

Patterson Farms Addendum

Site Events

Date	Event
3/10/2006	Data begins for Existing engine
7/7/2009	Data begins for New engine
7/9/2009	Multipliers Changed
7/30/2009	Phone Stick Switched

Hardware

Logger Chan	Chan Type	Data Point	Wire	Logger Mult	Notes
250-In1	Pulse	WG1		0.012 kWh/p	
250-In2	Pulse	WG2		1 kWh/p	
250-In3	Pulse	FGE1		10 cf/pulse	
250-In4	Pulse	FGE2		10 cf/pulse	
250-In5	Pulse	FGF2		10 cf/pulse	
250-In6	Pulse	FGF		1 cf/pulse	

Database Setup

<u>Chan Name</u>	<u>Device</u>	<u>column</u>
WG1 ,	mb-250 ,	0
WG2 ,	mb-250 ,	5
FGE1 ,	mb-250 ,	10
FGE2 ,	mb-250 ,	15
FGF2 ,	mb-250 ,	20
FGF ,	mb-250 ,	25

Sensor Verification

Power Meters

AquaSuite Readings

	Trial 1	Trial 2	Trial 3	Trial 4	Avg.
WG1 (kWh)	162.59	162.59	184.57	182.76	173.13
WG2 (kWh)	150	124	144	140	139.5

Meter Readings

	Trial 1	Trial 2	Trial 3	Trial 4	Avg.
WG1 (kWh)	172	175	172	169	172
WG2 (kWh)	150	149	149	152	150

% Difference

WG1	0.65%
WG2	7.53%

Biogas Flow Meters

AquaSuite Readings

	Trial 1	Trial 2	Trial 3	Trial 4	Avg.
FG1 (scf)	4186	4186	4200	4200	4193
FG2 (scf)	3272	3272	3280	3280	3276

Meter Readings

	Trial 1	Trial 2	Trial 3	Trial 4	Avg.
FG1 (scf)	4200	4260	4140	4200	4200
FG2 (scf)	3300	3300	3300	3240	3285

% Difference

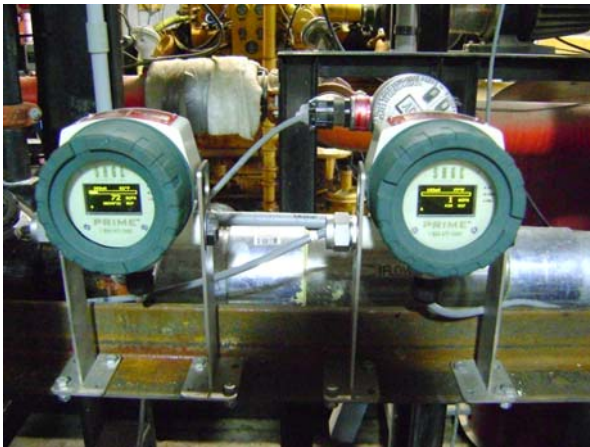
WG1	0.17%
WG2	0.27%



WattNode Power Transducer (WG1)



GenTec Power Transducer (WG2)



Sage Flow Meters – FGE1 (left) and FGE2 (right)



Obvius AcquiSuite data-logger and box.