Analytical Evidence Report

HPLC-DAD results for the submitted Semaglutide sample

REPORT NUMBER
DAYL-SEMA-5-102626

GENERATED
November 10, 2026

Semaglutide

Sample 6026_0364 | Client report DAYL-SEMA-5-102626

Results and chromatograms

Lot # TNPS-SEMA5-001 | Client: TrueNorth Peptide Supply

Laboratory Analysis: LAB-CA-01

Laboratory identity and applicable credentials are maintained by Testides and are available to regulatory authorities where required by law.

VIAL PHOTOGRAPH


SAMPLE INFORMATION	
Peptide:	**Semaglutide**
Sample ID:	**6026_0364**
Client ID:	**DAYL-SEMA-5-102626**
Label claim:	**5 mg**

ANALYSIS	
Method:	**HPLC-DAD**
Channels:	**214 / 280 nm + spectra**
Purity at:	**214 nm, blank-excluded**
Amount at:	**214 nm curve**
Identity:	**Conforms**

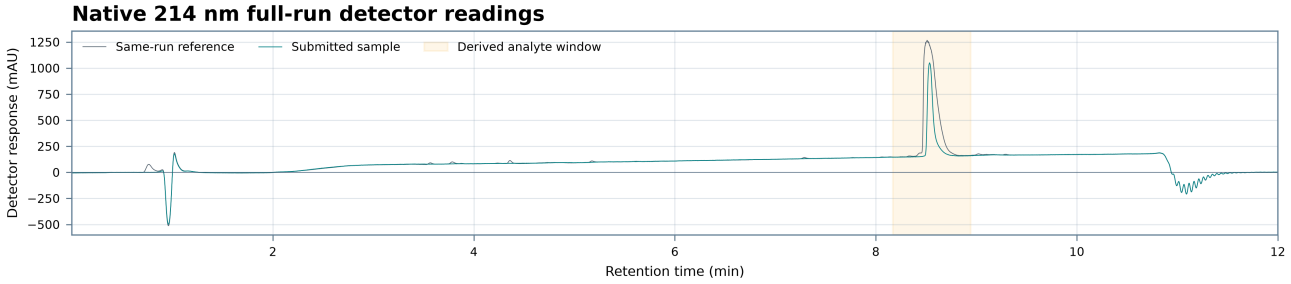
RUN DETAILS	
Run date:	**Nov 06, 2026**
First acquired:	**06:06:22 UTC**
Last acquired:	**07:57:32 UTC**
Run time:	**8.00 min / acquisition**

RESULTS AT A GLANCE

PROJECTED AMOUNT	HPLC PURITY	CONTENT VS. LABEL	IDENTITY
2.46 mg†	**99.96%**	**49.2%**	**Conforms**
214 NM CURVE, SAMPLE PREPARATION	214 NM AREA PERCENT, LIMIT 0.557%	2.46 MG OF 5 MG CLAIMED, REF. POTENCY 0.93	RETENTION TIME + UV PROFILE**

CHROMATOGRAM

Complete run - 214 nm detector response



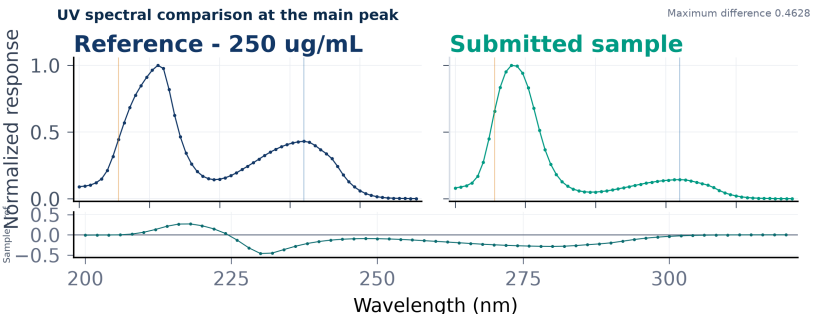
HPLC PURITY (214 NM)

Peptide + related	Main peak area %	Reporting limit	UV match
99.96%	**99.96%**	**0.557%**	**0.98146**
Main peak and UV-matched forms	1 injection(s)	Smallest reportable peak	Sample vs. reference

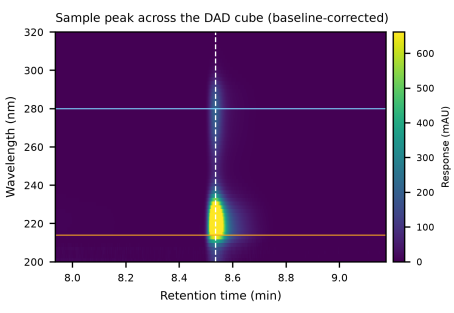
Purity is the main peak's share of the total integrated peak area at 214 nm, measured from the native detector readings. Peaks below 0.557% of total area cannot be resolved from this run's baseline and are not counted. No impurity was detected above the reporting limit; the smallest impurity this run could resolve is that limit. This result rests on a single injection; no duplicate was run.

UV SPECTRAL COMPARISON

Native wavelength samples - baseline-corrected, normalized; no smoothing



UV response through the sample peak



The complete acquisition is shown without smoothing or resampling: 28,800 native readings on the 214 nm channel.

* HPLC purity is the main peak's share of total integrated peak area at 214 nm. Peaks below 0.557% of total area are not resolvable from this run's baseline; every peak is itemised on page 3.

** Identity conforms: retention time within the same-run standards' range or within ±10% of their mean, and a UV match (220-300 nm cosine) at or above the standards' lowest, 0.999, or 0.98 where retention conforms.

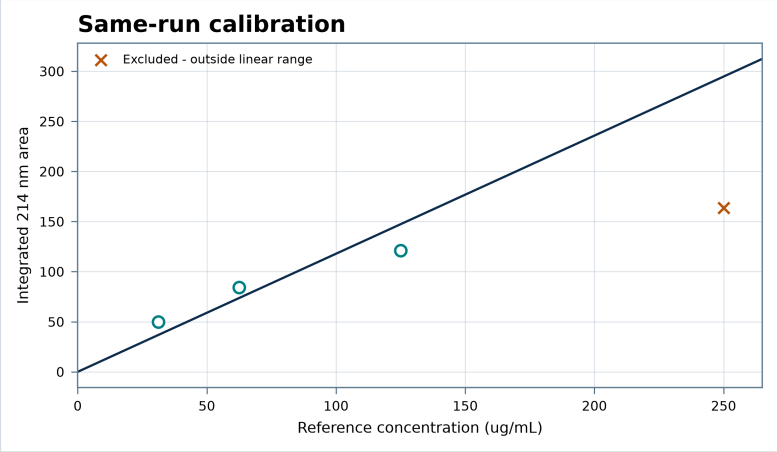
Semaglutide

Sample 6026_0364 | Client report DAYL-SEMA-5-102626

Reference comparison and calculation

Lot # TNPS-SEMA5-001 | Client: TrueNorth Peptide Supply

CONCENTRATION CALIBRATION - 214 NM (NO 280 NM ABSORBANCE)



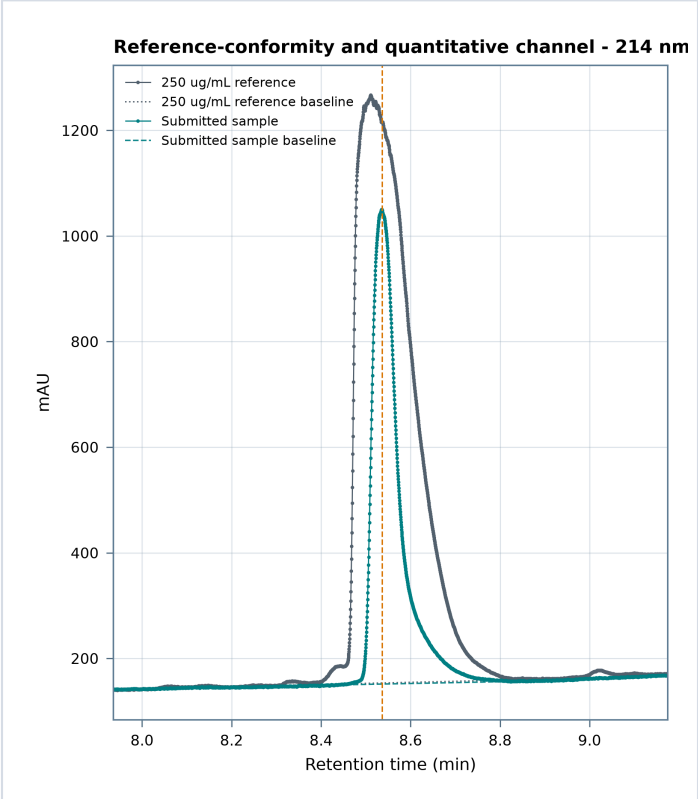
ug/mL	Area	Recovery
31.25	49.89279	135.41%
62.5	84.39397	114.52%
125	121.10936	82.17%
250	163.61614	55.51% excluded

Area = 1.17907086C +0.00000000
Unweighted OLS | R2 0.9999900
Sample area 62.6828 = 49.18 ug/mL x 2 mL x 25 / 1000 = 2.46 mg

UV spectra were recorded from 190-400 nm across the run

The integration method and the full peak table are on page 3.

MAIN PEAK COMPARED WITH THE SAME-RUN REFERENCE



Native acquisition points with the exact quantitative baselines; the dashed line marks the reference retention-time centre.

** Identity conforms: retention time within the same-run standards' range or within ±10% of their mean, and a UV match (220-300 nm cosine) at or above the standards' lowest, 0.999, or 0.98 where retention conforms.

Semaglutide

Sample 6026_0364 | Client report DAYL-SEMA-5-102626

Definitions, calculation detail, and scope

Lot # TNPS-SEMA5-001 | Client: TrueNorth Peptide Supply

HOW TO READ THIS REPORT

Start with the result on page 1. Pages 2 and 3 show the comparisons, calculations, and limits behind it.

01 **Complete chromatogram**

Shows the main peak in the context of the full detector run.

02 **Integrated peak table**

Lists every peak counted towards the purity result, and every peak not.

03 **UV comparison**

Compares the peak's UV pattern with the same-run reference.

WHAT THE UV COMPARISON ADDS

What diode-array detection adds to the comparison

What it adds

Retention time tells us when the peak left the column; DAD records its UV fingerprint across many wavelengths. Alignment requires both: retention time within the same-run standards' range or ±10% of their mean, and a UV match at or above the standards' lowest, 0.999, or 0.98 where retention conforms.

What it can reveal

A UV fingerprint that changes across the peak can indicate hidden co-elution. Here, apex cosine similarity is 0.981461 and minimum within-peak cosine is 0.999120, supporting close reference alignment and spectral uniformity.

Identity: retention time and UV spectrum are both compared with the reference standards.

HOW THE PURITY RESULT WAS MEASURED

214 nm area percent, measured from the native detector readings

The run's blank injections give the baseline and the detection floor. Each injection is corrected against the blanks bracketing it in time, every peak is integrated to a valley-to-valley baseline, and purity is the main peak's share of the total counted area.

Purity (%) = main peak area / total counted peak area x 100

RT (min)	Area	Area %	Classification	UV vs main	Counted
8.536	56.3446	99.960	Main peak	-	Counted

Reporting limit 0.557% of total area | counted peaks 0 | injections 1

Area percent assumes every peak absorbs at 214 nm like the main peak.

Content vs. label: Recovered mass is calculated from the method's calibration and the sample preparation recorded for this vial; the vial's reconstitution and dilution are recorded by the laboratory and are not independently measured here.

WHAT THIS REPORT CAN AND CANNOT TELL YOU

The report explains the measurement; it does not decide how a material should be used

Observed evidence

Chromatograms, reference and blank comparisons, and classified peaks.

Calculated results

Area-percent purity, concentration, projected amount, and calibration trace.

Method context

Retention time (standards' range or ±10%) and UV match (standards' lowest, 0.999, or 0.98 with retention).

Safety and regulatory status

No conclusion on safety, efficacy, fitness for use, or regulatory status.

This analytical record does not authorize or endorse manufacture, sale, marketing, distribution, or use of the material.