596	85	360	214	4.0	0	.3	0	1.0256	3628.2	1.0026	1.2953	0.9768	31.444	890.729
8	10.00	.596	85	360	214	4.0	0	.3	0	1.0256	3628.2	1.0026	1.2953	0.9768	31.444	890.729
9	10.30	.596	85	360	212	4.0	0	.3	0	1.0256	3628.2	1.0025	1.2953	0.9768	31.296	886.536
10	11.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
11	11.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
12	12.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
13	12.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
14	13.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	3	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☐ INCHES H_2O ☐ M BAR	☐ °F ☐ °C	☐ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	13.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
2	14.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
3	14.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
4	15.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
Press. Loss. Flow	10th Post Gravel Pack	Norway	31/6-2	01-09-84	1	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[ ] INCHES H_2O [ ] M BAR	[ ] °F [ ] °C	[ ] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	02.00	.596	88	365	327	3.625	0	.3	0	1.0255	2876.02	1.0044	1.2953	0.9741	30.993	877.950
2	02.15	.596	89	360	328	3.625	0	.3	0	1.0250	2876.02	1.0045	1.2953	0.9732	30.785	872.073
3	02.30	.596	90	360	328	3.625	0	.3	0	1.0248	2876.02	1.0045	1.2953	0.9723	30.752	871.143
4	02.45	.596	90	360	328	3.625	0	.3	0	1.0248	2876.02	1.0045	1.2953	0.9723	30.752	871.143
5	03.00	.596	90	360	328	3.625	0	.3	0	1.0248	2876.02	1.0045	1.2953	0.9723	30.752	871.143
6	03.01	LIFTED UP ORIFICE PLATE AND CHANGED CHOKE TO 80/64. 3.625" PLATE REINSTALLED.														
7	03.10	.596	88	360	308	3.625	0	.3	0	1.0251	2876.02	1.0042	1.2953	0.9741	29.855	845.737
8	03.15	.596	90	360	309	3.625	0	.3	0	1.0248	2876.02	1.0042	1.2953	0.9723	29.848	845.313
9	03.21	LIFTED UP ORIFICE PLATE AND CHANGED CHOKE TO 64/64. 3.625" PLATE REINSTALLED.														
10	03.25	.596	90	360	262	3.625	0	.3	0	1.0248	2876.02	1.0036	1.2953	0.9723	27.460	777.869
11	03.30	.596	91	360	262	3.625	0	.3	0	1.0246	2876.02	1.0036	1.2953	0.9715	27.430	777.042
12	03.40	.596	90	360	262	3.625	0	.3	0	1.0246	2876.02	1.0036	1.2953	0.9715	27.430	777.042
13	03.41	CHANGED CHOKE ON HEATER TO 56/64". 3.625% PLATE IN METER.														
14	03.45	.596	90	360	222	3.625	0	.3	0	1.0248	2876.02	1.0030	1.2953	0.9723	25.263	715.637

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
Press.Loss.Flow	10th Post Gravel Pack	Norway	31/6-2	01-09-84	2	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[ ] INCHES H_2O [ ] M BAR	[ ] °F [ ] °C	[ ] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	04.00	.596	90	360	222	3.625	0	.3	0	1.0248	2876.02	1.0030	1.2953	0.9723	25.263	715.637
2	04.00	CHANGED CHOKE ON HEATER TO 48/64. 3.625 IN METER.														
3	04.05	.596	93	360	168	3.625	0	.3	0	1.0243	2876.02	1.0023	1.2953	0.9797	21.890	620.106
4	04.15	.596	92	360	168	3.625	0	.3	0	1.0245	2876.02	1.0023	1.2953	0.9706	21.913	620.763
5	04.20	CHANGED CHOKE ON HEATER TO 40/64. 3.625 PLATE IN METER.														
6	04.25	.596	87	355	108	3.625	0	.3	0	1.0249	2876.02	1.0015	1.2953	0.9750	17.520	496.320
7	04.30	.596	92	350	110	3.625	0	.3	0	1.0238	2876.02	1.0015	1.2953	0.9706	17.459	494.571
8	04.40	CHANGED CHOKE ON HEATER TO 32/64. CHANGED ORIFICE PLATE TO 2.5".														
9	04.45	.596	92	345	296	2.500	0	.3	0	1.0235	1288.15	1.0051	1.2953	0.9706	12.776	361.919
10	05.00	.596	90	345	300	2.500	0	.3	0	1.0238	1288.15	1.0051	1.2953	0.9723	12.890	365.151
11	05.00	CHANGED CHOKE ON HEATER TO 28/64. 2.5" PLATE IN METER.														
12	05.05	.596	90	345	168	2.500	0	.3	0	1.0238	1288.15	1.0029	1.2953	0.9723	9.624	272.636
13	05.15	.596	90	340	168	2.500	0	.3	0	1.0234	1288.15	1.0029	1.2953	0.9723	9.551	270.571
14	05.20	CHANGED CHOKE ON HEATER TO 24/64. 2.5" PLATE IN METER.														

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
Press.Loss.Flow	10th Post Gravel Pack	Norway	31/6-2	01-09-84	3	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[ ] INCHES H_2O [ ] M BAR	[ ] °F [ ] °C	[ ] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR.	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	05.25	.596	90	330	94	2.500	0	.3	0	1.0227	1288.15	1.0017	1.2953	0.9723	7.025	199.010
2	05.30	.596	90	330	94	2.500	0	.3	0	1.0227	1288.15	1.0017	1.2953	0.9723	7.025	199.010
3	05.41	CLOSED WELL IN AT CHOKE MANIFOLD.														
4	06.41	96/64" CHOKE AT HEATER. FLOW DIRECTED THROUGH SEPARATOR. 4" ORIFICE PLATE INSTALLED.														
5	06.45	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
6	06.55	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
7	07.00	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
8	07.15	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
9																
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Randaberg Trykk A/S 003

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	29-08-84	1	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☐ INCHES H_2O ☐ M BAR	☐ °F ☐ °C	☐ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1		POST ACID FLOW NO 1. 96/64 HEATER CHOKE.														
2	19.20	.596	93	345	208	4.0	0	.3	0	1.0233	3628.2	1.0026	1.2953	0.9697	30.059	851.511
3		POST ACID FLOW NO 2. 128/64 CHOKE AT MANIFOLD.														
4	19.40	.596	45	345	196	4.0	0	.3	0	1.0321	3628.2	1.0024	1.2953	1.0147	30.793	872.295
5	30-08	POST ACID FLOW NO 3. 96/64 HEATER CHOKE.														
6	04.15	.596	92	345	212	4.0	0	.3	0	1.0235	3628.2	1.0026	1.2953	0.9706	30.380	860.607
7	04.30	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
8	04.45	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
9	05.00	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
10	05.15	.596	96	360	216	4.0	0	.3	0	1.0239	3628.2	1.0026	1.2953	0.9671	31.224	884.492
11	05.30	.596	95	360	216	4.0	0	.3	0	1.0240	3628.2	1.0026	1.2953	0.9680	31.256	885.421
12	05.45	.596	93	360	216	4.0	0	.3	0	1.0243	3628.2	1.0026	1.2953	0.9697	31.322	887.289
13	06.00	.596	94	360	216	4.0	0	.3	0	1.0242	3628.2	1.0026	1.2953	0.9688	31.289	886.353
14	06.15	.596	90	360	216	4.0	0	.3	0	1.0248	3628.2	1.0026	1.2953	0.9723	31.422	890.117

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GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	2	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☐ INCHES H_2O ☐ M BAR	☐ °F ☐ °C	☐ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	06.30	.596	88	360	214	4.0	0	.3	0	1.0251	3628.2	1.0026	1.2953	0.9741	31.342	887.860
2	07.00	.596	86	360	212	4.0	0	.3	0	1.0255	3628.2	1.0025	1.2953	0.9759	31.262	885.580
3	07.30	.596	84	360	212	4.0	0	.3	0	1.0258	3628.2	1.0026	1.2953	0.9777	31.330	887.495
4	08.00	.596	86	360	214	4.0	0	.3	0	1.0255	3628.2	1.0026	1.2953	0.9759	31.410	889.769
5	08.30	.596	85	360	214	4.0	0	.3	0	1.0256	3628.2	1.0026	1.2953	0.9768	31.444	890.729
6	09.00	.596	86	360	214	4.0	0	.3	0	1.0255	3628.2	1.0026	1.2953	0.9759	31.410	889.769
7	09.30	.596	85	360	214	4.0	0	.3	0	1.0256	3628.2	1.0026	1.2953	0.9768	31.444	890.729
8	10.00	.596	85	360	214	4.0	0	.3	0	1.0256	3628.2	1.0026	1.2953	0.9768	31.444	890.729
9	10.30	.596	85	360	212	4.0	0	.3	0	1.0256	3628.2	1.0025	1.2953	0.9768	31.296	886.536
10	11.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
11	11.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
12	12.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
13	12.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
14	13.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960

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GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	30-08-84	3	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	☐ OIL FIELD ☐ METRIC	☐ INCHES H_2O ☐ M BAR	☐ °F ☐ °C	☐ PSIA ☐ BAR	☐ 14.73 PSI 60°F ☐ 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	13.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
2	14.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
3	14.30	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
4	15.00	.596	85	365	212	4.0	0	.3	0	1.0260	3628.2	1.0025	1.2953	0.9768	31.523	892.960
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GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
DST No 1 Post Gravel Pack	Clean Up	Norway	31/6-2	31-08-84	1	1

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[X] INCHES H_2O [ ] M BAR	[X] °F [ ] °C	[X] PSIA [ ] BAR	[X] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400" H2O	o-1500 PSI	RANAREX

	TIME	GAS SPECIFIC GRAVITY G	DOWN STREAM GAS TEMP. Tg	STATIC PRESSURE Pf	DIFF. PRESSURE hw	ORIFICE SIZE (INCHES) d	N_2 (%)	CO_2 (%)	H_2S (PPM)	CORRECTION FACTORS Fpr	Fb	Y2	Fg	F+f.	CORRECTED GAS FLOW RATE MMSCF/DAY	SCM/DAY
1		9TH POST GRAVEL PACK FLOW.														1
2	14.45	.596	82	355	210	4.0	0	.3	0	1.0258	3628.2	1.0025	1.2953	0.9795	31.020	878.739
3	15.00	.596	86	345	216	4.0	0	.3	0	1.0244	3628.2	1.0027	1.2953	0.9759	30.863	874.280
4	15.15	.596	86	345	216	4.0	0	.3	0	1.0244	3628.2	1.0027	1.2953	0.9759	30.863	874.280
5	15.30	.596	85	345	216	4.0	0	.3	0	1.0245	3628.2	1.0027	1.2953	0.9768	30.896	875.217
6	15.45	.596	85	345	216	4.0	0	.3	0	1.0245	3628.2	1.0027	1.2953	0.9768	30.896	875.217
7	16.00	.596	88	345	216	4.0	0	.3	0	1.0241	3628.2	1.0027	1.2953	0.9741	30.797	872.417
8	16.15	.596	89	345	216	4.0	0	.3	0	1.0239	3628.2	1.0027	1.2953	0.9732	30.765	871.490
9	16.30	.596	86	345	216	4.0	0	.3	0	1.0244	3628.2	1.0027	1.2953	0.9759	30.863	874.280
10	16.45	.596	84	345	216	4.0	0	.3	0	1.0247	3628.2	1.0027	1.2953	0.9777	30.929	876.157
11	17.00	.596	88	345	216	4.0	0	.3	0	1.0241	3628.2	1.0027	1.2953	0.9741	30.797	872.417
12	17.15	.596	86	345	216	4.0	0	.3	0	1.0241	3628.2	1.0027	1.2953	0.9741	30.797	872.417
13																13
14																14

GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
Press. Loss. Flow	10th Post Gravel Pack	Norway	31/6-2	01-09-84	1	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[ ] INCHES H_2O [ ] M BAR	[ ] °F [ ] °C	[ ] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	02.00	.596	88	365	327	3.625	0	.3	0	1.0255	2876.02	1.0044	1.2953	0.9741	30.993	877.950
2	02.15	.596	89	360	328	3.625	0	.3	0	1.0250	2876.02	1.0045	1.2953	0.9732	30.785	872.073
3	02.30	.596	90	360	328	3.625	0	.3	0	1.0248	2876.02	1.0045	1.2953	0.9723	30.752	871.143
4	02.45	.596	90	360	328	3.625	0	.3	0	1.0248	2876.02	1.0045	1.2953	0.9723	30.752	871.143
5	03.00	.596	90	360	328	3.625	0	.3	0	1.0248	2876.02	1.0045	1.2953	0.9723	30.752	871.143
6	03.01	LIFTED UP ORIFICE PLATE AND CHANGED CHOKE TO 80/64. 3.625" PLATE REINSTALLED.														
7	03.10	.596	88	360	308	3.625	0	.3	0	1.0251	2876.02	1.0042	1.2953	0.9741	29.855	845.737
8	03.15	.596	90	360	309	3.625	0	.3	0	1.0248	2876.02	1.0042	1.2953	0.9723	29.848	845.313
9	03.21	LIFTED UP ORIFICE PLATE AND CHANGED CHOKE TO 64/64. 3.625" PLATE REINSTALLED.														
10	03.25	.596	90	360	262	3.625	0	.3	0	1.0248	2876.02	1.0036	1.2953	0.9723	27.460	777.869
11	03.30	.596	91	360	262	3.625	0	.3	0	1.0246	2876.02	1.0036	1.2953	0.9715	27.430	777.042
12	03.40	.596	90	360	262	3.625	0	.3	0	1.0246	2876.02	1.0036	1.2953	0.9715	27.430	777.042
13	03.41	CHANGED CHOKE ON HEATER TO 56/64". 3.625% PLATE IN METER.														
14	03.45	.596	90	360	222	3.625	0	.3	0	1.0248	2876.02	1.0030	1.2953	0.9723	25.263	715.637

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GAS FLOW RATE CALCULATIONS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
Press.Loss.Flow	10th Post Gravel Pack	Norway	31/6-2	01-09-84	2	3

CUSTOMER	UNITS	hw	Tg	Pf	CONDITIONS
STATOIL	[X] OIL FIELD [ ] METRIC	[ ] INCHES H_2O [ ] M BAR	[ ] °F [ ] °C	[ ] PSIA [ ] BAR	[ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	04.00	.596	90	360	222	3.625	0	.3	0	1.0248	2876.02	1.0030	1.2953	0.9723	25.263	715.637
2	04.00	CHANGED CHOKE ON HEATER TO 48/64. 3.625 IN METER.														
3	04.05	.596	93	360	168	3.625	0	.3	0	1.0243	2876.02	1.0023	1.2953	0.9797	21.890	620.106
4	04.15	.596	92	360	168	3.625	0	.3	0	1.0245	2876.02	1.0023	1.2953	0.9706	21.913	620.763
5	04.20	CHANGED CHOKE ON HEATER TO 40/64. 3.625 PLATE IN METER.														
6	04.25	.596	87	355	108	3.625	0	.3	0	1.0249	2876.02	1.0015	1.2953	0.9750	17.520	496.320
7	04.30	.596	92	350	110	3.625	0	.3	0	1.0238	2876.02	1.0015	1.2953	0.9706	17.459	494.571
8	04.40	CHANGED CHOKE ON HEATER TO 32/64. CHANGED ORIFICE PLATE TO 2.5".														
9	04.45	.596	92	345	296	2.500	0	.3	0	1.0235	1288.15	1.0051	1.2953	0.9706	12.776	361.919
10	05.00	.596	90	345	300	2.500	0	.3	0	1.0238	1288.15	1.0051	1.2953	0.9723	12.890	365.151
11	05.00	CHANGED CHOKE ON HEATER TO 28/64. 2.5" PLATE IN METER.														
12	05.05	.596	90	345	168	2.500	0	.3	0	1.0238	1288.15	1.0029	1.2953	0.9723	9.624	272.636
13	05.15	.596	90	340	168	2.500	0	.3	0	1.0234	1288.15	1.0029	1.2953	0.9723	9.551	270.571
14	05.20	CHANGED CHOKE ON HEATER TO 24/64. 2.5" PLATE IN METER.														

GAS FLOW RATE CALCULATIONS

OTIS

O.O.I.

TEST NUMBER	RATE NUMBER	AREA	WELL NAME OR NUMBER	DATE (DAY. MON. YR)	PAGE	OF
Press.Loss.Flow	10th Post Gravel Pack	Norway	31/6-2	01-09-84	3	3

CUSTOMER: STATOIL

UNITS: [X] OIL FIELD [ ] METRIC

hw: [ ] INCHES H_2O [ ] M BAR

Tg: [ ] °F [ ] °C

Pf: [ ] PSIA [ ] BAR

CONDITIONS: [ ] 14.73 PSI 60°F [ ] 101.325 kPa 15°C

METER TYPE	METER RUN SIZE (INCHES)	FLOW RECORDER TYPE	hw RANGE	STATIC PRESSURE RANGE	GAS GRAVITOMETER TYPE
DANIELS SNR.	6.065	BARTON	0-400	0-1500	RANAREX

	TIME	GAS SPECIFIC GRAVITY	DOWN STREAM GAS TEMP.	STATIC PRESSURE	DIFF. PRESSURE	ORIFICE SIZE (INCHES)	N_2	CO_2	H_2S	CORRECTION FACTORS					CORRECTED GAS FLOW RATE	
		G	Tg	Pf	hw	d	(%)	(%)	(PPM)	Fpr	Fb	Y2	Fg	F+f.	MMSCF/DAY	SCM/DAY
1	05.25	.596	90	330	94	2.500	0	.3	0	1.0227	1288.15	1.0017	1.2953	0.9723	7.025	199.010
2	05.30	.596	90	330	94	2.500	0	.3	0	1.0227	1288.15	1.0017	1.2953	0.9723	7.025	199.010
3	05.41	CLOSED WELL IN AT CHOKE MANIFOLD.														
4	06.41	96/64" CHOKE AT HEATER. FLOW DIRECTED THROUGH SEPARATOR. 4" ORIFICE PLATE INSTALLED.														
5	06.45	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
6	06.55	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
7	07.00	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
8	07.15	.596	90	365	210	4.0	0	.3	0	1.0252	3628.21	1.0025	1.2953	0.9723	31.205	883.953
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Randaberg Trykk A/S 003