



1440 Olympic Drive
Athens, Georgia 30601

Phone 706-353-4400

Fax 706-353-3205

Certificate of Analysis

Certificate Number: 2016-SA-121

Material Name: Noroxymorphone Carbamate
NDC #: 51634-2006-**
Reference Standard #: NQS1107
Date of Manufacture: March 2011
Requalification Date: November 30, 2019

<u>Test</u>	<u>Limit</u>	<u>Result</u>
Appearance	Report Results	White powder
Infrared Spectroscopy ¹	Consistent With Structure	Complies
Mass Spectrometry ²	Consistent With Structure	Complies
Proton (¹ H) NMR	Consistent With Structure	Complies
Carbon (¹³ C) NMR	Consistent With Structure	Complies
Residue on Ignition (ROI)	Report Results	< 0.05%
Total Impurity by HPLC	Report Results	2.94%
Purity Factor ³	Report Results	97.1%

¹ See Figure 1

² See Figure 2

³ Purity Factor is derived from 100% less summation of ROI and HPLC impurities (utilizing internal methods).
Values less than 0.05% are not included in the Purity Factor.

**Storage Conditions: Store under ambient temperature and humidity conditions.
This material is not intended for sale for human consumption.**

Note: Dry portion at 105°C for 2 hours under vacuum before use.

Prepared By: _____
Analytical Scientist, or designee

Approved By: _____
Analytical Services Supervisor, or designee

Authorized By: _____
Quality Assurance, or designee

Figure 1: Noroxymorphone Carbamate (NQS1107) ATR FT-IR Spectrum

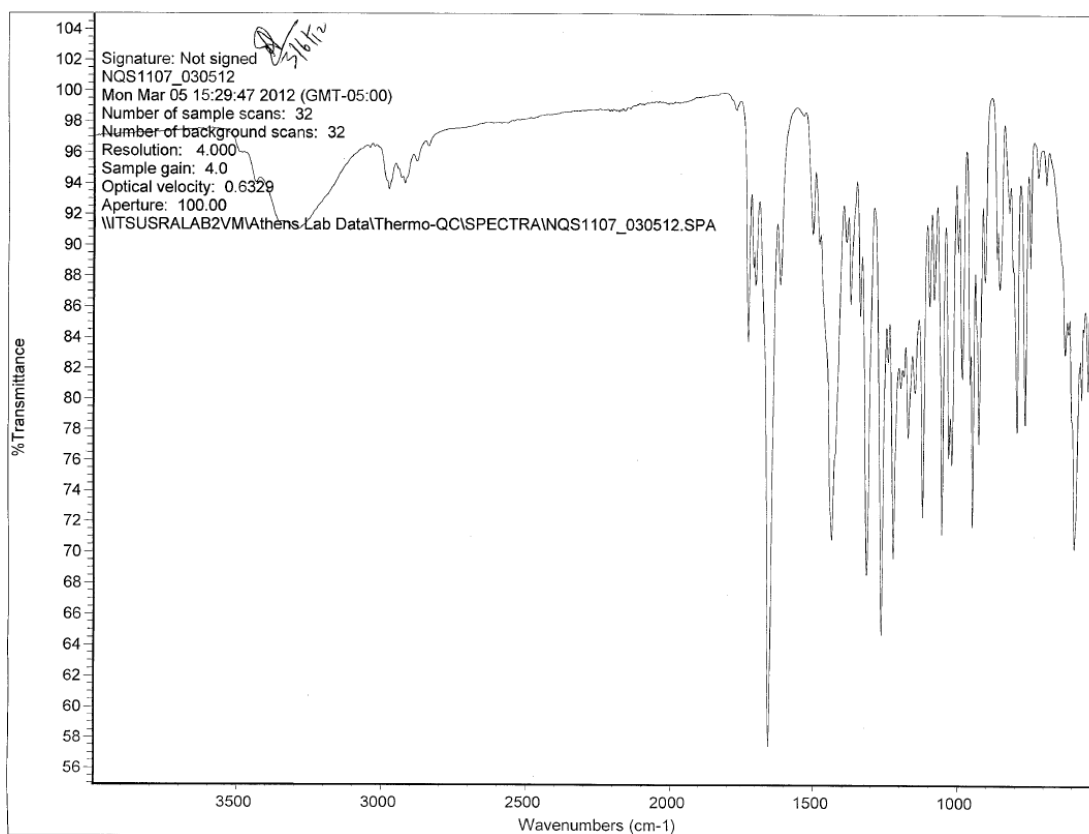


Figure 2: Noroxymorphone Carbamate (NQS1107) MS Spectrum

