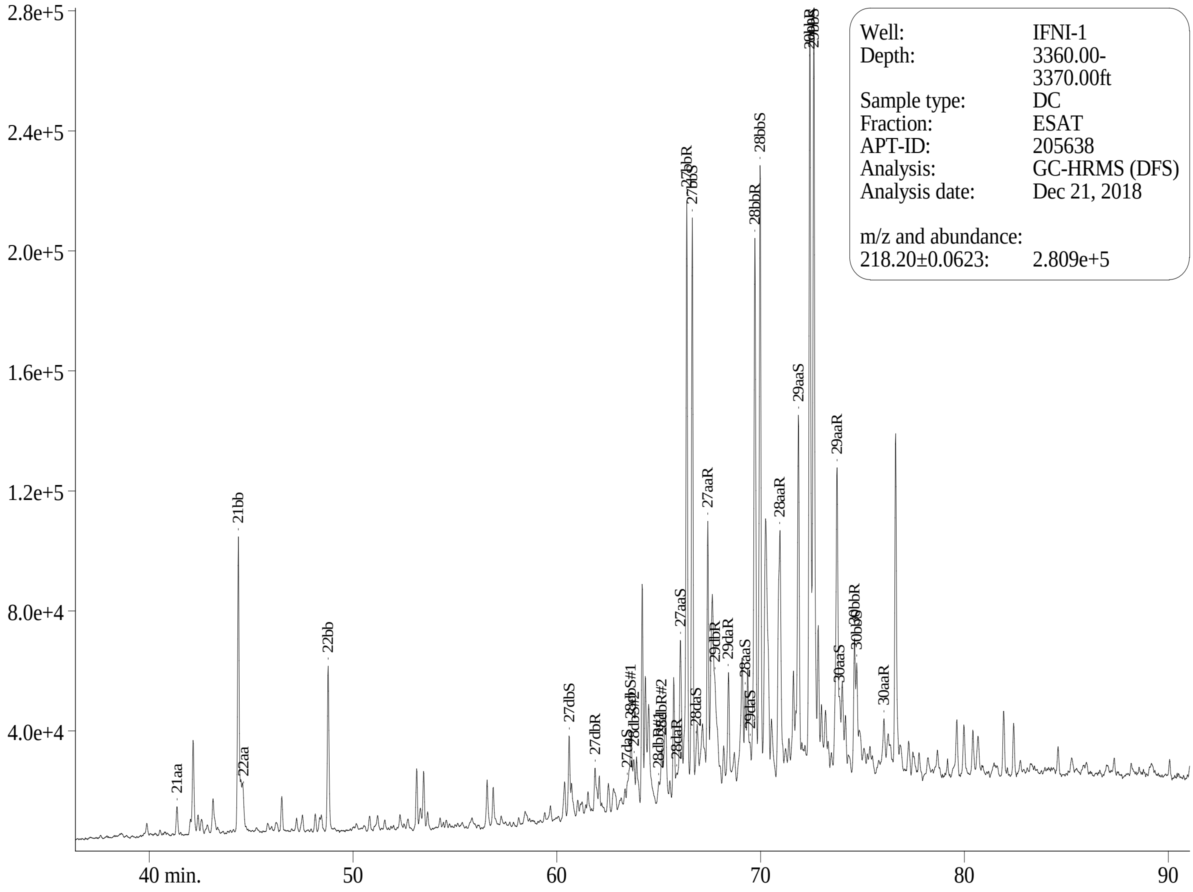
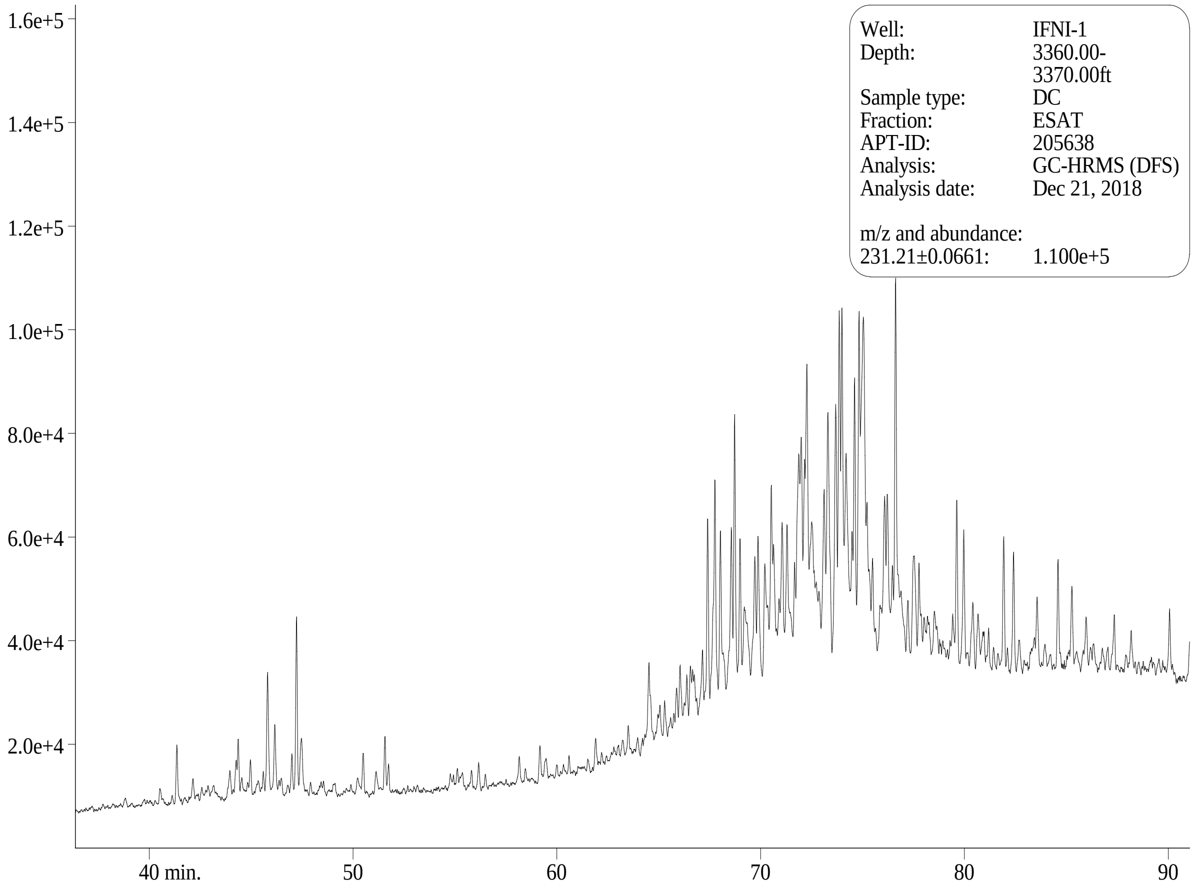
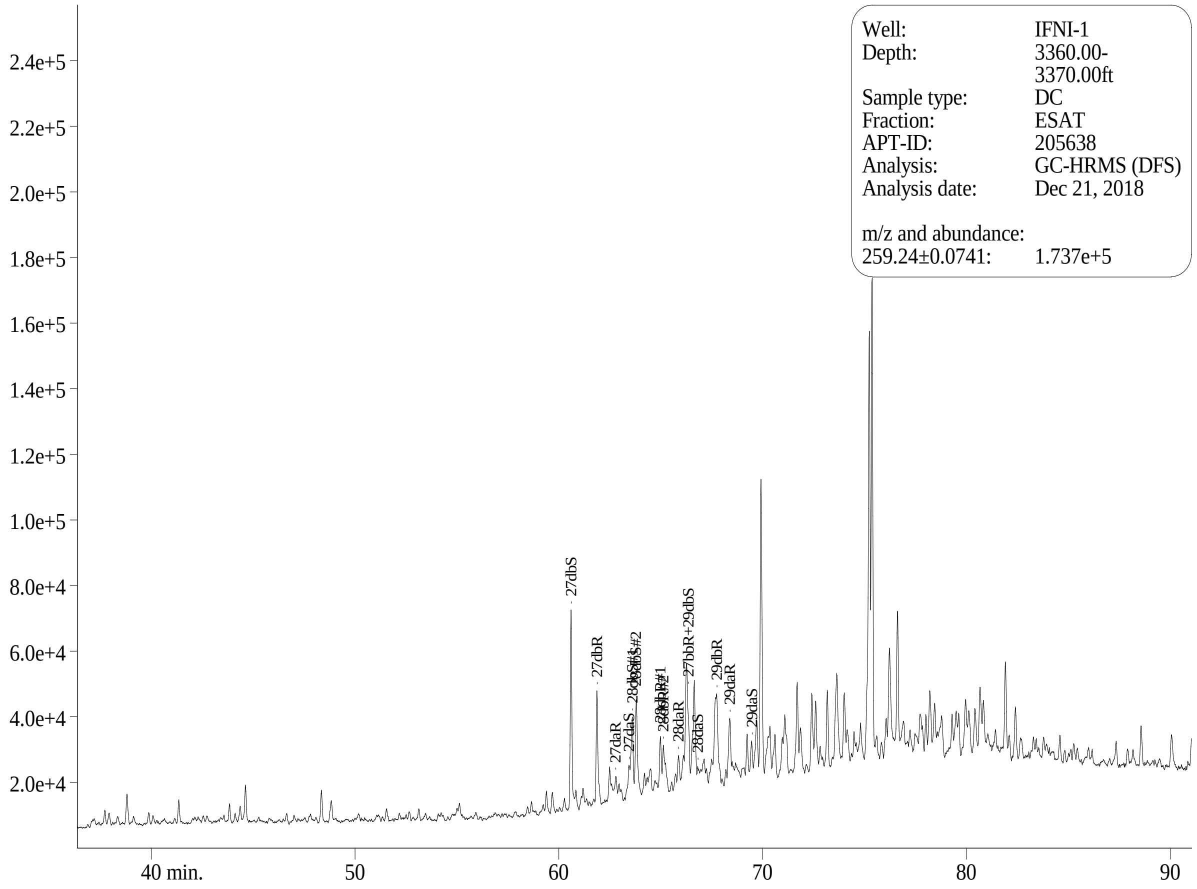
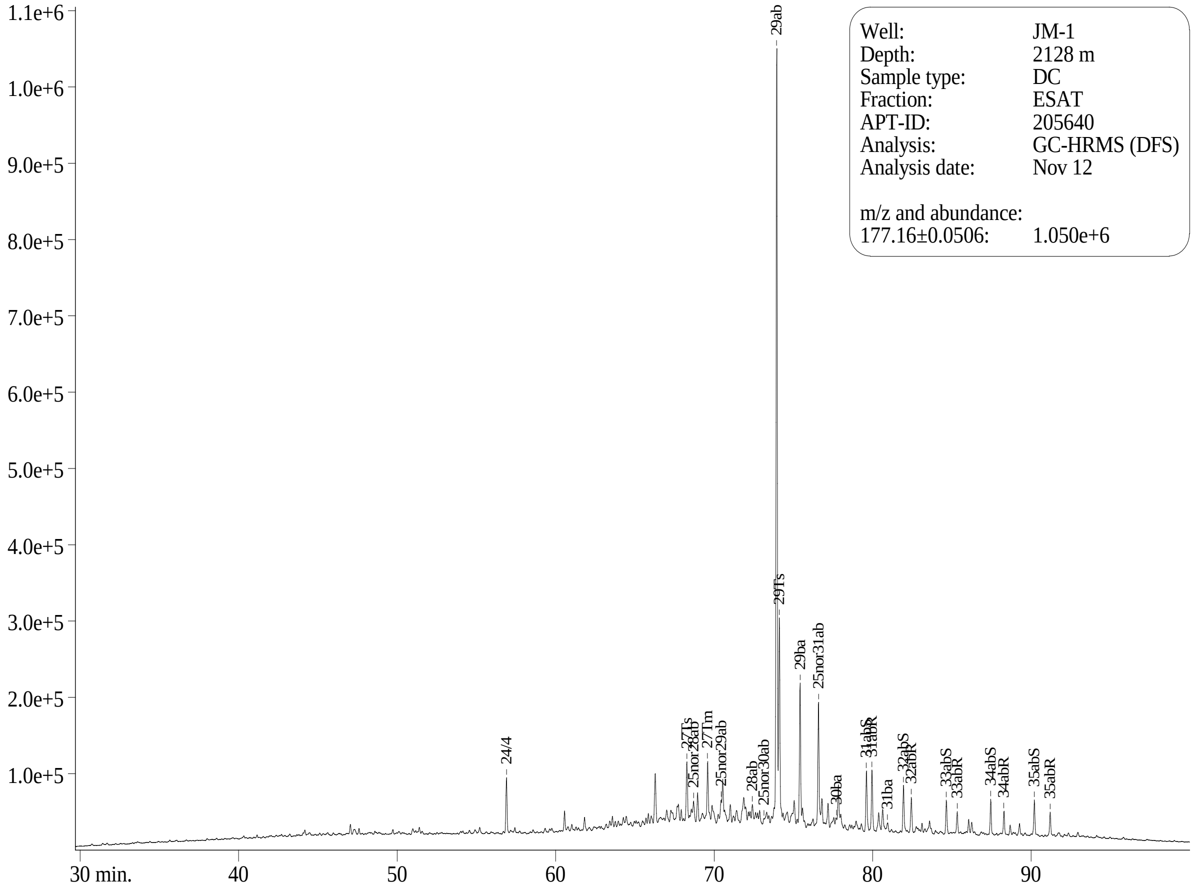

Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: ESAT
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
218.20±0.0623: 2.809e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
27daR
28dbS#1
28dbR#2
28daR
27bbR
27bbS
27aaS
27aaR
28daS
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR


Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: ESAT
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.21±0.0661: 1.100e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
40 min.
50
60
70
80
90



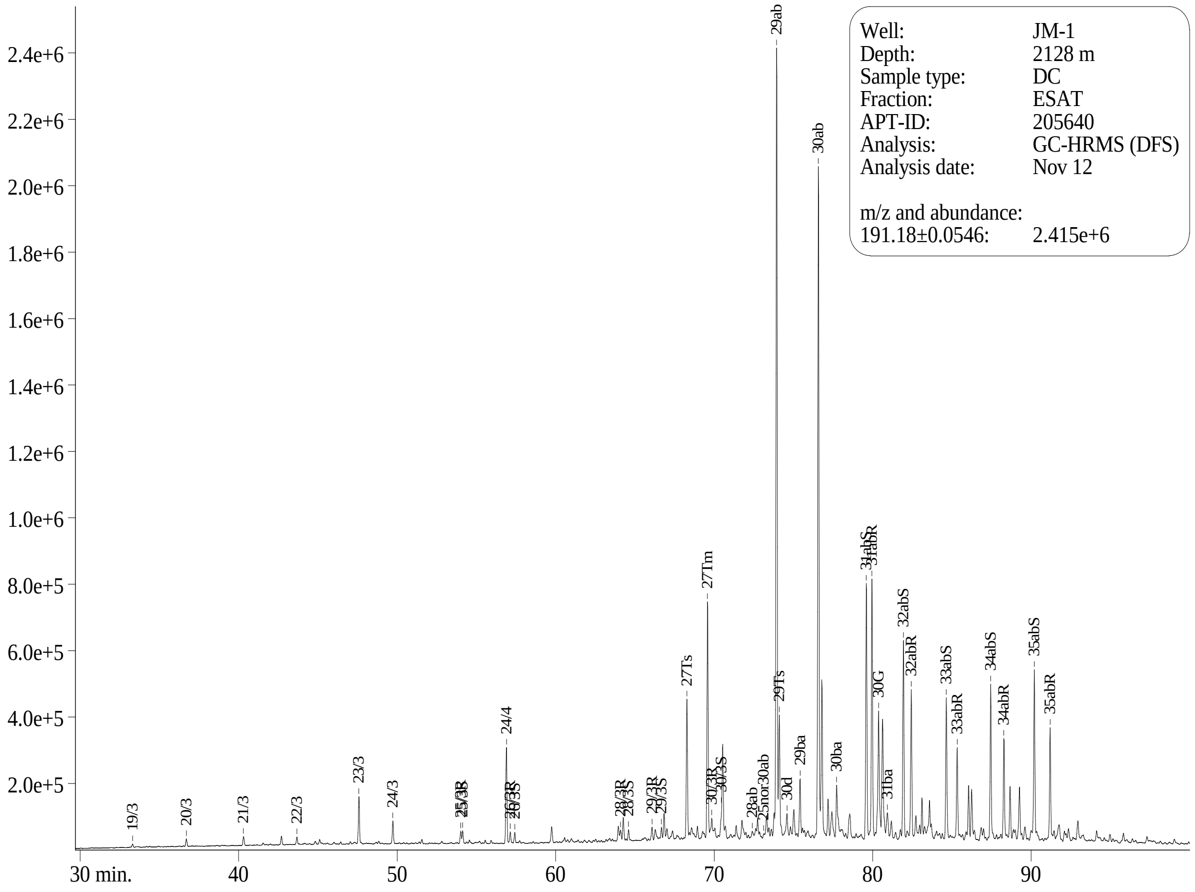
Well:	IFNI-1
Depth:	3360.00-3370.00ft
Sample type:	DC
Fraction:	ESAT
APT-ID:	205638
Analysis:	GC-HRMS (DFS)
Analysis date:	Dec 21, 2018

m/z and abundance:
259.24±0.0741: 1.737e+5



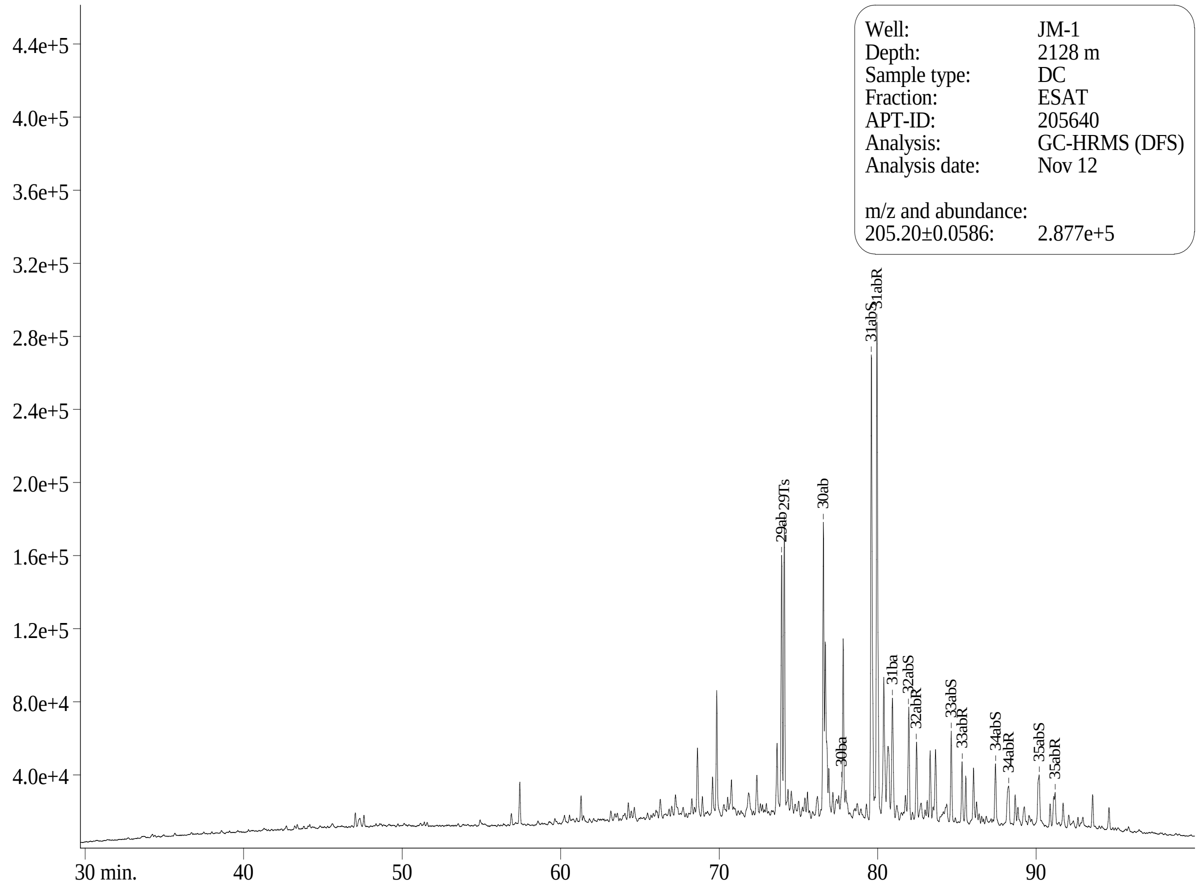
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: ESAT
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
177.16±0.0506: 1.050e+6



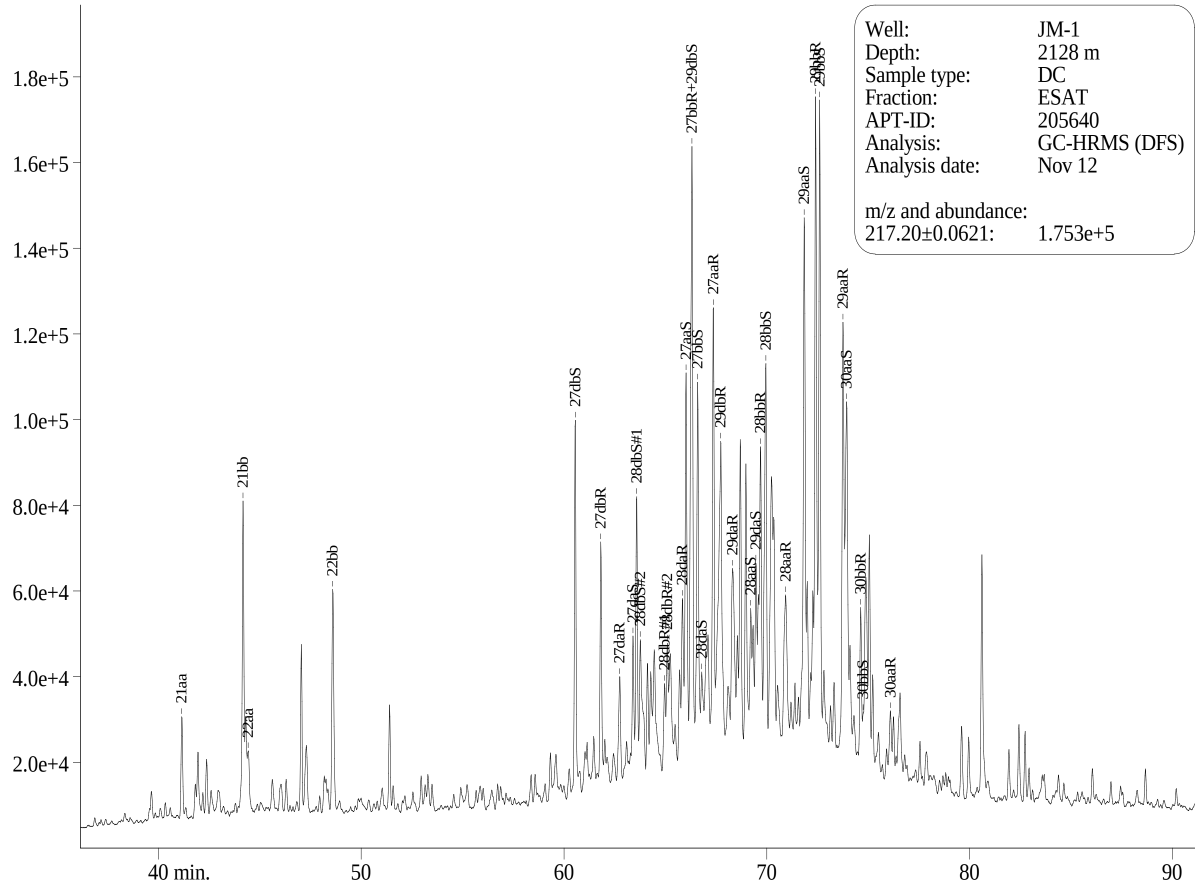
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: ESAT
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
191.18±0.0546: 2.415e+6



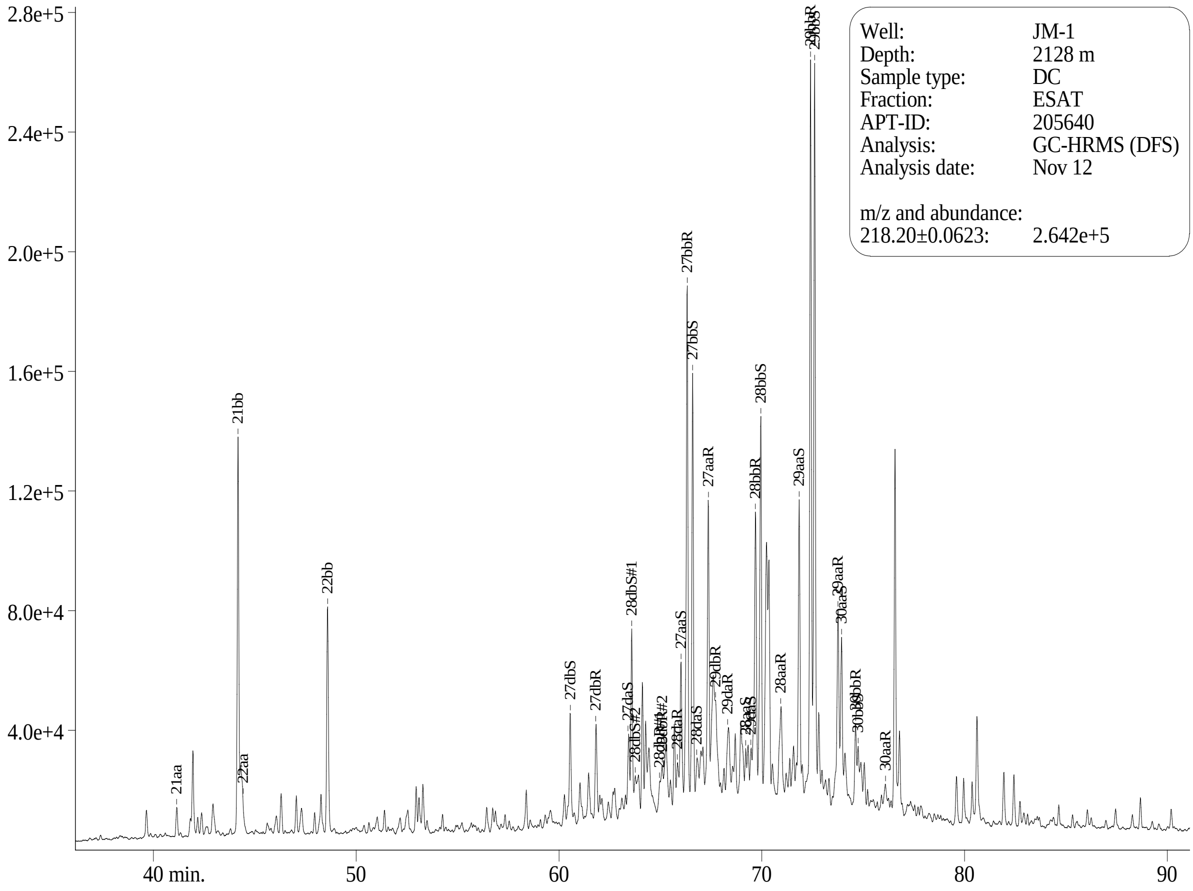
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: ESAT
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

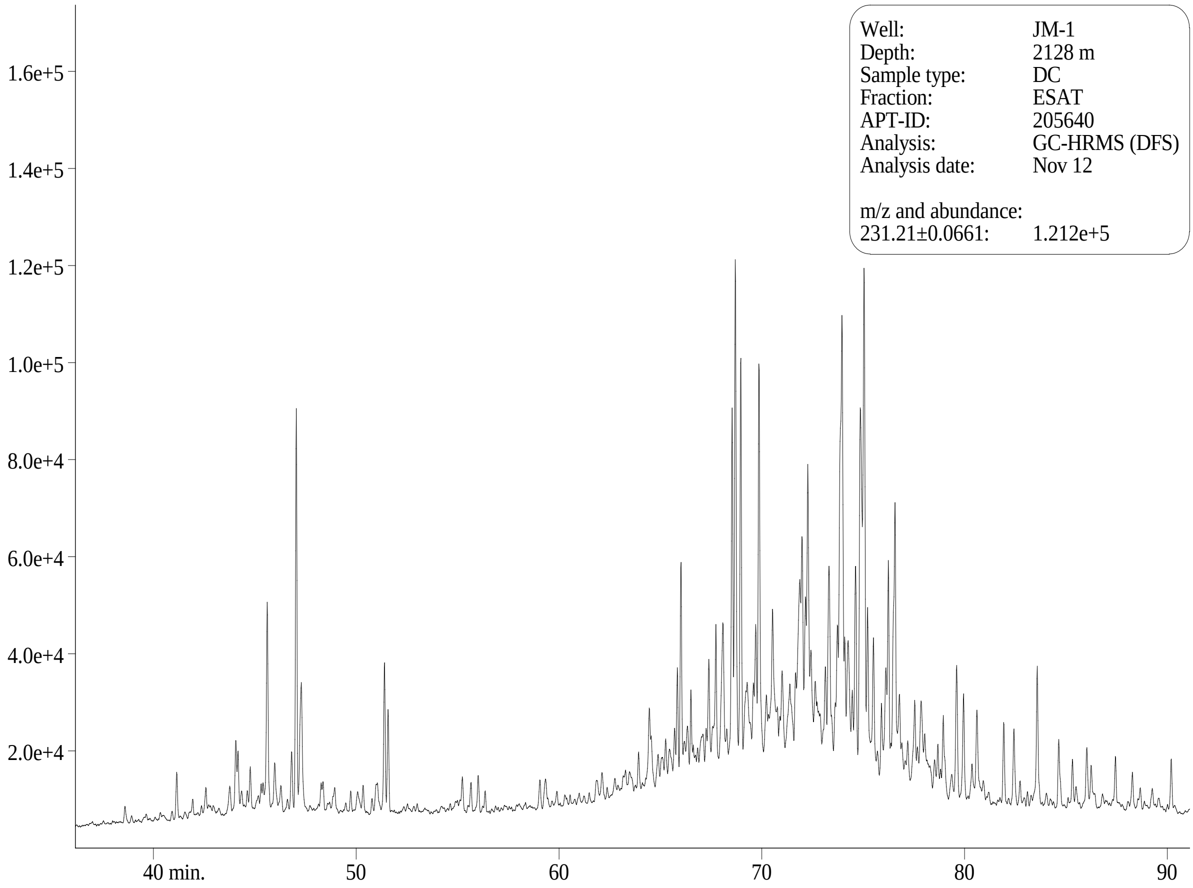
m/z and abundance:
205.20±0.0586: 2.877e+5

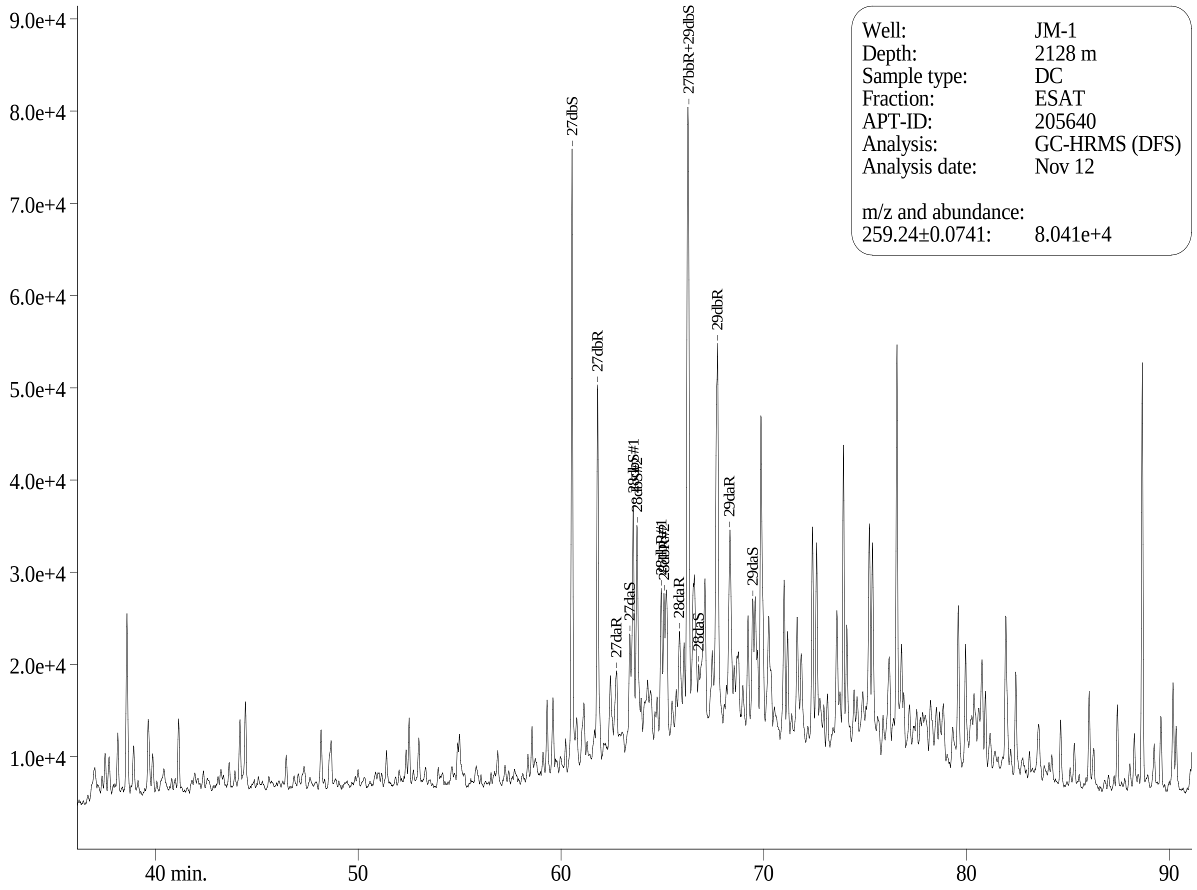


Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: ESAT
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

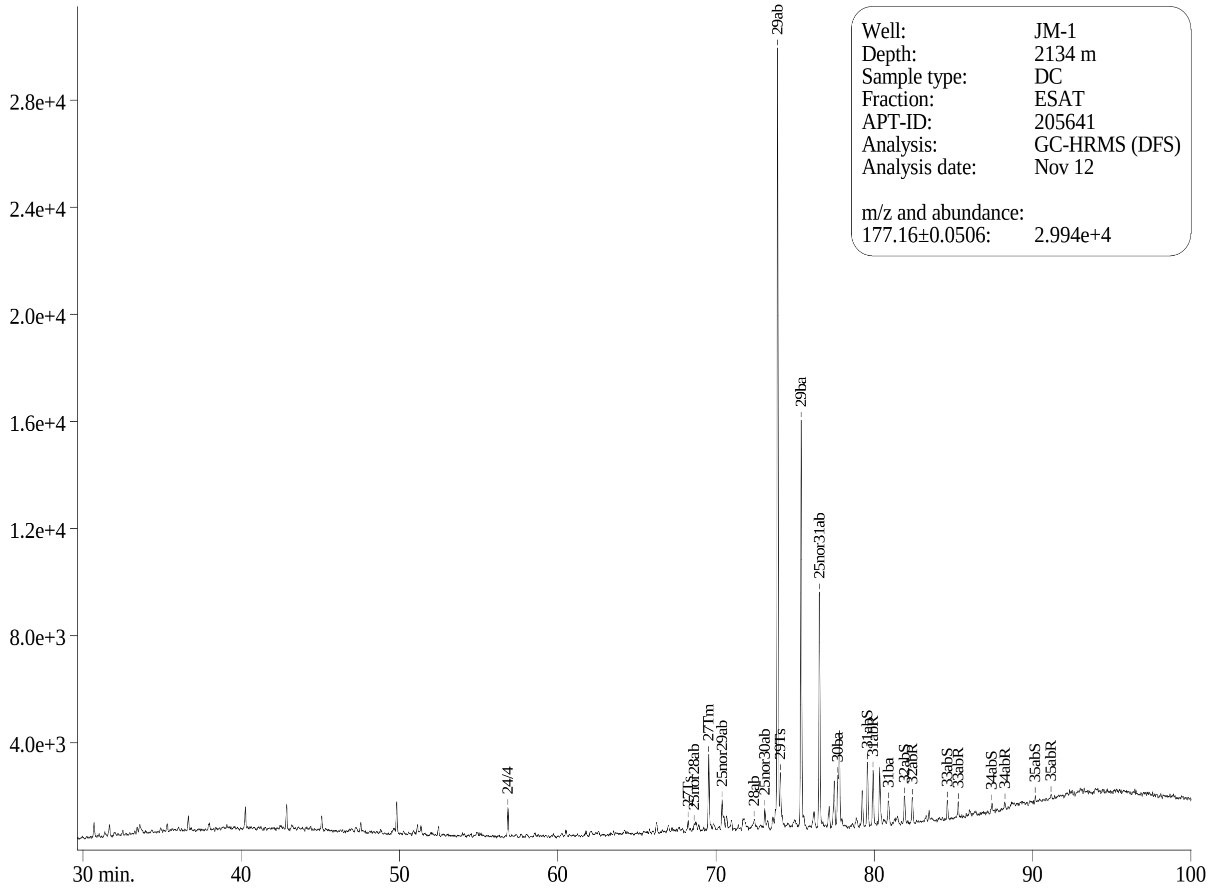
m/z and abundance:
217.20±0.0621: 1.753e+5


Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: ESAT
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
218.20±0.0623: 2.642e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
28dbS#1
28dbS#2
28dbR#2
28daR
27aaS
27bbR
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR


Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: ESAT
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
231.21±0.0661: 1.212e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
40 min.
50
60
70
80
90

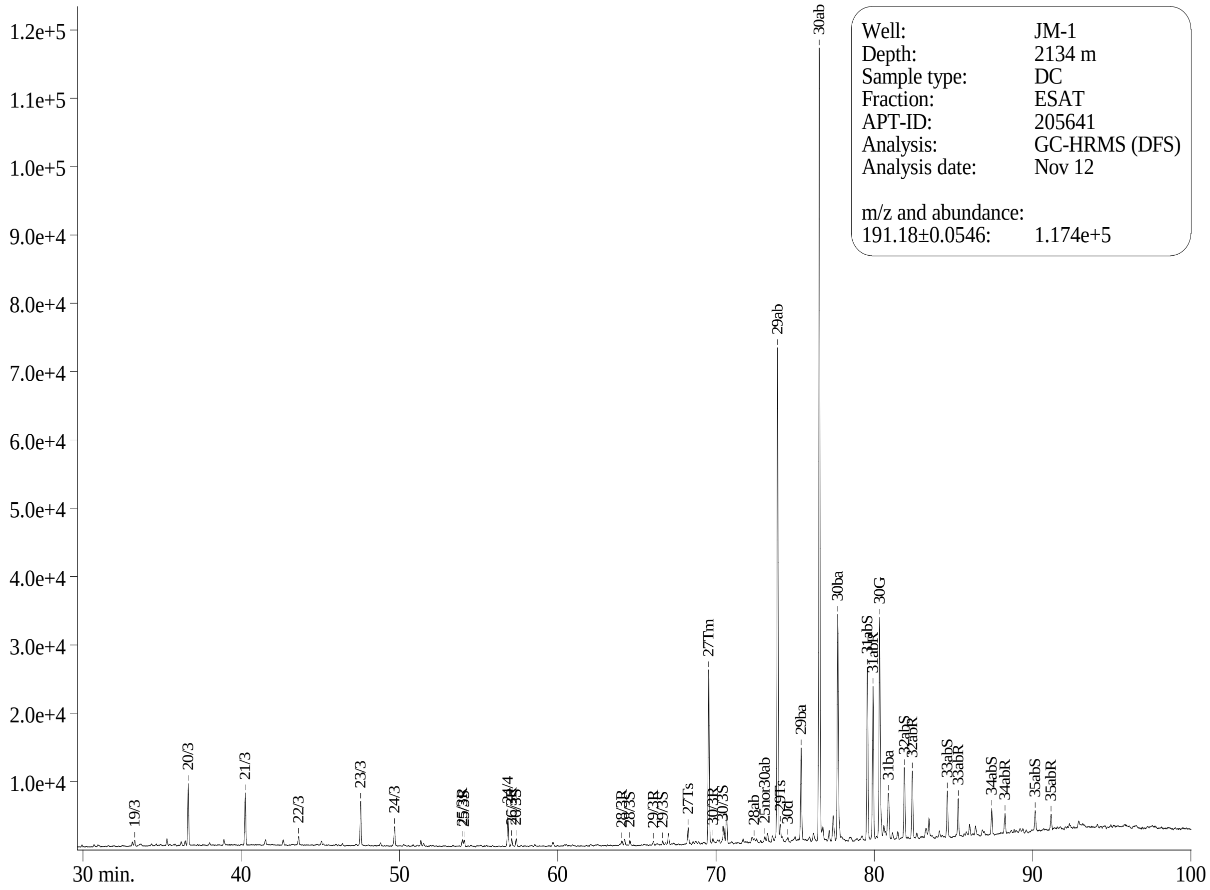


Well:	JM-1
Depth:	2128 m
Sample type:	DC
Fraction:	ESAT
APT-ID:	205640
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 12
m/z and abundance:	
259.24±0.0741:	8.041e+4



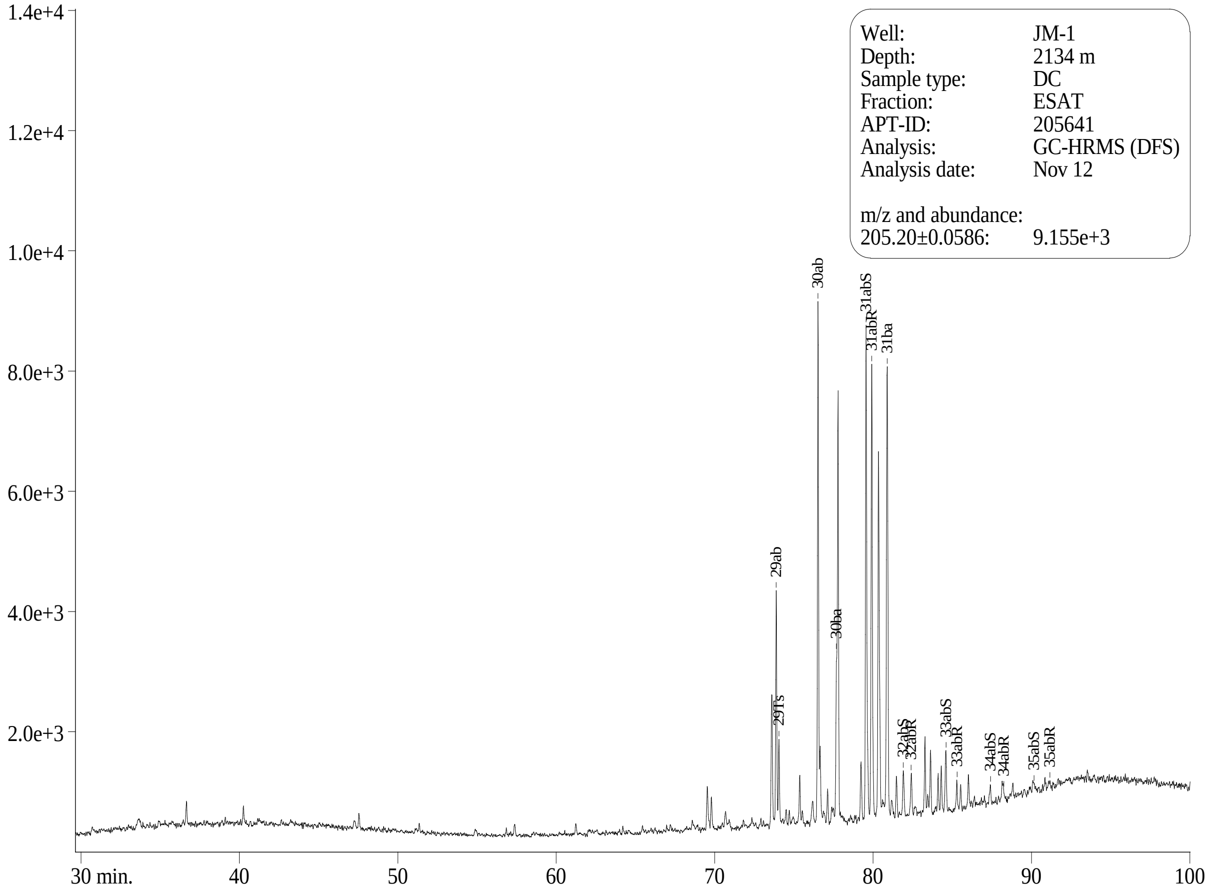
Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

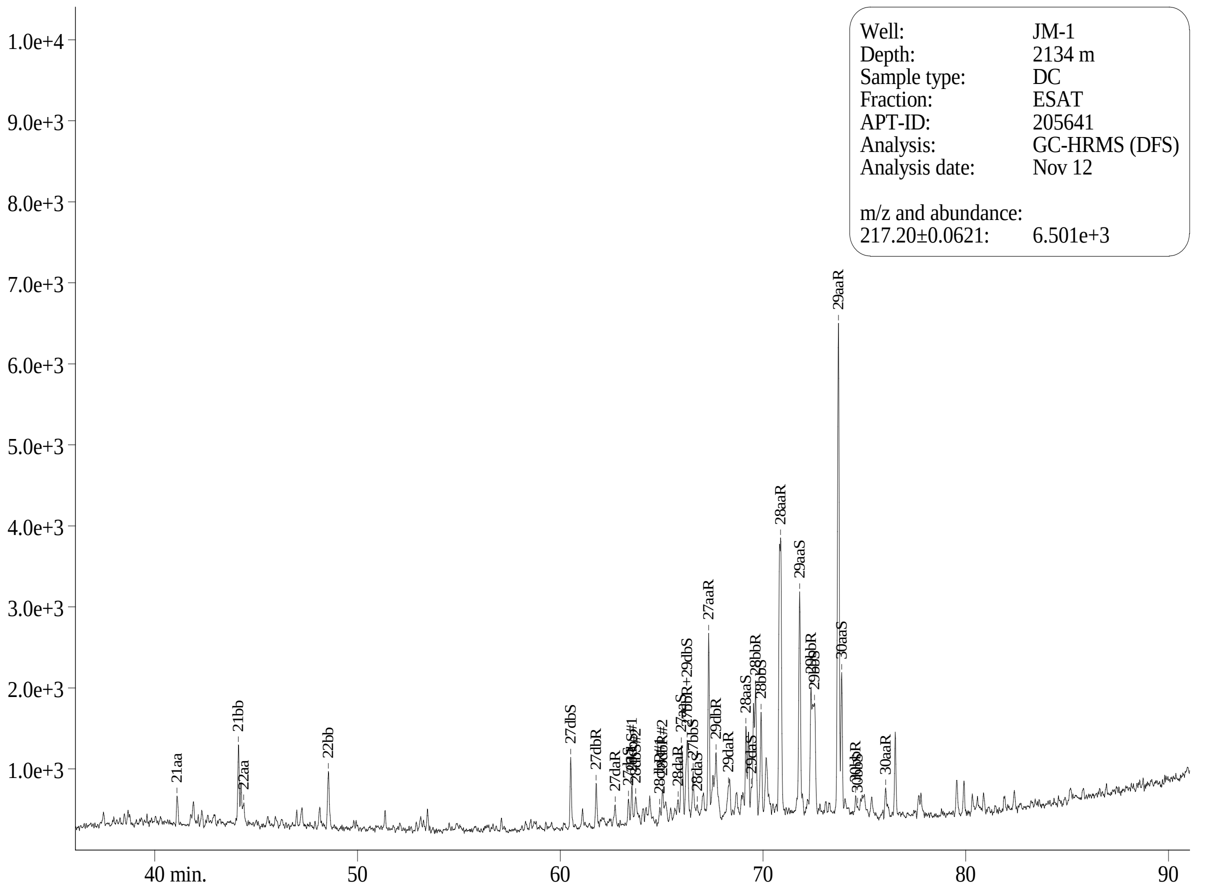
m/z and abundance:
177.16±0.0506: 2.994e+4

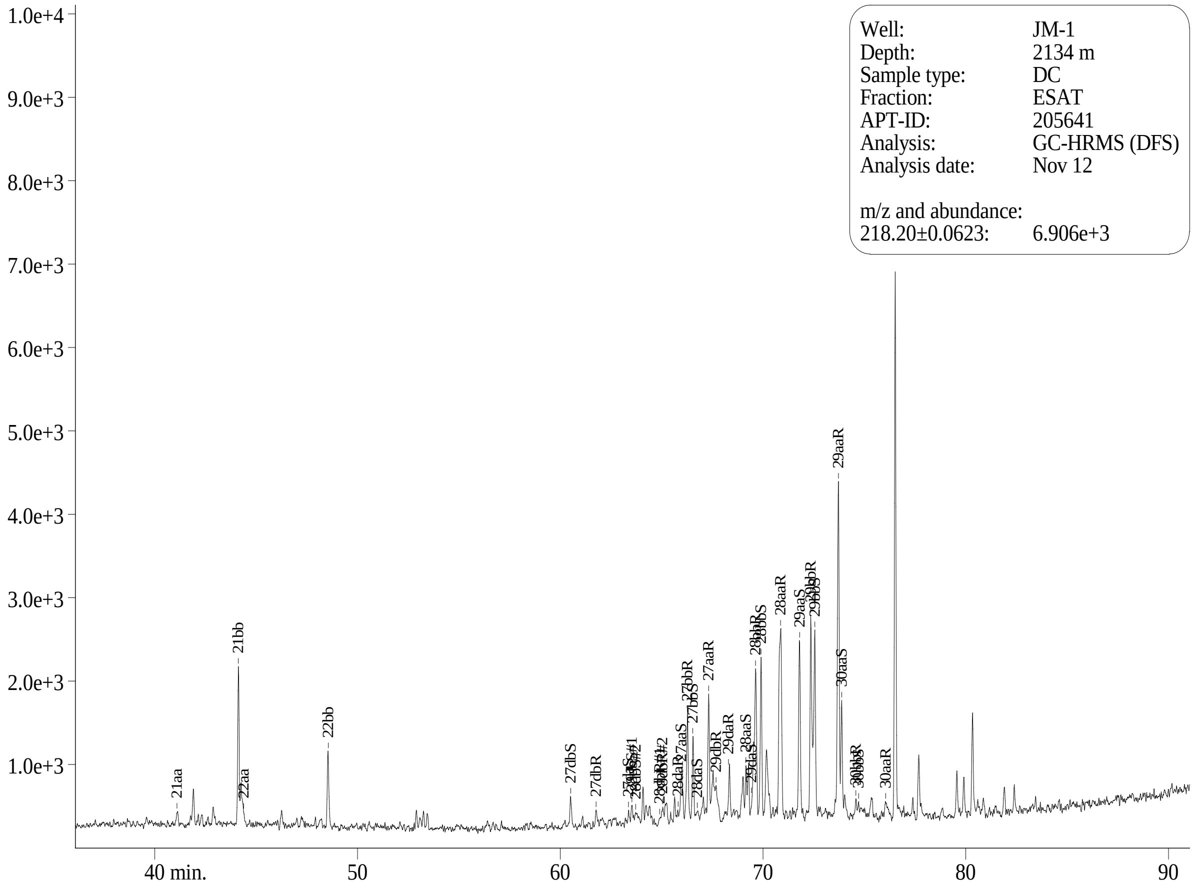


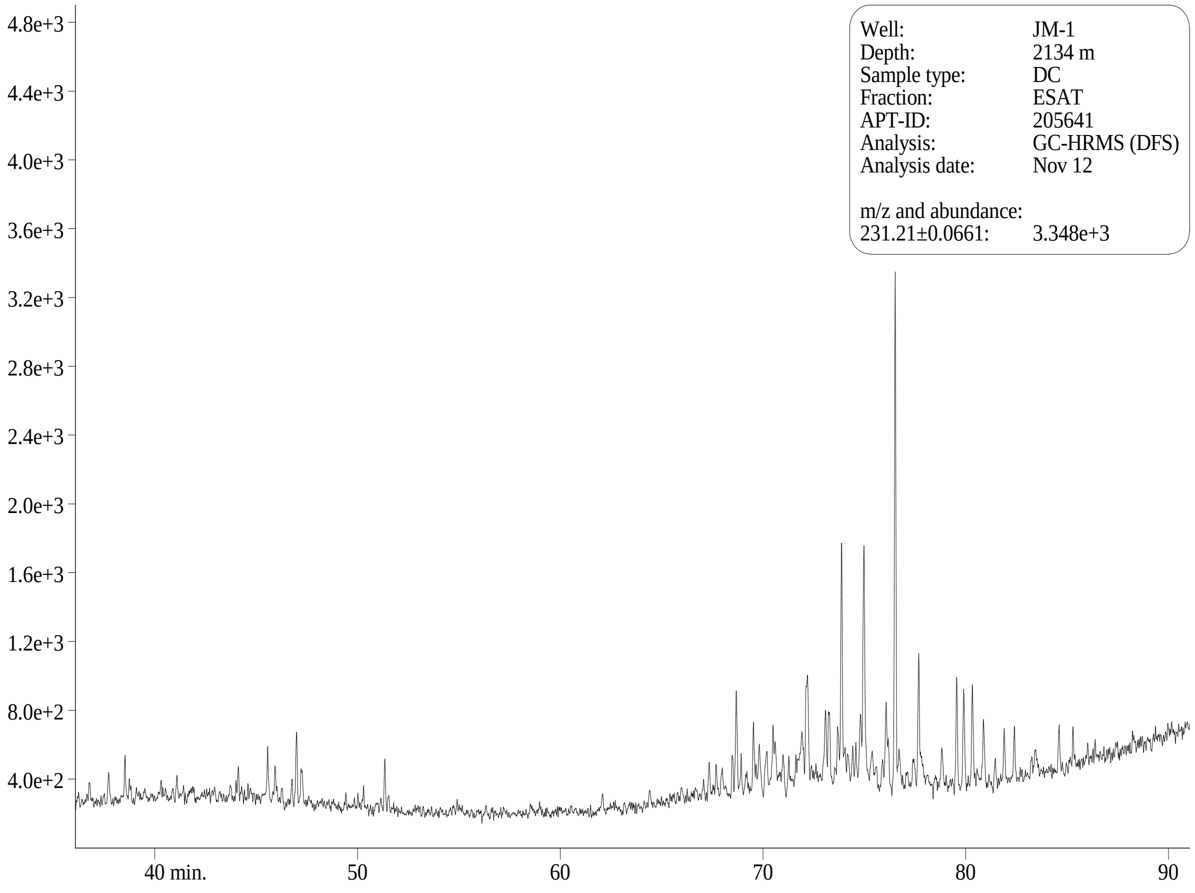
Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

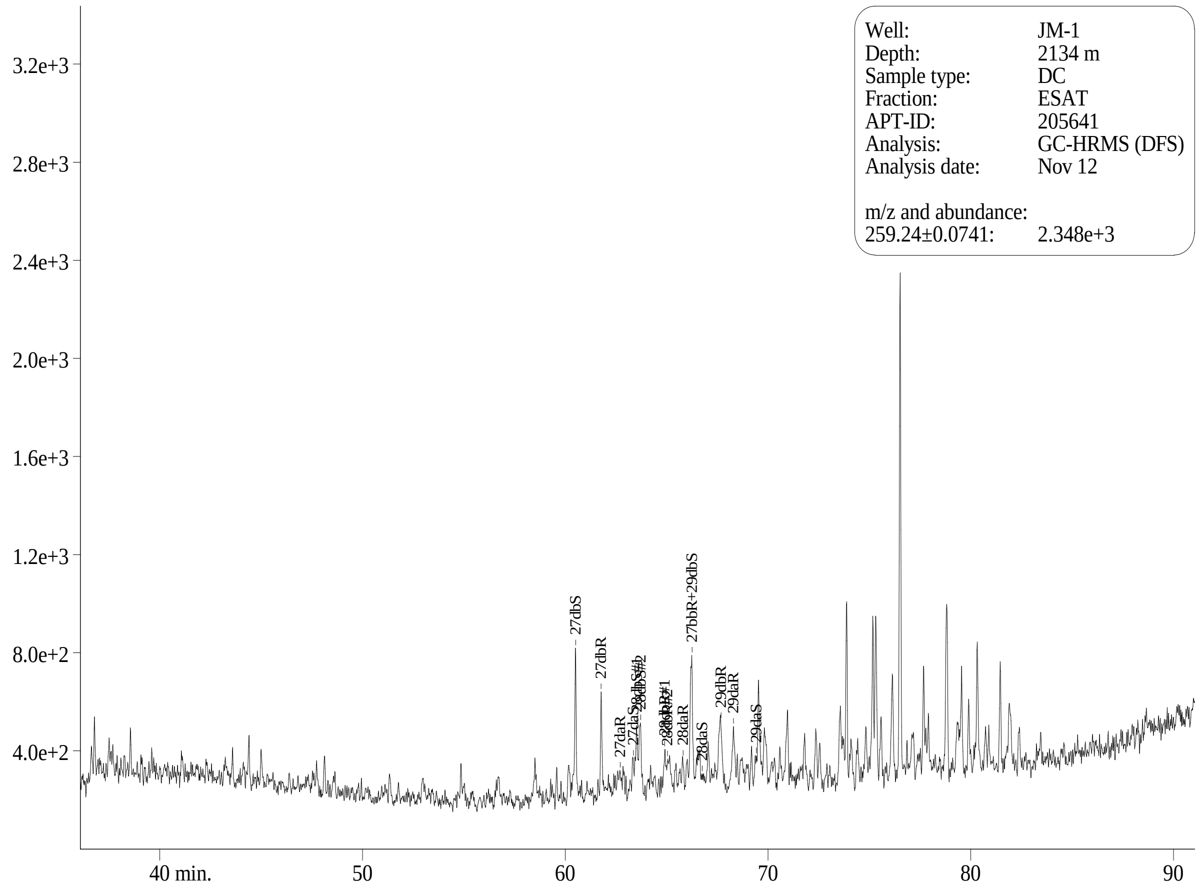
m/z and abundance:
191.18±0.0546: 1.174e+5


Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
205.20±0.0586: 9.155e+3
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
30 min.
40
50
60
70
80
90
100
29Ts
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
217.20±0.0621: 6.501e+3
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR+29dbS
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR

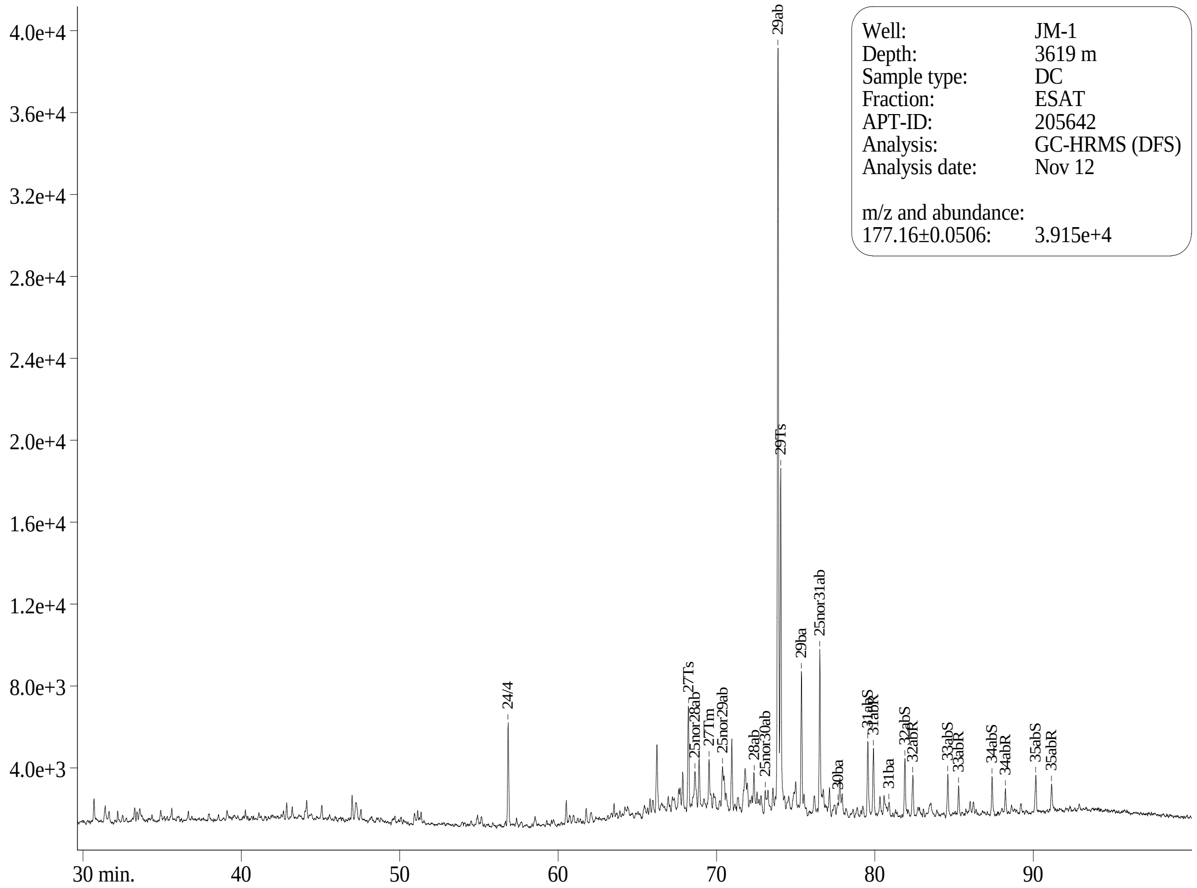

Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
218.20±0.0623: 6.906e+3
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
21aa
21bb
22aa
22bb
27dbS
27dbR
28daS
27aaS
27bbR
27bbS
27aaR
28daR
28aaS
29dbR
29daR
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR
40 min.
50
60
70
80
90

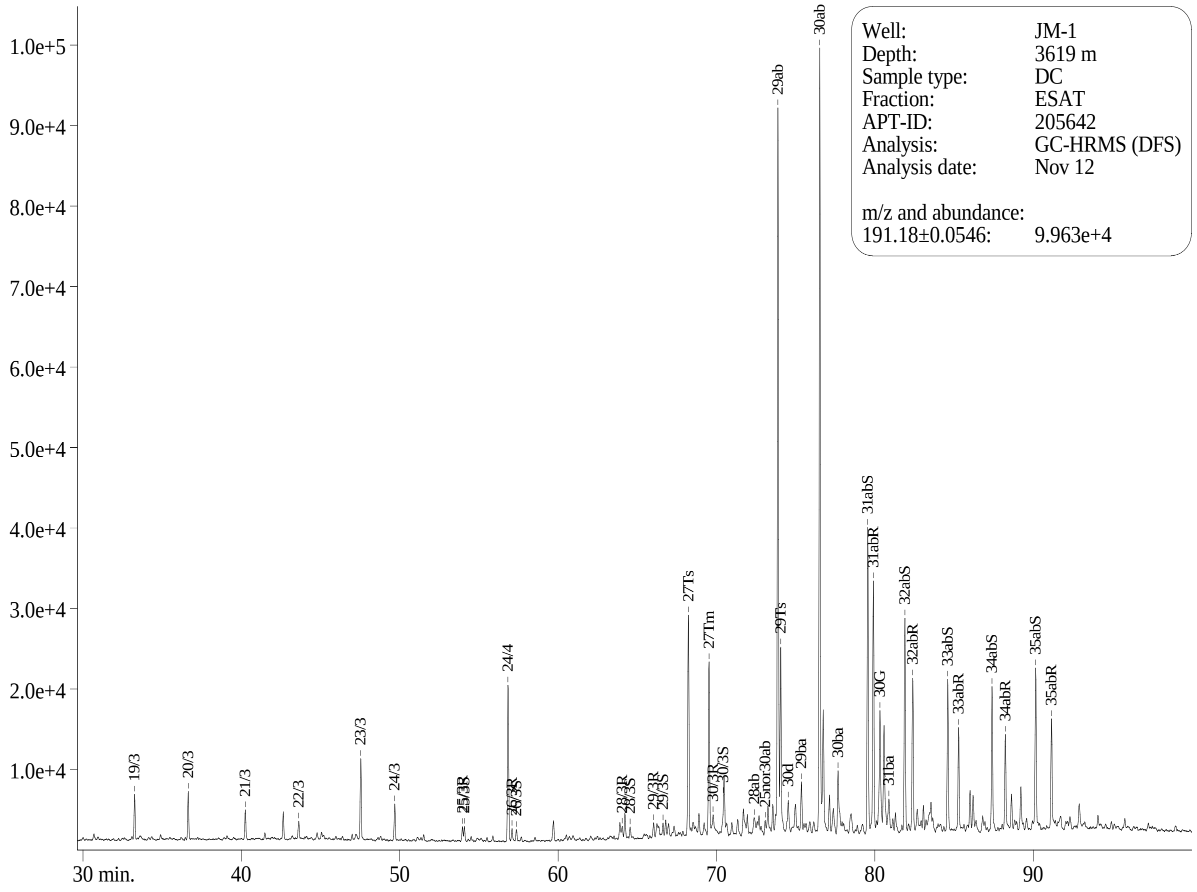

Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
231.21±0.0661: 3.348e+3
4.8e+3
4.4e+3
4.0e+3
3.6e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
40 min.
50
60
70
80
90

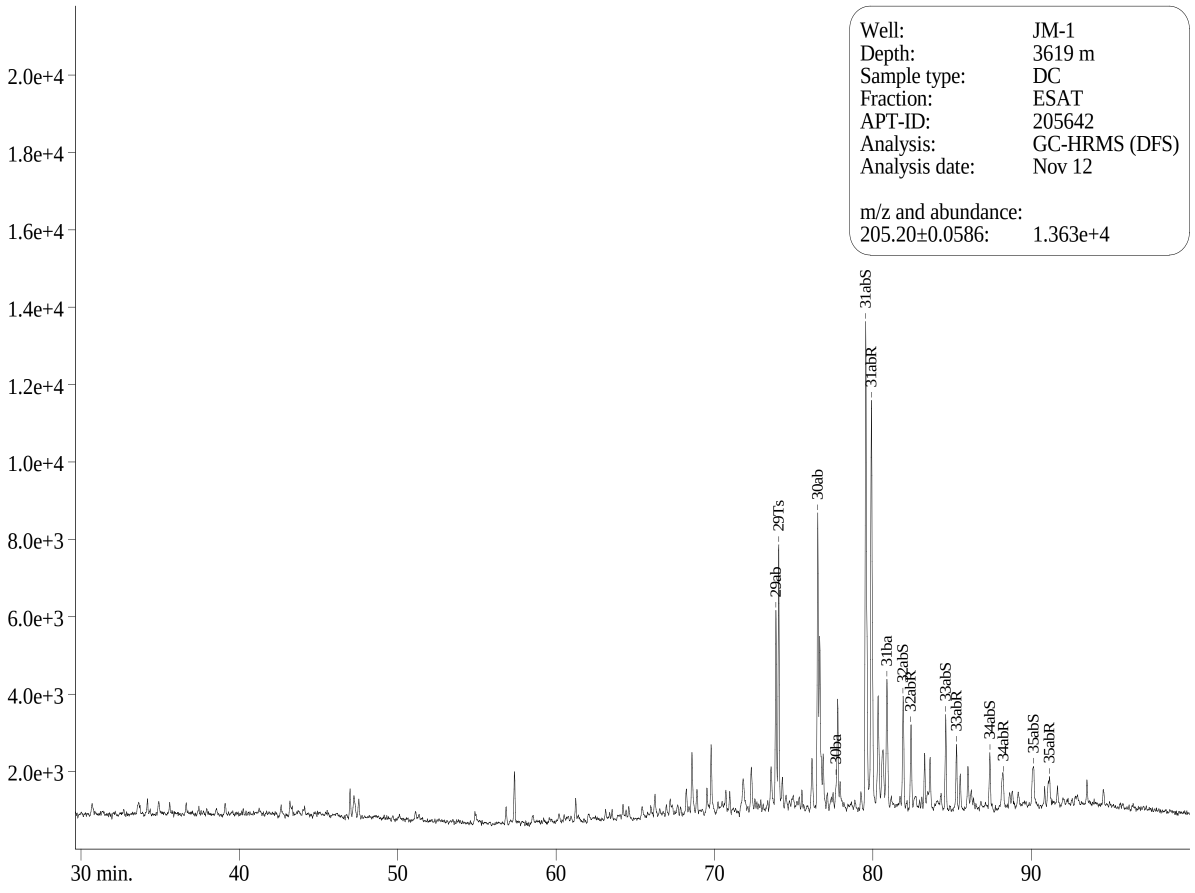


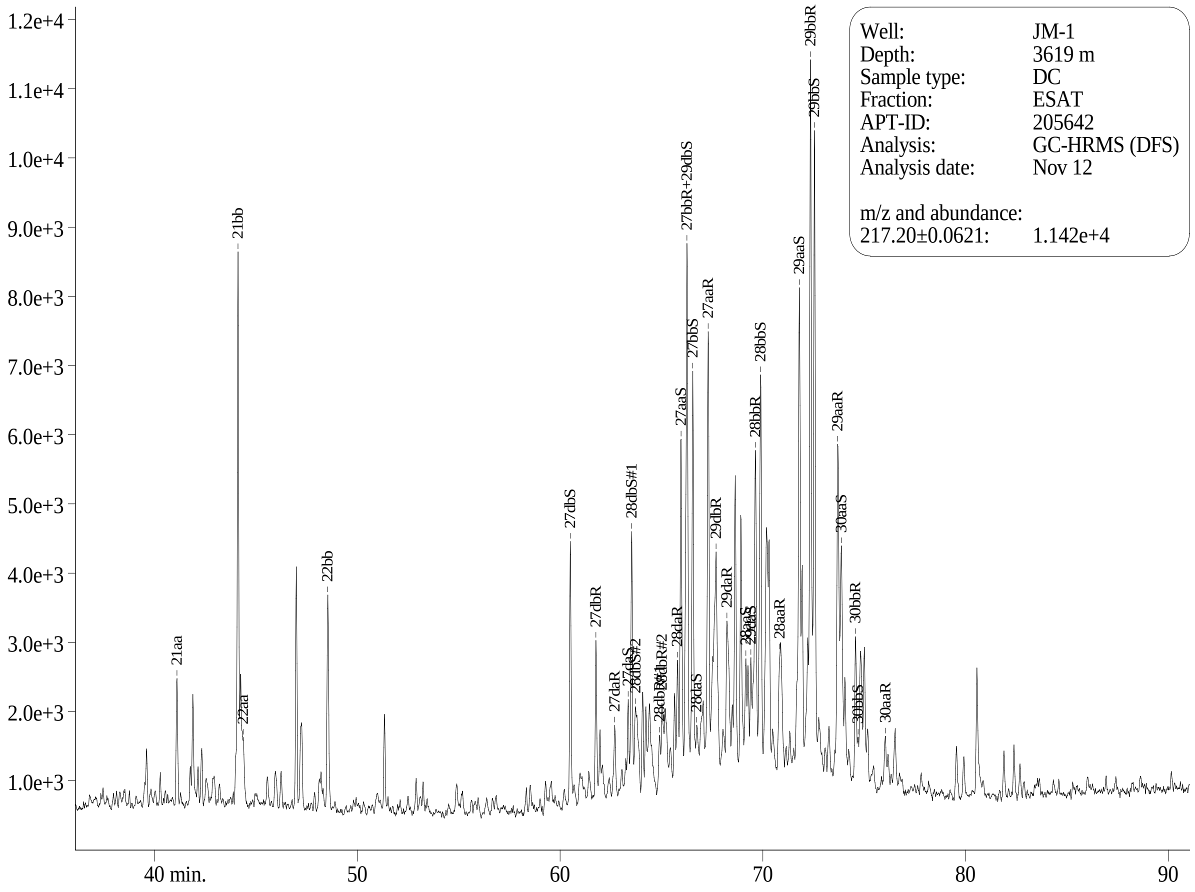
Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: ESAT
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
259.24±0.0741: 2.348e+3


4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
30 min.
40
50
60
70
80
90
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
177.16±0.0506: 3.915e+4
24/4
27Ts
25nor28ab
27Tm
25nor29ab
28ab
25nor30ab
29ab
29Ts
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
30 min.
40
50
60
70
80
90
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
191.18±0.0546: 9.963e+4
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
30/3R
30/3S
27Tm
28ab
25nor30ab
29ab
29Ts
30d
29ba
30ab
30ba
31abS
31abR
30G
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
205.20±0.0586: 1.363e+4
2.0e+4
1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
30 min.
40
50
60
70
80
90
29ab
29Ts
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
217.20±0.0621: 1.142e+4
1.2e+4
1.1e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27aaS
27bbR+29dbS
27bbS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
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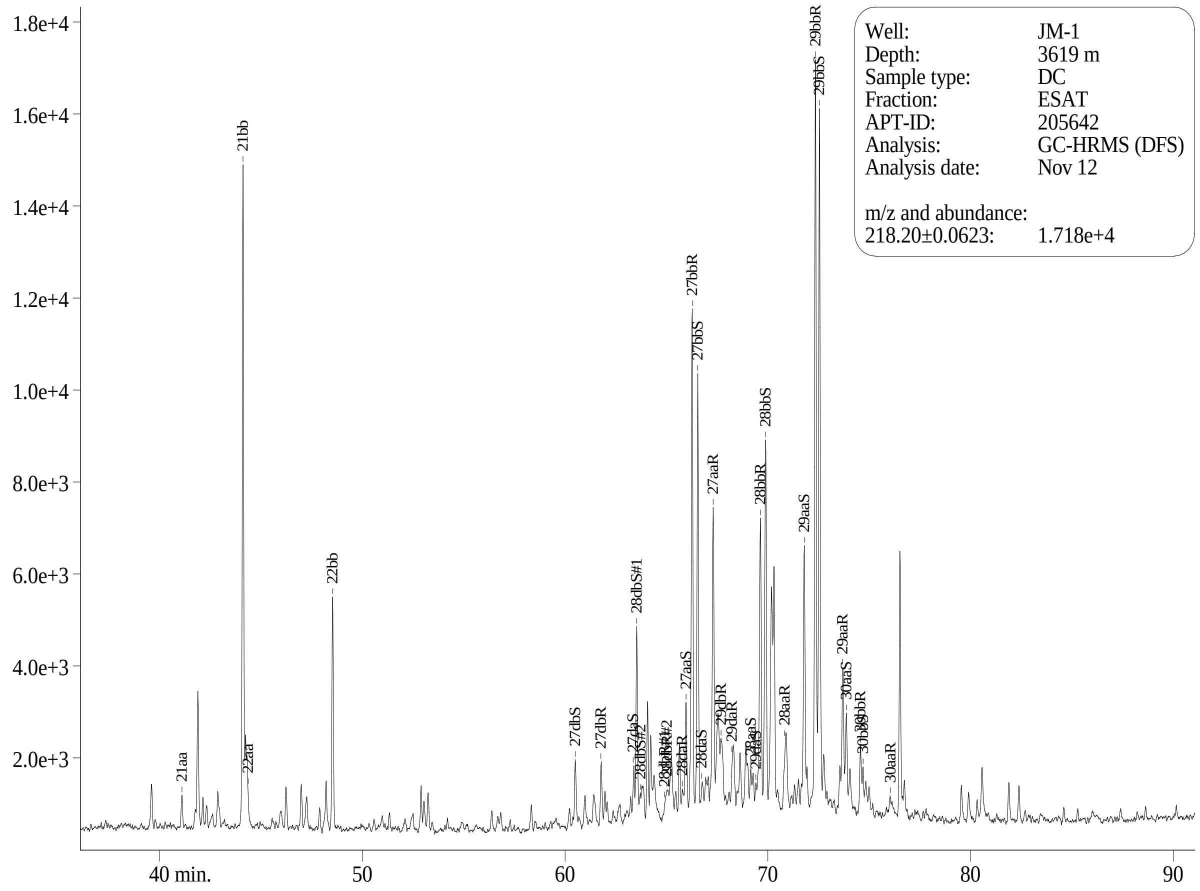
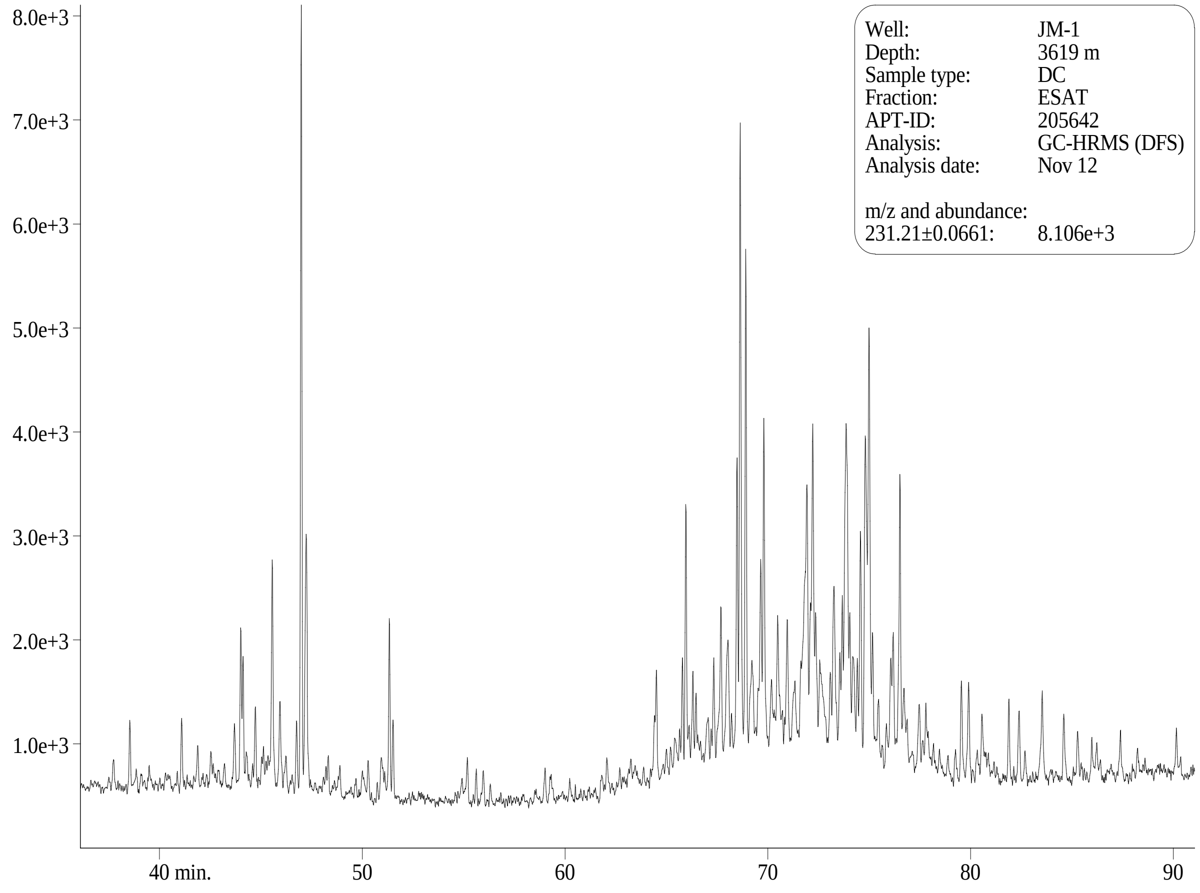
30aaS
30bbR
30bbS
30aaR



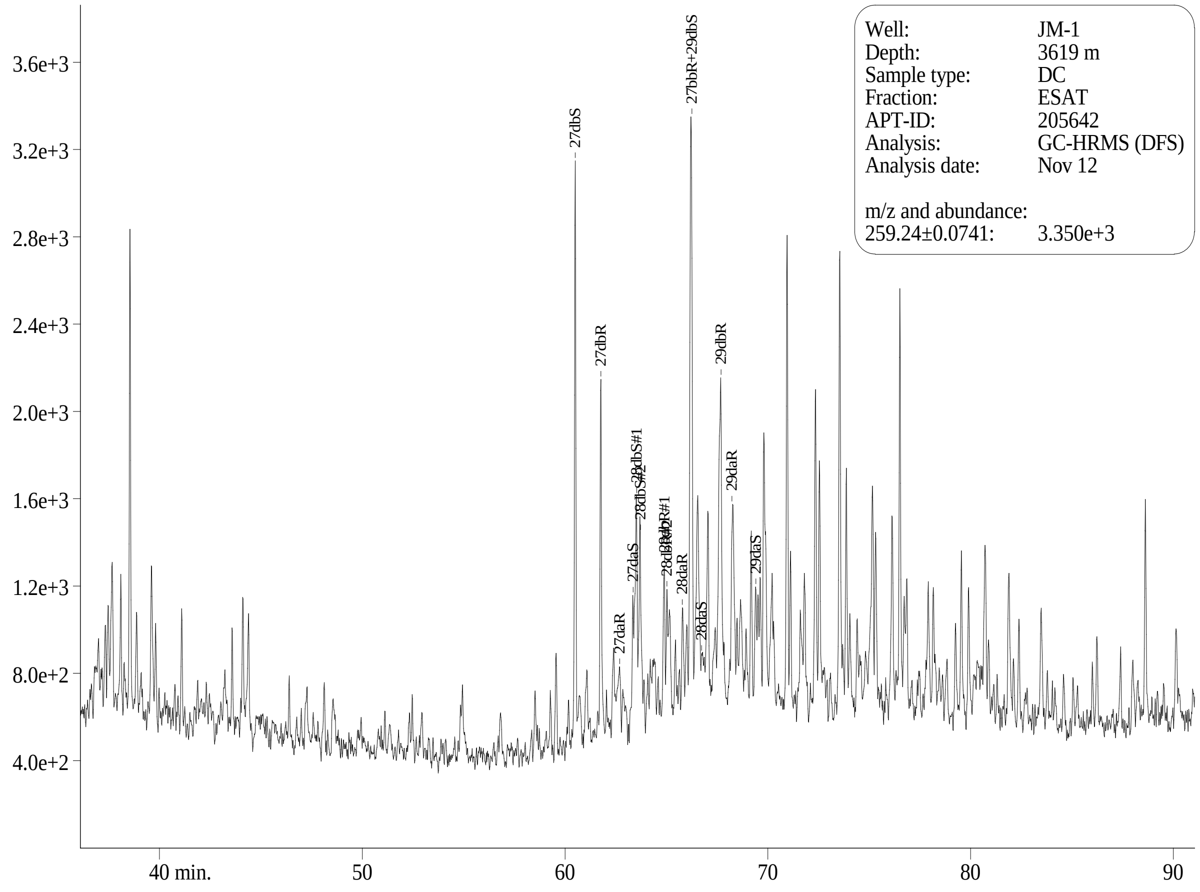
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
218.20±0.0623: 1.718e+4



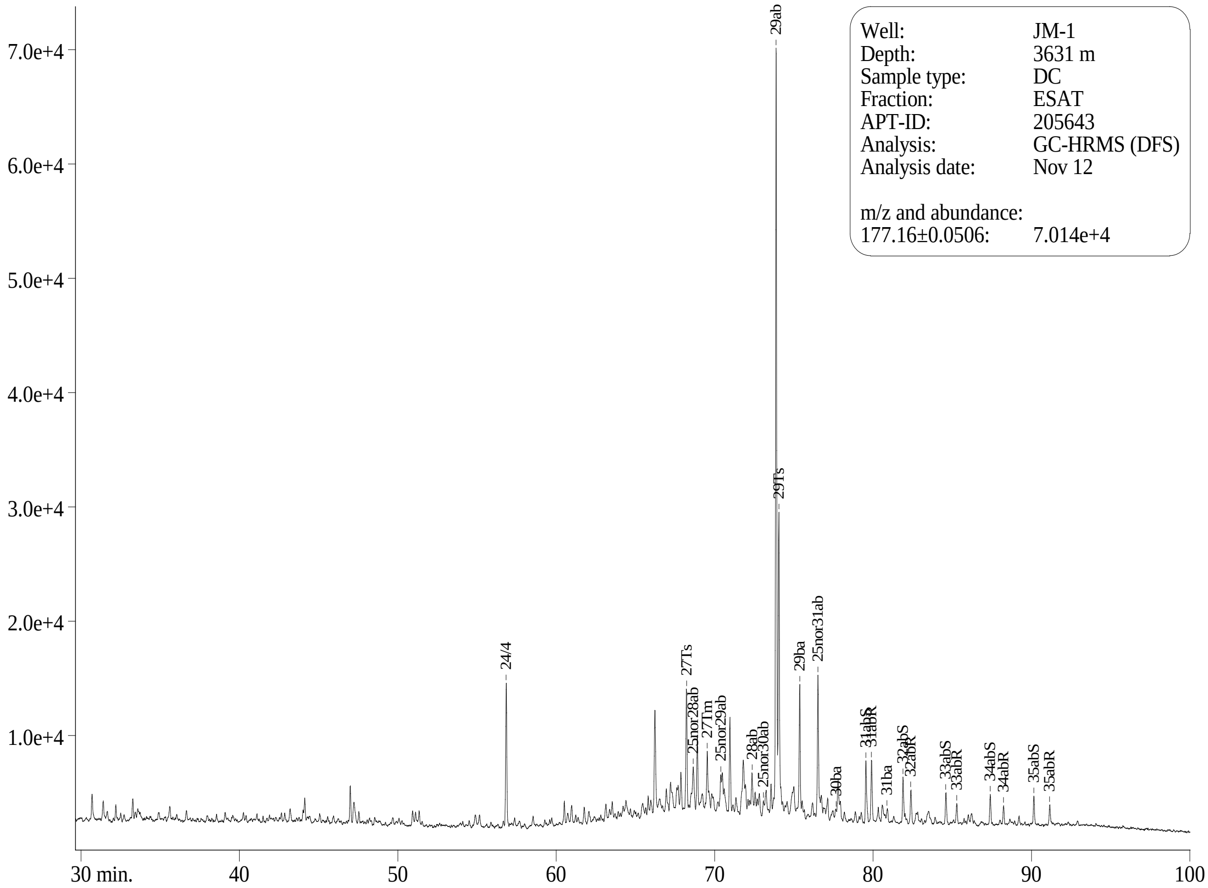
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
231.21±0.0661: 8.106e+3



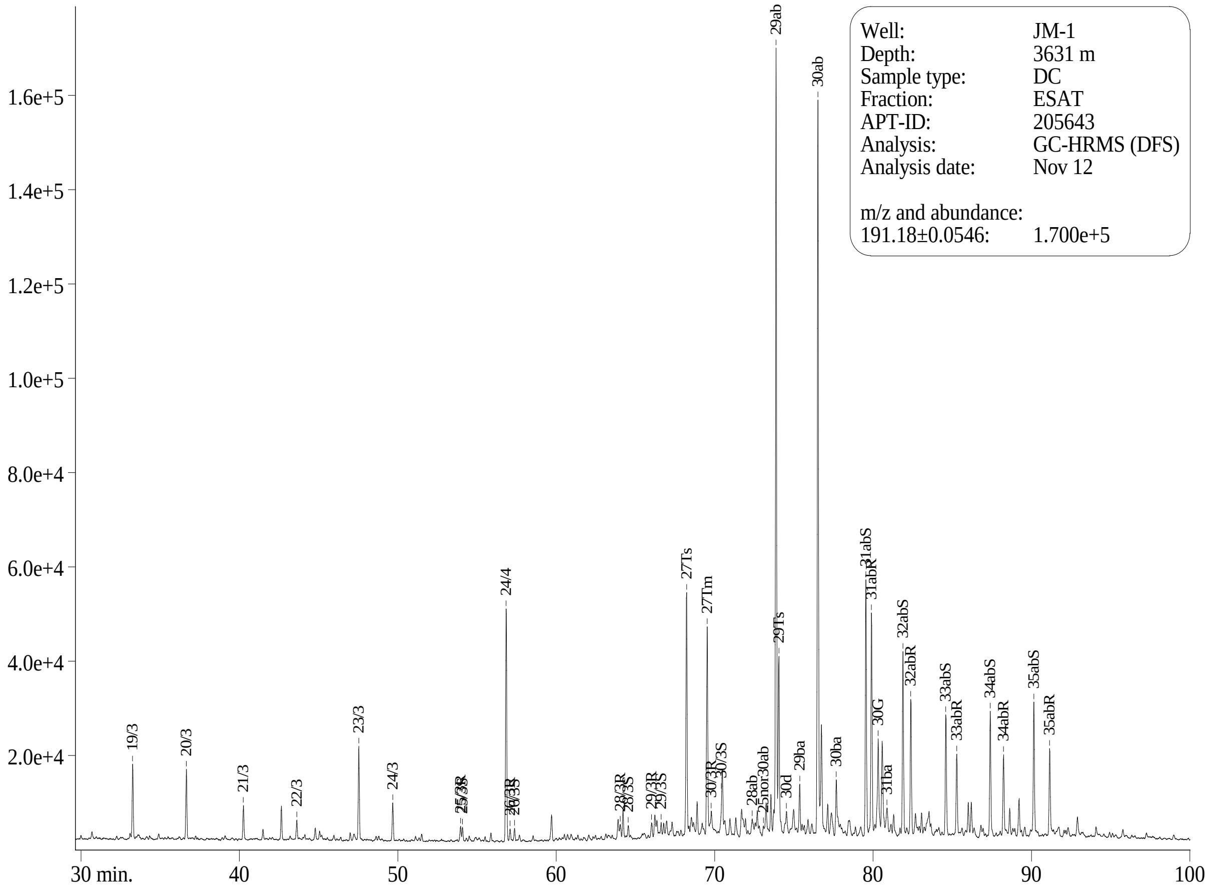
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: ESAT
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
259.24±0.0741: 3.350e+3



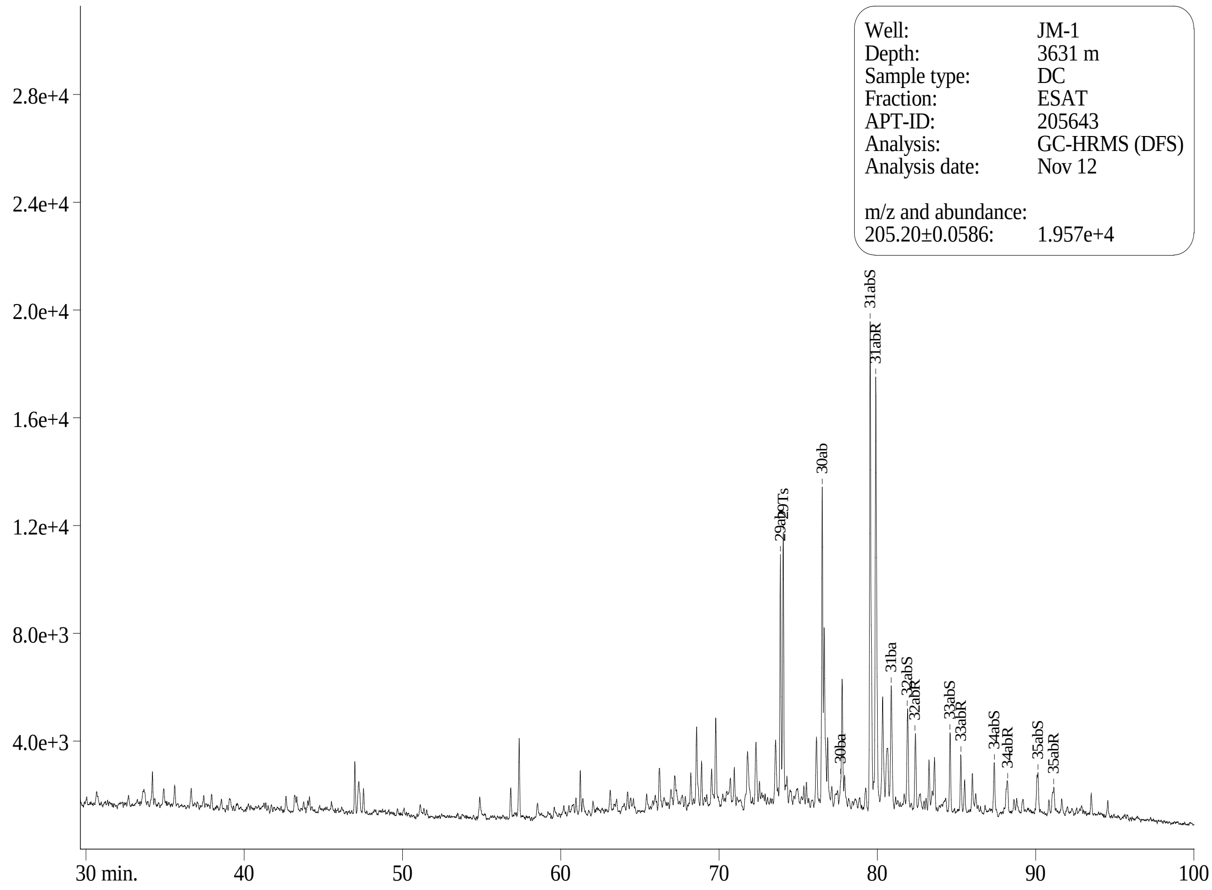
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
177.16±0.0506: 7.014e+4



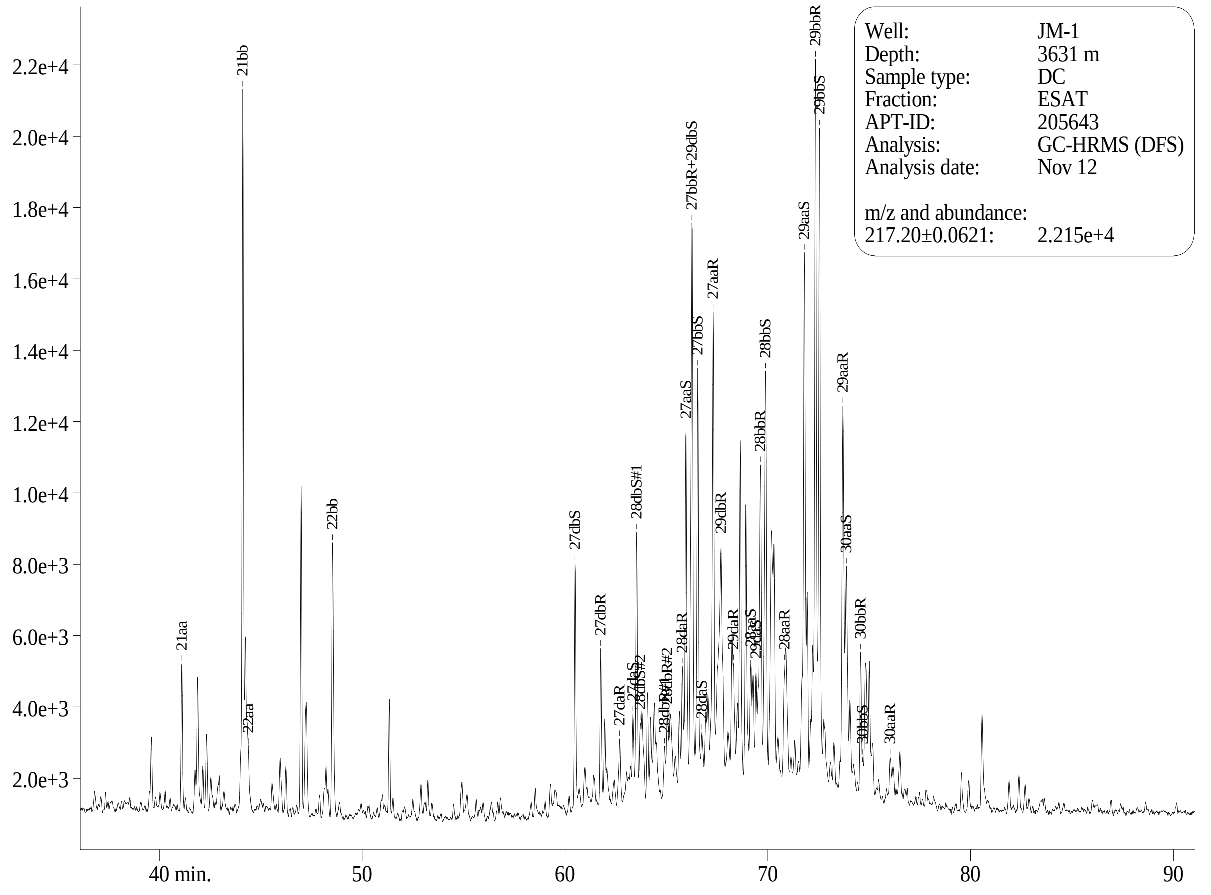
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
191.18±0.0546: 1.700e+5



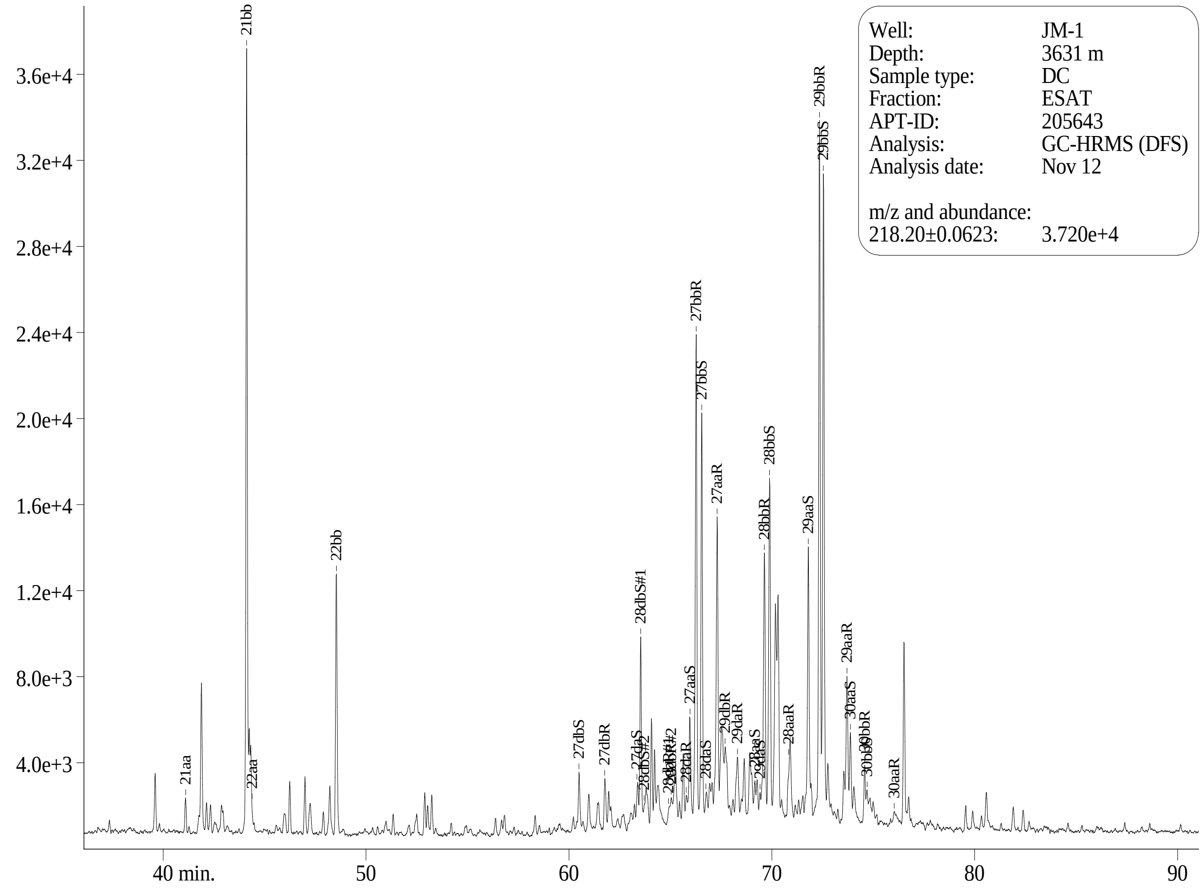
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

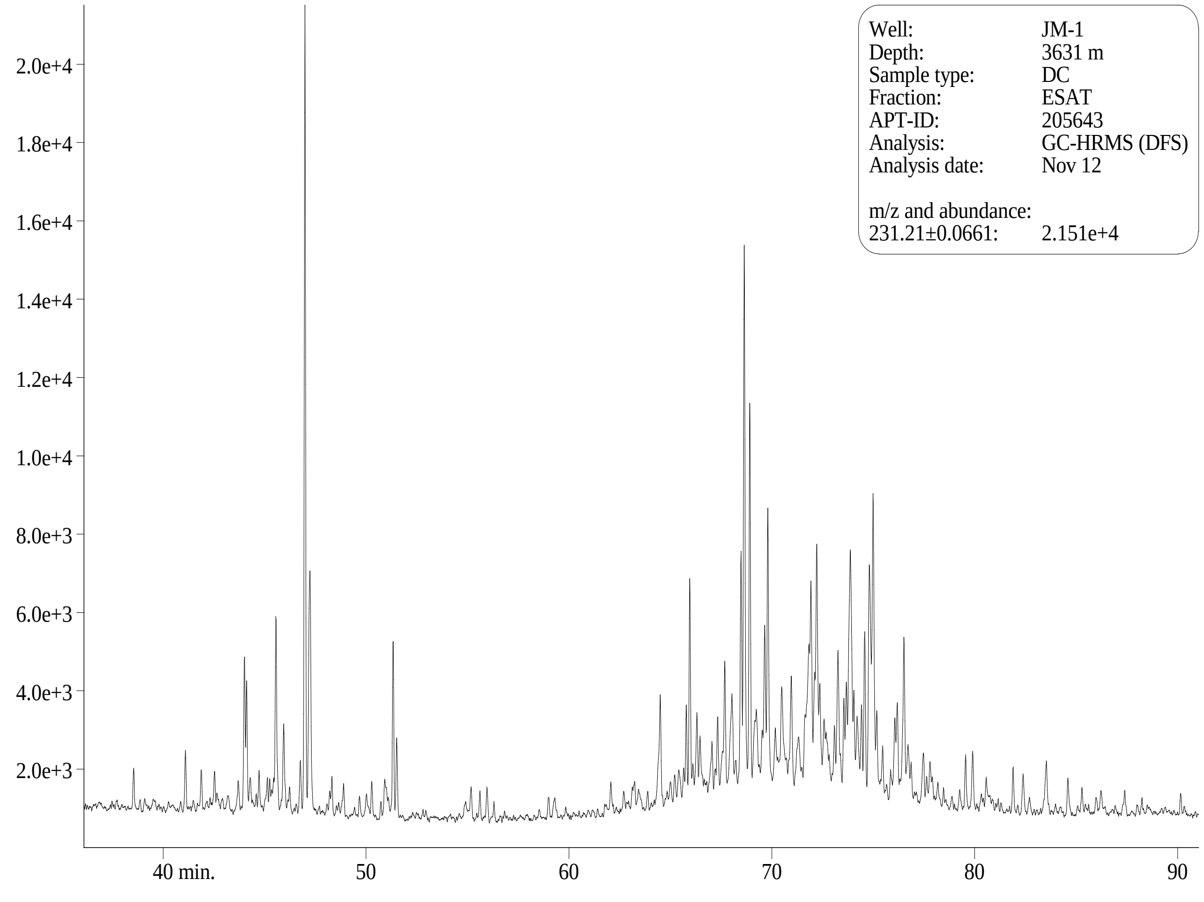
m/z and abundance:
205.20±0.0586: 1.957e+4

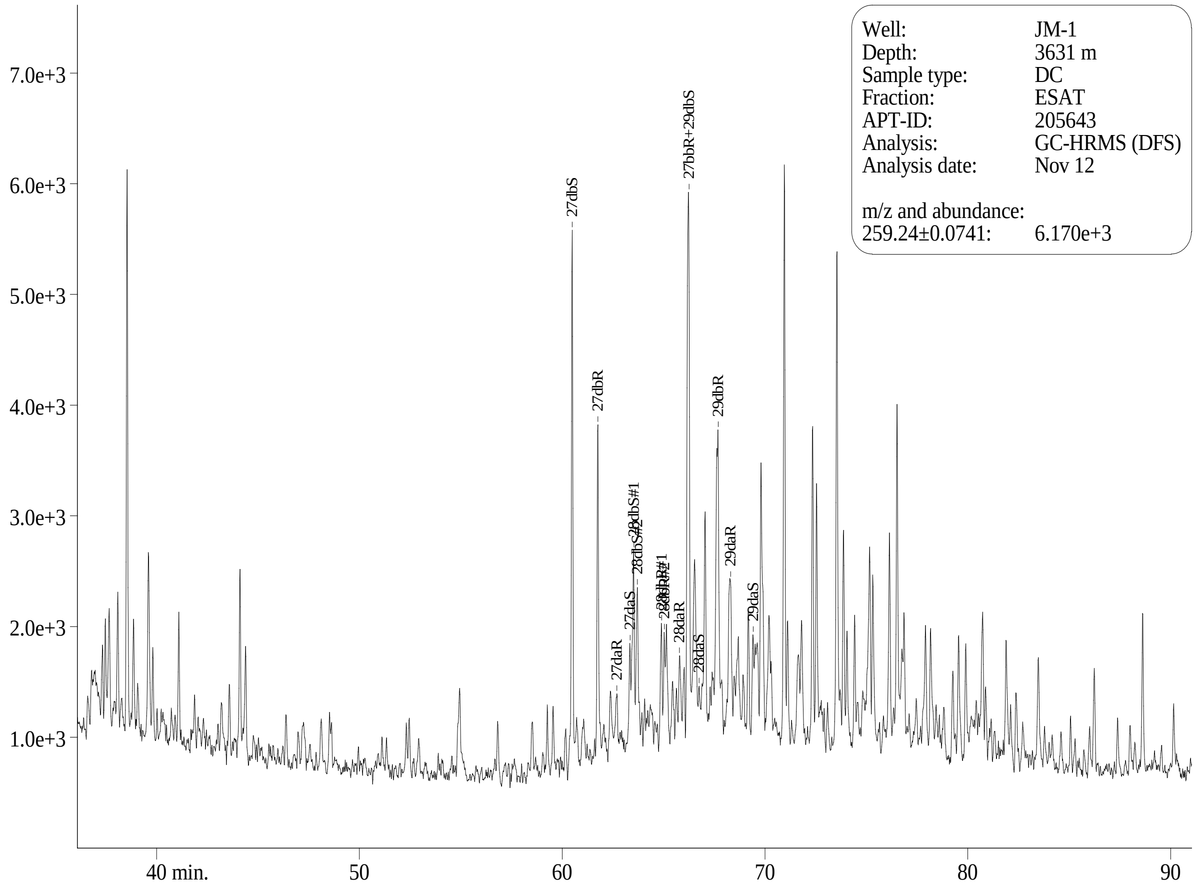


Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
217.20±0.0621: 2.215e+4

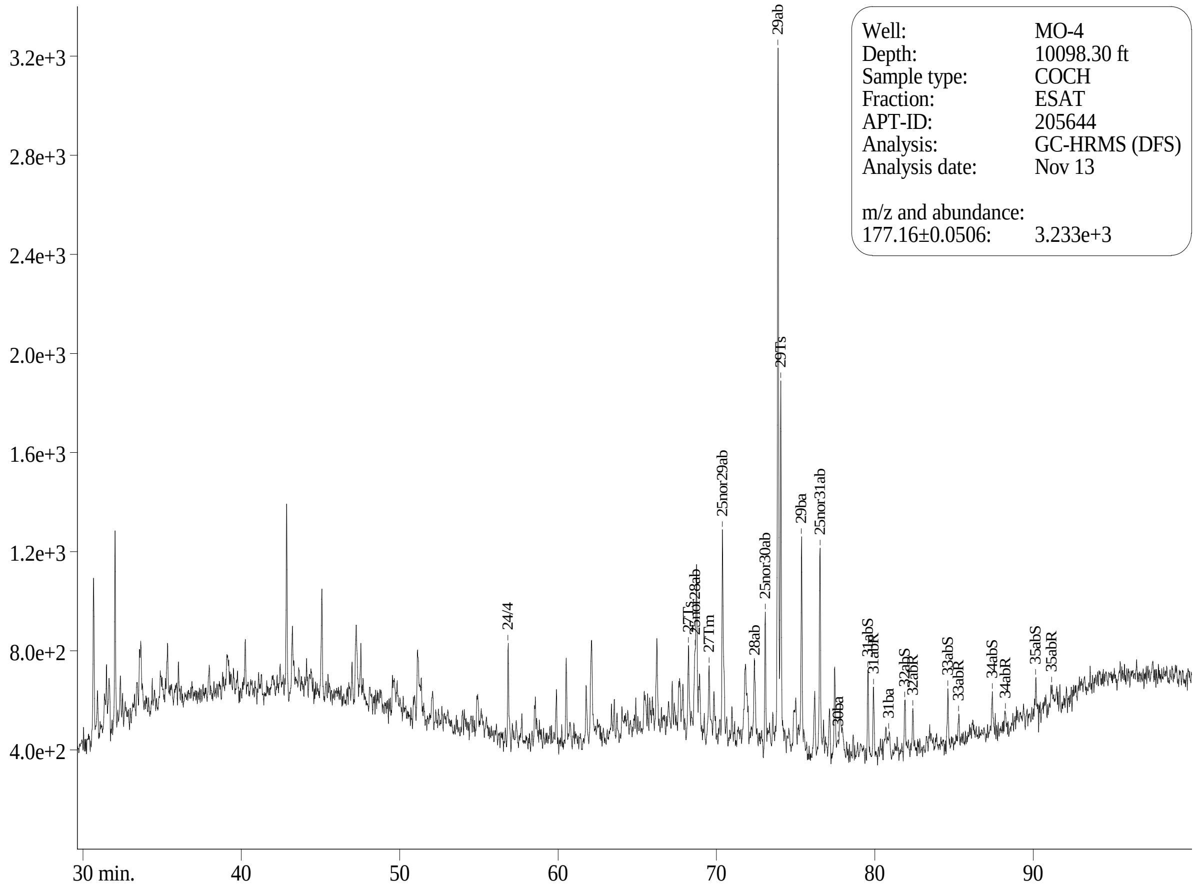

Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
218.20±0.0623: 3.720e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
28dbS#1
28dbS#2
28daR
27aaS
27bbR
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbS
29bbR
29aaR
30aaS
30bbR
30bbS
30aaR

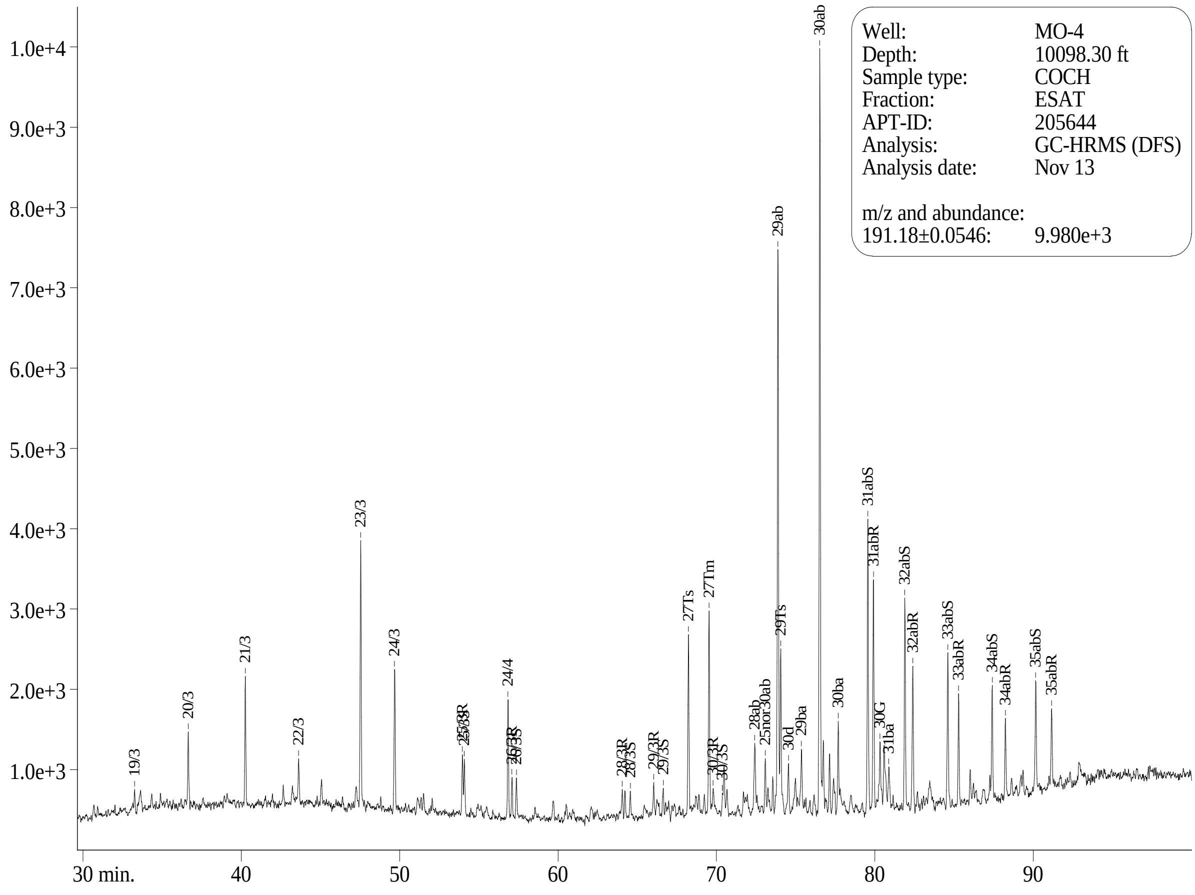

Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12
m/z and abundance:
231.21±0.0661: 2.151e+4
2.0e+4
1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
40 min.
50
60
70
80
90

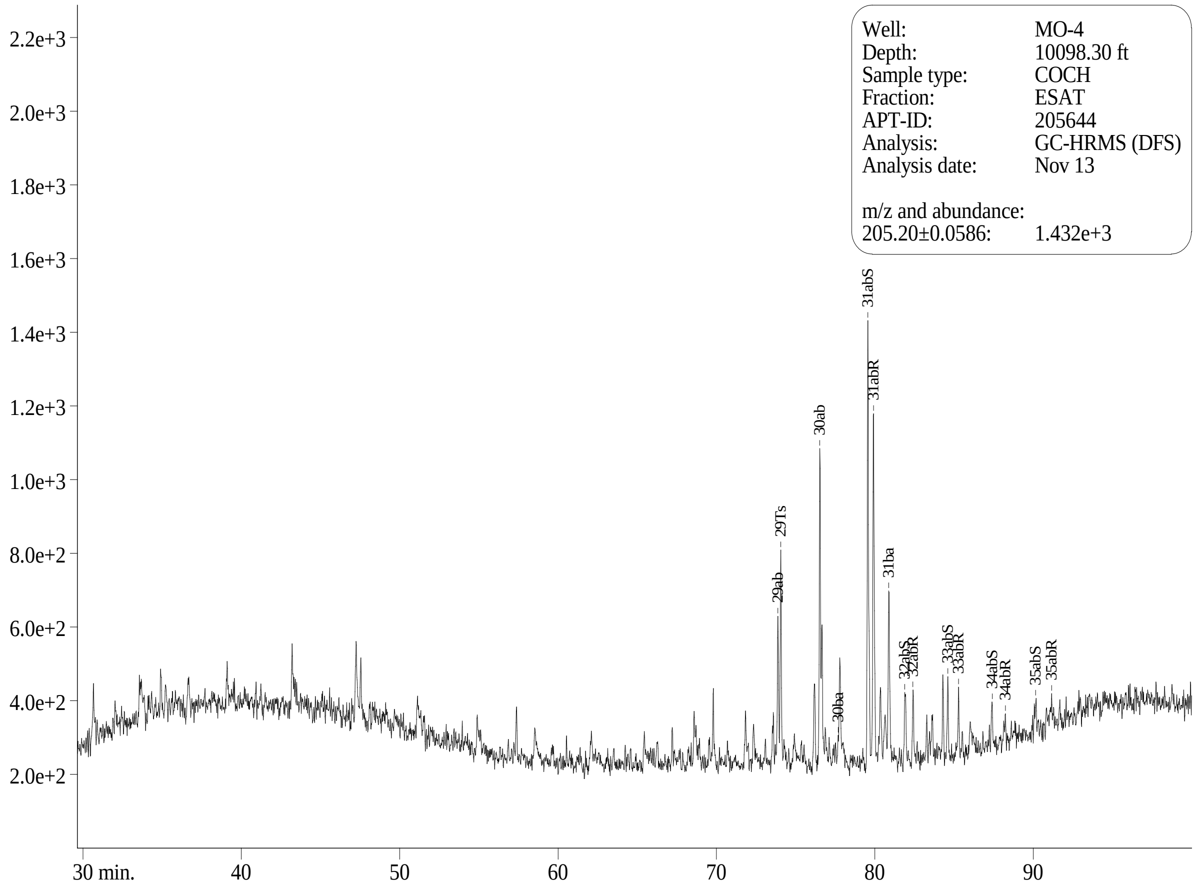


Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: ESAT
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 12

m/z and abundance:
259.24±0.0741: 6.170e+3

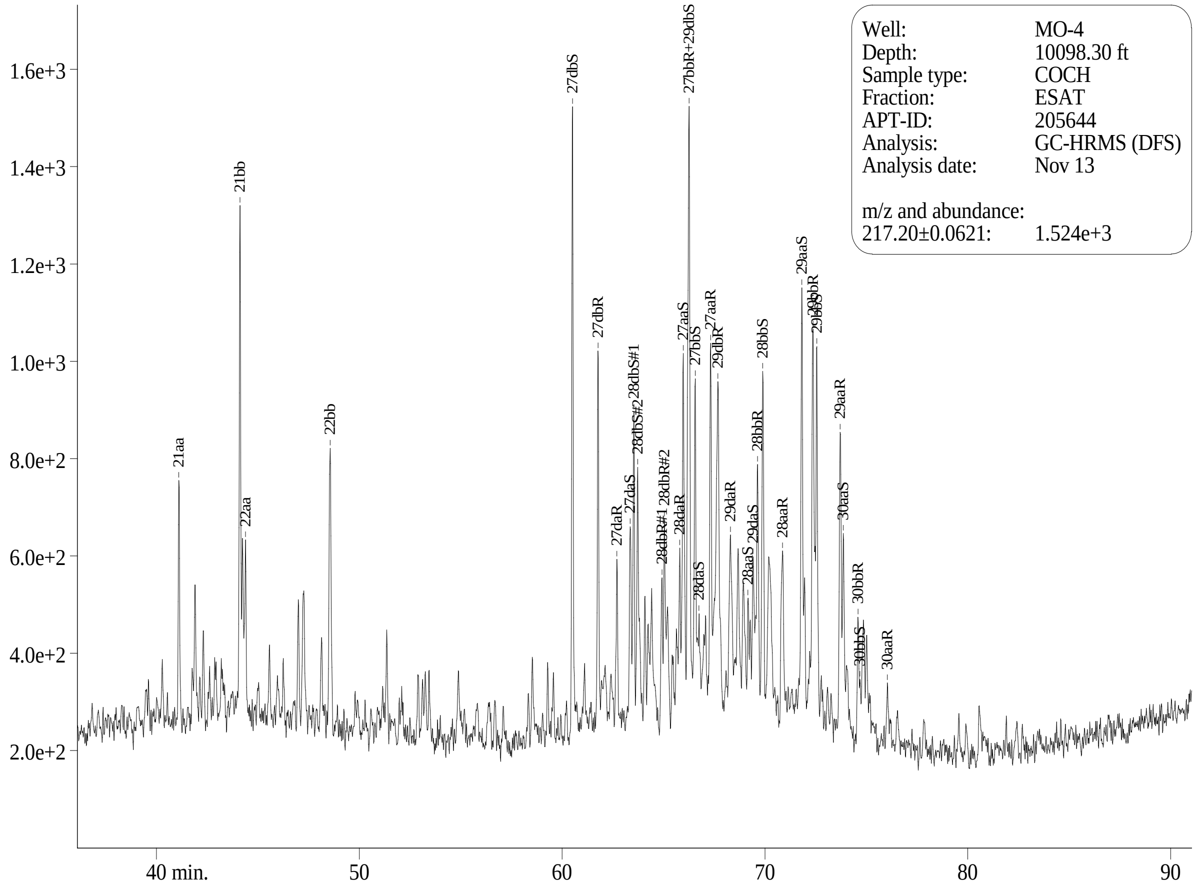

Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
177.16±0.0506: 3.233e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
30 min.
40
50
60
70
80
90
24/4
27Ts
25nor28ab
27Tm
25nor29ab
28ab
25nor30ab
29Ts
29ab
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
191.18±0.0546: 9.980e+3
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
30 min.
40
50
60
70
80
90
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
27Tm
30/3R
30/3S
28ab
25nor30ab
29Ts
29ab
30d
29ba
30ab
30ba
30G
31ba
31abS
31abR
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR



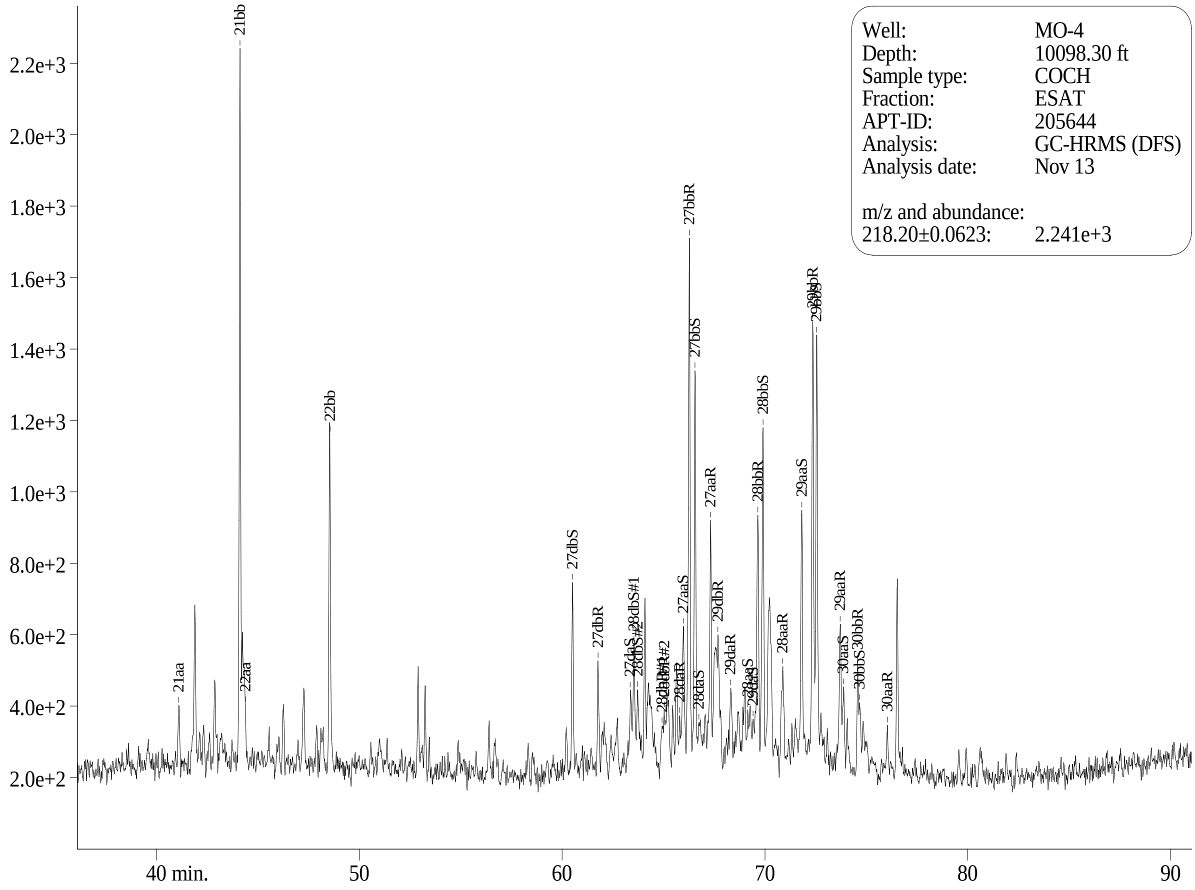
Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
205.20±0.0586: 1.432e+3

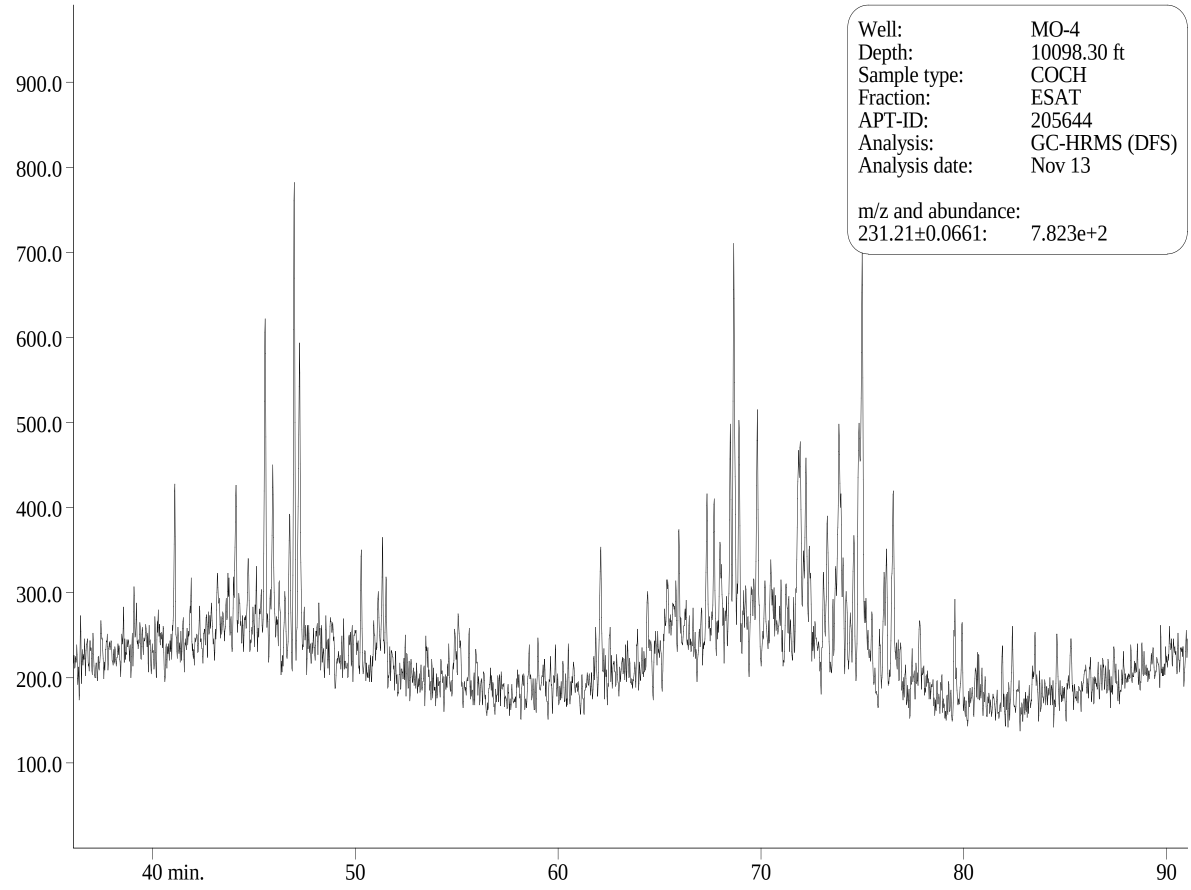


Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

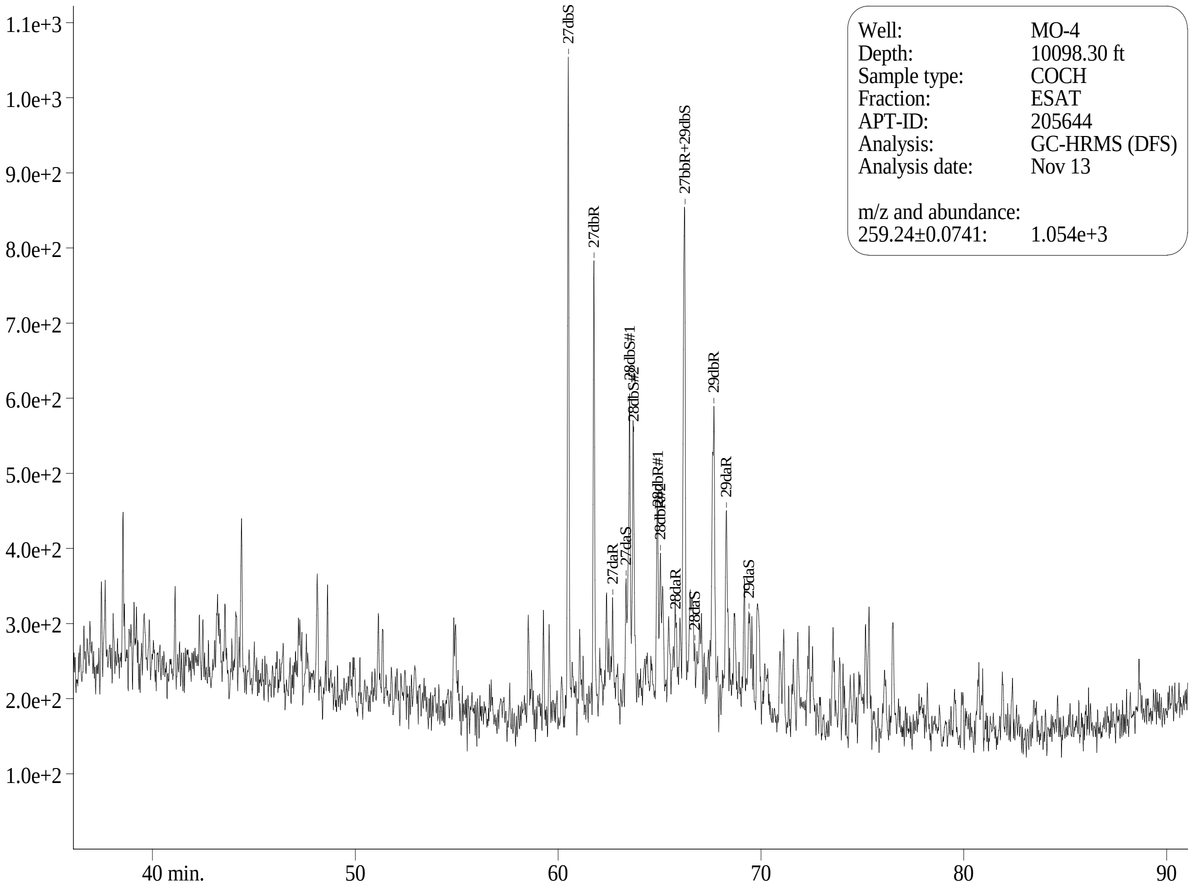
m/z and abundance:
217.20±0.0621: 1.524e+3



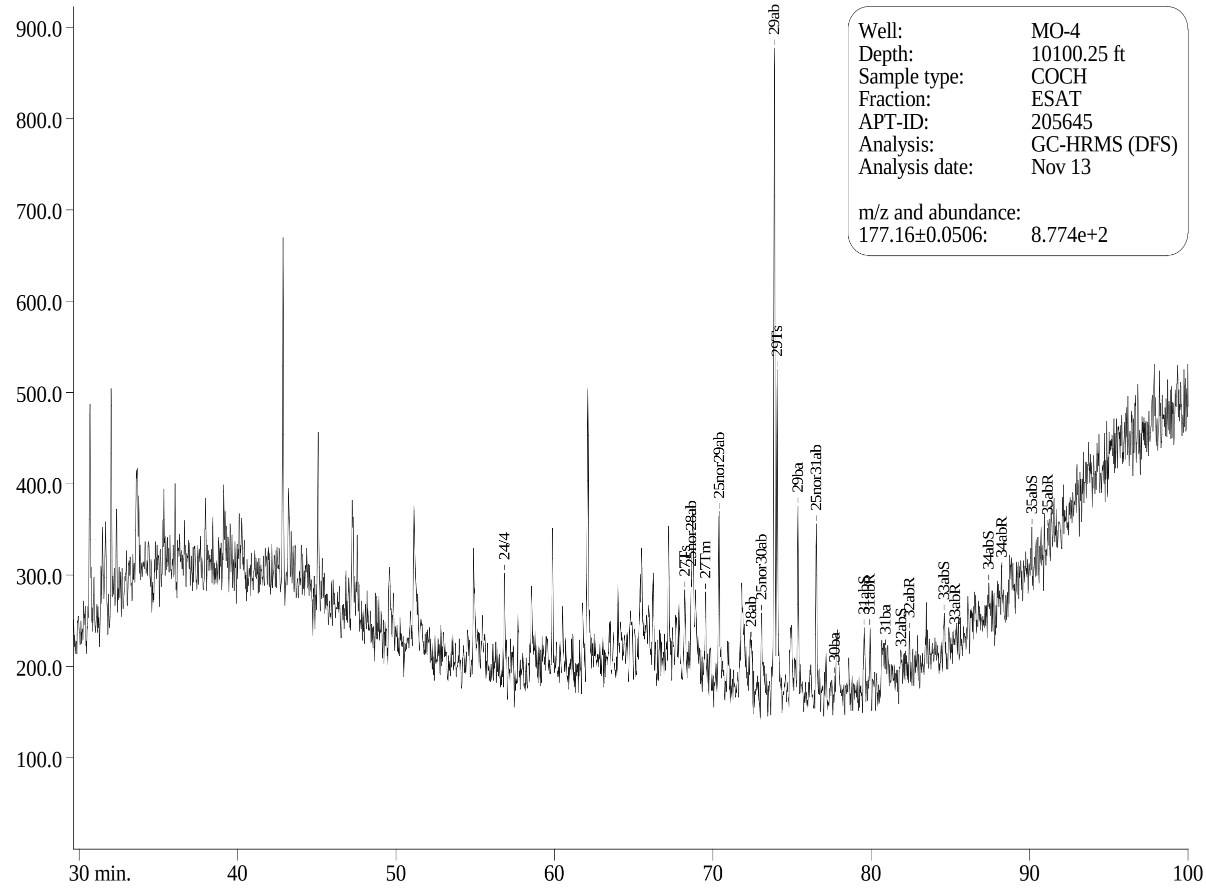
Well:	MO-4
Depth:	10098.30 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205644
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
218.20±0.0623:	2.241e+3

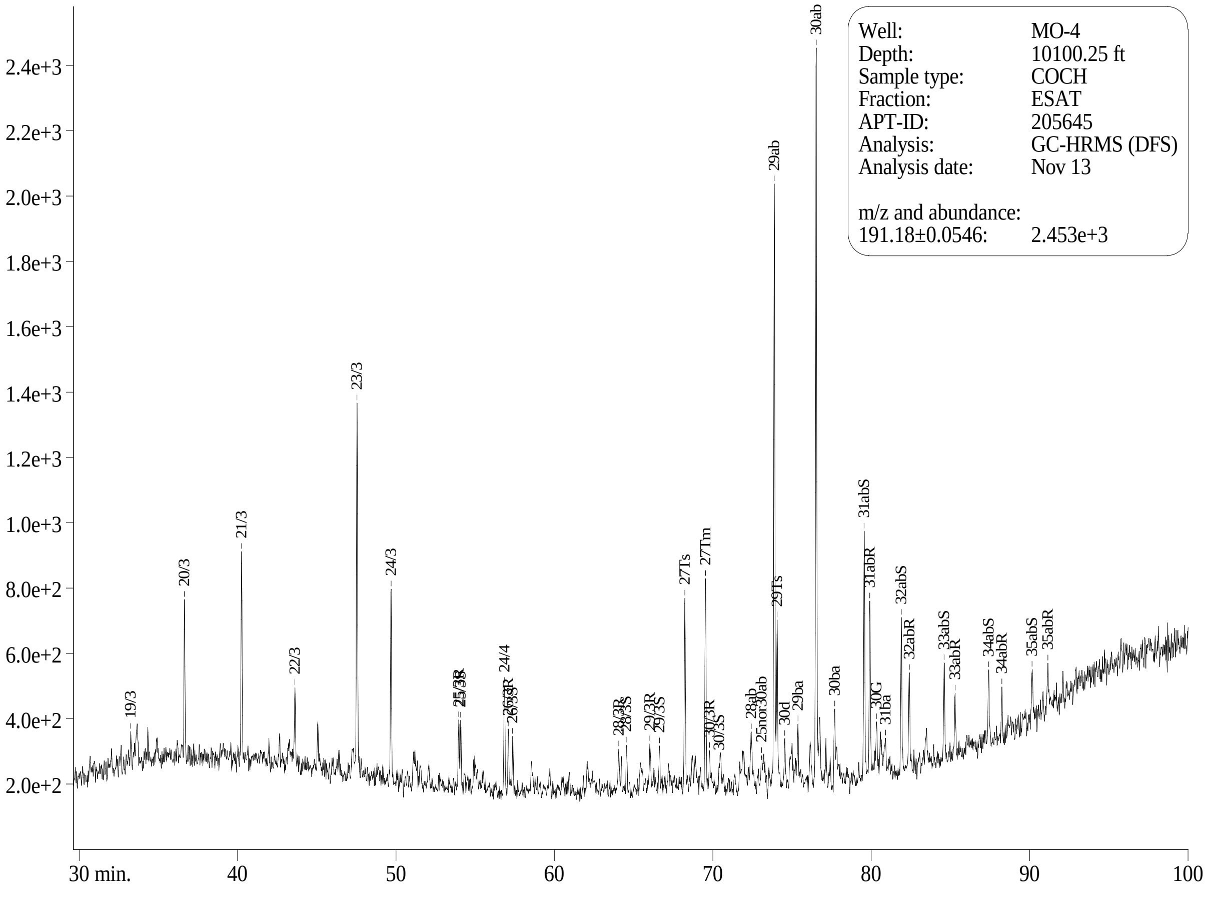


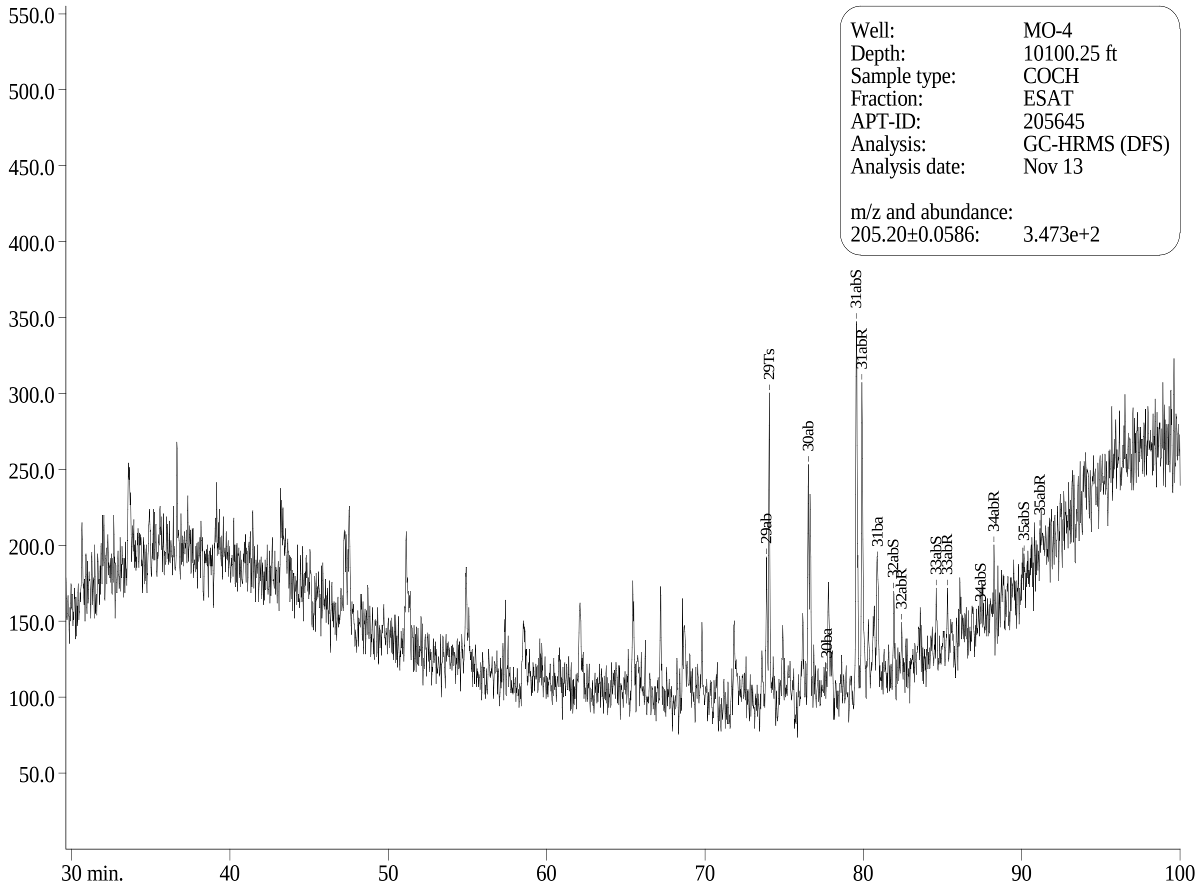
Well:	MO-4
Depth:	10098.30 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205644
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
231.21±0.0661:	7.823e+2

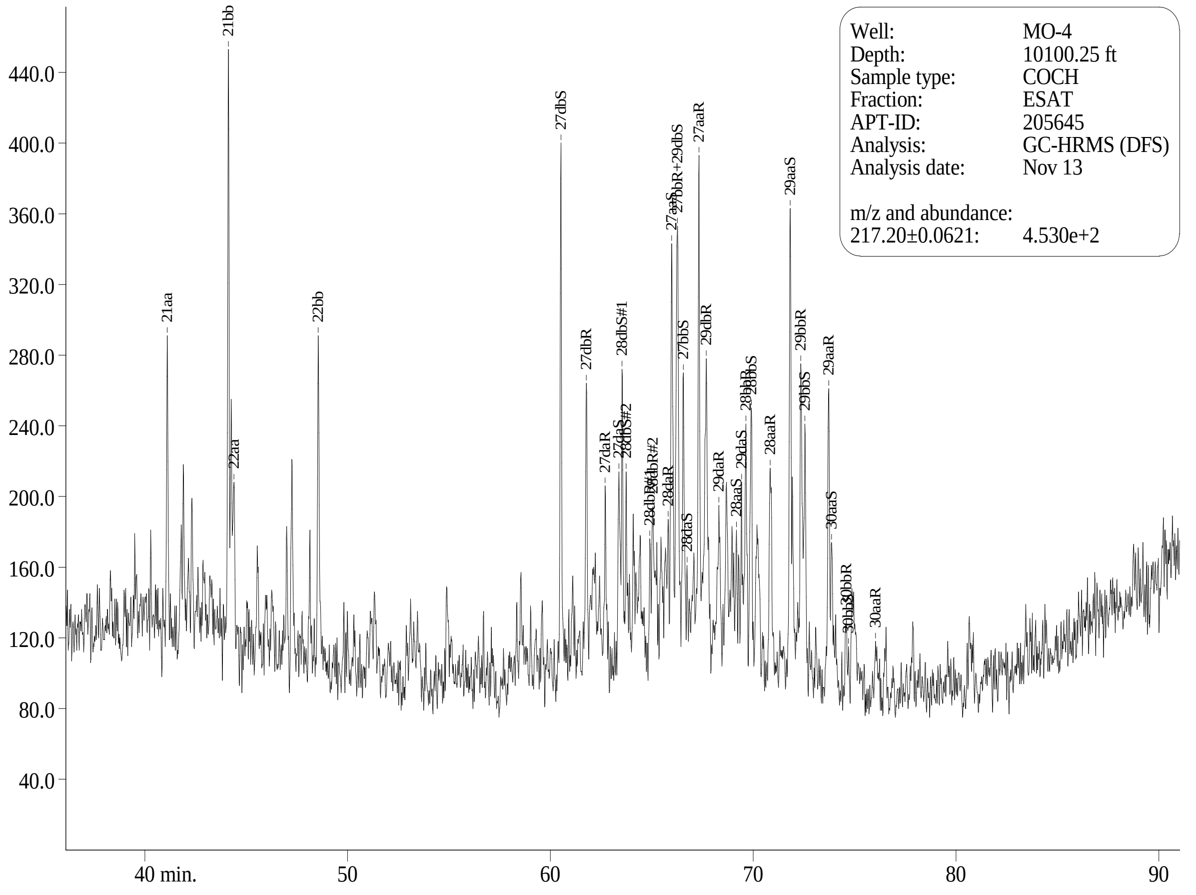


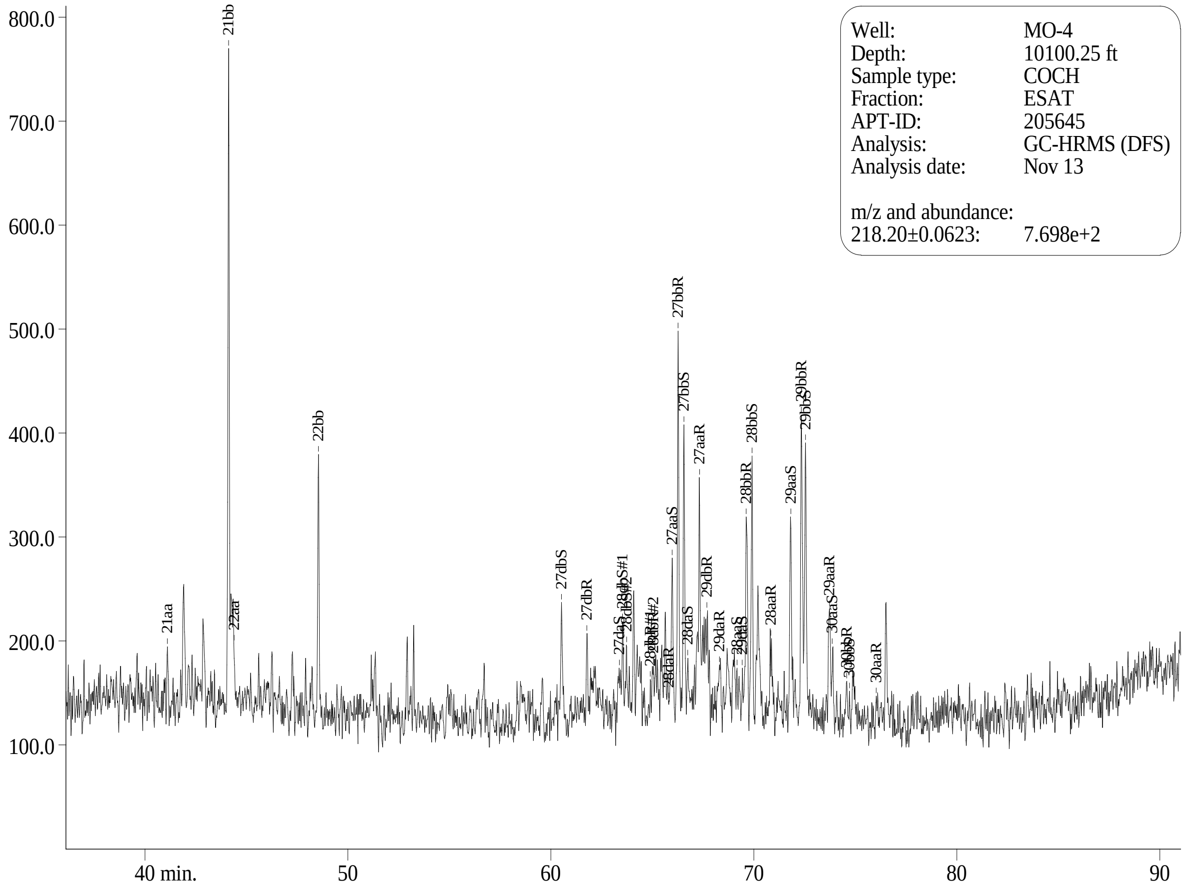
Well:	MO-4
Depth:	10098.30 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205644
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
259.24±0.0741:	1.054e+3


Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
177.16±0.0506: 8.774e+2
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
30 min.
40
50
60
70
80
90
100
24/4
27Ts
25nor28ab
27Tm
25nor29ab
28ab
25nor30ab
29ab
29Ts
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

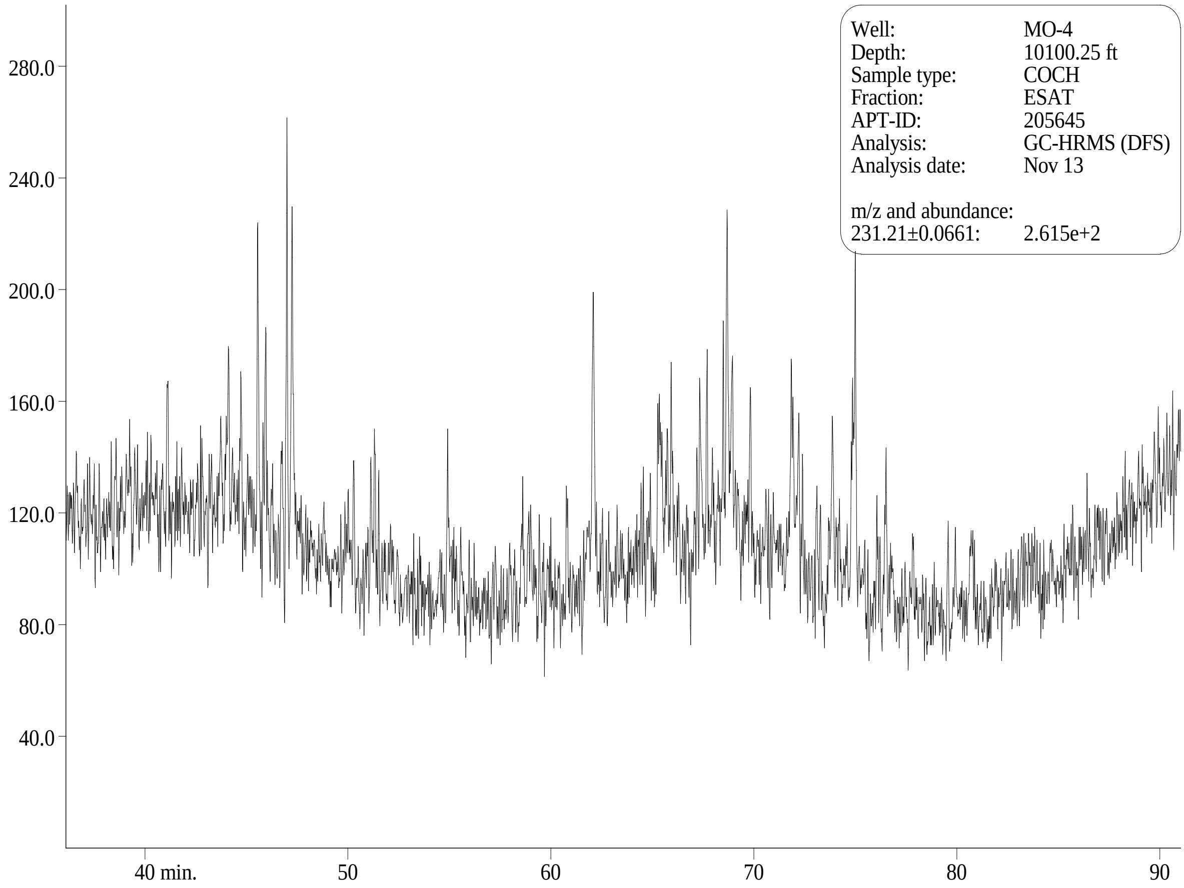

Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
191.18±0.0546: 2.453e+3
2.4e+3
2.2e+3
2.0e+3
1.8e+3
1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
30 min.
40
50
60
70
80
90
100
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
27Tm
30/3R
30/3S
28ab
25nor30ab
29ab
29Ts
30d
29ba
30ab
30ba
31abS
31abR
30G
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 3.473e+2
550.0
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
30 min.
40
50
60
70
80
90
100
29ab
29Ts
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

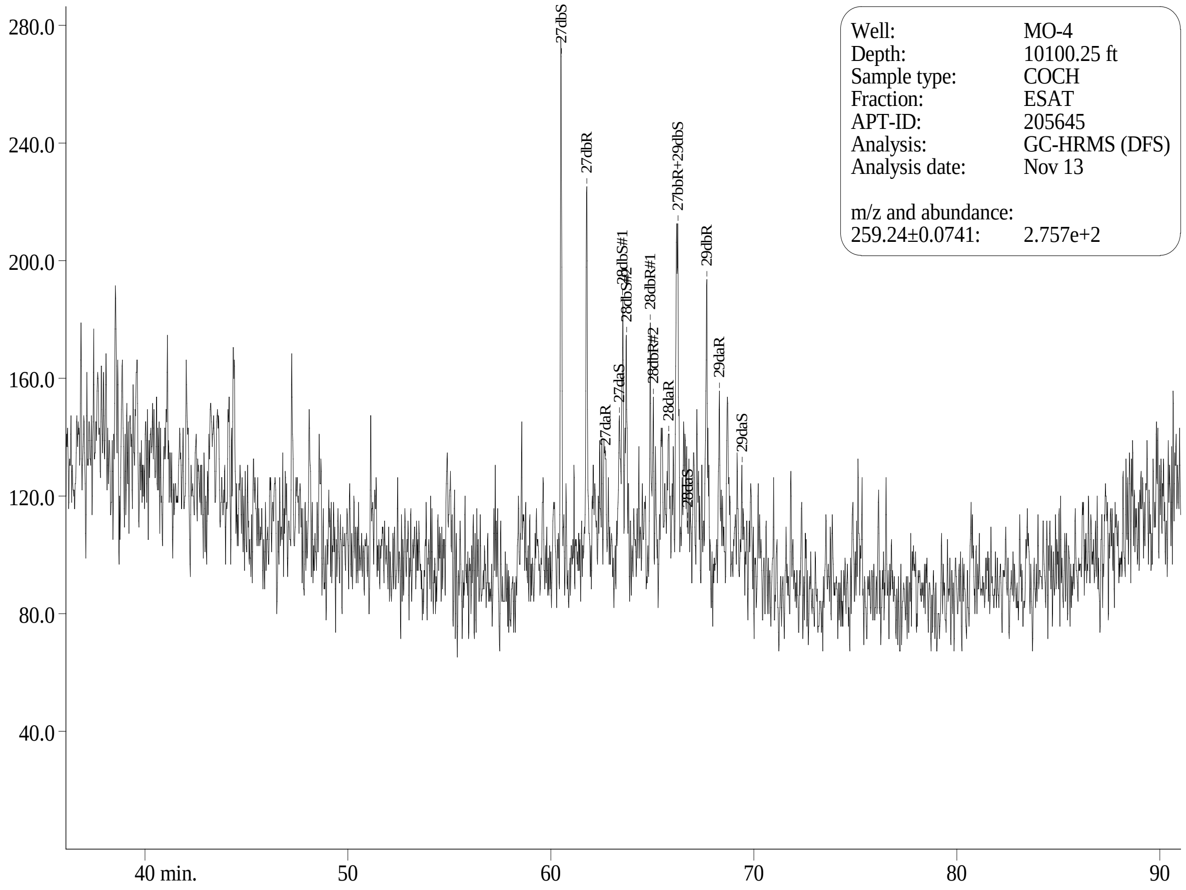

Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 4.530e+2
440.0
400.0
360.0
320.0
280.0
240.0
200.0
160.0
120.0
80.0
40.0
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR+29dbS
27aaR
27bbS
28daS
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbS
30bbR
30aaR



Well:	MO-4
Depth:	10100.25 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205645
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
218.20±0.0623:	7.698e+2

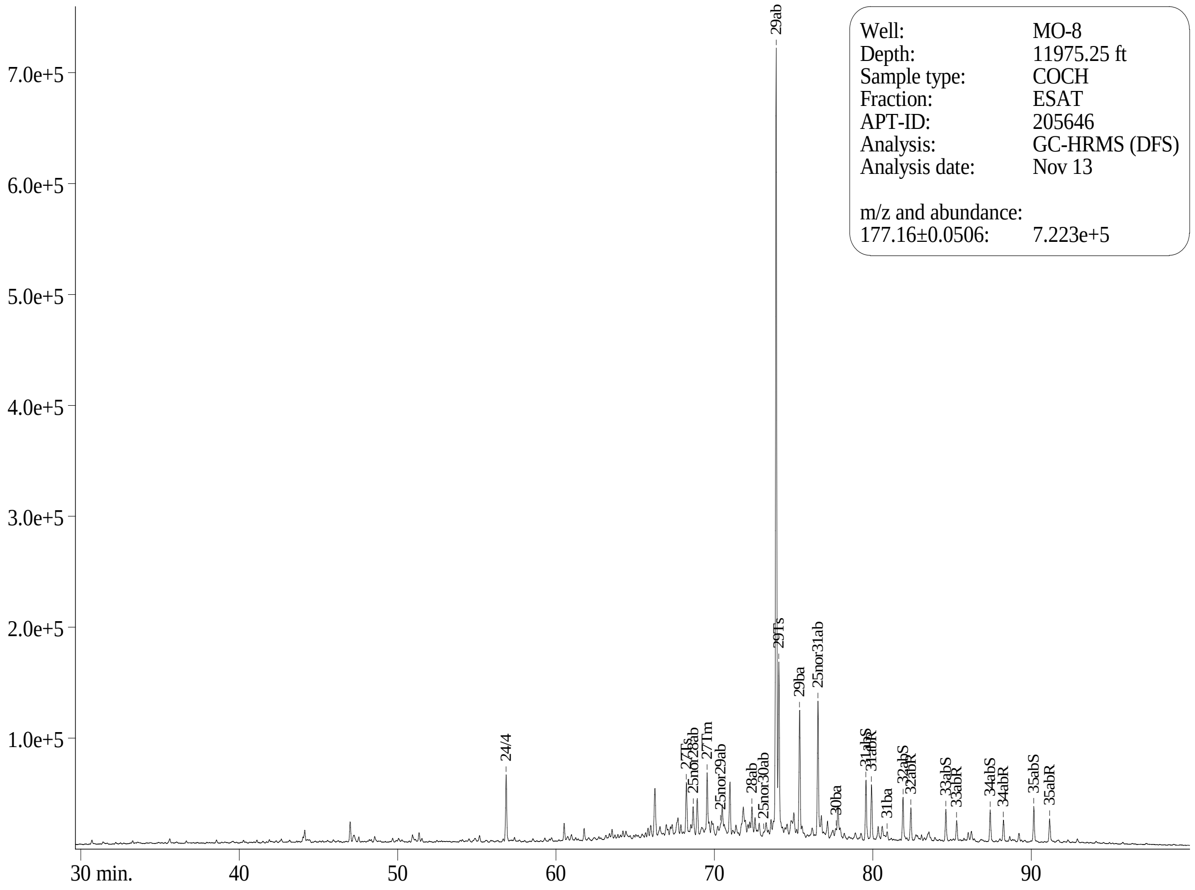


Well:	MO-4
Depth:	10100.25 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205645
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
231.21±0.0661:	2.615e+2



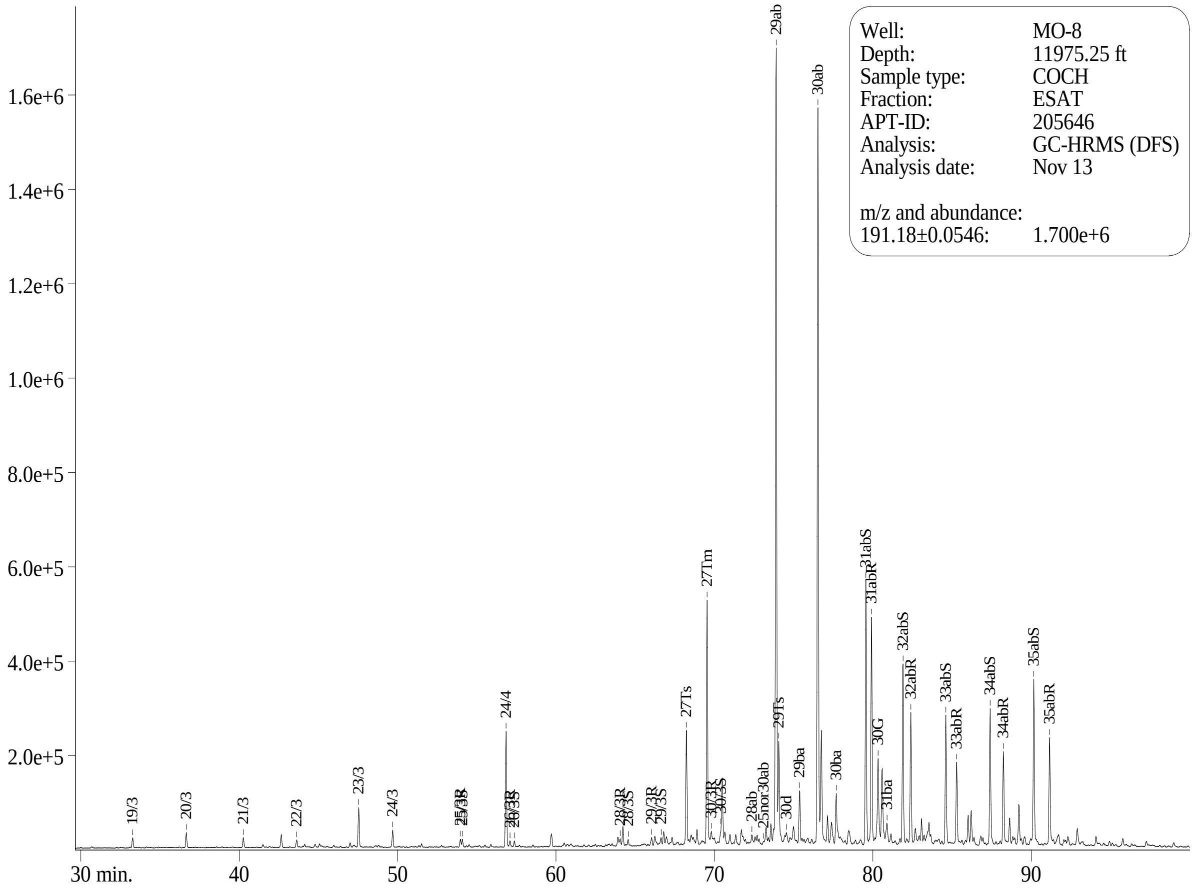
Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
259.24±0.0741: 2.757e+2



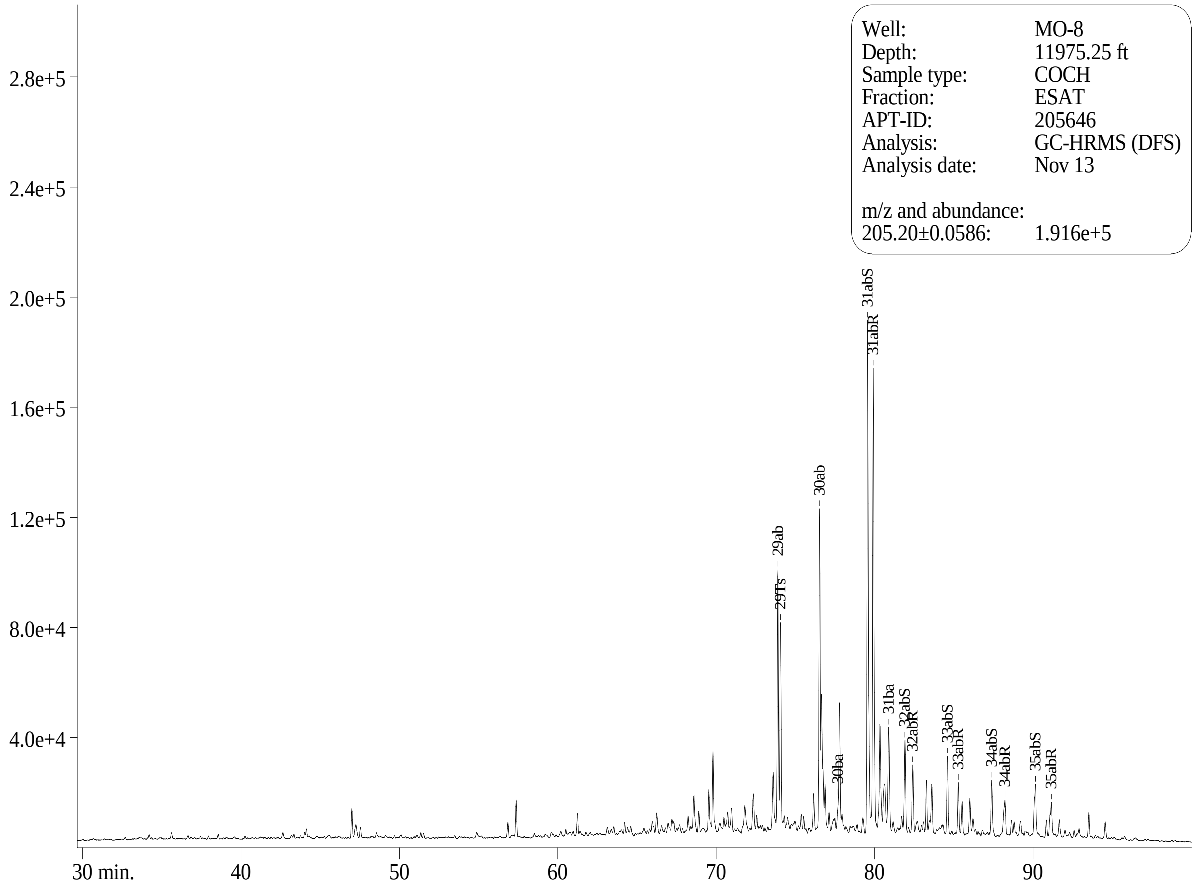
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

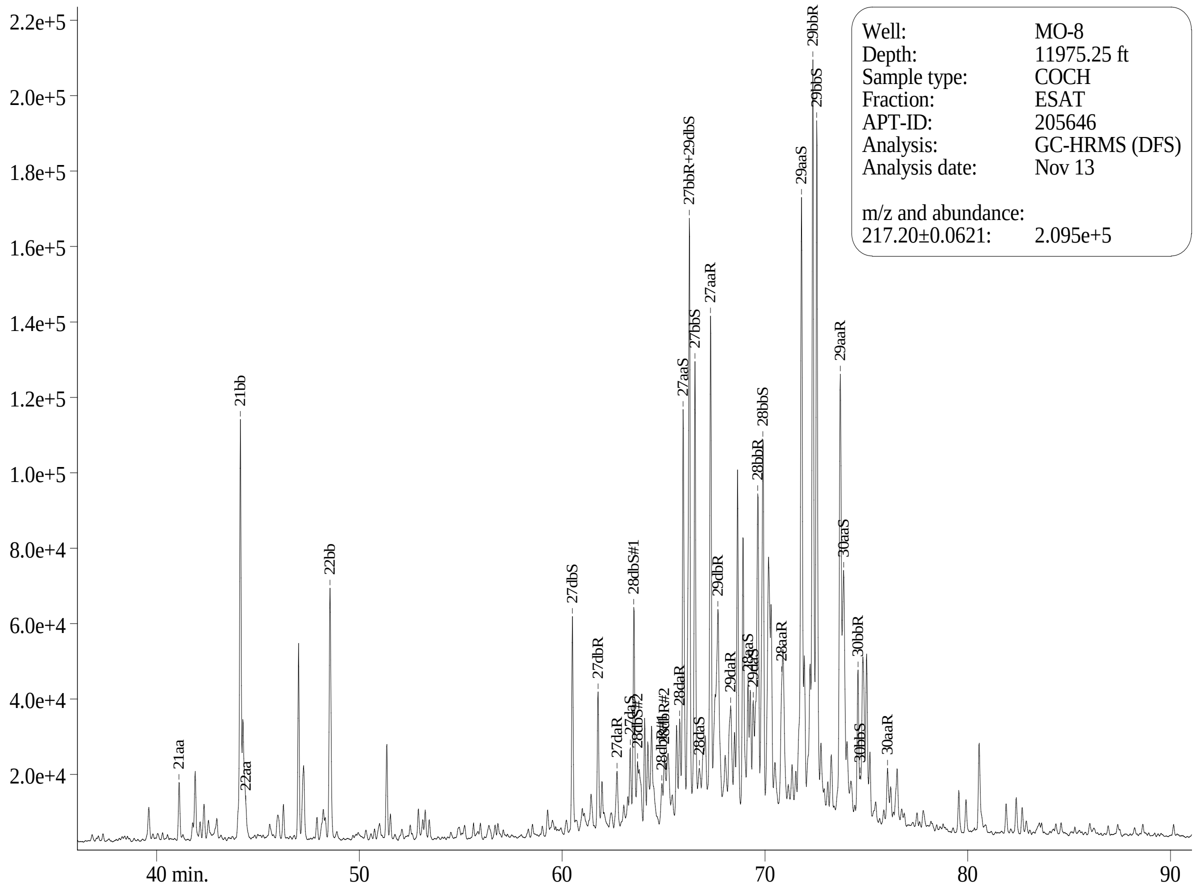
m/z and abundance:
177.16±0.0506: 7.223e+5

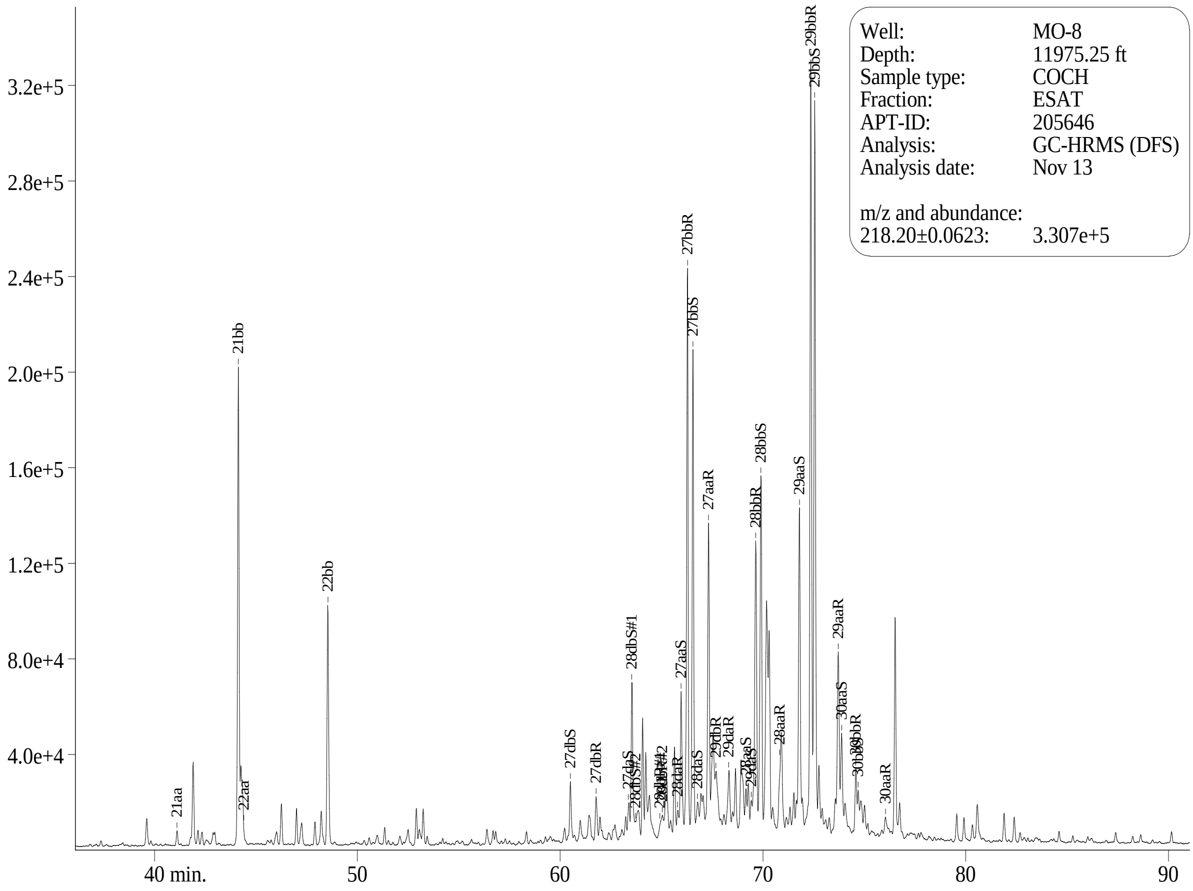


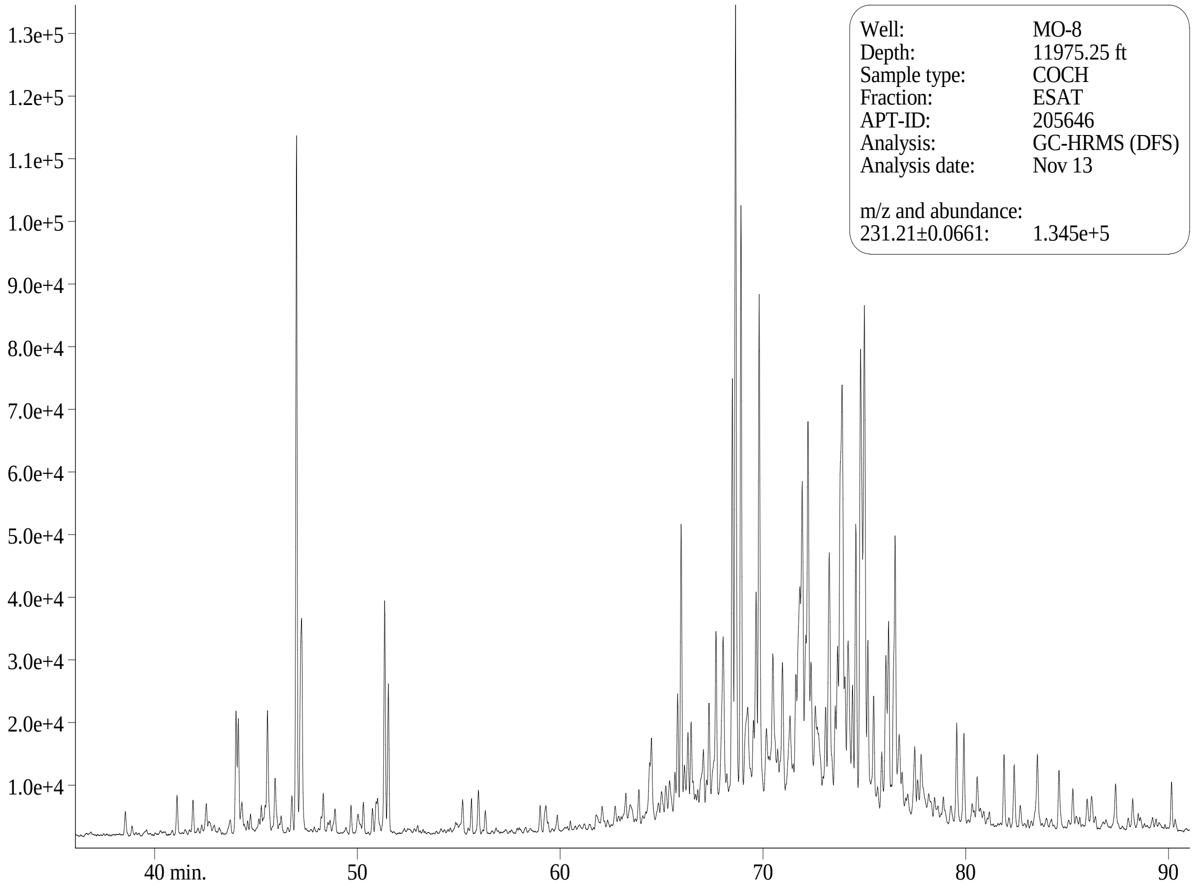
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

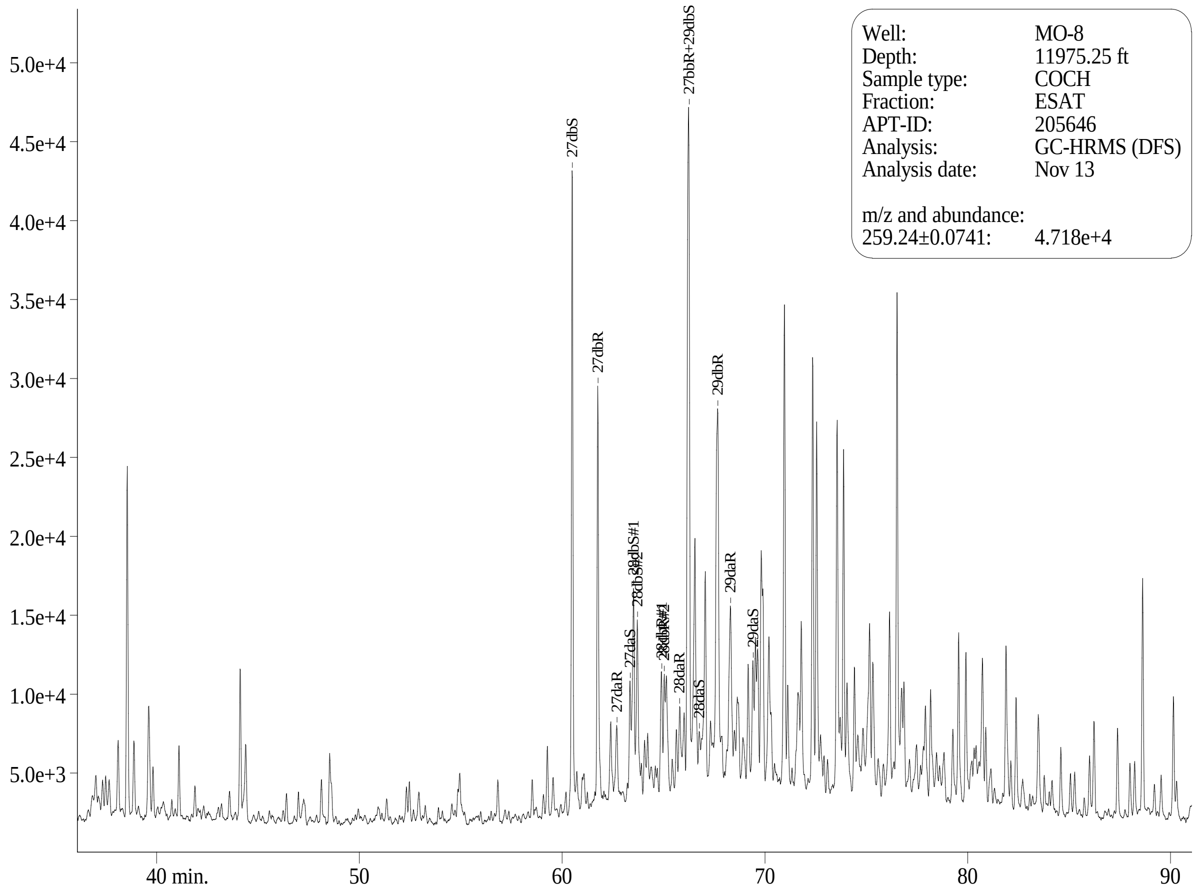
m/z and abundance:
191.18±0.0546: 1.700e+6


Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 1.916e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
30 min.
40
50
60
70
80
90
29Ts
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 2.095e+5
2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27aaS
27bbR+29dbS
27bbS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbS
29bbR
29aaR
30aaS
30bbR
30bbS
30aaR

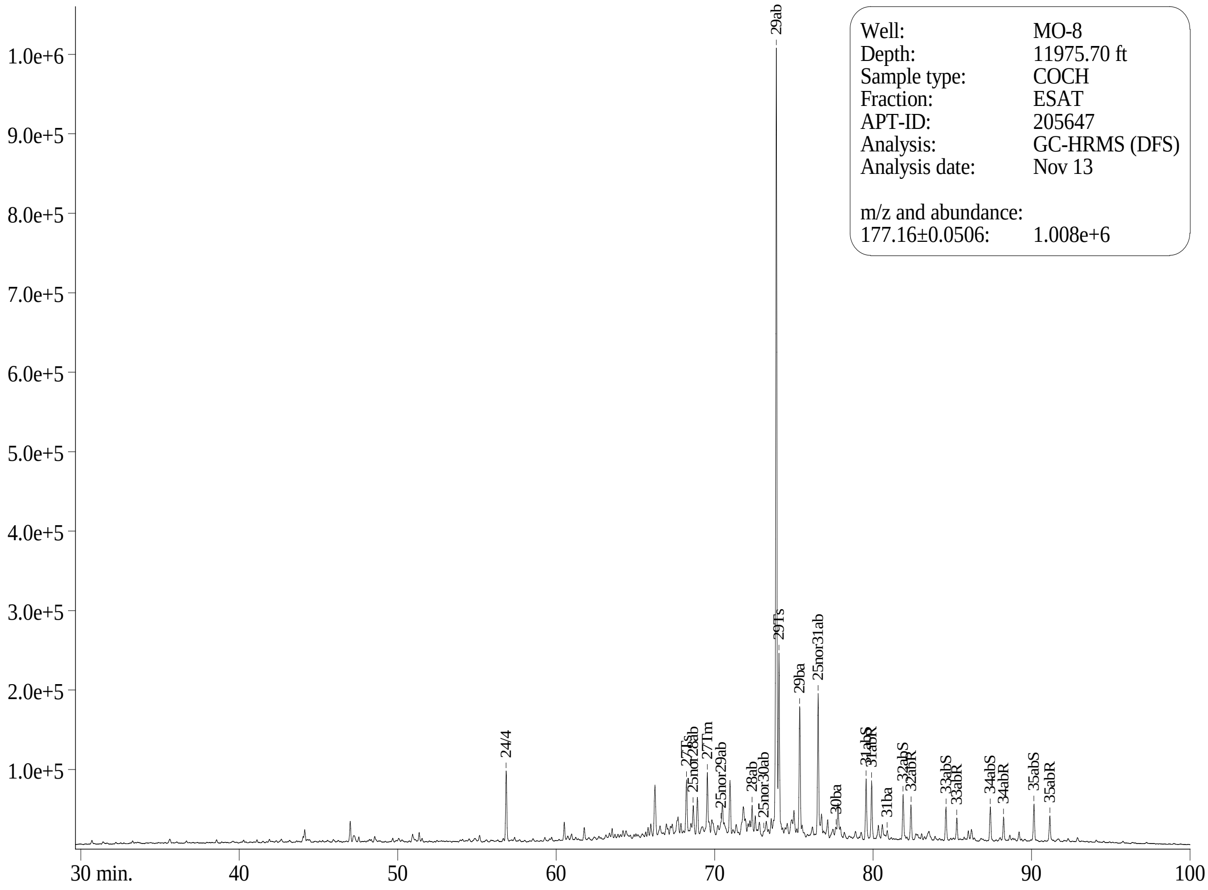

Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
218.20±0.0623: 3.307e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR
27bbS
28daS
27aaR
29dbR
29daR
28bbR
28bbS
28aaS
29daS
28aaR
29aaS
29bbS
29bbR
29aaR
30aaS
30bbR
30bbS
30aaR


Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
231.21±0.0661: 1.345e+5
1.3e+5
1.2e+5
1.1e+5
1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
40 min.
50
60
70
80
90



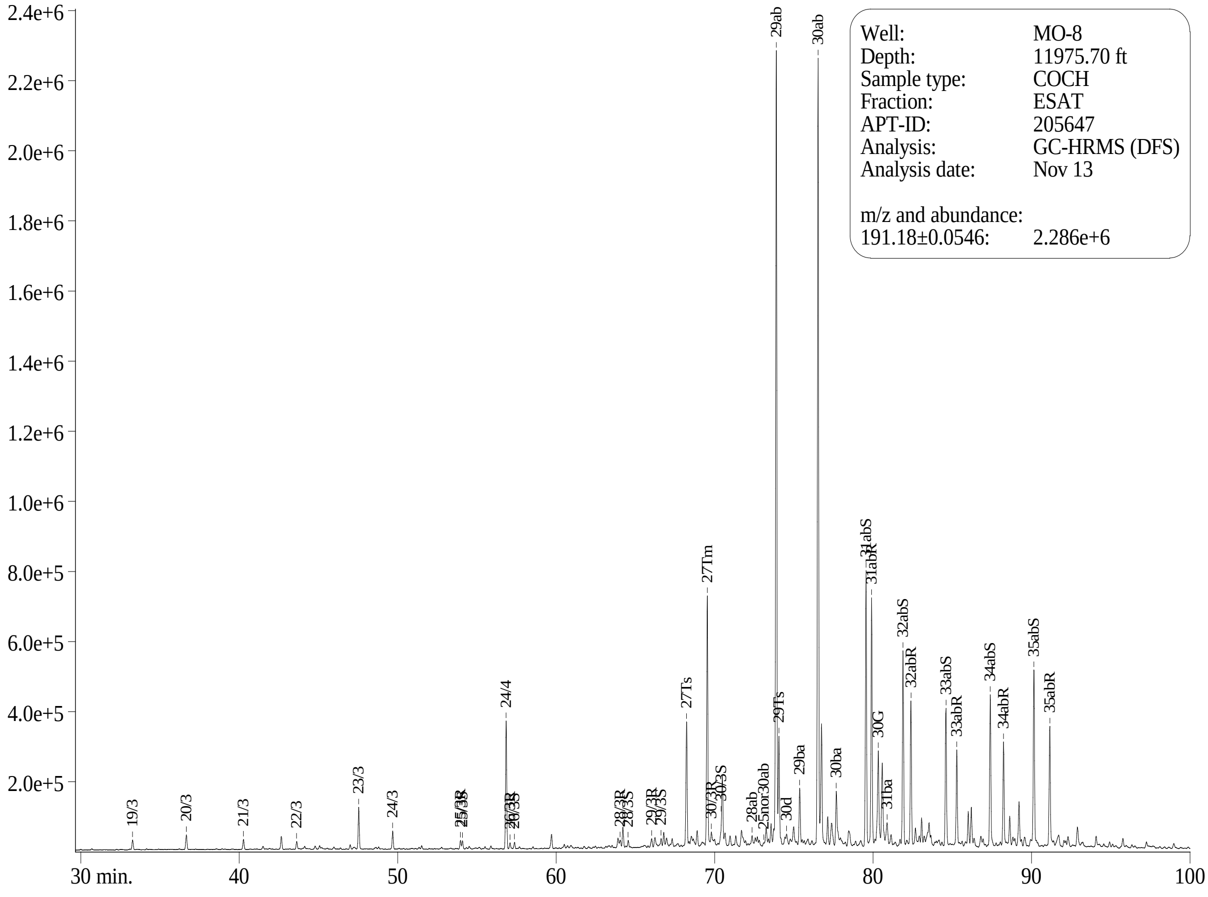
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
259.24±0.0741: 4.718e+4



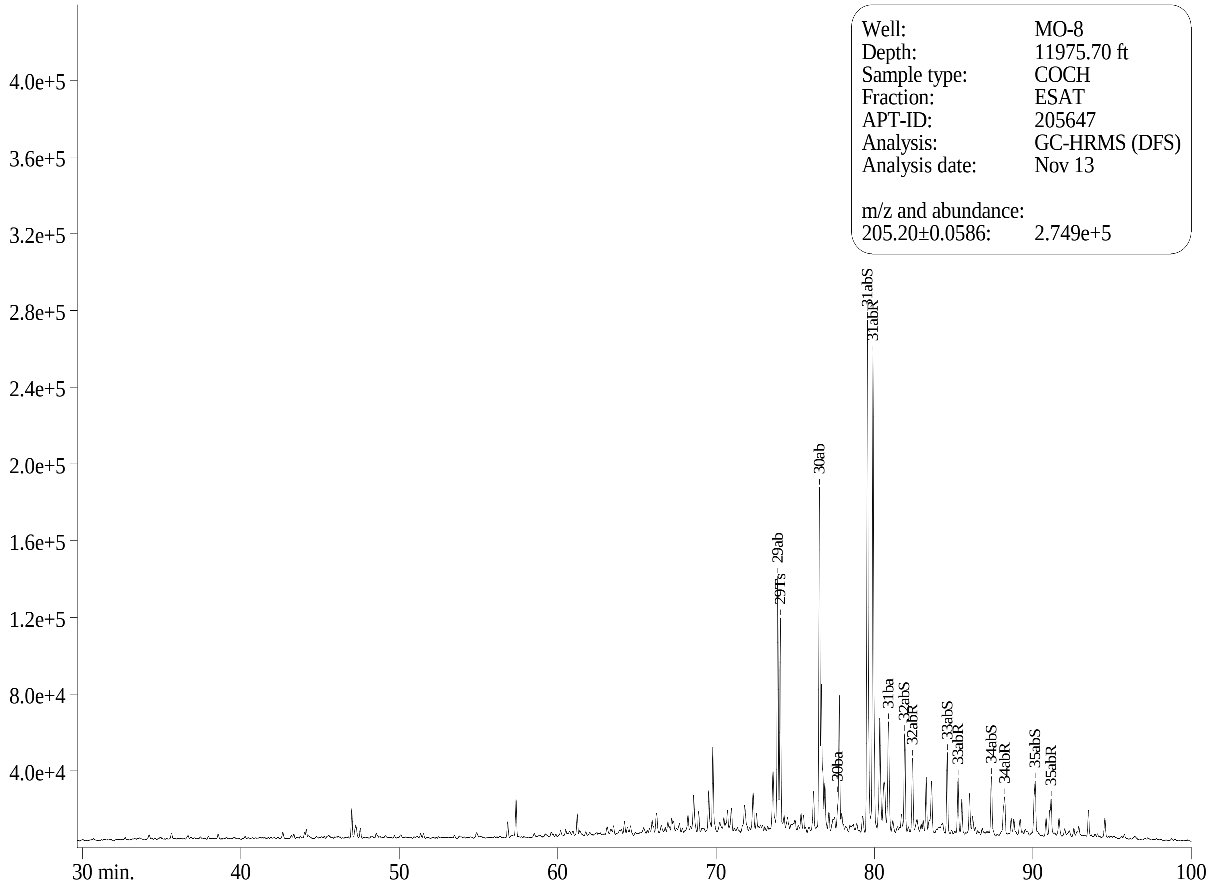
Well:	MO-8
Depth:	11975.70 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205647
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13

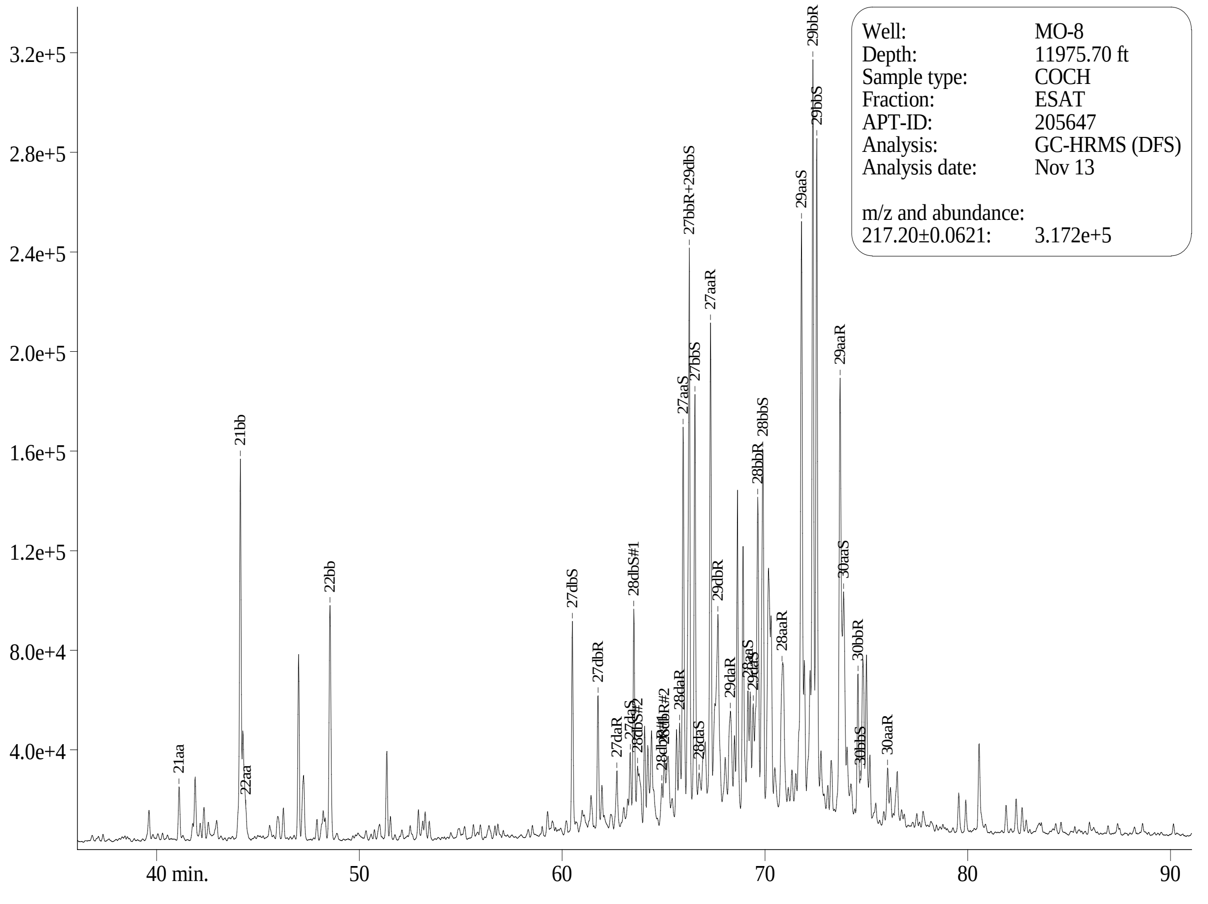
m/z and abundance:
177.16±0.0506: 1.008e+6

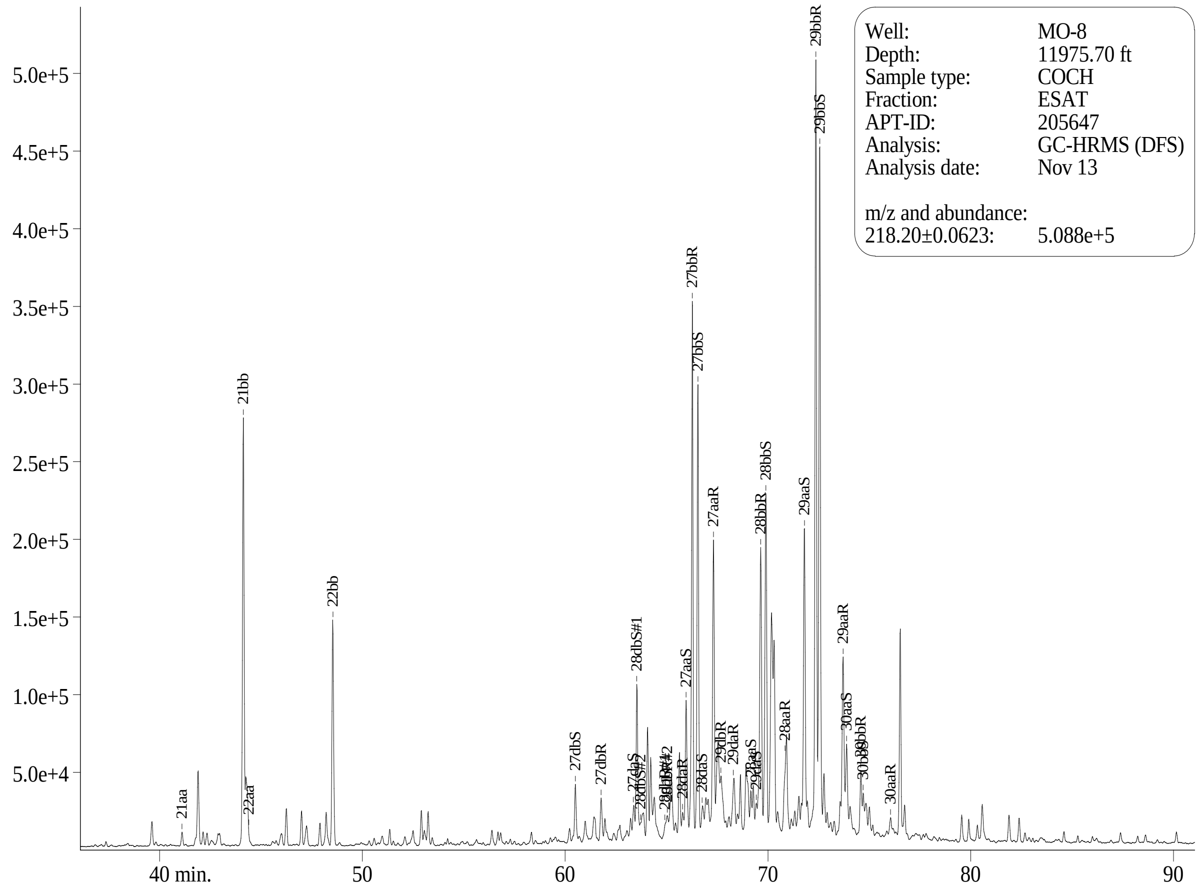


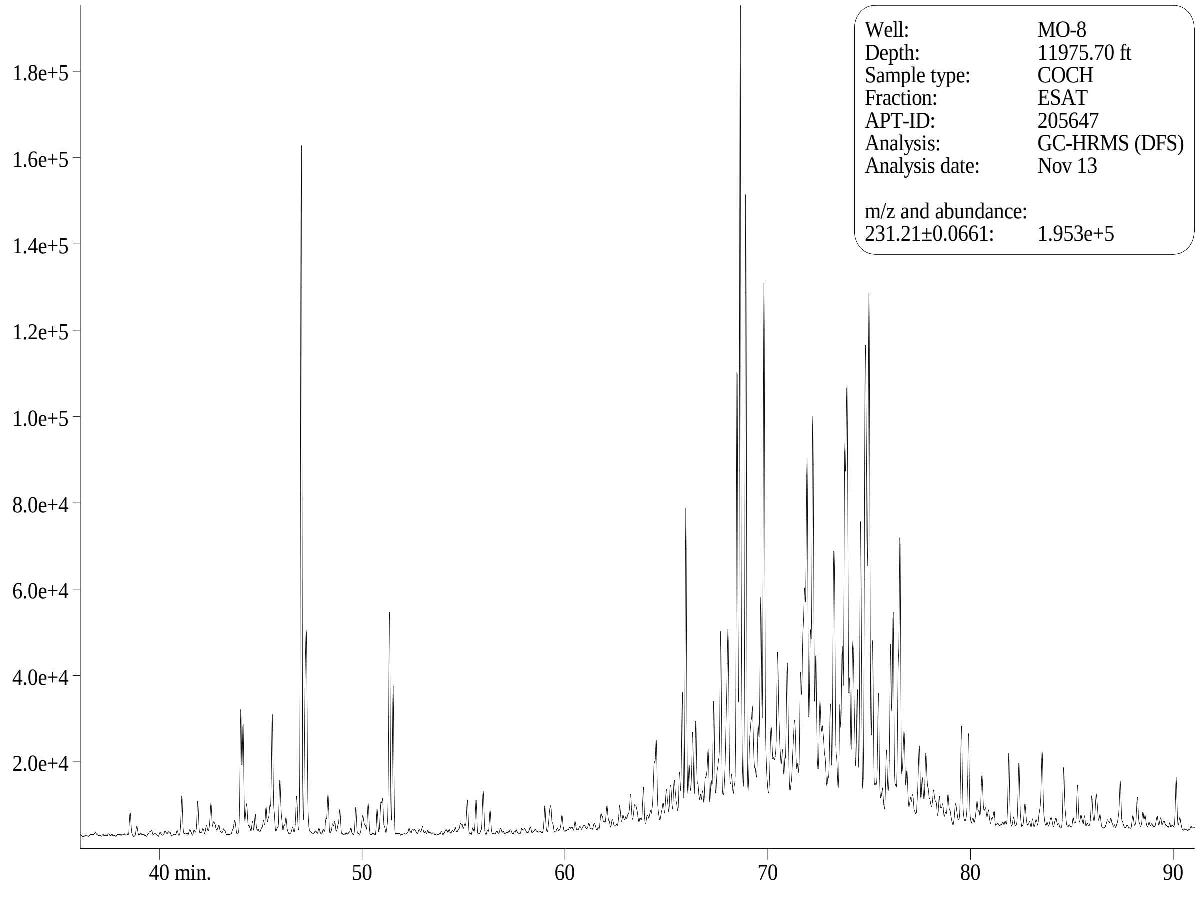
Well:	MO-8
Depth:	11975.70 ft
Sample type:	COCH
Fraction:	ESAT
APT-ID:	205647
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13

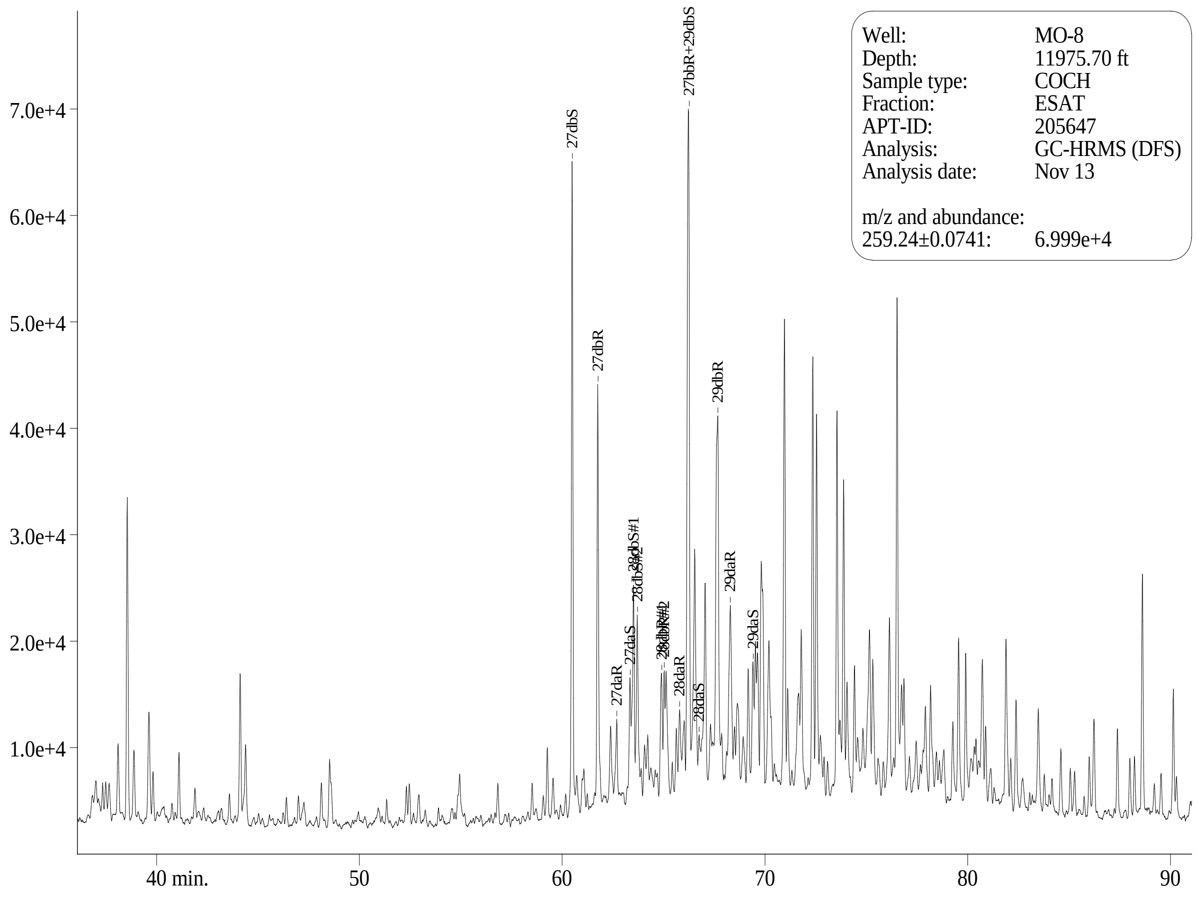
m/z and abundance:
191.18±0.0546: 2.286e+6


Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 2.749e+5
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
30 min.
40
50
60
70
80
90
100
29Ts
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 3.172e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27aaS
27bbR+29dbS
27bbS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR

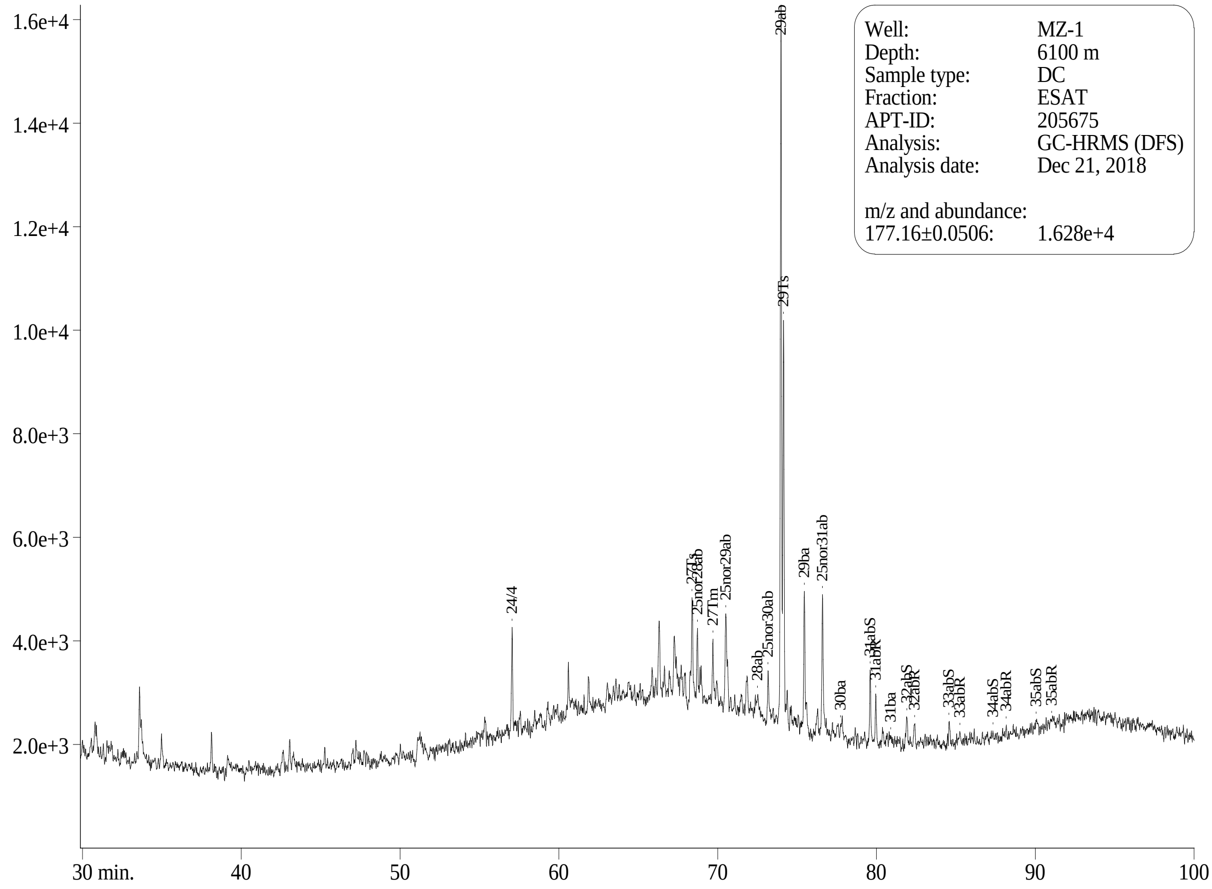

Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
218.20±0.0623: 5.088e+5
5.0e+5
4.5e+5
4.0e+5
3.5e+5
3.0e+5
2.5e+5
2.0e+5
1.5e+5
1.0e+5
5.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
28dbS#1
27daS
28dbS#2
27aaS
28daR
27bbR
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR

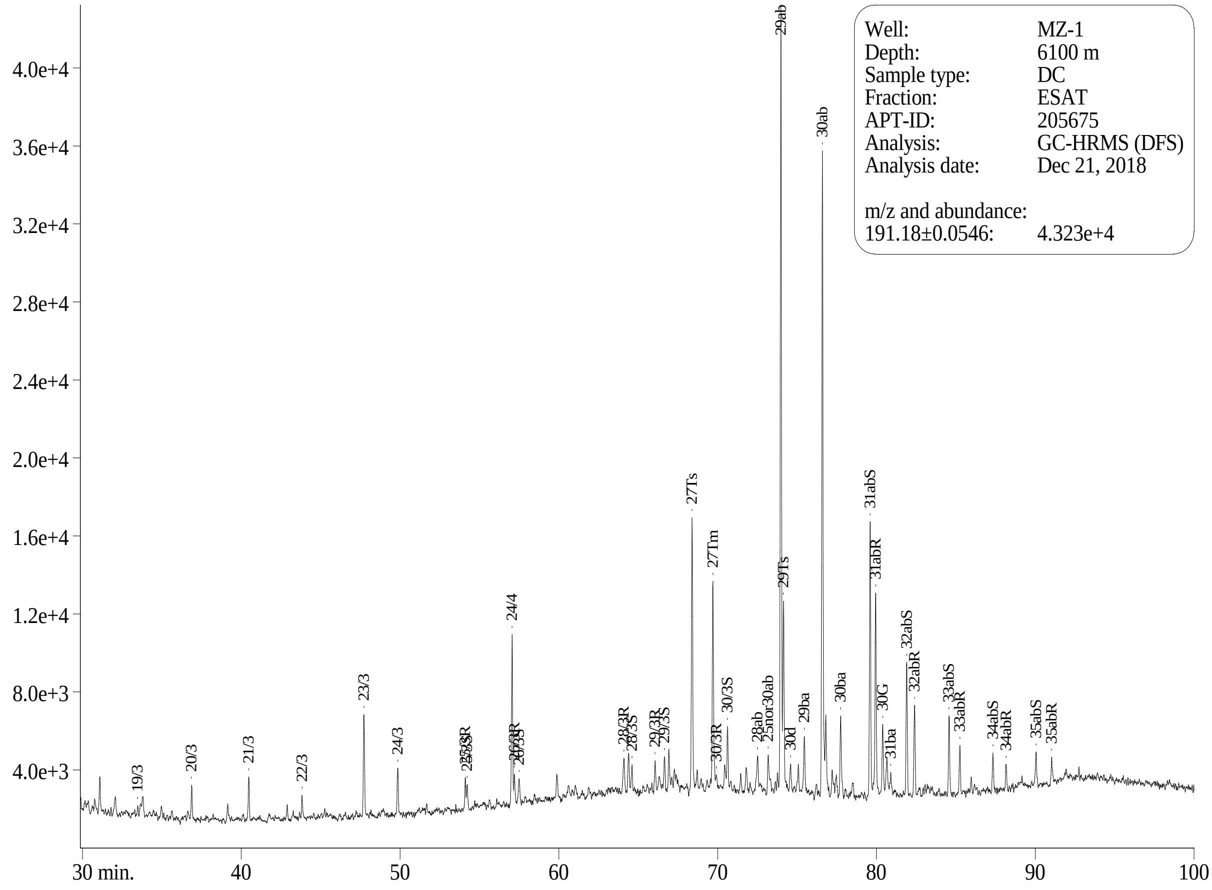

Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
231.21±0.0661: 1.953e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
40 min.
50
60
70
80
90

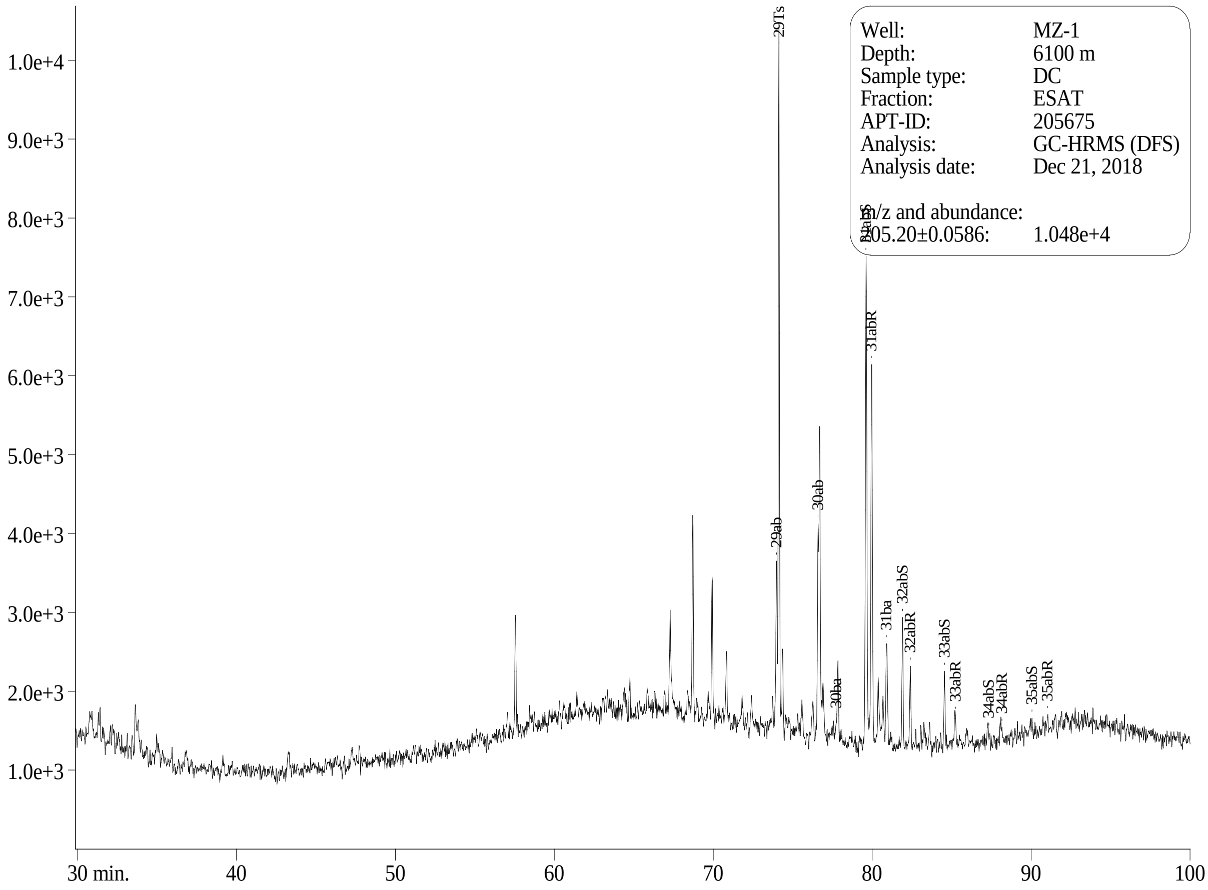


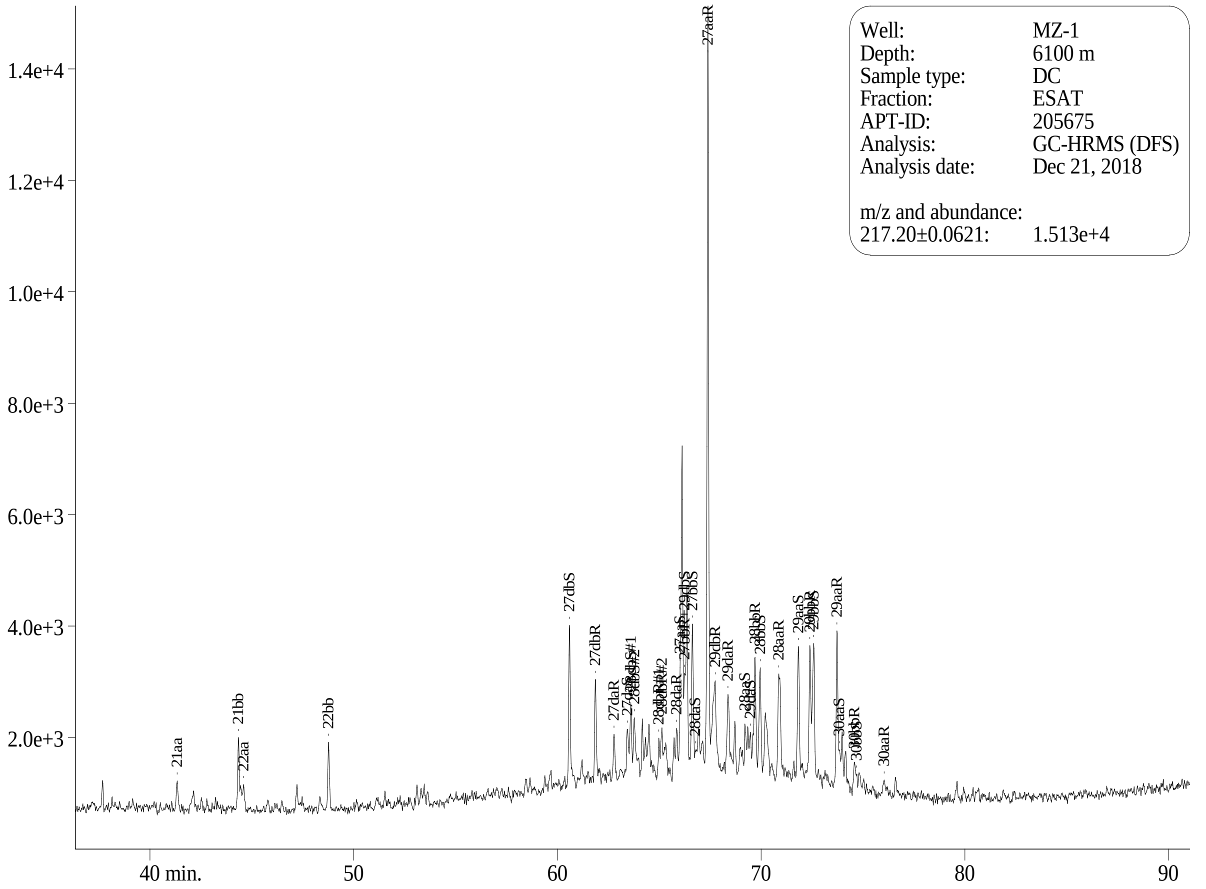
Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: ESAT
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

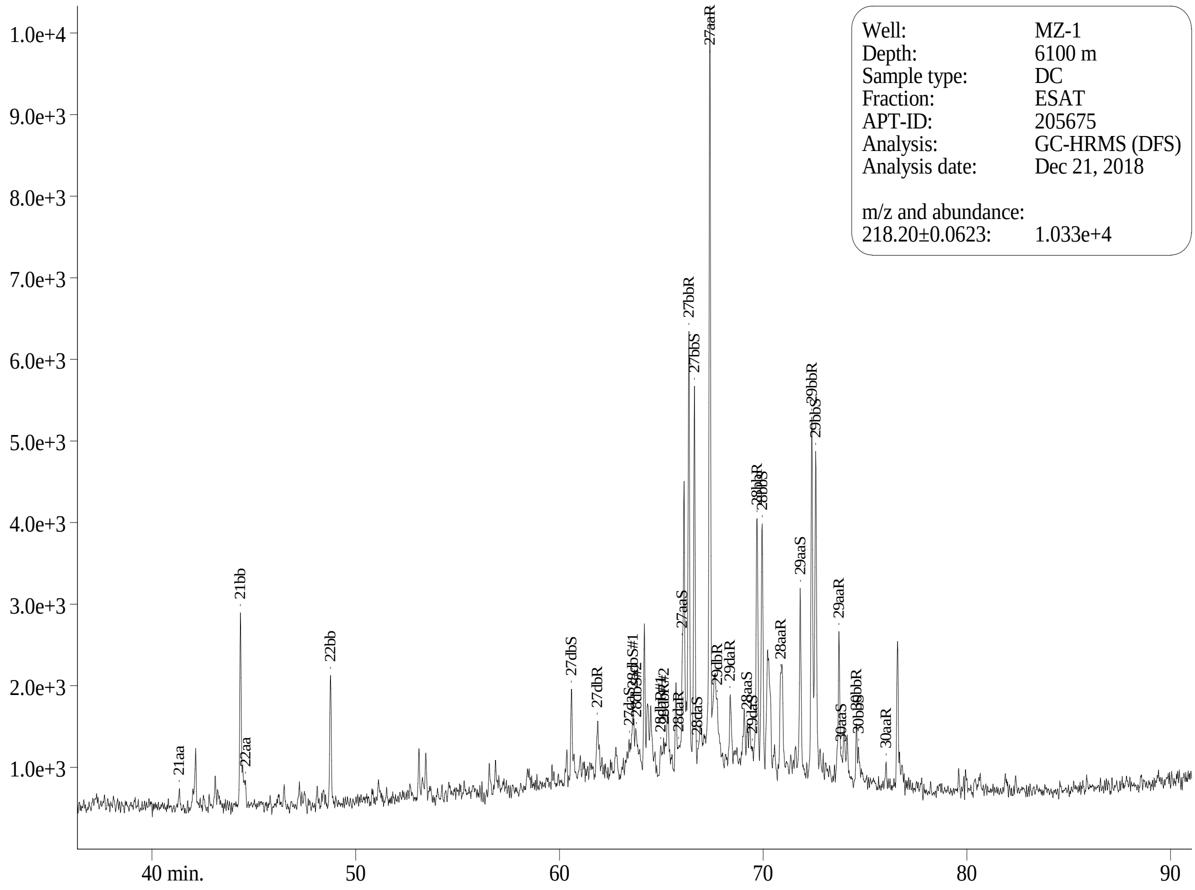
m/z and abundance:
259.24±0.0741: 6.999e+4

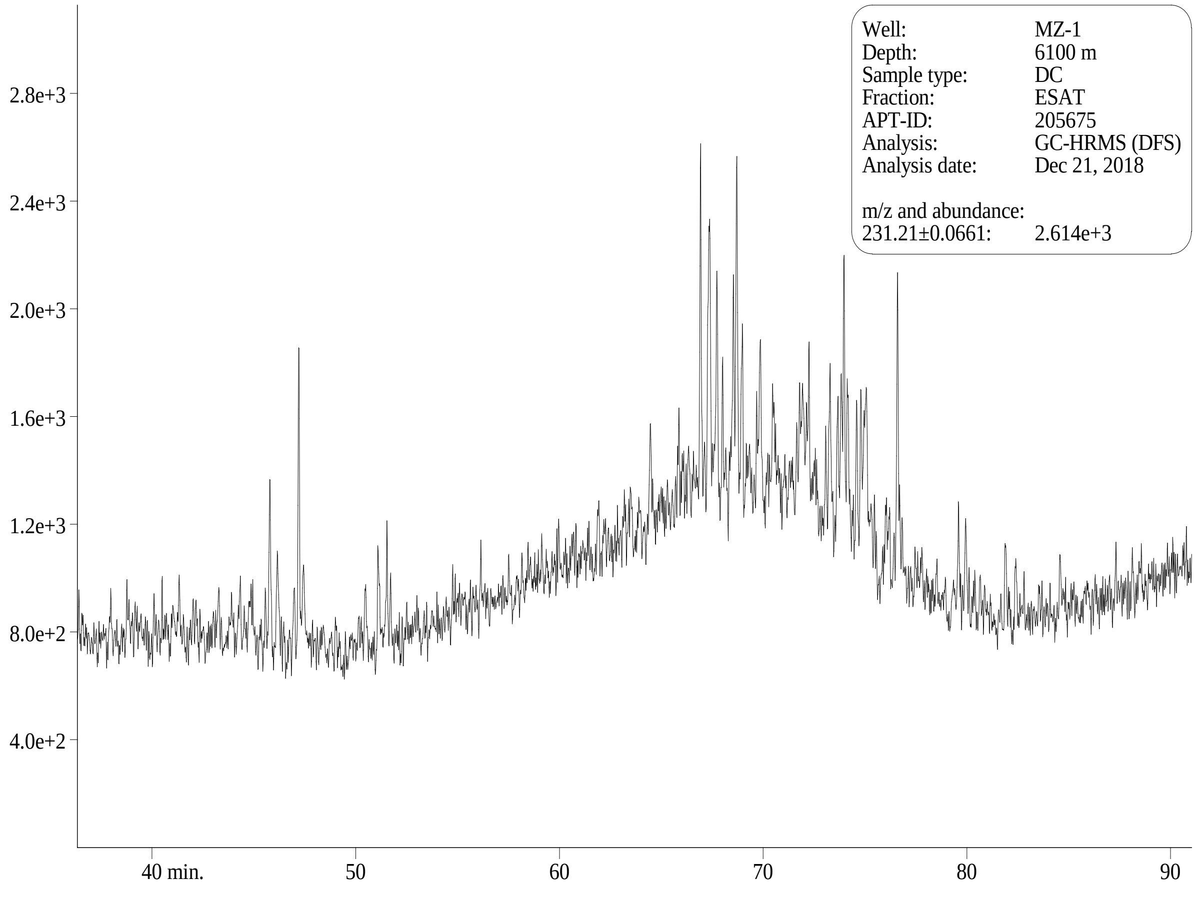

1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
30 min.
40
50
60
70
80
90
100
24/4
27Ts
25nor28ab
27Tm
25nor29ab
28ab
25nor30ab
29ab
29Ts
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
177.16±0.0506: 1.628e+4

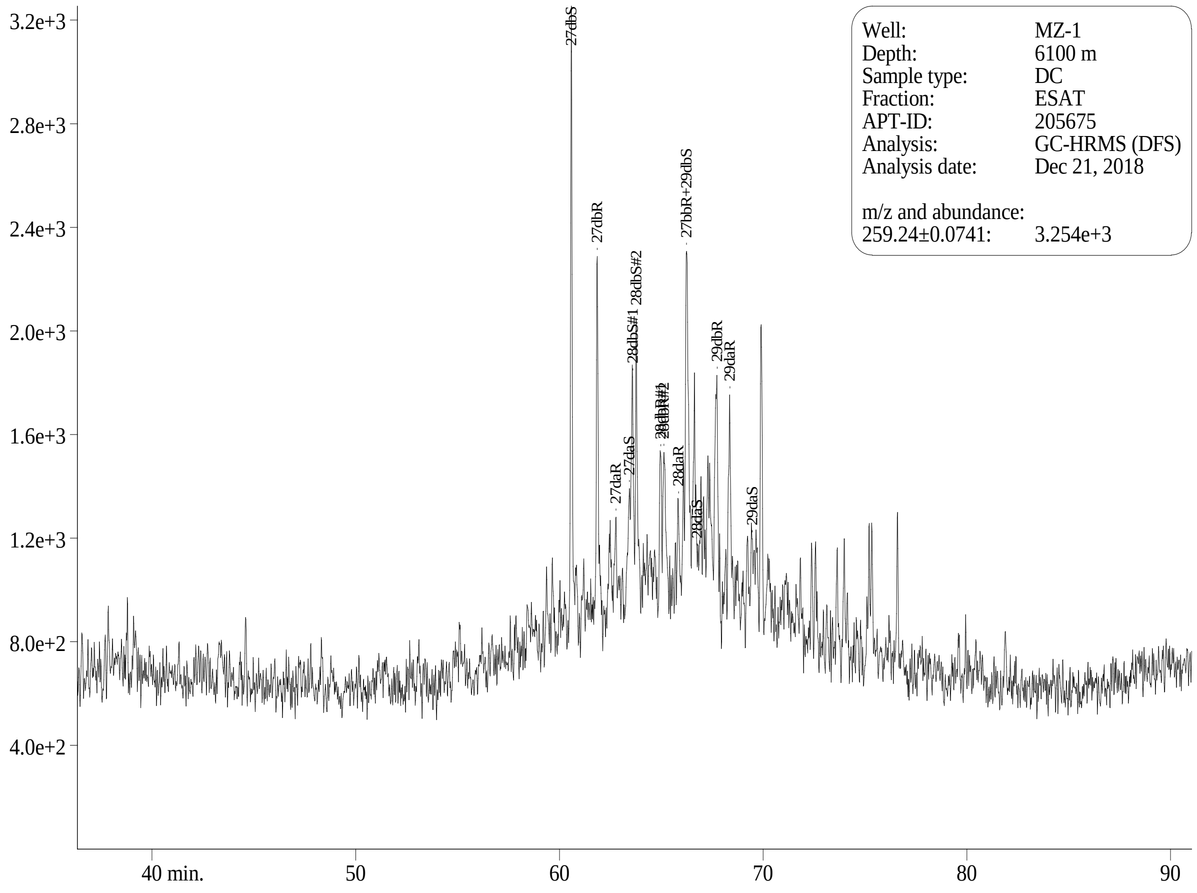

4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
30 min.
40
50
60
70
80
90
100
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
30/3R
27Tm
30/3S
28ab
25nor30ab
29ab
29Ts
30d
29ba
30ab
30ba
31abS
31abR
30G
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
191.18±0.0546: 4.323e+4

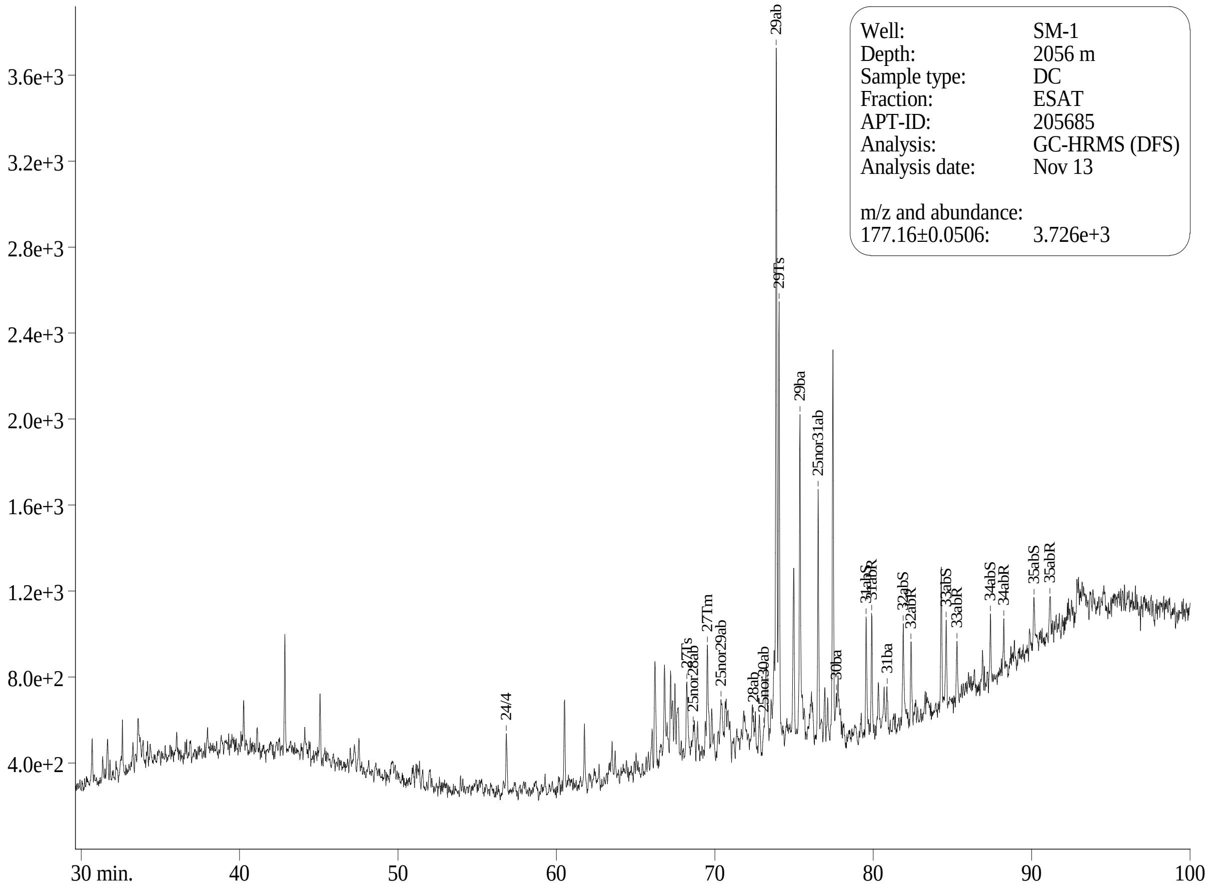

Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
205.20±0.0586: 1.048e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
30 min.
40
50
60
70
80
90
100
29Ts
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

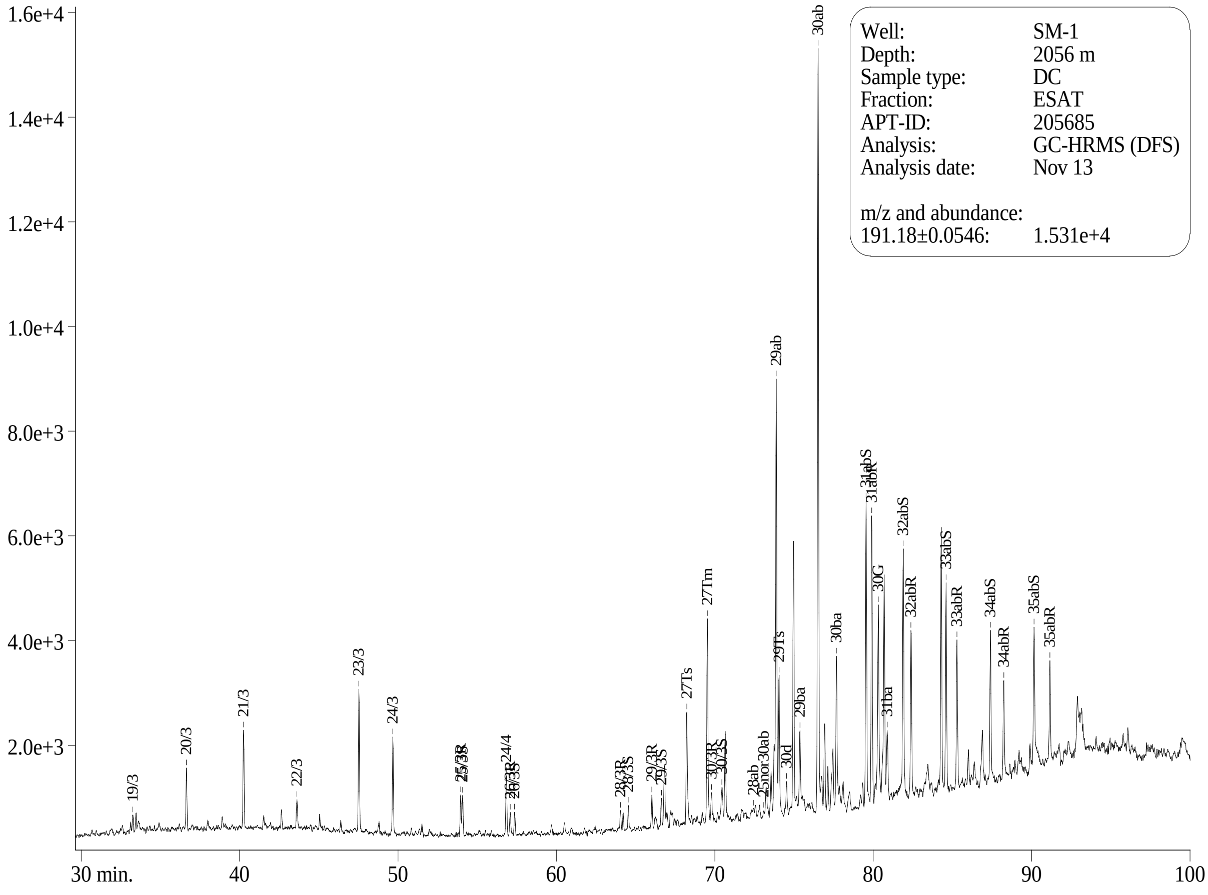

Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
217.20±0.0621: 1.513e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR
29dbS
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR

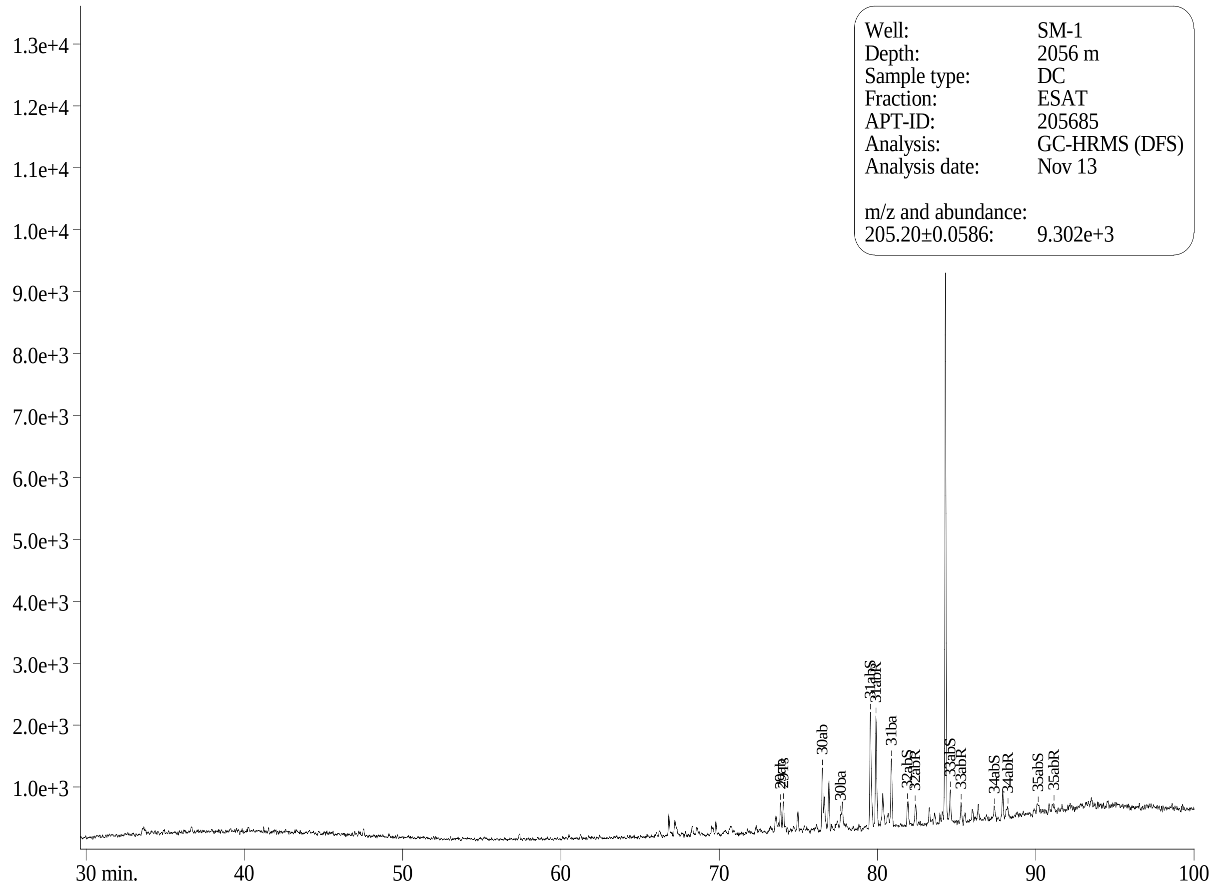

Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
218.20±0.0623: 1.033e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
28daS
27bbR
27bbS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbS
30bbR
30aaR

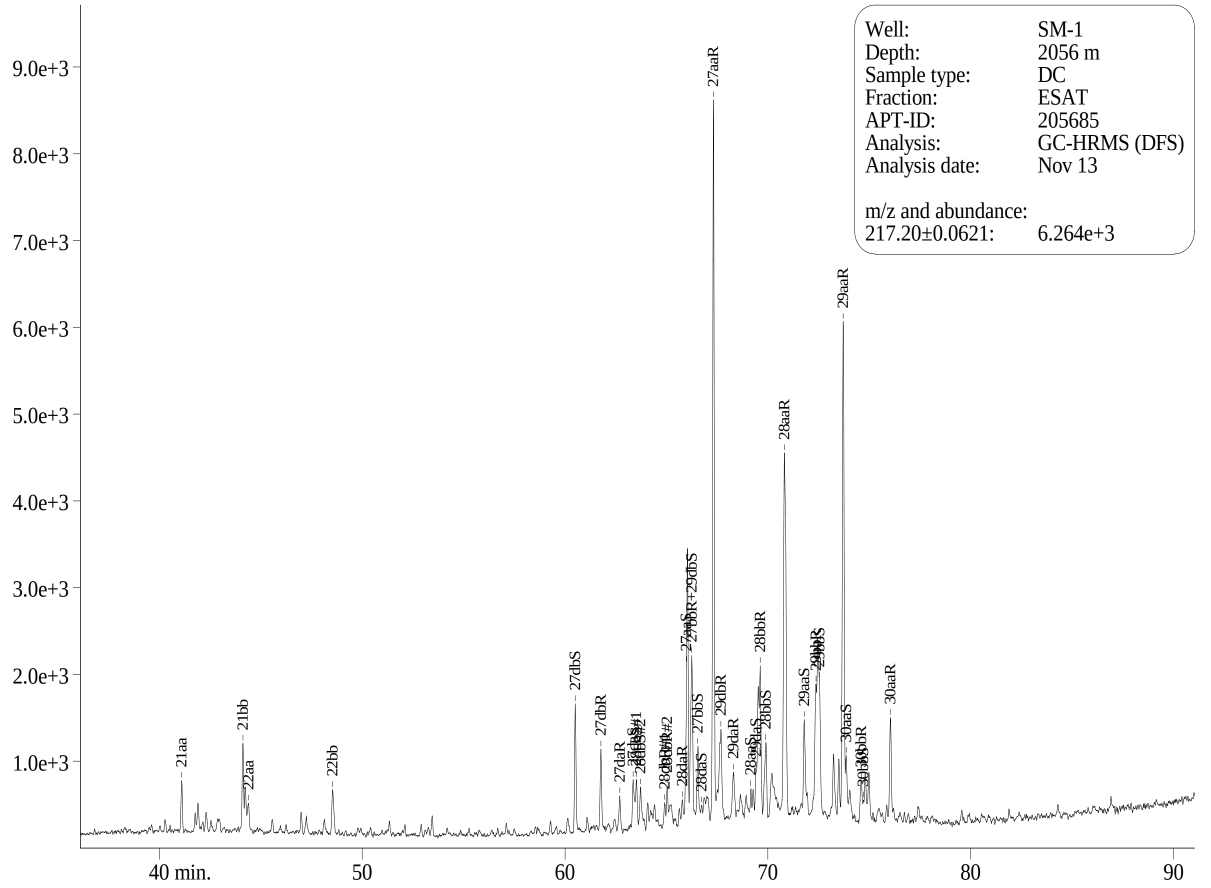

Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.21±0.0661: 2.614e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
40 min.
50
60
70
80
90

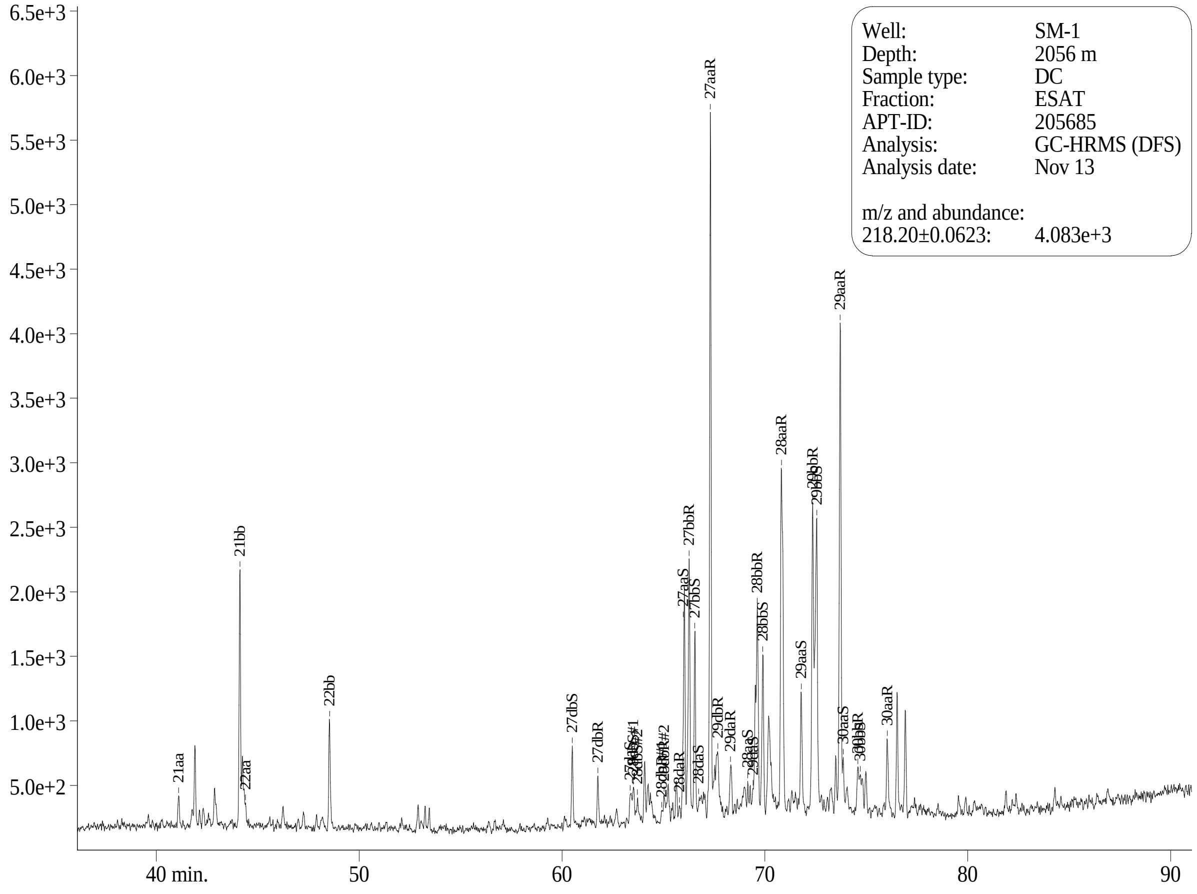

Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: ESAT
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
259.24±0.0741: 3.254e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
40 min.
50
60
70
80
90
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27bbR+29dbS
29dbR
29daR
29daS

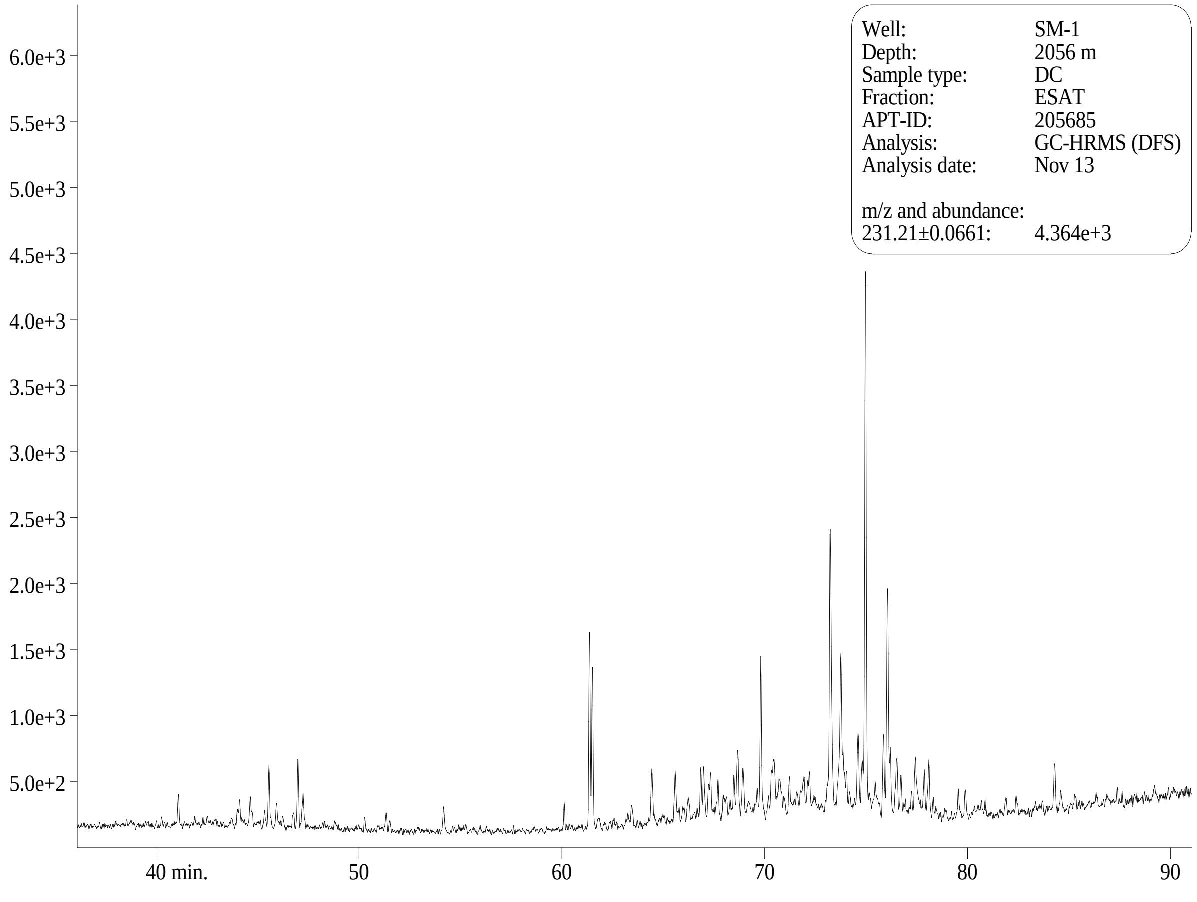

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: ESAT
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
177.16±0.0506: 3.726e+3
3.6e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
30 min.
40
50
60
70
80
90
100
24/4
25nor28ab
27Ts
27Tm
25nor29ab
28ab
25nor30ab
29ab
29Ts
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

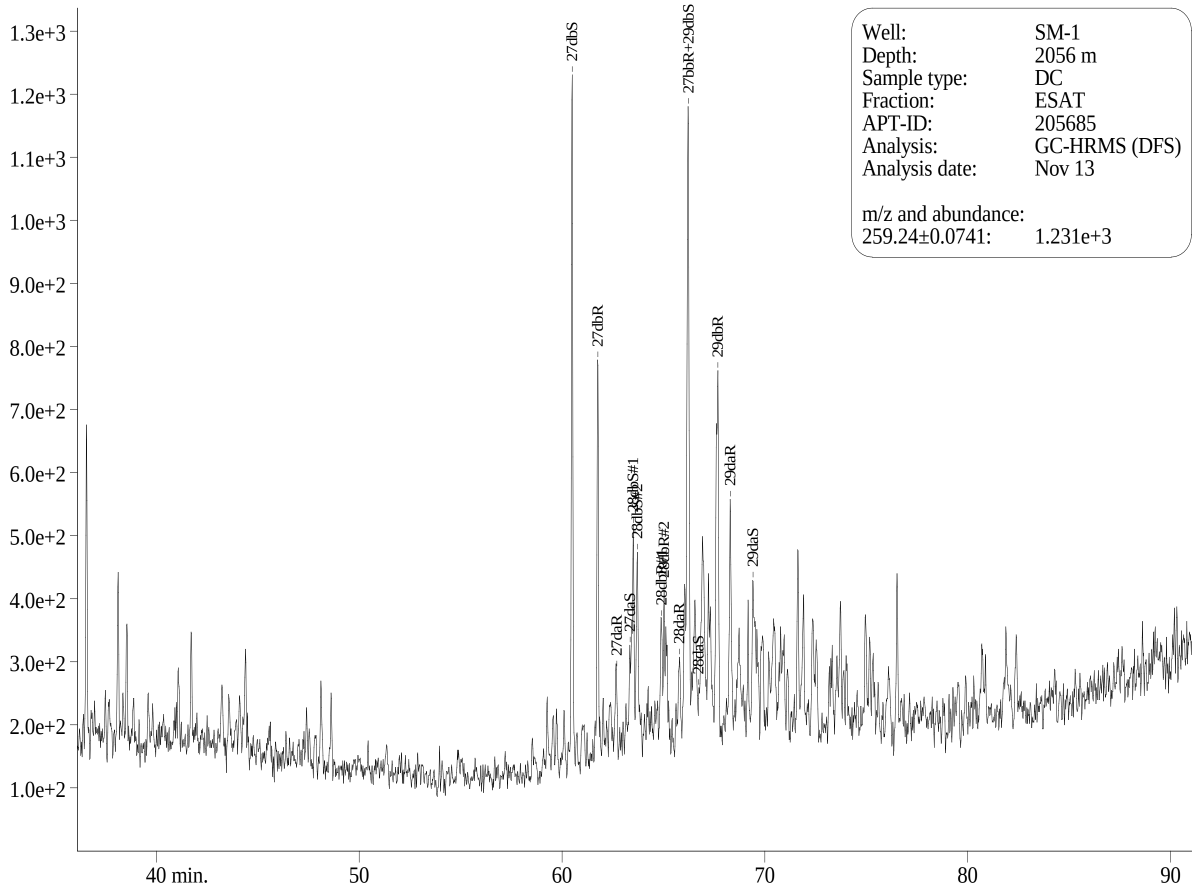

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: ESAT
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
191.18±0.0546: 1.531e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
30 min.
40
50
60
70
80
90
100
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
27Tm
30/3R
30/3S
28ab
25nor30ab
30d
29ab
29Ts
29ba
30ab
30ba
31abS
31abR
30G
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: ESAT
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 9.302e+3
1.3e+4
1.2e+4
1.1e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
30 min.
40
50
60
70
80
90
100
29ab
29ba
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

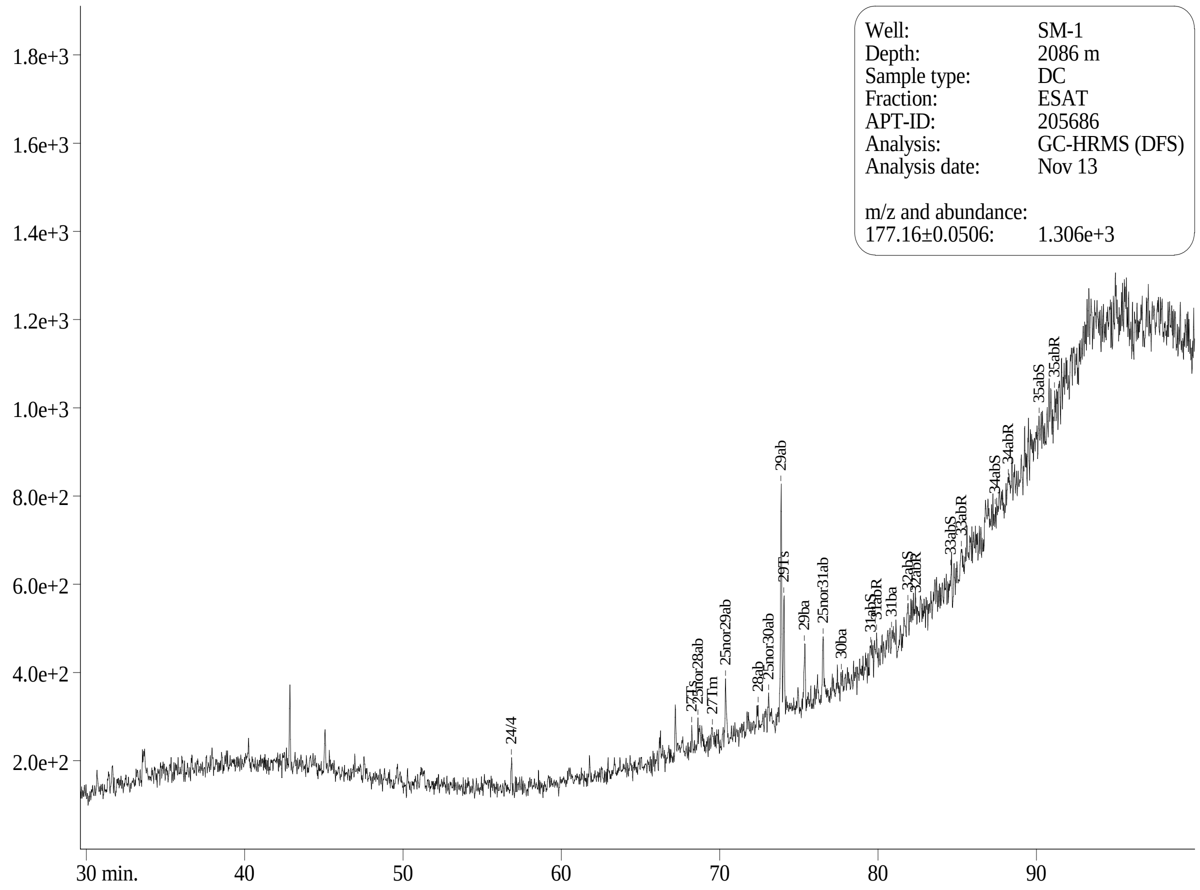

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: ESAT
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 6.264e+3
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
28dbS#1
28dbR#2
28daR
27aaS
27bbR+29dbS
27aaR
27bbS
28daS
29dbR
29daR
28aaS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR


Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: ESAT
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
218.20±0.0623: 4.083e+3
6.5e+3
6.0e+3
5.5e+3
5.0e+3
4.5e+3
4.0e+3
3.5e+3
3.0e+3
2.5e+3
2.0e+3
1.5e+3
1.0e+3
5.0e+2
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
28daR
28daS
27aaS
27bbR
27bbS
27aaR
29dbR
29daR
28aaS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30aaR


Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: ESAT
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
231.21±0.0661: 4.364e+3
6.0e+3
5.5e+3
5.0e+3
4.5e+3
4.0e+3
3.5e+3
3.0e+3
2.5e+3
2.0e+3
1.5e+3
1.0e+3
5.0e+2
40 min.
50
60
70
80
90

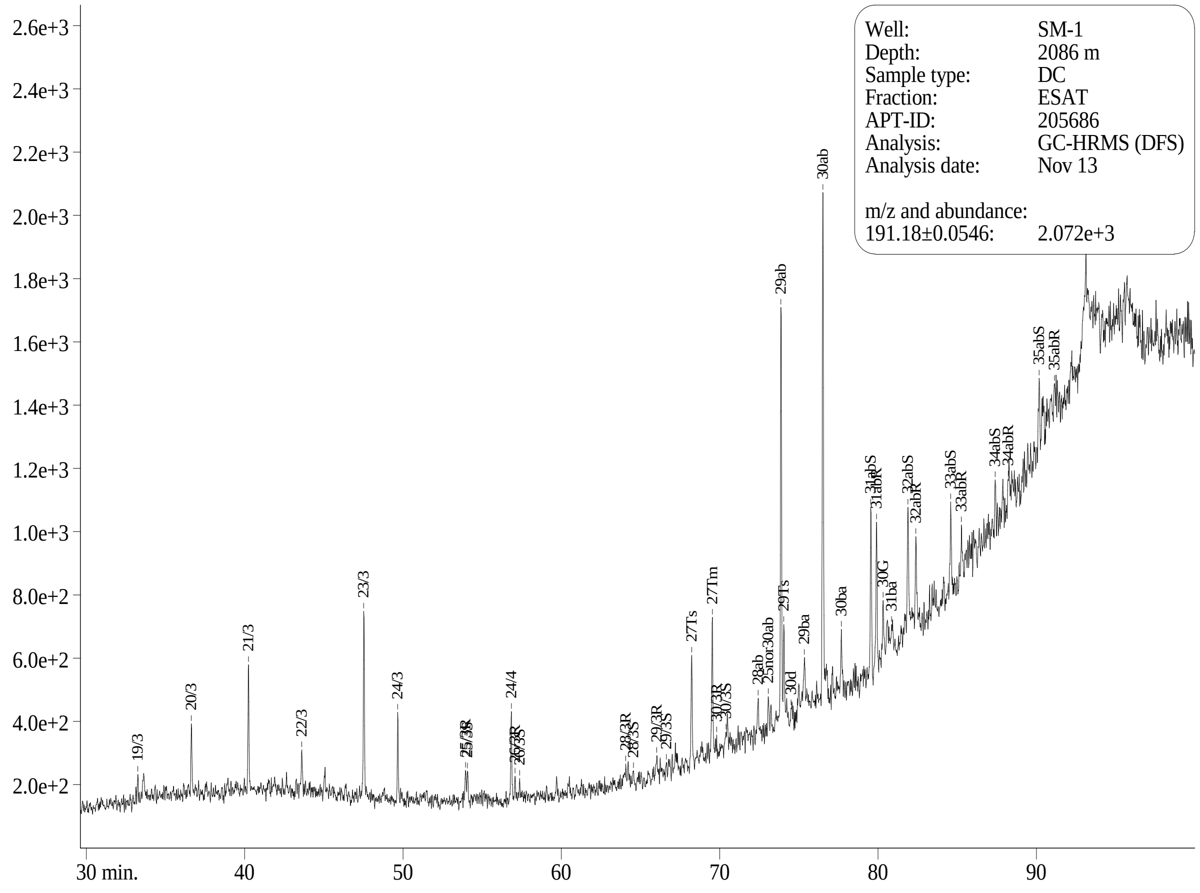


Well:	SM-1
Depth:	2056 m
Sample type:	DC
Fraction:	ESAT
APT-ID:	205685
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
259.24±0.0741:	1.231e+3



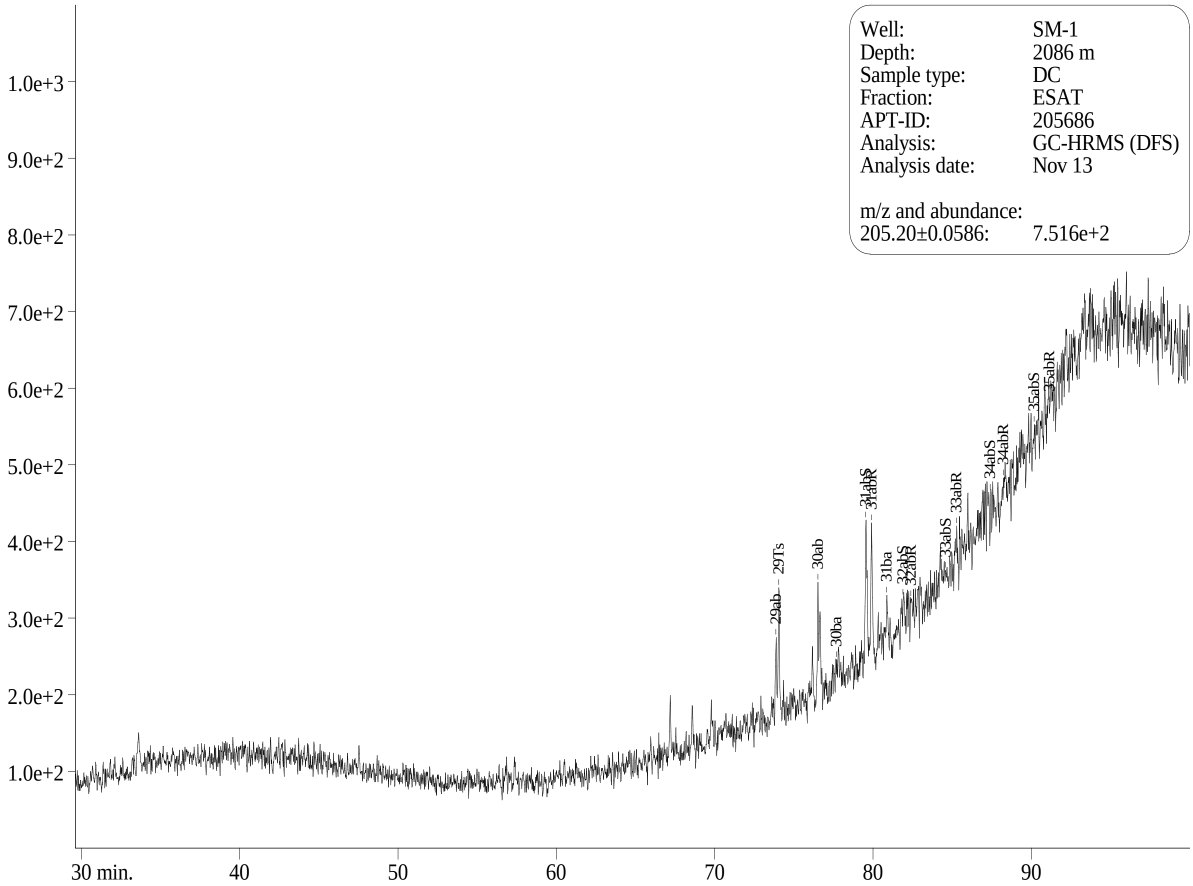
Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: ESAT
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
177.16±0.0506: 1.306e+3

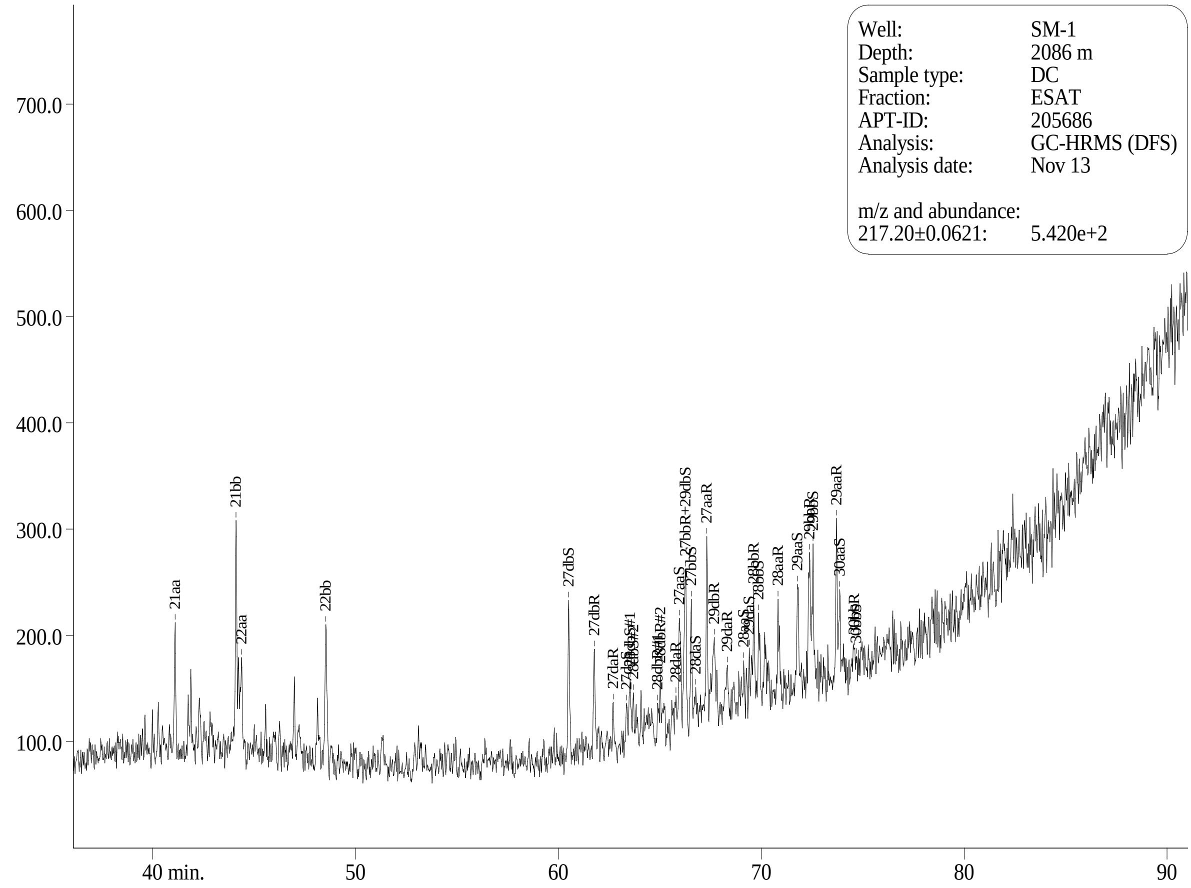


Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: ESAT
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

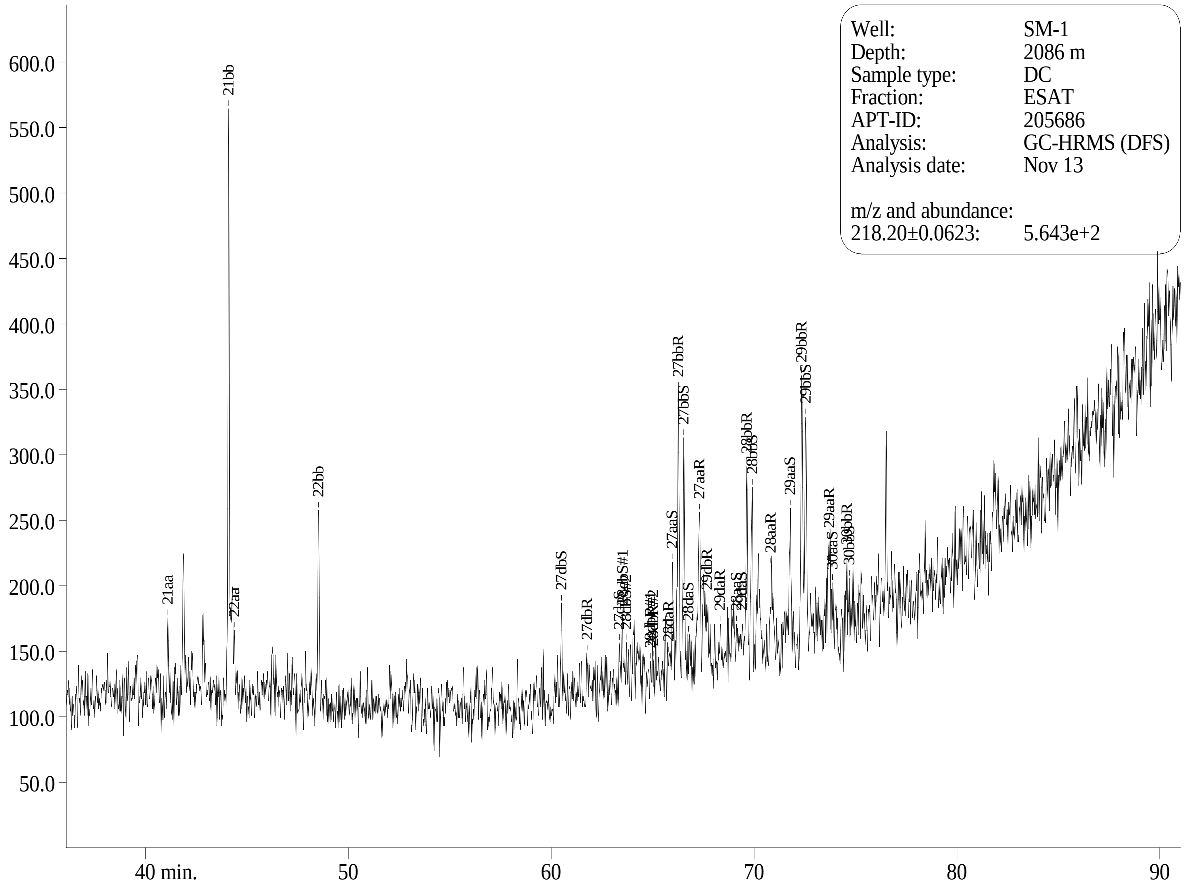
m/z and abundance:
191.18±0.0546: 2.072e+3



Well:	SM-1
Depth:	2086 m
Sample type:	DC
Fraction:	ESAT
APT-ID:	205686
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
205.20±0.0586:	7.516e+2

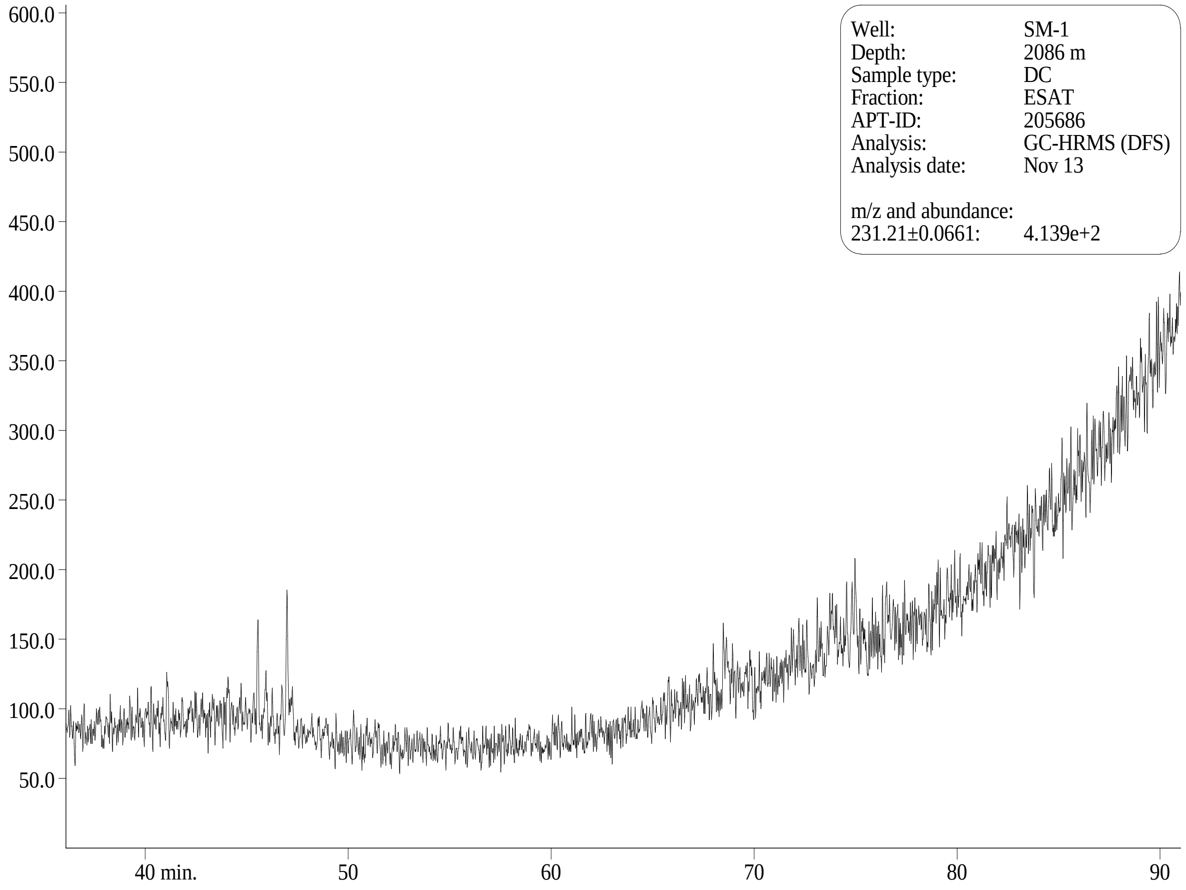


Well:	SM-1
Depth:	2086 m
Sample type:	DC
Fraction:	ESAT
APT-ID:	205686
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
217.20±0.0621:	5.420e+2



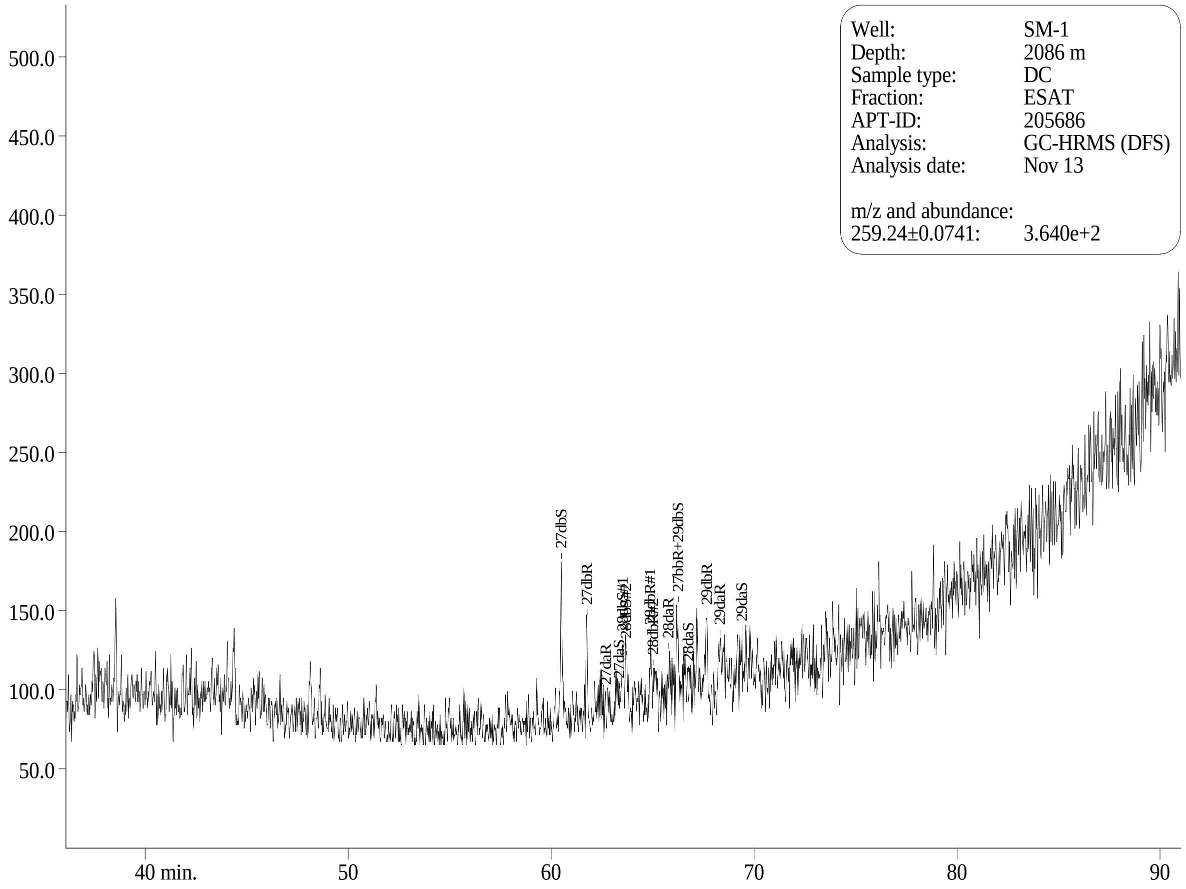
Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: ESAT
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

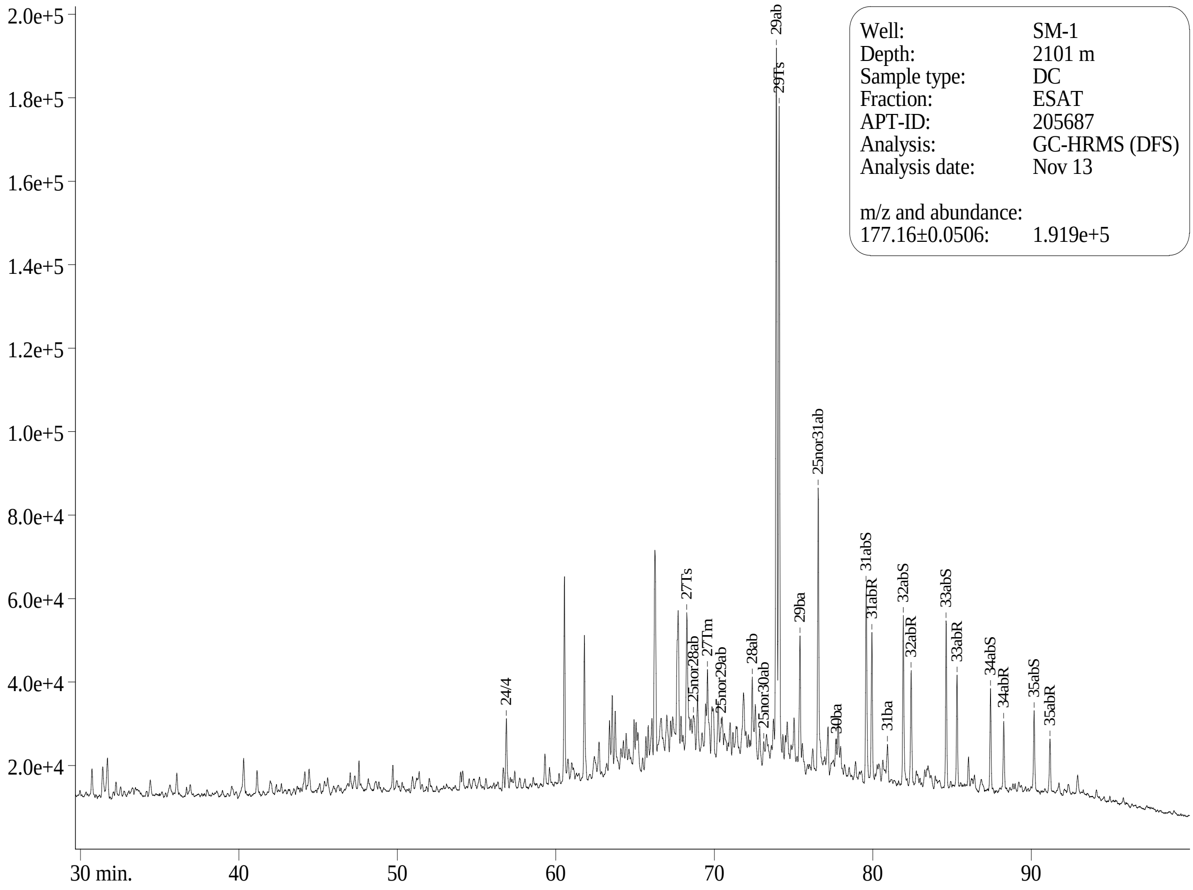
m/z and abundance:
218.20±0.0623: 5.643e+2



Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: ESAT
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

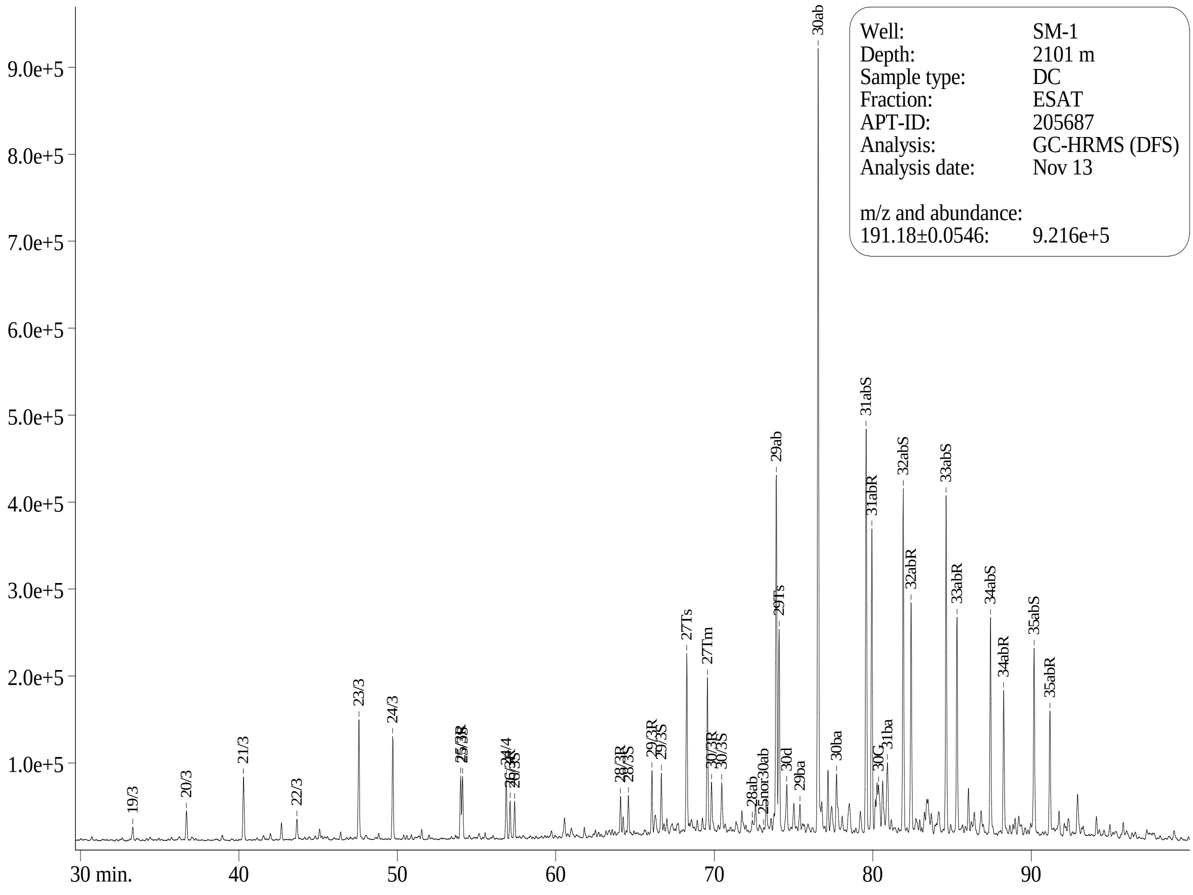
m/z and abundance:
231.21±0.0661: 4.139e+2


Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: ESAT
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
259.24±0.0741: 3.640e+2
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
40 min.
50
60
70
80
90
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27bbR+29dbS
28daS
29dbR
29daR
29daS



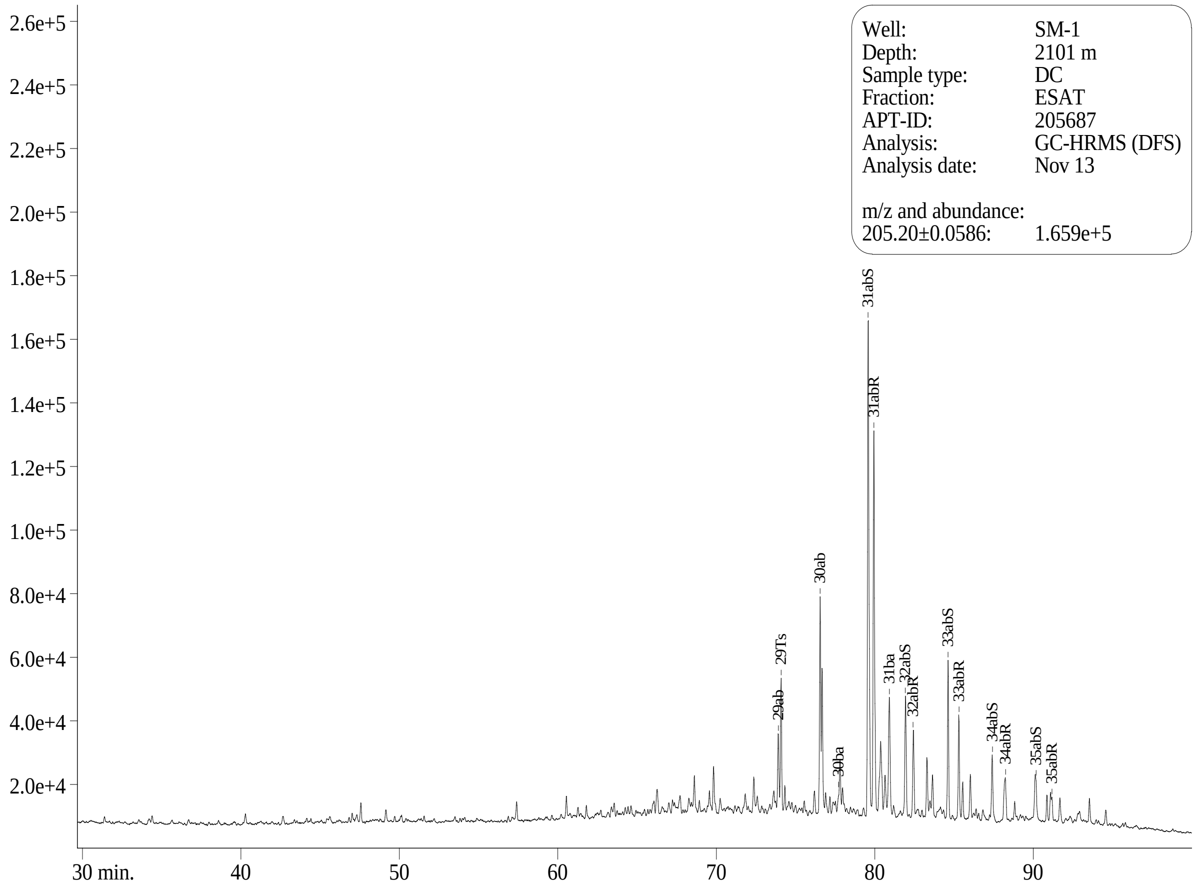
Well:	SM-1
Depth:	2101 m
Sample type:	DC
Fraction:	ESAT
APT-ID:	205687
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13

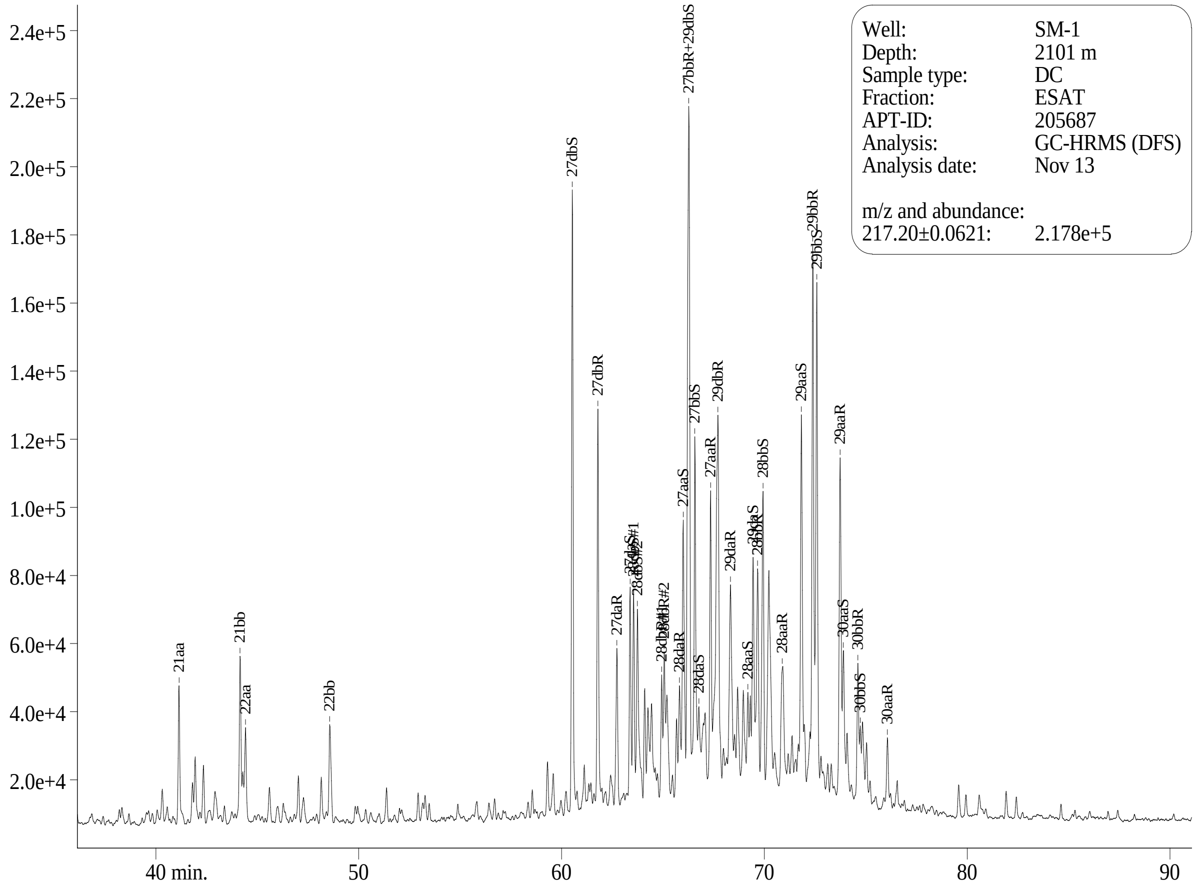
m/z and abundance:
177.16±0.0506: 1.919e+5

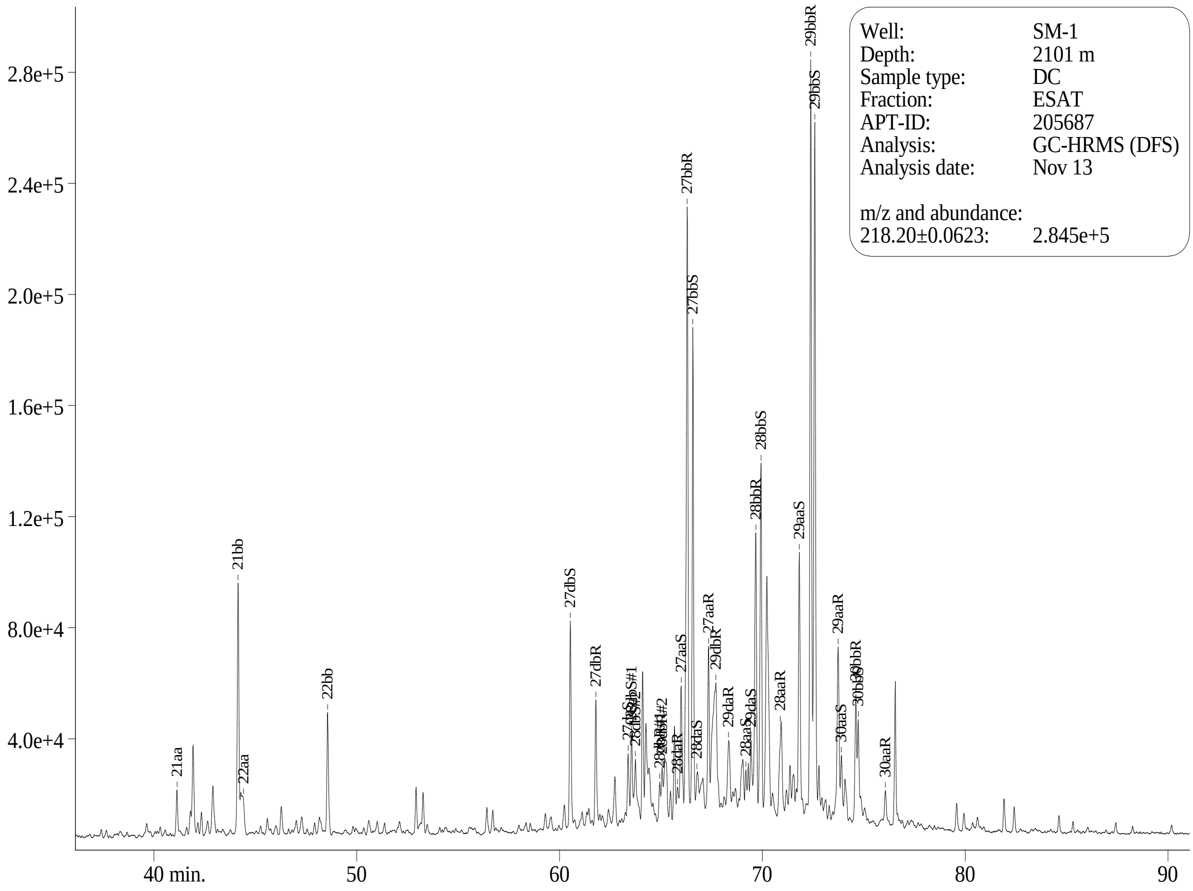


Well:	SM-1
Depth:	2101 m
Sample type:	DC
Fraction:	ESAT
APT-ID:	205687
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13

m/z and abundance:
191.18±0.0546: 9.216e+5

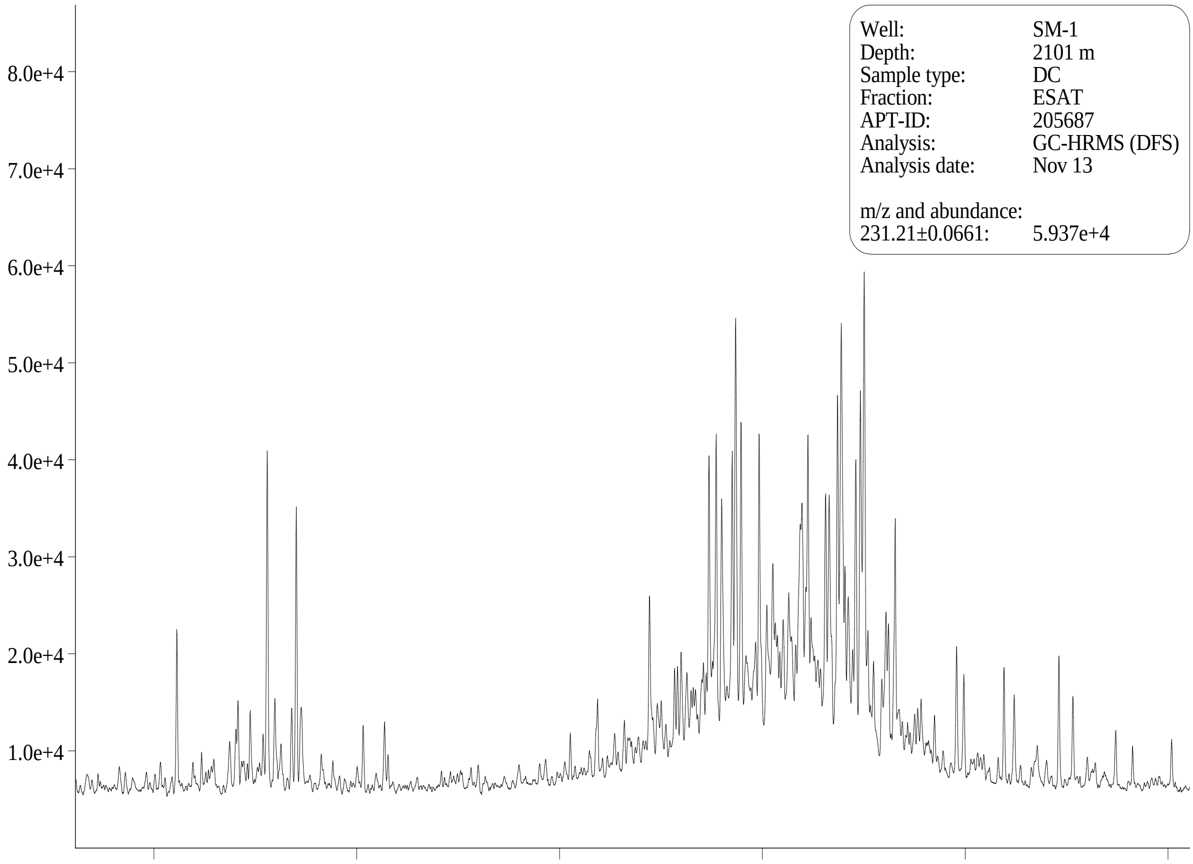

Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: ESAT
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 1.659e+5
2.6e+5
2.4e+5
2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
30 min.
40
50
60
70
80
90
29ab
29Ts
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: ESAT
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 2.178e+5
2.4e+5
2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27aaS
27bbR+29dbS
27bbS
27aaR
29dbR
29daR
29daS
28bbR
28bbS
28aaS
28aaR
29aaS
29bbS
29bbR
29aaR
30aaS
30bbR
30bbS
30aaR



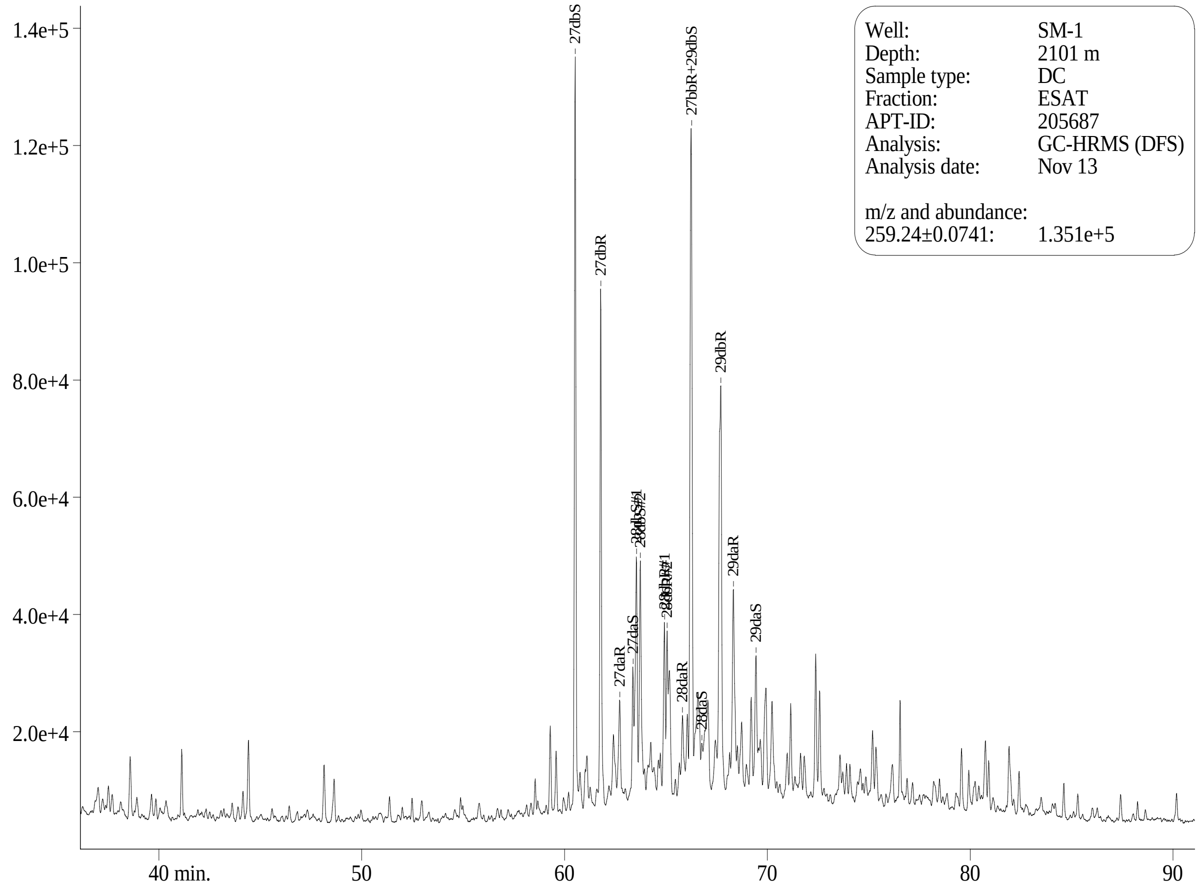
Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: ESAT
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

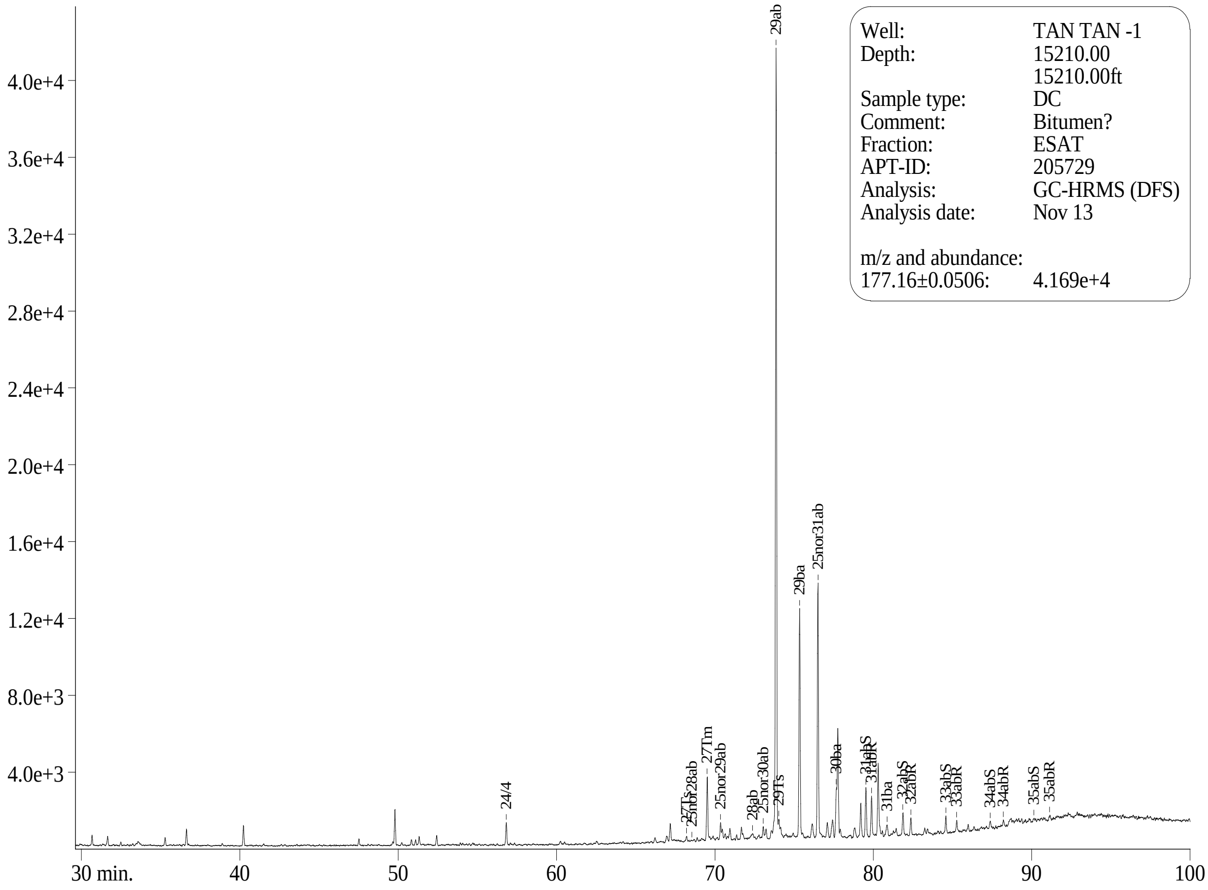
m/z and abundance:
218.20±0.0623: 2.845e+5



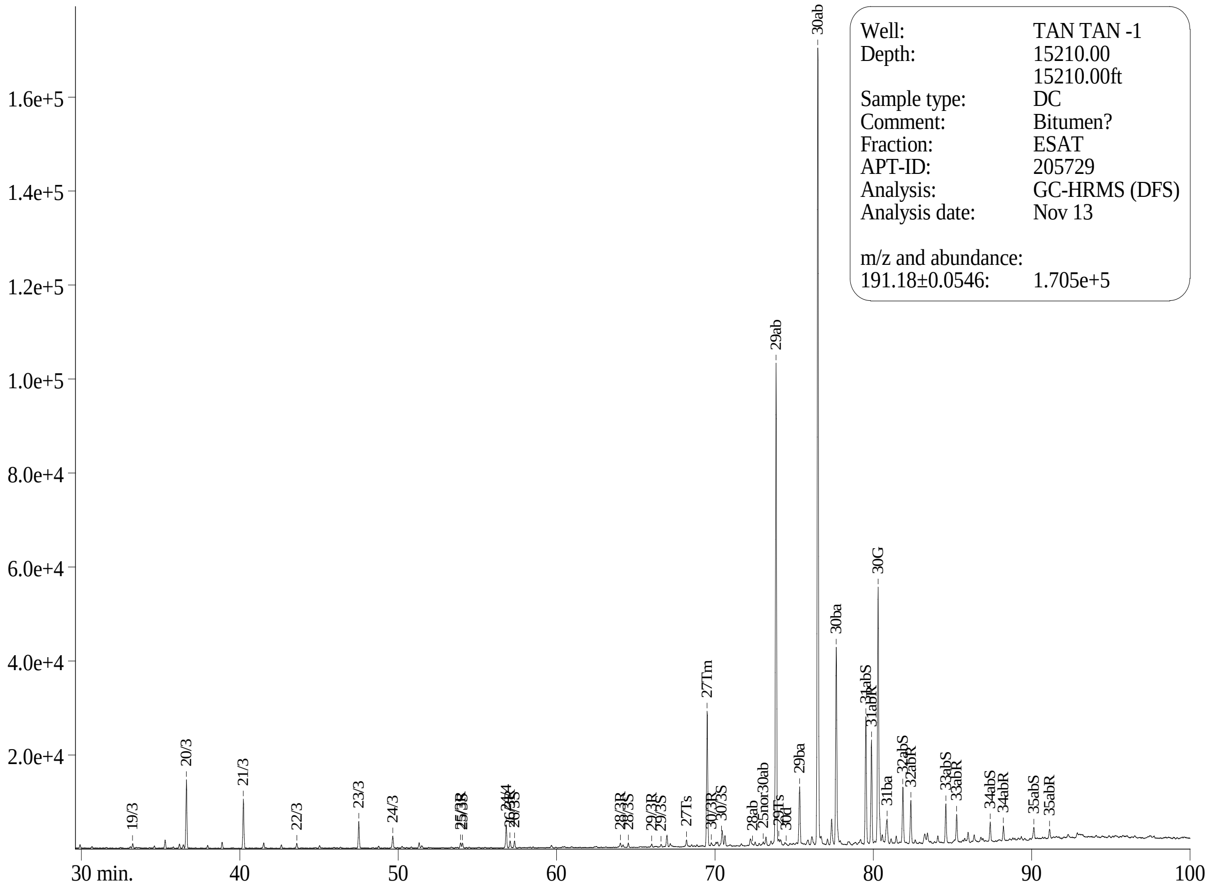
Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: ESAT
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
231.21±0.0661: 5.937e+4

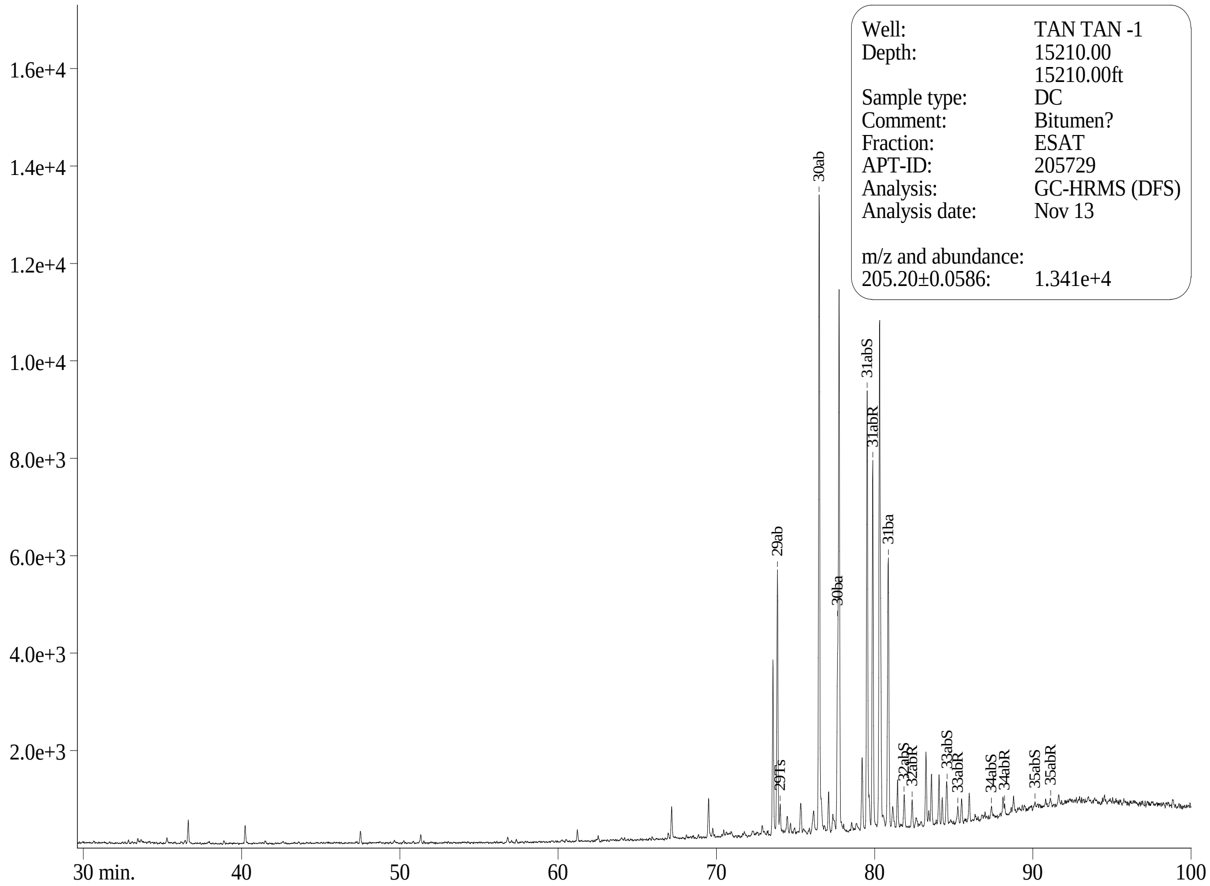

Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: ESAT
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
259.24±0.0741: 1.351e+5
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27bbR+29dbS
29dbR
29daR
29daS
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
40 min.
50
60
70
80
90

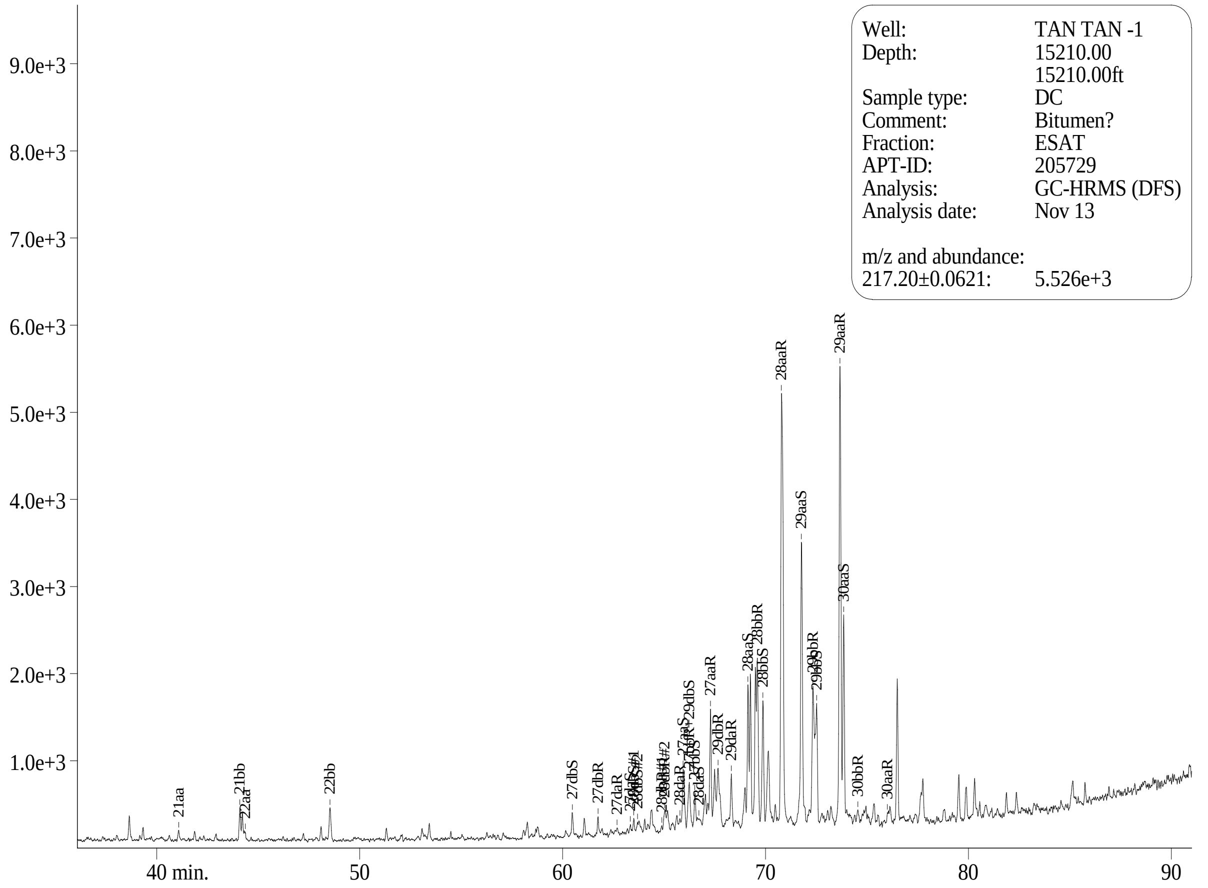


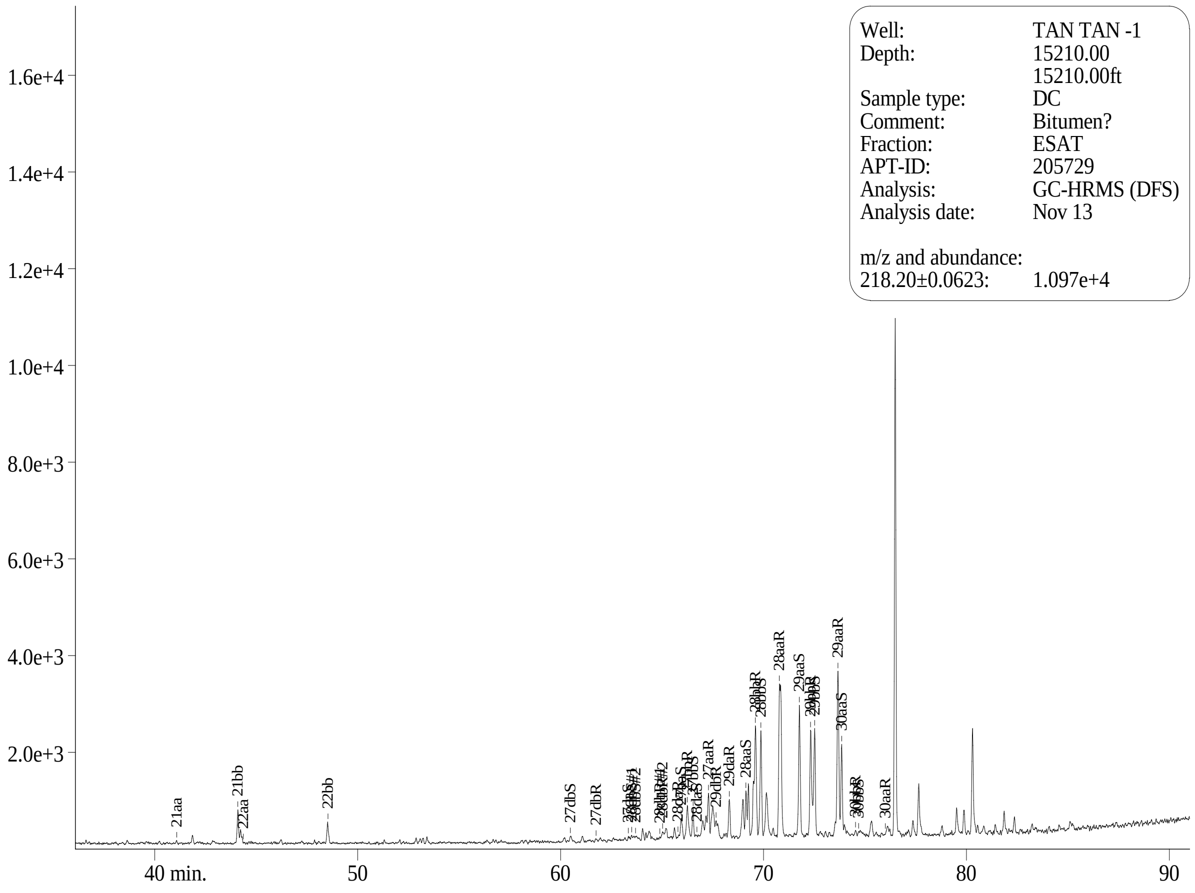
Well:	TAN TAN -1
Depth:	15210.00 15210.00ft
Sample type:	DC
Comment:	Bitumen?
Fraction:	ESAT
APT-ID:	205729
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
177.16±0.0506:	4.169e+4



Well:	TAN TAN -1
Depth:	15210.00 15210.00ft
Sample type:	DC
Comment:	Bitumen?
Fraction:	ESAT
APT-ID:	205729
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13
m/z and abundance:	
191.18±0.0546:	1.705e+5

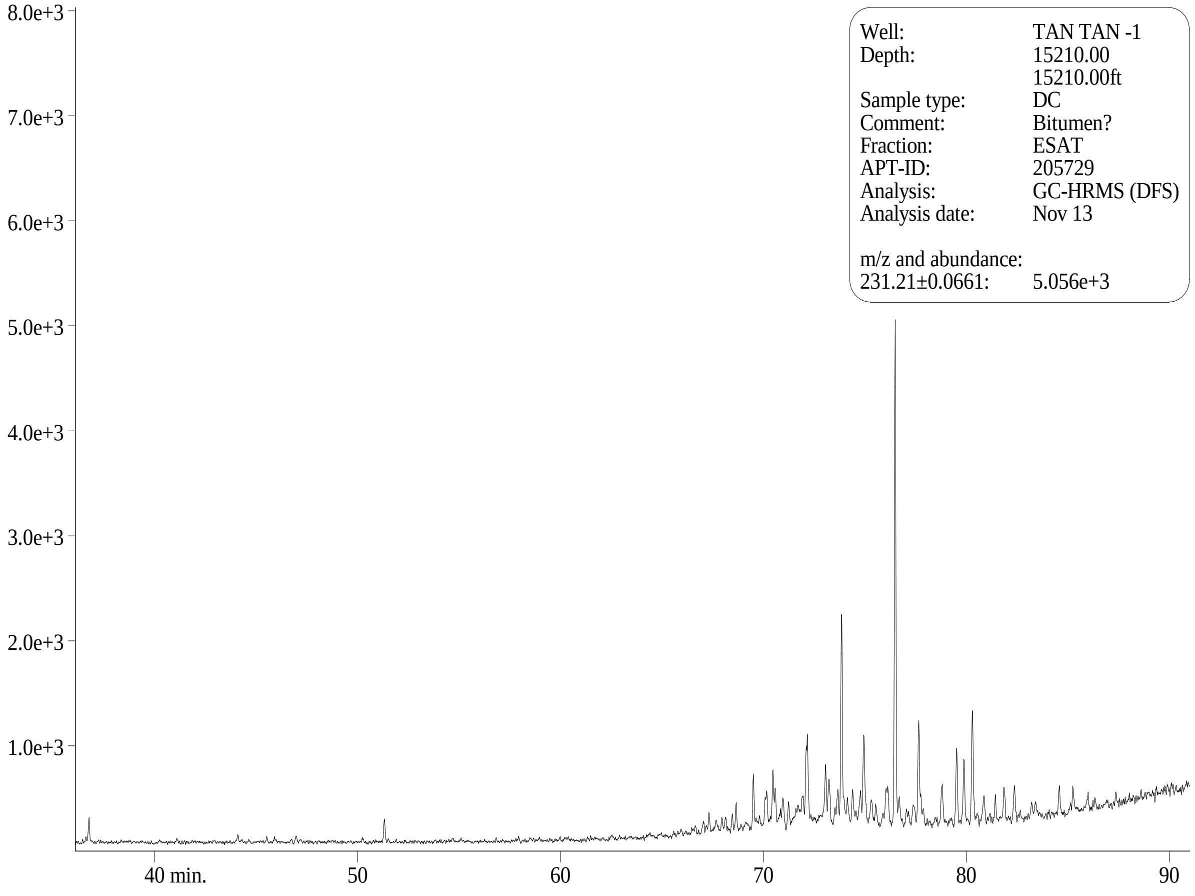

Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: ESAT
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 1.341e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
30 min.
40
50
60
70
80
90
100
29Ts
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: ESAT
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 5.526e+3
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR+29dbS
27bbS
28daS
27aaR
29dbR
29daR
28aaS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30aaR



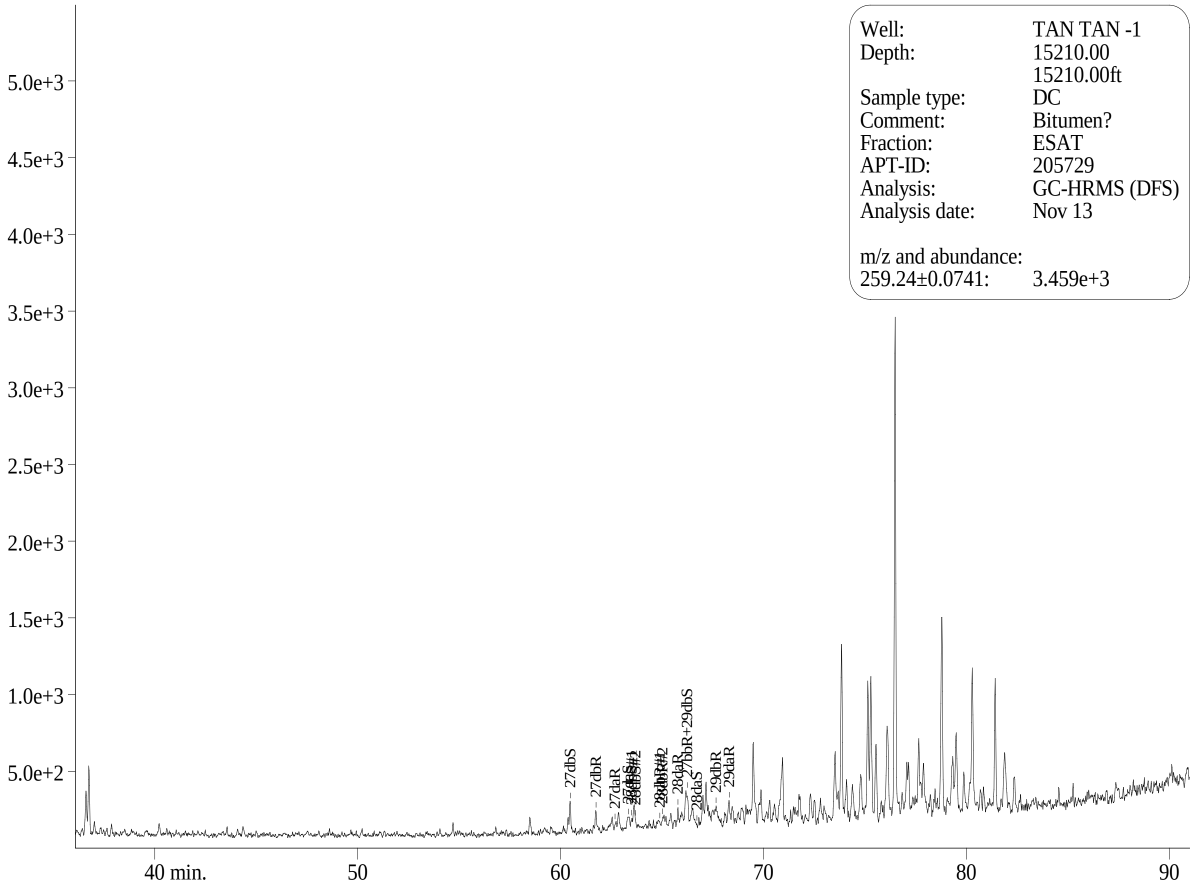
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: ESAT
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
218.20±0.0623: 1.097e+4



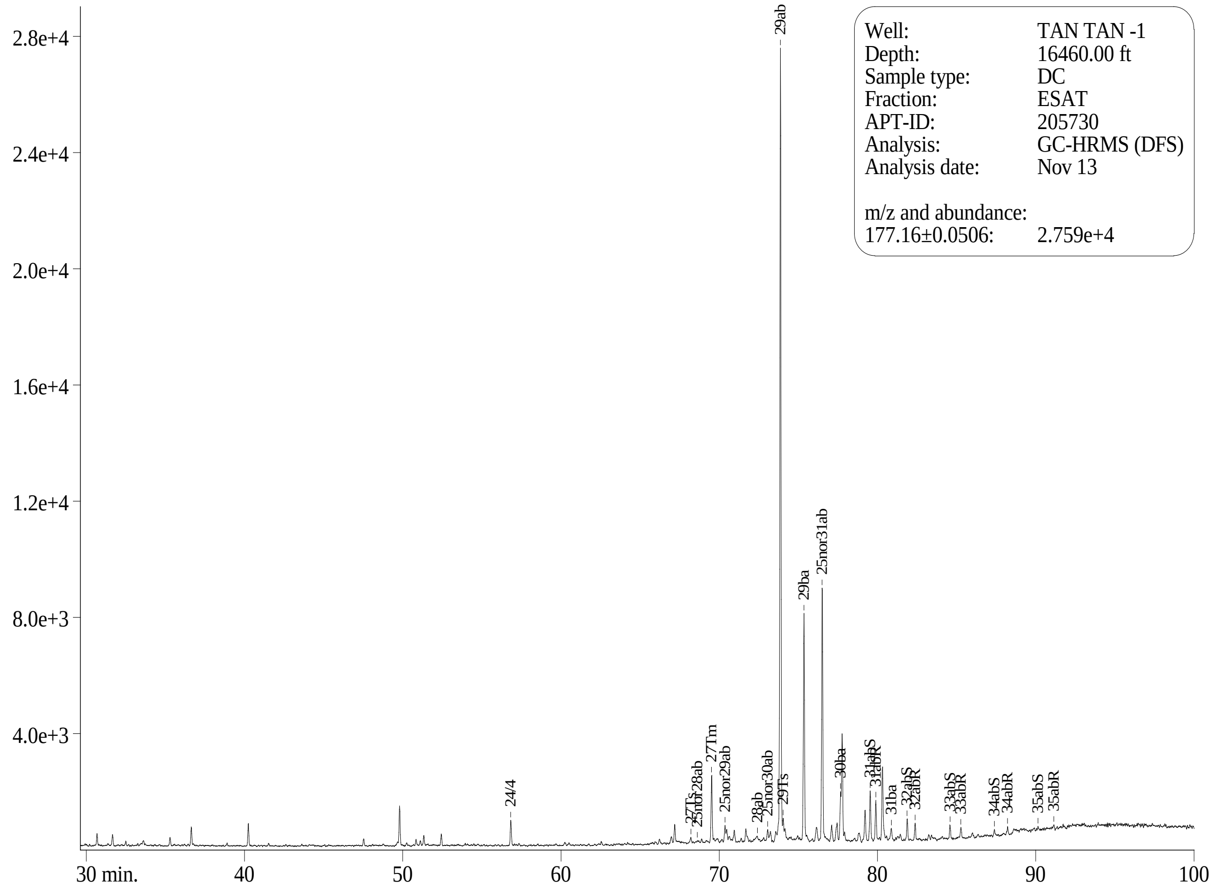
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: ESAT
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

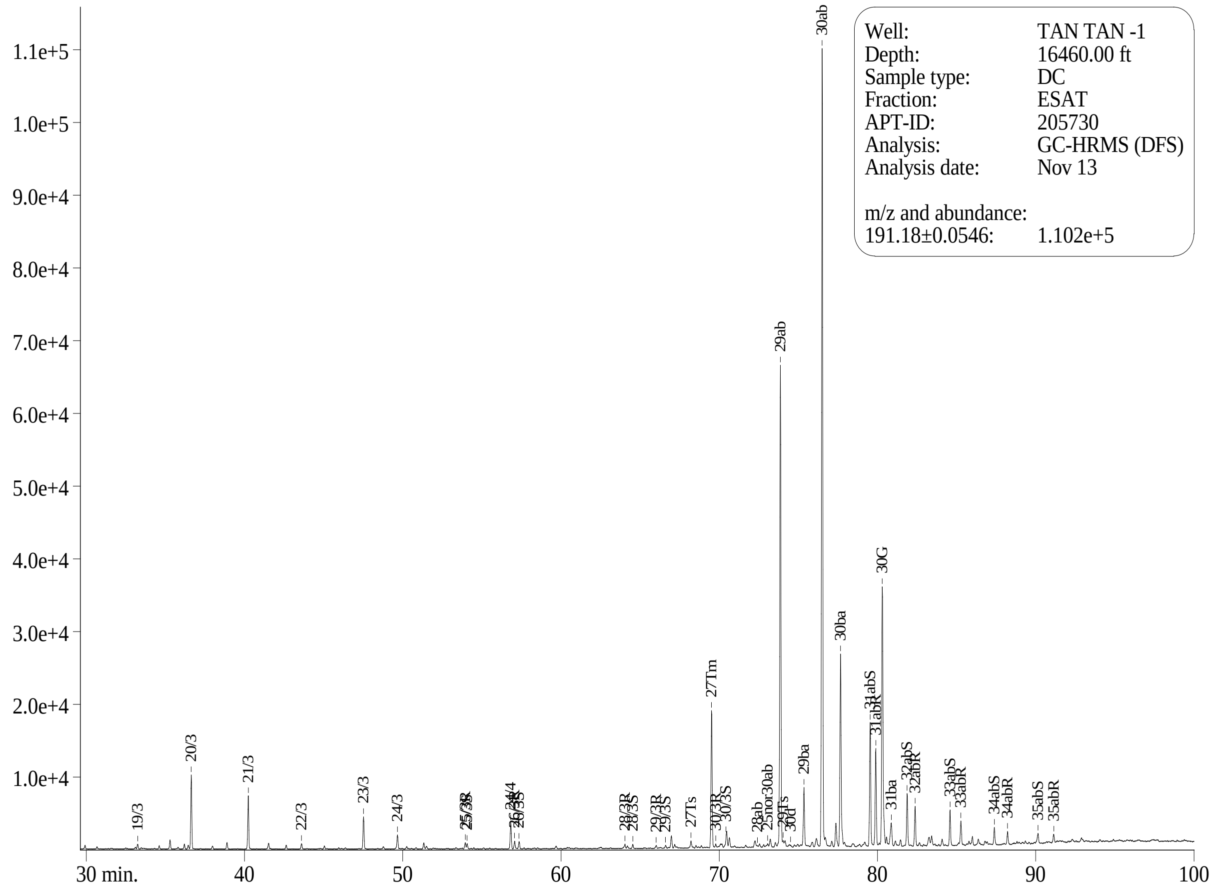
m/z and abundance:
231.21±0.0661: 5.056e+3

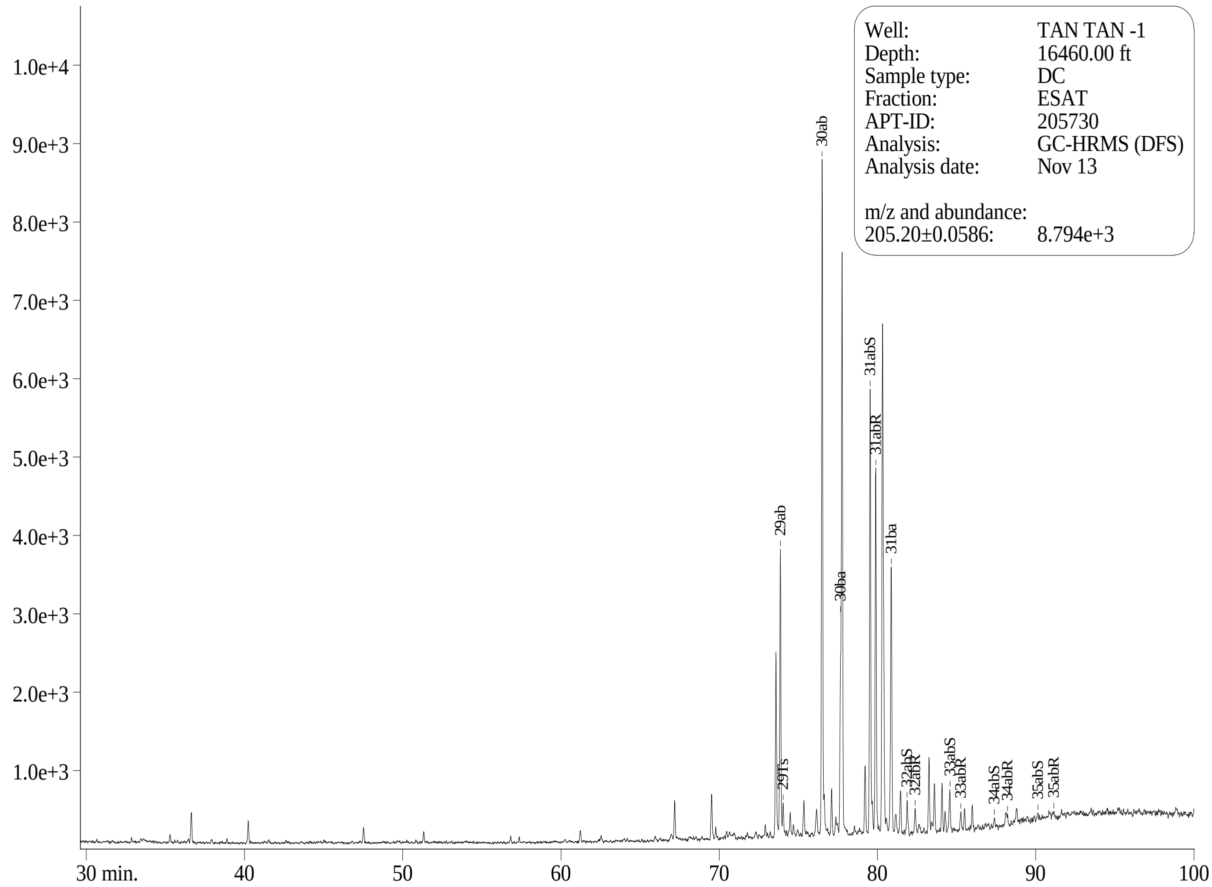


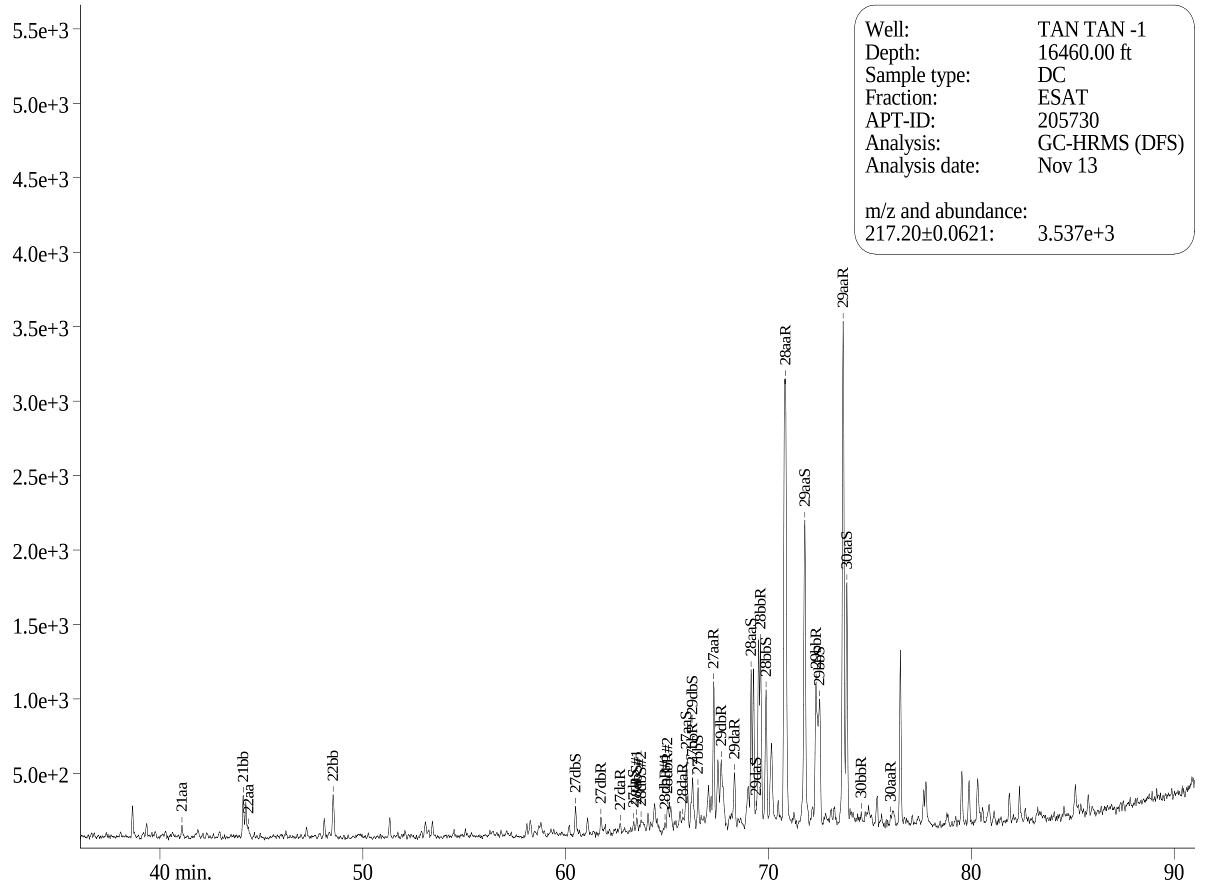
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: ESAT
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

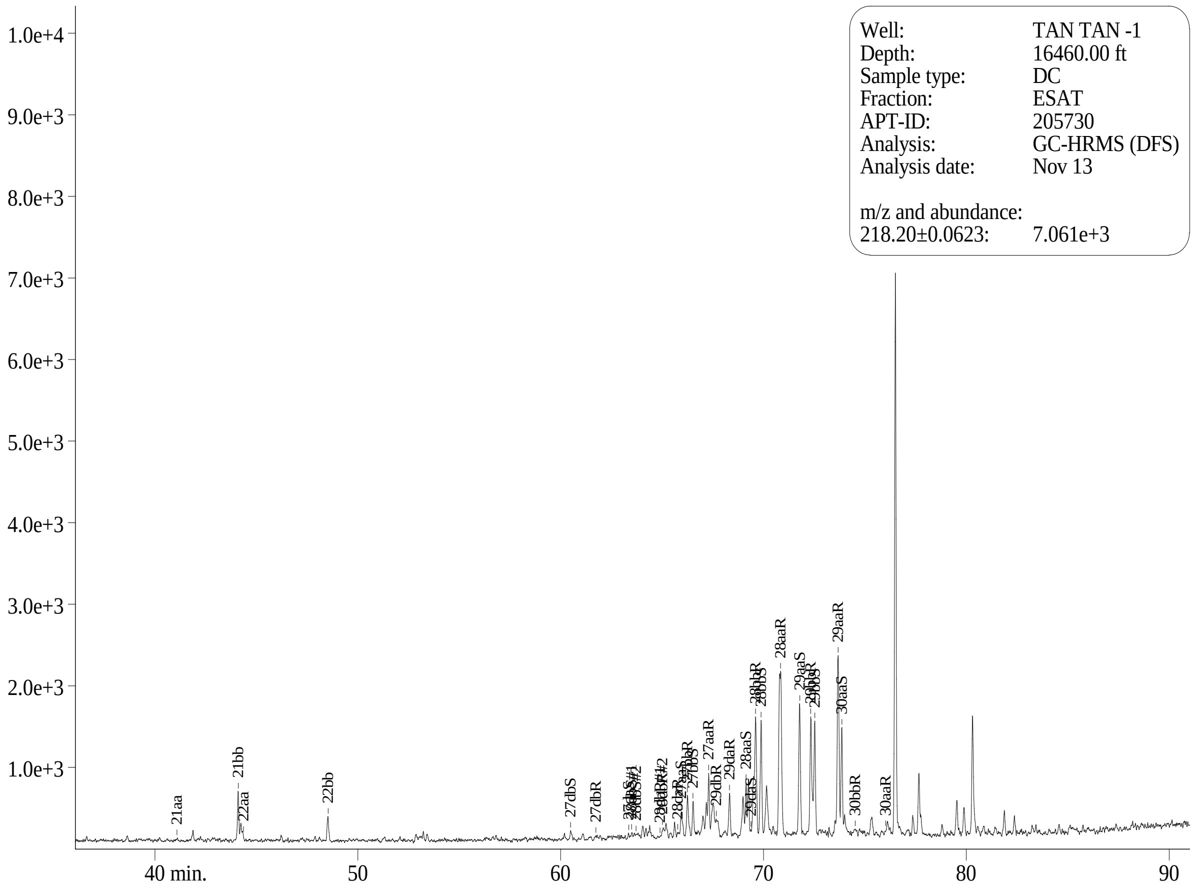
m/z and abundance:
259.24±0.0741: 3.459e+3

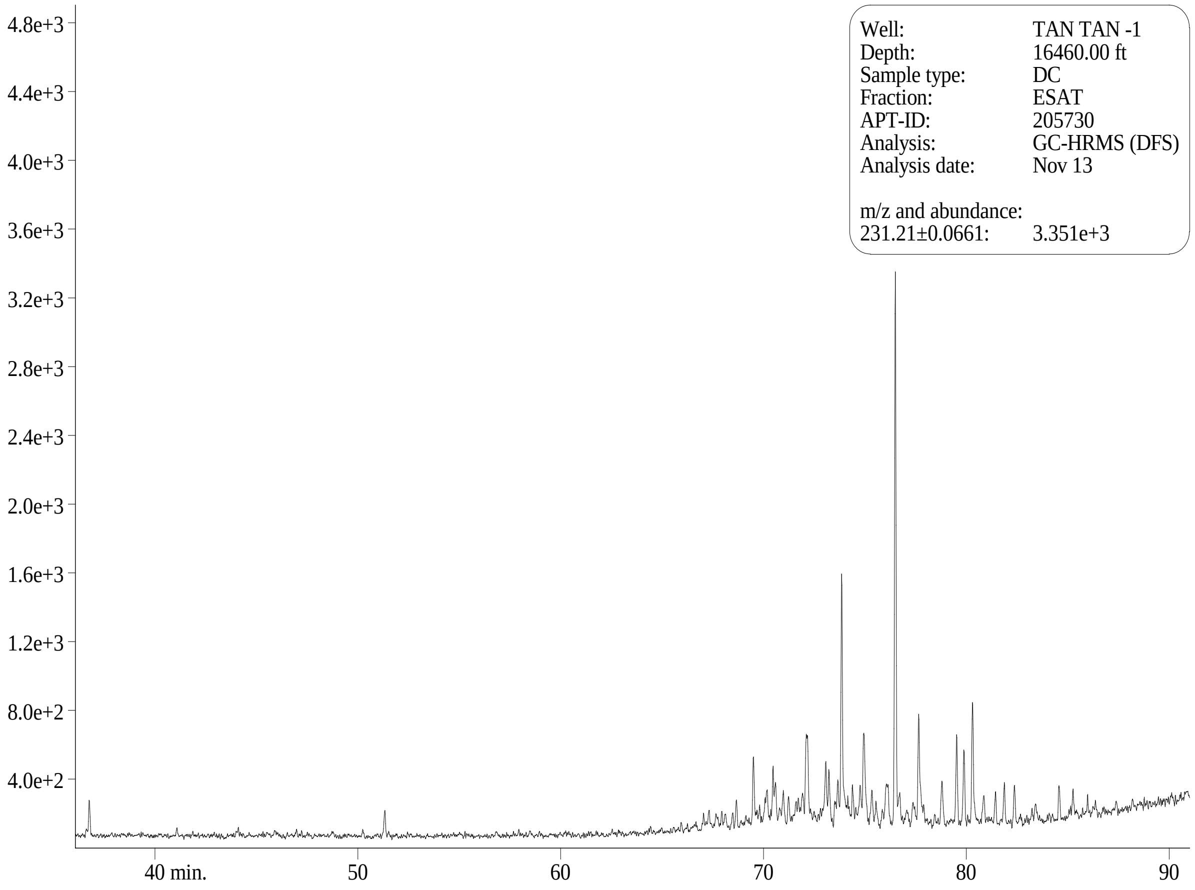

2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
30 min.
40
50
60
70
80
90
100
24/4
27Ts
25nor28ab
27Tm
25nor29ab
28ab
25nor30ab
29Ts
29ab
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
177.16±0.0506: 2.759e+4

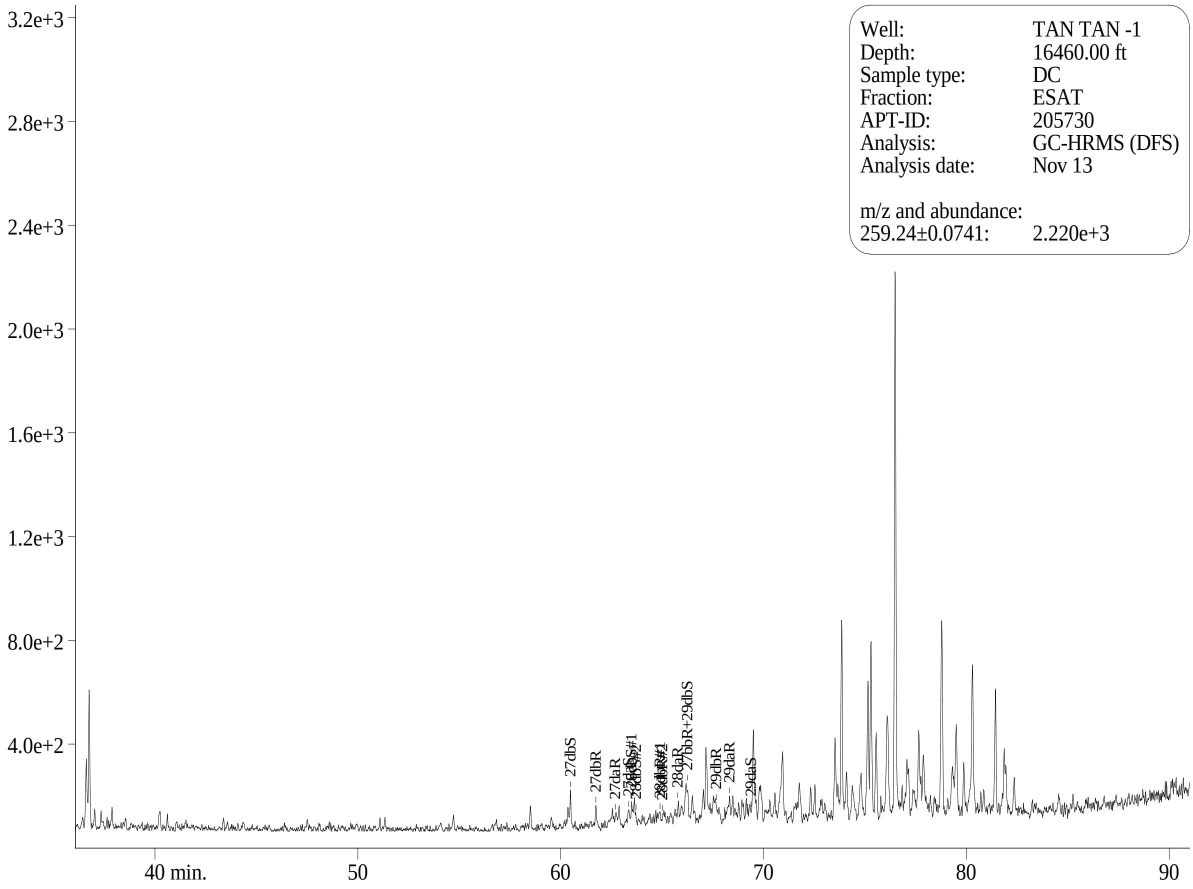

1.1e+5
1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
30 min.
40
50
60
70
80
90
100
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
26/3R
24/4
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
27Tm
30/3R
30/3S
28ab
25nor30ab
29Ts
30d
29ab
30ab
29ba
30ba
31abS
31abR
30G
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
191.18±0.0546: 1.102e+5


Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
205.20±0.0586: 8.794e+3
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
30 min.
40
50
60
70
80
90
100
30ab
31abS
31abR
29ab
31ba
30ba
29Ts
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

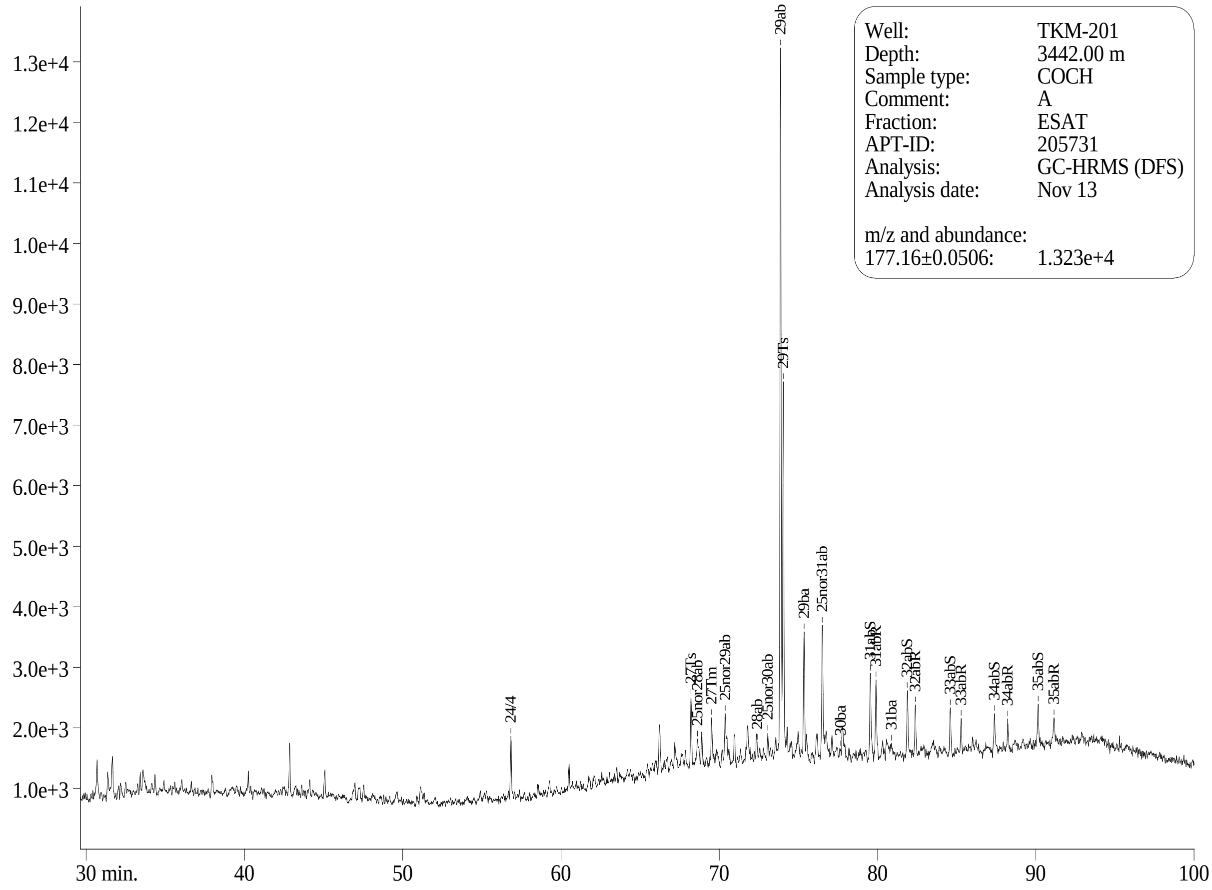

Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
217.20±0.0621: 3.537e+3
5.5e+3
5.0e+3
4.5e+3
4.0e+3
3.5e+3
3.0e+3
2.5e+3
2.0e+3
1.5e+3
1.0e+3
5.0e+2
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR
27bbS
29dbS
27aaR
29dbR
29daR
28aaS
28bbR
28bbS
29daS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30aaR


1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30aaR
Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
218.20±0.0623: 7.061e+3


4.8e+3
4.4e+3
4.0e+3
3.6e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
40 min.
50
60
70
80
90
Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
231.21±0.0661: 3.351e+3

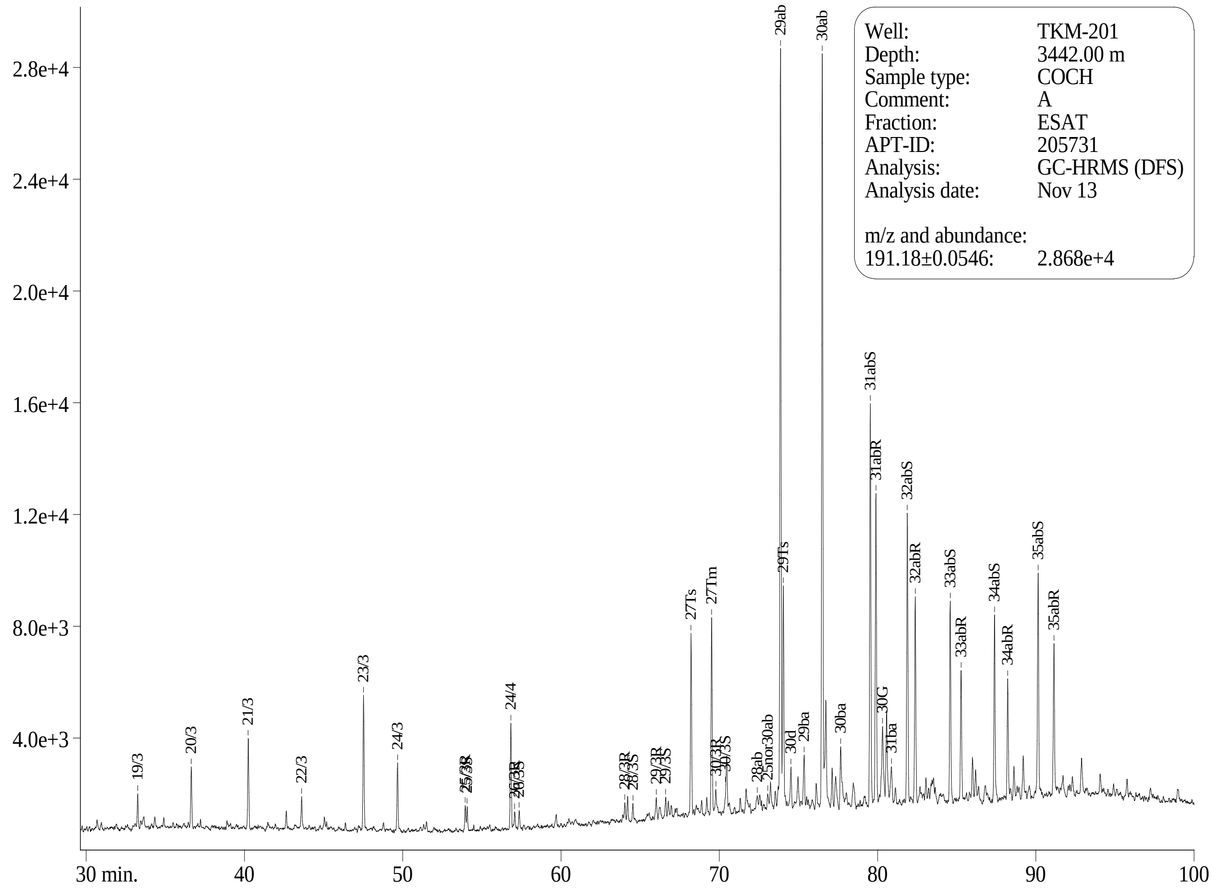

Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: ESAT
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
259.24±0.0741: 2.220e+3



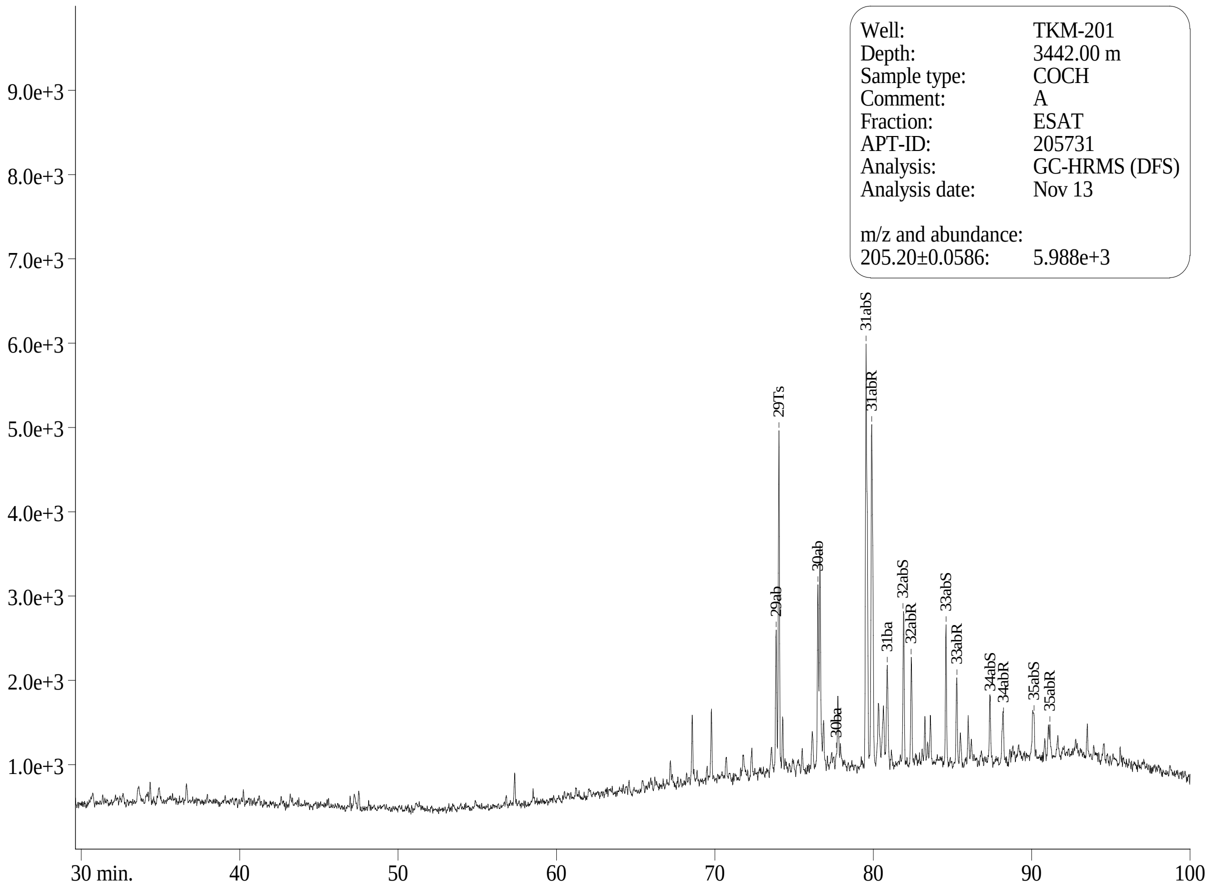
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
177.16±0.0506: 1.323e+4



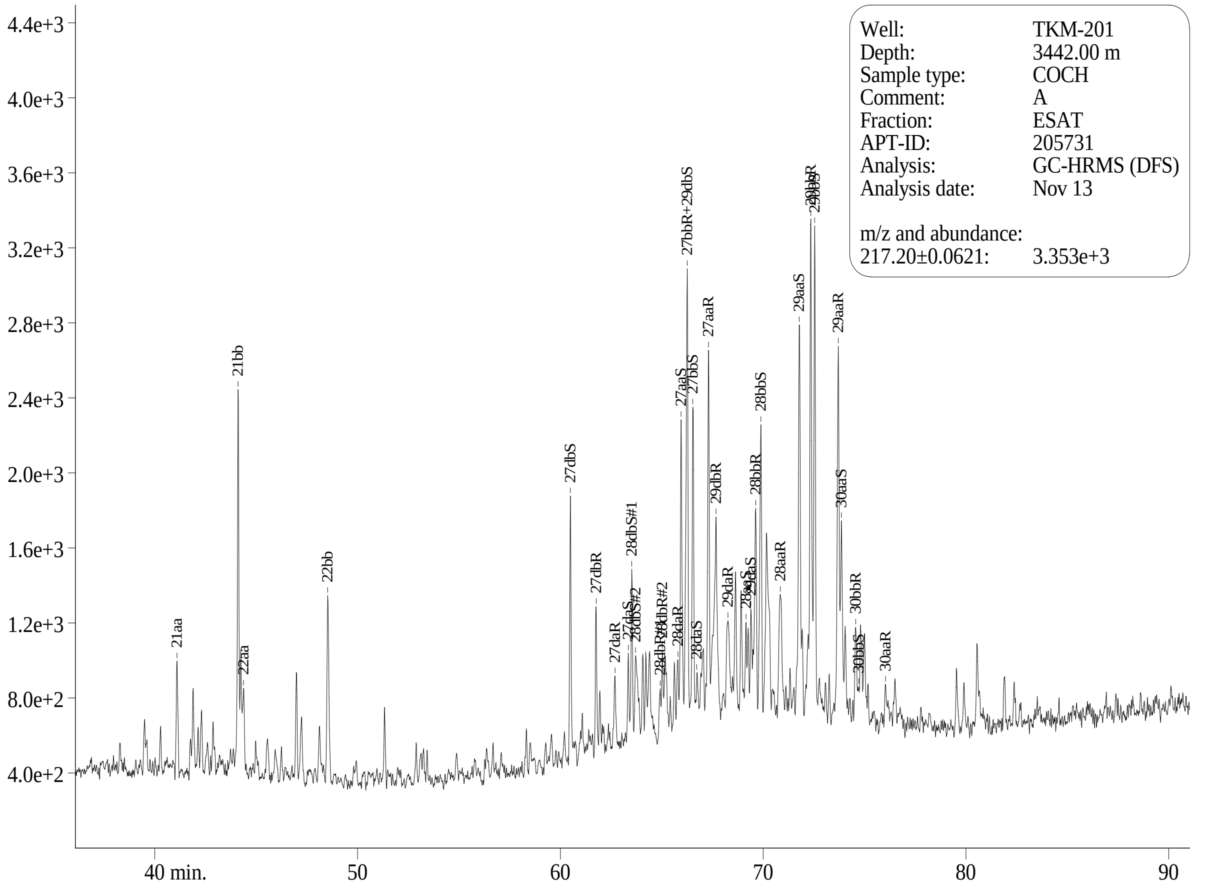
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
191.18±0.0546: 2.868e+4



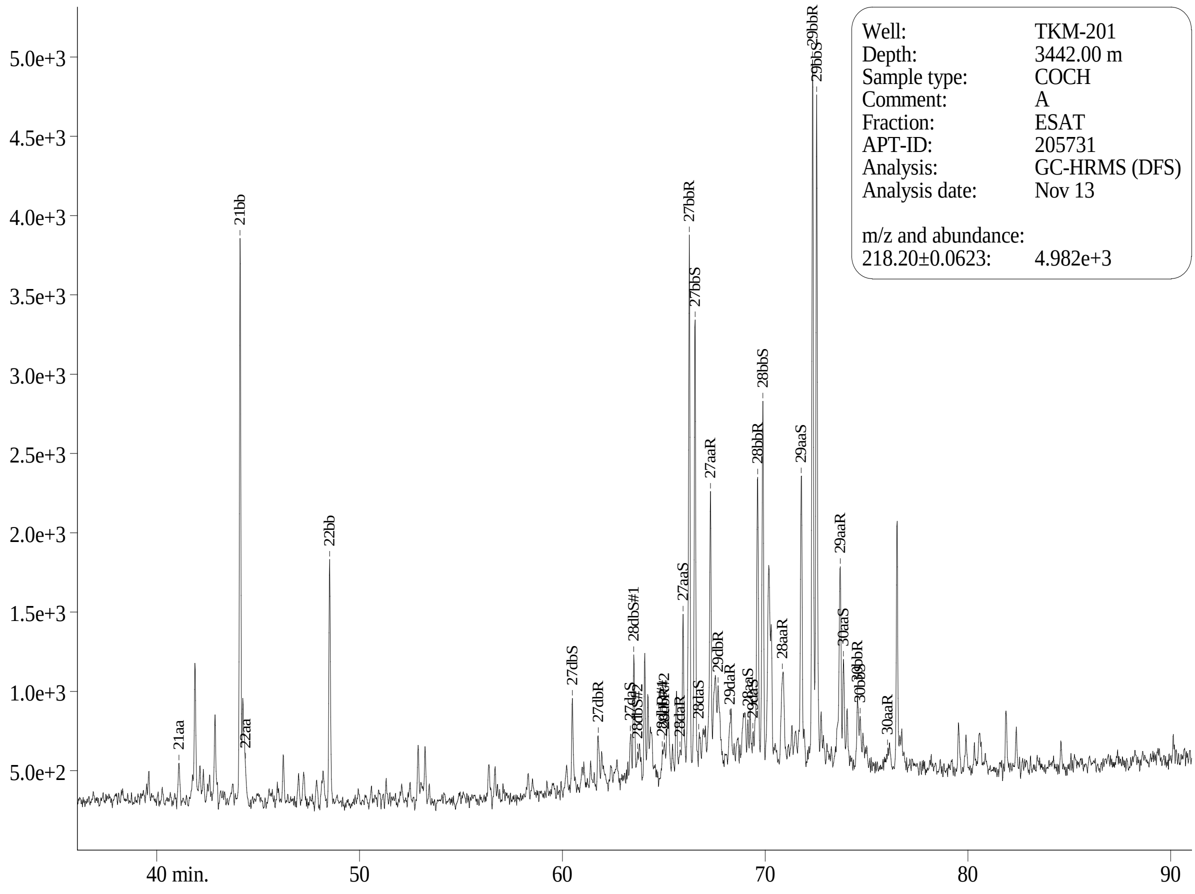
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

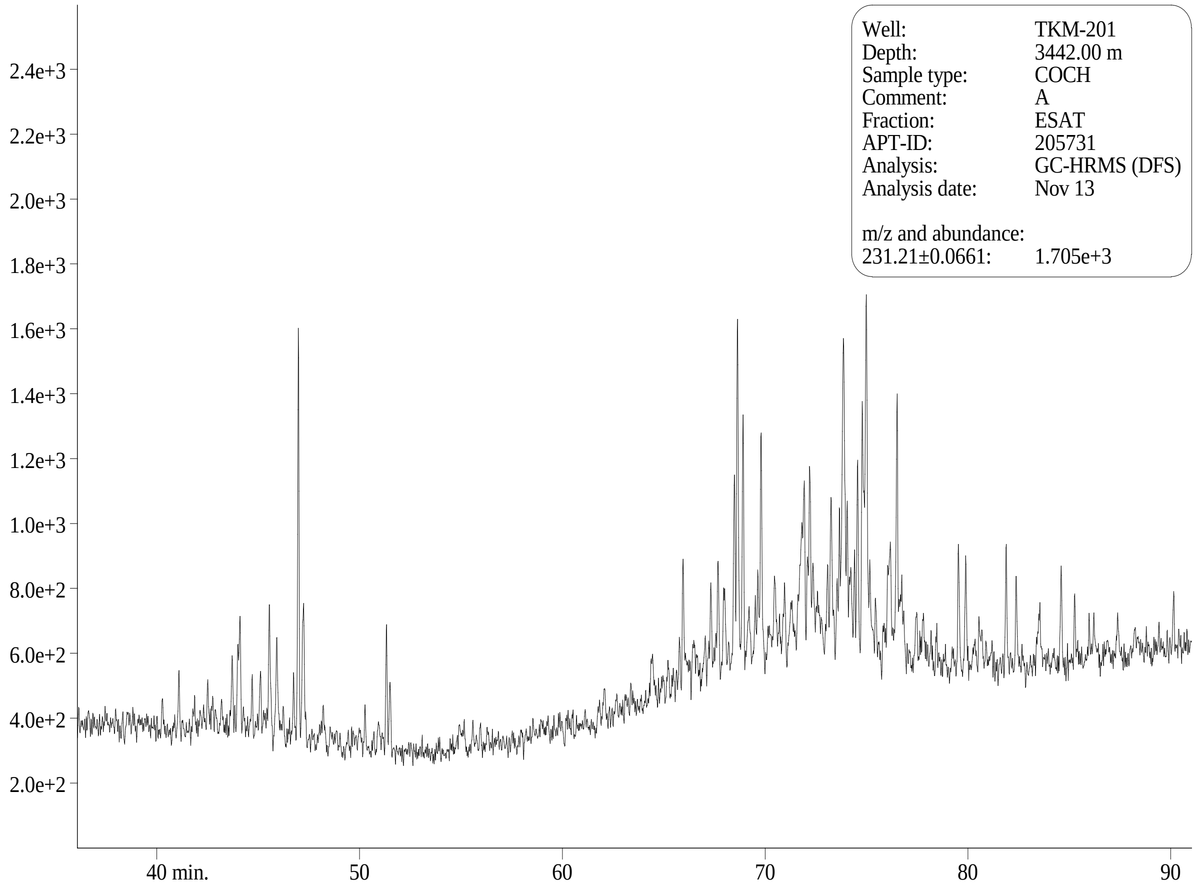
m/z and abundance:
205.20±0.0586: 5.988e+3

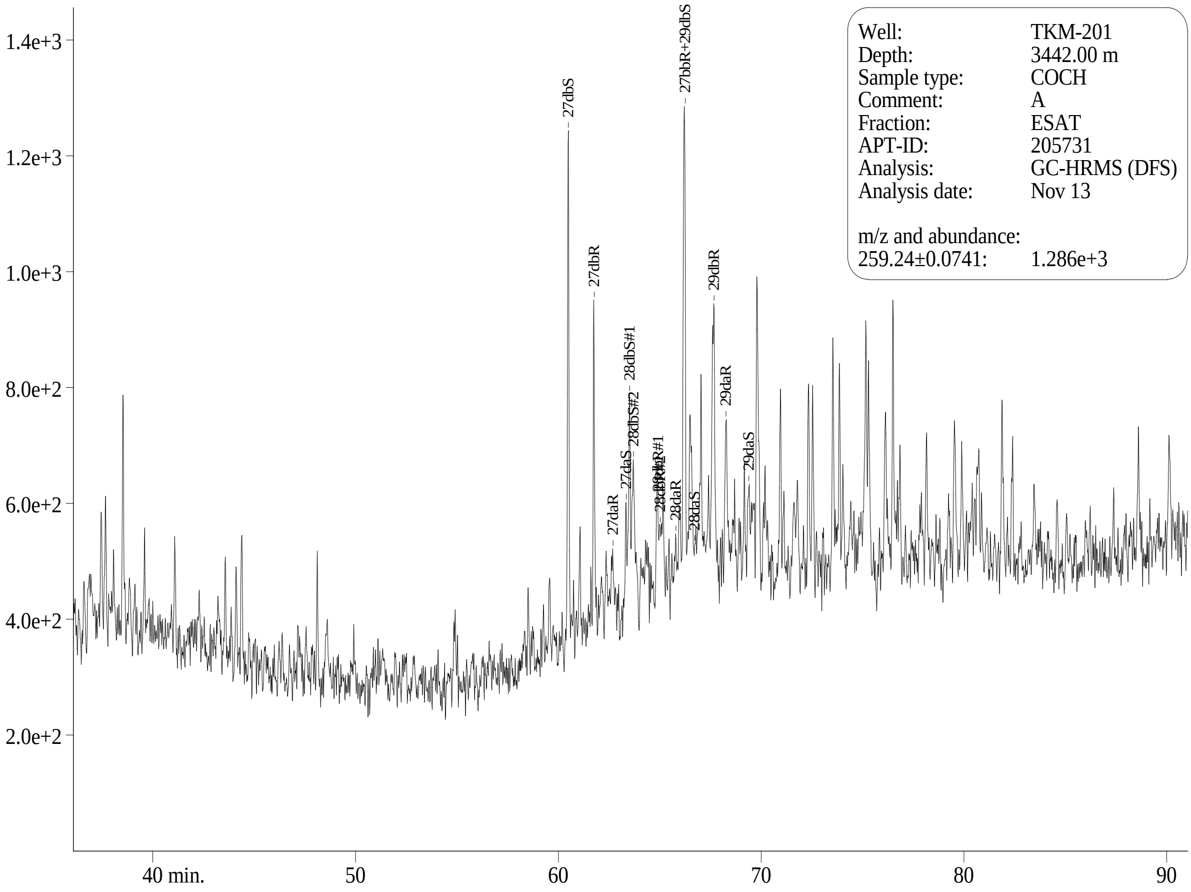


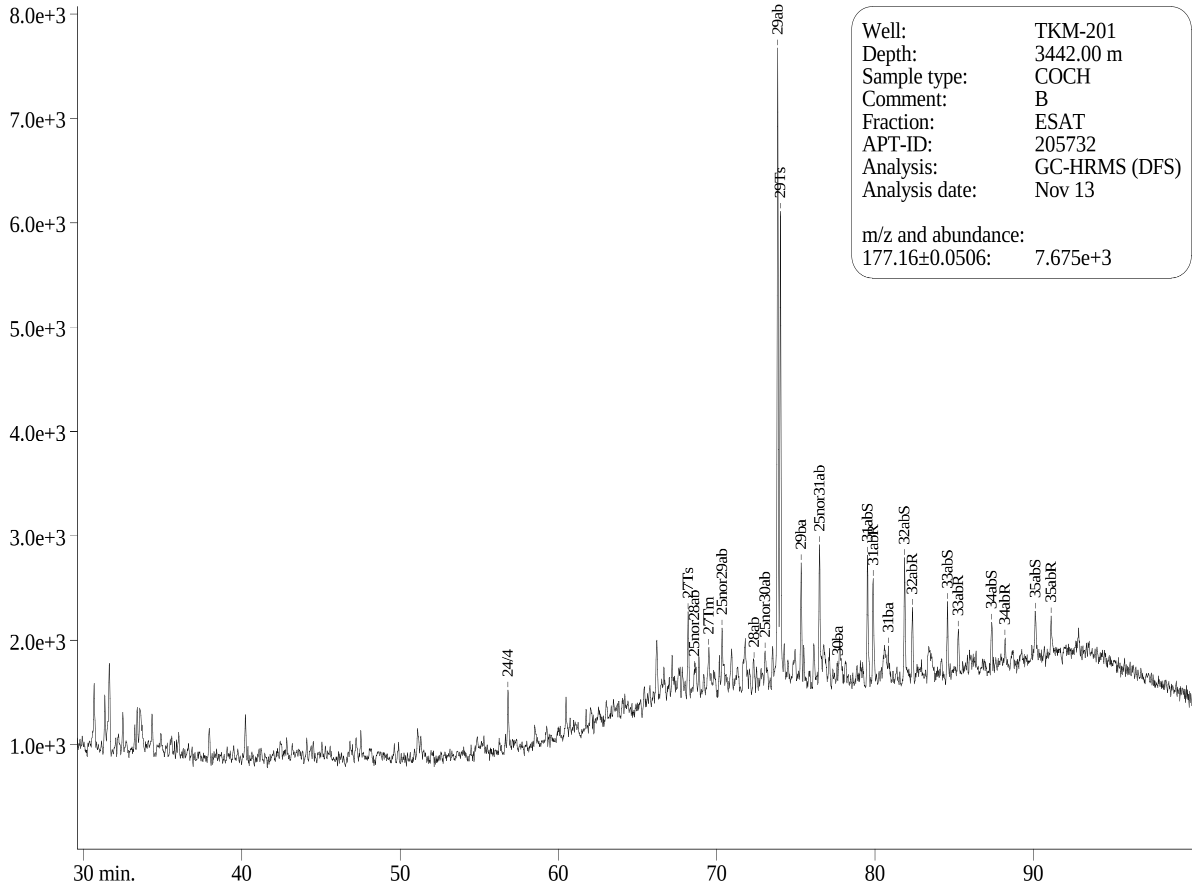
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
217.20±0.0621: 3.353e+3


Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
218.20±0.0623: 4.982e+3
5.0e+3
4.5e+3
4.0e+3
3.5e+3
3.0e+3
2.5e+3
2.0e+3
1.5e+3
1.0e+3
5.0e+2
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
28dbS#1
27daS
28dbS#2
28daR
27aaS
27bbR
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR

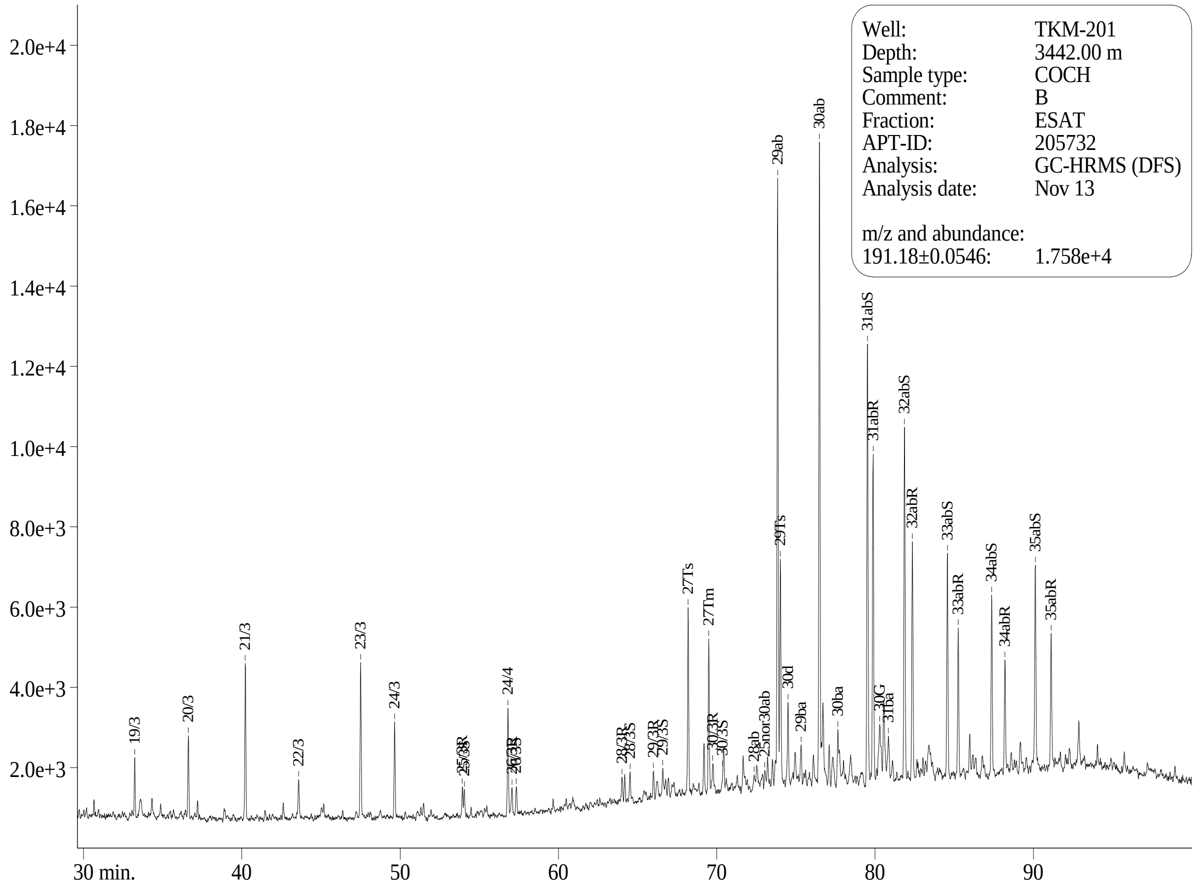

Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
231.21±0.0661: 1.705e+3
2.4e+3
2.2e+3
2.0e+3
1.8e+3
1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
40 min.
50
60
70
80
90


1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
40 min.
50
60
70
80
90
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27bbR+29dbS
29dbR
29daR
29daS
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: ESAT
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13
m/z and abundance:
259.24±0.0741: 1.286e+3



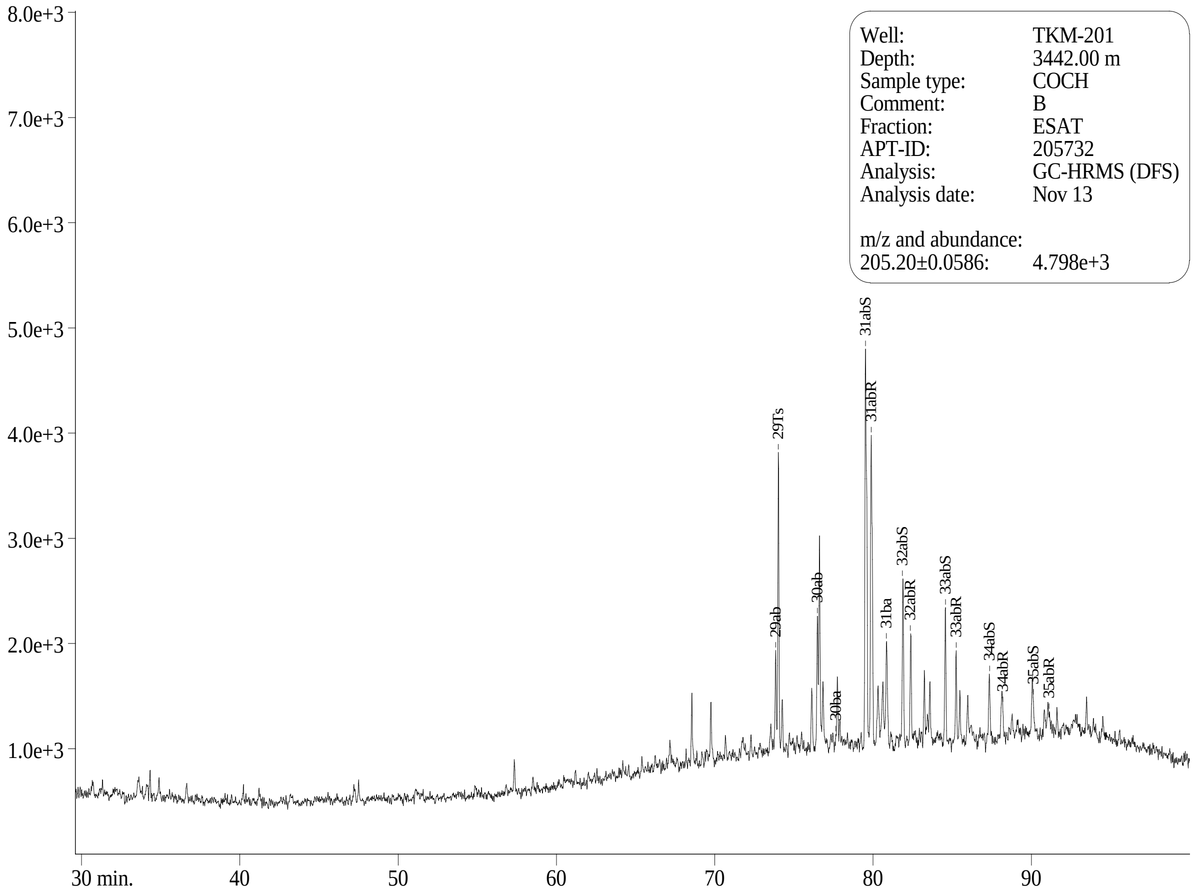
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: ESAT
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
177.16±0.0506: 7.675e+3



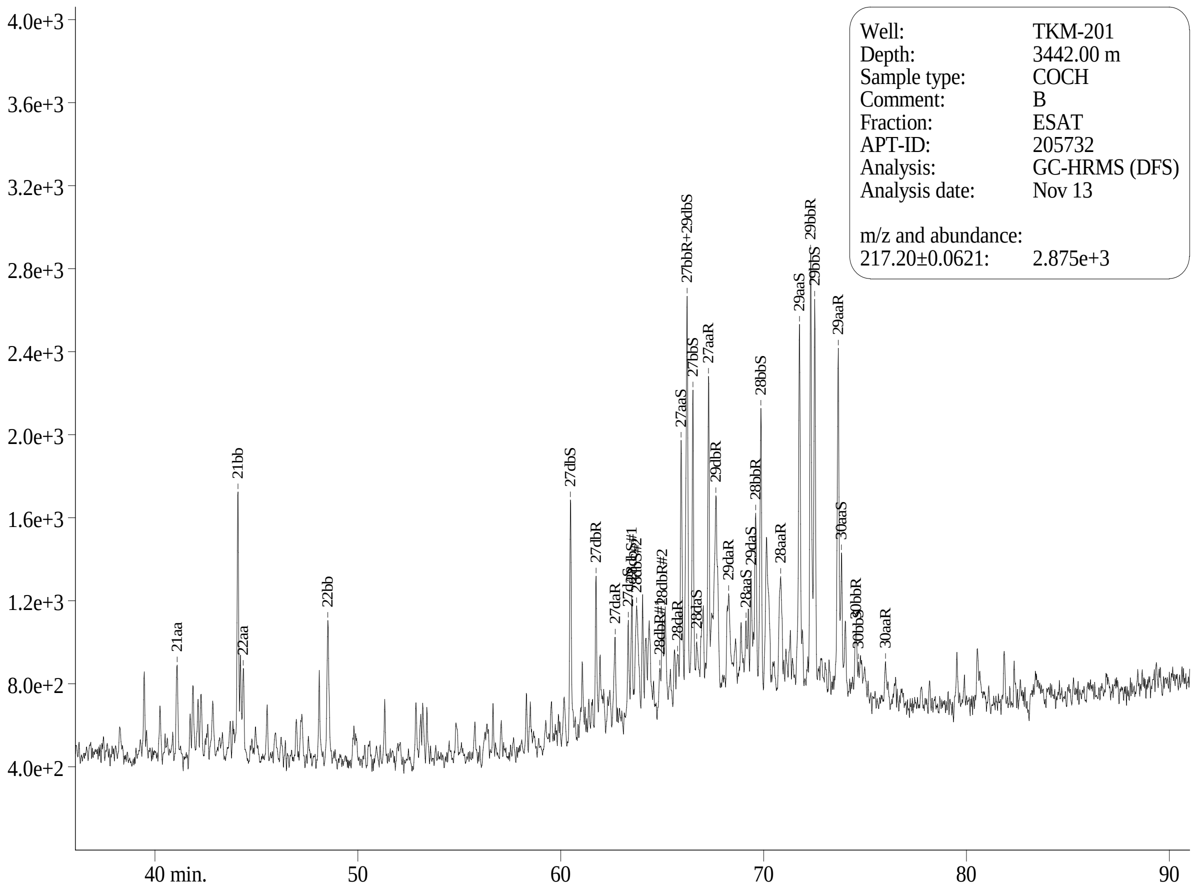
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: ESAT
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
191.18±0.0546: 1.758e+4



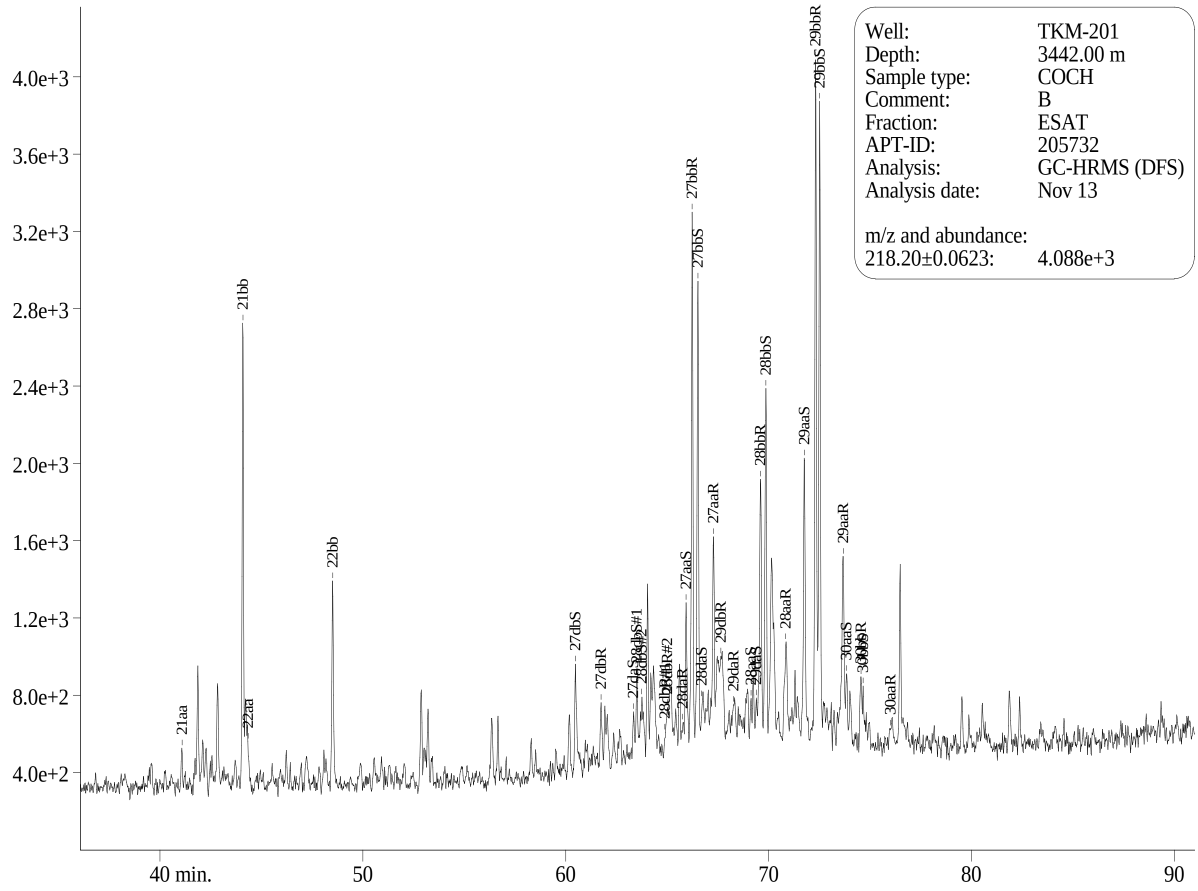
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: ESAT
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
205.20±0.0586: 4.798e+3



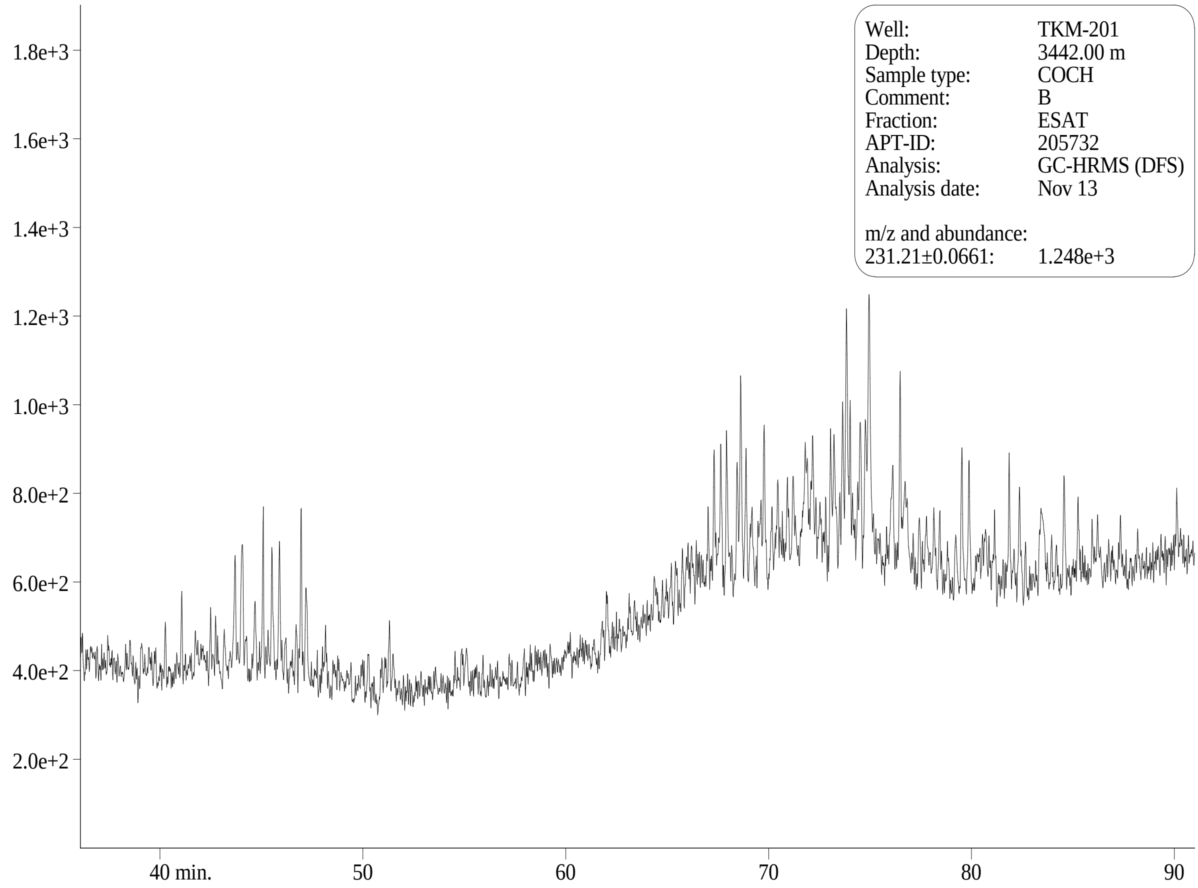
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: ESAT
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
217.20±0.0621: 2.875e+3



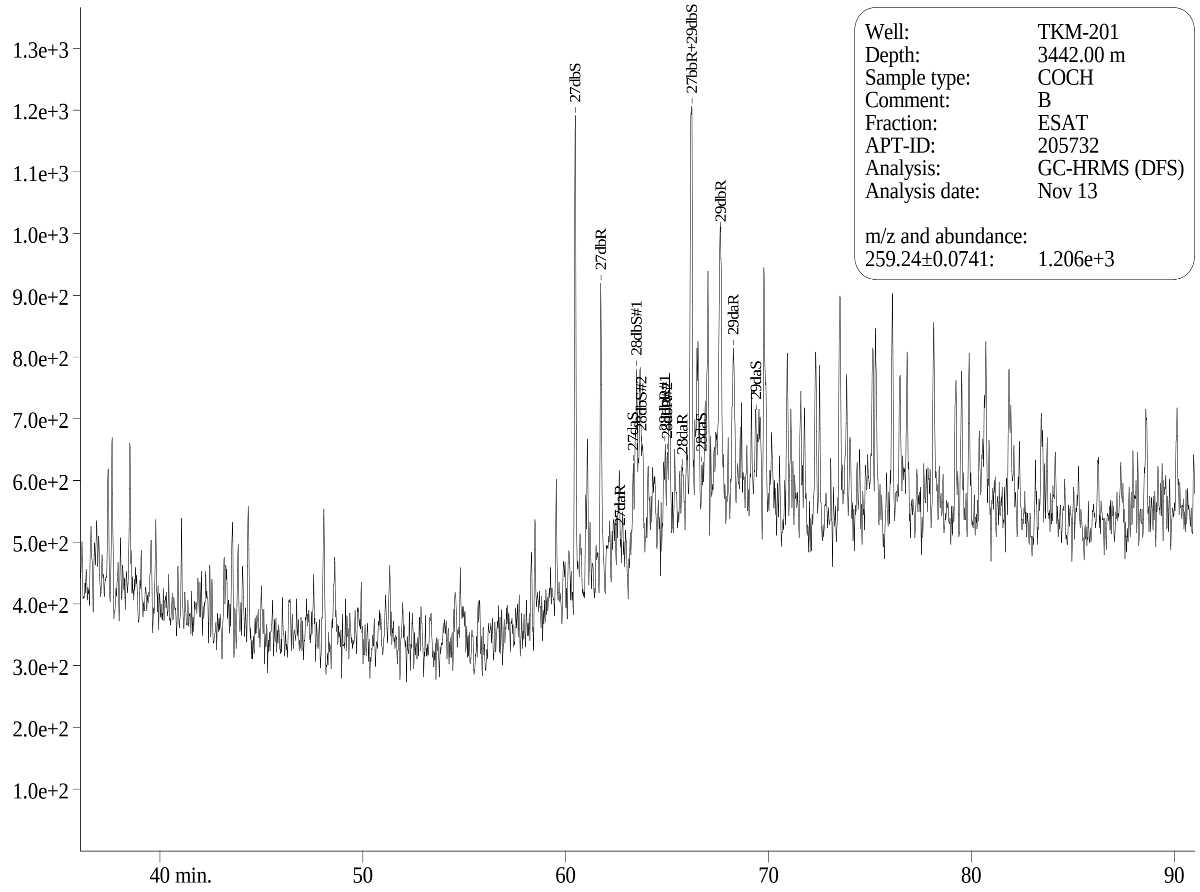
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: ESAT
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

m/z and abundance:
218.20±0.0623: 4.088e+3



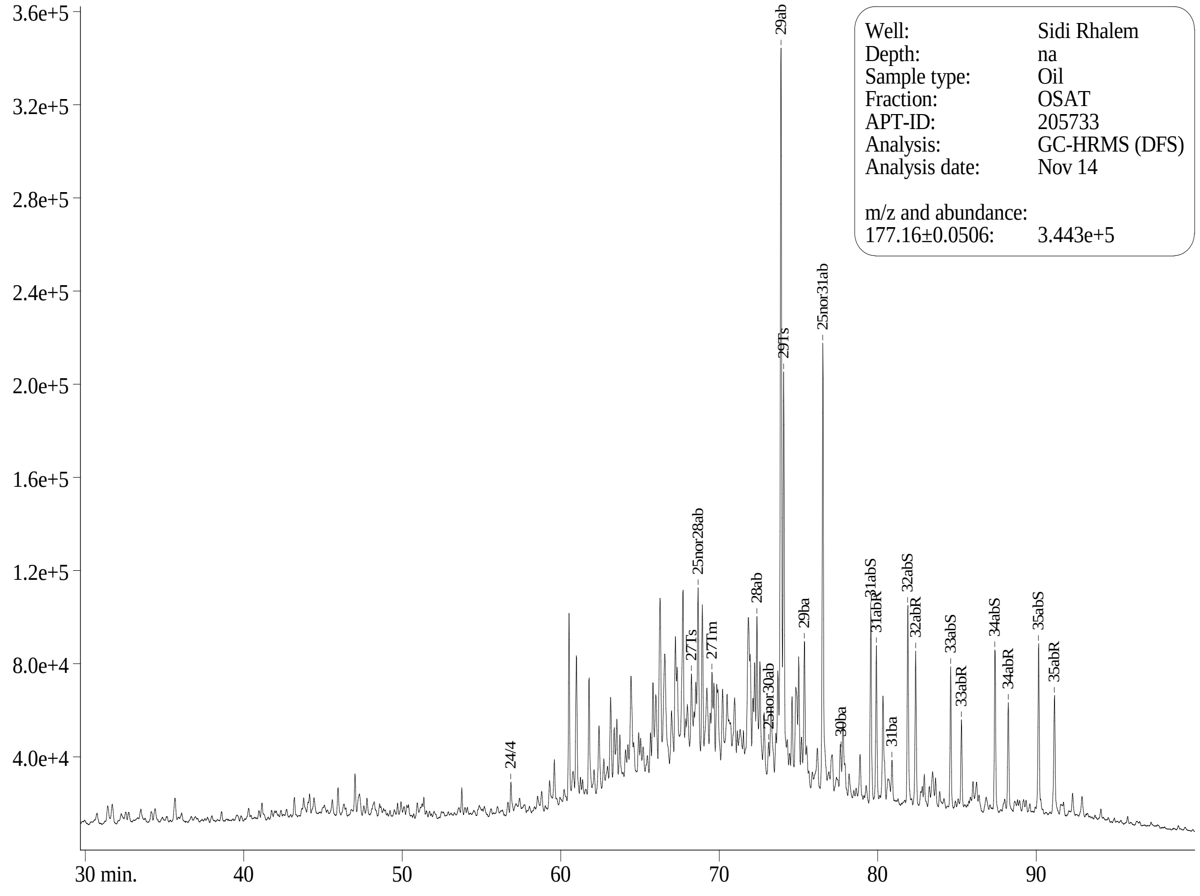
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: ESAT
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 13

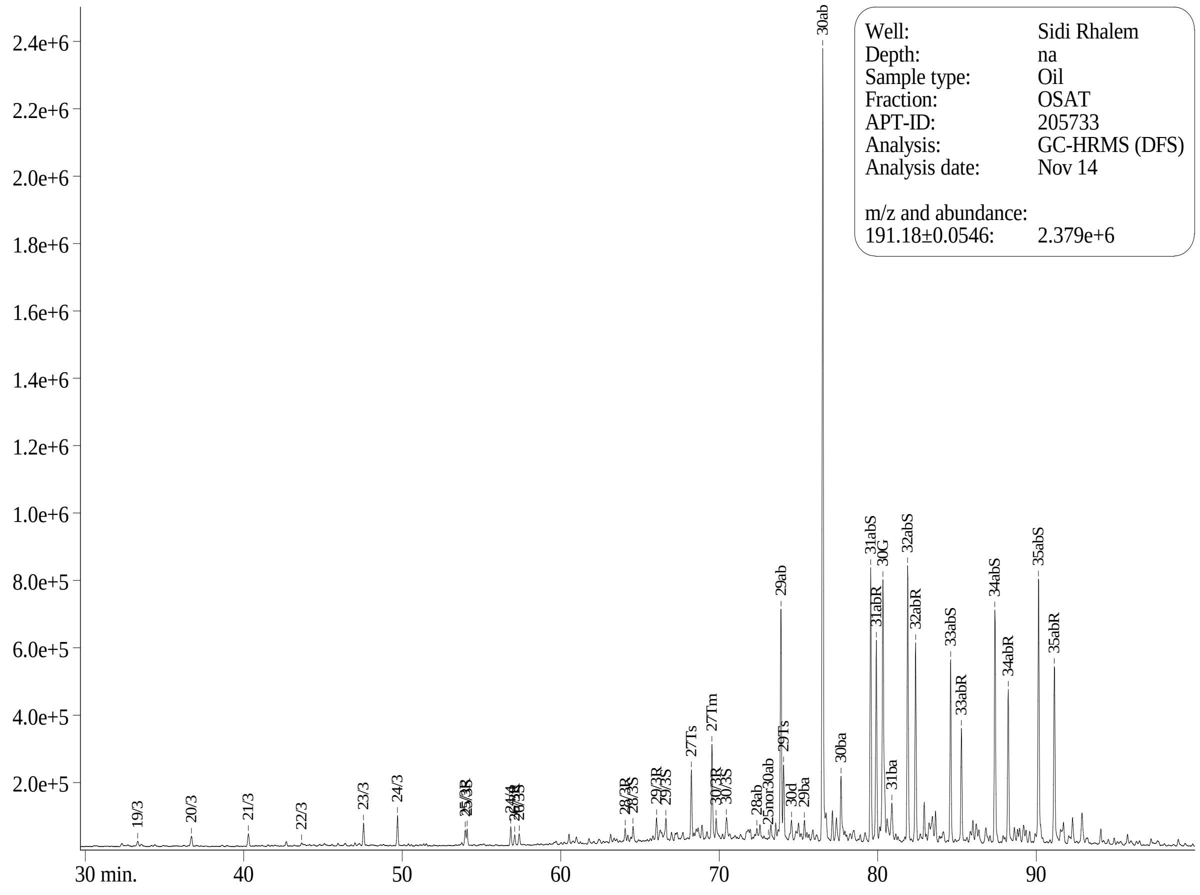
m/z and abundance:
231.21±0.0661: 1.248e+3

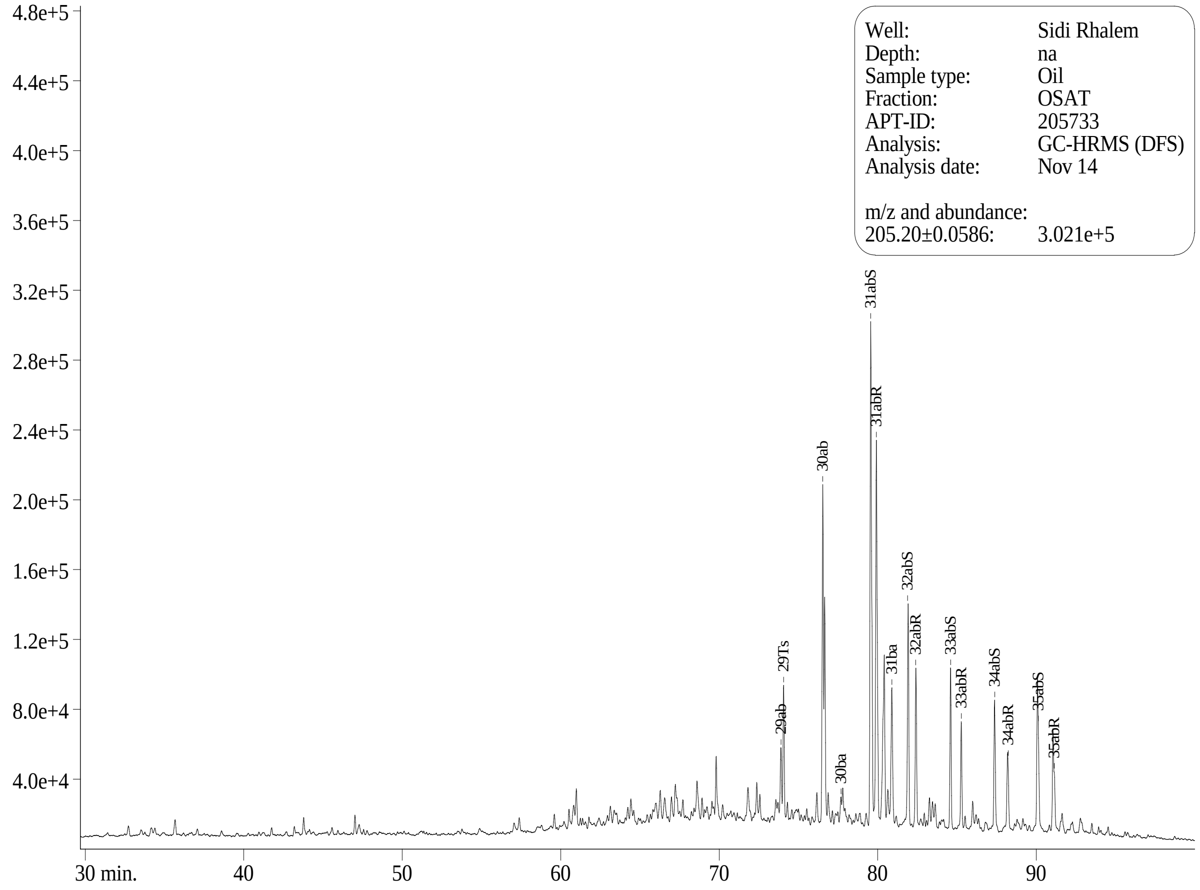


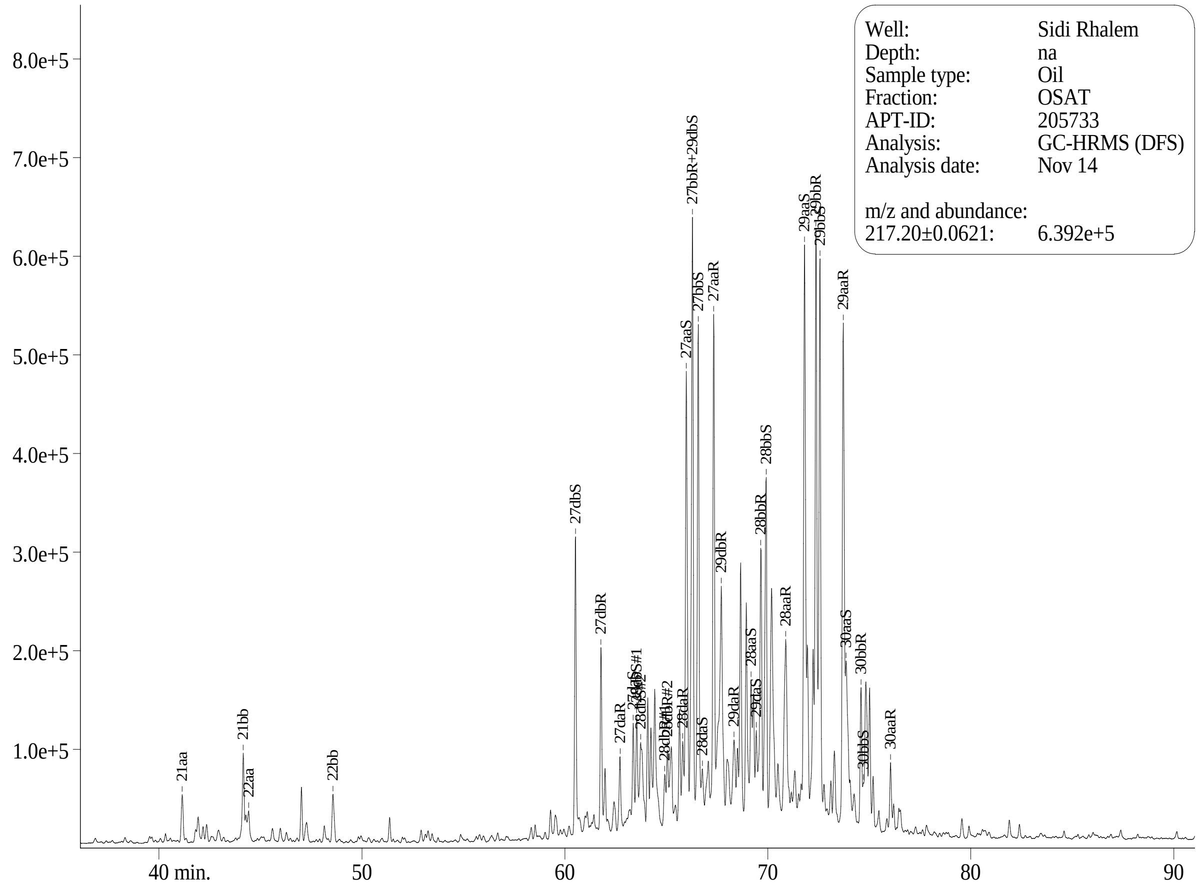
Well:	TKM-201
Depth:	3442.00 m
Sample type:	COCH
Comment:	B
Fraction:	ESAT
APT-ID:	205732
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 13

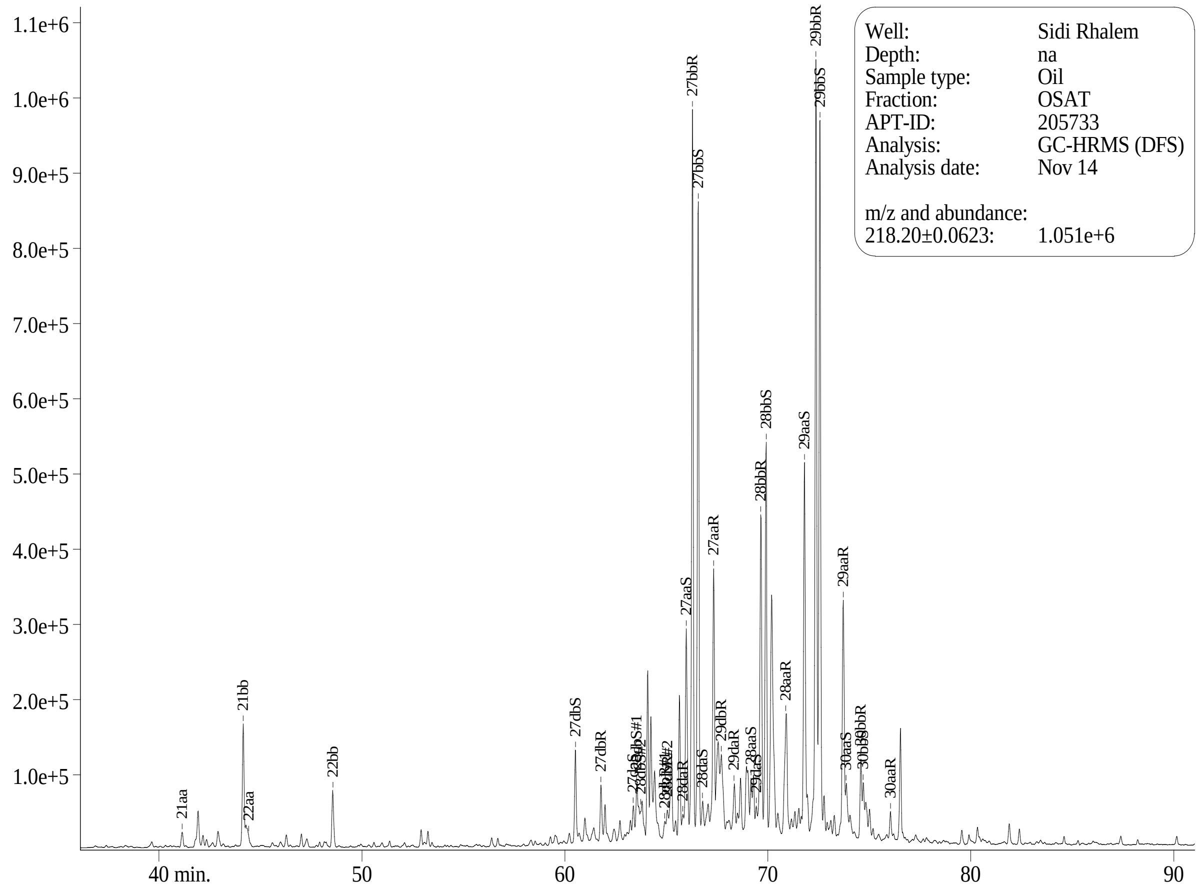
m/z and abundance:
259.24±0.0741: 1.206e+3

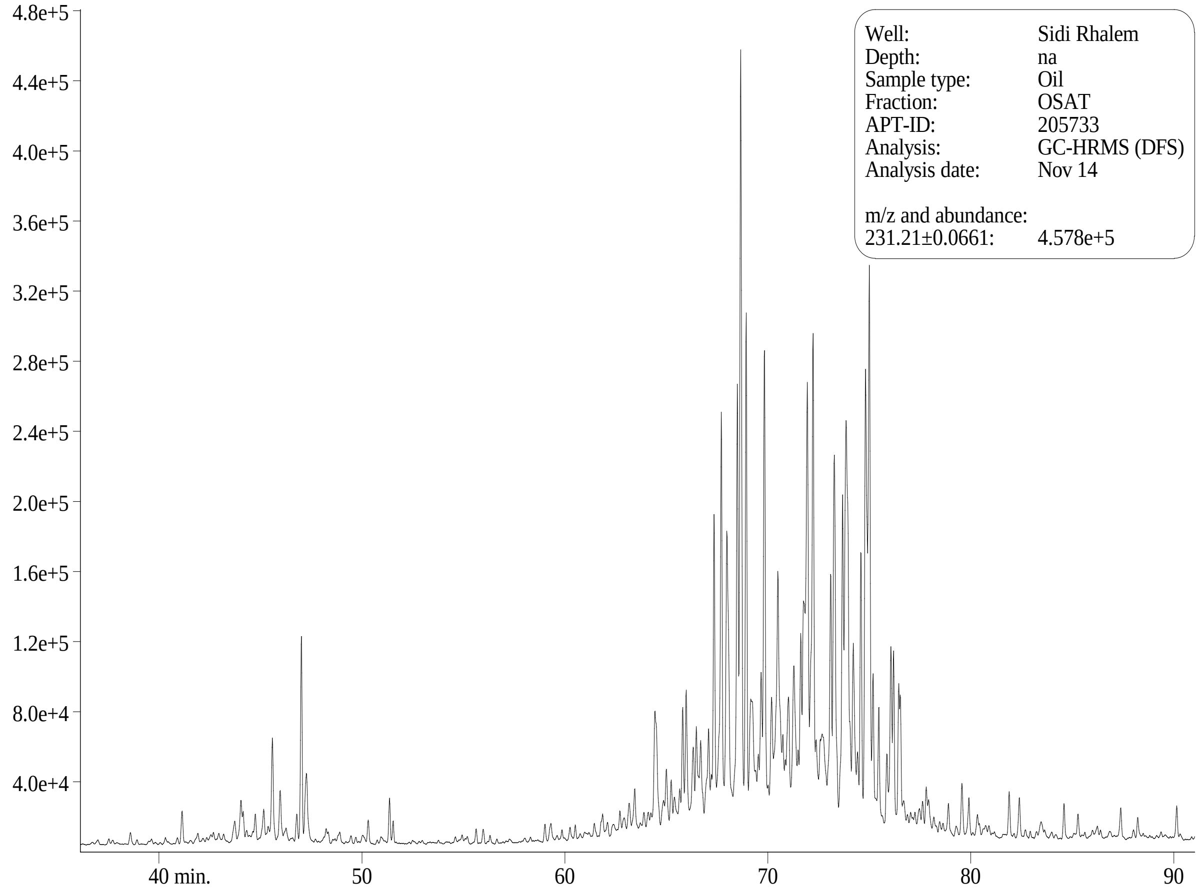

3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
30 min.
40
50
60
70
80
90
24/4
25nor28ab
27Ts
27Tm
28ab
25nor30ab
29ab
29Ts
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
177.16±0.0506: 3.443e+5

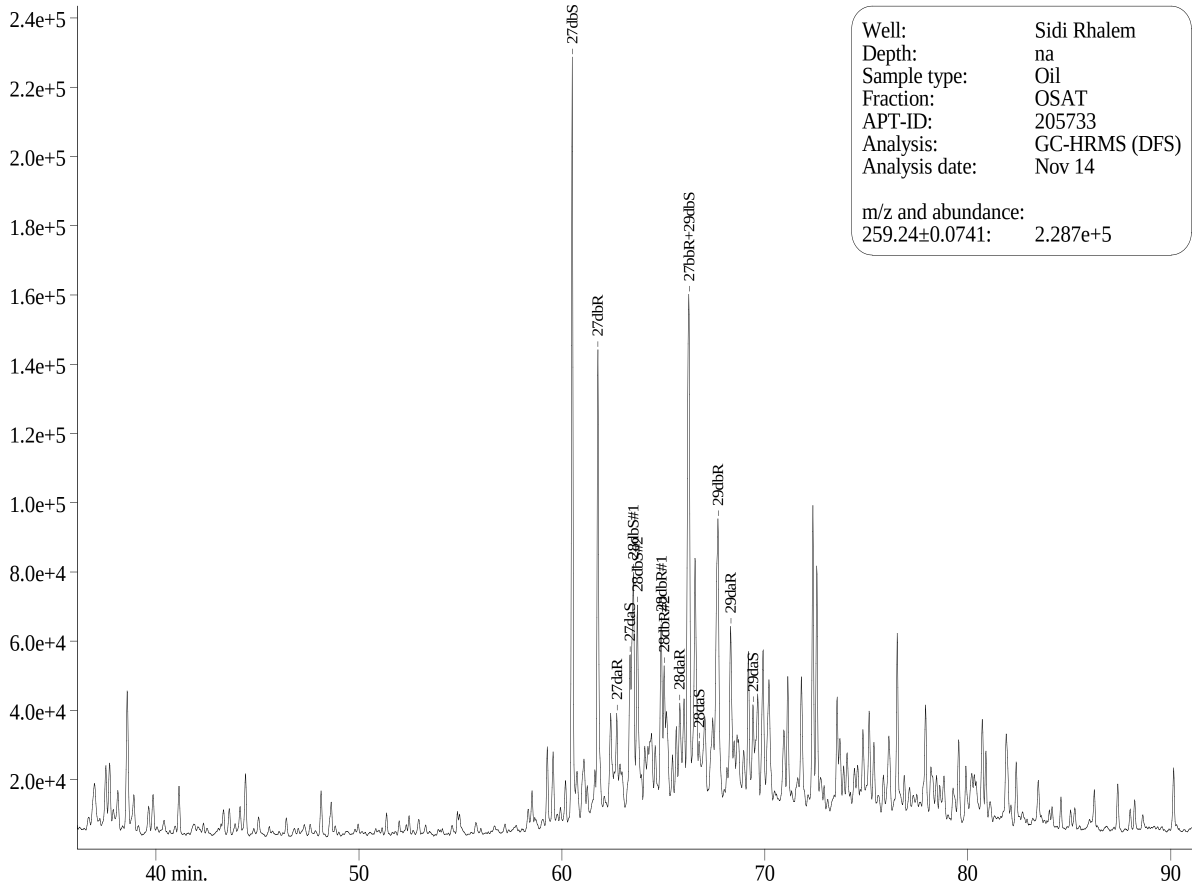

2.4e+6
2.2e+6
2.0e+6
1.8e+6
1.6e+6
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
30 min.
40
50
60
70
80
90
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
27Tm
30/3R
30/3S
28ab
25nor30ab
29ab
29Ts
30d
29ba
30ab
30ba
31abS
31abR
30G
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
191.18±0.0546: 2.379e+6


Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
205.20±0.0586: 3.021e+5
4.8e+5
4.4e+5
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
30 min.
40
50
60
70
80
90
29ab
29Ts
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

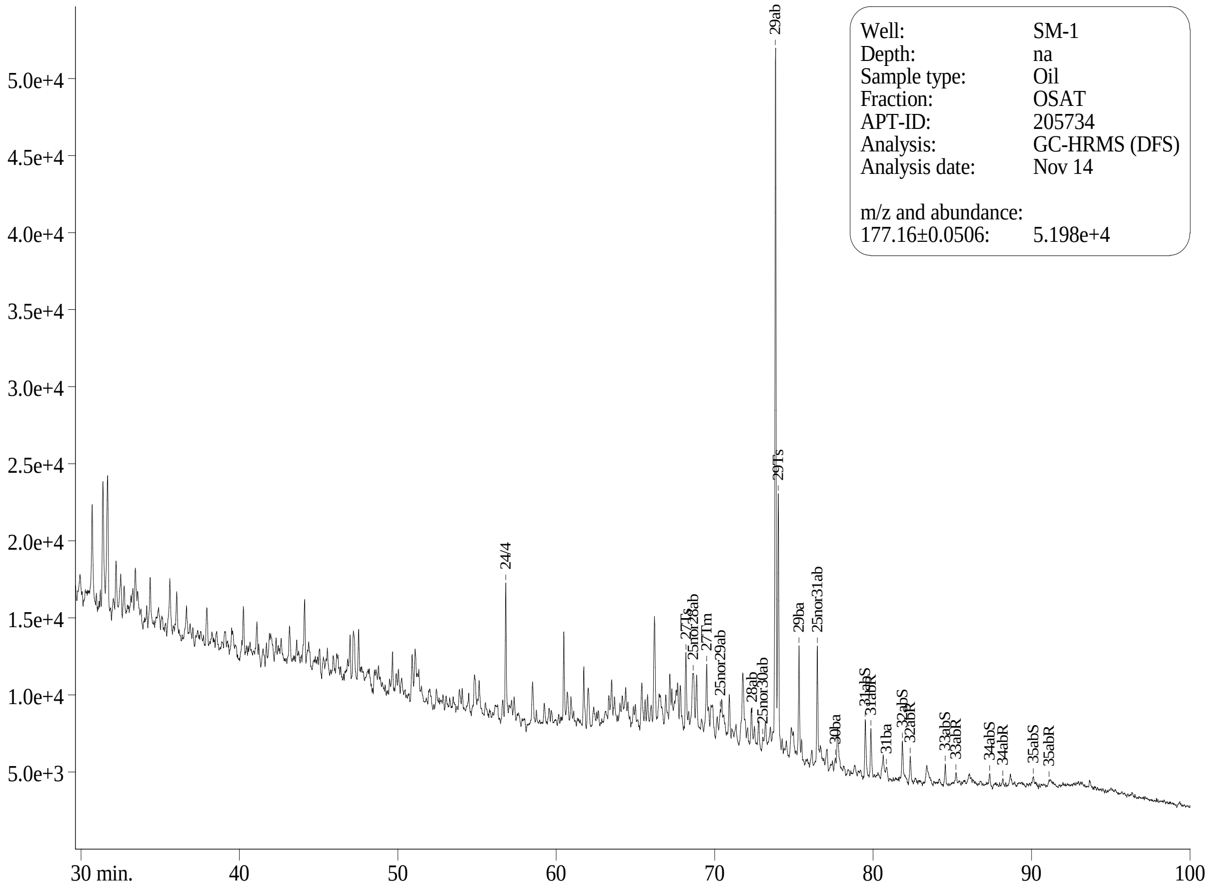

Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
217.20±0.0621: 6.392e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR+29dbS
27bbS
27aaR
28daS
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR


1.1e+6
1.0e+6
9.0e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
28dbS#1
28dbS#2
28dbR#2
28daR
27bbR
27bbS
27aaS
27aaR
28daS
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
218.20±0.0623: 1.051e+6


4.8e+5
4.4e+5
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
40 min.
50
60
70
80
90
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
231.21±0.0661: 4.578e+5

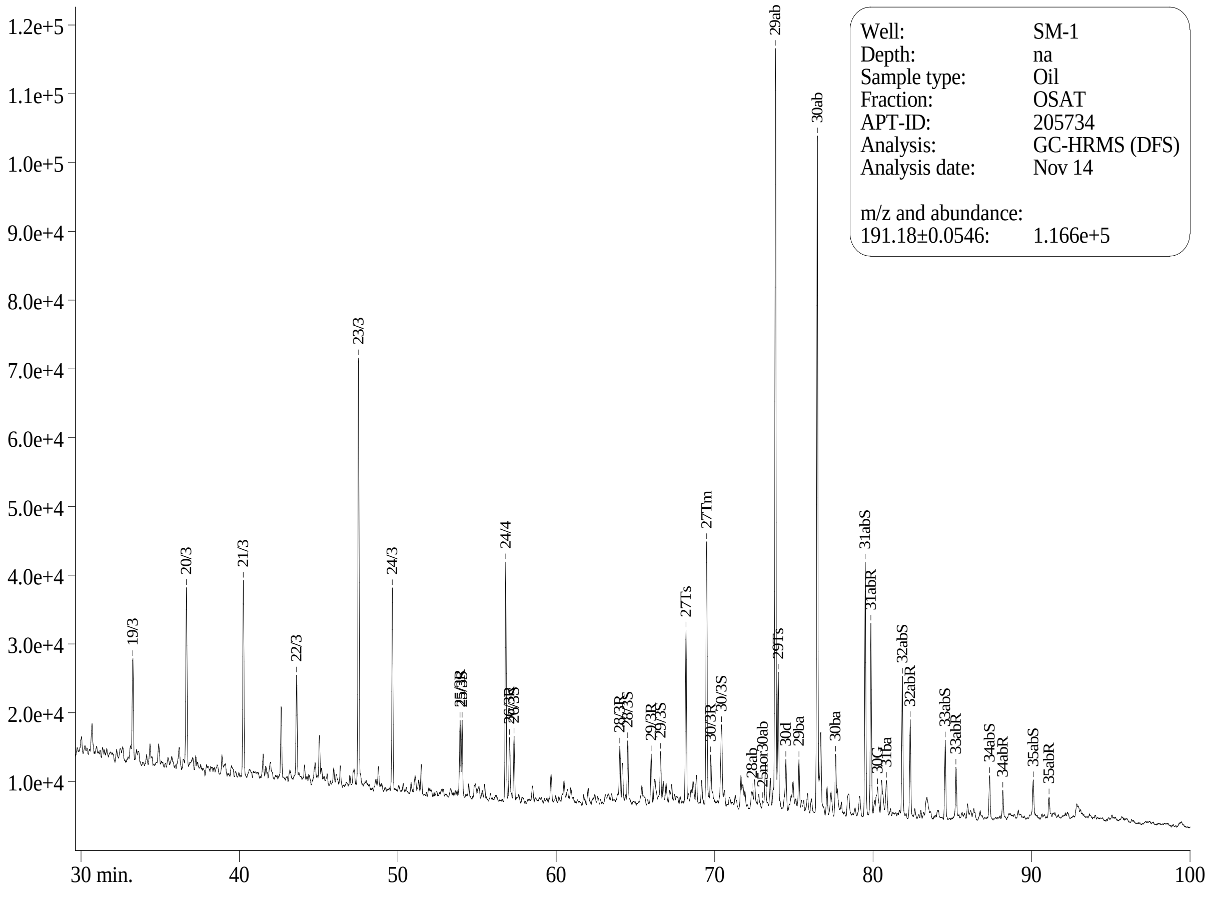


Well:	Sidi Rhalem
Depth:	na
Sample type:	Oil
Fraction:	OSAT
APT-ID:	205733
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 14
m/z and abundance:	
259.24±0.0741:	2.287e+5



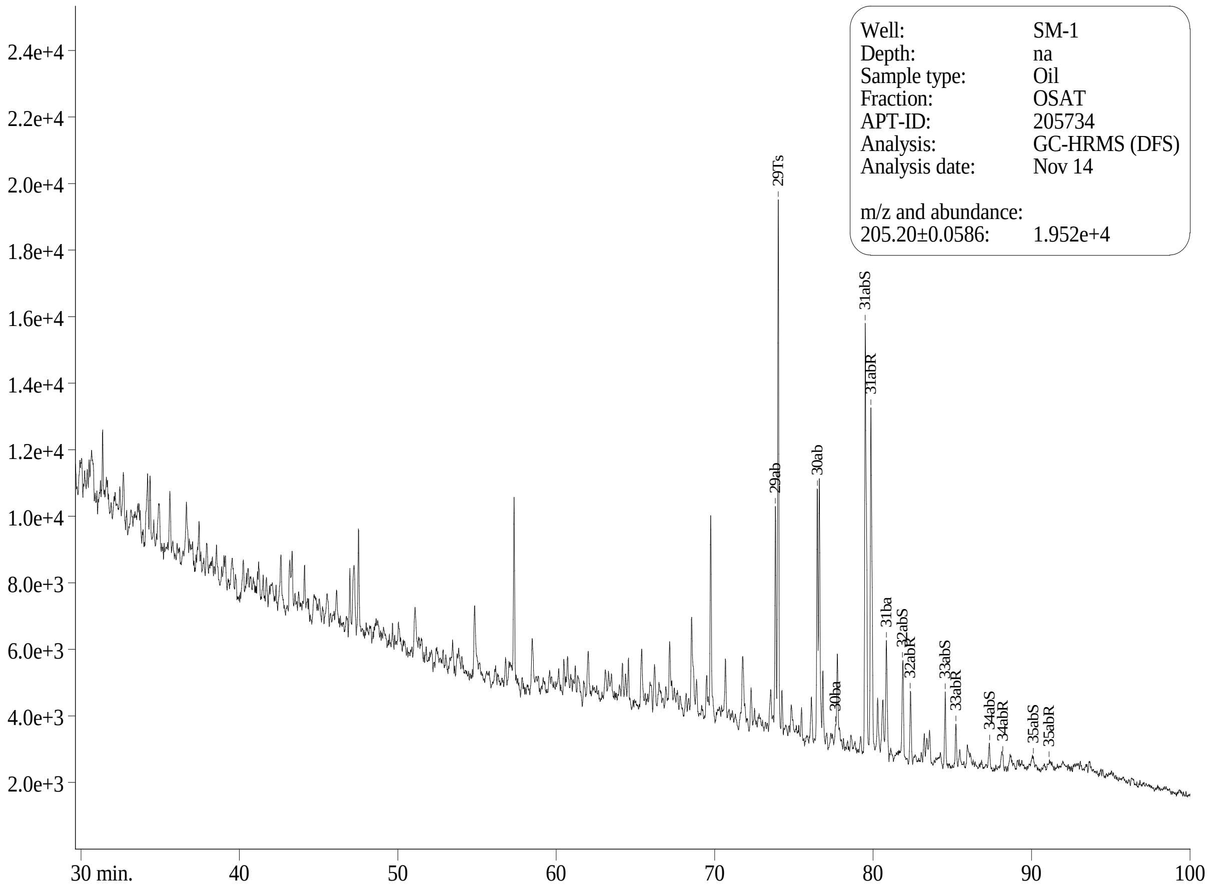
Well: SM-1
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14

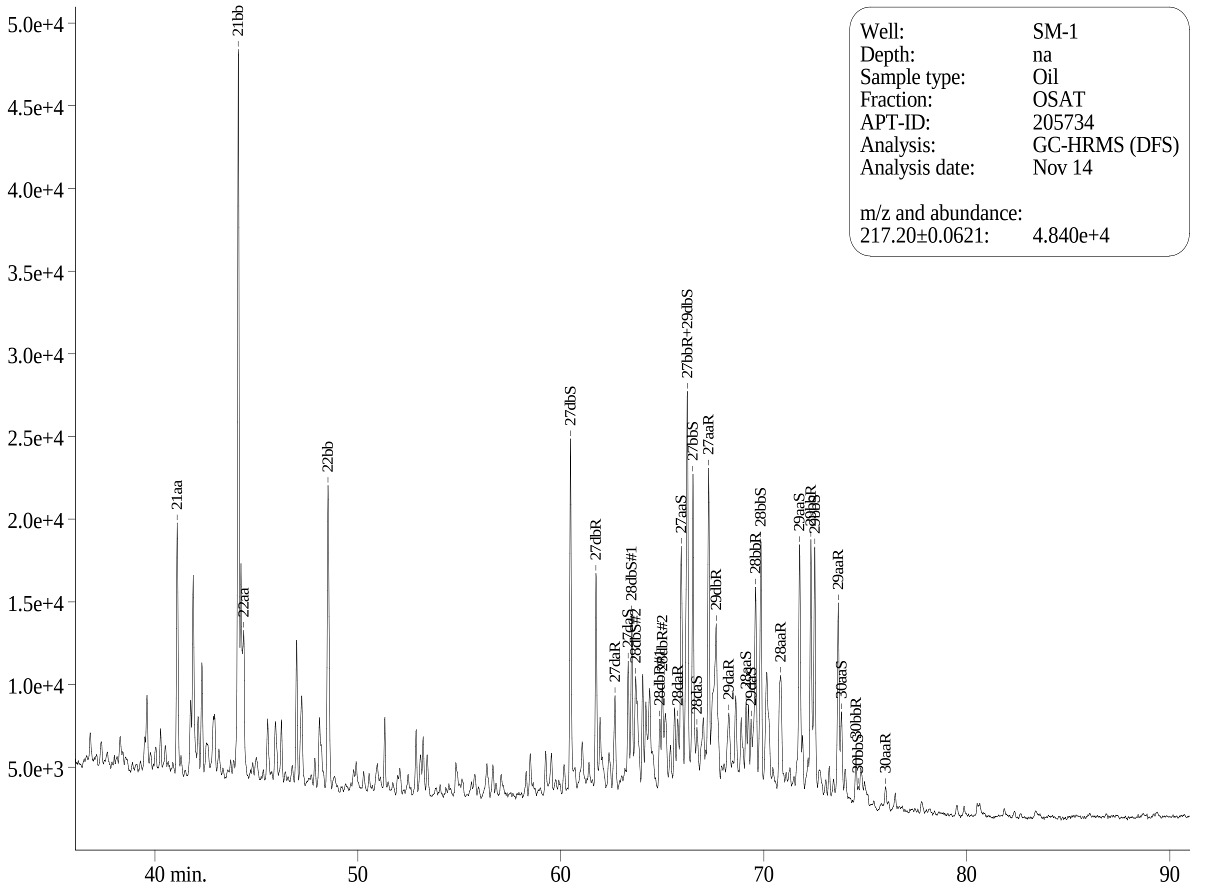
m/z and abundance:
177.16±0.0506: 5.198e+4

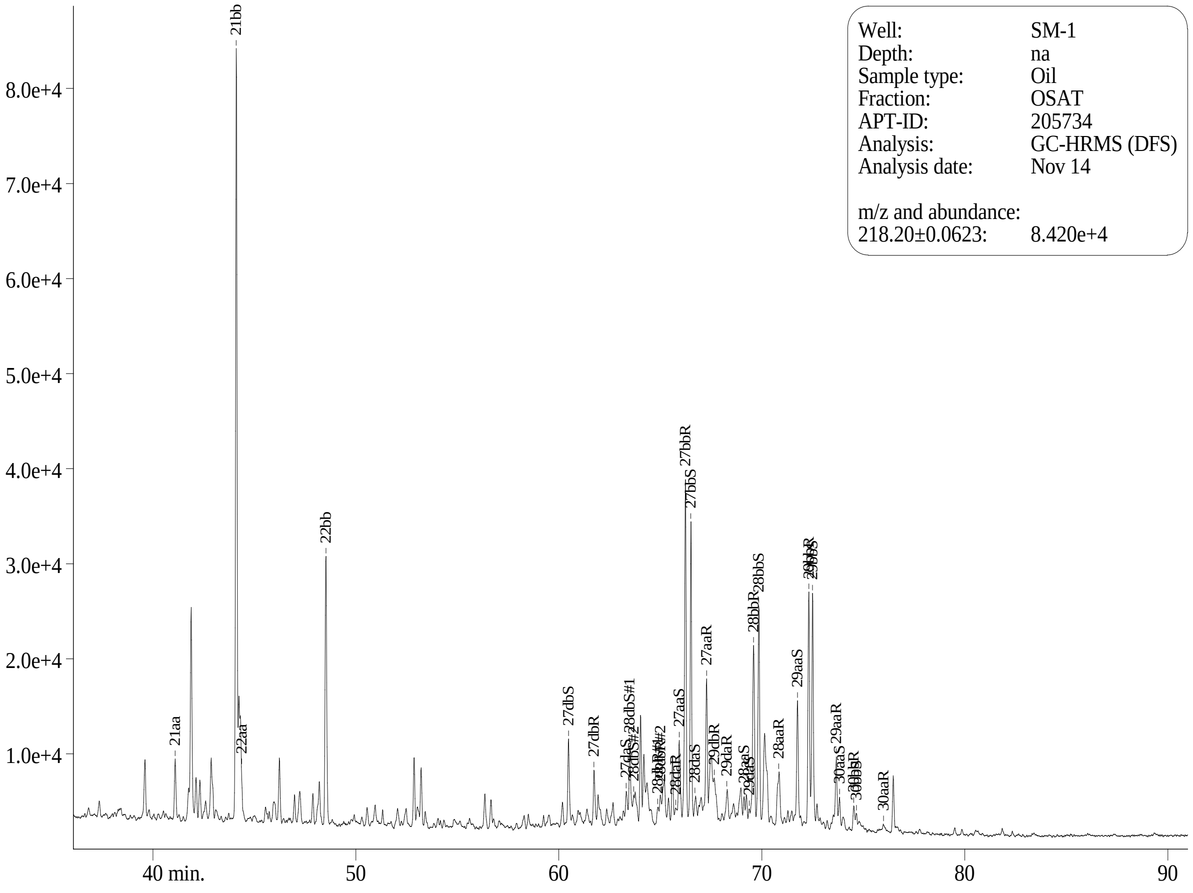


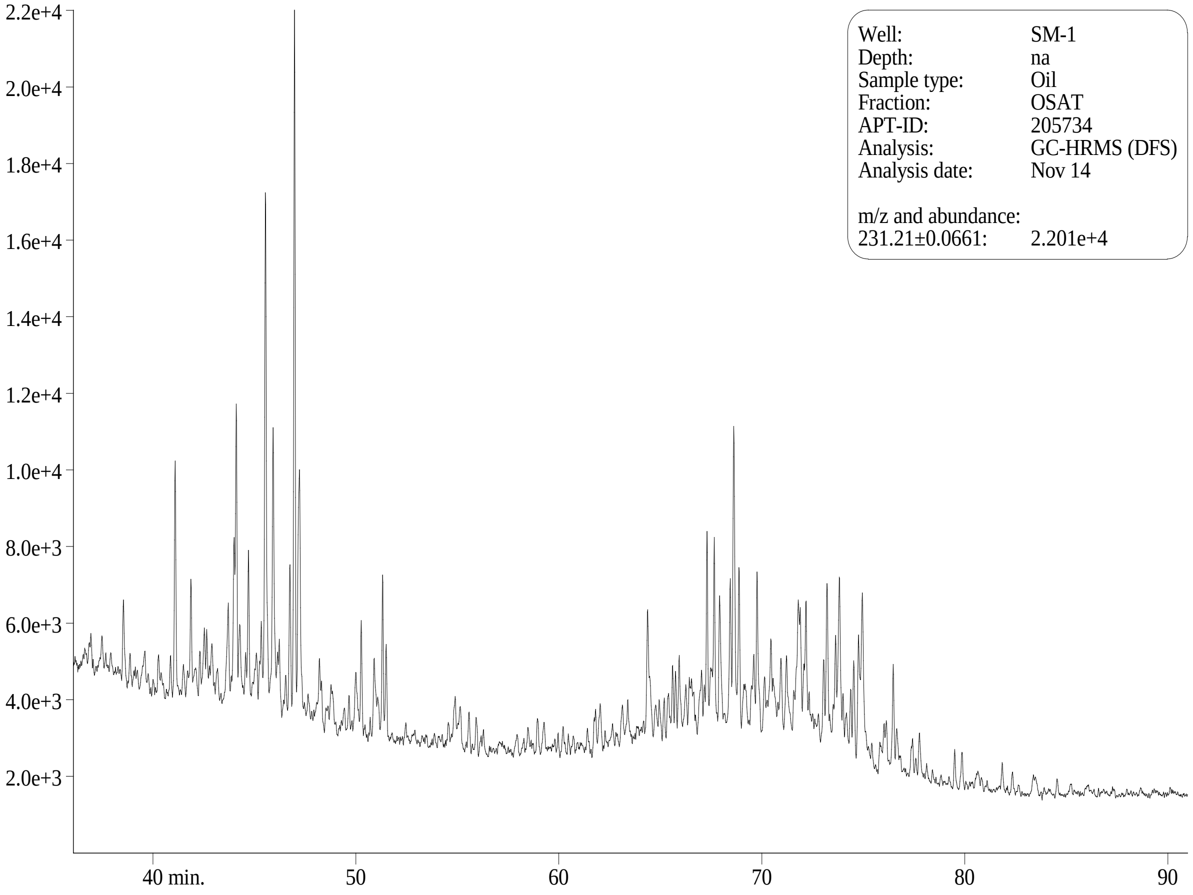
Well: SM-1
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14

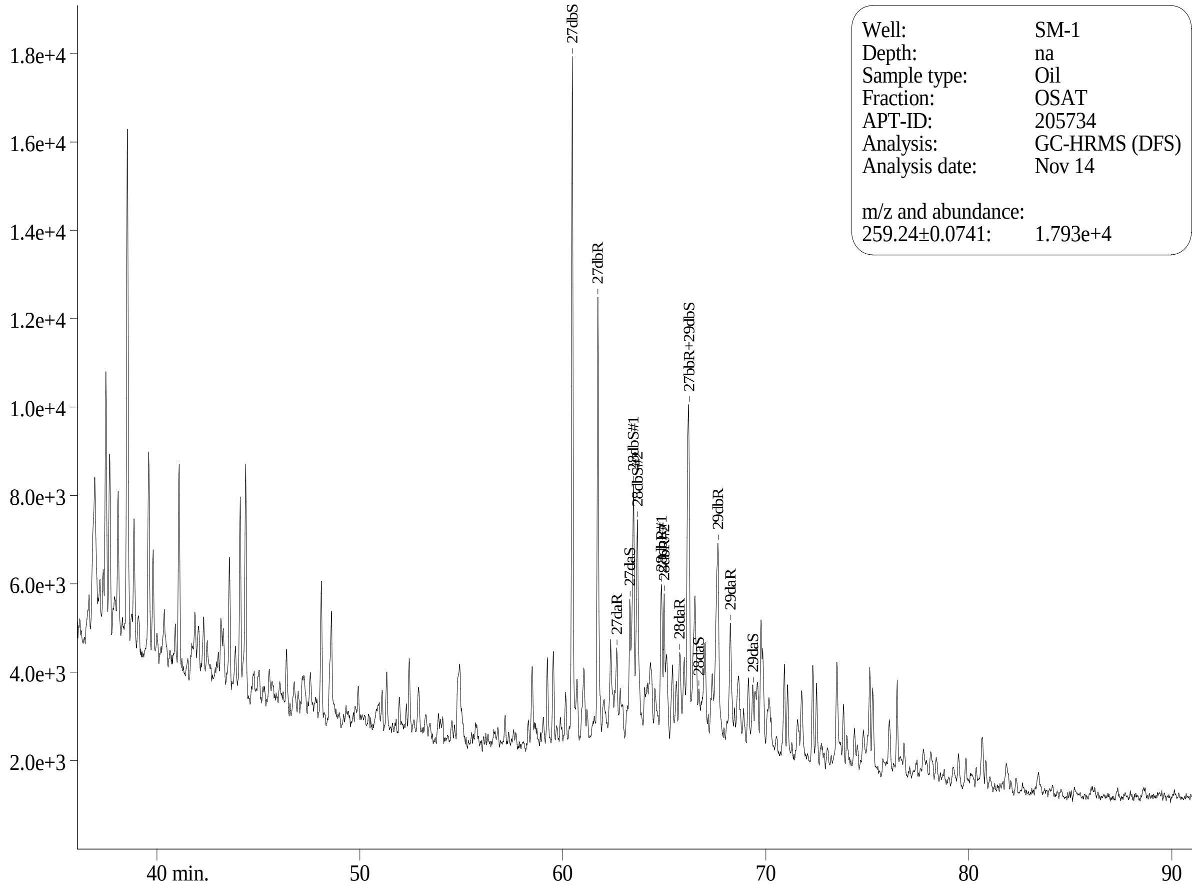
m/z and abundance:
191.18±0.0546: 1.166e+5


Well: SM-1
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
205.20±0.0586: 1.952e+4
2.4e+4
2.2e+4
2.0e+4
1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
30 min.
40
50
60
70
80
90
100
29Ts
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR

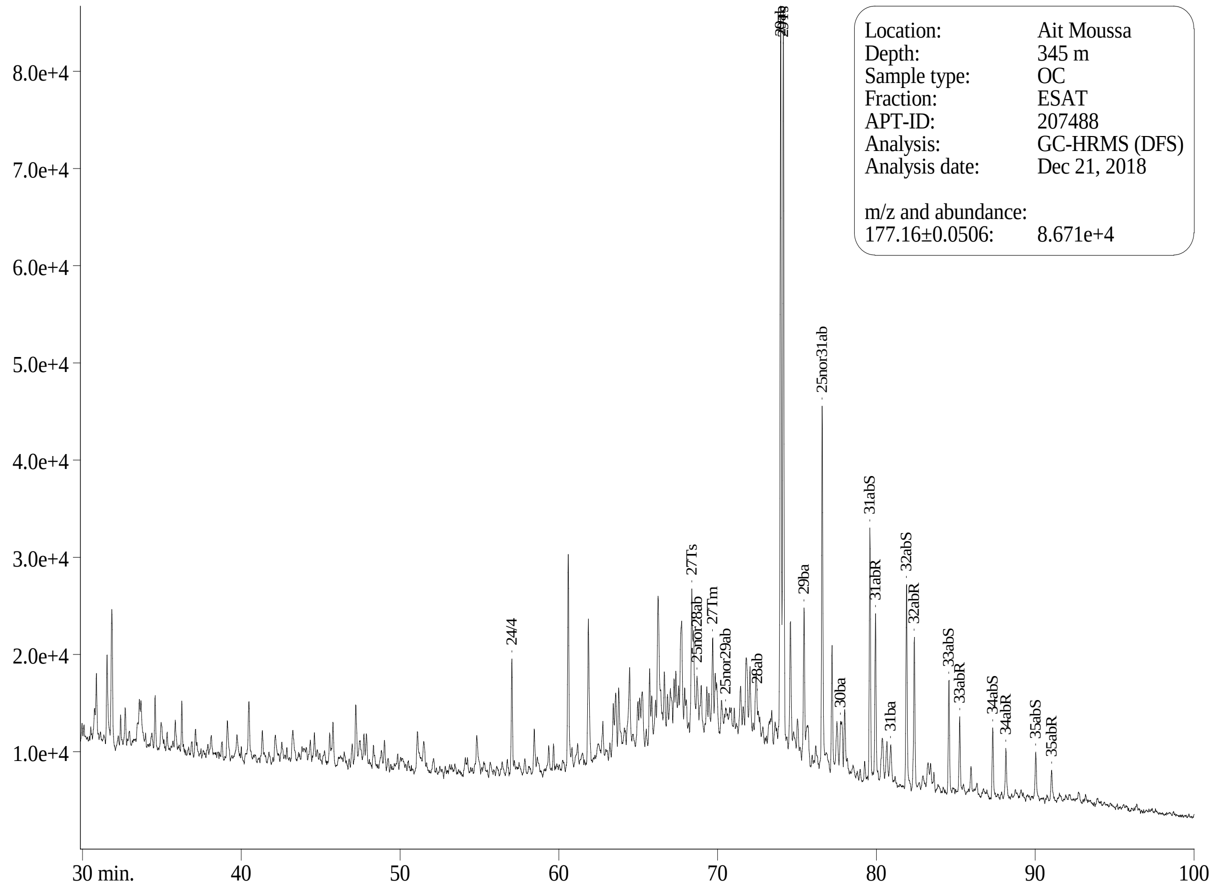

Well: SM-1
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
217.20±0.0621: 4.840e+4
5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
28daS
27aaS
27bbR+29dbS
27bbS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR


Well: SM-1
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
218.20±0.0623: 8.420e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daS
28dbS#1
28dbS#2
28dbR#2
28daR
27aaS
27bbR
27bbS
28daS
27aaR
29dbR
29daR
28aaS
28bbR
28bbS
28aaR
29aaS
29bbS
29aaR
30aaS
30bbR
30aaR


Well: SM-1
Depth: na
Sample type: Oil
Fraction: OSAT
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 14
m/z and abundance:
231.21±0.0661: 2.201e+4
2.2e+4
2.0e+4
1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
40 min.
50
60
70
80
90

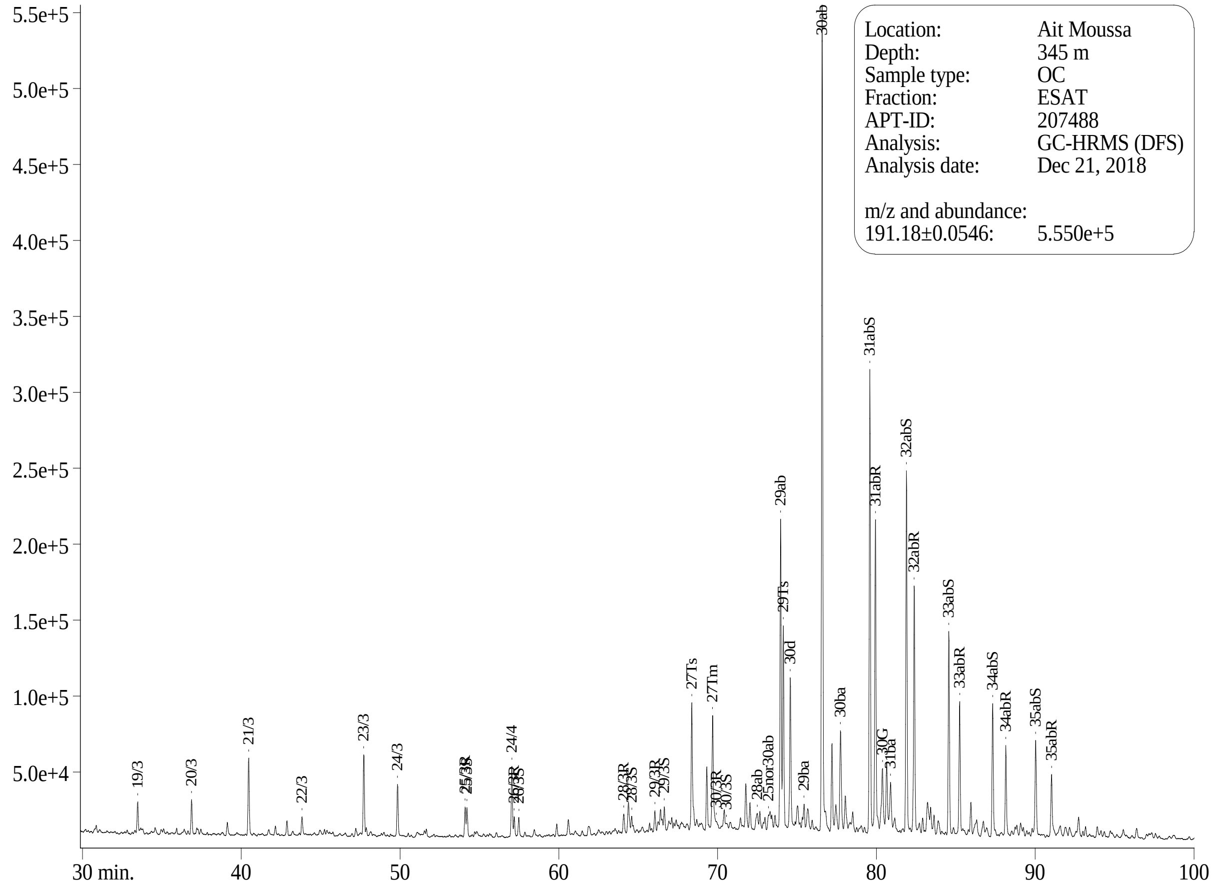


Well:	SM-1
Depth:	na
Sample type:	Oil
Fraction:	OSAT
APT-ID:	205734
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 14
m/z and abundance:	
259.24±0.0741:	1.793e+4



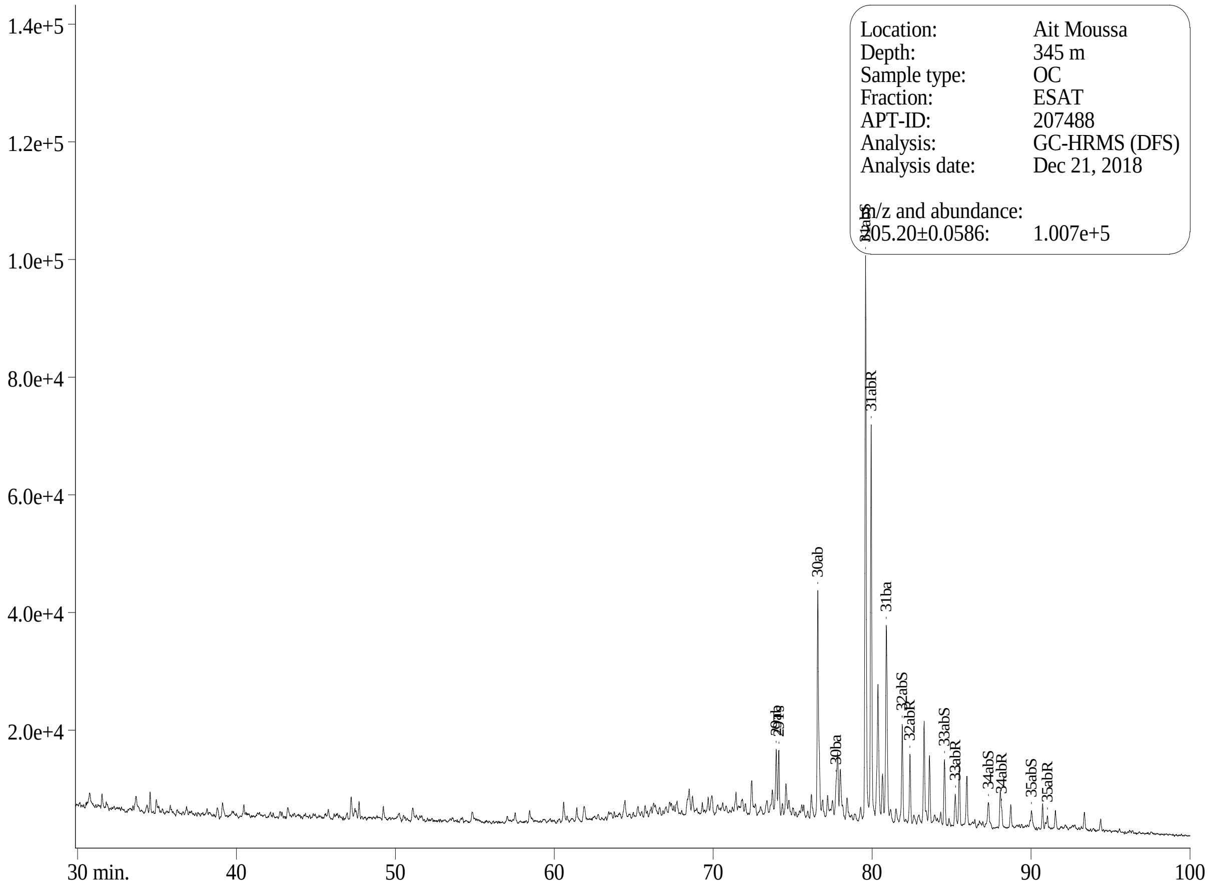
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
177.16±0.0506: 8.671e+4



Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
191.18±0.0546: 5.550e+5


Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
205.20±0.0586: 1.007e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
30 min.
40
50
60
70
80
90
100
29ab
29ba
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
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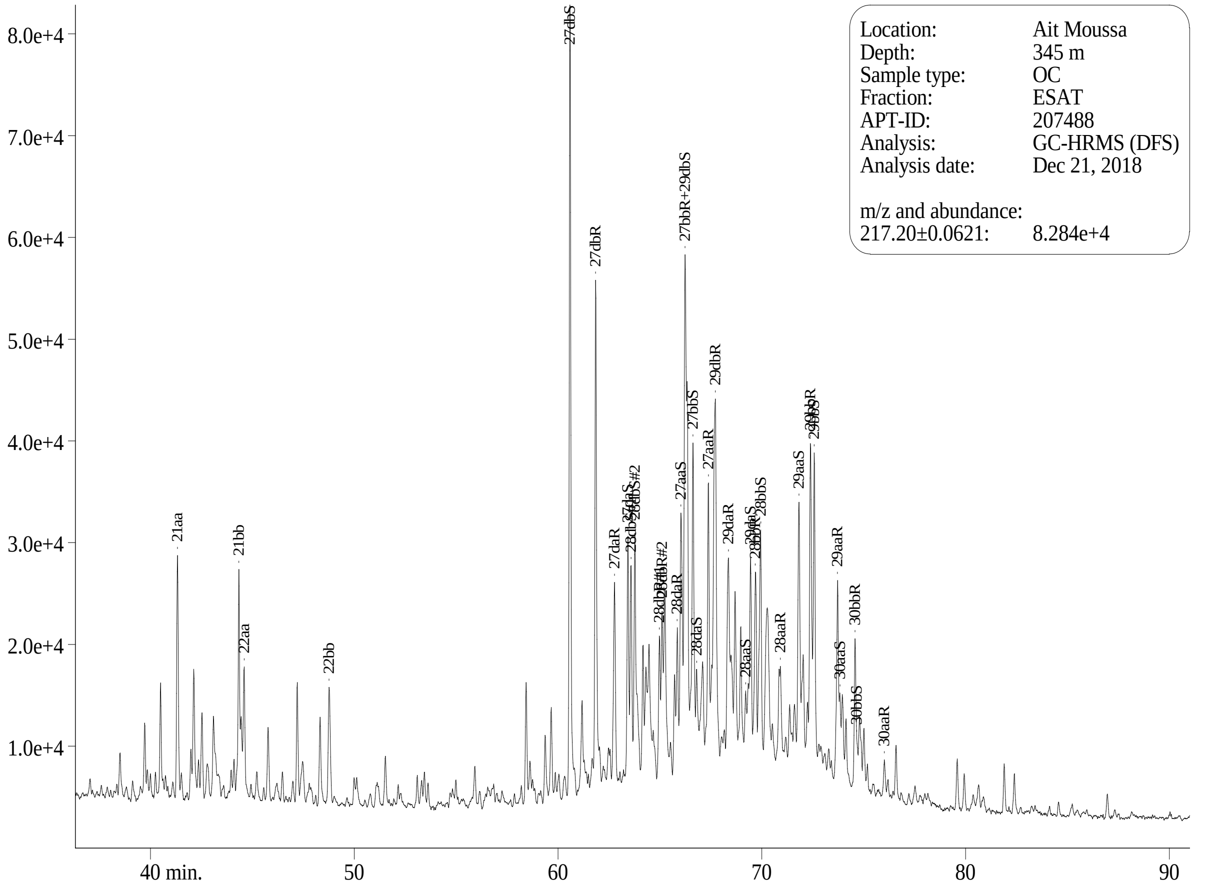
34abS
34abR
35abS
35abR


Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
217.20±0.0621: 8.284e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27bbR+29dbS
27aaS
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
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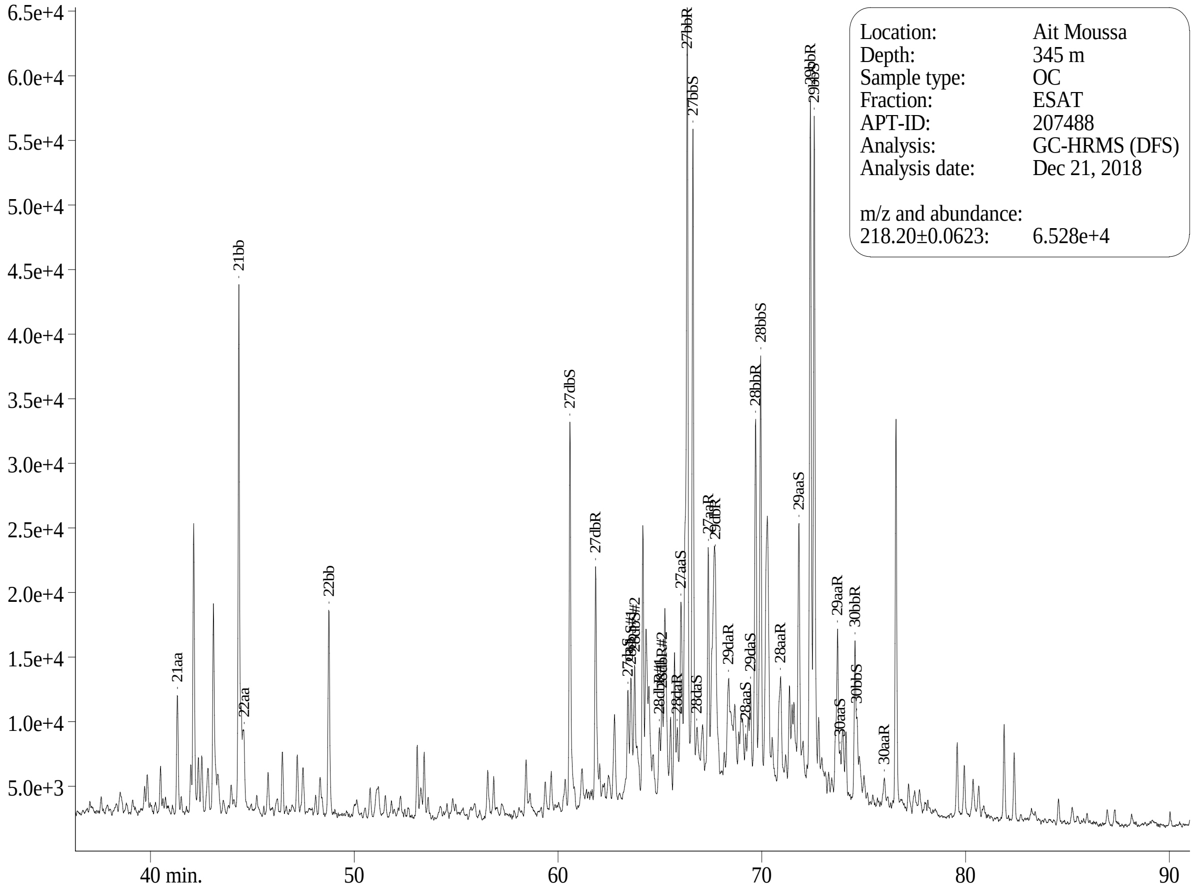
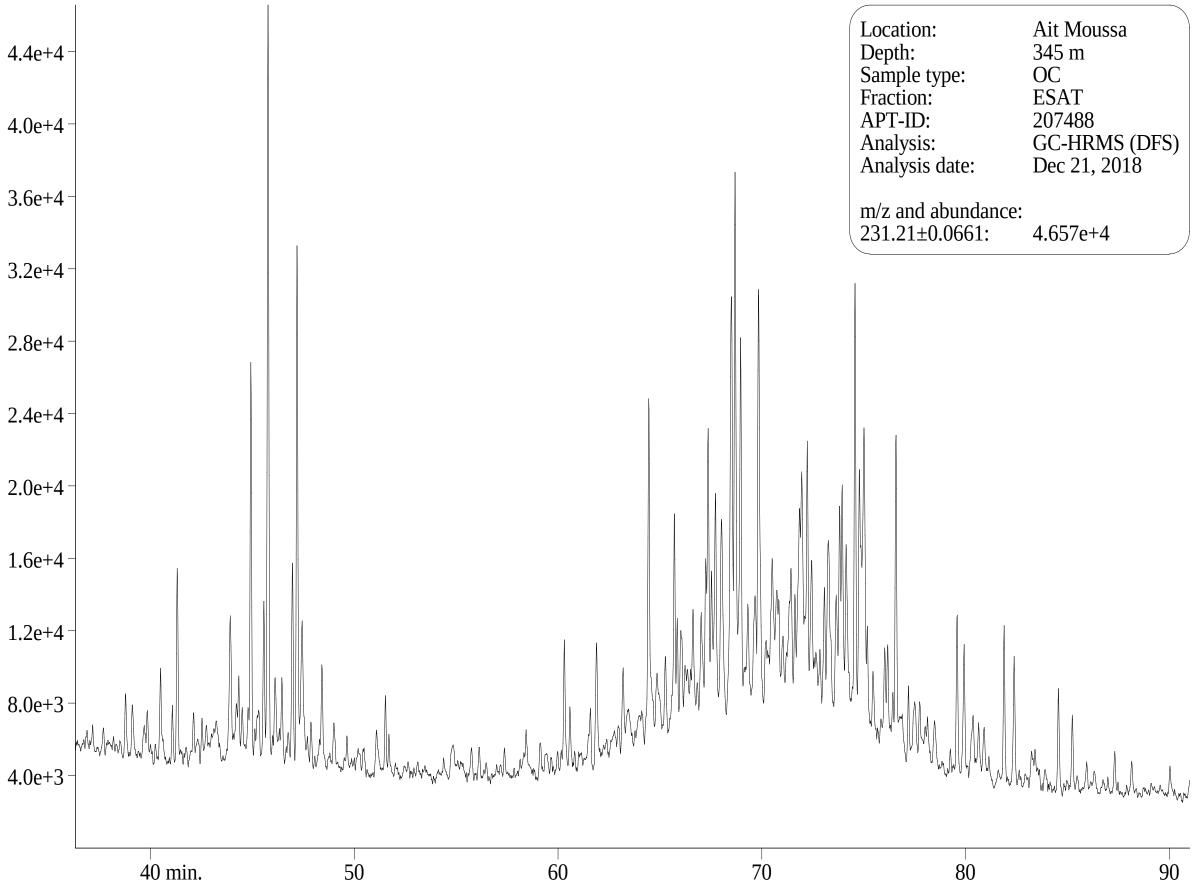
29aaR
30aaS
30bbR
30bbS
30aaR



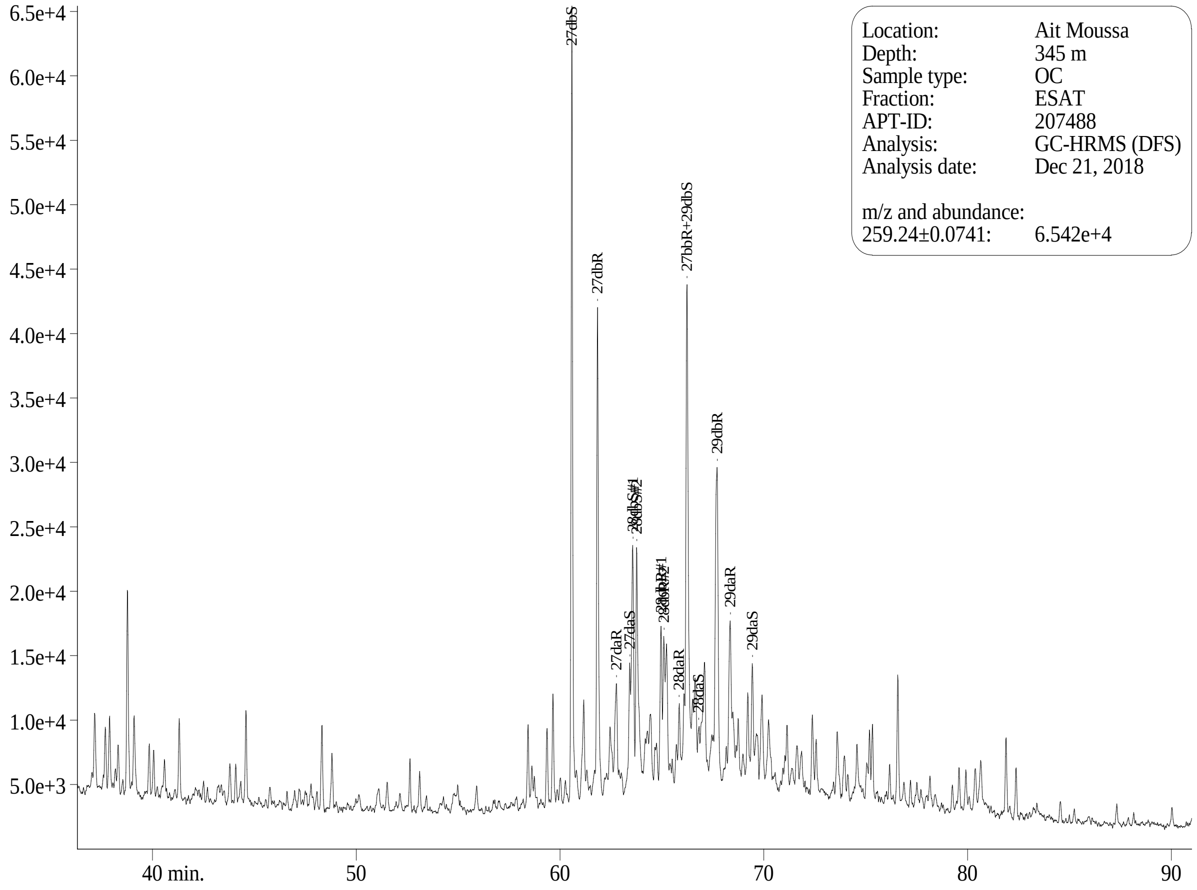
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
218.20±0.0623: 6.528e+4



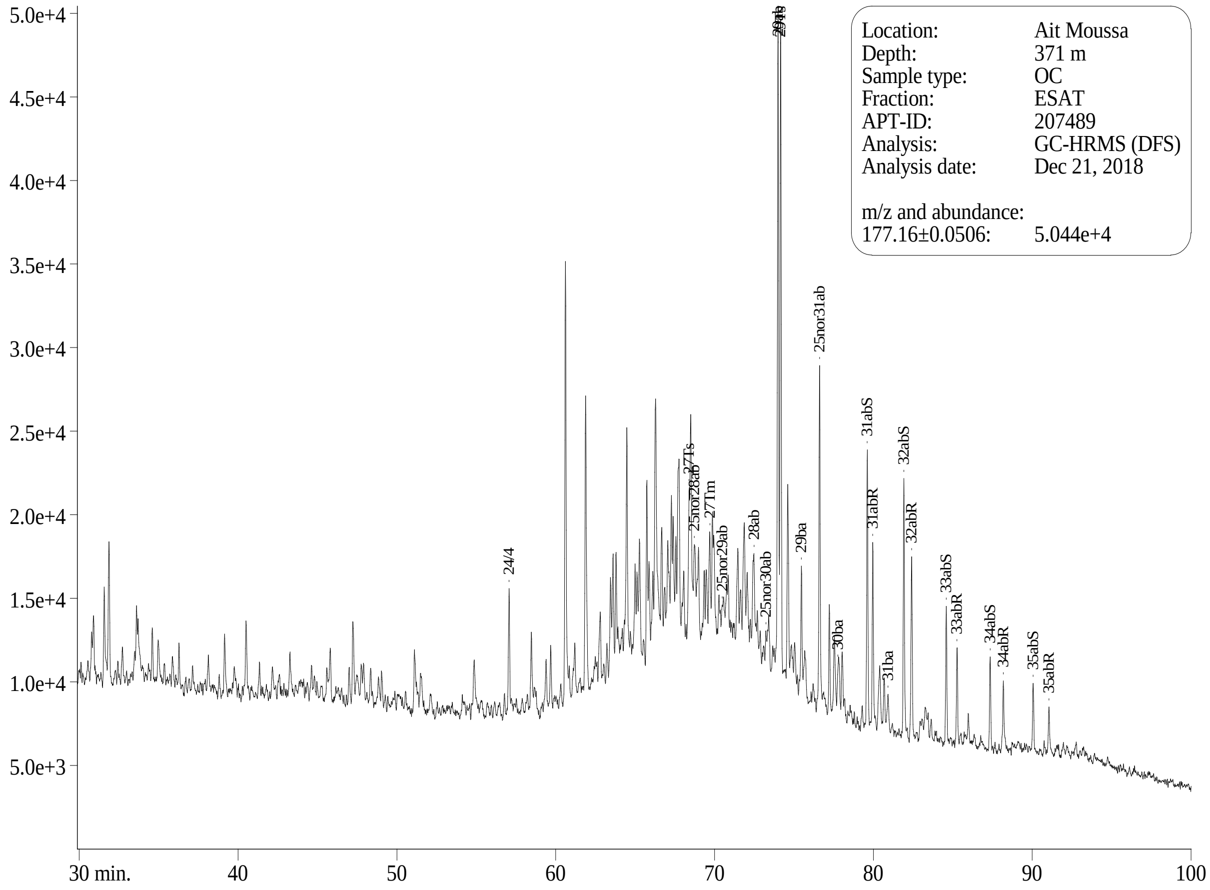
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

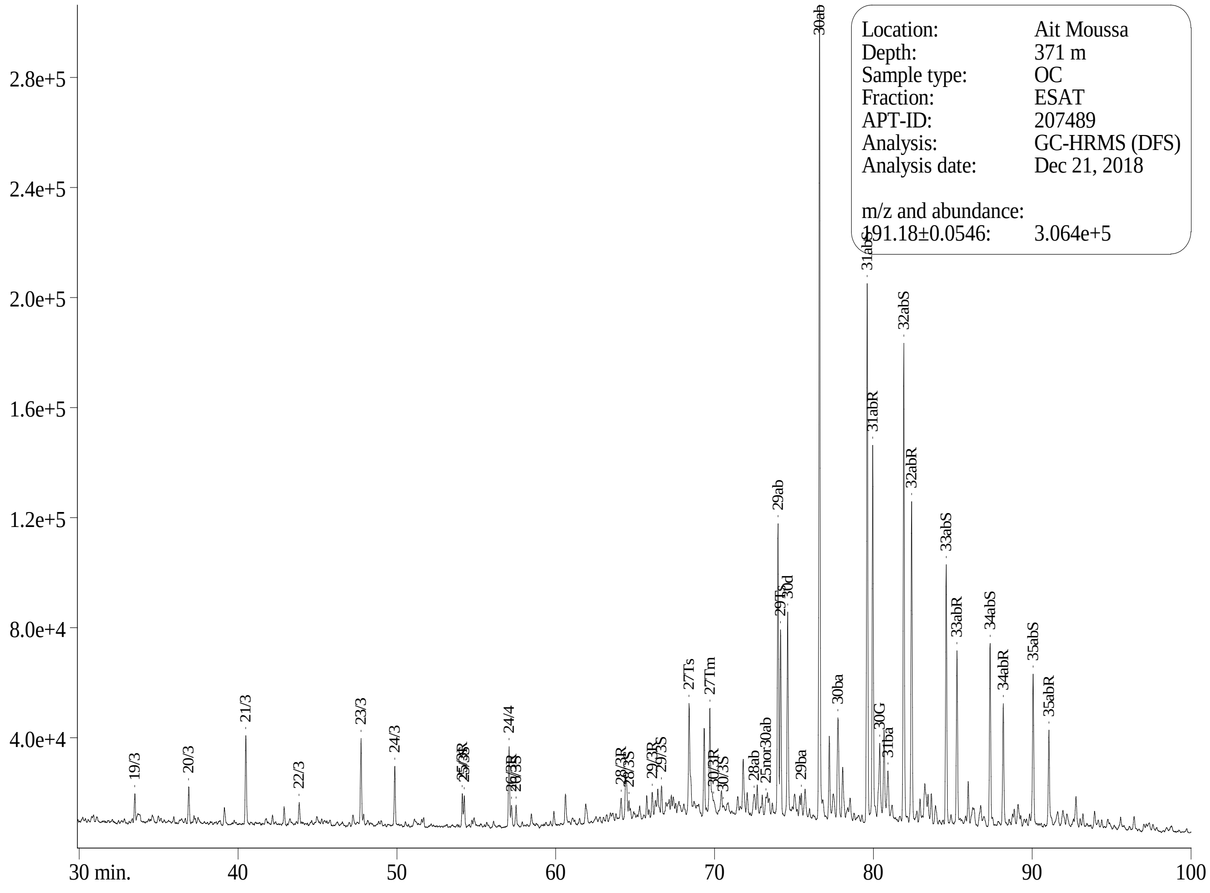
m/z and abundance:
231.21±0.0661: 4.657e+4

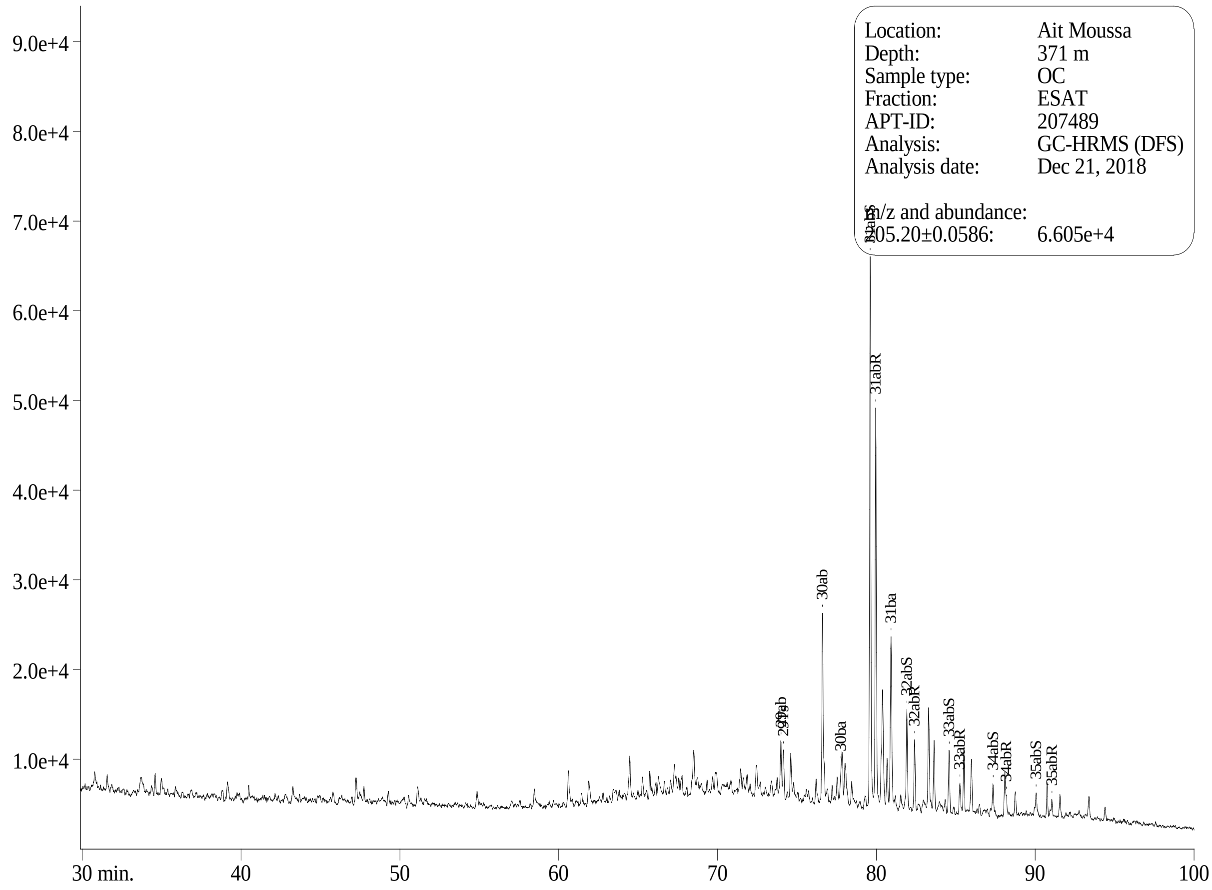


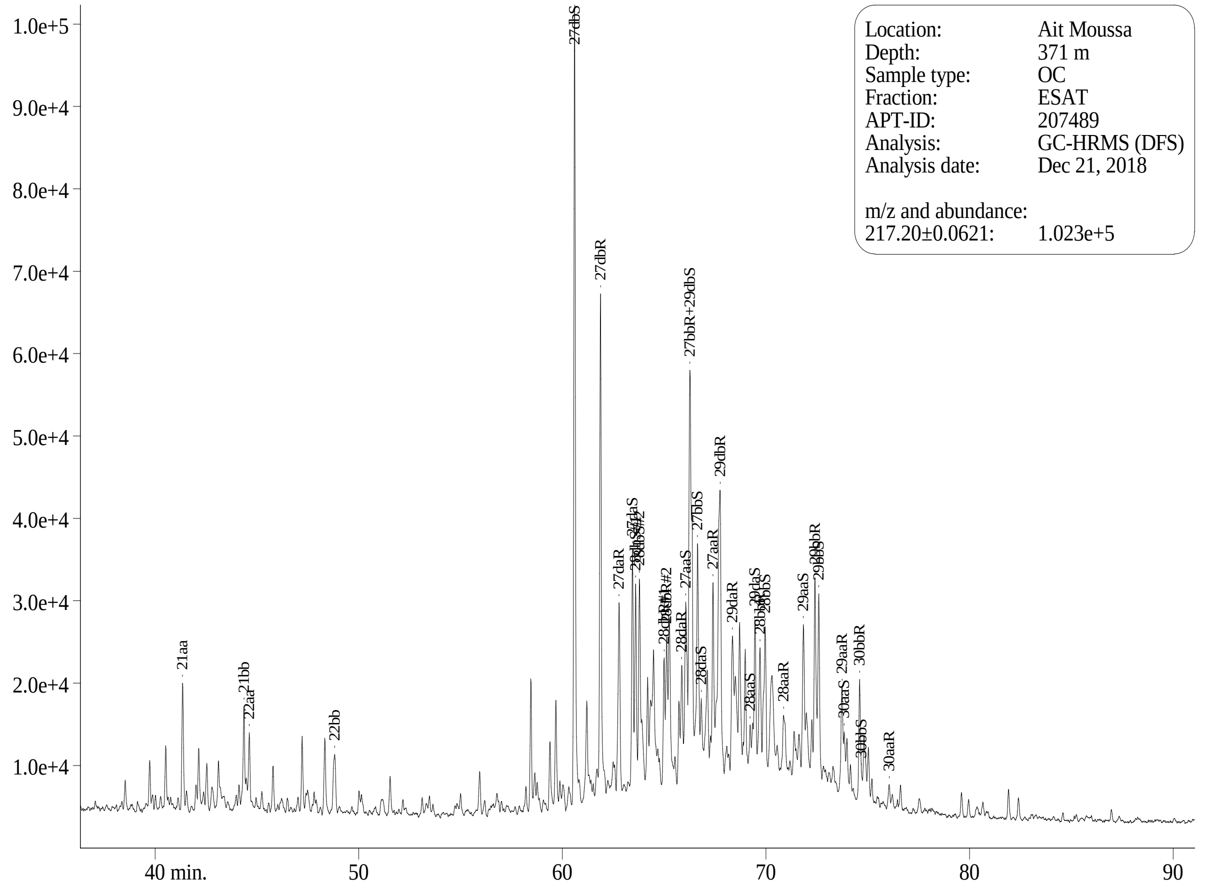
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: ESAT
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

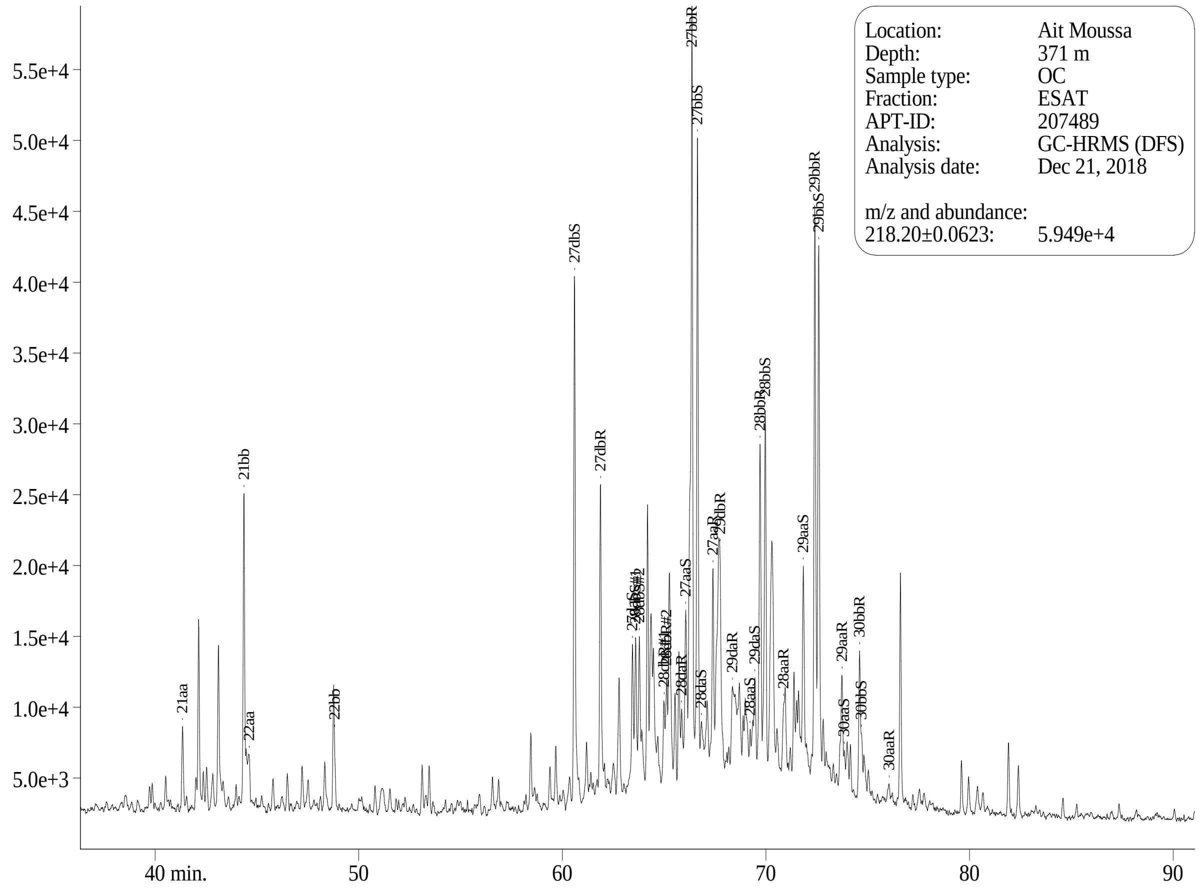
m/z and abundance:
259.24±0.0741: 6.542e+4


5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
30 min.
40
50
60
70
80
90
100
24/4
27Ts
25nor28ab
27Tm
25nor29ab
28ab
25nor30ab
29ab
30ab
29ba
25nor31ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
177.16±0.0506: 5.044e+4


2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
30 min.
40
50
60
70
80
90
100
19/3
20/3
21/3
22/3
23/3
24/3
25/3R
25/3S
24/4
26/3R
26/3S
28/3R
28/3S
29/3R
29/3S
27Ts
27Tm
30/3R
30/3S
28ab
25nor30ab
29ba
29Ts
29ab
30d
30ab
30ba
30G
31ba
31abS
31abR
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
191.18±0.0546: 3.064e+5

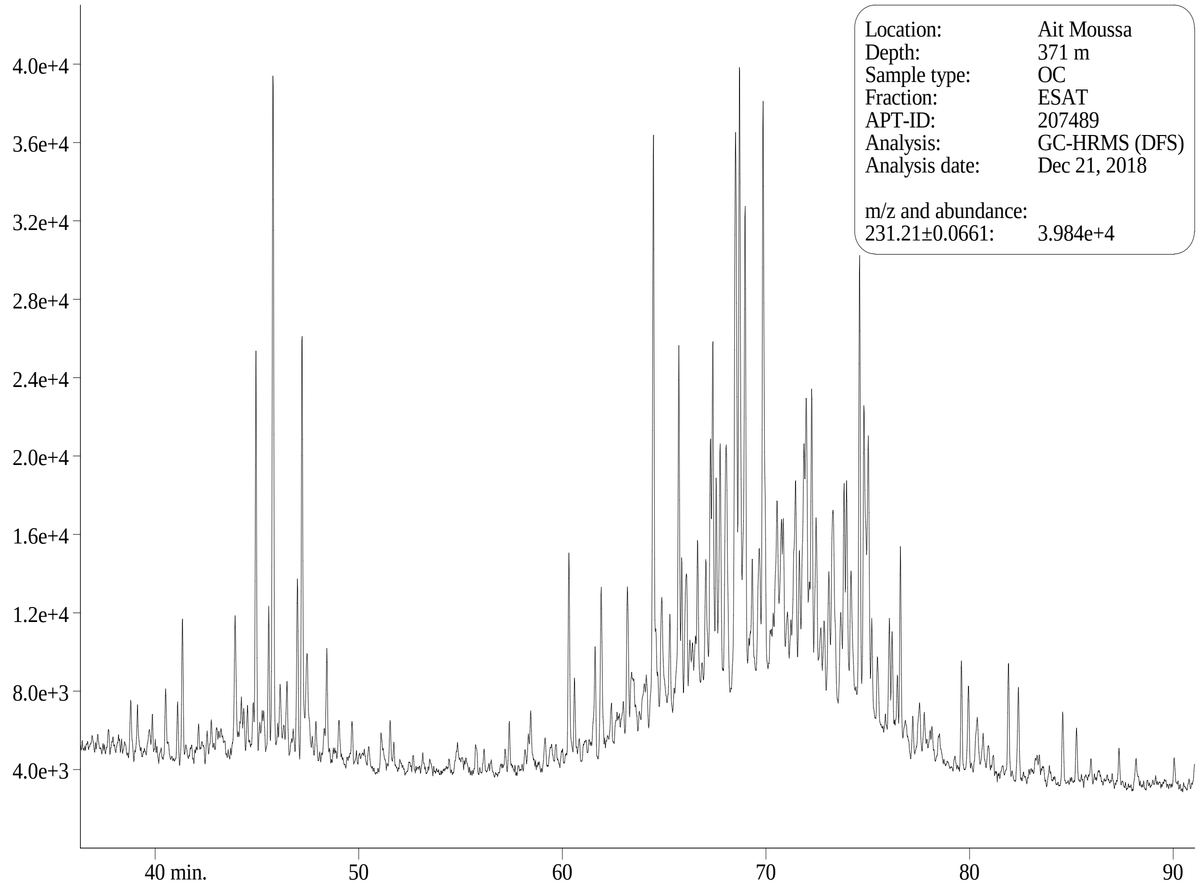

Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
205.20±0.0586: 6.605e+4
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
30 min.
40
50
60
70
80
90
100
29ab
29ba
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
217.20±0.0621: 1.023e+5
1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
27daS
28dbS#1
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
28daS
27bbR+29dbS
27bbS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
30aaS
29aaR
30bbR
30bbS
30aaR



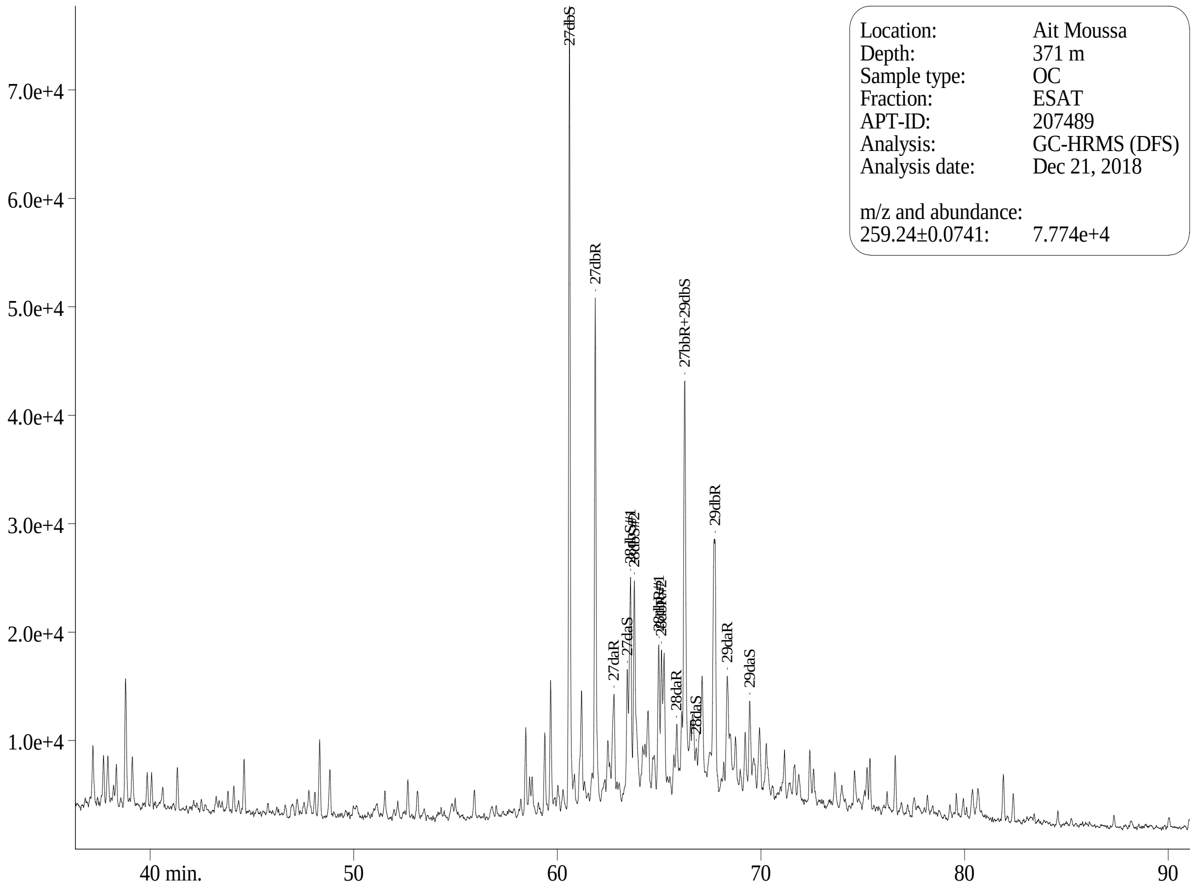
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
218.20±0.0623: 5.949e+4



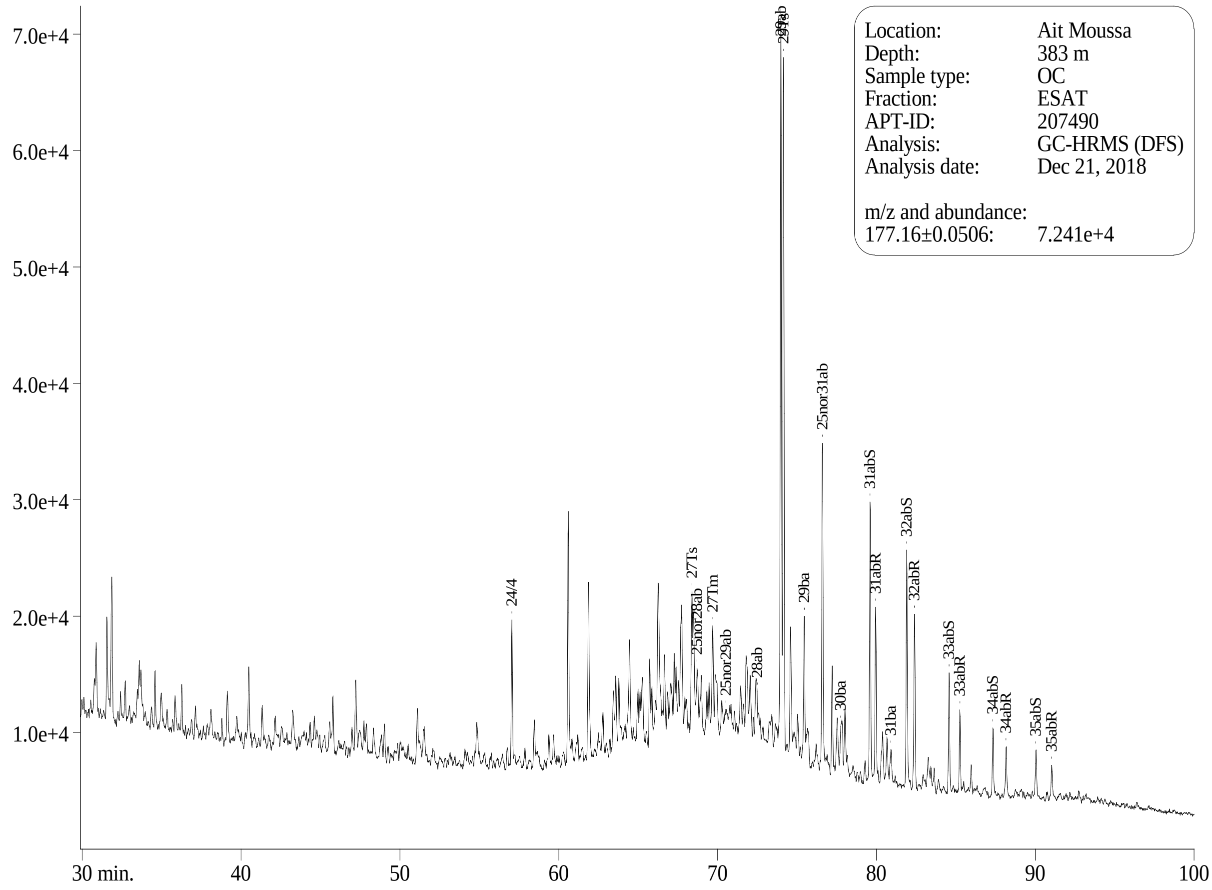
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
231.21±0.0661: 3.984e+4



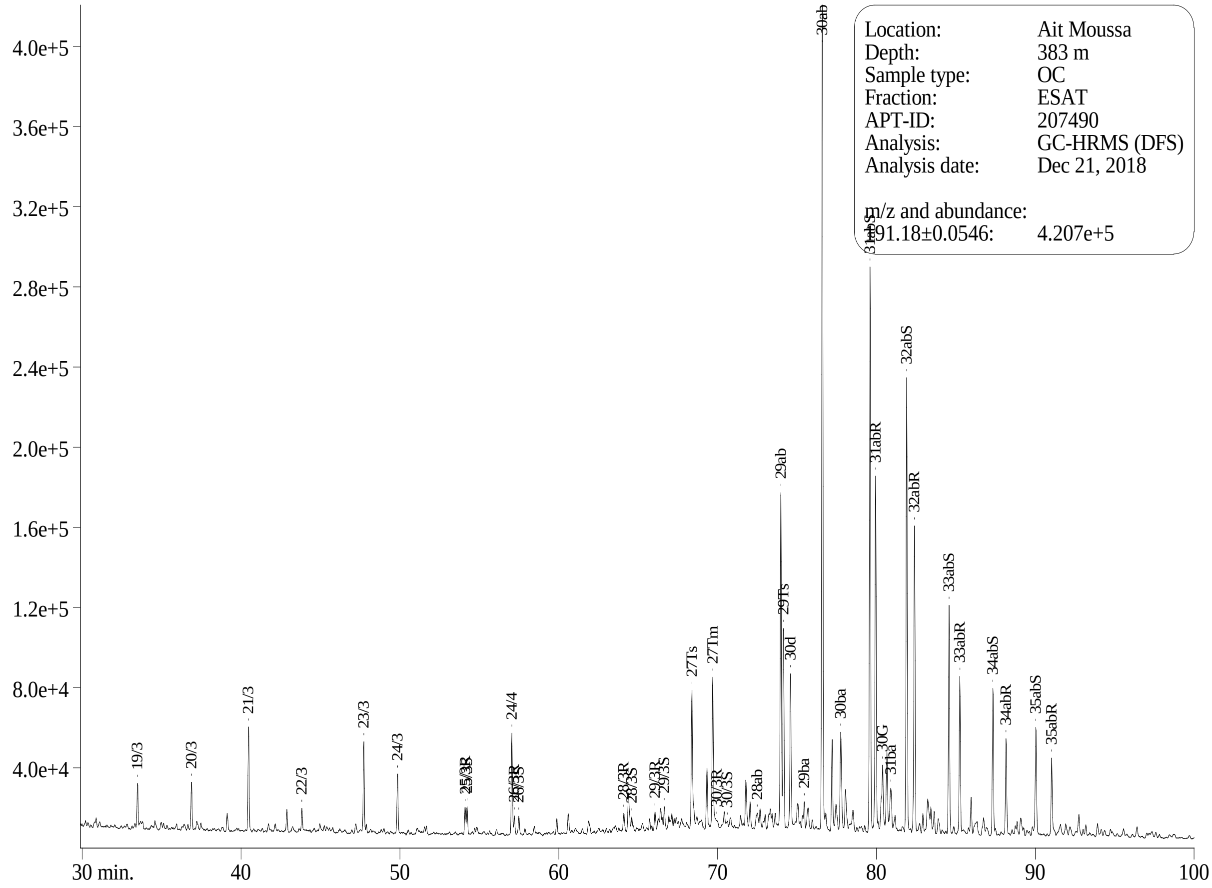
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: ESAT
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
259.24±0.0741: 7.774e+4



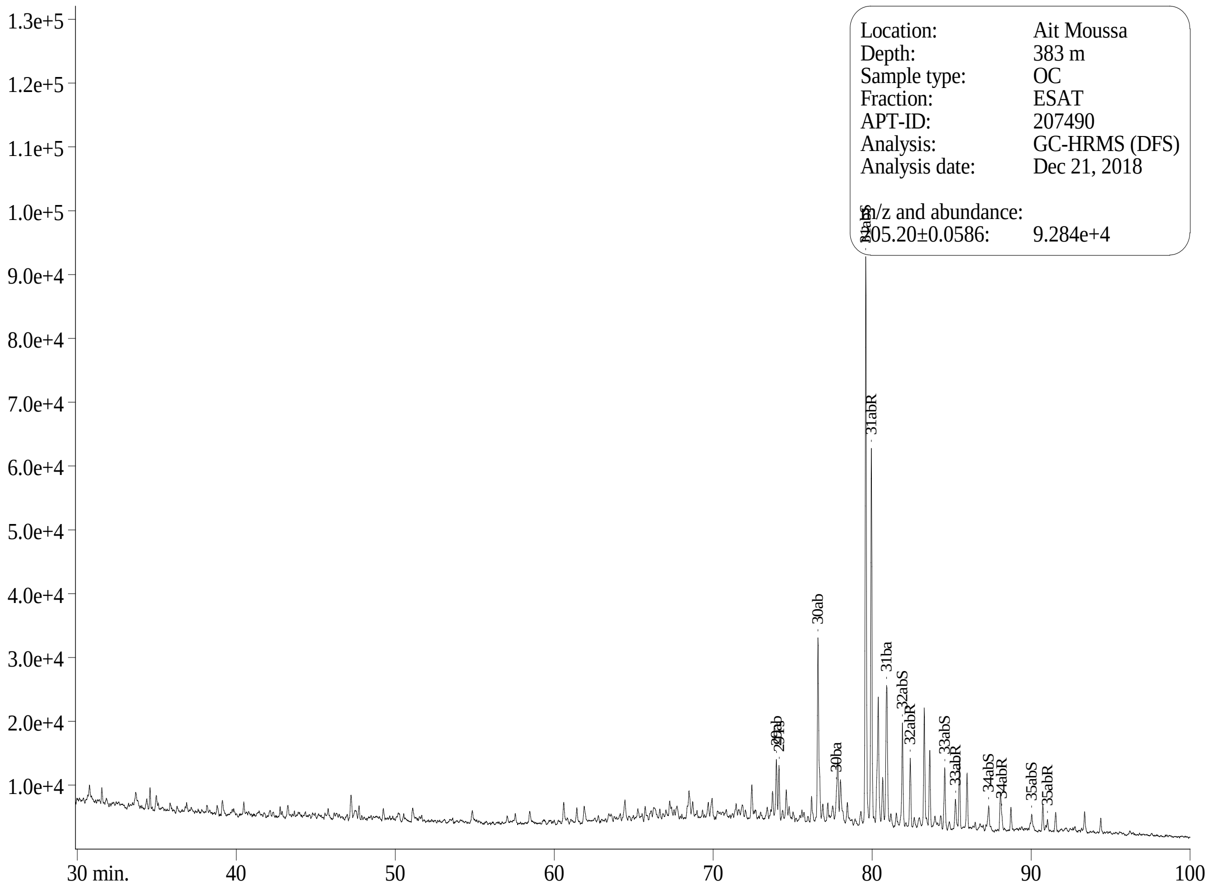
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

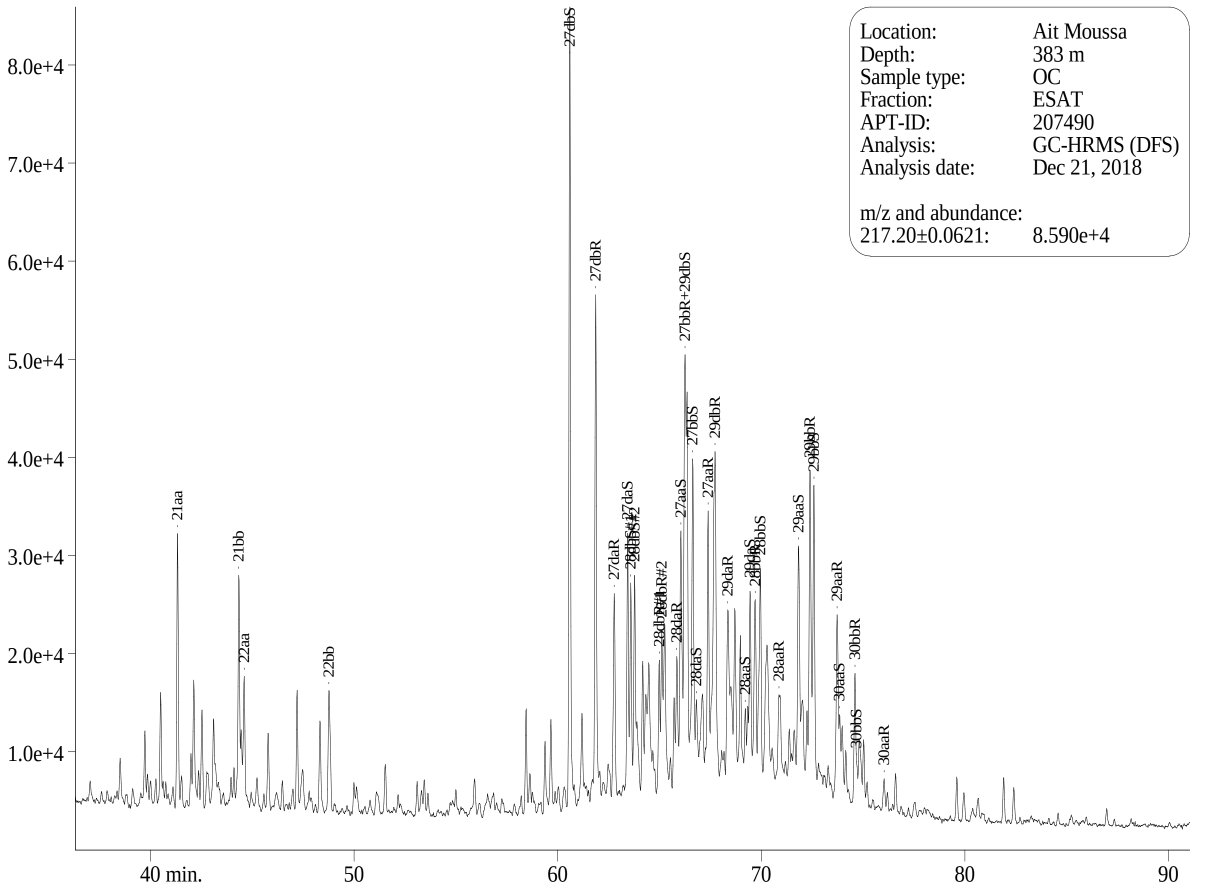
m/z and abundance:
177.16±0.0506: 7.241e+4

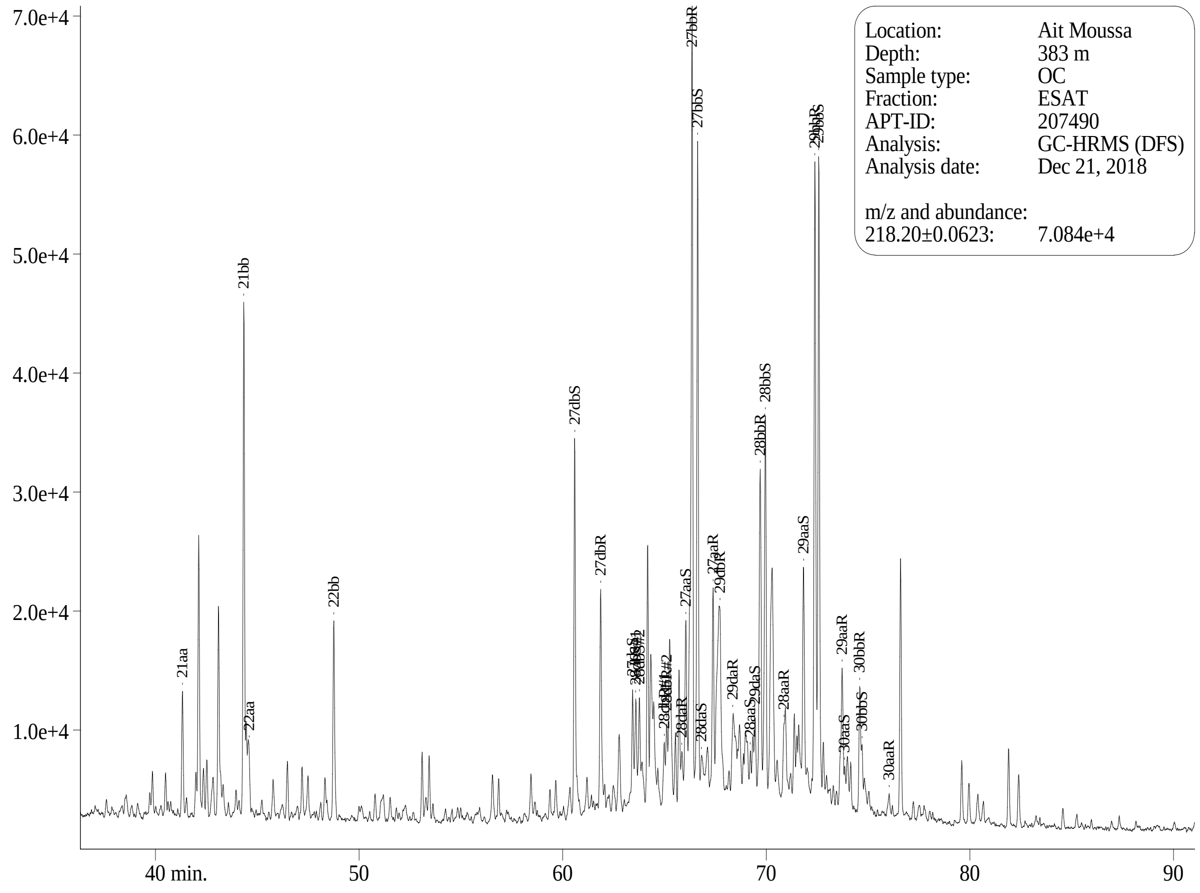


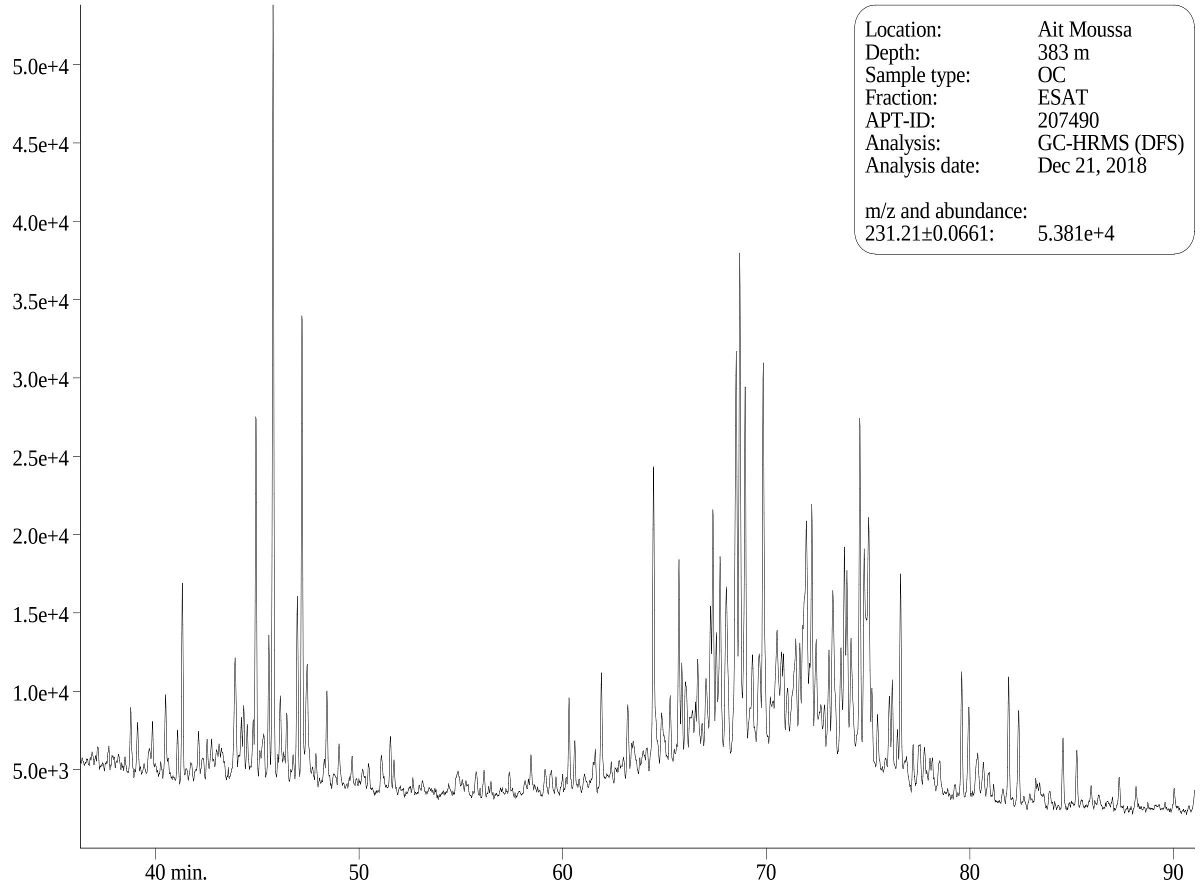
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

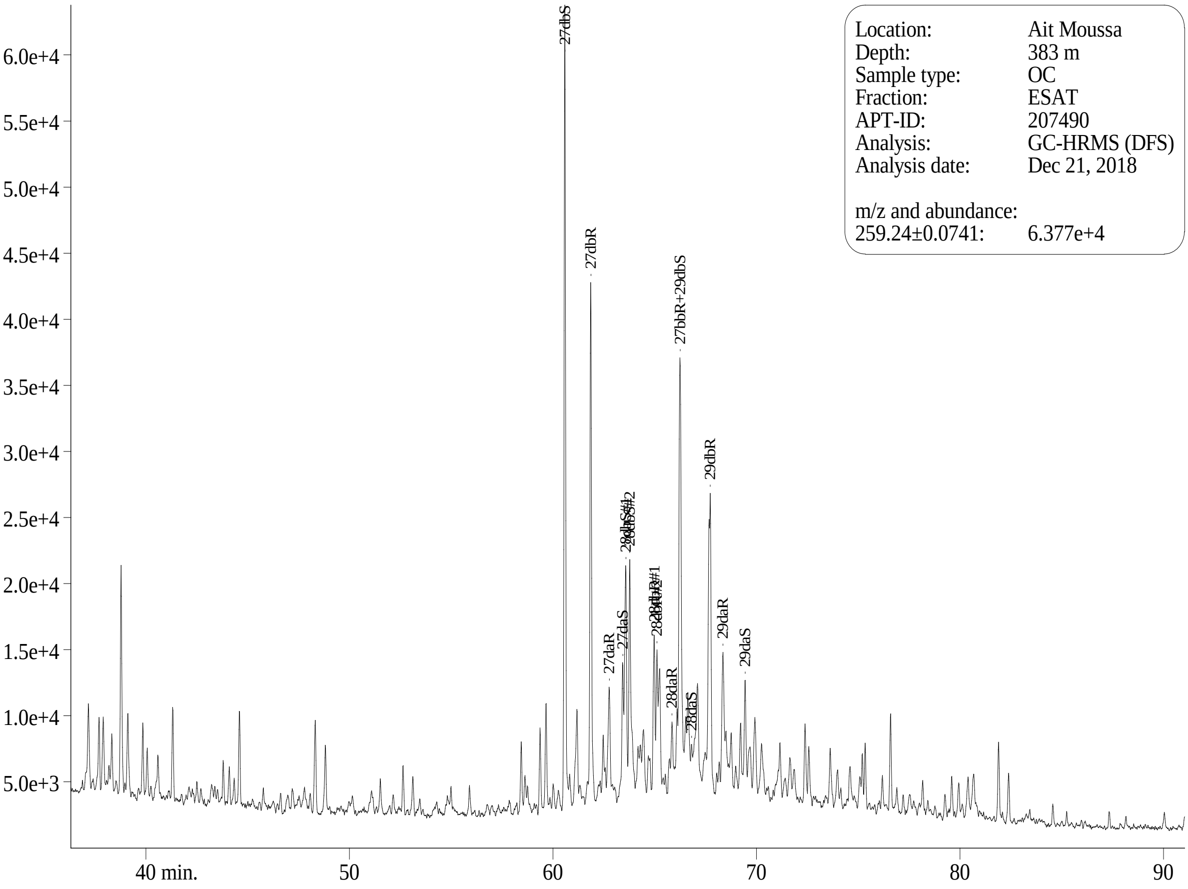
m/z and abundance:
191.18±0.0546: 4.207e+5


1.3e+5
1.2e+5
1.1e+5
1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
30 min.
40
50
60
70
80
90
100
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
205.20±0.0586: 9.284e+4
29ab
30ab
30ba
31abS
31abR
31ba
32abS
32abR
33abS
33abR
34abS
34abR
35abS
35abR


8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
40 min.
50
60
70
80
90
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
217.20±0.0621: 8.590e+4
21aa
21bb
22aa
22bb
27dbS
27dbR
27daR
28dbS#1
27daS
28dbS#2
28dbR#1
28dbR#2
28daR
27aaS
27bbR+29dbS
27bbS
28daS
27aaR
29dbR
29daR
28aaS
29daS
28bbR
28bbS
28aaR
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR


Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
218.20±0.0623: 7.084e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
40 min.
50
60
70
80
90
21aa
21bb
22aa
22bb
27dbS
27dbR
27aaS
27bbR
27bbS
27aaR
29dbR
28daR
28daS
28dbS
28dbR
28bbR
28bbS
28aaS
28aaR
29daR
29daS
29aaS
29bbR
29bbS
29aaR
30aaS
30bbR
30bbS
30aaR

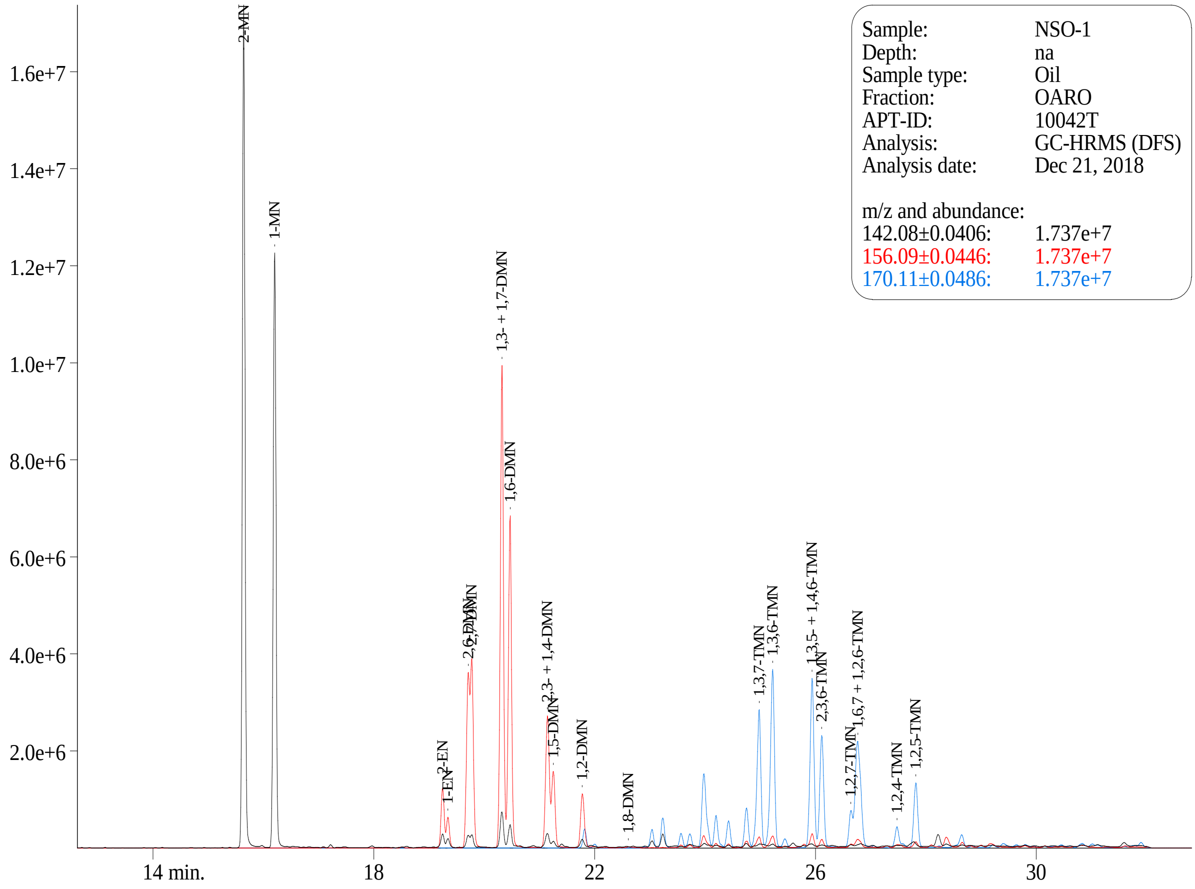

Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.21±0.0661: 5.381e+4
5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
40 min.
50
60
70
80
90



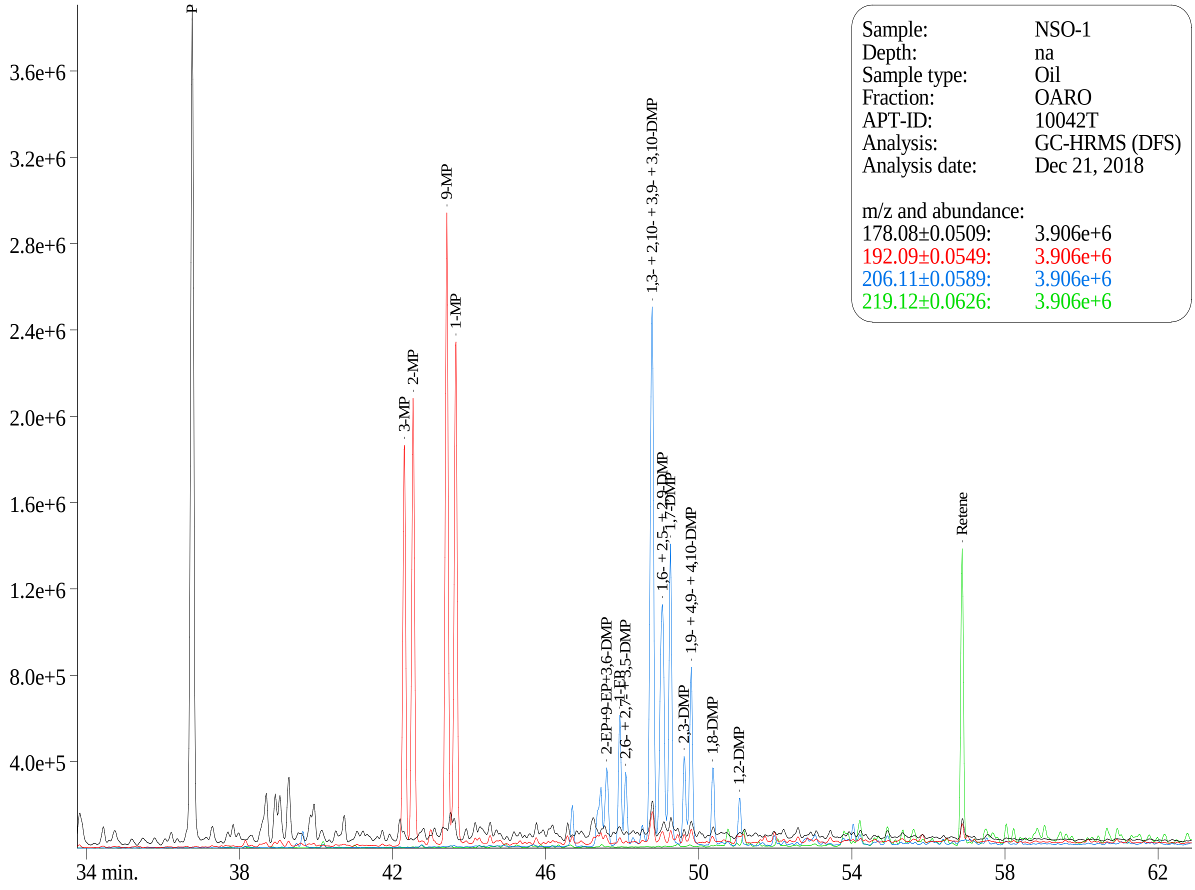
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: ESAT
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
259.24±0.0741: 6.377e+4

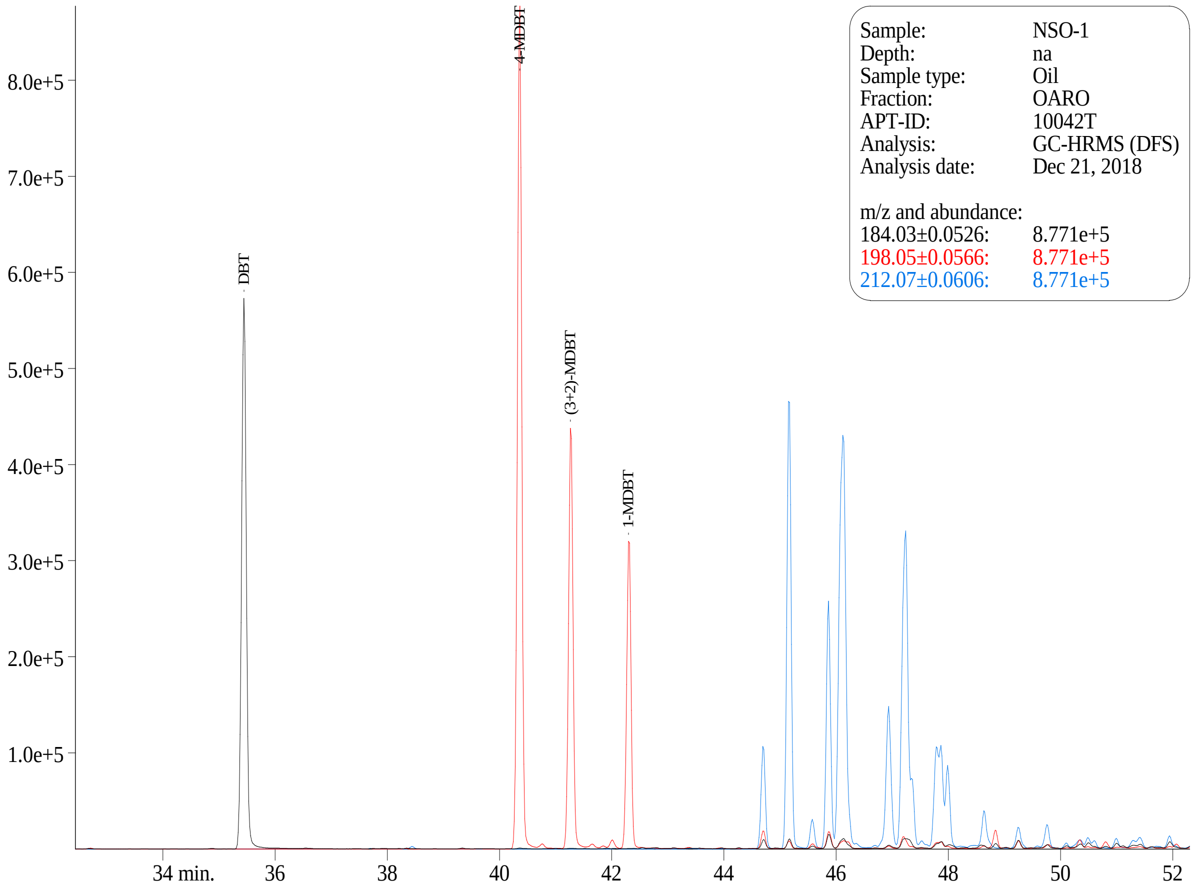
GC-MS Chromatograms of Aromatic Hydrocarbons

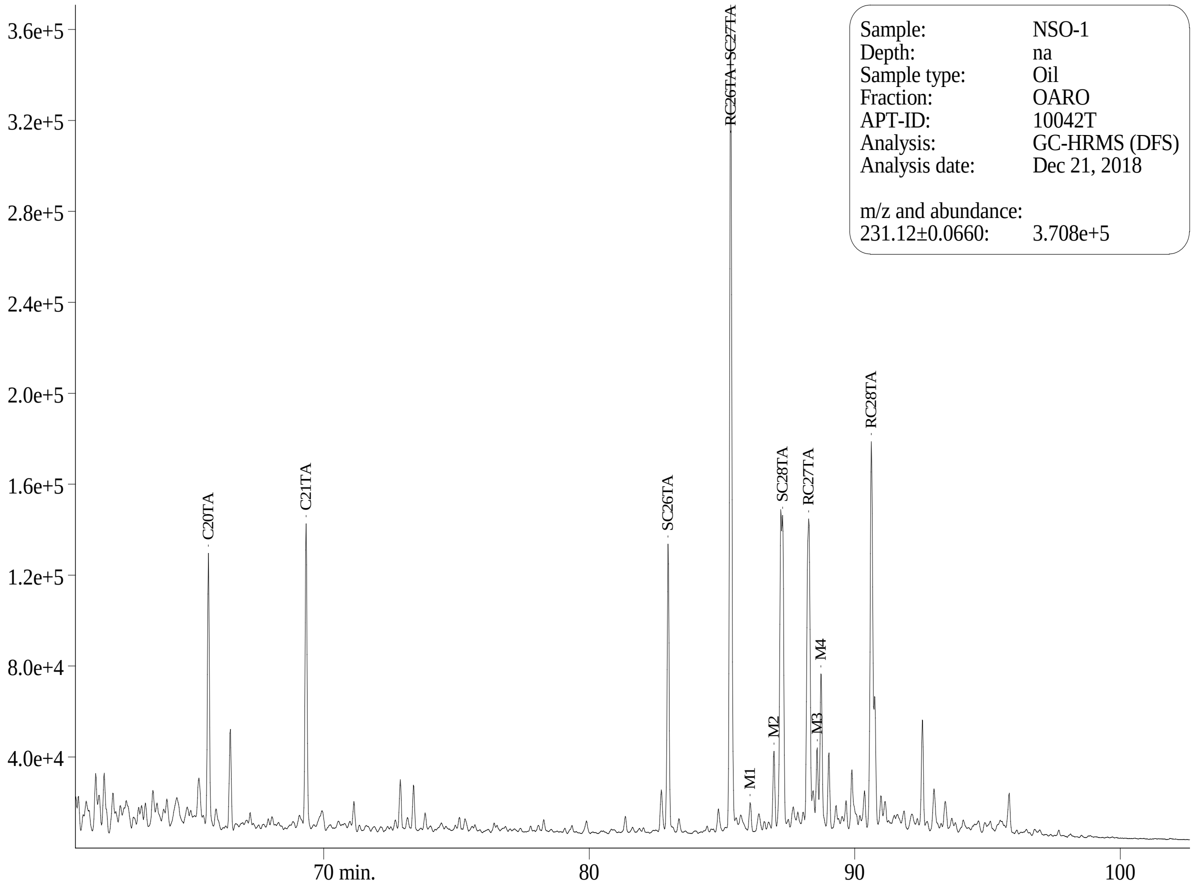


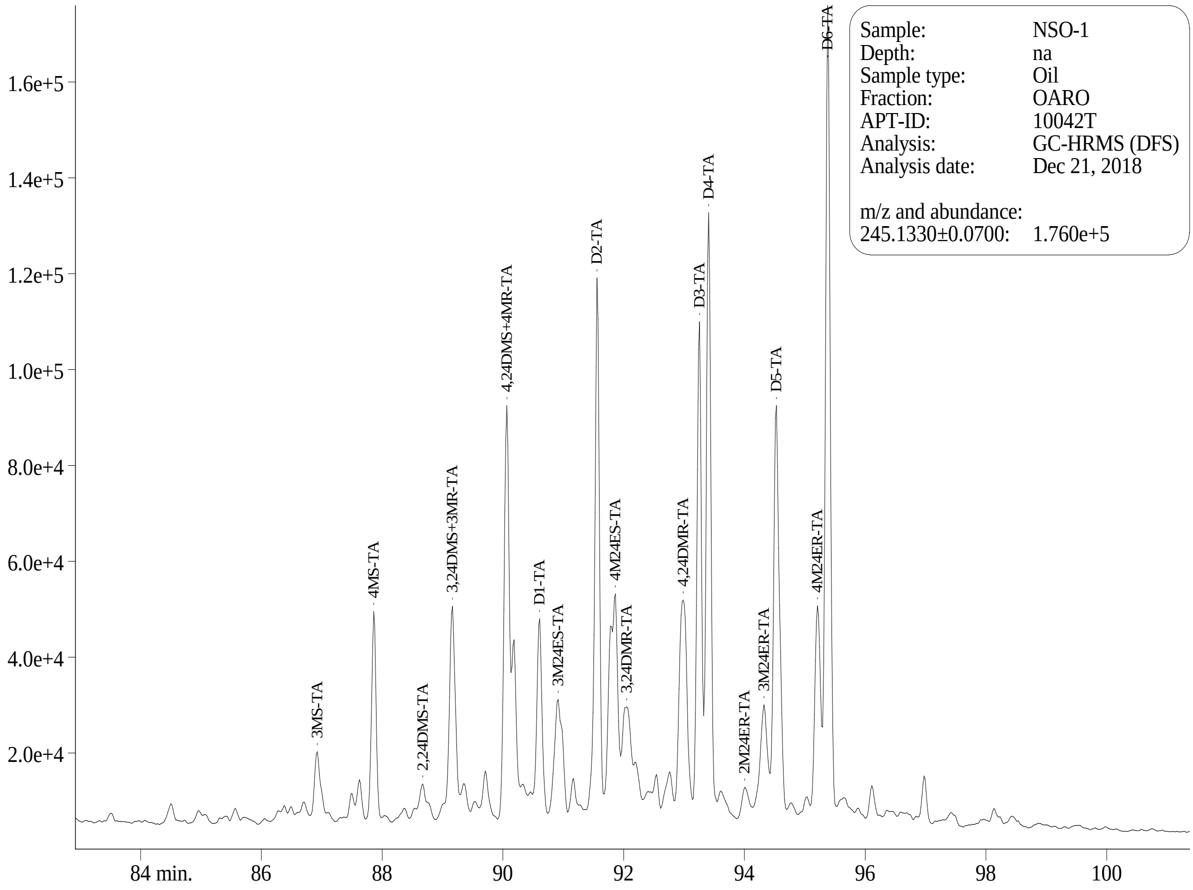
1.6e+7
1.4e+7
1.2e+7
1.0e+7
8.0e+6
6.0e+6
4.0e+6
2.0e+6
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Sample: NSO-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 10042T
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
142.08±0.0406: 1.737e+7
156.09±0.0446: 1.737e+7
170.11±0.0486: 1.737e+7



3.6e+6
3.2e+6
2.8e+6
2.4e+6
2.0e+6
1.6e+6
1.2e+6
8.0e+5
4.0e+5
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Sample: NSO-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 10042T
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
178.08±0.0509: 3.906e+6
192.09±0.0549: 3.906e+6
206.11±0.0589: 3.906e+6
219.12±0.0626: 3.906e+6

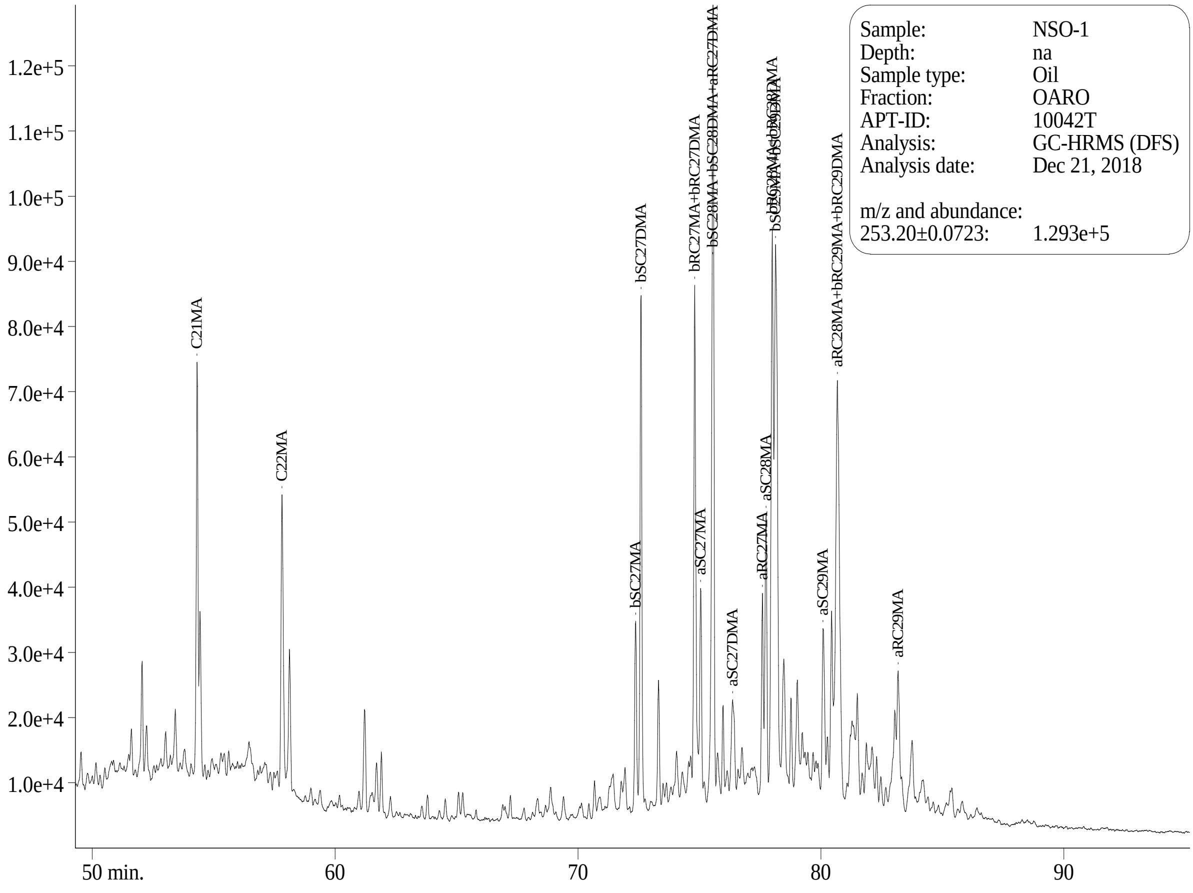

Sample: NSO-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 10042T
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
184.03±0.0526: 8.771e+5
198.05±0.0566: 8.771e+5
212.07±0.0606: 8.771e+5
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
34 min.
36
38
40
42
44
46
48
50
52


Sample: NSO-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 10042T
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.12±0.0660: 3.708e+5
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
70 min.
80
90
100



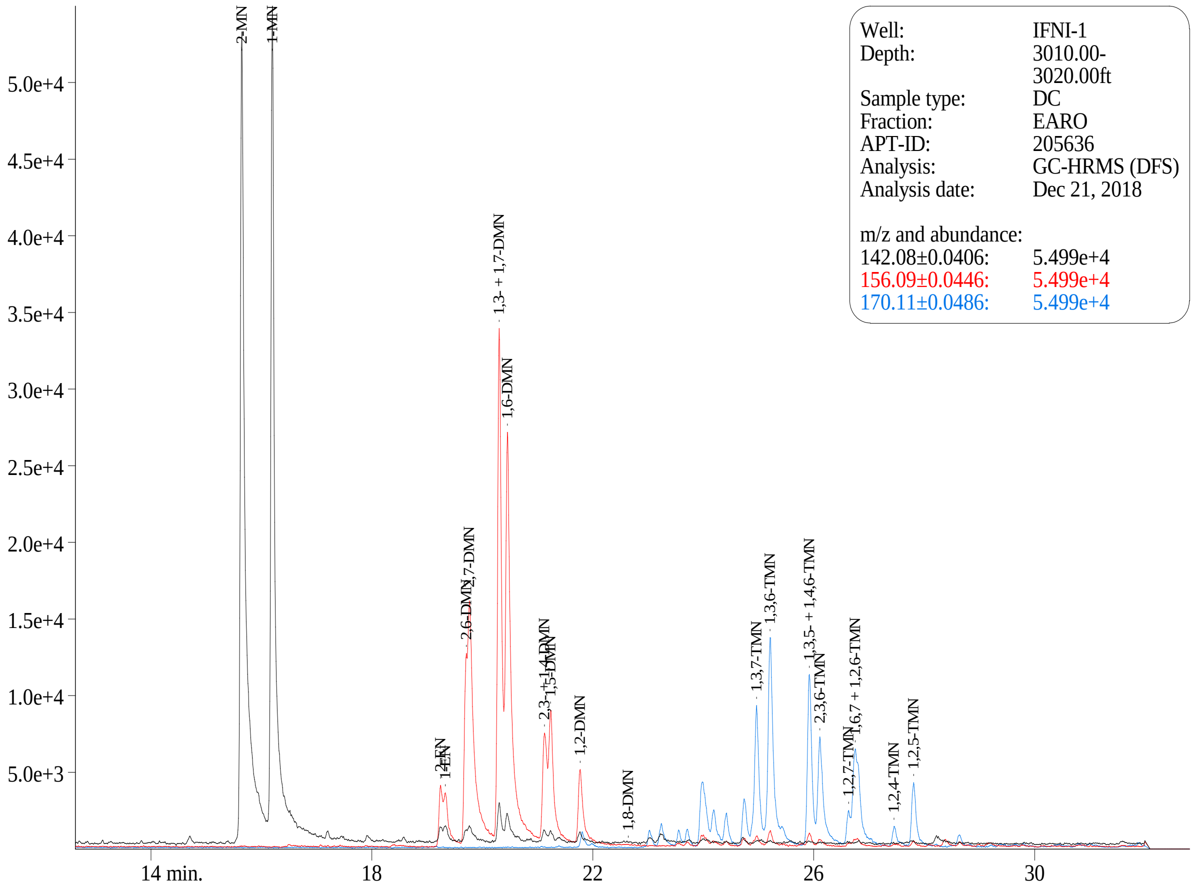
Sample: NSO-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 10042T
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

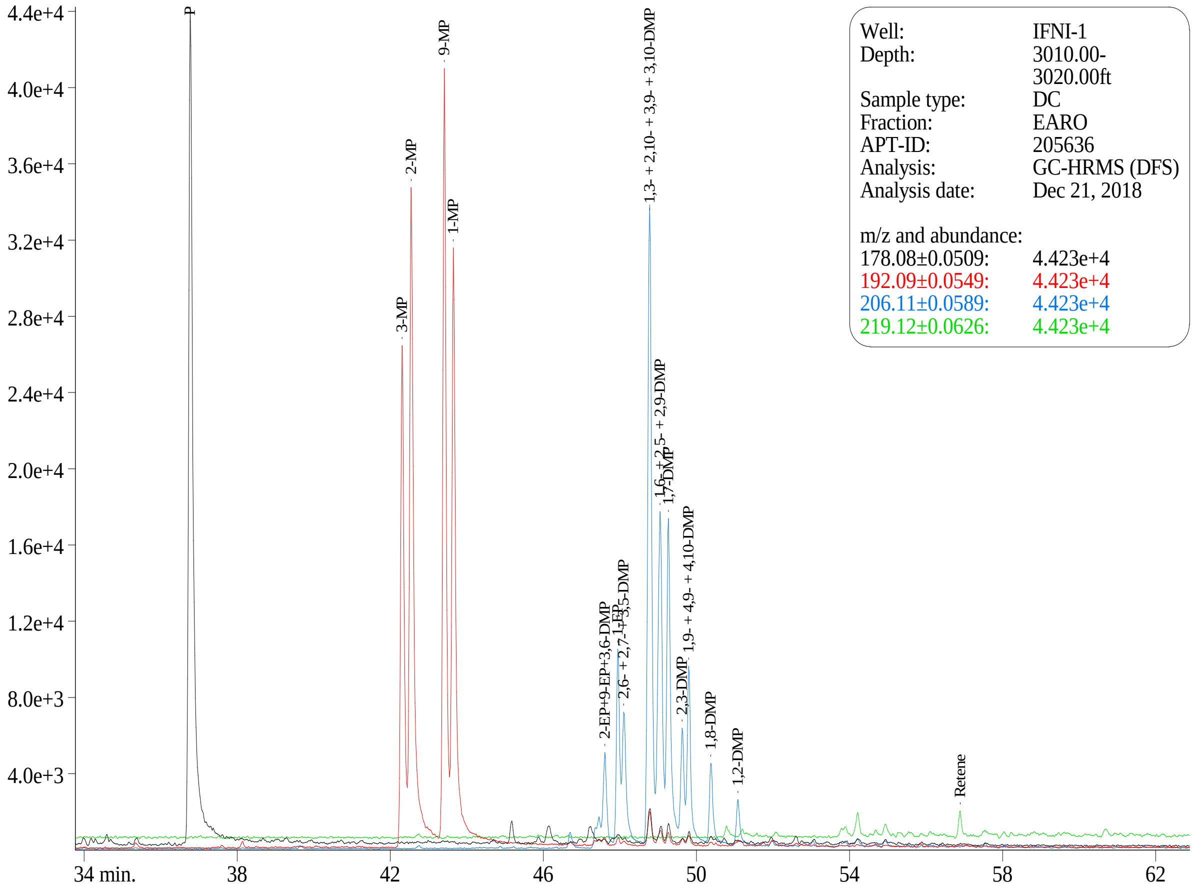
m/z and abundance:
245.1330±0.0700: 1.760e+5

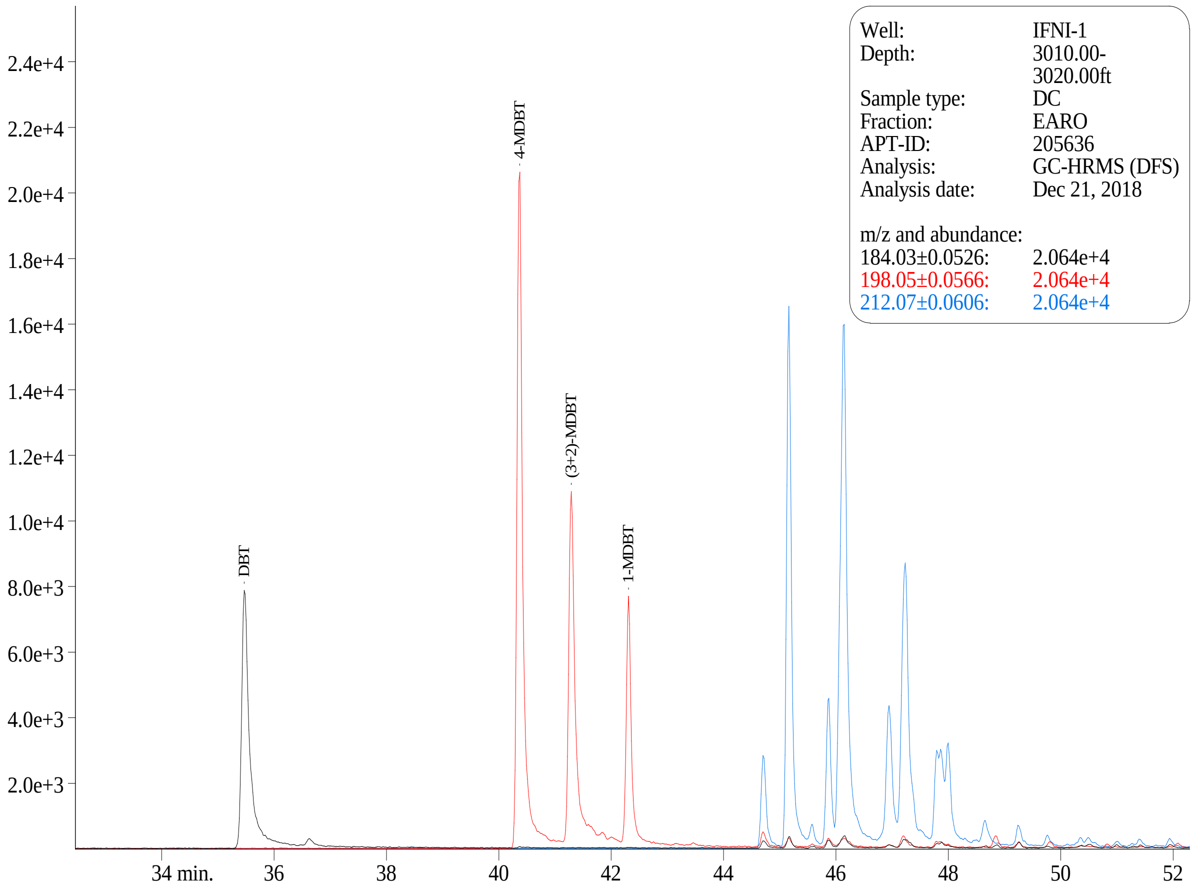


Sample: NSO-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 10042T
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
253.20±0.0723: 1.293e+5

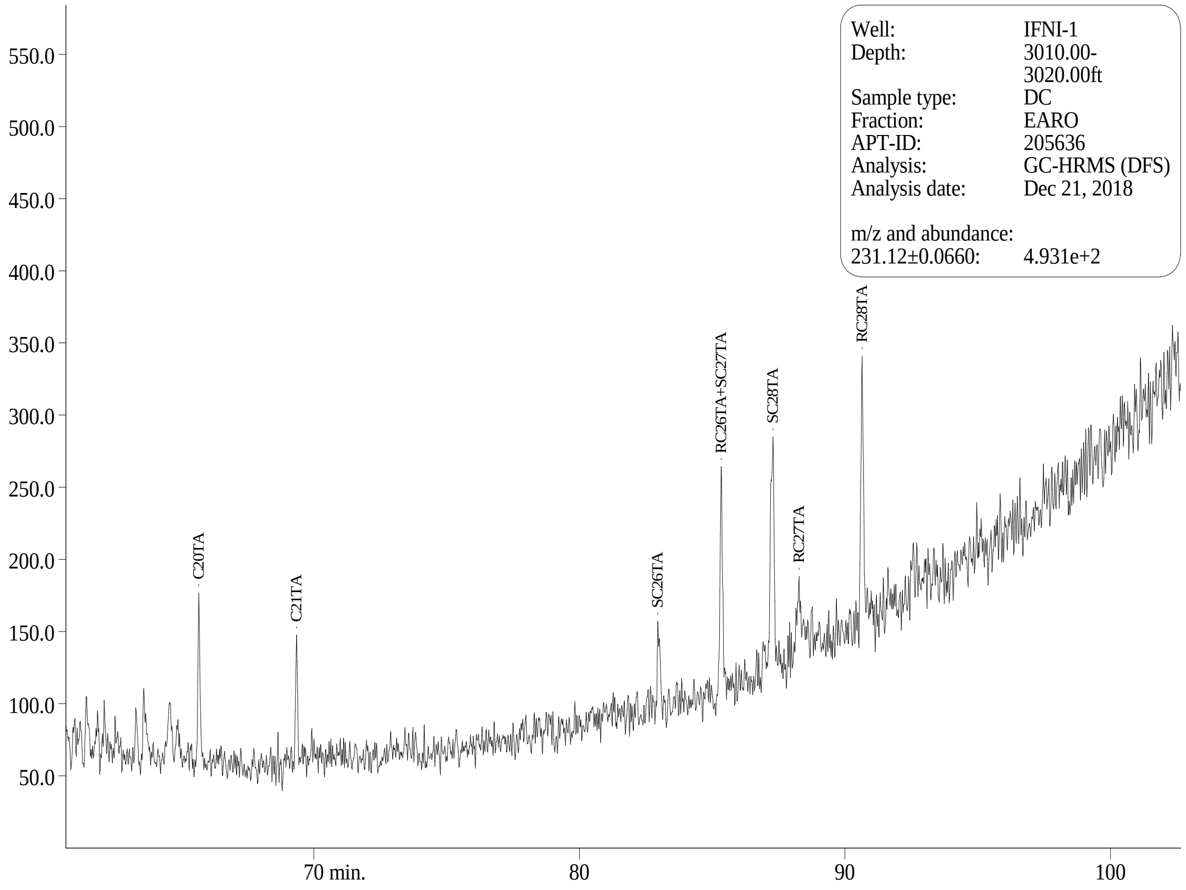

2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
14 min.
18
22
26
30
Well: IFNI-1
Depth: 3010.00-3020.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205636
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
142.08±0.0406: 5.499e+4
156.09±0.0446: 5.499e+4
170.11±0.0486: 5.499e+4


P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
2,6- + 2,7- + 3,5-DMP
1-EP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
1,9- + 4,9- + 4,10-DMP
2,3-DMP
1,8-DMP
1,2-DMP
Retene
4.4e+4
4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
34 min.
38
42
46
50
54
58
62
Well: IFNI-1
Depth: 3010.00-3020.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205636
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
178.08±0.0509: 4.423e+4
192.09±0.0549: 4.423e+4
206.11±0.0589: 4.423e+4
219.12±0.0626: 4.423e+4



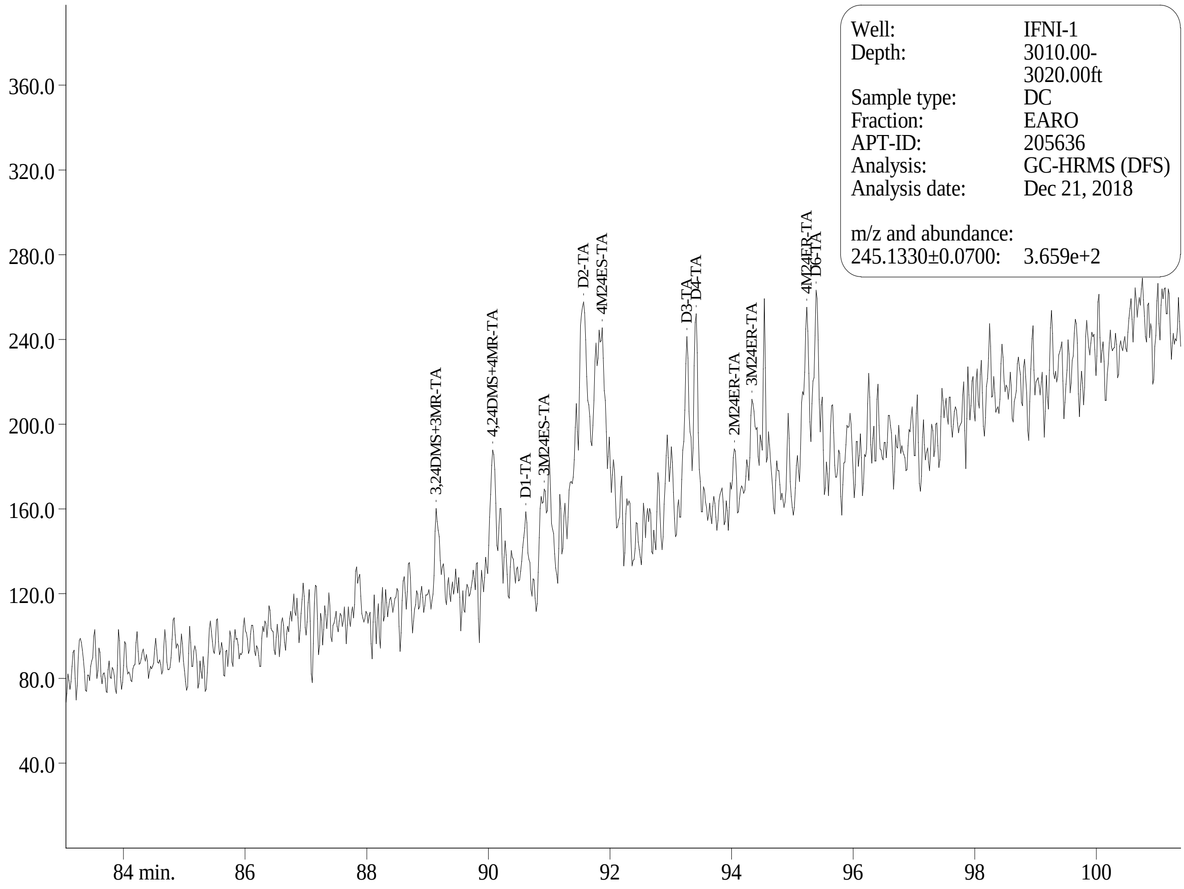
Well: IFNI-1
Depth: 3010.00-3020.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205636
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

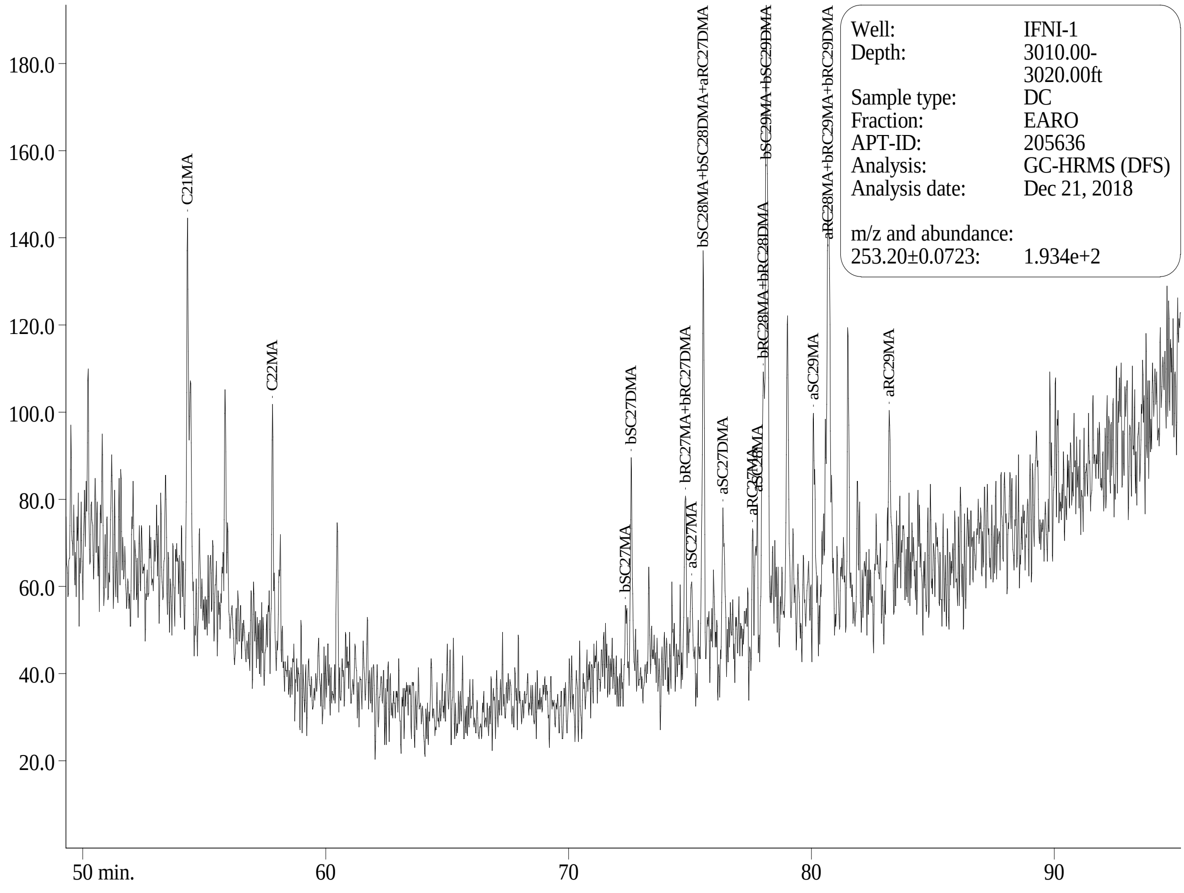
m/z and abundance:
184.03±0.0526: 2.064e+4
198.05±0.0566: 2.064e+4
212.07±0.0606: 2.064e+4

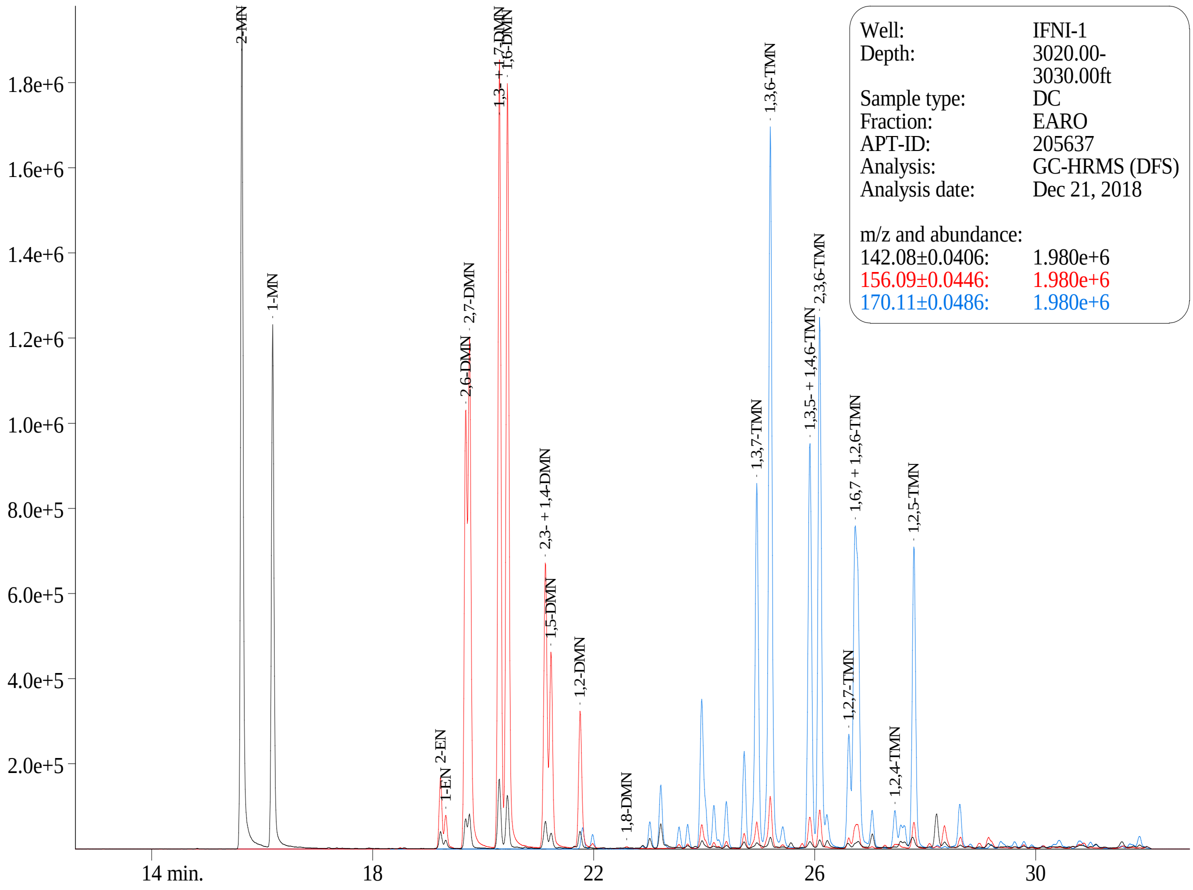


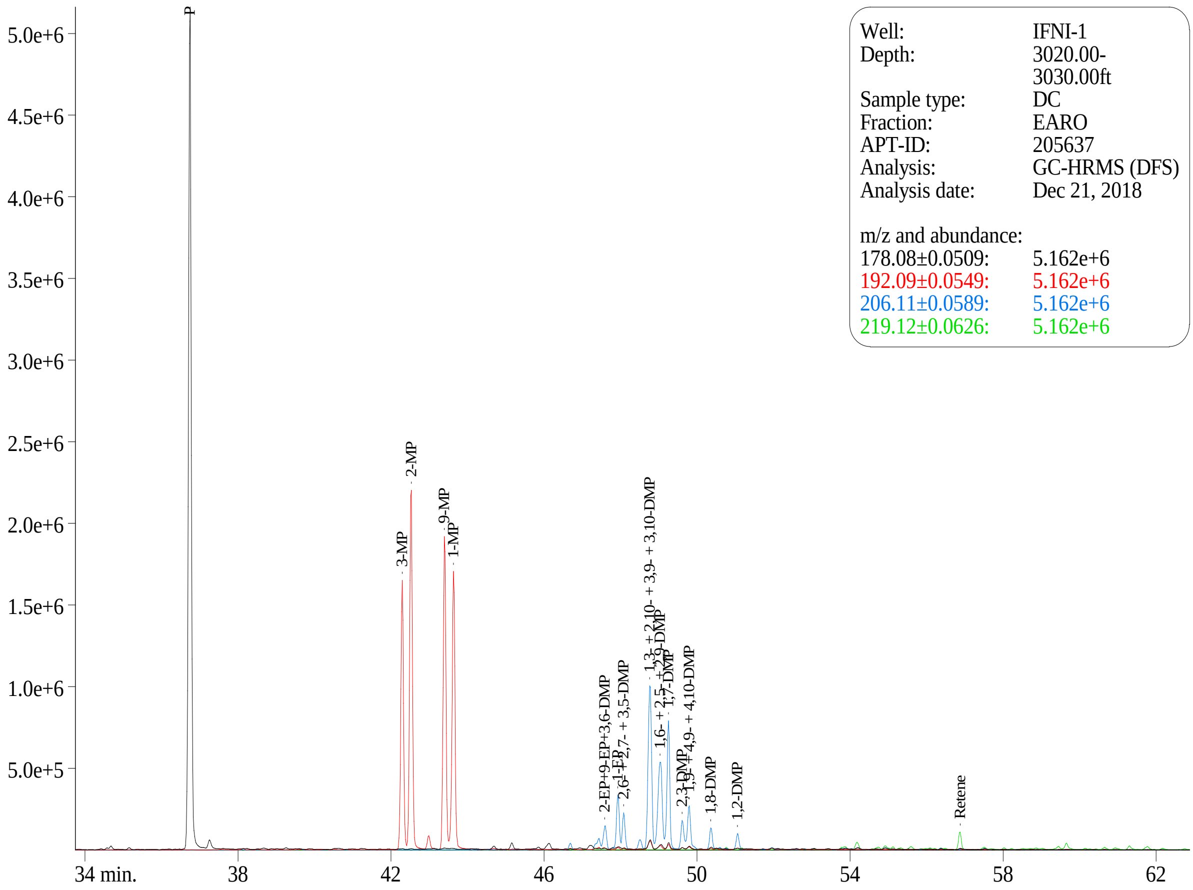
Well: IFNI-1
Depth: 3010.00-3020.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205636
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

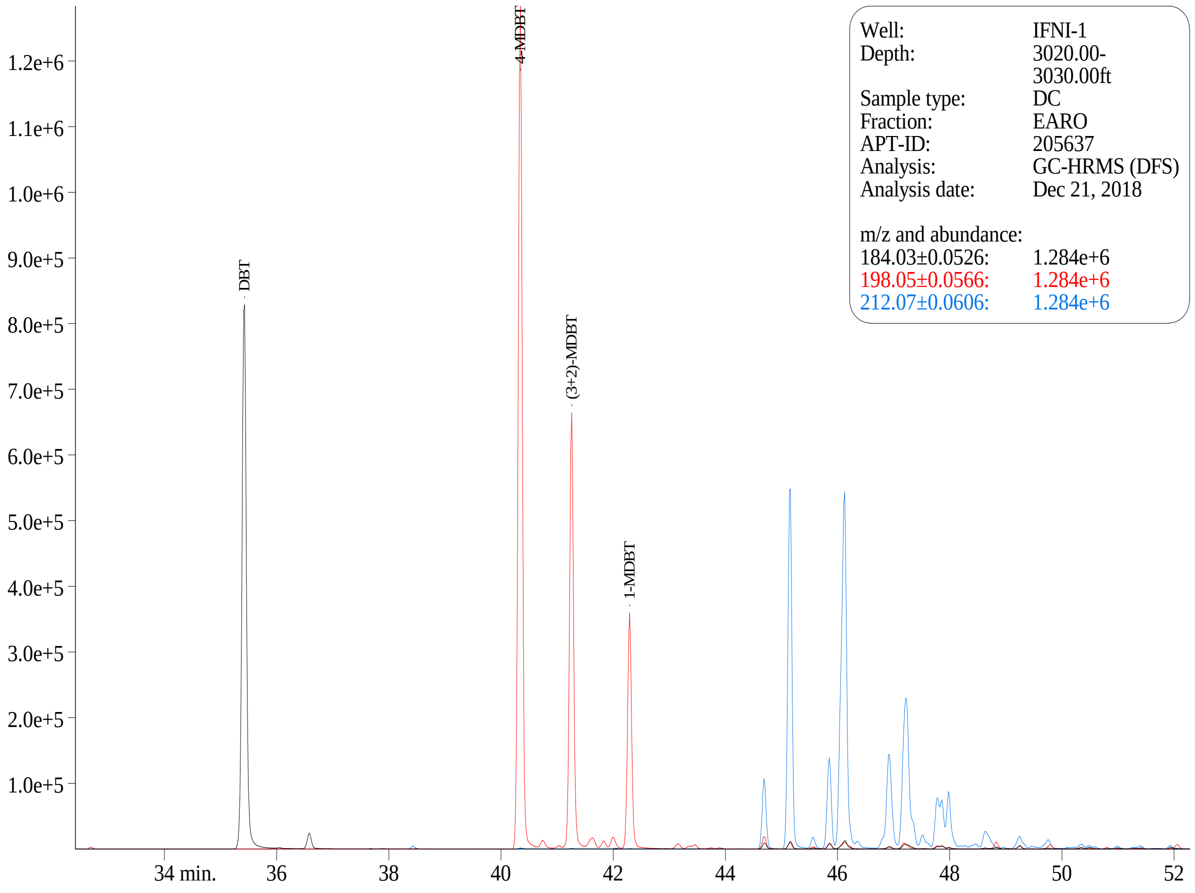
m/z and abundance:
231.12±0.0660: 4.931e+2


Well: IFNI-1
Depth: 3010.00-3020.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205636
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
245.1330±0.0700: 3.659e+2
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
4M24ER-TA
D6-TA
360.0
320.0
280.0
240.0
200.0
160.0
120.0
80.0
40.0
84 min.
86
88
90
92
94
96
98
100


Well: IFNI-1
Depth: 3010.00-3020.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205636
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
253.20±0.0723: 1.934e+2
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
50 min.
60
70
80
90

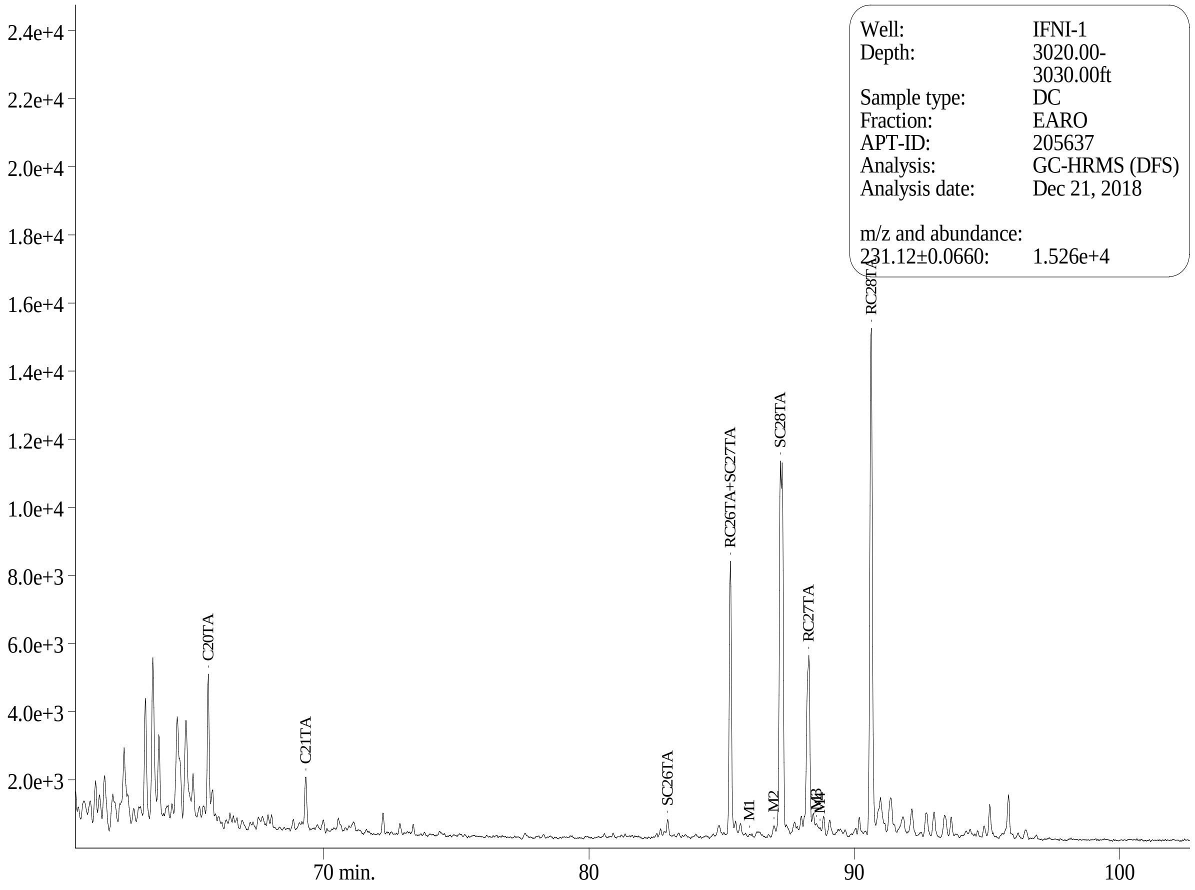

2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
1.8e+6
1.6e+6
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
14 min.
18
22
26
30
Well: IFNI-1
Depth: 3020.00-3030.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205637
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
142.08±0.0406: 1.980e+6
156.09±0.0446: 1.980e+6
170.11±0.0486: 1.980e+6


P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
2,6- + 2,7- + 3,5-DMP
1-EP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
5.0e+6
4.5e+6
4.0e+6
3.5e+6
3.0e+6
2.5e+6
2.0e+6
1.5e+6
1.0e+6
5.0e+5
34 min.
38
42
46
50
54
58
62
Well: IFNI-1
Depth: 3020.00-3030.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205637
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
178.08±0.0509: 5.162e+6
192.09±0.0549: 5.162e+6
206.11±0.0589: 5.162e+6
219.12±0.0626: 5.162e+6



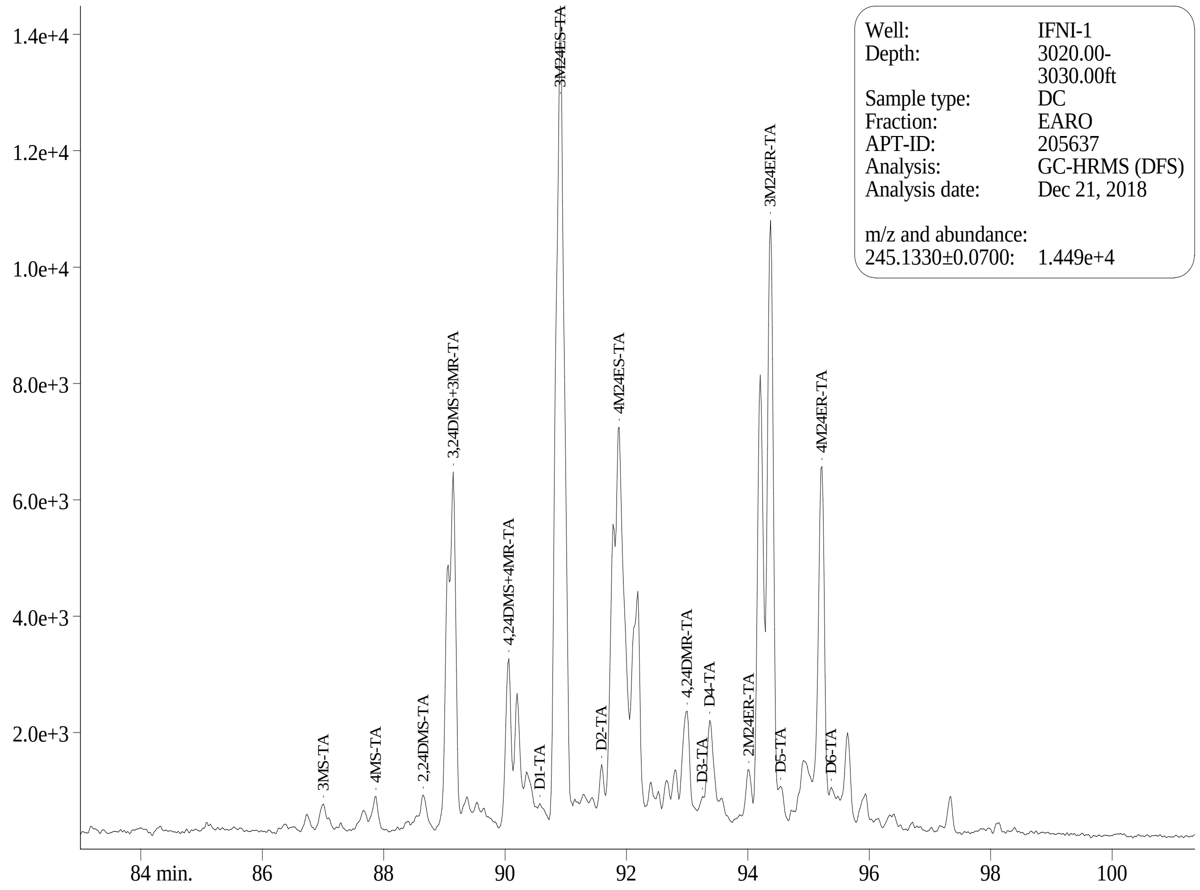
Well: IFNI-1
Depth: 3020.00-3030.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205637
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
184.03±0.0526: 1.284e+6
198.05±0.0566: 1.284e+6
212.07±0.0606: 1.284e+6



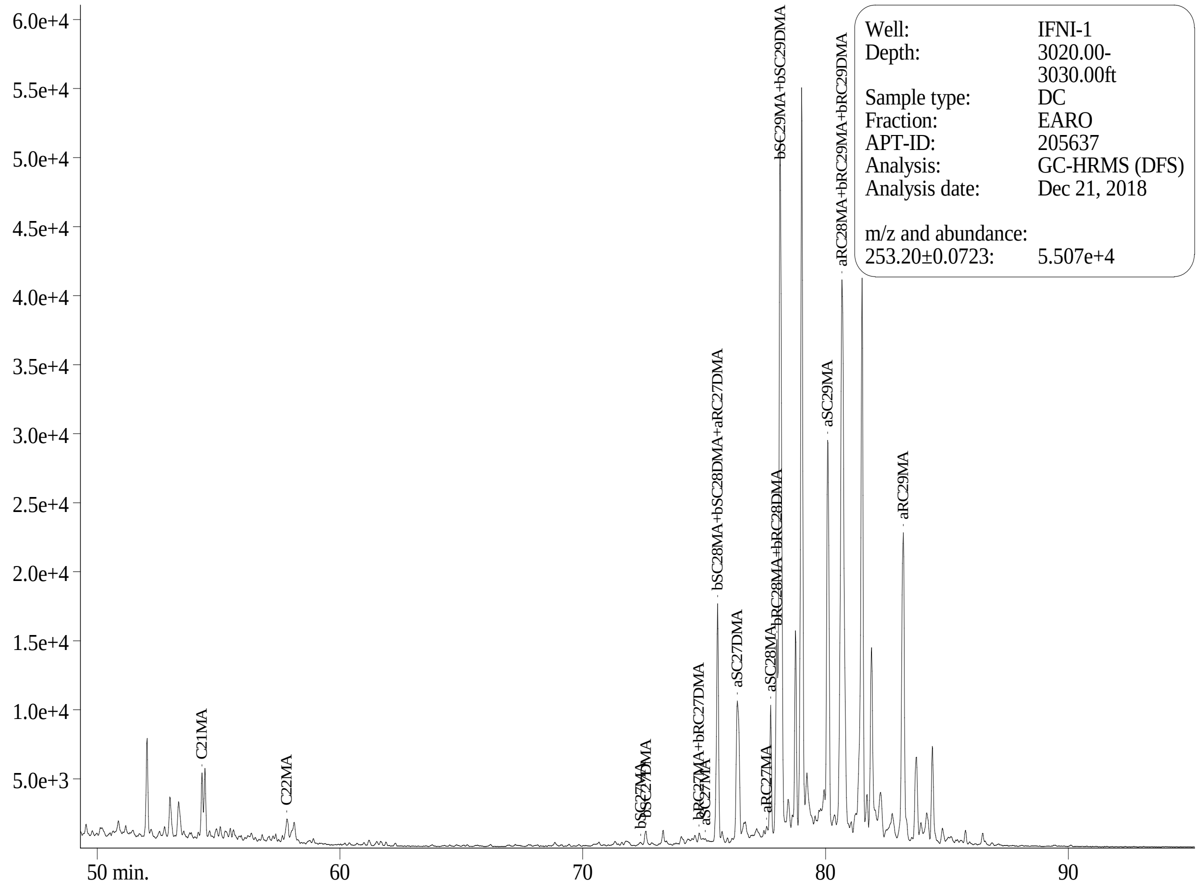
Well: IFNI-1
Depth: 3020.00-3030.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205637
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
231.12±0.0660: 1.526e+4



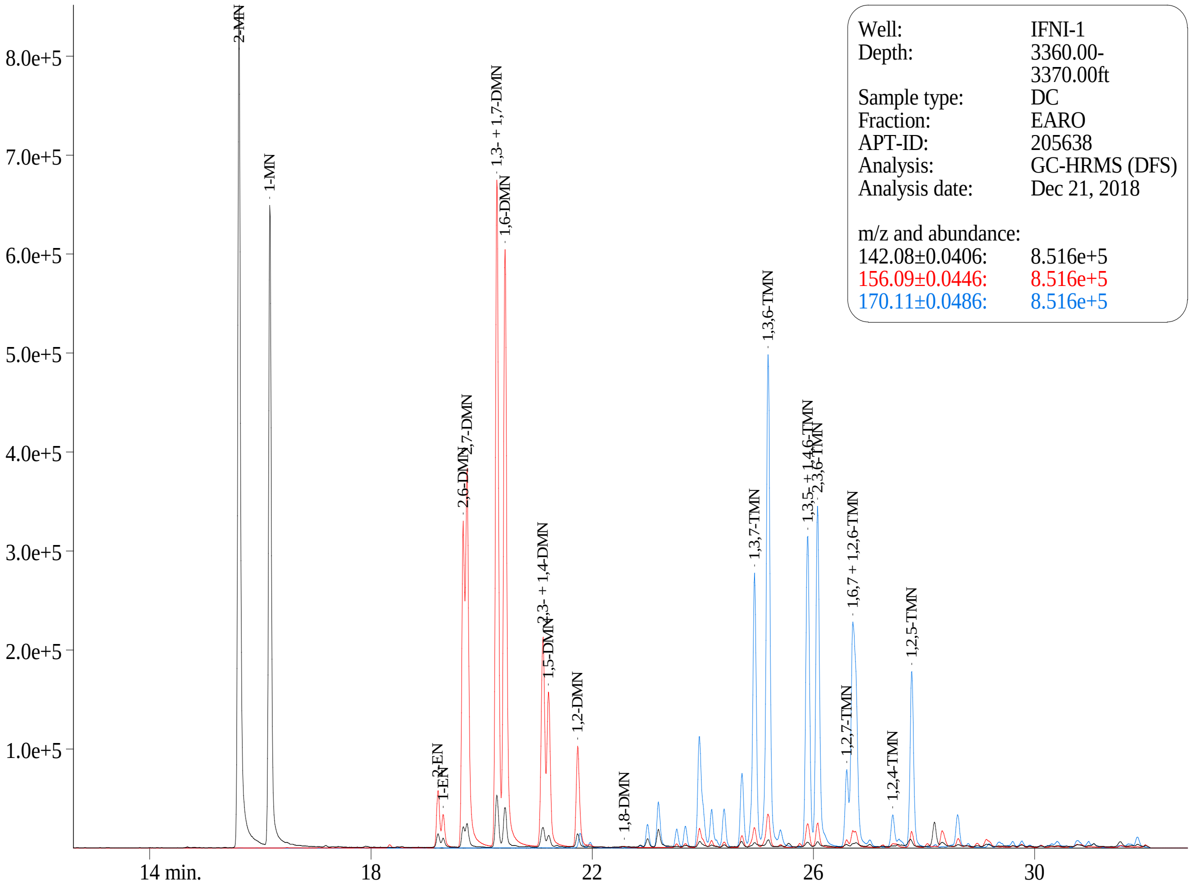
Well: IFNI-1
Depth: 3020.00-3030.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205637
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

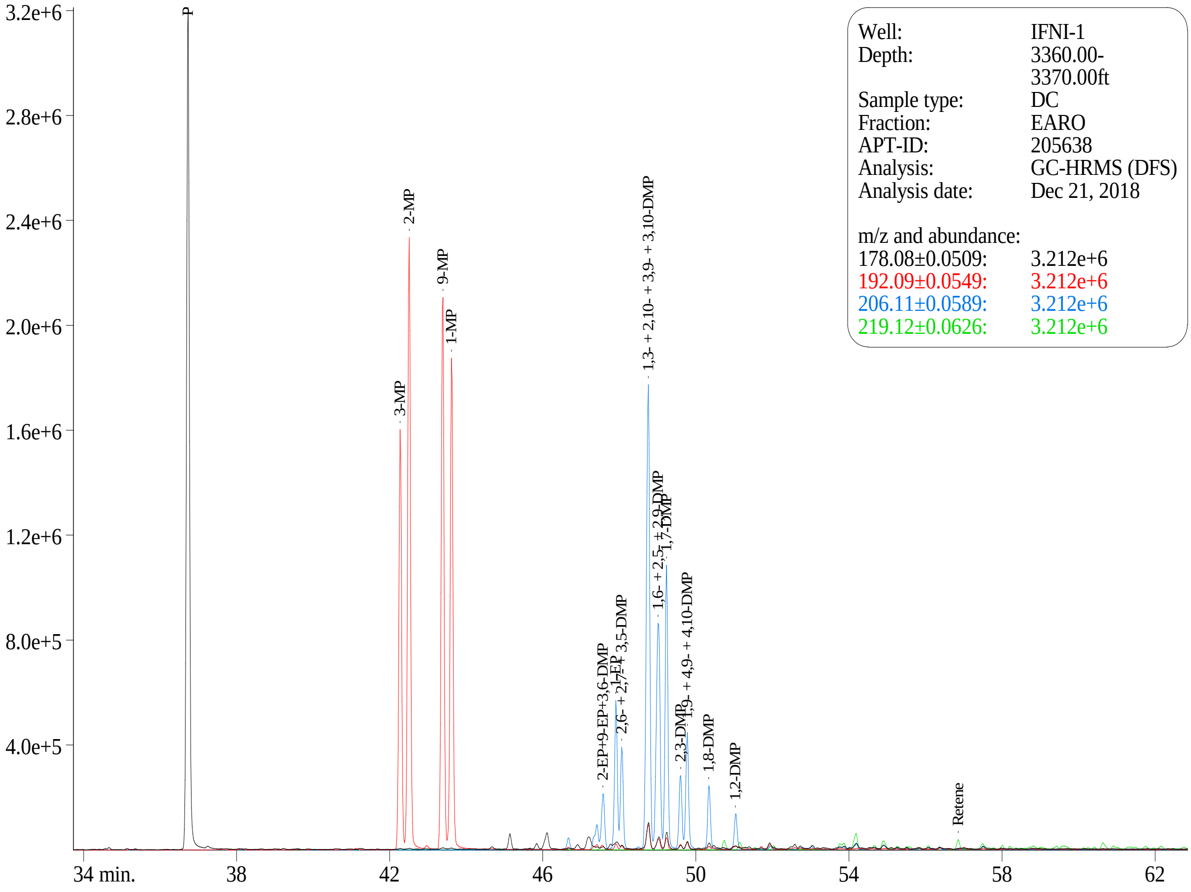
m/z and abundance:
245.1330±0.0700: 1.449e+4

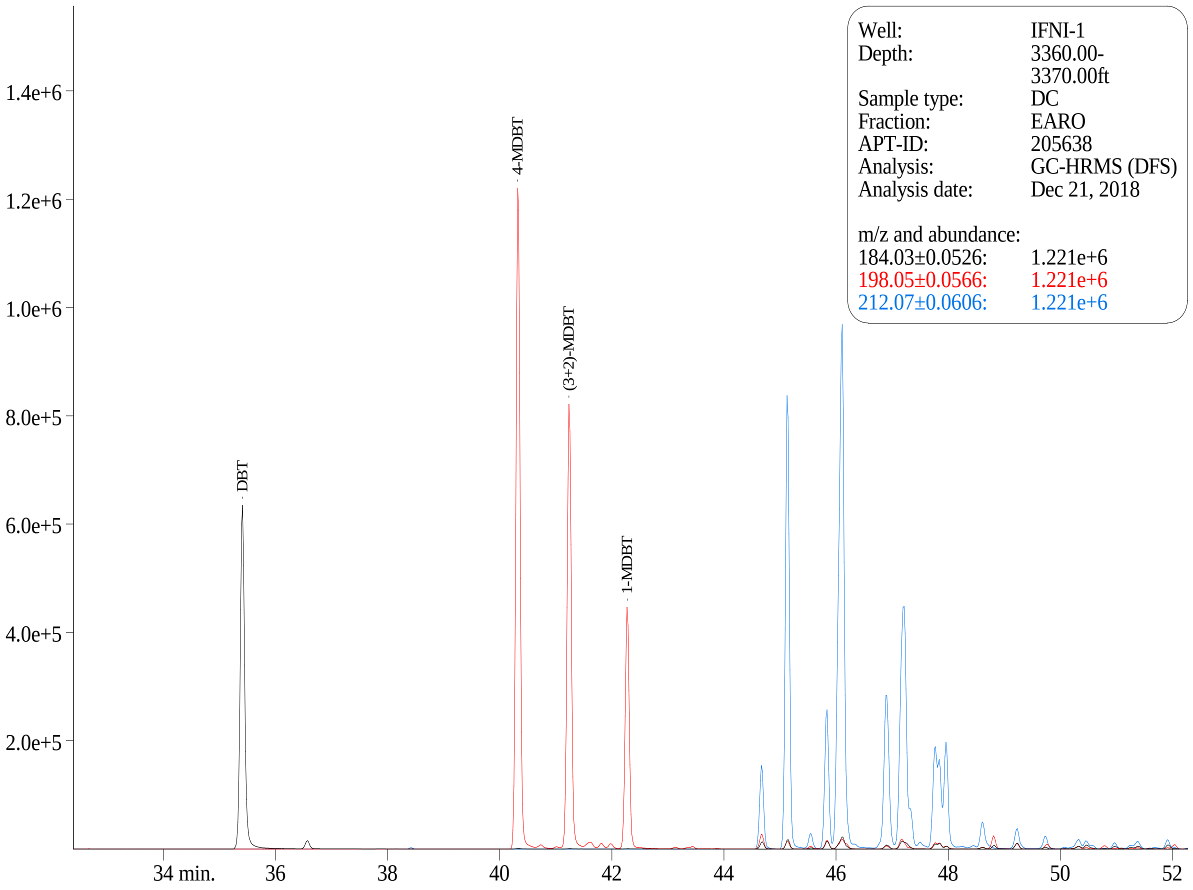


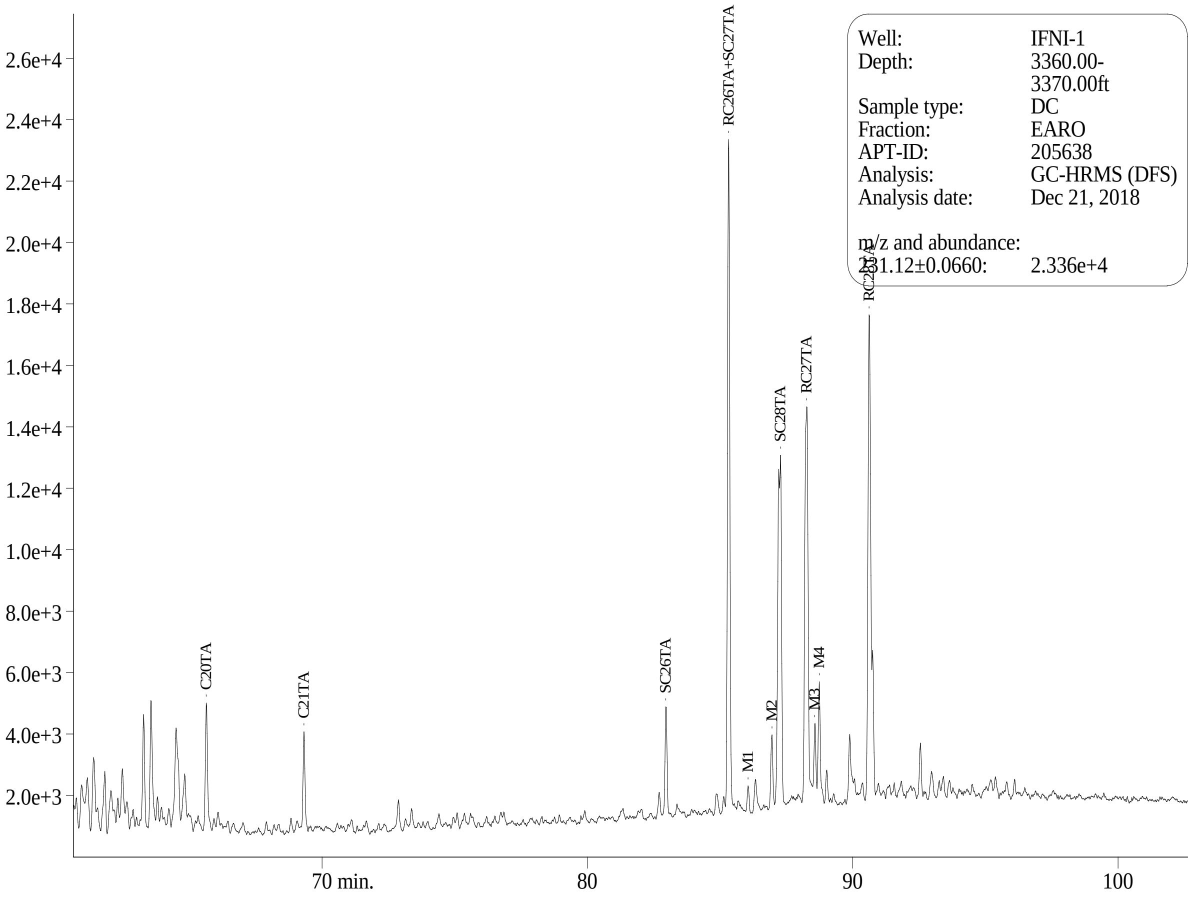
Well: IFNI-1
Depth: 3020.00-3030.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205637
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

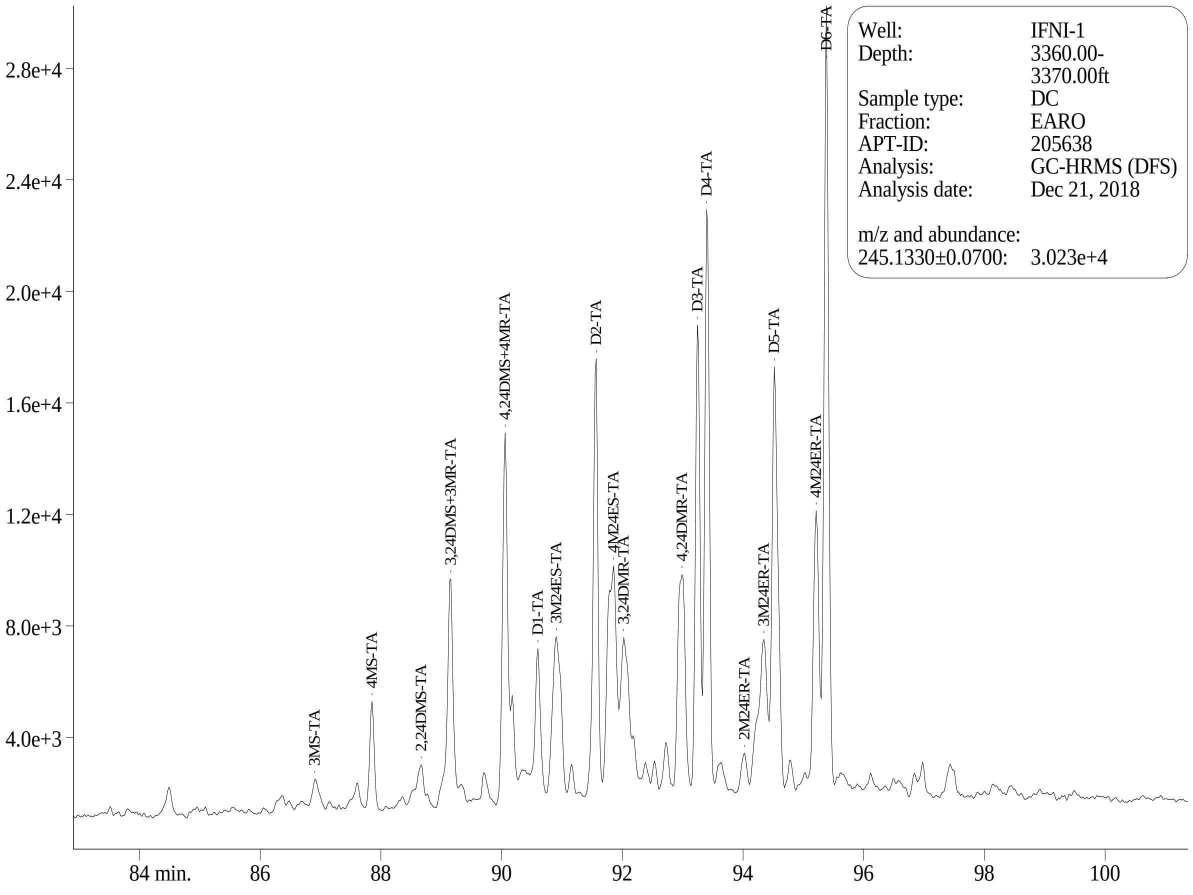
m/z and abundance:
253.20±0.0723: 5.507e+4

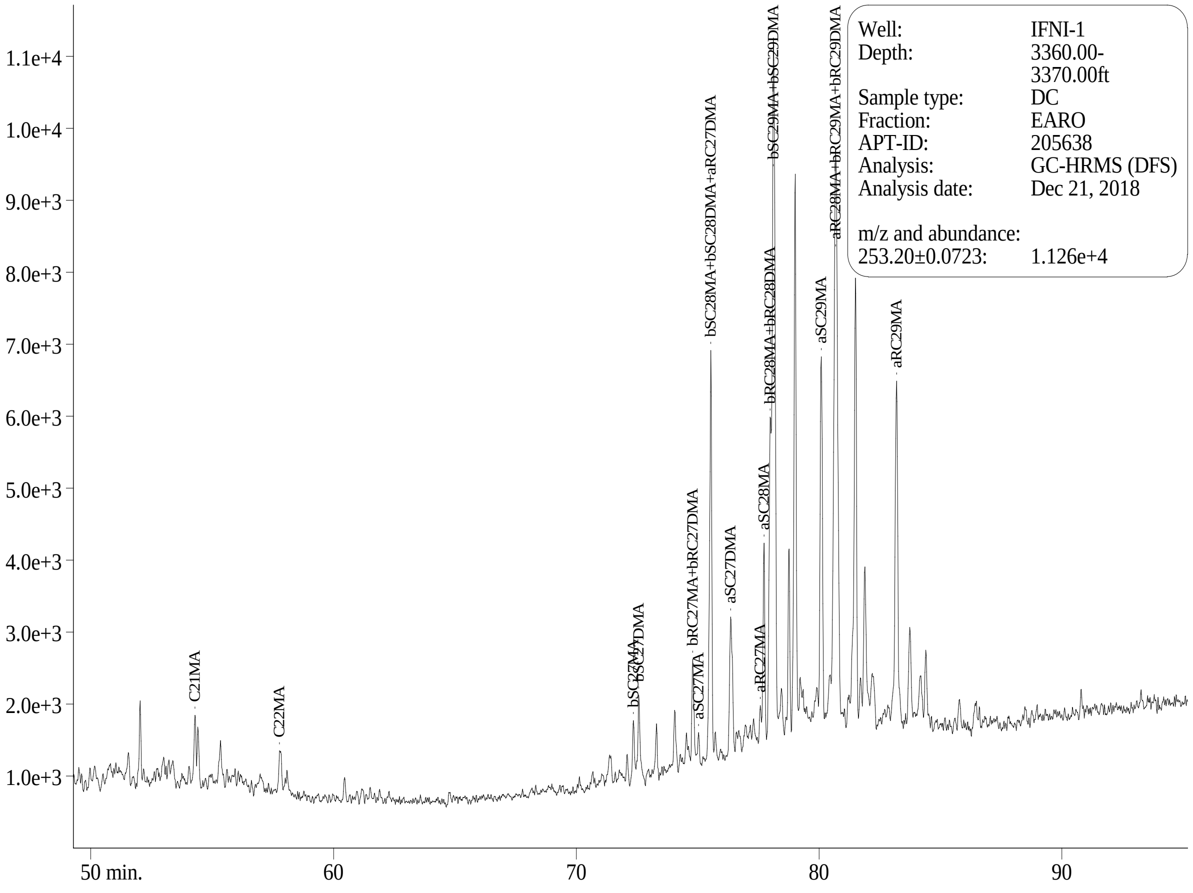

8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
14 min.
18
22
26
30
2-MN
1-MN
1,3- + 1,7-DMN
1,6-DMN
2,7-DMN
2,6-DMN
2-EN
1-EN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,6-TMN
1,3,7-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,6,7 + 1,2,6-TMN
1,2,7-TMN
1,2,4-TMN
1,2,5-TMN
Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
142.08±0.0406: 8.516e+5
156.09±0.0446: 8.516e+5
170.11±0.0486: 8.516e+5

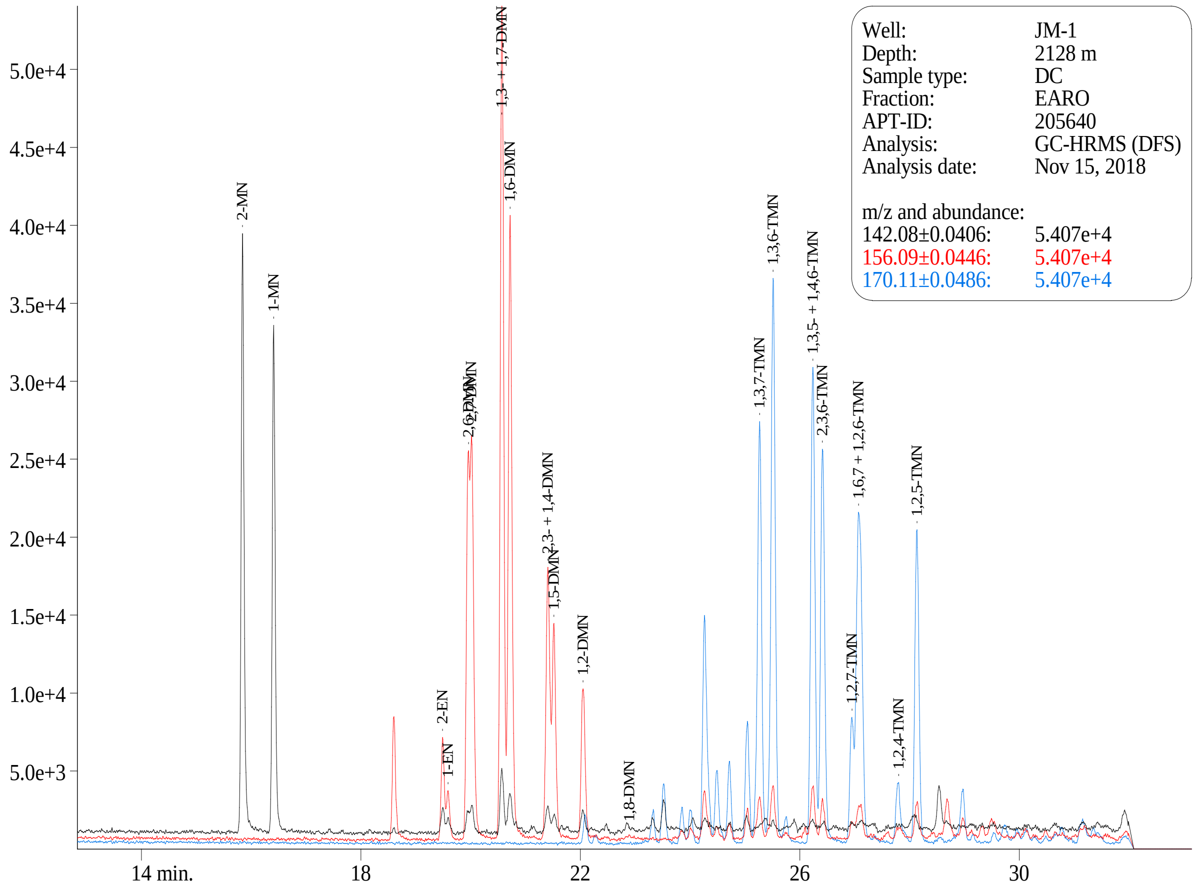

3.2e+6
2.8e+6
2.4e+6
2.0e+6
1.6e+6
1.2e+6
8.0e+5
4.0e+5
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
1,9- + 4,9- + 4,10-DMP
2,3-DMP
1,8-DMP
1,2-DMP
Retene
Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
178.08±0.0509: 3.212e+6
192.09±0.0549: 3.212e+6
206.11±0.0589: 3.212e+6
219.12±0.0626: 3.212e+6

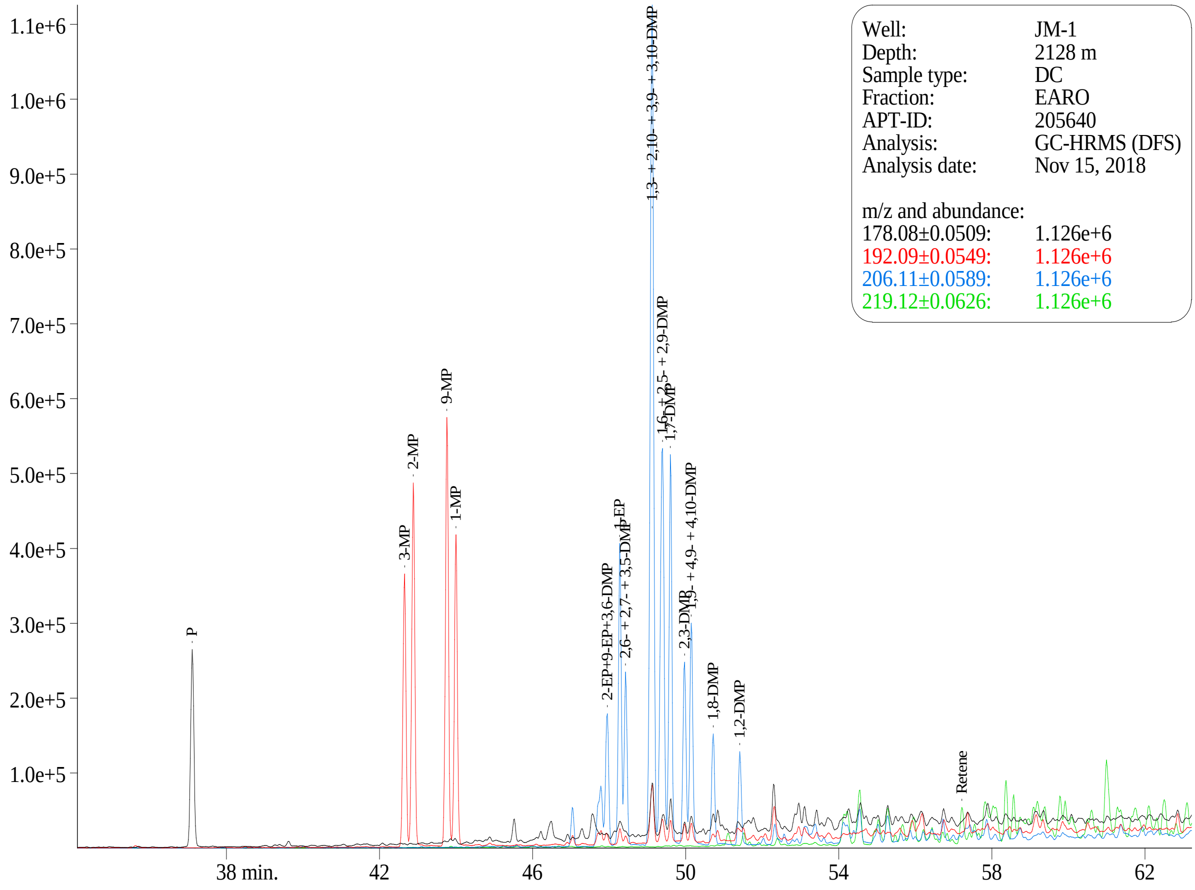

Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
184.03±0.0526: 1.221e+6
198.05±0.0566: 1.221e+6
212.07±0.0606: 1.221e+6
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
34 min.
36
38
40
42
44
46
48
50
52

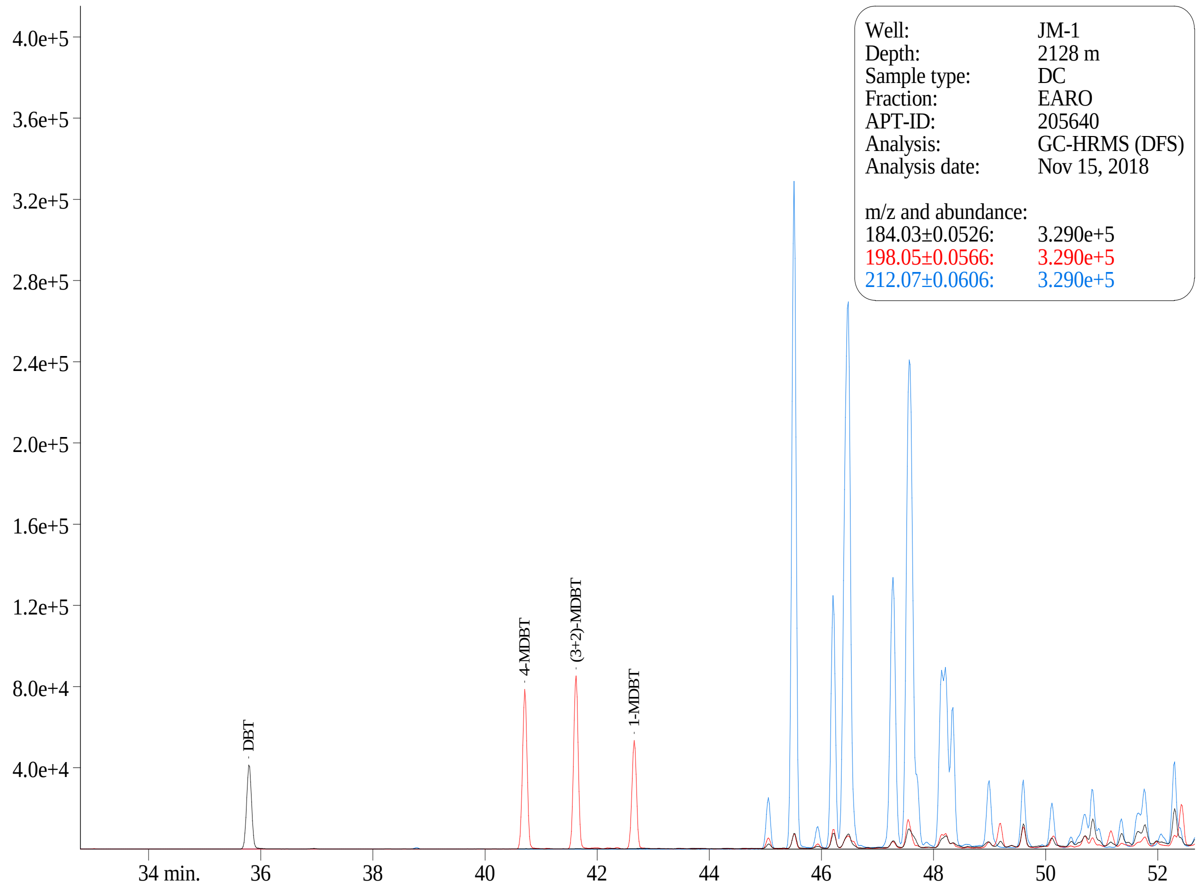

Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.12±0.0660: 2.336e+4
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
2.6e+4
2.4e+4
2.2e+4
2.0e+4
1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
70 min.
80
90
100

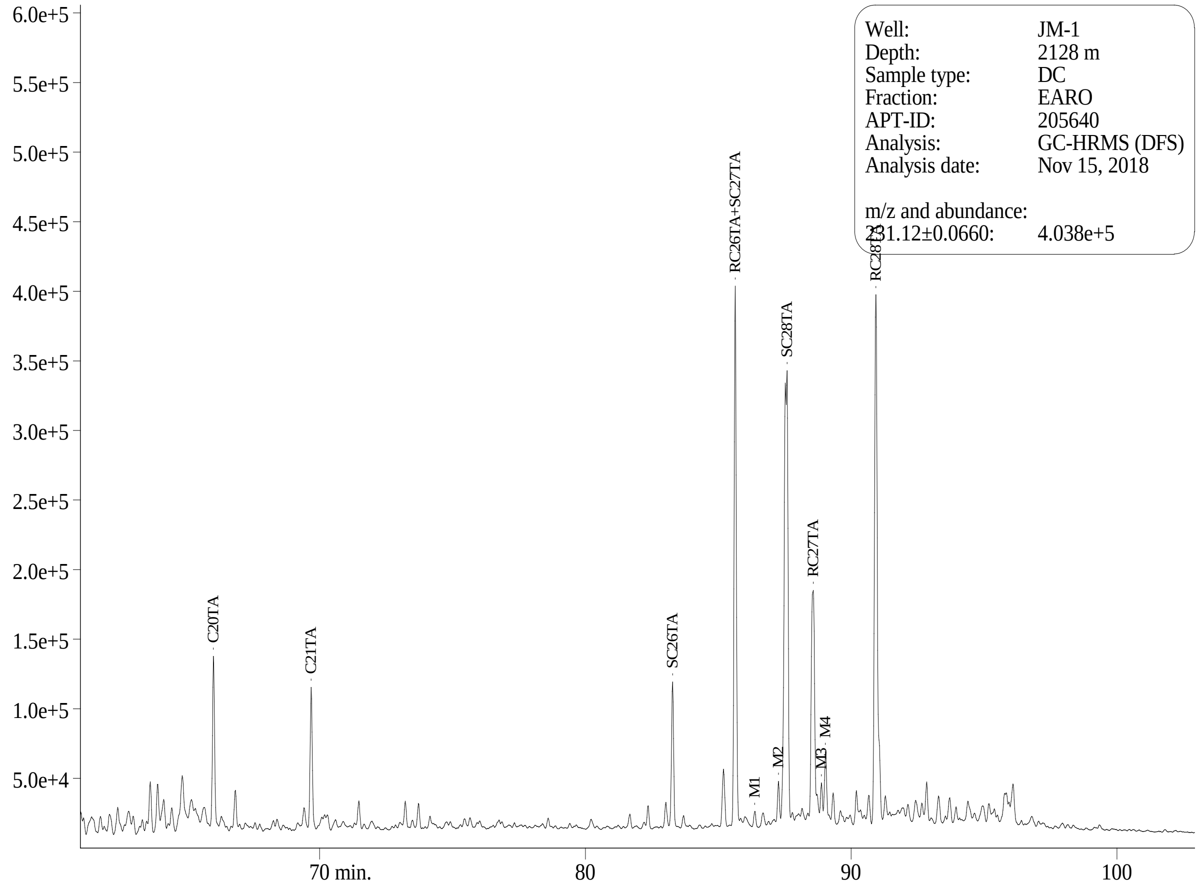

Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
245.1330±0.0700: 3.023e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA

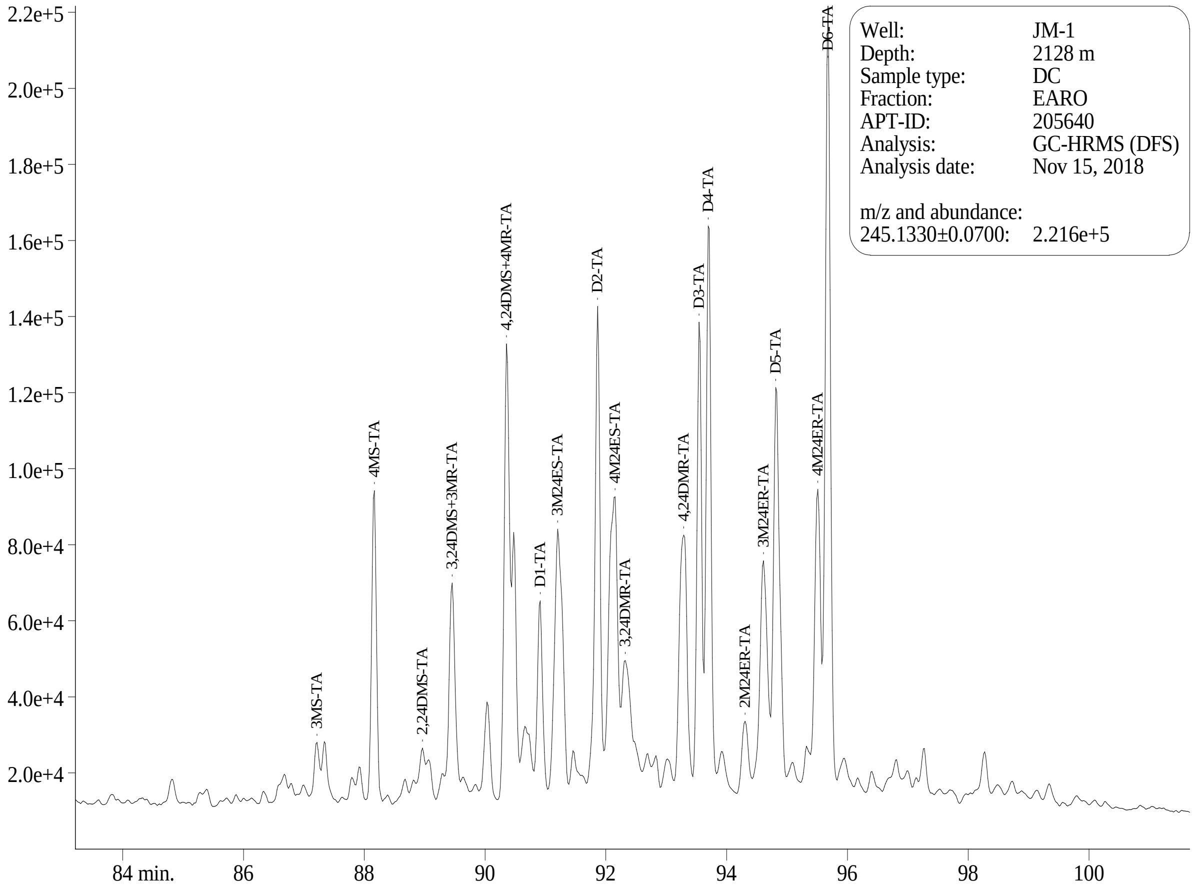

Well: IFNI-1
Depth: 3360.00-3370.00ft
Sample type: DC
Fraction: EARO
APT-ID: 205638
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
253.20±0.0723: 1.126e+4
1.1e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA

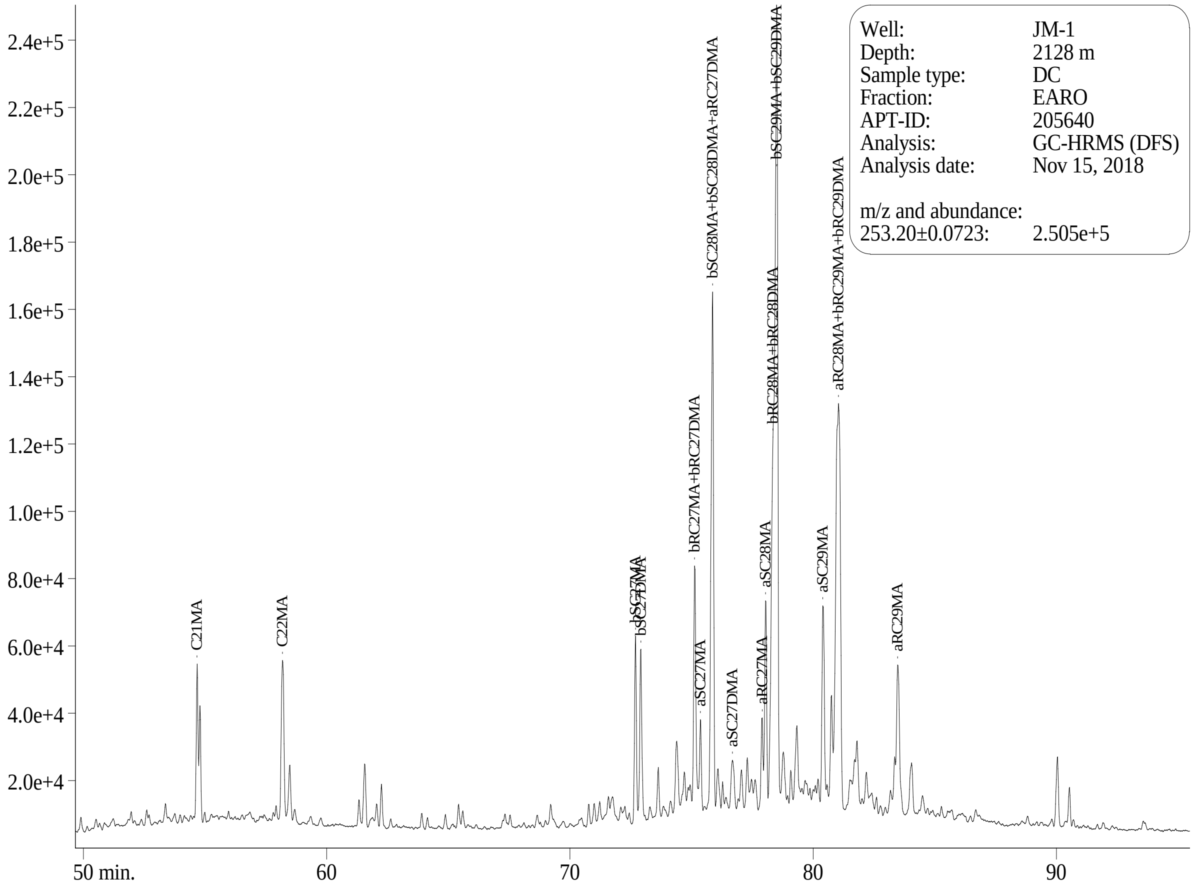

5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: EARO
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
142.08±0.0406: 5.407e+4
156.09±0.0446: 5.407e+4
170.11±0.0486: 5.407e+4

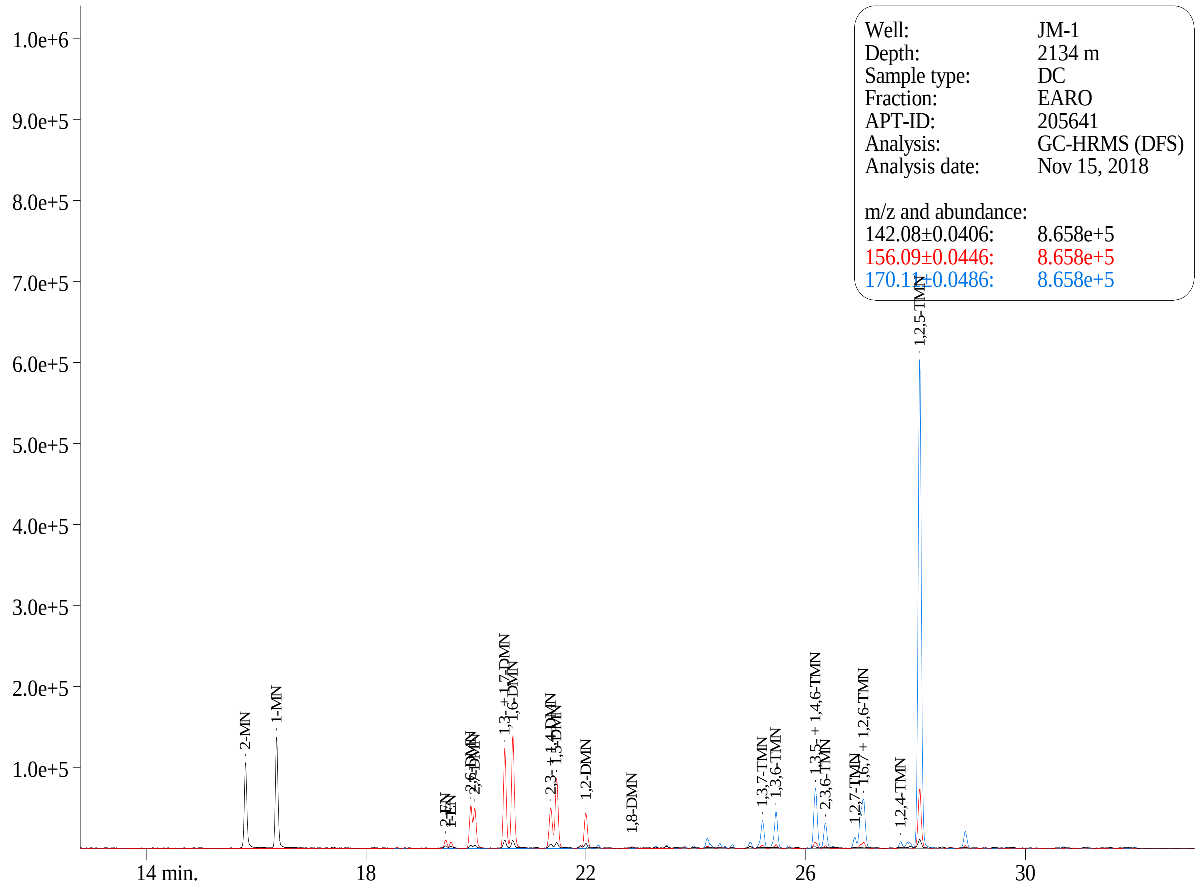

1.1e+6
1.0e+6
9.0e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
38 min.
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
2,6- + 2,7- + 3,5-DMP
1-EP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: EARO
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
178.08±0.0509: 1.126e+6
192.09±0.0549: 1.126e+6
206.11±0.0589: 1.126e+6
219.12±0.0626: 1.126e+6

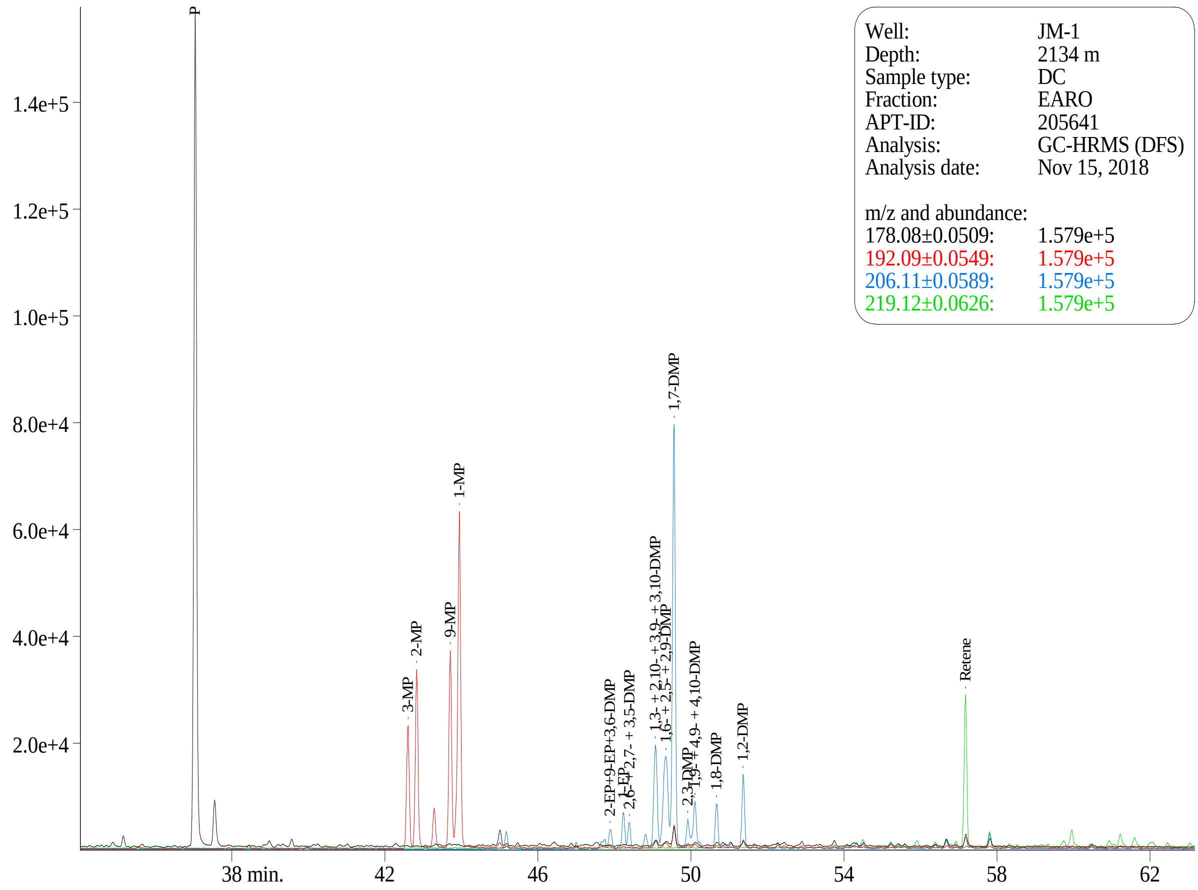

Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: EARO
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
184.03±0.0526: 3.290e+5
198.05±0.0566: 3.290e+5
212.07±0.0606: 3.290e+5
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
34 min.
36
38
40
42
44
46
48
50
52

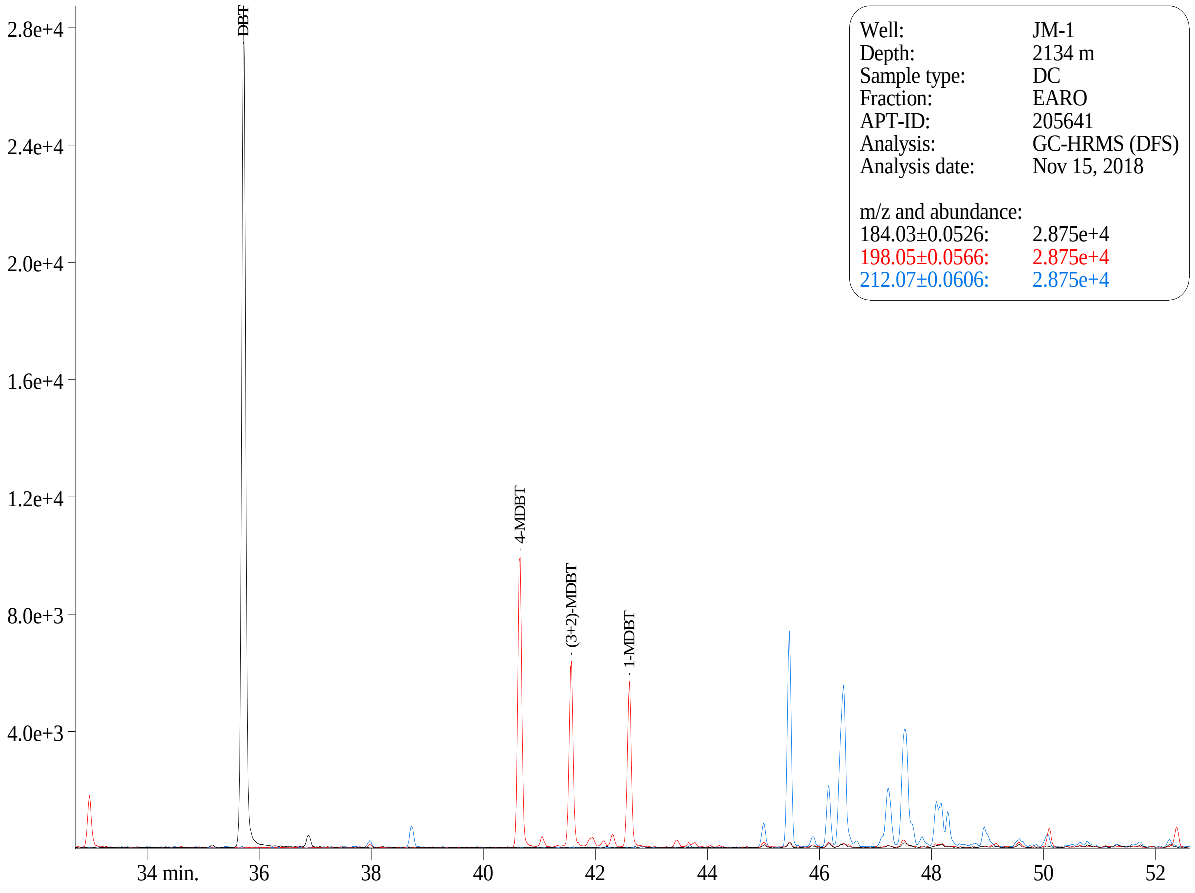

Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: EARO
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
231.12±0.0660: 4.038e+5
6.0e+5
5.5e+5
5.0e+5
4.5e+5
4.0e+5
3.5e+5
3.0e+5
2.5e+5
2.0e+5
1.5e+5
1.0e+5
5.0e+4
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28T
70 min.
80
90
100

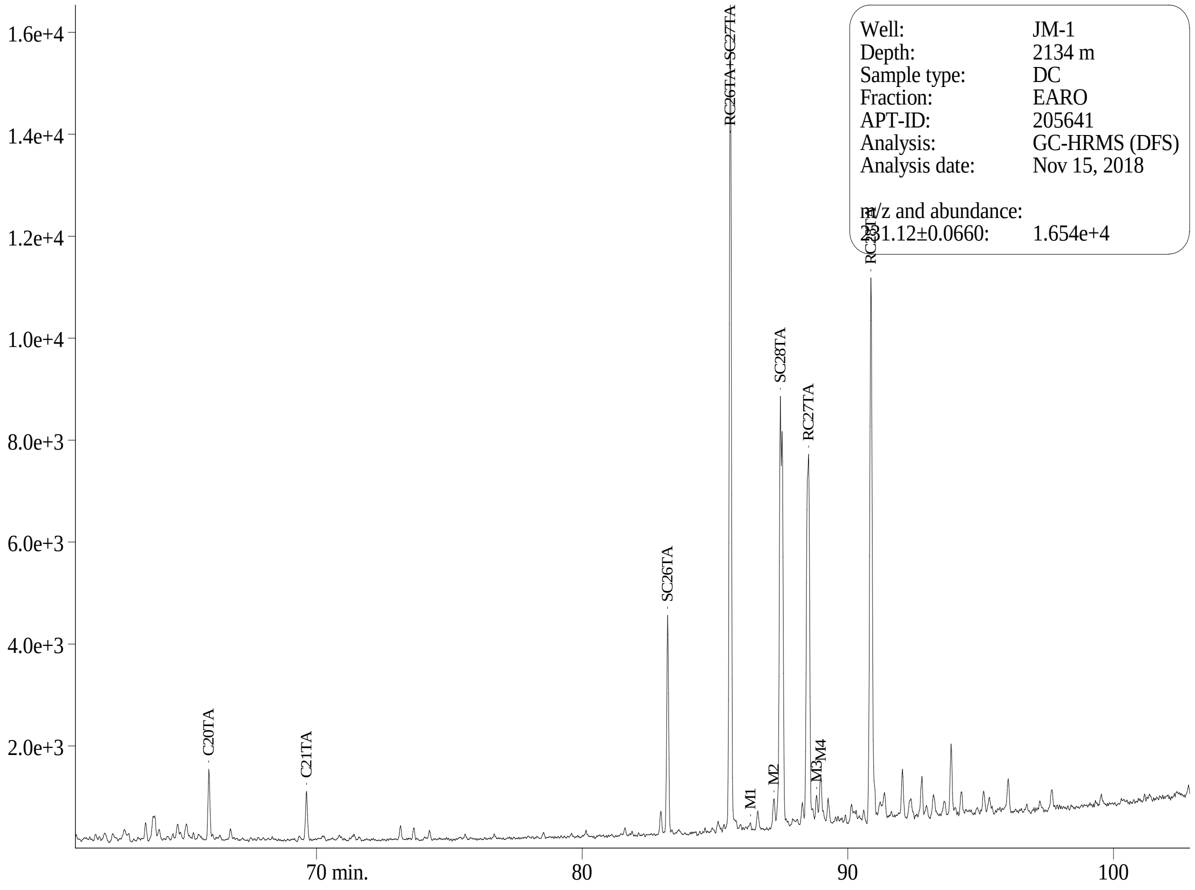

2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: EARO
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
245.1330±0.0700: 2.216e+5

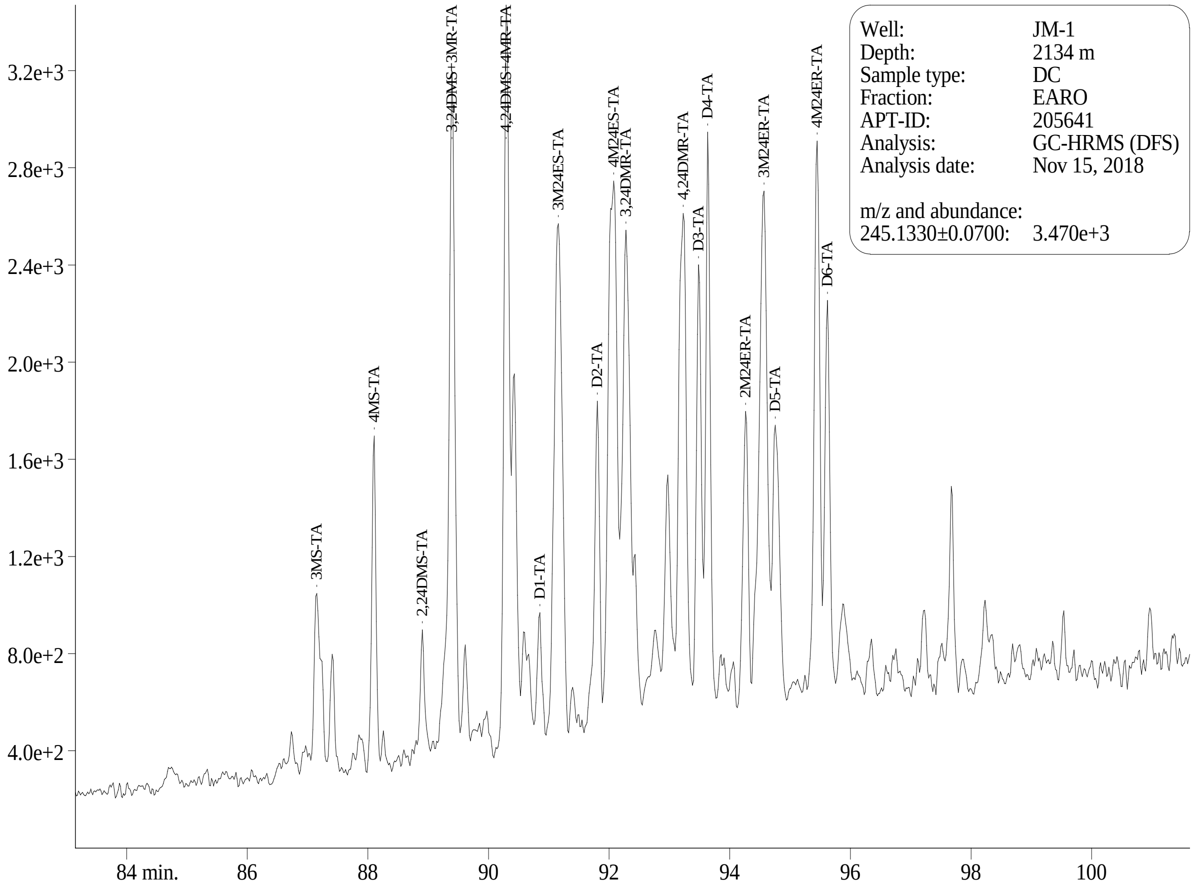

2.4e+5
2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
Well: JM-1
Depth: 2128 m
Sample type: DC
Fraction: EARO
APT-ID: 205640
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
253.20±0.0723: 2.505e+5

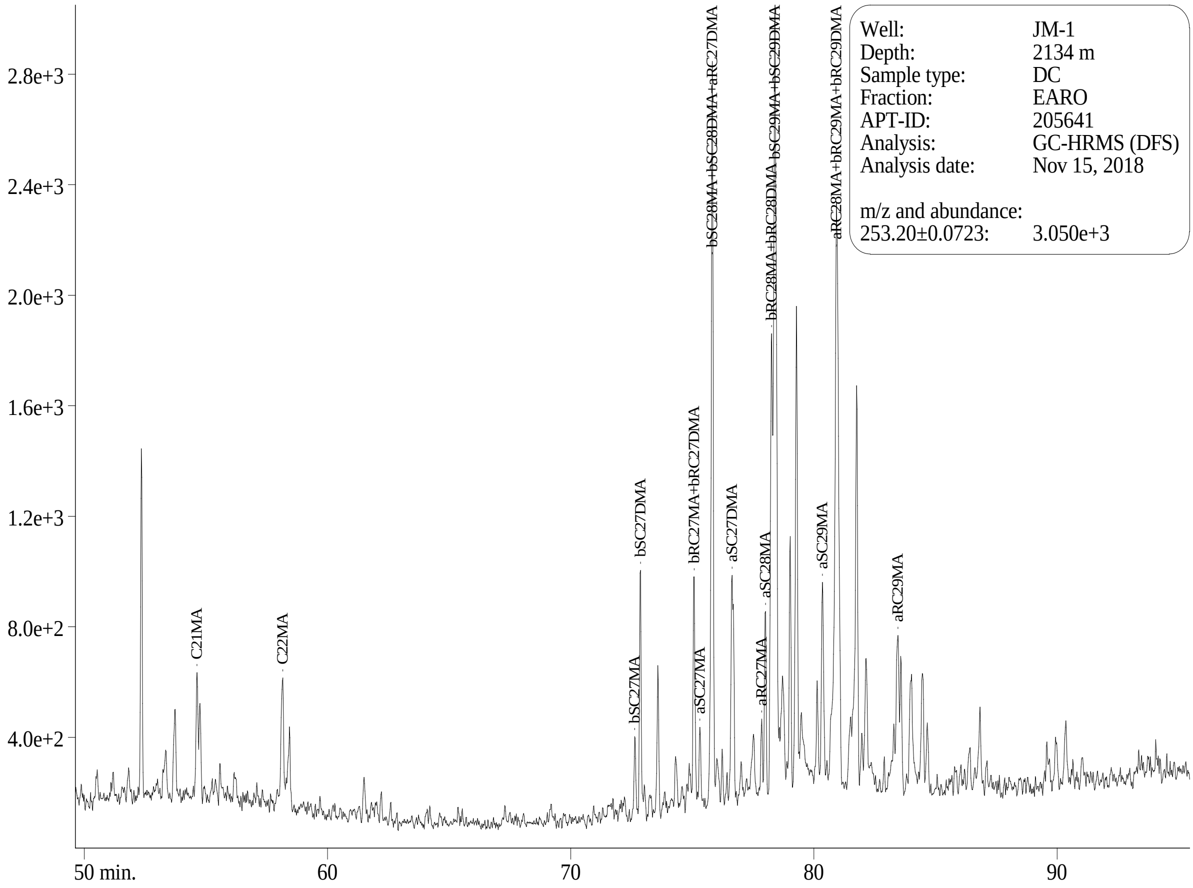

Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: EARO
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
142.08±0.0406: 8.658e+5
156.09±0.0446: 8.658e+5
170.11±0.0486: 8.658e+5
1.0e+6
9.0e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN

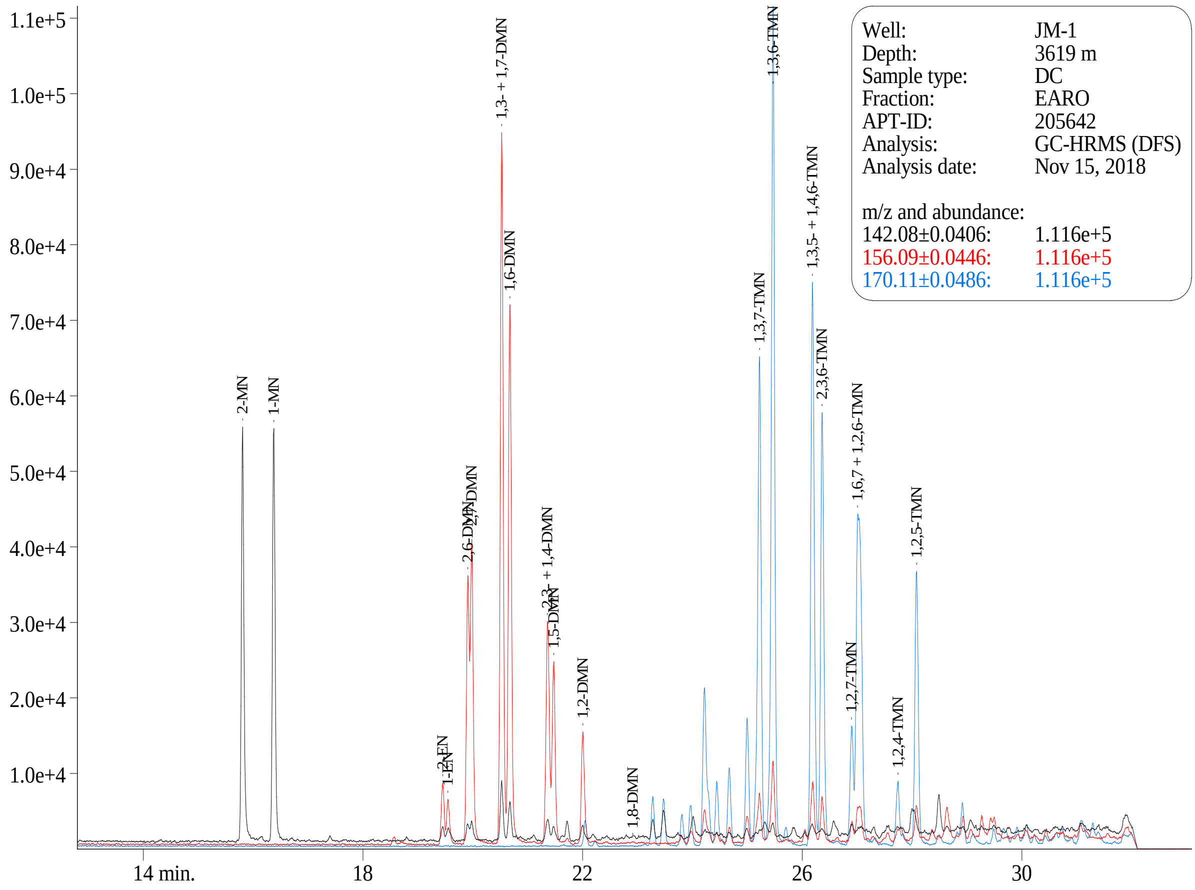

Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: EARO
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
178.08±0.0509: 1.579e+5
192.09±0.0549: 1.579e+5
206.11±0.0589: 1.579e+5
219.12±0.0626: 1.579e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
38 min.
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene


DBT
4-MDBT
(3+2)-MDBT
1-MDBT
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
34 min.
36
38
40
42
44
46
48
50
52
Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: EARO
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
184.03±0.0526: 2.875e+4
198.05±0.0566: 2.875e+4
212.07±0.0606: 2.875e+4


C20TA
C21TA
SC26TA
RC26TA+SC27TA
SC28TA
RC27TA
RC
M1
M2
M3
M4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
70 min.
80
90
100
Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: EARO
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
231.12±0.0660: 1.654e+4

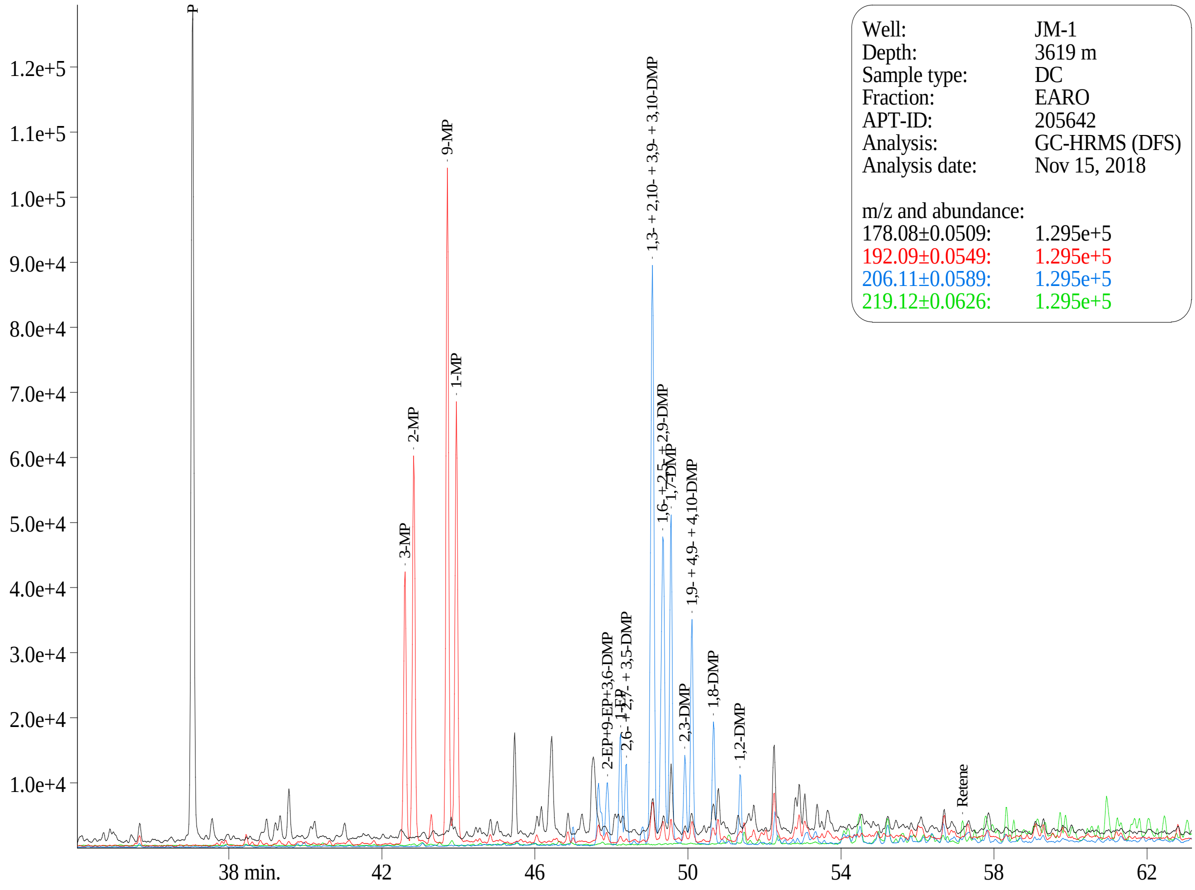

Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: EARO
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
245.1330±0.0700: 3.470e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA


Well: JM-1
Depth: 2134 m
Sample type: DC
Fraction: EARO
APT-ID: 205641
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
253.20±0.0723: 3.050e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA



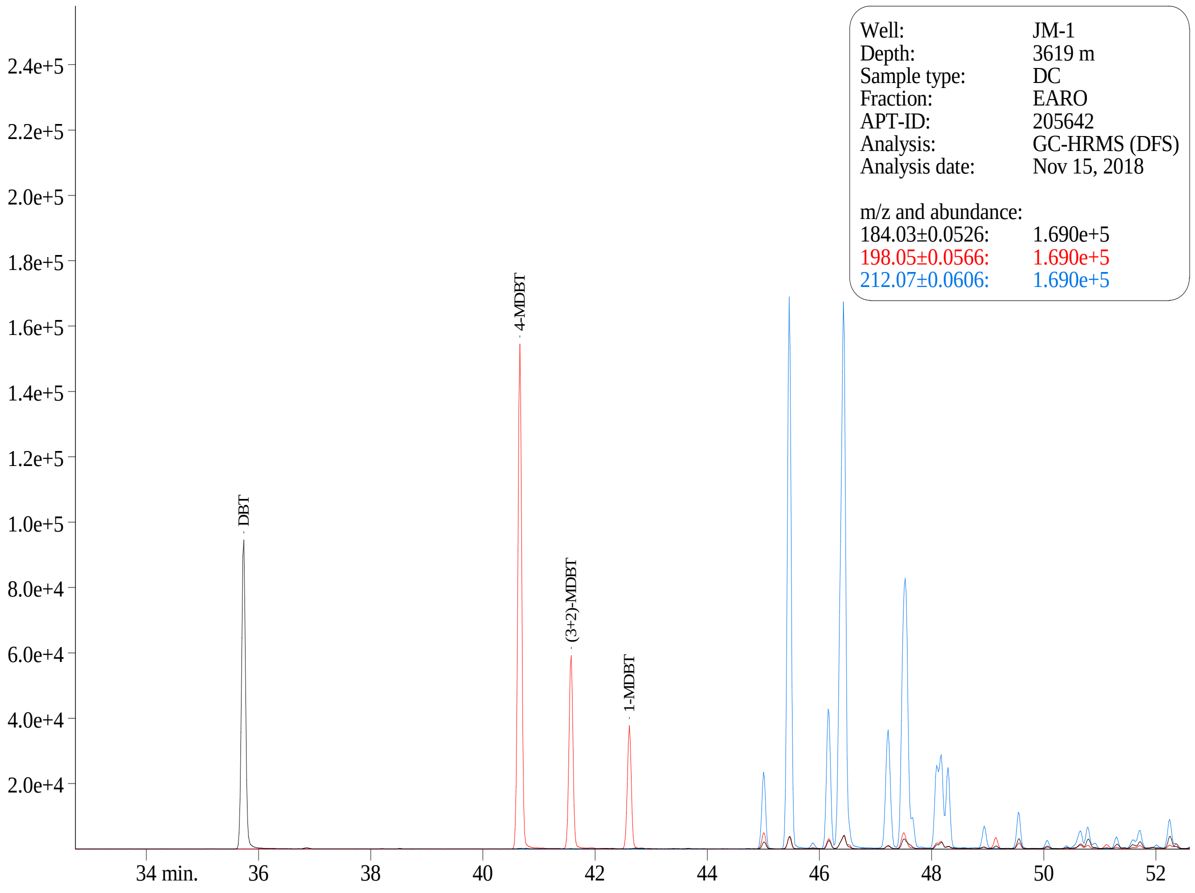
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: EARO
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
142.08±0.0406: 1.116e+5
156.09±0.0446: 1.116e+5
170.11±0.0486: 1.116e+5



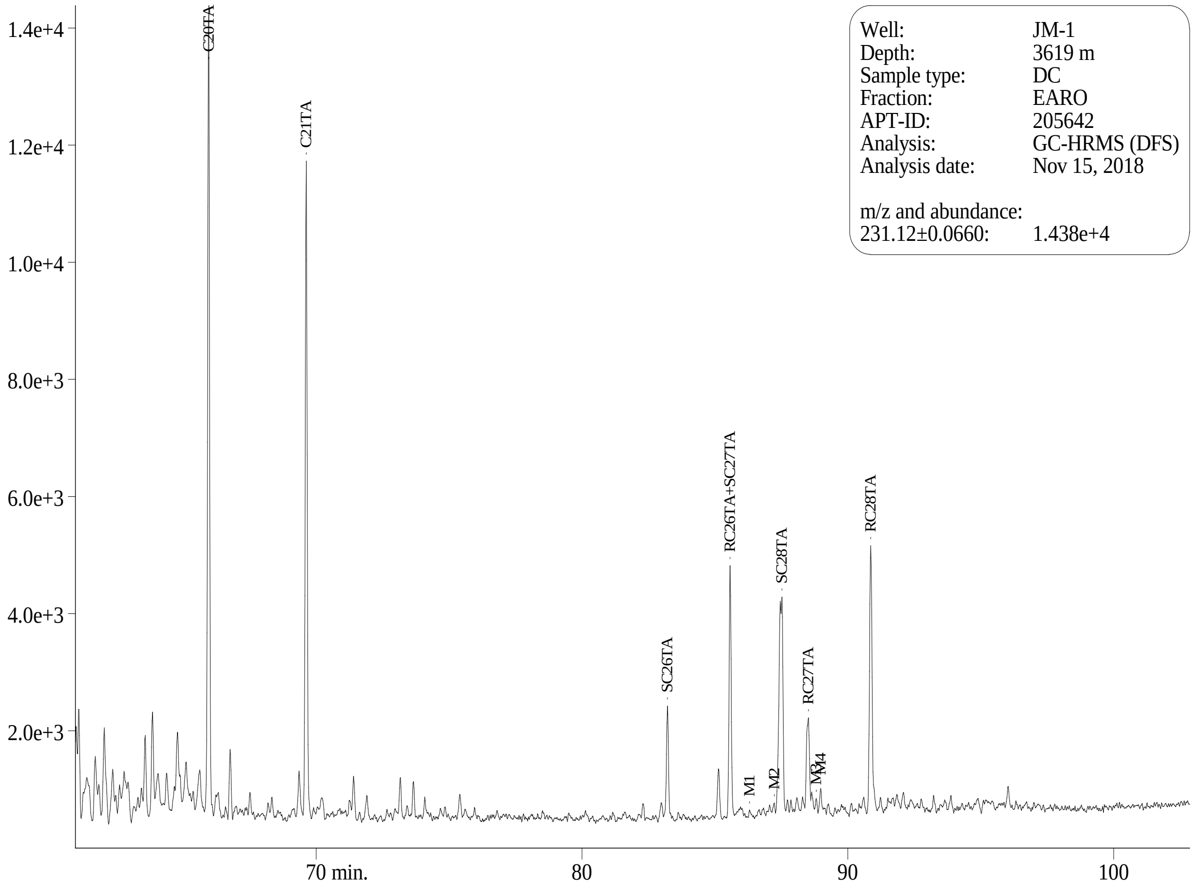
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: EARO
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
178.08±0.0509: 1.295e+5
192.09±0.0549: 1.295e+5
206.11±0.0589: 1.295e+5
219.12±0.0626: 1.295e+5



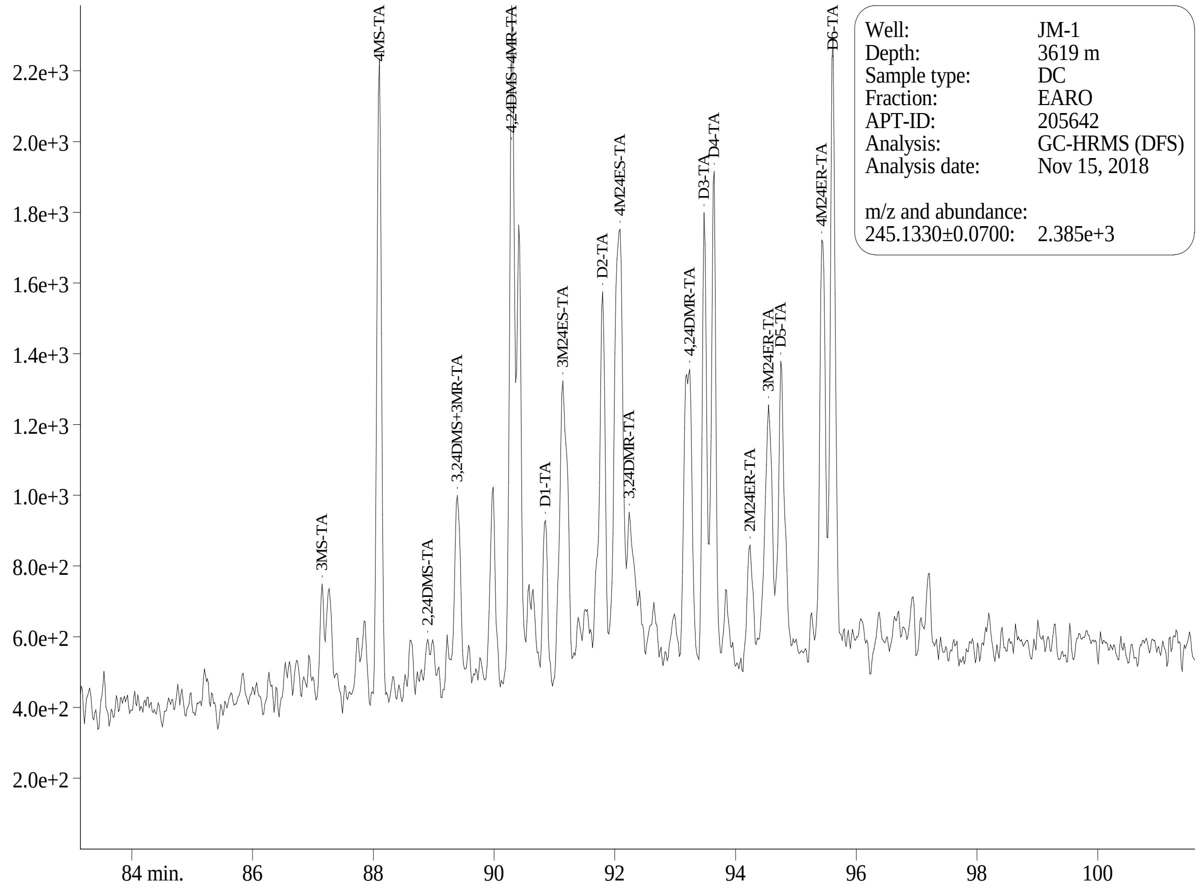
Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: EARO
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

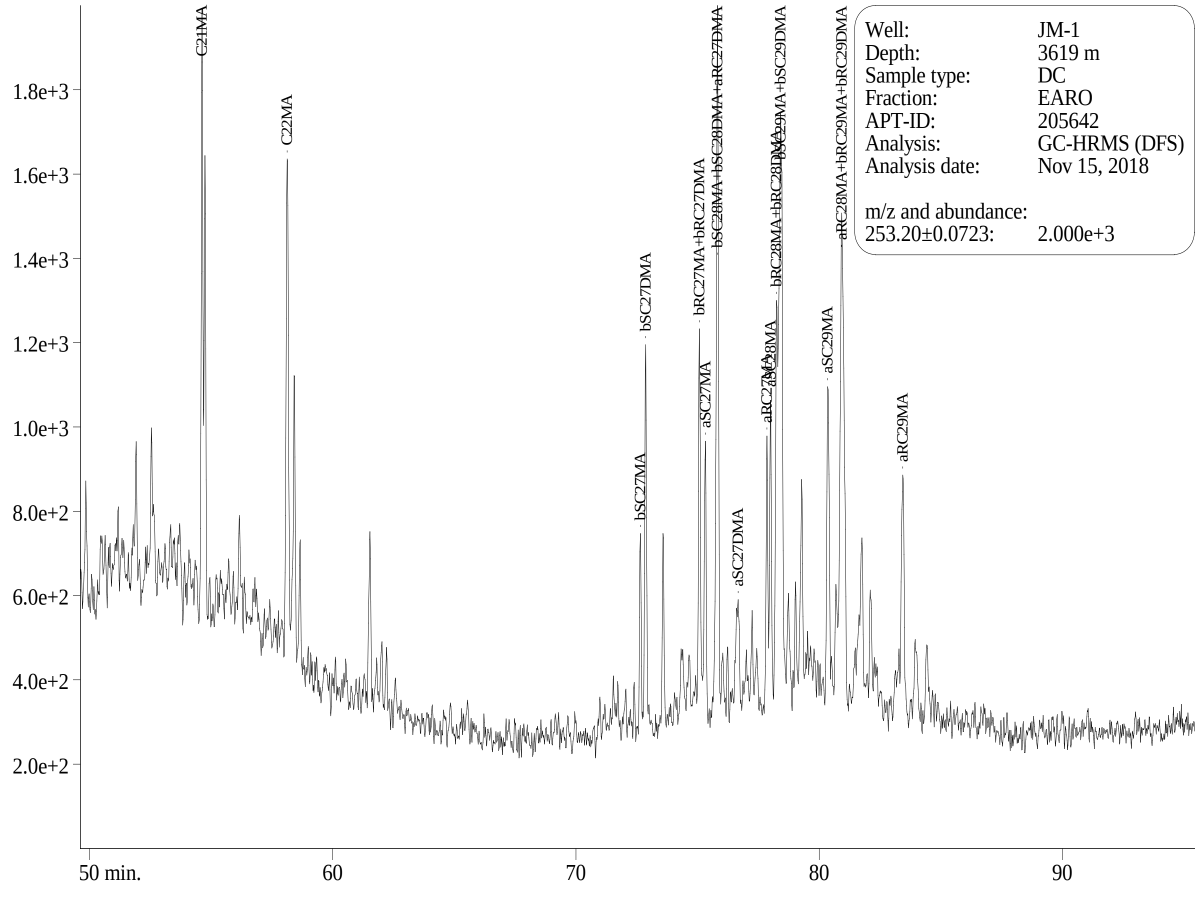
m/z and abundance:
184.03±0.0526: 1.690e+5
198.05±0.0566: 1.690e+5
212.07±0.0606: 1.690e+5

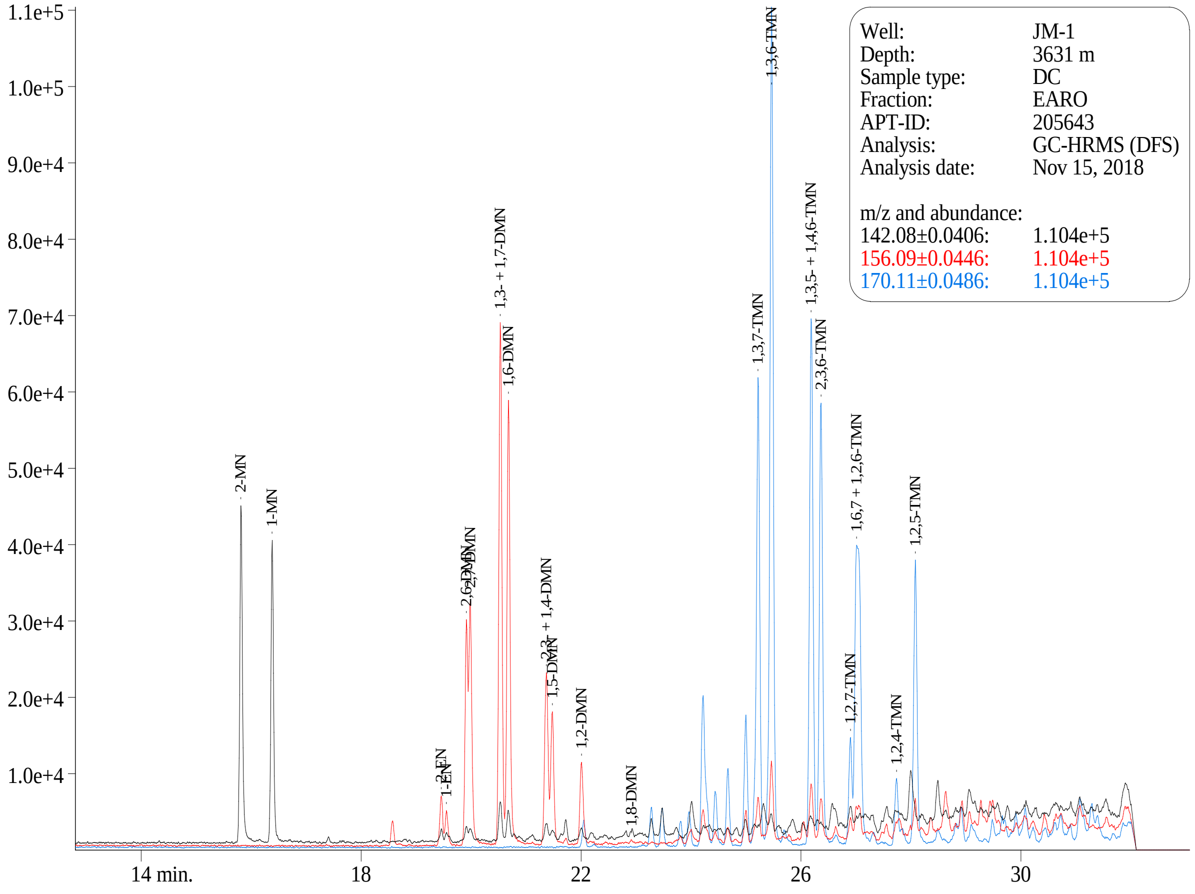


Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: EARO
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
231.12±0.0660: 1.438e+4

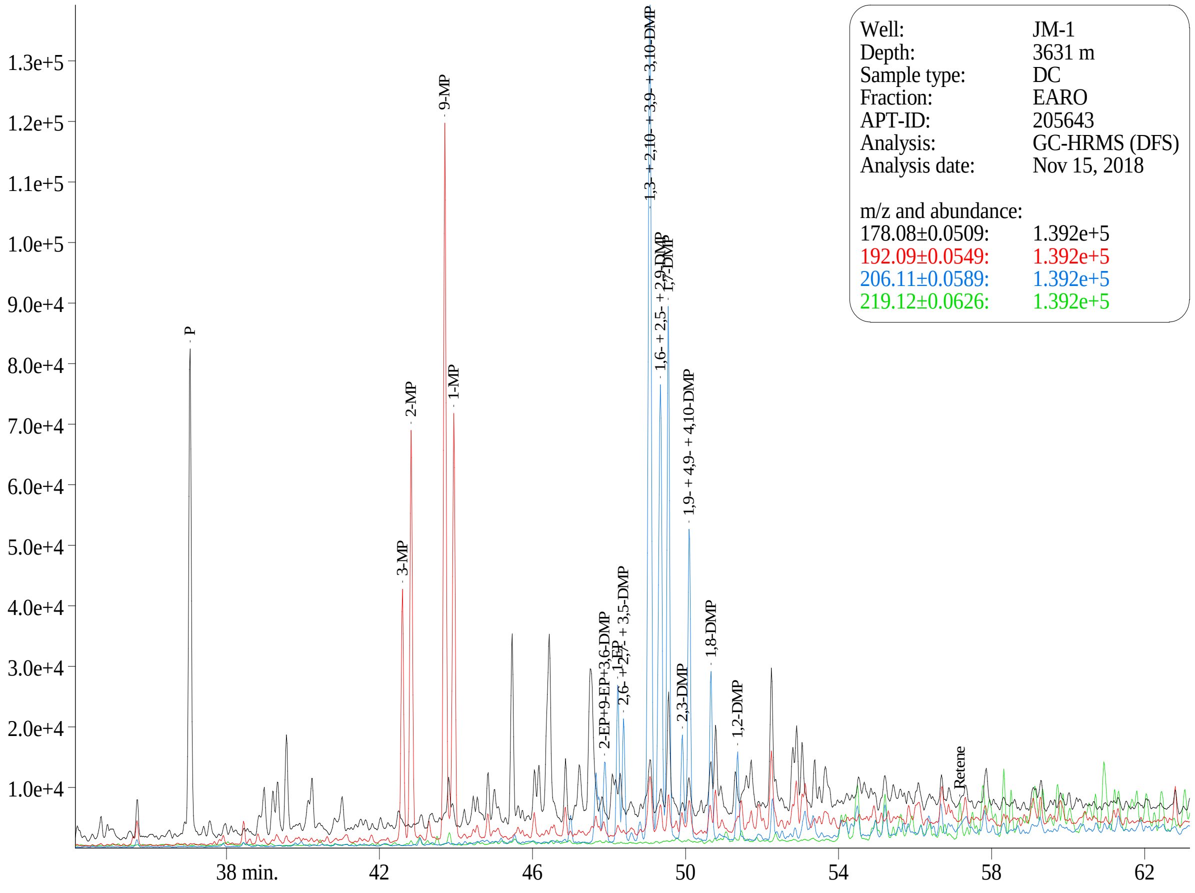

Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: EARO
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
245.1330±0.0700: 2.385e+3
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
2.0e+2
4.0e+2
6.0e+2
8.0e+2
1.0e+3
1.2e+3
1.4e+3
1.6e+3
1.8e+3
2.0e+3
2.2e+3
84 min.
86
88
90
92
94
96
98
100


Well: JM-1
Depth: 3619 m
Sample type: DC
Fraction: EARO
APT-ID: 205642
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
253.20±0.0723: 2.000e+3
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
2.0e+2
4.0e+2
6.0e+2
8.0e+2
1.0e+3
1.2e+3
1.4e+3
1.6e+3
1.8e+3
50 min.
60
70
80
90



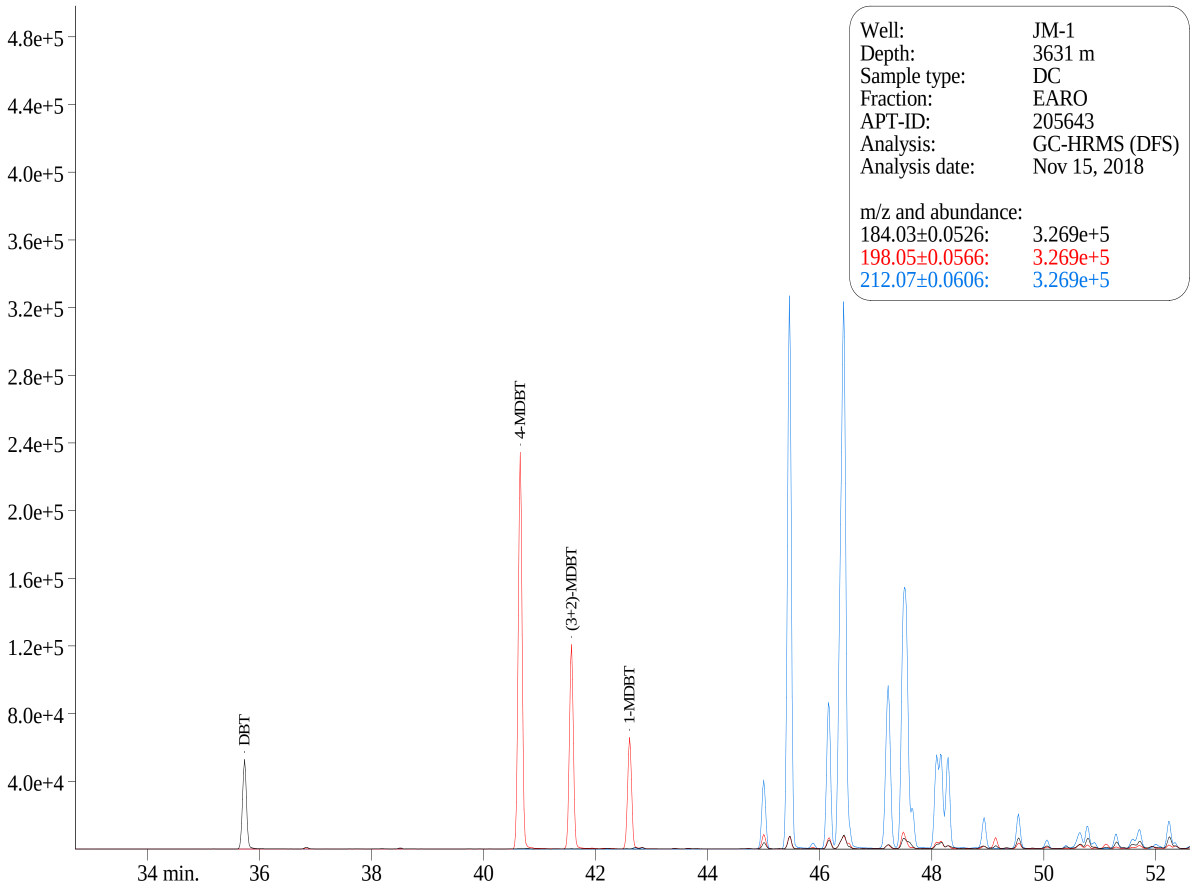
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: EARO
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
142.08±0.0406: 1.104e+5
156.09±0.0446: 1.104e+5
170.11±0.0486: 1.104e+5



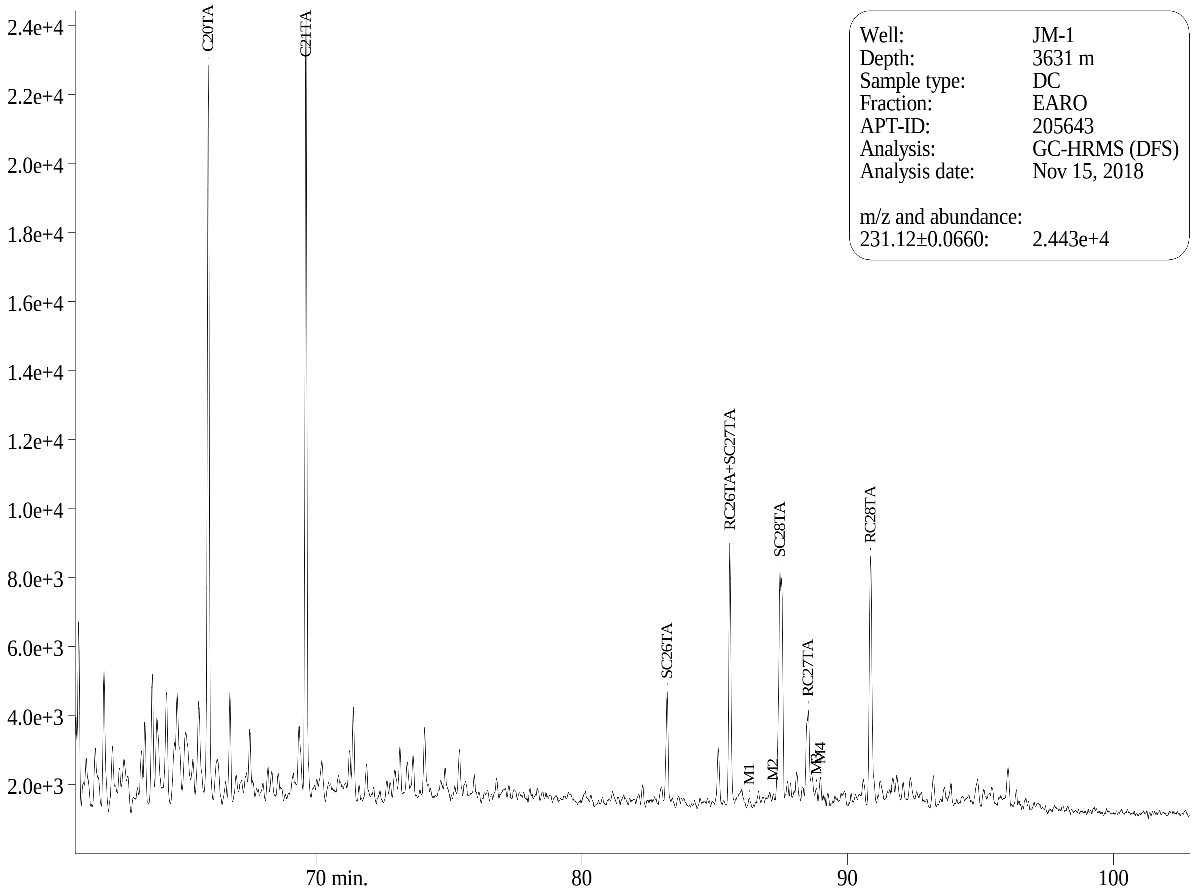
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: EARO
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
178.08±0.0509: 1.392e+5
192.09±0.0549: 1.392e+5
206.11±0.0589: 1.392e+5
219.12±0.0626: 1.392e+5



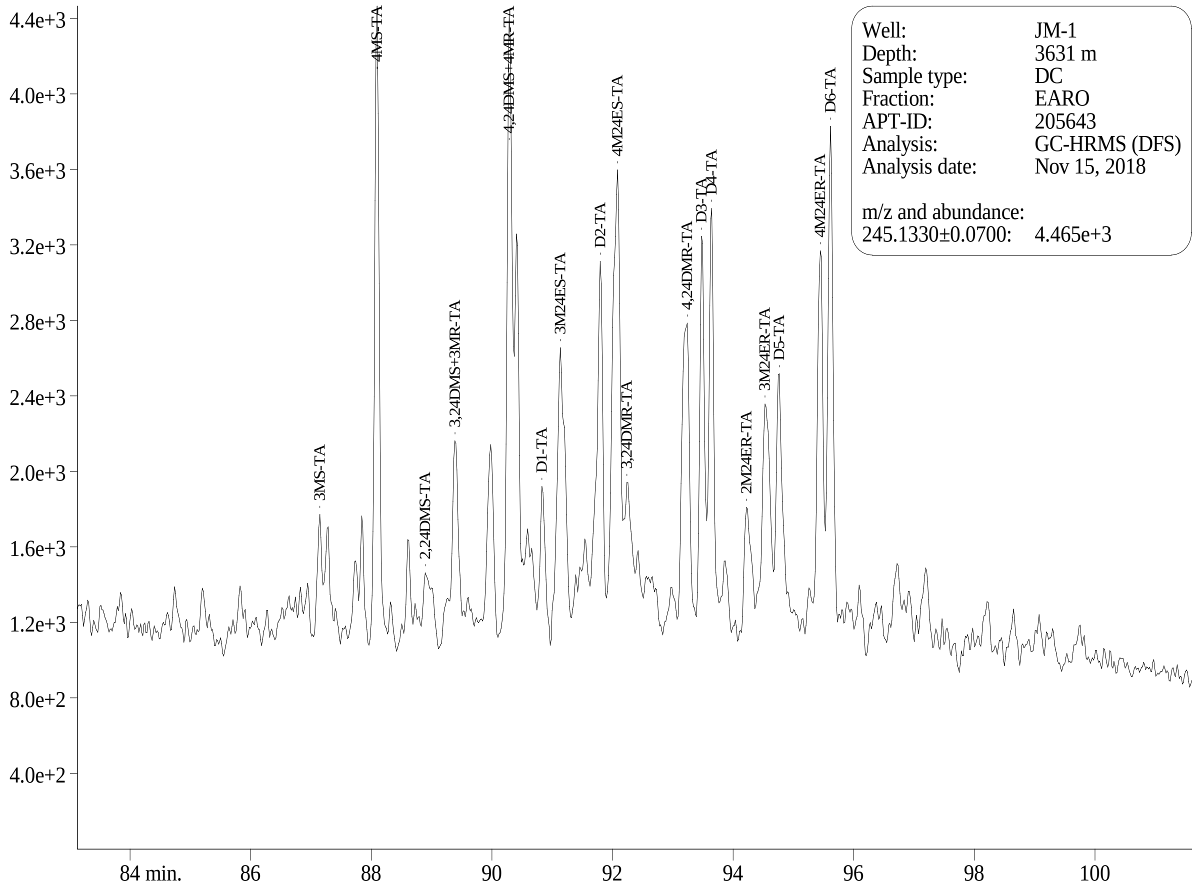
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: EARO
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
184.03±0.0526: 3.269e+5
198.05±0.0566: 3.269e+5
212.07±0.0606: 3.269e+5



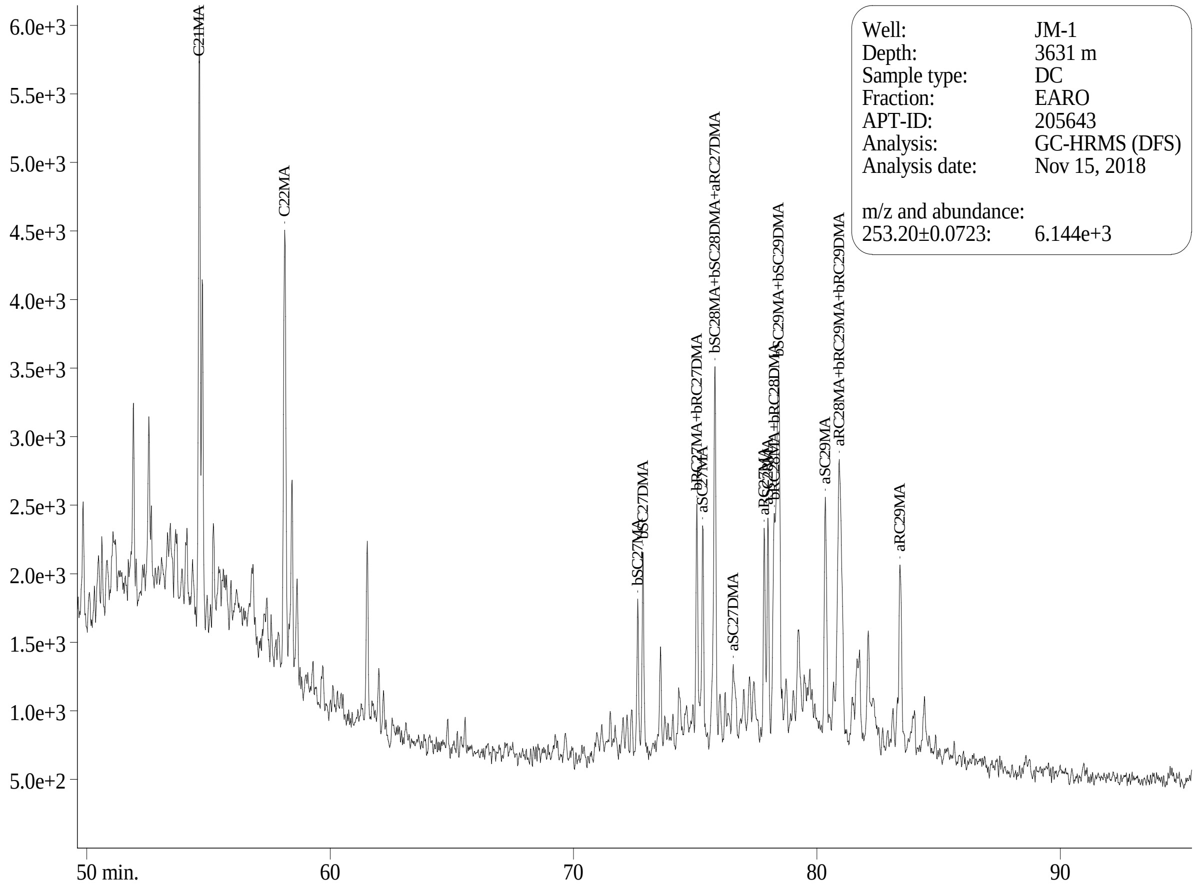
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: EARO
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

m/z and abundance:
231.12±0.0660: 2.443e+4



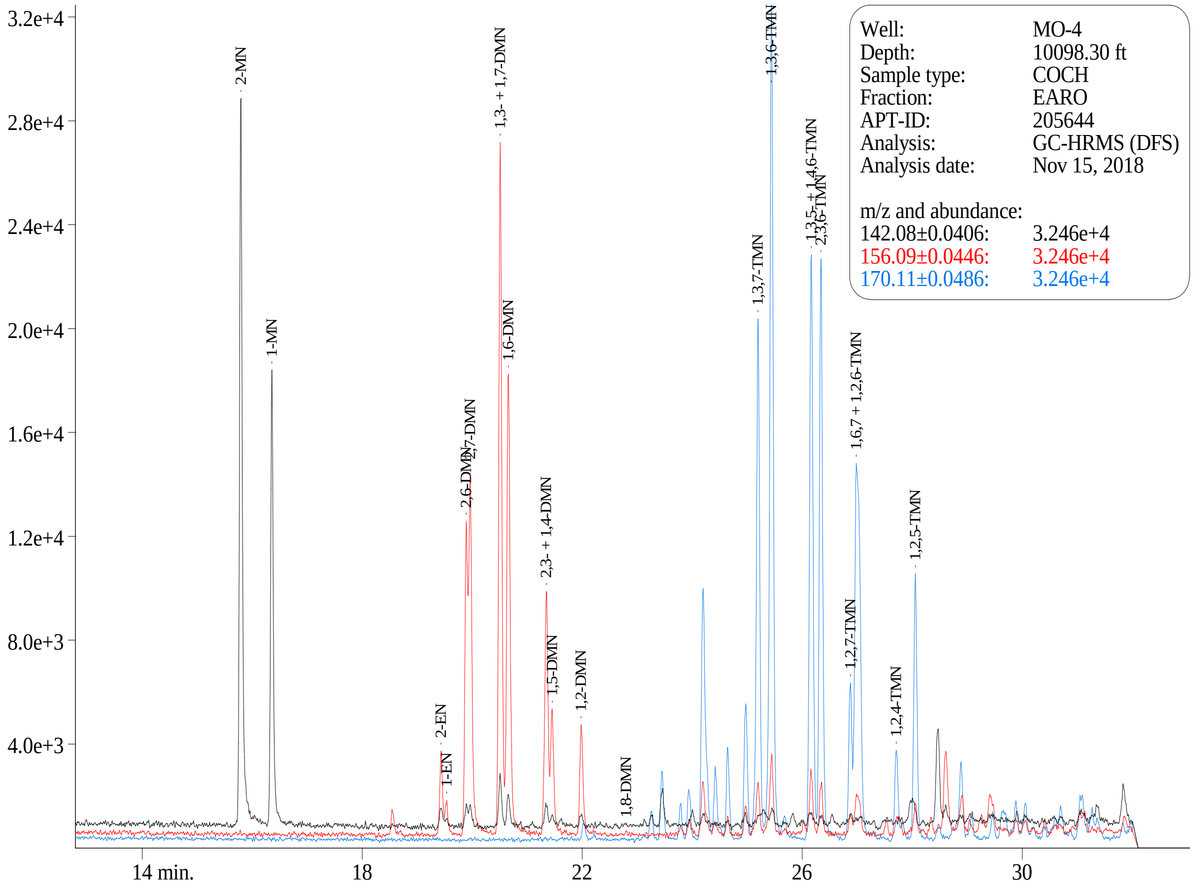
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: EARO
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

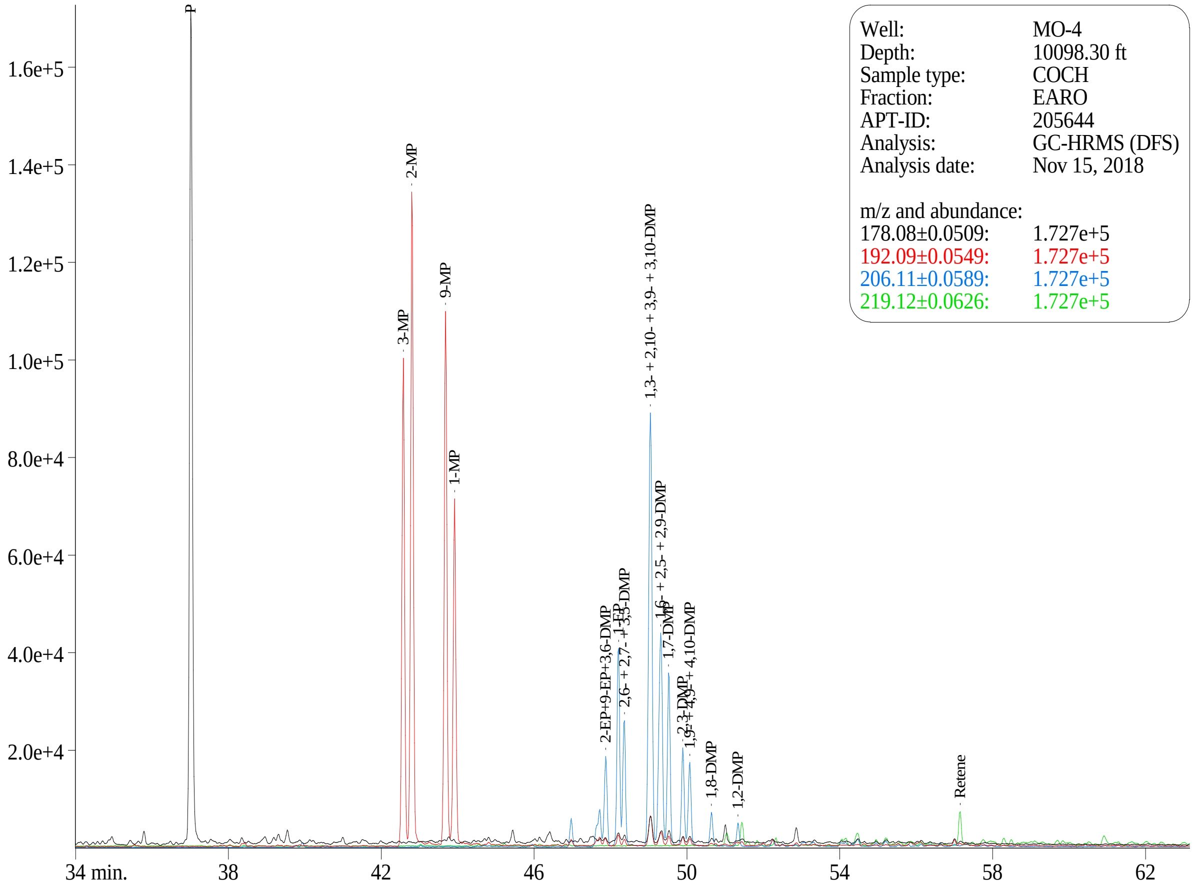
m/z and abundance:
245.1330±0.0700: 4.465e+3

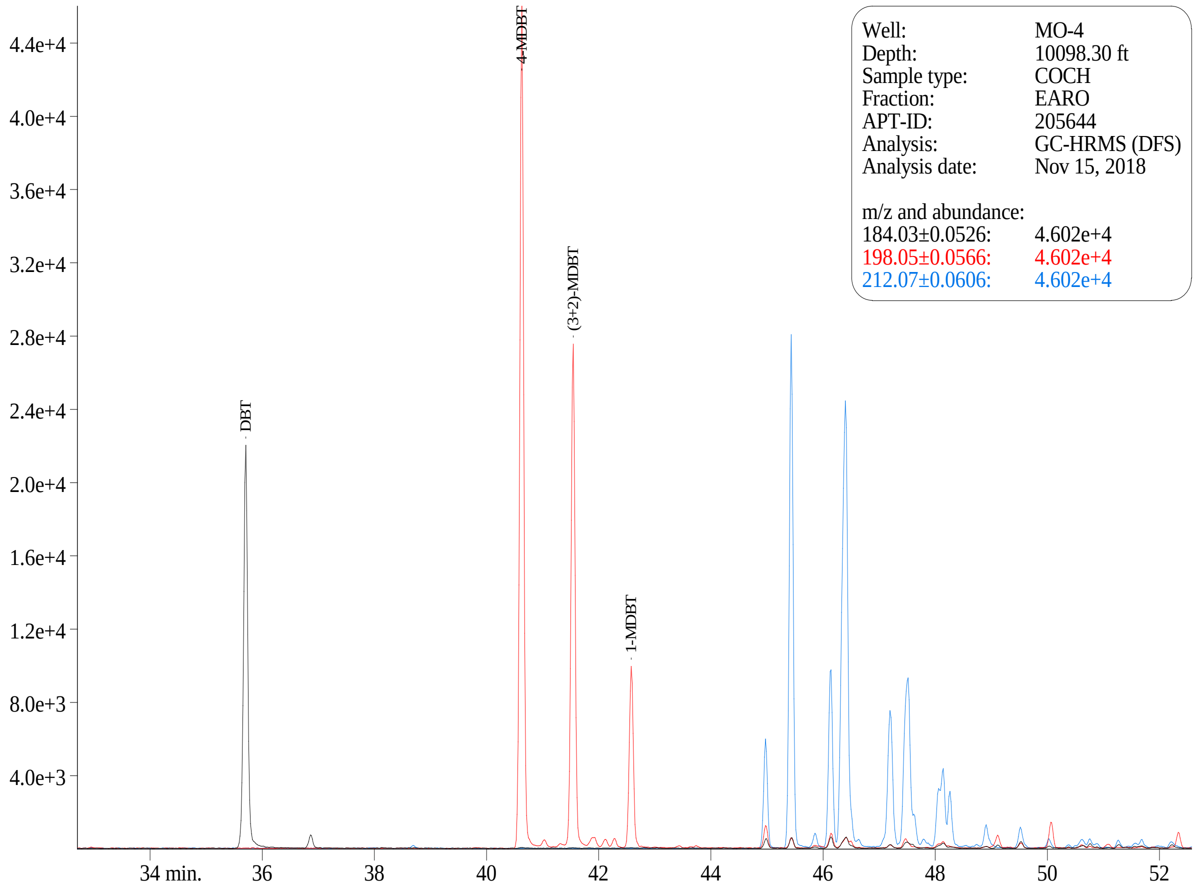


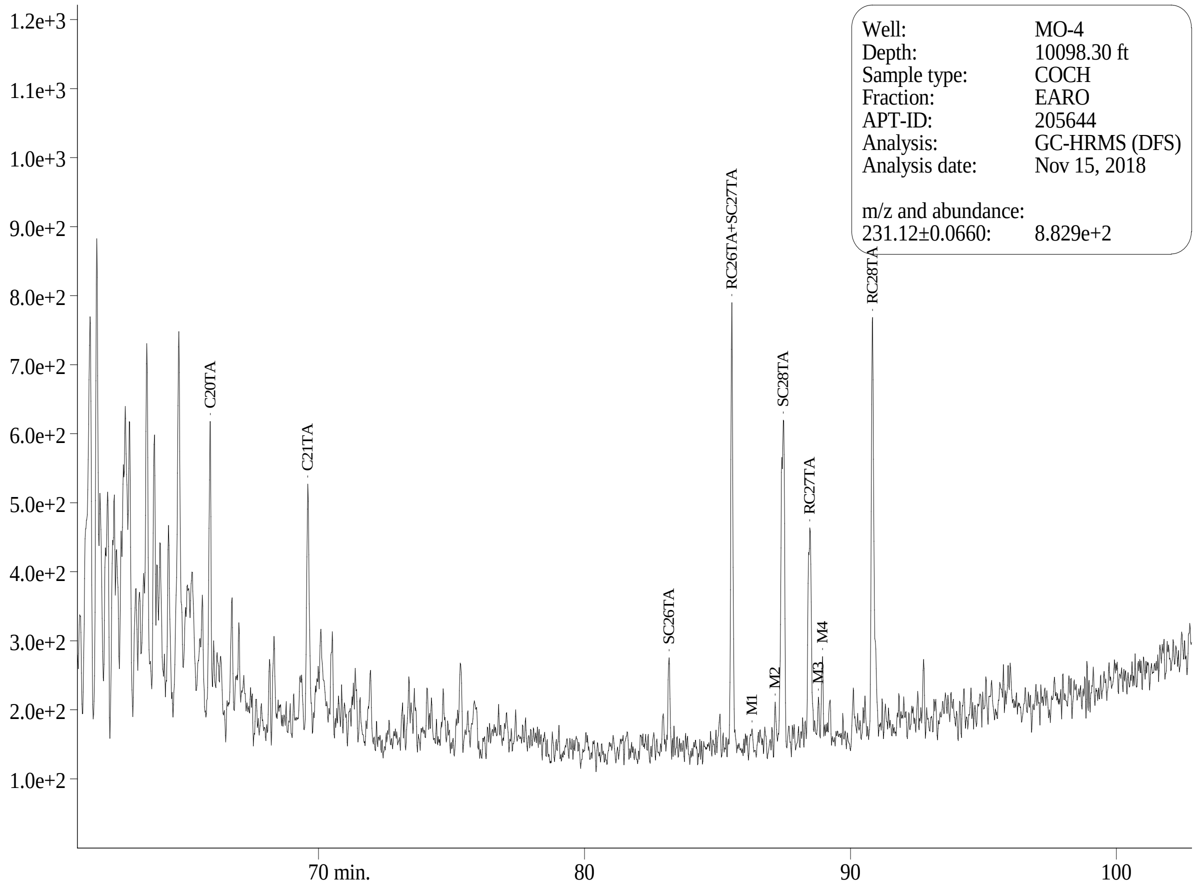
Well: JM-1
Depth: 3631 m
Sample type: DC
Fraction: EARO
APT-ID: 205643
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

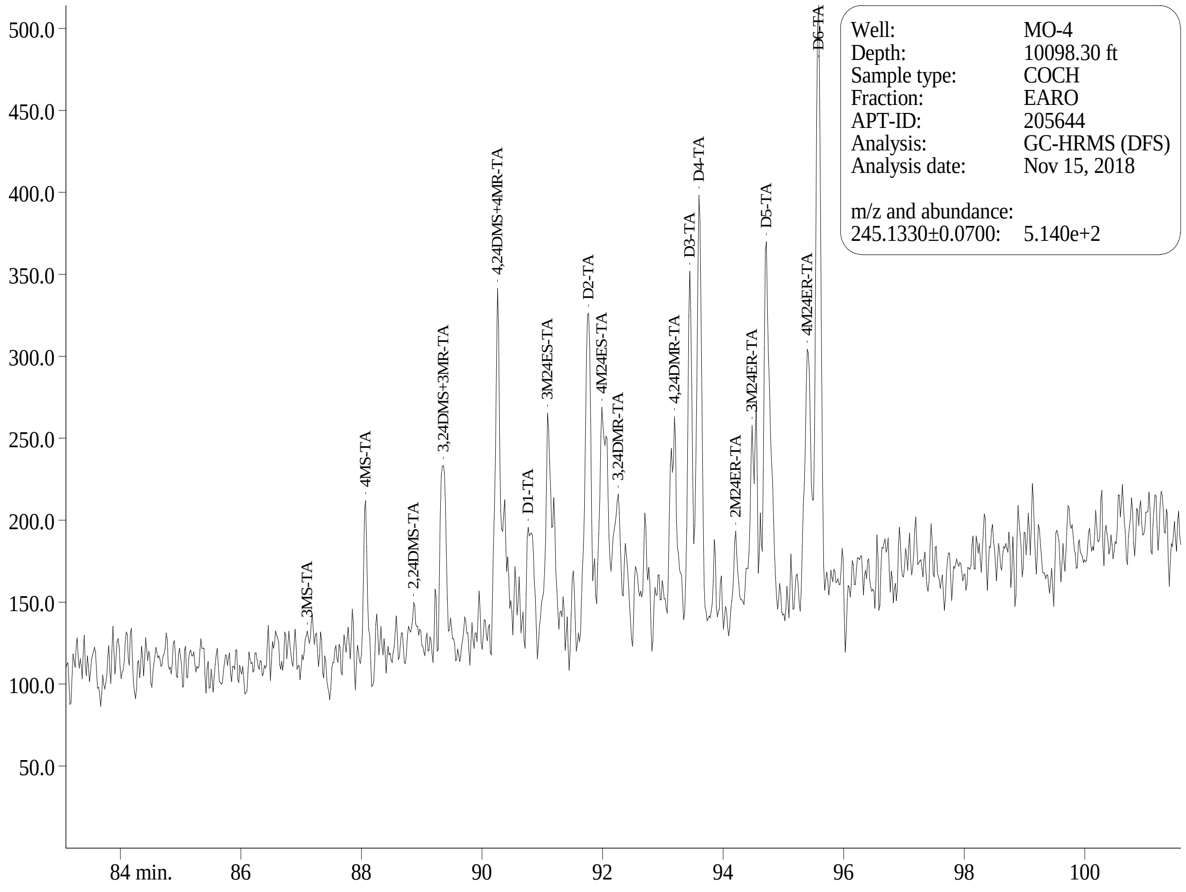
m/z and abundance:
253.20±0.0723: 6.144e+3

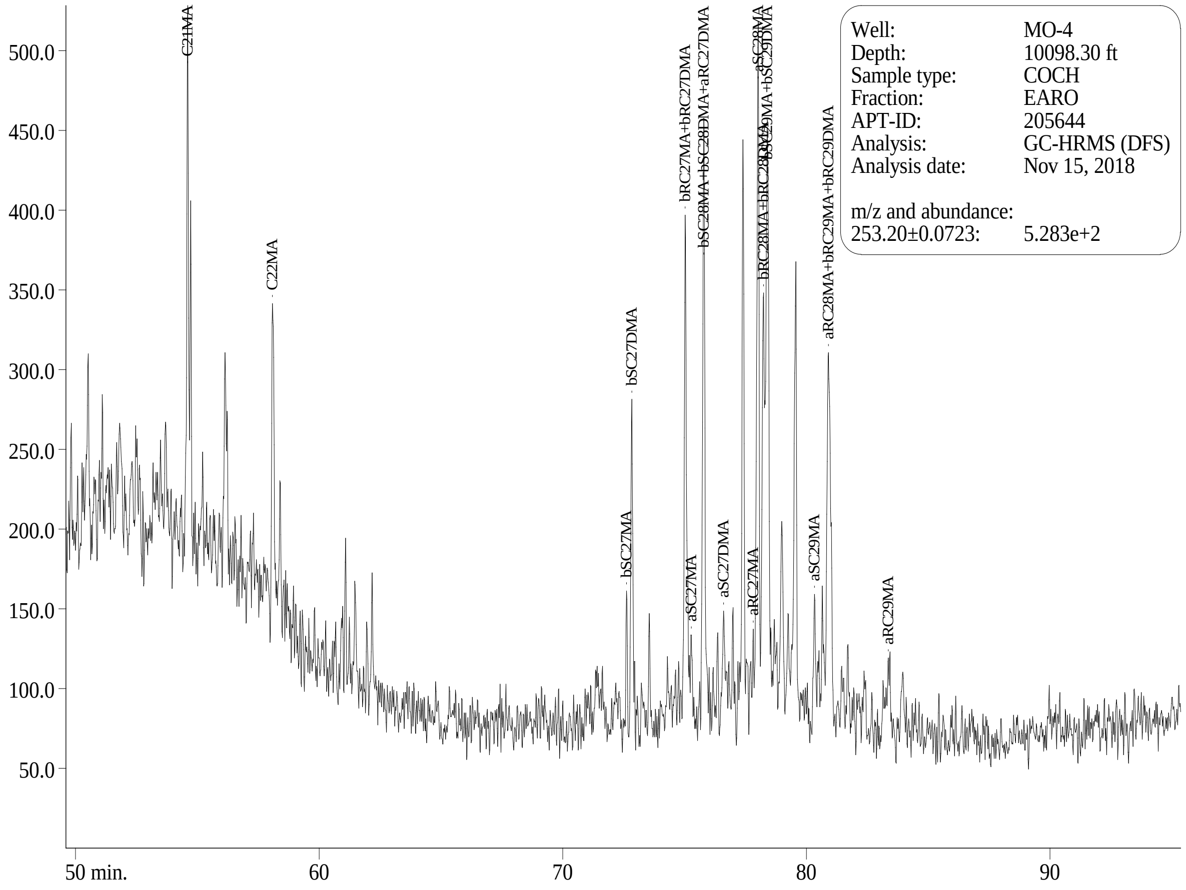

3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
142.08±0.0406: 3.246e+4
156.09±0.0446: 3.246e+4
170.11±0.0486: 3.246e+4

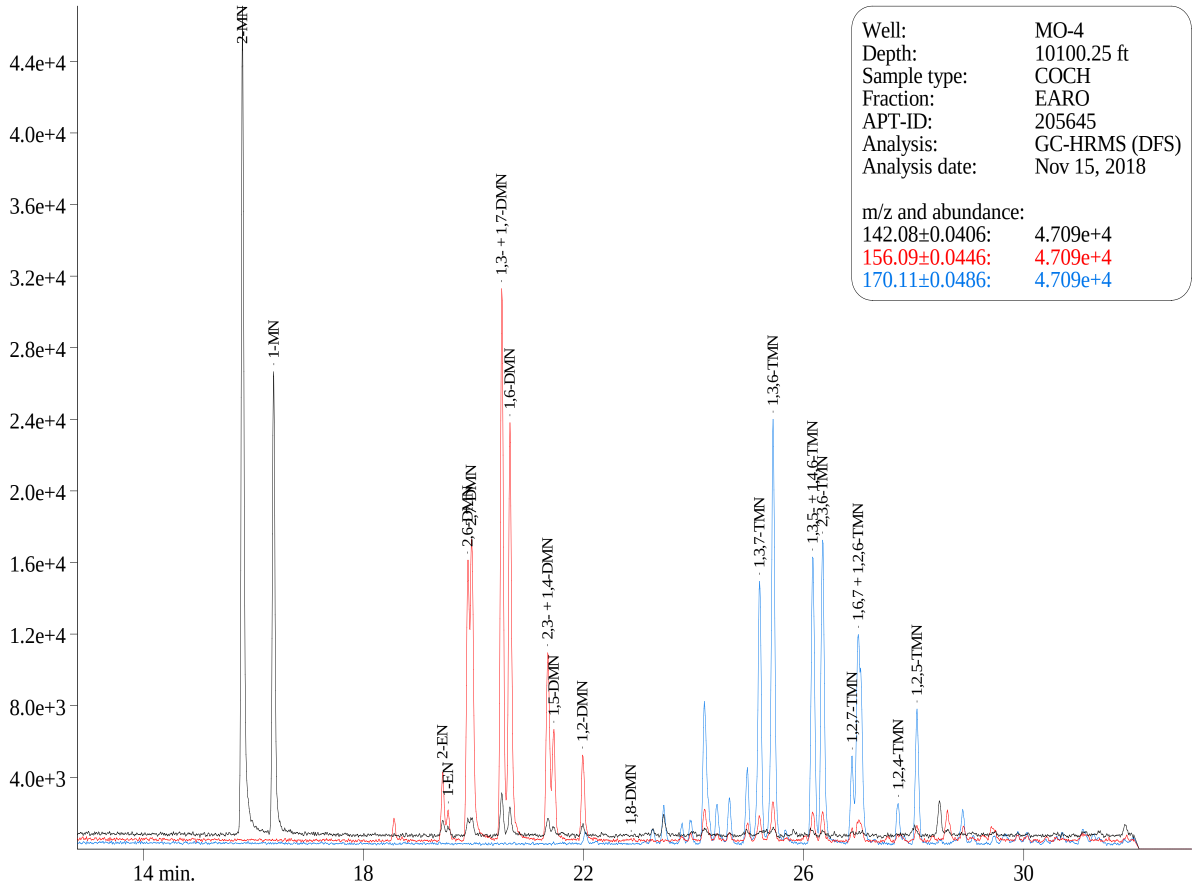

1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
178.08±0.0509: 1.727e+5
192.09±0.0549: 1.727e+5
206.11±0.0589: 1.727e+5
219.12±0.0626: 1.727e+5

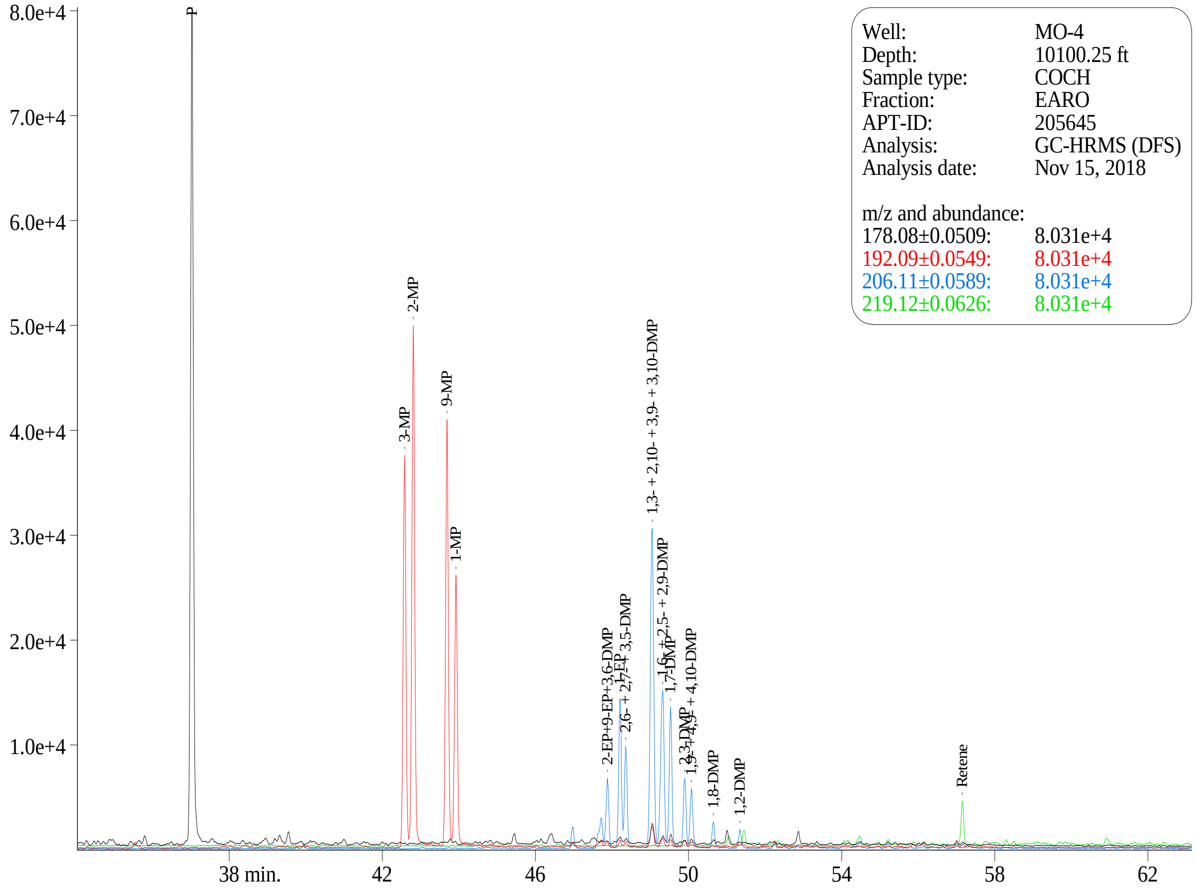

4.4e+4
4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
34 min.
36
38
40
42
44
46
48
50
52
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
184.03±0.0526: 4.602e+4
198.05±0.0566: 4.602e+4
212.07±0.0606: 4.602e+4

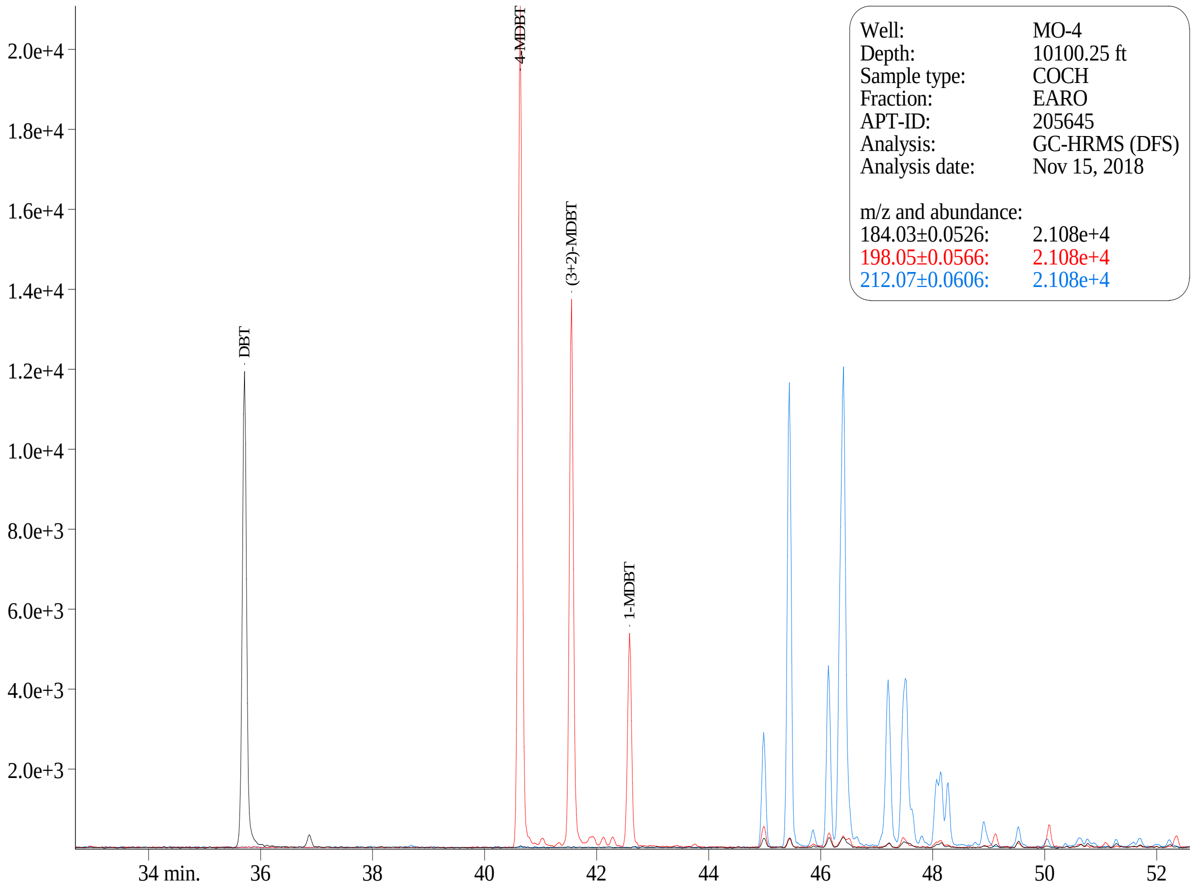

1.2e+3
1.1e+3
1.0e+3
9.0e+2
8.0e+2
7.0e+2
6.0e+2
5.0e+2
4.0e+2
3.0e+2
2.0e+2
1.0e+2
70 min.
80
90
100
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
231.12±0.0660: 8.829e+2


Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
245.1330±0.0700: 5.140e+2
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA


Well: MO-4
Depth: 10098.30 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205644
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
253.20±0.0723: 5.283e+2
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
bRC28MA+bRC28DMA
aSC28MA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA

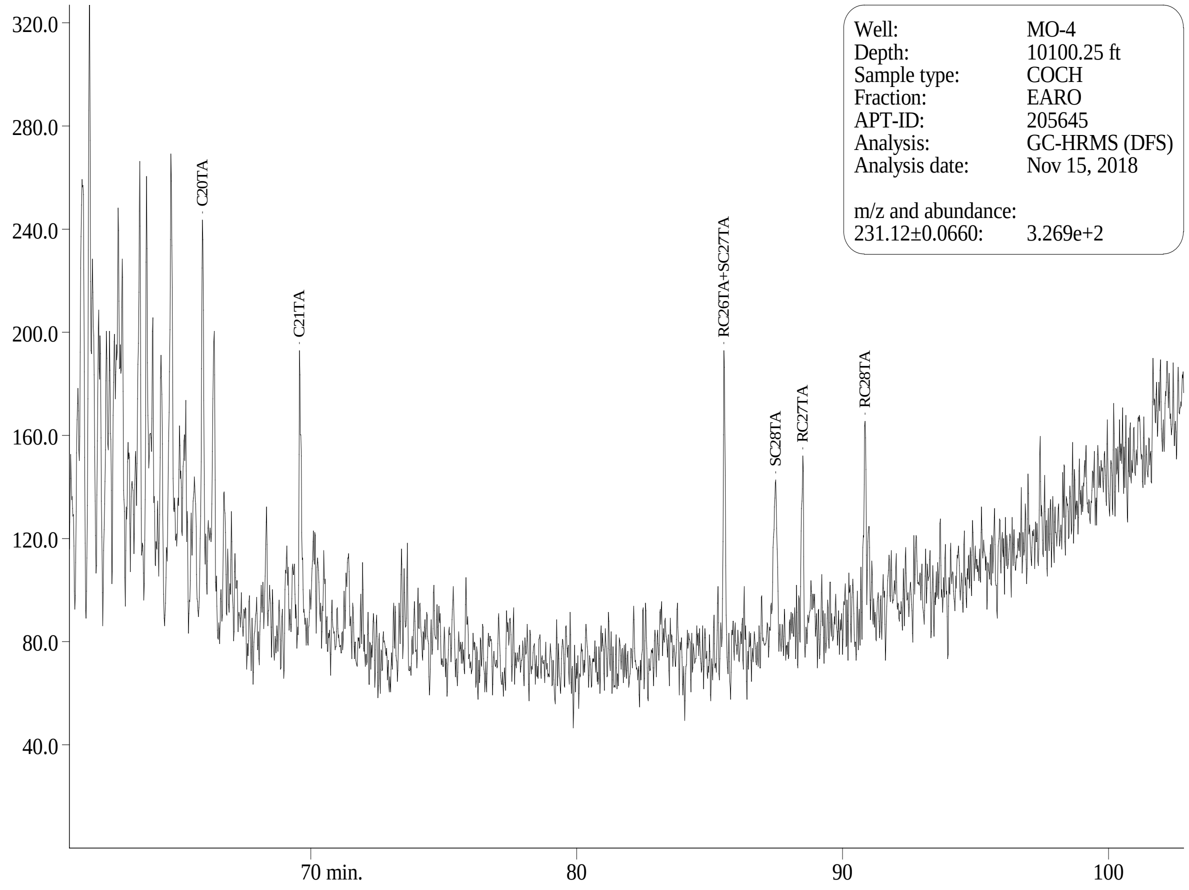

2-MN
1-MN
1-EN
2-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
4.4e+4
4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
14 min.
18
22
26
30
Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
142.08±0.0406: 4.709e+4
156.09±0.0446: 4.709e+4
170.11±0.0486: 4.709e+4


P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
38 min.
42
46
50
54
58
62
Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
178.08±0.0509: 8.031e+4
192.09±0.0549: 8.031e+4
206.11±0.0589: 8.031e+4
219.12±0.0626: 8.031e+4



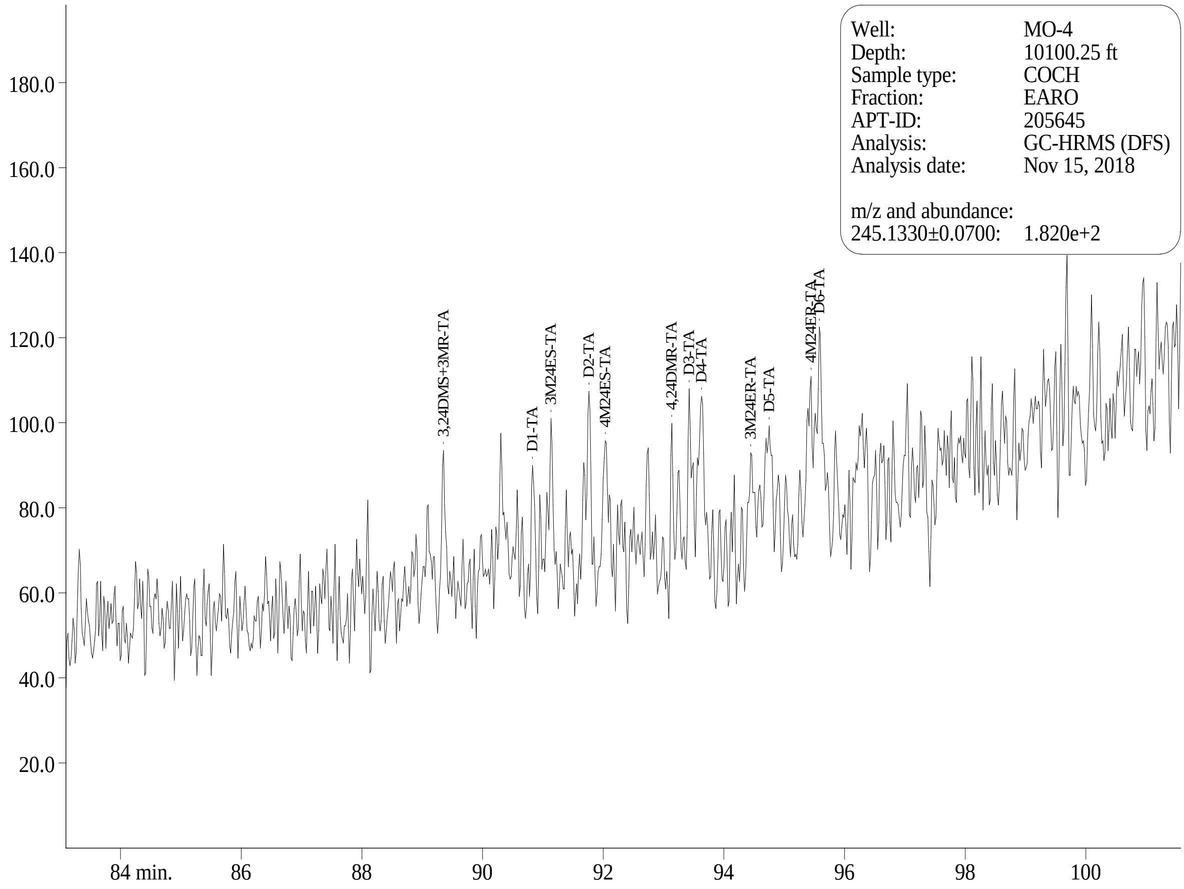
Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

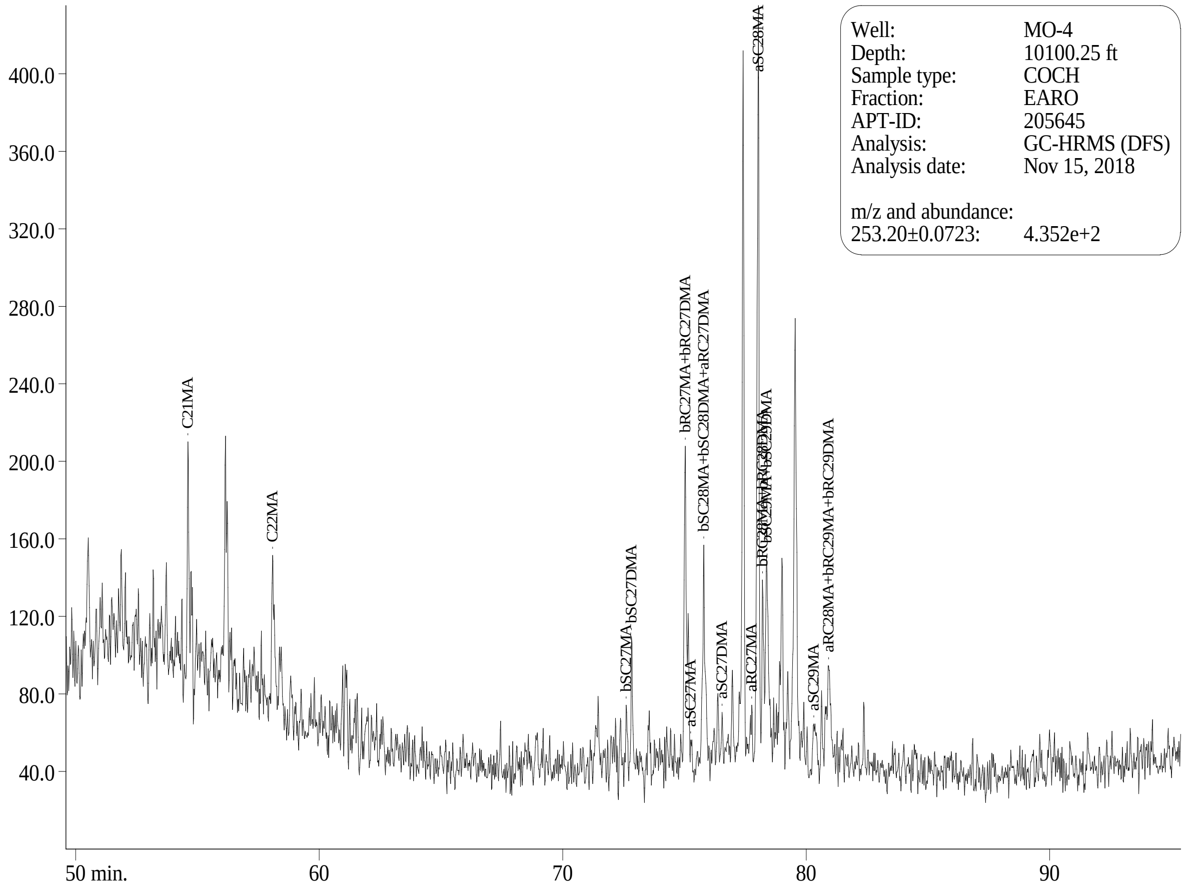
m/z and abundance:
184.03±0.0526: 2.108e+4
198.05±0.0566: 2.108e+4
212.07±0.0606: 2.108e+4

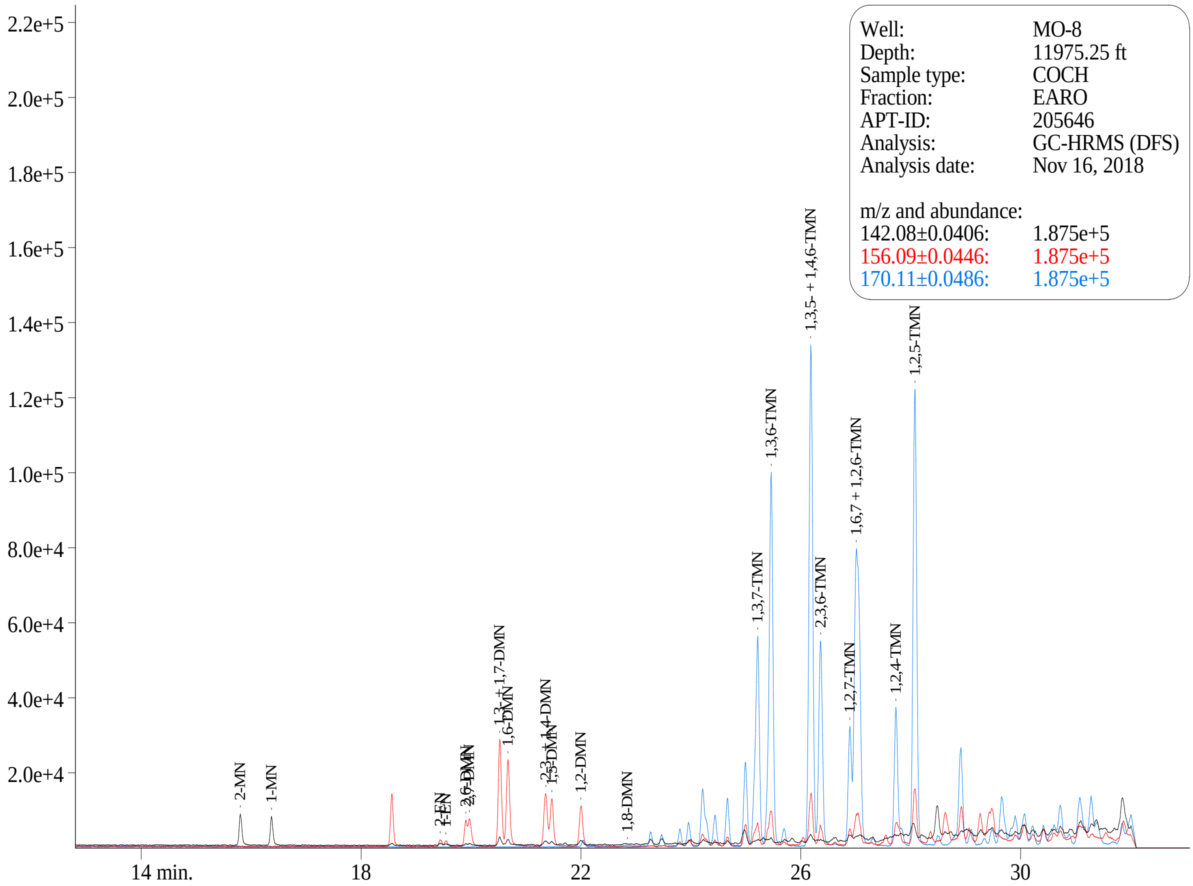


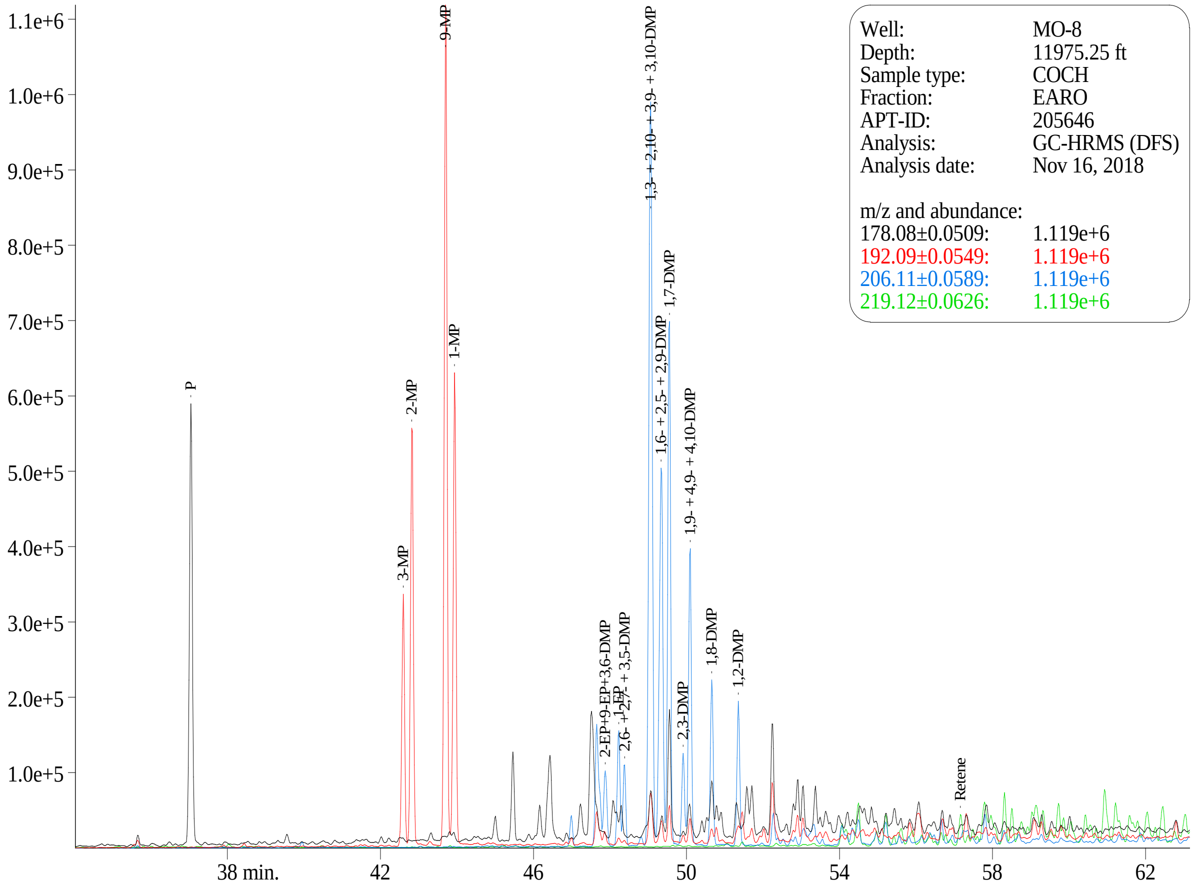
Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018

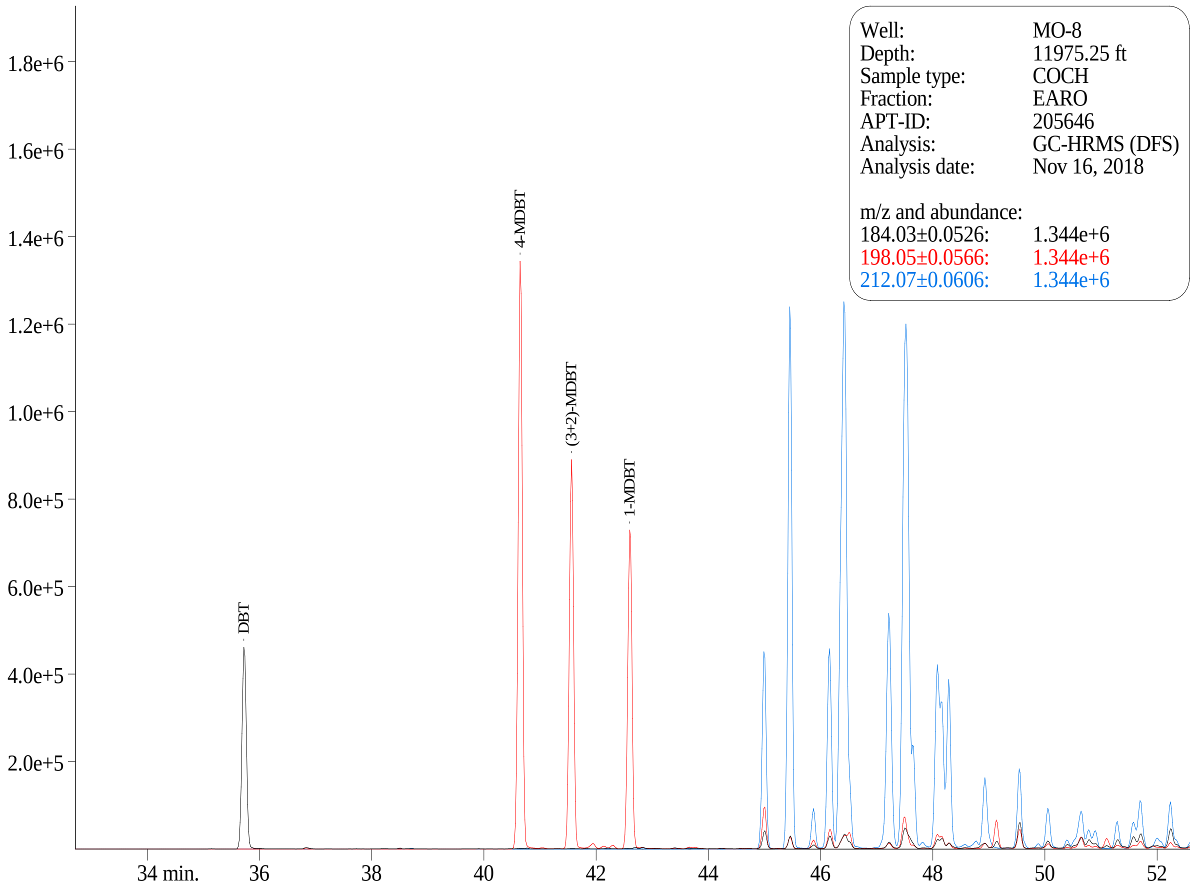
m/z and abundance:
231.12±0.0660: 3.269e+2

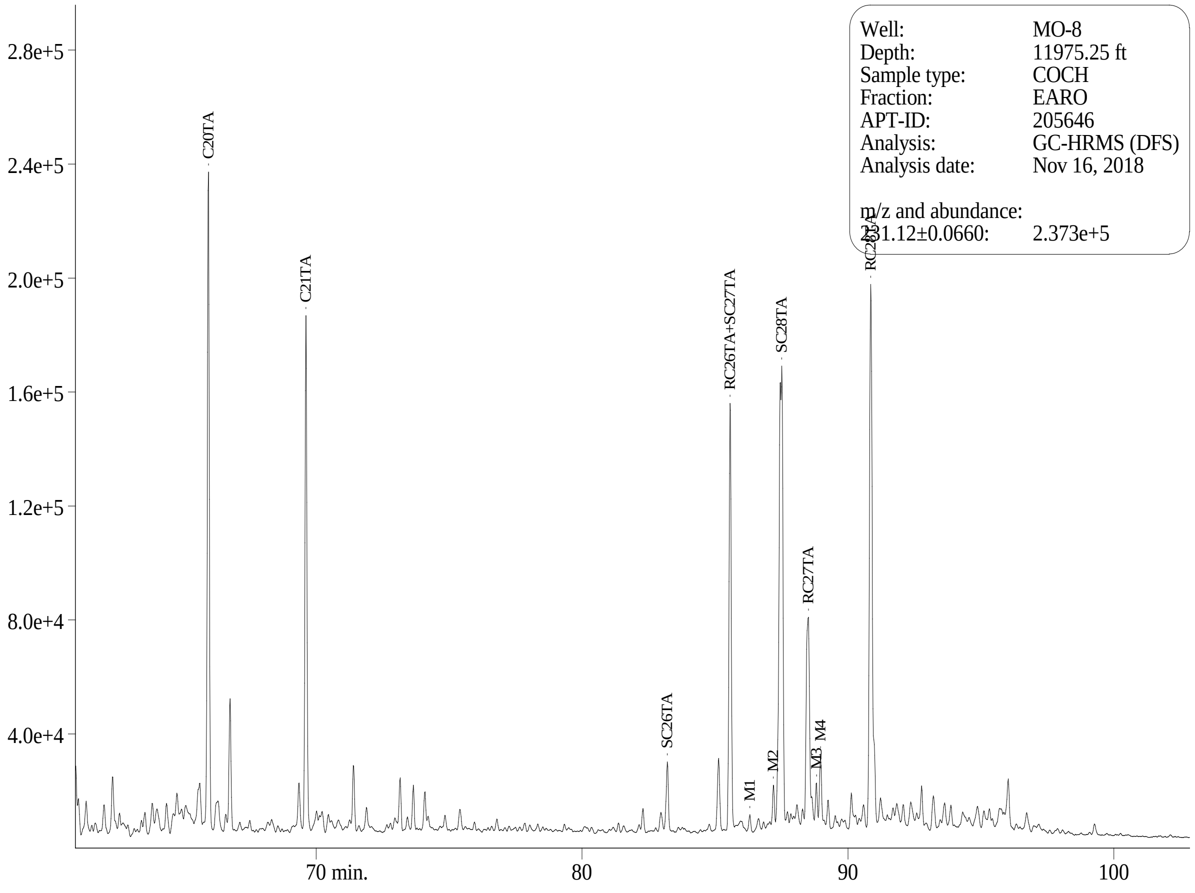

Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
245.1330±0.0700: 1.820e+2
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
84 min.
86
88
90
92
94
96
98
100
3,24DMS+3MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
4,24DMR-TA
D3-TA
D4-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA

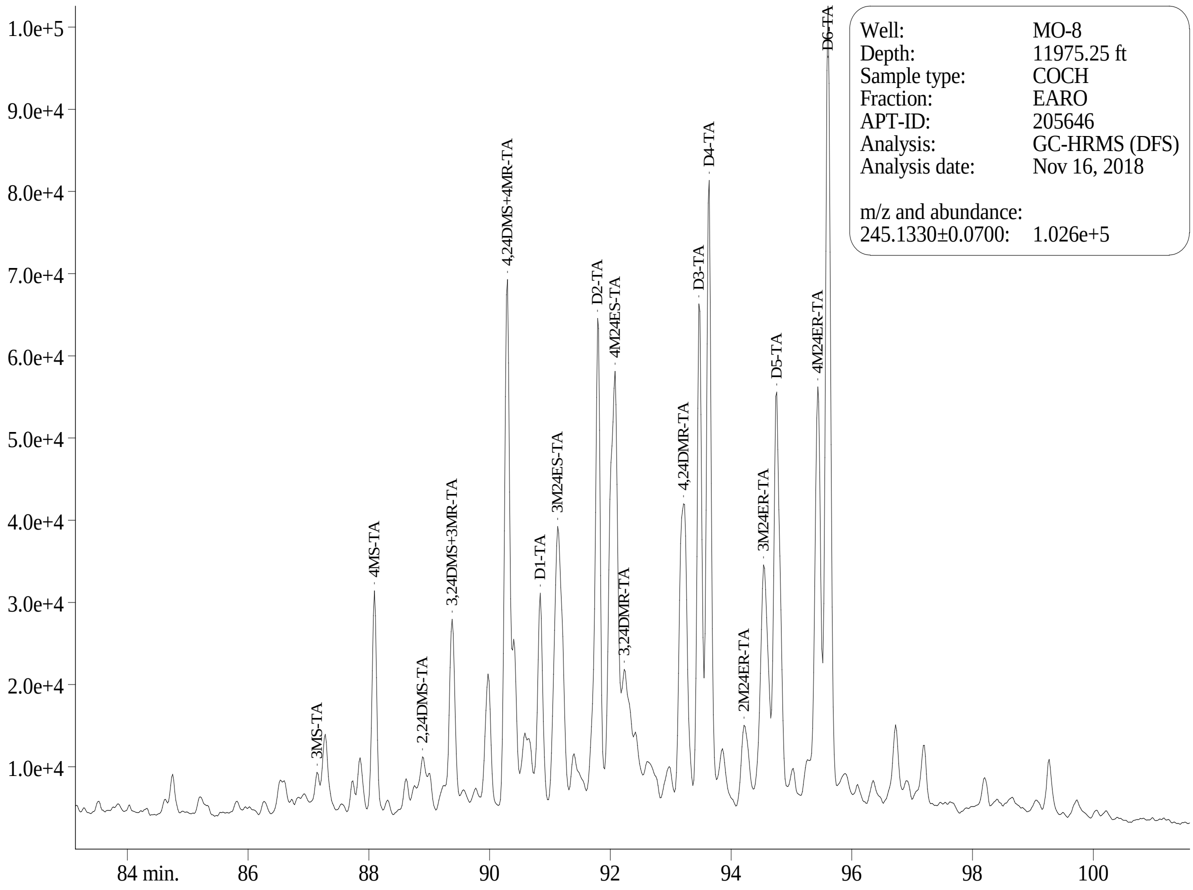

Well: MO-4
Depth: 10100.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205645
Analysis: GC-HRMS (DFS)
Analysis date: Nov 15, 2018
m/z and abundance:
253.20±0.0723: 4.352e+2
400.0
360.0
320.0
280.0
240.0
200.0
160.0
120.0
80.0
40.0
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA

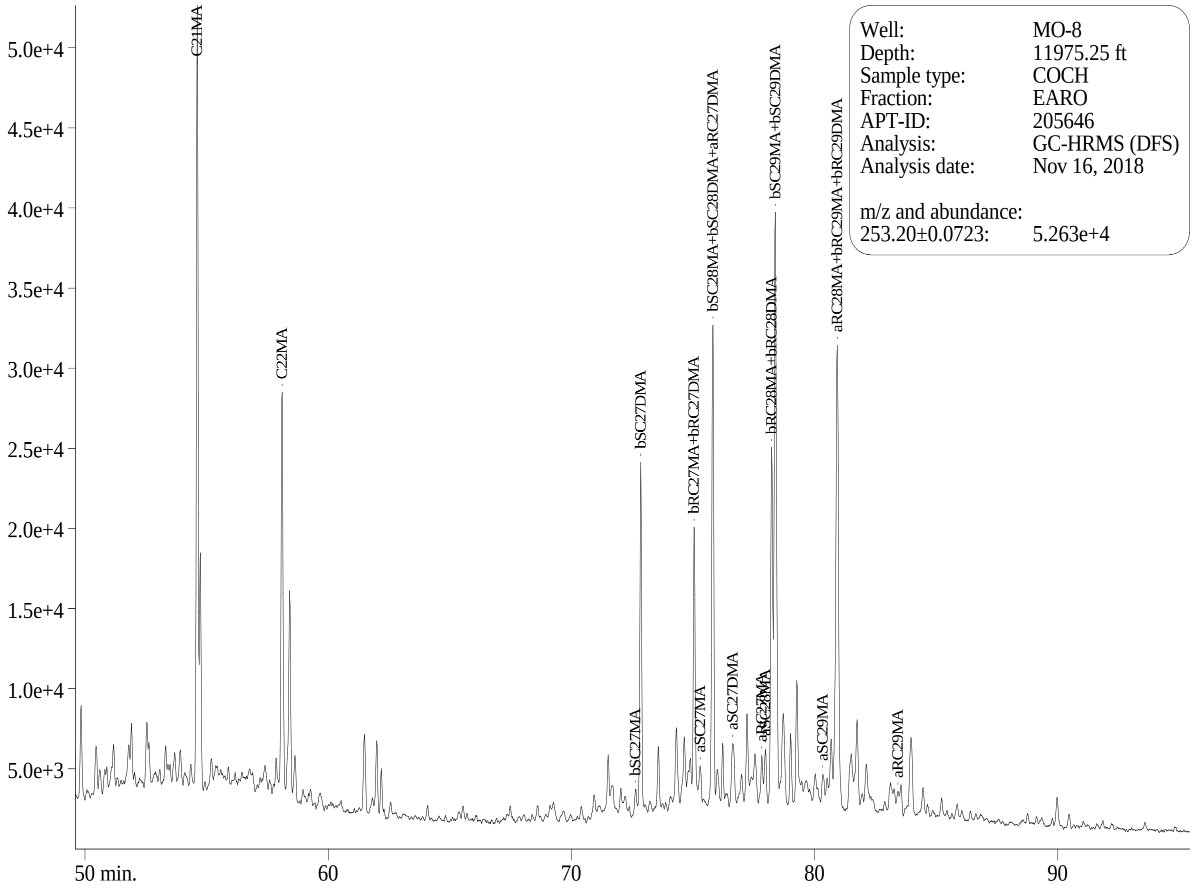

2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 1.875e+5
156.09±0.0446: 1.875e+5
170.11±0.0486: 1.875e+5

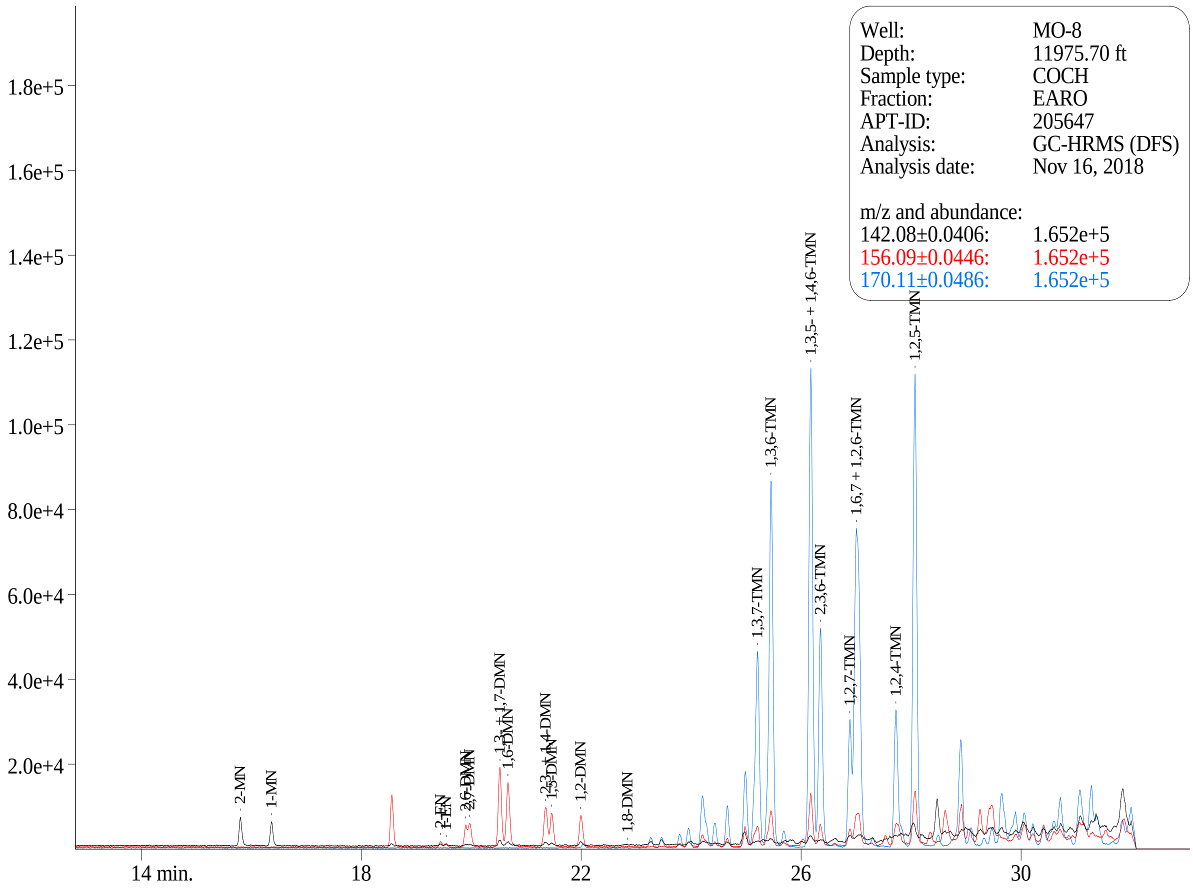

1.1e+6
1.0e+6
9.0e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
38 min.
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 1.119e+6
192.09±0.0549: 1.119e+6
206.11±0.0589: 1.119e+6
219.12±0.0626: 1.119e+6


Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 1.344e+6
198.05±0.0566: 1.344e+6
212.07±0.0606: 1.344e+6
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
1.8e+6
1.6e+6
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
34 min.
36
38
40
42
44
46
48
50
52


Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 2.373e+5
C20TA
C21TA
SC26TA
M1
RC26TA+SC27TA
M2
SC28TA
RC27TA
M3
M4
RC28TA
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
70 min.
80
90
100


1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.026e+5

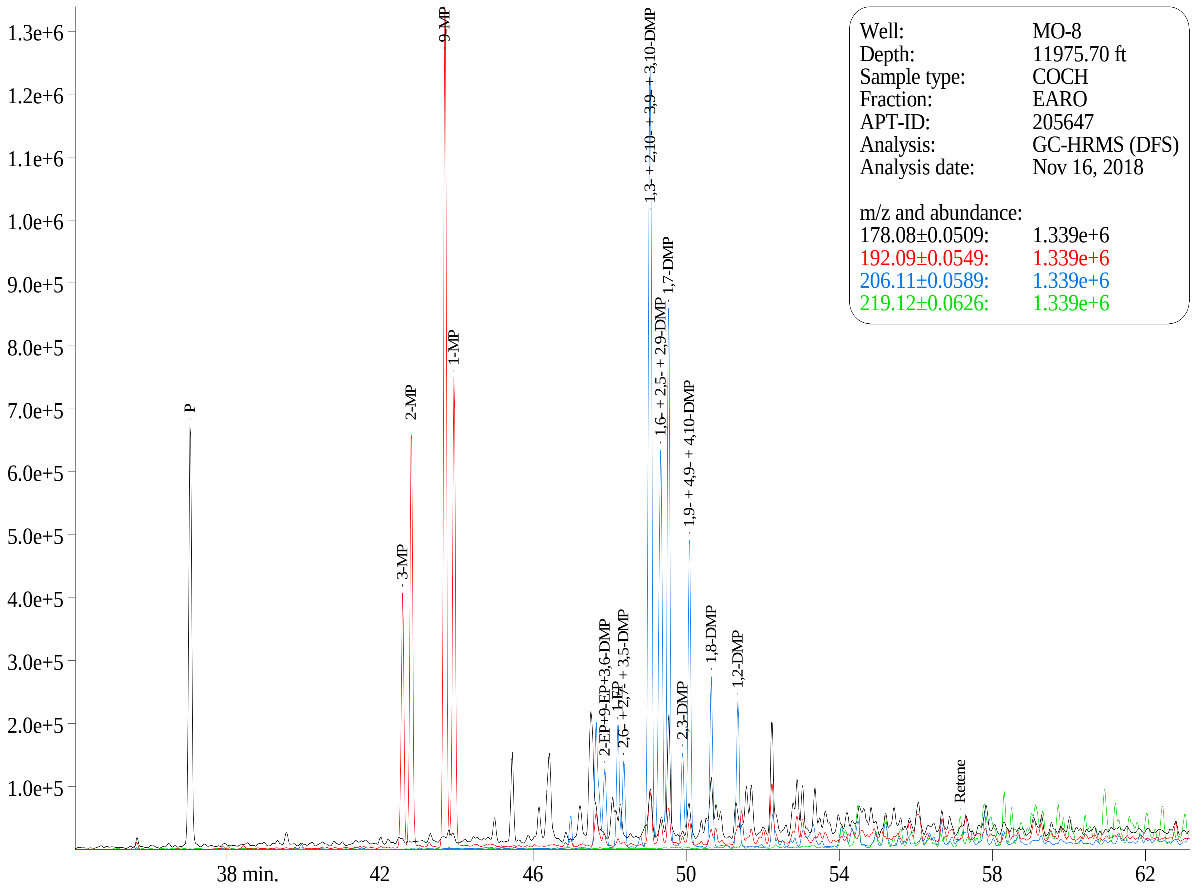

5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
Well: MO-8
Depth: 11975.25 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205646
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 5.263e+4



Well:	MO-8
Depth:	11975.70 ft
Sample type:	COCH
Fraction:	EARO
APT-ID:	205647
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 16, 2018

m/z and abundance:

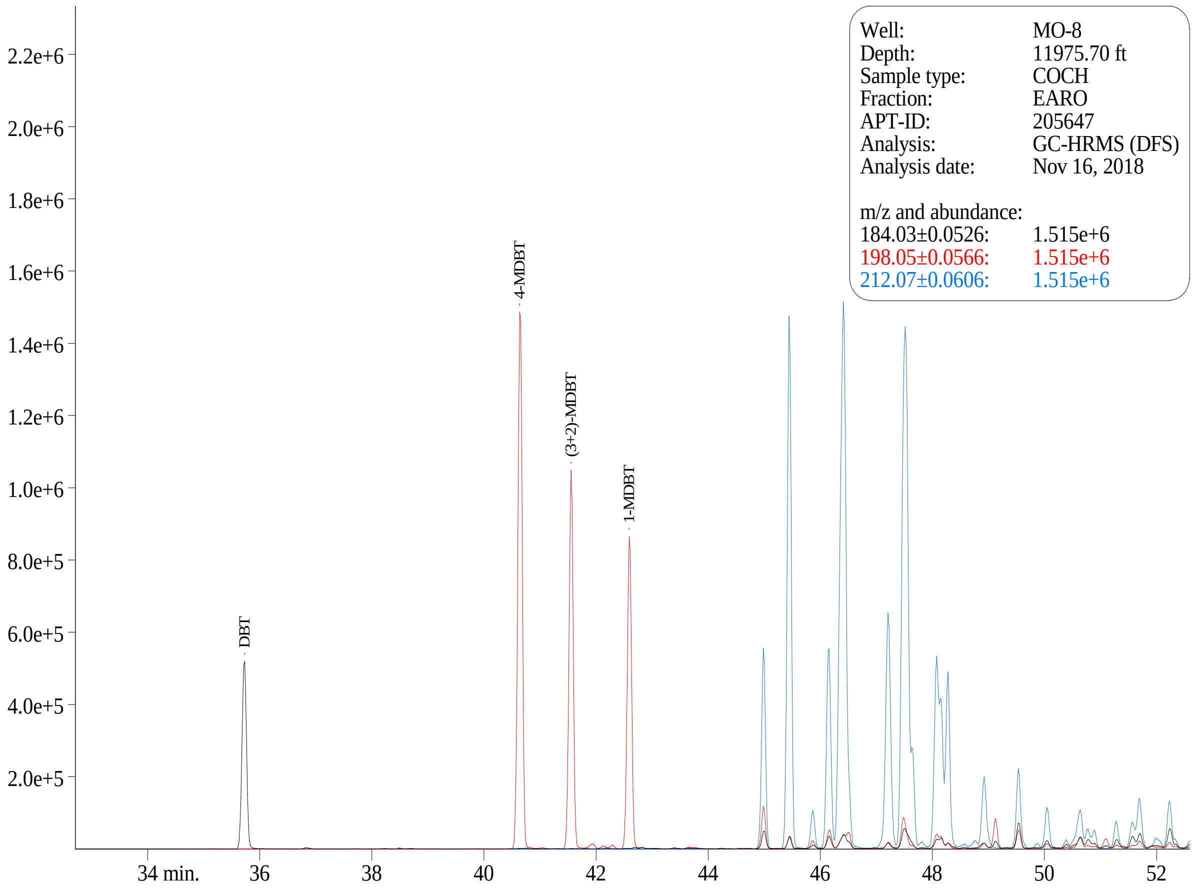
142.08±0.0406:	1.652e+5
156.09±0.0446:	1.652e+5
170.11±0.0486:	1.652e+5

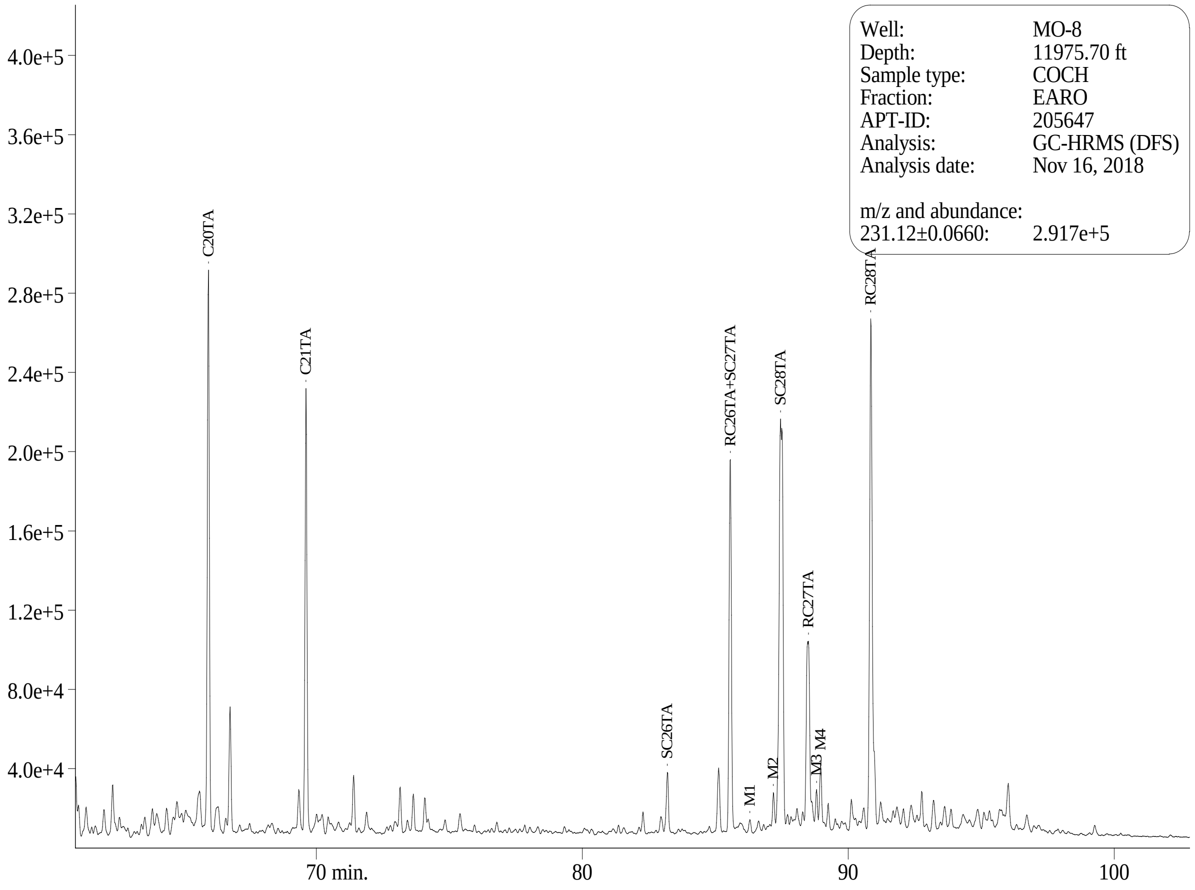


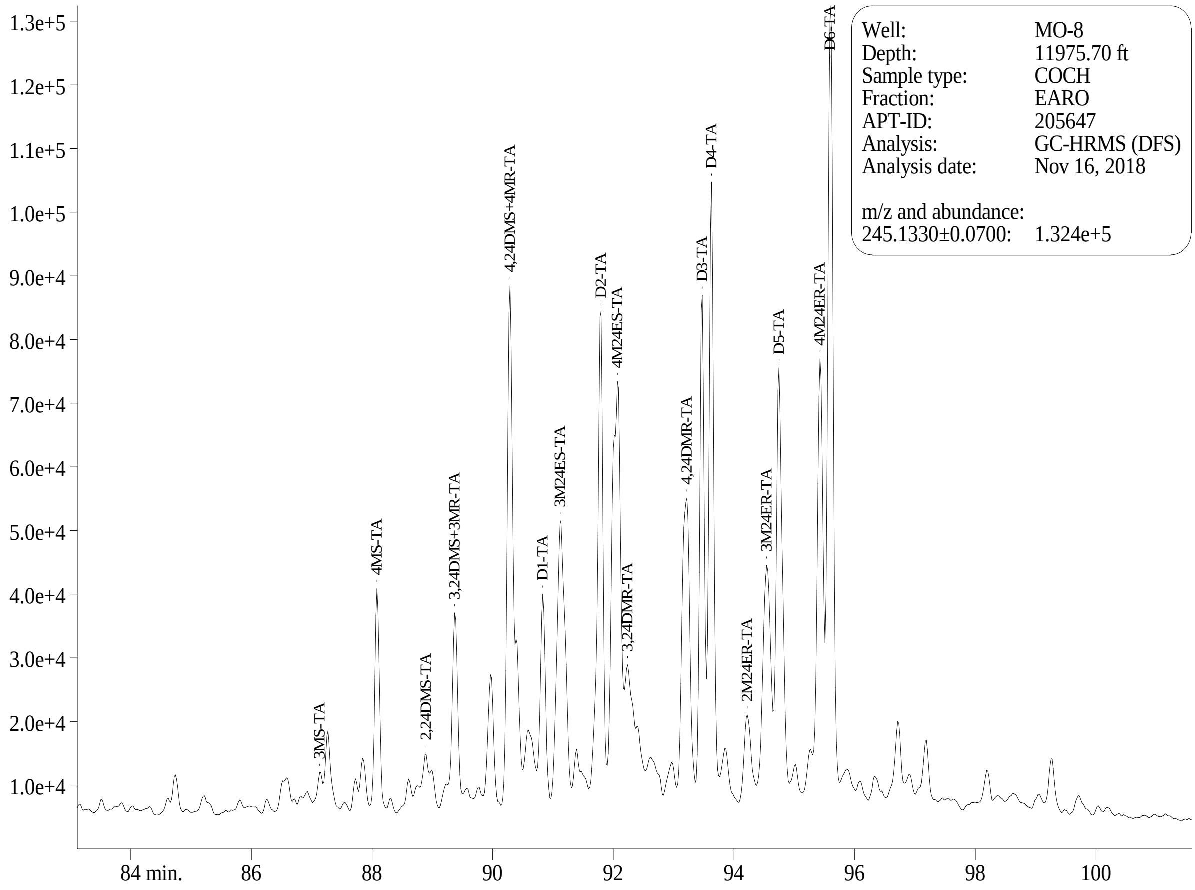
Well:	MO-8
Depth:	11975.70 ft
Sample type:	COCH
Fraction:	EARO
APT-ID:	205647
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 16, 2018

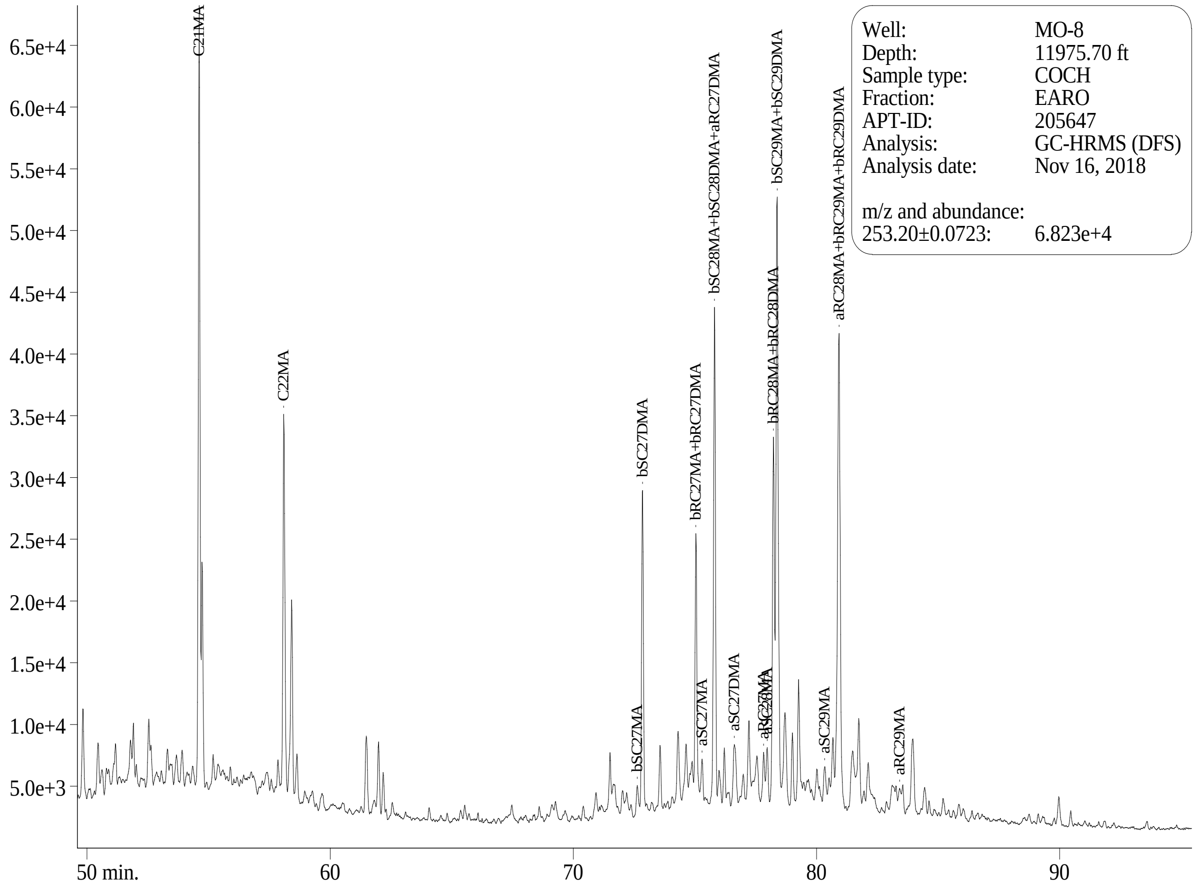
m/z and abundance:

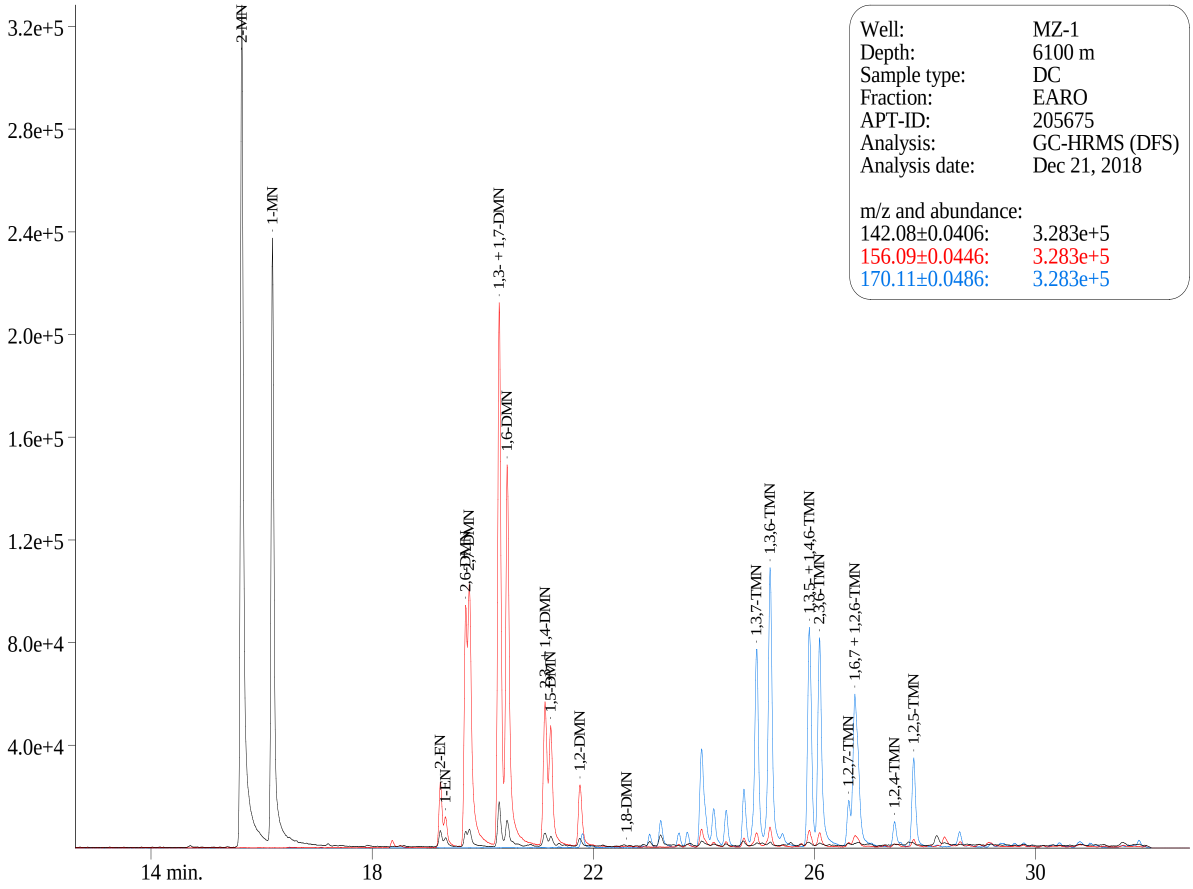
178.08±0.0509:	1.339e+6
192.09±0.0549:	1.339e+6
206.11±0.0589:	1.339e+6
219.12±0.0626:	1.339e+6

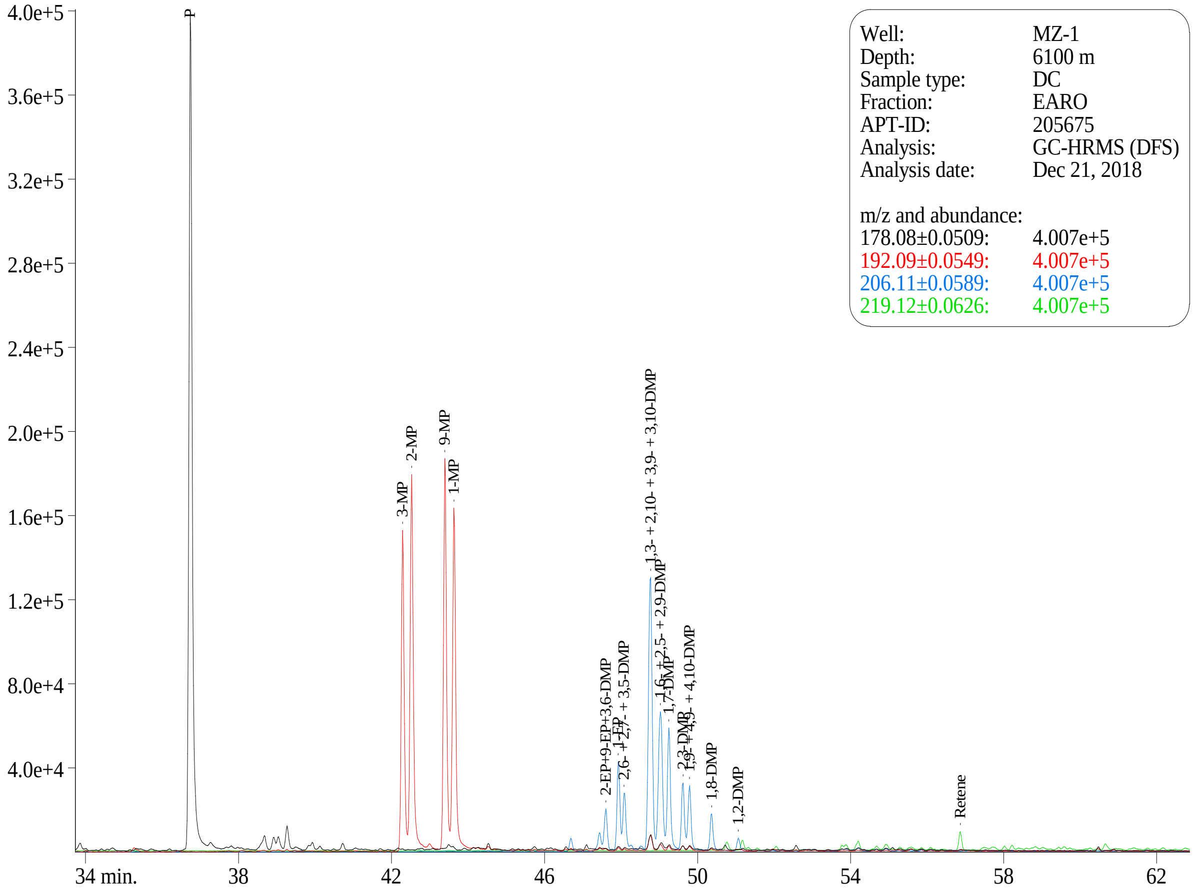

Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 1.515e+6
198.05±0.0566: 1.515e+6
212.07±0.0606: 1.515e+6
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
2.2e+6
2.0e+6
1.8e+6
1.6e+6
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
34 min.
36
38
40
42
44
46
48
50
52

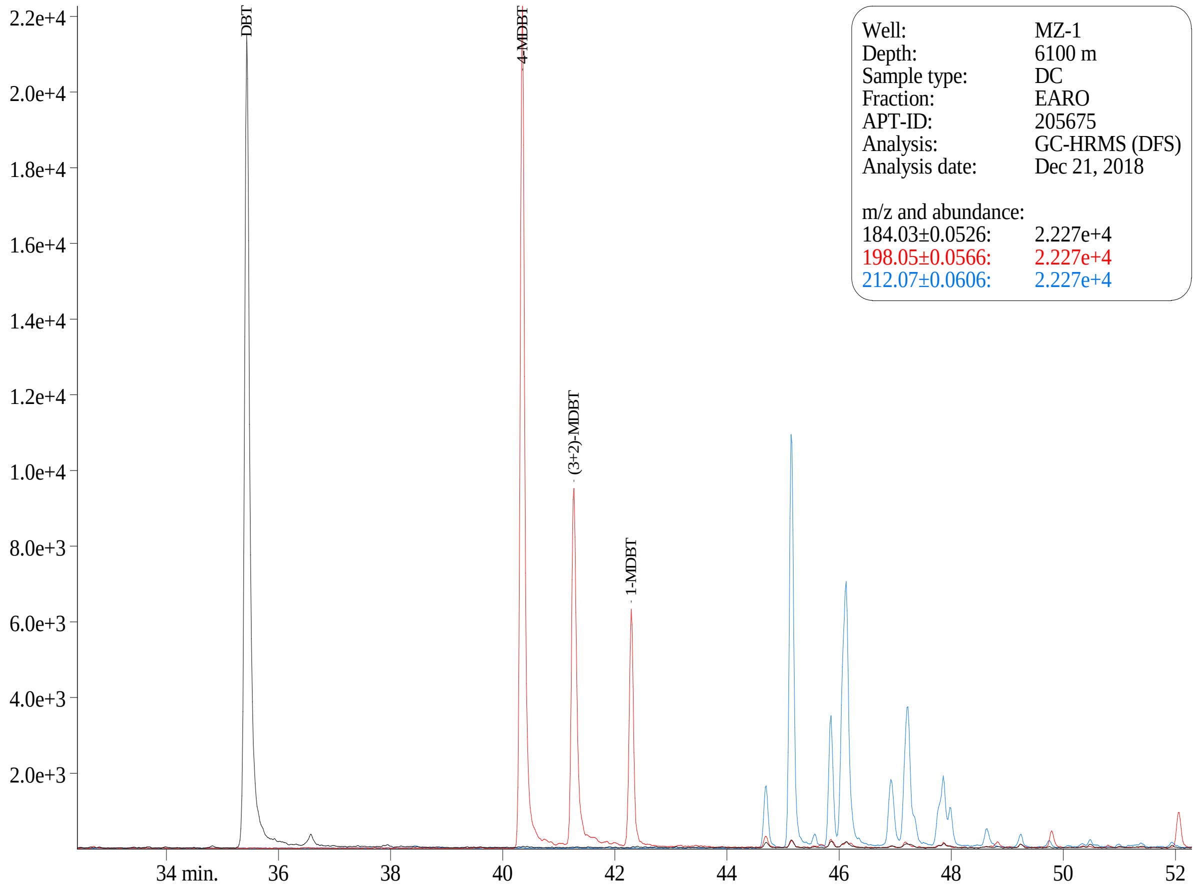

Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 2.917e+5
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
70 min.
80
90
100

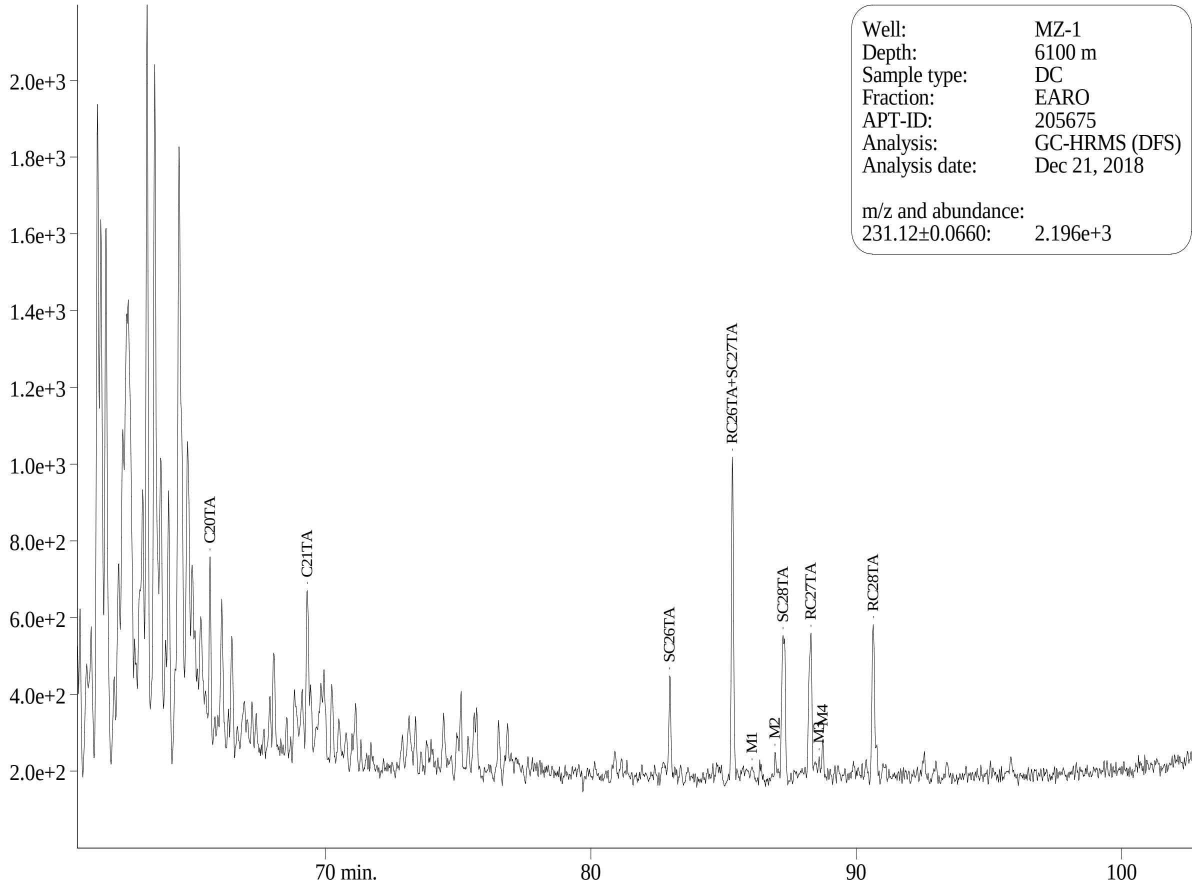

Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.324e+5
1.3e+5
1.2e+5
1.1e+5
1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA

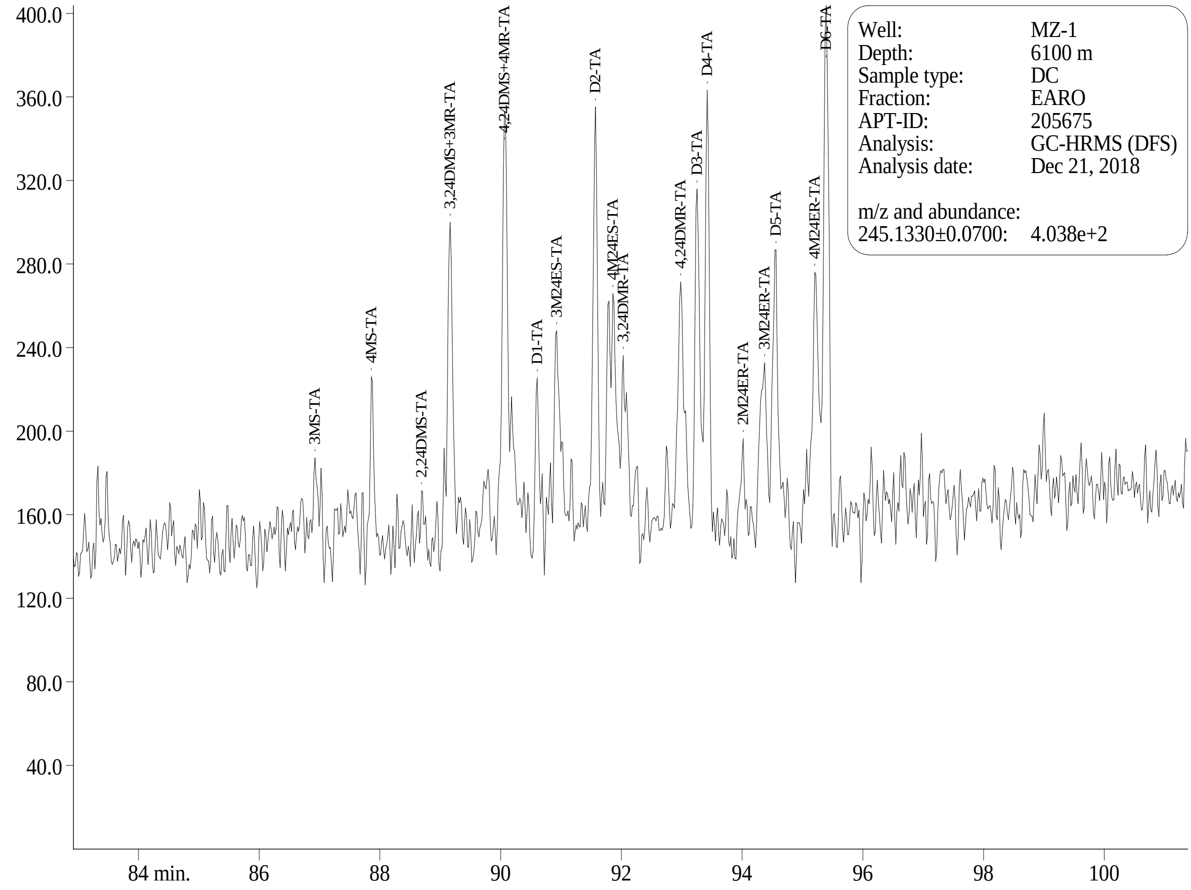

Well: MO-8
Depth: 11975.70 ft
Sample type: COCH
Fraction: EARO
APT-ID: 205647
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 6.823e+4
6.5e+4
6.0e+4
5.5e+4
5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA


3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
14 min.
18
22
26
30
2-MN
1-MN
1,3- + 1,7-DMN
1,6-DMN
2,6-DMN
2,7-DMN
2-EN
1-EN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,6,7 + 1,2,6-TMN
1,2,7-TMN
1,2,4-TMN
1,2,5-TMN
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: EARO
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
142.08±0.0406: 3.283e+5
156.09±0.0446: 3.283e+5
170.11±0.0486: 3.283e+5


4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
2,6- + 2,7- + 3,5-DMP
1-EP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: EARO
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
178.08±0.0509: 4.007e+5
192.09±0.0549: 4.007e+5
206.11±0.0589: 4.007e+5
219.12±0.0626: 4.007e+5

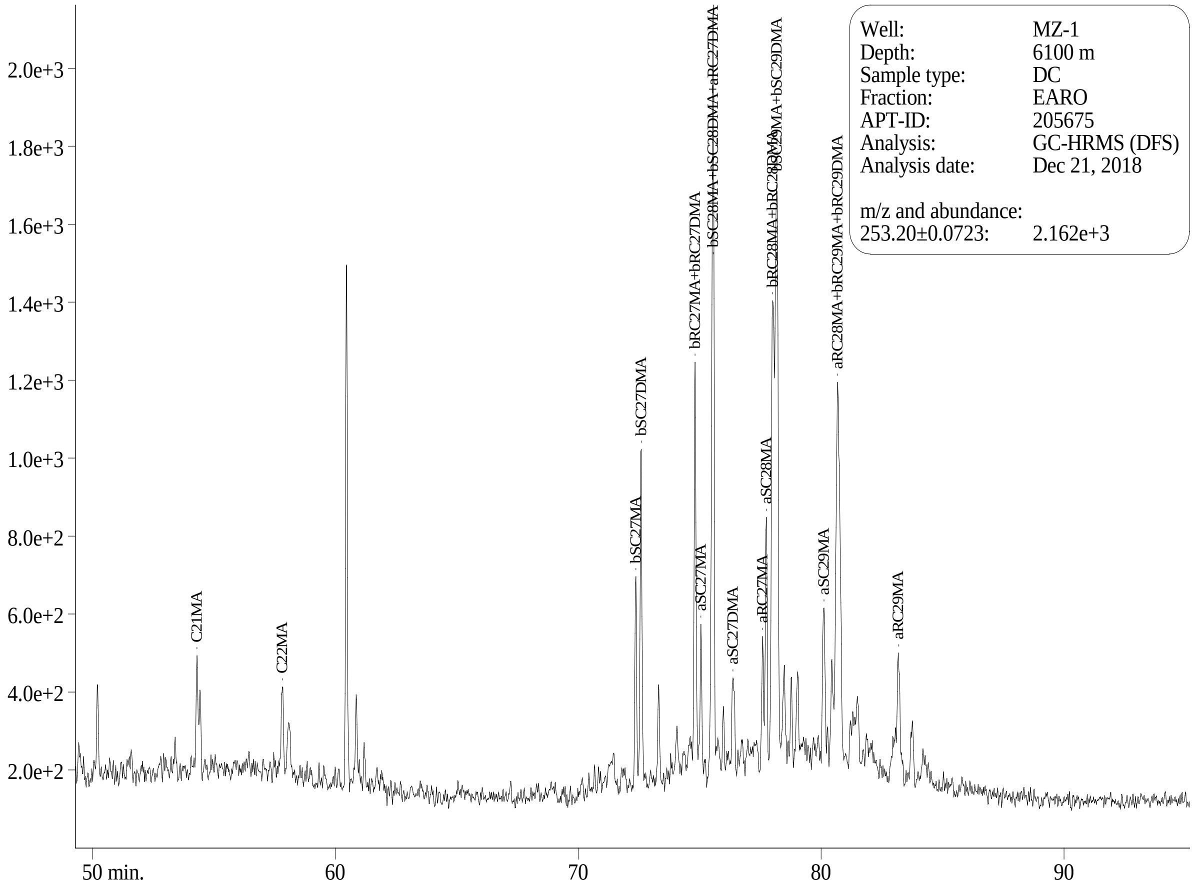

2.2e+4
2.0e+4
1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
34 min.
36
38
40
42
44
46
48
50
52
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: EARO
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
184.03±0.0526: 2.227e+4
198.05±0.0566: 2.227e+4
212.07±0.0606: 2.227e+4


2.0e+3
1.8e+3
1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
70 min.
80
90
100
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: EARO
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.12±0.0660: 2.196e+3



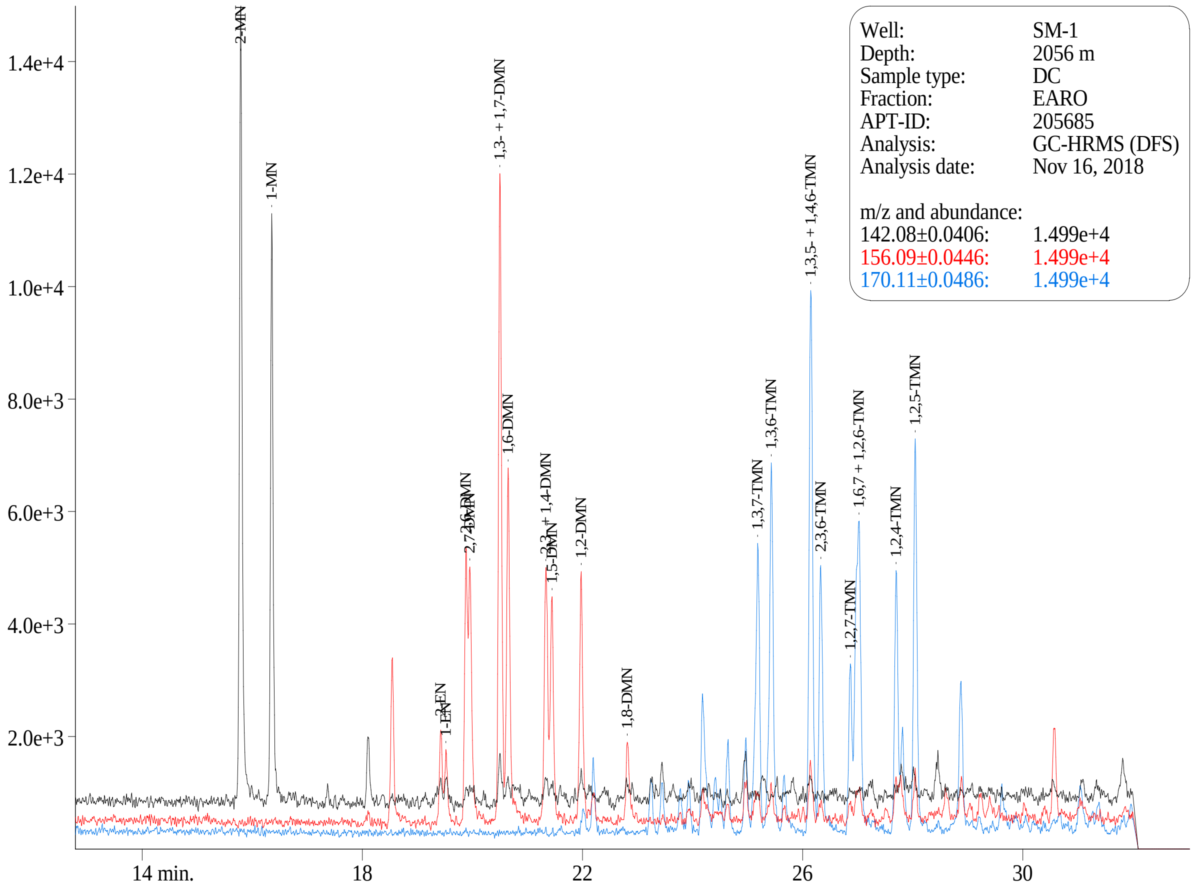
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: EARO
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

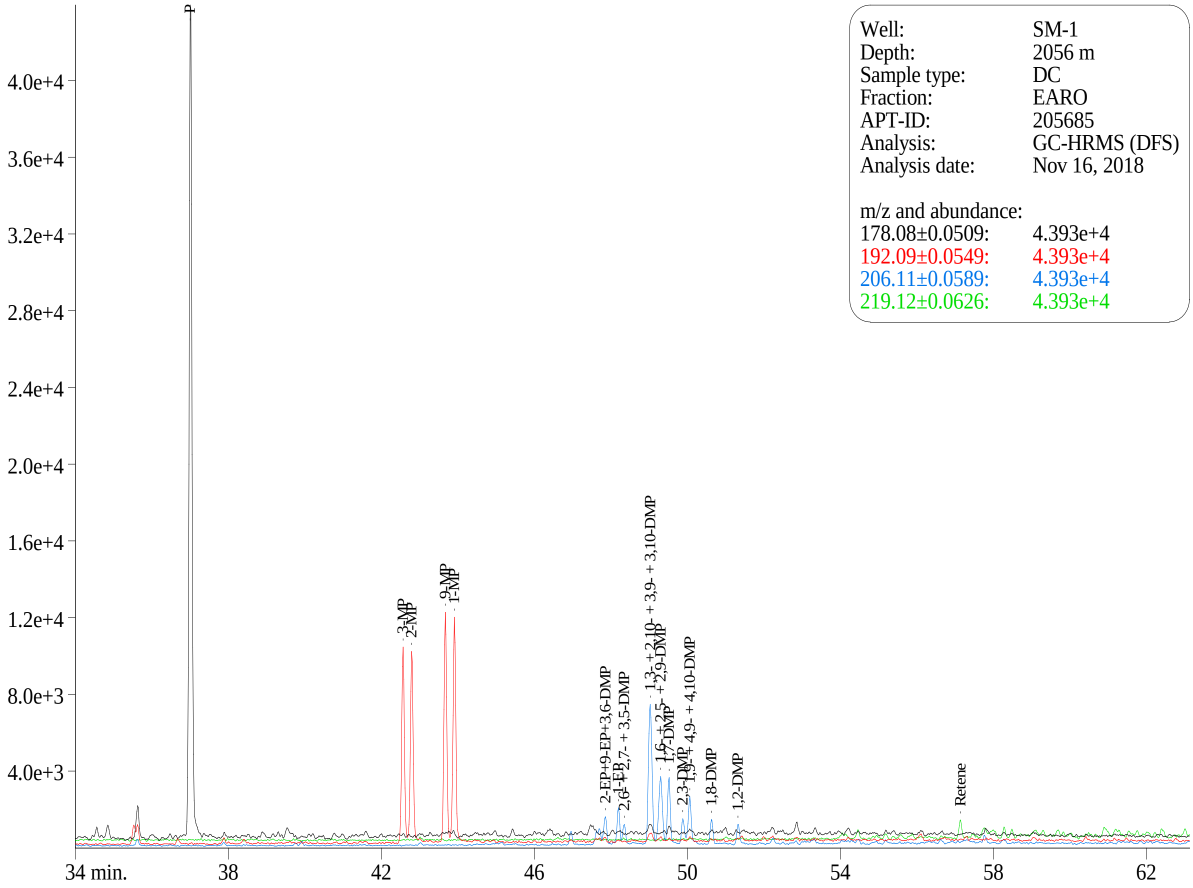
m/z and abundance:
245.1330±0.0700: 4.038e+2

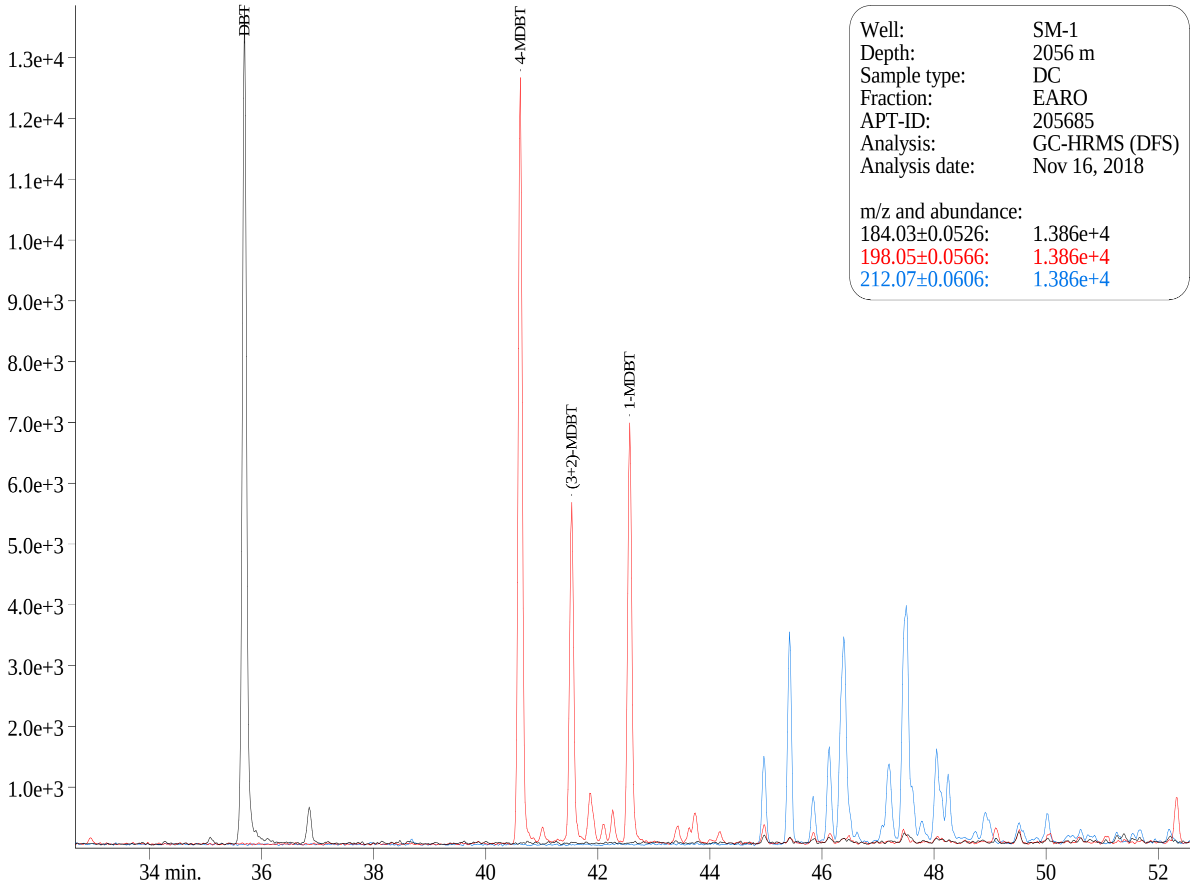


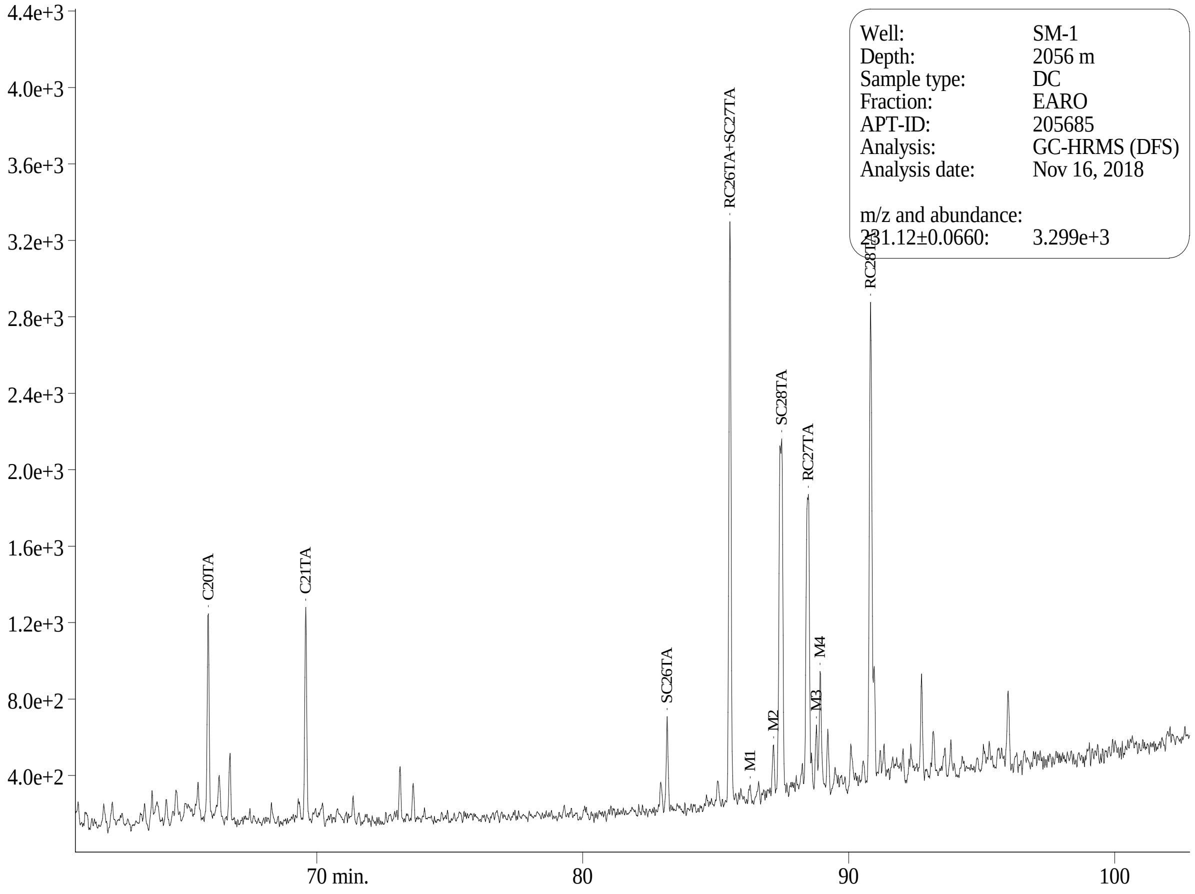
Well: MZ-1
Depth: 6100 m
Sample type: DC
Fraction: EARO
APT-ID: 205675
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

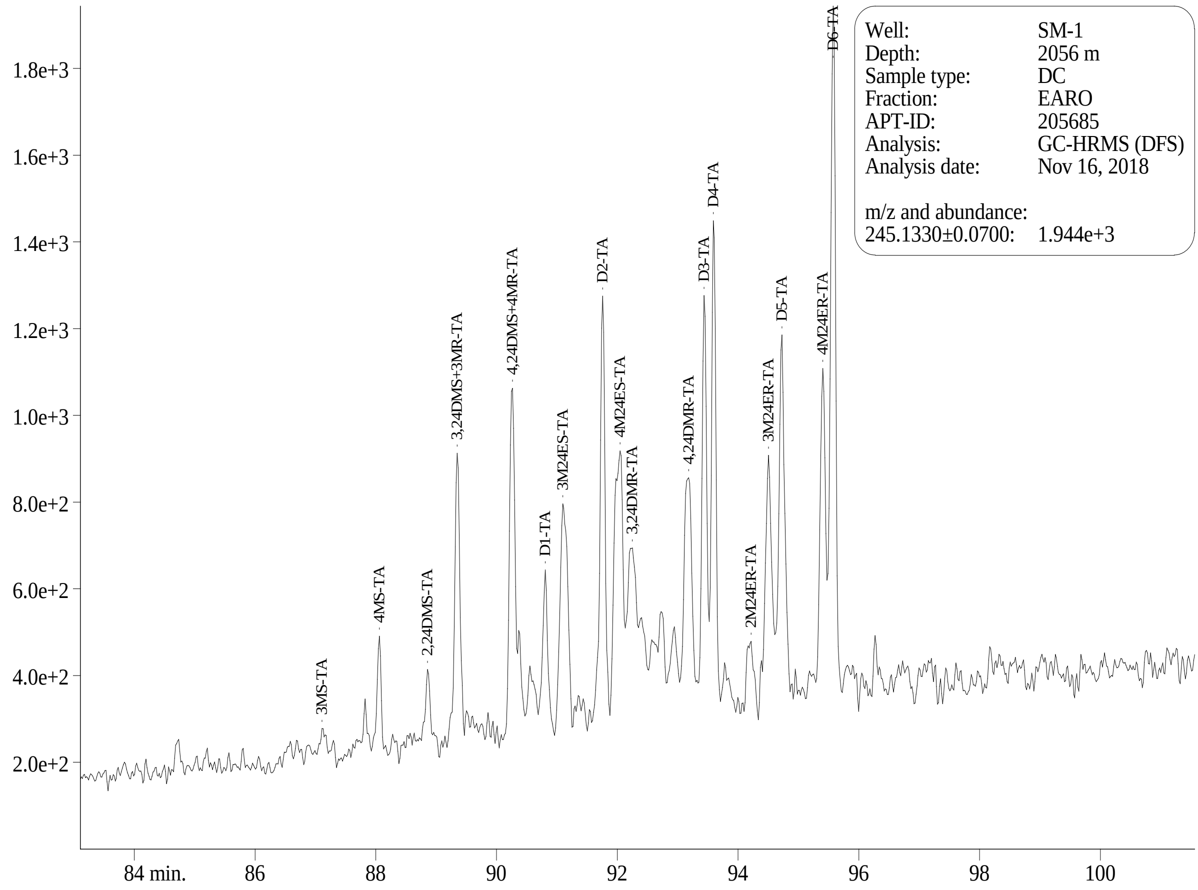
m/z and abundance:
253.20±0.0723: 2.162e+3

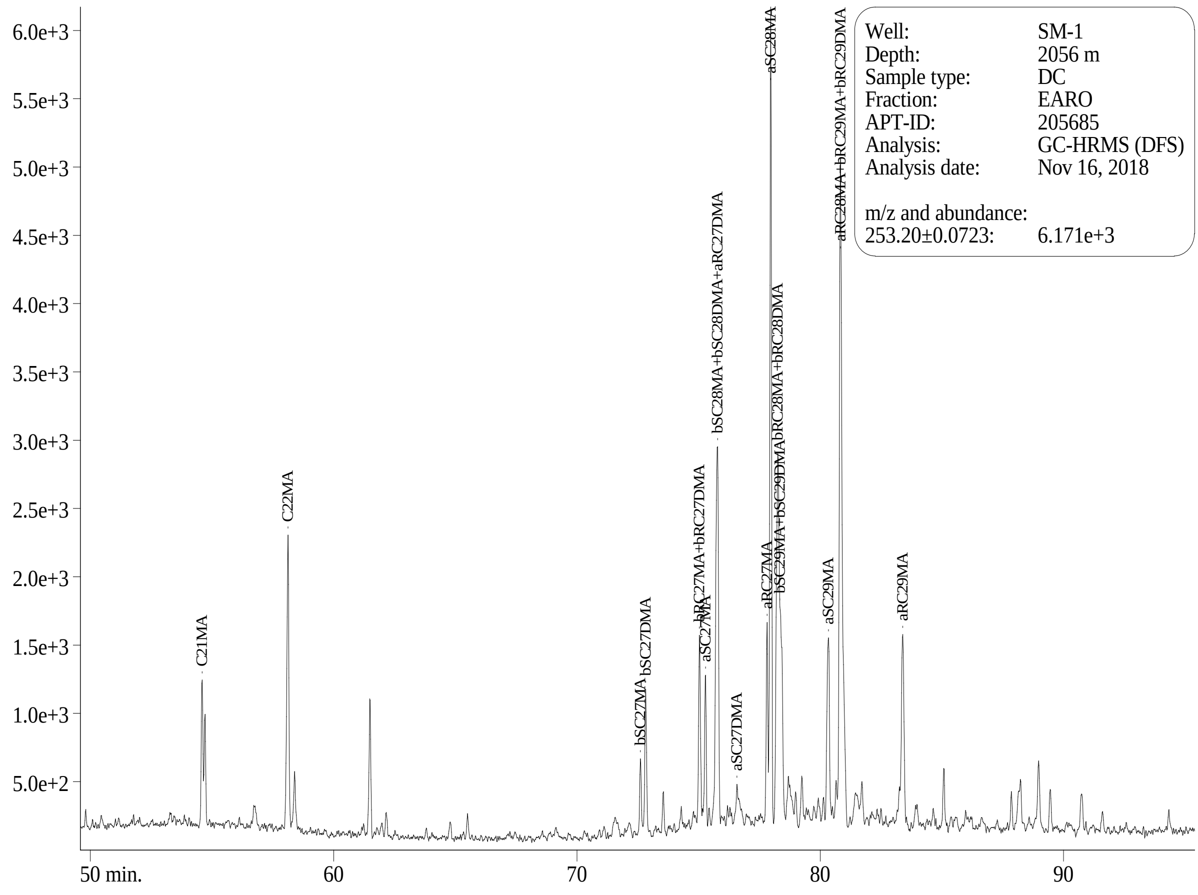

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: EARO
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 1.499e+4
156.09±0.0446: 1.499e+4
170.11±0.0486: 1.499e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN

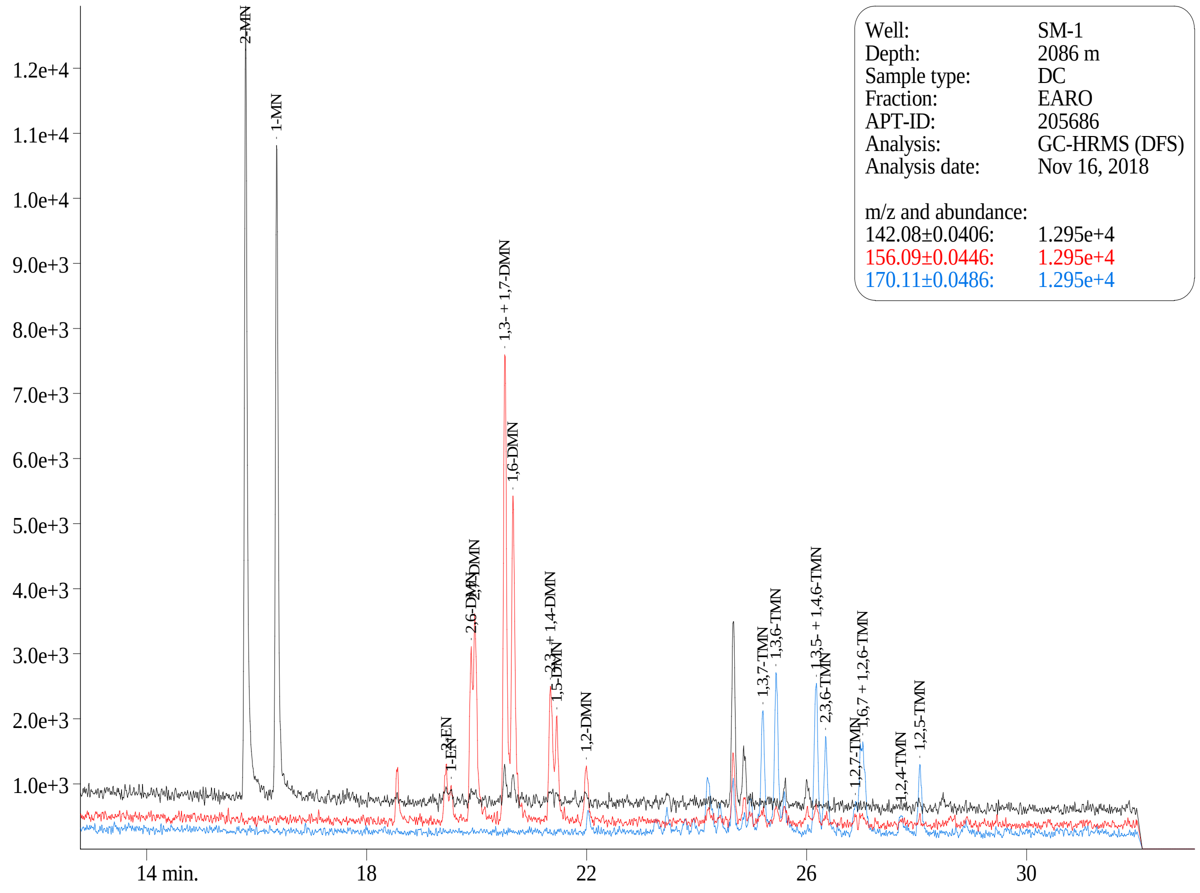

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: EARO
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 4.393e+4
192.09±0.0549: 4.393e+4
206.11±0.0589: 4.393e+4
219.12±0.0626: 4.393e+4
4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
2,6- + 2,7- + 3,5-DMP
1-EP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene

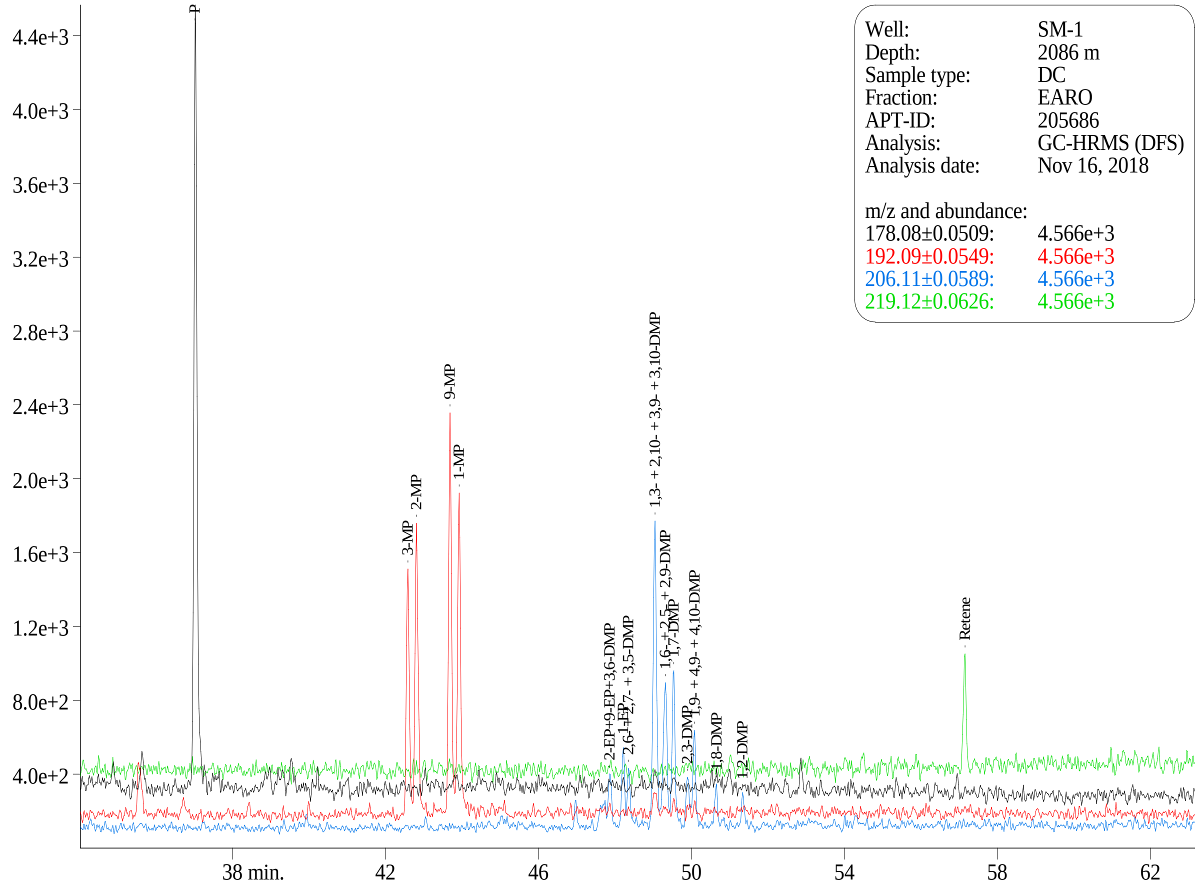

DBT
4-MDBT
(3+2)-MDBT
1-MDBT
1.3e+4
1.2e+4
1.1e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
34 min.
36
38
40
42
44
46
48
50
52
Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: EARO
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 1.386e+4
198.05±0.0566: 1.386e+4
212.07±0.0606: 1.386e+4

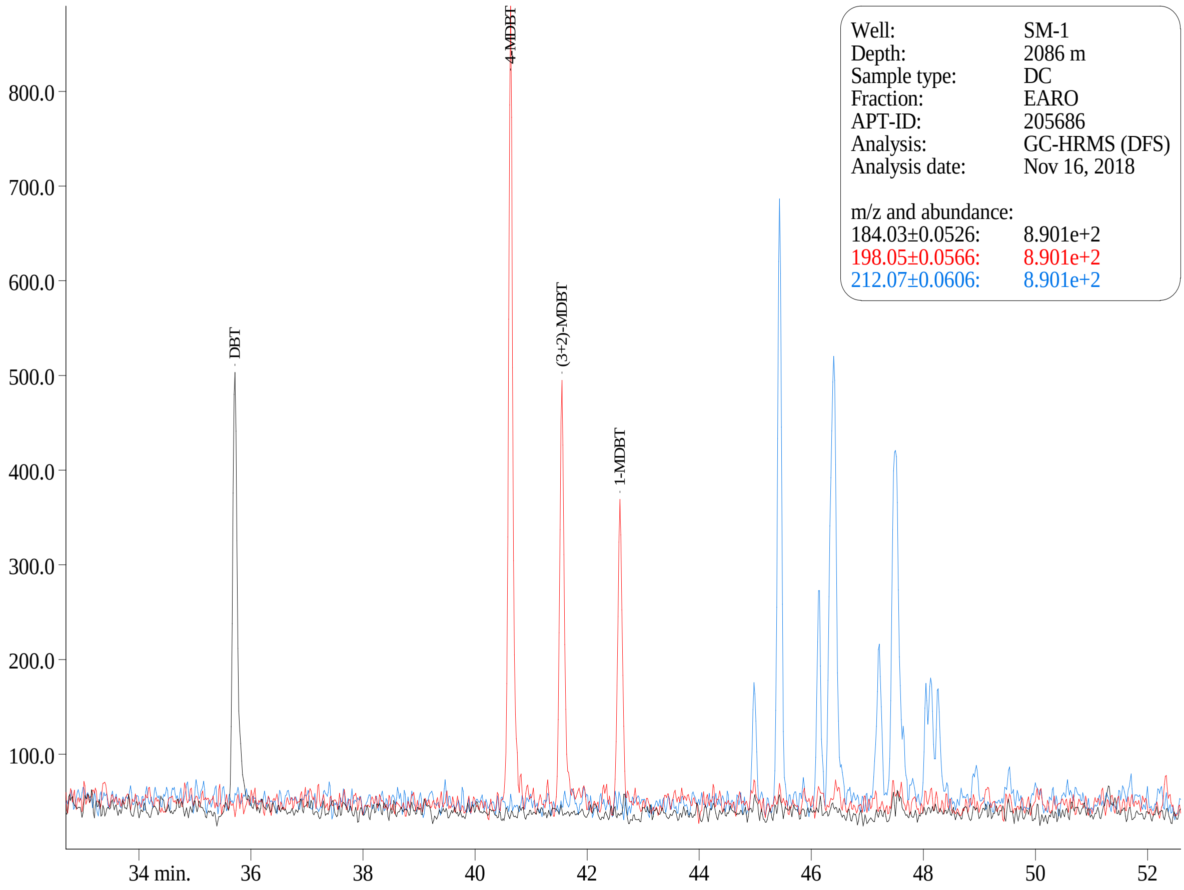

C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
4.4e+3
4.0e+3
3.6e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
70 min.
80
90
100
Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: EARO
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 3.299e+3

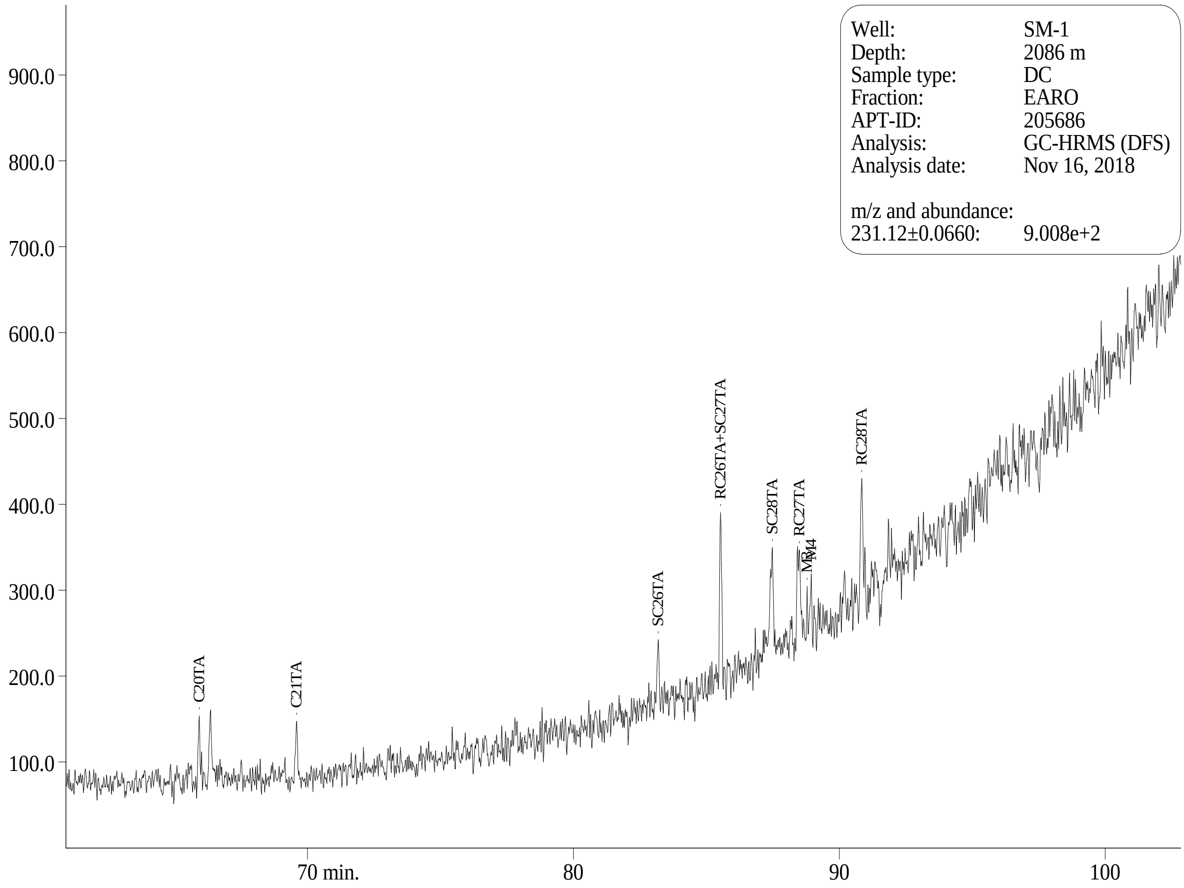

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: EARO
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.944e+3
1.8e+3
1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA

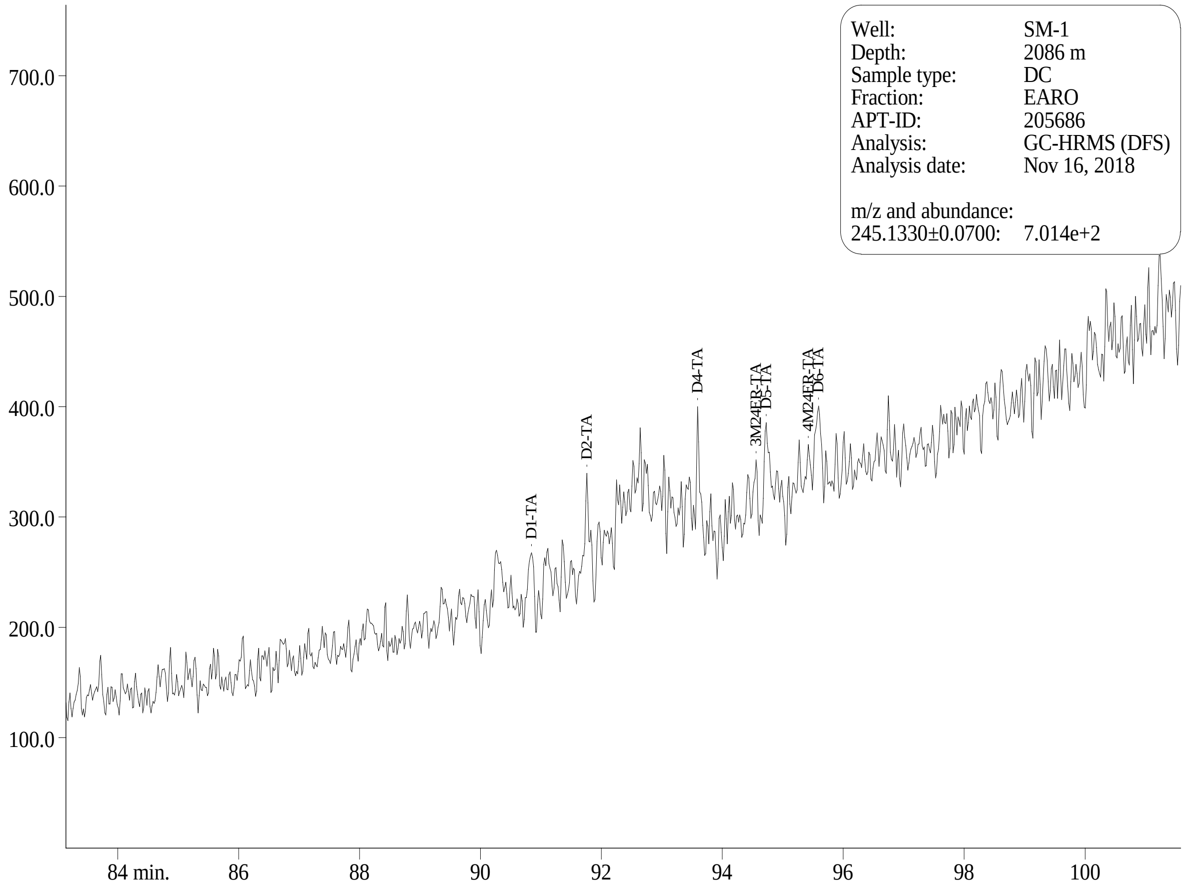

Well: SM-1
Depth: 2056 m
Sample type: DC
Fraction: EARO
APT-ID: 205685
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 6.171e+3
6.0e+3
5.5e+3
5.0e+3
4.5e+3
4.0e+3
3.5e+3
3.0e+3
2.5e+3
2.0e+3
1.5e+3
1.0e+3
5.0e+2
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bSC29MA+bSC29DMAbRC28MA+bRC28DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA


2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
1.2e+4
1.1e+4
1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
14 min.
18
22
26
30
Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: EARO
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 1.295e+4
156.09±0.0446: 1.295e+4
170.11±0.0486: 1.295e+4


P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
4.4e+3
4.0e+3
3.6e+3
3.2e+3
2.8e+3
2.4e+3
2.0e+3
1.6e+3
1.2e+3
8.0e+2
4.0e+2
38 min.
42
46
50
54
58
62
Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: EARO
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 4.566e+3
192.09±0.0549: 4.566e+3
206.11±0.0589: 4.566e+3
219.12±0.0626: 4.566e+3

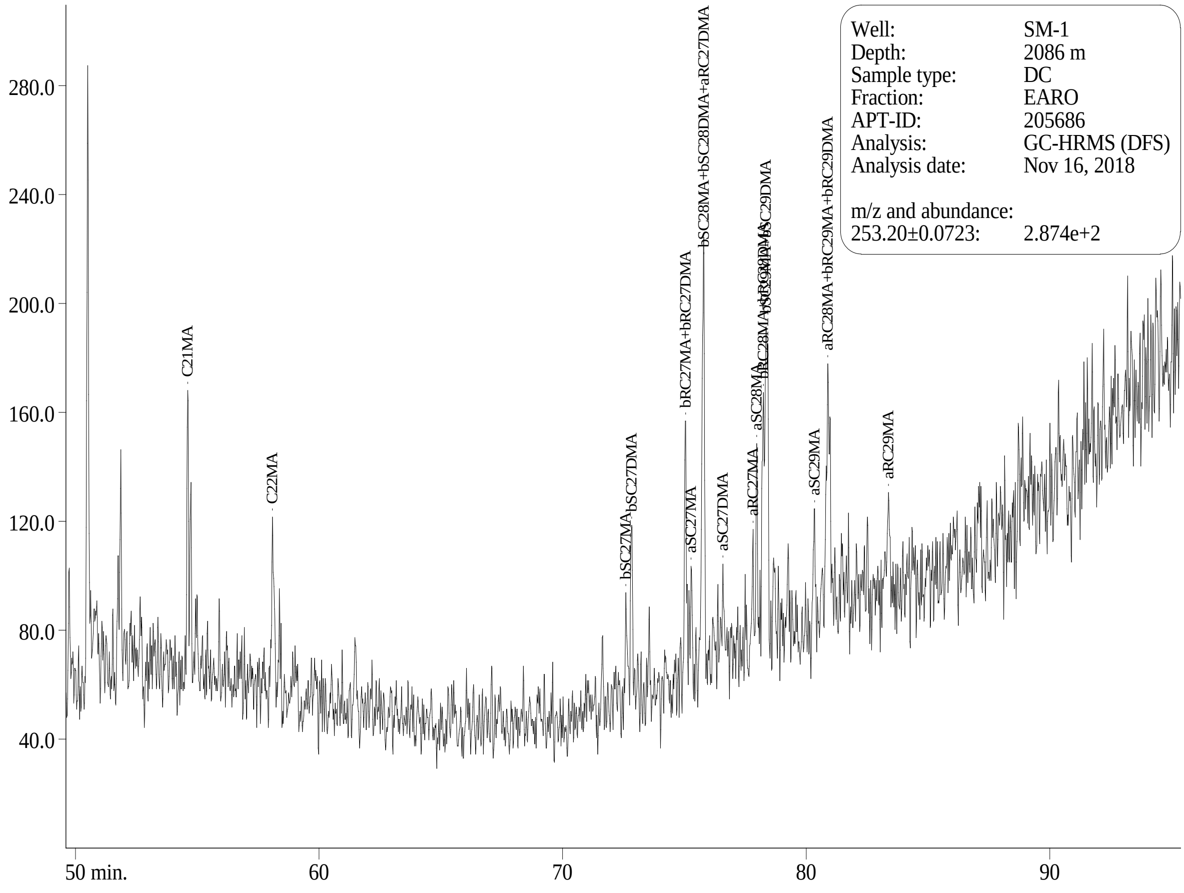

Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: EARO
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 8.901e+2
198.05±0.0566: 8.901e+2
212.07±0.0606: 8.901e+2
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
34 min.
36
38
40
42
44
46
48
50
52


Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: EARO
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 9.008e+2
C20TA
C21TA
SC26TA
RC26TA+SC27TA
SC28TA
RC27TA
M3
M4
RC28TA
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
70 min.
80
90
100



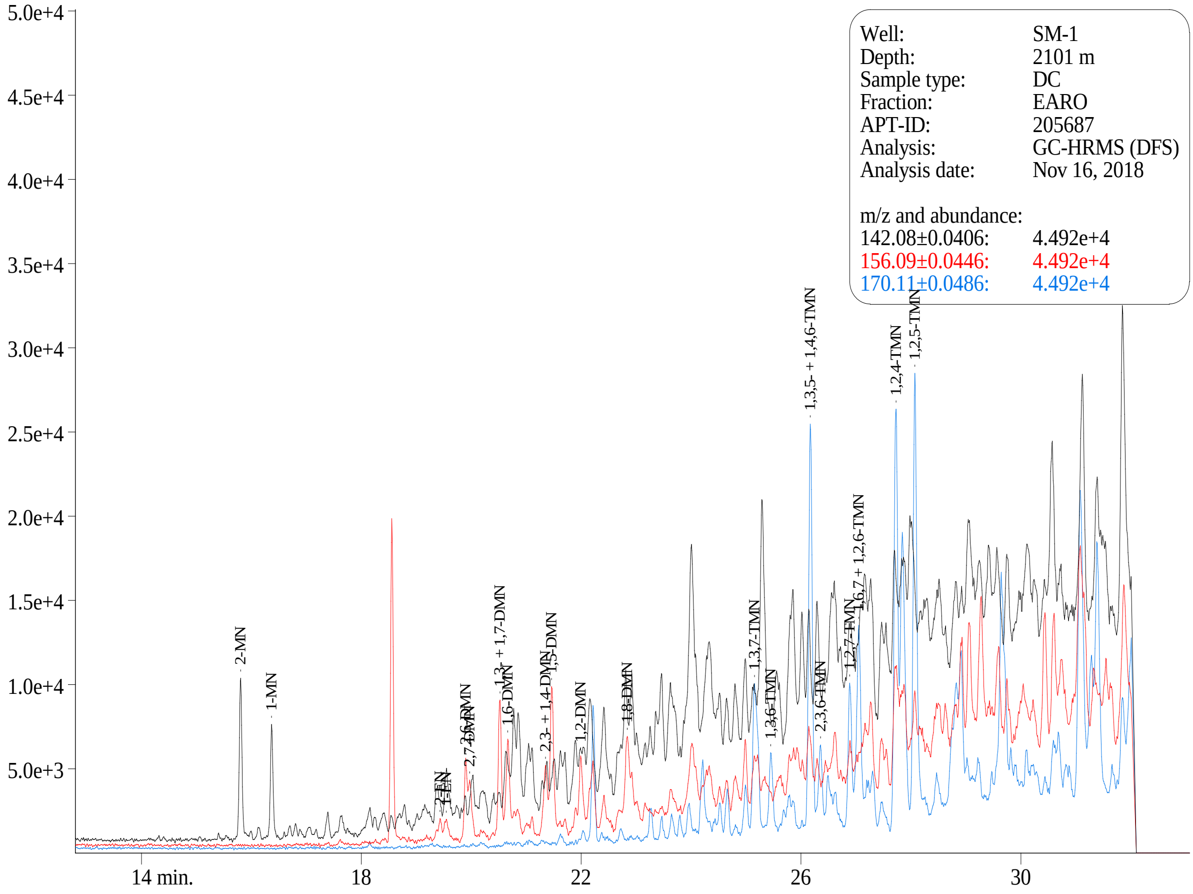
Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: EARO
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

m/z and abundance:
245.1330±0.0700: 7.014e+2



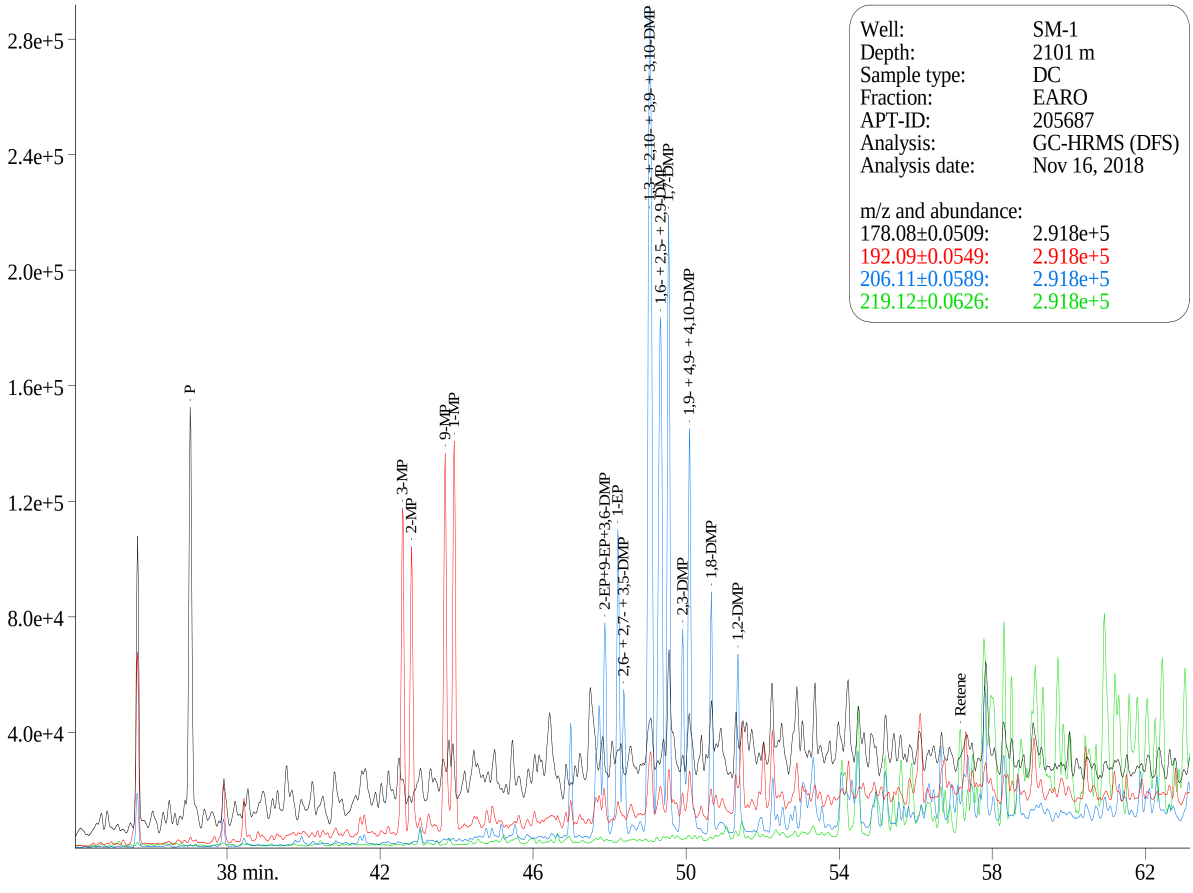
Well: SM-1
Depth: 2086 m
Sample type: DC
Fraction: EARO
APT-ID: 205686
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

m/z and abundance:
253.20±0.0723: 2.874e+2



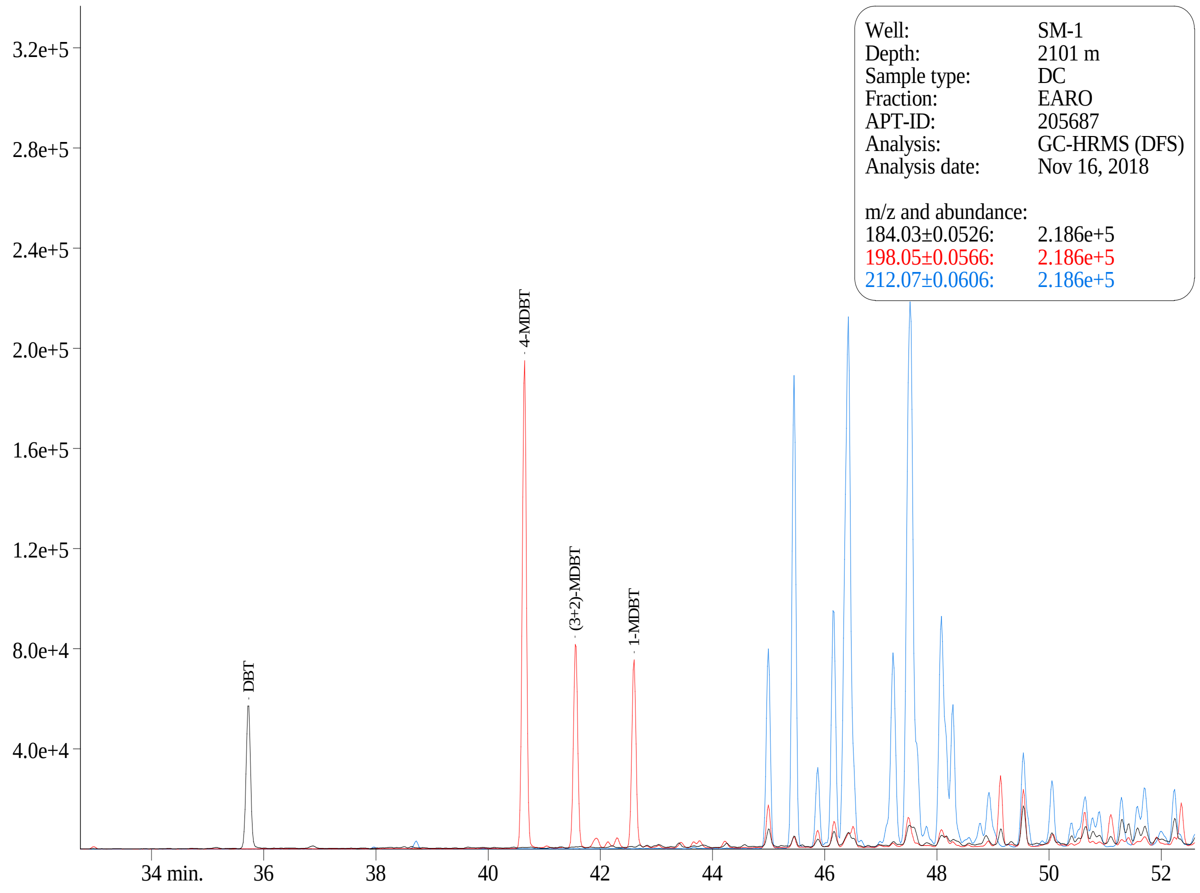
Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: EARO
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

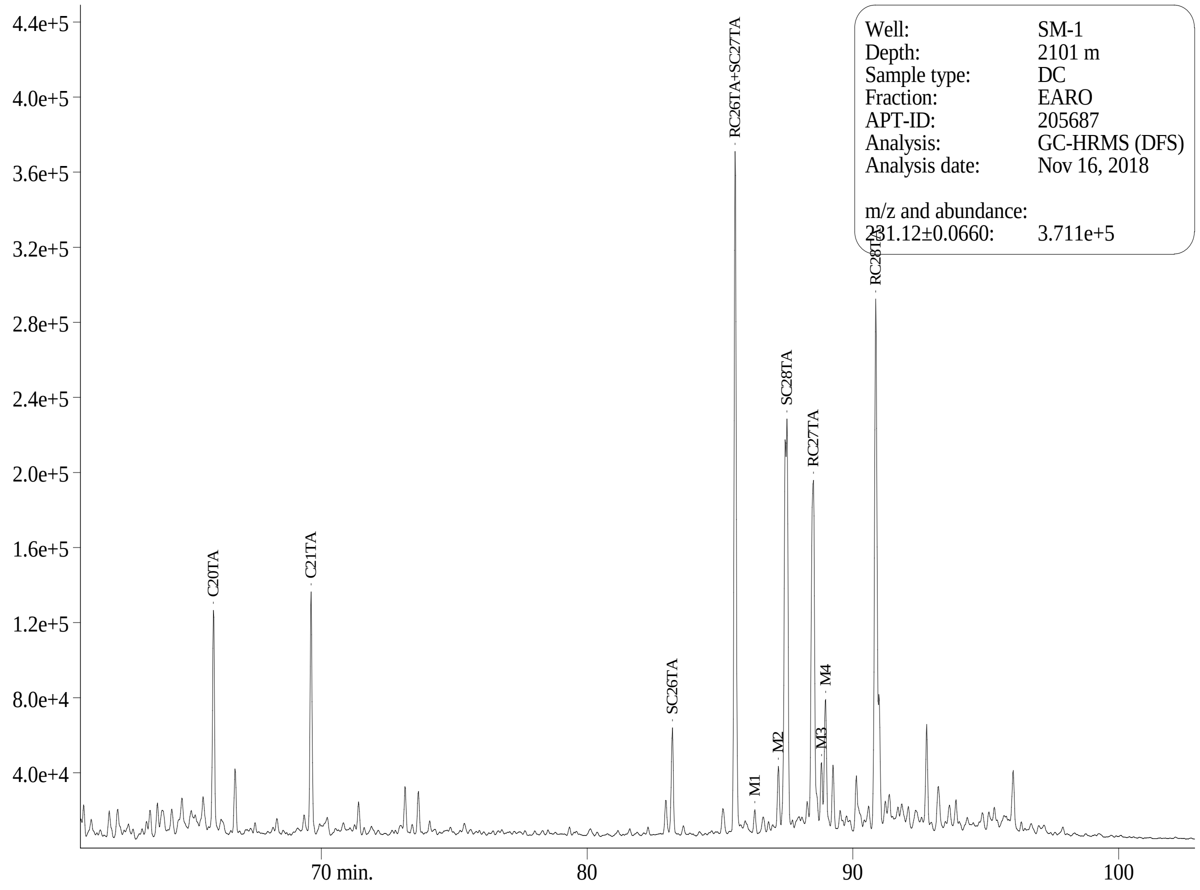
m/z and abundance:
142.08±0.0406: 4.492e+4
156.09±0.0446: 4.492e+4
170.11±0.0486: 4.492e+4

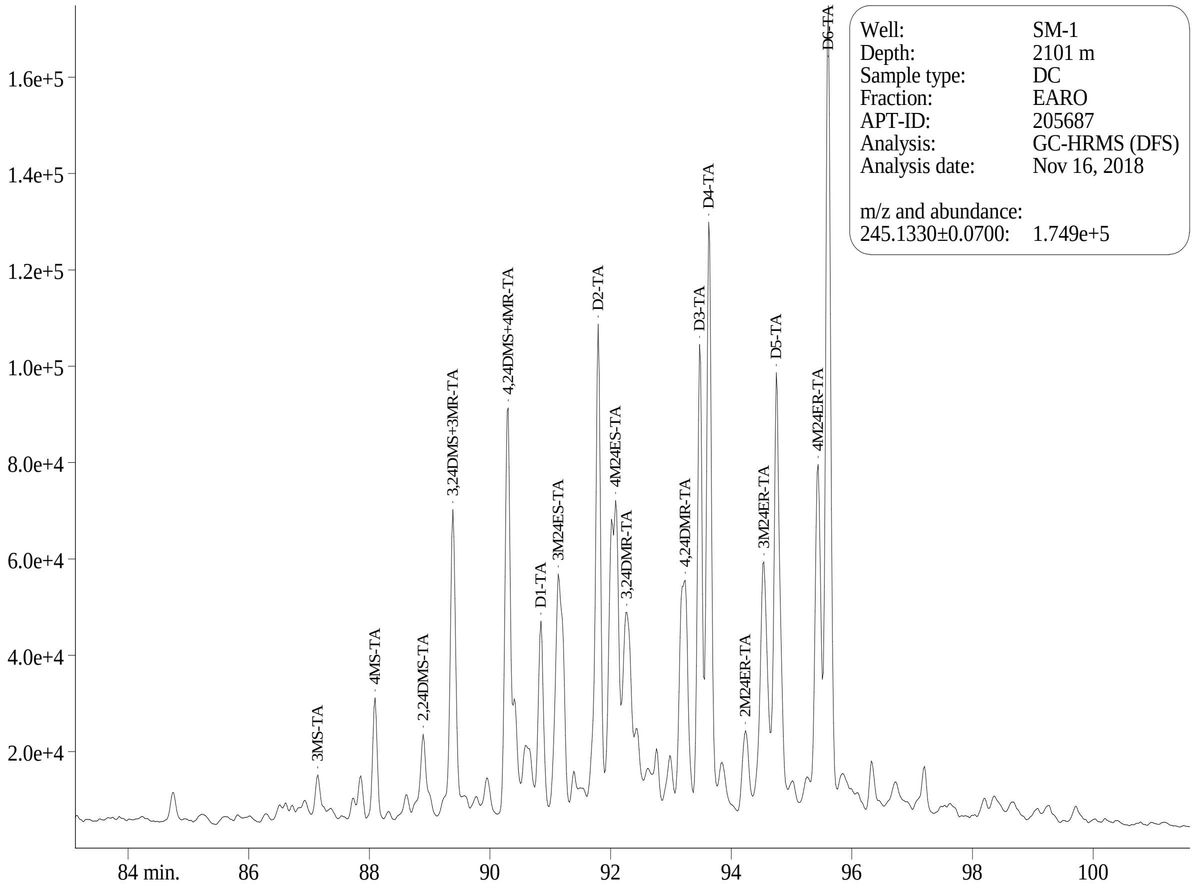


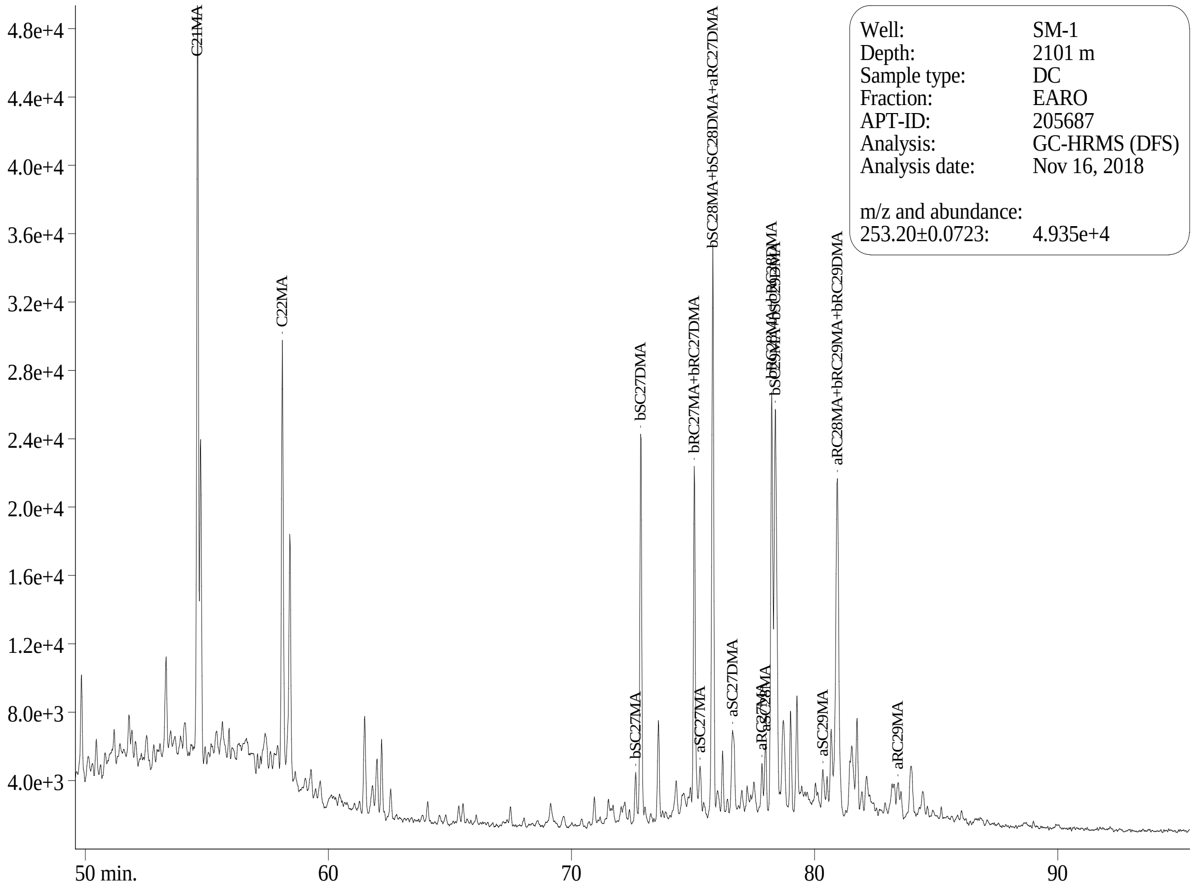
Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: EARO
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

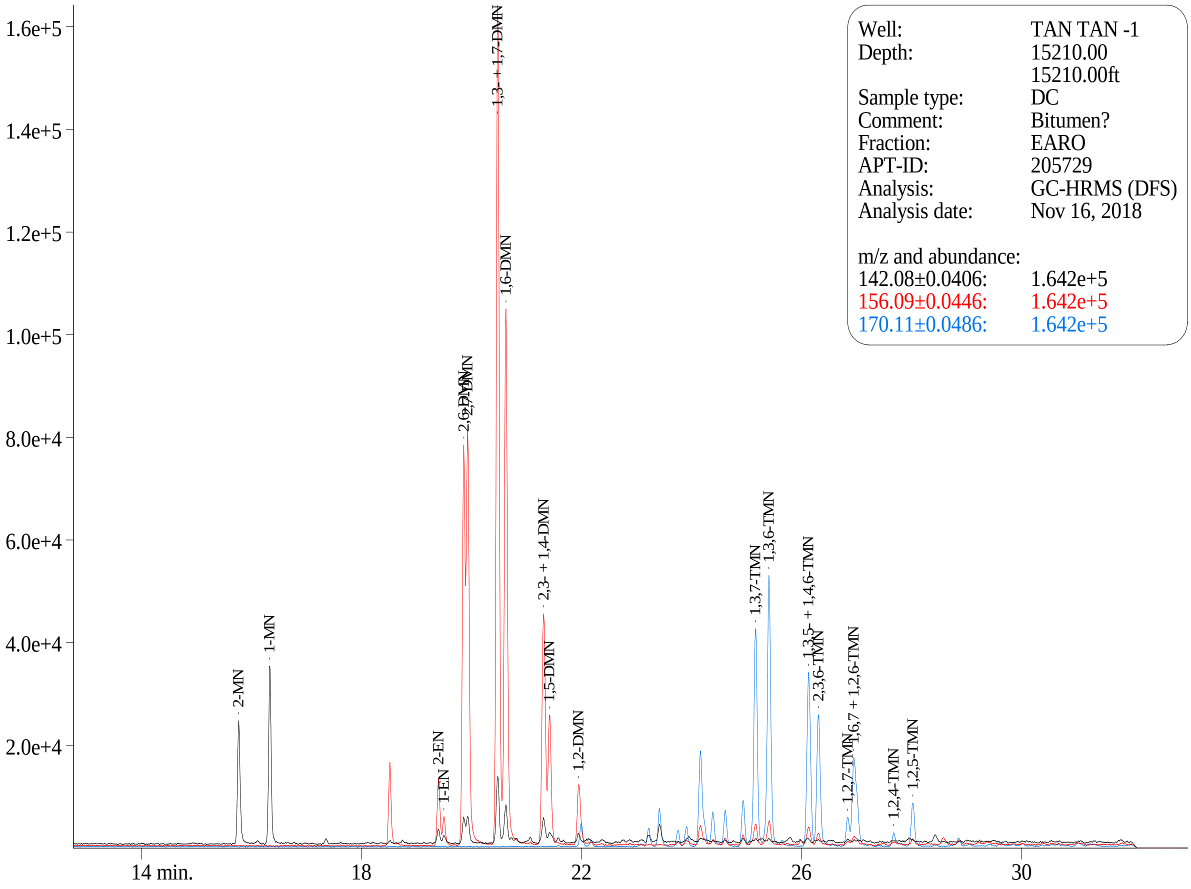
m/z and abundance:
178.08±0.0509: 2.918e+5
192.09±0.0549: 2.918e+5
206.11±0.0589: 2.918e+5
219.12±0.0626: 2.918e+5

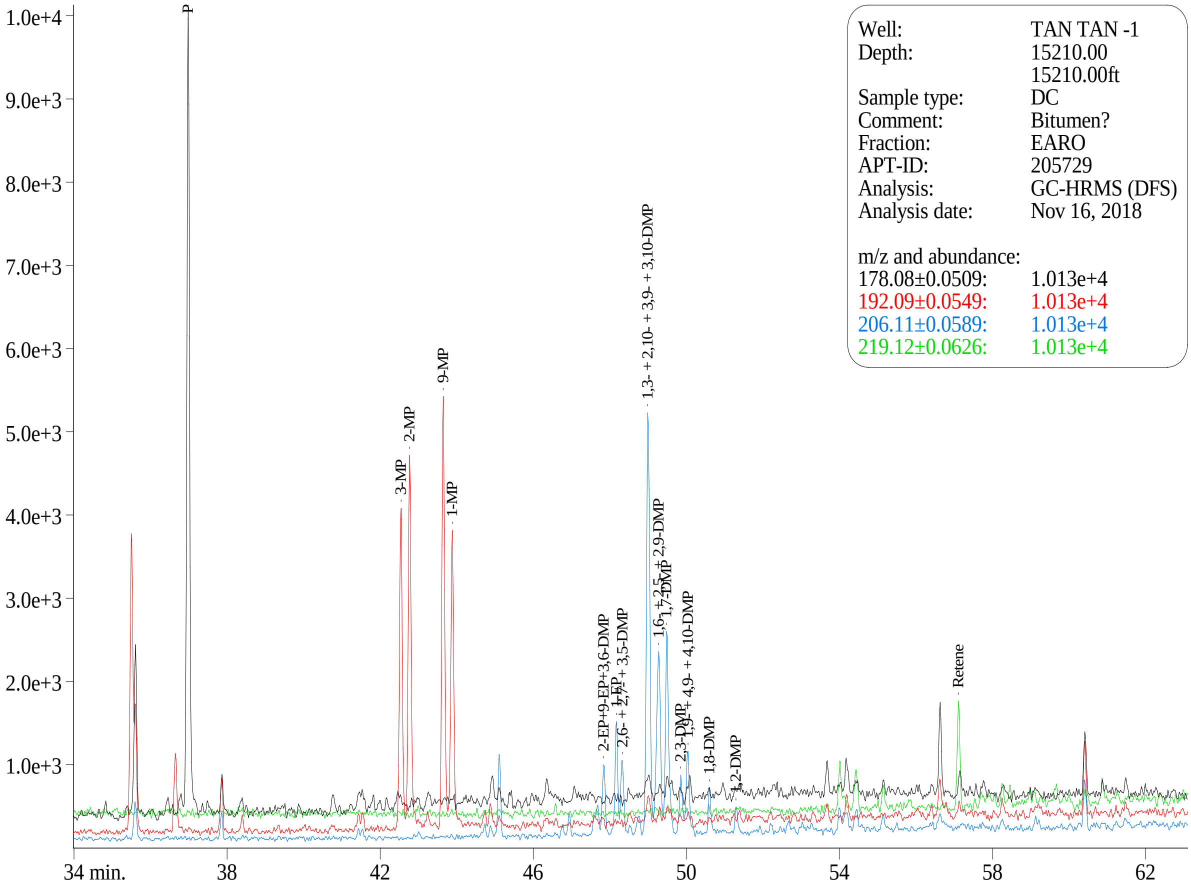

Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: EARO
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 2.186e+5
198.05±0.0566: 2.186e+5
212.07±0.0606: 2.186e+5
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
34 min.
36
38
40
42
44
46
48
50
52

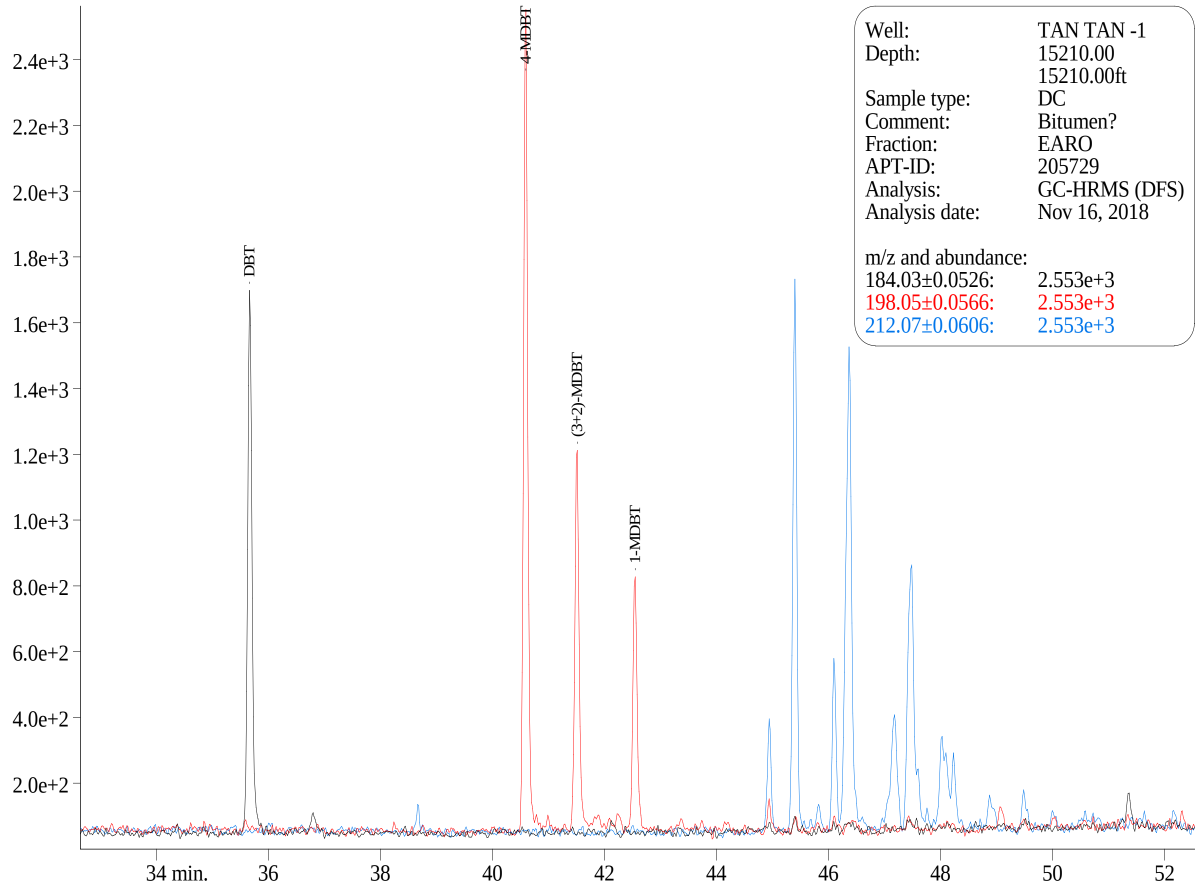

Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: EARO
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 3.711e+5
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
M3
RC27TA
M4
RC28TA
4.4e+5
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
70 min.
80
90
100


Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: EARO
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.749e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA


Well: SM-1
Depth: 2101 m
Sample type: DC
Fraction: EARO
APT-ID: 205687
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 4.935e+4
4.8e+4
4.4e+4
4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA

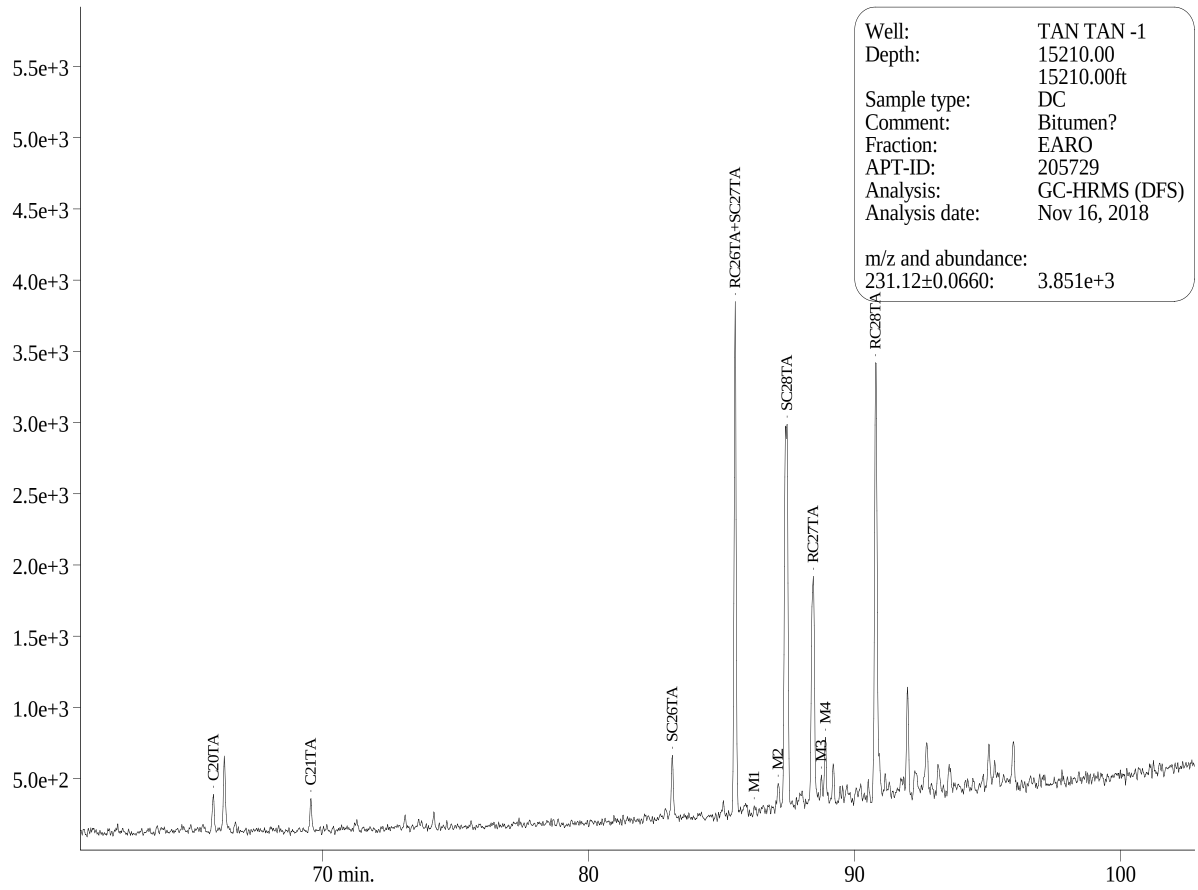

1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
14 min.
18
22
26
30
2-MN
1-MN
1-EN
2-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: EARO
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 1.642e+5
156.09±0.0446: 1.642e+5
170.11±0.0486: 1.642e+5


1.0e+4
9.0e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: EARO
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 1.013e+4
192.09±0.0549: 1.013e+4
206.11±0.0589: 1.013e+4
219.12±0.0626: 1.013e+4



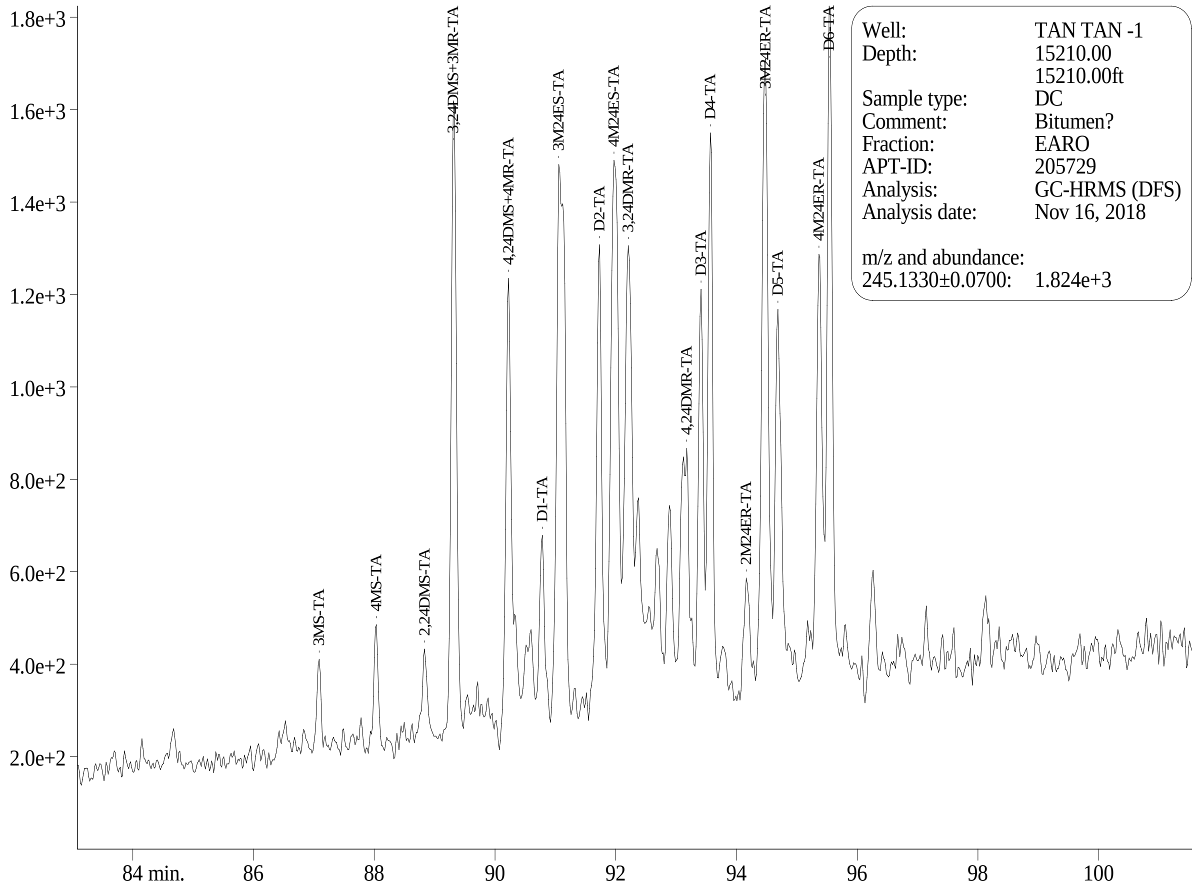
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: EARO
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

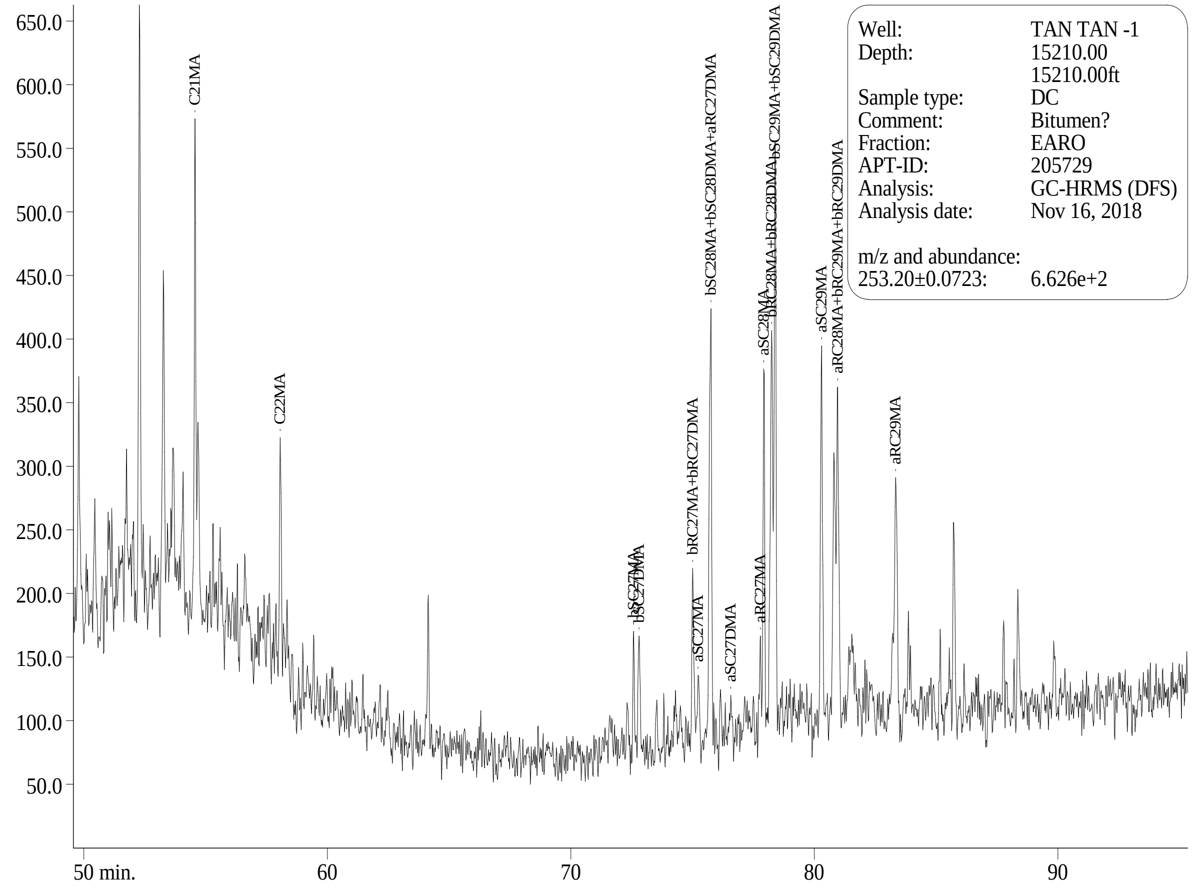
m/z and abundance:
184.03±0.0526: 2.553e+3
198.05±0.0566: 2.553e+3
212.07±0.0606: 2.553e+3

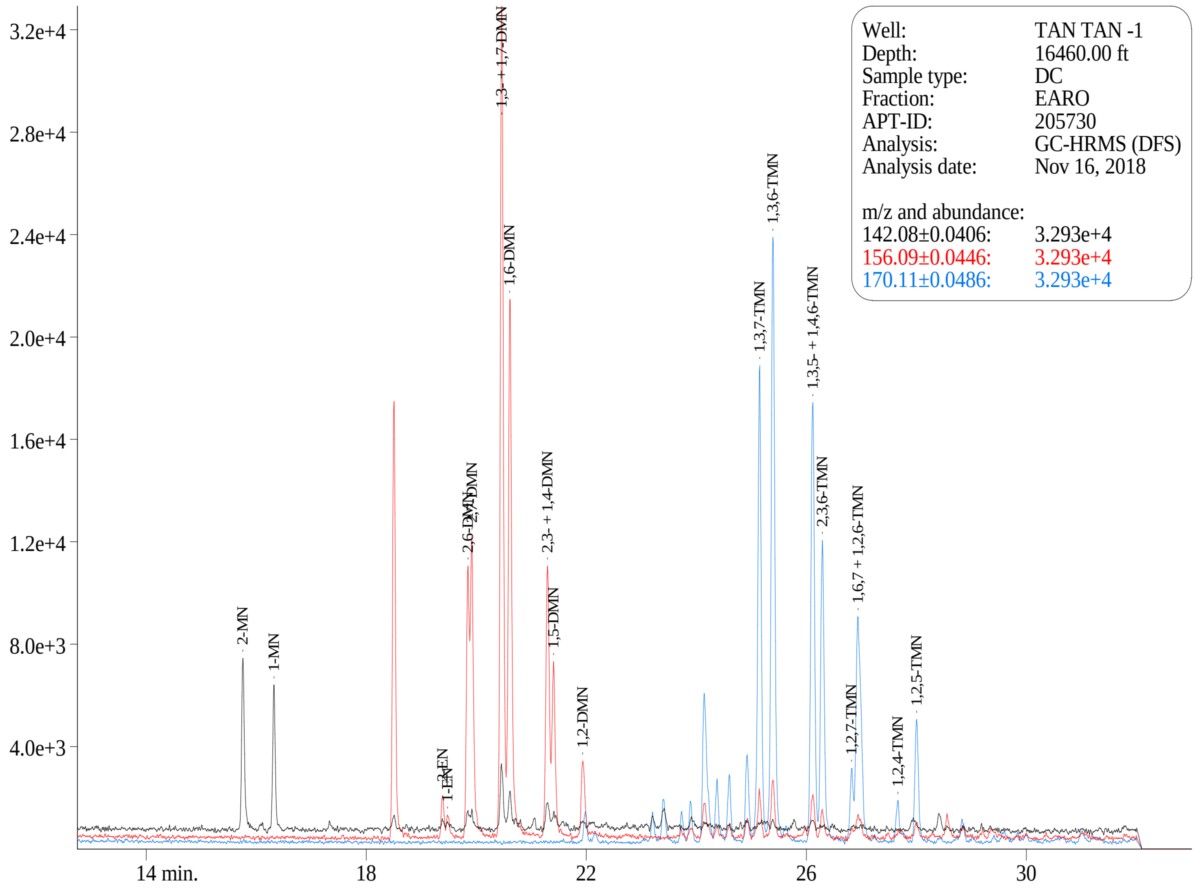


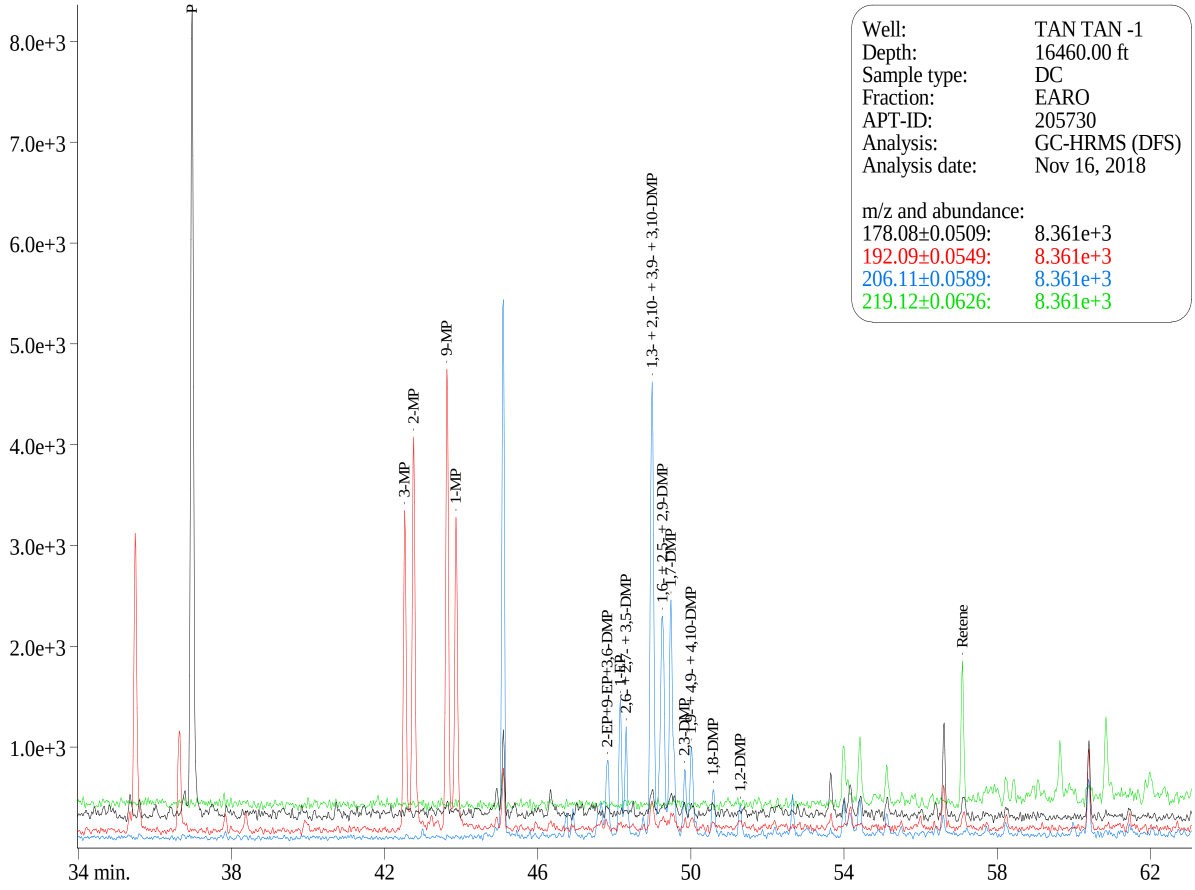
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: EARO
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

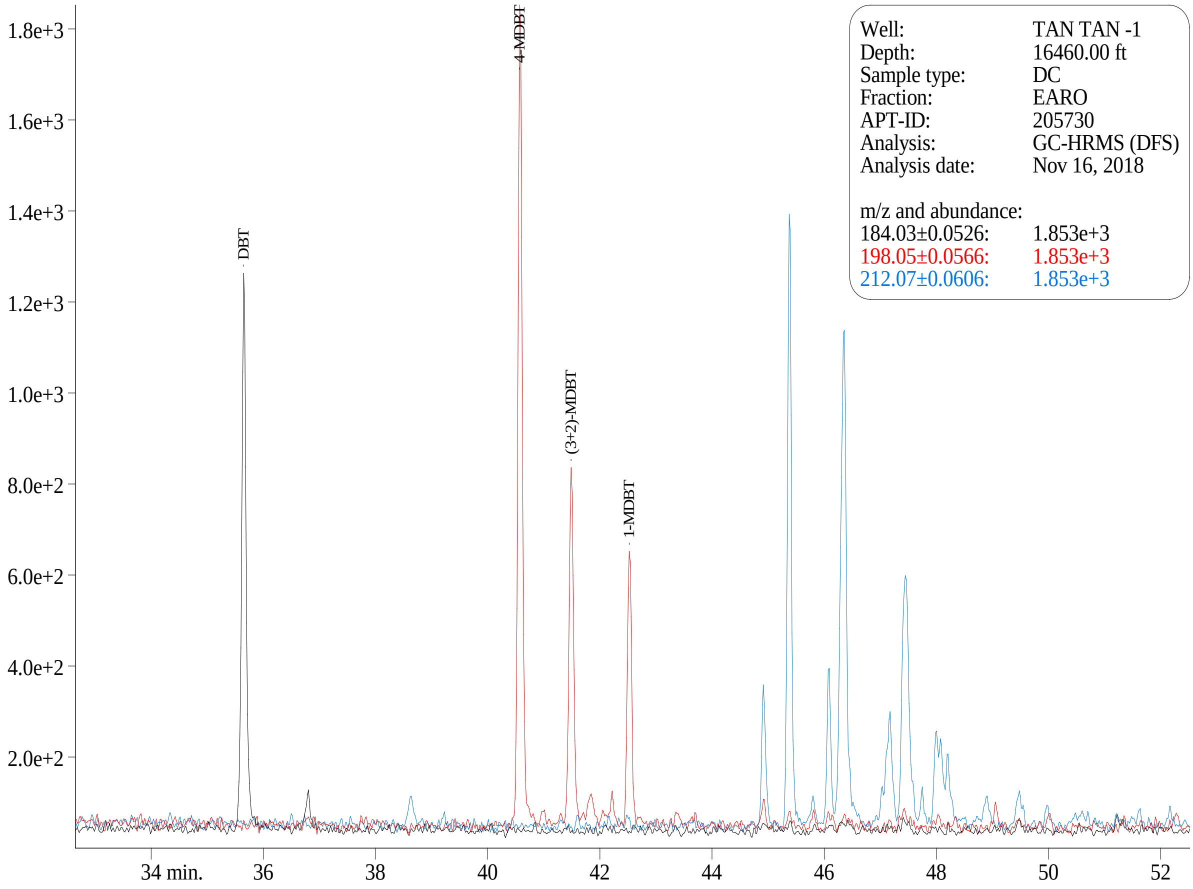
m/z and abundance:
231.12±0.0660: 3.851e+3


1.8e+3
1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: EARO
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.824e+3


650.0
600.0
550.0
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
Well: TAN TAN -1
Depth: 15210.00
15210.00ft
Sample type: DC
Comment: Bitumen?
Fraction: EARO
APT-ID: 205729
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 6.626e+2

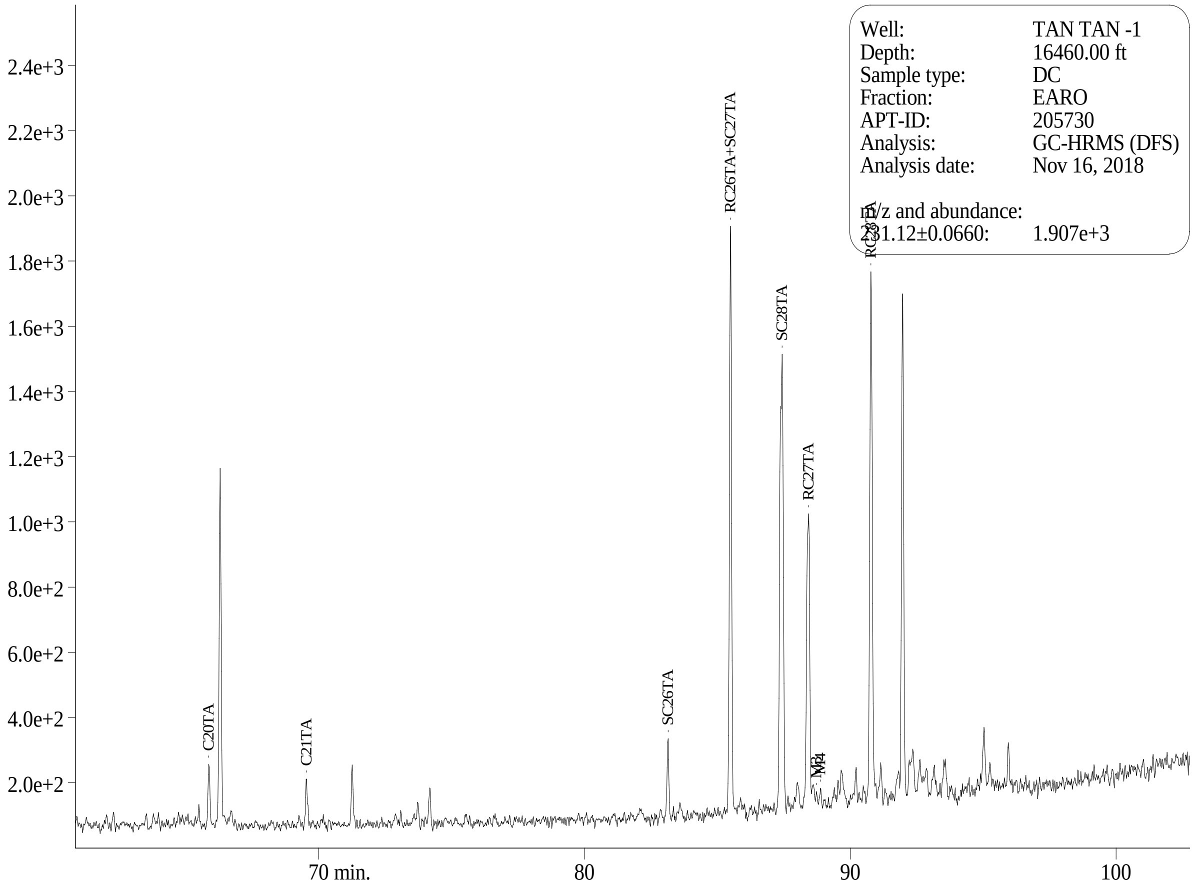

Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: EARO
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 3.293e+4
156.09±0.0446: 3.293e+4
170.11±0.0486: 3.293e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN


Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: EARO
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 8.361e+3
192.09±0.0549: 8.361e+3
206.11±0.0589: 8.361e+3
219.12±0.0626: 8.361e+3
8.0e+3
7.0e+3
6.0e+3
5.0e+3
4.0e+3
3.0e+3
2.0e+3
1.0e+3
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene



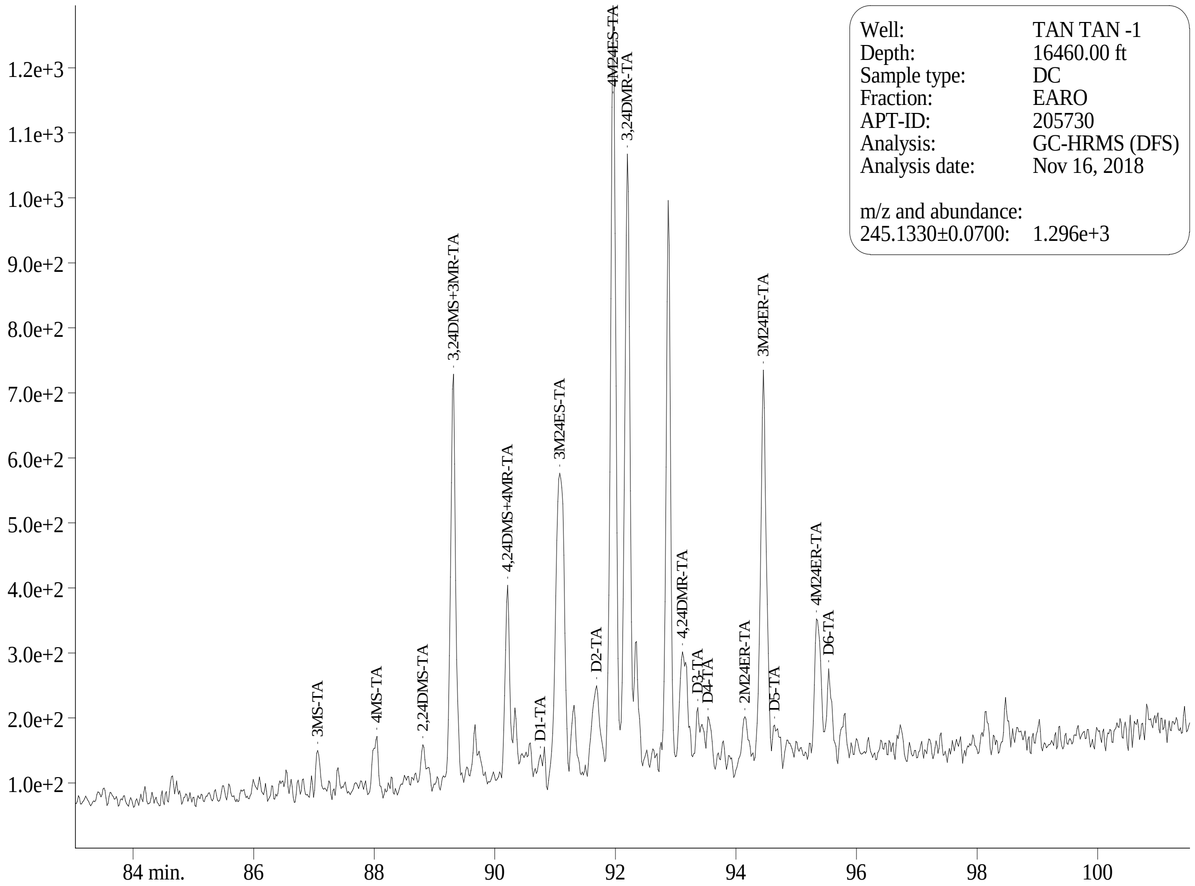
Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: EARO
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

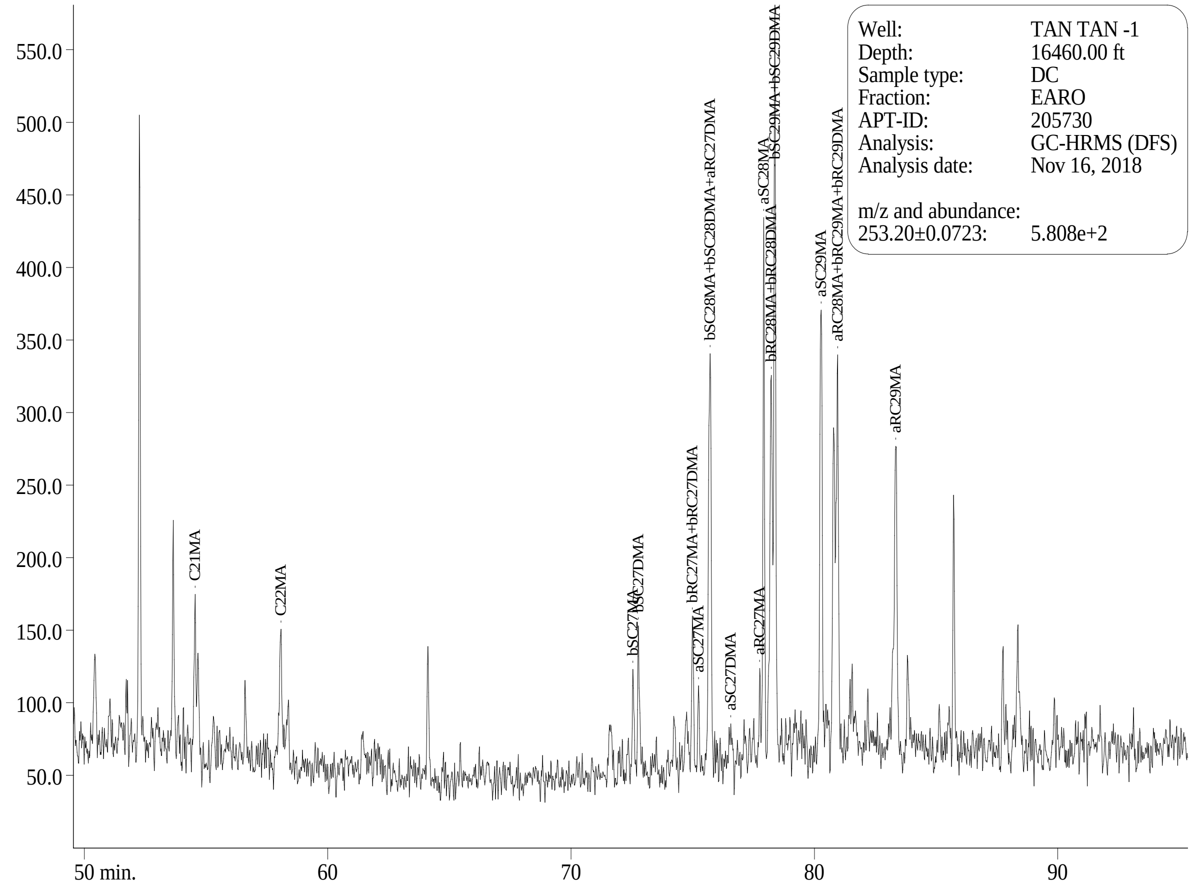
m/z and abundance:
184.03±0.0526: 1.853e+3
198.05±0.0566: 1.853e+3
212.07±0.0606: 1.853e+3

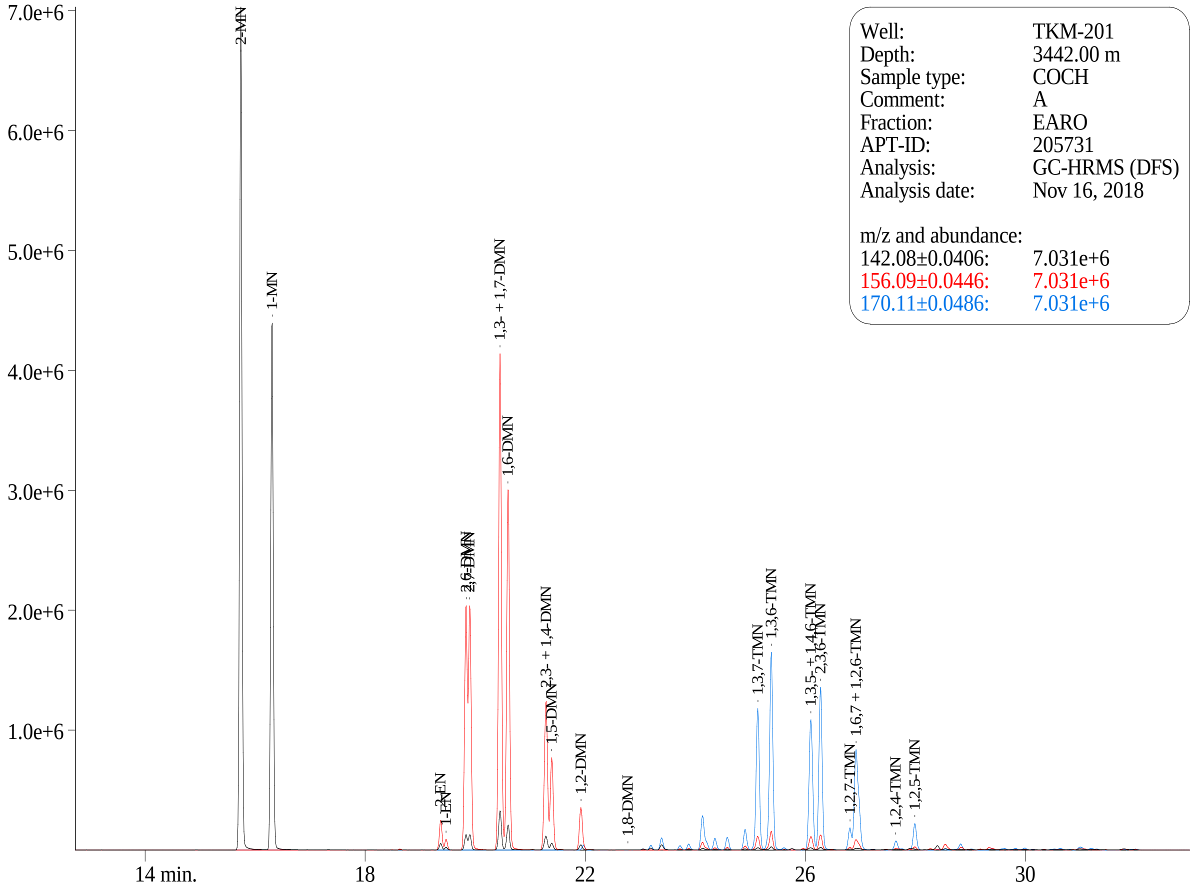


Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: EARO
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

m/z and abundance:
231.12±0.0660: 1.907e+3


Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: EARO
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.296e+3
1.2e+3
1.1e+3
1.0e+3
9.0e+2
8.0e+2
7.0e+2
6.0e+2
5.0e+2
4.0e+2
3.0e+2
2.0e+2
1.0e+2
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA

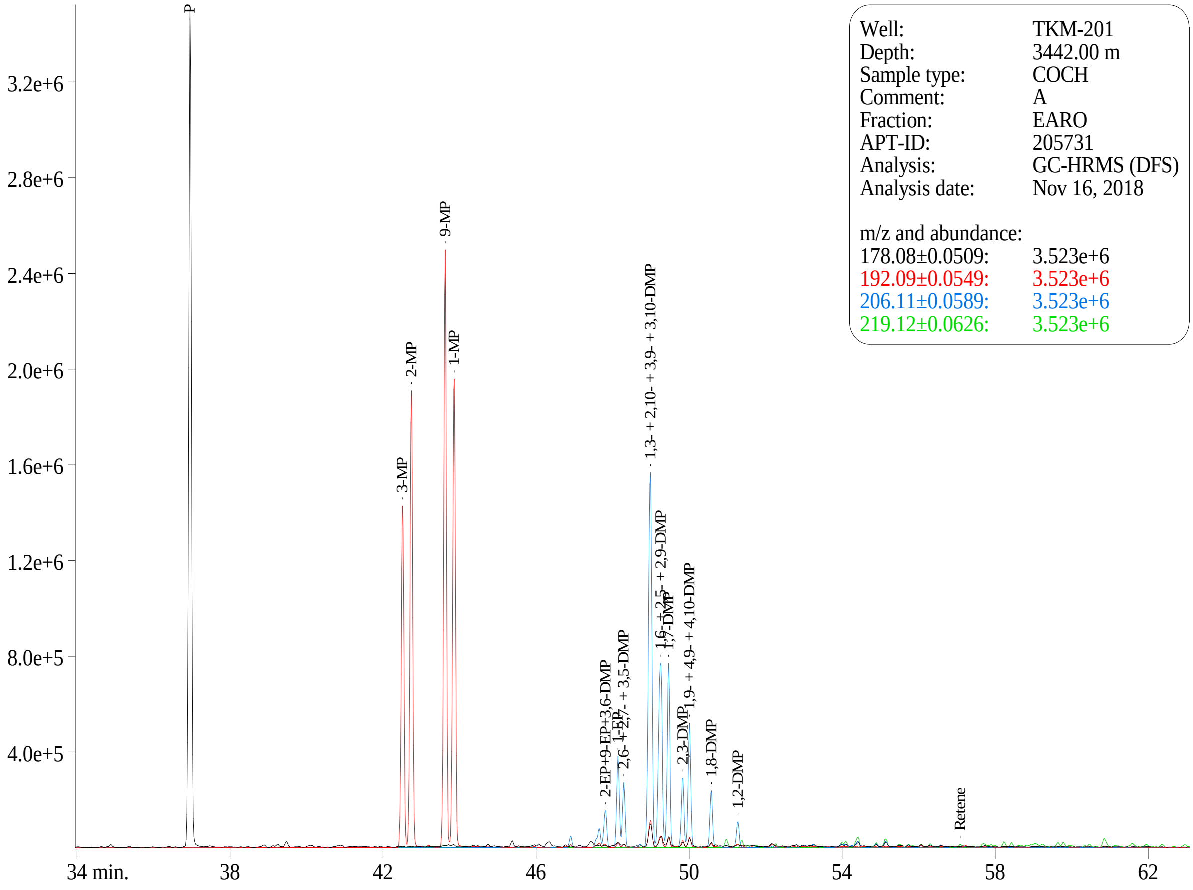

Well: TAN TAN -1
Depth: 16460.00 ft
Sample type: DC
Fraction: EARO
APT-ID: 205730
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 5.808e+2
550.0
500.0
450.0
400.0
350.0
300.0
250.0
200.0
150.0
100.0
50.0
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
aSC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aRC27MA
bRC28MA+bRC28DMA
aSC28MA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA



Well:	TKM-201
Depth:	3442.00 m
Sample type:	COCH
Comment:	A
Fraction:	EARO
APT-ID:	205731
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 16, 2018

m/z and abundance:

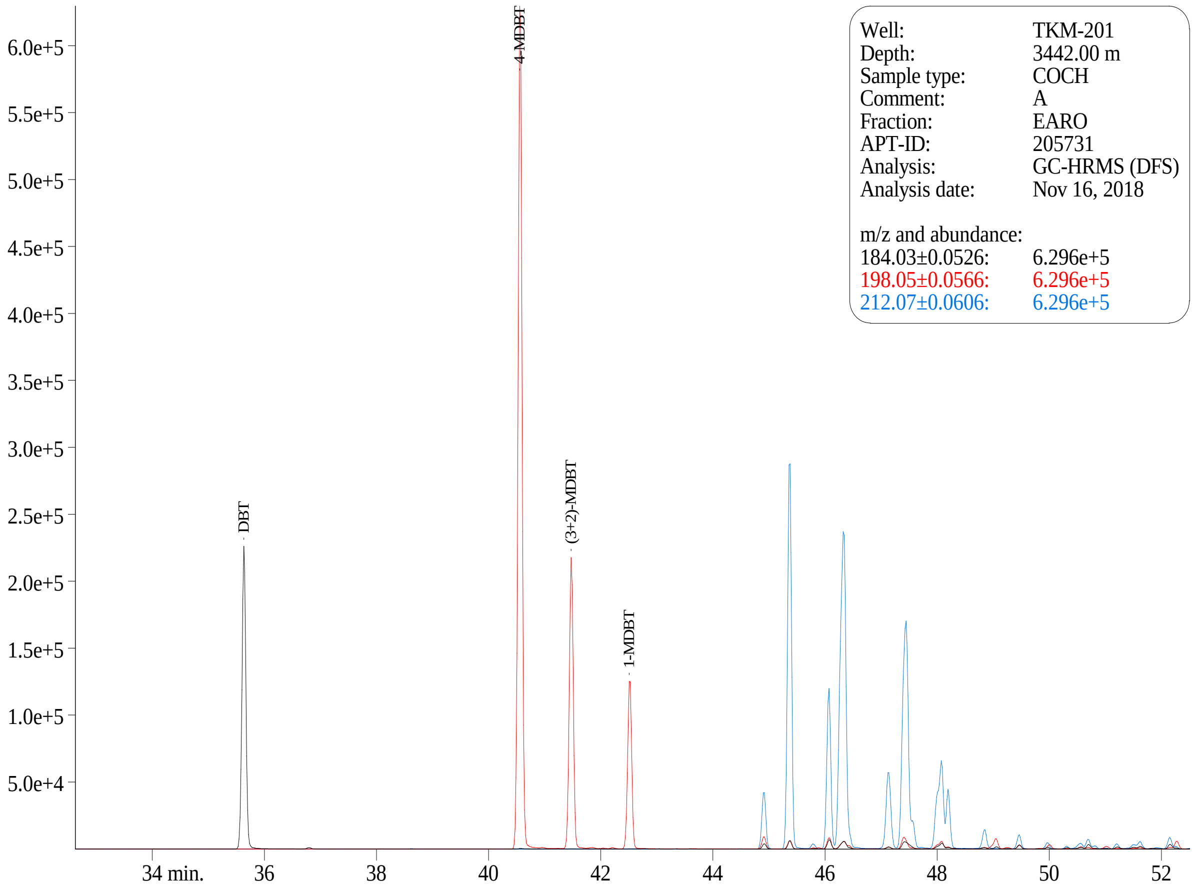
142.08±0.0406:	7.031e+6
156.09±0.0446:	7.031e+6
170.11±0.0486:	7.031e+6

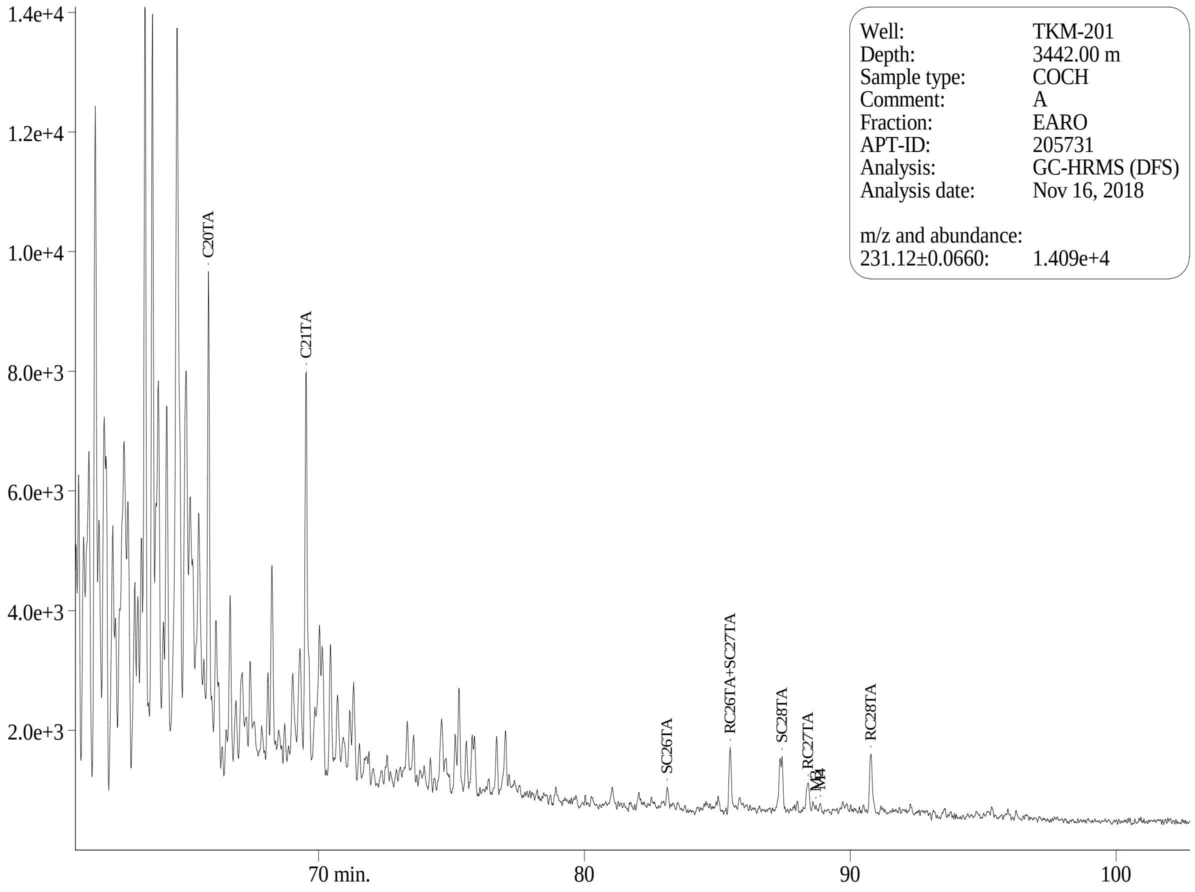


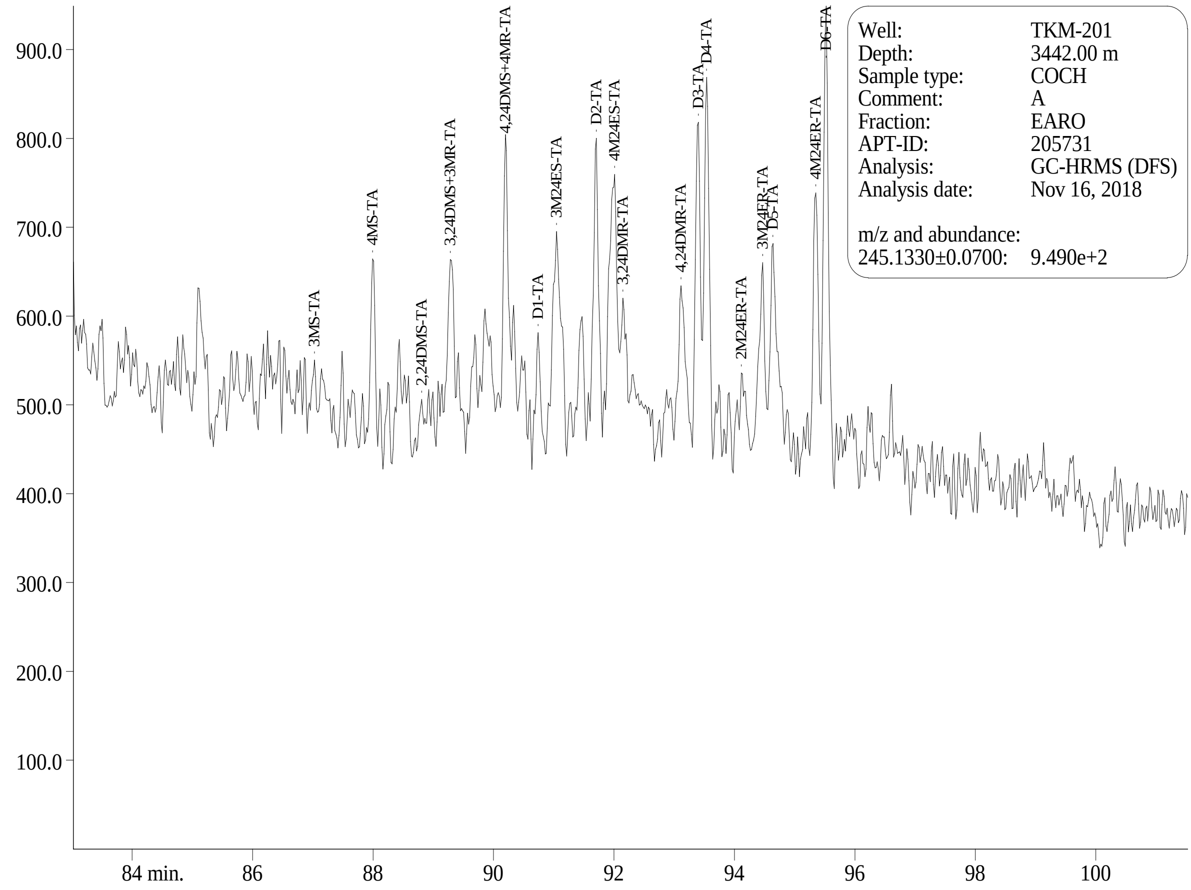
Well:	TKM-201
Depth:	3442.00 m
Sample type:	COCH
Comment:	A
Fraction:	EARO
APT-ID:	205731
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 16, 2018

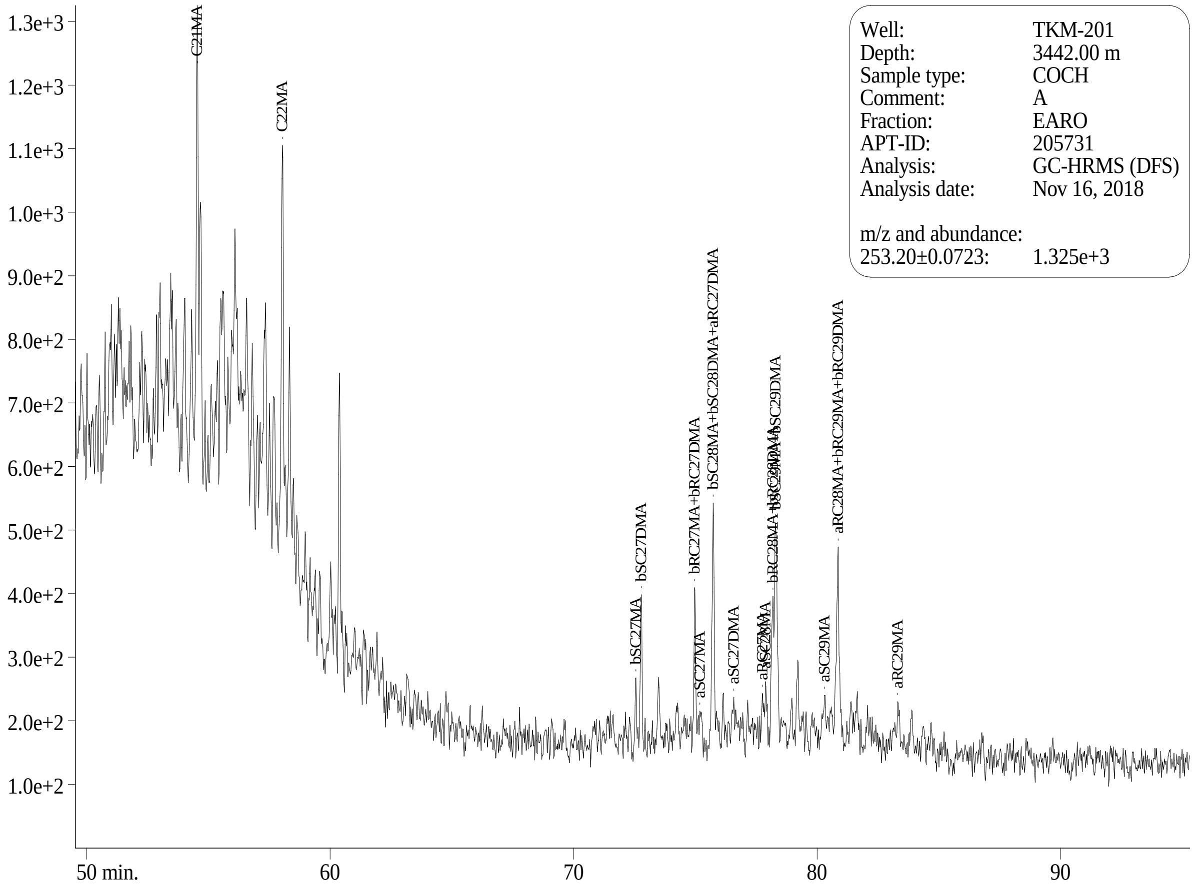
m/z and abundance:

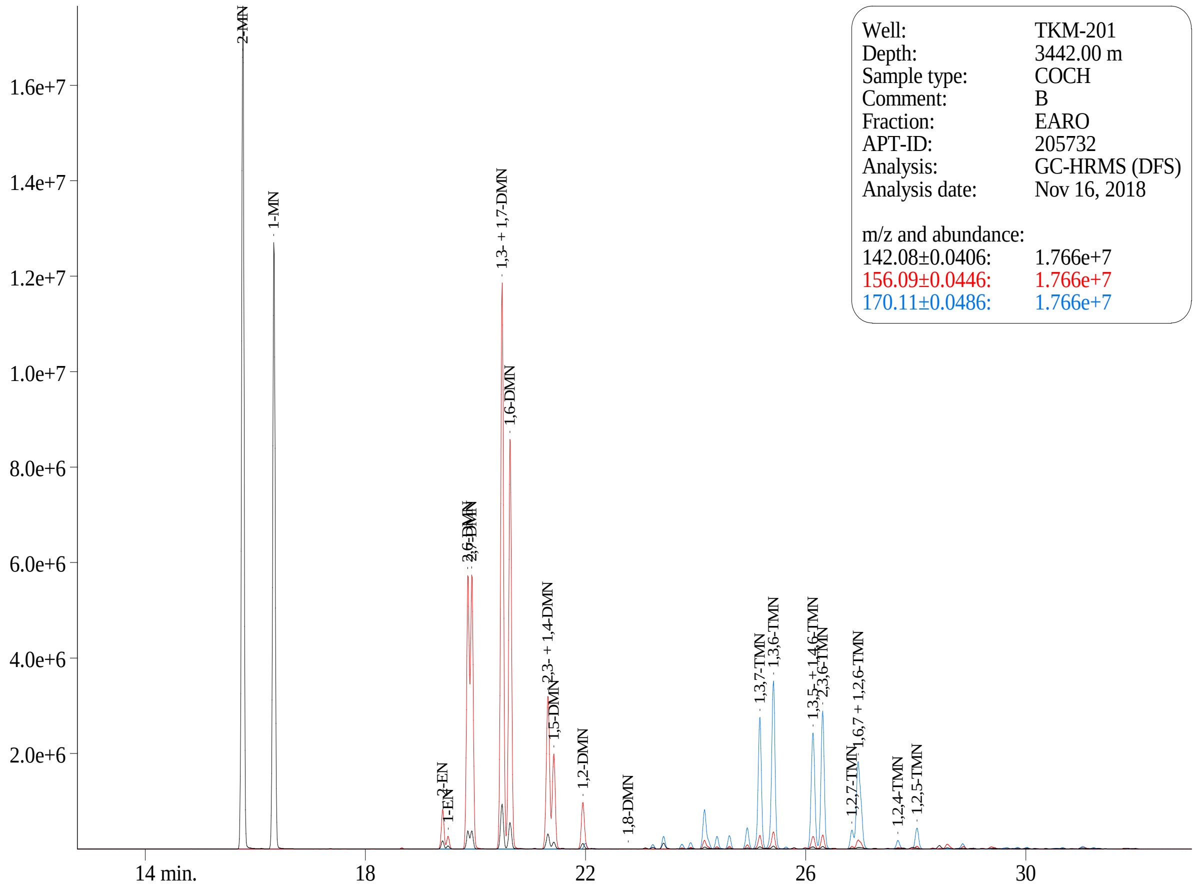
178.08±0.0509:	3.523e+6
192.09±0.0549:	3.523e+6
206.11±0.0589:	3.523e+6
219.12±0.0626:	3.523e+6

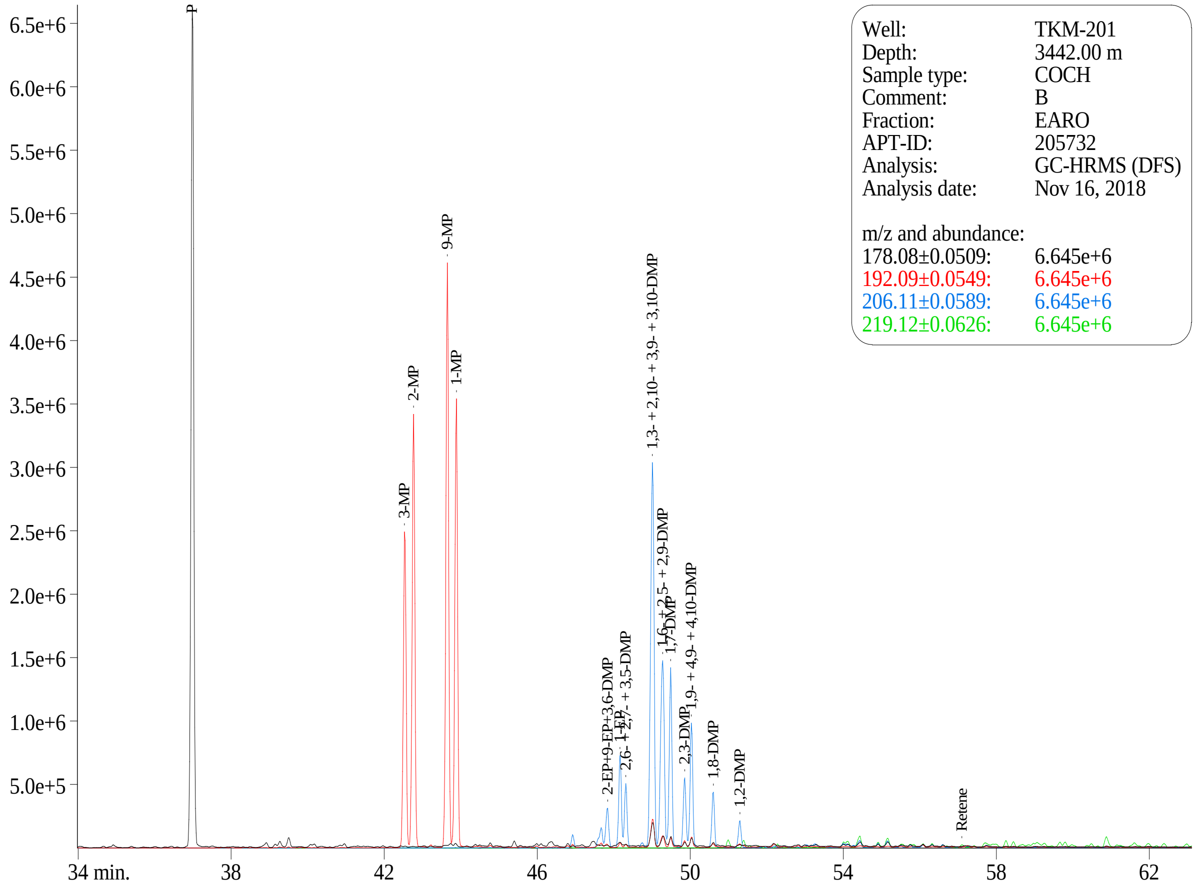

6.0e+5
5.5e+5
5.0e+5
4.5e+5
4.0e+5
3.5e+5
3.0e+5
2.5e+5
2.0e+5
1.5e+5
1.0e+5
5.0e+4
34 min.
36
38
40
42
44
46
48
50
52
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: EARO
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 6.296e+5
198.05±0.0566: 6.296e+5
212.07±0.0606: 6.296e+5

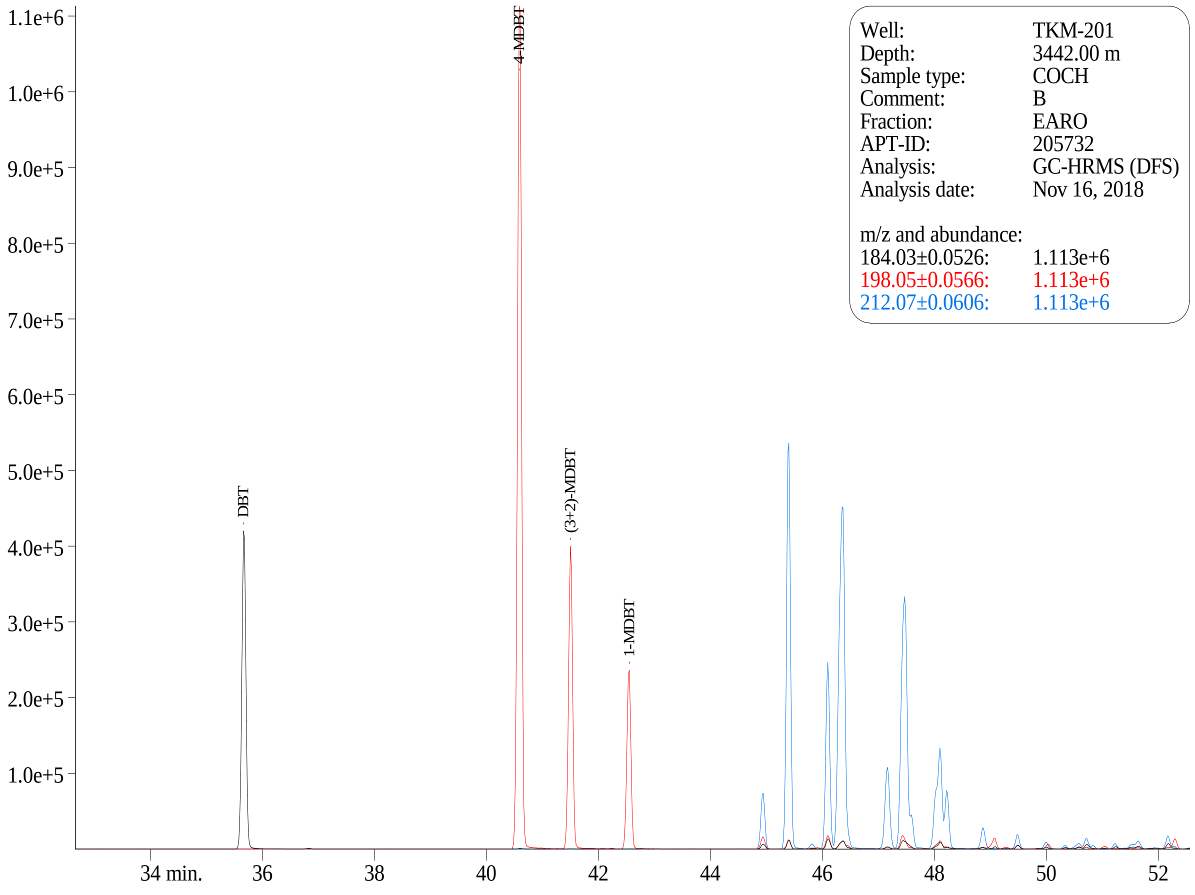

1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
70 min.
80
90
100
C20TA
C21TA
SC26TA
RC26TA+SC27TA
SC28TA
RC27TA
M3
M4
RC28TA
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: EARO
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 1.409e+4

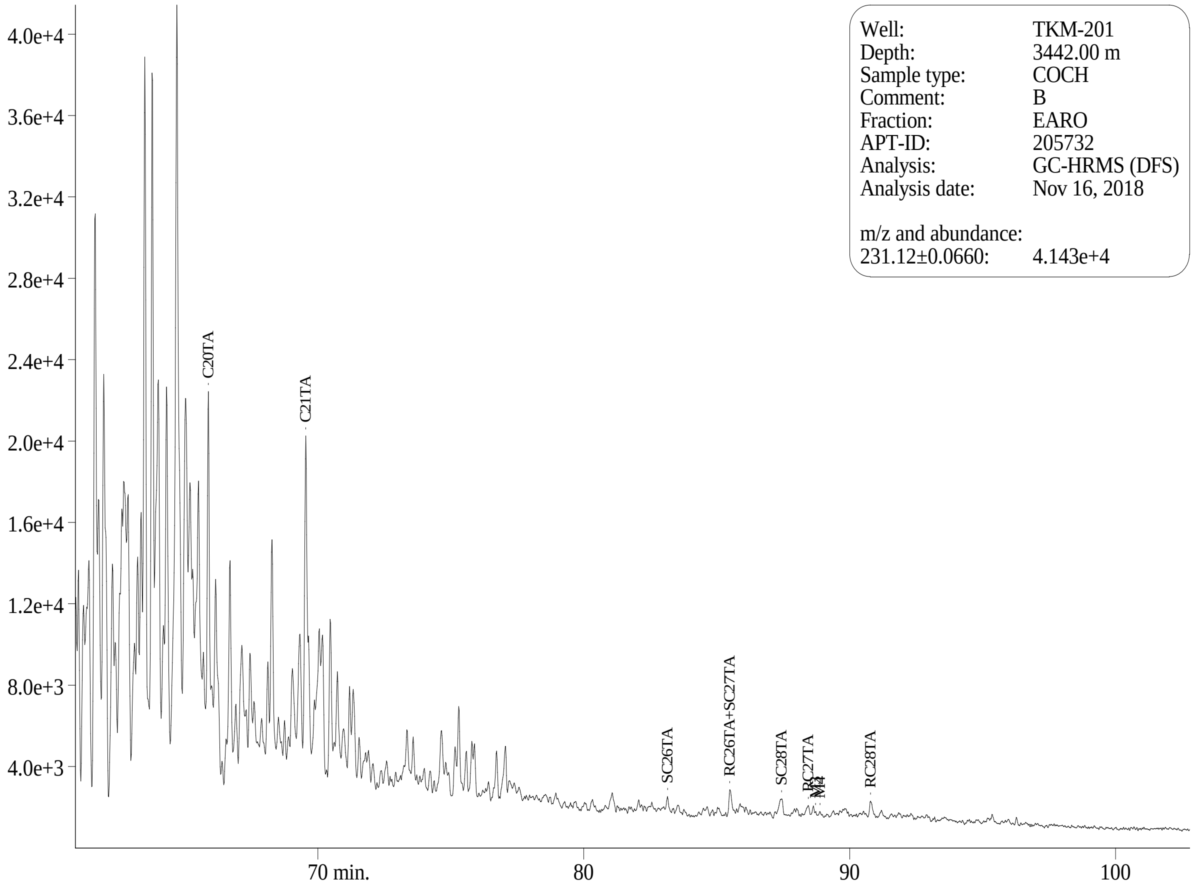

Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: EARO
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 9.490e+2
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
84 min.
86
88
90
92
94
96
98
100

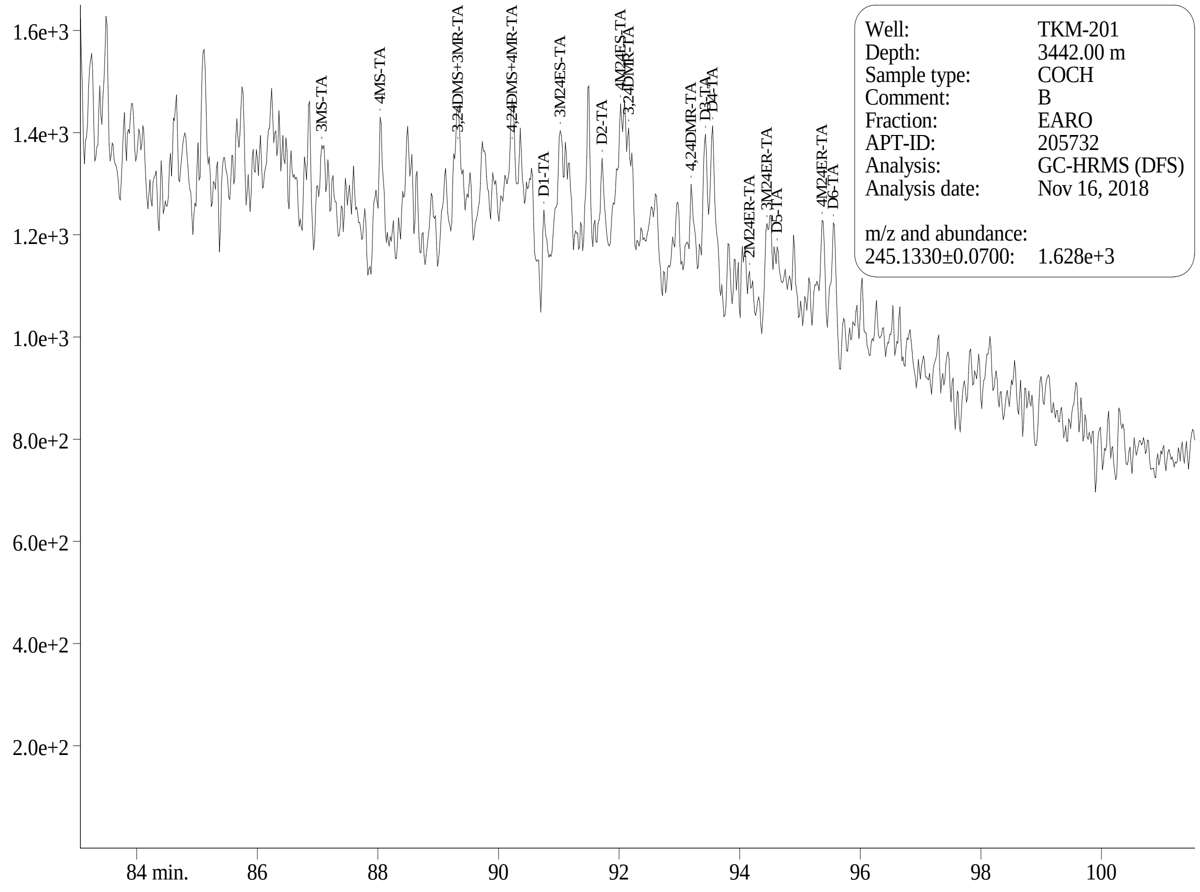

Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: A
Fraction: EARO
APT-ID: 205731
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 1.325e+3
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+aSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
1.3e+3
1.2e+3
1.1e+3
1.0e+3
9.0e+2
8.0e+2
7.0e+2
6.0e+2
5.0e+2
4.0e+2
3.0e+2
2.0e+2
1.0e+2
50 min.
60
70
80
90

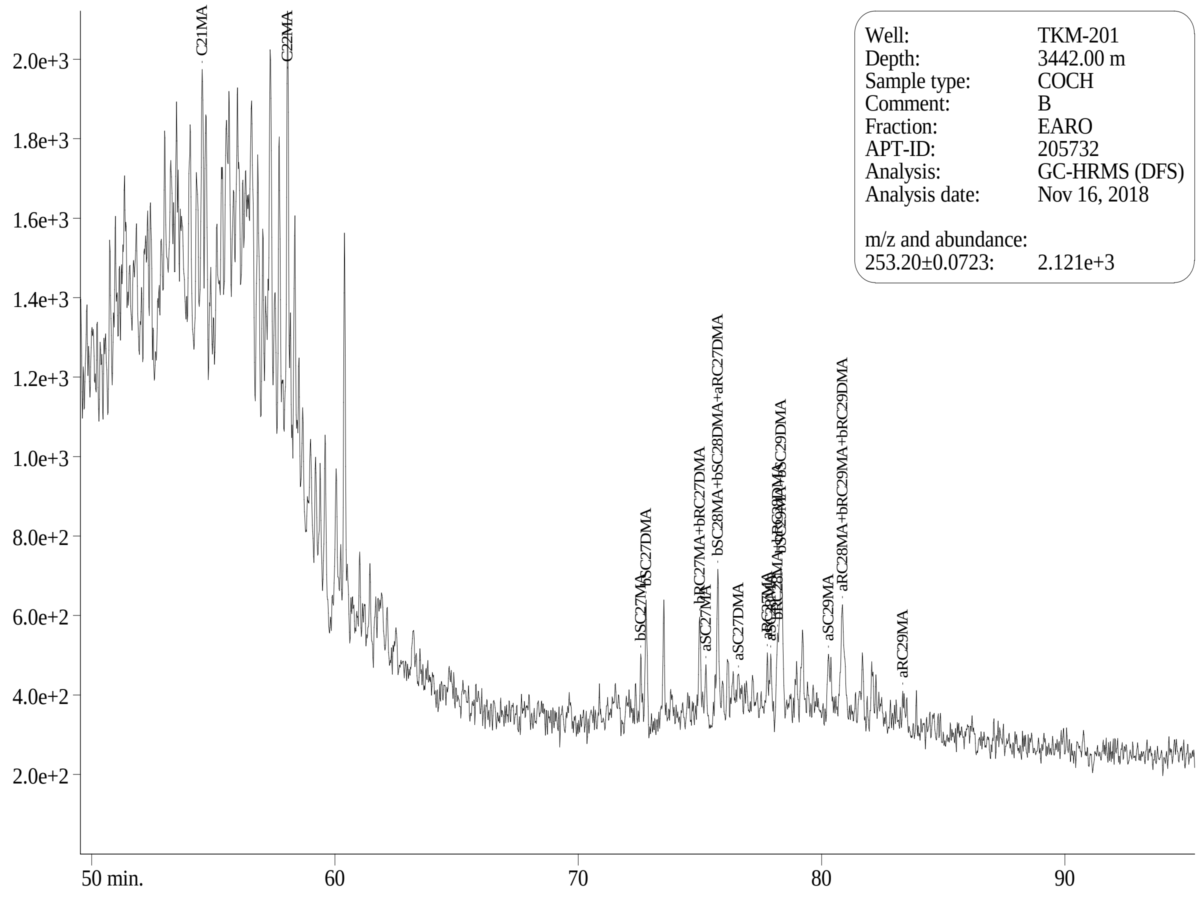

2-MN
1-MN
1,3- + 1,7-DMN
1,6-DMN
2,6-DMN
2,7-DMN
2-EN
1-EN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,6,7 + 1,2,6-TMN
1,2,7-TMN
1,2,4-TMN
1,2,5-TMN
1.6e+7
1.4e+7
1.2e+7
1.0e+7
8.0e+6
6.0e+6
4.0e+6
2.0e+6
14 min.
18
22
26
30
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: EARO
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 1.766e+7
156.09±0.0446: 1.766e+7
170.11±0.0486: 1.766e+7

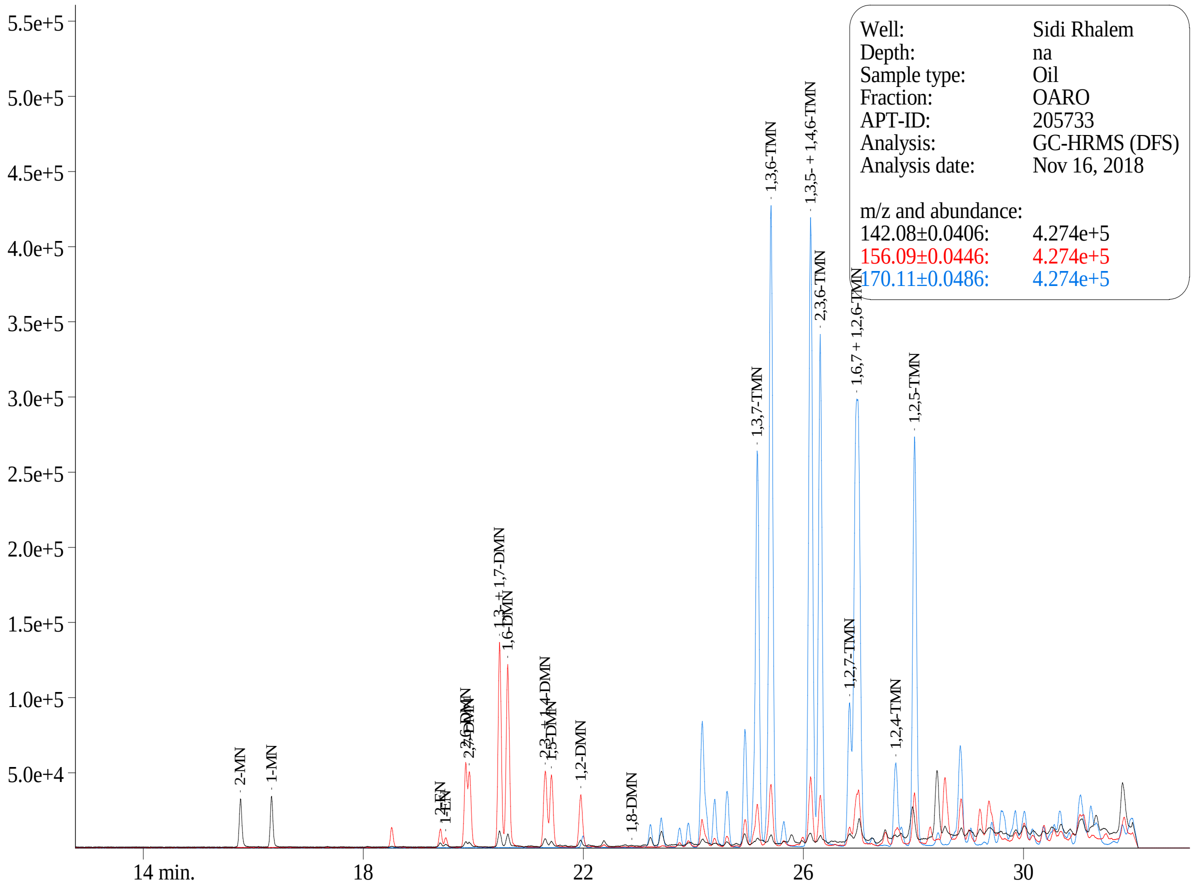

P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
1,9- + 4,9- + 4,10-DMP
2,3-DMP
1,8-DMP
1,2-DMP
Retene
6.5e+6
6.0e+6
5.5e+6
5.0e+6
4.5e+6
4.0e+6
3.5e+6
3.0e+6
2.5e+6
2.0e+6
1.5e+6
1.0e+6
5.0e+5
34 min.
38
42
46
50
54
58
62
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: EARO
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 6.645e+6
192.09±0.0549: 6.645e+6
206.11±0.0589: 6.645e+6
219.12±0.0626: 6.645e+6

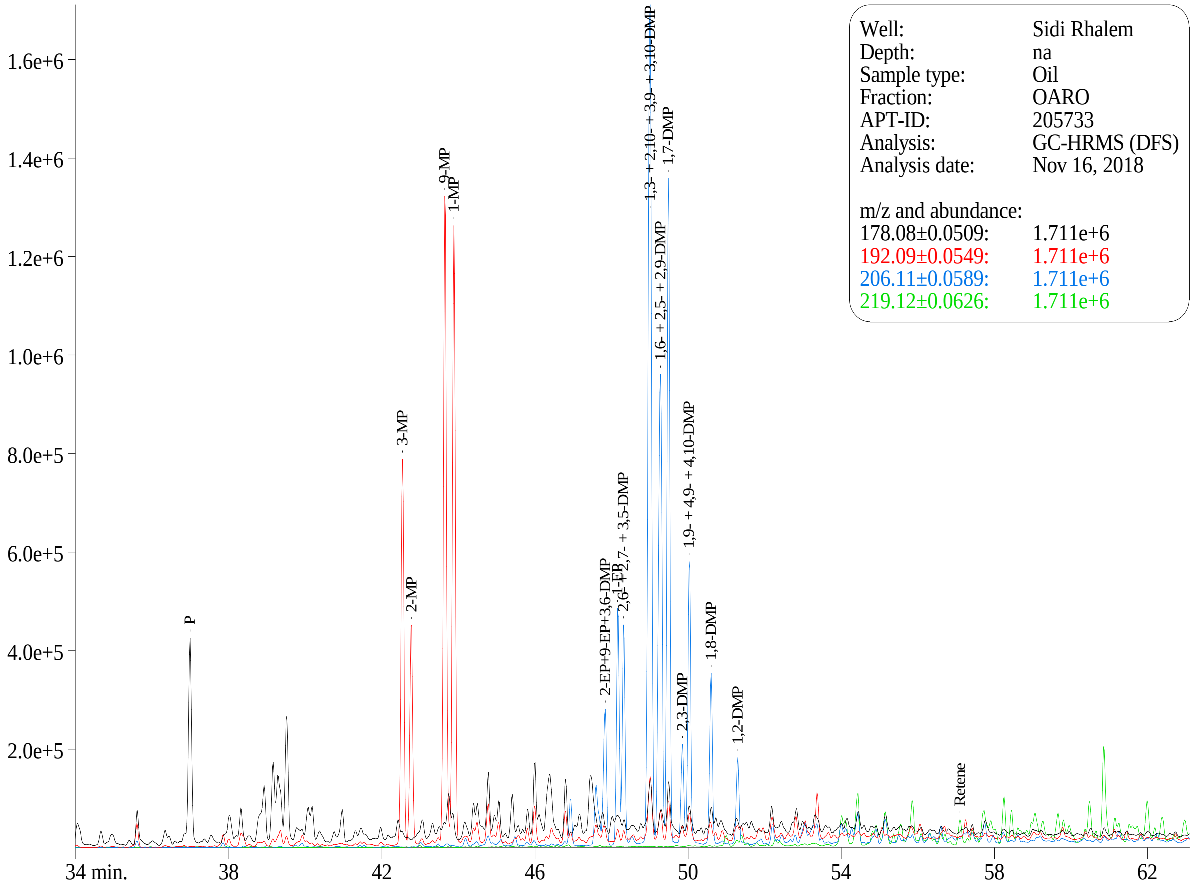

1.1e+6
1.0e+6
9.0e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
34 min.
36
38
40
42
44
46
48
50
52
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: EARO
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
184.03±0.0526: 1.113e+6
198.05±0.0566: 1.113e+6
212.07±0.0606: 1.113e+6

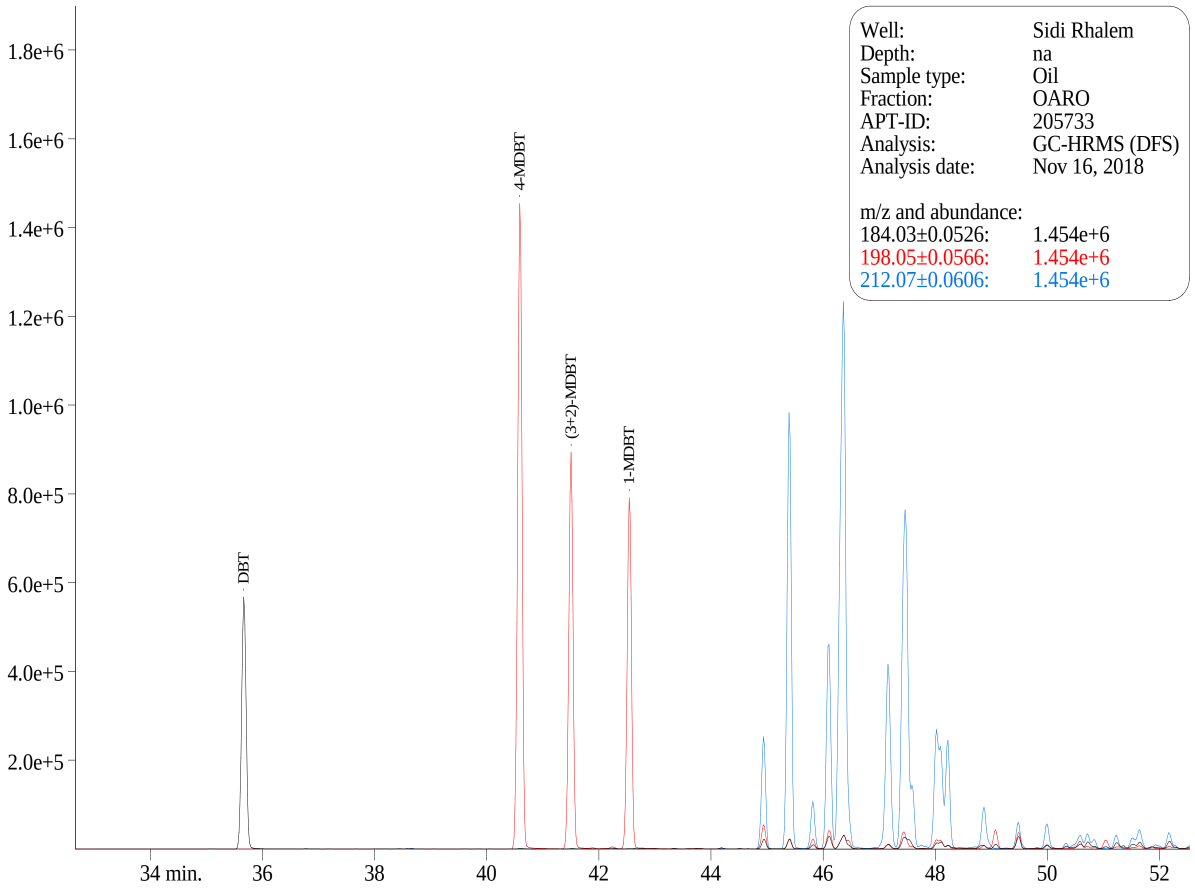

4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
C20TA
C21TA
SC26TA
RC26TA+SC27TA
SC28TA
RC27TA
M4
RC28TA
70 min.
80
90
100
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: EARO
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
231.12±0.0660: 4.143e+4


1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: EARO
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 1.628e+3


2.0e+3
1.8e+3
1.6e+3
1.4e+3
1.2e+3
1.0e+3
8.0e+2
6.0e+2
4.0e+2
2.0e+2
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
Well: TKM-201
Depth: 3442.00 m
Sample type: COCH
Comment: B
Fraction: EARO
APT-ID: 205732
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 2.121e+3

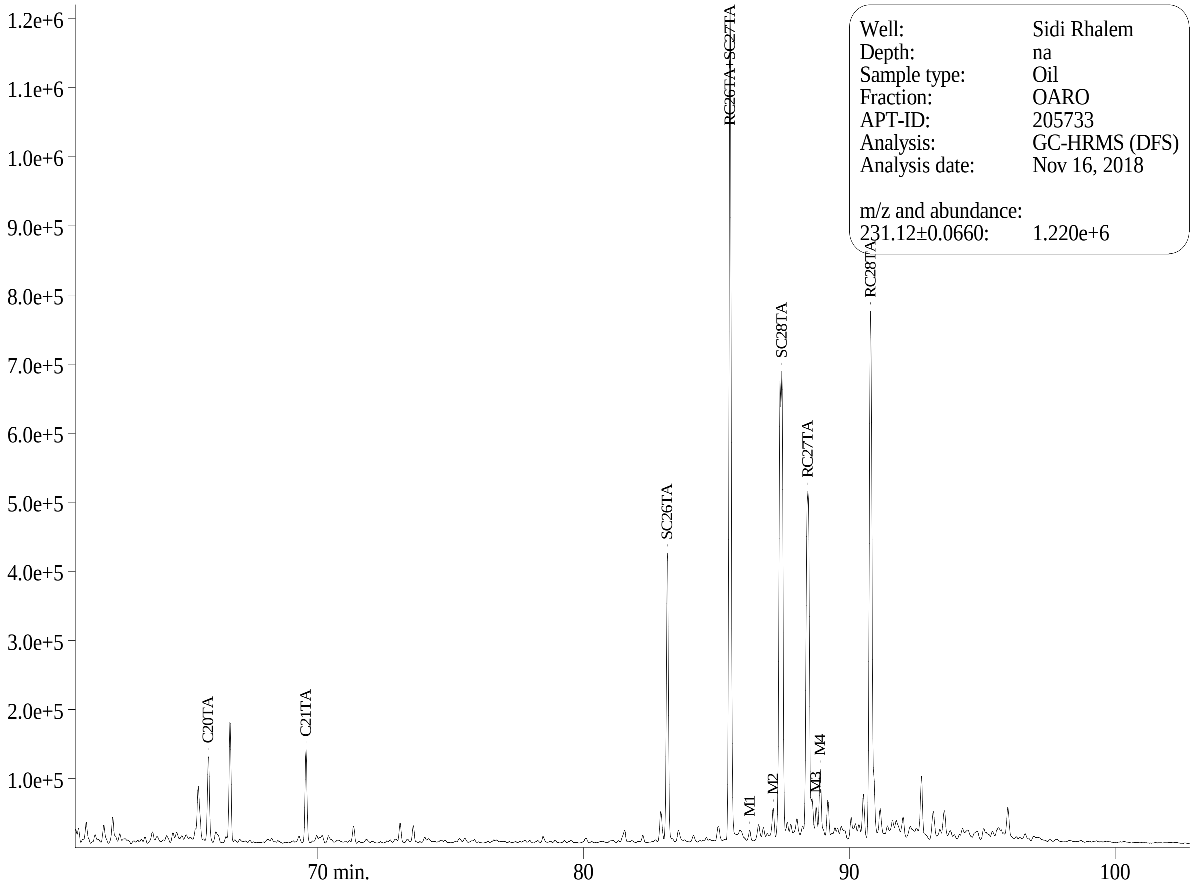

5.5e+5
5.0e+5
4.5e+5
4.0e+5
3.5e+5
3.0e+5
2.5e+5
2.0e+5
1.5e+5
1.0e+5
5.0e+4
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
142.08±0.0406: 4.274e+5
156.09±0.0446: 4.274e+5
170.11±0.0486: 4.274e+5


1.6e+6
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
2,3-DMP
1,9- + 4,9- + 4,10-DMP
1,8-DMP
1,2-DMP
Retene
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
178.08±0.0509: 1.711e+6
192.09±0.0549: 1.711e+6
206.11±0.0589: 1.711e+6
219.12±0.0626: 1.711e+6



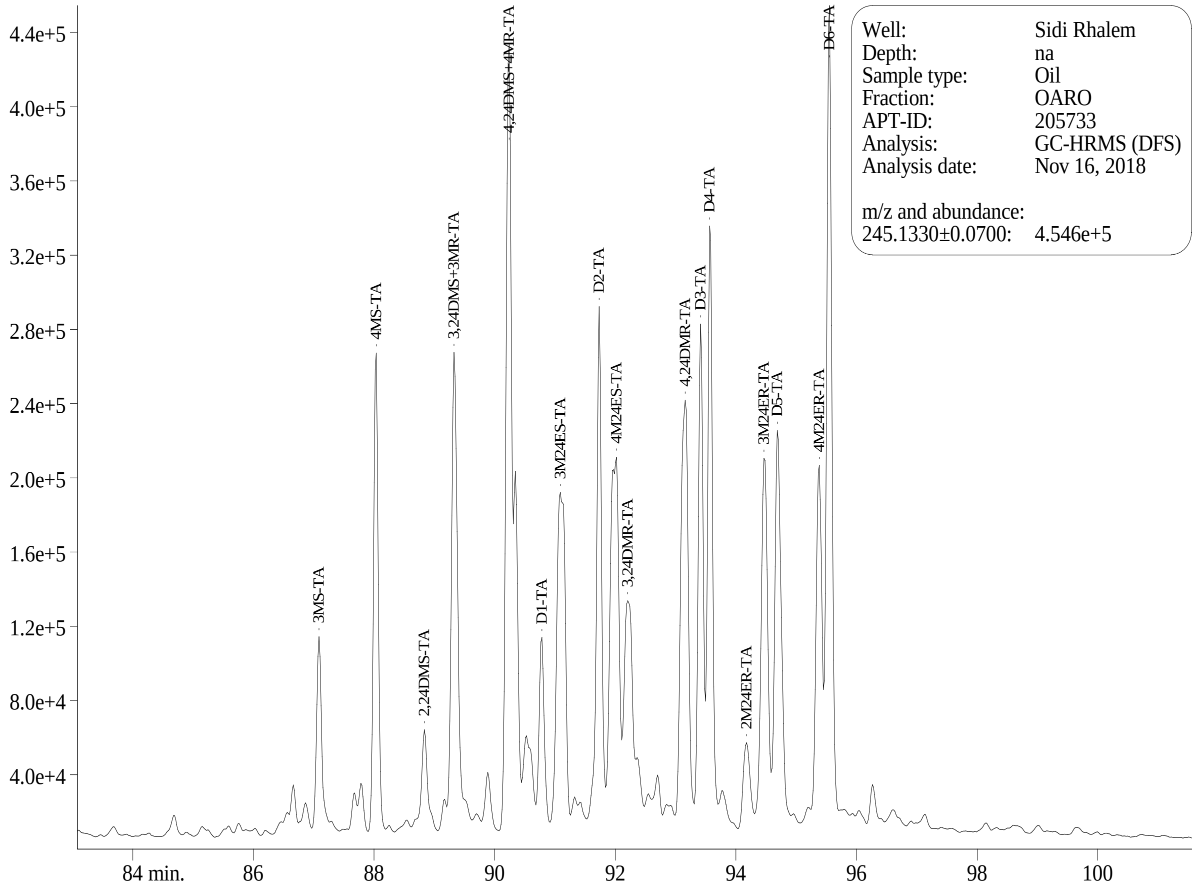
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

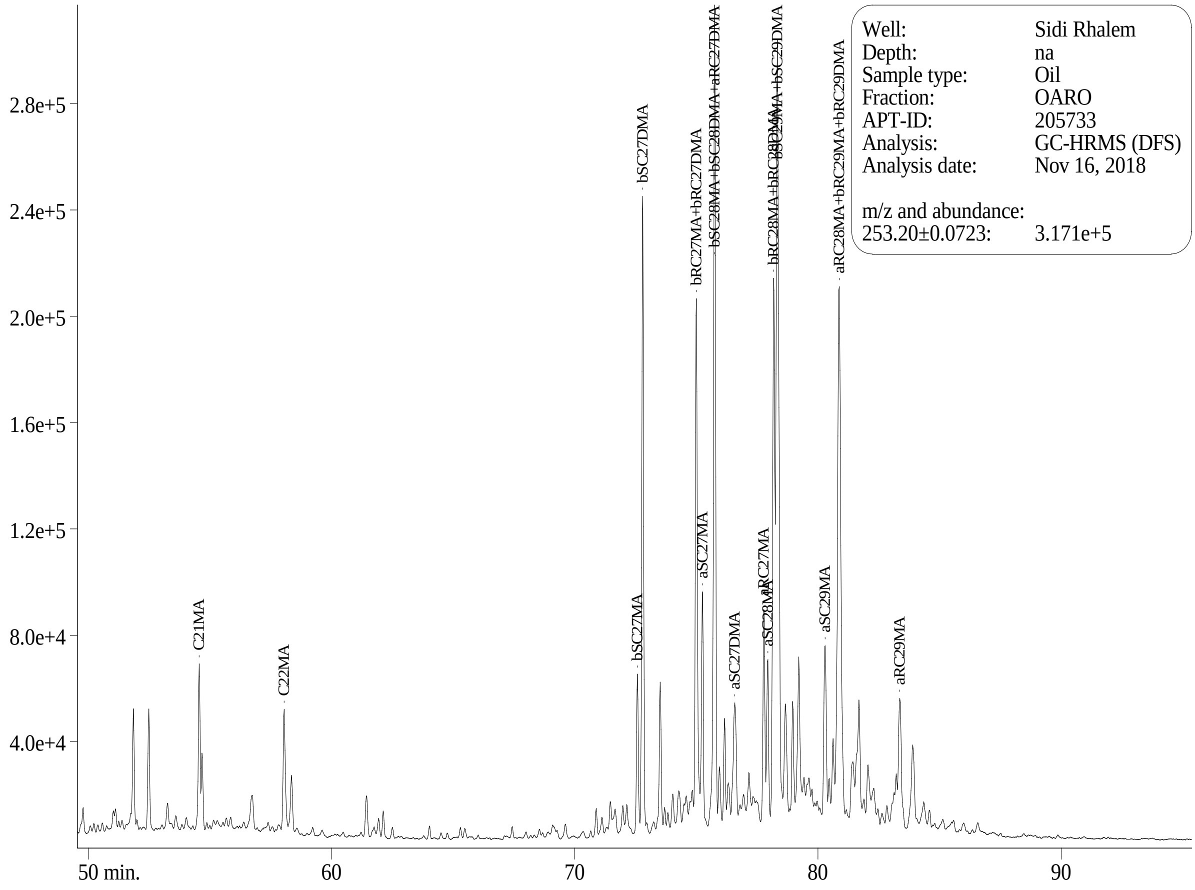
m/z and abundance:
184.03±0.0526: 1.454e+6
198.05±0.0566: 1.454e+6
212.07±0.0606: 1.454e+6

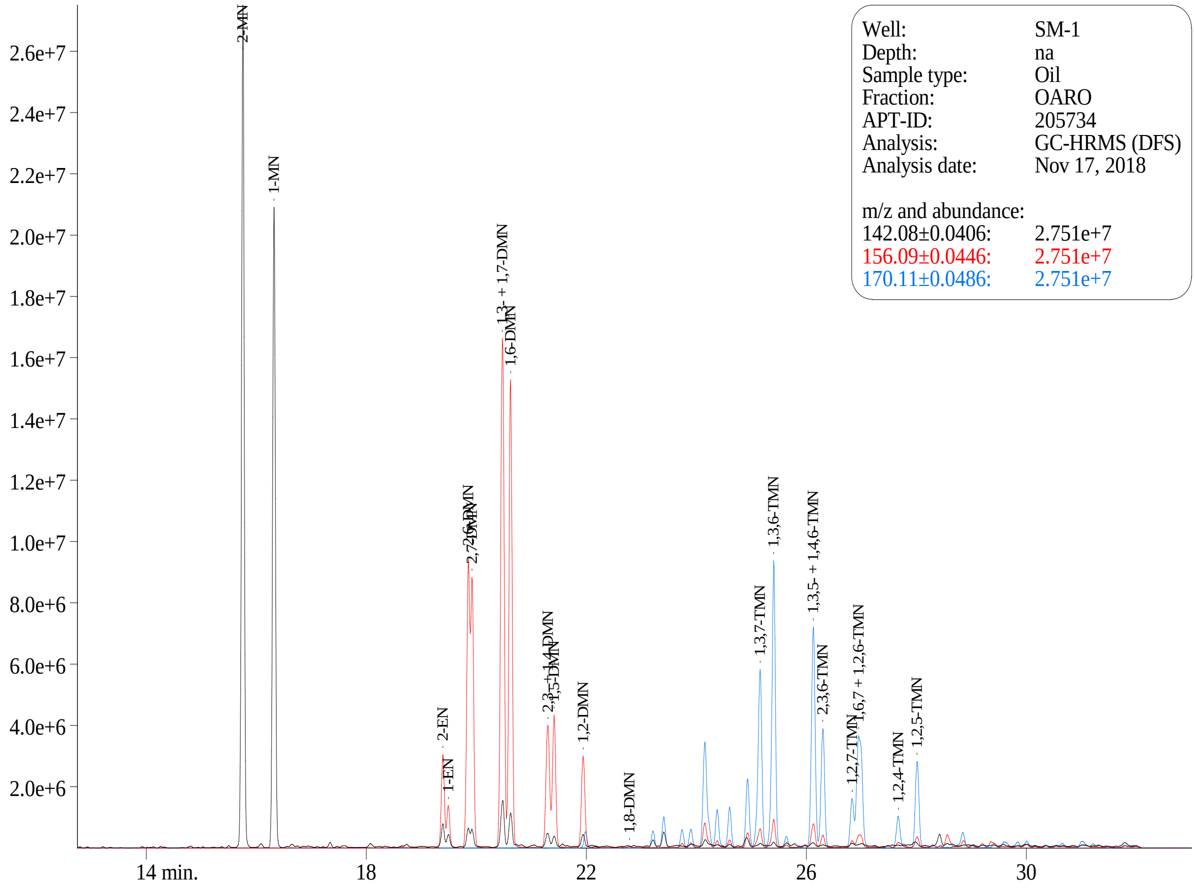


Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018

m/z and abundance:
231.12±0.0660: 1.220e+6

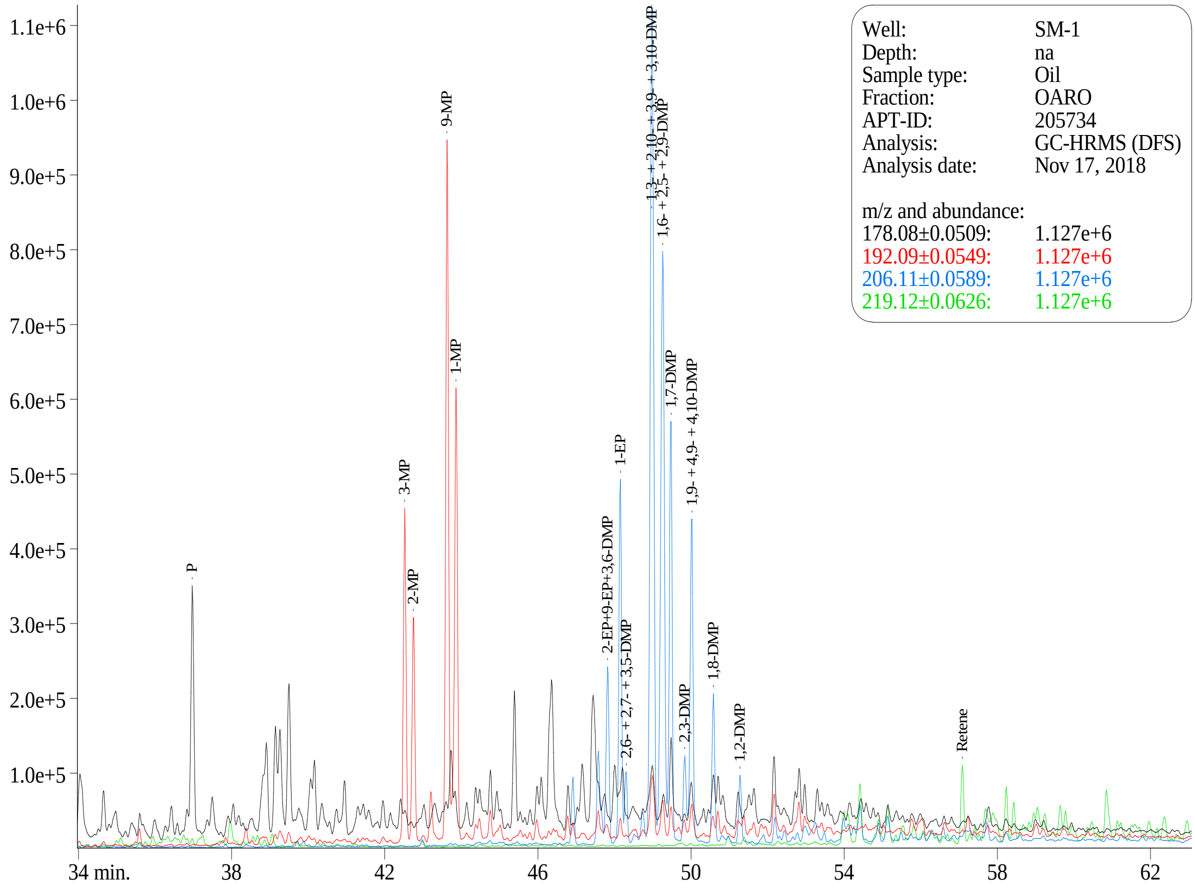

4.4e+5
4.0e+5
3.6e+5
3.2e+5
2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
245.1330±0.0700: 4.546e+5


2.8e+5
2.4e+5
2.0e+5
1.6e+5
1.2e+5
8.0e+4
4.0e+4
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aSC28MA
aRC27MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
Well: Sidi Rhalem
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205733
Analysis: GC-HRMS (DFS)
Analysis date: Nov 16, 2018
m/z and abundance:
253.20±0.0723: 3.171e+5



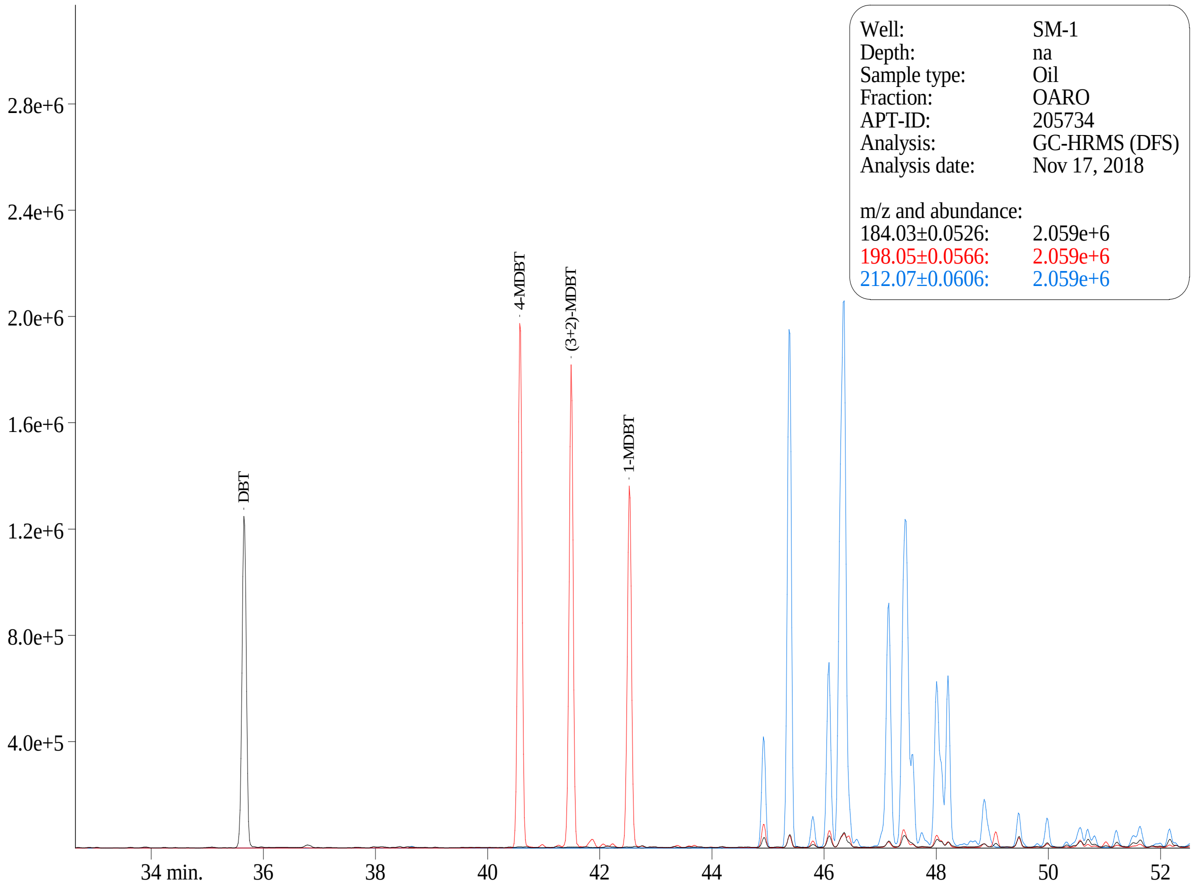
Well:	SM-1
Depth:	na
Sample type:	Oil
Fraction:	OARO
APT-ID:	205734
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 17, 2018

m/z and abundance:	
142.08±0.0406:	2.751e+7
156.09±0.0446:	2.751e+7
170.11±0.0486:	2.751e+7



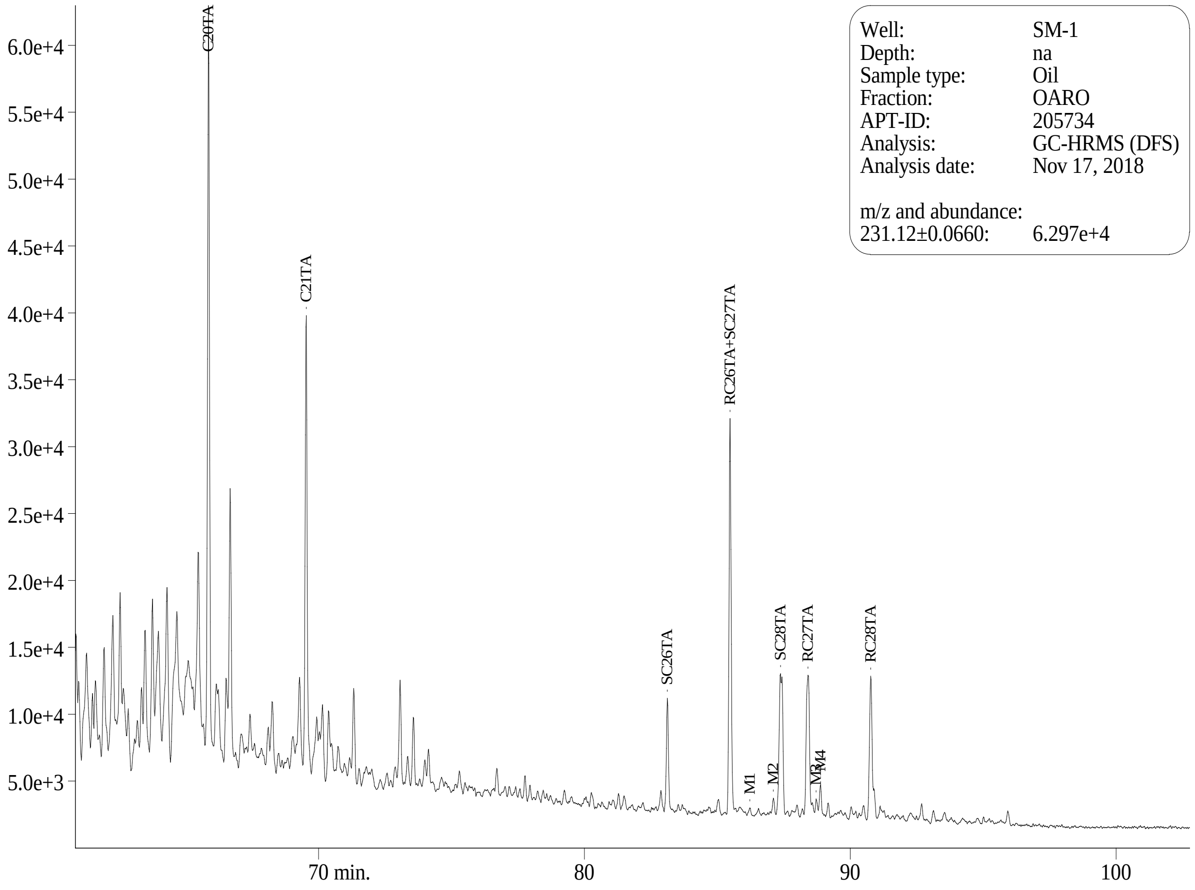
Well:	SM-1
Depth:	na
Sample type:	Oil
Fraction:	OARO
APT-ID:	205734
Analysis:	GC-HRMS (DFS)
Analysis date:	Nov 17, 2018

m/z and abundance:	
178.08±0.0509:	1.127e+6
192.09±0.0549:	1.127e+6
206.11±0.0589:	1.127e+6
219.12±0.0626:	1.127e+6



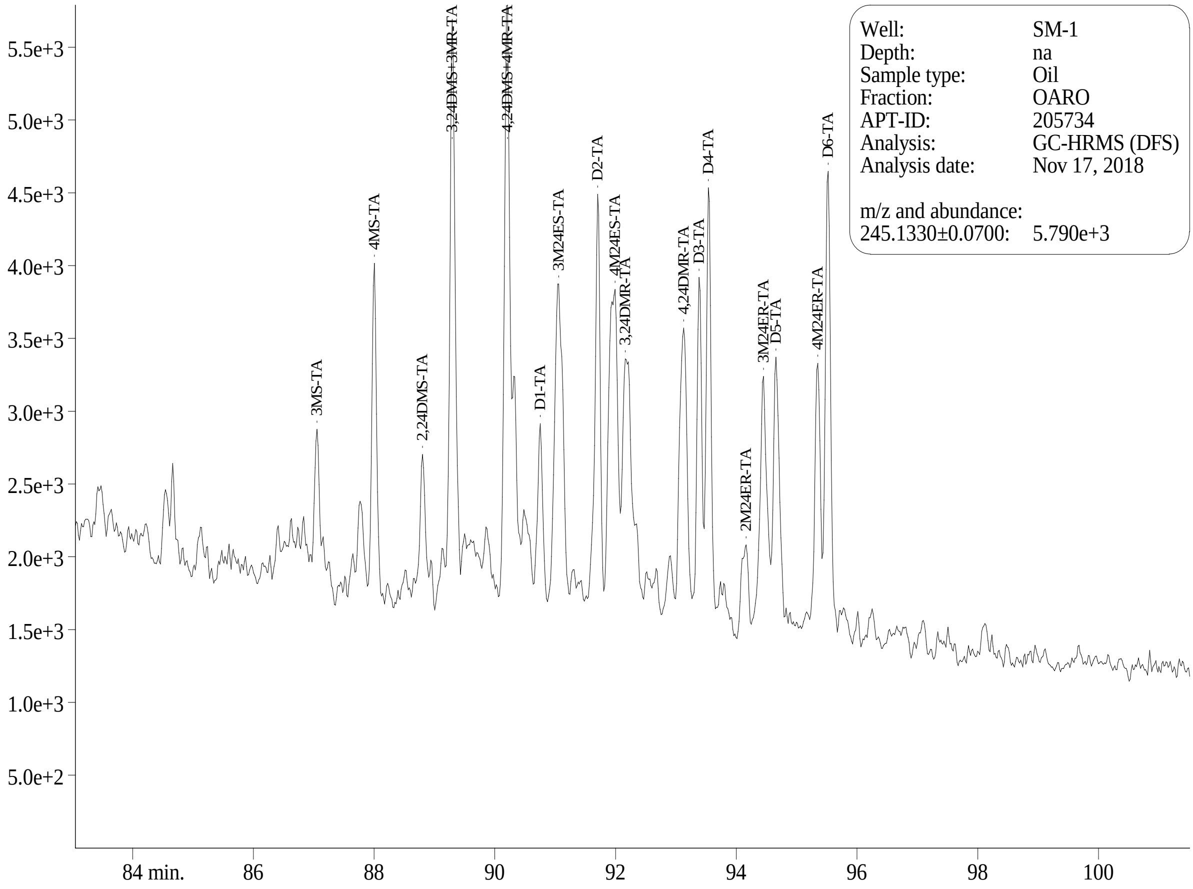
Well: SM-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 17, 2018

m/z and abundance:
184.03±0.0526: 2.059e+6
198.05±0.0566: 2.059e+6
212.07±0.0606: 2.059e+6



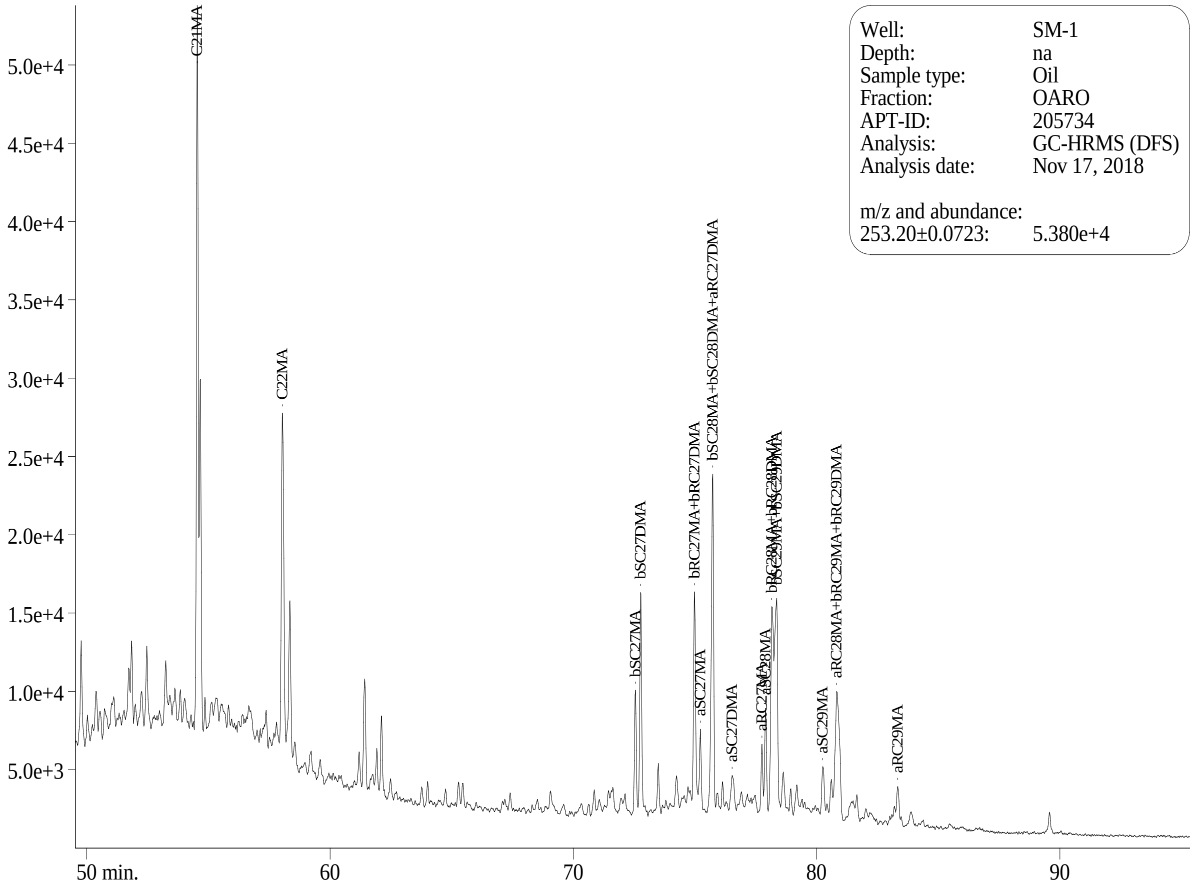
Well: SM-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 17, 2018

m/z and abundance:
231.12±0.0660: 6.297e+4



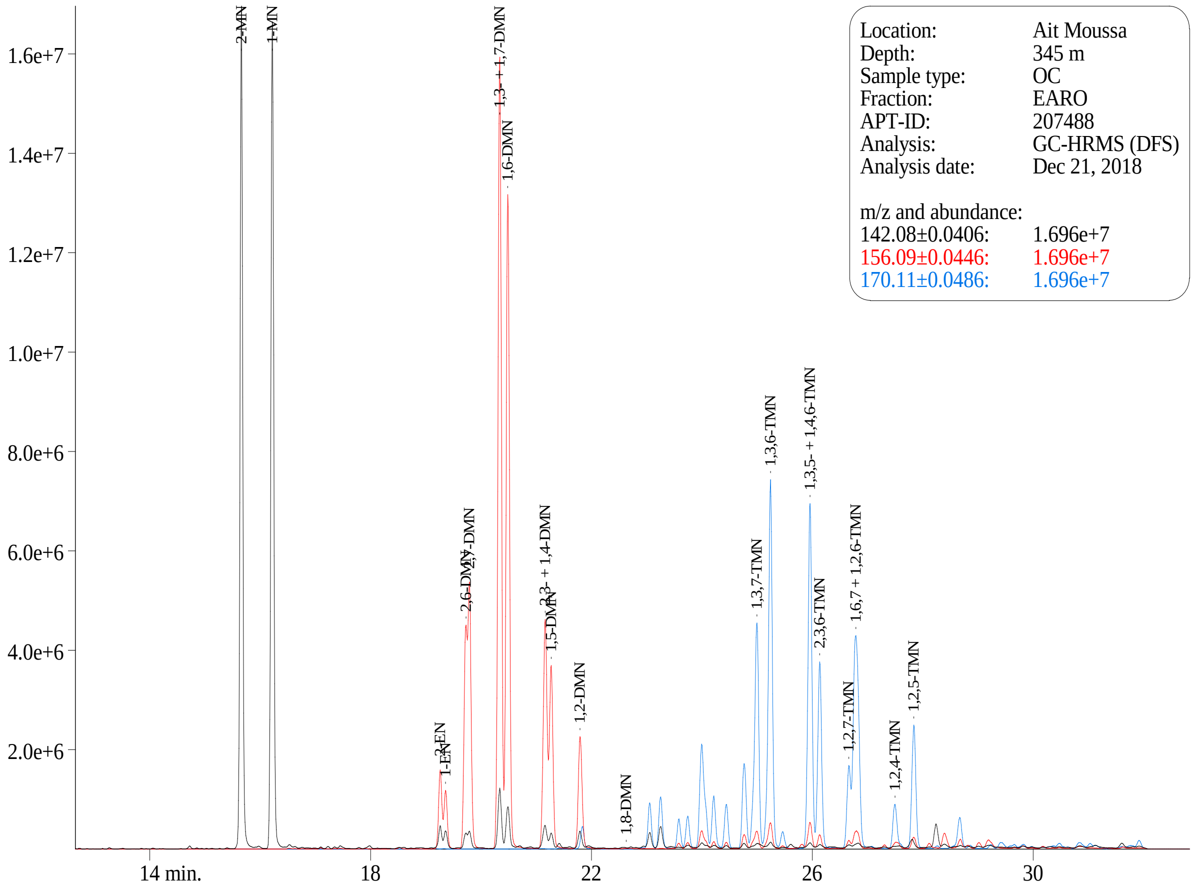
Well: SM-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 17, 2018

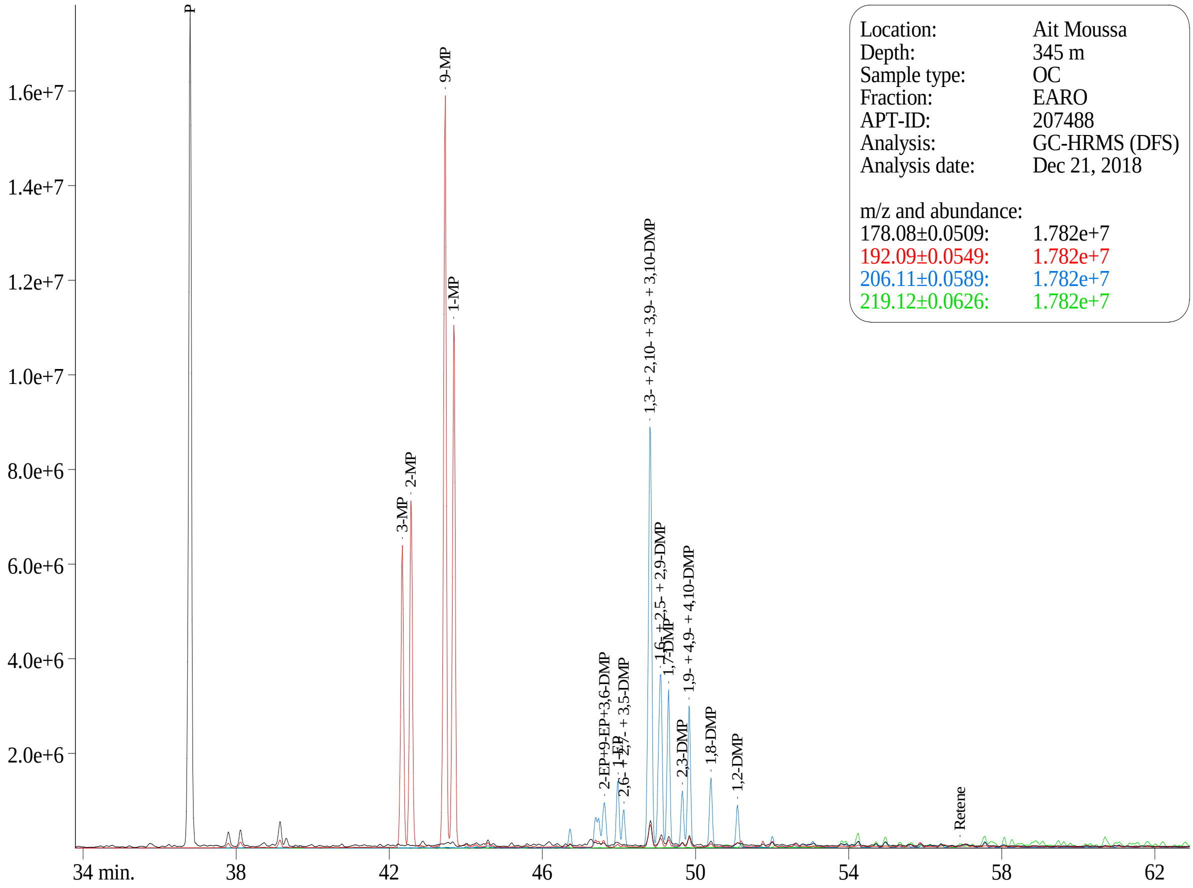
m/z and abundance:
245.1330±0.0700: 5.790e+3

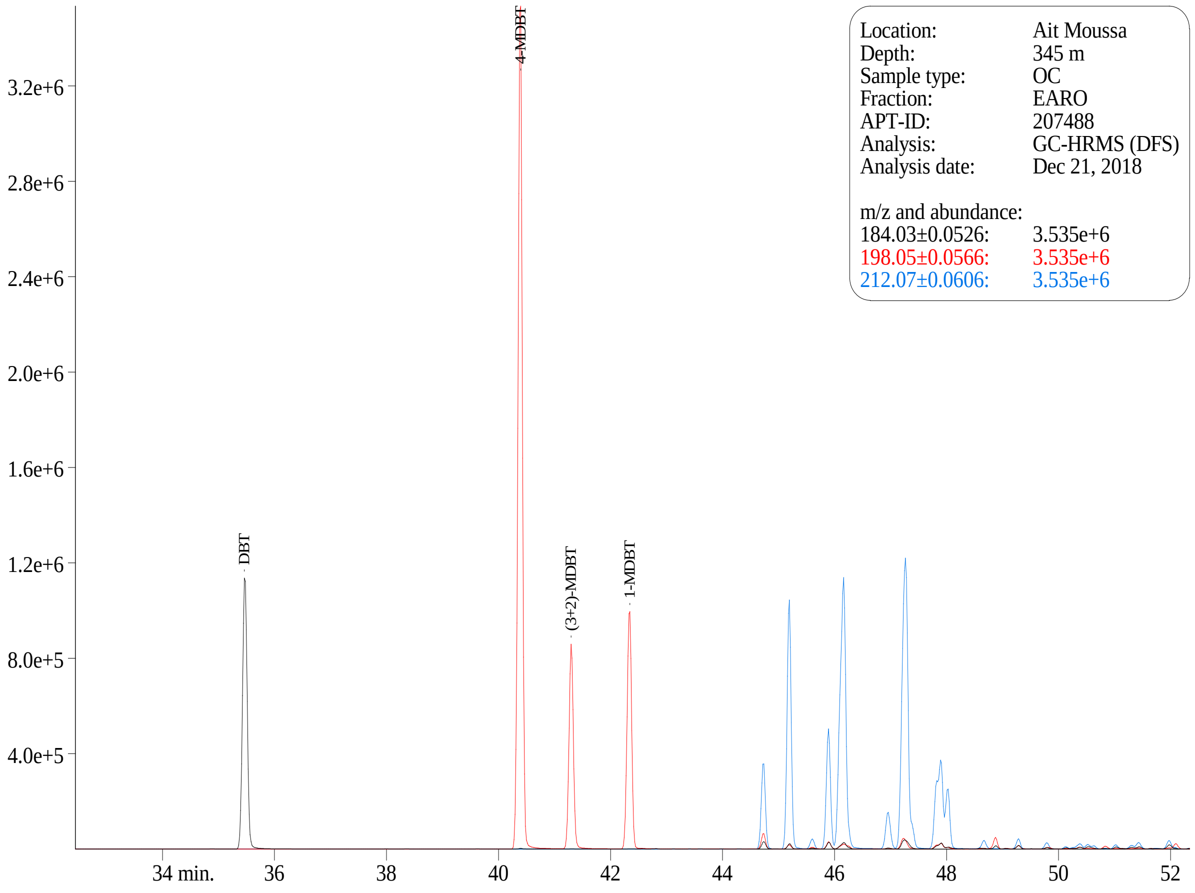


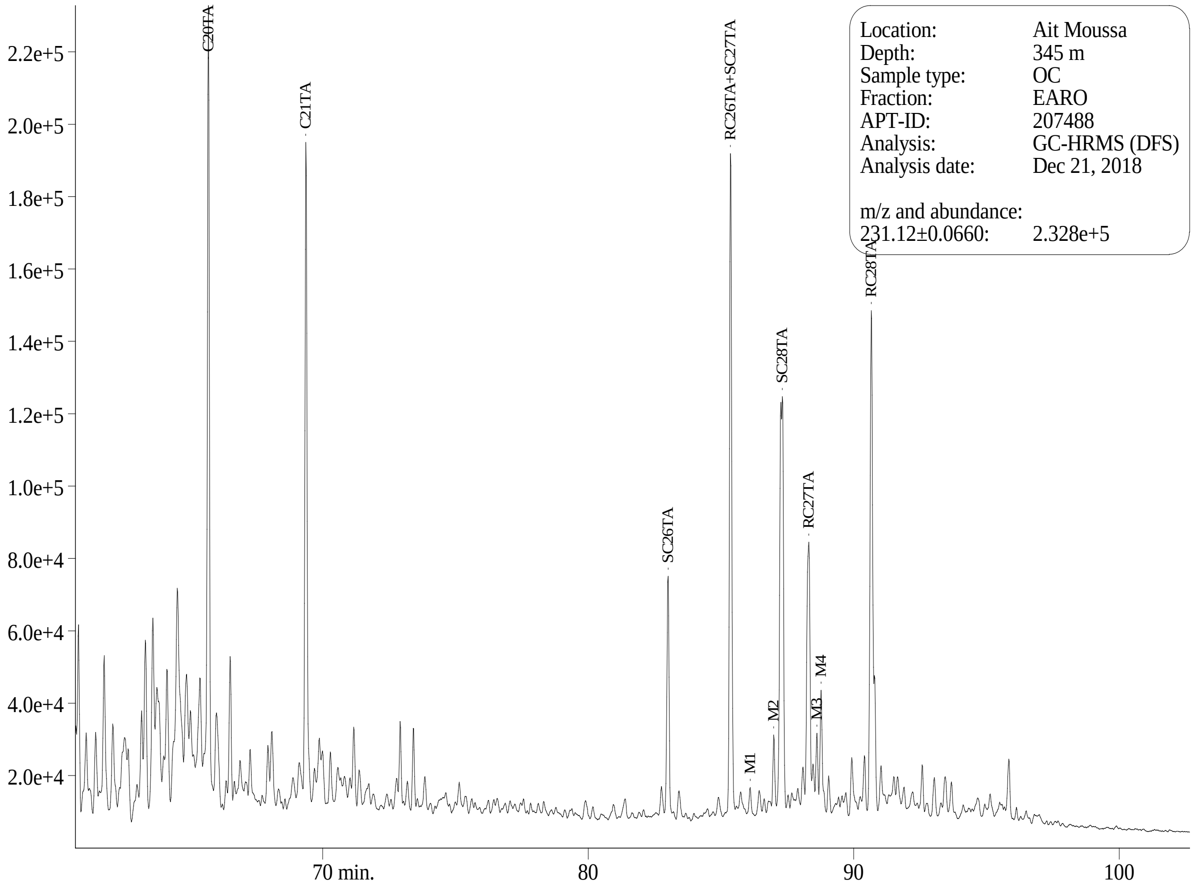
Well: SM-1
Depth: na
Sample type: Oil
Fraction: OARO
APT-ID: 205734
Analysis: GC-HRMS (DFS)
Analysis date: Nov 17, 2018

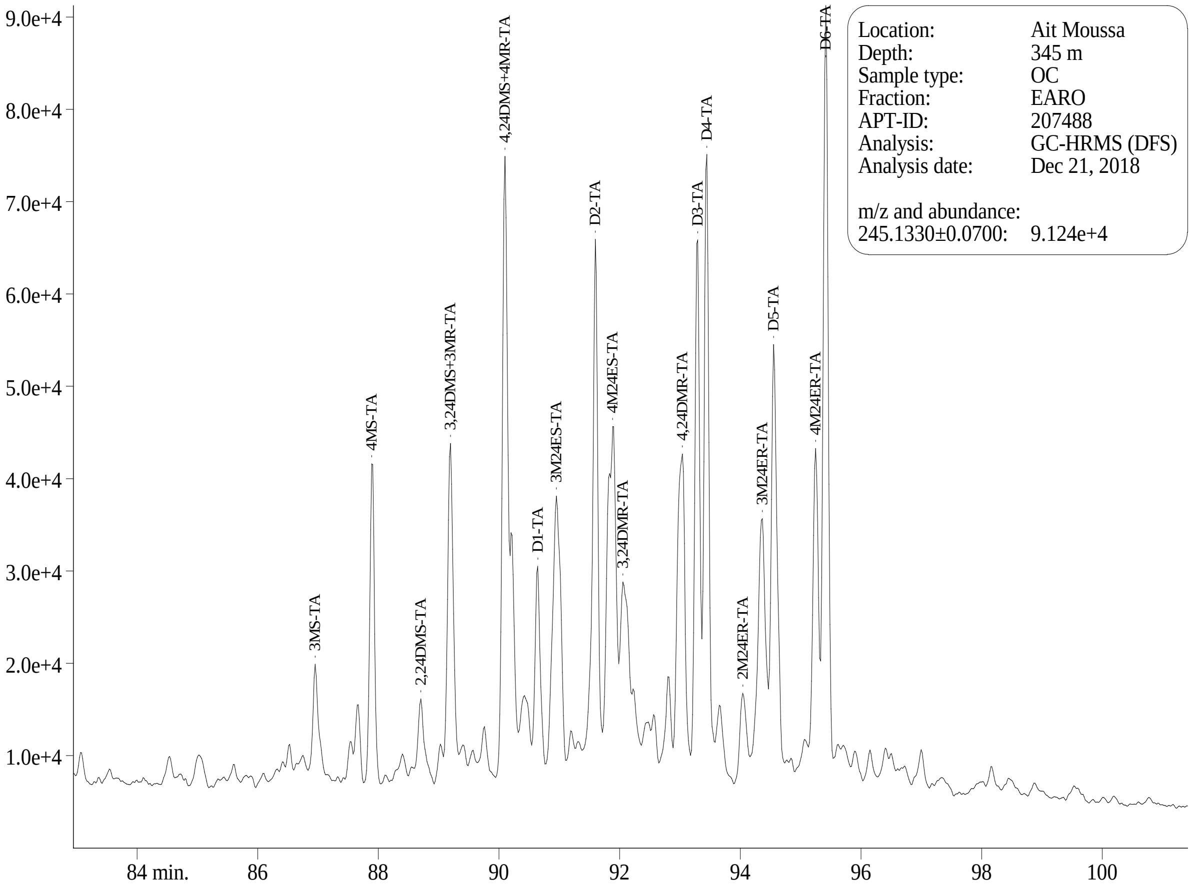
m/z and abundance:
253.20±0.0723: 5.380e+4


2-MN
1-MN
1,3- + 1,7-DMN
1,6-DMN
2-EN
1-EN
2,6-DMN
2,7-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
1.6e+7
1.4e+7
1.2e+7
1.0e+7
8.0e+6
6.0e+6
4.0e+6
2.0e+6
14 min.
18
22
26
30
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: EARO
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
142.08±0.0406: 1.696e+7
156.09±0.0446: 1.696e+7
170.11±0.0486: 1.696e+7


P
9-MP
1-MP
3-MP
2-MP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
1,9- + 4,9- + 4,10-DMP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
2,3-DMP
1,8-DMP
1,2-DMP
Retene
1.6e+7
1.4e+7
1.2e+7
1.0e+7
8.0e+6
6.0e+6
4.0e+6
2.0e+6
34 min.
38
42
46
50
54
58
62
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: EARO
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
178.08±0.0509: 1.782e+7
192.09±0.0549: 1.782e+7
206.11±0.0589: 1.782e+7
219.12±0.0626: 1.782e+7

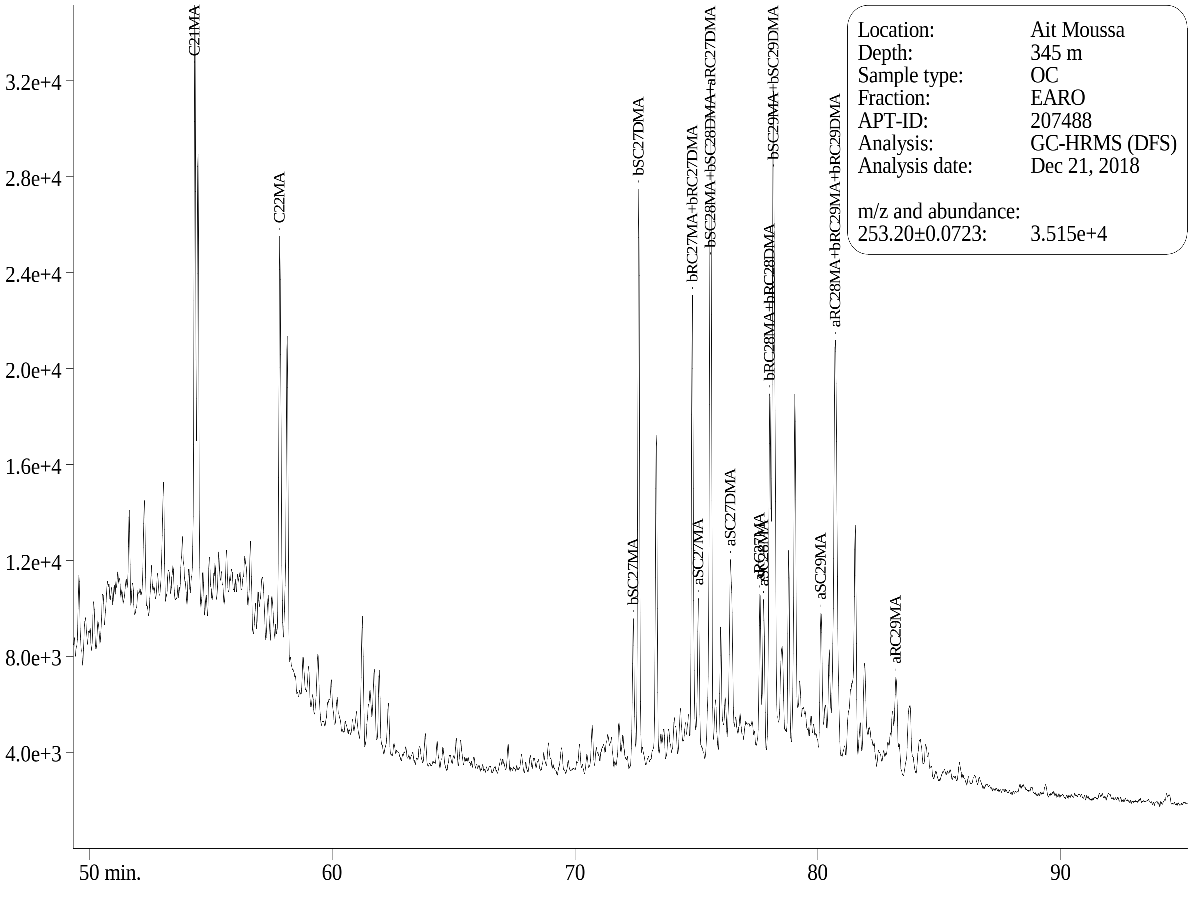

3.2e+6
2.8e+6
2.4e+6
2.0e+6
1.6e+6
1.2e+6
8.0e+5
4.0e+5
34 min.
36
38
40
42
44
46
48
50
52
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: EARO
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
184.03±0.0526: 3.535e+6
198.05±0.0566: 3.535e+6
212.07±0.0606: 3.535e+6


2.2e+5
2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
70 min.
80
90
100
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: EARO
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.12±0.0660: 2.328e+5



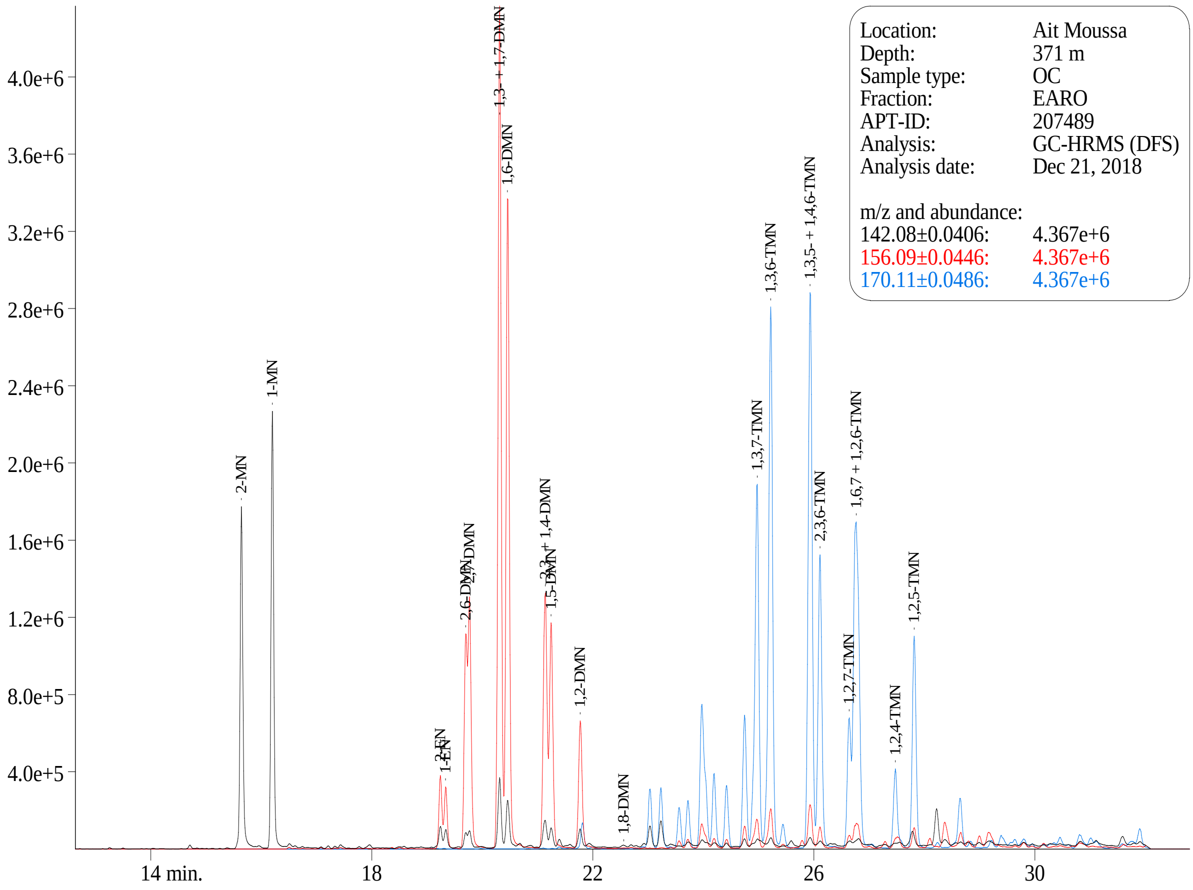
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: EARO
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
245.1330±0.0700: 9.124e+4



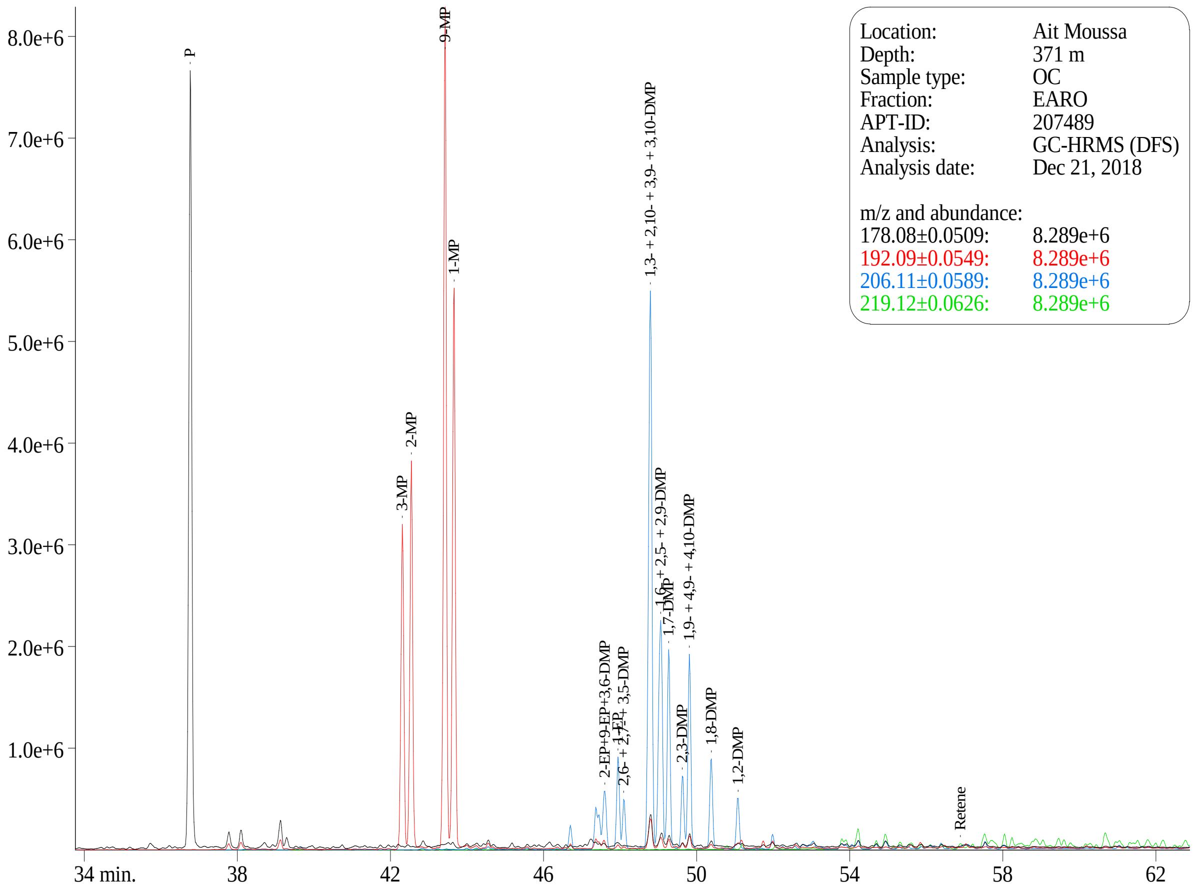
Location: Ait Moussa
Depth: 345 m
Sample type: OC
Fraction: EARO
APT-ID: 207488
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

m/z and abundance:
253.20±0.0723: 3.515e+4



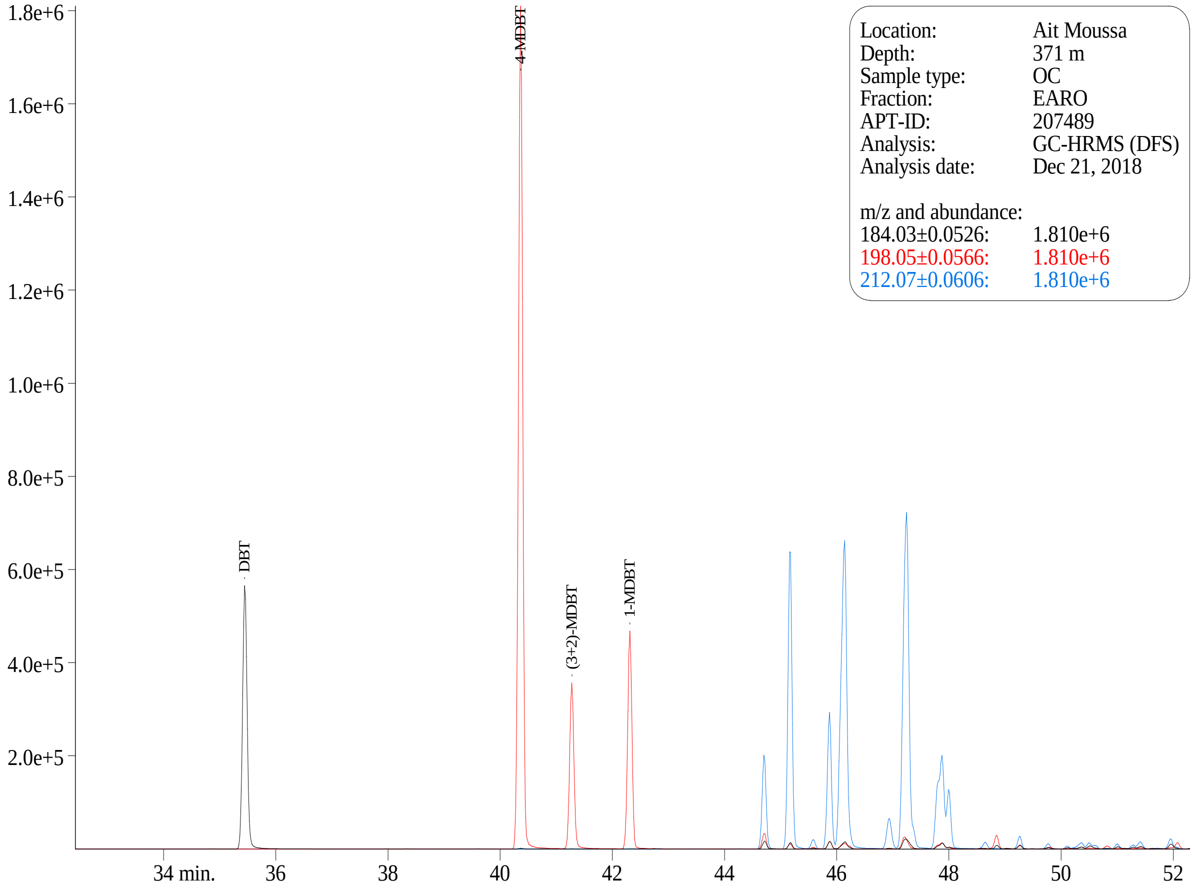
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: EARO
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

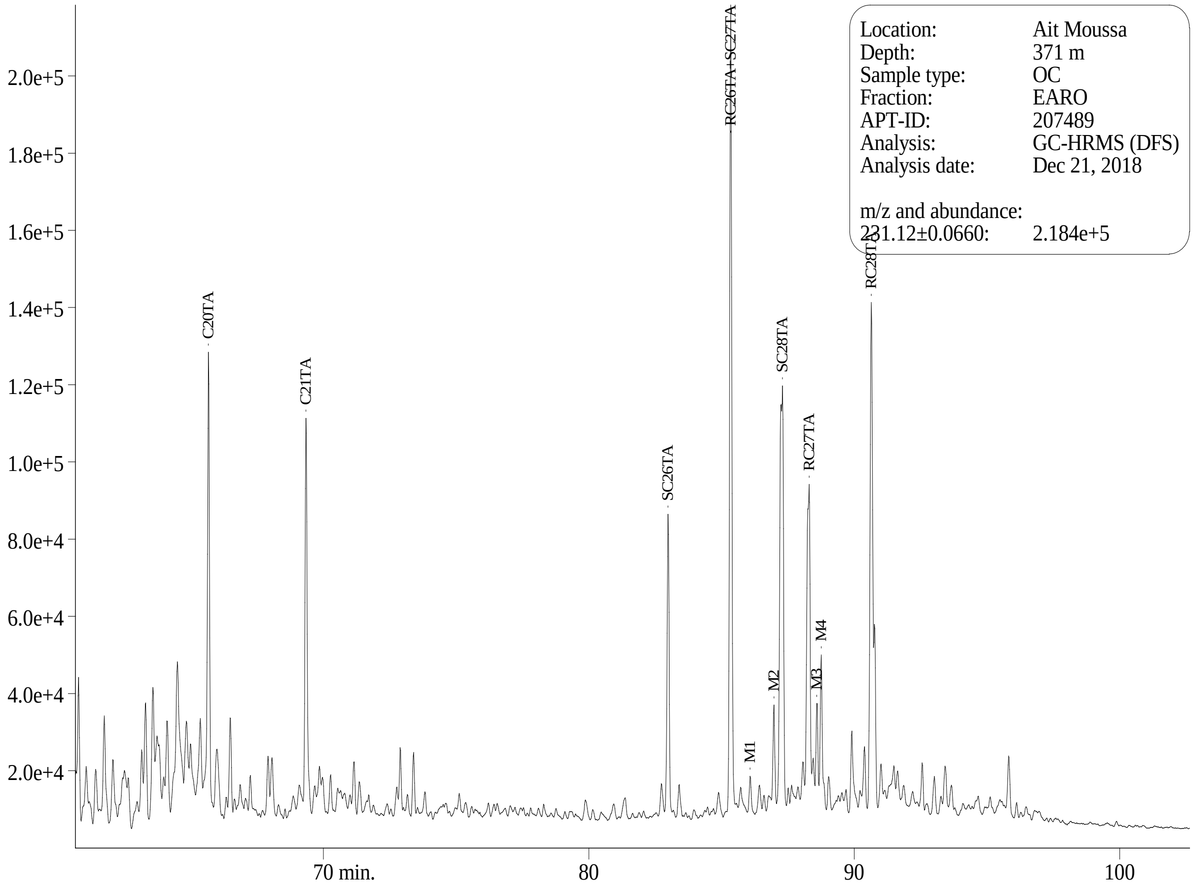
m/z and abundance:
142.08±0.0406: 4.367e+6
156.09±0.0446: 4.367e+6
170.11±0.0486: 4.367e+6

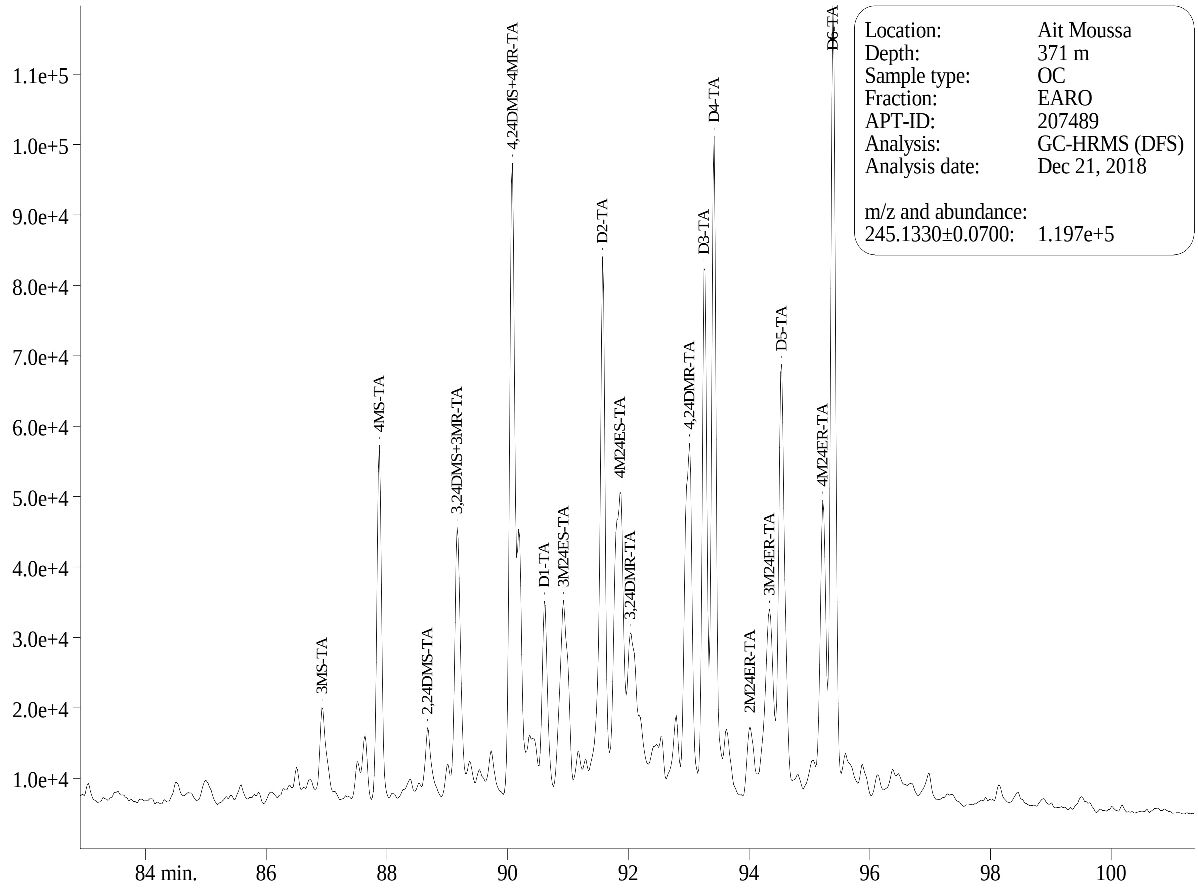


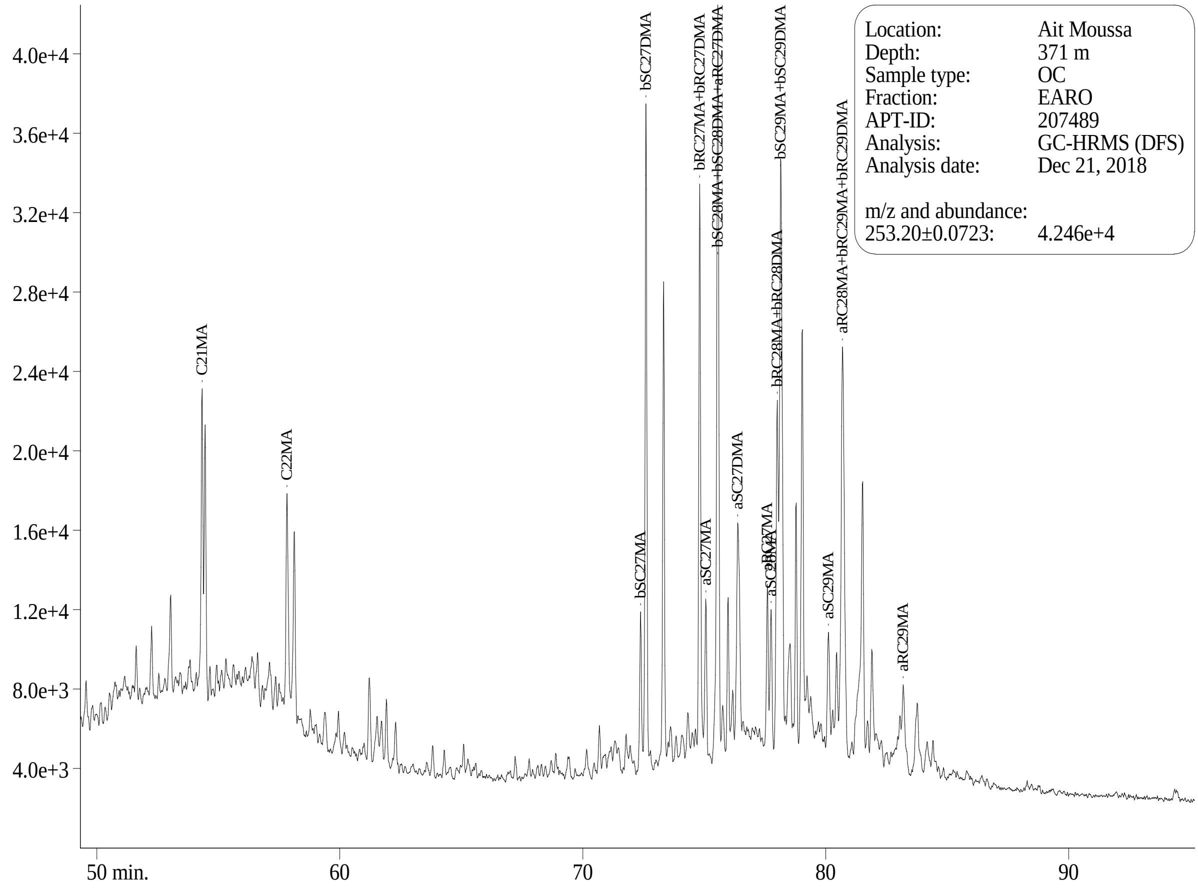
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: EARO
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018

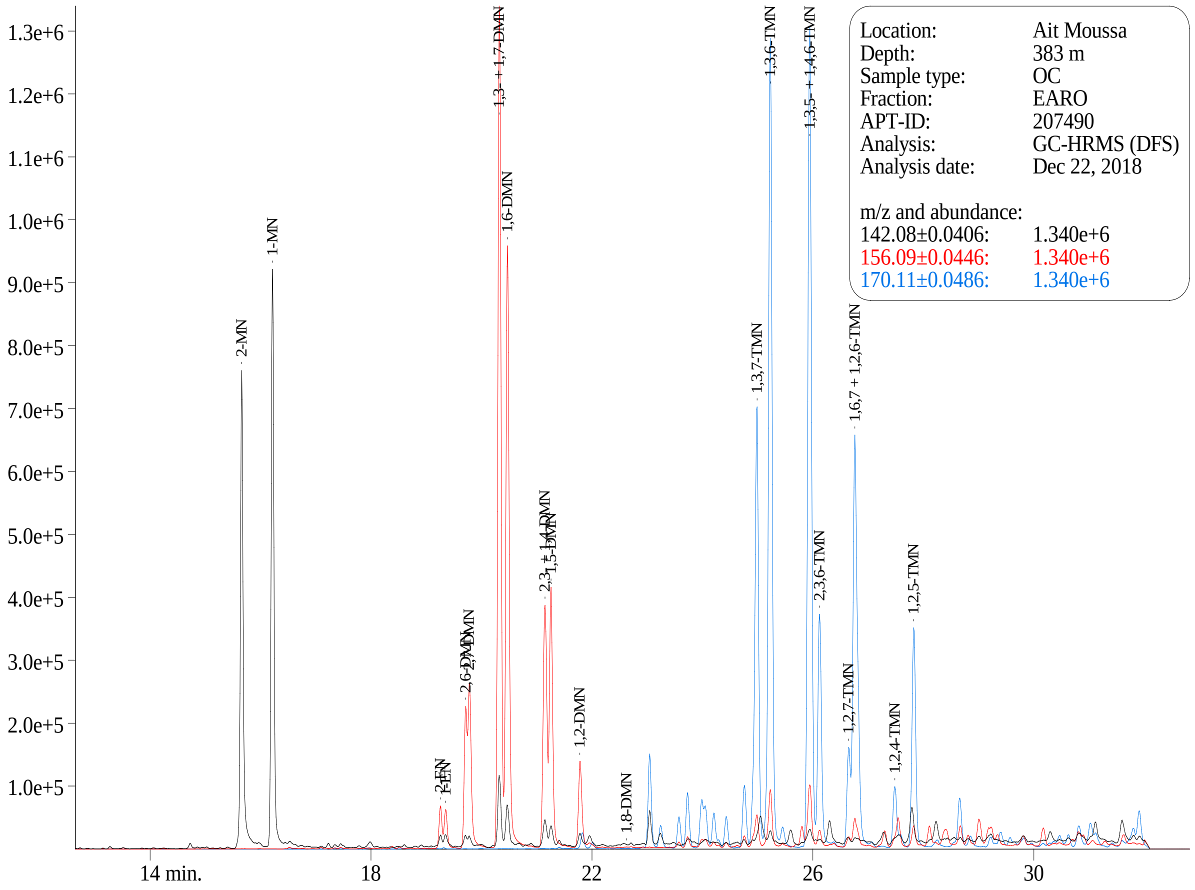
m/z and abundance:
178.08±0.0509: 8.289e+6
192.09±0.0549: 8.289e+6
206.11±0.0589: 8.289e+6
219.12±0.0626: 8.289e+6

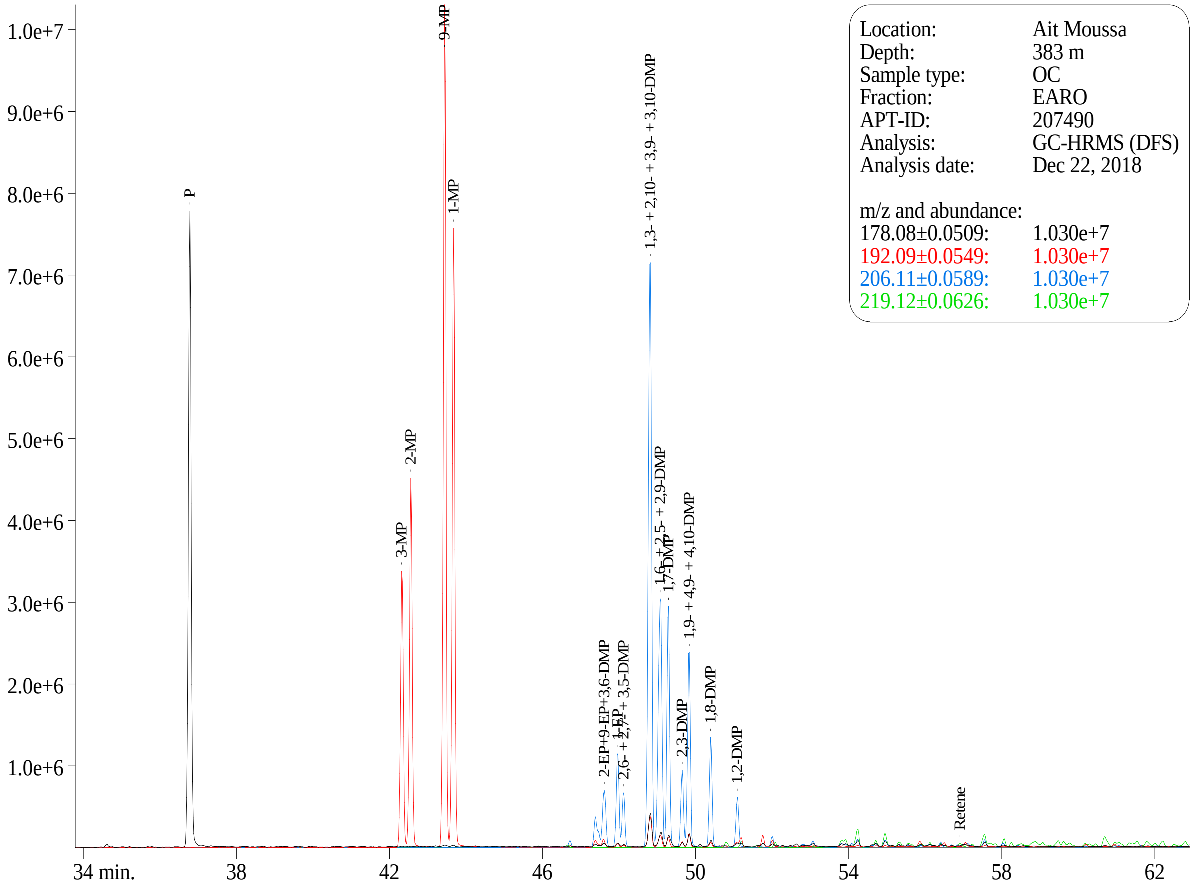

1.8e+6
1.6e+6
1.4e+6
1.2e+6
1.0e+6
8.0e+5
6.0e+5
4.0e+5
2.0e+5
DBT
4-MDBT
(3+2)-MDBT
1-MDBT
34 min.
36
38
40
42
44
46
48
50
52
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: EARO
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
184.03±0.0526: 1.810e+6
198.05±0.0566: 1.810e+6
212.07±0.0606: 1.810e+6

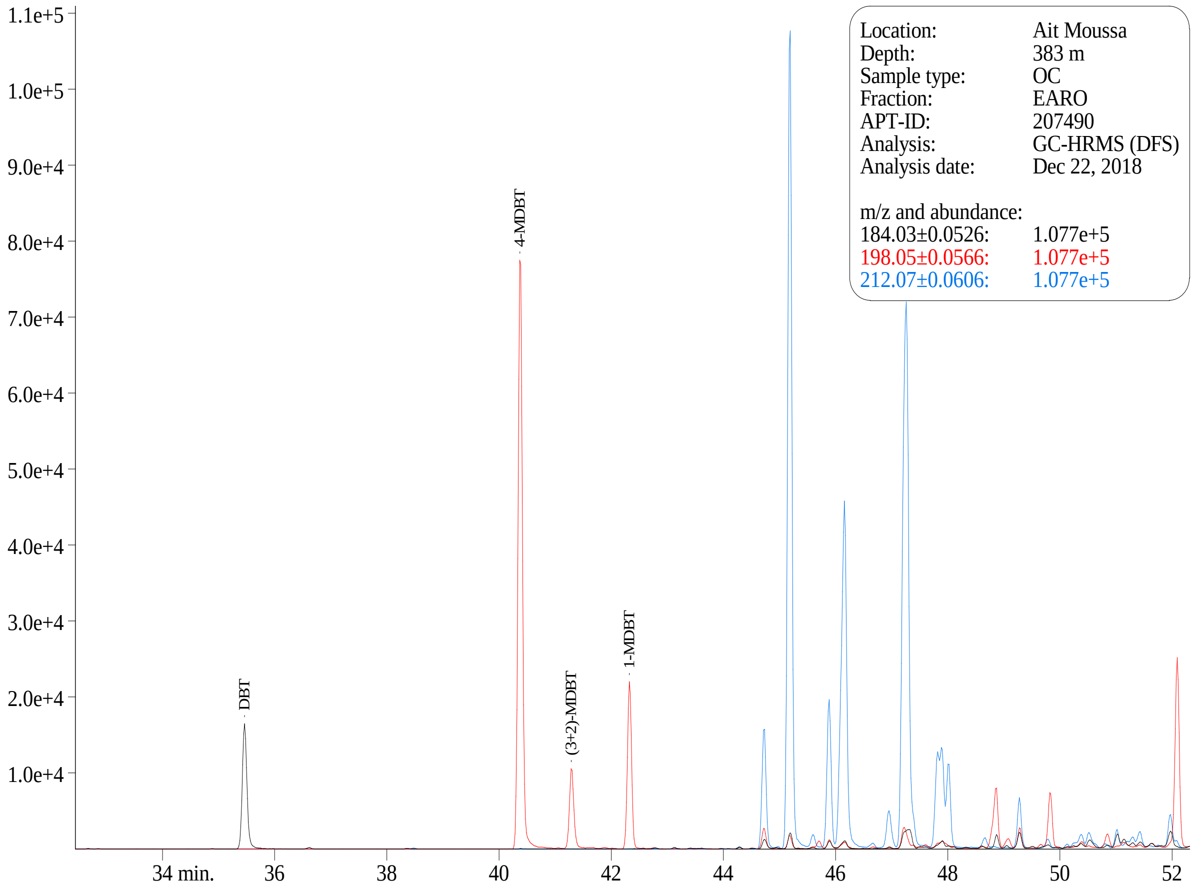

2.0e+5
1.8e+5
1.6e+5
1.4e+5
1.2e+5
1.0e+5
8.0e+4
6.0e+4
4.0e+4
2.0e+4
C20TA
C21TA
SC26TA
RC26TA+SC27TA
M1
M2
SC28TA
RC27TA
M3
M4
RC28TA
70 min.
80
90
100
Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: EARO
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
231.12±0.0660: 2.184e+5


Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: EARO
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
245.1330±0.0700: 1.197e+5
1.1e+5
1.0e+5
9.0e+4
8.0e+4
7.0e+4
6.0e+4
5.0e+4
4.0e+4
3.0e+4
2.0e+4
1.0e+4
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA


Location: Ait Moussa
Depth: 371 m
Sample type: OC
Fraction: EARO
APT-ID: 207489
Analysis: GC-HRMS (DFS)
Analysis date: Dec 21, 2018
m/z and abundance:
253.20±0.0723: 4.246e+4
4.0e+4
3.6e+4
3.2e+4
2.8e+4
2.4e+4
2.0e+4
1.6e+4
1.2e+4
8.0e+3
4.0e+3
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
aSC27MA
bRC27MA+bRC27DMA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aSC28MA
aRC27MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA

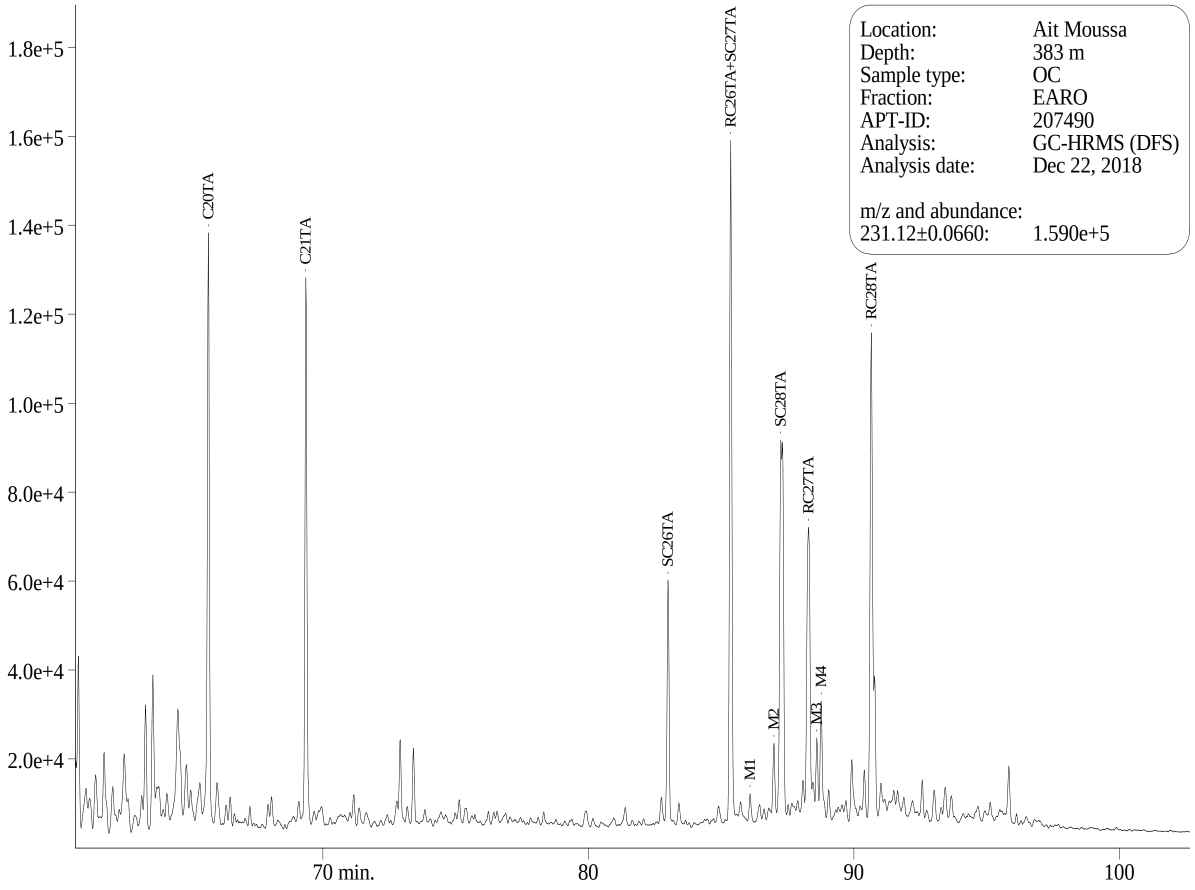

1.3e+6
1.2e+6
1.1e+6
1.0e+6
9.0e+5
8.0e+5
7.0e+5
6.0e+5
5.0e+5
4.0e+5
3.0e+5
2.0e+5
1.0e+5
14 min.
18
22
26
30
2-MN
1-MN
2-EN
1-EN
2,6-DMN
2,7-DMN
1,3- + 1,7-DMN
1,6-DMN
2,3- + 1,4-DMN
1,5-DMN
1,2-DMN
1,8-DMN
1,3,7-TMN
1,3,6-TMN
1,3,5- + 1,4,6-TMN
2,3,6-TMN
1,2,7-TMN
1,6,7 + 1,2,6-TMN
1,2,4-TMN
1,2,5-TMN
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: EARO
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 22, 2018
m/z and abundance:
142.08±0.0406: 1.340e+6
156.09±0.0446: 1.340e+6
170.11±0.0486: 1.340e+6


1.0e+7
9.0e+6
8.0e+6
7.0e+6
6.0e+6
5.0e+6
4.0e+6
3.0e+6
2.0e+6
1.0e+6
34 min.
38
42
46
50
54
58
62
P
3-MP
2-MP
9-MP
1-MP
2-EP+9-EP+3,6-DMP
1-EP
2,6- + 2,7- + 3,5-DMP
1,3- + 2,10- + 3,9- + 3,10-DMP
1,6- + 2,5- + 2,9-DMP
1,7-DMP
1,9- + 4,9- + 4,10-DMP
2,3-DMP
1,8-DMP
1,2-DMP
Retene
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: EARO
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 22, 2018
m/z and abundance:
178.08±0.0509: 1.030e+7
192.09±0.0549: 1.030e+7
206.11±0.0589: 1.030e+7
219.12±0.0626: 1.030e+7



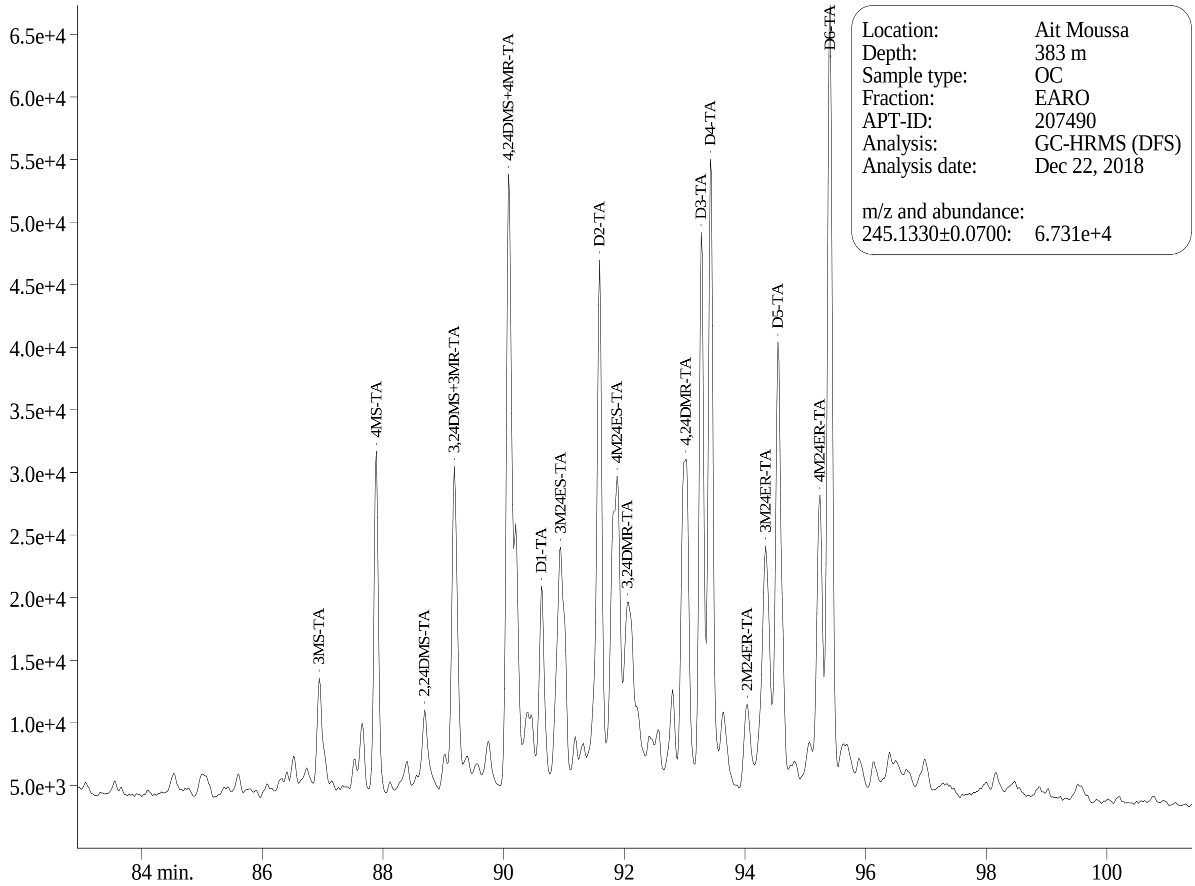
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: EARO
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 22, 2018

m/z and abundance:
184.03±0.0526: 1.077e+5
198.05±0.0566: 1.077e+5
212.07±0.0606: 1.077e+5



Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: EARO
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 22, 2018

m/z and abundance:
231.12±0.0660: 1.590e+5


6.5e+4
6.0e+4
5.5e+4
5.0e+4
4.5e+4
4.0e+4
3.5e+4
3.0e+4
2.5e+4
2.0e+4
1.5e+4
1.0e+4
5.0e+3
84 min.
86
88
90
92
94
96
98
100
3MS-TA
4MS-TA
2,24DMS-TA
3,24DMS+3MR-TA
4,24DMS+4MR-TA
D1-TA
3M24ES-TA
D2-TA
4M24ES-TA
3,24DMR-TA
4,24DMR-TA
D3-TA
D4-TA
2M24ER-TA
3M24ER-TA
D5-TA
4M24ER-TA
D6-TA
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: EARO
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 22, 2018
m/z and abundance:
245.1330±0.0700: 6.731e+4

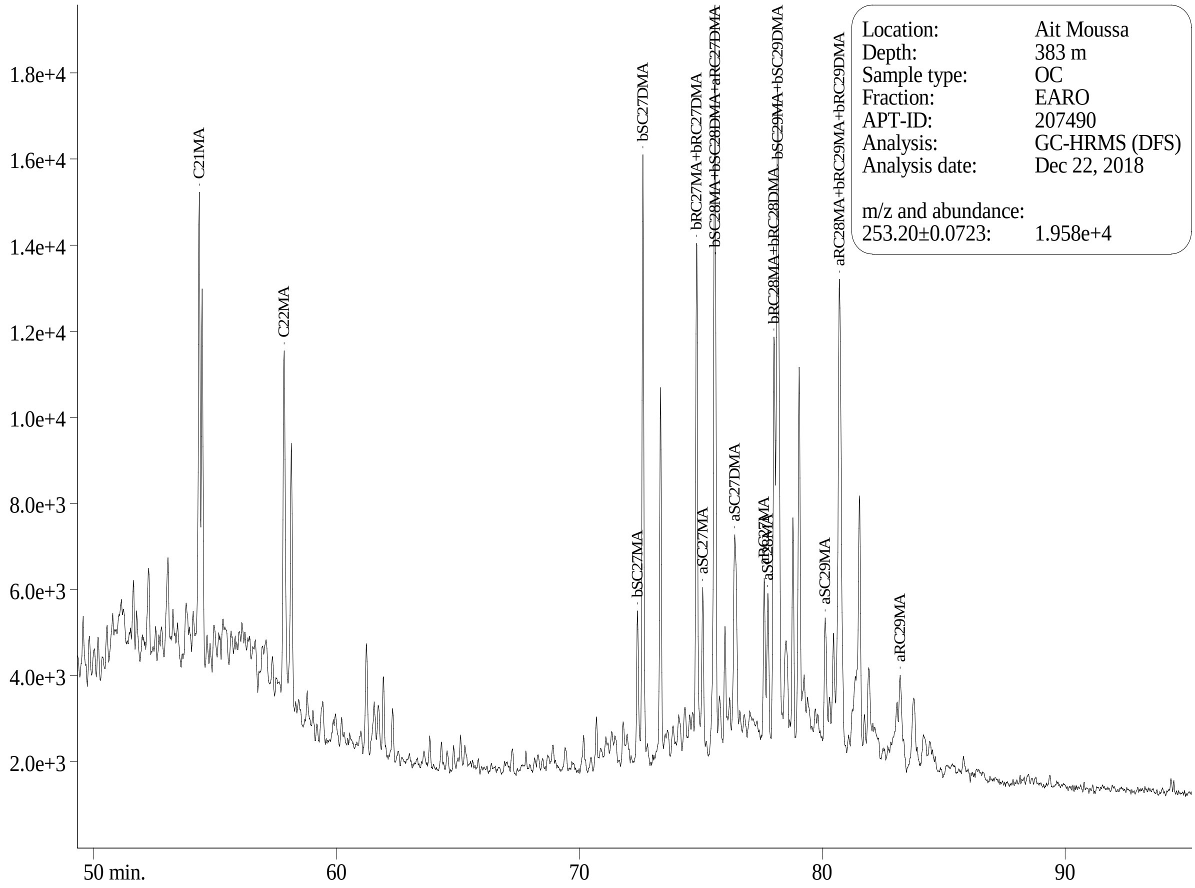

1.8e+4
1.6e+4
1.4e+4
1.2e+4
1.0e+4
8.0e+3
6.0e+3
4.0e+3
2.0e+3
50 min.
60
70
80
90
C21MA
C22MA
bSC27MA
bSC27DMA
bRC27MA+bRC27DMA
aSC27MA
bSC28MA+bSC28DMA+aRC27DMA
aSC27DMA
aRC27MA
aSC28MA
bRC28MA+bRC28DMA
bSC29MA+bSC29DMA
aSC29MA
aRC28MA+bRC29MA+bRC29DMA
aRC29MA
Location: Ait Moussa
Depth: 383 m
Sample type: OC
Fraction: EARO
APT-ID: 207490
Analysis: GC-HRMS (DFS)
Analysis date: Dec 22, 2018
m/z and abundance:
253.20±0.0723: 1.958e+4

Table 18. Reference data for GC of Saturated Compounds measured on NSO-1

Variable	Permissible range	Most likely value	13.12.2018	13.12.2018	13.12.2018	13.12.2018	13.12.2018	14.12.2018	14.12.2018	14.12.2018	11.12.2018	12.12.2018	05.11.2018	06.11.2018	07.11.2018	07.11.2018
Pr/n-C17	0.55-0.66	0.60	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.62	0.61	0.62	0.62	0.62	0.61	0.61
n-C15/n-C20	1.4-2.0	1.8	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6	1.6	1.6	1.5
n-C30/n-C20	0.20-0.32	0.29	0.27	0.28	0.27	0.27	0.27	0.28	0.28	0.28	0.28	0.28	0.30	0.29	0.29	0.29
n-C17/(n-C17+n-C27)	0.75-0.82	0.79	0.78	0.79	0.79	0.79	0.79	0.78	0.79	0.78	0.78	0.78	0.78	0.78	0.78	0.78

Table 19. Reference data for GC-MS of Saturated Compounds measured on NSO-1

Variable	Permissible range	Most likely value	21.12.2018	12.11.2018	13.11.2018	14.11.2018
[23/3]/30αβ	0.04-0.09	0.07	0.05	0.05	0.05	0.05
35αβR/30αβ	0.06-0.13	0.08	0.11	0.10	0.10	0.10
25nor30αβ/25nor28αβ	0.3-0.8	0.5	0.84	0.82	0.80	0.84
29ααR/27dβS	0.2-0.6	0.3	0.38	0.44	0.45	0.45
29ββS/27ββR	0.7-1.2	0.9	1.12	0.78	0.80	0.77

Our column resolves the 25nor28αβ doublet, thus giving a value in the high-end region of the acceptable range specified by NIGOGA.

Table 20. Reference data for GC-MS of Aromatic Compounds measured on NSO-1

Variable	Permissible range	Most likely value	21.12.2018
15.11.2018	16.11.2018	17.11.2018	22.12.2018
21.12.2018	15.11.2018	16.11.2018	17.11.2018
22.12.2018			
1-MP/P	0.53-0.70	0.59	0.60
0.63	0.61	0.68	0.62
0.58	0.56	0.60	0.64
0.60			
A1/E1	0.3-0.7	0.5	0.52
0.45	0.47	0.51	0.50
0.42	0.38	0.36	0.39
0.42			
a1/d1	0.2-0.4	0.31	0.33
0.30	0.30	0.32	0.33
0.31	0.28	0.28	0.29
0.30			
Variable	Permissible range	Most likely value	
1-MP/P	0.53-0.70	0.59	
A1/E1	0.3-0.7	0.5	
a1/d1	0.2-0.4	0.31	

Experimental Procedures

All procedures follow NIGOGA, 4th Edition. Below are brief descriptions of procedures/analytical conditions.

Sample preparation

Cuttings samples are washed in water to remove mud. When oil based mud is used, soap (Zalo) is added to the sample and the sample is washed thoroughly in warm water to remove mud and soap.

Extraction

A Soxtec Tecator instrument is used. Thimbles are pre extracted in dichloromethane with 7% (vol/vol) methanol, 10 min boiling and 20 min rinsing. The crushed sample is weighed accurately in the pre extracted thimbles and boiled for 1 hour and rinsed for 2 hours in approximately 80 cc of dichloromethane with 7% (vol/vol) methanol. Copper blades activated in concentrated hydrochloric acid are added to the extraction cups to cause free sulphur to react with the copper. An aliquot of 10% of the extract is transferred to a pre weighed bottle and evaporated to dryness. The amount of extractable organic matter is calculated from the weight of this 10% aliquot.

Deasphaltening

Extracts are evaporated almost to dryness before a small amount of dichloromethane (3 times the amount of EOM) is added. Pentane is added in excess (40 times the volume of EOM/oil and dichloromethane). The solution is stored for at least 12 hours in a dark place before the solution is filtered or centrifuged and the weight of the asphaltenes measured.

TOC

A Leco SC-632 instrument is used. Diluted HCl is added to the crushed rock sample to remove carbonate. The sample is then introduced into the Leco combustion oven, and the amount of carbon in the sample is measured as carbon dioxide by an IR-detector.

Rock-Eval Pyrolysis

A HAWK instrument is used. Jet-Rock 1 was run as every tenth sample and checked against the acceptable range given in NIGOGA.

Temperature programme

5 minutes purge before: Pyrolysis: 300 °C (3 min.) - 25 °C/min. - 650 °C (0 min.)

Quantitative MPLC 3 fractions

The MPLC is constructed as described by Radke et al. (1980). The system includes two HPLC pumps, sample injector, sample collector and two packed columns. The pre column is filled with Kieselgel 100, which is heated at 600 °C for 2 hours to deactivate it. The main column, a LiChroprep Si60 column, is heated at 120 °C for 2 hours with a helium flow to make it water free.

Approximately 30 mg of deasphaltened oil or EOM diluted in 1 ml hexane is injected into a sample loop. The solvents used are hexane and dichloromethane.

Fraction 1 - Saturates

Hexane through the sample loop, the pre column and the main column is collected until all saturates are collected.

Fraction 2 – Aromatics A
Hexane that back flushes the main column is collected.

Fraction 3 – Polars (NSO-fraction)
Dichloromethane that back flushes the pre column is collected.

Solvents from all fractions are removed until the total volum is 1 ml by using a Turbovap unit. The fractions are transferred to small pre weight vials and dried carefully. Then the weights are measured.

Stable carbon isotope analysis of fractions

The samples were dissolved in a known amount of dichloromethane and 5ul was transferred to a 5X8mm tin capsule. The solvent was evaporated in an oven at 50 °C. The samples were then loaded into an automatic sampler which then placed them into a combustion reactor (Thermo Fisher Scientific Elemental Analyzer) held at 1000 °C. The excess supply of oxygen helps to flash combust the tin capsules which results in a temperature rise to 1700 °C. The produced water is trapped on Magnesium Perchlorate. CO2 is separated by column and flashed into Delta V Plus Isotope Ratio Mass Spectrometer (IRMS) (Thermo Fisher Scientific) via Conflo IV. A standard (NGS NSO-1, topped oil) is analyzed for each 12th sample. The δ13C value obtained for this standard is –28.6‰ vPDB. The variation in the isotopic values for NSO-1 by repeated analysis over a period of one year is ± 0.09‰.

GC of saturated fraction

A HP7890 A instrument is used. The column is a CP-Sil-5 CB-MS, length 30 m, i.d. 0.25 mm, film thickness 0.25 μm. C20D42 is used as an internal standards.

Temperature programme
50 °C (1 min.) - 4 °C/min. - 320 °C (25 min.)

GC-MS of saturated and aromatic fractions

A Thermo Scientific DFS high resolution instrument is used. The instrument is tuned to a resolution of 3000 and data is acquired in Selected Ion Recording (SIR) mode. The column used is a 60 m CP-Sil-5 CB-MS with an i.d. of 0.25 mm and a film thickness 0.25 μm. D_4-27ααR is used as internal standard when quantitative results are requested for the saturated compounds. D_8-Naphthalene, D_{10}-Biphenyl , D_{10}-Phenanthrene and D_{12}- Chrysene are used as internal standards when quantitative results are required for the aromatic compounds. The aromatic and aliphatic fractions may be analysed together or separately.

Temperature programme
50 °C (1 min.) - 20 °C/min. - 120 °C - 2 °C/min - 320 °C (20 min.)