Fusion QbD®

UV & MS Spectra Based Peak Tracking

S-Matrix Corporation

www.smatrix.com

PeakTracker™ – UV & MS Spectra-based Tracking
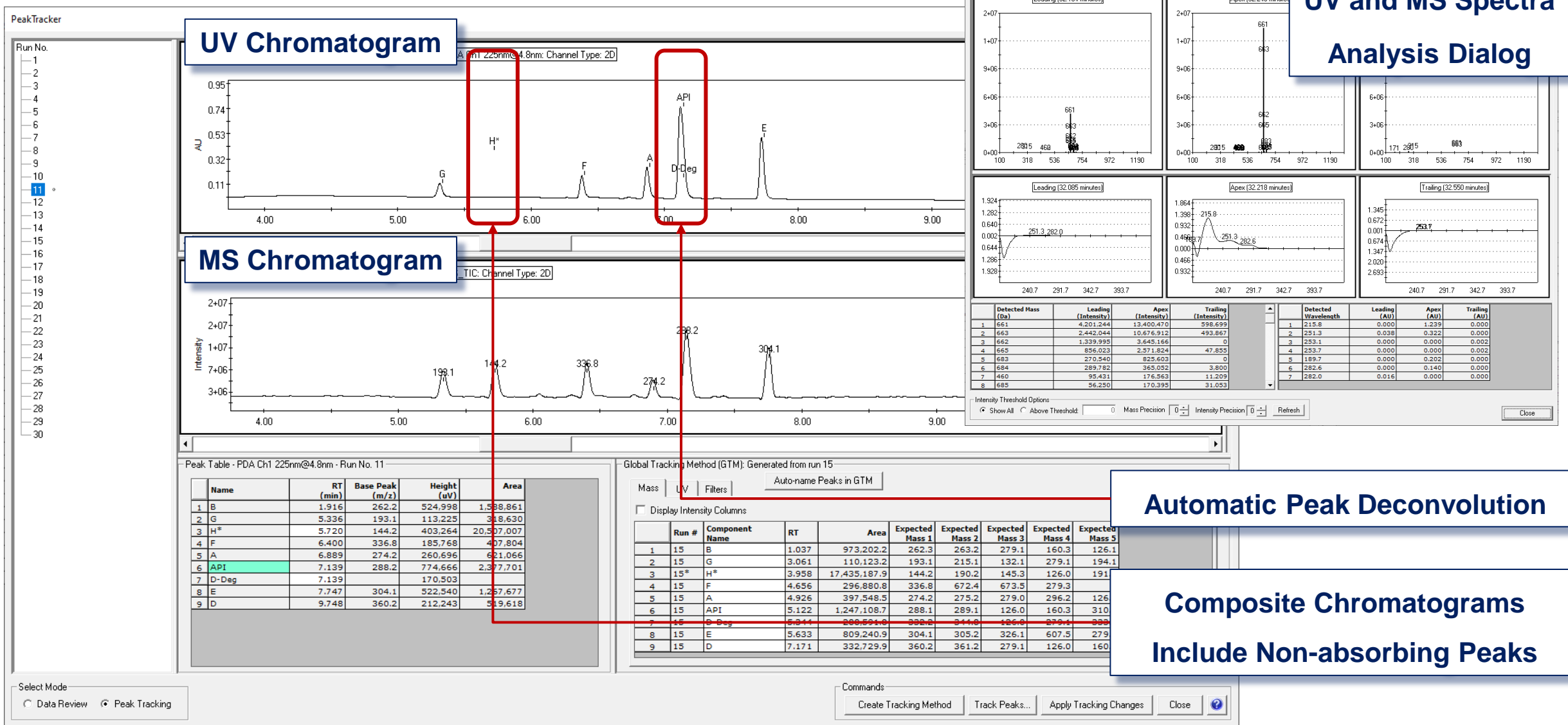
Run 15 - Global Tracking Method		
	Component Name	**Expected Mass 1**
1	B	262.2
2	G	193.1
9	H*	144.2
3	F	336.8
4	A	274.1
5	API	288.1
6	D-Deg	332.1
7	E	304.1
8	D	360.2

Co-eluted Peak Deconvolution in Run 10
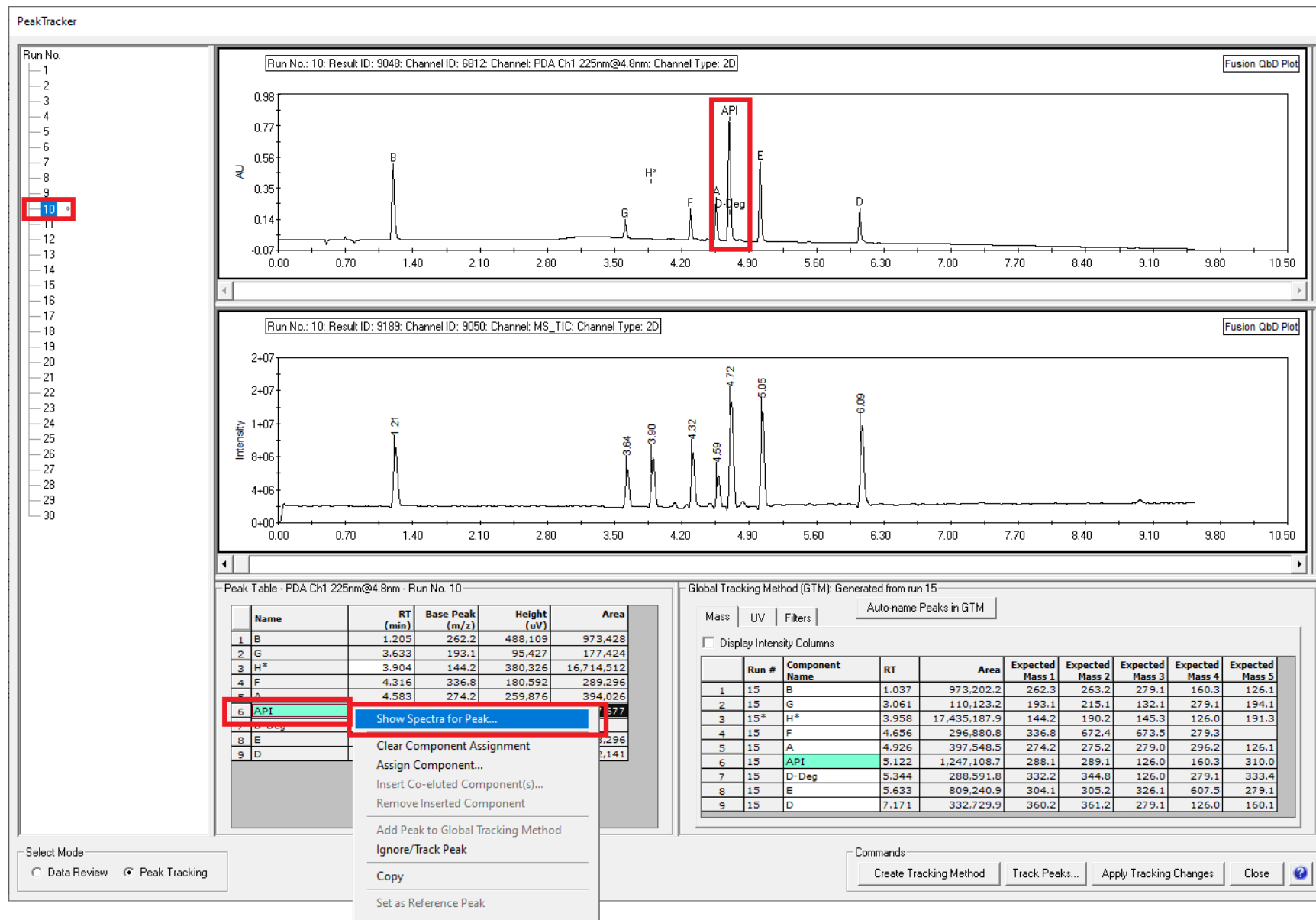

PeakTacker – Run 10:

- D-Deg is Missing in Data Chromatogram because it is Co-eluted with the API.

- PeakTracker Located the D-Deg peak under the API (Go to 2 Next Slides to See Why).

Access MS Spectra for the API Peak

PeakTacker – Run 10:

- Select the API peak in the Peak Table.

- Right click to launch the popup menu.
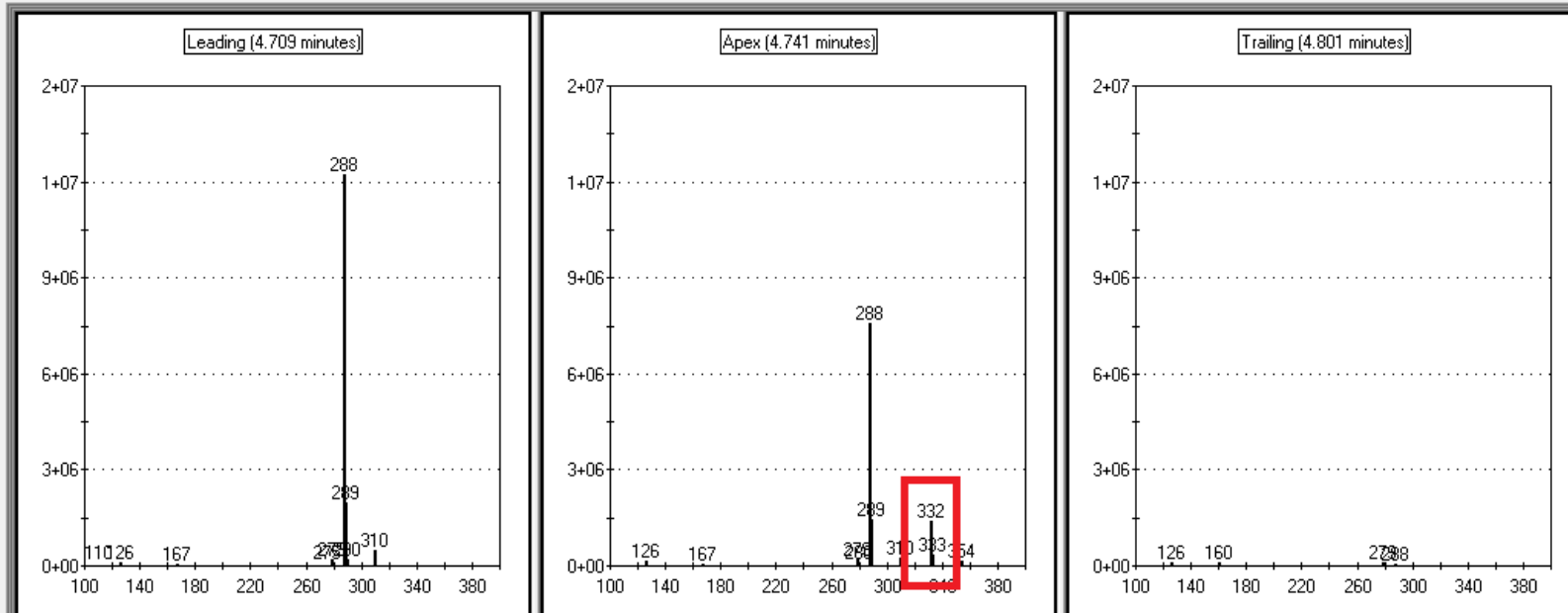
- Select the "Show Spectra for Peak" option.

MS Spectra Analysis –

API peak – Run 10:

- See the base peak value for the D-Deg peak (332) within the Apex spectra for the API.

Extracted Spectra: Row 6 (API)

	Detected Mass (Da)	Leading (Intensity)	Apex (Intensity)	Trailing (Intensity)
1	288	12,206,700	7,564,340	56,641
2	289	1,968,410	1,435,061	0
3	332	0	1,380,625	0
4	333	0	320,410	0
5	310	469,797	260,570	0
6	279	175,391	186,231	115,438
7	126	101,943	150,948	119,420
8	354	0	125,457	0
9	280	0	79,750	0
10	167	54,706	70,066	0
11	110	76,520	0	0

Column

Intensity Threshold Options: ⦿ Show All ○ Above Threshold: [0]   Mass Precision [0]   Intensity Precision [0]   Refresh
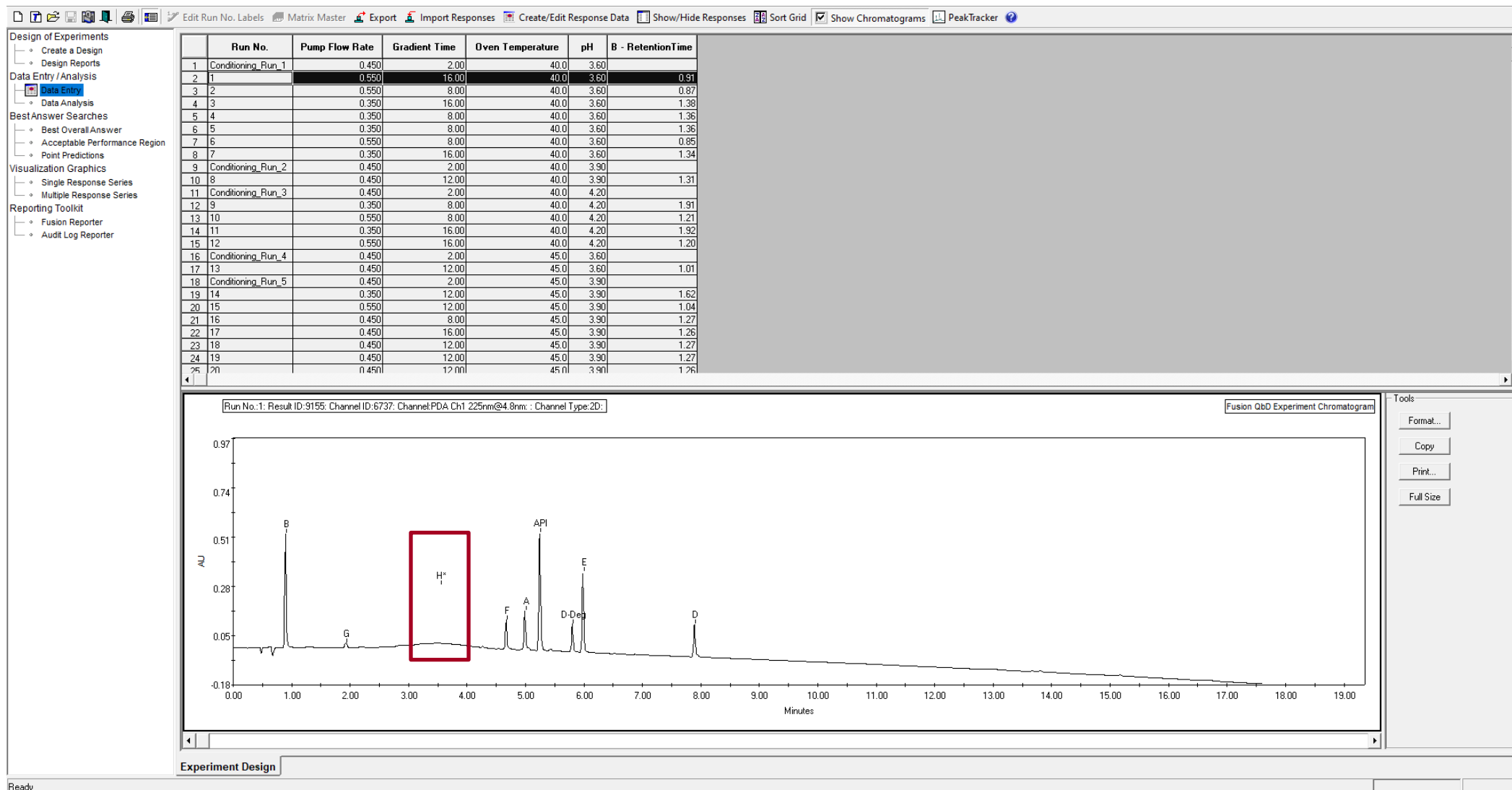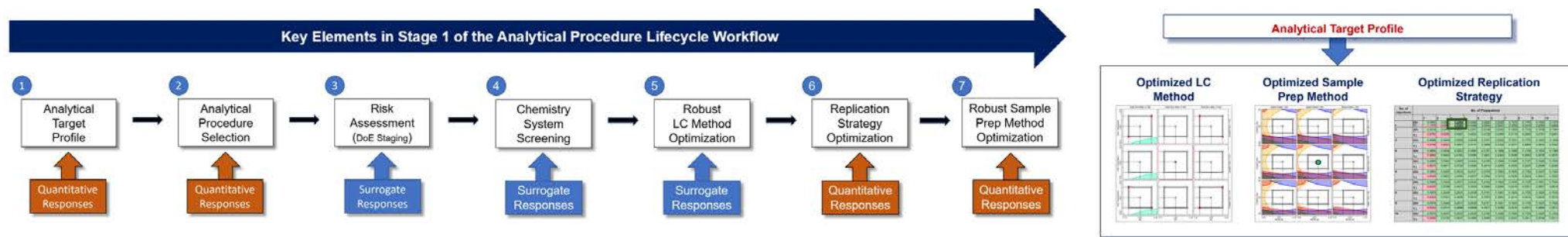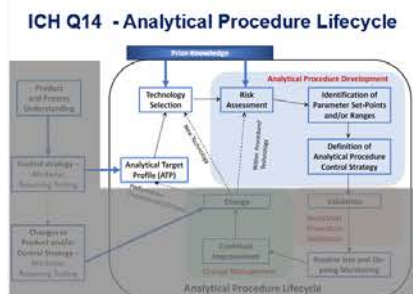
Close

Evaluate Data Completeness

Peaks are Identified and Tracked. Non-absorbing Compound H* is now Present in the UV Chromatograms.

End of Presentation

Fusion QbD is the Only LC Method Development Software Which Completely

Supports the AQbD / APLM Workflow in the Regulatory Guidances

ICH Q2(R2) / ICH Q14 / USP <1210> / USP <1220> / EP 11.60

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