



FAMES Analysis

Using



400 series GCs

Scion GC Product Line



Scion 436
Small Footprint
Dedicated Application



Scion 456
Large Footprint
Flexible Chassis

Scion 436 GC Highlights

- 2 Injectors & 1 Detector
plus Scion MS
- High Pressure Inlets
Range 0 – 150psi
- Full EFC capability
Up to 3 modules
- 120V 15A



- "Inert GC"
Option
- Fast Detectors
600Hz
- High Performance Oven
ramping rate: 170°C/min
Set Point resolution: 0.1°C
Max Temp: 450°C

Scion 456 GC Highlights

- 3 Injectors & 3 Detectors
plus Scion MS
- High Pressure Inlets
Range 0 – 150psi
- Full EFC capability
Up to 9 modules
- 120V 20A



- Automation Capabilities
- "Inert GC"
Option
- Fast Detectors
600Hz
- High Performance Oven
ramping rate: 150°C/min
Set Point resolution: 0.1°C
Max Temp: 450°C

Scion GC User Interface

- Larger
 - 9", Full Colour
- WVGA Resolution
 - (800 x 480)
- Multi-language
 - 14 languages
- Local Control
 - Touch Screen + Hard Keys
- Remote Access
 - GC Portal software



Scion Instruments AutoSamplers

CP-84x0 series

- CP-8400 Auto Sampler
- CP-8410 Auto Injector



CombiPAL – XT

- X,Y,Z programmable
- Liquid, HS, SPME



Gerstel - MPS

- The Ultimate in automation and FAMES Sample Prep.

Certified for H₂ carrier

- Scion 436 GC and 456 GC are certified for use with H₂ carrier gas.
- Scion EFC's shut off any flow when a leak is detected (broken column, bad septum, etc).
-  **Certified**

Parker H₂ Generator



Model H2PEMPD Hydrogen Generator



- Proton Exchange Membrane (PEM) for H₂ generation
- Available up to 1300 cc/min
- Pressure up to 100psi
- Pressure sensing auto-shutoff
- Only requires power and H₂O
- Available with H₂O autofeed

Parker Zero Air Generator



Model HPZA-7000



- Produce UHP Zero Air (<0.05ppm THC)
- Requires power & Compressor
- 3.5 L/min supports up to 8 FIDs
- Delivery pressure up to 125 psi
- Silent Operation
- SMART-Display Real time status

Silent-Aire Bench Top Compressor

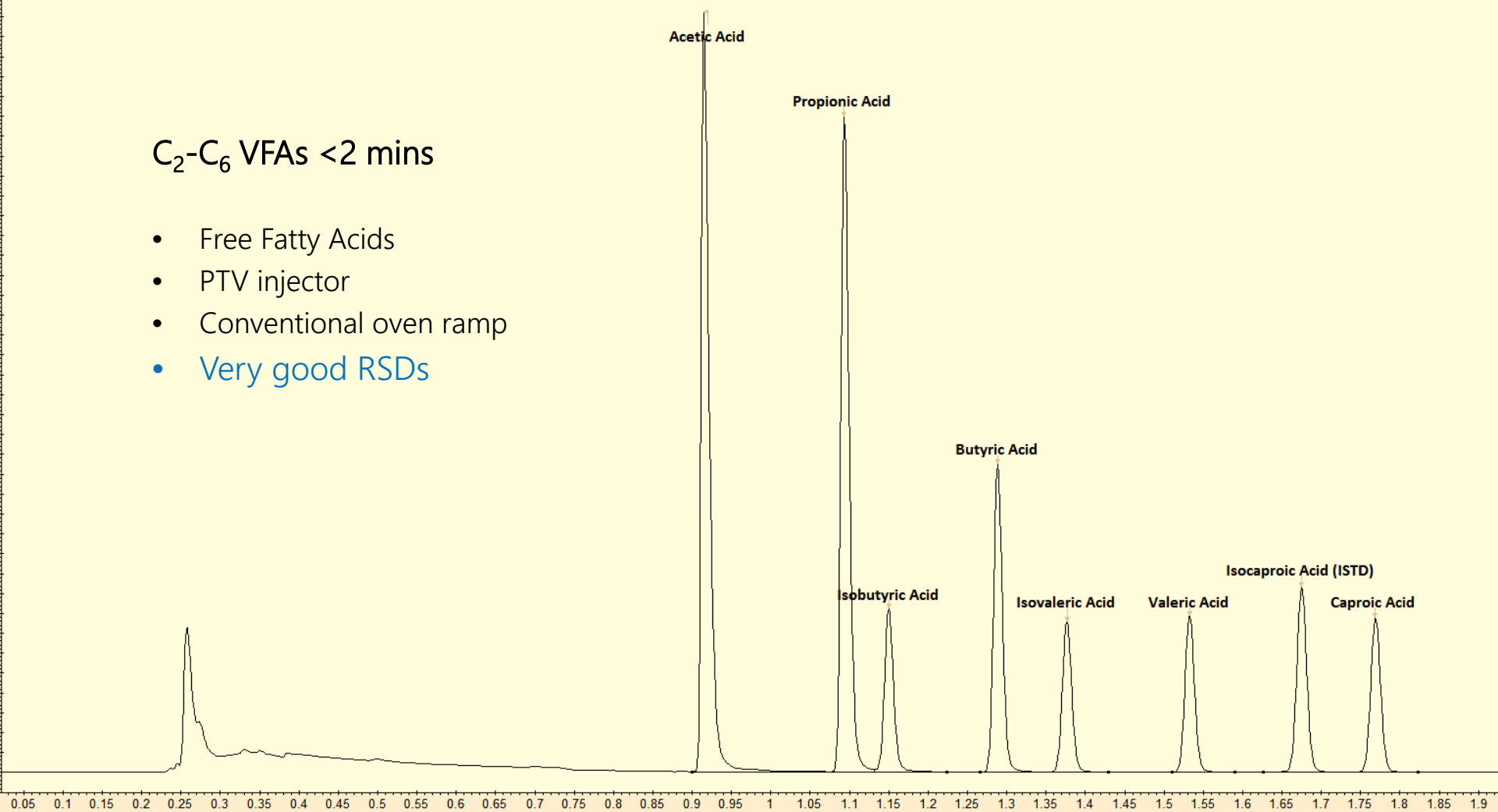


- Oil – Free Silent Compressor
- 70-100psi delivery pressure
- 57 dB operating noise level
- Built in Desiccant dryer
- Automatic Operation

30m x 0.53mm x 0.5um Stabilwax -DA

C₂-C₆ VFAs <2 mins

- Free Fatty Acids
- PTV injector
- Conventional oven ramp
- Very good RSDs

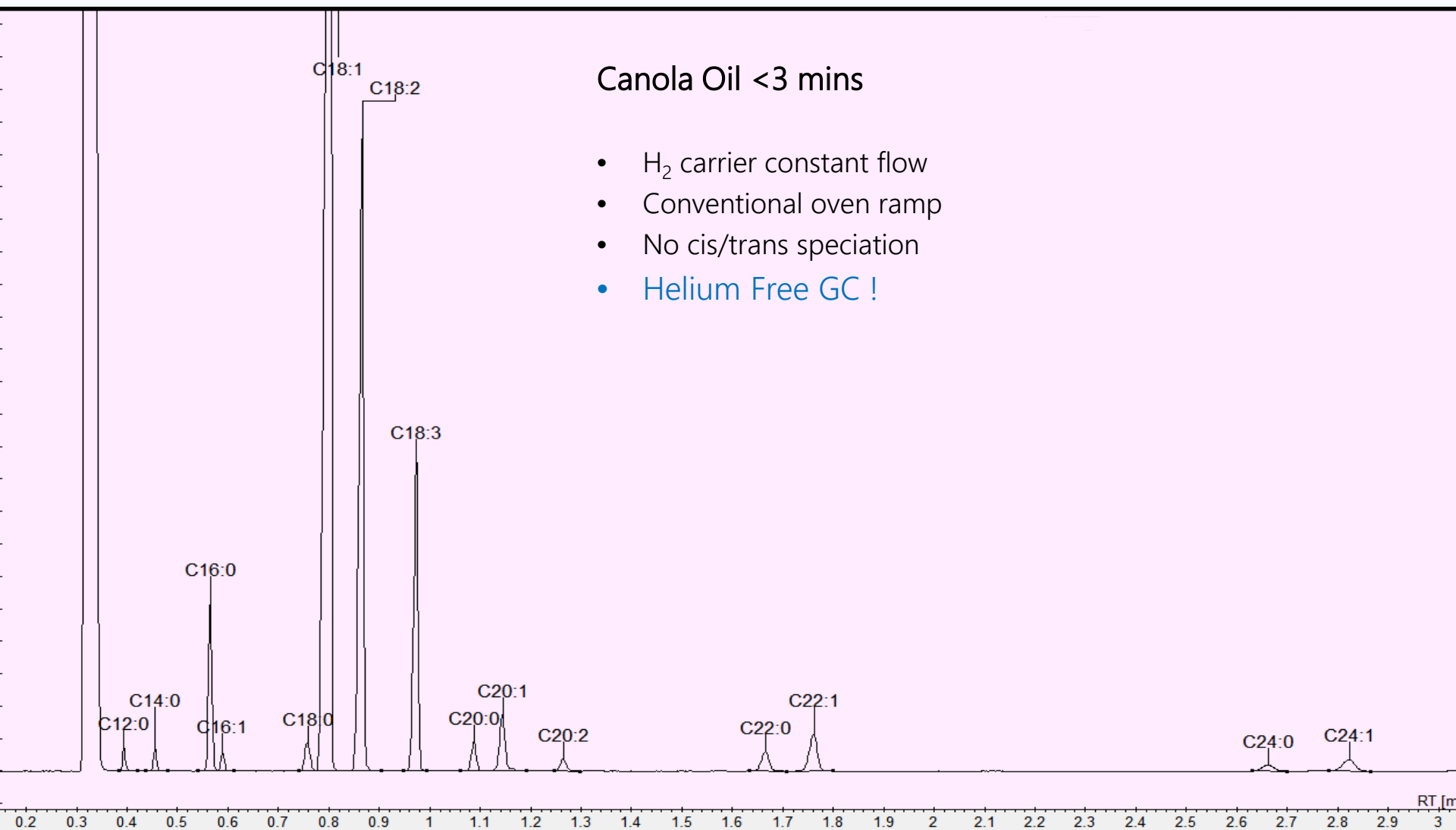


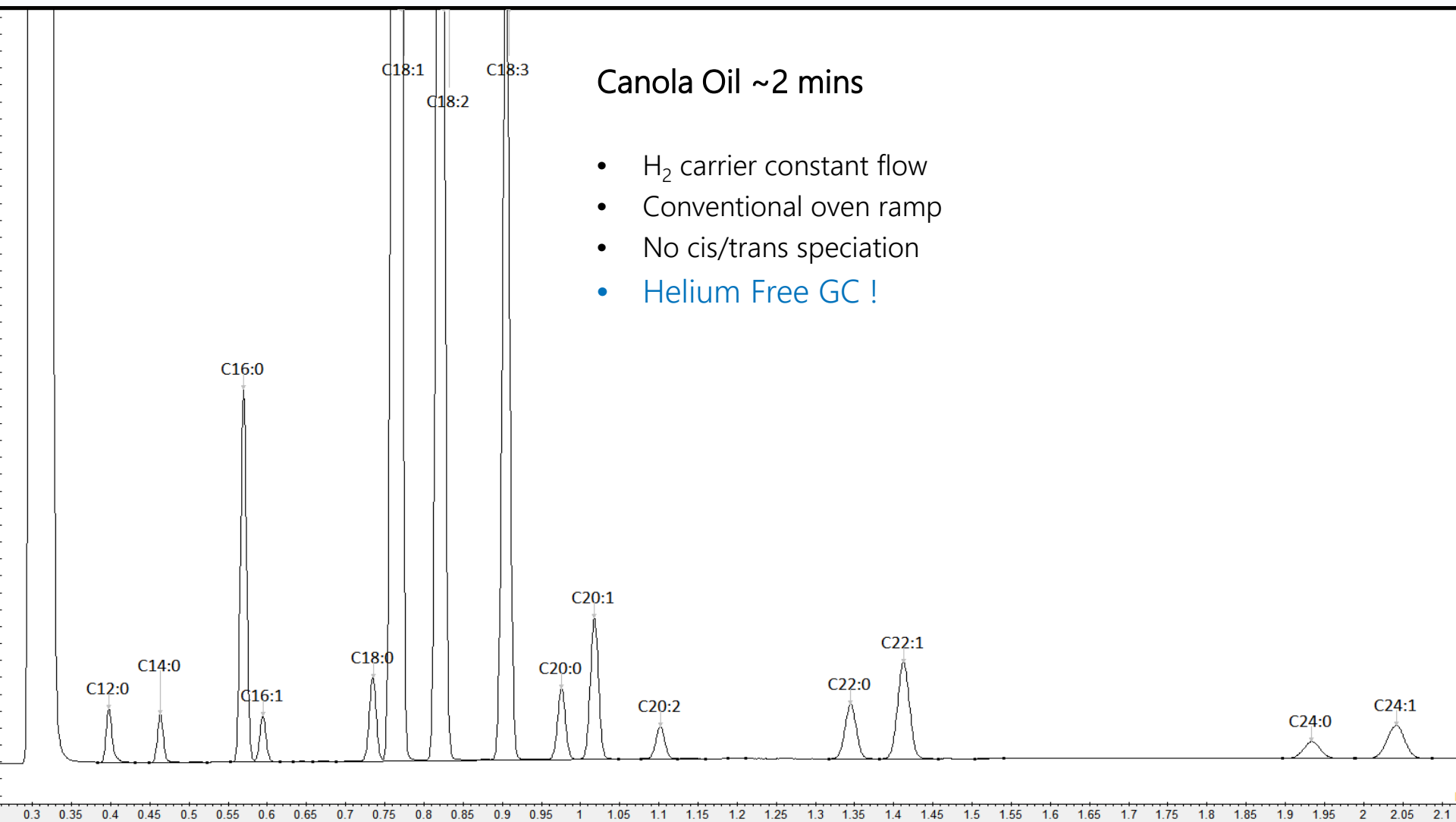
30m x 0.53mm x 0.5um Stabilwax -DA

C₂-C₆ VFAs <2 mins

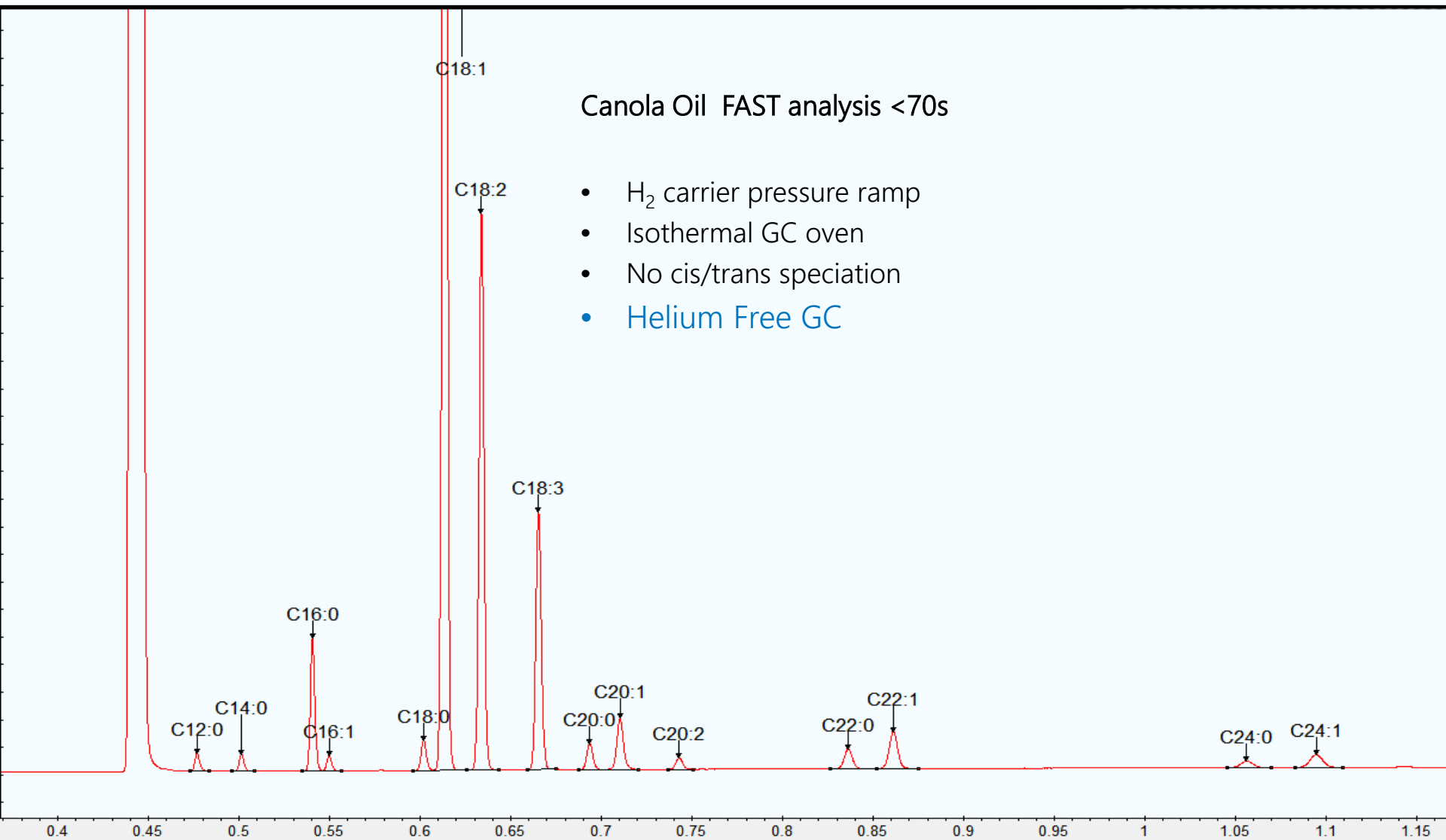
- Free Fatty Acids – direct inject in 5% Phosphoric Acid
- PTV injector
- 3.4mm focus liner with glass wool
- Very good RSDs!

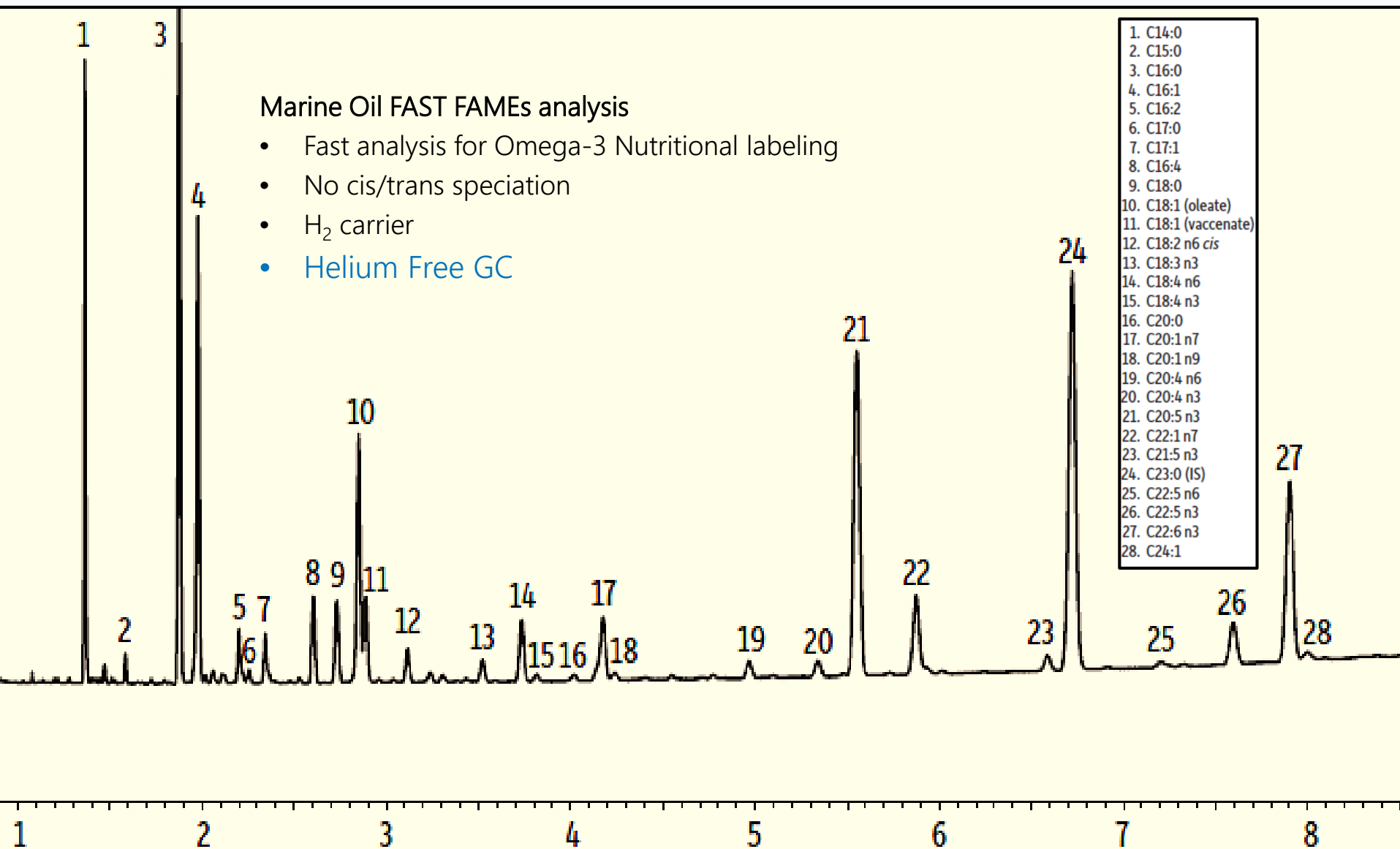
	Area Counts							
	Acetic	Propionic	isoButyric	Butyric	isoValeric	Valeric	isoCaproic	Caproic
VFA std 1	22962	20277	5575	10225	5391	5666	7027	5811
VFA std 2	22864	20187	5519	10147	5350	5636	7012	5782
VFA std 3	23037	20295	5586	10225	5397	5673	7057	5818
VFA std 4	23021	20325	5584	10214	5369	5653	7014	5787
VFA std 5	23006	20325	5569	10226	5408	5663	7049	5823
VFA std 6	22984	20412	5447	10260	5392	5663	7015	5819
Mean	22979	20304	5547	10216	5385	5659	7029	5807
Std Dev	56.7	67.2	50	34.2	19.4	11.9	17.7	16.1
Rsd %	0.25	0.33	0.90	0.34	0.36	0.21	0.25	0.28



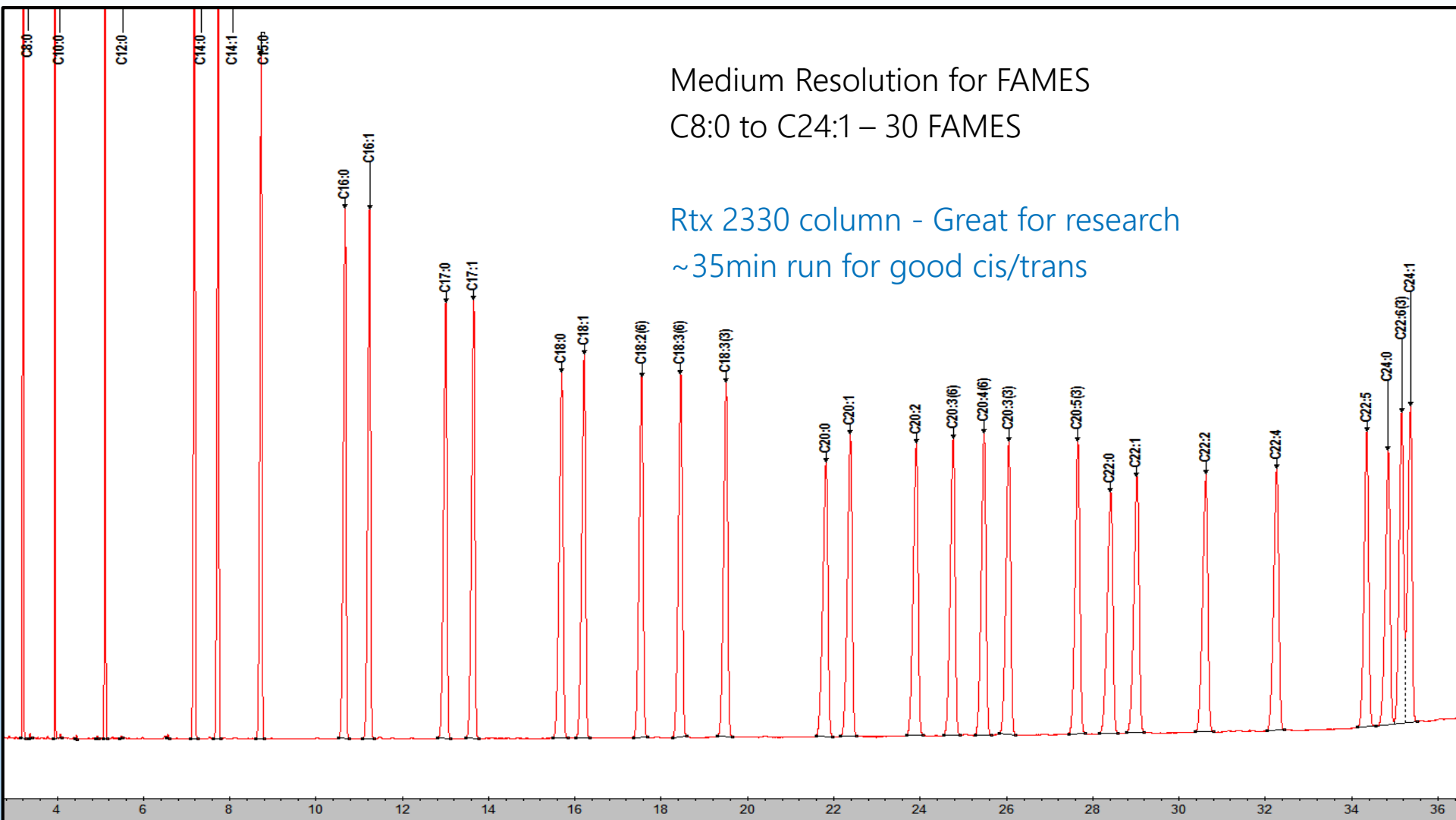


5m x 0.25mm x 0.5um Stabilwax

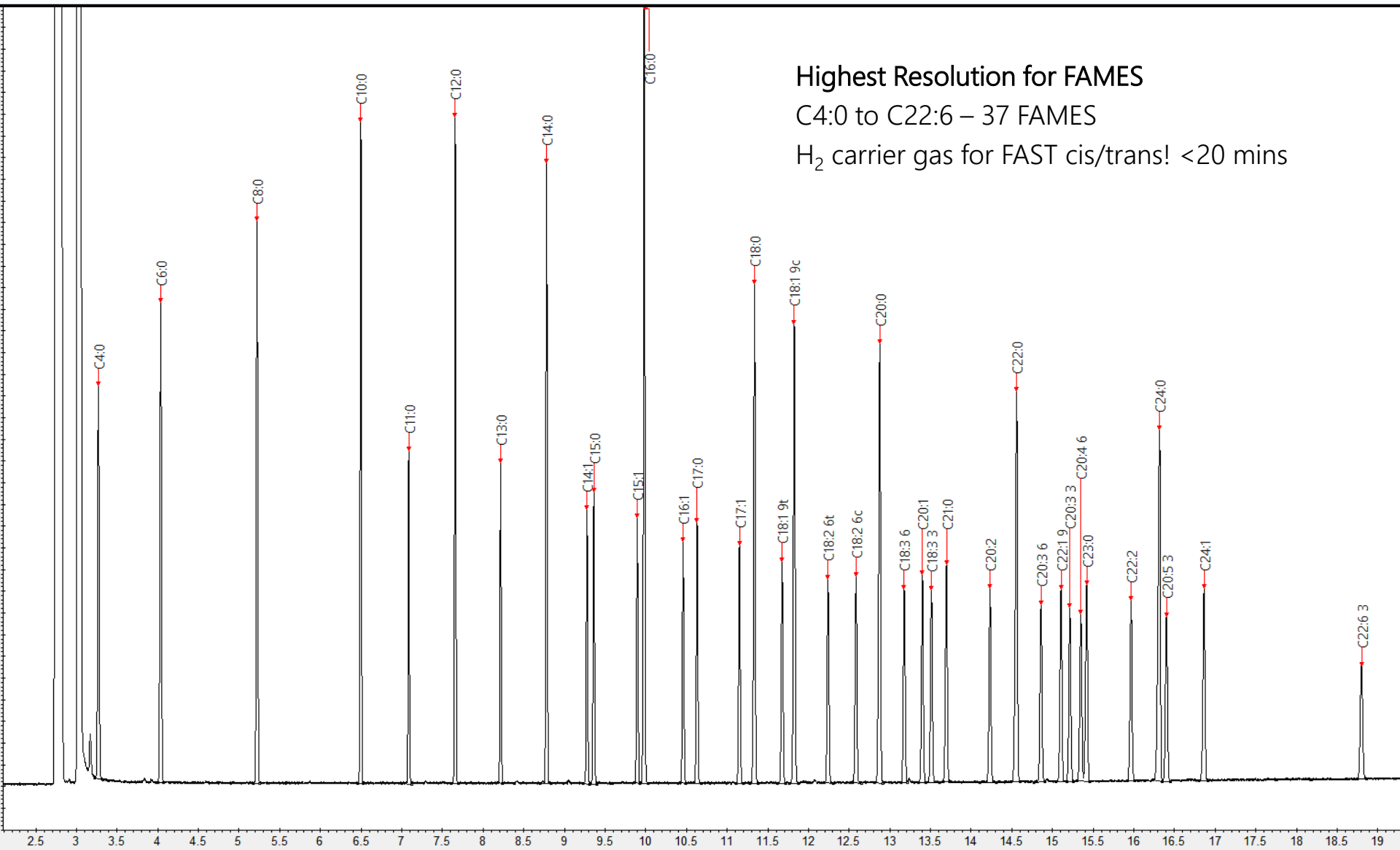




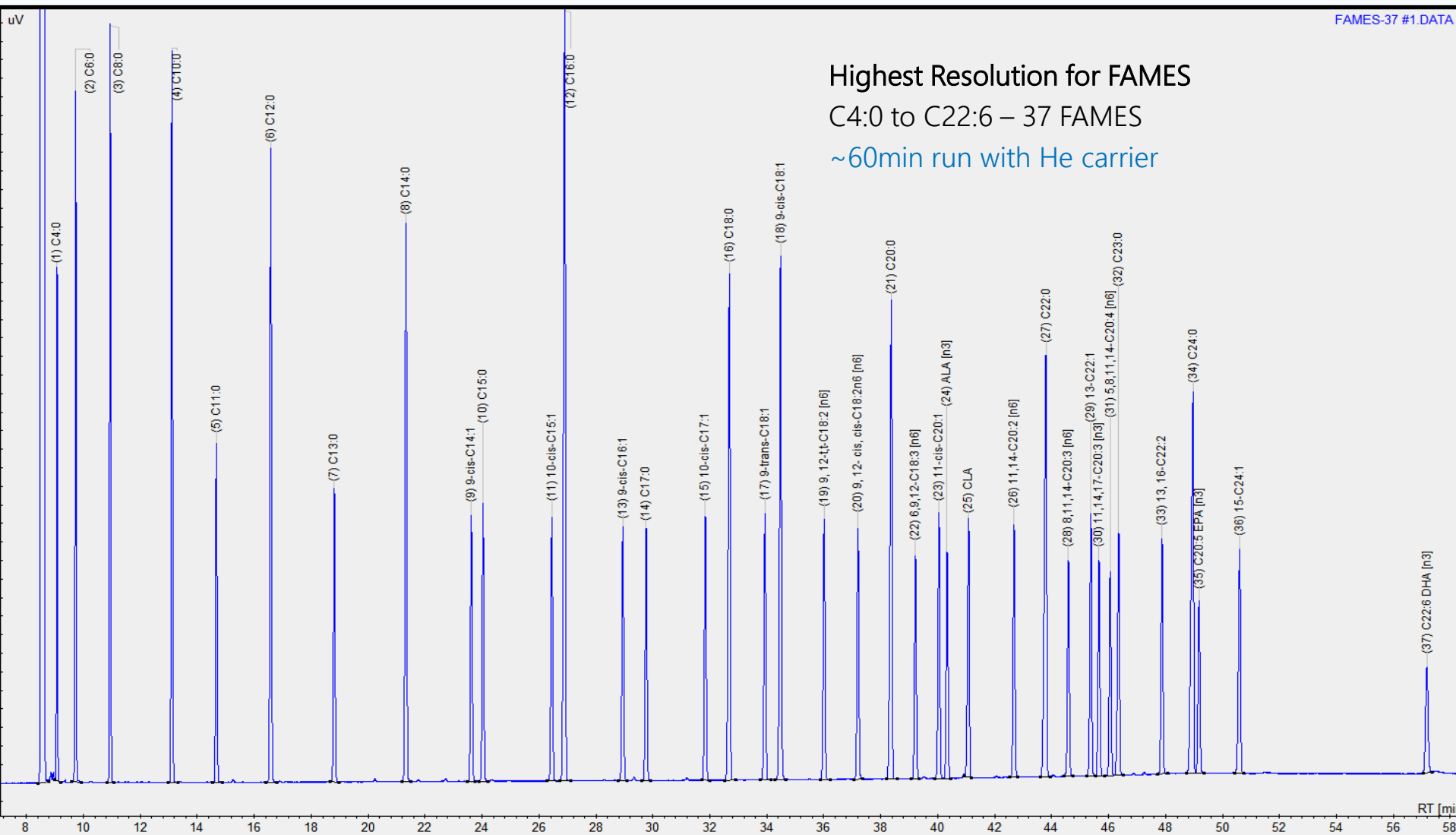
30m x 0.25mm x 0.25um Rtx-2330



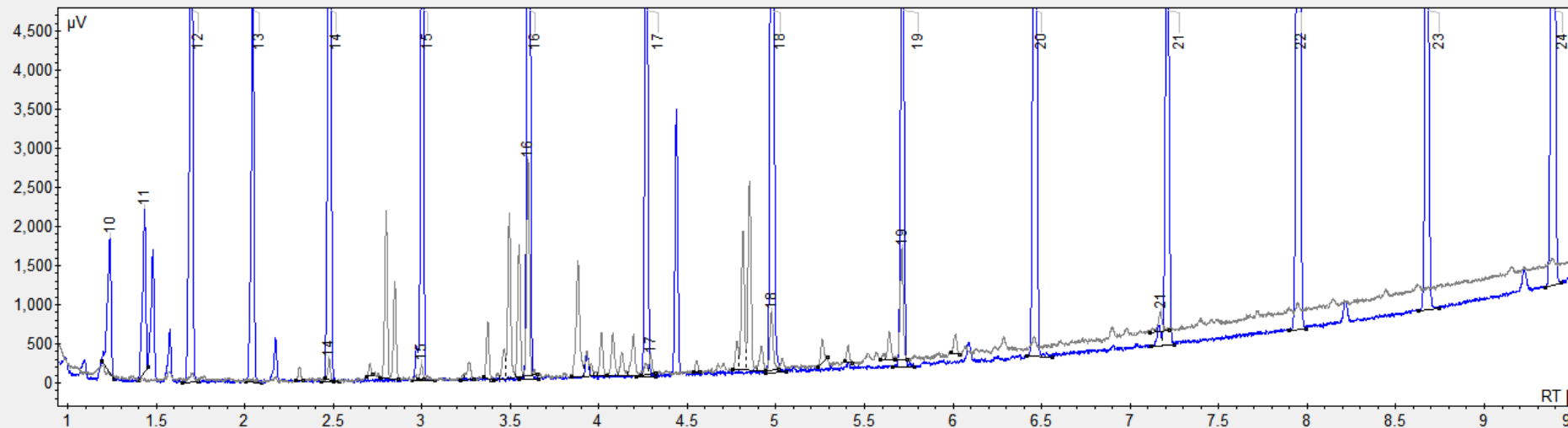
50m x 0.25mm x 0.20um Rtx-2560



100m x 0.25mm x 0.20um Rtx-2560



25m x 0.20mm x 0.33um HP-Ultra-2



#	Name	Time [Min]	Area [µV.Min]	Quantity [% Area]	Retention Index
1	UNKNOWN	2.3100	2.90	0.6002	1361.23
2	14	2.4767	4.27	0.8832	1399.62
3	UNKNOWN	2.7083	2.57	0.5320	1444.09
4	UNKNOWN	2.7992	35.94	7.4315	1461.50
5	UNKNOWN	2.8483	21.84	4.5170	1470.93
6	15	3.0000	2.77	0.5732	1500.00
7	UNKNOWN	3.2692	5.55	1.1468	1544.80
8	UNKNOWN	3.3725	12.62	2.6102	1562.00
9	UNKNOWN	3.4650	8.42	1.7421	1577.39
10	UNKNOWN	3.4942	39.38	8.1435	1582.25
11	UNKNOWN	3.5483	30.28	6.2617	1591.26
12	16	3.6000	49.27	10.1880	1599.86
13	UNKNOWN	3.8817	35.37	7.3153	1642.28
14	UNKNOWN	3.9317	7.67	1.5862	1649.81
15	UNKNOWN	3.9558	2.78	0.5754	1653.45
16	UNKNOWN	4.0150	10.45	2.1616	1662.36
17	UNKNOWN	4.0783	12.11	2.5048	1671.89
18	UNKNOWN	4.1292	6.97	1.4411	1679.55
19	UNKNOWN	4.1950	12.09	2.4997	1689.46
20	17	4.2917	4.75	0.9829	1703.76
21	UNKNOWN	4.5525	2.64	0.5464	1740.49
22	UNKNOWN	4.7800	7.17	1.4835	1772.54
23	UNKNOWN	4.8133	35.84	7.4109	1777.23
24	UNKNOWN	4.8500	48.21	9.9698	1782.39
25	UNKNOWN	4.9183	7.29	1.5077	1792.02
26	18	4.9742	16.01	3.3114	1799.88
27	UNKNOWN	5.2608	6.69	1.3829	1838.84
28	UNKNOWN	5.4075	3.67	0.7580	1858.78
29	UNKNOWN	5.6383	7.64	1.5795	1890.15
30	19	5.7108	29.38	6.0750	1900.00
31	UNKNOWN	6.0142	5.06	1.0467	1940.49
32	21	7.1725	5.96	1.2319	2095.42

PLFA analysis

C10:0 to C24:0

Automated Kovats Index software for
Identification!

Summary

- Scion Instruments – Continuing a tradition of excellence from Varian / Bruker
- 60+ year legacy of successfully providing solutions not just boxes
- A global team of highly accessible GC specialists in place to help you
- Extremely flexible GC hardware and software platform
- A full line of high performance application tuned columns

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