



## National Agricultural Genotyping Center

1616 Albrecht Blvd N Fargo, ND 58102

TEL: (701) 239-1451

[www.genotypingcenter.com](http://www.genotypingcenter.com)



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**To:** Saint Louis Beekeepers SSA  
765 Gravois Rd  
Fenton, MO 63026

**Attn:** Jane Sueme

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### REPORT ON THE EXAMINATION OF PHYSICAL SAMPLES

**Testing Request:** Honey Bee Quantitative

**Laboratory Case #:** 23-0285

**Report Date:** April 17<sup>th</sup>, 2023

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#### Description of Submitted Samples:

| <u>Item</u> | <u>Description</u>                           |
|-------------|--|
| 1           | One (1) glass jar labeled P containing bees  |
| 2           | One (1) glass jar labeled Q containing bees  |
| 3           | One (1) glass jar labeled L containing bees  |
| 4           | One (1) glass jar labeled L2 containing bees |
| 5           | One (1) glass jar labeled 13 containing bees |
| 6           | One (1) glass jar labeled 20 containing bees |
| 7           | One (1) glass jar labeled 82 containing bees |
| 8           | One (1) glass jar labeled K2 containing bees |

#### Results/Interpretations/Opinions:

The †Honey Bee Quantitative Pathogen Panel was performed on samples, as received, from Items 1 through 8. The results are reported in †total target copies/sample and can be viewed on page 2 of this report.

#### Disposition of Samples:

Items 1 through 8 will be retained and stored by the laboratory for thirty days before final disposition according to NAGC policy.

#### Report Disposition:

Jane Sueme  
Saint Louis Beekeepers SSA



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| Item | ABPV | AFB | BQCV         | CBPV | Cme | DWV | EFB | IABPV | KBV | Lpa          | LSV1        | LSV2       | <i>N. apis</i> | <i>N. ceranae</i> | SBPV | SBV          | Trop | VDV1       |
|------|------|-----|--------------|------|-----|-----|-----|-------|-----|--------------|-------------|------------|----------------|-------------------|------|--------------|------|------------|
| 1    | -    | -   | 552 Thousand | -    | -   | -   | -   | -     | -   | -            | 544 Million | 20 Million | -              | 113 Million       | -    | 413 Thousand | -    | 2 Billion  |
| 2    | -    | -   | 652 Thousand | -    | -   | -   | -   | -     | -   | -            | -           | 12 Million | -              | 32 Million        | -    | 694 Thousand | -    | 4 Million  |
| 3    | -    | -   | 20 Million   | -    | -   | -   | -   | -     | -   | 96 Thousand  | 18 Million  | -          | -              | 268 Million       | -    | 377 Thousand | -    | 2 Billion  |
| 4    | -    | -   | 114 Thousand | -    | -   | -   | -   | -     | -   | 717 Thousand | -           | -          | -              | 59 Million        | -    | 1 Million    | -    | 24 Million |
| 5    | -    | -   | 743 Thousand | -    | -   | -   | -   | -     | -   | -            | -           | -          | -              | 77 Million        | -    | 502 Thousand | -    | 4 Million  |
| 6    | -    | -   | 579 Thousand | -    | -   | -   | -   | -     | -   | -            | 25 Million  | -          | -              | 21 Million        | -    | 2 Million    | -    | 30 Million |
| 7    | -    | -   | 125 Thousand | -    | -   | -   | -   | -     | -   | -            | 4 Million   | -          | -              | 32 Million        | -    | 101 Thousand | -    | 45 Million |
| 8    | -    | -   | 203 Thousand | -    | -   | -   | -   | -     | -   | 2 Million    | 3 Billion   | -          | -              | 142 Million       | -    | 2 Million    | -    | QNS        |

ABPV: Acute Bee Paralysis Virus  
 CBPV: Chronic Bee Paralysis Virus  
 EFB: European Foulbrood  
 Lpa: *Lotmaria passim*  
*N. apis*: *Nosema apis*  
 SBV: Sacbrood Virus

AFB: American Foulbrood  
 Cme: *Crithidia mellificae*  
 IABPV: Israeli Acute Bee Paralysis Virus  
 LSV1: Lake Sinai Virus 1  
*N. ceranae*: *Nosema ceranae*  
 Trop: *Tropilaelaps* spp.

BQCV: Black Queen Cell Virus  
 DWV-A: Deformed Wing Virus A  
 KBV: Kashmir Bee Virus  
 LSV2: Lake Sinai Virus 2  
 SBPV: Slow Bee Paralysis Virus  
 VDV1: Varroa Destructor Virus 1 (Deformed Wing Virus B)

†The reported pathogen quantities for a sample are an estimate of the true quantity. It should be noted that qPCR will amplify both actively growing organisms, spores, and organisms that have died or are dormant, but their genetic material is still present in the sample and therefore pathogen quantities are often slightly higher than expected for a true infection.

NOTE: For more information regarding estimated pathogen quantities and to compare your results to others, please visit <https://genotypingcenter.com/services/bees/quantities>

- denotes a “not detected” result for the pathogen tested.

QNS stands for Quantity Not Sufficient. This notation indicates the pathogen was detected, but at levels too low to accurately quantitate.

NT specifies the pathogen was not tested, per request.



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I hereby certify that the above report is true and accurate and represents my opinions and interpretations.

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Missy Berry  
Research Analyst

This report shall not be duplicated or distributed, unless in full.