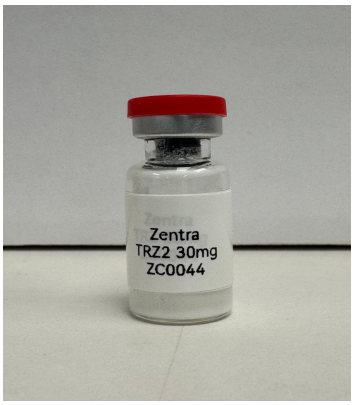
Analytical Testing Laboratory
7271 Engle Rd Unit 201A, Middleburg Heights, OH 44130
sonic-laboratories.com
Verify at sonic-laboratories.com/coa-lookup **Code: YZJBFEDE**

CERTIFICATE OF ANALYSIS

COA #: **SD20260829_004_TZ30**

SAMPLE INFORMATION

Client	Zentra Brands Limited	**Accession #**	SD20260829_004
Compound	TRZ2	**Date Received**	08/28/2026
Molecular Formula	C225H348N48O68	**Date Reported**	09/01/2026
Appearance	White lyophilized powder	**Labeled Quantity**	30 mg
Sample Form	Lyophilized Vial	**Lot / Batch #**	ZC0044
Storage	Room Temp	**CAS Number**	2023788-19-2
Cap Color	Red		



All Chemical Analysis Performed by LC-MS/MS

ANALYTICAL RESULTS

Test / Analysis	Method	Specification	Result	Status
Identity (Mass Confirmation)	LC-MS/MS	Matches reference mass	Tirzepatide	**Pass**
Purity	LC-MS/MS	≥ 95.0%	99.769 %	**Pass**
Net Peptide Content	LC-MS/MS	Report value	32.58mg	**Pass**
Observed Molecular Mass	LC-MS	Within ± 1.0 Da	1204.9 [M+4H]	**Pass**
Theoretical Molecular Mass	Reference	—	4813.45	**Pass**
Related Substances / Impurities	LC-MS/MS	Report value	Not Detected	**Pass**
Residual Solvents	LC-MS/MS	Report value	Not Detected	**Pass**

John Humes, MS. **John Humes, MS.**
Analyzed by · Laboratory Analyst · 09/01/2026

Chetan Soni, PhD. **Chetan Soni, PhD.**
Approved by · Laboratory Director · 09/01/2026

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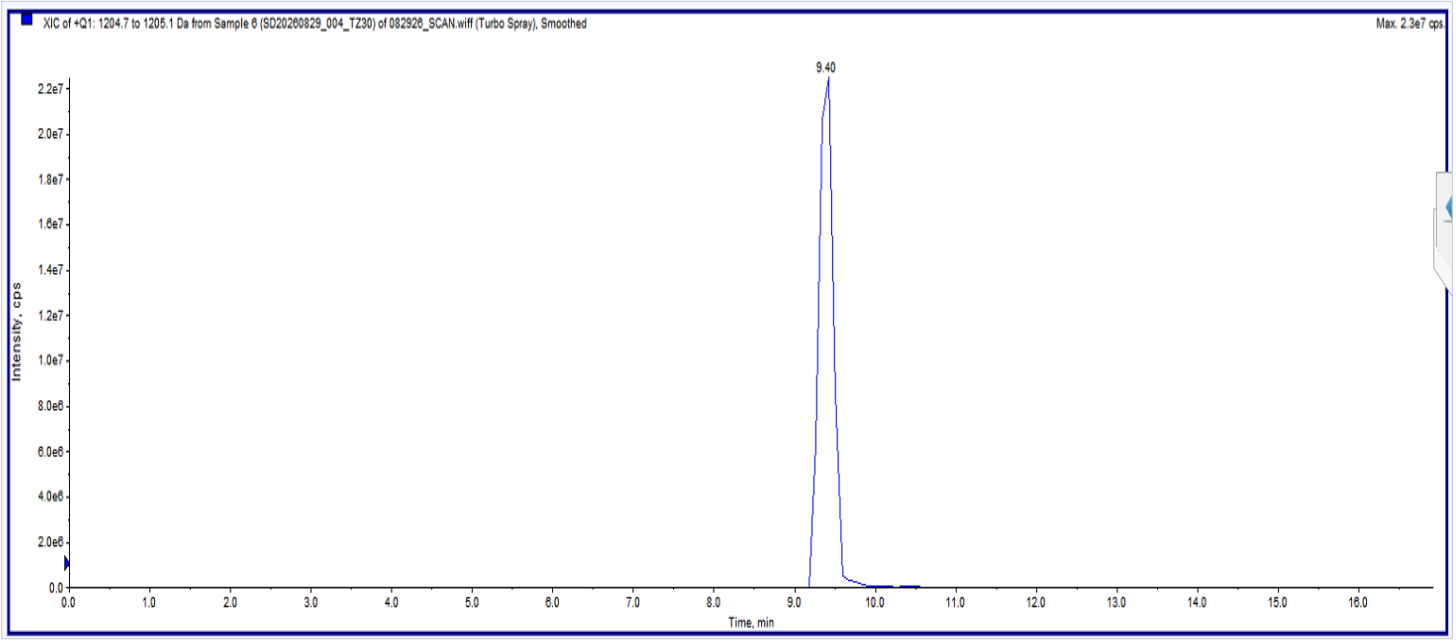
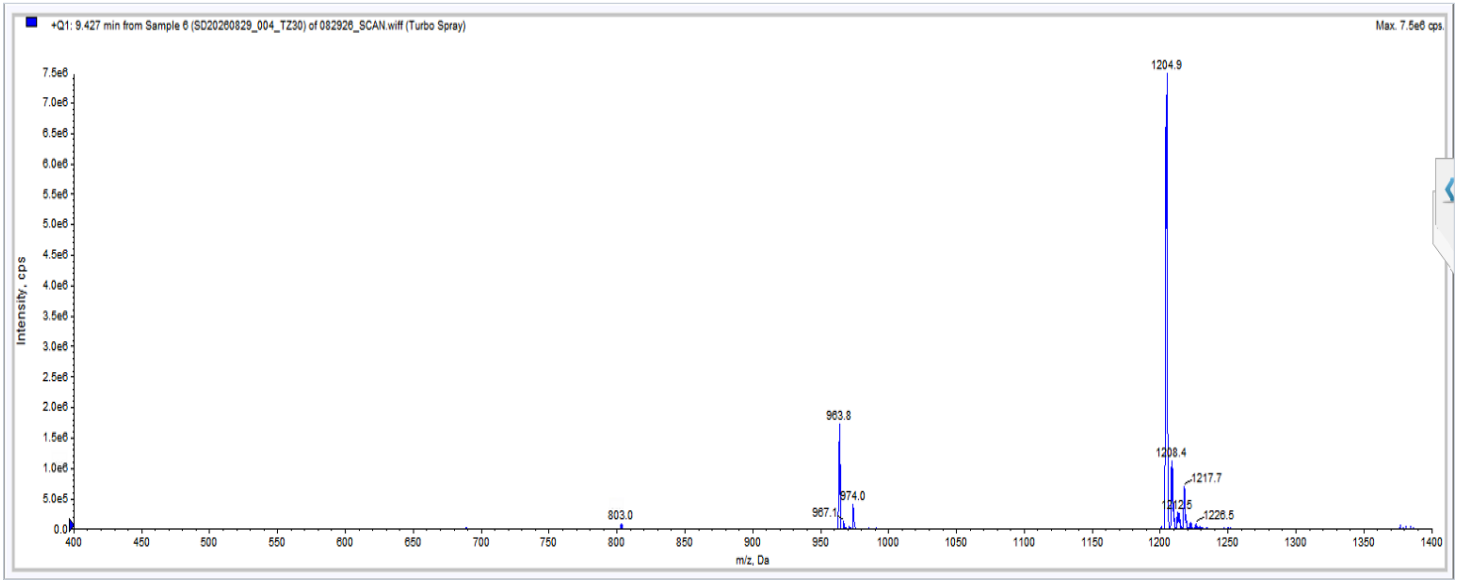
ANALYTICAL DATA

COA #: **SD20260829_004_TZ30**

CHROMATOGRAM



MASS SPECTRUM (LC-MS)



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ANALYTICAL INTERPRETATION

Chromatogram

Retention Time Match

Mass Spectrum (LC-MS)

Analyte: Tirzepatide
Sample ID: SD20200829_004_TZ30
Method (Identity): LC-MS, positive-mode Q1 full scan, TurboSpray ionization
Retention time: 9.427min

The Q1 full-scan spectrum at 9.427min shows a dominant ion at m/z≈1204.9, consistent with the $[M+4H]^{4}$ ion of Tirzepatide (MW≈4.8kDa). Additional peaks at m/z≈963.8 and 803.0 correspond to the [M+5H] and [M+6H] charge states, respectively, while closely spaced peaks at m/z≈1208.4, 1217.7, and 1226.5 represent adduct and isotopic variants of the 4+ ion. The observed charge-state distribution and retention time are consistent with the expected LC-MS profile for Tirzepatide.

Interpretation: Identity by LC-MS Q1 full scan — Confirmed (Tirzepatide detected; Q1 profile consistent with reference standard).

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