



# CUMBERLAND VALLEY ANALYTICAL SERVICES

Laboratory services for agriculture ... from the field to the feed bunk.

Farm: **WEAVER FALLS DAIRY**  
Desc: **WHEAT SILAGE**  
Submitter: **JONES,JOHN**  
Account: **FOUR STATE FEEDS**

Copies to:

Lab ID: **21963 081**  
Sampled: **05/02/2017**  
Arrived: **05/04/2017**  
Completed: **05/05/2017**  
Reported: **05/05/2017**

## Fermentation Analysis Results

| Analytical Results | DM Basis | Units       | Observed Range |
|--------------------|----------|-------------|----------------|
| Dry Matter         | 38.4     |             |                |
| pH                 | 3.83     |             | 4.2 - 5.3      |
| Ammonia            | 0.93     | %DM         | 3.4 - 12.0     |
|                    | 8.46     | %CP         |                |
| Total VFA          | 6.7      | %DM         | 5.7 - 9.6      |
| Lactic Acid        | 85.3     | % Total VFA | 50.0 - 88.5    |

| Lactic Acid and Volatile Fatty Acids |      |     |           |
|--------------------------------------|------|-----|-----------|
| Lactic Acid                          | 5.70 | %DM | 3.7 - 6.8 |
| Acetic Acid                          | 0.98 | %DM | 1.0 - 2.7 |
| Propionic Acid                       | ND   | %DM | 0.0 - 0.2 |
| Butyric Acid                         | ND   | %DM | 0.2 - 0.8 |
| Iso-butyric Acid                     | ND   | %DM | 0.0 - 0.2 |

| Alcohols, Acetates, and Lactates |      |     |             |
|----------------------------------|------|-----|-------------|
| 1, 2 Propanediol                 | 0.09 | %DM | 0.1 - 1.2   |
| 1-Propanol                       | ND   | %DM | -           |
| Methanol                         | 0.02 | %DM | 0.01 - 0.03 |
| Ethanol                          | 0.69 | %DM | 0.01 - 0.03 |
| 2-Butanol                        | ND   | %DM | -           |
| Methyl Acetate                   | ND   | %DM | 0 - 0.3     |
| Ethyl Acetate                    | 0.01 | %DM | 0 - 1.85    |
| Propyl Acetate                   | ND   | %DM | -           |
| Ethyl Lactate                    | ND   | %DM | 0 - 0.04    |
| Propyl Lactate                   | ND   | %DM | -           |

ND = non detect. Observed ranges are average +/- 1 SD based on the dry matter category of the silage; see [www.foragelab.com](http://www.foragelab.com) for more information.



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