FAIR OAKS DAIRY FARMS/PRAIRIE'S EDGE DAIRY FARMS, LLC

OUR LAND HISTORY

- Area has a long history of large cattle operations
- Original purchase was @9200 acres from Prudential
- Sold the owners on soil sampling/mapping/lime application
- Irrigation came to the area in a large way on this farm
- Highly Variable soils

DAIRY HISTORY

- Large parcel was identified due to size and location. I-65 very instrumental to future plans.
- Owned primarily by 3 families
- Construction began in ‘99
- First 4 dairies were finished in 18 months
- First digester was installed in ‘03
- Central Digester (II) was operational in ‘08

CENTRAL DIGESTER COMPONENTS

- Digestion
- Gas Upgrading/Generation
- Fiber Separation
- Nutrient Recovery

DIGESTION

- DVO 3 cell
- 280x300
- Heat before digester using waste heat from GUS and Generator

GUS/GENERATOR

- Greenlane Gas Upgrading system

Gas Upgrading Skid (G.U.S.)

GAS UPGRADING SKID

Fleet of 42 long-range CNG trucks—one of the largest CNG fleets in the US

Running 20,000+ miles a day on CNG delivering milk through the Midwest

On-farm anaerobic digester provides 1.5M DGE of gas a year to station.

GENERATOR

V-20 Jenbacher model 320 rated at 1060 KW

FIBER SEPARATION

- Fiber dewatered as the flow of manure travels to the Trident System
- Fiber used currently as bedding material for the dairy cows.
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TRIDENT NUTRIENT RECOVERY SYSTEMS

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- Step One
  - **Proper Fiber Removal-** Instrumental in performance of the System, must send to the DAF the correct size fiber to optimize float and nutrient extraction .

TRIDENT NUTRIENT RECOVERY SYSTEMS

- Step Two
  - Polymerization/DAF—The remaining liquid after fiber separation is sent to the DAF(dissolved air floatation) for nutrient extraction
  - Enroute to the DAF the liquid manure is polymerized, creating large durable flocs to remove the remaining fine particles.
  - Inside the DAF the floc is met with micronized air, the bubbles are measured in microns, and their larger surface area allows for maximum lift of the Phosphorous heavy floc

TRIDENT NUTRIENT RECOVERY SYSTEMS

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- Step Three
- The **key** to the Process
- MD Press

- Dewaters the Float from the DAF, creates a 22%-26% DM solid

TRIDENT NUTRIENT RECOVERY SYSTEMS

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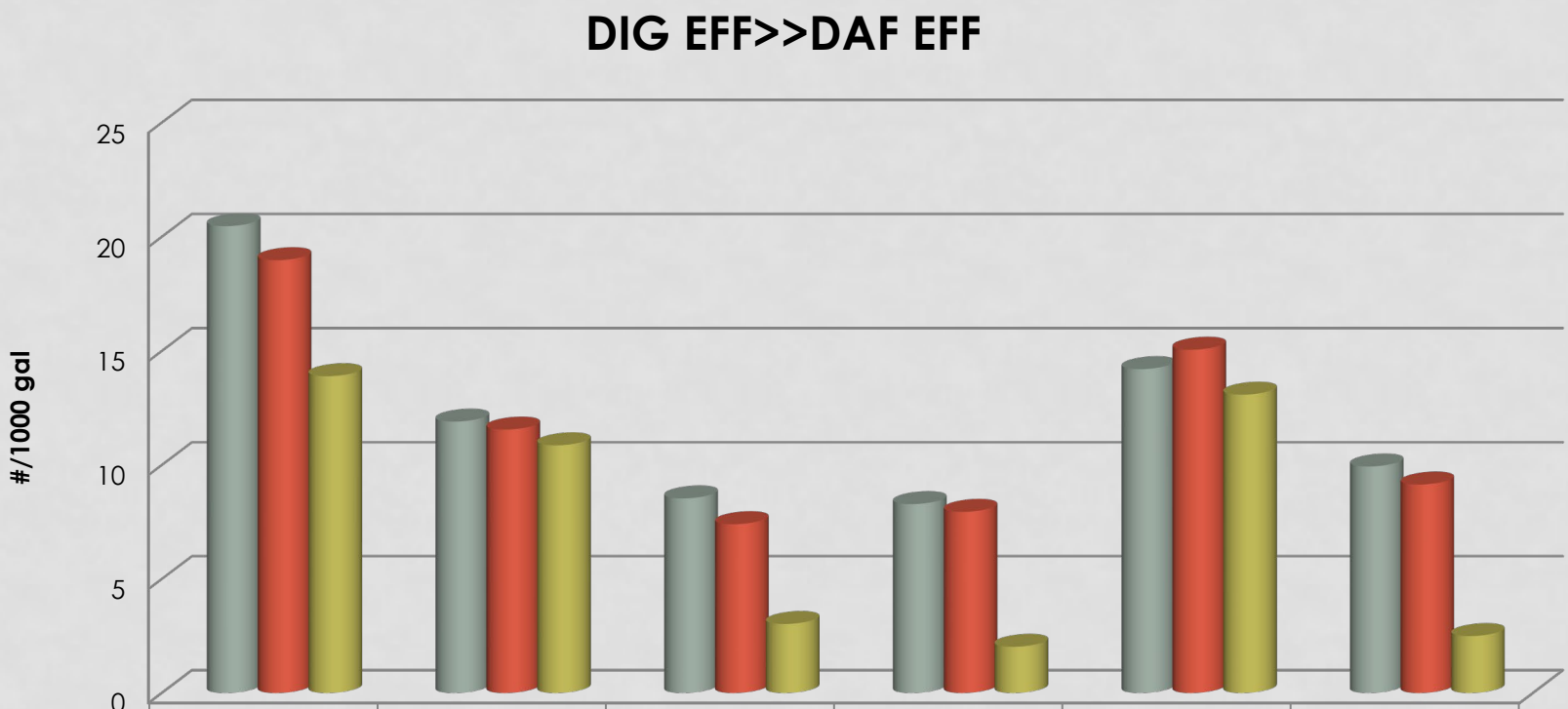


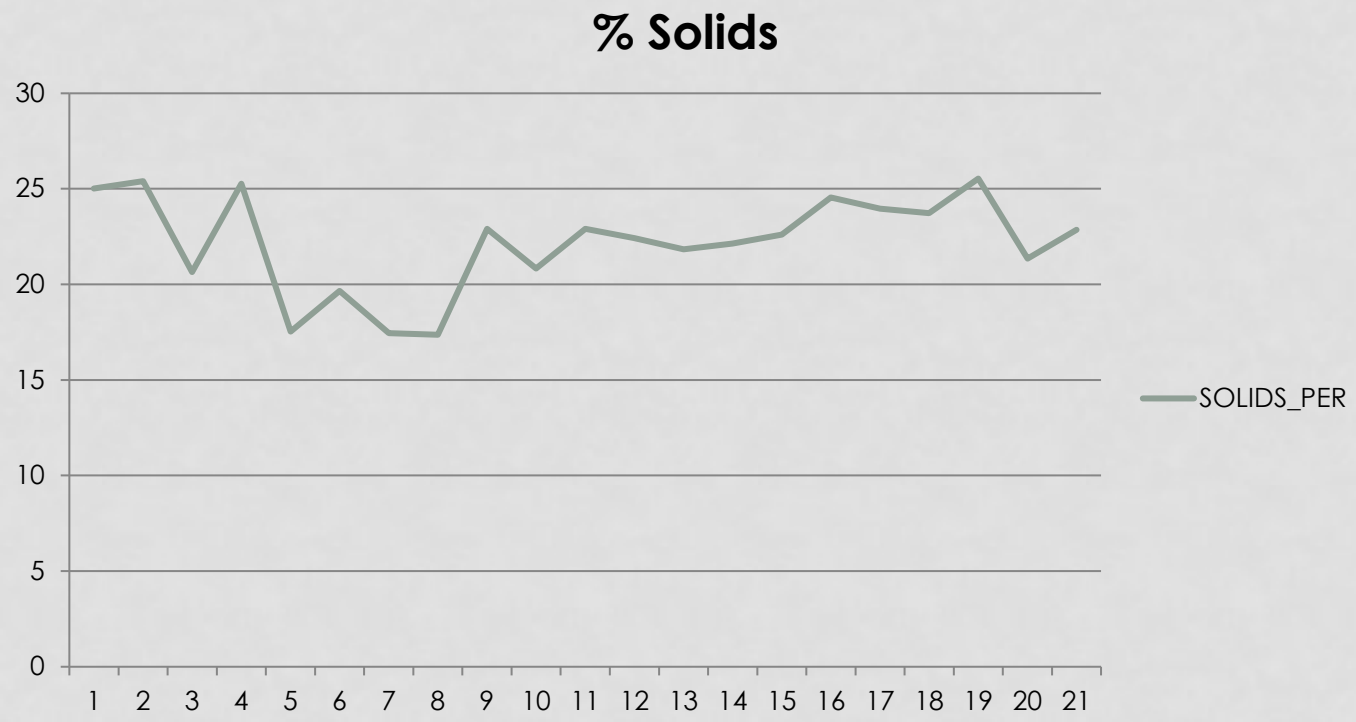
	TKN	NH4	ORG-N	P2O5	K20	CA
DIG EFF	20.47	11.91	8.54	8.29	14.21	9.94
DAF INF	18.98	11.56	7.41	7.95	15.06	9.15
DAF EFF	13.9	10.87	3.03	2.03	13.09	2.5

TRIDENT NUTRIENT RECOVERY SYSTEMS

	TS	TKN	P	K
DIGESTER EFFLUENT AVERAGE	4.10%	0.24%	0.05%	0.14%
DAF INFLUENT AVERAGE	2.63%	0.20%	0.04%	0.13%
DAF EFFLUENT AVERAGE	1.09%	0.15%	0.01%	0.12%
DIGESTER SOLIDS AVERAGE	23.39%	0.87%	0.35%	0.17%
DAF TO DIGESTER EFFLUENT REDUCTIOIN	73.30%	39.41%	81.00%	13.14%

TRIDENT NUTRIENT RECOVERY SYSTEMS

- Hi-P Solids



TRIDENT NUTRIENT RECOVERY SYSTEMS

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- System Benefits
  - Haul less water/increase efficiency of Application methods
  - Proper Nutrient Placement
  - More Uniform liquid application due to less solids going to your pivot, irrigation guns, drag line or tanker operations.
  - Less solids settling in storage structures
  - Another step in the process to monetize manure.