

**Borderview Farm – Biodiesel  
Standard Operating Procedures (SOP)**

- Oil of known, good, source. Filtered to 100 micron.
- Wear PPE & Check safety systems
- Titration (determining the recipe)
- Measure Lye and Alcohol based on recipe
- Power up
- 50 gal oil added
- Lye added
- Alcohol added
- “Start”
  - 6 hours acid reaction
  - 6 hours base reaction
  - 6 hours settle time
- Drain glycerin
- Connect dry wash column and storage tank
- Pump through dry wash (2 hours)
- Empty processor
- Drain lines, “safe” system & building
- Documentation of batch
  - o Date .....
  - o Feedstock seed type .....
  - o Feedstock seed harvest date / year..... / \_\_\_\_
  - o Feedstock seed press date/year..... / \_\_\_\_
  - o Any known issues with pressing, handling or storage?.....
  - o Filtration level of oil..... micron
  - o Water test value of oil..... ppm
  - o Titration value of oil .....
  - o Amount of alcohol added to reaction..... liters
  - o Amount of lye added to reaction..... kg
  - o Amount & concentration of sulfuric acid added to reaction..... liters
  - o Batch conversion observations.....
  - o Any known issues with batch (e.g. power loss, no conversion, etc.) .....
  - o pHlip test result on batch
    - o Top layer clarity & color .....
    - o Bottom layer clarity and color.....
    - o Interface mirror or not? .....
  - o Other notes .....

*Revision 1.0 – 8/4/2010*

*Changes since this revision:* \_\_\_\_\_  
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