SWEETWATER SCIENCE LABS

QUALITY TESTING AT AFFORDABLE PRICES

A Woman-Owned, ISO 170125 Laboratory

Antibiotics and Pesticides Report – Wildflower 2020

Client: Killerbee Honey Date: August 28, 2020

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)	0.68	µg/kg	30 µg/kg	LC/MS/MS (QQQ)
Sulfonamides (total)	<loq< td=""><td>µg/kg</td><td>5 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	5 µg/kg	LC/MS/MS (QQQ)
Trimethoprim	<loq< td=""><td>µg/kg</td><td>5 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	5 µg/kg	LC/MS/MS (QQQ)
Tylosin	<loq< td=""><td>µg/kg</td><td>60 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	60 µg/kg	LC/MS/MS (QQQ)
Quinolones (total)	<loq< td=""><td>µg/kg</td><td>2 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	2 µg/kg	LC/MS/MS (QQQ)
Chloramphenicol	<loq< td=""><td>µg/kg</td><td>0.3 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	0.3 µg/kg	LC/MS/MS (QQQ)
Streptomycin	<loq< td=""><td>µg/kg</td><td>10 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	10 µg/kg	LC/MS/MS (QQQ)

Nitrofuranes metabolites

Analysis	Result	Unit	LIMIT	Method
AOZ	<loq< td=""><td>µg/kg</td><td>0.5 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)
AMOZ	<loq< td=""><td>µg/kg</td><td>0.5 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)
AHD	<loq< td=""><td>µg/kg</td><td>0.5 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)
SEM	<loq< td=""><td>µg/kg</td><td>0.5 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	0.5 µg/kg	LC/MS/MS (QQQ)

Other residues

Analysis	Result	Unit	LIMIT	Method
Coumaphos	<loq< td=""><td>µg/kg</td><td>40 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	40 µg/kg	LC/MS/MS (QQQ)
Fluvalinate	<loq< td=""><td>µg/kg</td><td>20 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	20 µg/kg	LC/MS/MS (QQQ)
Amitraz (total)	<loq< td=""><td>µg/kg</td><td>40 µg/kg</td><td>LC/MS/MS (QQQ)</td></loq<>	µg/kg	40 µg/kg	LC/MS/MS (QQQ)

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