

Denne rapport
tilhører



UND-ARKIVET

L.NR. 20083350002

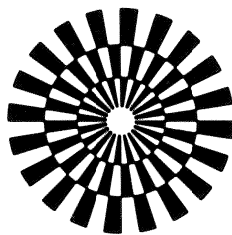
KODE Well 31/2-11 nr 6

Returneres etter bruk

NORSKE SHELL A/S

WELL: 31/2-11

DATE: AUGUST 1983



GECO
GEOPHYSICAL COMPANY
OF NORWAY A/S



NORSKE SHELL A/S

WELL: 31/2-11

DATE: AUGUST 1983

C O M M E N T S

Routine Core Analysis

- Technic : Frozen core technic.
- Preparation : The analyses were performed on frozen cores. The plug samples were cut by using liquid nitrogen as a cooling agent. Using a special plug holder the plugs were mounted in frozen condition. In this holder a cold cleaning takes place, using methanol, toluene and finally methanol.
- Measurements : The plugs were measured for brine porosity and air permeability. In addition grain density was measured. You have to notice that on some plugs the helium porosity was measured. This was done because the plugs were both consolidated and very tight.
- Abbreviations:
- nnp = no plug possible
 - nhpp = no horizontal plug possible
 - nvpp = no vertical plug possible
 - nmp = no measuring possible

FINAL REPORT

PAGE: 1
DATE: AUGUST

CORE NO.: 4

COMPANY : SHELL
WELL : 31/2-11
FIELD : 31/2
STATE : NORWAY

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal	vertical			
		K _a	K _a	He	Brine	
		K ₁	K ₁			
		K _{LH}		POR		
23	1555.15	1.5	1.2	17.5	2.68	consolidated plug
24	1555.45	nhpp				
25	1555.75	nhpp				
26	1556.10	nhpp				
17	1556.40	nhpp				
28	1556.70	nhpp				
29	1557.00	15.9	14.1	22.2	2.69	consolidated plug
30	1557.35	nhpp				
31	1557.70	3.9	3.3	21.9	2.73	consolidated plug
32	1558.05	nhpp				
33	1558.40	0.022	0.02	5.5	2.72	consolidated plug
34	1558.75	0.012	0.009	6.4	2.81	"
35	1559.30	304	292	32.4	2.67	partially consolidated plug
36	1559.65	155	149	31.5	2.66	consolidated plug
37	1562.05	94	88	33.2	2.65	partially consolidated plug
38	1562.40	0.028	0.02	2.4	2.70	consolidated plug

FINAL REPORT

COMPANY : SHELL
 WELL : 31/2-11
 FIELD : 31/2
 STATE : NORWAY

PAGE: 1

CORE NO.: 5

DATE: AUGUST 1983



Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal K _a	vertical K _v			
39	1564.05	72	67	30.5	2.70	consolidated plug
40	1564.35	162	154	30.0	2.66	"
41	1564.60	119	112	27.7	2.66	"
42	1565.00	31	28	28.4	2.67	"
43	1565.60	80	74	31.7	2.67	plugs
44	1565.95	80	75	31.7	2.65	plug
45	1566.30	nhpp				
46	1566.70	nhpp				
47	1567.10	37	34	29.1	2.66	consolidated plug
48	1567.35	nhpp				
49	1567.60	127	120	25.6	2.65	Hor. consolidated, vert broken
50	1567.95	0.009	0.006	1.1	2.67	consolidated plug
51	1568.30	79	74	24.3	2.66	"
52	1568.70	0.014	0.01	2.9	2.66	"

FINAL REPORT

COMPANY : SHELL
WELL : 31/2-11
FIELD : 31/2
STATE : NORWAY

PAGE: 1

DATE: AUGUST 1983

CORE NO.: 6

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description		
		horizontal Ka K _I	vertical Ka K _I					
1	1578.15	1.12	0.88	0.15	0.01	18.8	2.53	consolidated plugs
2	1578.50	194	174			31.5	2.66	unconsolidated plug
3	1578.80	153	138			31.8	2.63	"
4	1579.35	nmp						"
5	1579.65	nhpp		106	94			unconsolidated plug, vertical
6	1580.10	216	196			29.6	2.63	unconsolidated plug
7	1582.15	140	125	125	112	28.0	2.63	plugs
8	1582.45	1208	1158			30.0	2.63	plug
9	1582.70	0.012	0.008			0.5	2.69	consolidated plug
10	1583.00	0.013	0.009			0.8	2.70	"
11	1583.35	nmp						"
12	1583.75	0.012	0.009	0.016	0.01	0.5	2.69	consolidated plugs
13	1584.10	0.021	0.01			4.7	2.71	plug
14	1584.40	17	14			23.2	2.65	"
15	1584.75	37	31			25.4	2.66	"
16	1585.10	35	29			27.6	2.65	broken plug
17	1585.45	67	58	11.6	9.1	29.7	2.66	consolidated plugs
18	1585.75	49	42			28.6	2.66	plug
19	1586.10	26	21			27.2	2.61	broken plug
20	1586.40	20	16			30.0	2.66	consolidated plug
21	1586.75	42	35			28.8	2.63	broken plug
22	1587.10	32	27	16	13	29.5	2.66	broken plugs



FINAL REPORT

COMPANY : SHELL
 WELL : 31/2-11
 FIELD : 31/2
 STATE : NORWAY

PAGE: 1

DATE: AUGUST 1983

CORE NO.: 7

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal K _a	vertical K ₁			
53	1592.20	0.018	0.006	0.9	2.66	consolidated plugs
54	1592.80	2.0	1.6	19.9	2.63	plug
55	1593.10	4.3	3.7	23.0	2.62	"
56	1593.40	6.8	5.9	23.9	2.63	"
57	1593.70	6.6	5.7	24.2	2.63	"
58	1594.05	4.3	3.7	23.9	2.63	plugs
59	1594.40	4.7	4.0	24.7	2.63	plug
60	1594.75	2.7	2.3	22.6	2.64	"
61	1595.10	2.8	2.3	21.2	2.64	"
62	1595.40	0.012	0.008	0.6	2.65	"
63	1595.75	10.3	9.0	19.5	2.71	plugs
64	1596.10	6.7	5.8	25.4	2.63	plug
65	1596.40	6.9	6.0	24.9	2.63	"
66	1596.75	1.7	1.4	22.9	2.63	"
67	1597.10	2.3	1.8	23.5	2.63	"
68	1597.40	2.7	2.3	23.2	2.60	plugs
69	1597.90	2.9	2.5	24.1	2.56	plug
70	1598.20	2.0	1.6	23.1	2.59	"
71	1598.50	nmp		27.1	2.58	"
72	1598.80	17.8	15.9	27.5	2.62	plugs, horizontal cracked
73	1599.15	195	186	30.1	2.56	plug
74	1599.50	4.8	4.1	25.2	2.66	"
75	1599.85	30	27	25.5	2.62	"
76	1600.20	21	19	29.7	2.57	"
77	1601.50	3.0	2.5	24.9	2.60	"
78	1601.80	7.1	6.1	25.6	2.62	"
79	1602.15	7.1	6.2	25.3	2.61	"



GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S.
Petroleum laboratory

FINAL REPORT

PAGE: 2

COMPANY : SHELL
WELL : 31/2-11
FIELD : 31/2
STATE : NORWAY

CORE NO.: 7 (cont.) DATE: AUGUST 1983

Plug No.	Depth (meter)	Permeability (mD),		Porosity (%)	Grain dens. g/cc	Formation Description
		horizontal K _a	vertical K _v			
80	1602.50	5.1	4.3	25.6	2.62	consolidated plug
81	1602.80	3.4	2.9	25.2	2.61	"
82	1603.10	nmp		26.0	2.64	"
83	1603.45	4.1	3.5	24.4	2.60	"
84	1603.80	2.6	2.2	24.4	2.62	"
85	1604.10	2.8	2.4	24.4	2.62	"
86	1604.40	2.8	2.4	24.7	2.61	"
87	1604.70	1.8	1.4	23.7	2.62	"
88	1605.00	3.3	2.8	24.3	2.63	"
89	1605.30	3.4	2.8	25.0	2.62	"
90	1605.95	3.9	3.4	25.7	2.62	"
91	1606.30	4.0	3.4	24.9	2.62	"
92	1606.60	5.7	4.9	26.0	2.63	"
93	1606.90	12.7	11.2	27.8	2.65	"
94	1607.20	6.6	5.7	26.7	2.63	"
95	1607.50	3.2	2.7	24.9	2.63	"
96	1607.80	10.8	9.5	26.4	2.63	"
97	1608.15	7.9	6.8	25.5	2.63	"
98	1608.45	4.4	3.8	25.0	2.63	"
99	1608.80	0.015	0.01	6.8	2.69	"
100	1609.10	0.018	0.01	6.1	2.68	"
101	1609.40	5.8	5.0	28.0	2.58	"
102	1609.70	4.9	4.2		2.64	"
103	1610.00	4.1	3.5	25.1	2.65	"
104	1610.30	2.3	1.8	24.3	2.65	"
				24.2	2.62	"