GECO
GEOPHYSICAL COMPANY
OF NORWAY A·S

STATOIL

ROUTINE CORE ANALYSIS

WELL: 34/10-15

AUGUST 1983

GECO

ROUTINE CORE ANALYSIS

COMMENTS

Core analysis performed on core no. 1-10.

Selected intervals frozen:

Core no. 1 :	1870	- 1888	(rec. 50%),	entire core
Core no. 2 :	1888	- 1900	(rec. 75%),	entire core
Core no. 3 :	1900	- 1917	(rec. 34%),	entire core
Core no. 4 :	1917	- 1935	(rec. 63%),	entire core
Core no. 5 :	1935	- 1944	(rec. 62%),	entire core
Core no. 6 :	2170	- 2187.5	(rec. 98%),	entire core
Core no. 7 :	2187.5	- 2201	(rec. 91%),	entire core

Selected intervals unfrozen:

Core no. 8 :	2201	- 2213	(rec. 86.7%),	entire core
Core no. 9 :	2301	- 2316	(rec. 90%),	entire core
Core no. 10 :	2316.5	- 2323	(rec. 85%),	entire core

The frozen technique is based on freezing the core and drilling the plugs with liquid nitrogen. The plugs are mounted in a special core holder and thereafter allowed to thaw.

Porosity is measured by injection of brine (same composition as 34/10 - field formation water).

Permeability is measured using nitrogen gas. (Standard air permeability and then empirically converted to liquid permeability.)

The unfrozen part of the cores were measured as routine core analysis, which means that helium gas was used for helium porosity and N_2 for air permeability.

Abbreviations:

n.p.p.	-	no plug possible
n.h.p.p.	-	no horizontal plug possible
n.v.p.p.	-	no vertical plug possible
n.m.p.	-	no measurement possible

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 1

DATE: AUGUST 1983

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GEOPHYSICAL COMPANY OF NORWAY A/S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
	~~1870.00~~								
1 81	1870.10	904	864	nmp		36.4		2.67	Sd.Gry.F-gr.Sbrndd.w/Mic.
82	~~1870.35~~	nmp		nvpp		nmp			
2 83	1872.25	30	25	nmp		24.7		2.68	Sst.Gry.VF-gr.Sbrndd.VP-cmt.fis.w/Mic.
3 84	1872.55	0.015	0.01	5.3	4.5		4.7	2.70	Sst.Lt-gry.F-gr.Sbrndd.VW-cmt.Calc.w/Mic.
4 85	1874.65	8.0	6.1	15	12	23.8		2.65	Sltst.Gry.P-cmt.fis.w/Mic.Calc.
86	1874.95	2.6	1.9	nmp		26.9		2.66	A.A.
87	1875.90	253	233	68	59	34.7		2.63	Sd.Gry.VF-gr.w/Mic.
88	1876.10	164	148	nmp		30.1		2.65	Sltst.Gry.VP-cmt.fis.w/Mic.
89	1876.35	0.057	0.04	0.015	0.01		5.4	2.68	Sst.Lt-gry.VF-gr.Sbrndd.VW-cmt.Calc.
~~90~~	~~1876.75~~	nmp		nvpp		nmp			
91	1877.00	172	155	nmp		31.4		2.64	Sd.Gry.F-gr.w/Mic.
~~92~~	~~1877.35~~	nmp		nvpp		nmp			
93	1877.70	36	30	nvpp		25.0		2.64	A.A.
94	1878.20	305	275	nmp		34.0		2.65	A.A.
~~95~~	~~1878.45~~	nmp		nmp		nmp			A.A.
12 96	1878.90	55	47	nmp		24.5		2.66	Sst.Lt-gry.VF-gr.Sbrndd.VW-cmt.Calc.
96a	1879.08	0.28	0.21	1.2	0.90		8.2	2.67	A.A.w/Mic.C.Pyr.
96b	1879.28	1.46	1.1	0.022	0.02		4.3	2.69	A.A.
15 96c	1879.50	0.032	0.02	0.114	0.1		4.5	2.69	A.A.
	1888.00								

COMPANY : STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 2

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_1	vertical K_a	vertical K_1	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
	1888.00								
97	1888.20	0.021	0.01	0.014	0.01		2.2	2.69	Sst.Gry.VF-gr.Sbrndd.P-cmt.W-srt.w/Mic.
98	1888.50	1554	1504	583	553	38.0		2.66	A.A.
99	1888.80	774	734	58	50	35.0		2.63	A.A.
100	1889.00	1.3	0.91	nmp		22.5		2.66	Sltst.Gry.P-cmt.w/Calc.Mic.
101	1889.30	45	38	nmp		26.2		2.68	A.A.
102	1889.65	104	93	nmp		33.1		2.65	A.A.
103	1889.90	41	35	nmp		31.6		2.72	Sst.Lt-gry.VF-gr.Sbrndd.P-cmt.w/Calc.Mic.
104	1890.20	58	50	2.3	1.8	29.0		2.67	A.A.W-srt.
105	1890.50	533	503	28	23	38.6		2.66	A.A.F-gr.fis.
106	1891.75	185	165	52	44	26.0		2.64	A.A.
107	1892.05	272	252	nmp		35.5		2.66	A.A.
108	1892.35	18.9	16.8	20	16	26.0		2.62	Sltst.Gry.P-cmt.fis.w/Mic.
109	1892.65	69	65	nmp		24.4		2.68	Sst.Gry.F-gr.Sbrndd.Fr-cmt.Cl-lam.w/Mic.
110	1893.00	1.6	1.2	nmp			10.5	2.70	Sst.Lt-gry.F-gr.Sbrndd.VW-cmt.Calc.w/Mic.
111	1893.35	21	19	nmp		29.7		2.72	Sst.Gry.F-gr.Sbrndd.Fr-cmt.Cl-lam.w/Calc.
112	1893.65	46	43	nmp		32.3		2.69	A.A.W-srt.
113	1894.00	26	24	1.7	1.2	30.9		2.75	A.A.Calc.-mtrx.
114	1894.35	43	39	54	46	30.7		2.69	A.A.
115	1894.60	4.6	3.8	37	31	32.1		2.72	A.A.
116	1894.90	0.05	0.04	0.016	0.01		3.8	2.72	A.A.
117	1895.25	48	44	nmp		29.8		2.68	Sst.Gry.F-gr.Sbrndd.Fr-cmt.Cl-lam.w/Mic.
118	1895.60	452	437	nmp		36.0		2.67	A.A.W-srt.
119	1895.90	145	137	1.5	1.0	33.6		2.70	A.A.fis.
120	1896.15	59	51	nmp		28.0		2.72	A.A.VP-cmt.w/o Cl.
121	1896.45	4.5	3.3	nmp		21.7		2.67	A.A.VF-gr.W-cmt.w/o Calc.w/Cl.
122	1896.80	25	21	nmp		24.8		2.67	A.A.
	1900.00								

COMPANY : STATOIL
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FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 3

DATE: AUGUST 1983

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GEOPHYSICAL COMPANY OF NORWAY A·S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
	1900.00								
123	1900.05	6812	6712	nvpp		36.5		2.71	Sltst.Gry.Fr-cmt.w/Mic.Calc.
124	1900.95	nmp		nvpp					A.A. Lt-gry-fis.w/o Calc.
125	1901.30	nmp		nvpp					A.A.
126	1901.70	nmp		nvpp					A.A.
127	1902.05	nmp		nmp					A.A.
128	1902.35	nmp		nmp					A.A.
129	1902.60	822	782	319	289	32.6		2.73	Sd.Gry.F-gr.w/Mic.
130	1903.00	851	811	nvpp		28.8		2.72	Sst.Lt-gry.F-gr.Sbrndd.P-cmt.w/Calc.C.Cl.
131	1903.30	nmp		0.13	0.1		shale		Sltst.Gry.Fr-cmt.fis.w/Mic.
132	1903.60	21	17	nmp		21.6		2.64	A.A.Sd-lam.
133	1903.95	514	474	nvpp		33.1		2.60	A.A.w/C.
134	1904.30	nmp		nmp					A.A.fis.
135	1905.65	nmp		nmp					A.A.
	1917.00								

COMPANY : STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

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CORE NO.: 4

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A·S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Sum	Grain dens. g/cc	Formation Description
	1917.00								
136	1917.05	4.7	3.5	8.5	6.5	28.7		2.68	Sltst.Lt-gry.Fr-cmt.w/Mic.Calc.Sd-gr.
137	1917.35	16	13	314	284	31.7		2.67	A.A.
138	1917.70	4.7	3.5	4.5	3.3	27.4		2.65	A.A.
139	1918.00	13	10	2.6	1.9	30.7		2.66	A.A.
140	1918.30	16	13	2.1	1.5	31.0		2.65	A.A.
141	1918.65	14	11	2.4	1.7	29.5		2.65	A.A.
142	1919.00	8.1	6.2	2.3	1.6	31.1		2.66	A.A.
143	1919.40	1.4	1.0	3.0	2.5	25.7		2.66	A.A.
144	1919.70	0.028	0.02	0.048	0.1		7.5	2.73	Sst.Lt-gry.VF-gr.Sbrndd.VW-cmt.Calc.
145	1920.85	3.9	2.9	10.0	8.8	29.8		2.66	Sltst.Lt-gry.Fr-cmt.w/Mic.Sd-gr.Calc.
146	1921.40	0.64	0.42	1.8	1.4	24.6		2.64	A.A.
147	1921.70	0.90	0.60	0.84	0.65	26.8		2.66	A.A.
148	1922.05	0.46	0.29	0.40	0.30	20.4		2.67	A.A.fis.
149	1922.40	1.8	1.4	2.4	2.0	27.6		2.67	A.A.w/o fis.
150	1922.70	0.37	0.28	1.6	1.3	25.0		2.67	A.A.
151	1923.05	3.3	2.8	0.55	0.42	27.6		2.67	A.A.
152	1923.40	1.03	0.80	nvpp		29.7		2.87	A.A.Lt-brn.fis.w/Sid.
153	1923.70	0.92	0.71	1.6	1.3	26.3		2.67	Sltst.Lt-gry.Fr-cmt.w/Mic.Calc.Sd-gr.
154	1924.00	2.5	2.1	1.9	1.5	28.8		2.65	A.A.
155	1924.40	0.87	0.67	1.1	0.86	25.4		2.67	A.A.
156	1924.70	2.5	1.9	0.7	0.5	26.8		2.65	A.A.
157	1925.00	0.97	0.76	0.35	0.27	26.7		2.65	A.A.fis.
158	1925.75	8.5	7.4	2.2	1.7	28.7		2.74	A.A.w/o fis.
159	1926.05	10.5	9.3	0.68	0.53	29.2		2.68	A.A.
160	1926.30	1.4	1.1	0.87	0.68	26.0		2.65	A.A.
161	1926.50	1.9	1.5	2.3	1.8	26.6		2.67	A.A.
162	1926.80	5.8	5.0	9.0	7.9	30.8		2.67	A.A.
163	1927.80	26.4	23.9	1.7	1.3	32.4		2.68	A.A.
	1935.00								

COMPANY : STATOIL
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STATE : NORWAY

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CORE NO.: 5

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A·S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
	1935.00								
164	1935.05	0.077	0.06	0.064	0.05		7.9	2.69	Sst.Lt-gry.VF-gr.Sbrndd.VW-cmt.Calc.w/C
165	1935.40	0.021	0.02	0.022	0.02		4.4	2.69	A.A.VW-srt.
166	1935.70	0.027	0.02	0.02	0.01		5.4	2.68	A.A.
167	1936.00	0.022	0.02	0.087	0.06		5.0	2.67	A.A.
168	1936.35	0.035	0.03	0.028	0.02		6.7	2.68	A.A.
169	1936.70	0.128	0.16	30.2	27.4		13.7	2.68	A.A.
170	1938.15	10.7	9.5	0.54	0.42	30.5		2.69	Sltst.Lt-gry.Fr-cmt.w/Mic.Calc.Sd-gr.
171	1938.70	104	97	13	11	33.8		2.64	Sst.Lt-gry.VF-gr.Sbrndd.Fr-cmt.w/Mic.Cl.
172	1939.00	20.2	18.2	nvpp		31.3		2.66	A.A.VW-srt.w/Calc.
173	1939.35	24.3	22.1	nmp		33.5		2.66	A.A.fis.
174	1939.70	3.8	3.2	0.65	0.50	29.5		2.65	A.A.w/o fis.
175	1940.00	62	58	6.5	5.7	34.6		2.67	A.A.fis.
176	1940.35	4.4	3.8	nmp		29.4		2.73	A.A.
177	1940.60	0.01	<0.01	0.019	0.01		3.8	2.68	A.A.VW-cmt.Calc-mtrx.
	1944.00								

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 6

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A·S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
	2170.00								
178	2170.05	nmp		0.086	0.06		nmp		Sltst.Lt-gry.Fr-cmt.fis.w/Mic.Calc.
179	2170.40	nmp		nmp			nmp		A.A.
180	2170.75	nmp		0.076	0.06		nmp		A.A.
181	2171.05	nmp		nmp			nmp		A.A.
182	2171.40	0.71	0.55	0.23	0.17		22.8	2.65	A.A.w/o fis.
183	2171.75	nmp		nmp			nmp		A.A.fis.w/Sd-gr.
184	2172.05	nmp		0.33	0.25		nmp		A.A.
185	2172.40	nmp		nmp			nmp		A.A.
186	2172.75	2.8	2.3	0.14	0.11		23.5	2.68	Sst.Lt-gry.VF-gr.Sbrndd.W-cmt.w/Calc.
187	2173.05	0.61	0.47	0.16	0.12		23.5	2.66	A.A.W-srt.Slty.
188	2173.40	nmp		0.63	0.49		nmp		A.A.fis.
189	2173.75	0.37	0.28	0.46	0.35		22.1	2.66	A.A.
190	2174.05	0.24	0.18	2.2	1.7		22.7	2.67	A.A.
191	2174.40	0.070	0.05	0.064	0.05		18.6	2.68	A.A.
192	2174.75	0.162	0.12	0.60	0.46		16.9	2.69	A.A.
193	2175.05	0.042	0.03	0.51	0.40		10.7	2.69	A.A.
194	2175.45	0.32	0.24	0.52	0.40		21.8	2.66	A.A.
195	2175.75	0.48	0.37	0.99	0.77		23.3	2.67	A.A.
196	2176.05	0.50	0.38	0.85	0.66		24.6	2.69	A.A.
197	2176.45	1.8	1.4	0.55	0.42		25.6	2.68	A.A.
198	2176.75	1.4	1.1	0.55	0.42		26.2	2.69	A.A.
199	2177.05	0.37	0.28	0.58	0.45		26.1	2.69	A.A.
200	2177.35	1.4	1.1	0.73	0.56		25.2	2.68	A.A.
201	2177.65	nmp		1.23	0.96		26.0	2.71	A.A.fis.
202	2178.00	0.67	0.52	nmp			25.9	2.69	A.A.
203	2178.35	1.8	1.4	2.7	2.3		25.8	2.68	A.A.
204	2178.70	2.6	2.0	1.8	1.4		25.6	2.68	A.A.

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 6 (cont.)

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
205	2179.05	1.09	0.85	1.20	0.94		25.4	2.68	A.A.
206	2179.40	1.7	1.4	1.8	1.4		24.6	2.68	A.A.
207	2179.70	0.72	0.56	0.89	0.69		22.9	2.68	A.A.
208	2180.05	0.73	0.57	0.57	0.44		23.1	2.68	A.A
209	2180.40	0.012	0.009	0.027	0.02		5.2	2.70	A.A.VW-cmt.Calc.mtrx.
210	2180.70	0.055	0.04	0.048	0.04		6.3	2.70	A.A.
211	2181.05	0.020	0.01	0.027	0.02		5.1	2.70	A.A.
212	2181.40	nmp		78	73		nmp		A.A.W-cmt.w/o Calc-mtrx.w/Calc.
213	2181.75	0.49	0.38	3.2	2.7		25.3	2.68	A.A.
214	2182.05	0.45	0.35	1.5	1.2		24.4	2.67	A.A.
215	2182.40	0.41	0.31	1.6	1.2		22.4	2.68	A.A.
216	2182.75	0.27	0.20	nmp			10.4	2.71	A.A.VW-cmt.Calc-mtrx.
217	2183.05	0.24	0.18	0.41	0.32		9.7	2.70	A.A.
218	2183.40	2.3	1.8	1.05	0.82		24.3	2.68	A.A.W-cmt.w/o Calc-mtrx.w/Calc.
219	2183.75	0.46	0.36	2.9	2.5		25.3	2.69	A.A.
220	2184.05	0.67	0.52	1.9	1.3		27.5	2.69	A.A.fis.
221	2184.40	0.38	0.29	0.78	0.60		26.8	2.70	A.A.w/o fis.
222	2184.75	0.36	0.27	0.83	0.64		26.4	2.70	A.A.fis.
223	2185.05	0.45	0.34	1.11	0.87		26.1	2.71	A.A.
224	2185.40	0.77	0.60	0.63	0.49		25.3	2.68	A.A.
225	2185.75	2.0	1.6	0.66	0.51		26.4	2.69	A.A.
226	2186.05	1.32	1.0	2.8	2.4		26.5	2.69	A.A.
227	2186.35	0.24	0.18	nmp			25.1	2.70	A.A.
228	2186.65	0.27	0.20	0.63	0.49		25.0	2.69	A.A.
229	2186.95	0.94	0.73	nmp			25.4	2.68	A.A.
	2187.50								

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 7

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
	2187.50								
230	2187.60	0.021	0.02	0.014	0.010		6.6	2.70	Sst.Lt-gry.VF-gr.Sbrndd.VW-cmt.Calc.w/Mic.
231	2187.90	0.031	0.02	0.025	0.02		8.6	2.70	A.A.VW-srt.
232	2188.25	0.24	0.18	0.53	0.41		17.0	2.69	A.A.
233	2188.60	1.21	0.94	0.49	0.38		26.4	2.69	A.A.
234	2189.00	2.4	1.9	0.65	0.50		25.4	2.68	A.A.W-cmt.w/oCalc-mtrx.w/Calc.
235	2189.30	1.3	1.0	0.53	0.41		25.3	2.69	A.A.Slty.
236	2189.65	0.24	0.18	0.38	0.29		25.2	2.69	A.A.
237	2190.00	1.3	1.0	0.37	0.28		25.5	2.69	A.A.
238	2190.60	1.3	1.0	0.40	0.31		23.7	2.69	A.A.
239	2191.00	0.31	0.24	1.4	1.1		24.8	2.70	A.A.
240	2191.30	0.23	0.18	0.88	0.69		24.7	2.69	A.A.
241	2191.65	0.35	0.26	0.93	0.72		23.0	2.69	A.A.
242	2192.00	0.28	0.21	1.3	1.0		23.0	2.69	A.A.
243	2192.30	0.49	0.37	0.88	0.68		23.5	2.69	A.A.
244	2192.65	1.18	0.92	nmp		36.3		2.71	A.A.Fr-cmt.
245	2193.00	1.6	1.3	1.4	1.1		22.0	2.67	A.A.W-cmt.
246	2193.30	1.26	0.99	3.2	2.7		26.7	2.68	A.A.
247	2193.65	0.55	0.42	3.6	3.0		21.1	2.65	A.A.VW-cmt.
248	2194.00	1.6	1.2	1.5	1.2		23.1	2.66	A.A.
249	2194.30	0.98	0.77	0.54	0.42		21.5	2.68	A.A.
250	2194.65	3.1	2.4	3.8	3.2		20.8	2.67	A.A.
251	2195.00	3.4	2.7	0.72	0.56		22.0	2.68	A.A.
252	2195.30	3.9	3.1	1.6	1.2		23.9	2.67	A.A.
253	2195.65	4.8	4.1	4.0	3.4		22.1	2.67	A.A.
254	2196.00	3.9	3.4	1.8	1.4		25.8	2.68	A.A.
255	2196.30	2.8	2.3	0.42	0.32		24.6	2.67	A.A.
256	2196.65	1.15	0.90	1.5	1.1		26.0	2.67	A.A.

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 7 (cont.)

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A/S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) Brine	Porosity (%) Sum	Grain dens. g/cc	Formation Description
257	2197.00	2.8	2.3	2.5	2.0		22.9	2.66	A.A.
258	2197.30	4.6	4.0	0.98	0.76		23.6	2.66	A.A.
259	2197.65	nmp		2.1	1.6		25.6	2.67	A.A.
260	2198.00	0.95	0.74	48	44		22.6	2.66	A.A.
261	2198.30	0.31	0.24	0.038	0.03		11.6	2.68	A.A.
262	2198.65	0.009	0.007	0.012	0.008		5.6	2.69	A.A.VW-cmt.Calc-mtrx.
263	2199.10	19	17	0.25	0.19		22.6	2.69	A.A.
264	2199.50	nmp		1.9	1.5	nmp			A.A.fis.
265	2199.80	nmp		20.4	18.3		25.0	2.69	A.A.
	2201.00								

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 8

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A/S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) He	Porosity (%) Sum.	Pore saturation S_o	Pore saturation S_w	Grain dens. g/cc	Formation Description
	2201.00										
1	2201.05	0.88	0.59	0.196	0.12	24.9	14.1	0	37.2	2.70	Sst.Lt-gry.VF-gr.Sbrndd.W-cmt.w/Calc.Mic
2	2201.40	0.73	0.48	0.141	0.08	23.1				2.70	A.A.W-srt.w/Cl.
3	2201.75	0.58	0.38	0.170	0.10	23.4				2.70	A.A.
4	2202.05	0.62	0.41	0.201	0.12	23.9	20.8	0	50.8	2.69	A.A.
5	2202.30	0.72	0.48	0.58	0.38	25.2				2.70	A.A.
6	2202.75	0.110	0.06	0.029	0.02	12.3				2.70	A.A.
7	2203.05	3.2	2.3	0.108	0.06	24.0	21.3	0	61.9	2.70	A.A.
8	2203.40	0.65	0.43	0.28	0.17	23.9				2.70	A.A.
9	2203.75	1.7	1.2	0.015	0.01	23.3				2.70	A.A.
10	2204.05	0.079	0.05	nvpp		22.9	7.6	0	33.3	2.77	Sst.Brnsh-gry.VF-gr.Sbrndd.VW-cmt.Calc.
11	2204.40	nmp		0.76	0.51	24.0				2.70	Sst.Lt-gry.VF-gr.Sbrndd.W-cmt.w/Calc.Mic
12	2204.75	0.41	0.26	0.219	0.13	22.4				2.69	A.A.VW-srt.w/Cl.
13	2205.10	0.34	0.21	0.088	0.05	21.8	18.8	0	66.1	2.70	A.A.
14	2205.40	0.61	0.40	0.27	0.17	22.4				2.69	A.A.
15	2205.75	0.30	0.19	0.163	0.10	21.4				2.70	A.A.
16	2206.10	0.45	0.29	0.105	0.06	20.9	11.9	0	46.2	2.69	A.A.
17	2206.50	0.27	0.17	0.101	0.06	21.0				2.70	A.A.
18	2206.80	0.30	0.19	0.077	0.04	20.7				2.69	A.A.
19	2207.15	nmp		0.001	<0.001	5.7	17.8	0	90.2	2.75	A.A.VW-cmt.Calc-mtrx.w/Pyr.
20	2207.40	0.26	0.16	0.104	0.06	18.2				2.69	A.A.w/oCalc-mtrx.Pyr w/Calc.
21	2207.70	nmp		0.068	0.04	16.5				2.69	A.A.fis.
22	2208.05	nhpp		nmp			12.5	0	85.6		
23	2208.35	nmp		nmp		14.4				2.68	Sst.Rd.VF-gr.Sbrndd.W-cmt.W-srt.w/Mic.Cl
24	2208.80	nhpp		nmp							
25	2209.10	0.54	0.35	0.115	0.07	23.2	28.6	0	92.0	2.75	A.A.Calc.
26	2209.45	0.91	0.61	nmp		22.2				2.74	A.A.
27	2209.80	nmp		1.9	1.3	npp					A.A.
28	2210.10	npp					20.9	0	92.6		
29	2210.35	npp									
	2213.00										

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 9

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A/S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) He	Porosity (%) Sum.	Pore saturation S_o	Pore saturation S_w	Grain dens. g/cc	Formation Description
	2301.00										
30	2301.10	367	337	203	183	26.9	18.8	0	35.5	2.65	Sst.lt-gry.F-gr.Sbrndd.W-cmt.w/Mic.Calc
31	2301.45	107	95	3.5	2.5	20.5				2.66	A.A.VW-srt.
32	2301.75	107	95	62	53	22.9				2.66	A.A.
33	2302.05	79	69	68	59	20.8	17.5	0	41.4	2.65	A.A.
34	2302.35	46	39	57	49	20.6				2.65	A.A.
35	2302.80	3.2	2.3	0.73	0.48	14.3				2.66	A.A.
36	2303.10	112	99	16	13	16.7	14.9	0	19.1	2.66	A.A.
37	2303.35	180	160	136	122	19.8				2.65	A.A.
38	2303.70	27	22	5.1	3.8	14.7				2.66	A.A.
39	2304.05	nmp		nmp		17.0	5.2	0	84.7	2.66	A.A.Gnsh-gry.Fr-cmt.fis.
40	2304.30	0.135	0.08	nmp		11.8				2.68	A.A.
41	2304.65	0.34	0.21	nmp		17.0				2.67	A.A.
42	2305.00	0.32	0.20	nvpp		16.2	17.4	0	91.3	2.70	Sst.Rd.VF-gr.Sbrndd.W-cmt.ferr.w/Mic
43	2305.30	0.24	0.15	0.52	0.34	17.2				2.70	A.A.
44	2305.60	0.24	0.15	0.54	0.35	17.0				2.71	A.A.
45	2305.95	0.38	0.24	0.43	0.28	17.8	17.1	0	84.7	2.70	A.A.
46	2306.25	0.46	0.29	0.54	0.35	17.9				2.71	A.A.
47	2306.60	0.61	0.40	1.04	0.71	20.7				2.73	A.A.
48	2306.95	0.47	0.30	0.61	0.40	18.3	12.8	0	88.7	2.71	A.A.
49	2307.30	6.2	4.7	1.2	0.83	22.3				2.68	Sst.Gnsh-gry.VF-gr.Sbrndd.W-cmt.w/Mic.
50	2307.60	2.0	1.4	2.2	1.6	19.1				2.68	A.A.VW-srt.Calc.
51	2307.95	4.5	3.3	2.6	1.9	19.9	15.6	0	61.0	2.67	A.A.
52	2308.30	1.2	0.83	0.69	0.45	15.3				2.69	A.A.
53	2309.10	158	142	99	88	21.4				2.65	A.A.F-gr.
54	2309.45	235	215	98	87	25.0	13.7	0	38.4	2.65	A.A.
55	2309.75	0.56	0.36	0.021	0.01	6.5				2.70	A.A.VW-cmt.Calc-mtrx.
56	2310.05	0.38	0.24	0.033	0.02	8.5				2.72	A.A.
57	2310.35	314	284	125	112	26.6	14.4	0	73.1	2.65	A.A.Fr-cmt.w/o.Calc-mtrx.w/Calc.
58	2310.75	63	54	17	14	25.5				2.66	A.A.

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 9 (cont.)

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A.S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) He	Porosity (%) Sum.	Pore saturation S_o	Pore saturation S_w	Grain dens. g/cc	Formation Description
59	2311.10	220	200	184	164	27.4				2.66	A.A.
60	2312.40	0.27	0.17	0.23	0.14	19.0	17.6	0	52.8	2.75	A.A.Gn.w/Pyr.
61	2313.40	0.033	0.02	0.033	0.02	4.9	7.7	0	28.2	2.68	A.A.Gnsh-gry.VW-cmt.Calc.mtrx.
62	2313.70	0.036	0.02	0.027	0.02	4.5				2.68	A.A.
63	2314.05	0.063	0.04	0.063	0.04	6.0				2.69	A.A.
64	2314.45	123	110	nmp		27.1	21.1	0	48.4	2.66	A.A.P-cmt.w/o Calc-mtrx.w/Calc.
65	2314.80	335	305	313	283	28.6				2.66	A.A.
	2316.50										

COMPANY: STATOIL
WELL : 34/10-15
FIELD : 34/10
STATE : NORWAY

FINAL REPORT

CORE NO.: 10

DATE: AUGUST 1983

GECO
GEOPHYSICAL COMPANY OF NORWAY A-S
Petroleum laboratory

Plug No.	Depth (meter)	Permeability (mD), horizontal K_a	horizontal K_l	vertical K_a	vertical K_l	Porosity (%) He	Porosity (%) Sum.	Pore saturation S_o	Pore saturation S_w	Grain dens. g/cc	Formation Description
	2316.50										
66	2316.70	1078	1028	1129	1079	28.4	16.6	0	64.3	2.66	Sst.Lt-gry.F/M-gr.Sbrndd.Fr-cmt.w/Mic.
67	2316.95	551	521	33	28	29.0				2.66	A.A.W-srt.Calc.
68	2317.35	326	296	215	195	27.4				2.67	A.A.
69	2317.65	339	309	276	256	28.4	29.7	0	56.3	2.67	A.A.
70	2318.05	418	388	342	312	28.0				2.69	A.A.
71	2318.35	955	915	853	813	26.5				2.62	A.A.
72	2318.80	951	911	980	940	27.9	28.6	0	65.0	2.67	A.A.
73	2319.25	217	197	582	552	23.5				2.68	A.A.
74	2319.75	516	486	671	641	26.6				2.65	A.A.
75	2319.95	48	41	35	29	22.8	20.0	0	38.2	2.67	A.A.F-gr.W-cmt.
76	2320.30	0.034	0.02	0.030	0.02	6.5				2.71	Sst.Lt-gn.VF-gr.Sbrndd.VW-cmt.Calc.w/Mic
77	2320.65	31	26	9.4	7.3	15.7				2.67	A.A.Lt-gry.F/M-gr.W-srt.
78	2321.05	37	31	18	15	19.5	11.3	0	33.2	2.68	A.A.
79	2321.40	64	55	125	112	16.9				2.67	A.A.
80	2321.75	0.031	0.02	0.017	0.01	3.6				2.68	A.A.VF-gr.
	2323.00										

COMPANY: STATØIL | FIELD: 34/10 | FILE:

WELL: 34/10-15 | COUNTY: | DATE: AUG 1983

LOCATION: | STATE: NØRWAY | ELEV.:

CORE GRAPH

GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

LABORATORY

CORE-GAMMA SURFACE-LOG
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

DEPTH METER

POROSITY %
PERMEABILITY mD HORIZONTAL
VERTICAL
% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %
1000mD 100mD 10mD 0

FLUID SATURATION
OTHER OIL WATER
80 60 40 20 %

	DEPTH METER
	1870.00
	1873.00
	1876.00
	1879.00
	1882.00
	1885.00
	1888.00
	1891.00
	1888.00
	1891.00
	1894.00
	1897.00
	1900.00
	1903.00
	1900.00
	1903.00
	1906.00
	1909.00
	1912.00
	1915.00
	1918.00

CØRE NØ: 1
CØRE NØ: 2
CØRE NØ: 3

LOGGED INTERVAL:

CORE NO.1 :
1870.00 - 1888.00

CORE NO.2 :
1888.00 - 1900.00

CORE NO.3 :
1900.00 - 1917.00

COMPANY: STATØIL | FIELD: 34/10 | FILE:

WELL: 34/10-15 | COUNTY: | DATE: AUG 1983

LOCATION: | STATE: NØRWAY | ELEV.:

CORE GRAPH

GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

LABORATORY

CORE-GAMMA SURFACE-LOG
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

DEPTH METER

POROSITY % — x — x —
PERMEABILITY mD HORIZONTAL — ▫ —
VERTICAL — △ —

% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %

1000mD 100mD 10mD 0

FLUID SATURATION

OTHER | OIL | WATER

80 60 40 20 %

CORE NO: 4

1917.00
1920.00
1923.00
1926.00
1929.00
1932.00
1935.00

CORE NO: 5

1938.00
1935.00
1938.00
1941.00
1944.00

CORE NO: 6

1947.00
2170.00
2173.00
2176.00
2179.00
2182.00
2185.00
2188.00

LOGGED INTERVAL:

CORE NO.4 :
1917.00 - 1935.00

CORE NO.5 :
1935.00 - 1944.00

CORE NO.6 :
2170.00 - 2187.50

COMPANY: STATØIL | FIELD: 34/10 | FILE:

WELL: 34/10-15 | COUNTY: | DATE: AUG 1983

LOCATION: | STATE: NØRWAY | ELEV.:

CORE GRAPH

GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

LABORATORY

CORE-GAMMA SURFACE-LOG
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

DEPTH METER

POROSITY % — PERMEABILITY mD (HORIZONTAL, VERTICAL)
% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %
1000mD 100mD 10mD 0

FLUID SATURATION
OTHER OIL WATER
80 60 40 20 %

CORE NØ: 7

2188.00
2191.00
2194.00
2197.00
2200.00
2203.00

CORE NØ: 8

2201.00
2204.00
2207.00
2210.00
2213.00
2216.00

CORE NØ: 9

2301.00
2304.00
2307.00
2310.00
2313.00
2316.00
2319.00

LOGGED INTERVAL:

CORE NO.7 :
2187.50 - 2201.00

CORE NO.8 :
2201.00 - 2213.00

CORE NO.9 :
2301.00 - 2316.50

COMPANY: STATØIL | FIELD: 34/10 | FILE:

WELL: 34/10-15 | COUNTY: | DATE: AUG 1983

LOCATION: | STATE: NORWAY | ELEV.:

CORE GRAPH

GECO
GEOPHYSICAL COMPANY
OF NORWAY A.S

VERTICAL SCALE: 1:200

LABORATORY

CORE NØ: 10

CORE-GAMMA SURFACE-LOG
(PATENT APPLIED FOR)
GAMMA RAY
RADIATION INCREASE ----->
VOLTAGE: 985 VOLT
INTEGRATING TIME: 11 SEC
COUNTS PER MINUTE: 10 K

DEPTH METER

POROSITY % 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %
PERMEABILITY mD HORIZONTAL
VERTICAL
1000mD 100mD 10mD 0

FLUID SATURATION
OTHER OIL WATER
80 60 40 20 %

2317.00
2320.00
2323.00
2326.00

LOGGED INTERVAL:

CORE NO.10 :
2316.50 - 2323.00