

STATOIL

WELL: 34/10-I

CORE: I - I3

DATE: 30.AUGUST 1978

LABORATORY

FINAL REPORT



Company Statoil Date aug. 78
 Well 34/10-1 Core no. 3
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1802.55	515	485	18	15	31.0	32.4	35.0	26.3	2.75	S.st. gy.f.gr.sub.ang w.cemented w/mica and org.matter streaks
1803.15	109	97	2.6	1.9	26.3	17.3	19.4	23.6	2.84	A.A. V.F.GR
1803.50	157	141	n.v.	p.p.	31.8				2.72	A.A
1803.85	n.p.p.					19.3	14.7	58.9		
1804.20	n.p.p.									
1804.55	n.p.p.					20.9	5.8	77.9		
1808.15	0.58	0.38	0.82	0.55	17.3	19.6	54.2	18.5	2.96	S.St.Gv. silt v.w. cemented calcitic w/mica
1808.50	n.p.p.					25.0	29.8	45.7		
1809.55 - .61	n.p.p.					37.5	23.3	29.4		
1809.60	n.p.p.					24.9	15.2	55.1		
1811.45	547	517	51	43	29.2	38.4	31.7	32.8	2.86	S.st.GY.F.GR Sub.ang. w.cemented w/mica and org.matter streaks
1812.10	n.p.p.					25.8	30.1	32.9		
1813.05	56	48	2.9	2.1	25.6	27.1	39.9	36.1	2.84	S.ST.GY. V.F.GR.sub.ang w.cemented calcitic w/mica
1813.60	189	169	n.v.	p.p.	34.5				2.68	A.A. non calcitic w/org.matter streaks
1814.05	306	276	n.v.	p.p.	35.6	29.9	31.4	37.4	2.68	A.A
1814.50	45	38	35	30	29.0				2.69	A.A. W/org.matter dots
1815.00	162	145	12	9	33.5	30.9	42.3	29.2	2.72	A.A
1815.40	4.4	3.2	n.v.	p.p.	26.8				2.66	S.ST. Gy. Silt v.w.cemented w/mica.
			1804.60 -	1808.10	shale					
			1808.63 -	1809.60	shale					

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Company Statoil Date aug. 78
 Well 34/10-1 Core no. 4
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1820.55	5289	5209	n.v.	p.p.	32.8	27.4	38.4	32.9	2.72	S.St.GY/BR M.GR. sub. rounded poor cemented w/mica
1821.05						27.9	38.0	25.3		
1821.95						35.4	34.0	32.8		
1822.25						26.1	36.6	28.2		
1822.80						23.6	29.9	44.9		
1823.10						22.1	23.8	31.1		
1823.50						37.6	43.7	21.0		
1824.00						26.1	26.8	25.1		
1825.00						32.2	38.7	38.7		
1825.40						19.6	34.5	33.4		
1829.90						18.0	9.9	79.0		
1830.84	1213	1163	148	133	34.4	31.3	39.3	22.8	2.71	S.ST. GY/BR F.GR. sub. ang. Poor cemented calcitic w/mica and pyrite
1831.00						10.7	17.8	45.7		
1834.95						34.6	14.4	29.9		
	1819.00 - 1822.50		shale							
	1820.50 - 1822.00		loose sand							
	1825.50 - 1829.00		shale							
	1831.70 - 1834.90		shale							
	end of core no. 4.									

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Company Statoil Date aug. 78
 Well 34/10-1 Core no. 5
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1836.00	2352	2272	1870	1810	31.9	29.8	10.5	48.5	2.67	S. St. GY/BR. m. gr sub. ang. Poor cemented w/ mica and org. matter dots
1836.35	3676	3596	3317	3237	32.1				2.65	A.A
1836.70	2087	2027	2752	2672	31.6	33.2	51.3	12.0	2.72	A.A
1837.00	3594	3514	1359	1309	33.9				2.66	A.A
1837.35	n.m.p.		478	448	35.4	24.9	23.3	14.1	2.64	A.A
1837.70	3599	3519	5621	5541	33.4				2.64	A.A
1838.10	8825	8725	8246	8146	37.0	32.9	27.9	19.2	2.64	S. ST GY M. GR sub. ang Very poor cemented w/ traces of mica
1838.35	12263	12163	n.v.p.p.		36.0				2.63	A.A
1838.70	4905	4825	n.v.p.p.		36.5	38.6	38.7	24.7	2.66	A.A Poor cemented
1839.00	7625	7525	n.v.p.p.		35.6				2.64	A.A
1839.56 - .69						28.4	23.4	19.0		
1839.35						34.6	37.1	23.5		A.A
1839.70	n.p.p.									
1840.00	5499	5419	4075	3995	33.4	26.0	31.4	24.8	2.64	A.A M C.BR
1840.70	1599	1549	1013	963	32.0				2.68	S. ST GY/BR M. GR sub. ang Poor cemented w/ mica and org. matter dots
1841.00	1011	961	801	761	31.7	34.4	37.7	24.9	2.67	A.A
1841.35	2953	2873	2615	2535	33.2				2.67	A.A. M C. GR
1841.70	4497	4417	n.v.p.p.		33.7	35.3	36.2	24.1	2.66	A.A M. GR
1842.00	1243	1193	346	316	30.1				2.66	A.A
1842.35	3369	3289	n.v.p.p.		34.1	28.7	30.7	37.8	2.66	A.A without/ org. matter dots

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Company Statoil Date aug. 78
 Well 34/10-1 Core no. 5
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1842.70	3146	3026	6988	6888	34.8				2.67	S. ST GY. M. GR. sub. ang Poor cemented w/traces of mica
1843.00	6356	6256	6988	6888	36.3	30.7	29.1	23.7	2.66	A.A m C.GR very poor cemented
1843.35	8391	8291	6640	6540	36.4				2.66	A.A
1843.70	5533	5453	4661	4581	34.2	30.1	30.8	21.0	2.66	A.A
1844.00	1249	1199	1239	1189	34.2				2.70	S. ST GY/BR F M. GR sub. ang Poor cemented w/traces of mica and org. matter dots
1844.35	5297	5217	5087	5007	35.5	23.9	28.3	15.9	2.68	M. GR A.A. slight calcitic
1844.80	5435	5355	5630	5550	35.4				2.66	A.A
1845.00	n.p.p.					29.1	20.5	26.1		S. ST GY M C. GR sub. ang Poor cemented w/traces of mica.
1845.35	5526	5446	6111	6011	35.5				2.66	A.A
1845.70	6382	6282	n.v.p.p.		35.1	31.7	39.2	20.9	2.66	S. ST GY/BR M. GR sub. ang poor cemented w/traces of mica and org. matter dots
1846.00	2828	2748	1889	1839	33.9				2.69	A.A
1846.35	n.m.p.		1935	1885	32.7	28.5	17.1	26.0	2.65	A:A
1846.70	1574	1524	1271	1221	33.7				2.70	A.A
1847.00	2824	2744	n.v.p.p.		33.5	28.8	28.4	18.2	2.69	A.A
1847.35	4199	4119	2454	2374	35.6				2.68	A.A
1847.55	2568	2488	2242	2182	35.0	19.1	24.1	8.4	2.66	A.A. F M. GR
1848.25	n.p.p.					31.9	27.2	19.6		
1848.55	3034	2954	2909	2829	34.7				2.71	A.A w/pyrite
1848.95	2681	2601	2180	2120	35.3	32.6	36.1	22.0	2.70	A.A
1849.30	5434	5354	2733	2633	37.6				2.67	S. St. GY/BR M. GR sub. ang Poor cemented w/mica and org. matter streaks

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Company Statoil Date aug. 78
 Well 34/10-1 Core no. 5
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1849.65	2736	2656	2733	2653	34.1	34.1	33.6	21.2	2.69	S. ST. GY/BR M. GR sub. ang poor cemented w/mica and org. matter streaks
1850.00	n.h.p.p.		840	800						
1850.35	2719	2639	1617	1567	36.1	32.7	32.0	28.0	2.71	A.A. F M. GR
1850.45 - .57						20.2	10.9	26.1		
1850.75	5794	5714	n.v.p.p.		35.3				2.65	S. ST. GY. M. GR sub. ang poor cemented w/mica
1851.15	n.m.p.		n.v.p.p.		34.5	34.9	35.5	23.3	2.67	A.A. without mica
1851.50	4325	4245	3026	2946	34.3				2.69	A.A. GY/BR w/traces of mica and org. matter streaks
1851.55 - .75						32.1	16.7	28.7		
1851.85	6427	6327	4279	4199	36.6	25.2	28.6	14.3	2.67	A.A. very poor cemented
1852.20	3989	3909	1391	1341	36.1				2.69	A.A. Poor cemented
1853.05	4027	3947	n.v.p.p.		36.0	32.6	29.6	18.9	2.68	A.A. F M. GR
			n.m.p. means no measurements possible							
			1847.55 - 1848.20		loose sand					
			1852.40 - 1853.00		loose sand					
			end of core no. 5							

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Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 6
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1853.30	n.p.p.					37.0	34.3	24.3		
1853.52 - .69						34.5	21.2	35.1		
1853.70			4129	4049						
1854.12 - .21						32.5	17.0	30.9		
1854.35	n.p.p.					22.5	13.8	16.5		
1854.70	n.m.p.				35.4				2.68	S.ST.wh M.GR sub.ang poor cemented w/traces of mica.
1855.30	n.p.p.					33.6	33.4	26.5		
1855.65					36.2				2.66	A.A:
1855.87 - .98						27.3	13.3	27.4		
1856.00	n.p.p.					27.0	21.5	27.8		
1856.30	2709	2629	1380	1330	33.5				2.73	A.A w/PYRITE
1856.65	1929	1869	1380	1330	31.2	29.6	37.1	27.3	2.74	A. wh/gy
1856.72 - .88						31.2	20.9	27.1		
1857.00	5639	5559	n.v.p.p		35.3				2.68	A.A. wh. without/pyrite
1857.35	2449	2369	962	922	33.2	25.9	19.5	27.2	2.74	wh/Gy A:A w/pyrite
1857.65	n.p.p.									
1858.00	n.m.p.				28.4	27.6	21.9	28.9	2.73	A.A M C.GR
1858.48 - .61						30.6	23.7	35.2		
1858.65	3552	3472	1838	1778	32.3	28.7	22.4	21.6	2.74	A.A. WH. M.GR
1858.95	n.h.p.p.		1060	1010						

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Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 6
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1859.25	378	348	693	653	26.2	22.6	24.4	36.6	2.85	S. ST wh. F. GR sub. ang w. cemented, calcitic w/ mica and pyrite
1859.48 -.63	7398	7298	n.v.p.p.		31.9	25.2	22.4	34.1	2.69	S. st. GY. sub. ang. coarse gr. poor cemented calcitic w/ mica
1860.55	6112	6012	n.v.p.p.		32.8	33.9	25.3	24.1	2.71	A.A. M. C. GR poor cemented non calcitic
1860.85	n.p.p.									

LABORATORY

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Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 7
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1865.45	n.p.p.					35.6	26.4	36.9		
1865.90	n.p.p.									
1866.25	n.p.p.					34.0	31.2	38.7		
1866.60	n.p.p.									
1866.85 - .95						27.2	18.9	30.7		
1867.00	6977	6877	n.v.p.p.		34.6	38.1	32.1	38.1	2.66	S.st. wh. M. C.gr sub. ang. poor cemented w/mica.
1867.30	n.p.p.									
1867.60	8513	8413	n.v.p.p.		36.6	36.2	27.8	33.5	2.66	A.A
1867.90 68.00						28.8	12.8	21.3		
1868.20	n.p.p.									
1868.60	3516	3436	n.v.p.p.		35.0	29.2	19.7	42.3	2.71	A.A. wh/Br.
1868.80 .90						24.5	17.4	25.2		
1869.35	4145	4065	n.v.p.p.		36.4	21.2	11.6	13.6	2.67	A.A. F M.gr.
1870.10 .16						38.1	22.7	29.2		
1870.25	n.h.p.p.		4048	3968		30.1	24.4	34.2		
1870.55	n.p.p.									
1870.81 -.87						39.2	27.4	29.0		
1870.95	1780	1720	1444	1394	35.6	32.1	17.9	31.3	2.67	A.A
1871.45	n.p.p.									
1871.69 -.75						34.1	25.9	33.6		

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978

Well 34/10-1 Core no. 7

Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION	
	KA	KL	KA	KL			SO	STW.			
1871.80	671	641	482	452	33.0	22.8	21.6	20.6	2.75	S.St.Gy. F.Gr. w.cemented w/mica.	
1872.10	n.h.p.p.		671	641							
1872.52 -.58	735	695	n.v.p.p.		33.4	25.2	24.5	25.4	2.70	S.St. GY.Fine gr. sub.ang well cemented w/mica	
1872.60	666	636	486	456	34.1	18.2	14.5	14.5	2.72	S.st.gy.v.f.gr.w.cemented w/mica w/org.matter	
1873.00	1119	1069	818	778	35.4				2.70	A.A. without/org.matter poor cemented	
1873.30	1166	1116	855	815	35.5	34.8	29.2	29.2	2.67	A.A	
1873.34 -.39						24.7	16.8	23.8			
1873.60	689	659	830	790	34.8				2.70	A.A. w.cemented	
			end of core no. 7.								

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 8
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1875.10	323	293	184	164	33.9	28.8	21.1	40.0	2.69	s.st. gy. V.F. Gr. w.cemented w/mica
1875.45	794	754	405	375	34.9				2.73	A.A. v.f - f.gr.
1875.46 -.57	776	736	452	422	33.3	24.7	23.9	38.9	2.71	s.st.gy.fine gr.sub.ang well cemented calcitic w/mica.
1875.75	972	732	n.v.p.p.		36.0	30.4	25.1	37.3	2.68	s.st.gy. v.f - f.gr. poor cemented w/mica.
1876.10	85	74	169	153	28.4				2.76	A.A. v.f.gr. well cemented
1876.45	621	591	389	359	33.1	34.4	30.2	34.7	2.75	A.A. V:F - F.GR. slight calcitic
1876.54 -.62	812	772	489	459	33.4	35.4	28.3	34.6	2.72	s.st.gy.fine gr.sub.ang well cemented calcitic w/mica.
1876.80	874	834	555	525	34.3				2.74	s.st.gy.v.f.gr.w.cemented w/org.matter w/mica.
1877.40	208	188	70	61	29.5	32.1	27.3	35.0	2.80	A.A. calcitic
1877.66 -.74	3.8	2.8	0.70	0.46	15.0	12.2	10.9	19.7	2.75	s.st.gy.very fine to silt gr.very well cemented v.calcitic w/mica
1877.75	14	11	4.0	2.9	17.7				2.72	s.st.v.f.gr. gy. v.w.cemented very calcitic w/mica.
1878.10	762	722	327	297	33.7	27.4	26.9	35.3	2.72	s.st. f.gr. gy/br.. w.cemented w/mica
1878.45	1026	976	535	505	34.2				2.71	s.st. v.f. - f.gr. gy poor cemented w/mica slight calcitic
1878.55 -.67	762	722	396	366	33.3	36.3	28.7	33.5	2.69	s.st.gy fine gr.sub.ang poor cemented w/mica.
1878.80	1263	1213	682	652	35.9	31.2	26.3	32.5	2.69	s.st.v.f.-f.gr. gy poor cemented w/mica non calcitic
1879.15	1174	1124	959	919	36.0				2.70	A.A. V.F - F.GR
1879.50	1164	1114	n.v.p.p.		36.2	28.6	25.1	28.0	2.69	A.A. w/org.matter
1879.81 -.92	880	840	497	467	33.0	38.4	25.8	34.1	2.68	s.st.gy. fine gr.sub.ang poor cemented w/mica.
1880.00	537	507	403	373	33.8				2.72	s.st.v.f.-f.gr.gy. w.cemented w/mica slight calcitic
1880.35	1121	1071	739	699	35.6	33.3	26.5	32.2	2.70	A.A. poor cemented

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 Well 34/10-1 Core no. 8
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1880.65	450	420	264	244	33.5				2.75	s.st.v.f-f.gr.gy w.cemented w/mica slight calcitic
1880.77 -.82	n.p.p.									
1881.00	1159	1109	622	592	36.0	24.6	21.9	28.1	2.70	A.A. F.GR poor cemented
1881.40	957	917	604	574	35.0				2.71	A.A. v.f.-f.gr. w.cemented
1881.58 -.66	1237	1187	877	837	35.2	38.1	30.8	33.0	2.67	s.st.gy fine gr.sub.ang poor cemented w/mica
1882.30	843	803	660	630	34.8	20.0	22.1	44.1	2.72	s.st.v.f.-f.gr. w.cemented
1882.63 -.68	n.p.p.									
1882.70	1104	1054	650	620	36.3				2.72	s.st.gy.f.gr.sub.ang Poor cemented w/mica.
1883.05	1005	955	672	642	35.6	17.2	21.5	22.8	2.70	A.A
1883.40	630	600	n.v.p.p.		35.3				2.74	A.A. v.f.-f.gr. w.cemented
1883.81 -.95	1788	1728	1370	1320	36.6	34.3	21.3	40.8	2.67	s.st.gy fine gr.sub.ang poor cemented w/mica.
1883.95	1652	1602	1308	1258	35.7	35.6	28.5	32.7	2.71	s.st.gy.f.gr. sub.ang poor cemented w/mica.
1884.30	1613	1563	n.v.p.p.		37.0				2.70	A.A. w/org.matter
1884.60	328	298	153	138	31.1	21.7	27.0	27.0	2.74	A.A. VF-F.GR. w.cemented
1884.95	1202	1152	904	864	36.0				2.70	A.A. poor cemented
1885.04 -.09	n.p.p.					34.6	30.2	32.1		
1885.30	1467	1417	1061	1011	36.7	30.9	26.4	31.2	2.70	A.A. F.GR
1885.65	1098	1048	799	759	35.2				2.70	A.A. VF-F.GR.
1886.00	1381	1331	1034	984	35.9	30.6	31.8	28.9	2.70	A.A. without/org.matter
1886.07 -.15	1392	1342	1150	1100	35.0	38.3	28.9	31.6	2.67	s.st.gy.fine gr.sub.ang poor cemented w/mica.

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 8
 Field State Norway.....

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1886.35	1480	1430	n.v.p.p.		36.2				2.69	s.st.gv.f.gr.sub.ang. poor cemented w/mica w/org.matter
1886.70	1213	1163	n.v.p.p.		35.4	34.8	30.1	37.4	2.71	A.A.slight calcitic
1888.49										s.st. gy. fine gr.sub.ang
- 55	1434	1384	975	935	35.0	33.5	27.5	31.3	2.68	poor cemented w/mica.
			1886.80 - 1889.50			loose sand				
			end of core no. 8							

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no.9
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1893.55	269	249	145	130	29.8	30.9	24.7	33.5	2.70	S.ST. G fine gr. sub.ang well cemented w/mica.
1893.65 -.72	308	278	121	108	29.5	30.2	25.1	38.0	2.69	s.st. fine gr. sub.ang w.cemented calcitic
1893.90	109	97	305	275	29.8				2.70	s.st.gv fine gr. sub.ang well cemented w/mica.
1895.50	n.p.p.					33.6	21.4	56.7		
1895.54 -.62						31.3	23.0	36.2		
1895.90	n.p.p.					36.2	28.5	52.2		
1898.23 -.30						32.7	26.6	34.8		
1901.10	n.p.p.					27.3	23.7	49.1		
1904.05	492	462	309	279	32.7	22.9	16.6	24.4	2.67	A.A
1904.32 -.43	492	462	321	291	32.7	24.9	22.2	25.7	2.67	s.st.gv v.fine-finegr. sub.ang.w.cemented w/mica
1904.45	552	522	799	759	34.7				2.66	s.sv.gv: fine gr. sub.ang: well cemented w/mica.
1904.75	397	367	676	646	34.1	19.8	12.9	12.9	2.66	A.A
1905.10	242	222	403	373	32.4				2.69	A.A
1905.70	483	453	328	298	36.3	34.0	28.1	34.5	2.67	A.A
1906.02 -.06	559	529	463	433	33.8	35.0	28.7	30.6	2.66	s.st.gv: v.fine-fine gr. sub.ang: w.cemented w/mica.
1906.35	708	668	478	438	34.4	31.7	26.9	31.6	2.67	s.st.gv. fine gr.sub.ang well cemented w/mica.
1906.70	729	689	416	386	34.8				2.66	A.A
1907.05	442	412	171	154	32.2	29.2	23.1	26.8	2.67	A.A
1907.45	358	328	202	182	31.7				2.68	A.A
1907.80	432	402	136	122	32.3	26.6	23.7	33.8	2.68	A.A

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 9
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1908.10	221	201	100	88	30.3				2.70	s.st. Gy. fine gr. sub.ang. well cemented w/mica.
1908.16 - .30	167	151	83	73	29.5	30.3	21.0	36.8	2.75	s.st. Gy v.fine-fine gr. sub.ang. well cemented w/mica calcitic
1908.60	114	101	68	59	27.2	23.3	19.9	24.9	2.73	s.st.Gy fine gr.sub.ang well cemented w/mica calcitic
1909.00	221	201	107	95	30.2				2.69	A.A
1909.35	97	85	60	52	28.4	29.1	19.6	33.7	2.72	S.st. GY fine gr.sub.ang well cemented w/mica calcitic
1909.39 - .46						18.7	12.3	17.3		
1909.65	217	197	146	131	29.8				2.71	A.A
1910.00	261	241	176	156	30.4	26.1	25.3	27.6	2.70	A.A
1910.30	293	273	73	63	31.2				2.70	A.A
1910.80	191	171	105	93	30.8	26.4	22.7	28.5	2.69	A.A. without calcitè
1911.10	148	133	79	69	30.8				2.70	A.A. w/calcite
11.20 - .25						20.0	27.5	28.6		
										1894.14 - 1904.00 meter = loose sand
										end of core no. 9

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 10
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1911.40	96	85	106	94	29.7	31.2	29.7	39.4	2.76	s.st. gy. Fine-very gr. v.w. cemented calcitic w/mica.
1911.63 .68						40.5	39.6	37.4		
1911.80	n.p.p.									
1912.30	n.p.p.					29.0	26.2	33.2		
1912.65	475	445	253	233	34.1				2.68	s.st. gy. fine gr. sub. ang. well cemented w/mica.
1912.91 - .96	572	542	240	220	34.4	35.0	23.6	41.7	2.66	s.st. gy. v. fine-fine gr. well cemented w/mica.
1913.00	127	113	71	62	31.3	27.9	19.5	43.0	2.72	s.st. gy. fine-very fine gr. v.w. cemented w/mica.
1913.30	372	342	202	182	33.3				2.69	s.st. gy. fine-very fine gr. sub. ang. well cemented w/mica.
1913.65	363	333	197	177	33.2	23.5	20.6	33.7	2.68	A.A
1914.00	408	378	304	274	33.9				2.68	A.A
1914.30 - .37	576	546	408	378	34.4	33.9	24.5	39.3	2.66	s.st. gy. v. fine-fine gr. well cemented w/mica.
1914.40	424	394	539	509	31.6	32.1	26.2	35.6	2.70	s.st. gy. fine-very fine gr. sub. ang. well cemented w/mica w/org. matter
1914.70	729	689	496	466	35.1				2.67	A.A. without org. matter
1915.00	529	499	374	344	33.8	31.3	23.2	34.2	2.68	A.A
1915.09 - .16	507	477	366	336	33.4	21.7	20.3	24.4	2.69	s.st. gy. v. fine-fine gr. well cemented w/mica.
1915.85	399	369	231	211	32.6	33.7	23.0	38.0	2.72	s.st. gy. fine-v. fine gr. sub. ang. w. cemented w/mica.
1916.35	296	276	104	93	34.1				2.70	A.A.
1916.67 - .73	818	778	551	521	36.3	35.2	26.0	38.7	2.66	s.st. gy. v. fine-fine gr. well cemented w/mica.
1916.80	456	426	297	277	34.5	22.4	18.8	25.4	2.68	s.st. fine-very fine gr. sub. ang. well cemented w/mica.
1917.15	430	400	245	225	34.1				2.68	A.A

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 10
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION	
	KA	KL	KA	KL			SO	STW.			
1917.50	127	113	67	58	29.9	24.4	13.5	45.4	2.72	s.st.gv.fine-very fine gr. sub.ang. well cemented w/mica w/calclitic	
1917.85	167	151	106	94	30.7				2.71	A.A	
1918.07 - .13	264	244	124	111	31.5	27.9	28.7	35.6	2.69	s.st.gv.v.fine-fine gr. well cemented w/mica.	
1918.45	106	94	58	50	29.1	28.5	22.5	46.7	2.72	s.st.gv.fine-very fine gr. sub.ang. well cemented w/mica.	
1918.75	113	100	28	23	28.4				2.72	s.st.gv. fine-very fine gr. very well cemented, calcitic w/mica.	
1919.10	119	106	31	26	29.8	26.3	21.7	39.0	2.69	A.A. without calcitic	
1919.17 - .25	150	135	50	43	30.4	35.5	33.8	37.0	2.68	s.st.gv.v.fine-fine gr. well cemented w/mica.	
1919.45	56	48	7.1	5.4	27.6				2.70	s.st.gv.fine-very fine gr. very well cemented, calcitic w/mica w/org. matter	
1920.20	n.p.p.					21.4	19.5	40.2			
1920.50	71	62	87	76	30.0	32.1	27.8	37.5	2.67	A.A. without org.matter	
1921.45	263	243	n.v.p.p.		33.6	33.5	30.4	35.6	2.67	A.A	
1921.66 - .73	116	103	n.v.p.p.		32.1	33.3	22.3	43.3	2.66	s.st.gv.v.fine-fine gr. well cemented w/mica.	
			1919.50 - 1922.11 meter = rubble								
			end of core no 10.								

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 11
 Field State Norway,

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
1923.15	83	74	50	43	31.6	33.3	19.7	46.9	2.68	s.st.gy.fine-very fine gr. very well cemented w/mica
1923.55	78	69	21	17	28.5				2.76	A.A calcitic
1923.85	152	137	4.6	3.5	28.7				2.74	s.st.gy.fine-very fine gr. well cemented w/mica.
1924.15	65	245	61	53	34.1				2.67	A.A.
1924.70	153	138	56	48	33.1				2.67	A.A
1924.88 - .97	327	297	76	66	34.0	32.4	22.7	40.0	2.66	s.st.gy.v.fine-fine gr. well cemented w/mica.
1925.00	266	246	83	74	34.3	26.6	15.8	30.0	2.66	s.st.gy.fine-very fine gr. well cemented w/mica.
1925.30	12	9	n.v.p.p.		25.7				2.72	A.A. very well cemented
1925.75	n.p.p.									
1926.10	0.026	0.01	0.013	0.01	9.2	2.9	0.0	61.8	2.95	s.st. gy. very fine-silt gr. very well cemented calcitic w/mica.
1926.70	69	60	3.1	2.3	29.0				2.67	s.st. gy.fine-very fine gr. very well cemented w/mica, org.matter
1927.00	49	42	1.02	0.69	22.3	25.0	16.7	60.8	2.80	s.st. gy.fine-very fine gr. very well cemented w/mica calcitic
1928.10	16	13	7.7	5.9	28.4	24.9	12.4	55.5	2.69	A.A. without calcitic
1928.40	33	28	2.1	1.5	24.8				2.77	A.A. calcitic w/org.matter
1928.75	n.p.p.									
1929.10	0.051	0.03	0.013	0.01	4.9	4.7	0.0	70.2	2.93	s.st.gy.very fine-silt gr. very well cemented calcitic w/mica.
1929.45	15	12	n.p.p.		26.3				2.68	s.st. gy.fine-very fine gr. very well cemented w/mica.
1929.75	40	34	21	17	29.7				2.70	A.A
1930.05	2.5	1.8	2.6	1.9	17.1	7.4	0.0	50.3	2.78	A.A. calcitic
1931.85	2.1	1.5	0.57	0.38	14.4	3.3	0.0	67.8	2.83	A.A.

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no.11
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION	
	KA	KL	KA	KL			SO	STW.			
1932.50	97	87	3.6	2.7	30.6	31.4	22.8	47.0	2.69	s.st.gv.fine-very fine gr. very well cemented w/mica	
1932.80	300	270	2.6	1.9	33.5				2.70	s.st.gv.fine-very fine or well cemented w/mica org. matter	
1933.15	n.h.p.p.		0.104	0.03							
1933.50	0.102	0.06	0.051	0.03	8.5	5.1	0.0	63.4	2.89	s.st. gy. very fine-silt or very well cemented w/mica calcitic org. matter	
1933.85	0.42	0.27	0.46	0.30	13.2				2.79	s.st.gv.fine-very fine or very well cemented w/mica calcitic	
1934.25	n.p.p.										
1934.75	1.2	0.8	0.68	0.46	30.6	22.0	5.8	79.5	2.73	A.A	
1935.10	n.p.p.										
1935.40	n.h.p.p.		0.197	0.12		29.2	12.1	48.6			
1936.10	305	275	4.5	3.4	32.7	27.3	10.6	73.6	2.74	S.st. gy.fine-very fine or well cemented w/mica.	
1936.45	93	83	4.5	3.4	32.0				2.67	A.A. w/org.matter	
1936.80	n.p.p. ^{m.}		n.v.p.p.		27.5				2.70	A.A. Calcitic.	
1937.20	n.h.p.p.		4.5	3.3		16.7	11.4	55.7			
1937.50	0.026	0.01	0.026	0.01	1.9				2.92	s.st.gv.very fine-silt or very well cemented w/mica calcitic	
1937.90	n.p.p.										
1938.25	n.p.p.					22.5	4.4	73.2			
1938.55 - .65						23.7	3.2	83.5			
			1927.35 - 1928.05 = rubble								
			1930.45 - 1931.60 = rubble end of core no. 11								

LABORATORY

FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no.13
 Field State Norway

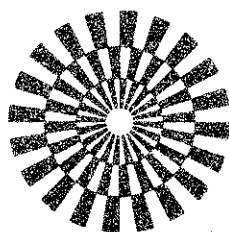
DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
2232.55	0.57	0.37	0.26	0.16	22.7	25.0	2.0	84.7	2.72	s. st. gv. med-very fine gr. sub. and very well cemented calcitic w/mica.
2233.05	0.60	0.39	0.33	0.21	21.8				2.70	A.A
2233.45	n.p.p.					25.5	0.5	87.8		
2234.45	0.207	0.130	0.077	0.04	12.5	14.9	0.9	84.3	2.72	A.A
2234.90	0.26	0.160	0.105	0.06	16.2				2.71	A.A
2236.00	n.p.p.					27.7	1.8	80.3		
2236.40	1.8	1.3	n.m.p.		21.9				2.71	A.A
2237.00	0.63	0.42	0.37	0.23	22.1	25.4	0.5	82.4	2.71	A.A
2237.50	1.4	1.0	0.41	0.26	21.5				2.70	A.A
2238.50	n.p.p.					28.2	1.8	82.4		
2238.40	1.9	1.3	0.47	0.30	23.0				2.71	A.A
2238.95	0.85	0.57	0.42	0.27	22.4	26.1	0.5	84.1	2.70	A.A
2239.60	0.159	0.100	0.104	0.06	15.6				2.72	A.A
2240.10	0.212	0.130	0.129	0.08	14.1	13.0	0.0	82.5	2.72	A.A
2240.60	0.62	0.41	0.32	0.20	21.2				2.70	A.A
2241.15	0.53	0.34	0.26	0.16	21.5	23.6	0.5	80.7	2.71	A.A
2241.70	0.78	0.52	0.62	0.41	22.1				2.70	A.A
2242.10	1.3	0.91	0.88	0.59	23.5	27.9	0.0	82.9	2.71	A.A
2243.20	n.p.p.									
	ukonsolidert sand: depth (m) 2233.45-2234.35									

LABORATORY FINAL REPORT



Company Statoil Date aug. 1978
 Well 34/10-1 Core no. 13
 Field State Norway

DEPTH	HORIZONTAL PERMEABILITY MILLIDARCY		VERTICAL PERMEABILITY MILLIDARCY		HELIUM POROSITY %	SATURATION POROSITY %	PORE-SATURATION PORESATORAT		GRAIN DENS.	FORMATION DESCRIPTION
	KA	KL	KA	KL			SO	STW.		
						2235.10	-	2235.95		
						2237.60	-	2238.25		
						2243.30	-	2244.50		
						end of core no. 13.				



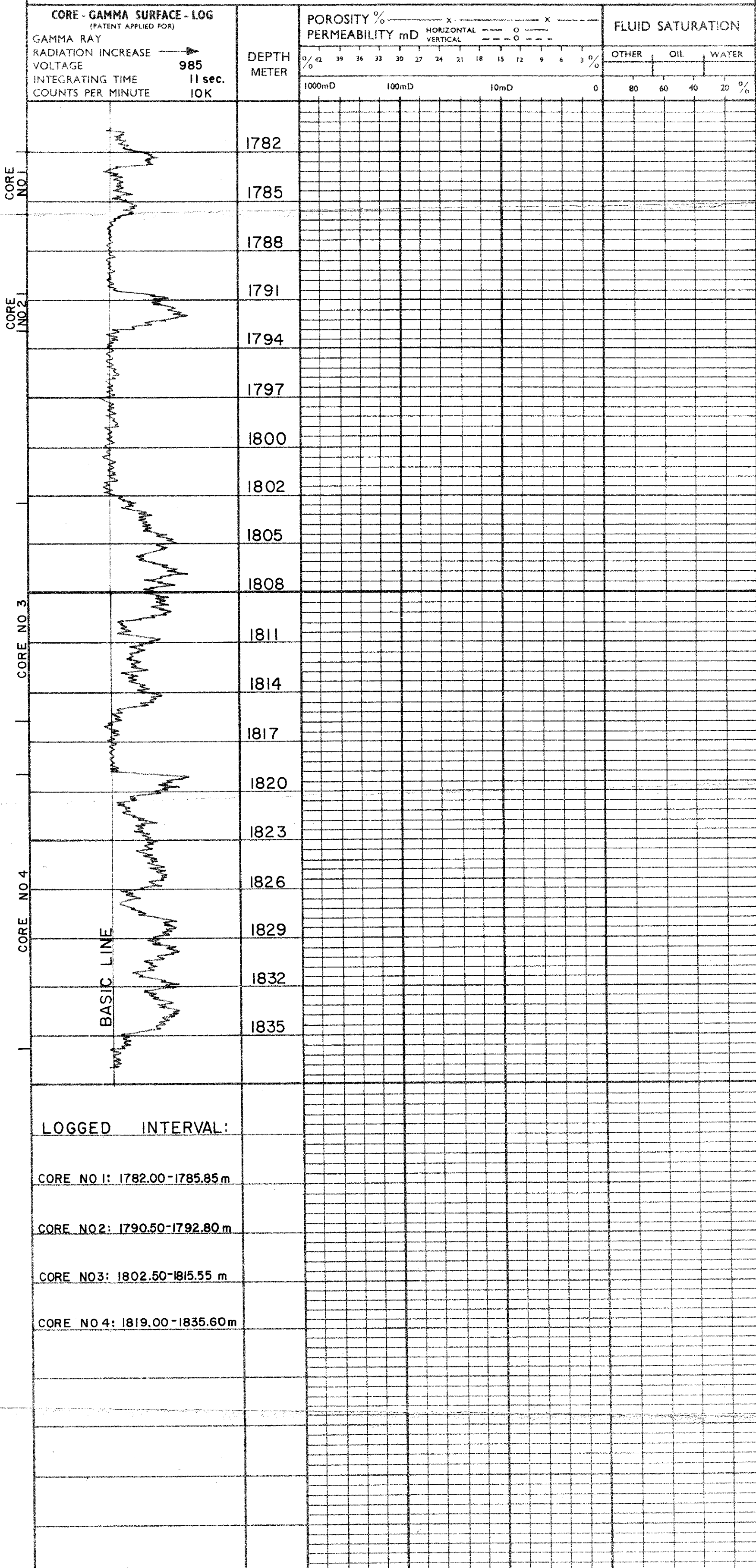
statex as laboratory

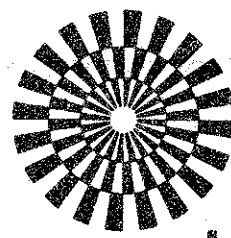
COMPANY STATOIL FIELD _____ FILE C.A. 204
 WELL 34/10-1 COUNTY _____ DATE _____
 LOCATION _____ STATE NORWAY ELEV _____

CORE GRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Statex laboratories and its officers and employees.

VERTICAL SCALE: 1 : 200





stalex as laboratory

COMPANY STATOIL FIELD _____ FILE C.A. 204
WELL 34/10-1 COUNTY _____ DATE _____
LOCATION _____ STATE NORWAY ELEV. _____

CORE GRAPH

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Stalex laboratories and its officers and employees.

VERTICAL SCALE: 1 : 200

CORE - GAMMA SURFACE - LOG (PATENT APPLIED FOR)		DEPTH METER	POROSITY %				FLUID SATURATION			
GAMMA RAY RADIATION INCREASE → 985 VOLTAGE 11 sec. INTEGRATING TIME 10K COUNTS PER MINUTE			PERMEABILITY mD				OTHER	OIL	WATER	
			HORIZONTAL VERTICAL							
			X ——— X O ——— O							
			0% 42 39 36 33 30 27 24 21 18 15 12 9 6 3 %							
			1000mD 100mD 10mD 0				80 60 40 20 %			
CORE NO 9		1892								
		1895								
		1898								
		1901								
		1904								
		1907								
		1910								
		1913								
	CORE NO 10		1916							
			1919							
			1922							
			1925							
	CORE NO 11		1928							
			1931							
			1934							
		1937								
		1940								
CORE NO 12		1943								
		1946								
		1949								
		1952								
LOGGED INTERVAL:										
CORE NO 9: 1893.50 - 1911.30 m										
CORE NO 10: 1911.30 - 1922.11 m										
CORE NO 11: 1923.10 - 1938.75 m										
CORE NO 12: 1938.75 - 1951.13 m										

