

Hydrogen sulphide was recorded as 6 to 25 ppm at app1075m. Appropriate safety and testing precautions in accordance with Norsk Agip procedures were put into effect. A MDT sampling taken at 1078m proved that the reservoir do not contain any H₂S. This was confirmed during the DST.

One DST was performed in the well.

Perforated intervals: 1078-1106 and 1127-1136.5m

Best flow:	Choke:	48/64"
	Oil flow:	685 m ³ /d
	Gas flow:	40.4 Km ³ /d
	GOR	59 m ³ /m ³
	Oil density:	33.5 ⁰ API

2.3.4 Wireline Logs

The following is a summary of the 8 ½” hole wireline logs run in the well.

Run No	TYPE OF LOGS	RECORDED INTERVAL m	DATE	SERVICE STARTED Hrs.min	SERVICE ENDED Hrs.min	TOTAL TIME Hrs.min	LOST TIME Hrs.dec.	TIME SINCE CIRC Hrs.dec.
1	MDT	1080	29.09.01					
2	HRLA - PEX - GR	1419-900	01/10/01	12:15	17:00	4,75	NIL	5,5
3	CMR - APS - HNGS	1419-900	01-02/10	17:45	00:30	6,75	NIL	11,50
4	FMI - DSI	1419-900	02/10	01:05	07:00	5,92	NIL	17,42
5A	MDT		02/10	07:55	17:30	9,9	6,67	34,09
6	VSP	1415-465	02-03/10	18:25	00:10	6,75	NIL	34,09
5B	MDT		03/10	16:15	21:00	5,25	2	9,5
5C	MDT	1162	03-04/10	21:30	02:00	3,5	3,5	13

Comments:

The MDT run 1 was performed to sample the top of the reservoir due to H₂S warning. No H₂S was detected in the sample.

The MDT 5A failed and a new MDT tool had to be brought out to the rig.

2.7.3 FMT Pressure Interpretation

25 MDT pressure measurements were taken in the well in two runs. The MDT failed during operation and the 13 last points were taken with another MDT tool. The pressure difference between the two runs is app. 0.1 bar.

Test No.	Test Depth	Test TVD	Gauge	Formation	Mud Before	Mud After	Drawdown	Pretest Vc	Remarks
	m	m		BAR	BAR	BAR	md/cp	cc	
1	1079,06	1078,92	BQP1	119,6	136,42	136,41	982,8	20	
2	1081,05	1080,91	BQP1	119,73	136,65	136,62	26,7	20	
3	1083,07	1082,93	BQP1	119,9	136,88	136,88	312,03	20	
4	1091,49	1091,34	BQP1	120,54	137,93	137,94	413,68	20	
5	1098,99	1098,83	BQP1	121,09	138,85	138,87	625,78	20	
6	1102,99	1102,82	BQP1	121,41	139,39	139,34	661,78	20	
7	1133,02	1132,81	BQP1	123,75	143,12	143,12	1056,55	20	
8	1136,01	1135,8	BQP1	123,98	143,5	143,47	58,79	20	
9	1139,01	1138,79	BQP1	124,22	143,87	143,86	475,22	20	
10	1148,2	1147,97	BQP1	124,94	145,02	145,02	644,3	20	
11	1150,1	1149,87	BQP1	125,29	145,26	145,25	62,62	20	
12	1152,5	1152,26	BQP1	125,37	145,56	145,55	29,34	20	
1	1079,09	1078,96	BQP1	119,69	135,98	135,98	1010,06	20	
2	1103,09	1102,92	BQP1	121,54	138,96	138,92	86,52	20	
3	1133,09	1132,88	BQP1	123,88	142,65	142,68	260,72	20	
4	1156,7	1156,46	BQP1	25,64	145,59	145,62		0,96	
5	1158,52	1158,28	BQP1	126,02	145,81	145,83	110,78	20	
6	1162	1161,75	BQP1	126,38	146,28	146,23	105,82	20	
7	1164	1163,75	BQP1	126,61	146,49	146,44	8,37	0,79	
8	1197,31	1197	BQP1	131,79	150,66	150,68	114,96	20	
9	1228,99	1228,64	BQP1	135,13	154,63	154,63	884,76	20	
10	1244,02	1243,65	BQP1	136,72	156,52	156,51	48,52	20	
11	1387,01	1386,49	BQP1	152,66	174,35	174,32	117	20	
12	1389	1388,48	BQP1	152,86	174,59	174,54	108,1	20	
13	1162	1161,75	BQP1	126,38	142,39	126,38		20	Sampling

MUD SUMMARY REPORT																				
Well 7122/7-2																				
Day no.	TMD (m)	Hole size (in)	Mud type	MW (g/cm3)	Viscosity (s/L)	PV (mPa*s)	YP (Pa)	Gels 10s/10m (Pa)	API WL (mL)	HTHP WL (mL)	HTHP TEMP (°C)	pH	Cl (mg/L)	Sand (%)	TS (%)	LGS (kg/m3)	MBT (kg/m3)	Tot. Hard. (mg/L)	Oil (%)	Tot. Vol. (m3)
13	0	12.25	SW/Bentonite	1.06	100	12	23	21/0/0			20									
14	910	12.25	SW/Bentonite	1.06	150	0	0	0/0/0			50									63
15	425	36	SW/Bentonite	1.06	150	19	19	0/0/0			50									271
16	481	36	SW/Bentonite	1.06	150	7	25	21/25/0			50									310
17	481	17.5	SW/Bentonite	1.06	150	7	25	21/25/0			50									208
18	910	17.5	SW/Bentonite	1.06	150	16	23	21/25/0			50									252
23	935	12.25	FORMATE/POLYMER	1.25	35	8	5	2/3/0	6			9.5	500	0	0				0	221
24	1075	12.25	FORMATE/POLYMER	1.25	35	8	6	2/4/0	6			9.5	500	0	0				0	240
25	1075	12.25	FORMATE/POLYMER	1.26	35	11	7	3/7/0	4			8.5	500	0	0				0	242
26	1109	12.25	FORMATE/POLYMER	1.26	35	11	7	3/6/0	3			8.5	500	0	0				0	244
27	1123	12.25	FORMATE/POLYMER	1.26	50	13	6	3/6/0	2.9			8.5	500	0	0				0	261
28	1135	12.25	FORMATE/POLYMER	1.25	50	12	6	2/4/0	3			9	500	0	0				0	263
29	1144	12.25	FORMATE/POLYMER	1.26	55	12	6	3/4/0	3			8	500	0	0				0	148
30	1159	12.25	FORMATE/POLYMER	1.25	59	12	6	3/4/0	3.2			9	500	0	0				0	149
31	1418	12.25	FORMATE/POLYMER	1.27	59	16	7	3/4/0	2			9	500	0	0				0	187
32	1418	12.25	FORMATE/POLYMER	1.26	58	16	7	3/4/0	2			9	500	0	0				0	
33	1418	12.25	FORMATE/POLYMER	1.26	58	16	7	3/4/0	2			9	500	0	0				0	
34	1418	12.25	FORMATE/POLYMER	1.26	49	17	5	2/3/0	2			8.8	500	0	0				0	
35	1418	12.25	FORMATE/POLYMER	1.26	49	17	5	2/3/0	2			8.8	500	0	0				0	

01/204



Eni

Goliath Field – Well 7122/7-2 Geochemical Study

OLJEDIREKTORATET
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14 AUG. 2002
Sak./Dok.nr.: 01, 204-35



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Source rock kinetic study by: D. Dolci

S. Donato Milanese, May 2002

GEOCHEMISTRY,
A. Muttoni

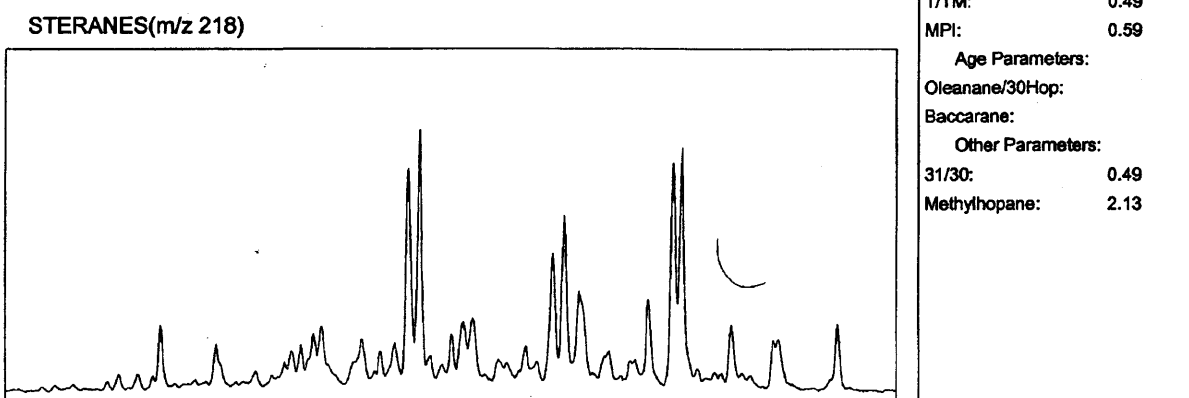
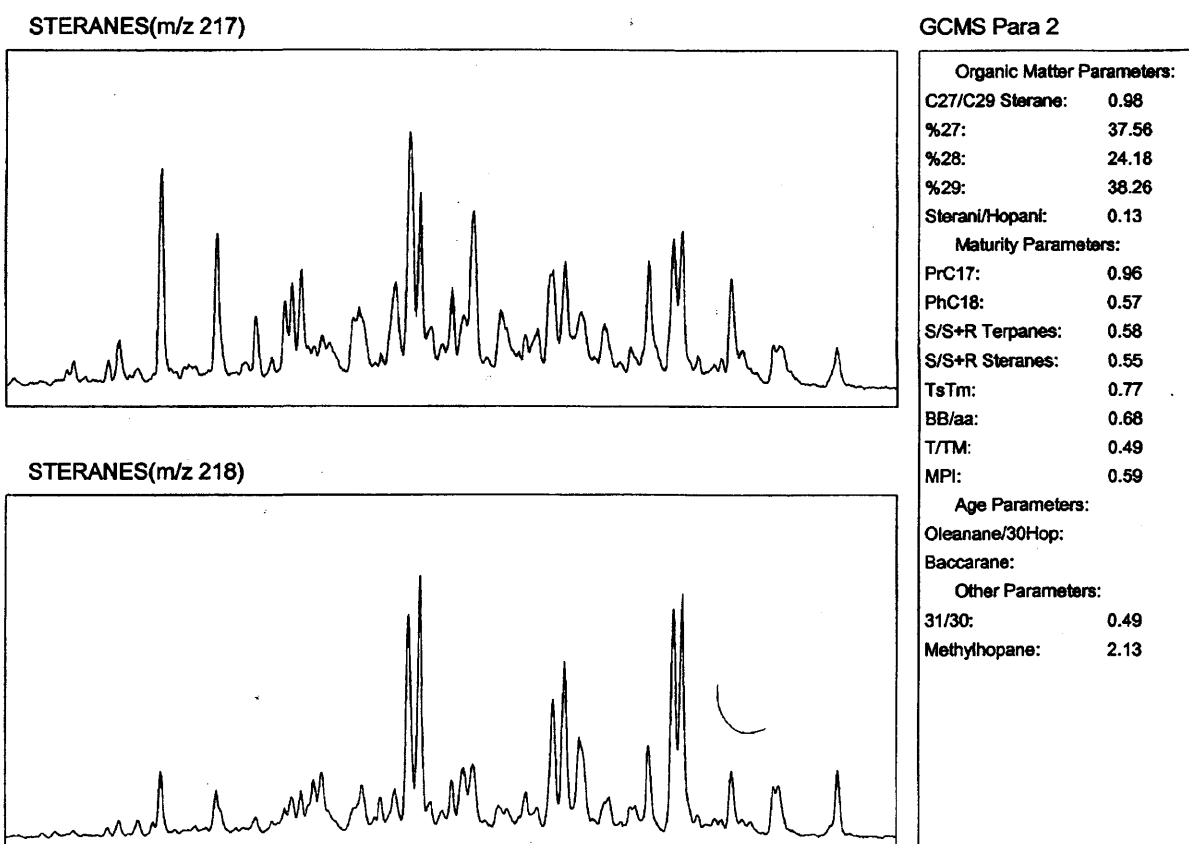
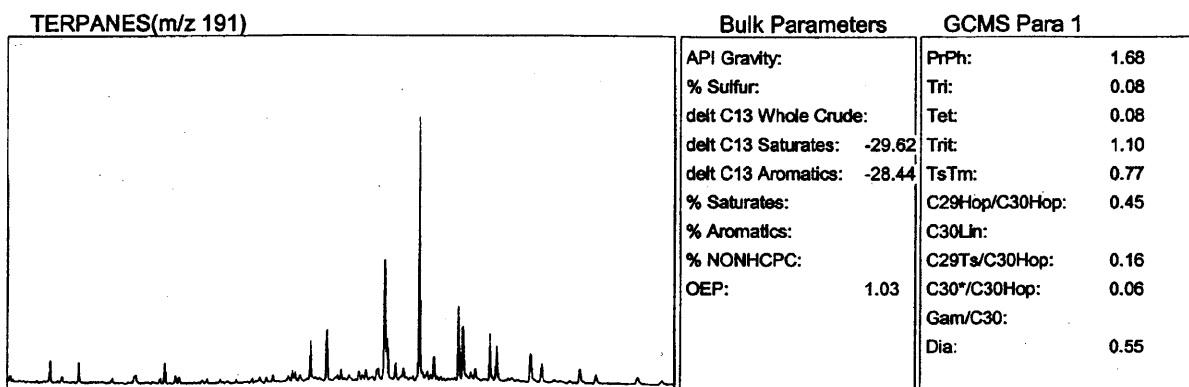
The stable isotopes analysis

Well	Depth (m)	HCS	HCA	NSO	C.V.
7122/7-2	1078-1136.5	-29,62	-28,44	-28,01	
7122/7-1	1106	-29,48	-28,11	-27,86	0,5
7122/7-1	1114,4	-29,42	-28,15	-27,96	0,3
7122/7-1	1140	-29,30	-28,14	-27,84	0,0

ANNEX 1: Geochemical parameters and main GC-MS chromatograms

Summary GC-MS

Country: NORVEGIA Well Name: 7122/7-2 GOLIATH 2 Depth:
 Basin: Type: OIL
 Form Name: Age: Sample: NOR_7525_OIL



ANNEX 2: TOC and ROCK-EVAL BULLETIN

ENI S.p.A.
Agip Division

S. Donato 05 -06 -2002
Bull. n° Bull. n° 16



Well : 7122/ 7 - 2 (Norway) Cuttings and Cores

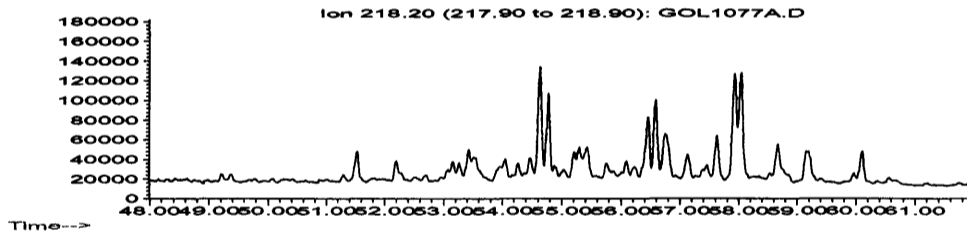
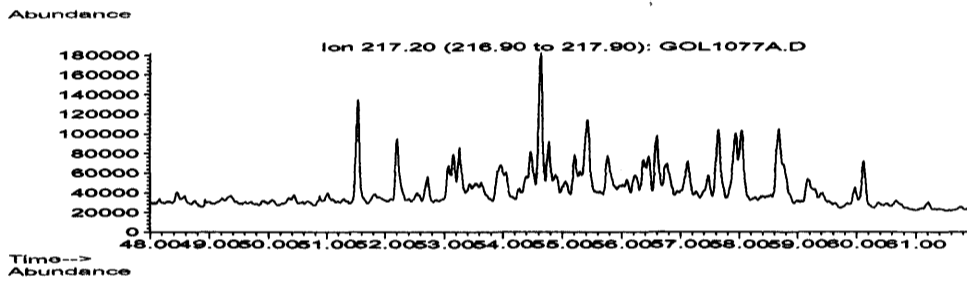
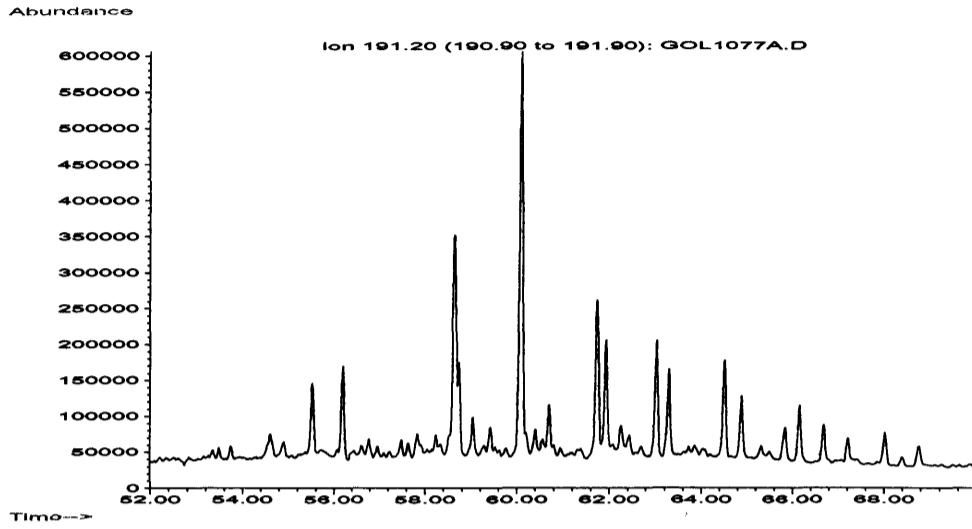
ROCK-EVAL AND TOTAL ORGANIC CARBON

Depth m	Sample Type	TOC %	S1 mg/g	S2 mg/g	S3 mg/g	H1	O1	Tmax °C	NOC mg oil/TOC	P1
918	cutting	0,56	0,1	0,25	0,59	45	105	427	17,9	0,29
930	cutting	0,67	0,07	0,25	1,67	37	249	425	10,4	0,22
942	cutting	0,57	0,04	0,18	1,33	32	233	425	7,0	0,18
978	cutting	0,38	0,05	0,14	1,25	37	329	420	13,2	0,26
990	cutting	0,50	0,05	0,21	1,40	42	280	425	10,0	0,19
998	cutting	2,98	0,16	2,3	1,01	77	34	426	5,4	0,07
1010	cutting	1,23	0,10	0,64	1,23	52	100	428	8,1	0,14
1018	cutting	0,49	0,05	0,16	0,59	33	120	423	10,2	0,24
1030	cutting	3,28	0,74	8,10	0,63	247	19	421	22,6	0,08
1042	cutting	6,09	1,71	17,80	0,66	292	11	413	28,1	0,09
1054	cutting	8,48	1,76	23,32	1,43	275	17	413	20,8	0,07
1066	cutting	10,10	3,21	27,06	1,48	268	15	414	31,8	0,11
1074	cutting	6,05	3,91	14,03	1,69	232	28	416	64,6	0,22
1075,85	core	1,14	5,37	1,89	10,58	166	928	418	471,1	0,74
1078,82	core	2,81	20,18	3,63	1,60	129	57	415	718,1	0,85
1081,40	core	2,54	24,85	2,94	1,42	116	56	369	978,3	0,89
1084,62	core	0,21	0,37	0,69	0,16	329	76	415	176,2	0,35
1087,06	core	0,24	0,22	0,62	0,14	258	58	395	91,7	0,26
1091,63	core	2,18	12,37	1,55	0,95	71	44	419	567,4	0,89
1097,67	core	3,53	30,06	4,21	0,64	119	18	414	851,6	0,88
1097,71	core	2,79	20,76	2,67	0,68	96	24	418	744,1	0,89
1100,72	core	6,48	8,62	6,93	0,99	107	15	427	133,0	0,55
1100,73	core	4,77	8,23	5,14	0,92	108	19	426	172,5	0,62
1102,34	core	3,13	26,99	3,78	0,63	121	20	337	862,3	0,88
1110,52	core	0,27	1,78	0,77	0,30	285	111	413	659,3	0,70
1113,27	core	0,28	0,08	0,39	0,31	139	111	398	28,6	0,17
1116,52	core	0,18	0,11	0,34	0,14	189	78	416	61,1	0,24
1119,92	core	0,65	0,15	0,52	0,53	80	82	424	23,1	0,22
1123,53	core	0,26	0,06	0,38	0,18	146	69	441	23,1	0,14
1126,83	core	0,28	0,09	0,40	0,39	143	139	454	32,1	0,18
1136,02	core	3,52	28,47	4,79	1,02	136	29	415	808,8	0,86
1140,82	core	3,62	33,13	4,15	0,34	115	9	343	915,2	0,89
1157,82	core	1,72	6,69	3,37	0,89	196	52	425	389,0	0,67
1160 - 72	cutting	0,89	1,18	1,02	2,24	115	252	422	132,6	0,54
1172 - 84	cutting	0,79	0,41	0,68	3,27	86	414	431	51,9	0,38
1184 - 96	cutting	0,76	0,19	0,58	1,45	76	191	435	25,0	0,25
1208	cutting	4,72	4,32	8,29	0,64	176	14	419	91,5	0,34
1218	cutting	0,73	0,33	0,76	0,62	104	85	429	45,2	0,30
1224	cutting	0,59	0,44	0,64	0,94	108	159	423	74,6	0,41
1232	cutting	0,44	0,36	0,41	1,04	93	236	424	81,8	0,47
1244	cutting	0,58	0,13	0,38	0,72	66	124	433	22,4	0,25
1266	cutting	0,47	0,07	0,34	0,86	72	183	427	14,9	0,17
1282	cutting	0,85	0,15	0,84	0,86	99	101	430	17,5	0,15
1318	cutting	0,32	0,06	0,18	0,63	56	197	431	18,8	0,25
1334	cutting	0,16	0,03	0,10	0,62	63	388	426	18,8	0,23
1366 - 78 ?	cutting	0,50	0,07	0,45	0,43	90	86	431	14,0	0,13
1394	cutting	0,45	0,06	0,42	0,26	93	58	431	13,3	0,13
1404	cutting	0,51	0,04	0,44	0,60	86	118	432	7,8	0,08

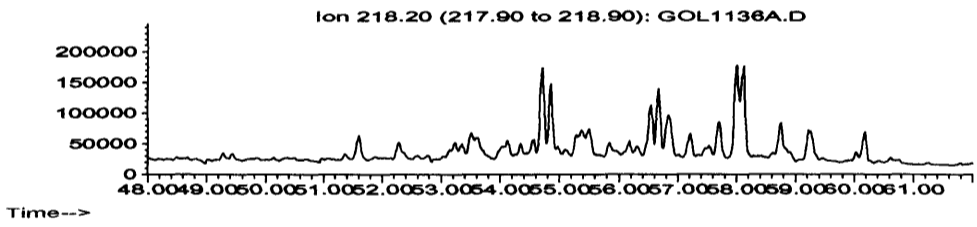
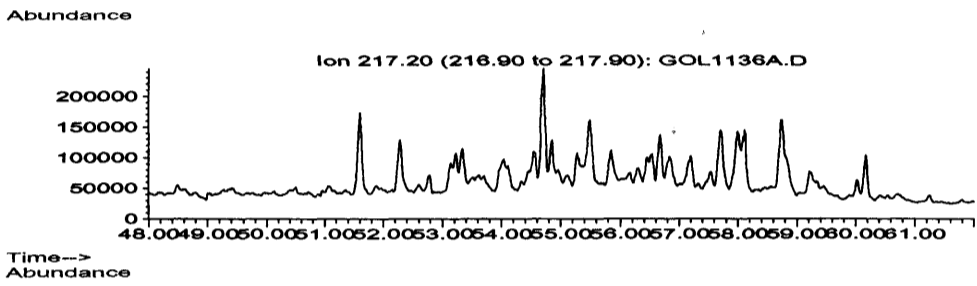
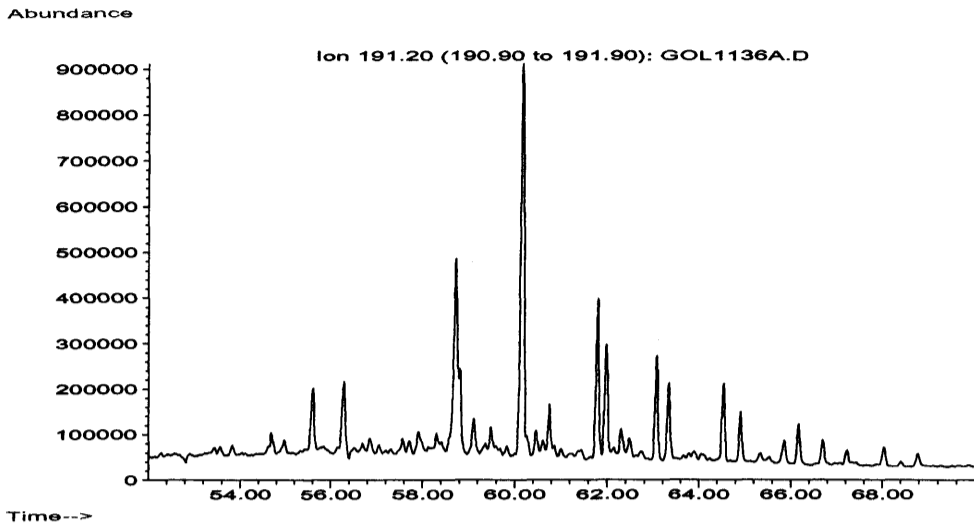
N O C = Normalized oil content (S1*100/TOC)

ANNEX 3: GC-MS CHROMATOGRAMS of CORE samples

WELL 7122/7-2 CORE 1077 m



WELL 7122/7-2 CORE 1136 m



WELL 7122/7-2 CORE 1100 m

