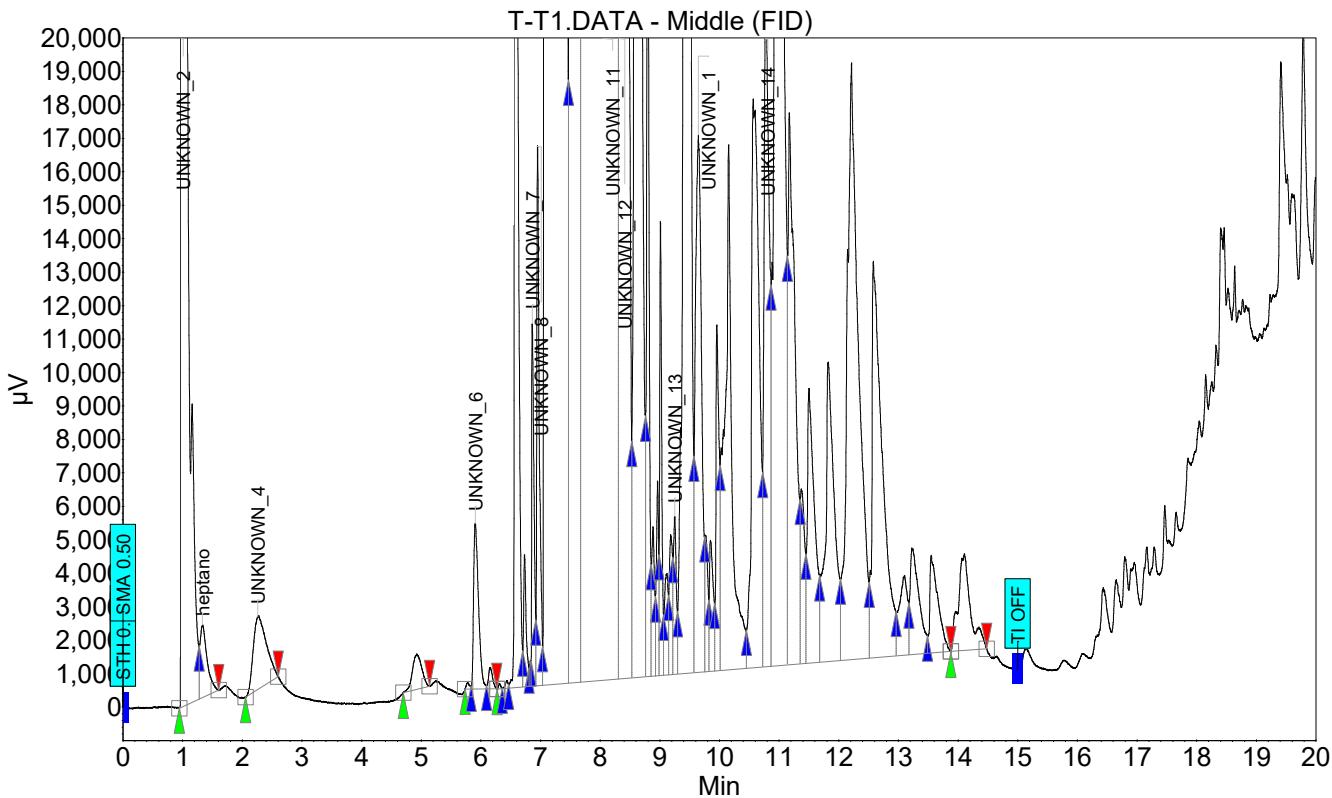


# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.



## CHROMATOGRAM METHOD REPORT :

Control method :

Scion/Bruker/Varian 400-GC Series (Excl)

### Autosampler (8410)

Autosampler	ENABLED
First injector used	Position 2
Syringe volume	10 uL
Advance tray	NO
Clean between injections	NO
Use injection delay	NO
Delay between injections	1.0 min
Injection mode	Std (Split/Splitless)
Sample penetration depth	90 %
Solvent penetration depth	90 %

### Abort clean

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Vial	I
Volume	5.0 $\mu$ L
Strokes	1
Drawup speed	5.0 $\mu$ L/s

Clean mode

Pre-injection solvent flushes	3
Pre-injection sample flushes	0
Post-injection solvent flushes	5
Clean solvent source	I

Injectors

Front (PWOC)

EFC 23 - Flow program	Rate (mL/min/min)	Step (mL/min)	Time (min)
	Initial	10.0	0.00
		Total time	0.00

EFC 23

Enabled OFF

Heat-only zone 1

Heater	OFF
Setpoint	50 °C

Middle (S/SL)

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Split event table	Time (min)	Split state	Split ratio
	Initial	ON	25

EFC 25

Enabled ON

Heat-only zone 2

Heater	ON
Setpoint	230 °C

Column oven

Stabilization time | 0.50 min

Column oven zone

Heater ON

Temperature program	Rate (°C/min)	Step (°C)	Time (min)
	Initial	100	4.00
	25.0	200	8.00
	20.0	250	5.00
		Total time	23.50

Valve oven

Rear (Small valve oven)

Heat-only zone 3

Heater	OFF
Setpoint	50 °C

Columns

Front

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Carrier gas	Helium
Length	15.00 m
Inside diameter	200 um
Type	WCOT

## Middle

Carrier gas	Helium
Length	30.00 m
Inside diameter	320 um
Type	PLOT

Pressure mode	Constant flow
Column flow	2.20 mL/min
Pressure pulse	DISABLED

## Detectors

### Heat-only zone 4

Heater	OFF
Setpoint	50 °C

### Front (TCD)

Electronics	OFF
Time constant	Fast
Data rate	10 Hz

Filament temp. limit	390 °C
Filament temperature	50 °C

TCD event table	Time (min)	Range	Autozero	Polarity
	Initial	0.05	YES	POSITIVE

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

## EFC 14

Enabled	OFF
Make-up (Helium) flow	25 mL/min
Reference (Helium) flow	30.0 mL/min

## Heat-only zone 5

Heater	ON
Setpoint	250 °C

## Middle (FID)

Electronics	ON
Time constant	Fast
Data rate	10 Hz

FID event table	Time (min)	Range	Autozero
	Initial	12	YES

## EFC 11

Enabled	ON
Make-up (Nitrogen) flow	28 mL/min
Combustion (H2) flow	30.0 mL/min
Combustion (Air) flow	300.0 mL/min

## Output ports

### Front

ENABLED	NO
---------	----

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Front	0

## Middle

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

**ENABLED** | NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Middle	0

**Rear**

**ENABLED** | NO

Output port program	Time (min)	Detector source	Attenuation (2^X)
	Initial	Rear	0

**Valves**

Valve event table	Time (min)	Gas Sample Valve
	Initial	Fill

**Miscellaneous**

Start automatically when ready | NO

Acquisition :  
Run Name : T-T1  
Run Id. : -1  
Run Time : 24.00

Integration method :  
Reduce Noise : Yes  
Spike Parameter : 1  
Use Relative Threshold ? : Yes  
Peak saturation level : min = 0 max = 0

Integration events :

Active	Time	Event	ON	Value
Yes	0.00	Set Peak Width		0.5
Yes	0.00	Set Threshold		0.05
Yes	0.00	Set Minimal Area		0.5
Yes	15.00	Turn Integration	OFF	

Manual actions :

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Manual integration action count : 16

Action #1 : 20/10/2025 04:21:49 p. m. : SPLIT peak # 5 at 5.84  
Action #2 : 20/10/2025 04:21:56 p. m. : SPLIT peak # 9 at 6.92  
Action #3 : 20/10/2025 04:21:59 p. m. : SPLIT peak # 15 at 8.85  
Action #4 : 20/10/2025 04:22:10 p. m. : SPLIT peak # 16 at 8.98  
Action #5 : 20/10/2025 04:22:14 p. m. : SPLIT peak # 17 at 9.15  
Action #6 : 20/10/2025 04:22:16 p. m. : SPLIT peak # 39 at 9.22  
Action #7 : 20/10/2025 04:22:17 p. m. : SPLIT peak # 19 at 9.75  
Action #8 : 20/10/2025 04:22:30 p. m. : SPLIT peak # 26 at 11.35  
Action #9 : 20/10/2025 04:22:55 p. m. : MOVE stop baseline # 6 from t=14.433 y=1993.567 to t=14.480 y=1736.440  
Action #10 : 20/10/2025 04:22:59 p. m. : MOVE stop peak # 34 from t=14.433 to t=14.478  
Action #11 : 20/10/2025 04:23:15 p. m. : SPLIT peak # 9 at 6.84  
Action #12 : 20/10/2025 04:23:55 p. m. : MOVE start baseline # 5 from t=6.355 y=554.144 to t=6.282 y=556.403  
Action #13 : 20/10/2025 04:24:00 p. m. : MOVE start baseline # 5 from t=6.282 y=556.403 to t=6.274 y=541.000  
Action #14 : 20/10/2025 04:24:03 p. m. : MOVE start peak # 7 from t=6.355 to t=6.274  
Action #15 : 20/10/2025 04:24:07 p. m. : SPLIT peak # 7 at 6.36  
Action #16 : 20/10/2025 04:24:09 p. m. : SPLIT peak # 44 at 6.46

Peak Identification table :

Peak Name	RT [min]	Abs.Window[min]	Window %	Ref?	Mode
UNKNOWN_2	1.14	0.20	0.00		Nearest
heptano	1.48	0.20	0.00		Nearest
UNKNOWN_4	2.11	0.20	0.00		Nearest
UNKNOWN_5	4.10	0.20	0.00		Nearest
UNKNOWN_6	5.86	0.20	0.00		Nearest
UNKNOWN_7	6.93	0.20	0.00		Nearest
UNKNOWN_8	6.96	0.20	0.00		Nearest
UNKNOWN_9	7.71	0.20	0.00		Nearest
UNKNOWN_10	7.84	0.20	0.00		Nearest
UNKNOWN_11	8.04	0.20	0.00		Nearest
UNKNOWN_12	8.41	0.20	0.00		Nearest
UNKNOWN_13	9.32	0.20	0.00		Nearest
UNKNOWN_1	9.54	0.20	0.00		Nearest
UNKNOWN_14	10.71	0.20	0.00		Nearest

Resolve with references : No

Group Identification table :

Group Name	Group type	Parameters

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

## Peak results :

Index	Name	Time [Min]	Quantity [% Area]	Height [µV]	Area [µV.Min]	Area % [%]
1	UNKNOWN 2	0.97	59.39	411724964.2	2753342.4	59.393
2	heptano	1.33	0.01	2171.9	304.6	0.007
3	UNKNOWN 4	2.26	0.01	2176.6	557.4	0.012
4	UNKNOWN	4.93	0.00	1045.1	189.9	0.004
5	UNKNOWN	5.78	0.00	205.7	12.3	0.000
35	UNKNOWN 6	5.91	0.01	4952.9	472.7	0.010
6	UNKNOWN	6.15	0.00	629.3	50.5	0.001
7	UNKNOWN	6.31	0.00	158.4	6.5	0.000
44	UNKNOWN	6.44	0.00	235.1	11.8	0.000
45	UNKNOWN	6.58	0.06	41577.3	2697.8	0.058
8	UNKNOWN	6.73	0.00	3946.0	205.0	0.004
9	UNKNOWN	6.83	0.00	765.2	21.8	0.000
43	UNKNOWN 7	6.86	0.01	10828.7	491.0	0.011
36	UNKNOWN 8	6.95	0.02	16135.6	813.1	0.018
10	UNKNOWN	7.06	3.37	1161752.5	156112.0	3.368
11	UNKNOWN	7.51	1.13	485669.6	52564.2	1.134
12	UNKNOWN 11	8.05	33.47	4390670.8	1551558.0	33.469
13	UNKNOWN 12	8.32	1.05	599854.9	48859.8	1.054
14	UNKNOWN	8.58	0.49	300526.8	22745.2	0.491
15	UNKNOWN	8.79	0.03	34846.1	1465.5	0.032
37	UNKNOWN	8.89	0.01	4452.7	248.1	0.005
16	UNKNOWN	8.96	0.01	5816.6	248.7	0.005
38	UNKNOWN	9.01	0.01	13562.4	549.9	0.012
17	UNKNOWN	9.12	0.00	3022.5	212.2	0.005
39	UNKNOWN	9.18	0.01	4185.9	259.3	0.006
40	UNKNOWN 13	9.25	0.01	4715.7	271.7	0.006
18	UNKNOWN	9.42	0.24	131072.7	11225.8	0.242
19	UNKNOWN 1	9.65	0.04	16060.0	1923.7	0.041
41	UNKNOWN	9.77	0.01	4080.2	240.9	0.005
20	UNKNOWN	9.85	0.01	3888.0	289.0	0.006
21	UNKNOWN	9.96	0.01	10331.9	617.7	0.013
22	UNKNOWN	10.15	0.05	15687.5	2281.1	0.049
23	UNKNOWN	10.57	0.06	16990.0	2562.3	0.055
24	UNKNOWN 14	10.77	0.05	20207.3	2092.6	0.045
25	UNKNOWN	10.98	0.14	38321.8	6368.1	0.137
26	UNKNOWN	11.17	0.05	16494.4	2259.9	0.049
42	UNKNOWN	11.37	0.01	5207.4	432.6	0.009
27	UNKNOWN	11.50	0.03	8204.6	1165.9	0.025
28	UNKNOWN	11.82	0.03	8930.5	1587.6	0.034
29	UNKNOWN	12.21	0.09	17830.3	3984.5	0.086
30	UNKNOWN	12.58	0.05	11827.0	2383.5	0.051
31	UNKNOWN	13.10	0.01	2374.0	382.1	0.008
32	UNKNOWN	13.23	0.01	3177.7	555.5	0.012
33	UNKNOWN	13.55	0.01	2889.6	467.0	0.010
34	UNKNOWN	14.11	0.01	2881.1	688.2	0.015
Total			100.00	419155324.4	4635779.4	100.000

## CHROMATOGRAM METHOD REPORT :

Control method :

Scion/Bruker/Varien 400-GC Series (Excl)

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

## Autosampler (8410)

Autosampler	ENABLED
First injector used	Position 2
Syringe volume	10 uL
Advance tray	NO
Clean between injections	NO
Use injection delay	NO
Delay between injections	1.0 min
Injection mode	Std (Split/Splitless)
Sample penetration depth	90 %
Solvent penetration depth	90 %

## Abort clean

Vial	I
Volume	5.0 uL
Strokes	1
Drawup speed	5.0 uL/s

## Clean mode

Pre-injection solvent flushes	3
Pre-injection sample flushes	0
Post-injection solvent flushes	5
Clean solvent source	I

## Injectors

## Front (PWOC)

EFC 23 - Flow program	Rate (mL/min/min)	Step (mL/min)	Time (min)
	Initial	10.0	0.00
		Total time	0.00

## EFC 23

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Enabled OFF

Heat-only zone 1

Heater	OFF
Setpoint	50 °C

Middle (S/SL)

Split event table	Time (min)	Split state	Split ratio
	Initial	ON	25

EFC 25

Enabled ON

Heat-only zone 2

Heater	ON
Setpoint	230 °C

Column oven

Stabilization time 0.50 min

Column oven zone

Heater ON

Temperature program	Rate (°C/min)	Step (°C)	Time (min)
	Initial	100	4.00
	25.0	200	8.00
	20.0	250	5.00
		Total time	23.50

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

## Valve oven

## Rear (Small valve oven)

## Heat-only zone 3

Heater	OFF
Setpoint	50 °C

## Columns

### Front

Carrier gas	Helium
Length	15.00 m
Inside diameter	200 um
Type	WCOT

### Middle

Carrier gas	Helium
Length	30.00 m
Inside diameter	320 um
Type	PLOT

Pressure mode	Constant flow
Column flow	2.20 mL/min
Pressure pulse	DISABLED

## Detectors

### Heat-only zone 4

Heater	OFF
Setpoint	50 °C

### Front (TCD)

Electronics	OFF
Time constant	Fast

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Electronics	OFF
Data rate	10 Hz

Filament temp. limit	390 °C
Filament temperature	50 °C

TCD event table	Time (min)	Range	Autozero	Polarity
	Initial	0.05	YES	POSITIVE

## EFC 14

Enabled	OFF
Make-up (Helium) flow	25 mL/min
Reference (Helium) flow	30.0 mL/min

## Heat-only zone 5

Heater	ON
Setpoint	250 °C

## Middle (FID)

Electronics	ON
Time constant	Fast
Data rate	10 Hz

FID event table	Time (min)	Range	Autozero
	Initial	12	YES

## EFC 11

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Enabled	ON
Make-up (Nitrogen) flow	28 mL/min
Combustion (H <sub>2</sub> ) flow	30.0 mL/min
Combustion (Air) flow	300.0 mL/min

## Ouput ports

### Front

ENABLED  NO

Output port program	Time (min)	Detector source	Attenuation (2 <sup>X</sup> )
	Initial	Front	0

### Middle

ENABLED  NO

Output port program	Time (min)	Detector source	Attenuation (2 <sup>X</sup> )
	Initial	Middle	0

### Rear

ENABLED  NO

Output port program	Time (min)	Detector source	Attenuation (2 <sup>X</sup> )
	Initial	Rear	0

## Valves

Valve event table	Time (min)	Gas Sample Valve
	Initial	Fill

## Miscellaneous

Start automatically when ready  NO

# Chromatogram : T-T1\_channel1

System : 456-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Acquisition :  
System : 456-GC  
Project : Aceites  
Run Name : T-T1  
Description  
Run Id. : -1  
Run Time : 24.00  
Vial : 8  
Rack : 0  
Analysis : Unknown  
Injection volume : 1.00

Scale :  
RT Min : 0.00  
RT Max : 20.00  
Y Min : -1,000.00  
Y Max : 20,000.00  
Divisor factor : 1.00  
Multiplier factor : 1.00  
Sample mass : 0.00

Run log :

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Injection report for Position 2

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-----  
Injection occurred at 20/10/2025 01:41:46 p. m.

---

Scion/Bruker/Varian 400-GC Series (Excl [Scion/Bruker/Varian 400-GC Series (Excluding 430)]  
Wrapper 5.0.8.31952  
Firmware 32834  
Driver 4.1.0.394

---

Preprocessing :  
Blank Subtract :  
File:  
N.A.

Integration method :  
Reduce Noise : Yes  
Spike Parameter : 1  
Use Relative Threshold ? : Yes  
Peak saturation level : min = 0 max = 0

Integration events :

Active	Time	Event	ON	Value
Yes	0.00	Set Peak Width		0.5
Yes	0.00	Set Threshold		0.05
Yes	0.00	Set Minimal Area		0.5
Yes	15.00	Turn Integration	OFF	

Manual actions :  
Manual integration action count : 16  
Action #1 : 20/10/2025 04:21:49 p. m. : SPLIT peak # 5 at 5.84  
Action #2 : 20/10/2025 04:21:56 p. m. : SPLIT peak # 9 at 6.92  
Action #3 : 20/10/2025 04:21:59 p. m. : SPLIT peak # 15 at 8.85

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Action #4 : 20/10/2025 04:22:10 p. m. : SPLIT peak # 16 at 8.98  
Action #5 : 20/10/2025 04:22:14 p. m. : SPLIT peak # 17 at 9.15  
Action #6 : 20/10/2025 04:22:16 p. m. : SPLIT peak # 39 at 9.22  
Action #7 : 20/10/2025 04:22:17 p. m. : SPLIT peak # 19 at 9.75  
Action #8 : 20/10/2025 04:22:30 p. m. : SPLIT peak # 26 at 11.35  
Action #9 : 20/10/2025 04:22:55 p. m. : MOVE stop baseline # 6 from t=14.433 y=1993.567 to t=14.480 y=1736.440  
Action #10 : 20/10/2025 04:22:59 p. m. : MOVE stop peak # 34 from t=14.433 to t=14.478  
Action #11 : 20/10/2025 04:23:15 p. m. : SPLIT peak # 9 at 6.84  
Action #12 : 20/10/2025 04:23:55 p. m. : MOVE start baseline # 5 from t=6.355 y=554.144 to t=6.282 y=556.403  
Action #13 : 20/10/2025 04:24:00 p. m. : MOVE start baseline # 5 from t=6.282 y=556.403 to t=6.274 y=541.000  
Action #14 : 20/10/2025 04:24:03 p. m. : MOVE start peak # 7 from t=6.355 to t=6.274  
Action #15 : 20/10/2025 04:24:07 p. m. : SPLIT peak # 7 at 6.36  
Action #16 : 20/10/2025 04:24:09 p. m. : SPLIT peak # 44 at 6.46

Peak Identification table :

Peak Name	RT [min]	Abs.Window[min]	Window %	Ref?	Mode
UNKNOWN_2	1.14	0.20	0.00		Nearest
heptano	1.48	0.20	0.00		Nearest
UNKNOWN_4	2.11	0.20	0.00		Nearest
UNKNOWN_5	4.10	0.20	0.00		Nearest
UNKNOWN_6	5.86	0.20	0.00		Nearest
UNKNOWN_7	6.93	0.20	0.00		Nearest
UNKNOWN_8	6.96	0.20	0.00		Nearest
UNKNOWN_9	7.71	0.20	0.00		Nearest
UNKNOWN_10	7.84	0.20	0.00		Nearest
UNKNOWN_11	8.04	0.20	0.00		Nearest
UNKNOWN_12	8.41	0.20	0.00		Nearest
UNKNOWN_13	9.32	0.20	0.00		Nearest
UNKNOWN_1	9.54	0.20	0.00		Nearest
UNKNOWN_14	10.71	0.20	0.00		Nearest

Resolve with references : No

Group Identification table :

Group Name	Group type	Parameters

Calibration Method :

Method type : Response %

Response : Area

Standard Unit : g/l

Calibration curve file name :

Factors : Curve

Subtract internal standard mass

Response unit : Curve

Unknown mode : None

Calibration components :

Component	Level 1	Level 2	Level 3	Level 4	Control Sample

Suitability tests :

Export :

# Chromatogram : T-T1\_channel1

System : 450-GC  
Method : Biodiesel FAME 2023  
User : User1

Acquired : 20/10/2025 01:41:46 p. m.  
Processed : 20/10/2025 04:24:12 p. m.  
Printed : 20/10/2025 04:24:34 p. m.

Post Run :

Print Method :  
File name : : default\_standard  
Copies : 0

Summary :