



A Woman-Owned, ISO 170125 Laboratory

Antibiotics and Pesticides Report – Sourwood 2022

Client: Killerbee Honey

Date: October 20, 2022

The antibiotic and pesticides groups requested for testing were quantified against gravimetric standards.

Validation:

Linearity: each compound was different from a near perfect $R^2=1$ to a low of 0.985 across the entire range of concentrations used (0 to 500 ppb).

Limit of quantitation: LOD and LOQ for each compound was calculated using the blank and low sample based on limits listed below.

Results are shown below:

Antibiotics

Analysis	Result	Unit	LIMIT	Method
Tetracyclines (total)	<LOQ	µg/kg	30 µg/kg	LC/MS/MS (QQQ)
Sulfonamides (total)	<LOQ	µg/kg	5 µg/kg	LC/MS/MS (QQQ)
Trimethoprim	<LOQ	µg/kg	5 µg/kg	LC/MS/MS (QQQ)
Tylosin	<LOQ	µg/kg	60 µg/kg	LC/MS/MS (QQQ)
Quinolones (total)	<LOQ	µg/kg	2 µg/kg	LC/MS/MS (QQQ)
Chloramphenicol	<LOQ	µg/kg	0.3 µg/kg	LC/MS/MS (QQQ)
Streptomycin	<LOQ	µg/kg	10 µg/kg	LC/MS/MS (QQQ)

Nitrofuranes metabolites

Analysis	Result	Unit	LIMIT	Method
AOZ	<LOQ	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)
AMOZ	<LOQ	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)
AHD	<LOQ	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)
SEM	<LOQ	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)

Other residues

Analysis	Result	Unit	LIMIT	Method
Coumaphos	<LOQ	µg/kg	40 µg/kg	LC/MS/MS (QQQ)
Fluvalinate	<LOQ	µg/kg	20 µg/kg	LC/MS/MS (QQQ)
Amitraz (total)	<LOQ	µg/kg	40 µg/kg	LC/MS/MS (QQQ)

All values are given in ppb (parts per billion).