June 2014

John Deere Constituent Sensing Alfalfa

John Deere Constituent Sensing Alfalfa are calibration files which need to be uploaded to the Sensor and then activated using an activation code generated by Stellar Support.

John Deere Constituent Sensing Alfalfa includes the following constituents for both Fresh and Ensiled material: Acid Detergent Fiber (ADF), Neutral Detergent Fiber (NDF), Sugar, Crude Protein and Moisture.

John Deere Constituent Sensing Alfalfa, like Corn Constituent Sensing, there is the possibility to select between two different moisture calibrations.

Moisture Calibration #1 – existing VDLUFA Moisture Calibration coming programmed on the sensor from the factory.

Moisture Calibration #2 – new Dairyland Inc. Moisture Calibration included in the John Deere Constituent Sensing Alfalfa bundle that includes moistures as well as other ingredient calibrations.

The two different Moisture Calibrations may not match. Again, similar to John Deere Constituent Sensing Corn. The reason for the differences in the 2 values are as follows:

- 2 different data sets "behind" the two different calibrations as the calibrations are coming from different suppliers.

- samples (different variety's included in each of the data sets)
- different climate conditions (growing conditions) represented in the data set

NOTE: This is strictly describing the potential differences of the 2 different moisture calibrations. Normal "bias" may occur in Harvest Lab operation, as mentioned above.

Updating Sensor Software and HMS

To enable correct display of data, the sensor needs to be updated to software version 45 or higher and the HMS on the SPFH needs to be updated to version 3.42A. It is paramount to complete these updates before using Constituent Sensing Alfalfa. How to perform this update is described in the release notes for the V45 or higher software.

Uploading John Deere Constituent Sensing Alfalfa

Follow the steps listed in Stellar Support for obtaining the calibration file and activation code for John Deere Constituent Sensing Alfalfa. Once the calibration file in zip format has been downloaded to your PC and the activation code has also been saved somewhere on your computer, proceed as follows:

Note: Do not unzip the calibration file when updating the sensor.

- 1. Turn the ignition switch of the machine to the OFF position.
- 2. Disconnect the plug from the HarvestLab unit and attach the connection box and then again the plug from the machine. If used in stationary mode ignore this step.
- 3. Attach Ethernet cable to PC and connection box and set up IP address as described in stationary install instructions or the HarvestLab TM.
- 4. Initiate calibration upload under the Calibration Administration tab in the WebUI.
- 5. Select the desired file from within your saved location in your PC and click add.
- 6. Almost immediately the new calibrations will be uploaded and they will then appear as inactive under the status column.
- 7. Now the previously saved activation code, generated by Stellar Support, needs to be entered below the list of current calibrations on the sensor.
- 8. A successful activation will be indicated by an 'Activation was successful' message from the webpage.
- 9. If used on SPFH, remove connection box and remount on spout.

Now the sensor is ready for use in either Stationary mode or SPFH use.