

Heron Lake BioEnergy LLC (HLBE) for Corn Ethanol in Minnesota CA-GREET Model

The applicant has conducted its analysis of direct effects on carbon intensity for this pathway using CA-GREET, v.1.8b (Dec. 2009) (See http://www.arb.ca.gov/fuels/lcfs/ca_greet1.8b_dec09.xls). The standard inputs and parameters specified in CA-GREET remain unchanged except as noted in the input table below. The input table below specifies the spreadsheet location of the CA-GREET inputs and other parameters that were claimed as confidential business information or trade secret by the applicant, but it does not disclose the actual value of such inputs and parameters because they are claimed to be confidential business information or trade secret.

HLBE Input data table (Locations of cells containing Confidential Business Information are shown, but the actual values of such confidential information are not disclosed):

HERON LAKE BIOENERGY, LLC
 CALCULATIONS FOR CA-GREET MODEL INPUT
 ATTACHMENT E-1: TABLE OF CA-GREET MODEL INPUTS FOR HLBE PATHWAY

CONFIDENTIAL BUSINESS INFORMATION

| CA-GREET Model Tab | Cell | Default Pathway | HLBE Pathway Value **CONFIDENTIAL** | Units | Percentage Reduced/Improved | Description |
|--------------------|------|-----------------|--|---------|-----------------------------|--|
| Regional LT | C2 | U.S. Average | Midwest | n/a | n/a | Region for analysis using Midwest corn and Midwest power |
| Fuel_Prod_TS | L277 | 36,000 | ████ | btu/gal | ████ | Corn-based ethanol facility energy use |
| Fuel_Prod_TS | D277 | 2.72 | ██ | gal/bu | ██ | Ethanol yield |
| Inputs | C247 | 10.19% | ████ | % | ████ | Process energy for electricity |
| Inputs | C254 | 32,330 | ████ | btu/gal | ████ | Process fuel |
| Inputs | C258 | 1.08 | ██ | kwh/gal | ██ | Electricity used for ethanol production |