

tilhører

L&U DOK. SENTER

L. NR. 20284120003

KODE well 31/2-3 nr. 21

Returneres etter bruk

# Formation testing service report

31/2

3

DST 1

1600.5 METERS - 1605.0 METERS

NORSK SHELL A/S



**HALLIBURTON**  
MANUFACTURING & SERVICES LTD.  
REGISTERED IN ENGLAND

31/2  
 Lease Name  
 3  
 DST 1  
 1600.5 METERS - 1605.0 METERS  
 NORSK SHELL A/S  
 Well No.  
 Test No.  
 Field Area  
 Meq. From Tester Valve  
 County  
 NORTH SEA  
 State  
 NORWAY  
 Lease Owner/Company Name

FLUID SAMPLE DATA			Date 30 MAY- 1 JUNE 1980	Ticket Number 032842
Sampler Pressure _____ P.S.I.G. at Surface	Kind of Job DST 1	Halliburton District STAVANGER	R.D. BOZARTH	
Recovery: Cu. Ft. Gas _____	Tester J. CARPENTER	Witness FRED HARDINGS	BILL ELLIS	
cc. Oil _____	Drilling Contractor BORGNEY DOLPHIN		EQUIPMENT & HOLE DATA	
cc. Water _____	Formation Tested _____			
cc. Mud _____	Elevation 25 METERS Ft.			
Tot. Liquid cc. _____	Net Productive Interval 4.5 METERS Ft.			
Gravity _____ ° API @ _____ ° F.	All Depths Measured From RKB			
Gas/Oil Ratio _____ cu. ft./bbl.	Total Depth _____ Ft.			
RESISTIVITY _____	Main Hole/Casing Size _____			
CHLORIDE CONTENT _____	Drill Collar Length 328.15 M I.D. 2.813"			
Recovery Water _____ @ _____ ° F. _____ ppm	Drill Pipe Length 1073.16 M I.D. 2.922"			
Recovery Mud _____ @ _____ ° F. _____ ppm	Packer Depth(s) 1574.70 METERS Ft.			
Recovery Mud Filtrate _____ @ _____ ° F. _____ ppm	Depth Tester Valve 1566.31 METERS Ft.			
Mud Pit Sample _____ @ _____ ° F. _____ ppm				
Mud Pit Sample Filtrate _____ @ _____ ° F. _____ ppm				
Mud Weight _____ vis _____ cp				

TYPE CUSHION	AMOUNT 1250 METERS FRESH H <sub>2</sub> O	Depth Back Pres. Valve	Surface Choke	Bottom Choke 2.0
Recovered	282 METER	FORMATION WATER		
Recovered	Feet of			
Recovered	Feet of			
Recovered	Feet of			
Recovered	Feet of			
Remarks	RT-7 TEMP GAUGE No. 12049 RECORDED A MAXIMUM TEMPERATURE OF 130°F			

TEMPERATURE	Gauge No. 1737		Gauge No. 1805		Gauge No. TE-42		TIME	
	Depth: 1583 METERS		Depth: 1584 METERS		Depth: 1585 METERS			
Set _____ ° F.	48	Hour Clock YES	72	Hour Clock YES	72	Hour Clock YES	Tool Opened	A.M. P.M.
Actual 130/133 ° F.	Pressures		Pressures		Pressures		By-pass	A.M. P.M.
Initial Hydrostatic	Field 2718.8	Office 2725	Field 2727.0	Office 2730	Field	Office	Reported	Computed
Flow	Initial	1780.0	1788	1795.5	1791	MAX TEMP: 133°F		
	Final	2280.0	2284	2282.7	2285			
	Closed in	2280.0	2284	2282.7	2285			
Flow	Initial						}	170
	Final							
	Closed in							
Flow	Initial							
	Final							
Final Hydrostatic	2725.5	2725	2734.1	2730				

FORMATION TEST DATA

Casing perms. \_\_\_\_\_ Bottom choke \_\_\_\_\_ Surf. temp \_\_\_\_\_ °F Ticket No. \_\_\_\_\_  
 Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
 Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED \_\_\_\_\_

Date	Time	Choke Size	Surface Pressure psi	Gas Rate MCF	Liquid Rate BPD	Remarks
MAY 30						
	22:26					GAUGE 1737 STARTED
	22:28					GAUGE TE-42 STARTED
	22:30					GAUGE 1805 STARTED
	22:33					GAUGE H 229 STARTED
	22:33					GAUGE 35069 STARTED
	22:36					GAUGE H-228 STARTED
	23:00					RTTS PACKER IN HOLE
MAY 31						
	00:03		3000			TESTED LOWER SLIP JOINTS
	01:12		2000			TESTED UPPER SLIP JOINTS
	14:07					LANDED IN WELL HEAD
	16:34					SET PACKER
	19:05					CLOSED RAMS
	19:15					PRESSURED ANNULUS TO 1000 PSI GETTING BRINE FLOW FROM ABOVE LUBRICATOR.
	19:17	2X1"	0			AIR CUSHION TO SURFACE - OPEN MANIFOLD
	19:30		0			CLOSED MANIFOLD
	19:32		0			WELL DEAD
	20:05					RUN WIRELINE TO TAG WATER
	21:36					bled off ANNULUS - CLOSE APR-N
	21:58					OPEN CIRCULATING VALVE
	22:07					UNSEAT PACKER
	22:14					BEGAN REVERSING
	22:48					OPEN RAMS - ANNULUS LOOSING FLUID
						PUMP LOST CIRCULATION SLUG

Casing perms. \_\_\_\_\_ Bottom choke \_\_\_\_\_ Surf. temp \_\_\_\_\_ °F Ticket No. \_\_\_\_\_  
Gas gravity \_\_\_\_\_ Oil gravity \_\_\_\_\_ GOR \_\_\_\_\_  
Spec. gravity \_\_\_\_\_ Chlorides \_\_\_\_\_ ppm Res. \_\_\_\_\_ @ \_\_\_\_\_ °F

INDICATE TYPE AND SIZE OF GAS MEASURING DEVICE USED \_\_\_\_\_

Date		Choke	Surface	Gas	Liquid	Remarks
Time	a.m. p.m.	Size	Pressure psi	Rate MCF	Rate BPD	
JUNE 1						
03:03						BEGAN P.O.O.H.
12:28						PACKER OUT OF HOLE
12:32						H-228 SHUT OFF
12:37						H-229 SHUT OFF
12:43						12049 SHUT OFF
13:01						1737 SHUT OFF
13:02						1805 SHUT OFF
12:56						TE-42 SHUT OFF

DESCRIPTION	I.D.	O.D.	LENGTH	DEPTH
4½ TUBING & SUB SEA TREE			361.59	
3½ VAM TUBING	2.922"	3.50"	1073.16	361.59
X-OVER (3½ VAM BOX X 3½ IF PIN)	2.25"	3.50"	1.07	1434.75
4 3/8 SLIP JOINT (OPEN)	2.00"	4.38"	6.08	1435.82
4 3/8 SLIP JOINT (CLOSED)	2.00"	4.38"	4.56	1441.90
X-OVER (3½ IF BOX X 3½ FH PIN)	2.438"	4.75"	0.20	1446.46
X-OVER (3½ FH PIN X 4½ IF PIN)	2.438"	6.125"	0.21	1446.66
6¼ DRILL COLLARS (3 STANDS)	2.813"	6.25"	72.90	1446.87
9 5/8 RTTS CIRCULATING VALVE	3.00"	6.12"	0.98	1519.77
X-OVER (4½ IF BOX X 3½ IF PIN)	2.563"	6.12"	0.29	1520.75
4 5/8 APR-M SAMPLER	2.00"	4.625"	3.40	1521.04
X-OVER (3½ IF BOX X 3½ FH PIN)	2.50"	4.75"	0.20	1524.44
5" FUL-FLO TESTER VALVE	2.25"	5.03"	4.24	1524.64
X-OVER (3½ FH BOX X 4½ IF PIN)	2.50"	6.12"	0.20	1528.88
6½ DRILL COLLARS (1 STANDS)	2.813"	6.50"	27.12	1529.08
X-OVER (4½ IF BOX X 3½ IF PIN)	2.813"	6.38"	0.20	1556.20
X-OVER (3½ IF BOX X 3½ FH PIN)	2.50"	4.94"	0.23	1556.40
DRAIN VALVE	2.25"	5.00"	0.31	1556.63
X-OVER (3½ FH BOX X 3½ IF PIN)	2.313"	5.06"	0.25	1556.94
4 3/8 SLIP JOINT (CLOSED)	2.00"	4.38"	4.56	1557.19
4 3/8 SLIP JOINT (CLOSED)	2.00"	4.38"	4.56	1561.75
5" APR-N TESTER VALVE	2.25"	5.00"	3.90	1566.31
4 5/8 BIG JOHN JARS	2.37"	4.63"	1.52	1570.21
X-OVER (3½ IF BOX X 4½ IF PIN)	2.688"	6.12"	0.20	1571.73
9 5/8 RTTS CIRCULATING VALVE	3.00"	6.12"	0.98	1571.93
9 5/8 RTTS SAFETY JOINT	3.12"	6.12"	1.09	1572.92
9 5/8 RTTS PACKER (TOP)	2.44"	8.25"	0.70	1574.00
RPG BUNDLE CARRIER	2.281"	5.38"	2.43	1575.99
X-OVER (3½ FH BOX X 2 7/8 EUE PIN)	2.438"	4.63"	0.20	1578.42
PERF. TUBING	2.375"	2.825"	1.84	1578.62
X-OVER (2 7/8 EUE BOX X 3½ EUE PIN)	2.438"	3.75"	0.19	1582.43
X-OVER (3½ EUE X 2 7/8 D.P. PIN)	2.094"	4.50"	0.29	1582.62
BLANKED-OFF B.T. CASE ( 1737)	-	3.87"	1.23	1582.91
BLANKED-OFF B.T. CASE ( 1805)	-	3.87"	1.23	1584.14
BLANKED-OFF B.T. CASE ( TE-42)	-	3.87"	1.23	1585.37
TOTAL DEPTH				1586.60

COMPANY: NORSK SHELL  
TICKET NO: H032842  
GAUGE NO: 1737

FLOW/CLOSURE 33, 5 MINUTE INTERVALS. LAST INTERVAL= 5 MINS.  
----- TOTAL 170 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.331	1788	0
P1	5	.006	1.652	2216	428
P2	10	.011	1.692	2269	53
P3	15	.017	1.698	2277	8
P4	20	.023	1.700	2280	3
P5	25	.029	1.701	2281	1
P6	30	.034	1.701	2281	0
P7	35	.040	1.701	2281	0
P8	40	.046	1.702	2282	1
P9	45	.051	1.702	2282	0
P10	50	.057	1.702	2282	0
P11	55	.063	1.702	2282	0
P12	60	.068	1.702	2282	0
P13	65	.074	1.702	2282	0
P14	70	.080	1.703	2284	2
P15	75	.086	1.703	2284	0
P16	80	.091	1.703	2284	0
P17	85	.097	1.703	2284	0
P18	90	.103	1.703	2284	0
P19	95	.108	1.703	2284	0
P20	100	.114	1.703	2284	0
P21	105	.120	1.703	2284	0
P22	110	.126	1.703	2284	0
P23	115	.131	1.703	2284	0
P24	120	.137	1.703	2284	0
P25	125	.143	1.703	2284	0
P26	130	.148	1.703	2284	0
P27	135	.154	1.703	2284	0
P28	140	.160	1.703	2284	0
P29	145	.165	1.703	2284	0
P30	150	.171	1.703	2284	0
P31	155	.177	1.703	2284	0
P32	160	.183	1.703	2284	0
P33	165	.188	1.703	2284	0
P34	170	.194	1.703	2284	0

COMPANY: NORSE SHELL  
TICKET NO: H032842  
GAUGE NO: 1805

FLOW/CLOSURE 33. 5 MINUTE INTERVALS. LAST INTERVAL= 5 MINS.  
TOTAL 170 MINUTES

	TIME		PRESSURE		DELTA P
	MINUTES	INCHES DEFL.	INCHES DEFL.	PSIG	
P0	0	.000	1.342	1791	0
P1	5	.003	1.610	2149	358
P2	10	.017	1.690	2256	107
P3	15	.025	1.704	2274	18
P4	20	.034	1.707	2278	4
P5	25	.042	1.709	2281	3
P6	30	.051	1.709	2281	0
P7	35	.059	1.709	2281	0
P8	40	.063	1.710	2282	1
P9	45	.076	1.710	2282	0
P10	50	.084	1.710	2282	0
P11	55	.093	1.710	2282	0
P12	60	.101	1.710	2282	0
P13	65	.110	1.711	2284	2
P14	70	.118	1.711	2284	0
P15	75	.127	1.711	2284	0
P16	80	.135	1.711	2284	0
P17	85	.144	1.712	2285	1
P18	90	.152	1.712	2285	0
P19	95	.160	1.712	2285	0
P20	100	.169	1.712	2285	0
P21	105	.177	1.712	2285	0
P22	110	.186	1.712	2285	0
P23	115	.194	1.712	2285	0
P24	120	.203	1.712	2285	0
P25	125	.211	1.712	2285	0
P26	130	.219	1.712	2285	0
P27	135	.228	1.712	2285	0
P28	140	.236	1.712	2285	0
P29	145	.245	1.712	2285	0
P30	150	.253	1.712	2285	0
P31	155	.262	1.712	2285	0
P32	160	.270	1.712	2285	0
P33	165	.279	1.712	2285	0
P34	170	.287	1.712	2285	0

COMPANY: NORSK SHELL  
TICKET NO: H032842  
GAUGE NO: 42

FLOW/CLOSURE

33. 5 MINUTE INTERVALS. LAST INTERVAL= 5 MINS.  
TOTAL 170 MINUTES

	TIME		TEMPERATURE		DELTA T
	MINUTES	INCHES DEFL.	INCHES DEFL.	DEG. F	
P0	0	.000	.092	127	0
P1	5	.005	.096	128	1
P2	10	.011	.102	131	3
P3	15	.016	.107	132	1
P4	20	.021	.109	132	0
P5	25	.027	.111	133	1
P6	30	.032	.113	133	0
P7	35	.037	.113	133	0
P8	40	.043	.113	133	0
P9	45	.048	.113	133	0
P10	50	.053	.113	133	0
P11	55	.059	.113	133	0
P12	60	.064	.113	133	0
P13	65	.069	.113	133	0
P14	70	.075	.112	133	0
P15	75	.080	.112	133	0
P16	80	.085	.112	133	0
P17	85	.090	.112	133	0
P18	90	.096	.111	133	0
P19	95	.101	.111	133	0
P20	100	.106	.111	133	0
P21	105	.112	.111	133	0
P22	110	.117	.110	133	0
P23	115	.122	.110	133	0
P24	120	.128	.110	133	0
P25	125	.133	.110	133	0
P26	130	.138	.110	133	0
P27	135	.144	.110	133	0
P28	140	.149	.110	133	0
P29	145	.154	.110	133	0
P30	150	.160	.110	133	0
P31	155	.165	.110	133	0
P32	160	.170	.110	133	0
P33	165	.176	.110	133	0
P34	170	.181	.110	133	0



COMPANY: NO RSK SHELL  
 TICKET NO: H032842  
 GAUGE NO: 12049

FLOW/CLOSURE ----- 33, 5 MINUTE INTERVALS. LAST INTERVAL= 5 MINS.  
 ----- TOTAL 170 MINUTES

	TIME		TEMPERATURE		DELTA T
	MINUTES	INCHES DEFL.	INCHES DEFL.	DEG. F	
P0	0	.000	.187	125	0
P1	5	.006	.197	128	3
P2	10	.011	.202	129	1
P3	15	.017	.204	130	1
P4	20	.023	.206	130	0
P5	25	.029	.206	130	0
P6	30	.034	.206	130	0
P7	35	.040	.206	130	0
P8	40	.046	.206	130	0
P9	45	.052	.206	130	0
P10	50	.057	.205	130	0
P11	55	.063	.205	130	0
P12	60	.069	.205	130	0
P13	65	.075	.205	130	0
P14	70	.080	.205	130	0
P15	75	.086	.204	130	0
P16	80	.092	.204	130	0
P17	85	.098	.204	130	0
P18	90	.103	.204	130	0
P19	95	.109	.204	130	0
P20	100	.115	.204	130	0
P21	105	.120	.204	130	0
P22	110	.126	.203	130	0
P23	115	.132	.203	130	0
P24	120	.138	.203	130	0
P25	125	.143	.203	130	0
P26	130	.149	.203	130	0
P27	135	.155	.203	130	0
P28	140	.161	.203	130	0
P29	145	.166	.203	130	0
P30	150	.172	.203	130	0
P31	155	.178	.203	130	0
P32	160	.184	.203	130	0
P33	165	.189	.203	130	0
P34	170	.195	.203	130	0