

GREENWOOD DAIRY – DATABASE NOTES

Table 1 Database Notes

Data Collection	Data Logger: Data Collection Interval: Collection Method:	Obvius Aquisuite A8812 1 – Minute Obvius Upload Manager to CDH servers
Site Information	DER Unit (make & model): Nameplate Capacity: Heat Recovery Medium: Heat Recovery Uses: Excess Heat:	Guascor MGG-500 Engine / Stamford HJM636J 480VAC Generator 406 kW (de-rated from 484 kW) Hot Water Digester heating, and space heating Rejected to atmosphere by dump radiator
DER Electricity Generated (WG)	Engineering Units: Energy Measurement (net/gross): Measurement Type:	kWh Gross Accumulated kWh/int from pulse output, from Wattnode power meter.
Biogas to Generator (FGE)	Engineering Units: Measurement type:	cf Calculated from cfm output from Sage gas meter.
Biogas to Flare (FGF)	Engineering Units: Measurement type:	cf Calculated from pulse output from RCM panel (repeated signal from Sage meter).

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Table 2 Event Timeline

Date	Event
February 18, 2014	CDH on site to verify power and gas readings and work out IT issues. Data collection begins.
March 9, 2020	Relational checks added.

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Range Checks

Table 3 Range Checks

Data Point	Units	Database Lower Range	Database Upper Range	Notes
DER Electricity Generated	kWh/hour	0	500	
Biogas to Generator	cfh	0	12,000	
Biogas to Flare	cfh	0	12,000	
Ambient Temperature	°F	-20	130	NOAA Airport Code - KSYR

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Relational Checks

Table 4 Relational Checks

Evaluated Point(s)	Criteria	Result
Electricity Generated Fuel Consumed	Fuel Consumed > 0 and Electricity Generated Invalid Electricity Generated > 0 and Fuel Consumed Invalid	Fuel Consumed = invalid Electricity Generated = invalid