

CORE ANALYSIS REPORT

FOR

STATOIL

34/10-19



CORE LAB NORSK

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COAST CENTRE BASE
ÅGOTNES
BERGEN NORWAY
Postboks 63—CCB

Statoil
Damsgårdsgt. 131
PO Box 1212

5001 BERGEN

Bergen, 9. March 1984

Attn.: I. Morvik


Gentlemen,

On the 28th. November, 1983 Core Lab Norsk A/S received 44,3 metres of core from Statoil well 34/10-19.

Conventional core analysis was performed and the results are contained herein. Note that the liquid permeability (kl) results are not measured but are derived from a theoretical chart.

We thank you for this opportunity to be of service once again.

Yours,


Steve Erskine
Core Analysis supervisor

STATOIL
34/10-19

DATE : JAN 1984
FORMATION :
DRLG. FLUID:
LOCATION :

FILE NO : NOR 830022
ANALYSTS : SE
ELEVATION:

SAMPLE NUMBER	DEPTH	PERM. TO AIR HORIZTL KL CORR	He	POROSITY FLD	FLUID OIL	FLUID SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
CORE 1									
1	1763.00							5	CLAYSTONE
2	1763.33							17	AA
3	1763.66							18	AA
4	1764.00							15	AA
5	1764.33							20	AA
6	1764.66							15	AA
7	1765.00							20	AA
8	1765.33							24	AA
9	1765.66							22	AA
10	1766.00							17	AA
11	1766.33							18	AA
12	1766.66							26	AA
13	1767.00							28	AA
14	1767.33							26	AA
15	1767.66							20	AA
16	1768.00							28	AA
17	1768.33							24	AA
18	1768.66							21	AA
19	1769.00							21	AA
20	1769.33							18	AA
21	1769.66							12	AA
22	1770.00							18	AA
23	1770.33							21	AA
24	1770.66							18	AA
25	1771.00							20	AA

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FILE NO : NDR 830022
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SAMPLE NUMBER	DEPTH	PERM. TO AIR HORIZTL KL CORR	POROSITY He	FLD OIL	FLUID SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
26	1771.33						23	AA
27	1771.66						21	AA
28	1772.00						17	AA
29	1772.33						20	AA
30	1772.66						23	AA
31	1773.00						16	AA
32	1773.33						18	AA
33	1773.66						16	AA
34	1774.00						16	AA
35	1774.33						15	AA
36	1774.66						21	AA
37	1775.00						17	AA
38	1775.33						19	AA
39	1775.66						19	AA
40	1776.00						22	AA
41	1776.33						26	AA
42	1776.66						21	AA
43	1777.00	3.20	31.9	14.6	6.8	71.9	12	LS BRN SID/ANK
44	1777.33	1.40	0.97	25.7		2.70	20	LS BRN FOSS
45	1777.66						16	RUBBLE
46	1778.00			23.7	35.9	35.9	9	AA
47	1778.33	1.30	0.90	19.6		2.71	11	LS WH
48	1778.66	0.11	0.07	12.3		2.70	10	AA
49	1779.00	0.02	0.01	4.3	5.7	19.3	20	AA
50	1779.33			25.5		2.70	19	SLST/VFG SST GNSH MICA LAM
51	1779.66			23.4		2.84	16	SLST/VFG SST GNSH MICA
52	1780.00			22.9	26.6	8.6	13	AA
53	1780.33					2.70	6	RUBBLE
54	1780.66						2	PRESERVED SAMPLE

CORE 1 ENDS 1780.7

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SAMPLE NUMBER	DEPTH	PERM. TO AIR HORIZTL KL CORR	POROSITY He FLD	FLUID SATS. OIL WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION	
CORE 2								
55	1847.00	2.50	31.1	36.2	8.3	79.6	2.85	SST VFG GNSH GLAUC CMT CARB
56	1847.33							PRESERVED SAMPLE
57	1847.66	0.34	34.1	35.4	5.9	79.4	2.83	SST VFG GNSH GLAUC CMT CARB
58	1848.00	0.43	35.9	35.0			2.86	AA
59	1848.33						2.90	AA
60	1848.66							PRESERVED SAMPLE
61	1849.00	0.53	33.3	30.6	7.2	82.0	2.78	SST VFG GNSH GLAUC CMT CARB
62	1849.33	0.36	32.0				2.78	AA
63	1849.66	0.27	32.5				2.80	AA
64	1850.00	0.27	34.1	35.6	6.2	81.2	2.84	AA
65	1850.33	0.66	35.2				2.81	AA
66	1850.66	1.10	37.9				2.88	AA
67	1851.00	3.30	36.8	33.9	16.8	63.4	2.80	AA
68	1851.33							PRESERVED SAMPLE
69	1851.66	0.43	41.2				2.82	SLST GNSH GLAUC CMT CARB
70	1852.00	0.18	35.3	37.5	16.8	66.7	3.02	RUBBLE
71	1852.33	0.96	39.8				3.06	SST VFG GNSH GLAUC CMT CARB
72	1852.66	0.02	38.4	25.4	12.2	73.6	3.00	SLST/VFG SST GLAUC CMT CARB
73	1853.00	1.20	14.0				2.85	AA
74	1853.33						2.82	LS GNSH-GRY FOSS
75	1853.66							SLST/VFG SST GNSH
76	1854.00							SLST
77	1854.33							SILTSTONE/CLAY
78	1854.66							AA
79	1855.00							AA
80	1855.33							AA
81	1855.66							AA

CORE 2 ENDS 1855.7

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SAMPLE NUMBER	DEPTH	PERM. TO AIR HORIZTL KL CORR	POROSITY He	FLD OIL	FLUID SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
	CORE 3							
82	1856.50						6	SILTSTONE
83	1856.66						21	AA
84	1857.00						29	AA
85	1857.33						22	AA
86	1857.66						20	AA
87	1858.00						25	AA
88	1858.33						23	AA
89	1858.66						22	AA
90	1859.00						22	AA
91	1859.33						26	AA
92	1859.66						24	AA
93	1860.00						20	AA
94	1860.33						23	AA
95	1860.66						16	AA
96	1861.00						19	AA
97	1861.33						19	AA/PRESERVED SAMPLE
98	1861.66						25	SILTSTONE
99	1862.00						15	AA
100	1862.33						16	SILTSTONE/LIMESTONE
101	1862.66						21	AA
102	1863.00						30	AA
103	1863.33						24	SILTSTONE
104	1863.66						17	AA
105	1864.00						23	AA
106	1864.33						30	AA
107	1864.66						20	AA
108	1865.00						21	AA
109	1865.33						33	AA

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SAMPLE NUMBER	DEPTH	PERM. TO AIR HORIZTL KL CORR	POROSITY He	FLD	FLUID OIL	SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
110	1865.66							33	AA
111	1866.00							23	AA
112	1866.33							19	AA
113	1866.66							23	AA
114	1867.00							21	AA
115	1867.33							20	PRESERVED SAMPLE
116	1867.66							22	SILTSTONE
117	1868.00							21	AA
118	1868.33							16	AA
119	1868.66							20	AA
120	1869.00							20	AA
121	1869.33							25	AA
122	1869.66							30	AA
123	1870.00							24	AA
124	1870.33							25	AA
125	1870.66							20	AA
126	1871.00							20	PRESERVED SAMPLE
127	1871.33							33	SILTSTONE
128	1871.66							27	AA
129	1872.00							23	AA
130	1872.33							27	AA
131	1872.66							23	PRESERVED SAMPLE
132	1873.00							22	SILTSTONE/LIMESTONE
133	1873.33							21	PRESERVED SAMPLE
134	1873.66							15	SILTSTONE
135	1874.00							12	AA
136	1874.33							7	AA/LIMESTONE

CORE 3 ENDS 1874.4

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VERTICAL PERMEABILITIES

SAMPLE NUMBER	DEPTH	PERM. TO AIR VERTICAL KL CORR	POROSITY He	FLD	OIL	FLUID SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
CORE 1									
1	1763.00							5	CLAYSTONE
2	1763.33							17	AA
3	1763.66							18	AA
4	1764.00							15	AA
5	1764.33							20	AA
6	1764.66							15	AA
7	1765.00							20	AA
8	1765.33							24	AA
9	1765.66							22	AA
10	1766.00							17	AA
11	1766.33							18	AA
12	1766.66							26	AA
13	1767.00							28	AA
14	1767.33							26	AA
15	1767.66							20	AA
16	1768.00							28	AA
17	1768.33							24	AA
18	1768.66							21	AA
19	1769.00							21	AA
20	1769.33							18	AA
21	1769.66							12	AA
22	1770.00							18	AA
23	1770.33							21	AA
24	1770.66							18	AA
25	1771.00							20	AA

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ANALYSTS : SE

VERTICAL PERMEABILITIES

SAMPLE NUMBER	DEPTH	PERM. TO AIR VERTICAL	TO AIR CORR	He	POROSITY FLD	FLUID OIL	SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
26	1771.33								23	AA
27	1771.66								21	AA
28	1772.00								17	AA
29	1772.33								20	AA
30	1772.66								23	AA
31	1773.00								16	AA
32	1773.33								18	AA
33	1773.66								16	AA
34	1774.00								16	AA
35	1774.33								15	AA
36	1774.66								21	AA
37	1775.00								17	AA
38	1775.33								19	AA
39	1775.66								19	AA
40	1776.00								22	AA
41	1776.33								26	AA
42	1776.66								21	AA
43	1777.00	0.11	0.07	31.9	14.6	6.8	71.9	3.25	12	LS BRN SID/ANK
44	1777.33	1.40	0.97	25.7				2.70	20	LS BRN FOSS
45	1777.66								16	RUBBLE
46	1778.00								9	AA
47	1778.33	1.10	0.75	19.6		23.7	35.9	35.9	11	LS WH
48	1778.66	1.70	1.19	12.3				2.71	10	AA
49	1779.00	0.06	0.03	4.3	5.7	19.3	38.6	2.70	20	AA
50	1779.33			25.5				2.72	19	SLST/VFG SST GNSH MICA LAM
51	1779.66	0.09	0.05	23.4				2.70	16	SLST/VFG SST GNSH MICA
52	1780.00			22.9	26.6	8.6	74.8	2.84	13	AA
53	1780.33							2.70	6	RUBBLE
54	1780.66								2	PRESERVED SAMPLE

CORE 1 ENDS 1780.7

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VERTICAL PERMEABILITIES

SAMPLE NUMBER	DEPTH	PERM. TO AIR VERTICAL	He	POROSIITY FLD	OIL	FLUID SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
CORE 2									
55	1847.00	0.17	0.10	31.1	36.2	8.3	79.6	2.85	20
56	1847.33								20
57	1847.66	0.10	0.06	34.1				2.83	28
58	1848.00	0.13	0.08	35.9	35.4	5.9	79.4	2.86	26
59	1848.33	0.23	0.14	35.0				2.90	21
60	1848.66								18
61	1849.00	0.18	0.11	33.3	30.6	7.2	82.0	2.78	23
62	1849.33	0.21	0.13	32.0				2.78	20
63	1849.66	0.10	0.06	32.5				2.80	24
64	1850.00	0.09	0.05	34.1	35.6	6.2	81.2	2.84	20
65	1850.33	0.33	0.21	35.2				2.81	21
66	1850.66	0.53	0.35	37.9				2.88	18
67	1851.00	0.93	0.63	36.8	33.9	16.8	63.4	2.80	15
68	1851.33								13
69	1851.66	1.10	0.75	41.2				2.82	17
70	1852.00				37.5	16.8	66.7		25
71	1852.33	0.96	0.65	35.3				3.02	26
72	1852.66	0.39	0.25	39.8				3.06	22
73	1853.00	0.17	0.10	38.4	25.4	12.2	73.6	3.00	22
74	1853.33				14.0			2.85	17
75	1853.66	0.10	0.06	33.6				2.82	19
76	1854.00				25.4	18.9	65.4		15
77	1854.33								14
78	1854.66								22
79	1855.00								20
80	1855.33								17
81	1855.66								10

CORE 2 ENDS 1855.7

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VERTICAL PERMEABILITIES

SAMPLE NUMBER	DEPTH	PERM. TO AIR VERTICAL KL CORR	POROSITY He	FLD FLD	FLUID OIL	SATS. WTR	GRAIN DEN	GAMMA DIGIT	DESCRIPTION
									SILTSTONE
82	1856.50							6	
83	1856.66							21	AA
84	1857.00							29	AA
85	1857.33							22	AA
86	1857.66							20	AA
87	1858.00							25	AA
88	1858.33							23	AA
89	1858.66							22	AA
90	1859.00							22	AA
91	1859.33							26	AA
92	1859.66							24	AA
93	1860.00							20	AA
94	1860.33							23	AA
95	1860.66							16	AA
96	1861.00							19	AA
97	1861.33							19	AA/PRESERVED SAMPLE
98	1861.66							25	SILTSTONE
99	1862.00							15	AA
100	1862.33							16	SILTSTONE/LIMESTONE
101	1862.66							21	AA
102	1863.00							30	AA
103	1863.33							24	SILTSTONE
104	1863.66							17	AA
105	1864.00							23	AA
106	1864.33							30	AA
107	1864.66							20	AA
108	1865.00							21	AA
109	1865.33							33	AA

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110	1865.66							33	AA
111	1866.00							23	AA
112	1866.33							19	AA
113	1866.66							23	AA
114	1867.00							21	AA
115	1867.33							20	PRESERVED SAMPLE
116	1867.66							22	SILTSTONE
117	1868.00							21	AA
118	1868.33							16	AA
119	1868.66							20	AA
120	1869.00							20	AA
121	1869.33							25	AA
122	1869.66							30	AA
123	1870.00							24	AA
124	1870.33							25	AA
125	1870.66							20	AA
126	1871.00							20	PRESERVED SAMPLE
127	1871.33							33	SILTSTONE
128	1871.66							27	AA
129	1872.00							23	AA
130	1872.33							27	AA
131	1872.66							23	PRESERVED SAMPLE
132	1873.00							22	SILTSTONE/LIMESTONE
133	1873.33							21	PRESERVED SAMPLE
134	1873.66							15	SILTSTONE
135	1874.00							12	AA
136	1874.33							7	AA/LIMESTONE

CORE 3 ENDS 1874.4

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PLOTS AND STATISTICS

(a) Core Graph

Gamma radiation, permeability (horizontal, vertical or both), helium or summation of fluids porosity, oil saturation and water saturation are plotted versus depth on a 1:200 scale and other scales if required.

(b) Permeability Versus Porosity Plot

One statistical page accompanies this plot.

Averages are for all data points within the depth interval shown, even if some data points are shown off the top or bottom of the graph grid. Both permeability and porosity scales can be optionally chosen. As standard, the permeability versus porosity plot will include all poro-perm pairs of data measured from the core submitted. Optionally, plots for specific depth intervals or for specific permeability or porosity ranges may be requested.

A best fit line is included in this plot.

(c) Histograms

Accompanying the histogram page are five pages of statistical data and a permeability versus porosity range plot.

Helium porosity is used as standard.

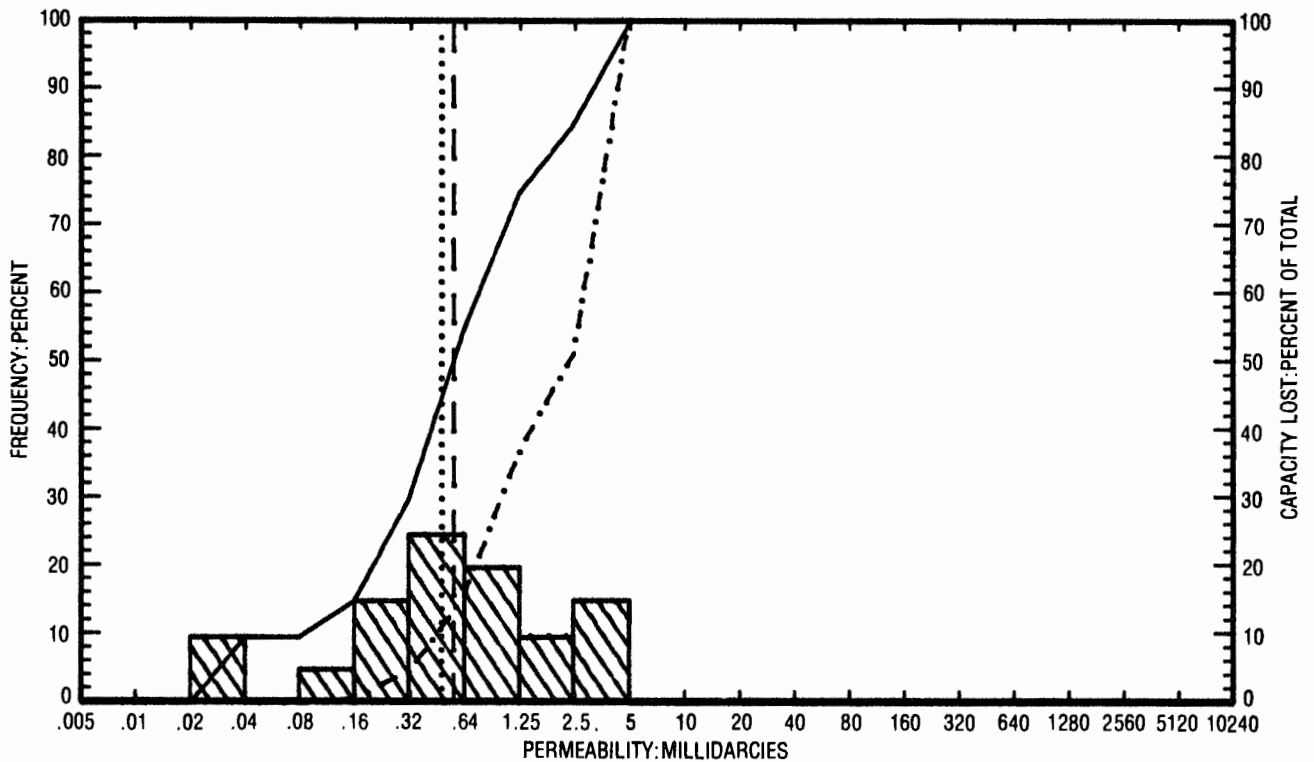
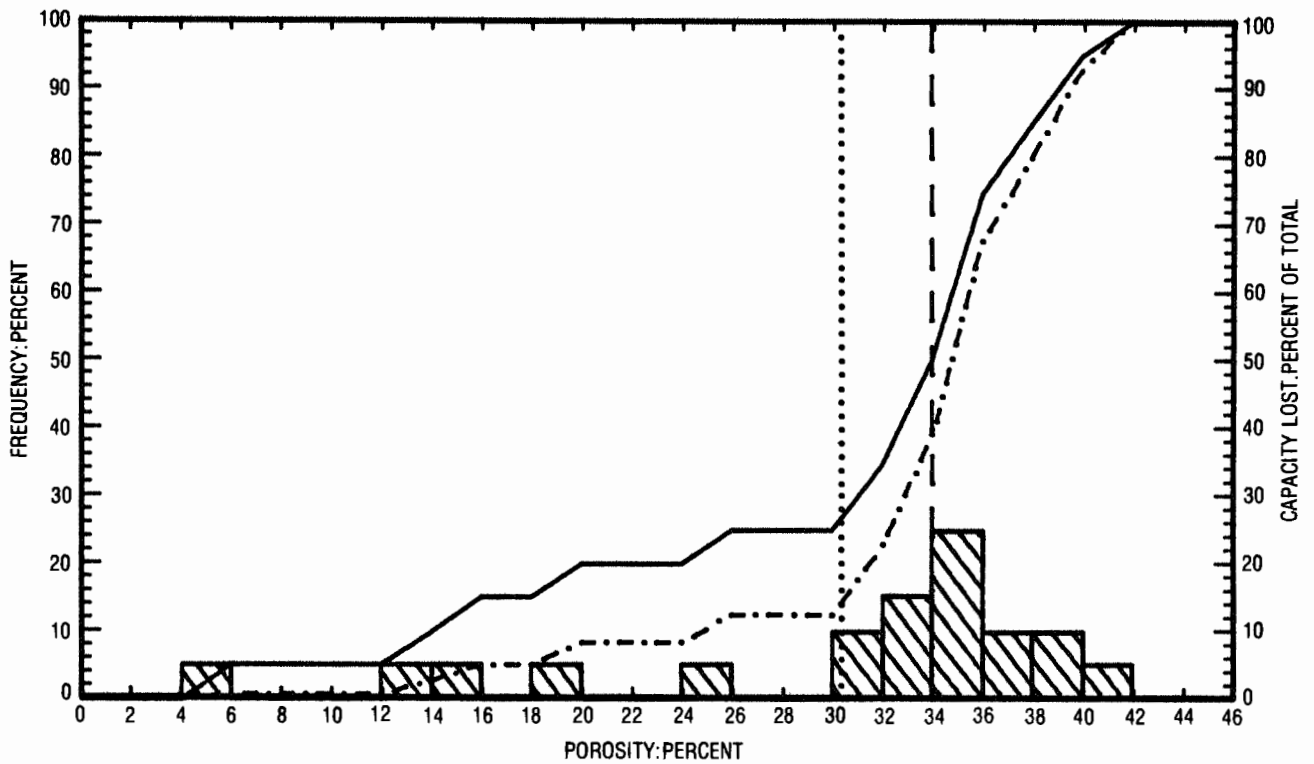
Note that in the permeability histogram, 10240 millidarcies is the upper limit, and the subsequent permeability averages (page 1) will reflect this (However, there is no upper permeability limit when permeability averages are calculated from the permeability versus porosity plot, q.v.)

"Feet (or metres) analyzed in zone" (page 1) is the total length of the cores.

"Total number of feet (or metres)" (page 2) is the total of the sample intervals for which a permeability/porosity pair of data was measured. Each sample interval is taken to be from one whole foot mark (25 cm. mark for metric clients) to the next, irrespective of the exact point where the plug was drilled within that foot (25 cm.) interval.

Symbol "+" plots the arithmetic average of the porosities in each porosity group (top histogram) versus the geometric average of the corresponding permeabilities of each sample in the porosity group. Symbol "X" plots the geometric average of the permeabilities in each permeability group (bottom histogram) versus the arithmetic average of the corresponding porosities of each sample in the permeability group. Again, permeability and porosity scales are optional.

Finally, Multiple wells may be processed together in the above manner, using any depth intervals required from each well.



HORIZONTAL PERMEABILITY AND POROSITY HISTOGRAMS

STATOIL
34/10-19

LEGEND

- ARITHMETIC MEAN POROSITY (dotted line)
- GEOMETRIC MEAN PERMEABILITY (dotted line)
- MEDIAN VALUE ----- (dashed line)
- CUMULATIVE FREQUENCY _____ (solid line)
- CUMULATIVE CAPACITY LOST -.-.-.-.- (dash-dot line)

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Petroleum Reservoir Engineering
LONDON · ABERDEEN

PAGE 1

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: STATOIL
FIELD :

WELL : 34/10-19
COUNTY, STATE:

AIR PERMEABILITY : MD. (HORIZONTAL) RANGE USED 0.000 TO 10240.
POROSITY : PERCENT (HELIUM) RANGE USED 0.0 TO 46.0

(PERMEABILITY UNCORRECTED FOR SLIPPAGE)

DEPTH LIMITS : 1763.0 - 1874.4 INTERVAL LENGTH : 111.4
MTRS ANALYZED IN ZONE : 56.5 LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

POROSITY	PERMEABILITY AVERAGES
AVERAGE	ARITHMETIC HARMONIC GEOMETRIC
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30.4	0.93 0.14 0.47

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: STATOIL
 FIELD :

WELL : 34/10-19
 COUNTY, STATE:

GROUPING BY POROSITY RANGES

POROSITY RANGE	MTRS IN RANGE	AVERAGE POROSITY	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
4.0 - 6.0	0.3	4.3	0.020	0.020	5.0	5.0
12.0 - 14.0	0.3	12.3	0.110	0.110	5.1	10.1
14.0 - 16.0	0.3	14.0	0.020	0.020	5.0	15.0
18.0 - 20.0	0.3	19.6	1.3	1.3	5.0	20.0
24.0 - 26.0	0.3	25.7	1.4	1.4	5.0	24.9
30.0 - 32.0	0.7	31.5	2.8	2.8	9.9	34.8
32.0 - 34.0	1.0	32.7	0.613	0.698	15.2	50.0
34.0 - 36.0	1.6	35.1	0.341	0.348	24.8	74.8
36.0 - 38.0	0.7	37.4	0.849	0.877	10.1	84.8
38.0 - 40.0	0.7	39.1	0.410	0.564	10.1	94.9
40.0 - 42.0	0.3	41.2	3.3	3.3	5.1	100.0

TOTAL NUMBER OF MTRS = 6.7

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: STATOIL
 FIELD :
 WELL : 34/10-19
 COUNTY, STATE:

GROUPING BY PERMEABILITY RANGES

PERMEABILITY RANGE	MTRS IN RANGE	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	AVERAGE POROSITY	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
0.020 - 0.039	0.7	0.020	0.020	9.1	9.9	9.9
0.078 - 0.156	0.3	0.110	0.110	12.3	5.1	15.0
0.156 - 0.312	1.0	0.235	0.239	36.4	15.0	30.0
0.312 - 0.625	1.7	0.413	0.418	34.1	24.9	55.0
0.625 - 1.250	1.3	0.955	0.979	36.7	20.1	75.1
1.250 - 2.500	0.7	1.3	1.4	22.6	9.9	85.0
2.500 - 5.000	1.0	3.0	3.0	34.8	15.0	100.0

TOTAL NUMBER OF MTRS = 6.7

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: STATOIL
 FIELD :

WELL : 34/10-19
 COUNTY, STATE:

POROSITY- MTRS OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

POROSITY CUT OFF	MTRS LOST	CAPACITY LOST (%)	MTRS REMAINING	CAPACITY REMAINING (%)	ARITH MEAN	MEDIAN
0.0	0.0	0.0	6.7	100.0	30.4	34.0
2.0	0.0	0.0	6.7	100.0	30.4	34.0
4.0	0.0	0.0	6.7	100.0	30.4	34.0
6.0	0.3	0.7	6.3	99.3	31.7	34.2
8.0	0.3	0.7	6.3	99.3	31.7	34.2
10.0	0.3	0.7	6.3	99.3	31.7	34.2
12.0	0.3	0.7	6.3	99.3	31.7	34.2
14.0	0.7	2.8	6.0	97.2	32.8	34.4
16.0	1.0	5.1	5.7	94.9	33.9	34.6
18.0	1.0	5.1	5.7	94.9	33.9	34.6
20.0	1.3	8.3	5.3	91.7	34.8	34.8
22.0	1.3	8.3	5.3	91.7	34.8	34.8
24.0	1.3	8.3	5.3	91.7	34.8	34.8
26.0	1.7	12.5	5.0	87.5	35.4	35.0
28.0	1.7	12.5	5.0	87.5	35.4	35.0
30.0	1.7	12.5	5.0	87.5	35.4	35.0
32.0	2.3	22.7	4.3	77.3	36.0	35.4
34.0	3.3	39.1	3.3	60.9	37.0	36.0
36.0	5.0	67.7	1.7	32.3	38.8	38.5
38.0	5.6	80.1	1.0	19.9	39.8	
40.0	6.3	93.1	0.3	6.9	41.2	
42.0	6.7	100.0	0.0	0.0		

TOTAL STORAGE CAPACITY IN POROSITY-MTRS = 202.2

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

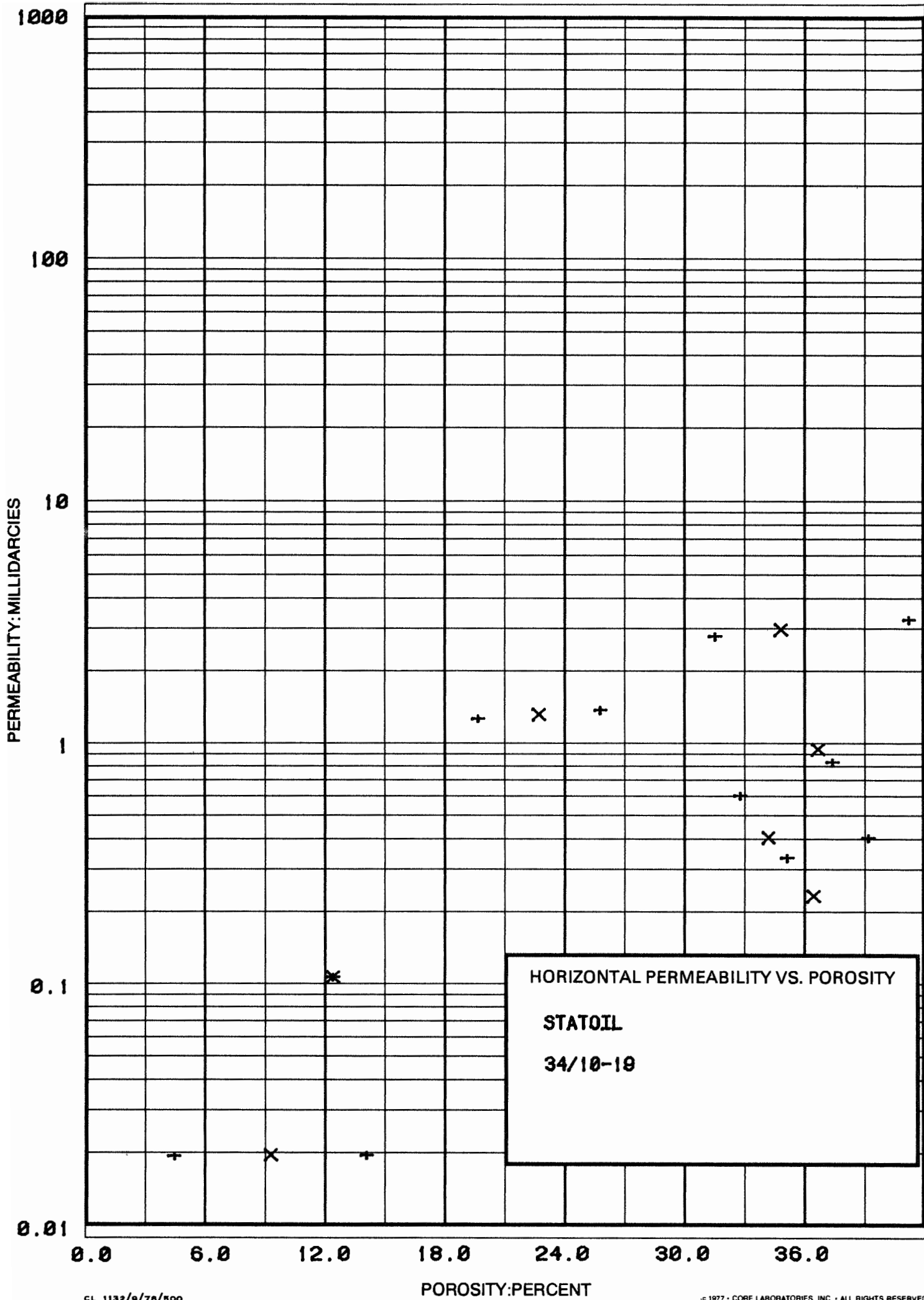
COMPANY: STATOIL
 FIELD :

WELL : 34/10-19
 COUNTY, STATE:

MILLIDARCY-MTRS OF FLOW CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

PERMEABILITY CUT OFF	MTRS LOST	CAPACITY LOST (%)	MTRS REMAINING	CAPACITY REMAINING (%)	GEOM MEAN	MEDIAN
0.005	0.0	0.0	6.7	100.0	0.47	0.54
0.010	0.0	0.0	6.7	100.0	0.47	0.54
0.020	0.0	0.0	6.7	100.0	0.47	0.54
0.039	0.7	0.2	6.0	99.8	0.67	0.62
0.078	0.7	0.2	6.0	99.8	0.67	0.62
0.156	1.0	0.8	5.7	99.2	0.74	0.68
0.312	2.0	4.7	4.7	95.3	0.95	0.88
0.625	3.7	15.9	3.0	84.1	1.51	1.48
1.250	5.0	37.1	1.7	62.9	2.17	2.81
2.500	5.7	51.5	1.0	48.5	2.98	
5.	6.7	100.0	0.0	0.0		

TOTAL FLOW CAPACITY IN MILLIDARCY-MTRS(ARITHMETIC) = 6.19



PERMEABILITY VS POROSITY

COMPANY: STATOIL
 FIELD :

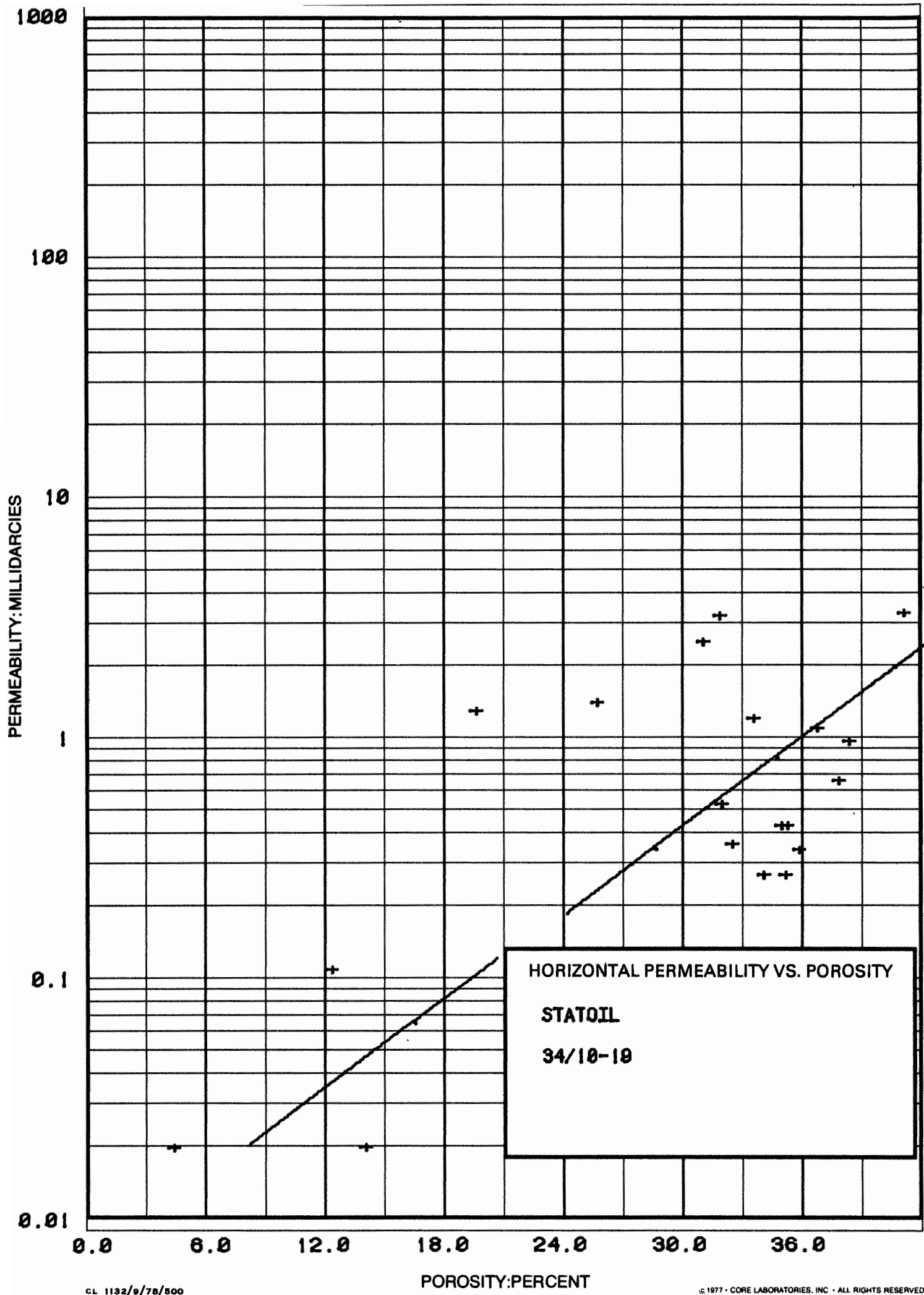
WELL : 34/10-19
 COUNTY, STATE:

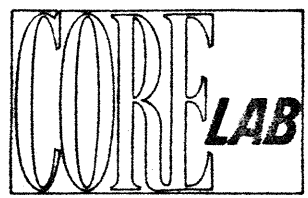
AIR PERMEABILITY : MD - HORIZONTAL (UNCORRECTED FOR SLIPPAGE)
 POROSITY : PERCENT (HELIUM)

DEPTH INTERVAL	RANGE & SYMBOL	PERMEABILITY MINIMUM MAXIMUM	POROSITY MIN. MAX.	POROSITY AVERAGE	PERMEABILITY AVERAGES ARITHMETIC HARMONIC GEOMETRIC
1763.0 - 1874.4	1 (X)	0.020 3.3	4.3 41.2	30.4	0.93 0.14 0.47

EQUATION OF REDUCED LINE RELATING PERMEABILITY(K) TO POROSITY :
 $\text{LOG}(K) = (\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT}$
 $K = \text{ANTILOG}((\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT})$

RANGE EQUATION OF THE LINE
 1 PERM = ANTILOG((0.0616)(POROSITY) + -2.1969)





CORE LABORATORIES, INC. Petroleum Reservoir Engineering

COMPANY STATOIL FIELD FILE NOR 830022
WELL 34/10-19 STATE DATE JANUARY 1984
LOCATION BERGEN COUNTRY NORWAY ELEV.

CORE-GAMMA CORRELATION

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VERTICAL SCALE: 1 FT. = 200 FT.

TOTAL WATER PERCENT PORE SPACE 100 80 60 40 20 0

GAMMA RAY RADIATION INCREASE

PERMEABILITY MILLIDARCIES 1000 100 10 1.0 0.1 0.01

POROSITY PERCENT 40 20 0

OIL SATURATION PERCENT PORE SPACE 0 20 40 60 80 100

