

7.4.4. Fluid data

No DST was performed. Three RFT samplings were attempted.

The segregated sampling at 2748.5 m provided in the 1 gallon chamber, 3.2 liters of clear formation water with the following parameters (see also annex 6):

density	= 1.136
pH	= 5.62
Rw	= 0.054 Ω /m at 20°C
total salinity	= 213.12 g/l

The two other samplings at 3096 m (run 2) and 3034 m (run 3) were attempted on zones which have provided hydrocarbon shows while drilling. Both provided insignificant results (mud-filtrate) or failed.

WELL 7119/9-1

RFT PRESSURE MEASUREMENTS

	DEPTH (RKB)	INITIAL HYDROSTATIC PRESSURE	FORMATION PRESSURE	
			PSI	BAR
1	2748.5	6220	5885	405.86
2	2751	6230	5890	406.21
3	2758.5	6244	5900	406.90
4	2768	6262	5912	407.72
5	2780	6286	TIGHT	
6	2792	6313	5950	410.34
7	2844	6421	TIGHT	
8	2861	6460	6060	417.93
9	2866	6474	6071	418.69
10	2901	6548	6128	422.62
11	2953	6665	TIGHT	
12	3033.4	6837	6336	436.97
13	3039.5	6851	TIGHT	
14	3042	6859	TIGHT	
15	3084	6950	6433	443.66
16	3096	6975	6450	444.83
17	3104	6992	6465	445.86
18	3138	7067	6525	450.00
19	3175	7144	TIGHT	
20	3202.3	7202	6615	456.21
21	3202	7209	6610	455.86
22	2749.5	6216	5867	404.62

RFT SAMPLING

1 at 2748.5 m: SEGREGATED SAMPLING:

- 2 3/4 GAL; BROWN MUDFILTRATE W/ YELLOW GREEN FLUORESCENCE
SALINITY ~ 57 G/L

- 1 GAL CHAMBER: 3.2 liter of CLEAR FORMATION WATER W/ YELLOW
GREEN FLUORESCENCE; SALINITY: 213.12 G/L;
 $d = 1.136$; $R_w = 0.0547 \Omega / M$ at 20°C

2 at 3096 m; MUD + FILTRATE? W/ YELLOW GREEN FLUORESCENCE; SALINITY
OF 38.7 G/L, $d = 1.029$. $R_w = 0.213 \Omega / M$ at 68°F

NOTA: SAMPLING RECOVERED FROM STUCKED TOOL

3 at 3033.4 m: DRY

at 3034 m: FAILURE AND STUCKING

LABORATORY

FORMATION WATER ANALYSIS

Company Elf Aquitaine Date Sample no. RFT #1
 Well 7119/9-1 Field State
 Sampled from 1 Gallon Chamber, depth 2748.5 m
 Date sampled 14.09.84. Date analyzed 19.09.84, Analyst TSB/BB

Total Dissolved Solids 213.120 mg/L Specific Gravity 1.136 @ 68 °F
 Resistivity 0.0547 ohm-meters @ 68 °F pH 5.62 @ 68 °F

* Constituents	mg/L	meq/L	Constituents	mg/L	meq/L
Sodium	57.891	2.517	Chloride	129.930	3.660
Calcium	19.600	980	Bicarbonate	555	9
Magnesium	1.200	100	Sulfate	710	15
Strontium	1.390	36	Carbonate	n.d.	-
Barium	34	-	Hydroxide	n.d.	-
Iron	230	10	Phosphate	-	-
Potassium	1.580	41			

REMARKS: The content of hydrocarbons : 0
 The sample contents of some lignosulphonates.



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DIRECTION EXPLORATION
DIVISION RECHERCHES et APPLICATIONS en GEOLOGIE
LABORATOIRE
ETABLISSEMENT DE BOUSSENS

EP/S/EXP/RAG - Lab. Bss n° 048/85 RP
/cl

3
24 JULI 1985
REGISTRERT
OLJEDIREKTORATET

71-19/9-1 WELL (NORWAY)

ORGANIC GEOCHEMISTRY

(UPPER CRETACEOUS DOWN TO UPPER TRIASSIC)

U-421

P. CAILLEAUX

Boussens - May 1985

This report presents the results of the study in organic geochemistry carried out on the organic matter from the 71-19/9-1 Well (location map on Fig. 1) between 1585 m (upper Cretaceous) and 3240 m (upper Triassic) and the results of the optical study in reflectance fluorescence on 21 samples (1 core, 7 SWC and 13 cuttings) between 1855 (late Cretaceous) and 3243 (upper Triassic).

Due to the presence of droplets and a film of grease, the ditch cutting samples had to be washed with chloroform. So the thermal analysis consisted of :

- on the side wall core samples, measurement of the total organic carbon content and Rock Eval analysis,
- on the cutting samples, measurement of the insoluble (in CHCl₃) organic carbon content and Rock Eval analysis.

.../...

* published in an other report :
71-19/9-1 : Palynological study - Optical study of the organic matter

P. MOREAU - C. PALACIOS EP/S/EXP/RAG - Lab. Bss n° 035/85 RP

Depth (m)	V.Ro %	% VRo :eq. fluo.:	T.A.I.
1655 m SWC		# 0,60	
1872 m SWC		# 0,65	
2150 m		# 0,65	
2200 m SWC			2,5+/3-
2284 m SWC			3-
2350 m SWC			3-
2396 m SWC			3-
2450 m	0.8-0.9		
2502 m SWC			3
2528 m SWC			3+
2550 m	0.9		
2650 m SWC			3+
2675 m SWC			3+/3.5
2701 m SWC			3.5+
2720 m	0.9-0.95		
2741 m SWC			3.5+
2745 m K1			3.5+
2773.4 m K2	0.95		3.5+
2818 m SWC			3.5+
2940 m SWC			3.5+
2972 m SWC			3.5+
3053 m	1.00		
3150 m SWC			3.5+
3211 m SWC			4-
3243 m	1,15		

.../...

TABLE 1 : 71-19/9-1

ORGANIC INVENTORY

Depth (m)	S/C	TOC	IOC	S1	S2	S3	PI X100	HI	OI	Tmax	n°
1585	S	0,45		0,07	0,20	0,37	27	45	80	-	1
1617	S	0,86		0,09	0,75	0,73	11	85	85	433	2
1655	S	1,03		0,10	0,83	0,41	11	80	40	429	3
1676	S	1,03		0,15	0,84	0,54	15	80	50	432	4
1716	S	0,99		0,06	1,01	1,00	6	100	100	429	5
1750	S	6,07		0,04	0,30	1,58	12	5	25	-	6
1775	S	0,95		0,10	0,67	0,60	13	70	65	428	7
1800	S	0,92		0,10	0,52	0,23	16	55	25	429	8
1831	S	1,21		0,46	1,43	0,30	24	120	25	433	9
1872	S	1,16		0,13	1,35	0,38	9	115	30	434	10
1901	S	1,01		0,11	0,56	0,68	17	55	65	433	11
1925	C		1,70	-	0,62	1,42	-	35	85	439	12
1940	C		2,71	-	0,49	0,85	-	20	30	438	13
1960	C		2,54	-	0,19	0,87	-	5	35	441	14
1975	S	2,44		0,03	0,18	0,50	15	5	20	-	15
2000	S	0,81		0,07	0,23	18,56	23	30	2290	-	16
2020	C		1,88	-	0,46	1,45	-	25	75	438	17
2026	S	1,43		0,38	1,07	14,08	26	75	985	434	18
2055	S	1,47		0,33	1,16	6,32	22	80	430	438	19
2074	S	1,37		0,31	1,01	2,10	23	75	155	437	20
2095	S	1,54		0,43	1,06	15,04	29	70	975	437	21
2100	C		2,18	-	0,94	14,61	-	45	670	440	22
2120	S	1,89		0,31	1,22	0,84	20	65	45	440	23
2138	S	1,70		0,29	1,34	0,47	18	75	25	440	24
2160	C		2,15	-	0,57	0,55	-	25	25	444	25
2173,5	S	1,35		0,13	0,67	0,60	16	50	45	439	26
2180	C		2,38	-	0,61	0,90	-	25	35	444	27
2200	S	1,28		0,11	0,42	0,59	21	30	45	443	28
2215	S	1,49		0,15	0,64	0,60	19	45	40	440	29
2220	C		1,91	-	0,61	0,90	-	30	45	445	30
2232	S	1,33		0,17	0,57	0,89	23	40	65	439	31
2240	C		2,27	-	0,71	0,65	-	30	30	445	32
2253	S	1,35		0,24	0,91	0,69	21	65	50	442	33
2260	C		1,72	-	0,79	0,38	-	45	20	446	34
2284	S	0,59		0,07	0,05	0,45	58	10	75	-	35
2300	C		2,18	-	0,83	0,89	-	40	40	443	36
2323	S	2,73		0,56	0,99	1,55	36	35	55	435	37
2340	C		3,94	-	1,68	0,82	-	40	20	444	38
2350	S	1,29		0,14	0,52	0,32	21	40	25	440	39
2360	C		3,27	-	2,02	1,08	-	60	35	445	40
2380	C		2,80	-	1,38	2,07	-	50	75	445	41
2386	S	1,81		0,47	1,20	1,82	28	65	100	439	42
2400	C		2,60	-	1,41	0,75	-	55	30	446	43
2424	S	3,28		0,83	3,58	0,73	19	110	20	444	44
2440	C		2,13	-	1,33	1,09	-	60	50	446	45
2460	C		2,68	-	1,11	1,33	-	40	50	452	46
2485	S	2,04		0,85	2,91	1,22	23	110	45	445	47
2502	S	1,71		0,46	1,61	0,86	22	95	50	446	48
2528	S	2,31		0,63	2,63	0,64	19	115	25	447	49

Depth (m)	S/C	TOC	IOC	S1	S2	S3	PI X100	HI	OI	Tmax	n°
2540	C		2,37	-	1,21	0,85	-	50	75	453	50
2575	S	1,79		0,40	1,46	0,25	22	80	15	450	51
2599	S	1,22		0,33	0,90	0,71	27	75	60	446	52
2620	S	1,00		0,13	0,34	0,86	28	35	85	-	53
2650 <i>sl</i>	S	3,24		0,38	2,31	0,50	14	70	15	450	54
2675 <i>"</i>	S	0,65		0,11	0,55	0,81	17	85	125	-	55
2701 <i>"</i>	S	0,33		0,05	0,16	0,29	25	50	85	-	56
2715 <i>old</i>	S	2,89		1,64	2,96	0,75	36	100	25	453	57
2741 <i>Rio</i>	S	0,99		0,23	0,85	0,33	21	85	35	453	58
2785 <i>Star</i>	C		0,34		0,11	0,59	-	30	175	-	59
2800 <i>"</i>	C		0,62		0,20	0,95	-	30	155	-	60
2820 <i>"</i>	C		0,13		0,03	0,36	-	25	275	-	61
2840 <i>"</i>	C		0,14		0,03	0,16	-	20	115	-	62
2882 <i>Nord</i>	S	0,38		0,23	0,26	0,95	48	70	250	-	63
2886 <i>"</i>	S	0,55		0,36	0,40	1,00	47	70	180	-	64
2920 <i>"</i>	C		0,51		0,27	0,18	-	50	35	-	65
2930 <i>"</i>	S	2,80		0,67	3,20	0,51	17	115	20	454	66
2940 <i>"</i>	S	1,14		0,48	0,98	1,04	33	85	90	452	67
2960 <i>"</i>	C		0,20	-	0,07	0,05	-	35	25	-	68
2980 <i>"</i>	C		0,65	-	0,22	0,68	-	35	105	-	69
2990 <i>"</i>	S	0,62		0,25	0,39	1,04	39	60	165	455	70
3000 <i>"</i>	C		0,40	-	0,20	0,14	-	50	75	-	71
3020 <i>"</i>	C		1,04	-	0,80	0,35	-	75	35	459	72
3040 <i>Dyr</i>	C		0,14	-	0,05	0,06	-	35	40	-	73
3060 <i>"</i>	C		0,42	-	0,15	0,51	-	35	120	-	74
3080 <i>"</i>	C		0,50	-	0,28	0,39	-	55	80	-	75
3100 <i>"</i>	C		0,77	-	0,13	1,27	-	15	165	-	76
3120 <i>"</i>	C		0,60	-	0,13	0,93	-	20	155	-	77
3140 <i>"</i>	C		0,61	-	0,10	2,10	-	15	345	-	78
3150 <i>thin</i>	S	0,85		0,06	0,27	1,09	19	30	130	469	79
3160 <i>"</i>	C		0,69	-	0,25	0,98	-	35	140	-	80
3188 <i>"</i>	S	6,11		1,02	5,92	0,85	15	95	15	463	81
3193 <i>"</i>	S	2,04		0,27	1,79	0,29	13	85	15	467	82
3200 <i>"</i>	C		4,18	-	5,45	0,14	-	130	5	465	83
3218 <i>"</i>	S	0,26		0,04	0,28	0,27	12	105	105	-	84
3240 <i>"</i>	C		2,26	-	1,65	0,39	-	75	15	465	85

S = Sidewall core sample
C = Cutting sample

TOC : Total organic carbon (% weight of rock)
IOC : Insoluble organic carbon (after CHCl₃ extraction)
S1 : Hydrocarbons present in the rock (mgHC/g of rock)
S2 : Hydrocarbons produced by pyrolysis (mgHC/g of rock)
S3 : CO₂ produced by pyrolysis (mgCO₂/g of rock)
PI : Production index = S1/(S1 + S2)
HI : Hydrogen index (mgHC/g of OC)
OI : Oxygen index (mgHC/g of OC)
Tmax : Temperature at the maximum of pyrolysis (S2)

TABLE 2 : 71-19/9-1

AMOUNT AND GROSS COMPOSITION OF THE EXTRACTS

N°	Depth (m)	EOM	FOM % TOC	SAT.	ARO.	POL.	S/A
9	1831	1330	11	58,9	13,6	27,5	4,34
18	2026	1150	8	31,4	18,7	49,9	1,68
31	2232	580	4,5	15,5	16,6	67,9	0,93
37	2323	1650	6	26,6	29,4	44,0	0,90
44	2424	1560	4,5	51,2	27,1	21,7	1,89
54	2650	1370	9	21,4	26,1	52,5	0,82
66	2930	2960	10,5	25,8	27,5	46,7	0,94
81	3188	2790	4,5	12,9	42,5	44,6	0,30

EOM : Amount (in ppm) of the organic matter extractable with CHCl₃,
 SAT, ARO : Saturated, aromatic hydrocarbons (% of EOM)
 POL : Polar compounds (% of EOM)
 S/A : Saturated HC/aromatic HC

TABLE 3 : 71-19/a-1

CHROMATOGRAPHICAL INDICES

N°	Depth	ΣTV ppm	nAlk % TV	X1	X2	Y1	Z1	n. Alk % SAT	Pr = A	Ph = B	Pr Ph	A/B	CPI	MPI 1	MPI 2
9	1831							20	1,08	0,46	2,06	2,37	1,07	0,652	0,729
18	2026							27	0,69	0,35	1,73	1,97	1,06	-	-
26	2173,5	17	17	(3,25)	7,6	0,2	1,1								
31	2232							22	0,79	0,28	3,05	2,80	1,03	-	-
37	2323							22	0,80	0,30	2,62	2,71	1,07	0,639	0,694
42	2386	22	22	(1,79)	4,8	0,4	2,1								
44	2424							18	0,73	0,28	2,32	2,63	1,07	0,664	0,729
54	2650							26	0,51	0,21	2,64	2,39	1,02	0,787	0,862
57	2715	30	32	(2,31)	4,6	1,2	5,2								
66	2930							4	0,31	0,15	2,31	2,10	1,08	0,824	0,920
81	3188							6	0,35	0,18	2,32	1,89	0,99	1,017	1,114

ΣTV : Amount (in ppm of rock) of the C15⁻ hydrocarbons

X1 : n-C6/methylcyclopentane

X2 : n-C7/dimethylcyclopentane

Y1 : n-C7/toluene

Z1 : n-C10/dimethylnonane

Pr, Ph: Pristane/Phytane

$$MPI\ 1 = \frac{1,5(2\ MP + 3\ MP)}{P + 1\ MP + 9\ MP}$$

$$MPI\ 2 = \frac{3(2\ MP)}{P + 1\ MP + 9\ MP}$$

k MP = k methylphenantrene

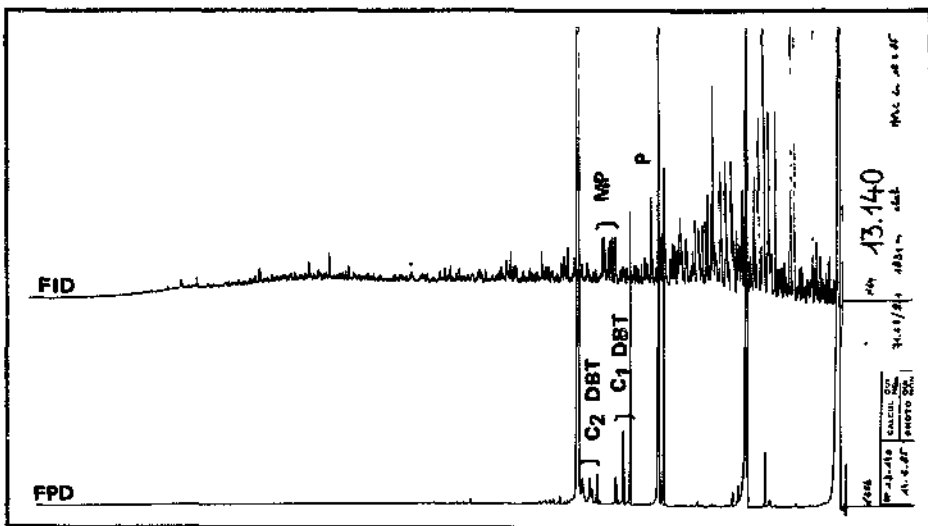
SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

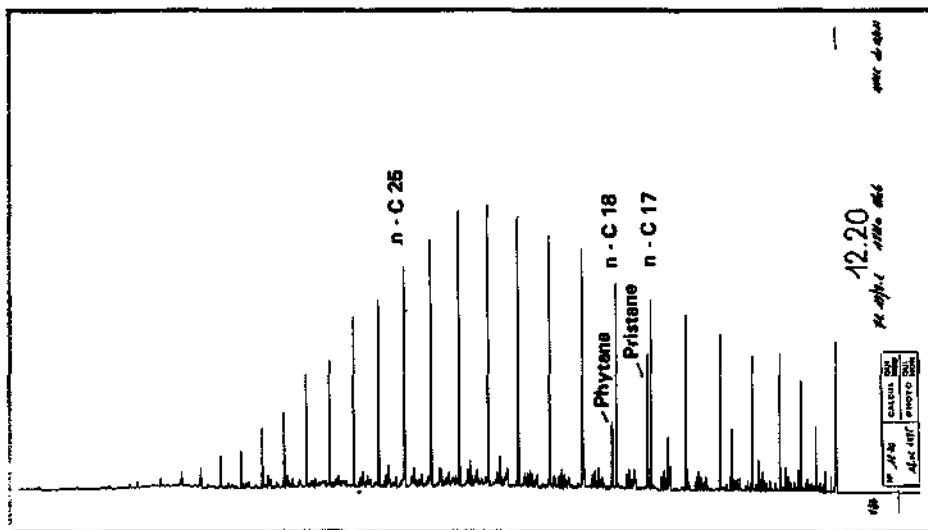
PAYS : NORWAY
 Country :
 SONDAGE : 71-19/9-1
 Well :

Cote / Depth : 1831 m
 Identification : S. W. C.
 Formation :
 Age : UPPER CRETACEOUS

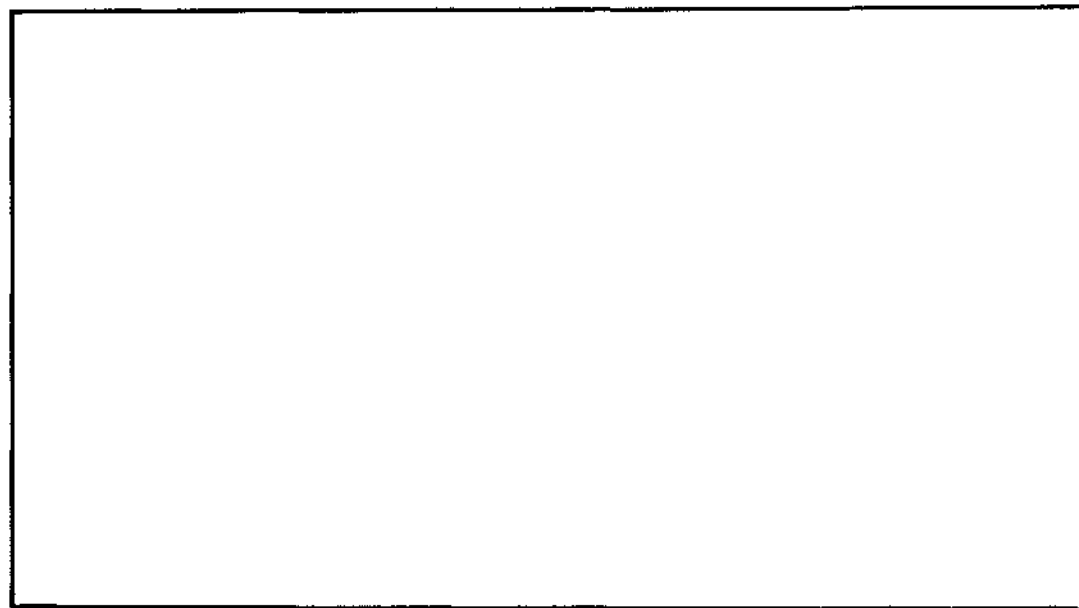
Fig 5



HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC



HC THERMOVAPORISES THERMOVAPORIZED HC

Composition du produit total (%)
 Composition of total product EOM = 1831 ppm

Asphaltènes Asphaltenes	As	:	} 27,5	
Résines Resins	R	:		
HC saturés Saturated HC	S	:	58,9	$\frac{S}{A}$ 4,34
HC aromatiques Aromatic HC	A	:	13,6	

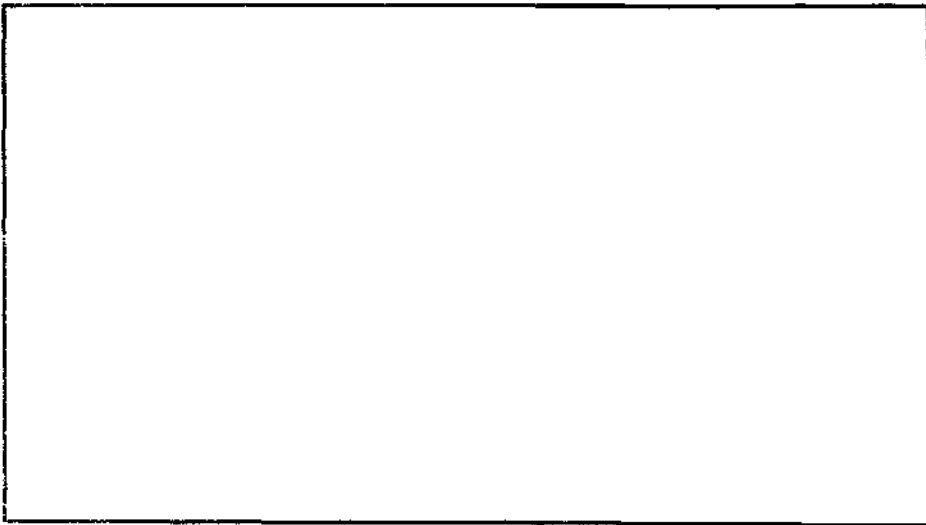
SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : **NORWAY**
 Country
 SONDAGE : **71-19/9-1**
 Well

Cote Depth **2026 m**
 Identification **S. W. C.**
 Identification
 Roche Rock **FORMATION**
 Formation
 Age **LOWER CRETACEOUS**
 Age

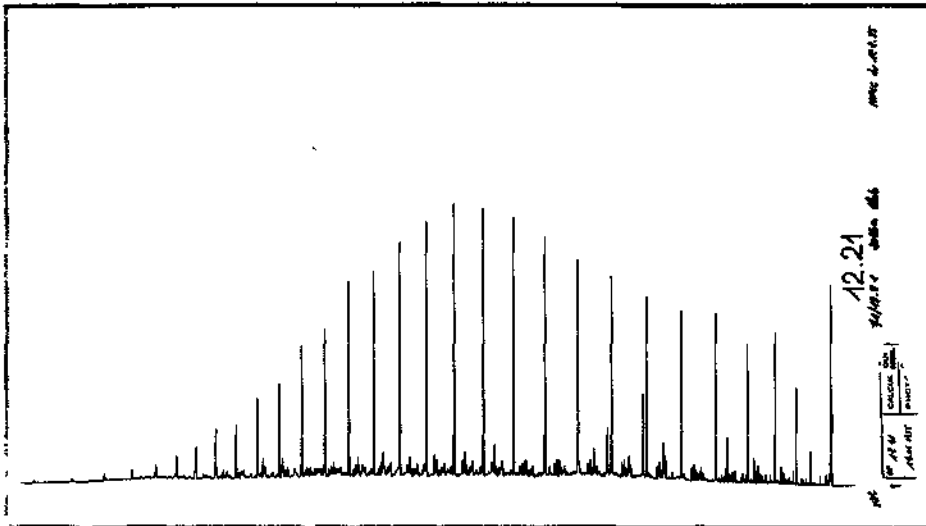
Fig. 6



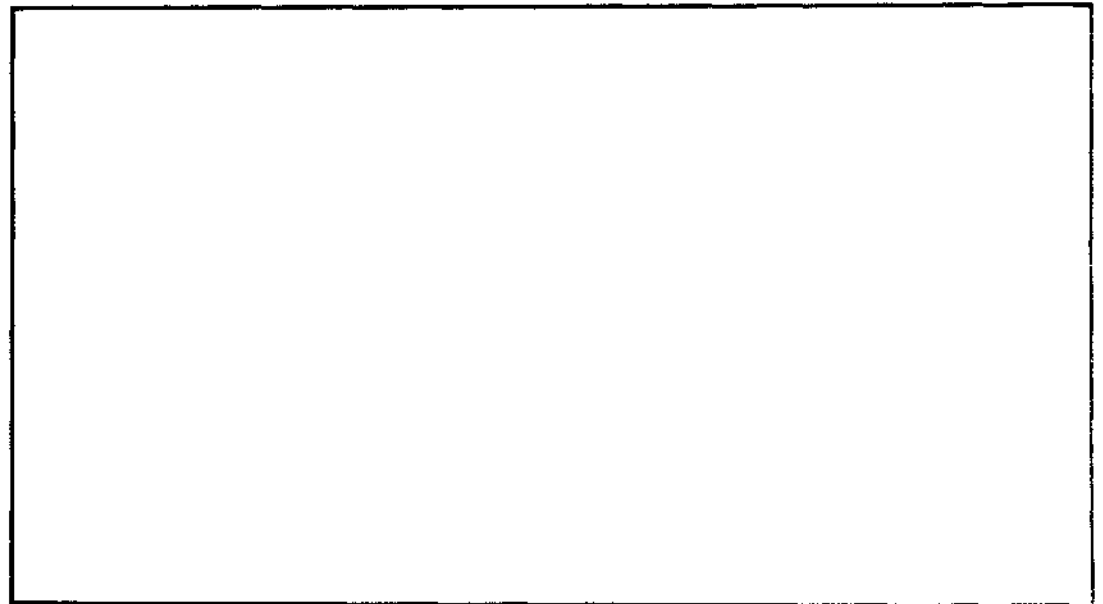
HC AROMATIQUES AROMATIC HC

Composition du produit total (%) EOM = 2026 ppm
 Composition of total product

Asphaltènes Asphaltenes	As	:	} 49,9		
Résines Resins	R	:			
HC saturés Saturated HC	S	:	31,4	$\frac{S}{A}$	1,68
HC aromatiques Aromatic HC	A	:	18,7	A	



HC SATURES SATURATED HC

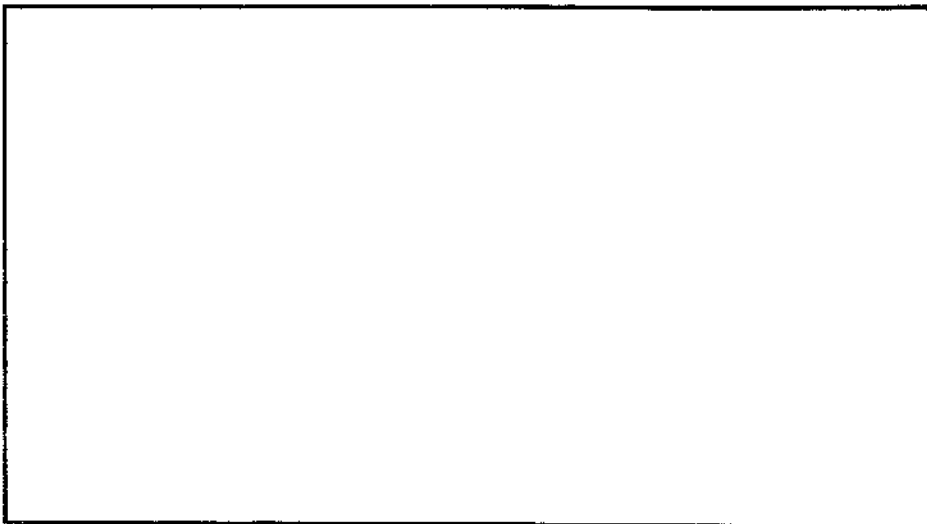


HC THERMOVAPORISES THERMOVAPORIZED HC

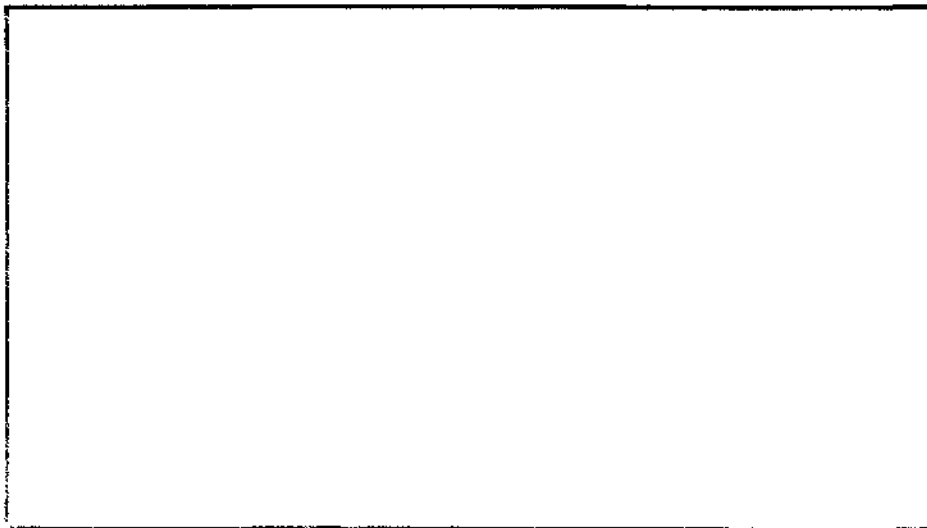
SNEA(P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : NORWAY
Country
SONDAGE : 71-19/9-1
Well



HC AROMATIQUES AROMATIC HC



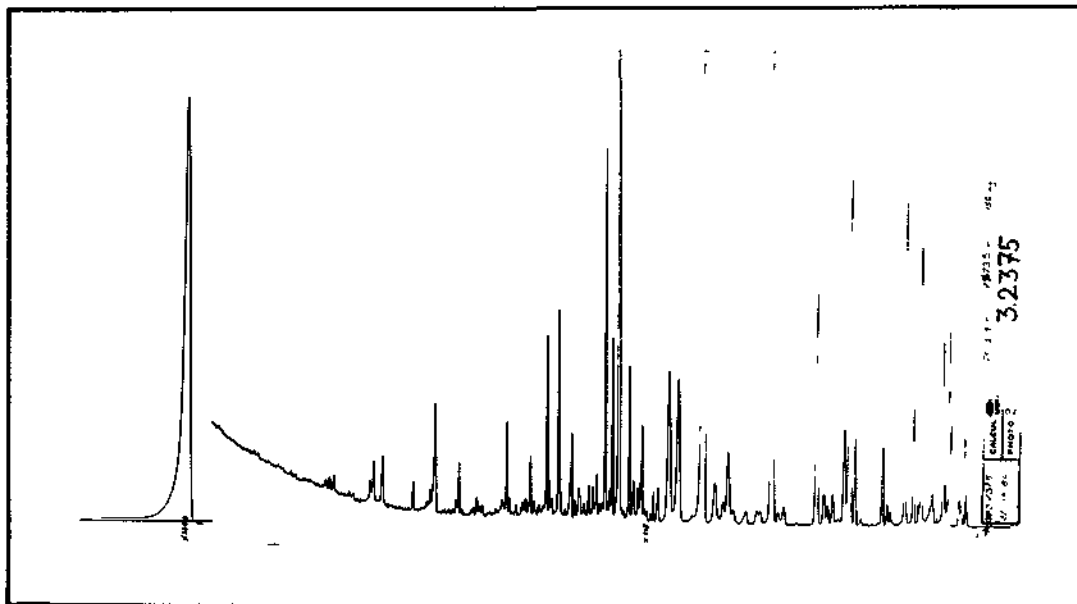
HC SATURES SATURATED HC

Cote Depth 2173,5 m
Identification S. W. C.
Identification
Roche Rock Formation
Formation
Age LOWER CRETACEOUS
Age

Fig. 7

Composition du produit total (%)
Composition of total product

Asphaltènes Asphaltenes	As	:	
Résines Resins	R	:	
HC saturés Saturated HC	S	:	$\frac{S}{A}$
HC aromatiques Aromatic HC	A	:	A
Distillat Distillate	D	:	



HC THERMOVAPORISES THERMOVAPORIZED HC

SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : NORWAY
Country

SONDAGE : 71 - 19 / 9 - 1
Well

Cote : 2232 m
Depth

Identification : S. W. C.
Identification

Roche :
Rock

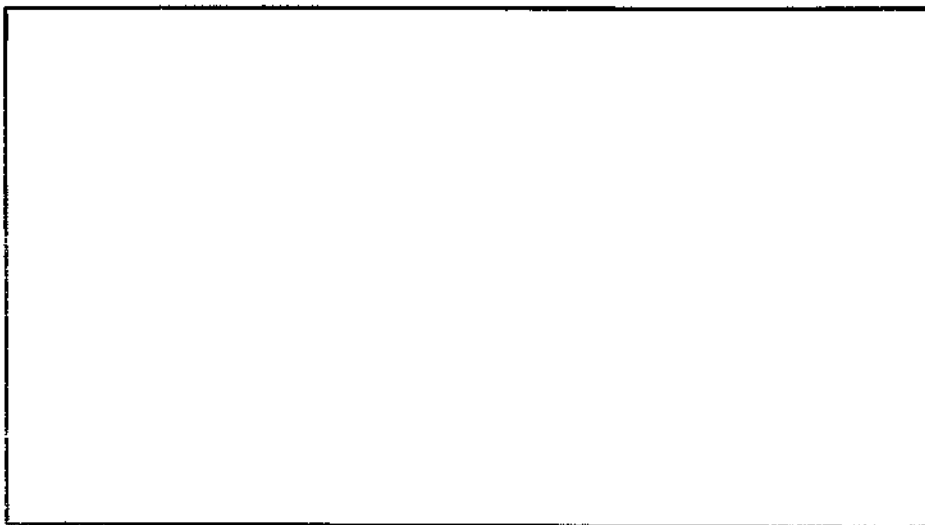
Formation :
Formation

Age : LOWER CRETACEOUS
Age

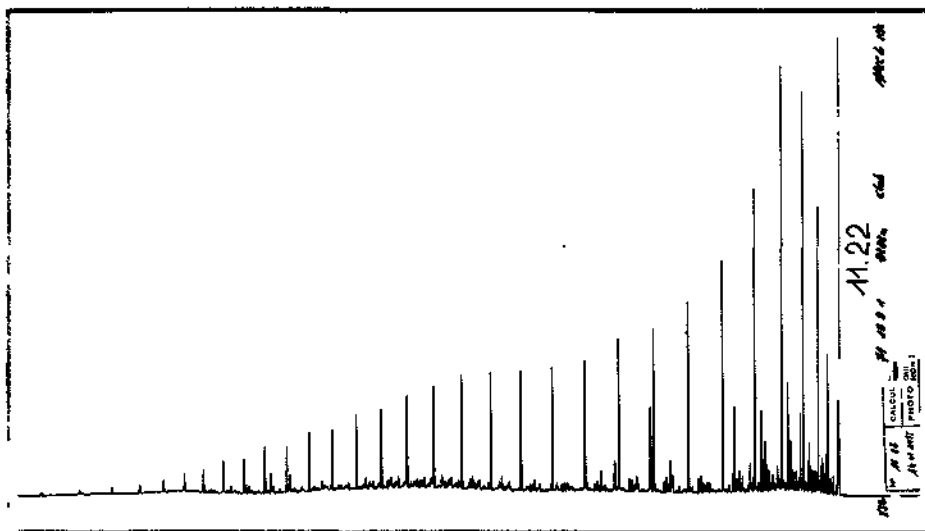
Fig. 8

Composition du produit total (%) EOM = 580 ppm
Composition of total product

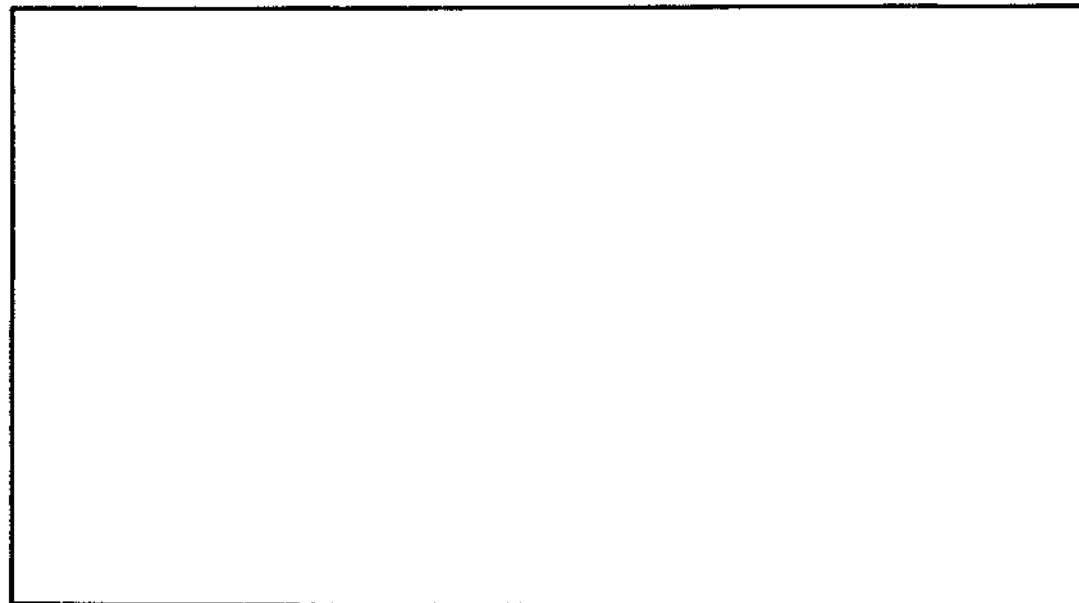
Asphaltènes Asphaltenes	As	:	} 67,9	
Résines Resins	R	:		
HC saturés Saturated HC	S	:	15,5	$\frac{S}{A}$ 0,93
HC aromatiques Aromatic HC	A	:	16,6	



HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC



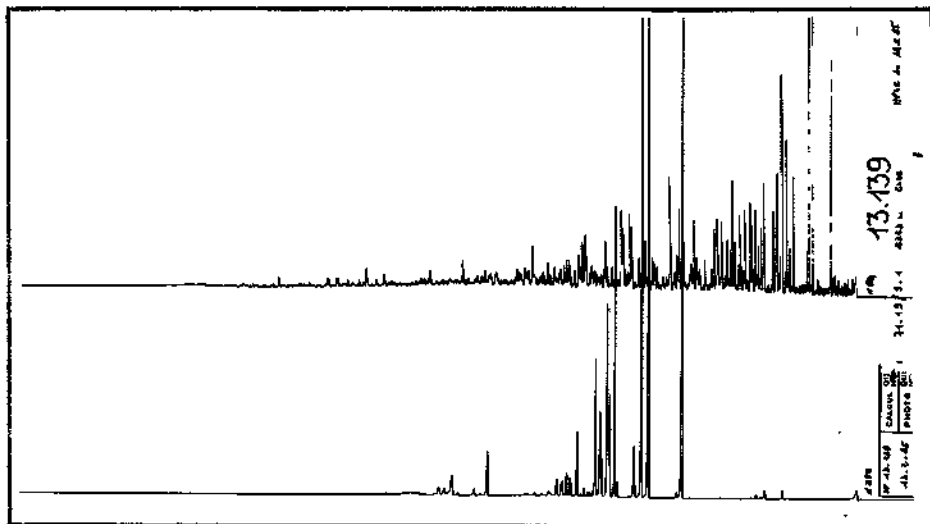
HC THERMOVAPORISES THERMOVAPORIZED HC

SNEA (P)

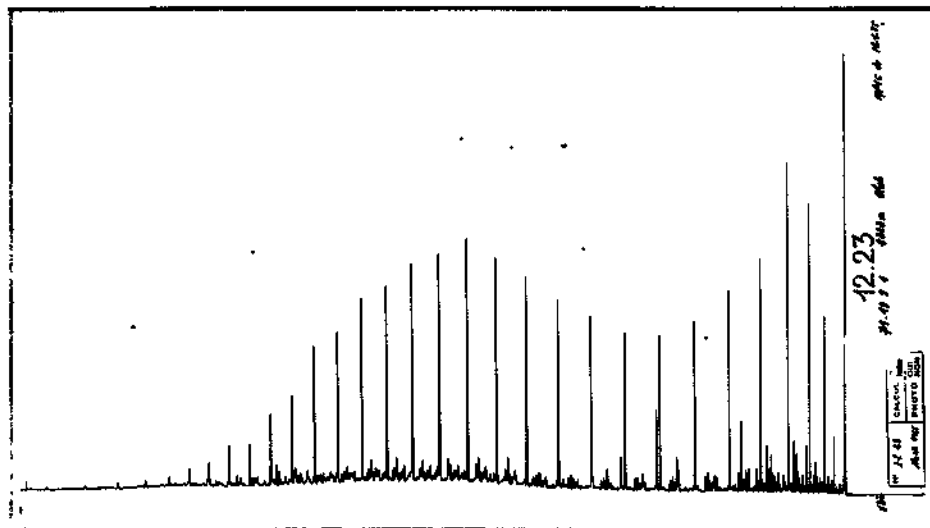
DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : **NORWAY**
Country

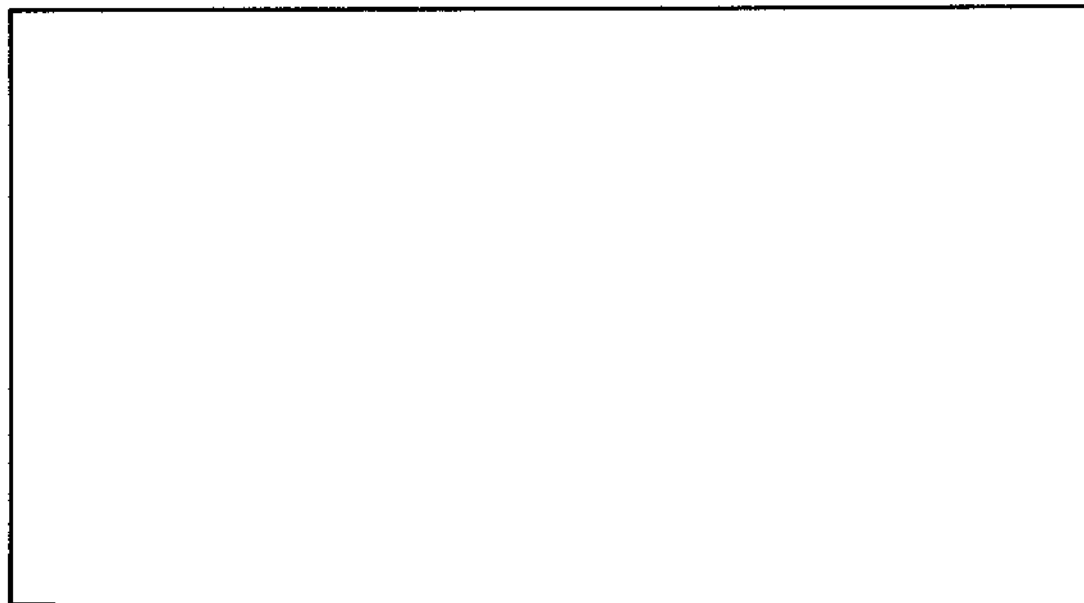
SONDAGE : **71-19/9-1**
Well



HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC



HC THERMOVAPORISES THERMOVAPORIZED HC

Cote Depth	2323 m
Identification Identification	S. W. C.
Roche Rock	Formation
Age Age	LOWER CRETACEOUS

Fig. 9

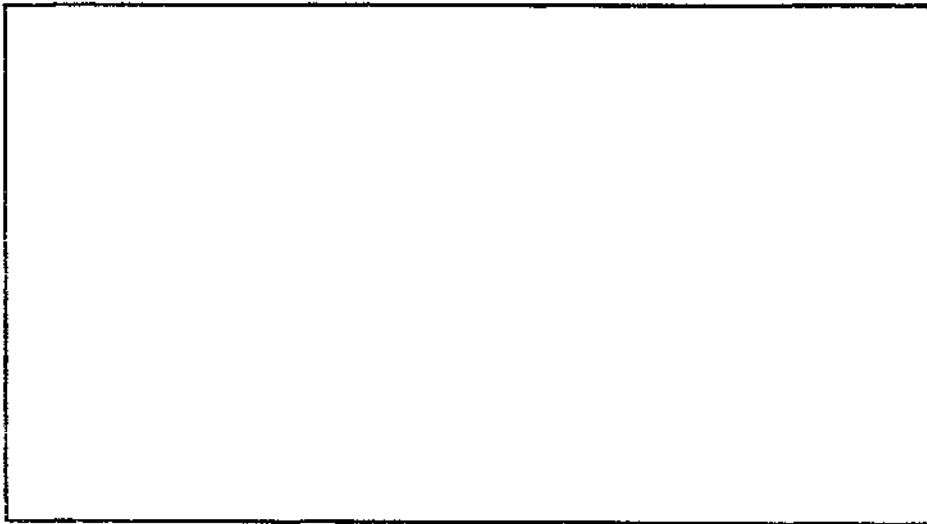
Composition du produit total (%) EOM = 1650 ppm
Composition of total product

Asphaltènes Asphaltenes	As	:	} 44,0	
Résines Resins	R	:		
HC saturés Saturated HC	S	:	26,6	$\frac{S}{A}$ 0,90
HC aromatiques Aromatic HC	A	:	29,4	

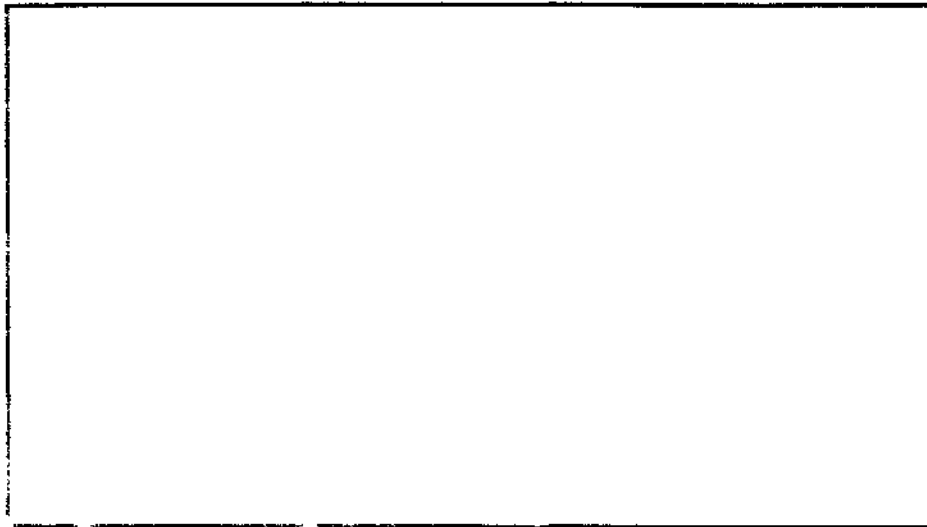
SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : **NORWAY**
 Country
 SONDAGE : **71-19/9-1**
 Well



HC AROMATIQUES AROMATIC HC



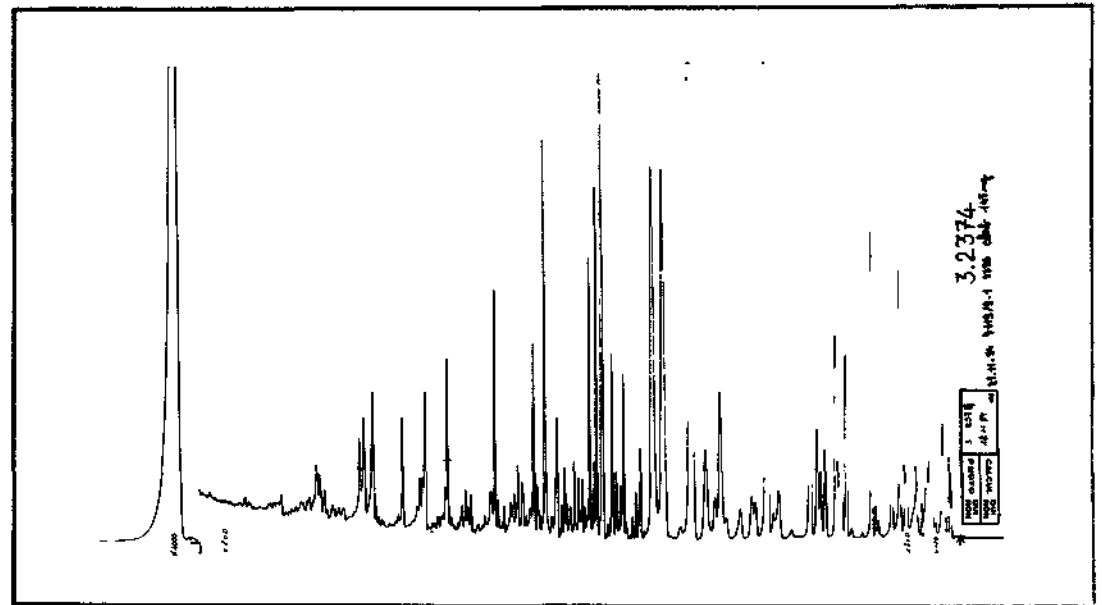
HC SATURES SATURATED HC

Cote Depth	2386 m
Identification Identification	S. W. C.
Roche Rock	Formation Formation
Age Age	LOWER CRETACEOUS

Fig. 10

Composition du produit total (%)
 Composition of total product

Asphaltènes Asphaltenes	As	:	
Résines Resins	R	:	
HC saturés Saturated HC	S	:	<u>S</u>
HC aromatiques Aromatic HC	A	:	<u>A</u>
Distillat Distillate	D	:	



HC THERMOVAPORISES THERMOVAPORIZED HC

SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : **NORWAY**
Country

SONDAGE : **71-19/9-1**
Well

Cote : **2424 m**
Depth

Identification : **S. W. C.**
Identification

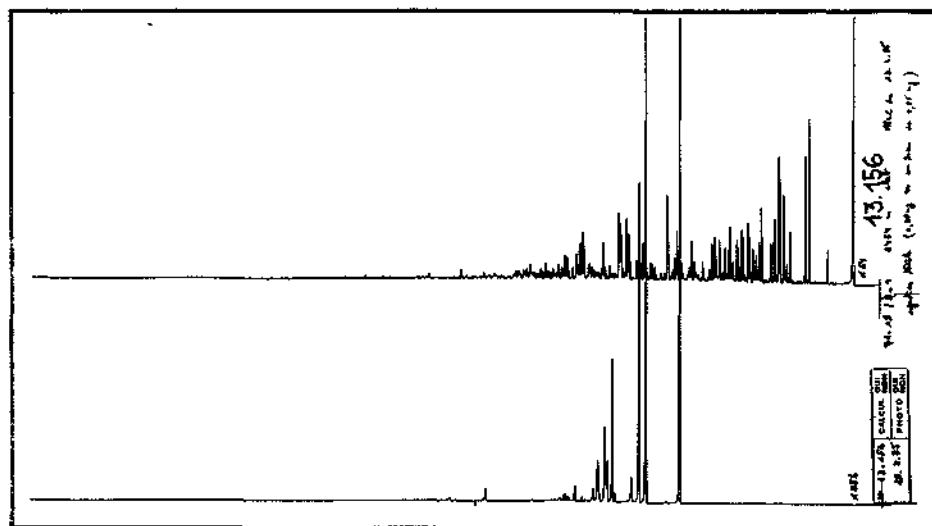
Roche : **Formation**
Rock Formation

Age : **LOWER CRETACEOUS**
Age

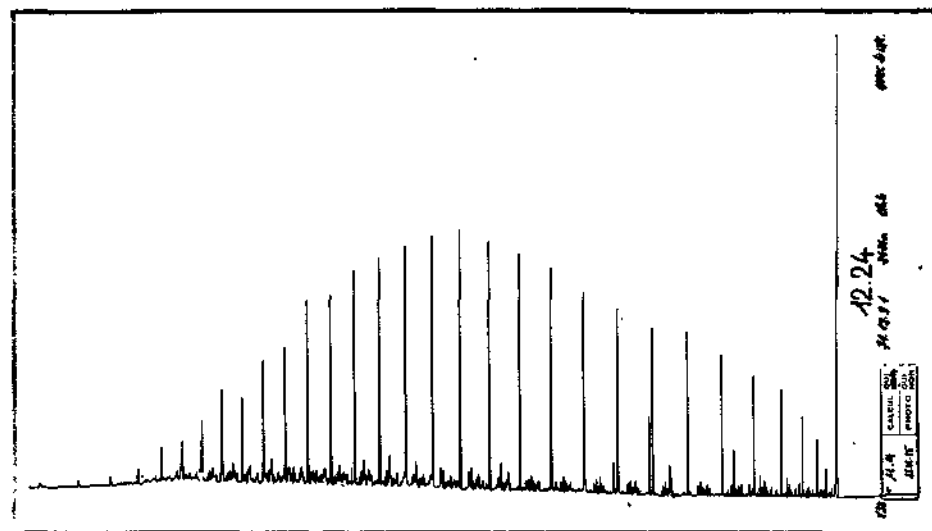
Fig. 11

Composition du produit total (%) EOM = 1560 ppm
Composition of total product

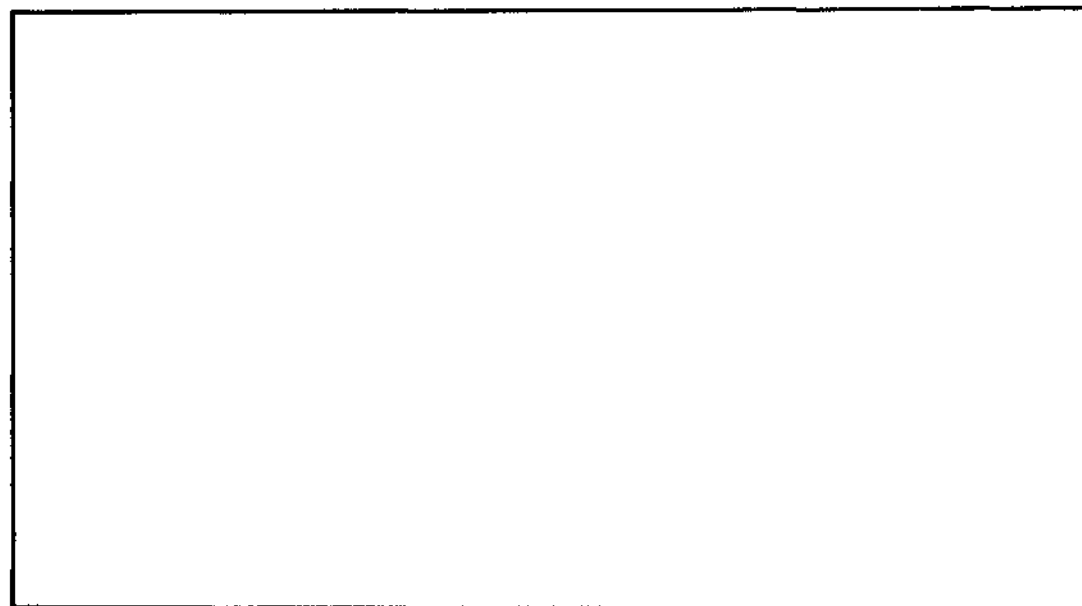
Asphaltènes Asphaltenes	As	:		}	21,7		
Résines Resins	R	:					
HC saturés Saturated HC	S	:	51,2			$\frac{S}{A}$	1,89
HC aromatiques Aromatic HC	A	:	27,1				



HC AROMATIQUES AROMATIC HC



HC SATURÉS SATURATED HC



HC THERMOVAPORISÉS THERMOVAPORIZED HC

SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : **NORWAY**
Country

SONDAGE : **71-19/9-1**
Well

Cote : **2650 m**
Depth

Identification : **S. W. C.**
Identification

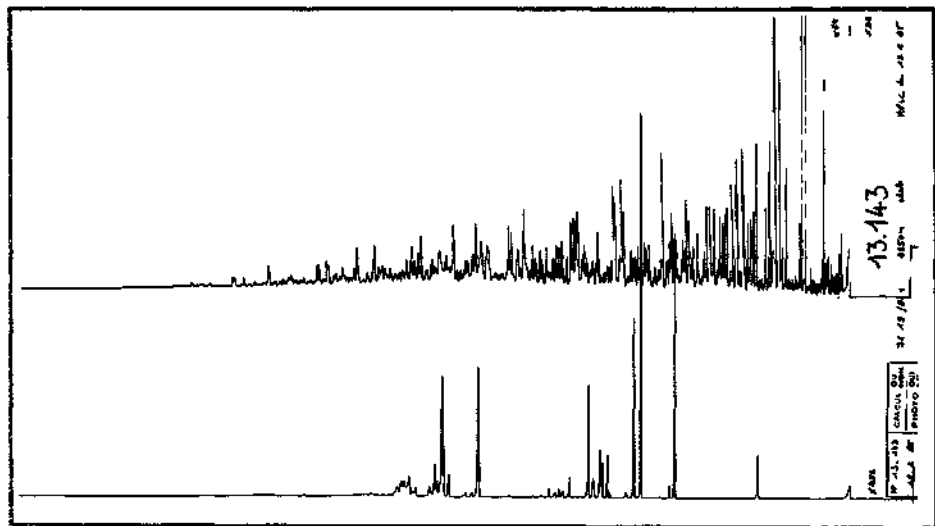
Roche : **Formation**
Rock Formation

Age : **LOWER CRETACEOUS**
Age

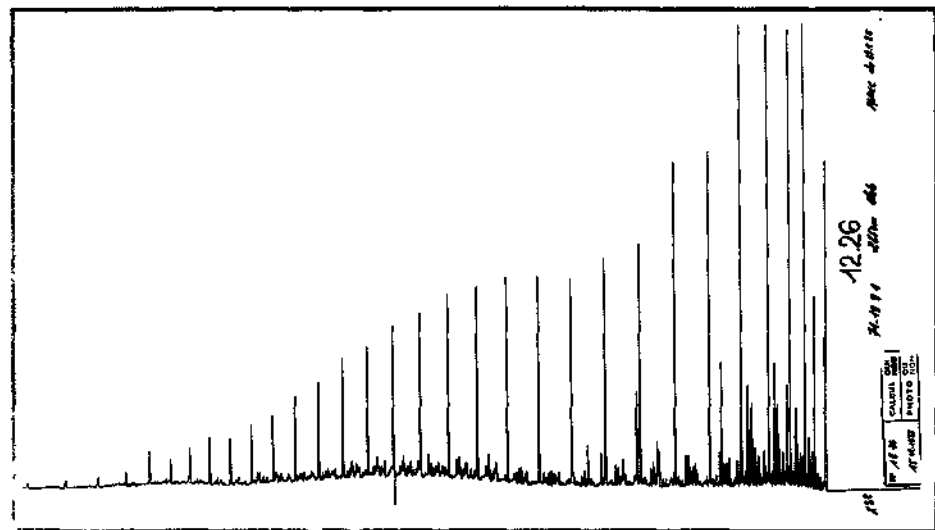
Fig. 12

Composition du produit total (%) EOM = 1370 ppm
Composition of total product

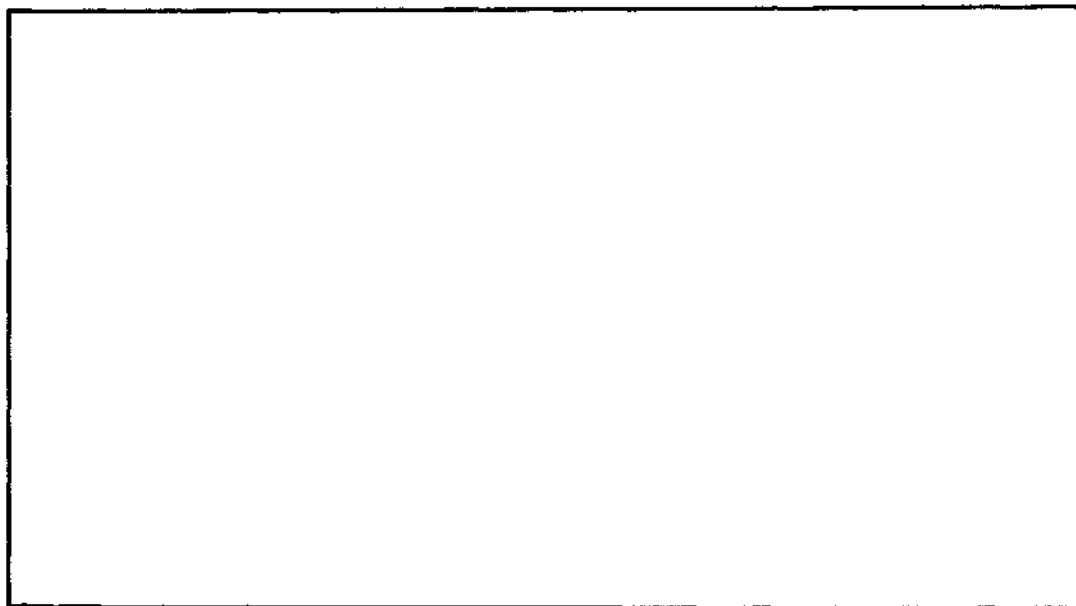
Asphaltènes Asphaltenes	As	}	52,5	
Résines Resins	R			
HC saturés Saturated HC	S	21,4	$\frac{S}{A}$	0,82
HC aromatiques Aromatic HC	A	26,1		



HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC



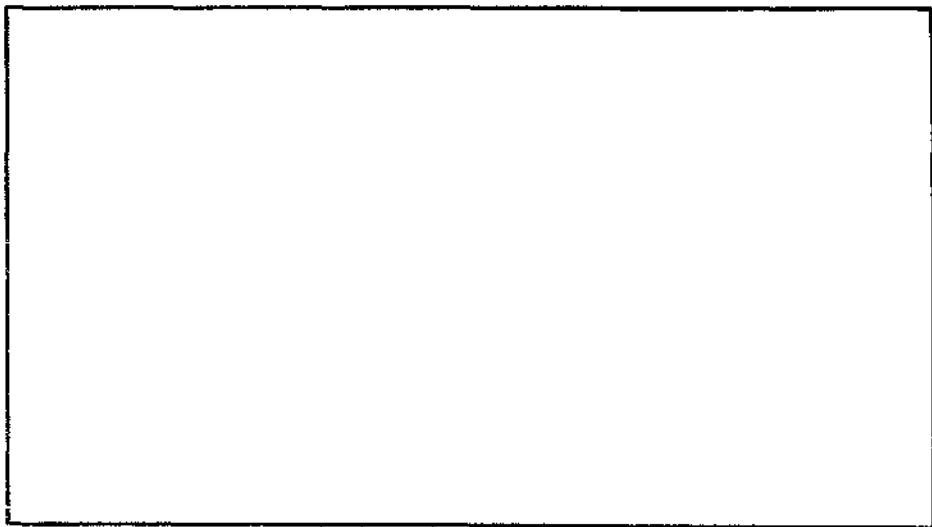
HC THERMOVAPORISES THERMOVAPORIZED HC

SNEA (P)

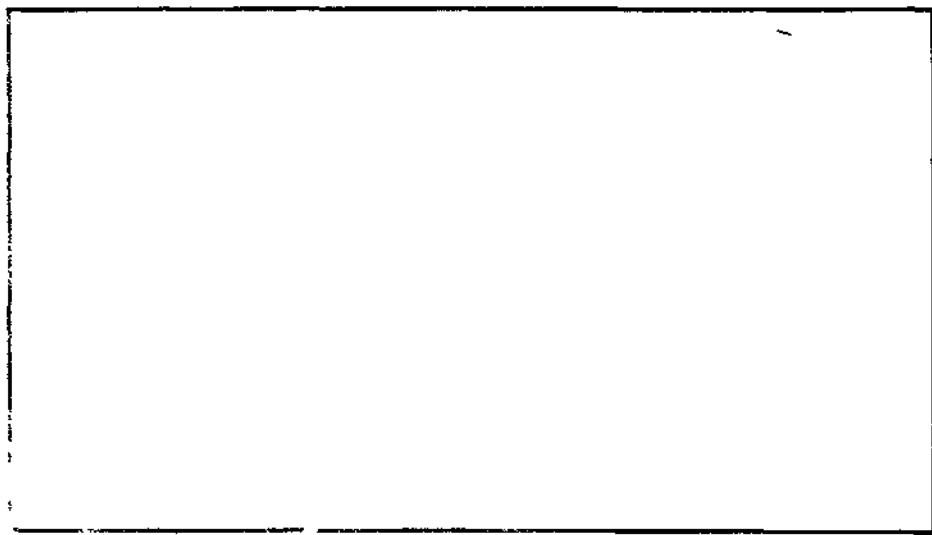
DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

PAYS : **NORWAY**
Country

SONDAGE : **71-19/9-1**
Well



HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC

Cote : **2715 m**
Depth

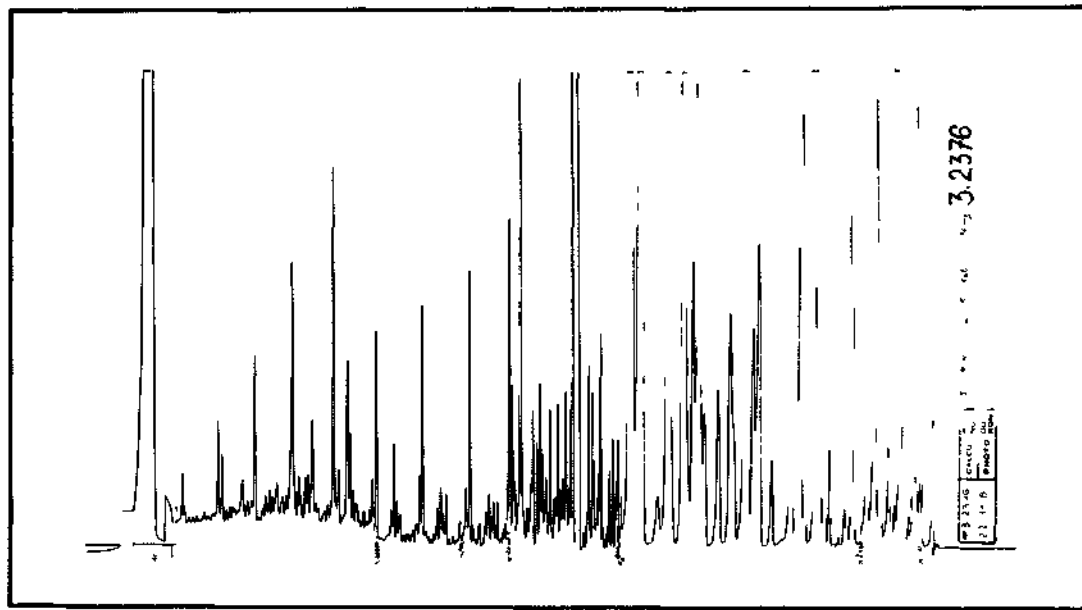
Identification : **S. W. C.**
Identification

Roche : **UPPER JURASSIC**
Rock Formation Age

Fig. 13

Composition du produit total (%)
Composition of total product

Asphaltènes Asphaltenes	As		
Résines Resins	R	-	
HC saturés Saturated HC	S		<u>S</u>
HC aromatiques Aromatic HC	A	-	A
Distillat Distillate	D	:	



HC THERMOVAPORISES THERMOVAPORIZED HC

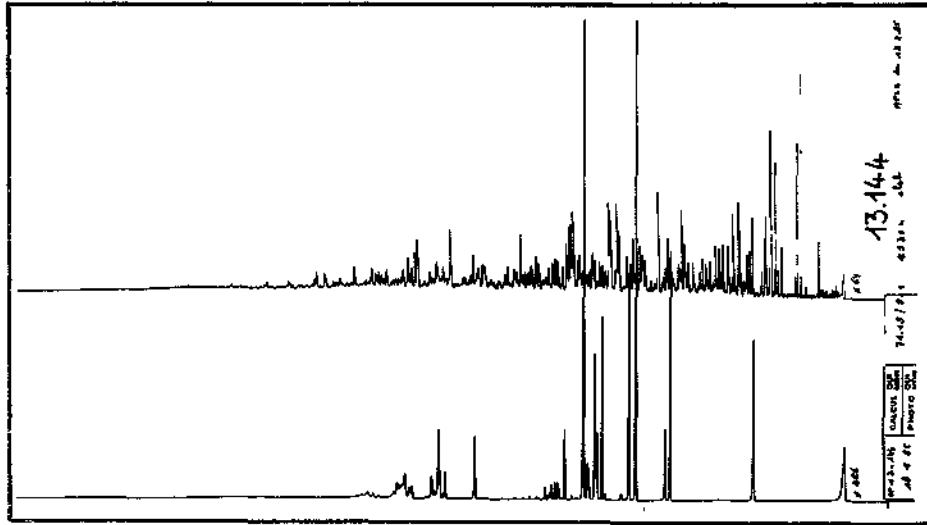
SNEA (P)

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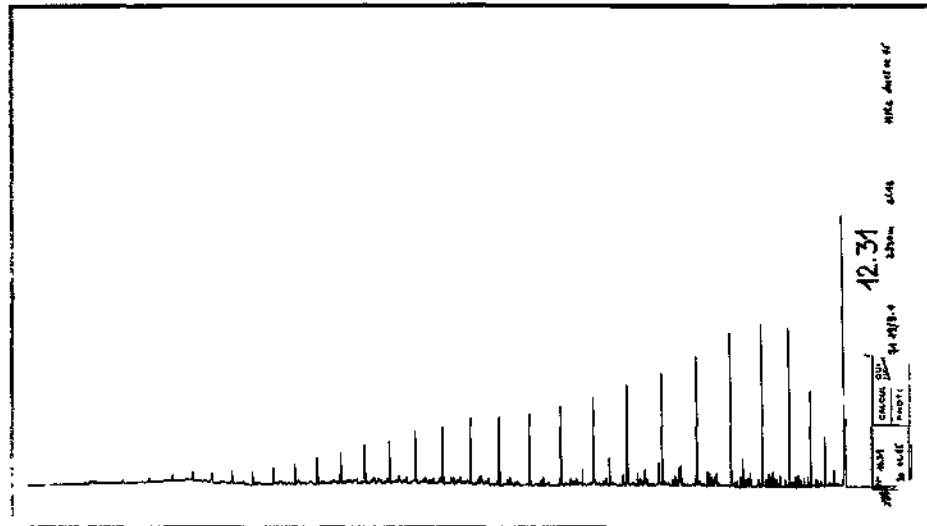
PAYS : **NORWAY**
 Country
 SONDAGE : **71-19/9-1**
 Well

Cote / Depth : **2930 m**
 Identification / Identification : **S. W. C.**
 Roche / Rock :
 Formation / Formation :
 Age / Age : **LOWER JURASSIC**

Fig. 14



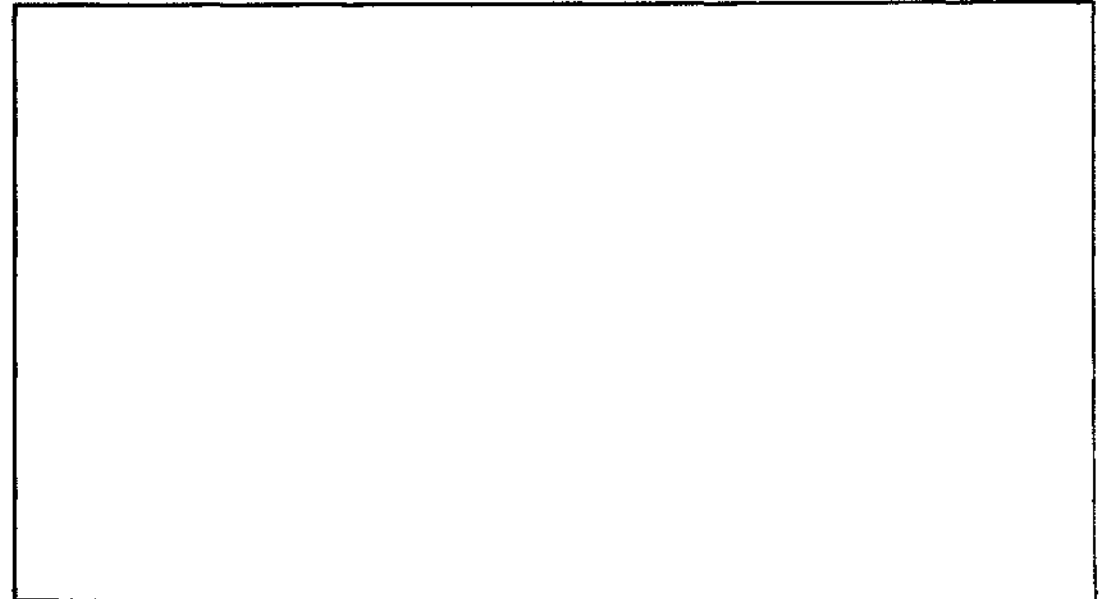
HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC

Composition du produit total (%) EOM = 2960 ppm
 Composition of total product

Asphaltènes Asphaltenes	As	:	} 46,7		
Résines Resins	R	:			
HC saturés Saturated HC	S	:	25,8	$\frac{S}{A}$	0,94
HC aromatiques Aromatic HC	A	:	27,5	A	



HC THERMOVAPORISES THERMOVAPORIZED HC

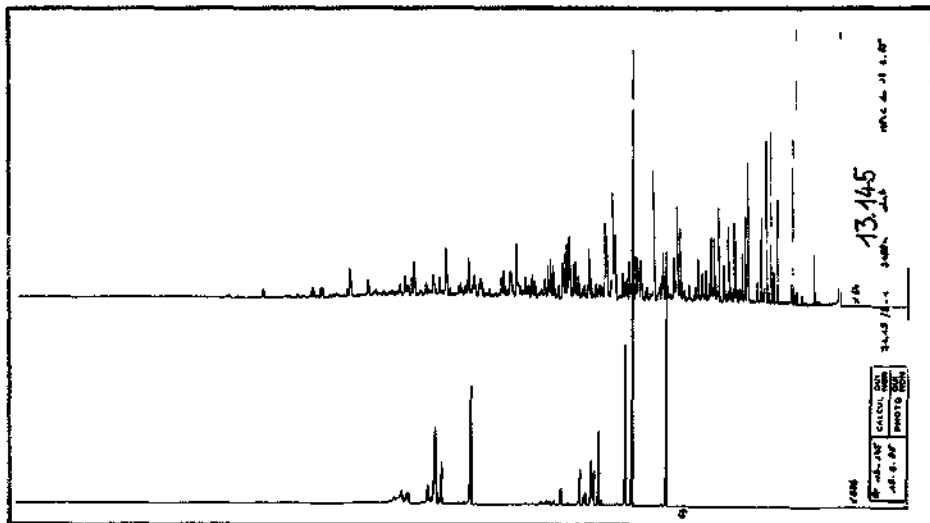
SNEA (P)

DIVISION RECHERCHES ET APPLICATIONS EN GEOLOGIE

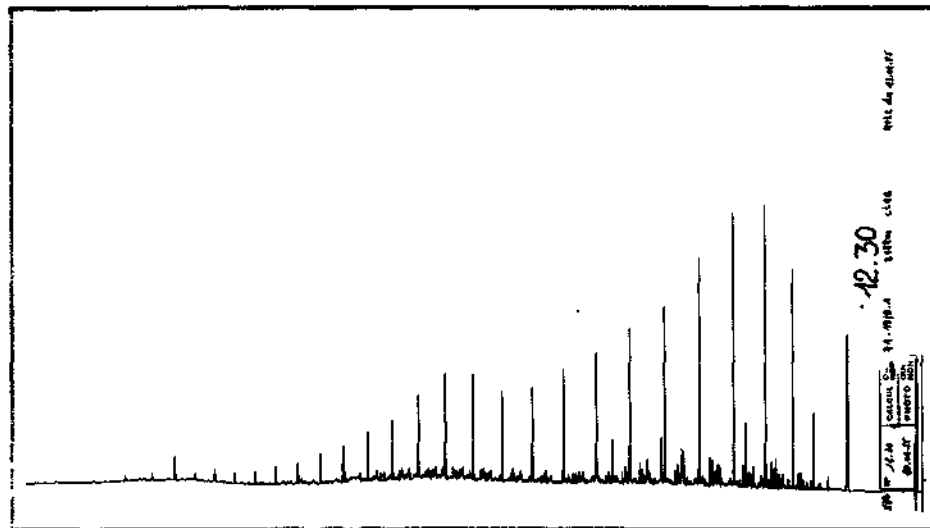
PAYS : **NORWAY**
 Country
 SONDAGE : **71-19/9-1**
 Well

Cote : **3188 m**
 Depth
 Identification : **S. W. C.**
 Identification
 Roche : **UPPER TRIASSIC**
 Rock
 Formation :
 Formation
 Age :
 Age

Fig. 15



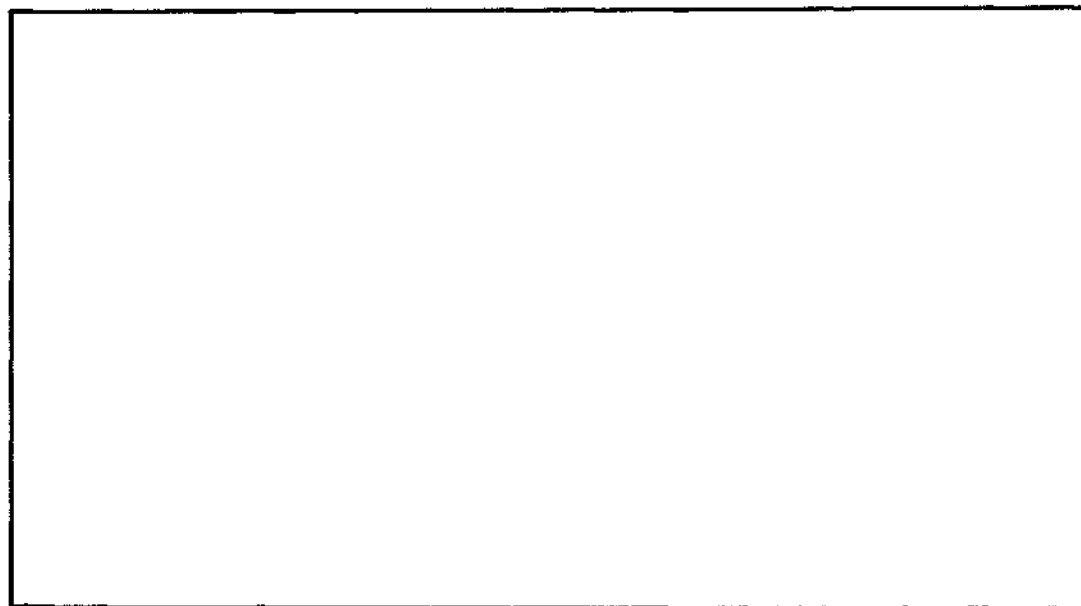
HC AROMATIQUES AROMATIC HC



HC SATURES SATURATED HC

Composition du produit total (%) EOM = 2790 ppm
 Composition of total product

Asphaltènes Asphaltenes	As	}	44,6	
Résines Resins	R			
HC saturés Saturated HC	S	:	12,9	S A 0,30
HC aromatiques Aromatic HC	A	:	42,5	



HC THERMOVAPORISES THERMOVAPORIZED HC

A 5772