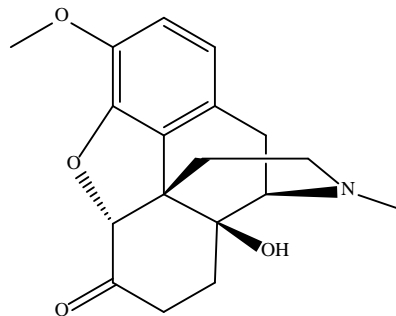


Certificate of Analysis

Certificate Number: 2017-SA-077

Material Name: Oxycodone Base
 NDC #: 51634-0003-**
 Reference Standard #: NQS1111
 Date of Manufacture: April 2011
 Requalification Date: September 30, 2018



Chemical Formula: C₁₈H₂₁NO₄
 Molecular Weight: 315.37

| Test | Limit | Result |
|------------------------------------|--------------------------------|-------------------------|
| Appearance | Report Results | White Crystalline Solid |
| Infrared Spectroscopy ¹ | Consistent with USP Lot L0K381 | Complies |
| Mass Spectrometry ² | Consistent with Structure | Complies |
| Residue on Ignition (ROI) | Report Results | <0.05% |
| Karl Fisher (KF) | Report Results | 0.05% |
| Residual Solvents (ROS) | Report Results | 0.11% |
| Total Impurity by HPLC | Report Results | <0.05% |
| Purity Factor ³ | Report Results | 99.8% |

¹ See Figure 1

² See Figure 2

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

Storage Conditions: Store under controlled room temperature conditions.
This material is not intended for sale for human consumption.

Prepared By: _____

Department Approval: _____

Quality Assurance: _____

Figure 1: Oxycodone Base (NQS1111) FT-IR Spectrum in ATR

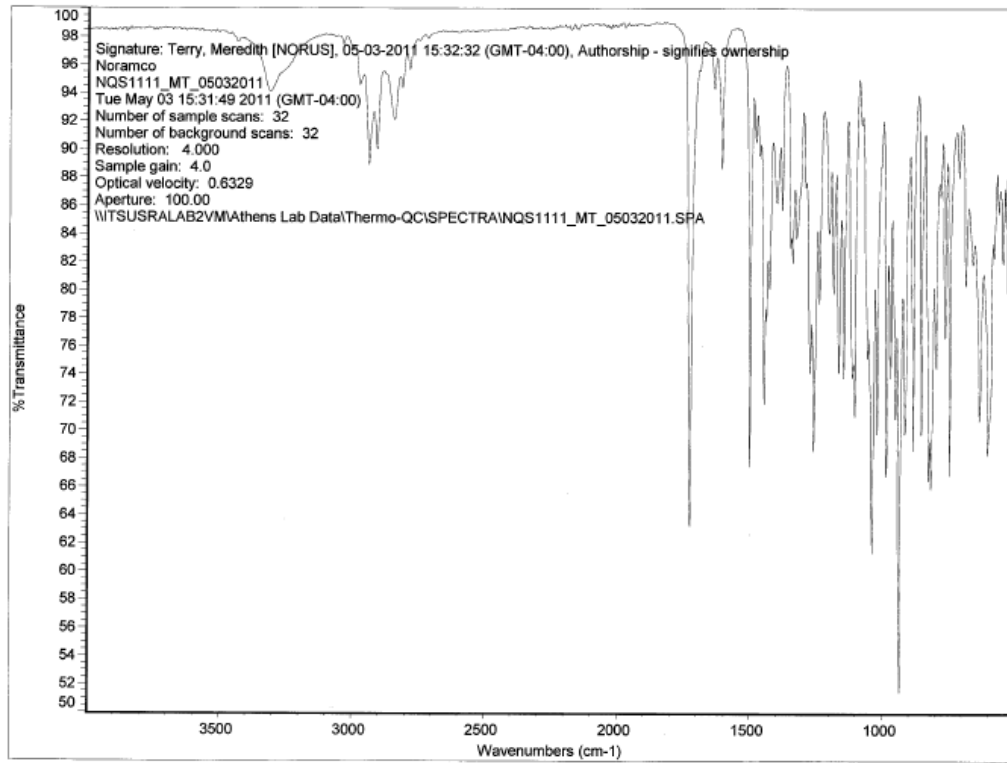


Figure 2: Oxycodone Base (NQS1111) MS Spectrum

