SECURITIES AND EXCHANGE COMMISSION

FORM 10-K

Annual report pursuant to section 13 and 15(d)

Filing Date: **2022-01-31** | Period of Report: **2021-10-31**
SEC Accession No. 0001558370-22-000635

(HTML Version on secdatabase.com)

FILER

Granite Falls Energy, LLC

CIK:**1181749**| IRS No.: **411997390** | State of Incorp.:**MN** | Fiscal Year End: **1031**
Type: **10-K** | Act: **34** | File No.: **000-51277** | Film No.: **22573656**
SIC: **2860** Industrial organic chemicals

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.**

For the fiscal year ended October 31, 2021

OR

☐ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.**

For the transition period from to .

COMMISSION FILE NUMBER 000-51277

GRANITE FALLS ENERGY, LLC

(Exact name of registrant as specified in its charter)

Minnesota	**41-1997390**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

15045 Highway 23 SE, Granite Falls, MN 56241-0216
(Address of principal executive offices)

(320) 564-3100
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: **None**

Securities registered pursuant to Section 12(g) of the Act: **Membership Units**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ? Yes ☒ No

Indicated by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ? Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ? No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ? No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large Accelerated Filer ?	Accelerated Filer ?

Non-Accelerated Filer ☒ Smaller Reporting Company ☒
Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ?

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). ☐ Yes ☒ No

The aggregate market value of the 20,059 membership units held by non-affiliates of the registrant (computed by reference to the most recent sale price of $1,350 per unit of membership units) was $27,079,650 as of April 30, 2021. The membership units are not listed on an exchange or otherwise publicly traded. Additionally, the membership units are subject to significant restrictions on transfer under the registrant's operating and member control agreement. The value of the membership units for this purpose has been based solely upon the initial offering price of the membership units. In determining this value, the registrant has assumed that all of its governors, chief executive officer, chief financial officer and beneficial owners of 5% or more of its outstanding membership units are affiliates, but this assumption shall not apply to or be conclusive for any other purpose.

As of January 31, 2022, there were 30,606 membership units outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant has incorporated by reference into Part III of this Annual Report on Form 10-K portions of its definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year covered by this Annual Report (October 31, 2021). This proxy statement is referred to in this report as the 2022 Proxy Statement.

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CAUTION REGARDING FORWARD LOOKING STATEMENTS

This annual report contains historical information, as well as forward-looking statements regarding our business, financial condition, results of operations, performance and prospects. All statements that are not historical or current facts are forward-looking statements and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks and relate to future events, our future financial performance, or our expected future operations and actions. In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “future,” “intend,” “could,” “hope,” “predict,” “target,” “potential,” or “continue” or the negative of these terms or other similar expressions. These forward-looking statements are only our predictions based on current information and involve numerous assumptions, risks and uncertainties, including, but not limited to the following:

- Fluctuations in the prices of grain, utilities and ethanol, which are affected by various factors including weather, production levels, supply, demand, and availability of production inputs;
- Changes in the availability and price of corn and natural gas;
- Changes in general economic conditions or the occurrence of certain events causing an economic impact in the agriculture, oil or automobile industries;
- Fluctuations in the price of crude oil and gasoline;
- Ethanol may trade at a premium to gasoline at times, causing a disincentive for discretionary blending of ethanol beyond the requirements of the federal Renewable Fuel Standard (“RFS”) and resulting in a negative impact on ethanol prices and demand;
- Changes in federal and/or state laws and environmental regulations including elimination, waiver or reduction of the RFS, may have an adverse effect on our business;
- Any impairment of the transportation, storage and blending infrastructure that prevents ethanol from reaching markets;
- Changes in fuel consumption due to decreased vehicle travel as a result of the COVID-19 or other factors.
- Challenges created by the COVID-19 pandemic, including increased production costs, market barriers, and decreased demand for fuel.
- Any effect on prices of distillers’ grains and ethanol resulting from actions in international markets;
- Changes in our business strategy, capital improvements or development plans;
- The effect of our risk mitigation strategies and hedging activities on our financial performance and cash flows;
- Alternative fuel additives may be developed that are superior to, or cheaper than ethanol;
- Changes or advances in plant production capacity or technical difficulties in operating our plants;
- Our ability to profitably operate our ethanol plants and maintain positive margins and generate free cash flow, which may impact our ability to meet current obligations, invest in our business, service our debt and satisfy the financial covenants contained in our credit agreement with our lender;
- Changes in interest rates or the lack of credit availability;
- Our ability to make distributions in light of financial covenants in our credit facility;
- Our ability to retain key employees and maintain labor relations;
- The supply of ethanol rail cars in the market has fluctuated in recent years and may affect our ability to obtain new tanker cars or negotiate new leases at a reasonable fee when our current leases expire;
- Any delays in shipping our products by rail and corresponding decreases in our sales or production as a result of shipping delay and ethanol storage constraints;
- Our units are subject to a number of transfer restrictions, no public market exists for our units, and we do not expect one to develop.

Our actual results or actions may differ materially from these forward-looking statements for many reasons, including the reasons listed above. We undertake no duty to update these forward-looking statements, even though our situation may change in the future. We cannot guarantee future results, levels of activity, performance or achievements. We caution you not to put undue reliance on any forward-looking statements, which speak only as of the date of this report. You should read this report and the documents that we reference in this report and have filed as exhibits, completely and with the understanding that our actual future results may be materially different from what we currently expect. We qualify all of our forward-looking statements with these cautionary statements. Unless otherwise stated, references in this report to particular years or quarters refer to our fiscal years ended October 31 and the associated quarters of those fiscal years.

INDUSTRY AND MARKET DATA

Much of the information in this report regarding the ethanol industry, including government regulation relevant to the industry, the market for our products and competition is from information published by the Renewable Fuels Association ("RFA"), a national trade association for the U.S. ethanol industry, as well as other publicly available information from governmental agencies or publications. Although we believe these sources are reliable, we have not independently verified the information.

AVAILABLE INFORMATION

Our principal executive offices are located at 15045 Highway 23 SE, Granite Falls, Minnesota 56241, and our telephone number is 320-564-3100. We make available free of charge on or through our Internet website, *www.granitefallsenergy.com*, all of our reports and all amendments to those reports as soon as reasonably practicable after such material is electronically filed with, or furnished to, the Securities and Exchange Commission (SEC). The Securities and Exchange Commission also maintains an Internet site (http://www.sec.gov) through which the public can access our reports. We will provide electronic or paper copies of these documents free of charge upon request.

PART I

When we use the terms "Granite Falls Energy" or "GFE" or similar words in this Annual Report on Form 10-K, unless the context otherwise requires, we are referring to Granite Falls Energy, LLC and our operations at our ethanol production facility located in Granite Falls, Minnesota. When we use the terms "Heron Lake BioEnergy", "Heron Lake", or "HLBE" or similar words, unless the context otherwise requires, we are referring to Heron Lake BioEnergy, LLC and its wholly owned subsidiary, HLBE Pipeline Company, LLC, through which, HLBE holds a 100% interest in Agrinatural Gas, LLC. When we use the terms the "Company," "we," "us," "our" or similar words in this Annual Report on Form 10-K, unless the context otherwise requires, we are referring to Granite Falls Energy, LLC and our consolidated wholly- and majority-owned subsidiaries.

ITEM 1. BUSINESS

Overview

Granite Falls Energy, LLC is a Minnesota limited liability company formed on December 29, 2000 for the purpose of constructing, owning and operating a fuel-grade ethanol plant located in Granite Falls, Minnesota.

Our business consists primarily of the production and sale of ethanol and its co-products (wet, modified wet and dried distillers' grains, corn oil and corn syrup) locally, and throughout the continental U.S. However, as markets allow, our products can be, and have been, sold in the export markets. Our revenues from operations come from three primary sources: sales of fuel ethanol, sales of distillers' grains and sales of corn oil at GFE's ethanol plant and HLBE's ethanol plant.

Heron Lake BioEnergy, LLC ("Heron Lake BioEnergy" or "HLBE"), which owns an ethanol plant located near Heron Lake, Minnesota, is a wholly owned subsidiary of GFE. In July 2013, we acquired controlling interest in HLBE through our wholly owned subsidiary Project Viking, L.L.C ("Project Viking"). Prior to September 29, 2021, GFE held a 50.7% ownership interest in HLBE. On September 29, 2021, we completed a merger in which we acquired the remaining non-controlling interest of HLBE for $14,000,000. As a result of the merger, GFE and Project Viking own 100% of HLBE's issued and outstanding membership units. The merger is further described in the section captioned "***Merger with HLBE***."

Appointment of Jeffrey Oestmann as CEO

We appointed Jeffrey Oestmann, to serve as CEO, effective May 26, 2021. Oestmann has worked in the agriculture and bio-fuel sectors for approximately 27 years, most recently serving as head of bio-fuel operations for Syngenta, an agricultural science and technology company. Oestmann replaced Steve Christensen, who resigned as CEO of the Company effective May 26, 2021, pursuant to a separation agreement dated February 17, 2021. Oestmann serves as the CEO of both GFE and its wholly owned subsidiary HLBE. Additional information regarding Oestmann's employment agreement and Christensen's separation agreement are available in GFE's Form 8-K filed with the SEC May 25, 2021, which is incorporated herein by reference.

Merger with HLBE

On September 29, 2021, we completed a transaction, in which GFE acquired the remaining non-controlling interest of HLBE. The structure of the transaction was a merger, in which Granite Heron Merger Sub, LLC, a wholly owned subsidiary of GFE ("Merger Sub"), merged with and into HLBE, with HLBE emerging from the transaction as the surviving entity and as a wholly owned subsidiary of GFE (the "Merger"). Prior to the Merger, GFE directly and indirectly owned approximately 50.7% of HLBE's issued and outstanding units. The balance of HLBE's units were owned by approximately 1,200 investors. GFE paid $14 million for the non-controlling interest, or approximately $0.36405 per unit. Additional information regarding the Merger is available in HLBE's Definitive Proxy Statement filed with the SEC August 19, 2021, which is incorporated herein by reference.

To finance the Merger and consolidate certain existing debts, GFE on September 27, 2021, finalized loan documents for an amended credit facility (the "2021 Credit Facility") with AgCountry Farm Credit Services, PCA, AgCountry Farm Credit Services, FLCA ("AgCountry"). CoBank FCB ("CoBank") serves as AgCountry's administrative agent for the 2021 Credit Facility. The loan documents include an Amended and Restated Credit Agreement (the "Credit Agreement"), which amends and replaces the Company's credit agreement with AgCountry dated September 27, 2018. The 2021 Credit Facility includes: the credit agreement, a $20 million revolving credit promissory note, a $500,000 amended and restated letter of credit promissory note, a $20 million amended and restated revolving term promissory note, a $25 million single advance term promissory note, and a $2.4 million single advance term promissory note. Additional information regarding the 2021 Credit Facility is available in GFE's Form 8-K filed with the SEC October 1, 2021, which is incorporated herein by reference, and in the section below titled "**PART II - ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS - Credit Arrangements**."

The purpose of the Merger was to improve the financial stability of HLBE by allowing GFE to acquire HLBE's non-controlling interest. In fiscal year 2020 and the first quarter of 2021, HLBE had experienced significant net losses due to several factors, including elevated corn prices, the breakdown of its ethanol plant boiler, and reduced demand for ethanol due to the COVID-19 pandemic. Due to these net losses, HLBE violated certain loan covenants related to working capital and net worth ratio, for which the HLBE obtained waivers from its lender. HLBE was in violation of such loan covenants as of October 31, 2020, and January 31, 2021. As a result of these loan covenant violations, there was substantial doubt about HLBE's ability to continue operating as a going concern. Additional loan covenant violations would have allowed HLBE's lender to accelerate certain loans and designate a substantial portion of HLBE's debt due and payable. If HLBE's loans became due and payable, there was a substantial risk HLBE would have lacked the cash on hand, borrowing capacity, and cash flows to repay the debt, and if that had occurred, HLBE could have been forced to cease operations or seek bankruptcy protection. GFE believes the Merger reduces the risk of future loan covenant violations because GFE is expected to have sufficient working capital and net worth to remain in compliance with its loan covenants.

On September 23, 2021, HLBE held a special meeting of its members, at which a majority in interest of HLBE's members and a majority in interest of the non-controlling interest voted to authorize the Merger. The Merger was effective as of September 29, 2021, upon the filing of Articles of Merger with the Minnesota Secretary of State. HLBE is the surviving entity of the Merger. Upon completion of the Merger, 100% of the membership interests in Merger Sub were converted into and became 100% of the membership interest in HLBE, as the surviving entity in the Merger. As a result of the Merger, HLBE became a wholly owned subsidiary of GFE. GFE and Project Viking together own 100% of the HLBE's issued and outstanding units.

Following the Merger, HLBE deregistered from the SEC and is no longer required to file annual, quarterly, or periodic reports with the SEC. By de-registering with the SEC, HLBE is expected to save approximately $300,000 in filing fees and regulatory costs on an annual basis. Upon completion of the

Merger, each issued and outstanding unit of HLBE's non-controlling interest was canceled and converted into the right to receive $0.36405 per unit. GFE has transferred $14 million to an exchange agent to hold in trust to be distributed pro-rata to the non-controlling interest unitholders. The non-controlling interest unitholders no longer own any units of HLBE or any rights as a member of the HLBE.

As part of the Merger, GFE and HLBE agreed to release, acquit, and discharge each other and all related parties from all claims, including, all liabilities, obligations, claims, litigation, actions, causes of action, suits, proceedings, executions, judgments, demands, damages, losses, duties, debts, dues, accounts, fees, costs, expenses and penalties, and agree not to initiate, maintain, prosecute or continue to maintain or prosecute any action, suit or proceeding, or seek to enforce any right or claim against the other or its related parties.

We expect minimal changes, if any, to the operations of GFE and HLBE as a result of the Merger, as both companies are expected to maintain their same operations under the same management. HLBE, which had been managed by GFE's executive officers pursuant to the Management Services Agreement, will continue to be managed by GFE's executive officers. As a result of the Merger, GFE's Board of Governors has assumed managerial and oversight control over HLBE. On January 3, 2022, HLBE adopted an operating agreement that repealed, replaced, and superseded HLBE's existing member control agreement. The HLBE operating agreement eliminates the HLBE board of governors and establishes GFE as the sole manager of HLBE.

HLBE Boiler Replacement

In July 2020, HLBE experienced significant operational issues with its boiler, which negatively impacted production. HLBE operated with temporary boilers from August 2020 through part of January 2021. HLBE determined that the purchase and installation of a new boiler would be more economical and efficient than attempted repairs to the failing boiler. On September 2, 2020, HLBE received notice of approval of the new boiler from the Minnesota Pollution Control Agency. As a result, HLBE abandoned the failing boiler at that time. The Company recorded the loss on disposal as a component of operating expenses during the fourth fiscal quarter of the fiscal year ended October 31, 2020 of approximately $1.8 million. The new boiler was placed in service in January 2021 at cost of approximately $5.2 million. The Company believes that the new boiler has improved HLBE's operating efficiency.

COVID-19 Pandemic

After experiencing volatile and adverse conditions for much of the fiscal year 2020 due to the COVID-19 pandemic and its ramifications, the Company and the ethanol industry as a whole benefited from more favorable market conditions during our 2021 fiscal year.

The ethanol industry, including our Company, experienced significant adverse conditions throughout 2020 as a result of industry-wide record low ethanol prices due to reduced demand and high industry inventory levels caused, in large part, by the COVID-19 pandemic. Due to the market risks and uncertainties related to the COVID-19 pandemic, both GFE and HLBE idled their plants in the spring of 2020. Additionally, market conditions, coupled with the idling of our plants, resulted in lower production, negative operating margins, significantly lower cash flow from operations and substantial net losses in the fiscal year 2020. The ramifications of these net losses prompted GFE and HLBE to engage in the Merger.

Market conditions improved in fiscal year 2021, as vehicle travel and demand for transportation fuel, including the ethanol we produce, rebounded. The prices we received for a gallon of ethanol increased significantly in 2021, as compared to the prior year. As a result, we experienced greater production, positive operating margins, increased cash flow from operations, and net income for the fiscal year 2021, as compared to the previous year.

Our Facilities

Our business consists primarily of producing ethanol and its related co-products, including wet, modified and dried distillers' grains, as well as corn oil. Our ethanol production operations are carried out at our ethanol plant located in Granite Falls, Minnesota and at the ethanol plant operated by HLBE located near Heron Lake, Minnesota.

The GFE plant has an annual nameplate production capacity of approximately 63 million gallons of denatured ethanol, but is currently permitted to produce up to 70 million gallons of undenatured ethanol on a twelve-month rolling sum basis. The HLBE plant has an approximate annual nameplate production capacity of approximately 65 million gallons of denatured ethanol, but is currently permitted to produce up to approximately 72.3 million gallons of undenatured fuel-grade ethanol on a twelve-month rolling sum basis. After experiencing major issues with the HLBE plant's boiler, HLBE purchased and installed a new boiler, which was placed into service in January 2021 at cost of approximately $5.2 million. We intend to continue working toward increasing production at both the GFE and HLBE plants to take advantage of the additional production allowed pursuant to our permits as long as we believe it is profitable to do so.

HLBE is also the sole owner Agrinatural Gas, LLC ("Agrinatural"), through its wholly owned subsidiary, HLBE Pipeline Company, LLC. Agrinatural owns approximately 190 miles of natural gas pipeline and provides natural gas to HLBE's ethanol plant and other commercial, agricultural and residential customers through a connection with the natural gas pipeline facilities of Northern Border Pipeline Company. Agrinatural's revenues are generated through natural gas distribution fees and sales. HLBE is its largest customer by volume and revenue.

Operating Segments

Accounting Standards Codification ("ASC") 280, "Segment Reporting," establishes the standards for reporting information about segments in financial statements. Operating segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. Therefore, in applying the criteria set forth in ASC 280, the Company determined that based on the nature of the products and production process and the expected financial results, the Company's operations at GFE's ethanol plant and HLBE's plant, including the production and sale of ethanol and its co-products, are aggregated into one reporting segment.

Additionally, we also realize relatively immaterial revenue from natural gas pipeline operations at Agrinatural, HLBE's wholly owned subsidiary. Before and after accounting for intercompany eliminations, these revenues from Agrinatural represent less than 1% of our consolidated gross revenues and have little to no impact on the overall performance of the Company. Therefore, our management does not separately review Agrinatural's revenues, cost of sales or other operating performance information. Rather, management reviews Agrinatural's natural gas pipeline financial data on a consolidated basis with our ethanol production operating segment. Additionally, management believes that the presentation of separate operating performance information for Agrinatural's natural gas pipeline operations would not provide meaningful information to a reader of the Company's financial statements and would not achieve the basic principles and objectives of ASC 280.

We currently do not have or anticipate we will have any other lines of business or other significant sources of revenue other than the sale of ethanol and its co-products, which include distillers' grains and non-edible corn oil.

Financial Information

Please refer to "**ITEM 7 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**" for information about our revenue, profit and loss measurements, and total assets and liabilities and "**ITEM 8 - FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**" for our consolidated financial statements and supplementary data.

Principal Products

The principal products from ethanol production at GFE's plant and HLBE's plant, and from which we derive nearly all our revenue, are fuel-grade ethanol, distillers' grains, and non-edible corn oil. In addition, HLBE's plant also has miscellaneous other revenue generated by sales of corn syrup, a by-product of the ethanol production process, and revenues from Agrinatural's natural gas pipeline operations. We did not introduce any new products or services as part of our ethanol production segment during our fiscal year ended October 31, 2021.

The table below shows the approximate percentage of our total revenue which is attributable to each of our principal products for each of the last two fiscal years.

	2021	2020
Ethanol	77.8 %	76.8 %
Distillers' Grains	15.9 %	17.9 %
Corn Oil	5.5 %	4.0 %

Misc. Other Revenue*	0.8 %	1.3 %

* Includes incidental sales of corn syrup at HLBE's plant and revenues from natural gas pipeline operations at Agrinatural, net of intercompany eliminations for distribution fees paid by HLBE to Agrinatural for natural gas transportation services.

Ethanol

Ethanol is a type of alcohol produced in the U.S. principally from corn. Ethanol is ethyl alcohol, a fuel component made primarily from corn in the U.S. but can also be produced from various other grains. Ethanol is primarily used as:

- an octane enhancer in fuels;
- an oxygenated fuel additive that can reduce ozone and carbon monoxide vehicle emissions;
- a non-petroleum-based gasoline substitute; and
- as a renewable fuel to displace consumption of imported oil.

Ethanol produced in the U.S. is primarily used for blending with unleaded gasoline and other fuel products as an octane enhancer or fuel additive. Ethanol is most commonly sold as E10 (10% ethanol and 90% gasoline), which is the blend of ethanol approved by the U.S. Environmental Protection Agency ("EPA") for use in all American automobiles. Increasingly, ethanol is also available as E85, a higher percentage ethanol blend (85% ethanol and 15% gasoline) approved by the EPA for use in flexible fuel vehicles. Additionally, ethanol is available as E15 (15% ethanol and 85% gasoline), which is approved by the EPA for use in model year 2001 and newer cars, light-duty trucks, medium-duty passenger vehicles, and all flex-fuel vehicles.

Distillers' Grains

The principal co-product of the ethanol production process is distillers' grains, a high protein and high-energy animal feed ingredient primarily marketed to the dairy and beef industries. Dry mill ethanol processing creates three primary forms of distillers' grains: wet distillers' grains, modified wet distillers' grains, and dried distillers' grains with solubles. Most of the distillers' grains that we sell are in the form of dried distillers' grains and modified/wet distillers' grains. Modified/wet distillers' grains are processed corn mash that has been dried to approximately 50% moisture. Modified/wet distillers' grains are often sold to nearby markets. Dried distillers' grains with solubles are corn mash that has been dried to approximately 10% to 12% moisture. It has an almost indefinite shelf life and may be sold and shipped to any market and fed to almost all types of livestock.

Corn Oil

We also extract non-edible crude corn oil during the thin stillage evaporation process immediately prior to production of distillers' grains. The corn oil that we produce is not food grade corn oil and therefore cannot be used for human consumption. Corn oil is used primarily as a biodiesel feedstock and as a supplement for animal feed.

Principal Product Markets

As described below in "**Distribution of Principal Products**", we market and distribute all of GFE's and HLBE's ethanol, distillers' grains, and corn oil through professional third party marketers. Our marketers make all decisions, in consultation with management, with regard to where our products are marketed.

Our ethanol, distillers' grains and corn oil are primarily sold in the domestic market; however, as markets allow, our products can be, and have been, sold in the export markets. We expect our ethanol and distillers' grains marketers to explore all markets for our products, including export markets. We believe that there is some potential for increased international sales of our products. Nevertheless, due to high transportation costs, and the fact that we are not located near a major international shipping port, we expect a majority of our products to continue to be marketed and sold domestically.

Ethanol Markets

The success of our sales efforts in the ethanol markets will depend primarily upon the efforts of Eco-Energy, Inc. ("Eco-Energy"), which buys and markets our ethanol. There are local, regional, national, and international markets for ethanol. The principal markets for our ethanol are petroleum terminals in the continental U.S. The principal purchasers of ethanol are generally wholesale gasoline distributors or blenders.

We believe that local markets will be limited and must typically be evaluated on a case-by-case basis. Although local markets may be the easiest to service, they may be oversold because of the number of ethanol producers near our plants, which may depress the price of ethanol in those markets.

Typically, a regional market is one that is outside of the local market, yet within the neighboring states. Some regional markets include large cities that are subject to anti-smog measures in either carbon monoxide or ozone non-attainment areas, or that have implemented oxygenated gasoline programs, such as Chicago, St. Louis, Denver, and Minneapolis. We consider our primary regional market to be large cities within a 450-mile radius of our ethanol plants. In the national ethanol market, the highest demand by volume is primarily in the southern U.S. and the east and west coast regions.

We expect a majority of our ethanol to continue to be marketed and sold domestically. Over our past fiscal year, U.S. exports of ethanol have decreased slightly, according to the U.S. Department of Agriculture (the "USDA"). Importers of U.S. ethanol include Canada, South Korea, China, Brazil, India, Mexico, the United Kingdom, Nigeria, and the Netherlands. The decrease in ethanol exports is due to various factors, including a decrease in trading with Brazil, which had been one of the top two largest importers of U.S. ethanol, prior to the expiration of a Brazilian import quota. The USDA projects that U.S. ethanol exports will increase slightly in 2022 due to both volume and price gains due, in part, to increased renewable fuel blending requirements in the United Kingdom, India, and other nations. Ethanol export demand is more unpredictable than domestic demand and tends to fluctuate over time as it is subject to monetary and political forces in other nations. For example, a strong U.S. dollar is a force that may negatively impact ethanol exports from the United States. Additionally, the imposition of tariffs and duties on ethanol imported from the U.S., as well as increased production of ethanol and similar fuels in other countries, can also negatively impact domestic export demand.

U.S. ethanol exports to China increased during the 2021 fiscal year. During the 12 months ended October 31, 2021, the U.S. exported approximately 3.14 million barrels of fuel ethanol to China. This is an increase from virtually zero fuel ethanol exports to China in the 2020 and 2019 fiscal years. While China's official tariffs on U.S. ethanol remains high, early last year such tariffs were reduced from an effective rate of 70% to 45% for importers who applied for tariff exclusions.

The increase in ethanol exports to China followed the execution of a "phase one" trade agreement with China. The agreement, signed by former President Donald Trump on January 15, 2020, includes a commitment by China to purchase agricultural products, including ethanol, over the course of two years. While this agreement appears positive for the industry, China's actual purchases of U.S. agricultural products have fallen below the levels set in the phase one agreement. There is no guarantee that exports of ethanol to China will continue or increase. Further, President Joe Biden may enter into additional or different trade agreements or may otherwise take positions that affect the export of U.S. ethanol to China and other international markets. U.S. trade policy towards China may change, and we cannot now predict whether or how China may consider changing its tariffs against our products.

In December 2020, Brazil's import quota on imported ethanol expired. As a result, imports of U.S. ethanol are subject to a 20% tariff. Under the original, expired import quota, the 20% tariff on U.S. ethanol imports was levied only after the import level exceeded 150 million liters, or 39.6 million gallons per quarter. The import quota was initially set to expire in September 2019. In September 2019, Brazil raised the import quota to 187.5 million liters, or 49.5 million gallons, per quarter, before the imports become subject to the 20% tariff. U.S. exports to Brazil have decreased from our 2019 fiscal year to our 2020 fiscal year. The tariff has had and likely will continue to have a negative impact on the export market demand and prices for ethanol produced in the United States.

We transport our ethanol primarily by rail. In addition to rail, we service certain regional markets by truck from time to time. We believe that regional pricing tends to follow national pricing less the freight difference.

Distillers' Grains Markets

We sell distillers' grains ("DDGS") as animal feed for beef and dairy cattle, poultry, and hogs. Most of the distillers' grains that we sell are in the form of dried distillers' grains. Currently, the U.S. ethanol industry exports a significant amount of dried distillers' grains, which may increase as worldwide acceptance grows.

According to the U.S. Grains Council, total U.S. distiller's grains exports through October 2021 increased compared to distiller's grains exports for the same period last year. Top export markets include Mexico, Vietnam, Korea, Indonesia, Turkey, Thailand, and the European Union and United Kingdom. Driven by strong exports to Mexico, Vietnam, Turkey, and Canada, exports of U.S. distiller's grains increased more than 10% from the previous 12-month period, according to the U.S. Grains Council. Historically, the United States ethanol industry exported a significant amount of distillers' grains to China and Vietnam. However, during 2016, China began an anti-dumping and countervailing duty investigation related to distillers' grains imported from the U.S. which contributed to a decline in distillers' grains shipped to China. In January 2017, the Chinese issued final tariffs on U.S. distillers' grains. The Chinese distillers' grains anti-dumping tariffs range from 42.2% to 53.7% and the anti-subsidy tariffs range from 11.2% to 12%. The imposition of these duties has resulted in a significant decline in demand from this top importer requiring U.S. producers to seek out alternative markets. There is no guarantee that distillers' grains exports to China will return to pre-tariff levels.

On January 15, 2020, then President Trump signed a "phase one" trade agreement with China. The agreement includes a commitment by China to purchase agricultural products over two years, including distillers' grains. The agreement will also provide U.S. manufacturers of DDGS with a streamlined process for registration and licensing in order to facilitate U.S. exports to China. While this agreement appears positive for the industry, there is no guarantee that the agreement will be fully implemented, nor is there a guarantee that exports to China return to pre-tariff levels.

We also sell modified wet distillers' grains, which has a much smaller, more local market and makes the timing of its sale critical. Further, because of its moisture content, the modified wet distillers' grains are heavier and more difficult to handle. The customer must be close enough to justify the additional handling and shipping costs. As a result, modified wet distillers' grains are principally sold only to local feedlots and livestock operations.

Various factors affect the price of distillers' grain, including, among others, the price of corn, soybean meal and other alternative feed products, the performance or value of distillers' grains in a particular feed market, and the supply and demand within the market. Like other commodities, the price of distillers' grains can fluctuate significantly.

Corn Oil Markets

Our corn oil is primarily sold to diesel manufacturers and, to a lesser extent, feed lot and poultry markets. We generally transport our corn oil by truck to users located primarily in the upper Midwest.

Distribution of Principal Products

GFE's ethanol plant is located near Granite Falls, Minnesota, in Chippewa County. It is served by the TC&W Railway which provides connection to the Canadian Pacific and Burlington Northern Santa Fe Railroads. The completion of our rail loop during our 2012 fiscal year enables us to load unit trains. Our site is in close proximity to major highways that connect to major population centers such as Minneapolis, Minnesota; Chicago, Illinois; and Detroit, Michigan.

HLBE's ethanol plant is located near Heron Lake, Minnesota. It is served by the Union Pacific Railroad. HLBE's site is also in close proximity to major highways that connect to major population centers such as Minneapolis, Minnesota; Chicago, Illinois; and Detroit, Michigan.

Ethanol Distribution

Eco-Energy is the ethanol marketer for both the GFE plant and HLBE plant. Pursuant to our marketing agreements, Eco-Energy purchases and markets the entire ethanol output of GFE's and HLBE's ethanol plants. Under GFE's ethanol marketing agreement, GFE is responsible for securing all of the rail cars necessary for the transport of ethanol by rail except for 59 rail cars leased to GFE by Eco-Energy. Under HLBE's ethanol marketing agreement, Eco-Energy arranges for the transportation of HLBE's ethanol. GFE and HLBE pay Eco-Energy a marketing fee per gallon of ethanol sold, as well as a fixed lease fee for rail cars leased from Eco-Energy. The marketing fee and timing of payments by Eco-Energy were negotiated based on prevailing market-rate conditions for comparable ethanol marketing services. Our marketing contracts were amended for an effective date of January 1, 2022, and an expiration date of December 31, 2023. The contracts will automatically renew for an additional two years unless either party gives written 90-day notice.

Distillers' Grains Distribution

RPMG, Inc. ("RPMG") is the distillers' grains marketer for our Granite Falls plant. Pursuant to GFE's distillers' grains marketing agreement, RPMG markets all the distillers' grains produced at the Granite Falls plant. The contract commenced on February 1, 2011, with an initial term of one year, and will continue in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party.

Gavilon Ingredients, LLC ("Gavilon") is the distillers' grains marketer for HLBE. Under HLBE's distillers' grains marketing agreement, Gavilon purchases all of the distillers' grains produced at our Heron Lake ethanol plant in exchange for a service fee. The contract commenced on November 1, 2013 with an initial term of six months, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 60 days to the other party.

Corn Oil Distribution

RPMG is also the corn oil marketer for both the GFE plant and the HLBE plant. Currently, RPMG markets our corn oil, which is used primarily as a biodiesel feedstock and as a supplement for animal feed. We pay RPMG a commission based on each pound of corn oil sold by RPMG under these marketing agreements. The contract for GFE commenced on April 29, 2010, and the contract for HLBE commenced on November 1, 2013. Both contracts have an initial term of one year, and will continue in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party.

Dependence on One or a Few Major Customers

As discussed above, we have exclusive ethanol marketing agreements with Eco-Energy. Additionally, we have agreements with RPMG and Gavilon to market all of the distillers' grains produced at GFE's plant and HLBE's plant, respectively, and with RPMG to market all of the corn oil produced at our plants. We rely on Eco-Energy, RPMG and Gavilon for the sale and distribution of all of our products; therefore, we are highly dependent on Eco-Energy, RPMG and Gavilon for the successful marketing of our products. Any loss of these companies as our marketing agents for our ethanol, distillers' grains, or corn oil could have a negative impact on our revenues.

Seasonality of Ethanol Sales

We experience some seasonality of demand for our ethanol. Since ethanol is predominantly blended with conventional gasoline for use in automobiles, ethanol demand tends to shift in relation to gasoline demand. As a result, we experience some seasonality of demand for ethanol in the summer months related to increased driving. In addition, we experience some increased ethanol demand during holiday seasons related to increased gasoline demand.

Pricing of Corn and Ethanol

We expect that ethanol sales will represent our primary revenue source and corn will represent our primary component of cost of goods sold. Therefore, changes in the price at which we can sell the ethanol we produce and the price at which we buy corn for our ethanol plants present significant operational risks inherent in our business. Trends in ethanol prices and corn prices are subject to a number of factors and are difficult to predict.

The price and availability of corn is subject to significant fluctuations depending upon a number of factors that affect commodity prices in general, including crop conditions, yields, domestic and global stocks, weather, federal policy and foreign trade. With the volatility of the weather and commodity markets, we cannot predict the future price of corn. Historically, ethanol prices have tended to correlate with corn prices, wholesale gasoline prices, with demand for and the price of ethanol increasing as supplies of petroleum decreased or appeared to be threatened, crude oil prices increased and wholesale gasoline prices increased. However, the prices of both ethanol and corn do not always follow historical trends.

If a period of high corn prices were to be sustained for some time, such pricing may reduce our ability to operate profitably because of the higher cost of operating our plants. Corn prices increased significantly during the 12 months ended October 31, 2021, due in part to the improved domestic economy, increased demand from China, and drought in South America's corn-growing regions. Because the market price of ethanol is not directly related to corn prices, we, like most ethanol producers, are not able to compensate for increases in the cost of corn through adjustments in our prices for our ethanol although we do tend to see increases in the prices of our distillers' grains during times of higher corn prices. Given that ethanol sales comprise a majority of our revenues, our inability to adjust our ethanol prices can result in a negative impact on our profitability during periods of high corn prices.

Ethanol prices were higher during fiscal year 2021 compared to fiscal year 2020. The increase in ethanol prices was due primarily to the rebound in demand for transportation fuel as the effects of the COVID-19 pandemic subsided. Management expects demand and prices for ethanol to be volatile in 2022, with factors including, but not limited to, inflation, federal infrastructure legislation, extreme weather events, and additional surges in COVID-19 infections contributing to market volatility. According to EIA forecasts, ethanol production is projected to increase slightly in 2022, and demand is also expected to increase slightly. However, there is no guarantee that either of these forecasts will occur. Ethanol exports decreased slightly in 2021, compared to the previous year, and are expected to increase slightly in 2022, according to the USDA. However, tariffs, international competition, the lingering effects of COVID-19, international conflicts, and other factors could adversely affect the export market, and there is no guarantee that the export market will improve in 2022. U.S. gas demand increased moderately year over year in 2021, due primarily to the rebound from the COVID-19 pandemic. Ethanol consumption is projected to increase slightly in 2022; however, there is no guarantee that this projection will be accurate. A continued or further decrease in demand for either gasoline or ethanol blends would adversely impact the price of ethanol, which could result in a material adverse effect on our business, results of operations and financial condition.

Sources and Availability of Raw Materials

The primary raw materials used in the production of ethanol at our plants are corn and natural gas. Our plants also require significant and uninterrupted amounts of electricity and water.

Corn

Ethanol production requires substantial amounts of corn. The cost of corn represented approximately 80.8% and 71.6% of our cost of goods sold for the years ended October 31, 2021 and 2020, respectively. At GFE's current production rate of approximately 60.3 million gallons of undenatured ethanol per year, the GFE plant requires approximately 20.4 million bushels of corn per year. The HLBE ethanol plant requires approximately 21.8 million bushels of corn per year to operate at its current production rate of approximately 65.6 million gallons of undenatured ethanol per year.

GFE purchases corn directly from grain elevators, farmers, and local dealers within approximately 80 miles of Granite Falls, Minnesota, and accepts delivery of corn at its Granite Falls plant. HLBE purchases its corn directly from grain elevators, farmers, and local dealers within approximately 80 miles of Heron Lake, Minnesota. Neither GFE's nor HLBE's members are obligated to deliver corn to the Granite Falls plant or Heron Lake plant.

GFE and HLBE generally purchase corn through spot cash, fixed-price forward, basis only, and futures only contracts. Our fixed-price forward contracts specify the amount of corn, the price and the time period over which the corn is to be delivered. These forward contracts are at fixed prices indexed to Chicago Board of Trade ("CBOT") prices. Our plants corn requirements can be contracted in advance under fixed-price forward contracts or options. The parameters of these contracts are based on the local supply and demand situation and the seasonality of the price. For delayed pricing contracts, producers will deliver corn to either the GFE or HLBE plant, but the pricing for that corn and the related payment will occur at a later date. We may also purchase a portion of our corn on a spot basis. For our spot purchases, GFE and HLBE post daily corn bids so that corn producers can sell to directly to our plants on a spot basis.

In addition, both plants' facilities have sufficient corn storage capacity, with the capability to store approximately 20 days of corn supply at HLBE and approximately 20 days of corn supply at the GFE plant.

We compete with ethanol producers in close proximity for the supplies of corn we will require to operate our plants. There are 8 ethanol plants within an approximate 50 mile radius of HLBE's plant and 5 ethanol plants within an approximate 50 mile radius of the GFE plant. The existence of other ethanol plants, particularly those in close proximity to our plants, increase the demand for corn and may result in higher costs for supplies of corn. We also compete with other users of corn, including ethanol producers regionally and nationally, producers of food and food ingredients for human consumption (such as high fructose corn syrup, starches, and sweeteners), producers of animal feed and industrial users.

Since corn is the primary raw material we use to produce our products, the availability and cost of corn can have a significant impact on the profitability of our operations. Corn prices were significantly higher during our 2021 fiscal year, as compared to our 2020 fiscal year. If unfavorable conditions occur during our 2022 fiscal year, the price we pay for corn and the availability of corn near our plants could be negatively impacted. If we experience a localized shortage of corn, we may be forced to purchase corn from producers who are farther away from our ethanol plants which can increase our transportation costs.

Utilities

Natural Gas

Natural gas is a significant input to our manufacturing process. The cost of natural gas represented approximately 4.5% and 5.2% of our cost of goods sold for the years ended October 31, 2021 and 2020, respectively.

We do not anticipate any problems securing the natural gas we require to continue to operate our plants at capacity during our 2021 fiscal year or beyond. At GFE's plant, we pay Center Point Energy/ Minnegasco a per unit fee to move the natural gas through the pipeline, and we have guaranteed to move a minimum of 1,500,000 MMBTU annually through December 31, 2025, which is the ending date of the agreement. GFE also has an agreement with Kinetic Energy Group. On our behalf, Kinetic Energy Group procures contracts with various natural gas vendors to supply the natural gas necessary to operate the GFE plant. We determined that sourcing our natural gas from a variety of vendors is more cost-efficient than using an exclusive supplier.

HLBE has a facilities agreement with Northern Border Pipeline Company, which allows HLBE to access an existing interstate natural gas pipeline located approximately 16 miles north from its plant. HLBE has entered into a firm natural gas transportation agreement with its indirectly wholly owned subsidiary, Agrinatural. Under the terms of the firm natural gas transportation agreement, Agrinatural will provide natural gas to the HLBE plant with a specified price per MMBTU for a term ending on October 31, 2021, with an automatic renewal option for an additional five year period. HLBE also has a base agreement for the sale and purchase of natural gas with Constellation NewEnergy—Gas Division, LLC ("Constellation"). HLBE buys all of its natural gas from Constellation and this agreement runs through March 31, 2022.

The prices for and availability of natural gas are subject to volatile market conditions. These market conditions often are affected by factors beyond our control such as higher prices as a result of colder than average weather conditions or natural disasters, overall economic conditions and foreign and domestic governmental regulations and relations. Significant disruptions in the supply of natural gas could impair our ability to manufacture ethanol and more significantly, dried distillers' grains for our customers. Furthermore, increases in natural gas prices or changes in our natural gas costs relative to natural gas costs paid by competitors may adversely affect our results of operations and financial condition.

Electricity

Our plants require a continuous supply of electricity. We have agreements in place to supply electricity to our plants. Our GFE plant obtains electricity from Minnesota Valley Light and Power Cooperative, and our HLBE plant obtains electricity from Federated Rural Electric. We do not anticipate any problems securing the electricity that we require to continue to operate our plants at capacity during our 2022 fiscal year or beyond.

Water

We do not anticipate any problems securing the water that we require to continue to operate our plants at capacity during our 2022 fiscal year or beyond. GFE obtains the water necessary to operate its plant from the Minnesota River with an adjustable gravity-flow intake system.

HLBE obtains its water pursuant to an industrial water supply agreement with the City of Heron Lake and Jackson County, Minnesota.

Risk Management and Hedging

The profitability of our operations is highly dependent on the impact of market fluctuations associated with commodity prices. We use various derivative instruments as part of an overall strategy to manage market risk and to reduce the risk that our ethanol production will become unprofitable when market prices among our principal commodities and products do not correlate.

In order to mitigate our commodity and product price risks, we enter into hedging transactions, including forward corn, ethanol, distillers' grains and natural gas contracts, in an attempt to partially offset the effects of price volatility for corn and ethanol. However, we are not always presented with an opportunity to lock in a favorable margin and our plant's profitability may be negatively impacted during periods of high grain prices. We also enter into over-the-counter and exchange-traded futures, swaps and option contracts for corn, ethanol and distillers' grains, designed to limit our exposure to increases in the price of corn and manage ethanol price fluctuations.

Although we believe that our hedging strategies can reduce the risk of price fluctuations, the financial statement impact of these activities depends upon, among other things, the prices involved and our ability to physically receive or deliver the commodities involved. Our hedging activities could cause net income to be volatile from quarter to quarter due to the timing of the change in value of the derivative instruments relative to the cost and use of the commodity being hedged. As corn and ethanol prices move in reaction to market trends and information, our income statement will be affected depending on the impact such market movements have on the value of our derivative instruments.

Hedging arrangements expose us to the risk of financial loss in situations where the counterparty to the hedging contract defaults or, in the case of exchange-traded contracts, where there is a change in the expected differential between the price of the commodity underlying the hedging agreement and the actual prices paid or received by us for the physical commodity bought or sold. There are also situations where the hedging transactions themselves may result in losses, as when a position is purchased in a declining market or a position is sold in a rising market. Hedging losses may be offset by a decreased cash price for corn and natural gas and an increased cash price for ethanol and distillers' grains.

We have established a risk management committee which assists the board and our risk manager to, among other things, establish appropriate policies and strategies for hedging and enterprise risk. We continually monitor and manage our commodity risk exposure and our hedging transactions as part of our overall risk management policy. As a result, we may vary the amount of hedging or other risk mitigation strategies we undertake, and we may choose not to engage in hedging transactions. Our ability to hedge is always subject to our liquidity and available capital.

Process Improvement

We are continually working to develop new methods of operating the ethanol plants more efficiently. We continue to conduct process improvement activities in order to realize these efficiency improvements.

Patents, Trademarks, Licenses, Franchises and Concessions

We do not currently hold any patents, trademarks, franchises, or concessions. We were granted a license by ICM, Inc. ("ICM") to use certain ethanol production technology necessary to operate our ethanol plants. The cost of the license granted by ICM was included in the amount we paid to Fagen, Inc., to design and build our ethanol plants.

Competition

Ethanol Competition

Domestic Competition

We sell our ethanol in a highly competitive market. Ethanol is a commodity product where competition in the industry is predominantly based on price. On a national scale, we are in direct competition with numerous other ethanol producers. According to the Renewable Fuels Association ("RFA"), there are approximately 210 biorefineries with a total nameplate capacity of approximately 17.4 billion gallons of ethanol per year, with two additional plants under expansion or construction with capacity to produce an additional 26 million gallons.

The following table identifies the top five largest ethanol producers in the U.S. along with their production capacities.

Company	Nameplate Capacity (mmgy)
POET Biorefining	2,648
Valero Renewable Fuels	1,740
Archer Daniels Midland	1,674
Green Plains, Inc.	1,039
The Andersons	475

Source: Renewable Fuels Association

Each of the large ethanol producers above are capable of producing significantly more ethanol than we produce. These producers and other large producers are, among other things, capable of producing a significantly greater amount of ethanol or have multiple ethanol plants that may help them achieve certain benefits that we could not achieve with one ethanol plant. This could put us at a competitive disadvantage to other ethanol producers.

Larger ethanol producers may have an advantage over us from economies of scale and stronger negotiating positions with purchasers. Many large producers own multiple ethanol plants and may have flexibility to run certain facilities while shutting or slowing down production at their other facilities. This added flexibility may allow these producers to compete more effectively, especially during periods when operating margins are unfavorable in the ethanol industry. Some large producers own ethanol plants in geographically diverse areas of the U.S. and as result, may be able to more effectively spread the risk they encounter related to feedstock prices. Some of our competitors are owned by subsidiaries of larger oil companies, such as Valero Renewable Fuels and POET Biorefining. Because their parent oil companies are required to blend a certain amount of ethanol each year, these competitors may be able to operate their ethanol production facilities at times when it is unprofitable for us to operate our ethanol plant. Further, new products or methods of ethanol production developed by larger and better-financed competitors could provide them competitive advantages over us and harm our business.

Local Competition

A majority of the U.S. ethanol plants, and therefore, the greatest number of gallons of ethanol production capacity, are concentrated in the corn-producing states of Iowa, Nebraska, Illinois, Indiana, Minnesota, South Dakota, Ohio, Wisconsin, Kansas, and North Dakota. According to the RFA, Minnesota is one of the top producers of ethanol in the U.S. with 19 ethanol plants producing an aggregate of approximately 1.4 billion gallons of ethanol per year. Therefore, we face increased regional and local competition because of the location of our ethanol plant.

Eco-Energy markets our ethanol primarily on a regional and national basis. We compete with other ethanol producers both for markets in Minnesota and markets in other states. We believe that we are able to reach the best available markets through the use of our experienced marketer and by the rail delivery methods we use. We believe that we can compete favorably with other ethanol producers due to our proximity to ample grain, natural gas, electricity and water supplies at favorable prices.

International Competition

In addition to intense competition with domestic producers of ethanol, we have faced increased competition from ethanol produced in foreign countries. Depending on feedstock prices, ethanol imported from foreign countries may be less expensive than domestically-produced ethanol. However, foreign demand, transportation costs and infrastructure constraints may temper the market impact on the United States. Ethanol imports have been lower in recent years and ethanol exports have been higher. However, if demand for imported ethanol were to increase again, demand for domestic ethanol may be reduced, which could lead to lower domestic prices and lower operating margins. Large international companies with much greater resources than ours have developed, or are developing, increased foreign ethanol production capacities. Many international suppliers produce ethanol primarily from inputs other than corn, such as sugar cane, and have cost structures that may be substantially lower than U.S. based ethanol producers including us. Many of these international suppliers are companies with much greater resources than us with greater production capacities.

Alternative Fuels and Other Fuel Additives Competition

Alternative fuels and alternative ethanol production methods are continually under development. New ethanol products or methods of ethanol production developed by larger and better-financed competitors could provide them competitive advantages over us and harm our business.

We anticipate increased competition from renewable fuels that do not use corn as the feedstock. Many of the current ethanol production incentives are designed to encourage the production of renewable fuels using raw materials other than corn. One type of ethanol production feedstock that is being explored is cellulose. Cellulose is found in wood chips, corn stalks and rice straw, amongst other common plants. Several companies and researchers have commenced pilot projects to study the feasibility of commercially producing cellulosic ethanol.

A few companies have completed commercial scale cellulosic ethanol plants. If this technology can be profitably employed on a commercial scale, it could potentially lead to ethanol that is less expensive to produce than corn based ethanol. Cellulosic ethanol may also capture more government subsidies and assistance than corn based ethanol. This could decrease demand for our product or result in competitive disadvantages for our ethanol production process.

A number of automotive, industrial and power generation manufacturers are developing alternative fuels and clean power systems using fuel cells, plug-in hybrids, electric cars or clean burning gaseous fuels. Electric car technology has recently grown in popularity, especially in urban areas. While there are currently a limited number of vehicle recharging stations, there has been increased focus on developing these recharging stations to make electric car technology more feasible and widely available in the future. Additional competition from these other sources of alternative energy, particularly in the automobile market, could reduce the demand for ethanol, which would negatively impact our profitability.

In addition to competing with ethanol producers, we also compete with producers of other gasoline oxygenates. Many gasoline oxygenates are produced by other companies, including oil companies. The major oil companies have significantly greater resources than we have to develop alternative products and to influence legislation and public perception of ethanol. Historically, as a gasoline oxygenate, ethanol primarily competed with two gasoline oxygenates, both of which are ether-based: MTBE (methyl tertiary butyl ether) and ETBE (ethyl tertiary butyl ether). While ethanol has displaced these two gasoline oxygenates, the development of ethers intended for use as oxygenates is continuing and we will compete with producers of any future ethers used as oxygenates.

Distillers' Grains Competition

The amount of distillers' grains produced annually in North America has increased significantly as the number of ethanol plants increased. We compete with other producers of distillers' grains products both locally and nationally, with more intense competition for sales of distillers' grains among ethanol producers in close proximity to our ethanol plant. These competitors may be more likely to sell to the same markets that we target for our distillers' grains.

Distillers' grains are primarily used as an animal feed, competing with other feed formulations using corn and soybean meal. As a result, we believe that distillers' grains prices are positively impacted by increases in corn and soybean prices. In fiscal year 2021, the U.S. ethanol industry exports of distillers' grains increased slightly compared to the previous year. If distillers' grain experts decrease in the future, it could result in increased competition among ethanol producers for sales of distillers' grains and could negatively impact distillers' grains prices in the U.S.

Corn Oil Competition

We compete with many ethanol producers for the sale of corn oil. Many ethanol producers have installed the equipment necessary to separate corn oil from the distillers' grains they produce which has increased competition for corn oil sales and has resulted in lower market corn oil prices.

Government Ethanol Supports

The ethanol industry is dependent on several economic incentives to produce ethanol, the most significant of which is the federal Renewable Fuels Standard (the "RFS"). The RFS is a national program that does not require that any renewable fuels be used in any particular area or state, allowing refiners to use renewable fuel blends in those areas where it is most cost-effective. The RFS has been, and we expect will continue to be, a significant factor impacting ethanol usage.

Under the RFS, the EPA is required to pass an annual rule that establishes the number of gallons of different types of renewable fuels that must be used in the U.S. by refineries, blenders, distributors and importers which is called the renewable volume obligations ("RVOs"). The EPA has the authority to waive the mandates in whole or in part if one of two conditions is met: 1) there is inadequate domestic renewable fuel supply, or 2) implementation of the mandate requirement severely harms the economy or environment of a state, region or the United States.

The RFS sets the statutory RVO for corn-based ethanol at 15 billion gallons beginning in 2016 and each year thereafter through 2022. Under RFS statute, the EPA is required to finalize RVOs for a particular compliance year by

November 30 of the preceding year. The EPA, however, failed to propose or finalize an RVO for compliance years 2021 and 2022 prior to the statutory deadline.

On December 7, 2021, the EPA announced long-delayed blending requirement under the RFS. The EPA proposed RVOs of 17.13 billion gallons for 2020, 18.52 billion gallons for 2021, and 20.77 billion gallons for 2022. Ethanol industry advocates have denounced the proposal for significantly cutting the 2020 RVO, which was set in a 2019 final rule. The proposal reduces the 2020 blending requirement from 20.09 billion gallons to 17.13 billion gallons, an approximately 15 percent decrease. For 2021, the EPA proposed to set the RVO for total renewable fuel at 18.52 billion gallons. For 2022, the proposed RVO is 20.77 billion gallons, which the EPA said is the highest level in the history of the RFS program.

In a separate action also on December 7, 2021, the EPA proposed an action to deny 65 pending applications for small refinery exemptions. Because the denial of the small refinery exemptions reflects an updated interpretation of the Clean Air Act, and is a change from previous EPA practice, the agency is implementing a public notice-and-comment process and seeking input from stakeholders, the public, and from individual petitioning refineries.

Concurrently with the EPA's RVO proposal and denial of small refinery exemptions, the USDA announced $800 million to support biofuel producers and infrastructure. This includes up to $700 million to provide economic relief to biofuel producers and restore renewable fuel markets affected by the pandemic. The trio of actions drew mixed reviews from ethanol industry advocates. The RFA criticized the EPA's RVO proposal, describing it as an unprecedented and possibly illegal move to retroactively reduce already-finalized 2020 RFS requirements, but also noted the small refinery exemption denials and economic relief funding were beneficial to ethanol producers and farmers.

The following chart illustrates the potential U.S. ethanol demand based on the schedule of minimum usage established by the RFS program through the year 2022 (in billions of gallons):

Year	RVO Source	Total Renewable Fuel RVO	Cellulosic Ethanol RVO	Biodiesel RVO	Advanced Biofuel	Maximum Amount of Corn-based Ethanol That Can Be Used to Satisfy Total Renewable Fuel RVO
2017	RFS Statute	24.00	5.50	—	9.00	15.00
	EPA Final Rule(1)	19.28	0.31	2.00	4.28	15.00
2018	RFS Statute	26.00	7.00	—	11.00	15.00
	EPA Final Rule(2)	19.29	0.29	2.10	4.29	15.00
2019	RFS Statute	28.00	8.50	—	13.00	15.00
	EPA Final Rule(3)	19.92	0.42	2.10	4.92	15.00
2020	RFS Statute	30.00	10.50	—	15.00	15.00
	EPA Proposed Rule(4)	17.13	0.51	2.43	4.63	12.50
2021	RFS Statute	33.00	13.50	—	18.00	15.00
	EPA Proposed Rule(5)	18.52	0.62	2.43	5.20	13.32
2022	RFS Statute	36.00	16.00	—	21.00	15.00
	EPA Proposed Rule(6)	20.77	0.77	2.76	5.77	15.00

(1) Final EPA RFS RVOs for 2017 issued November 2016.
(2) Final EPA RFS RVOs for 2018 issued November 2017.
(3) Final EPA RFS RVOs for 2019 issued November 2018.
(4) Proposed EPA RFS RVOs for 2020 issued December 2021.
(5) Proposed EPA RFS RVOs for 2021 issued December 2021.

(6) Proposed EPA RFS RVOs for 2022 issued December 2021.

Beyond the federal mandates, there are limited domestic markets for ethanol. Further, opponents of ethanol such as large oil companies will likely continue their efforts to repeal or reduce the RFS through lawsuits or lobbying of Congress. If such efforts are successful in further reducing or repealing the blending requirements of the RFS, a significant decrease in ethanol demand may result and could have a material adverse effect on our results of operations, cash flows and financial condition, unless additional demand from exports or discretionary or E85 blending develops.

Most ethanol that is used in the U.S. is sold in a blend called E10. E10 is a blend of 10% ethanol and 90% gasoline. E10 is approved for use in all standard vehicles. Estimates indicate that gasoline demand in the U.S. is approximately 140 billion gallons per year. Assuming that all gasoline in the U.S. is blended at a rate of 10% ethanol and 90% gasoline, the maximum demand for ethanol is 14.3 billion gallons per year. This is commonly referred to as the "blend wall," which represents a theoretical limit where more ethanol cannot be blended into the national gasoline pool. This is a theoretical limit because it is believed that it would not be possible to blend ethanol into every gallon of gasoline that is being used in the U.S. and it discounts the possibility of additional ethanol used in higher percentage blends such as E15 and E85. These higher percentage blends may lead to additional ethanol demand if they become more widely available and accepted by the market.

There is growing availability of E85 for use in flexible fuel vehicles, however it is limited due to lacking infrastructure. In addition, the industry has been working to introduce E15 to the retail market since the EPA approved its use in vehicles of model years 2001 and newer. However, widespread adoption of E15 has been hampered by regulatory and infrastructure hurdles in many states, as well as consumer acceptance. Additionally, sales of E15 may be limited because: (i) it is not approved for use in all vehicles; (ii) the EPA requires a label that management believes may discourage consumers from using E15; and (iii) retailers may choose not to sell E15 due to concerns regarding liability. In addition, different gasoline blendstocks may have been required at certain times of the year in order to use E15 due to federal regulations related to fuel evaporative emissions. This prevented E15 from being used during certain times of the year in various states. While the EPA in 2019 issued a final rule that allowed E15 to be sold year-round, the U.S. Court of Appeals for the District of Columbia struck down the rule in July 2021, dealing a significant setback to the ethanol industry, as the ruling is expected to lead to a decrease in demand for renewable fuels, including the ethanol we produce.

Obligated parties use renewable identification numbers ("RINs") to show compliance with RFS-mandated volumes. RINs are attached to renewable fuels by producers and detached when the renewable fuel is blended with transportation fuel or traded in the open market. The market price of detached RINs affects the price of ethanol in certain markets and influences the purchasing decisions by obligated parties. Under the RFS, small refineries may petition for and be granted temporary exemptions from the RVOs if they can demonstrate that compliance with the RVOs would cause disproportionate economic hardship. Small refineries petitioned the EPA for 32 economic hardship exemptions in 2019 and 28 economic hardship exemptions in 2020. For the 2018 compliance year, the EPA granted 31 small refinery economic hardship petitions, which resulted in the exemption of approximately 1.43 billion RINs. Exemptions from RIN requirements reduces the amount of renewable fuel that must be blended into gasoline and diesel supplies and thereby reduces demand for ethanol. To the extent the EPA approves additional small refinery exemptions, it will further decrease demand for the ethanol we produce, which could negatively affect our profitability.

On June 25, 2021, the U.S. Supreme Court provided a significant setback for the ethanol industry, issuing a ruling that will make it easier for small refineries to secure exemptions from the RVOs. The case was brought by a coalition of farm and ethanol groups, which challenged the economic hardship exemptions claimed by certain small refineries. In its decision, the U.S. Supreme Court ruled against the farm and ethanol coalition, holding that small refineries could apply for an extension to their hardship exemptions from the RFS's blending requirements, even if such refineries' exemptions had previously lapsed. The ruling overturned a 2020 decision from the United States Court of Appeals for the Tenth Circuit. The Supreme Court's decision is expected to increase the availability of economic hardship exemptions for small refineries and thereby decrease demand for renewable fuels, including the ethanol we produce.

Additional legal actions related to the RFS are underway. These include lawsuits challenging fuel volume waivers based on "inadequate domestic supply," challenging the EPA's lower threshold for granting small refinery exemptions, seeking broader, forward-looking remedy to account for the collective lost volumes caused by recent small refinery exemptions, alleging that the EPA and U.S. Department of Energy have improperly denied access to public records request by RFA, and challenging the Final 2019 Rule over the EPA's failure to address small refinery exemptions in the rulemaking. If these legal actions, which generally seek to require the EPA to enforce the renewable fuel blending requirements of the RFS, are unsuccessful, there may negative impacts on the ethanol industry and our financial performance.

Compliance with Environmental Laws and Other Regulatory Matters

Our business subjects us to various federal, state, and local environmental laws and regulations, including: those relating to discharges into the air, water, and ground; the generation, storage, handling, use, transportation, and disposal of hazardous materials; and the health and safety of our employees. These laws and regulations require us to obtain and comply with numerous permits to construct and operate our ethanol plants, including water, air, and other environmental permits. The costs associated with obtaining these permits and meeting the conditions of these permits have increased our costs of construction and production.

Additionally, compliance with environmental laws and permit conditions in the future could require expensive pollution control equipment or operational changes to limit actual or potential impacts to the environment, as well as significant management time and expense. A violation of these laws, regulations or permit conditions can result in substantial fines, natural resource damage, criminal sanctions, permit revocations, and/or plant shutdown, any of which could have a material adverse effect on our operations. Although violations and environmental non-compliance still remain a possibility following our conversion from coal to natural gas combustion, the exposure to the company has been greatly reduced.

Our plants' air permits require certain on-going performance testing to be completed periodically to ensure compliance with minor source emission limits. Non-compliance with on-going performance testing may result in civil penalties or other enforcement actions by the Minnesota Pollution Control Agency ("MPCA").

In the fiscal year ended October 31, 2021, GFE and HLBE incurred costs and expenses of approximately $140,000 and $235,000, respectively, complying with environmental laws. Although we have been successful in obtaining all of the permits currently required to operate our plants, any retroactive change in environmental regulations, either at the federal or state level, could require us to obtain additional or new permits or spend considerable resources in complying with such regulations.

In 2015, the EPA awarded efficient producer pathway approval to HLBE and GFE. In the approval determinations, the EPA's analysis indicated that HLBE achieved at least a 20.1% reduction and GFE achieved a 26.0% reduction in greenhouse gas ("GHG") emissions for their non-grandfathered volumes compared to the baseline lifecycle GHG emissions. Pursuant to the award approval, HLBE and GFE are only authorized to generate RINs for each plant's non-grandfathered volumes if each plant can demonstrate that all ethanol produced at the plant during an averaging period (defined as the prior 365 days or the number of days since the date EPA efficient producer pathway approval) meets the 20% GHG reduction requirement. To make these demonstrations, HLBE and GFE must develop compliance plans and keep certain records as specified in the approvals. Additionally, the EPA approvals require that HLBE and GFE register with the EPA as a renewable fuel producer for the non-grandfathered volumes. Although we believe GFE and HLBE will be able to maintain continuous compliance with the 20% reduction in GHG emissions requirement, there is no guarantee that we will do so. If GFE or HLBE do not maintain continuous compliance with the 20% reduction in GHG emissions requirement, we will not be able issue RINs for the non-grandfathered volumes of ethanol produced at the plants. As a result, we may be forced to rely on exports sales for these non-grandfathered volumes ethanol, which could adversely affect our operating margins, which, in turn could adversely affect our results of operations, cash flows and financial condition.

Employees

We compete with ethanol producers in close proximity for the personnel we will require to operate our plants. The existence and development of other ethanol plants will increase competition for qualified managers, engineers, operators and other personnel. We also compete for personnel with businesses other than ethanol producers and with businesses located within the Granite Falls and Heron Lake, Minnesota communities.

As of the date of this report, we have 82 full-time employees at our two consolidated ethanol plants, of which 42 are employed at the GFE plant and 40 are employed at the HLBE plant. Of our total employees, 17 are involved primarily in management and administration with 10 employees at the GFE plant and 7 at the HLBE plant. The remaining employees are involved primarily in plant operations. We do not currently anticipate any significant change in the number of employees at our plants.

GFE's executive officers manage HLBE, pursuant to HLBE's operating agreement adopted January 3, 2022, which appoints GFE as the sole manager of HLBE.

Financial Information about Geographic Areas

All of our operations are domiciled in the U.S. All of the products sold to our customers for fiscal years 2021 and 2020 were produced in the U.S. and all of our long-lived assets are domiciled in the U.S. We have engaged third-party professional marketers who decide where our products are marketed and we have no control over the marketing decisions made by our third-party professional marketers. These third-party marketers may decide to sell our products in countries other than the U.S. However, we anticipate that our products will primarily be sold in the United States.

Investments

GFE owns 1,600 capital units of Ringneck Energy & Feed, LLC ("Ringneck") at a price of $5,000 per unit for a total of $8,000,000. Ringneck is a South Dakota limited liability company that has constructed an 80 million gallon per year ethanol manufacturing plant in outside of Onida, South Dakota in Sully County. Construction has reached substantial completion and the plant commenced operations in June 2019. GFE's investment is sufficient to grant it the right to appoint one director to the board of directors of Ringneck, and GFE has appointed Jeffrey Oestmann, its CEO, to serve as its appointed director. The units we acquired in Ringneck are subject to restrictions on transfer; therefore, this should not be considered a liquid investment. It may take a significant amount of time before we realize a return on our investment, if we realize a return on the investment at all.

Ringneck offered its units pursuant to a private placement memorandum. Additionally, because Ringneck did not conduct a federally-registered offering, we do not expect that information about Ringneck will be available via the SEC's EDGAR filing system. Therefore, it may be difficult for our investors to obtain information about Ringneck.

In connection with our subscription in Ringneck, GFE entered into a credit facility with Project Hawkeye, LLC ("Project Hawkeye") pursuant to which GFE borrowed $7.5 million to finance the investment in Ringneck. Additional information regarding the Project Hawkeye credit facility are provided below in the section below entitled **Part II - Item 8. Financial Statements, Note 10 - DEBT FACILITIES**.

On June 29, 2018, we subscribed to purchase 20 preferred membership units of Harvestone Group, LLC ("Harvestone") at a price of $100,000 per unit for a total of $2,000,000. We paid the $2,000,000 in connection with our subscription, which is reflected in our investing cash flows. Harvestone is a Delaware limited liability company that provides ethanol marketing, logistics, and trading services. Harvestone's headquarters are located in Franklin, Tennessee. Harvestone is owned by several other ethanol producers and other private investors.

On November 15, 2021, Harvestone redeemed GFE's 20 units for $3,000,000. As a result of the Harvestone redemption, GFE no longer owns any Harvestone units and has ceased to be a member of Harvestone. As a result of the ongoing negotiations as of fiscal year end, the Harvestone investment was impaired to $3,000,000 at October 31, 2021. The Company received and recorded the $3,000,000 redemption in November 2021.

In August 2004, GFE entered an electric service agreement with Minnesota Valley Cooperative Light and Power Association ("***MVCLPA***") to supply electricity to the GFE plant. The MVCLPA electric service agreement entitles GFE to receive patronage dividends in the form of a special allocation of capital credits. The capital credits are recognized as a component of other income on the consolidated statement of operations. Through the fiscal year 2021, GFE has recognized approximately $3.2 million of investment income related to the MVCLPA capital credits. Approximately $273,000 of GFE's capital credits were redeemed in March 2021, and as a result the investment balance was approximately $2.9 million as of October 31, 2021. MVCLPA generally redeems its capital credits on a first-in, first-out basis on a 13-year rotation, and therefore if MVCLPA continues to be successful, managements expects the MVCLPA capital credits will continue to be redeemed for cash payments to GFE. Additional information regarding the MVCLPA capital credits is provided below in the section below entitled P**art II - Item 8. Financial Statements, Note 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES -** ***Patronage Investment***, and **Part II - Item 8. Financial Statements, Note 2 - PATRONAGE INVESTMENT AND CORRECTION OF ERROR**.

ITEM 1A. RISK FACTORS

Not applicable.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our Granite Falls ethanol plant is located approximately three miles east of Granite Falls, Minnesota in Chippewa County at the junction of Highways 212 and 23. The plant's address is 15045 Highway 23 SE, Granite Falls, Minnesota. The ethanol plant sits on approximately 200 acres. This site includes an administrative building which serves as our headquarters. The site also includes corn, ethanol, and distillers' grains handling facilities. All of our tangible and intangible property, real and personal, serves as the collateral for our credit facilities with AgCountry.

HLBE's ethanol plant is sited on approximately 216 acres of land located near Heron Lake, Minnesota. The site includes corn, coal, ethanol, and distillers' grains storage and handling facilities. The site includes administration building that serves as HLBE's headquarters. The plant's address is 91246 390th Avenue, Heron Lake, Minnesota 56137-3175. All of HLBE's tangible and intangible property, real and personal, serves as the collateral for our credit facilities with AgCountry.

HLBE's wholly owned subsidiary, Agrinatural, property consists of 190 miles of distribution main pipelines and service pipelines, together with the associated easement and land rights, a town border station, meters and regulators, office and other equipment and construction in process. All of Agrinatural's real property and assets are subject to mortgages in favor of HLBE as security for loan obligations owed to HLBE.

HLBE's credit facilities are discussed in more detail under **"ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS - Credit Arrangements".**

ITEM 3. LEGAL PROCEEDINGS

From time to time in the ordinary course of business, Granite Falls Energy, LLC or its subsidiaries may be named as a defendant in legal proceedings related to various issues, including workers' compensation claims, tort claims, or contractual disputes. We are not currently involved in any material legal proceedings.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information

There is no public trading market for our units. However, GFE has established an online unit trading bulletin board ("QMS") through FNC Ag Stock, LLC, in order to facilitate trading in our units. The QMS has been designed to comply with federal tax laws and IRS regulations establishing a "qualified matching service," as well as state and federal securities laws. The QMS consists of an electronic bulletin board that provides a list of interested buyers with a list of interested sellers, along with their non-firm price quotes. The QMS does not automatically affect matches between potential sellers and buyers and it is the sole responsibility of sellers and buyers to contact each other to make a determination as to whether an agreement to transfer units may be reached. We do not become involved in any purchase or sale negotiations arising from the QMS and have no role in effecting the transactions beyond approval, as required under our member control agreement, and the issuance of new certificates. We do not give advice regarding the merits or shortcomings of any particular transaction. We do not receive, transfer or hold funds or securities as an incident of operating the QMS. We do not receive any compensation for creating or maintaining the QMS. In advertising the QMS, we do not characterize GFE as being a broker or dealer or an exchange. We do not use the QMS to offer to buy or sell securities other than in compliance with securities laws, including any applicable registration requirements.

There are detailed timelines that must be followed under the QMS rules and procedures with respect to offers and sales of membership units. All transactions must comply with the QMS rules and procedures, our member control agreement, and are subject to approval by our board of governors.

So long as we remain a publicly reporting company, information about the Company will be publicly available through the SEC's filing system. However, if at any time we cease to be a publicly reporting company, we anticipate continuing to make information about the Company publicly available on our website in order to continue operating the QMS.

The following table contains historical information by fiscal quarter for the past two fiscal years regarding the actual unit transactions that were completed by our unit-holders during the periods specified. We believe this most accurately represents the current trading value of the Company's units. The information was compiled by reviewing the completed unit transfers that occurred on our qualified matching service bulletin board during the quarters indicated.

Fiscal Quarter	Low Per Unit Price	High Per Unit Price	Total Units Traded
2020 1st	$ 1,800	$ 1,800	143
2020 2nd	$ 1,800	$ 1,800	5
2020 3rd	$ —	$ —	—
2020 4th	$ —	$ —	—
2021 1st	$ 1,300	$ 1,400	27
2021 2nd	$ 1,200	$ 1,350	22
2021 3rd	$ —	$ —	—
2021 4th	$ —	$ —	—

As a limited liability company, we are required to restrict the transfers of our membership units in order to preserve our partnership tax status. Our membership units may not be traded on any established securities market or readily traded on a secondary market (or the substantial equivalent thereof). All transfers are subject to a determination that the transfer will not cause GFE to be deemed a publicly traded partnership.

Issuer Repurchases of Equity Securities

We did not make any repurchases of our units during fiscal year 2021.

Holders of Record

As of January 31, 2022, there were 1,000 holders of record of our membership units.

As of October 31, 2021 and January 31, 2022, there were no outstanding options or warrants to purchase, or securities convertible for or into, our units.

Distributions

Granite Falls Energy

Distributions by GFE to its unit holders are in proportion to the number of units held by each unit holder. A unit holder's distribution is determined by multiplying the number of units by distribution per unit declared. GFE's board of governors has complete discretion over the timing and amount of distributions to our unit holders. However, GFE's credit facility with AgCountry provides that we may not declare any distributions prior to fiscal year 2023 without the consent of our lender, and that subsequent distributions may be no greater than 50% of the Company's net profit (determined according to GAAP) for prior fiscal year, or up to 75% of the Company's net profit from the prior fiscal year if the Company's working capital remains above $26 million; provided that we are and will remain in compliance with all of the covenants, terms and conditions of the credit facility. If our financial performance and loan covenants permit, we expect to make future cash distributions at times and in amounts that will permit our members to make income tax payments, along with distributions in excess of these amounts. Cash distributions are not assured, however, and in the future, we may not be in a position to make distributions. Under Minnesota law, we cannot make a distribution to a member if, after the distribution, we would not be able to pay our debts as they become due or our liabilities, excluding liabilities to our members on account of their capital contributions, would exceed our assets.

On December 22, 2021, the Board of Governors of the Company declared a cash distribution of $330.00 per membership unit to the holders of record of the Company's units at the close of business on December 22, 2021, for a total distribution of $10,099,980, which the Company paid in January 2022. No distributions were declared or paid in fiscal years 2021 or 2020.

Heron Lake BioEnergy

Prior to the merger, distributions by HLBE to its unit holders were in proportion to the number of units held by each unit holder. A unit holder's distribution was determined by multiplying the number of units by distribution per unit declared. HLBE’s board of governors had complete discretion over the timing and amount of distributions to its unit holders. Distributions are restricted by certain loan covenants in our credit facility with AgCountry. Additionally, under Minnesota law, HLBE cannot make a distribution to a member if, after the distribution, it would not be able to pay its debts as they become due or its liabilities, excluding liabilities to its members on account of their capital contributions, would exceed its assets.

No distributions were either declared or paid in 2020 or 2021.

Unregistered Sales of Equity Securities

The Company had no unregistered sales of securities during fiscal year 2021.

Securities Authorized for Issuance Under Equity Compensation Plans

As of the date of this annual report, we had no “equity compensation plans” (including individual equity compensation arrangements) under which any of our equity securities are authorized for issuance.

ITEM 6. SELECTED FINANCIAL DATA

Not applicable.

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

General

We prepared the following discussion and analysis to help readers better understand our financial condition, changes in our financial condition, and results of operations for the fiscal year ended October 31, 2021. This discussion should be read in conjunction with the consolidated financial statements included herewith and notes to the consolidated financial statements thereto and the risk factors contained herein.

Overview

Our business consists primarily of the production and sale of ethanol and its co-products (wet, modified wet and dried distillers’ grains, corn oil and corn syrup) locally, and throughout the continental U.S. Our production operations are carried out at GFE’s plant located in Granite Falls, Minnesota and HLBE’s ethanol plant near Heron Lake, Minnesota.

The GFE plant has an annual production capacity of approximately 63 million gallons of denatured ethanol, but is currently permitted to produce up to 70 million gallons of undenatured ethanol on a twelve month rolling sum basis. The HLBE plant has an approximate annual production capacity of 65 million gallons of denatured ethanol, but is currently permitted production capacity to produce approximately 72 million gallons of undenatured ethanol on a twelve-month rolling sum basis. We intend to continue working toward increasing production to take advantage of the additional production allowed pursuant to our permits as long as we believe it is profitable to do so.

HLBE also owns a 100% interest in Agrinatural, which is a natural gas distribution and sales company located in Heron Lake, Minnesota that owns approximately 190 miles of natural gas pipeline and provides natural gas to HLBE's ethanol plant and other commercial, agricultural and residential customers through a connection with the natural gas pipeline facilities of Northern Border Pipeline Company. Agrinatural's revenues are generated through natural gas distribution fees and sales.

Plan of Operations Through October 31, 2022

During the twelve months ended October 31, 2021, the Company and the ethanol industry as a whole benefited from improved market conditions, as the effects of the COVID-19 pandemic subsided and demand for transportation fuel rebounded. Due to the reduction in demand for transportation fuel, the ethanol industry experienced record-low ethanol prices in 2020, and we experienced prolonged negative operating margins, significantly lower cash flow from operations and substantial net losses. Economists estimated the ethanol industry suffered $8 billion in losses in 2020 due, in large part, to the effects of the pandemic, according to the Journal of Agricultural and Food Industrial Organization. In the 2021 fiscal year, the Company experienced increased market prices for our principal prices and improved profitability, as compared to the fiscal year ended October 31, 2020. However, the pandemic is ongoing and various dynamic factors, including the spread of new coronavirus variants, make it difficult to forecast the long-term effects of the pandemic on our industry as a whole and our Company specifically. Further, tangential effects of the COVID-19 pandemic, including supply chain bottlenecks, labor market volatility, and price increases of raw materials may adversely affect our operations and profitability.

It is possible that even after the pandemic subsides, there will be permanent changes to social and economic patterns that will reduce demand for ethanol. For example, increased adoption of “work from home” policies or tele-commuting, and the use virtual meetings, may permanently reduce business travel and thereby reduce the demand for transportation fuel, including the ethanol we produce.

Over the next year, we will continue our focus on operational improvements at our plants. These operational improvements include exploring methods to improve ethanol yield per bushel and increasing production output at our plants, continued emphasis on safety and environmental regulation, reducing our operating costs, and optimizing our margin opportunities through prudent risk-management policies.

In addition, we expect to continue to conduct routine maintenance and repair activities at the ethanol plants to maintain current plant infrastructure, as well as some small capital projects to improve operating efficiency. We anticipate using cash we generate from our operations and our credit facilities for each plant to finance these plant upgrade projects.

Trends and Uncertainties Impacting Our Operations

The principal factors affecting our results of operations and financial conditions are the market prices for corn, ethanol, distillers’ grains and natural gas, as well as governmental programs designed to create incentives for the use of corn-based ethanol.

Our operations are highly dependent on commodity prices, especially prices for corn, ethanol, distillers’ grains and natural gas. As a result, our operating results can fluctuate substantially due to volatility in these commodity markets. The price and availability of corn is subject to significant fluctuations depending upon a number of factors that affect commodity prices in general, including crop conditions, yields, domestic and global stocks, weather, federal policy and foreign trade. Natural gas prices are influenced by severe weather in the summer and winter and hurricanes in the spring, summer and fall. Other factors include North American exploration and production, and the amount of natural gas in underground storage during injection and withdrawal seasons. Ethanol prices are sensitive to world crude oil supply and demand, domestic gasoline supply and demand, the price of crude oil, gasoline and corn, the price of substitute fuels and octane enhancers, refining capacity and utilization, government regulation and incentives and consumer demand for alternative fuels. Distillers’ grains prices are impacted by livestock numbers on feed, prices for feed alternatives and supply, which is associated with ethanol plant production.

In the ethanol industry, it is generally expected that 2.8 gallons of denatured ethanol will be produced for each bushel of grain processed in the production cycle. Because the market price of ethanol is not always directly related to corn, at times ethanol prices may lag price movements in corn prices and corn-ethanol price spread (the difference between the price per gallon of ethanol and the price per bushel of grain divided by 2.8) may be tightly compressed or negative. If the corn-ethanol spread is compressed or negative for sustained period, it is possible that our operating margins will decline or become negative and our ethanol plants may not generate adequate cash flow for operations. In such cases, we may reduce or cease production at our ethanol plants in order to minimize our variable costs and optimize cash flow.

For the fiscal year ended October 31, 2021 compared to fiscal year ended October 31, 2020, our average price per gallon of ethanol sold increased by approximately 65%. Ethanol prices were higher during the fiscal year ended

October 31, 2021, due primarily to the fact that the effects of the COVID-19 pandemic subsided in the fiscal year 2021, resulting in increased demand for transportation fuel, including the ethanol we produce. While demand for transportation fuel has increased, it is possible that new coronavirus variants, additional government lockdowns, or other factors could reduce demand for transportation fuel and thereby decrease the price of the ethanol we produce. Additionally, the continued issuance hardship exemptions from the RVOs may further decrease domestic demand for ethanol. Management believes that the ethanol outlook will remain volatile in the fiscal year 2022.

Exports of ethanol decreased slightly in our fiscal year 2021, after increasing slightly each of the previous two fiscal years. Export demand for ethanol is less consistent compared to domestic demand which can lead to ethanol price volatility. The decrease in ethanol exports is due to various factors, including a decrease in trading with Brazil, which had been one of the top two largest importers of U.S. ethanol, due to the expiration of a Brazilian import quota. The USDA projects that U.S. ethanol exports will increase slightly in 2022 due to both volume and price gains due, in part, to increased renewable fuel blending requirements in the United Kingdom, India, and other nations.

On September 1, 2017, Brazil's Chamber of Foreign Trade imposed a 20% tariff on U.S. ethanol imports in excess of 150 million liters, or 39.6 million gallons, per quarter. The tariff was renewed in September 2019, but the import quota was raised to 187.5 million liters, or 49.5 million gallons, per quarter. In December 2020, the import quota expired, thereby subjecting all Brazilian imports of U.S. ethanol to a 20% tariff. These tariffs have had and will likely continue to have a negative impact on the export market demand and prices for ethanol produced in the United States. Any decrease in U.S. ethanol exports could adversely impact the market price of ethanol unless domestic demand increases or additional foreign markets are developed.

U.S. ethanol exports to China increased during the 2021 fiscal year, following the execution of a "phase one" trade agreement with China. The agreement, signed by former President Donald Trump on January 15, 2020, includes a commitment by China to purchase agricultural products, including ethanol, over the course of two years. There is, however, no guarantee that exports of ethanol to China will continue or increase. Additionally, the imposition of tariffs and duties on ethanol imported from the U.S., as well as increased production of ethanol and similar fuels in other countries, can also negatively impact domestic export demand.

Corn prices increased significantly in fiscal year 2021, due in part to the improved domestic economy as well as increased demand from China and drought in South America's corn-growing regions. Corn prices remained above \$5 per bushel for most of the year and peaked above \$7 per bushel in May 2021.

The latest USDA supply and demand projections estimate the 2020-2021 ending corn stocks at approximately 1.24 billion bushels, and project the 2021-2022 U.S. corn production to be approximately 15.1 billion bushels, which is slightly less than the 2020-2021 production, with corn consumption for ethanol and co-products slightly higher at approximately 5.3 billion bushels, suggesting higher corn prices into fiscal 2022. In fiscal year 2021, China substantially increased its purchase of U.S. corn reducing U.S. inventories and increasing prices. Increases in domestic ethanol production in fiscal year 2021, also contributed to elevated corn prices. Weather, world supply and demand, current and anticipated stocks, agricultural policy and other factors can contribute to volatility in corn prices. If corn prices rise, it will have a negative effect on our operating margins unless the price of ethanol and our other primary products outpace rising corn prices.

Distillers' grain prices increased in 2021 compared to 2020, due to increased supply as a result of increased production. Top export markets include Mexico, Vietnam, South Korea, Indonesia, Turkey, Thailand, and Canada. Export demand from China, historically one of the largest importers of U.S. produced distillers' grains, has significantly declined. In 2017, China imposed significant anti-dumping and anti-subsidies on distillers' grains imported from the U.S. which resulted in significant declines in exports of U.S. distillers' grains to China. The imposition of these duties has resulted in a significant decline in demand from this top importer requiring U.S. producers to seek out alternative markets. Exports to China remain substantially below the pre-tariff export levels, and there is no guarantee that distillers' grains exports to China will return to pre-tariff levels.

On January 15, 2020, President Trump signed a "phase one" trade agreement with China. The agreement includes a commitment by China to purchase agricultural products over the next two years, including distillers' grains. The agreement will also provide U.S. manufacturers of DDGS with a streamlined process for registration and licensing in order to facilitate U.S. exports to China. While this agreement appears positive for the industry, there is no guarantee that the agreement will be fully implemented, nor is there a guarantee that exports to China return to pre-tariff levels.

Management anticipates distillers' grains prices will remain steady during our 2022 fiscal year, unless additional domestic demand or other foreign markets develop. Domestic demand for distillers' grains could remain low if corn prices decline and end-users switch to lower priced alternatives.

Corn oil prices increased significantly in fiscal year 2021, due in part to elevated corn prices and strong demand for biodiesel and livestock feed.

Given the inherent volatility in ethanol, distillers' grains, non-food grade corn oil, grain and natural gas prices, we cannot predict the likelihood that the spread between ethanol, distillers' grains, non-food grade corn oil and grain prices in future periods will be consistent compared to historical periods.

Results of Operations for the Fiscal Years Ended October 31, 2021 and 2020

The following table shows the results of our operations and the percentage of revenues, costs of goods sold, operating expenses and other items to total revenues in our audited consolidated statements of operations for the fiscal years ended October 31, 2021 and 2020 (amounts in thousands):

	Fiscal Year Ended October 31,			
	2021		2020	
Statement of Operations Data	**Amount**	**%**	**Amount**	**%**
Revenue	$ 309,615	100.0 %	$ 164,954	100.0 %
Cost of Goods Sold	282,847	91.4 %	176,031	106.7 %
Gross Profit (Loss)	26,768	8.6 %	(11,077)	(6.7)%
Operating Expenses	8,127	2.6 %	8,581	5.2 %
Goodwill Impairment	—	— %	1,372	0.8 %
Operating Income (Loss)	18,641	6.0 %	(21,030)	(12.7)%
Other Income, net	7,389	2.4 %	463	0.3 %
Net Income (Loss)	26,030	8.4 %	(20,567)	(12.4)%
Less: Net (Income) Loss Attributable to Non-controlling Interest	(2,373)	(0.8)%	7,289	4.4 %
Net Income (Loss) Attributable to Granite Falls Energy, LLC	$ 23,657	6.7 %	$ (13,278)	(8.0)%

Revenues

Our revenues from operations come from three primary sources: sales of fuel ethanol, sales of distillers' grains and sales of corn oil. Our remaining consolidated revenues are attributable to miscellaneous other revenue from incidental sales of corn syrup at HLBE's plant and revenues generated from natural gas pipeline operations at Agrinatural.

The following table shows the sources of our consolidated revenue and the approximate percentage of revenues from those sources to total revenues in our audited consolidated statements of operations for the fiscal year ended October 31, 2021 (amounts in thousands):

	Fiscal Year Ended October 31, 2021	
Revenue Sources	**Sales Revenue**	**% of Total Revenues**
Ethanol sales	$ 240,875	77.8 %
Distillers' grains sales	49,186	15.9 %
Corn oil sales	17,148	5.5 %
Miscellaneous other	2,406	0.8 %
Total Revenues	$ 309,615	100.0 %

The following table shows the sources of our consolidated revenue and the approximate percentage of revenues from those sources to total revenues in our audited consolidated statements of operations for the fiscal year ended October 31, 2020 (amounts in thousands):

	Fiscal Year Ended October 31, 2020	
Revenue Sources	**Sales Revenue**	**% of Total Revenues**
Ethanol sales	$ 126,605	76.8 %
Distillers' grains sales	29,673	17.9 %
Corn oil sales	6,590	4.0 %
Miscellaneous other	2,086	1.3 %
Total Revenues	$ 164,954	100.0 %

Our total consolidated revenues increased by approximately 87.7% for the fiscal year ended October 31, 2021, as compared to the fiscal year 2020, due to increases in both the prices received for and in the quantities sold of our ethanol, distillers' grains, and corn oil.

The following table reflects quantities of our three primary products sold and the average net prices received for the fiscal years ended October 31, 2021 and 2020 (quantities in thousands):

	Fiscal Year Ended October 31, 2021		Fiscal Year Ended October 31, 2020	
Product	**Quantity Sold** *(in thousands)*	**Avg. Net Price**	**Quantity Sold** *(in thousands)*	**Avg. Net Price**
Ethanol (gallons)	126,746	$ 1.90	105,172	$ 1.20
Distillers' grains (tons)	288	$ 170.75	240	$ 123.43
Corn oil (pounds)	35,963	$ 0.48	27,528	$ 0.24

Ethanol

Total revenues from sales of ethanol increased by approximately 90.3% for fiscal year 2021 compared to the fiscal year 2020 due primarily to an approximately 20.5% increase in the volumes sold from period to period, coupled with an approximately 58.3% increase in the average price per gallon we received for our ethanol. The increase in price is primarily due to an increase in demand for transportation fuel, including the ethanol we produce, as a result of the larger economic rebound from the COVID-19 pandemic. The increase in the quantity of ethanol sold was due primarily to our increased production in fiscal year 2021 compared to the prior year, due to the fact that we operated our plants throughout the 2021 fiscal year and idled them for a portion of the 2020 fiscal year. Management anticipates steady ethanol production and sales during our 2022 fiscal year, as compared to our 2021 fiscal year.

We occasionally engage in hedging activities with respect to our ethanol sales. We recognize the gains or losses that result from the changes in the value of these derivative instruments in revenues as the changes occur. At October 31, 2021, GFE had fixed and basis contracts for forward ethanol sales for various delivery periods through December 2021 valued at approximately $19.6 million, and HLBE had fixed and basis contracts for forward ethanol sales for various delivery periods through December 2021 valued at approximately $18.7 million. Separately, ethanol derivative instruments resulted in a gain of approximately $210,000 during the fiscal year ended October 31, 2021, and a loss of approximately $350,000 during the fiscal year ended October 31, 2020.

Distillers' Grains

Total revenues from sales of distillers' grains increased approximately 65.8% for fiscal year 2021 compared to fiscal year 2020. The increase in distillers' grains revenues is primarily attributable to an approximately 20.0% increase in the tons of distillers' grains sold during fiscal year 2021 compared to fiscal year 2020, coupled with an approximately 38.3% increase in the average price per ton we received for our distillers' grains from period to period.

The increase in the market price of distillers' grains is due to increased demand for livestock feed and higher prices for soybean meal, which is a competitive product to distillers' grains. The increase in total tons of distillers' grains sold during fiscal year 2021 compared to the fiscal year 2020 was due increased production at both plants, as a result of operating the plants year-round in the fiscal year 2021, after the plants for portions of the fiscal year 2020 due to the effects of the COVID-19 pandemic and HLBE's boiler malfunction. Management anticipates steady distillers' grains production during our 2022 fiscal year, as compared to our 2021 fiscal year.

At October 31, 2021, GFE had forward contracts to sell approximately $1.3 million of distillers' grains for delivery through November 2021, and HLBE had forward contracts to sell approximately $1.6 million of distillers' grains for delivery through December 2021.

Corn Oil

Separating the corn oil from our distillers' grains decreases the total tons of distillers' grains that we sell; however, our corn oil has a higher per ton value than our distillers' grains. Total revenues from sales of corn oil increased by approximately 160.2% for fiscal year 2021 compared to the fiscal year 2020. This increase is attributable to an approximately 30.6% increase in pounds sold from period to period, coupled with an approximately 100% increase in the average price per pound of corn oil sold from period to period. Management attributes the increase in corn oil prices to increased demand for biodiesel and livestock feed. Management attributes the increase in corn oil sales during fiscal year 2021 as compared to 2020 primarily to increased production at the plants as a result of the GFE plant and HLBE plant being idled during portions of the fiscal year 2020 as a result of the COVID-19 pandemic and HLBE's boiler malfunction.

Although management believes that corn oil prices will remain relatively steady, prices may decrease if there is an oversupply of corn oil production resulting from increased production rates at ethanol plants or if biodiesel producers begin to utilize lower-priced alternatives such as soybean oil or if biodiesel blenders' tax credit is not renewed and biodiesel production declines.

At October 31, 2021, GFE had forward corn oil sales contracts to sell approximately $1.7 million for delivery through December 2021, and HLBE had forward corn oil sales contracts to sell approximately $1.5 million for delivery through December 2021.

Cost of Goods Sold

Our cost of goods sold increased by approximately 60.7% for the fiscal year ended October 31, 2021, as compared to the fiscal year ended October 31, 2020. However, cost of goods sold, as a percentage of revenues, decreased to approximately 91.4% for the fiscal year ended October 31, 2021, as compared to approximately 106.7% for the 2020 fiscal year due to an improved margin between the price of ethanol and the price of corn. Approximately 90% of our total costs of goods sold is attributable to ethanol production. As a result, the cost of goods sold per gallon of ethanol produced for the fiscal year ended October 31, 2021 was approximately $2.23 per gallon of ethanol sold compared to approximately $1.67 per gallon of ethanol sold for the fiscal year ended October 31, 2020.

The following table shows the costs of corn and natural gas (our two largest single components of costs of goods sold), as well as all other components of cost of goods sold, which includes processing ingredients, depreciation expense, electricity, and wages, salaries and benefits of production personnel, and the approximate percentage of costs of those components to total costs of goods sold in our audited consolidated statements of operations for the fiscal year ended October 31, 2021 (amounts in thousands):

	Fiscal Year Ended October 31, 2021	
	Cost *(in thousands)*	% of Cost of Goods Sold
Corn costs	$ 228,483	80.8 %
Natural gas costs	12,618	4.5 %
All other components of costs of goods sold	41,746	14.8 %
Total Cost of Goods Sold	$ 282,847	100.0 %

The following table shows the costs of corn, natural gas and all other components of cost of goods sold and the approximate percentage of costs of those components to total costs of goods sold in our audited consolidated statements of operations for the fiscal year ended October 31, 2020 (amounts in thousands):

	Fiscal Year Ended October 31, 2020	
	Cost (in thousands)	% of Cost of Goods Sold
Corn costs	$ 126,289	71.8 %
Natural gas costs	9,209	5.2 %
All other components of costs of goods sold	40,533	23.0 %
Total Cost of Goods Sold	$ 176,031	100.0 %

Corn Costs

Our cost of goods sold related to corn increased approximately 80.9% for our 2021 fiscal year compared to our 2020 fiscal year, due to an approximately 19.1% increase in the number of bushels of corn processed from period to period, coupled with an approximately 51.9% increase in the average price per bushel paid for corn from period to period. The corn-ethanol price spread (the difference between the price per gallon of ethanol and the price per bushel of grain divided by 2.8) for our 2021 fiscal year was $0.04 more than the corn-ethanol price spread we experienced for the same period of 2020.

For our fiscal years ended October 31, 2021 and 2020, our plants processed approximately 42.2 million and 35.4 million bushels of corn, respectively. This increase in corn consumption was due primarily to the fact that we idled production at our plants in the fiscal year 2020 due to the effects of the COVID-19 pandemic and the boiler malfunction at HLBE's plant. Management anticipates steady corn consumption during our 2022 fiscal year compared to our 2021 fiscal year provided that we can achieve operating margins that allow us to continue to operate the ethanol plants at capacity.

The increase in our cost per bushel of corn was a result of elevated corn prices caused primarily by export demand, including demand for corn from China and South America. Due to these factors, management anticipates that corn prices will be higher during our 2022 fiscal year.

From time to time, we enter into forward purchase contracts for our corn purchases. At October 31, 2021, GFE had forward corn purchase contracts for approximately 4.9 million bushels for deliveries through December 2022 and HLBE had forward corn purchase contracts for approximately 3.2 million bushels for deliveries through December 2022.

Our corn derivative positions resulted in a loss of approximately $8.2 million and $2.4 million for the fiscal years ended October 31, 2021, and October 31, 2020, respectively, which increased our cost of goods sold. We recognize the gains or losses that result from the changes in the value of our derivative instruments from corn in cost of goods sold as the changes occur. As corn prices fluctuate, the value of our derivative instruments are impacted, which affects our financial performance. We anticipate continued volatility in our cost of goods sold due to the timing of the changes in value of the derivative instruments relative to the cost and use of the commodity being hedged.

Natural Gas Costs

For our 2021 fiscal year, we experienced an increase of approximately 37.0% in our overall natural gas costs compared to our 2020 fiscal year. Management attributes the increase in natural gas costs to an increase in production, as we operated out plants throughout the year in the 2021 fiscal year after idling our plants for portions of the 2020 fiscal year. Further, natural gas prices spiked in early 2021 due to severe weather in Texas and other areas that disrupted the production and transportation of natural gas. Management anticipates higher natural gas prices during the winter months due to the typical seasonal natural gas cost increases experienced during the winter months.

Operating Expense

Operating expenses include wages, salaries and benefits of administrative employees at the plants, insurance, professional fees and similar costs. Operating expenses as a percentage of revenues decreased to 2.6% of revenues for our fiscal year ended October 31, 2021 compared to 5.2% of revenues for our fiscal year ended October 31, 2020. This decrease was primarily due to a significant increase in revenues and the recognition of the approximately $1.8 million loss on disposal of assets related to HLBE's boiler during the 2020 fiscal year.

Our efforts to optimize efficiencies and maximize production may result in a decrease in our operating expenses on a per gallon basis. Additionally, because HLBE has de-registered from the SEC and is no longer required to file SEC reports as a result of the Merger, we expect our operating expenses related to certain filing fees and regulatory costs to decrease. However, due to inflation, labor shortages, or other unforeseen issues, it is possible that our operating expenses will remain steady or increase during our 2022 fiscal year.

Operating Income (Loss)

Our operating margin increased approximately $39.7 million during the past year as we recorded operating income of approximately $18.6 million in our fiscal year ended October 31, 2021, compared with an operating loss of approximately $21.0 million in our fiscal year ended October 31, 2020. The increase in our operating income resulted largely from increased prices for all our principal products coupled with increased production at both our plants.

Other Income, Net

We had net other income for our fiscal year ended October 31, 2021 of approximately $7.4 million compared to net other income of approximately $463,000 for our fiscal year ended October 31, 2020. We had more other income during fiscal year 2021 compared to fiscal year 2020 due in part to an increase in investment income during the 2021 fiscal year, the PPP loan forgiveness income recognized during fiscal year 2021, and the recognition of the MVCPLA patronage capital credit income.

Changes in Financial Condition at October 31, 2021 and 2020

The following table highlights the changes in our financial condition at October 31, 2021 compared to October 31, 2020 (amounts in thousands):

	October 31, 2021	October 31, 2020
Current Assets	$ 64,814	$ 31,715
Total Assets	$ 145,137	$ 116,198
Current Liabilities	$ 30,024	$ 31,252
Long-Term Debt, less current portion	$ 27,621	$ 5,876
Operating lease, long-term liabilities	$ 12,102	$ 15,755
Other Long-Term Liabilities	$ 1,468	$ 1,422
Members' Equity attributable to Granite Falls Energy, LLC	$ 73,922	$ 52,112
Non-controlling Interest	$ —	$ 9,780

Total assets increased by approximately $28.9 million and current assets increased by approximately $33.1 million at October 31, 2021 compared to October 31, 2020. The increase in total assets was primarily due to an increase in cash, accounts receivable, and inventory in the 2021 period.

Total current liabilities decreased by approximately $1.2 million at October 31, 2021 compared to October 31, 2020. This decrease was mainly due to a decrease in current maturities of long-term debt, which occurred because certain HLBE debt was classified as current as of October 31, 2020, due to loan covenant violations, was reclassified as long-term debt as of October 31, 2021. The decrease in current maturities of long-term debt was partially offset by an increase in accounts payable.

Long-term debt, less current portion, totaled approximately $27.6 million at October 31, 2021, which is approximately $21.7 million greater than our long-term debt, less current portion, at October 31, 2020. The increase is primarily due to the execution of the 2021 Credit Facility, which provided loans to finance the acquisition of HLBE's non-controlling interest and to fund continued operations.

Members' equity attributable to Granite Falls Energy, LLC at October 31, 2021 increased by approximately $21.8 million compared to October 31, 2020. The increase was due primarily to the net income attributable to Granite Falls Energy, LLC for the 2021 fiscal year.

There was no non-controlling interest at October 31, 2021, due to the Merger, in which GFE acquired HLBE's remaining approximately 49.3% non-controlling interest.

Liquidity and Capital Resources

Our principal sources of liquidity consist of cash provided by operations, cash on hand, and available borrowings under our credit facility with AgCountry. Our principal uses of cash are to purchase raw materials necessary to operate the ethanol plants, capital expenditures to maintain and upgrade our plants, to make debt service payments, and to make distribution payments to our members.

We do not currently anticipate any significant purchases of property and equipment that would require us to secure additional capital in the next twelve months. For our 2022 fiscal year, we anticipate completion of several small capital projects to maintain current plant infrastructure and improve operating efficiency. We expect to have sufficient cash generated by continuing operations and availability on our credit facilities and other loans to fund our operations and complete our capital expenditures during our 2022 fiscal year. However, should unfavorable operating conditions occur in the ethanol industry that prevent us from profitably operating our plants, we may need to seek additional debt or equity funding or idle ethanol production.

Management continues to evaluate conditions in the ethanol industry and explore opportunities to improve the efficiency and profitability of our operations which may require additional capital to supplement cash generated from operations and our current debt.

Year Ended Compared October 31, 2021 to Year Ended October 31, 2020

The following table summarizes cash flows for the fiscal years ended October 31 (amounts in thousands):

	2021		2020	
Net cash provided by (used in) operating activities	$	19,867	$	(3,647)
Net cash used in investing activities	$	(4,258)	$	(5,826)
Net cash provided by financing activities	$	1,748	$	9,479
Net increase in cash, cash equivalents and restricted cash	$	17,357	$	6

Operating Cash Flows

During the fiscal year ended October 31, 2021, net cash provided by operating activities increased by approximately $20.6 million compared to the fiscal year ended October 31, 2020. This increase was due primarily to an approximately $46.6 million increase in net income, which was partially offset an approximately $12.7 million decrease in accounts receivable, approximately $7.0 million decrease in inventory, and an approximately $6.9 million decrease in commodity derivative instruments.

Investing Cash Flows

Cash used in investing activities was approximately $1.6 million less during fiscal year 2021 as compared to fiscal year 2020. During fiscal year 2021, we used approximately $4.3 million of cash related capital expenditures at the GFE and HLBE plants. Comparatively, during fiscal year 2020, we used approximately $5.8 million for capital expenditures at the GFE and HLBE plants.

Financing Cash Flows

We were provided with approximately $1.7 million by financing activities during fiscal year 2021, compared to being provided with approximately $9.5 million by financing activities during fiscal year 2020.

The decrease was primarily attributable to the fact that we used approximately $14.0 million to acquire the non-controlling interest in fiscal year 2021, compared with using approximately $2.0 million to acquired non-controlling interest in fiscal year 2020. Additionally, in fiscal year 2021, we had proceeds on long-term debt of approximately $36.2 million and made payments on long-term debt of approximately $21.0 million, as compared with fiscal year 2020, when we had proceeds on long-term debt of approximately $66.3 million and made payments of long-term debt of approximately $56.8 million.

Credit Arrangements

On September 27, 2021, GFE finalized loan documents for an amended credit facility (the "2021 Credit Facility") with AgCountry. CoBank serves as AgCountry's administrative agent for the 2021 Credit Facility. We entered into the 2021 Credit Facility to finance the acquisition of HLBE's non-controlling interest and consolidate certain debts of GFE and HLBE. The loan documents include an Amended and Restated Credit Agreement (the "Credit Agreement"), which amends and replaces the Company's credit agreement with AgCountry dated September 27, 2018.

As of October 31, 2021, GFE had indebtedness consisting of the following loans and agreements: the Credit Agreement, a $20 million revolving credit promissory note, a $500,000 amended and restated letter of credit promissory note, a $20 million amended and restated revolving term promissory note, a $25 million single advance term promissory note, a $2.4 million single advance term promissory note, and the Project Hawkeye credit facility. During the fiscal year 2021, two SBA Paycheck Protection Program loans to HLBE and two SBA Paycheck Protection Program loans to GFE were forgiven in full.

Additional information regarding our credit arrangements is available in **Part II - Item 8. Financial Statements, Note 10 - DEBT FACILITIES, and Note 16 COMMITMENTS AND CONTINGENCIES**.

Off-Balance Sheet Arrangements

We currently have no off-balance sheet arrangements.

Critical Accounting Estimates

Management uses estimates and assumptions in preparing our financial statements in accordance with generally accepted accounting principles in the United States of America. These estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. Our significant accounting policies are summarized in **Part II - Item 8. Financial Statements, Note 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

BOULAY

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Governors and Members of
Granite Falls Energy, LLC and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Granite Falls Energy, LLC and Subsidiaries (the Company) as of October 31, 2021 and 2020, and the related consolidated statements of operations, members' equity, and cash flows for each of the years in the two-year period ended October 31, 2021, and the related notes (collectively referred to as the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of October 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the two-year period ended October 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there were no critical audit matters.

Boulay PLLP (PCAOB ID 542)

We have served as the Company's auditor since 2002.

Minneapolis, Minnesota
January 31, 2022

GRANITE FALLS ENERGY, LLC AND SUBSIDIARIES
Consolidated Balance Sheets

ASSETS	October 31, 2021	October 31, 2020
Current Assets		
Cash and cash equivalents	$ 29,295,657	$ 11,423,427
Restricted cash	1,641,123	2,156,694
Accounts receivable	12,028,397	3,386,068
Inventory	20,749,831	13,791,805
Commodity derivative instruments	39,076	56,050
Prepaid expenses and other current assets	1,059,604	901,384
Total current assets	64,813,688	31,715,428
Property and Equipment, net	49,716,246	54,965,983
Investments	14,518,331	9,799,384
Operating lease right of use asset	15,755,395	19,383,654
Other Assets	333,254	333,254
Total Assets	$145,136,914	$116,197,703
LIABILITIES AND MEMBERS' EQUITY		
Current Liabilities		
Checks drawn in excess of bank balances	$ —	$ 692,984
Current maturities of long-term debt	5,046,429	12,954,538
Accounts payable	19,445,954	12,294,097
Commodity derivative instruments	732,801	816,478
Accrued expenses	1,145,326	865,883
Operating lease, current liabilities	3,653,131	3,628,259
Total current liabilities	30,023,641	31,252,239
Long-Term Debt, less current portion	27,621,428	5,876,318
Operating lease, long-term liabilities	12,102,264	15,755,395
Other Long-Term Liabilities	1,467,848	1,421,924
Commitments and Contingencies		
Members' Equity		
Members' equity attributable to Granite Falls Energy, LLC consists of 30,606 units authorized, issued and outstanding at October 31, 2021 and 2020	73,921,733	52,111,525
Non-controlling interest	—	9,780,302
Total members' equity	73,921,733	61,891,827
Total Liabilities and Members' Equity	$145,136,914	$116,197,703

Notes to the Consolidated Financial Statements are an integral part of this Statement.

GRANITE FALLS ENERGY, LLC AND SUBSIDIARIES
Consolidated Statements of Operations

	Fiscal Year Ended October 31,	
	2021	2020
Revenues	$ 309,615,376	$ 164,953,841
Cost of Goods Sold	282,847,152	176,031,094
Gross Profit (Loss)	26,768,224	(11,077,253)
Operating Expenses	8,127,172	8,580,559
Goodwill Impairment	—	1,372,473
Operating Income (Loss)	18,641,052	(21,030,285)
Other Income (Expense)		
Other income, net	2,911,096	497,272
Interest income	5,456	45,991
Interest expense	(802,340)	(552,500)
Investment income	2,091,952	471,800
Patronage investment - correction of error	3,182,690	—
Total other income, net	7,388,854	462,563
Net Income (Loss)	$ 26,029,906	$ (20,567,722)
Less: Net (Income) Loss Attributable to Non-controlling Interest	(2,372,825)	7,289,429
Net Income (Loss) Attributable to Granite Falls Energy, LLC	$ 23,657,081	$ (13,278,293)
Weighted Average Units Outstanding - Basic and Diluted	30,606	30,606
Amounts attributable to Granite Falls Energy, LLC:		
Net Income (Loss) Per Unit - Basic and Diluted	$ 772.96	$ (433.85)

Notes to the Consolidated Financial Statements are an integral part of this Statement.

GRANITE FALLS ENERGY, LLC AND SUBSIDIARIES
Consolidated Statement of Changes in Members' Equity

	Members' Equity attributable to Granite Falls Energy, LLC	Non-controlling Interest	Total Members' Equity
Balance - October 31, 2019	$ 65,468,635	$ 19,215,914	$ 84,684,549
Acquisition of non-controlling interest	(78,817)	(2,146,183)	(2,225,000)
Net loss attributable to non-controlling interest	—	(7,289,429)	(7,289,429)
Net loss attributable to Granite Falls Energy, LLC	(13,278,293)	—	(13,278,293)
Balance - October 31, 2020	$ 52,111,525	$ 9,780,302	$ 61,891,827
Acquisition of noncontrolling interest	(1,846,873)	(12,153,127)	(14,000,000)
Net income attributable to non-controlling interest	—	2,372,825	2,372,825
Net income attributable to Granite Falls Energy, LLC	23,657,081	—	23,657,081
Balance - October 31, 2021	$ 73,921,733	$ —	$ 73,921,733

Notes to the Consolidated Financial Statements are an integral part of this Statement.

GRANITE FALLS ENERGY, LLC AND SUBSIDIARIES
Consolidated Statements of Cash Flows

	Fiscal Year Ended October 31,	
	2021	2020
Cash Flows from Operating Activities		
Net income (loss)	$ 26,029,906	$ (20,567,722)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operations:		
Depreciation and amortization	7,396,463	9,310,775
Paycheck Protection Program loan forgiveness income	(2,604,185)	—
Change in fair value of derivative instruments	7,962,719	2,719,697
(Gain) loss on equity method investments	(2,091,952)	(471,800)
Patronage investment income - correction of error	(3,182,690)	—
Return on investment	282,902	—
Patronage investment redemption	272,793	—
(Gain) loss on disposal of assets	21,728	1,833,928
Goodwill impairment	—	1,372,473
Changes in operating assets and liabilities:		
Commodity derivative instruments	(8,029,422)	(1,136,171)
Accounts receivable	(8,642,329)	4,041,827
Inventory	(6,958,026)	11,220
Prepaid expenses and other current assets	(158,220)	(2,436)
Accounts payable	9,241,560	(889,813)
Accrued expenses	279,443	85,088
Accrued railcar rehabilitation costs	45,924	45,924
Net Cash Provided By (Used In) Operating Activities	19,866,614	(3,647,010)
Cash Flows from Investing Activities		
Payments for capital expenditures	(4,258,157)	(5,826,105)
Net Cash Used In Investing Activities	(4,258,157)	(5,826,105)
Cash Flows from Financing Activities		
Checks drawn in excess of bank balance	(692,984)	692,984
Proceeds from Paycheck Protection Program loans	1,299,593	1,299,593
Proceeds from long-term debt	36,157,195	66,305,585
Payments on long-term debt	(21,015,602)	(56,819,216)
Acquisition of non-controlling interest	(14,000,000)	(2,000,000)
Net Cash Provided By Financing Activities	1,748,202	9,478,946
Net Increase in Cash, Cash Equivalents and Restricted Cash	17,356,659	5,831
Cash, Cash Equivalents and Restricted Cash - Beginning of Period	13,580,121	13,574,290
Cash, Cash Equivalents and Restricted Cash - End of Period	$ 30,936,780	$ 13,580,121
Reconciliation of Cash, Cash Equivalents and Restricted Cash		
Cash and Cash Equivalents - Balance Sheet	$ 29,295,657	$ 11,423,427
Restricted Cash - Balance Sheet	1,641,123	2,156,694
Cash, Cash Equivalents and Restricted Cash	$ 30,936,780	$ 13,580,121
Supplemental Cash Flow Information		
Cash paid during the period for:		
Interest expense	$ 799,834	$ 463,861
Supplemental Disclosure of Non-Cash Investing and Financing Activities		

Capital expenditures and construction in process included in accounts payable	$ 50,922	$ 2,140,625

Notes to the Consolidated Financial Statements are an integral part of this Statement.

GRANITE FALLS ENERGY, LLC AND SUBSIDIARIES
Notes to Consolidated Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

Granite Falls Energy, LLC ("GFE") is a Minnesota limited liability company currently producing fuel-grade ethanol, distillers' grains, and crude corn oil near Granite Falls, Minnesota and sells these products, pursuant to marketing agreements, throughout the continental U.S. and on the international market. GFE's plant has an approximate annual production capacity of 60 million gallons, but is currently permitted to produce up to 70 million gallons of undenatured ethanol on a twelve-month rolling sum basis.

Additionally, as of October 31, 2021, GFE has 100% ownership in Heron Lake BioEnergy, LLC ("HLBE"). HLBE is a Minnesota limited liability company currently producing fuel-grade ethanol, distillers' grains, and crude corn oil near Heron Lake, Minnesota and sells these products, pursuant to marketing agreements, throughout the continental United States. HLBE's plant has an approximate annual production capacity of 65 million gallons, but is currently permitted to produce up to 72.3 million gallons per year of undenatured ethanol on a twelve-month rolling sum basis. Additionally, HLBE, through a wholly owned subsidiary, operates a natural gas pipeline that provides natural gas to the HLBE's ethanol production facility and other customers.

Principles of Consolidation

The accompanying consolidated financial statements consolidate the operating results and financial position of GFE, and its approximately 50.7% owned subsidiary, HLBE (through GFE's 100% ownership of Project Viking, L.L.C.) through September 29, 2021, when the remaining non-controlling interest was acquired. Given GFE's control over the operations of HLBE and its majority voting interest, GFE consolidates the financial statements of HLBE with its consolidated financial statements. The remaining approximately 49.3% ownership of HLBE is included in the consolidated financial statements as a non-controlling interest through September 2021 when the remaining non-controlling interest was acquired through the merger. HLBE is also the sole owner Agrinatural Gas, LLC ("Agrinatural"), through its wholly owned subsidiary, HLBE Pipeline Company, LLC. Given HLBE's control over the operations of Agrinatural and its majority voting interest, HLBE consolidates the financial statements of Agrinatural with its consolidated financial statements, with the equity and earnings (loss) attributed to the remaining 27% non-controlling interest identified separately in the accompanying consolidated balance sheets and statements of operations through December 11, 2019 when the remaining non-controlling interest was acquired. All significant intercompany balances and transactions are eliminated in consolidation.

On September 29, 2021, GFE acquired the remaining non-controlling interest in HLBE for cash consideration of $14,000,000. As of October 31, 2021, GFE has 100% ownership of HLBE. When we use the terms "Granite Falls Energy" or "GFE" or similar words in this Annual Report on Form 10-K, unless the context otherwise requires, we are referring to Granite Falls Energy, LLC and our operations at our ethanol production facility located in Granite Falls, Minnesota. When we use the terms "Heron Lake BioEnergy", "Heron Lake", or "HLBE" or similar words, unless the context otherwise requires, we are referring to Heron Lake BioEnergy, LLC and its wholly owned subsidiary, HLBE Pipeline Company, LLC, through which, HLBE holds a 100% interest in Agrinatural Gas, LLC. When we use the terms the "Company," "we," "us," "our" or similar words in this Annual Report on Form 10-K, unless the context otherwise requires, we are referring to Granite Falls Energy, LLC and our consolidated wholly- and majority-owned subsidiaries.

Fiscal Reporting Period

The Company's fiscal year end for reporting financial operations is October 31 for financial reporting purposes.

Accounting Estimates

Management uses estimates and assumptions in preparing these consolidated financial statements in accordance with generally accepted accounting principles in the United States of America. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses. The Company uses estimates and assumptions in accounting for the following significant matters, among others:

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economic lives of property and equipment, valuation of commodity derivatives, inventory, and inventory purchase and sale commitments, evaluation of rail car rehabilitation costs, and the assumptions used in the impairment analysis of long-lived assets and evaluation of going concern. Actual results may differ from previously estimated amounts, and such differences may be material to our consolidated financial statements. The Company periodically reviews estimates and assumptions, and the effects of revisions are reflected in the period in which the revision is made.

Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. Our contracts primarily consist of agreements with marketing companies and other customers as described below. Our performance obligations consist of the delivery of ethanol, distillers' grains, corn oil, and natural gas to our customers. Our customers primarily consist of two distinct marketing companies as described below. The consideration we receive for these products reflects an amount that the Company expects to be entitled to in exchange for those products, based on current observable market prices at the Chicago Mercantile Exchange, generally, and adjusted for local market differentials. Our contracts have specific delivery modes, rail or truck, and dates. Revenue is recognized when the Company delivers the products to the mode of transportation specified in the contract, at the transaction price established in the contract, net of commissions, fees, and freight. We sell each of the products via different marketing channels as described below.

- Ethanol. The Company sells its ethanol via a marketing agreement with Eco-Energy, Inc. Eco-Energy sells one hundred percent of the Company's ethanol production based on agreements with end users at prices agreed upon mutually among the end user, Eco-Energy and the Company. Our performance obligations consist of our obligation to deliver ethanol to our customers. Our customer contracts consist of orders received from the customer pursuant to a marketing agreement. The marketing agreement calls for control and title to pass to Eco-Energy once a rail car is released to the railroad or a truck is released from the Company's scales. Revenue is recognized then at the price in the agreement with the end user, net of commissions, freight, and fees.

- Distillers grains. GFE and HLBE engage another third-party marketing company, RPMG, Inc. ("RPMG") and Gavilon Ingredients, Inc. ("Gavilon"), respectively, to sell one hundred percent of the distillers grains it produces at the plant. RPMG and Gavilon take title and control once a rail car is released to the railroad or a truck is released from the Company's scales. Prices are agreed upon between RPMG, Gavilon and the Company. Our performance obligations consist of our obligation to deliver corn oil to our customers. Our customer contracts consist of orders received from the customer pursuant to a marketing agreement. Revenue is recognized net of commissions, freight and fees.

- Distillers corn oil (corn oil). The Company sells one hundred percent of its corn oil production to RPMG, Inc. The process for selling corn oil is the same as our distillers' grains. RPMG takes title and control once a rail car is released to the railroad or a truck is released from the Company's scales. Prices are agreed upon between RPMG and the Company. Our performance obligations consist of our obligation to deliver corn oil to our customers. Our customer contracts consist of orders received from the customer pursuant to a marketing agreement. Revenue is recognized net of commissions, freight and fees.

- Natural gas. The Company sells natural gas through its wholly-owned subsidiary Agrinatural Gas, LLC. Agrinatural owns approximately 190 miles of natural gas pipeline and provides natural gas to HLBE's ethanol plant and other commercial, agricultural and residential customers through a connection with the natural gas pipeline facilities of Northern Border Pipeline Company. Agrinatural's revenues are generated through natural gas distribution fees and sales. HLBE is its largest customer by volume and revenue.

Cost of Goods Sold

The primary components of cost of goods sold for the production of ethanol and related co-products are corn, energy, raw materials, overhead, depreciation, rail car rehabilitation costs, and direct labor.

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Operating Expenses

The primary components of operating expenses are salaries and expenses for administrative employees, professional fees, board of governor expenses, loss on disposal of assets and property taxes.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. The Company maintains its accounts at multiple financial institutions, of which one is a member of the Company. At times throughout the year, the Company's cash balances may exceed amounts insured by the Federal Deposit Insurance Corporation. The Company does not believe it is exposed to any significant credit risk on its cash balances.

Restricted Cash

The Company is periodically required to maintain at its broker cash balances related to open commodity derivative instrument positions as discussed in Note 8.

Accounts Receivable

Credit terms are extended to customers in the normal course of business. The Company performs ongoing credit evaluations of its customers' financial condition and, generally, requires no collateral.

Accounts receivable are recorded at their estimated net realizable value. Accounts are considered past due if payment is not made on a timely basis in accordance with the Company's credit terms. Accounts considered uncollectible are written off. The Company follows a policy of providing an allowance for doubtful accounts; however, based on historical experience, and its evaluation of the current status of receivables, the Company is of the belief that such accounts will be collectible in all material respects and thus an allowance was not necessary at October 31, 2021 or 2020. It is at least possible this estimate will change in the future.

Inventory

Inventory is stated at the lower of cost or net realizable value. Cost for all inventories is determined using the first in first out method. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Inventory consists of raw materials, work in process, finished goods, and supplies. Corn is the primary raw material along with other raw materials. Finished goods consist of ethanol, distillers' grains, and corn oil.

Derivative Instruments

From time to time, the Company enters into derivative transactions to hedge its exposures to commodity price fluctuations. The Company is required to record these derivatives in the balance sheets at fair value.

In order for a derivative to qualify as a hedge, specific criteria must be met and appropriate documentation maintained. Gains and losses from derivatives that do not qualify as hedges, or are undesignated, must be recognized immediately in earnings. If the derivative does qualify as a hedge, depending on the nature of the hedge, changes in the fair value of the derivative will be either offset against the change in fair value of the hedged assets, liabilities, or firm commitments through earnings or recognized in other comprehensive income until the hedged item is recognized in earnings. Changes in the fair value of undesignated derivatives are recorded in earnings.

Additionally, the Company is required to evaluate its contracts to determine whether the contracts are derivatives. Certain contracts that literally meet the definition of a derivative may be exempted as "normal purchases or normal sales". Normal purchases and normal sales are contracts that provide for the purchase or sale of something other than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the normal course of business.

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Contracts that meet the requirements of normal purchases or normal sales are documented as normal and exempted from accounting and reporting requirements, and therefore, are not marked to market in our consolidated financial statements.

In order to reduce the risks caused by market fluctuations, the Company occasionally hedges its anticipated corn, natural gas, and denaturant purchases and ethanol sales by entering into options and futures contracts. These contracts are used with the intention to fix the purchase price of anticipated requirements for corn in the Company's ethanol production activities and the related sales price of ethanol. The fair value of these contracts is based on quoted prices in active exchange-traded or over-the-counter market conditions. Although the Company believes its commodity derivative positions are economic hedges, none have been formally designated as a hedge for accounting purposes and derivative positions are recorded on the balance sheet at their fair market value, with changes in fair value recognized in current period earnings or losses. The Company does not enter into financial instruments for trading or speculative purposes.

The Company has adopted authoritative guidance related to "Derivatives and Hedging," and has included the required enhanced quantitative and qualitative disclosure about objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses from derivative instruments, and disclosures about credit-risk-related contingent features in derivative agreements. See further discussion in Note 8.

Property and Equipment

Property and equipment are stated at cost. Depreciation is provided over the following estimated useful lives by use of the straight-line method.

Asset Description	Years
Land improvements	5-20 years
Railroad improvements	5-20 years
Process equipment and tanks	5-40 years
Administration building	10-40 years
Office equipment	3-10 years
Rolling stock	5-10 years

Maintenance and repairs are expensed as incurred; major improvements and betterments are capitalized. Construction in progress expenditures will be depreciated using the straight-line method over their estimated useful lives once the assets are placed into service.

Long-Lived Assets

Long-lived assets, such as property and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When determining impairment losses, a long-lived asset should be grouped with other assets or liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets or liabilities. If circumstances require a long-lived asset be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by an asset to the carrying value of the asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, impairment is recognized to the extent that the carrying value exceeds its fair value. Fair value is determined through various valuation techniques including, but not limited to, discounted cash flow models, quoted market values and third-party independent appraisals, as considered necessary. No impairment expense was recorded during fiscal 2021 and 2020.

Investments

GFE owns 1,600 capital units of Ringneck Energy & Feed, LLC ("Ringneck") at a price of $5,000 per unit for a total of $8,000,000. Ringneck is a South Dakota limited liability company that constructed an 80 million gallon per year ethanol manufacturing plant outside of Onida, South Dakota in Sully County. GFE's investment is sufficient to secure the Company

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the right to appoint one director to the board of directors of Ringneck. GFE has appointed Jeffrey Oestmann, its CEO, to serve as its appointed director.

On June 29, 2018, GFE executed a subscription agreement for investment in Harvestone Group, LLC ("Harvestone"), a Delaware limited liability company, and a Joinder to the Operating Agreement of Harvestone. In connection with the execution of the subscription agreement and joinder, GFE made a capital contribution of $2,000,000 in exchange for twenty (20) preferred membership units. Harvestone is an ethanol marketing, logistics, and trading company headquartered in Franklin, Tennessee. Harvestone is owned by several other ethanol producers and other private investors, and its primary business is marketing and trading for member and non-member ethanol producers. The marketing and trading commenced in January 2019.

On November 15, 2021, Harvestone redeemed GFE's 20 units for $3,000,000. As a result of the Harvestone redemption, GFE no longer owns any Harvestone units and has ceased to be a member of Harvestone. As a result of the ongoing negotiations as of fiscal year end, the Harvestone investment was impaired to $3,000,000, and the impairment of approximately $300,000 was recorded within investment income on the consolidated statement of operations, at October 31, 2021. The Company received and recorded the $3,000,000 redemption in November 2021.

The investments are accounted for by the equity method, under which the Company's share of the net income of the investee is recognized as income in the Company's Consolidated Statements of Operations and added to the investment account, and distributions received from the affiliates are treated as a reduction of the investment.

Summarized financial information of Ringneck, which was a significant investment as of October 31, 2020, is as follows:

		2020
Current Assets	$	19,510,000
Total Assets		149,434,000
Current Liabilities		16,206,000
Total Liabilities		69,439,000
Members' Equity		79,995,000
		12 Months Ended October 31, 2020
Revenue	$	114,768,000
Gross Profit		6,325,000
Operating Profit		7,758,000
Net Profit		424,000

Patronage Investment

Patronage investment consists of the patron equities of GFE's electricity supplier. Non-cash patronage dividends are recognized when declared/communicated to GFE. Cash redemptions are recorded as a reduction of the investment. This investment is carried at the lower of cost or fair value. See **Note 2 - PATRONAGE INVESTMENT AND CORRECTION OF ERROR**.

Fair Value of Financial Instruments

The Company's accounting for fair value measurements of assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring or nonrecurring basis adhere to the Financial Accounting Standards Board ("FASB") fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The Company has adopted guidance for fair value measurement related to nonfinancial items that are recognized and disclosed at fair value in the financial statements on a nonrecurring basis. The guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements).

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The three levels of the fair value hierarchy are as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.
- Level 2 inputs include:
    1. Quoted prices in active markets for similar assets or liabilities.
    2. Quoted prices in markets that are observable for the asset or liability either directly or indirectly, for substantially the full term of the asset or liability.
    3. Inputs that derived primarily from or corroborated by observable market date by correlation or other means.
- Level 3 inputs are unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which a fair measurement in its entirety falls is based on the lowest level input that is significant to the fair value measurement in its entirety.

Except for those assets and liabilities which are required by authoritative accounting guidance to be recorded at fair value, the Company has elected not to record any other assets or liabilities at fair value. Except for the impairment of the Harvestone investment to fair value, no events occurred during the fiscal years ended October 31, 2021 or 2020 that required adjustment to the recognized balances of assets or liabilities, which are recorded at fair value on a nonrecurring basis.

The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair value due to the short maturity of these instruments. The Company obtains fair value measurements from an independent pricing service for corn derivative contracts. The fair value measurements consider observable data that may include dealer quotes and live trading levels from the Chicago Board of Trade and New York Mercantile Exchange markets. The fair value of the long-term debt is estimated based on anticipated interest rates which management believes would currently be available to the Company for similar issues of debt, taking into account the current credit risk of the Company and other market factors. The Company believes the carrying value of the debt instruments approximate fair value.

Income Taxes

The Company is treated as a partnership for federal and state income tax purposes, and generally does not incur income taxes. Instead, its earnings and losses are included in the income tax returns of its members. Therefore, no provision or liability for federal or state income taxes has been included in these financial statements. Differences exist between financial statement basis of assets and tax basis of assets and financial statement basis of liabilities and tax basis of liabilities. In addition, the Company uses the alternative depreciation system for tax depreciation instead of the straight-line method that is used for book depreciation, which also causes temporary differences. The Company's tax year end is December 31.

The Company had no significant uncertain tax positions as of October 31, 2021 or 2020 that would require disclosure, primarily due to the partnership tax status. The Company recognizes and measures tax benefits when realization of the benefits is uncertain under a two-step approach. The first step is to determine whether the benefit meets the more-likely-than-not condition for recognition and the second step is to determine the amount to be recognized based on the cumulative probability that exceeds 50%. Primarily due to the Company's tax status as a partnership, the adoption of this guidance had no material impact on the Company's financial condition or results of operations.

The Company files income tax returns in the U.S. federal and Minnesota state jurisdictions. For years before 2018, the Company is no longer subject to U.S. Federal or state income tax examinations.

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Net Income (Loss) per Unit

Basic net income (loss) per unit is computed by dividing net income (loss) by the weighted average number of members' units outstanding during the period. Diluted net income per unit is computed by dividing net income by the weighted average number of members' units and members' unit equivalents outstanding during the period. There were no member unit equivalents outstanding during the periods presented; accordingly, for all periods presented, the calculations of the Company's basic and diluted net income per unit are the same.

Environmental Liabilities

The Company's operations are subject to environmental laws and regulations adopted by various governmental entities in the jurisdiction in which it operates. These laws require the Company to investigate and remediate the effects of the release or disposal of materials at its location. Accordingly, the Company has adopted policies, practices, and procedures in the areas of pollution control, occupational health, and the production, handling, storage, and use of hazardous materials to prevent material environmental or other damage, and to limit the financial liability, which could result from such events. Environmental liabilities are recorded when the liability is probable and the costs can be reasonably estimated. No expense has been recorded for the fiscal years ended October 31, 2021 or 2020.

Reportable Operating Segments

Accounting Standards Codification ("ASC") 280, "Segment Reporting," establishes the standards for reporting information about segments in financial statements. Operating segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision maker in deciding how to allocate resources and in assessing performance. Therefore, in applying the criteria set forth in ASC 280, the Company determined that based on the nature of the products and production process and the expected financial results, the Company's operations at GFE's ethanol plant and HLBE's plant, including the production and sale of ethanol and its co-products, are aggregated into one reporting segment.

Additionally, the Company also realizes relatively immaterial revenue from natural gas pipeline operations at Agrinatural, HLBE's majority owned subsidiary. Before and after accounting for intercompany eliminations, these revenues from Agrinatural's represent less than less than 1% of our consolidated revenues and have little to no impact on the overall performance of the Company. Therefore, the Company does not separately review Agrinatural's revenues, cost of sales or other operating performance information. Rather, the Company reviews Agrinatural's natural gas pipeline financial data on a consolidated basis with the Company's ethanol production operating segment. The Company believes that the presentation of separate operating performance information for Agrinatural's natural gas pipeline operations would not provide meaningful information to a reader of the Company's consolidated financial statements and would not achieve the basic principles and objectives of ASC 280.

2. PATRONAGE INVESTMENT AND CORRECTION OF ERROR

During the fourth quarter of fiscal year 2021, management became aware of an investment related to patronage in the Company's electricity supplier that had not previously been recognized in the consolidated financial statements. The Company recognized the investment during the fourth quarter of fiscal year 2021 whereby approximately $3.2 million of investment income was recognized as a component of other income on the consolidated statement of operations for the fiscal year ended October 31, 2021. Of the approximate $3.2 million of investment income recognized during 2021, approximately $0.4 million related to income earned during fiscal year 2021, approximately $0.4 million related to investment income earned during fiscal year 2020, and the remaining $2.4 million related to fiscal years prior to 2020. The investment balance as of October 31, 2021 was approximately $2.9 million.

3. RISKS AND UNCERTAINTIES

The Company has certain risks and uncertainties that it experiences during volatile market conditions. These volatilities can have a severe impact on operations. The Company's revenues are derived primarily from the sale and distribution of

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ethanol, distillers' grains and corn oil to customers primarily located in the U.S. Corn for the production process is supplied to our plants primarily from local agricultural producers and from purchases on the open market. Ethanol sales typically average 75-90% of total revenues and corn costs typically average 65-85% of cost of goods sold.

The Company's operating and financial performance is largely driven by the prices at which it sells ethanol and the net expense of corn. The price of ethanol is influenced by factors such as supply and demand, the weather, government policies and programs, unleaded gasoline prices and the petroleum markets as a whole. Excess ethanol supply in the market, in particular, puts downward pressure on the price of ethanol. The largest cost of production is corn. The cost of corn is generally impacted by factors such as supply and demand, the weather, government policies and programs, and a risk management program used to protect against the price volatility of these commodities. Market fluctuations in the price of and demand for these products may have a significant adverse effect on the Company's operations, profitability and the availability and adequacy of cash flow to meet the Company's working capital requirements.

4. REVENUE

Revenue by Source

All revenues from contracts with customers under ASC Topic 606 are recognized at a point in time. The following table disaggregates revenue by major source for the fiscal year ended October 31:

	Fiscal Year Ended October 31, 2021	
	Total	
Ethanol	$	240,874,504
Distillers' Grains		49,185,948
Corn Oil		17,147,981
Other		1,221,727
Natural Gas Pipeline		1,185,216
Total Revenues	$	309,615,376
	Fiscal Year Ended October 31, 2020	
	Total	
Ethanol	$	126,605,211
Distillers' Grains		29,672,577
Corn Oil		6,590,481
Other		678,226
Natural Gas Pipeline		1,407,346
Total Revenues	$	**164,953,841**

Payment Terms

The Company has contractual payment terms with each respective marketer that sells ethanol, distillers' grains and corn oil. These terms are 10 calendar days after the transfer of control date. The Company has contractual payment terms with the natural gas customers of 20 days.

Shipping and Handling Costs

Shipping and handling costs related to contracts with customers for sale of goods are accounted for as a fulfillment activity and are included in cost of goods sold. Accordingly, amounts billed to customers for such costs are included as a component of revenue.

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5. FAIR VALUE

The Company follows accounting guidance related to fair value disclosures. For the Company, this guidance applies to certain derivative investments. The authoritative guidance also clarifies the definition of fair value for financial reporting, establishes a framework for measuring fair value and requires additional disclosures about the use of fair measurements.

The following table provides information on those derivative assets and liabilities measured at fair value on a recurring basis at October 31, 2021:

			Fair Value Measurement Using		
Financial Assets:	Carrying Amount in Consolidated Balance Sheet	Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Commodity Derivative instruments - Corn	$ 39,067	$ 39,067	$ 39,067	$ —	$ —
Financial Liabilities:					
Commodity Derivative instruments - Corn	$ 732,801	$732,801	$ 732,801	$ —	$ —
Accounts Payable (1)	$ 923,550	$923,550	$ —	$ 923,550	$ —

The following table provides information on those derivative assets measured at fair value on a recurring basis at October 31, 2020:

			Fair Value Measurement Using		
	Carrying Amount in Consolidated Balance Sheet	Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial Assets:					
Commodity Derivative Instruments - Ethanol	$ 56,050	$ 56,050	$ 56,050	$ —	$ —
Financial Liabilities:					
Commodity Derivative Instruments - Corn	$ 816,478	$816,478	$ 816,478	$ —	$ —
Accounts Payable (1)	$ 772,795	$772,795	$	$ 772,795	

(1) Accounts payable is generally stated at historical amounts with the exception of amounts in this table related to certain delivered inventory for which the payable fluctuates based on the changes in commodity prices. These payables are hybrid financial instruments for which the Company has elected the fair value option.

The Company determines the fair value of commodity derivative instruments by obtaining fair value measurements from an independent pricing service. The fair value measurements consider observable data that may include dealer quotes and live trading levels from the Chicago Board of Trade market and New York Mercantile Exchange.

6. CONCENTRATIONS

Granite Falls Energy

GFE sold all of the ethanol, distillers' grains, and corn oil produced at its plant to two customers under marketing agreements during the fiscal years ended October 31, 2021 and 2020.

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The percentage of GFE's total revenues attributable to each of its two major customers for the fiscal years ended October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	76.7%	77.0%
RPMG, Inc. - Distillers' Grains & Corn Oil	23.3%	23.0%

The percentage of GFE's total accounts receivable attributable to each of its two major customers at October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	82.9%	72.1%
RPMG, Inc. - Distillers' Grains & Corn Oil	15.0%	24.6%

Heron Lake BioEnergy

HLBE sold all of the ethanol, distillers' grains, and corn oil produced at its plant to three customers under marketing agreements during the fiscal years ended October 31, 2021 and 2020.

The percentage of HLBE's total revenues attributable to each of HLBE's two major customers for the fiscal years ended October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	78.7%	76.7%
Gavilon Ingredients, LLC - Distillers' Grains	14.3%	15.9%

The percentage of HLBE's total accounts receivable attributable to each of HLBE's two major customers at October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	66.5%	54.8%
Gavilon Ingredients, LLC - Distillers' Grains	22.2%	20.0%

7. INVENTORY

Inventory consists of the following at October 31:

	October 31, 2021	October 31, 2020
Raw materials	$ 10,742,480	$ 4,893,502
Supplies	3,322,639	3,070,458
Work in process	2,023,966	1,480,871
Finished goods	4,660,746	4,346,974
Totals	$ 20,749,831	$ 13,791,805

The Company performs a lower of cost or net realizable value analysis on inventory to determine if the market values of certain inventories are less than their carrying value, which is attributable primarily to decreases in market prices of corn and ethanol. Based on the lower of cost or net realizable value analysis, the Company recorded a loss on ethanol inventories, as a component of cost of goods sold, of approximately $383,000 for the fiscal year ended October 31, 2020. There were no recorded losses on inventory for the fiscal year ended October 31, 2021.

8. DERIVATIVE INSTRUMENTS

The Company enters into corn, ethanol, and natural gas derivatives in order to protect cash flows from fluctuations caused by volatility in commodity prices for periods up to 24 months. These derivatives are put in place to protect gross profit margins from potentially adverse effects of market and price volatility on ethanol sales and corn purchase commitments

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where the prices are set at a future date. Although these derivative instruments serve the Company's purpose as an economic hedge, they are not designated as effective hedges for accounting purposes. For derivative instruments that are not accounted for as hedges, or for the ineffective portions of qualifying hedges, the change in fair value is recorded through earnings in the period of change.

As of October 31, 2021, the total notional amount of GFE's outstanding corn derivative instruments was approximately 6,385,000 bushels, comprised of long corn futures positions on 2,075,000 bushels that were entered into to hedge forecasted ethanol sales through March 2022, and short corn futures positions on 4,310,000 bushels that were entered into to hedge its forward corn purchase contracts through December 2022. Additionally, there are corn options positions of 140,000 bushels through May 2022. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2021, GFE had approximately $1,365,000 of cash collateral (restricted cash) related to derivatives held by a broker.

As of October 31, 2021, the total notional amount of HLBE's outstanding corn derivative instruments was approximately 2,790,000 bushels, comprised of long corn futures positions on 1,105,000 bushels that were entered into to hedge forecasted ethanol sales through December 2021, and short corn futures positions on 1,685,000 bushels that were entered into to hedge its forward corn purchase contracts through December 2022. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2021, HLBE had approximately $276,000 in cash collateral (restricted cash) related to derivatives held by a broker.

The following tables provide details regarding the Company's derivative instruments at October 31, 2021, none of which were designated as hedging instruments:

	Consolidated Balance Sheet Location	Assets	Liabilities
Corn contracts - GFE	Commodity derivative instruments	$ —	$ 605,813
Corn contracts - HLBE	Commodity derivative instruments	—	126,988
Ethanol contracts - GFE	Commodity derivative instruments	8,813	—
Ethanol contracts - HLBE	Commodity derivative instruments	30,263	—
Totals		$ 39,076	$ 732,801

As of October 31, 2020, the total notional amount of GFE's outstanding corn derivative instruments was approximately 4,275,000 bushels, comprised of long corn futures positions on 760,000 bushels that were entered into to hedge forecasted ethanol sales through March 2021, and short corn futures positions on 3,515,000 bushels that were entered into to hedge forecasted corn purchases through December 2022 and are directly related to corn forward contracts. Additionally, there are corn options positions of 1,920,000 bushels through March 2021. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2020, GFE had approximately $1,643,000 of cash collateral (restricted cash) related to derivatives held by a broker.

As of October 31, 2020, the total notional amount of HLBE's outstanding corn derivative instruments was approximately 2,095,000 bushels, comprised of long corn futures positions on 325,000 bushels that were entered into to hedge forecasted ethanol sales through March 2021, and short corn futures positions on 1,770,000 bushels that were entered into to hedge forecasted corn purchases through July 2022 and are directly related to corn forward contracts. Additionally, there are corn options positions of 1,380,000 bushels through March 2021. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2020, HLBE had approximately $514,000 in cash collateral (restricted cash) related to derivatives held by a broker.

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The following tables provide details regarding the Company's derivative instruments at October 31, 2020, none of which were designated as hedging instruments:

	Consolidated Balance Sheet Location	Assets	Liabilities
Corn contracts - GFE	Commodity derivative instruments	$ —	$ 642,550
Corn contracts - HLBE	Commodity derivative instruments	—	173,928
Ethanol contracts - GFE	Commodity derivative instruments	40,900	—
Ethanol contracts - HLBE	Commodity derivative instruments	15,150	—
Totals		$ 56,050	$ 816,478

The following tables provide details regarding the gains (losses) from Company's derivative instruments in statements of operations, none of which are designated as hedging instruments:

	Consolidated Statement of Operations Location	Fiscal Year Ended October 31, 2021	Fiscal Year Ended October 31, 2020
Corn contracts	Cost of Goods Sold	$ (8,172,806)	$ (2,369,337)
Ethanol contracts	Revenues	210,087	(350,360)
Total loss		$ (7,962,719)	$ (2,719,697)

9. PROPERTY AND EQUIPMENT

A summary of property and equipment is as follows:

	October 31, 2021	October 31, 2020
Land and improvements	$ 13,926,199	$ 13,926,199
Railroad improvements	9,045,112	9,045,112
Process equipment and tanks	139,934,099	134,233,838
Administration building	569,328	569,328
Office equipment	1,083,694	1,083,694
Rolling stock	2,151,700	2,150,700
Construction in progress	1,147,909	4,680,716
	167,858,041	165,689,587
Less: accumulated depreciation	(118,141,795)	(110,723,604)
Net property and equipment	$ 49,716,246	$ 54,965,983

Depreciation expense totaled approximately $7,396,000 and $9,311,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

In July 2020, HLBE experienced significant operational issues with its boiler, which negatively impacted production. HLBE operated with temporary boilers from August 2020 through part of January 2021. HLBE determined that the purchase and installation of a new boiler would be more economical and efficient than attempted repairs to the failing boiler. During fiscal year 2020, HLBE abandoned the failing boiler and recorded a loss on the disposal as a component of operating expenses during the fourth quarter of the fiscal year ended October 31, 2020, totaling approximately $1.8 million.

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10. DEBT FACILITIES

Granite Falls Energy

On September 27, 2021, GFE finalized loan documents for an amended credit facility (the "2021 Credit Facility") with AgCountry Farm Credit Services, PCA, AgCountry Farm Credit Services, FLCA ("AgCountry"). CoBank FCB ("CoBank") serves as AgCountry's administrative agent for the 2021 Credit Facility. The 2021 Credit Facility is intended to finance GFE's acquisition of Heron Lake BioEnergy, LLC ("HLBE") and consolidate certain existing debts of GFE and HLBE. The loan documents include an Amended and Restated Credit Agreement (the "Credit Agreement"), which amends and replaces the Company's credit agreement with AgCountry dated September 27, 2018.

The 2021 Credit Facility contains customary financial and affirmative covenants and negative covenants for loans of this type and size to ethanol companies. Each loan from AgCountry to GFE is subject to the terms of the Credit Agreement. Pursuant to the Credit Agreement, all agreements between GFE and AgCountry and/or CoBank are secured by a first lien on all equity or personal property owned or acquired by GFE. Financial covenants under the Amended Credit Facility include (i) maintenance of working capital of at least $20.0 million, and (ii) maintenance of a debt service coverage ratio of not less than 1.75 to 1.00 at the end of each fiscal year, beginning October 31, 2022.

The 2021 Credit Facility provides for customary events of default which include (subject in certain cases to customary grace and cure periods), among others, the following: nonpayment of principal or interest; breach of covenants or other agreements in the Amended Credit Facility; defaults in failure to pay certain other indebtedness; and certain events of bankruptcy or insolvency. If any event of default occurs, the remaining principal balance and accrued interest on all loans subject to the Amended Credit Facility will become immediately due and payable.

The 2021 Credit Facility includes the following agreements:

$20 million Revolving Credit Promissory Note:

Under the terms of the Revolving Credit Promissory Note, GFE may borrow, repay, and reborrow up to the aggregate principal commitment amount of $20.0 million. Final payment of amounts borrowed under revolving credit promissory note is due October 1, 2022. Interest on the amended revolving term promissory note accrues at a variable weekly rate equal to the One-Month London Interbank Offered Rate ("LIBOR") Index rate plus 3.25% and is payable monthly in arrears, which equated to 3.34% at October 31, 2021. The revolving credit promissory note is also subject to a 0.30% fee on the unused commitment. The purpose of the revolving credit promissory note is to provide for the operating needs of GFE and consolidate a $5 million revolving credit promissory note dated February 4, 2021, between AgCountry and HLBE.

$20 million Amended and Restated Revolving Term Promissory Note:

Under the terms of the Amended and Restated Revolving Term Promissory Note, GFE may borrow, repay, and reborrow up to the aggregate principal commitment amount of $20.0 million. Final payment of amounts borrowed under the note is due October 1, 2026. Subject to GFE's selection, interest on the note accrues at either a variable weekly rate of the LIBOR Index rate plus 3.50%, which equated to 3.59% at October 31, 2021, or an annual fixed rate determined by CoBank. The note is subject to an overadvance fee, an amendment fee, and a 0.50% unused commitment fee. The purposes of the note are to providing working capital to GFE, to finance GFE's acquisition of the non-controlling interest of HLBE, and to terminate and transfer to GFE the existing indebtedness on a $13 million amended and restated revolving term promissory note dated June 11, 2020, between HLBE and AgCountry.

$25 million Single Advance Term Promissory Note:

Under the terms of the $25.0 million Single Advance Term Promissory Note, AgCountry agrees to make a single advance loan to GFE in the amount of $25.0 million for the purpose of financing GFE's acquisition of the non-controlling interest of HLBE and refinancing existing indebtedness. GFE agrees to repay the note in eighteen quarterly installments of $1.125 million, beginning March 2022, plus a final installment of any unpaid balance. Subject to GFE's selection, the amounts

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borrowed bear interest at either a variable weekly rate equal to the LIBOR Index Rate plus 3.50%, which equated to 3.59% at October 31, 2021, or an annual fixed rate set by CoBank, with a minimum period of one year and minimum amount of $100,000.

$2.4 million Single Advance Term Promissory Note:

Under the terms of the $2.4 million Single Advance Term Promissory Note, AgCountry made a single advance loan to GFE in the amount of $2.4 million loan for the purpose of financing GFE's acquisition of the non-controlling interest of HLBE and to terminate and transfer GFE's existing indebtedness pursuant to a HLBE's single advance term promissory note dated June 19, 2020. Amounts borrowed under the note bear interest at a fixed rate of 3.80%. The note is to be repaid in seven semi-annual installments of $300,000, beginning December 2021 and the final installment of the unpaid balance in June 2025. HLBE's single advance term promissory note dated June 19, 2020 provided a commitment of $3.0 million to HLBE for the purpose of constructing a new grain bin and reducing a revolving term promissory note.

Project Hawkeye Loan

On August 2, 2017, GFE entered into a replacement credit facility with Project Hawkeye. The terms of the replacement credit facility allow GFE to borrow up to $7.5 million of variable-rate, amortizing non-recourse debt from Project Hawkeye using the GFE's $7.5 million investment in Ringneck Energy & Feed, LLC ("Ringneck"), as collateral. The Project Hawkeye loan bears interest from date funds are first advanced on the loan through maturity, at a rate per annum equal to the sum of the One Month LIBOR Index Rate plus 3.05% per annum, with an interest rate floor of 3.55%, which equated to 3.55% at October 31, 2021.

The Project Hawkeye loan requires annual interest payments only for the first two years of the loan and monthly principal and interest payments for years three through nine based on a seven-year amortization period. The monthly amortized payments will be re-amortized following any change in interest rate. The entire outstanding principal balance of the loan, plus any accrued and unpaid interest thereon, is due and payable in full on August 2, 2026. GFE is permitted to voluntarily prepay all or any portion of the outstanding balance of this loan at any time without premium or penalty.

Pursuant to a pledge agreement entered into in connection with the Project Hawkeye loan, GFE's obligations are secured by all of its right, title, and interest in its investment in Ringneck, including the 1,500 units subscribed for by GFE. The loan is non-recourse to all of GFE's other assets, meaning that in the event of default, the only remedy available to Project Hawkeye will be to foreclose and seize all of GFE's right, title and interest in its investment in Ringneck.

SBA Paycheck Protection Program Loan

In March 2020, Congress passed the Paycheck Protection Program, authorizing loans to small businesses for use in paying employees that they continue to employ throughout the COVID-19 pandemic and for rent, utilities and interest on mortgages. Loans obtained through the Paycheck Protection Program are eligible to be forgiven as long as the proceeds are used for qualifying purposes and certain other conditions are met. On April 17, 2020, GFE received a loan in the amount of $703,900 through the Paycheck Protection Program. This note was forgiven in full during February 2021. Forgiveness income is recorded as a component of other income on the consolidated statement of operations.

In February 2021, GFE received a second Paycheck Protection Program loan in the amount of $703,900. The loan was forgiven in full during July 2021. Forgiveness income is recorded as a component of other income on the statement of operations.

Heron Lake BioEnergy

SBA Paycheck Protection Program Loan

In March 2020, Congress passed the Paycheck Protection Program, authorizing loans to small businesses for use in paying employees that they continue to employ throughout the COVID-19 pandemic and for rent, utilities and interest on mortgages. Loans obtained through the Paycheck Protection Program are eligible to be forgiven as long as the proceeds

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are used for qualifying purposes and certain other conditions are met. On April 18, 2020, HLBE received a loan in the amount of $595,693 through the Paycheck Protection Program. The loan was forgiven in full during March 2021. Forgiveness income is recorded as a component of other income on the consolidated statement of operations.

In February 2021, HLBE received a second Paycheck Protection Program loan in the amount of $595,693. The loan was forgiven in full during August 2021. Forgiveness income is recorded as a component of other income on the statement of operations.

Long-term debt consists of the following:

	October 31, 2021	October 31, 2020
GRANITE FALLS ENERGY:		
$20 million Revolving Credit Promissory Note, see terms above	$ —	$ —
$20 million Revolving term loan, see terms above	—	—
$25 million Single Advance Term Promissory Note, see terms above	25,000,000	—
$2.4 million Single Advance Term Promissory Note, see terms above	2,400,000	—
Term note payable to Project Hawkeye, see terms above	5,267,857	6,339,286
SBA Paycheck Protection Program loan, see terms above	—	703,900
HERON LAKE BIOENERGY:		
Amended revolving term note payable to lending institution, amended within the 2021 Credit Facility as noted above	—	7,891,426
Single advance term note payable to lending institution, amended within the 2021 Credit Facility as noted above	—	3,000,000
Short term revolving note, see notes above	—	—
Assessment payable as part of water supply agreement, due in semi-annual installments of $189,393 with interest at 6.55%, enforceable by statutory lien, with the final payment paid October 2021. HLBE made deposits for one year's worth of debt service payments of approximately $364,000, which is included with other current assets that are held on deposit to be applied with the final payments of the assessment.	—	300,551
SBA Paycheck Protection Program Loan, see terms above	—	595,693
Totals	32,667,857	18,830,856
Less: amounts due within one year	5,046,429	12,954,538
Net long-term debt	$ 27,621,428	$ 5,876,318

Based on the most recent debt agreements, estimated maturities of long-term debt at October 31, 2021 are as follows:

2022	$ 5,046,429
2023	6,171,429
2024	6,171,429
2025	6,171,429
2026	9,107,141
Total debt	$ 32,667,857

11. MEMBERS' EQUITY

GFE has one class of membership units. The units have no par value and have identical rights, obligations and privileges. Income and losses are allocated to all members based upon their respective percentage of units held. As of October 31, 2021 and 2020, GFE had 30,606 membership units authorized, issued, and outstanding.

On December 22, 2021, the Board of Governors of the Company declared a cash distribution of $330.00 per membership unit to the holders of record of the Company's units at the close of business on December 22, 2021, for a total distribution of $10,099,980. The Company paid the distribution in January 2022.

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12. LEASES

The Company leases rail cars for its facility to transport ethanol and dried distillers' grains to its end customers. Operating lease right of use assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. The Company uses its estimated incremental borrowing rate, unless an implicit rate is readily determinable, as the discount rate for each lease in determining the present value of lease payments. For the twelve months ended October 31, 2021, the Company's weighted average discount rate was 4.87%. Operating lease expense is recognized on a straight-line basis over the lease term.

The Company determines if an arrangement is a lease or contains a lease at inception. The Company's leases have remaining terms of approximately one to six years. For the twelve months ended October 31, 2021, the weighted average remaining lease term was four years.

The Company elected to use a portfolio approach for lease classification, which allows for an entity to group together leases with similar characteristics provided that its application does not create a material difference when compared to accounting for the leases at a contract level. For railcar leases, the Company elected to combine the railcars within each rider and account for each rider as an individual lease.

The following table summarizes the remaining annual maturities of the Company's operating lease liabilities as of October 31, 2021:

2022	$	4,315,800
2023		4,056,600
2024		3,442,200
2025		3,034,200
2026		2,131,650
Thereafter		545,800
Totals		17,526,250
Less: Amount representing interest		1,770,855
Lease liabilities	$	15,755,395

HLBE recorded operating lease costs of approximately $2,666,000 and $2,331,000 in cost of goods sold in the Company's consolidated statement of operations, which approximates the cash paid for the fiscal years ending October 31, 2021 and 2020, respectively.

GFE recorded operating lease costs of approximately $3,324,000 and $3,181,000 in cost of goods sold in the Company's consolidated statement of operations, which approximates the cash paid for the fiscal years ending October 31, 2021 and 2020, respectively.

13. EMPLOYEE BENEFIT PLANS

GFE has a defined contribution plan available to all of its qualified employees. GFE contributes a match of 50% of the participant's salary deferral up to a maximum of 3% of the employee's salary. GFE contributions totaled approximately $74,000 and $76,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

HLBE has a defined contribution plan available to all of its qualified employees. HLBE contributes a match of 50% of the participant's salary deferral up to a maximum of 4% of the employee's salary. HLBE contributions totaled approximately $91,000 and $89,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

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14. INCOME TAXES

The differences between the consolidated financial statement basis and tax basis of assets are estimated as follows:

	October 31, 2021	October 31, 2020
Financial Statement basis of assets	* $145,136,914	$116,197,703
Organization & start-up costs capitalized for tax purposes, net	175,030	12,415
Tax depreciation greater than book depreciation	(58,514,418)	(6,156,300)
Impairment charge	27,844,579	—
Unrealized derivatives gains (losses) of commodity derivative instruments	(39,076)	(40,900)
Capitalized inventory	122,930	35,777
Operating lease right of use assets	(15,755,395)	(10,092,405)
Investment in other partnerships	(7,110,613)	—
Net effect of consolidation of acquired subsidiary	—	(37,161,919)
Income tax basis of assets	$ 91,859,951	$ 62,794,371
*The Financial Statement basis of assets is the total assets of GFE and HLBE. See consolidated balance sheet in financial statements.		
Financial Statement basis of liabilities	$ 71,215,181	$ 54,305,876
Accrued rail car maintenance	(252,797)	(825,000)
Other accruals	(1,467,848)	(122,041)
Operating lease liability	(15,755,395)	(10,092,405)
Net effect of consolidation of acquired subsidiary	—	(10,065,001)
Income tax basis of liabilities	$ 53,739,141	$ 33,201,429

15. RELATED PARTY TRANSACTIONS

GFE Corn Purchases - Members

GFE purchased corn from members of its Board of Governors of approximately $5,824,000 for the fiscal year ended October 31, 2021, of which approximately $233,000 is included in the accounts payable at October 31, 2021 and $3,099,000 for the fiscal year ended October 31, 2020, of which approximately $353,000 is included in accounts payable at October 31, 2020.

HLBE Corn Purchases - Members

Until the date of the completed Merger, HLBE purchased corn from members of its Board of Governors of approximately $19,809,000 in fiscal year 2021, of which none is included in accounts payable at October 31, 2021 and $12,545,000 in fiscal year 2020, of which approximately $171,000 is included in accounts payable at October 31, 2020.

16. COMMITMENTS AND CONTINGENCIES

Corn Purchase Commitments

At October 31, 2021, GFE had cash and basis contracts for forward corn purchase commitments for approximately 4,929,000 bushels for deliveries through December 2022.

At October 31, 2021, HLBE had cash and basis contracts for forward corn purchase commitments for approximately 3,272,000 bushels for deliveries through December 2022.

Given the uncertainty of future ethanol and corn prices, the Company could incur a loss on the outstanding corn purchase contracts in future periods. Management has evaluated these forward contracts using the lower of cost or net realizable value evaluation, similar to the method used on its inventory, and has determined that an impairment loss existed at HLBE of approximately $47,000 at October 31, 2020, and no impairment losses existed at GFE at October 31, 2021 or 2020, or HLBE at October 31, 2021. The impairment expense is recorded as a component of costs of goods sold.

Ethanol Marketing Agreement

GFE currently has an ethanol marketing agreement with Eco-Energy, Inc., an unrelated party ("Eco-Energy"). Pursuant to this marketing agreement, Eco-Energy purchases the entire ethanol output of GFE's ethanol plant and arranges for the transportation of ethanol; however, GFE is responsible for securing all of the rail cars necessary for the transport of ethanol by rail except for 43 rail cars leased to GFE by Eco-Energy under the marketing agreement. GFE pays Eco-Energy a marketing fee per gallon of ethanol sold in consideration of Eco-Energy's services, as well as a fixed lease fee for rail cars leased from Eco-Energy to GFE. Our marketing contracts were amended for an effective date of January 1, 2022, and an expiration date of December 31, 2023. The contracts will automatically renew for an additional two years unless either party gives written 90-day notice. The amendment provides for certain negotiated changes to the marketing fees payable to Eco-Energy by GFE and payment terms based on prevailing market-rate conditions for comparable ethanol marketed services. The changes to the marketing fee and timing of payments by Eco-Energy were negotiated based on prevailing market-rate conditions for comparable ethanol marketing services.

HLBE has an ethanol marketing agreement with Eco-Energy, an unrelated party, for the sale of ethanol ("Eco Agreement"). Under this marketing agreement, Eco-Energy purchases, markets and resells 100% of the ethanol produced at HLBE's ethanol production facility and arranges for the transportation of ethanol. HLBE pays Eco-Energy a marketing fee per gallon of ethanol sold in consideration of Eco-Energy's services, as well as a fixed lease fee for rail cars leased from Eco-Energy to HLBE. The marketing fee was negotiated based on prevailing market-rate conditions for comparable ethanol marketing services. The initial term of the Eco Agreement continued through December 31, 2016, with automatic renewals for additional three terms of three-year periods unless terminated by either party by providing written notice to the other party at least three months prior to the end of the then current term. During the third fiscal quarter of 2016, HLBE amended the Eco Agreement. The term of the Eco Agreement expired on December 31, 2020, with automatic renewals for additional consecutive terms of one year unless either party provides written notice to the other at least 90 days prior to the end of the then-current term. Additionally, the amended Eco Agreement provides for certain negotiated changes to the marketing fees payable to Eco-Energy and payment terms based on prevailing market-rate conditions for comparable ethanol marketing services.

Total ethanol marketing fees and commissions of GFE and HLBE approximated $754,000 and $589,000 for the fiscal years ended October 31, 2021 and 2020, respectively, and are included net within revenues.

Ethanol Contracts

At October 31, 2021, GFE had fixed and basis contracts to sell approximately $19,612,000 of ethanol for various delivery periods through December 2021, which approximates 85% of its anticipated ethanol sales for this that period.

At October 31, 2021, HLBE had fixed and basis contracts to sell approximately $18,711,000 of ethanol for various delivery periods through December 2021, which approximates 78% of its anticipated ethanol sales for this that period.

Distillers Grain Marketing Agreement

GFE has a distillers' grains marketing agreement with RPMG, Inc. ("RPMG"), an unrelated party, for the purpose of marketing and selling all distillers' grains produced by GFE. The contract commenced on February 1, 2011 with an initial term of one year, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party. Distillers' grains commissions to RPMG totaled approximately $277,000 and $255,000 for the fiscal years ended October 31, 2021 and 2020, respectively, and are included net within revenues.

At October 31, 2021, GFE had forward contracts to sell approximately $1,349,000 of distillers' grain for deliveries through November 2021, which approximates 45% of its anticipated distillers' grain sales during that period.

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HLBE has a distillers' grains off-take agreement with Gavilon Ingredients, LLC ("Gavilon"), an unrelated party. Under this agreement, Gavilon purchases all of the distillers' grains produced at HLBE's ethanol plant in exchange for a service fee. The contract commenced on November 1, 2013 with an initial term of six months, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 60 days to the other party. Distillers' grains commissions totaled approximately $326,000 and $187,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

At October 31, 2021, HLBE had forward contracts to sell approximately $1,550,000 of distillers' grains for delivery through December 2021, which approximates 30% of its anticipated distillers' grains sales during that period.

Corn Oil Marketing Agreement

GFE has a corn oil marketing agreement with RPMG, an unrelated party, for the purpose of marketing and selling all corn oil produced by GFE. The contract commenced on April 29, 2010 with an initial term of one year, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party.

HLBE has a corn oil marketing agreement with RPMG, an unrelated party, for the purpose of marketing and selling all corn oil produced by HLBE. The contract commenced on November 1, 2013 with an initial term of one year, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party.

Corn oil commissions of GFE and HLBE totaled approximately $180,000 and $138,000 for the fiscal years ended October 31, 2021 and 2020, respectively, and are included net within revenues.

At October 31, 2021, GFE had forward contracts to sell approximately $1,693,000 of corn oil for delivery through December 2021, which approximates 85% of its anticipated corn oil sales for that period.

At October 31, 2021, HLBE had forward contracts to sell approximately $1,470,000 of corn oil for delivery through December 2021, which approximates 70% of its anticipated corn oil sales for that period.

Contract for Natural Gas Pipeline to Plant

GFE has an agreement with an unrelated company for the construction of and maintenance of 9.5 miles of natural gas pipeline that serves the GFE plant. The agreement requires the Company to receive a minimum of 1,400,000 DT of natural gas annually through the term of the agreement. The Company is charged a fee based on the amount of natural gas delivered through the pipeline.

HLBE has a facilities agreement with Northern Border Pipeline Company which allows us access to an existing interstate natural gas pipeline located approximately 16 miles north from the HLBE plant. Agrinatural was formed to own and operate the pipeline and transports gas to HLBE pursuant to a transportation agreement. HLBE also has a base agreement for the sale and purchase of natural gas with Constellation NewEnergy-Gas Division, LLC ("Constellation"). This agreement runs until March 31, 2022.

Amended and Restated Letter of Credit Promissory Note

Under the terms of the Amended and Restated Letter of Credit Promissory Note, GFE may borrow, repay, and reborrow up to the aggregate principal commitment amount of $500,000 for the purpose of opening letters of credit for its account. Final payment of amounts borrowed under revolving credit promissory note is due December 1, 2023. Amounts borrowed bear interest at the LIBOR Index Rate plus 3.25%, which equated to 3.34% at October 31, 2021. The Amended and Restated Letter of Credit Promissory Note replaces the amended and restated letter of credit promissory note dated September 30, 2020, between GFE and AgCountry.

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Water Agreements

In September 2019, HLBE entered into an industrial water supply development and distribution agreement, effective as of February 1, 2019, with the City of Heron Lake for 10 years. HLBE has the exclusive rights to the first 600 gallons per minute of capacity that is available from the well. In consideration, HLBE will pay flow charges at a rate of $0.60 cents per thousand gallons of water, in addition to a fixed monthly charge of $1,500 per month. The flow charges are placed into a dedicated fund for operation and maintenance of the well, and are capped at $300,000 at the end of each year. HLBE is also responsible for paying 55% of operation and maintenance costs in excess of the $300,000 cap, in the first two years of the agreement. Thereafter, the percentage payable by HLBE is determined based on a two-year average of HLBE's usage compared to the total amount of industrial water supplied to HLBE and a third-party customer of the City of Heron Lake.

Under the previous industrial water supply development and distribution agreement with the City of Heron Lake, HLBE paid one half of the City of Heron Lake's water well bond payments of $735,000, plus a 5% administrative fee, totaling approximately $594,000, and operating costs, relative to HLBE's water usage, plus a 10% profit. HLBE recorded an assessment of approximately $367,000 with long-term debt as described in Note 10. HLBE paid operating and administrative expenses of approximately $12,000 per year.

In May 2006, HLBE entered into a water treatment agreement with the City of Heron Lake and Jackson County for 30 years. HLBE will pay for operating and maintenance costs of the plant in exchange for receiving treated water. In addition, HLBE agreed to an assessment for a portion of the capital costs of the water treatment plant.

HLBE recorded assessments within long-term debt of $500,000 and $3,550,000 in fiscal 2007 and 2006, respectively, as described in Note 10. HLBE paid operating and maintenance expenses of approximately $59,000 and $77,000 in fiscal 2021 and 2020, respectively.

Rail Car Rehabilitation Costs

GFE leases 75 hopper rail cars under a multi-year agreement, which ends November 2025. HLBE leases 50 hopper rail cars under a multi-year agreement which ends in May 2027. Under the agreements, the Company is required to pay to rehabilitate each car for "damage" that is considered to be other than normal wear and tear upon turn in of the car(s) at the termination of the lease. During the fiscal years ended October 31, 2021 and 2020, GFE has recorded a corresponding estimated long-term liability totaling $825,000. During the fiscal years ended October 31, 2021 and 2020, HLBE has recorded a corresponding estimated long-term liability totaling approximately $643,000 and $597,000, respectively. The Company accrues the estimated cost of rail car damages over the term of the leases as the damages are incurred as a component of cost of goods sold.

17. LEGAL PROCEEDINGS

From time to time in the ordinary course of business, the Company may be named as a defendant in legal proceedings related to various issues, including without limitation, workers' compensation claims, tort claims, or contractual disputes. We are not currently a party to any material pending legal proceedings and we are not currently aware of any such proceedings contemplated by governmental authorities.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit pursuant to the Securities Exchange Act of 1934 (the “Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosures.

Our management, including our Chief Executive Officer (the principal executive officer), Jeffrey Oestmann, along with our Chief Financial Officer (the principal financial officer), Stacie Schuler, have reviewed and evaluated the effectiveness of our disclosure controls and procedures as of October 31, 2021. Based upon this review and evaluation, these officers have concluded that our consolidated disclosure controls and procedures are not effective as of October 31, 2021 because of the identification of a material weakness in our internal control over financial reporting, as discussed further below.

(b) Management’s Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a15-(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that:

(i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and governors of the Company; and

(iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision of our Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the criteria set forth in the 2013 Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management has concluded that the Company’s internal control over financial reporting was not effective as of October 31, 2021 due to a material weakness in our controls over patronage investments. Remediation efforts will consist of new policies and procedures to assist management to better understand contractual terms with suppliers and vendors, including an assessment of any potential accounting implications. We will consider this material weakness to be fully remediated once the applicable controls operate for a sufficient period of time and our management has concluded, through testing, that these controls are operating effectively.

An attestation report from our accounting firm on our internal control over financial reporting is not included in this annual report because an attestation report is only required under the regulations of the Securities and Exchange Commission for accelerated filers and large accelerated filers.

(c) Changes in Internal Control Over Financial Reporting

Other than the material weakness and remediation efforts mentioned above, there were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the fourth fiscal quarter ended October 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Pursuant to General Instruction G(3), we omit Part III, Items 10, 11, 12, 13 and 14 and incorporate such items by reference to an amendment to this Annual Report on Form 10-K or to a definitive proxy statement (the "2022 Proxy Statement") to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year covered by this Annual Report (October 31, 2021).

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The Information required by this Item is incorporated by reference to the 2022 Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The Information required by this Item is incorporated by reference to the 2022 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The Information required by this Item is incorporated by reference to the 2022 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The Information required by this Item is incorporated by reference to the 2022 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Information required by this Item is incorporated by reference to the 2022 Proxy Statement.

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

(a) List of Documents Filed as Part of this Report

The following exhibits and financial statements are filed as part of, or are incorporated by reference into, this report:

(1) **Financial Statements**

The financial statements appear beginning at page 38 of this report.

(2) **Financial Statement Schedules**

All supplemental schedules are omitted as the required information is inapplicable or the information is presented in the financial statements or related notes.

(3) **Exhibits**

Exhibit No.	Exhibit	Incorporated by Reference To:
2.1	Plan of Merger between Granite Heron Merger Sub, LLC, and Heron Lake BioEnergy, LLC, dated March 24, 2021	Exhibit 2.1 to the registrant's Form 8-K filed March 25, 2021 (File No. 000-51825)
3.1	Articles of Organization	Exhibit 3.1 to the registrant's Form SB-2 filed with the Commission on August 30, 2002 (File No. 000-51277).
3.2	Amendment of Articles of Organization	Exhibit 3.1 to the registrant's Form 10-QSB filed with the Commission on August 15, 2005 (File No. 000-51277).
3.3	Sixth Amended and Restated Operating Agreement	Exhibit 3.1 to the registrant's Form 8-K filed with the Commission on March 29, 2017 (File No. 000-51277).
4.1	Form of Membership Unit Certificate.	Exhibit 4.1 to the registrant's Pre-Effective Amendment No. 1 to Form SB-2 filed with the Commission on December 20, 2002 (File No. 000-51277).
10.1	Corn Storage and Delivery Agreement and Pre-Closing Memorandum dated October 6, 2003 between the Company and Farmers Cooperative Elevator Company.	Exhibit 10.2 to the registrant's Form 10-QSB filed with the Commission on November 14, 2003 (File No. 000-51277).
10.2	Grain Procurement Agreement with Farmers Cooperative Elevator Company.	Exhibit 10.2 to the registrant's Form 10-QSB filed with the Commission on November 15, 2004 (File No. 000-51277).
10.3	Electric Service Agreement dated August, 2004 with Minnesota Valley Cooperative Light and Power.	Exhibit 10.13 to the registrant's Form 10-KSB filed with the Commission on March 31, 2005 (File No. 000-51277).

10.4	Trinity Rail Proposal for Rail Cars.	Exhibit 10.16 to the registrant's Form 10-KSB filed with the Commission on March 31, 2005 (File No. 000-51277).
10.5	Ethanol Marketing Agreement with Eco-Energy, Inc. dated December 24, 2008. (+)	Exhibit 10.1 to the registrant's Form 10-K filed with the Commission on January 27, 2009 (File No. 000-51277).
10.6	Corn Oil Marketing Agreement between the registrant and Renewable Products Marketing Group, LLC dated April 29, 2010. (+)	Exhibit 10.1 to the registrant's Form 10-Q filed with the Commission on June 14, 2010 (File No. 000-51277).

10.7	Distillers' Grains Marketing Agreement between RPMG, Inc. and Granite Falls Energy, LLC dated December 10, 2010. (+)	Exhibit 10.31 to the registrant's Form 10-K filed with the Commission on January 26, 2011 (File No. 000-51277).
10.8	Insider Trading Policy of Granite Falls Energy, LLC dated February 17, 2011.	Exhibit 10.1 to the registrant's Form 10-Q filed with the Commission on March 16, 2011 (File No. 000-51277).
10.9	Ethanol Marketing Agreement Amendment No. 2 between Eco-Energy, Inc. and Granite Falls Energy, LLC dated August 30, 2011. (+)	Exhibit 99.1 to the registrant's Form 8-K filed with the Commission on September 1, 2011 (File No. 000-51277).
10.10	Master Loan Agreement between United FCS, PCA and Granite Falls Energy, LLC dated August 22, 2012.	Exhibit 10.14 to the registrant's Form 10-K filed with the Commission on January 29, 2013 (File No. 000-51277).
10.11	Subscription Supplement Agreement dated July 31, 2013, by and among Heron Lake BioEnergy, LLC, Granite Falls Energy, LLC and Project Viking, L.L.C.	Exhibit 10.3 to the registrant's Form 10-Q filed with the Commission on September 16, 2013 (File No. 000-51277).
10.12	Management Services Agreement effective as of July 31, 2013 between Granite Falls Energy, LLC and Heron Lake BioEnergy, LLC.	Exhibit 10.4 to the registrant's Form 10-Q filed with the Commission on September 16, 2013 (File No. 000-51277).
10.13	Revolving Credit Supplement dated July 26, 2013 between United FCS, PCA and Granite Falls Energy, LLC.	Exhibit 10.9 to the registrant's Form 10-Q filed with the Commission on September 16, 2013 (File No. 000-51277).
10.14	First Amended and Restated Articles of Organization of Heron Lake BioEnergy, LLC	Exhibit 3.1 to HLBE's Form 8-K dated September 2, 2011 (File No. 000-51825).
10.15	Member Control Agreement of Heron Lake BioEnergy, LLC, as amended through August 30, 2011.	Exhibit 3.2 to HLBE's Form 8-K dated September 2, 2011 (File No. 000-51825).
10.16	Industrial Water Supply Development and Distribution Agreement dated October 27, 2003 among Heron Lake BioEnergy, LLC (f/k/a Generation II Ethanol, LLC), City of Heron Lake, Jackson County, and Minnesota Soybean Processors.	Exhibit 10.10 to HLBE's Registration Statement on Form 10 filed on August 22, 2008 (the "2008 Registration Statement") (File No. 000-51825).
10.17	Industrial Water Supply Treatment Agreement dated May 23, 2006 among Heron Lake BioEnergy, LLC, City of Heron Lake and County of Jackson.	Exhibit 10.11 to HLBE's 2008 Registration Statement (File No. 000-51825).
10.18	Secured Promissory Note issued December 28, 2007 by Heron Lake BioEnergy, LLC as borrower to Federated Rural Electric Association as lender in principal amount of $600,000.	Exhibit 10.20 to HLBE's 2008 Registration Statement (File No. 000-51825).
10.19	Electric Service Agreement dated October 17, 2007 by and between Interstate Power and Light Company and Heron Lake BioEnergy, LLC.	Exhibit 10.22 to HLBE's 2008 Registration Statement (File No. 000-51825).

10.20	Corn Oil Marketing Agreement dated September 4, 2013 by and among Heron Lake BioEnergy, LLC and RPMG, Inc. (+)	Exhibit 10.76 to HLBE's Form 10-K/A for the year ended October 31, 2013 (File No. 000-51825).
10.21	Ethanol Marketing Agreement dated September 17, 2013 by and among Heron Lake BioEnergy, LLC and Eco-Energy, LLC. (+)	Exhibit 10.77 to HLBE's Form 10-K for the year ended October 31, 2013 (File No. 000-51825).

10.22	Distillers' grains Off-Take Agreement dated September 24, 2013 by and among Heron Lake BioEnergy, LLC and Gavilon Ingredients, LLC. (+)	Exhibit 10.78 to HLBE's Form 10-K/A for the year ended October 31, 2013 (File No. 000-51825).
10.23	Amendment No. 3 Ethanol Marketing Agreement dated September 17, 2013 by and between Eco-Energy, LLC and Granite Falls Energy, LLC. (+)	Exhibit 10.40 to the registrant's Form 10-K filed with the Commission on January 29, 2014 (File No. 000-51277).
10.24	First Amendment to the Member Control Agreement of Heron Lake BioEnergy, LLC, as amended through August 30, 2011.	Exhibit 3.1 to HLBE's Form 8-K dated March 19, 2014 (File No. 000-51825).
10.25	Master Loan Agreement dated July 29, 2014 by and between AgStar Financial Services, FLCA and Heron Lake BioEnergy, LLC	Exhibit 10.6 to HLBE's Form 10-Q for the quarter ended July 31, 2014 (File No. 000-51825).
10.26	$28,000,000 Revolving Term Loan Supplement dated July 29, 2014 by and between AgStar Financial Services, FLCA and Heron Lake BioEnergy, LLC	Exhibit 10.7 to HLBE's Form 10-Q for the quarter ended July 31, 2014 (File No. 000-51825).
10.27	Security Agreement dated July 29, 2014 between Heron Lake BioEnergy, LLC and AgStar Financial Services, FLCA and CoBank, ACB	Exhibit 10.8 to HLBE's Form 10-Q for the quarter ended July 31, 2014 (File No. 000-51825).
10.28	Real Estate Mortgage, Assignment of Rents and Profits and Fixture Financing Statement dated July 29, 2014 by and between AgStar Financial Services, FLCA, CoBank, ACB and Heron Lake BioEnergy, LLC	Exhibit 10.9 to HLBE's Form 10-Q for the quarter ended July 31, 2014 (File No. 000-51825).
10.29	Guaranty dated July 29, 2014 by HLBE Pipeline Company, LLC in favor of AgStar Financial Services, FLCA	Exhibit 10.10 to HLBE's Form 10-Q for the quarter ended July 31, 2014 (File No. 000-51825).
10.30	Security Agreement dated July 29, 2014 between HLBE Pipeline Company, LLC and AgStar Financial Services, FLCA and CoBank, ACB	Exhibit 10.11 to HLBE's Form 10-Q for the quarter ended July 31, 2014 (File No. 000-51825).
10.31	Employment Contract between Stacie Schuler and Granite Falls Energy, LLC dated October 31, 2014. (*)	Exhibit 10.1 to the registrant's Form 8-K filed with the Commission on November 6, 2014 (File No. 000-51277).
10.32	Employment Contract between Steve Christensen and Granite Falls Energy, LLC dated October 31, 2014. (*)	Exhibit 10.1 to the registrant's Form 8-K filed with the Commission on November 26, 2014 (File No. 000-51277).
10.33	Amendment No. 1 dated July 22, 2016 to the Ethanol Marketing Agreement dated September 17, 2013 by and among Heron Lake BioEnergy, LLC and Eco-Energy, LLC. (+)	Exhibit 10.1 to HLBE's Form 10-Q for the quarter ended July 31, 2016 (File No. 000-51825).
10.34	Amendment No. 4 dated July 22, 2016 to the Ethanol Marketing Agreement dated December 24, 2008 by and among Eco-	Exhibit 10.2 to the registrant's Form 10-Q for the quarter ended July 31, 2016 (File No. 000-51277).

	Energy, LLC and Granite Falls Energy, LLC. (+)	
10.35	Amendment No. 1 dated July 22, 2016 to the Ethanol Marketing Agreement dated September 17, 2013 by and among Heron Lake BioEnergy, LLC and Eco-Energy, LLC. (+)	Exhibit 10.1 to HLBE's Form 10-Q for the quarter ended July 31, 2016 (File No. 000-51825).

10.36	Second Amendment to the Member Control Agreement of Heron Lake BioEnergy, LLC, as amended through August 30, 2011.	Exhibit 3.1 to HLBE's Form 8-K/A dated March 29, 2017 (File No. 000-51825).
10.37	Agreement of Termination and To Execute Substitute Promissory Note; Commercial Security Agreement and Pledge Agreement (Ringneck Investment) Dated August 2, 2017 between Granite Falls Energy, LLC, Fagen Energy, LLC and Project Hawkeye, LLC	Exhibit 10.1 to the registrant's Form 10-Q filed with the Commission on September 14, 2017 (File No. 000-51277).
10.38	Promissory Note issued August 2, 2017 by Granite Falls Energy, LLC as borrower to Project Hawkeye, LLC as lender in principal amount of $7,500,000.	Exhibit 10.2 to the registrant's Form 10-Q filed with the Commission on September 14, 2017 (File No. 000-51277).
10.39	Pledge Agreement Dated August 2, 2017 between Granite Falls Energy, LLC and Project Hawkeye, LLC	Exhibit 10.3 to the registrant's Form 10-Q filed with the Commission on September 14, 2017 (File No. 000-51277).
10.40	Amendment to Master Loan Agreement between AgCountry Farm Credit Services, PCA, successor by merger to United FCS, PCA and Granite Falls Energy, LLC dated September 8, 2017.	Exhibit 10.40 to the registrant's Form 10-K filed with the Commission on January 29, 2018 (File No. 000-51277).
10.41	Revolving Credit Supplement dated September 8, 2017 between AgCountry Farm Credit Services, PCA, successor by merger to United FCS, PCA and Granite Falls Energy, LLC.	Exhibit 10.41 to the registrant's Form 10-K filed with the Commission on January 29, 2018 (File No. 000-51277).
10.42	Subscription Agreement for Harvestone Group, LLC dated June 29, 2018 between Granite Falls Energy, LLC and Harvestone Group, LLC	Exhibit 10.1 to the registrant's Form 10-Q filed with the Commission on September 14, 2018 (File No. 000-51277).
10.43	Industrial Water Supply and Distribution Agreement dated September 25, 2019 by and among Heron Lake BioEnergy, LLC (f/k/a Generation II Ethanol, LLC) and City of Heron Lake, Minnesota	Exhibit 10.32 to HLBE's Form 10-K filed with the Commission on January 29, 2019 (File No. 000-51825).
10.44	Membership Interest Purchase Agreement dated October 18, 2019 by and among Rural Energy Solutions, LLC, HLBE Pipeline Company, LLC, Swan Engineering, Inc., Mychael Swan, and Agrinatural Gas, LLC	Exhibit 10.33 to HLBE's Form 10-K filed with the Commission on January 29, 2019 (File No. 000-51825).
10.45	Amendment No. 2 dated October 28, 2019 to the Ethanol Marketing Agreement dated September 17, 2018 by and among Heron Lake BioEnergy, LLC and Eco-Energy, LLC (ϖ)	Exhibit 10.34 to HLBE's Form 10-K filed with the Commission on January 29, 2019 (File No. 000-51825).
10.46	Amendment No. 5 dated September 26, 2019 to the Ethanol Marketing Agreement dated December 24, 2008 by and among Eco-Energy, LLC and Granite Falls Energy, LLC (ϖ) (**)	Exhibit 10.46 to HLBE's Form 10-K filed with the Commission on January 29, 2020 (File No. 000-51277).

10.47	Negotiable Promissory Note dated December 1, 2020 by and between Heron Lake BioEnergy, LLC and Granite Falls Energy, LLC	Exhibit 10.35 to HLBE's Form 10-K filed with the Commission on February 16, 2021 (File No. 000-51277).
10.48	Separation Agreement dated February 17, 2021 between Granite Falls Energy, LLC and Steve Christensen.(*)	Exhibit 10.1 to the registrant's Form 8-K filed with the Commission on February 22, 2021 (File No. 000-51277).

10.49	Merger Agreement between Granite Falls Energy, LLC, and Heron Lake BioEnergy, LLC, dated March 24, 2021.	Exhibit 10.1 to registrant's Form 8-K filed with the Commission on March 25, 2021 (File No. 000-51277).
10.50	Voting Agreement between Granite Falls Energy, LLC, and Heron Lake BioEnergy, LLC, dated March 24, 2021.	Exhibit 10.2 to registrant's Form 8-K filed with the Commission on March 25, 2021 (File No. 000-51277).
10.51	Voting Agreement between Granite Falls Energy, LLC, and certain governors of Heron Lake BioEnergy, LLC, dated March 24, 2021.	Exhibit 10.3 to registrant's Form 8-K filed with the Commission on March 25, 2021 (File No. 000-51277).
10.52	Letter of Employment between Jeffrey Oestmann and Granite Falls Energy, LLC, dated May 20, 2021.(*)	Exhibit 10.1 to registrant's Form 8-K filed with the Commission on May 25, 2021 (File No. 000-51277).
10.53	Amended and Restated Credit Agreement dated as of September 27, 2021 among Granite Falls Energy, LLC, AgCountry Farm Credit Services, FLCA and AgCountry Farm Credit Services, PCA (Agreement No. 00079054SLA-C)	Exhibit 7.7 to registrant's Schedule 13D filed with the Commission October 5, 2021.
10.54	Single Advance Term Promissory Note dated as of September 27, 2021 among Granite Falls Energy, LLC and AgCountry Farm Credit Services, FLCA (Loan No. 00079054T05)	Exhibit 7.8 to registrant's Schedule 13D filed with the Commission October 5, 2021.
10.55	Single Advance Term Promissory Note dated as of September 27, 2021 among Granite Falls Energy, LLC and AgCountry Farm Credit Services, FLCA (Loan No. 00079054T06).	Exhibit 7.9 to registrant's Schedule 13D filed with the Commission October 5, 2021.
10.56	Amended and Restated Revolving Term Promissory Notes dated as of September 27, 2021 among Granite Falls Energy, LLC and AgCountry Farm Credit Services, FLCA (Loan No. 00079054T04-A).	Exhibit 7.10 to registrant's Schedule 13D filed with the Commission October 5, 2021.
10.57	Revolving Credit Promissory Note dated as of September 27, 2021 among Granite Falls Energy, LLC and AgCountry Farm Credit Services, FLCA (Loan No. 00079054S01). (**)	Attached hereto.
10.58	Amended and Restated Letter of Credit Promissory Note dated as of September 27, 2021 among Granite Falls Energy, LLC and AgCountry Farm Credit Services, FLCA (Loan No. 00079054T03-B). (**)	Attached hereto.
14.1	Code of Ethics.	Exhibit 14.1 to the registrant's Form 10-KSB filed with the Commission on March 30, 2004 (File No. 000-51277).
21.1	Subsidiaries of the registrant.	Exhibit 21.1 to the registrant's Form 10-K filed with the Commission on January 29, 2014 (File No. 000-51277).

31.1	Certification of Chief Executive Officer pursuant to 17 CFR 240.13a-14(a). (**)	Attached hereto.
31.2	Certification of Chief Financial Officer pursuant to 17 CFR 240.13a-14(a). (**)	Attached hereto.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350. (**)	Attached hereto.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350. (**)	Attached hereto.

99.1	Definitive Proxy Statement of Heron Lake BioEnergy, LLC filed August 19, 2021.	Exhibit 99.1 to HLBE's Form 8-K filed with the Commission on September 29, 2021 (File No. 000-51825).
101	The following financial information from Granite Falls Ethanol, LLC's Annual Report on Form 10-K for the fiscal year ended October 31, 2021, formatted in XBRL (eXtensible Business Reporting Language): (i) the Consolidated Balance Sheets as of October 31, 2021, and 2020, (ii) the Consolidated Statements of Operations for the fiscal years ended October 31, 2021 and 2020, (iii) the Consolidated Statement of Changes in Members' Equity for the fiscal years ended October 31, 2021 and 2020; (iv) the Consolidated Statements of Cash Flows for the fiscal years ended October 31, 2021 and 2020, and (v) the Notes to the Consolidated Financial Statements. (**)	

(*) Indicates compensatory agreement.
(+) Certain portions of this exhibit have been redacted and filed on a confidential basis with the Commission pursuant to a request for confidential treatment under Rule 24b-2 of under the Exchange Act. Spaces corresponding to the deleted portions are represented by brackets with asterisks [* * *].
(**) Filed herewith
(ϖ) Certain portions of this exhibit have been redacted pursuant to Item 601(b)(10)(iv) as they are both not material and would likely cause competitive harm to the Company if publicly disclosed. Spaces corresponding to the deleted portions are represented by brackets with asterisks [* * *].

(b) Exhibits Filed.

All required exhibits are filed herein or incorporated by reference as described in Item 15(a)(3).

(c) Financial Statements Filed.

All schedules have been omitted as the required information is inapplicable, immaterial or the information is presented in the consolidated financial statements or related notes.

ITEM 16. 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GRANITE FALLS ENERGY, LLC

Date: January 31, 2022

/s/ Jeffrey Oestmann
Jeffrey Oestmann
Chief Executive Officer

Date: January 31, 2022

/s/ Stacie Schuler
Stacie Schuler
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Date:	January 31, 2022	*/s/ Jeffrey Oestmann* Jeffrey Oestmann, Chief Executive Officer (Principal Executive Officer)
Date:	January 31, 2022	*/s/ Stacie Schuler* Stacie Schuler, Chief Financial Officer (Principal Financial and Accounting Officer)
Date:	January 31, 2022	*/s/ Paul Enstad* Paul Enstad, Governor and Chairman
Date:	January 31, 2022	*/s/ Rodney R. Wilkison* Rodney R. Wilkison, Governor and Vice Chairman
Date:	January 31, 2022	*/s/ Dean Buesing* Dean Buesing, Governor and Secretary
Date:	January 31, 2022	*/s/ David Forkrud* David Forkrud, Governor
Date:	January 31, 2022	*/s/ Kenton Johnson* Kenton Johnson, Governor
Date:	January 31, 2022	*/s/ Sherry Jean Larson* Sherry Jean Larson, Governor
Date:	January 31, 2022	*/s/ Bruce LaVigne* Bruce LaVigne, Governor
Date:	January 31, 2022	*/s/ Les Bergquist* Les Bergquist, Governor
Date:	January 31, 2022	*/s/ Robin Spaude* Robin Spaude, Governor
Date:	January 31, 2022	*/s/ Marty Seifert* Marty Seifert, Alternate Governor

Loan No. 00079054S01

REVOLVING CREDIT PROMISSORY NOTE

THIS REVOLVING CREDIT PROMISSORY NOTE (this "**Promissory Note**") to the Credit Agreement dated ____________________ (such agreement, as may be amended, hereinafter referred to as the "**Credit Agreement**"), is entered into as of ______________________ between **AGCOUNTRY FARM CREDIT SERVICES, PCA**, a federally-chartered instrumentality of the United States ("**Lender**") and **GRANITE FALLS ENERGY, LLC**, Granite Falls, Minnesota, a limited liability company (together with its permitted successors and assigns, the "**Borrower**"). Capitalized terms not otherwise defined in this Promissory Note will have the meanings set forth in the Credit Agreement.

SECTION 1. REVOLVING CREDIT COMMITMENT. On the terms and conditions set forth in the Credit Agreement and this Promissory Note, Lender agrees to make loans to the Borrower during the period set forth below in an aggregate principal amount not to exceed $20,000,000.00, at any one time outstanding (the "**Commitment**"). Within the limits of the Commitment, the Borrower may borrow, repay and re-borrow.

SECTION 2. PURPOSE. The purpose of the Commitment is to finance the operating needs of the Borrower. In addition, the purpose of the Commitment is to consolidate under this Promissory Note Heron Lake BioEnergy, LLC's existing indebtedness to Lender under the Revolving Credit Promissory Note numbered 00090497S02, dated as of February 4, 2021 (the "**Existing Agreement(s)**"). The Borrower agrees that on the date when all conditions precedent to Lender's obligation to extend credit hereunder have been satisfied: (A) the principal balance outstanding under the Existing Agreement(s) will be transferred to and charged against the Commitment; (B) all obligations relating to any letters of credit issued and outstanding under the Existing Agreement(s), if any, will be transferred to and continued as if the letters of credit had been issued under this Promissory Note; (C) all accrued obligations of the Borrower under the Existing Agreement(s) for the payment of interest or other charges will be billed to the Borrower; and (D) the Existing Agreement(s) and the promissory note(s) set forth in or executed in connection therewith will be deemed replaced and superseded, but the indebtedness evidenced by such note will not be deemed to have been paid off, by this Promissory Note and the Credit Agreement. In addition, in the event any balances bearing interest at a fixed rate are outstanding on the date such loans are being transferred hereto, then such balances will continue to be subject to such rates for the remaining agreed upon fixed rate periods but will otherwise be subject to the terms hereof.

SECTION 3. TERM. The term of the Commitment will be from the date hereof, up to and including October 1, 2022, or such later date as Agent may, in its sole discretion, authorize in writing (the "**Term Expiration Date**"). Notwithstanding the foregoing, the Commitment will be renewed for an additional year only if, on or before the Term Expiration Date, Agent provides to the Borrower a written notice of renewal for an additional year (a "**Renewal Notice**"). If on or before the Term Expiration Date, Lender grants a short-term extension of the Commitment, the Commitment will be renewed for an additional year only if Agent provides to the Borrower a Renewal Notice on or before such extended expiration date. All annual renewals will be measured from, and effective as of, the same day as the Term Expiration Date in any year.

SECTION 4. LIMITS ON ADVANCES, AVAILABILITY, ETC. The loans will be made available as provided in Article 2 of the Credit Agreement.

SECTION 5. INTEREST.

The Borrower agrees to pay interest on the unpaid balance of the loan(s) in accordance with the following interest rate option(s):

(A) One-Month LIBOR Index Rate. At a rate (rounded upward to the nearest 1/100th and adjusted for reserves required on Eurocurrency Liabilities (as hereinafter defined) for banks subject to FRB Regulation D (as hereinafter defined) or required by any other federal law or regulation) per annum equal at all times to 3.250% above the higher of: (1) zero percent (0.00%); or (2) the rate reported at 11:00 a.m. London time for the offering of one (1)-month U.S. dollars deposits, by Bloomberg Information Services (or any successor or substitute service providing rate quotations comparable to those currently provided by such service, as determined by Agent from time to time, for the purpose of providing quotations of interest rates applicable to dollar deposits in the London interbank market) on the first U.S. Banking Day (as hereinafter defined) in each week, with such rate to change weekly on such day. The rate will be reset automatically, without the necessity of notice being provided to Agent, the Borrower, or any other party, on the first U.S. Banking Day of each succeeding week, and each change in the rate will be applicable to all balances subject to this option. Information about the then-current rate will be made available upon telephonic request. For purposes hereof: (a) "**U.S. Banking Day**" means a day on which Agent is open for business and banks are open for business in New York, New York; (b) "**Eurocurrency Liabilities**" will have the meaning as set forth in "FRB Regulation D"; and (c) "**FRB Regulation D**" means Regulation D as promulgated by the Board of Governors of the Federal Reserve System, 12 CFR Part 204, as amended.

Interest will be calculated on the actual number of days each loan is outstanding on the basis of a year consisting of 360 days and will be payable monthly in arrears by the 20th day of the following month or on such other day as Agent will require in a written notice to the Borrower ("**Interest Payment Date**").

SECTION 6. PROMISSORY NOTE. The Borrower promises to repay the unpaid principal balance of the loans on the Term Expiration Date, as the term may be extended from time to time.

In addition to the above, the Borrower promises to pay interest on the unpaid principal balance of the loans at the times and in accordance with the provisions set forth herein.

SECTION 7. SECURITY. The Borrower's obligations hereunder and, to the extent related hereto, under the Credit Agreement, will be secured as provided in Section 2.4 of the Credit Agreement.

SECTION 8. FEES.

(A) Loan Origination Fee. In consideration of the Commitment, the Borrower agrees to pay to Agent on the execution hereof a loan origination fee in the amount of $20,000.00.

(B) Arrangement Fee. In consideration of the Commitment, the Borrower agrees to pay to Agent on the execution hereof an arrangement fee in the amount of $32,500.00.

(C) Commitment Fee. In consideration of the Commitment, the Borrower agrees to pay to Agent a commitment fee on the average daily unused available portion of the Commitment at the rate of 0.300% per annum (calculated on a 360-day basis), payable monthly in arrears by the 20th day following each month. Such fee will be payable for each month (or portion thereof) occurring during the original or any extended term of the Commitment.

SECTION 9. LETTERS OF CREDIT. INTENTIONALLY OMITTED.

SECTION 10. LIBOR TERMINATION.

(A) If at any time the generally recognized administrator of interest rates offered for U.S. dollars on the London interbank market (a "**LIBOR Rate**") ceases to provide quotations for LIBOR Rates, or if such administrator or any person having authority over such administrator or with respect to LIBOR Rates generally announces that LIBOR Rates will cease to be provided within a period not exceeding 90 days, or if Agent otherwise determines that LIBOR Rates have been, or are likely within a period not exceeding 90 days to be, discontinued, or that LIBOR Rates do not, or are likely within a period not exceeding 90 days not to, adequately and fairly reflect the cost to the Agent of making or maintaining loans hereunder, then the Agent may, after consultation with but without the consent of the Borrower, amend this promissory note and any other Loan Document to (1) replace any interest rate in this promissory note based upon the LIBOR Rate with a replacement benchmark rate deemed appropriate by the Agent in good faith and in its sole discretion, (2) adjust the margins applicable to the determination of interest rates under this promissory note (whether up or down) as deemed appropriate by Agent in good faith and in its sole discretion to compensate for differences between the LIBOR Rate and such replacement benchmark rate, and (3) after consultation with but without the consent of the Borrower, effect such other technical, administrative and operational changes to the Loan Documents as Agent in good faith and in its sole discretion deems appropriate to reflect the adoption and implementation of such replacement rate. Agent shall give the Borrower not less than five days' notice of any such amendment prior to the effective date thereof.

(B) Notwithstanding the foregoing paragraph (A), if prior to the commencement of any interest period proposed to be subject to a LIBOR Rate, Agent determines (which determination shall be conclusive and binding absent manifest error) that:

(1) either dollar deposits are not being offered to banks in the London interbank market or that adequate and reasonable means do not exist for ascertaining a LIBOR Rate for such interest period; or

(2) a LIBOR Rate for such interest period will not adequately and fairly reflect the cost to Agent of making or maintaining the loans for such interest period;

then Agent shall give notice thereof to the Borrower as promptly as practicable thereafter and, until Agent notifies the Borrower that the circumstances giving rise to such notice no longer exist, (a) any request to convert any loan to, or continue any LIBOR Rate loan at, a LIBOR Rate shall be ineffective, and (b) the Agent shall, after consultation but without the consent of the Borrower, select an alternate rate of interest to apply to any and all balances upon the expiration of the interest period applicable thereto, which rate of interest shall be commercially reasonable and generally consistent with the then-prevailing market convention, if any, for replacement of a LIBOR Rate in bilateral loan transactions.

SECTION 11. OVERADVANCES. Agent shall not be obligated to make advances in excess of the Commitment ("Overadvances"), but may elect to do so in its sole discretion. Each such Overadvance shall be secured hereunder and under Section 2.3 of the Credit Agreement. If Agent approves an Overadvance, the Borrower shall reimburse Lender immediately and without notice or demand for (1) the full amount of each overadvance; (2) all overadvance fees and charges that Agent may impose from time to time; (3) interest on the amount of each overadvance at the rate that applies to the loan(s) for the day such overadvance was created and for each following day until it has been repaid, and (4) all losses Agent incurs in collecting the overadvance and any fees, charges, expenses or interest relating to it. In addition to all other rights and remedies available to Agent, Agent may (and the Borrower specifically gives Agent the authority to): (1) set off the unpaid balance of any overadvance against any debt or other amount that Agent or Lender owes to the Borrower; (2) liquidate any investments or other assets in any account the Borrower maintains with Agent or Lender or in connection with the loan(s); and (3) enforce its interests in any available collateral it holds to secure the Borrower's obligations hereunder and under the Credit Agreement. If Agent elects to make an advance in excess of the Commitment, doing so does not obligate Agent or Lender to make or permit future Overadvances under the Commitment.

SIGNATURE PAGE FOLLOWS

SIGNATURE PAGE TO PROMISSORY NOTE

IN WITNESS WHEREOF, the parties have caused this Promissory Note to the Credit Agreement to be executed by their duly authorized officer(s).

GRANITE FALLS ENERGY, LLC

By: ______________________________

Name: ______________________________

Title: ______________________________

SIGNATURE PAGE TO PROMISSORY NOTE

IN WITNESS WHEREOF, the parties have caused this Promissory Note to the Credit Agreement to be executed by their duly authorized officer(s).

AGCOUNTRY FARM CREDIT SERVICES, PCA

By: ______________________________

Name: ______________________________

Title: ______________________________

Loan No. 00079054T03-B

AMENDED AND RESTATED LETTER OF CREDIT PROMISSORY NOTE

THIS AMENDED AND RESTATED LETTER OF CREDIT PROMISSORY NOTE (this "**Promissory Note**") to the Credit Agreement dated ____________________ (such agreement, as may be amended, hereinafter referred to as the "**Credit Agreement**"), is entered into as of ______________________ between **AGCOUNTRY FARM CREDIT SERVICES, PCA**, a federally-chartered instrumentality of the United States ("**Lender**") and **GRANITE FALLS ENERGY, LLC**, Granite Falls, Minnesota, a limited liability company (together with its permitted successors and assigns, the "**Borrower**"). Capitalized terms not otherwise defined in this Promissory Note will have the meanings set forth in the Credit Agreement.

RECITALS

(A) This Promissory Note amends, restates, replaces and supersedes, but does not constitute payment of the indebtedness evidenced by, the promissory note set forth in the Amended and Restated Letter of Credit Promissory Note numbered 00079054T03-A, dated as of September 30, 2020, between Lender and the Borrower.

LETTER OF CREDIT COMMITMENT. On the terms and conditions set forth in the Credit Agreement and this Promissory Note, Lender agrees to make loan(s) to the Borrower during the period set forth below in an aggregate principal amount not to exceed $500,000.00 at any one time outstanding (the "**Commitment**"). Within the limits of the Commitment, the Borrower may borrow, repay and re-borrow.

PURPOSE. The purpose of the Commitment is to allow the Borrower to open irrevocable letters of credit (each a "Letter of Credit") for its account.

TERM. The term of the Commitment will be from the date hereof, up to and including December 1, 2023, or such later date as Agent may, in its sole discretion, authorize in writing (the "**Term Expiration Date**").

LIMITS ON ADVANCES, AVAILABILITY, ETC. Letter of Credit will be issued within a reasonable period of time after Agent's receipt of a duly completed and executed copy of Agent's then current form of Application and Reimbursement Agreement or, if applicable, in accordance with the terms of any CoTrade Agreement between the parties, and will reduce the amount available under the Commitment by the maximum amount capable of being drawn thereunder. Any draw under the Letter of Credit issued hereunder will be deemed a loan under the Commitment and will be repaid in accordance with this Promissory Note. The Letter of Credit must be in form and content acceptable to Agent and must expire no later than the maturity date of the Commitment.

INTEREST.

The Borrower agrees to pay interest on the unpaid balance of the loan(s) in accordance with the following interest rate option(s):

(A) One-Month LIBOR Index Rate. At a rate (rounded upward to the nearest 1/100th and adjusted for reserves required on Eurocurrency Liabilities (as hereinafter defined) for banks subject to FRB Regulation D (as hereinafter defined) or required by any other federal law or regulation) per annum equal at all times to 3.250% (the "**LIBOR Margin**") above the higher of: (1) zero percent (0.00%); or (2) the rate reported at 11:00 a.m. London time for the offering of one (1)-month U.S. dollars deposits, by Bloomberg Information Services (or any successor or substitute service providing rate quotations comparable to those currently provided by such service, as determined by Agent from time to time, for the purpose of providing quotations of interest rates applicable to dollar deposits in the London interbank market) on the first U.S. Banking Day (as hereinafter defined) in each week, with such rate to change weekly on such day. The rate will be reset automatically, without the necessity of notice being provided to Agent, the Borrower, or any other party, on the first U.S. Banking Day of each succeeding week, and each change in the rate will be applicable to all balances subject to this option. Information about the then-current rate will be made available upon telephonic request. For purposes hereof: (a) "**U.S. Banking Day**" means a day on which Agent is open for business and banks are open for business in New York, New York; (b) "**Eurocurrency Liabilities**" will have the meaning as set forth in "FRB Regulation D"; and (c) "**FRB Regulation D**" means Regulation D as promulgated by the Board of Governors of the Federal Reserve System, 12 CFR Part 204, as amended.

Interest will be calculated on the actual number of days each loan is outstanding on the basis of a year consisting of 360 days and will be payable monthly in arrears by the 20th day of the following month or on such other day as Agent will require in a written notice to the Borrower ("**Interest Payment Date**").

PROMISSORY NOTE. The Borrower promises to repay the unpaid principal balance of the loans on the Term Expiration Date, or such later date as Agent may, in its sole discretion, authorized in writing.

In addition to the above, the Borrower promises to pay interest on the unpaid principal balance of the loans at the times and in accordance with the provisions set forth herein.

PREPAYMENT. Subject to the broken funding surcharge provision of the Credit Agreement, the Borrower may, on one Business Day's prior written notice, prepay all or any portion of the loan(s). Unless otherwise agreed by Agent, all prepayments will be applied to principal installments in the inverse order of their maturity and to such balances, fixed or variable, as Agent will specify.

SECURITY. The Borrower's obligations hereunder and, to the extent related hereto, under the Credit Agreement, will be secured as provided in Section 2.4 of the Credit Agreement.

FEES.

(A) Letter of Credit Fee(s): The Borrower agrees to pay to Agent any fees, administrative expenses, and other customary charges that Agent may charge or incur from time to time in connection with the issuance, maintenance, amendment (if any), assignment or transfer (if any), negotiation, and administration of the letter of credit. In addition, the Borrower agrees to pay to Agent:

1. **Issuance Fee.** Upon the issuance of the letter of credit, an issuance fee equal to $1,000.00.

2. **Commission Fee.** A commission fee equal to the LIBOR Margin multiplied by the face amount of the letter of credit (computed on the basis of a year of 360 days and actual days elapsed), which fee shall be payable quarterly in arrears on the 20th of each calendar quarter following issuance of the Letter of Credit, and on the last day of the term of the Commitment.

LIBOR TERMINATION.

(A) If at any time the generally recognized administrator of interest rates offered for U.S. dollars on the London interbank market (a "**LIBOR Rate**") ceases to provide quotations for LIBOR Rates, or if such administrator or any person having authority over such administrator or with respect to LIBOR Rates generally announces that LIBOR Rates will cease to be provided within a period not exceeding 90 days, or if Agent otherwise determines that LIBOR Rates have been, or are likely within a period not exceeding 90 days to be, discontinued, or that LIBOR Rates do not, or are likely within a period not exceeding 90 days not to, adequately and fairly reflect the cost to the Agent of making or maintaining loans hereunder, then the Agent may, after consultation with but without the consent of the Borrower, amend this promissory note and any other Loan Document to (1) replace any interest rate in this promissory note based upon the LIBOR Rate with a replacement benchmark rate deemed appropriate by the Agent in good faith and in its sole discretion, (2) adjust the margins applicable to the determination of interest rates under this promissory note (whether up or down) as deemed appropriate by Agent in good faith and in its sole discretion to compensate for differences between the LIBOR Rate and such replacement benchmark rate, and (3) after consultation with but without the consent of the Borrower, effect such other technical, administrative and operational changes to the Loan Documents as Agent in good faith and in its sole discretion deems appropriate to reflect the adoption and implementation of such replacement rate. Agent shall give the Borrower not less than five days' notice of any such amendment prior to the effective date thereof.

(B) Notwithstanding the foregoing paragraph (A), if prior to the commencement of any interest period proposed to be subject to a LIBOR Rate, Agent determines (which determination shall be conclusive and binding absent manifest error) that:

(1) either dollar deposits are not being offered to banks in the London interbank market or that adequate and reasonable means do not exist for ascertaining a LIBOR Rate for such interest period; or

(2) a LIBOR Rate for such interest period will not adequately and fairly reflect the cost to Agent of making or maintaining the loans for such interest period;

then Agent shall give notice thereof to the Borrower as promptly as practicable thereafter and, until Agent notifies the Borrower that the circumstances giving rise to such notice no longer exist, (a) any request to convert any loan to, or continue any LIBOR Rate loan at, a LIBOR Rate shall be ineffective, and (b) the Agent shall, after consultation but without the consent of the Borrower, select an alternate rate of interest to apply to any and all balances upon the expiration of the interest period applicable thereto, which rate of interest shall be commercially reasonable and generally consistent with the then-prevailing market convention, if any, for replacement of a LIBOR Rate in bilateral loan transactions.

SIGNATURE PAGE FOLLOWS

SIGNATURE PAGE TO PROMISSORY NOTE

IN WITNESS WHEREOF, the parties have caused this Promissory Note to the Credit Agreement to be executed by their duly authorized officer(s).

GRANITE FALLS ENERGY, LLC

By: ________________________________

Name: ________________________________

Title: ________________________________

SIGNATURE PAGE TO PROMISSORY NOTE

IN WITNESS WHEREOF, the parties have caused this Promissory Note to the Credit Agreement to be executed by their duly authorized officer(s).

AGCOUNTRY FARM CREDIT SERVICES, PCA

By: ______________________________

Name: ______________________________

Title: ______________________________

EXHIBIT 31.1

CERTIFICATIONS

I, Jeffrey Oestmann, certify that:

1. I have reviewed this annual report on Form 10-K of Granite Falls Energy, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date:	January 31, 2022	/s/ Jeffrey Oestmann
		Jeffrey Oestmann Chief Executive Officer (principal executive officer)

EXHIBIT 31.2

CERTIFICATIONS

I, Stacie Schuler, certify that:

1. I have reviewed this annual report on Form 10-K of Granite Falls Energy, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation;

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date:	January 31, 2022	/s/ Stacie Schuler
		Stacie Schuler Chief Financial Officer (principal financial officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report on Form 10-K of Granite Falls Energy, LLC (the "Company") for the fiscal year ended October 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey Oestmann, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: January 31, 2022

/s/ Jeffrey Oestmann

Jeffrey Oestmann
Chief Executive Officer
(principal executive officer)

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report on Form 10-K of Granite Falls Energy, LLC (the "Company") for the fiscal year ended October 31, 2021, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stacie Schuler, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: January 31, 2022

/s/ Stacie Schuler

Stacie Schuler
Chief Financial Officer
(principal financial officer)

Document and Entity Information - USD ($)	12 Months Ended Oct. 31, 2021	Jan. 28, 2022	Apr. 30, 2020
Cover [Abstract]			
Document Type	10-K		
Document Annual Report	true		
Document Period End Date	Oct. 31, 2021		
Document Transition Report	false		
Entity File Number	000-51277		
Entity Registrant Name	Granite Falls Energy, LLC		
Entity Incorporation, State or Country Code	MN		
Entity Tax Identification Number	41-1997390		
Entity Address, Address Line One	15045 Highway 23 SE		
Entity Address, City or Town	Granite Falls		
Entity Address, State or Province	MN		
Entity Address, Postal Zip Code	56241-0216		
City Area Code	320		
Local Phone Number	564-3100		
Title of 12(g) Security	Membership Units		
Entity Well-known Seasoned Issuer	No		
Entity Voluntary Filers	No		
Entity Current Reporting Status	Yes		
Entity Interactive Data Current	Yes		
Entity Filer Category	Non-accelerated Filer		
Entity Small Business	true		
Entity Emerging Growth Company	false		
ICFR Auditor Attestation Flag	false		
Entity Shell Company	false		
Entity Public Float			$ 27,079,650
Entity Common Stock, Shares Outstanding		30,606	
Current Fiscal Year End Date	--10-31		
Entity Central Index Key	0001181749		
Document Fiscal Year Focus	2021		
Document Fiscal Period Focus	FY		
Amendment Flag	false		
Auditor Name	Boulay PLLP		
Auditor Firm ID	542		
Auditor Location	Minneapolis, Minnesota		

Consolidated Balance Sheets - USD ($)	Oct. 31, 2021	Oct. 31, 2020
Current Assets		
Cash and cash equivalents	$ 29,295,657	$ 11,423,427
Restricted cash	1,641,123	2,156,694
Accounts receivable	12,028,397	3,386,068
Inventory	20,749,831	13,791,805
Commodity derivative instruments	39,076	56,050
Prepaid expenses and other current assets	1,059,604	901,384
Total current assets	64,813,688	31,715,428
Property and Equipment, net	49,716,246	54,965,983
Investments	14,518,331	9,799,384
Operating lease right of use asset	15,755,395	19,383,654
Other Assets	333,254	333,254
Total Assets	145,136,914	116,197,703
Current Liabilities		
Checks drawn in excess of bank balances		692,984
Current maturities of long-term debt	5,046,429	12,954,538
Accounts payable	19,445,954	12,294,097
Commodity derivative instruments	732,801	816,478
Accrued expenses	1,145,326	865,883
Operating lease, current liabilities	3,653,131	3,628,259
Total current liabilities	30,023,641	31,252,239
Long-Term Debt, less current portion	27,621,428	5,876,318
Operating lease, long-term liabilities	12,102,264	15,755,395
Other Long-Term Liabilities	1,467,848	1,421,924
Commitments and Contingencies		
Members' Equity		
Members' equity attributable to Granite Falls Energy, LLC consists of 30,606 units authorized, issued and outstanding at October 31, 2021 and 2020	73,921,733	52,111,525
Non-controlling interest		9,780,302
Total members' equity	73,921,733	61,891,827
Total Liabilities and Members' Equity	$ 145,136,914	$ 116,197,703

Consolidated Balance Sheets (Parenthetical) - shares	Oct. 31, 2021	Oct. 31, 2020
Consolidated Balance Sheets		
Common Units Authorized	30,606	30,606
Common Units Issued	30,606	30,606
Common Units Outstanding	30,606	30,606

Consolidated Statements of Operations - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Consolidated Statements of Operations		
Revenues	$ 309,615,376	$ 164,953,841
Cost of Goods Sold	282,847,152	176,031,094
Gross Profit (Loss)	26,768,224	(11,077,253)
Operating Expenses	8,127,172	8,580,559
Goodwill Impairment		1,372,473
Operating Income (Loss)	18,641,052	(21,030,285)
Other Income (Expense)		
Other income, net	2,911,096	497,272
Interest income	5,456	45,991
Interest expense	(802,340)	(552,500)
Investment income	2,091,952	471,800
Patronage investment - correction of error	3,182,690	
Total other income, net	7,388,854	462,563
Net Income (Loss)	26,029,906	(20,567,722)
Less: Net (Income) Loss Attributable to Non-controlling Interest	(2,372,825)	7,289,429
Net Income (Loss) Attributable to Granite Falls Energy, LLC	$ 23,657,081	$ (13,278,293)
Weighted Average Units Outstanding - Basic and Diluted	30,606	30,606
Net Income (Loss) Per Unit - Basic and Diluted	$ 772.96	$ (433.85)

Consolidated Statements of Changes in Members' Equity - USD ($)	Parent [Member]	Noncontrolling Interest [Member]	Total
Balance - at Oct. 31, 2019	$ 65,468,635	$ 19,215,914	$ 84,684,549
Changes in Members' Equity			
Acquisition of non-controlling interest	(78,817)	(2,146,183)	(2,225,000)
Net income (loss) attributable to non-controlling interest		(7,289,429)	(7,289,429)
Net income (loss) attributable to Granite Falls Energy, LLC	(13,278,293)		(13,278,293)
Balance - at Oct. 31, 2020	52,111,525	9,780,302	61,891,827
Changes in Members' Equity			
Acquisition of non-controlling interest	(1,846,873)	(12,153,127)	(14,000,000)
Net income (loss) attributable to non-controlling interest		$ 2,372,825	2,372,825
Net income (loss) attributable to Granite Falls Energy, LLC	23,657,081		23,657,081
Balance - at Oct. 31, 2021	$ 73,921,733		$ 73,921,733

Consolidated Statements of Cash Flows - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Cash Flows from Operating Activities		
Net income (loss)	$ 26,029,906	$ (20,567,722)
Adjustments to reconcile net income (loss) to net cash used in operations:		
Depreciation and amortization	7,396,463	9,310,775
Paycheck Protection Program loan forgiveness income	(2,604,185)	
Change in fair value of derivative instruments	7,962,719	2,719,697
(Gain) loss on equity method investments	(2,091,952)	(471,800)
Patronage investment income	(3,182,690)	
Return on investment	282,902	
Patronage investment redemption	272,793	
(Gain) loss on disposal of assets	21,728	1,833,928
Goodwill impairment		1,372,473
Changes in operating assets and liabilities:		
Commodity derivative instruments	(8,029,422)	(1,136,171)
Accounts receivable	(8,642,329)	4,041,827
Inventory	(6,958,026)	11,220
Prepaid expenses and other current assets	(158,220)	(2,436)
Accounts payable	9,241,560	(889,813)
Accrued expenses	279,443	85,088
Accrued railcar rehabilitation costs	45,924	45,924
Net Cash Provided By (Used In) Operating Activities	19,866,614	(3,647,010)
Cash Flows from Investing Activities		
Payments for capital expenditures	(4,258,157)	(5,826,105)
Net Cash Used In Investing Activities	(4,258,157)	(5,826,105)
Cash Flows from Financing Activities		
Checks drawn in excess of bank balance	(692,984)	692,984
Proceeds from Paycheck Protection Program loan	1,299,593	1,299,593
Proceeds from long-term debt	36,157,195	66,305,585
Payments on long-term debt	(21,015,602)	(56,819,216)
Acquisition of non-controlling interests	(14,000,000)	(2,000,000)
Net Cash Provided By Financing Activities	1,748,202	9,478,946
Net Increase in Cash, Cash Equivalents and Restricted Cash	17,356,659	5,831
Cash, Cash Equivalents and Restricted Cash - Beginning of Period	13,580,121	13,574,290
Cash, Cash Equivalents and Restricted Cash - End of Period	30,936,780	13,580,121
Cash paid during the period for:		
Interest expense	799,834	463,861
Supplemental Disclosure of Non-Cash Investing and Financing Activities		
Capital expenditures and construction in process included in accounts payable	$ 50,922	$ 2,140,625

Consolidated Statements of Cash Flows (Parenthetical) - USD ($)	Oct. 31, 2021	Oct. 31, 2020	Oct. 31, 2019
Reconciliation of Cash, Cash Equivalents and Restricted Cash			
Cash and Cash Equivalents - Balance Sheet	$ 29,295,657	$ 11,423,427	
Restricted Cash - Balance Sheet	1,641,123	2,156,694	
Cash, Cash Equivalents and Restricted Cash	$ 30,936,780	$ 13,580,121	$ 13,574,290

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES	12 Months Ended Oct. 31, 2021

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

Granite Falls Energy, LLC ("GFE") is a Minnesota limited liability company currently producing fuel-grade ethanol, distillers' grains, and crude
Minnesota and sells these products, pursuant to marketing agreements, throughout the continental U.S. and on the international market. GFE'
annual production capacity of 60 million gallons, but is currently permitted to produce up to 70 million gallons of undenatured ethanol on a twelv

Additionally, as of October 31, 2021, GFE has 100% ownership in Heron Lake BioEnergy, LLC ("HLBE"). HLBE is a Minnesota limited
producing fuel-grade ethanol, distillers' grains, and crude corn oil near Heron Lake, Minnesota and sells these products, pursuant to marketing
continental United States. HLBE's plant has an approximate annual production capacity of 65 million gallons, but is currently permitted to produc
per year of undenatured ethanol on a twelve-month rolling sum basis. Additionally, HLBE, through a wholly owned subsidiary, operates a natura
natural gas to the HLBE's ethanol production facility and other customers.

Principles of Consolidation

The accompanying consolidated financial statements consolidate the operating results and financial position of GFE, and its approximately 50.7
(through GFE's 100% ownership of Project Viking, L.L.C.) through September 29, 2021, when the remaining non-controlling interest was acq
over the operations of HLBE and its majority voting interest, GFE consolidates the financial statements of HLBE with its consolidated financial
approximately 49.3% ownership of HLBE is included in the consolidated financial statements as a non-controlling interest through September 20
controlling interest was acquired through the merger. HLBE is also the sole owner Agrinatural Gas, LLC ("Agrinatural"), through its wholly owned
Company, LLC. Given HLBE's control over the operations of Agrinatural and its majority voting interest, HLBE consolidates the financial stat
its consolidated financial statements, with the equity and earnings (loss) attributed to the remaining 27% non-controlling interest identified sepa
consolidated balance sheets and statements of operations through December 11, 2019 when the remaining non-controlling interest was acquired. A
balances and transactions are eliminated in consolidation.

On September 29, 2021, GFE acquired the remaining non-controlling interest in HLBE for cash consideration of $14,000,000. As of October
ownership of HLBE. When we use the terms "Granite Falls Energy" or "GFE" or similar words in this Annual Report on Form 10-K, unless the
we are referring to Granite Falls Energy, LLC and our operations at our ethanol production facility located in Granite Falls, Minnesota. Whe
Lake BioEnergy", "Heron Lake", or "HLBE" or similar words, unless the context otherwise requires, we are referring to Heron Lake BioEnergy,
subsidiary, HLBE Pipeline Company, LLC, through which, HLBE holds a 100% interest in Agrinatural Gas, LLC. When we use the terms the "C
or similar words in this Annual Report on Form 10-K, unless the context otherwise requires, we are referring to Granite Falls Energy, LLC and ou
majority-owned subsidiaries.

Fiscal Reporting Period

The Company's fiscal year end for reporting financial operations is October 31 for financial reporting purposes.

Accounting Estimates

Management uses estimates and assumptions in preparing these consolidated financial statements in accordance with generally accepted account
States of America. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and
revenues and expenses. The Company uses estimates and assumptions in accounting for the following significant matters, among others:
economic lives of property and equipment, valuation of commodity derivatives, inventory, and inventory purchase and sale commitments, evaluat
costs, and the assumptions used in the impairment analysis of long-lived assets and evaluation of going concern. Actual results may differ from pre
and such differences may be material to our consolidated financial statements. The Company periodically reviews estimates and assumptions, and
reflected in the period in which the revision is made.

Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we ex
for those products or services. Our contracts primarily consist of agreements with marketing companies and other customers as described below. C
consist of the delivery of ethanol, distillers' grains, corn oil, and natural gas to our customers. Our customers primarily consist of two distin
described below. The consideration we receive for these products reflects an amount that the Company expects to be entitled to in exchange fo
current observable market prices at the Chicago Mercantile Exchange, generally, and adjusted for local market differentials. Our contracts have s
or truck, and dates. Revenue is recognized when the Company delivers the products to the mode of transportation specified in the contract, at the t
in the contract, net of commissions, fees, and freight. We sell each of the products via different marketing channels as described below.

- Ethanol. The Company sells its ethanol via a marketing agreement with Eco-Energy, Inc. Eco-Energy sells one hundred percent of the C
production based on agreements with end users at prices agreed upon mutually among the end user, Eco-Energy and the Company. Our p
consist of our obligation to deliver ethanol to our customers. Our customer contracts consist of orders received from the customer pursua
agreement. The marketing agreement calls for control and title to pass to Eco-Energy once a rail car is released to the railroad or a truck
Company's scales. Revenue is recognized then at the price in the agreement with the end user, net of commissions, freight, and fees.

- Distillers grains. GFE and HLBE engage another third-party marketing company, RPMG, Inc. ("RPMG") and Gavilon Ingredients, Inc. (
to sell one hundred percent of the distillers grains it produces at the plant. RPMG and Gavilon take title and control once a rail car is rele

truck is released from the Company's scales. Prices are agreed upon between RPMG, Gavilon and the Company. Our performance oblig
obligation to deliver corn oil to our customers. Our customer contracts consist of orders received from the customer pursuant to a market
recognized net of commissions, freight and fees.

- Distillers corn oil (corn oil). The Company sells one hundred percent of its corn oil production to RPMG, Inc. The process for selling co distillers' grains. RPMG takes title and control once a rail car is released to the railroad or a truck is released from the Company's scales. between RPMG and the Company. Our performance obligations consist of our obligation to deliver corn oil to our customers. Our custor orders received from the customer pursuant to a marketing agreement. Revenue is recognized net of commissions, freight and fees.

- Natural gas. The Company sells natural gas through its wholly-owned subsidiary Agrinatural Gas, LLC. Agrinatural owns approximately pipeline and provides natural gas to HLBE's ethanol plant and other commercial, agricultural and residential customers through a connec pipeline facilities of Northern Border Pipeline Company. Agrinatural's revenues are generated through natural gas distribution fees and s customer by volume and revenue.

Cost of Goods Sold

The primary components of cost of goods sold for the production of ethanol and related co-products are corn, energy, raw materials, overh rehabilitation costs, and direct labor.

Operating Expenses

The primary components of operating expenses are salaries and expenses for administrative employees, professional fees, board of governor ex assets and property taxes.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. The Compar multiple financial institutions, of which one is a member of the Company. At times throughout the year, the Company's cash balances may exce Federal Deposit Insurance Corporation. The Company does not believe it is exposed to any significant credit risk on its cash balances.

Restricted Cash

The Company is periodically required to maintain at its broker cash balances related to open commodity derivative instrument positions as discuss

Accounts Receivable

Credit terms are extended to customers in the normal course of business. The Company performs ongoing credit evaluations of its customer generally, requires no collateral.

Accounts receivable are recorded at their estimated net realizable value. Accounts are considered past due if payment is not made on a timely b Company's credit terms. Accounts considered uncollectible are written off. The Company follows a policy of providing an allowance for doubtfu on historical experience, and its evaluation of the current status of receivables, the Company is of the belief that such accounts will be collectible thus an allowance was not necessary at October 31, 2021 or 2020. It is at least possible this estimate will change in the future.

Inventory

Inventory is stated at the lower of cost or net realizable value. Cost for all inventories is determined using the first in first out method. Net reali selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Inventory consist process, finished goods, and supplies. Corn is the primary raw material along with other raw materials. Finished goods consist of ethanol, distille

Derivative Instruments

From time to time, the Company enters into derivative transactions to hedge its exposures to commodity price fluctuations. The Company derivatives in the balance sheets at fair value.

In order for a derivative to qualify as a hedge, specific criteria must be met and appropriate documentation maintained. Gains and losses from de as hedges, or are undesignated, must be recognized immediately in earnings. If the derivative does qualify as a hedge, depending on the nature o fair value of the derivative will be either offset against the change in fair value of the hedged assets, liabilities, or firm commitments through earn comprehensive income until the hedged item is recognized in earnings. Changes in the fair value of undesignated derivatives are recorded in earni

Additionally, the Company is required to evaluate its contracts to determine whether the contracts are derivatives. Certain contracts that litera derivative may be exempted as "normal purchases or normal sales". Normal purchases and normal sales are contracts that provide for the purchas than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the

Contracts that meet the requirements of normal purchases or normal sales are documented as normal and exempted from accounting and reporting r are not marked to market in our consolidated financial statements.

In order to reduce the risks caused by market fluctuations, the Company occasionally hedges its anticipated corn, natural gas, and denaturant pur entering into options and futures contracts. These contracts are used with the intention to fix the purchase price of anticipated requirements for cor production activities and the related sales price of ethanol. The fair value of these contracts is based on quoted prices in active exchange-traded conditions. Although the Company believes its commodity derivative positions are economic hedges, none have been formally designated as a hed and derivative positions are recorded on the balance sheet at their fair market value, with changes in fair value recognized in current period earnin does not enter into financial instruments for trading or speculative purposes.

The Company has adopted authoritative guidance related to “Derivatives and Hedging,” and has included the required enhanced quantitative and objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses from derivative instruments, a risk-related contingent features in derivative agreements. See further discussion in Note 8.

Property and Equipment

Property and equipment are stated at cost. Depreciation is provided over the following estimated useful lives by use of the straight-line method.

Asset Description	Ye
Land improvements	5-20
Railroad improvements	5-20
Process equipment and tanks	5-40
Administration building	10-40
Office equipment	3-10
Rolling stock	5-10

Maintenance and repairs are expensed as incurred; major improvements and betterments are capitalized. Construction in progress expenditures w straight-line method over their estimated useful lives once the assets are placed into service.

Long-Lived Assets

Long-lived assets, such as property and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whe circumstances indicate that the carrying amount of an asset may not be recoverable. When determining impairment losses, a long-lived asset sh assets or liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets or liabilities. long-lived asset be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by an asset asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, impairment is recognized to the extent tha its fair value. Fair value is determined through various valuation techniques including, but not limited to, discounted cash flow models, quoted m independent appraisals, as considered necessary. No impairment expense was recorded during fiscal 2021 and 2020.

Investments

GFE owns 1,600 capital units of Ringneck Energy & Feed, LLC (“Ringneck”) at a price of $5,000 per unit for a total of $8,000,000. Ringnec liability company that constructed an 80 million gallon per year ethanol manufacturing plant outside of Onida, South Dakota in Sully County. GF to secure the Company
the right to appoint one director to the board of directors of Ringneck. GFE has appointed Jeffrey Oestmann, its CEO, to serve as its appointed di

On June 29, 2018, GFE executed a subscription agreement for investment in Harvestone Group, LLC (“Harvestone”), a Delaware limited liabi to the Operating Agreement of Harvestone. In connection with the execution of the subscription agreement and joinder, GFE made a capital co exchange for twenty (20) preferred membership units. Harvestone is an ethanol marketing, logistics, and trading company headquartered in Frank is owned by several other ethanol producers and other private investors, and its primary business is marketing and trading for member and non- The marketing and trading commenced in January 2019.

On November 15, 2021, Harvestone redeemed GFE’s 20 units for $3,000,000. As a result of the Harvestone redemption, GFE no longer owns ar ceased to be a member of Harvestone. As a result of the ongoing negotiations as of fiscal year end, the Harvestone investment was impaired to $3,0 of approximately $300,000 was recorded within investment income on the consolidated statement of operations, at October 31, 2021. The Comp the $3,000,000 redemption in November 2021.

The investments are accounted for by the equity method, under which the Company’s share of the net income of the investee is recognized a Consolidated Statements of Operations and added to the investment account, and distributions received from the affiliates are treated as a reductio

Summarized financial information of Ringneck, which was a significant investment as of October 31, 2020, is as follows:

Current Assets	$
Total Assets	
Current Liabilities	
Total Liabilities	
Members' Equity	
	12 Months
Revenue	$
Gross Profit	
Operating Profit	
Net Profit	

Patronage Investment

Patronage investment consists of the patron equities of GFE’s electricity supplier. Non-cash patronage dividends are recognized when declared/c redemptions are recorded as a reduction of the investment. This investment is carried at the lower of cost or fair value. See **Note 2 - PATRONA CORRECTION OF ERROR**.

Fair Value of Financial Instruments

The Company’s accounting for fair value measurements of assets and liabilities that are recognized or disclosed at fair value in the financial s nonrecurring basis adhere to the Financial Accounting Standards Board (“FASB”) fair value hierarchy that prioritizes the inputs to valuation tech value. The Company has adopted guidance for fair value measurement related to nonfinancial items that are recognized and disclosed at fair valu on a nonrecurring basis. The guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority significant unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access
- Level 2 inputs include:
    1. Quoted prices in active markets for similar assets or liabilities.
    2. Quoted prices in markets that are observable for the asset or liability either directly or indirectly, for substantially the full te
    3. Inputs that derived primarily from or corroborated by observable market date by correlation or other means.
- Level 3 inputs are unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which a fair measurement in its entirety falls is based on the lowest level input that is significant to th its entirety.

Except for those assets and liabilities which are required by authoritative accounting guidance to be recorded at fair value, the Company has ele assets or liabilities at fair value. Except for the impairment of the Harvestone investment to fair value, no events occurred during the fiscal years 2020 that required adjustment to the recognized balances of assets or liabilities, which are recorded at fair value on a nonrecurring basis.

The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair value due to instruments. The Company obtains fair value measurements from an independent pricing service for corn derivative contracts. The fair va observable data that may include dealer quotes and live trading levels from the Chicago Board of Trade and New York Mercantile Exchange ma long-term debt is estimated based on anticipated interest rates which management believes would currently be available to the Company for simila account the current credit risk of the Company and other market factors. The Company believes the carrying value of the debt instruments appro

Income Taxes

The Company is treated as a partnership for federal and state income tax purposes, and generally does not incur income taxes. Instead, its earni in the income tax returns of its members. Therefore, no provision or liability for federal or state income taxes has been included in these finan exist between financial statement basis of assets and tax basis of assets and financial statement basis of liabilities and tax basis of liabilities. In the alternative depreciation system for tax depreciation instead of the straight-line method that is used for book depreciation, which also causes Company's tax year end is December 31.

The Company had no significant uncertain tax positions as of October 31, 2021 or 2020 that would require disclosure, primarily due to the Company recognizes and measures tax benefits when realization of the benefits is uncertain under a two-step approach. The first step is to de meets the more-likely-than-not condition for recognition and the second step is to determine the amount to be recognized based on the cumulat 50%. Primarily due to the Company's tax status as a partnership, the adoption of this guidance had no material impact on the Company's fina operations.

The Company files income tax returns in the U.S. federal and Minnesota state jurisdictions. For years before 2018, the Company is no longer su income tax examinations.

Net Income (Loss) per Unit

Basic net income (loss) per unit is computed by dividing net income (loss) by the weighted average number of members' units outstanding du income per unit is computed by dividing net income by the weighted average number of members' units and members' unit equivalents outstand were no member unit equivalents outstanding during the periods presented; accordingly, for all periods presented, the calculations of the Com income per unit are the same.

Environmental Liabilities

The Company's operations are subject to environmental laws and regulations adopted by various governmental entities in the jurisdiction in w require the Company to investigate and remediate the effects of the release or disposal of materials at its location. Accordingly, the Company has and procedures in the areas of pollution control, occupational health, and the production, handling, storage, and use of hazardous materials to pre or other damage, and to limit the financial liability, which could result from such events. Environmental liabilities are recorded when the liabil can be reasonably estimated. No expense has been recorded for the fiscal years ended October 31, 2021 or 2020.

Reportable Operating Segments

Accounting Standards Codification ("ASC") 280, "Segment Reporting," establishes the standards for reporting information about segments in fin segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief deciding how to allocate resources and in assessing performance. Therefore, in applying the criteria set forth in ASC 280, the Company determi of the products and production process and the expected financial results, the Company's operations at GFE's ethanol plant and HLBE's plant, i sale of ethanol and its co-products, are aggregated into one reporting segment.

Additionally, the Company also realizes relatively immaterial revenue from natural gas pipeline operations at Agrinatural, HLBE's majority ow after accounting for intercompany eliminations, these revenues from Agrinatural's represent less than less than 1% of our consolidated revenues on the overall performance of the Company. Therefore, the Company does not separately review Agrinatural's revenues, cost of sales or o information. Rather, the Company reviews Agrinatural's natural gas pipeline financial data on a consolidated basis with the Company's ethanol pr

The Company believes that the presentation of separate operating performance information for Agrinatural's natural gas pipeline operations wo
information to a reader of the Company's consolidated financial statements and would not achieve the basic principles and objectives of ASC 280

PATRONAGE INVESTMENT AND CORRECTION OF ERROR	12 Months Ended Oct. 31, 2021
PATRONAGE INVESTMENT AND CORRECTION OF ERROR	
PATRONAGE INVESTMENT AND CORRECTION OF ERROR	**2. PATRONAGE INVESTMENT AND CORRECTION OF ERROR** During the fourth quarter of fiscal year 2021, management became aware of an investment related to patronage in the Company's electricity supplier that had not previously been recognized in the consolidated financial statements. The Company recognized the investment during the fourth quarter of fiscal year 2021 whereby approximately $3.2 million of investment income was recognized as a component of other income on the consolidated statement of operations for the fiscal year ended October 31, 2021. Of the approximate $3.2 million of investment income recognized during 2021, approximately $0.4 million related to income earned during fiscal year 2021, approximately $0.4 million related to investment income earned during fiscal year 2020, and the remaining $2.4 million related to fiscal years prior to 2020. The investment balance as of October 31, 2021 was approximately $2.9 million.

RISKS AND UNCERTAINTIES	12 Months Ended Oct. 31, 2021

RISKS AND UNCERTAINTIES

RISKS AND UNCERTAINTIES

3. RISKS AND UNCERTAINTIES

The Company has certain risks and uncertainties that it experiences during volatile market conditions. These volatilities can have a severe impact on operations. The Company's revenues are derived primarily from the sale and distribution of
ethanol, distillers' grains and corn oil to customers primarily located in the U.S. Corn for the production process is supplied to our plants primarily from local agricultural producers and from purchases on the open market. Ethanol sales typically average 75-90% of total revenues and corn costs typically average 65-85% of cost of goods sold.

The Company's operating and financial performance is largely driven by the prices at which it sells ethanol and the net expense of corn. The price of ethanol is influenced by factors such as supply and demand, the weather, government policies and programs, unleaded gasoline prices and the petroleum markets as a whole. Excess ethanol supply in the market, in particular, puts downward pressure on the price of ethanol. The largest cost of production is corn. The cost of corn is generally impacted by factors such as supply and demand, the weather, government policies and programs, and a risk management program used to protect against the price volatility of these commodities. Market fluctuations in the price of and demand for these products may have a significant adverse effect on the Company's operations, profitability and the availability and adequacy of cash flow to meet the Company's working capital requirements.

REVENUE	12 Months Ended Oct. 31, 2021

REVENUE

REVENUE

4. REVENUE

Revenue by Source

All revenues from contracts with customers under ASC Topic 606 are recognized at a point in time. The following table disaggregates revenue by major source for the fiscal year ended October 31:

		Fiscal Year Ended October 31, 2021
		Total
Ethanol	$	240,874,504
Distillers' Grains		49,185,948
Corn Oil		17,147,981
Other		1,221,727
Natural Gas Pipeline		1,185,216
Total Revenues	$	309,615,376
		Fiscal Year Ended October 31, 2020
		Total
Ethanol	$	126,605,211
Distillers' Grains		29,672,577
Corn Oil		6,590,481
Other		678,226
Natural Gas Pipeline		1,407,346
Total Revenues	$	**164,953,841**

Payment Terms

The Company has contractual payment terms with each respective marketer that sells ethanol, distillers' grains and corn oil. These terms are 10 calendar days after the transfer of control date. The Company has contractual payment terms with the natural gas customers of 20 days.

Shipping and Handling Costs

Shipping and handling costs related to contracts with customers for sale of goods are accounted for as a fulfillment activity and are included in cost of goods sold. Accordingly, amounts billed to customers for such costs are included as a component of revenue.

FAIR VALUE

	12 Months Ended
	Oct. 31, 2021

FAIR VALUE

FAIR VALUE

5. FAIR VALUE

The Company follows accounting guidance related to fair value disclosures. For the Company, this guidance applies to certain derivative inve guidance also clarifies the definition of fair value for financial reporting, establishes a framework for measuring fair value and requires addition of fair measurements.

The following table provides information on those derivative assets and liabilities measured at fair value on a recurring basis at October 31, 2021:

	Carrying Amount in Consolidated Balance Sheet	Fair Value	Fair Value Measurement U Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)
Financial Assets:				
Commodity Derivative instruments - Corn	$ 39,067	$ 39,067	$ 39,067	$ —
Financial Liabilities:				
Commodity Derivative instruments - Corn	$ 732,801	$ 732,801	$ 732,801	$ —
Accounts Payable (1)	$ 923,550	$ 923,550	$ —	$ 923,550

The following table provides information on those derivative assets measured at fair value on a recurring basis at October 31, 2020:

	Carrying Amount in Consolidated Balance Sheet	Fair Value	Fair Value Measurement U Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)
Financial Assets:				
Commodity Derivative Instruments - Ethanol	$ 56,050	$ 56,050	$ 56,050	$ —
Financial Liabilities:				
Commodity Derivative Instruments - Corn	$ 816,478	$ 816,478	$ 816,478	$ —
Accounts Payable (1)	$ 772,795	$ 772,795	$	$ 772,795

(1) Accounts payable is generally stated at historical amounts with the exception of amounts in this table related to certain delivered invento fluctuates based on the changes in commodity prices. These payables are hybrid financial instruments for which the Company has electe

The Company determines the fair value of commodity derivative instruments by obtaining fair value measurements from an independent pric measurements consider observable data that may include dealer quotes and live trading levels from the Chicago Board of Trade market and New Y

CONCENTRATIONS	12 Months Ended Oct. 31, 2021
CONCENTRATIONS	
CONCENTRATIONS	**6. CONCENTRATIONS**

Granite Falls Energy

GFE sold all of the ethanol, distillers' grains, and corn oil produced at its plant to two customers under marketing agreements during the fiscal years ended October 31, 2021 and 2020.

The percentage of GFE's total revenues attributable to each of its two major customers for the fiscal years ended October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	76.7%	77.0%
RPMG, Inc. - Distillers' Grains & Corn Oil	23.3%	23.0%

The percentage of GFE's total accounts receivable attributable to each of its two major customers at October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	82.9%	72.1%
RPMG, Inc. - Distillers' Grains & Corn Oil	15.0%	24.6%

Heron Lake BioEnergy

HLBE sold all of the ethanol, distillers' grains, and corn oil produced at its plant to three customers under marketing agreements during the fiscal years ended October 31, 2021 and 2020.

The percentage of HLBE's total revenues attributable to each of HLBE's two major customers for the fiscal years ended October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	78.7%	76.7%
Gavilon Ingredients, LLC - Distillers' Grains	14.3%	15.9%

The percentage of HLBE's total accounts receivable attributable to each of HLBE's two major customers at October 31, 2021 and 2020 were as follows:

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	66.5%	54.8%
Gavilon Ingredients, LLC - Distillers' Grains	22.2%	20.0%

INVENTORY	12 Months Ended Oct. 31, 2021

INVENTORY

INVENTORY

7. INVENTORY

Inventory consists of the following at October 31:

	October 31, 2021	October 31, 2020
Raw materials	$ 10,742,480	$ 4,893,502
Supplies	3,322,639	3,070,458
Work in process	2,023,966	1,480,871
Finished goods	4,660,746	4,346,974
Totals	$ 20,749,831	$ 13,791,805

The Company performs a lower of cost or net realizable value analysis on inventory to determine if the market values of certain inventories are less than their carrying value, which is attributable primarily to decreases in market prices of corn and ethanol. Based on the lower of cost or net realizable value analysis, the Company recorded a loss on ethanol inventories, as a component of cost of goods sold, of approximately $383,000 for the fiscal year ended October 31, 2020. There were no recorded losses on inventory for the fiscal year ended October 31, 2021.

DERIVATIVE INSTRUMENTS	12 Months Ended Oct. 31, 2021
DERIVATIVE INSTRUMENTS	
DERIVATIVE INSTRUMENTS	**8. DERIVATIVE INSTRUMENTS**

8. DERIVATIVE INSTRUMENTS

The Company enters into corn, ethanol, and natural gas derivatives in order to protect cash flows from fluctuations caused by volatility in commodity prices for periods up to 24 months. These derivatives are put in place to protect gross profit margins from potentially adverse effects of market and price volatility on ethanol sales and corn purchase commitments
where the prices are set at a future date. Although these derivative instruments serve the Company's purpose as an economic hedge, they are not designated as effective hedges for accounting purposes. For derivative instruments that are not accounted for as hedges, or for the ineffective portions of qualifying hedges, the change in fair value is recorded through earnings in the period of change.

As of October 31, 2021, the total notional amount of GFE's outstanding corn derivative instruments was approximately 6,385,000 bushels, comprised of long corn futures positions on 2,075,000 bushels that were entered into to hedge forecasted ethanol sales through March 2022, and short corn futures positions on 4,310,000 bushels that were entered into to hedge its forward corn purchase contracts through December 2022. Additionally, there are corn options positions of 140,000 bushels through May 2022. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2021, GFE had approximately $1,365,000 of cash collateral (restricted cash) related to derivatives held by a broker.

As of October 31, 2021, the total notional amount of HLBE's outstanding corn derivative instruments was approximately 2,790,000 bushels, comprised of long corn futures positions on 1,105,000 bushels that were entered into to hedge forecasted ethanol sales through December 2021, and short corn futures positions on 1,685,000 bushels that were entered into to hedge its forward corn purchase contracts through December 2022. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2021, HLBE had approximately $276,000 in cash collateral (restricted cash) related to derivatives held by a broker.

The following tables provide details regarding the Company's derivative instruments at October 31, 2021, none of which were designated as hedging instruments:

	Consolidated Balance Sheet Location	Assets	Liabilities
Corn contracts - GFE	Commodity derivative instruments	$ —	$ 605,813
Corn contracts - HLBE	Commodity derivative instruments	—	126,988
Ethanol contracts - GFE	Commodity derivative instruments	8,813	—
Ethanol contracts - HLBE	Commodity derivative instruments	30,263	—
Totals		$ 39,076	$ 732,801

As of October 31, 2020, the total notional amount of GFE's outstanding corn derivative instruments was approximately 4,275,000 bushels, comprised of long corn futures positions on 760,000 bushels that were entered into to hedge forecasted ethanol sales through March 2021, and short corn futures positions on 3,515,000 bushels that were entered into to hedge forecasted corn purchases through December 2022 and are directly related to corn forward contracts. Additionally, there are corn options positions of 1,920,000 bushels through March 2021. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2020, GFE had approximately $1,643,000 of cash collateral (restricted cash) related to derivatives held by a broker.

As of October 31, 2020, the total notional amount of HLBE's outstanding corn derivative instruments was approximately 2,095,000 bushels, comprised of long corn futures positions on 325,000 bushels that were entered into to hedge forecasted ethanol sales through March 2021, and short corn futures positions on 1,770,000 bushels that were entered into to hedge forecasted corn purchases through July 2022 and are directly related to corn forward contracts. Additionally, there are corn options positions of 1,380,000 bushels through March 2021. There may be offsetting positions that are not shown on a net basis that could lower the notional amount of positions outstanding.

As of October 31, 2020, HLBE had approximately $514,000 in cash collateral (restricted cash) related to derivatives held by a broker.

The following tables provide details regarding the Company's derivative instruments at October 31, 2020, none of which were designated as hedging instruments:

	Consolidated Balance Sheet Location	Assets	Liabilities
Corn contracts - GFE	Commodity derivative instruments	$ —	$ 642,550
Corn contracts - HLBE	Commodity derivative instruments	—	173,928
Ethanol contracts - GFE	Commodity derivative instruments	40,900	—
Ethanol contracts - HLBE	Commodity derivative instruments	15,150	—
Totals		$ 56,050	$ 816,478

The following tables provide details regarding the gains (losses) from Company's derivative instruments in statements of operations, none of which are designated as hedging instruments:

	Consolidated Statement of Operations Location	Fiscal Year Ended October 31, 2021	2020
Corn contracts	Cost of Goods Sold	$ (8,172,806)	$ (2,369,337)
Ethanol contracts	Revenues	210,087	(350,360)
Total loss		$ (7,962,719)	$ (2,719,697)

PROPERTY AND EQUIPMENT	12 Months Ended Oct. 31, 2021

PROPERTY AND EQUIPMENT

PROPERTY AND EQUIPMENT

9. PROPERTY AND EQUIPMENT

A summary of property and equipment is as follows:

	October 31, 2021	October 31, 2020
Land and improvements	$ 13,926,199	$ 13,926,199
Railroad improvements	9,045,112	9,045,112
Process equipment and tanks	139,934,099	134,233,838
Administration building	569,328	569,328
Office equipment	1,083,694	1,083,694
Rolling stock	2,151,700	2,150,700
Construction in progress	1,147,909	4,680,716
	167,858,041	165,689,587
Less: accumulated depreciation	(118,141,795)	(110,723,604)
Net property and equipment	$ 49,716,246	$ 54,965,983

Depreciation expense totaled approximately $7,396,000 and $9,311,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

In July 2020, HLBE experienced significant operational issues with its boiler, which negatively impacted production. HLBE operated with temporary boilers from August 2020 through part of January 2021. HLBE determined that the purchase and installation of a new boiler would be more economical and efficient than attempted repairs to the failing boiler. During fiscal year 2020, HLBE abandoned the failing boiler and recorded a loss on the disposal as a component of operating expenses during the fourth quarter of the fiscal year ended October 31, 2020, totaling approximately $1.8 million.

DEBT FACILITIES	12 Months Ended Oct. 31, 2021

DEBT FACILITIES

DEBT FACILITIES

10. DEBT FACILITIES

Granite Falls Energy

On September 27, 2021, GFE finalized loan documents for an amended credit facility (the "2021 Credit Facility") with AgCountry Farm Credit Services, PCA, AgCountry Farm Credit Services, FLCA ("AgCountry"). CoBank FCB ("CoBank") serves as AgCountry's administrative agent for the 2021 Credit Facility. The 2021 Credit Facility is intended to finance GFE's acquisition of Heron Lake BioEnergy, LLC ("HLBE") and consolidate certain existing debts of GFE and HLBE. The loan documents include an Amended and Restated Credit Agreement (the "Credit Agreement"), which amends and replaces the Company's credit agreement with AgCountry dated September 27, 2018.

The 2021 Credit Facility contains customary financial and affirmative covenants and negative covenants for loans of this type and size to ethanol companies. Each loan from AgCountry to GFE is subject to the terms of the Credit Agreement. Pursuant to the Credit Agreement, all agreements between GFE and AgCountry and/or CoBank are secured by a first lien on all equity or personal property owned or acquired by GFE. Financial covenants under the Amended Credit Facility include (i) maintenance of working capital of at least $20.0 million, and (ii) maintenance of a debt service coverage ratio of not less than 1.75 to 1.00 at the end of each fiscal year, beginning October 31, 2022.

The 2021 Credit Facility provides for customary events of default which include (subject in certain cases to customary grace and cure periods), among others, the following: nonpayment of principal or interest; breach of covenants or other agreements in the Amended Credit Facility; defaults in failure to pay certain other indebtedness; and certain events of bankruptcy or insolvency. If any event of default occurs, the remaining principal balance and accrued interest on all loans subject to the Amended Credit Facility will become immediately due and payable.

The 2021 Credit Facility includes the following agreements:

$20 million Revolving Credit Promissory Note:

Under the terms of the Revolving Credit Promissory Note, GFE may borrow, repay, and reborrow up to the aggregate principal commitment amount of $20.0 million. Final payment of amounts borrowed under revolving credit promissory note is due October 1, 2022. Interest on the amended revolving term promissory note accrues at a variable weekly rate equal to the One-Month London Interbank Offered Rate ("LIBOR") Index rate plus 3.25% and is payable monthly in arrears, which equated to 3.34% at October 31, 2021. The revolving credit promissory note is also subject to a 0.30% fee on the unused commitment. The purpose of the revolving credit promissory note is to provide for the operating needs of GFE and consolidate a $5 million revolving credit promissory note dated February 4, 2021, between AgCountry and HLBE.

$20 million Amended and Restated Revolving Term Promissory Note:

Under the terms of the Amended and Restated Revolving Term Promissory Note, GFE may borrow, repay, and reborrow up to the aggregate principal commitment amount of $20.0 million. Final payment of amounts borrowed under the note is due October 1, 2026. Subject to GFE's selection, interest on the note accrues at either a variable weekly rate of the LIBOR Index rate plus 3.50%, which equated to 3.59% at October 31, 2021, or an annual fixed rate determined by CoBank. The note is subject to an overadvance fee, an amendment fee, and a 0.50% unused commitment fee. The purposes of the note are to providing working capital to GFE, to finance GFE's acquisition of the non-controlling interest of HLBE, and to terminate and transfer to GFE the existing indebtedness on a $13 million amended and restated revolving term promissory note dated June 11, 2020, between HLBE and AgCountry.

$25 million Single Advance Term Promissory Note:

Under the terms of the $25.0 million Single Advance Term Promissory Note, AgCountry agrees to make a single advance loan to GFE in the amount of $25.0 million for the purpose of financing GFE's acquisition of the non-controlling interest of HLBE and refinancing existing indebtedness. GFE agrees to repay the note in eighteen quarterly installments of $1.125 million, beginning March 2022, plus a final installment of any unpaid balance. Subject to GFE's selection, the amounts
borrowed bear interest at either a variable weekly rate equal to the LIBOR Index Rate plus 3.50%, which equated to 3.59% at October 31, 2021, or an annual fixed rate set by CoBank, with a minimum period of one year and minimum amount of $100,000.

$2.4 million Single Advance Term Promissory Note:

Under the terms of the $2.4 million Single Advance Term Promissory Note, AgCountry made a single advance loan to GFE in the amount of $2.4 million loan for the purpose of financing GFE's acquisition of the non-controlling interest of HLBE and to terminate and transfer GFE's existing indebtedness pursuant to a HLBE's single advance term promissory note dated June 19, 2020. Amounts borrowed under the note bear interest at a fixed rate of 3.80%. The note is to be repaid in seven semi-annual installments of $300,000, beginning December 2021 and the final installment of the unpaid balance in June 2025. HLBE's single advance term promissory note dated June 19, 2020 provided a commitment of $3.0 million to HLBE for the purpose of constructing a new grain bin and reducing a revolving term promissory note.

Project Hawkeye Loan

On August 2, 2017, GFE entered into a replacement credit facility with Project Hawkeye. The terms of the replacement credit facility allow GFE to borrow up to $7.5 million of variable-rate, amortizing non-recourse debt from Project Hawkeye using the GFE's $7.5 million investment in Ringneck Energy & Feed, LLC ("Ringneck"), as collateral. The Project Hawkeye loan bears interest from date funds are first advanced on the loan through maturity, at a rate per annum equal to the sum of the One Month LIBOR Index Rate plus 3.05% per annum, with an interest rate floor of 3.55%, which equated to 3.55% at October 31, 2021.

The Project Hawkeye loan requires annual interest payments only for the first two years of the loan and monthly principal and interest payments for years three through nine based on a seven-year amortization period. The monthly amortized payments will be re-amortized following any change in interest rate. The entire outstanding principal balance of the loan, plus any accrued and unpaid interest thereon, is due and payable in full on August 2, 2026. GFE is permitted to voluntarily prepay all or any portion of the outstanding balance of this loan at any time without premium or penalty.

Pursuant to a pledge agreement entered into in connection with the Project Hawkeye loan, GFE's obligations are secured by all of its right, title, and interest in its investment in Ringneck, including the 1,500 units subscribed for by GFE. The loan is non-recourse to all of GFE's other assets, meaning that in the event of default, the only remedy available to Project Hawkeye will be to foreclose and seize all of GFE's right, title and interest in its investment in Ringneck.

SBA Paycheck Protection Program Loan

In March 2020, Congress passed the Paycheck Protection Program, authorizing loans to small businesses for use in paying employees that they continue to employ throughout the COVID-19 pandemic and for rent, utilities and interest on mortgages. Loans obtained through the Paycheck Protection Program are eligible to be forgiven as long as the proceeds are used for qualifying purposes and certain other conditions are met. On April 17, 2020, GFE received a loan in the amount of $703,900 through the Paycheck Protection Program. This note was forgiven in full during February 2021. Forgiveness income is recorded as a component of other income on the consolidated statement of operations.

In February 2021, GFE received a second Paycheck Protection Program loan in the amount of $703,900. The loan was forgiven in full during July 2021. Forgiveness income is recorded as a component of other income on the statement of operations.

Heron Lake BioEnergy

SBA Paycheck Protection Program Loan

In March 2020, Congress passed the Paycheck Protection Program, authorizing loans to small businesses for use in paying employees that they continue to employ throughout the COVID-19 pandemic and for rent, utilities and interest on mortgages. Loans obtained through the Paycheck Protection Program are eligible to be forgiven as long as the proceeds are used for qualifying purposes and certain other conditions are met. On April 18, 2020, HLBE received a loan in the amount of $595,693 through the Paycheck Protection Program. The loan was forgiven in full during March 2021. Forgiveness income is recorded as a component of other income on the consolidated statement of operations.

In February 2021, HLBE received a second Paycheck Protection Program loan in the amount of $595,693. The loan was forgiven in full during August 2021. Forgiveness income is recorded as a component of other income on the statement of operations.

Long-term debt consists of the following:

	October 31, 2021	October 31, 2020
GRANITE FALLS ENERGY:		
$20 million Revolving Credit Promissory Note, see terms above	$ —	$ —
$20 million Revolving term loan, see terms above	—	—
$25 million Single Advance Term Promissory Note, see terms above	25,000,000	—
$2.4 million Single Advance Term Promissory Note, see terms above	2,400,000	—
Term note payable to Project Hawkeye, see terms above	5,267,857	6,339,286
SBA Paycheck Protection Program loan, see terms above	—	703,900
HERON LAKE BIOENERGY:		
Amended revolving term note payable to lending institution, amended within the 2021 Credit Facility as noted above	—	7,891,426
Single advance term note payable to lending institution, amended within the 2021 Credit Facility as noted above	—	3,000,000
Short term revolving note, see notes above	—	—
Assessment payable as part of water supply agreement, due in semi-annual installments of $189,393 with interest at 6.55%, enforceable by statutory lien, with the final payment paid October 2021. HLBE made deposits for one year's worth of debt service payments of approximately $364,000, which is included with other current assets that are held on deposit to be applied with the final payments of the assessment.	—	300,551
SBA Paycheck Protection Program Loan, see terms above	—	595,693
Totals	32,667,857	18,830,856
Less: amounts due within one year	5,046,429	12,954,538
Net long-term debt	$ 27,621,428	$ 5,876,318

Based on the most recent debt agreements, estimated maturities of long-term debt at October 31, 2021 are as follows:

2022	$	5,046,429
2023		6,171,429
2024		6,171,429
2025		6,171,429
2026		9,107,141
Total debt	$	32,667,857

MEMBERS' EQUITY	12 Months Ended Oct. 31, 2021
MEMBERS' EQUITY	
MEMBERS' EQUITY	**11. MEMBERS' EQUITY** GFE has one class of membership units. The units have no par value and have identical rights, obligations and privileges. Income and losses are allocated to all members based upon their respective percentage of units held. As of October 31, 2021 and 2020, GFE had 30,606 membership units authorized, issued, and outstanding. On December 22, 2021, the Board of Governors of the Company declared a cash distribution of $330.00 per membership unit to the holders of record of the Company's units at the close of business on December 22, 2021, for a total distribution of $10,099,980. The Company paid the distribution in January 2022.

LEASES	12 Months Ended Oct. 31, 2021

LEASES.
LEASES

12. LEASES

The Company leases rail cars for its facility to transport ethanol and dried distillers' grains to its end customers. Operating lease right of use assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. The Company uses its estimated incremental borrowing rate, unless an implicit rate is readily determinable, as the discount rate for each lease in determining the present value of lease payments. For the twelve months ended October 31, 2021, the Company's weighted average discount rate was 4.87%. Operating lease expense is recognized on a straight-line basis over the lease term.

The Company determines if an arrangement is a lease or contains a lease at inception. The Company's leases have remaining terms of approximately one to six years. For the twelve months ended October 31, 2021, the weighted average remaining lease term was four years.

The Company elected to use a portfolio approach for lease classification, which allows for an entity to group together leases with similar characteristics provided that its application does not create a material difference when compared to accounting for the leases at a contract level. For railcar leases, the Company elected to combine the railcars within each rider and account for each rider as an individual lease.

The following table summarizes the remaining annual maturities of the Company's operating lease liabilities as of October 31, 2021:

2022	$	4,315,800
2023		4,056,600
2024		3,442,200
2025		3,034,200
2026		2,131,650
Thereafter		545,800
Totals		17,526,250
Less: Amount representing interest		1,770,855
Lease liabilities	$	15,755,395

HLBE recorded operating lease costs of approximately $2,666,000 and $2,331,000 in cost of goods sold in the Company's consolidated statement of operations, which approximates the cash paid for the fiscal years ending October 31, 2021 and 2020, respectively.

GFE recorded operating lease costs of approximately $3,324,000 and $3,181,000 in cost of goods sold in the Company's consolidated statement of operations, which approximates the cash paid for the fiscal years ending October 31, 2021 and 2020, respectively.

EMPLOYEE BENEFIT PLANS	12 Months Ended Oct. 31, 2021
EMPLOYEE BENEFIT PLANS	
EMPLOYEE BENEFIT PLANS	**13. EMPLOYEE BENEFIT PLANS** GFE has a defined contribution plan available to all of its qualified employees. GFE contributes a match of 50% of the participant's salary deferral up to a maximum of 3% of the employee's salary. GFE contributions totaled approximately $74,000 and $76,000 for the fiscal years ended October 31, 2021 and 2020, respectively. HLBE has a defined contribution plan available to all of its qualified employees. HLBE contributes a match of 50% of the participant's salary deferral up to a maximum of 4% of the employee's salary. HLBE contributions totaled approximately $91,000 and $89,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

INCOME TAXES

INCOME TAXES

INCOME TAXES

12 Months Ended
Oct. 31, 2021

14. INCOME TAXES

The differences between the consolidated financial statement basis and tax basis of assets are estimated as follows:

		October 31, 2021	October 31, 2020
Financial Statement basis of assets	*	$145,136,914	$116,197,703
Organization & start-up costs capitalized for tax purposes, net		175,030	12,415
Tax depreciation greater than book depreciation		(58,514,418)	(6,156,300)
Impairment charge		27,844,579	—
Unrealized derivatives gains (losses) of commodity derivative instruments		(39,076)	(40,900)
Capitalized inventory		122,930	35,777
Operating lease right of use assets		(15,755,395)	(10,092,405)
Investment in other partnerships		(7,110,613)	—
Net effect of consolidation of acquired subsidiary		—	(37,161,919)
Income tax basis of assets		$ 91,859,951	$ 62,794,371
*The Financial Statement basis of assets is the total assets of GFE and HLBE. See consolidated balance sheet in financial statements.			
Financial Statement basis of liabilities		$ 71,215,181	$ 54,305,876
Accrued rail car maintenance		(252,797)	(825,000)
Other accruals		(1,467,848)	(122,041)
Operating lease liability		(15,755,395)	(10,092,405)
Net effect of consolidation of acquired subsidiary		—	(10,065,001)
Income tax basis of liabilities		$ 53,739,141	$ 33,201,429

RELATED PARTY TRANSACTIONS	12 Months Ended Oct. 31, 2021
RELATED PARTY TRANSACTIONS	
RELATED PARTY TRANSACTIONS	**15. RELATED PARTY TRANSACTIONS** *GFE Corn Purchases - Members* GFE purchased corn from members of its Board of Governors of approximately $5,824,000 for the fiscal year ended October 31, 2021, of which approximately $233,000 is included in the accounts payable at October 31, 2021 and $3,099,000 for the fiscal year ended October 31, 2020, of which approximately $353,000 is included in accounts payable at October 31, 2020. *HLBE Corn Purchases - Members* Until the date of the completed Merger, HLBE purchased corn from members of its Board of Governors of approximately $19,809,000 in fiscal year 2021, of which none is included in accounts payable at October 31, 2021 and $12,545,000 in fiscal year 2020, of which approximately $171,000 is included in accounts payable at October 31, 2020.

COMMITMENTS AND CONTINGENCIES	12 Months Ended Oct. 31, 2021
COMMITMENTS AND CONTINGENCIES	
COMMITMENTS AND CONTINGENCIES	**16. COMMITMENTS AND CONTINGENCIES**

Corn Purchase Commitments

At October 31, 2021, GFE had cash and basis contracts for forward corn purchase commitments for approximately 4,929,000 bushels for deliveries through December 2022.

At October 31, 2021, HLBE had cash and basis contracts for forward corn purchase commitments for approximately 3,272,000 bushels for deliveries through December 2022.

Given the uncertainty of future ethanol and corn prices, the Company could incur a loss on the outstanding corn purchase contracts in future periods. Management has evaluated these forward contracts using the lower of cost or net realizable
value evaluation, similar to the method used on its inventory, and has determined that an impairment loss existed at HLBE of approximately $47,000 at October 31, 2020, and no impairment losses existed at GFE at October 31, 2021 or 2020, or HLBE at October 31, 2021. The impairment expense is recorded as a component of costs of goods sold.

Ethanol Marketing Agreement

GFE currently has an ethanol marketing agreement with Eco-Energy, Inc., an unrelated party ("Eco-Energy"). Pursuant to this marketing agreement, Eco-Energy purchases the entire ethanol output of GFE's ethanol plant and arranges for the transportation of ethanol; however, GFE is responsible for securing all of the rail cars necessary for the transport of ethanol by rail except for 43 rail cars leased to GFE by Eco-Energy under the marketing agreement. GFE pays Eco-Energy a marketing fee per gallon of ethanol sold in consideration of Eco-Energy's services, as well as a fixed lease fee for rail cars leased from Eco-Energy to GFE. Our marketing contracts were amended for an effective date of January 1, 2022, and an expiration date of December 31, 2023. The contracts will automatically renew for an additional two years unless either party gives written 90-day notice. The amendment provides for certain negotiated changes to the marketing fees payable to Eco-Energy by GFE and payment terms based on prevailing market-rate conditions for comparable ethanol marketed services. The changes to the marketing fee and timing of payments by Eco-Energy were negotiated based on prevailing market-rate conditions for comparable ethanol marketing services.

HLBE has an ethanol marketing agreement with Eco-Energy, an unrelated party, for the sale of ethanol ("Eco Agreement"). Under this marketing agreement, Eco-Energy purchases, markets and resells 100% of the ethanol produced at HLBE's ethanol production facility and arranges for the transportation of ethanol. HLBE pays Eco-Energy a marketing fee per gallon of ethanol sold in consideration of Eco-Energy's services, as well as a fixed lease fee for rail cars leased from Eco-Energy to HLBE. The marketing fee was negotiated based on prevailing market-rate conditions for comparable ethanol marketing services. The initial term of the Eco Agreement continued through December 31, 2016, with automatic renewals for additional three terms of three-year periods unless terminated by either party by providing written notice to the other party at least three months prior to the end of the then current term. During the third fiscal quarter of 2016, HLBE amended the Eco Agreement. The term of the Eco Agreement expired on December 31, 2020, with automatic renewals for additional consecutive terms of one year unless either party provides written notice to the other at least 90 days prior to the end of the then-current term. Additionally, the amended Eco Agreement provides for certain negotiated changes to the marketing fees payable to Eco-Energy and payment terms based on prevailing market-rate conditions for comparable ethanol marketing services.

Total ethanol marketing fees and commissions of GFE and HLBE approximated $754,000 and $589,000 for the fiscal years ended October 31, 2021 and 2020, respectively, and are included net within revenues.

Ethanol Contracts

At October 31, 2021, GFE had fixed and basis contracts to sell approximately $19,612,000 of ethanol for various delivery periods through December 2021, which approximates 85% of its anticipated ethanol sales for this that period.

At October 31, 2021, HLBE had fixed and basis contracts to sell approximately $18,711,000 of ethanol for various delivery periods through December 2021, which approximates 78% of its anticipated ethanol sales for this that period.

Distillers Grain Marketing Agreement

GFE has a distillers' grains marketing agreement with RPMG, Inc. ("RPMG"), an unrelated party, for the purpose of marketing and selling all distillers' grains produced by GFE. The contract commenced on February 1, 2011 with an initial term of one year, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party. Distillers' grains commissions to RPMG totaled approximately $277,000 and $255,000 for the fiscal years ended October 31, 2021 and 2020, respectively, and are included net within revenues.

At October 31, 2021, GFE had forward contracts to sell approximately $1,349,000 of distillers' grain for deliveries through November 2021, which approximates 45% of its anticipated distillers' grain sales during that period.

HLBE has a distillers' grains off-take agreement with Gavilon Ingredients, LLC ("Gavilon"), an unrelated party. Under this agreement, Gavilon purchases all of the distillers' grains produced at HLBE's ethanol plant in exchange for a service fee. The contract commenced on November 1, 2013 with an initial term of six months, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 60 days to the other party. Distillers' grains commissions totaled approximately $326,000 and $187,000 for the fiscal years ended October 31, 2021 and 2020, respectively.

At October 31, 2021, HLBE had forward contracts to sell approximately $1,550,000 of distillers' grains for delivery through December 2021, which approximates 30% of its anticipated distillers' grains sales during that period.

Corn Oil Marketing Agreement

GFE has a corn oil marketing agreement with RPMG, an unrelated party, for the purpose of marketing and selling all corn oil produced by GFE. The contract commenced on April 29, 2010 with an initial term of one year, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party.

HLBE has a corn oil marketing agreement with RPMG, an unrelated party, for the purpose of marketing and selling all corn oil produced by HLBE. The contract commenced on November 1, 2013 with an initial term of one year, and will continue to remain in effect until terminated by either party at its unqualified option, by providing written notice of not less than 90 days to the other party.

Corn oil commissions of GFE and HLBE totaled approximately $180,000 and $138,000 for the fiscal years ended October 31, 2021 and 2020, respectively, and are included net within revenues.

At October 31, 2021, GFE had forward contracts to sell approximately $1,693,000 of corn oil for delivery through December 2021, which approximates 85% of its anticipated corn oil sales for that period.

At October 31, 2021, HLBE had forward contracts to sell approximately $1,470,000 of corn oil for delivery through December 2021, which approximates 70% of its anticipated corn oil sales for that period.

Contract for Natural Gas Pipeline to Plant

GFE has an agreement with an unrelated company for the construction of and maintenance of 9.5 miles of natural gas pipeline that serves the GFE plant. The agreement requires the Company to receive a minimum of 1,400,000 DT of natural gas annually through the term of the agreement. The Company is charged a fee based on the amount of natural gas delivered through the pipeline.

HLBE has a facilities agreement with Northern Border Pipeline Company which allows us access to an existing interstate natural gas pipeline located approximately 16 miles north from the HLBE plant. Agrinatural was formed to own and operate the pipeline and transports gas to HLBE pursuant to a transportation agreement. HLBE also has a base agreement for the sale and purchase of natural gas with Constellation NewEnergy-Gas Division, LLC ("Constellation"). This agreement runs until March 31, 2022.

Amended and Restated Letter of Credit Promissory Note

Under the terms of the Amended and Restated Letter of Credit Promissory Note, GFE may borrow, repay, and reborrow up to the aggregate principal commitment amount of $500,000 for the purpose of opening letters of credit for its account. Final payment of amounts borrowed under revolving credit promissory note is due December 1, 2023. Amounts borrowed bear interest at the LIBOR Index Rate plus 3.25%, which equated to 3.34% at October 31, 2021. The Amended and Restated Letter of Credit Promissory Note replaces the amended and restated letter of credit promissory note dated September 30, 2020, between GFE and AgCountry.

Water Agreements

In September 2019, HLBE entered into an industrial water supply development and distribution agreement, effective as of February 1, 2019, with the City of Heron Lake for 10 years. HLBE has the exclusive rights to the first 600 gallons per minute of capacity that is available from the well. In consideration, HLBE will pay flow charges at a rate of $0.60 cents per thousand gallons of water, in addition to a fixed monthly charge of $1,500 per month. The flow charges are placed into a dedicated fund for operation and maintenance of the well, and are capped at $300,000 at the end of each year. HLBE is also responsible for paying 55% of operation and maintenance costs in excess of the $300,000 cap, in the first two years of the agreement. Thereafter, the percentage payable by HLBE is determined based on a two-year average of HLBE's usage compared to the total amount of industrial water supplied to HLBE and a third-party customer of the City of Heron Lake.

Under the previous industrial water supply development and distribution agreement with the City of Heron Lake, HLBE paid one half of the City of Heron Lake's water well bond payments of $735,000, plus a 5% administrative fee, totaling approximately $594,000, and operating costs, relative to HLBE's water usage, plus a 10% profit. HLBE recorded an assessment of approximately $367,000 with long-term debt as described in Note 10. HLBE paid operating and administrative expenses of approximately $12,000 per year.

In May 2006, HLBE entered into a water treatment agreement with the City of Heron Lake and Jackson County for 30 years. HLBE will pay for operating and maintenance costs of the plant in exchange for receiving treated water. In addition, HLBE agreed to an assessment for a portion of the capital costs of the water treatment plant.

HLBE recorded assessments within long-term debt of $500,000 and $3,550,000 in fiscal 2007 and 2006, respectively, as described in Note 10. HLBE paid operating and maintenance expenses of approximately $59,000 and $77,000 in fiscal 2021 and 2020, respectively.

Rail Car Rehabilitation Costs

GFE leases 75 hopper rail cars under a multi-year agreement, which ends November 2025. HLBE leases 50 hopper rail cars under a multi-year agreement which ends in May 2027. Under the agreements, the Company is required to pay to rehabilitate each car for "damage" that is considered to be other than normal wear and tear upon turn in of the car(s) at the termination of the lease. During the fiscal years ended October 31, 2021 and 2020, GFE has recorded a corresponding estimated long-term liability totaling $825,000. During the fiscal years ended October 31, 2021 and 2020, HLBE has recorded a corresponding estimated long-term liability totaling approximately $643,000 and $597,000, respectively. The Company accrues the estimated cost of rail car damages over the term of the leases as the damages are incurred as a component of cost of goods sold.

LEGAL PROCEEDINGS	12 Months Ended Oct. 31, 2021
LEGAL PROCEEDINGS	
LEGAL PROCEEDINGS	**17. LEGAL PROCEEDINGS** From time to time in the ordinary course of business, the Company may be named as a defendant in legal proceedings related to various issues, including without limitation, workers' compensation claims, tort claims, or contractual disputes. We are not currently a party to any material pending legal proceedings and we are not currently aware of any such proceedings contemplated by governmental authorities.

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Policies)	12 Months Ended
	Oct. 31, 2021

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

Nature of Business

Granite Falls Energy, LLC ("GFE") is a Minnesota limited liability company currently producing fuel-grade ethanol, distillers' grains, and crude
Minnesota and sells these products, pursuant to marketing agreements, throughout the continental U.S. and on the international market. GFE'
annual production capacity of 60 million gallons, but is currently permitted to produce up to 70 million gallons of undenatured ethanol on a twelv

Additionally, as of October 31, 2021, GFE has 100% ownership in Heron Lake BioEnergy, LLC ("HLBE"). HLBE is a Minnesota limited
producing fuel-grade ethanol, distillers' grains, and crude corn oil near Heron Lake, Minnesota and sells these products, pursuant to marketing
continental United States. HLBE's plant has an approximate annual production capacity of 65 million gallons, but is currently permitted to produc
per year of undenatured ethanol on a twelve-month rolling sum basis. Additionally, HLBE, through a wholly owned subsidiary, operates a natura
natural gas to the HLBE's ethanol production facility and other customers.

Principles of Consolidation

Principles of Consolidation

The accompanying consolidated financial statements consolidate the operating results and financial position of GFE, and its approximately 50.7
(through GFE's 100% ownership of Project Viking, L.L.C.) through September 29, 2021, when the remaining non-controlling interest was acq
over the operations of HLBE and its majority voting interest, GFE consolidates the financial statements of HLBE with its consolidated financial
approximately 49.3% ownership of HLBE is included in the consolidated financial statements as a non-controlling interest through September 20
controlling interest was acquired through the merger. HLBE is also the sole owner Agrinatural Gas, LLC ("Agrinatural"), through its wholly owned
Company, LLC. Given HLBE's control over the operations of Agrinatural and its majority voting interest, HLBE consolidates the financial stat
its consolidated financial statements, with the equity and earnings (loss) attributed to the remaining 27% non-controlling interest identified sepa
consolidated balance sheets and statements of operations through December 11, 2019 when the remaining non-controlling interest was acquired. A
balances and transactions are eliminated in consolidation.

On September 29, 2021, GFE acquired the remaining non-controlling interest in HLBE for cash consideration of $14,000,000. As of October
ownership of HLBE. When we use the terms "Granite Falls Energy" or "GFE" or similar words in this Annual Report on Form 10-K, unless the
we are referring to Granite Falls Energy, LLC and our operations at our ethanol production facility located in Granite Falls, Minnesota. Whe
Lake BioEnergy", "Heron Lake", or "HLBE" or similar words, unless the context otherwise requires, we are referring to Heron Lake BioEnergy,
subsidiary, HLBE Pipeline Company, LLC, through which, HLBE holds a 100% interest in Agrinatural Gas, LLC. When we use the terms the "C
or similar words in this Annual Report on Form 10-K, unless the context otherwise requires, we are referring to Granite Falls Energy, LLC and ou
majority-owned subsidiaries.

Fiscal Reporting Period

Fiscal Reporting Period

The Company's fiscal year end for reporting financial operations is October 31 for financial reporting purposes.

Accounting Estimates

Accounting Estimates

Management uses estimates and assumptions in preparing these consolidated financial statements in accordance with generally accepted account
States of America. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and
revenues and expenses. The Company uses estimates and assumptions in accounting for the following significant matters, among others:
economic lives of property and equipment, valuation of commodity derivatives, inventory, and inventory purchase and sale commitments, evaluat
costs, and the assumptions used in the impairment analysis of long-lived assets and evaluation of going concern. Actual results may differ from pre
and such differences may be material to our consolidated financial statements. The Company periodically reviews estimates and assumptions, and
reflected in the period in which the revision is made.

Revenue Recognition

Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we ex
for those products or services. Our contracts primarily consist of agreements with marketing companies and other customers as described below. O
consist of the delivery of ethanol, distillers' grains, corn oil, and natural gas to our customers. Our customers primarily consist of two distin
described below. The consideration we receive for these products reflects an amount that the Company expects to be entitled to in exchange fo
current observable market prices at the Chicago Mercantile Exchange, generally, and adjusted for local market differentials. Our contracts have s
or truck, and dates. Revenue is recognized when the Company delivers the products to the mode of transportation specified in the contract, at the t
in the contract, net of commissions, fees, and freight. We sell each of the products via different marketing channels as described below.

- Ethanol. The Company sells its ethanol via a marketing agreement with Eco-Energy, Inc. Eco-Energy sells one hundred percent of the C
production based on agreements with end users at prices agreed upon mutually among the end user, Eco-Energy and the Company. Our p
consist of our obligation to deliver ethanol to our customers. Our customer contracts consist of orders received from the customer pursua
agreement. The marketing agreement calls for control and title to pass to Eco-Energy once a rail car is released to the railroad or a truck
Company's scales. Revenue is recognized then at the price in the agreement with the end user, net of commissions, freight, and fees.

- Distillers grains. GFE and HLBE engage another third-party marketing company, RPMG, Inc. ("RPMG") and Gavilon Ingredients, Inc. (
to sell one hundred percent of the distillers grains it produces at the plant. RPMG and Gavilon take title and control once a rail car is rele
truck is released from the Company's scales. Prices are agreed upon between RPMG, Gavilon and the Company. Our performance oblig
obligation to deliver corn oil to our customers. Our customer contracts consist of orders received from the customer pursuant to a market
recognized net of commissions, freight and fees.

- Distillers corn oil (corn oil). The Company sells one hundred percent of its corn oil production to RPMG, Inc. The process for selling co distillers' grains. RPMG takes title and control once a rail car is released to the railroad or a truck is released from the Company's scales. between RPMG and the Company. Our performance obligations consist of our obligation to deliver corn oil to our customers. Our custon orders received from the customer pursuant to a marketing agreement. Revenue is recognized net of commissions, freight and fees.

- Natural gas. The Company sells natural gas through its wholly-owned subsidiary Agrinatural Gas, LLC. Agrinatural owns approximately pipeline and provides natural gas to HLBE's ethanol plant and other commercial, agricultural and residential customers through a connec pipeline facilities of Northern Border Pipeline Company. Agrinatural's revenues are generated through natural gas distribution fees and s customer by volume and revenue.

Cost of Goods Sold

Cost of Goods Sold

The primary components of cost of goods sold for the production of ethanol and related co-products are corn, energy, raw materials, over rehabilitation costs, and direct labor.

Operating Expenses

Operating Expenses

The primary components of operating expenses are salaries and expenses for administrative employees, professional fees, board of governor ex assets and property taxes.

Cash and Cash Equivalents

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents. The Compa multiple financial institutions, of which one is a member of the Company. At times throughout the year, the Company's cash balances may exc Federal Deposit Insurance Corporation. The Company does not believe it is exposed to any significant credit risk on its cash balances.

Restricted Cash

Restricted Cash

The Company is periodically required to maintain at its broker cash balances related to open commodity derivative instrument positions as discus

Account Receivable

Accounts Receivable

Credit terms are extended to customers in the normal course of business. The Company performs ongoing credit evaluations of its custome generally, requires no collateral.

Accounts receivable are recorded at their estimated net realizable value. Accounts are considered past due if payment is not made on a timely b Company's credit terms. Accounts considered uncollectible are written off. The Company follows a policy of providing an allowance for doubtfu on historical experience, and its evaluation of the current status of receivables, the Company is of the belief that such accounts will be collectible thus an allowance was not necessary at October 31, 2021 or 2020. It is at least possible this estimate will change in the future.

Inventory

Inventory

Inventory is stated at the lower of cost or net realizable value. Cost for all inventories is determined using the first in first out method. Net reali selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Inventory consist process, finished goods, and supplies. Corn is the primary raw material along with other raw materials. Finished goods consist of ethanol, distille

Derivative Instruments

Derivative Instruments

From time to time, the Company enters into derivative transactions to hedge its exposures to commodity price fluctuations. The Company derivatives in the balance sheets at fair value.

In order for a derivative to qualify as a hedge, specific criteria must be met and appropriate documentation maintained. Gains and losses from de as hedges, or are undesignated, must be recognized immediately in earnings. If the derivative does qualify as a hedge, depending on the nature c fair value of the derivative will be either offset against the change in fair value of the hedged assets, liabilities, or firm commitments through earn comprehensive income until the hedged item is recognized in earnings. Changes in the fair value of undesignated derivatives are recorded in earni

Additionally, the Company is required to evaluate its contracts to determine whether the contracts are derivatives. Certain contracts that litera derivative may be exempted as "normal purchases or normal sales". Normal purchases and normal sales are contracts that provide for the purchas than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold over a reasonable period in the

Contracts that meet the requirements of normal purchases or normal sales are documented as normal and exempted from accounting and reporting are not marked to market in our consolidated financial statements.

In order to reduce the risks caused by market fluctuations, the Company occasionally hedges its anticipated corn, natural gas, and denaturant pur entering into options and futures contracts. These contracts are used with the intention to fix the purchase price of anticipated requirements for co production activities and the related sales price of ethanol. The fair value of these contracts is based on quoted prices in active exchange-traded conditions. Although the Company believes its commodity derivative positions are economic hedges, none have been formally designated as a hed and derivative positions are recorded on the balance sheet at their fair market value, with changes in fair value recognized in current period earnin does not enter into financial instruments for trading or speculative purposes.

The Company has adopted authoritative guidance related to "Derivatives and Hedging," and has included the required enhanced quantitative and objectives and strategies for using derivatives, quantitative disclosures about fair value amounts of gains and losses from derivative instruments, a risk-related contingent features in derivative agreements. See further discussion in Note 8.

Property and Equipment

Property and Equipment

Property and equipment are stated at cost. Depreciation is provided over the following estimated useful lives by use of the straight-line method.

Asset Description	Ye
Land improvements	5-20
Railroad improvements	5-20

Process equipment and tanks	5-40
Administration building	10-40
Office equipment	3-10
Rolling stock	5-10

Maintenance and repairs are expensed as incurred; major improvements and betterments are capitalized. Construction in progress expenditures w straight-line method over their estimated useful lives once the assets are placed into service.

Long-Lived Assets

Long-Lived Assets

Long-lived assets, such as property and equipment, and purchased intangible assets subject to amortization, are reviewed for impairment whe circumstances indicate that the carrying amount of an asset may not be recoverable. When determining impairment losses, a long-lived asset sh assets or liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets or liabilities. long-lived asset be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by an asset t asset. If the carrying value of the long-lived asset is not recoverable on an undiscounted cash flow basis, impairment is recognized to the extent tha its fair value. Fair value is determined through various valuation techniques including, but not limited to, discounted cash flow models, quoted m independent appraisals, as considered necessary. No impairment expense was recorded during fiscal 2021 and 2020.

Investments

Investments

GFE owns 1,600 capital units of Ringneck Energy & Feed, LLC (“Ringneck”) at a price of $5,000 per unit for a total of $8,000,000. Ringneck liability company that constructed an 80 million gallon per year ethanol manufacturing plant outside of Onida, South Dakota in Sully County. GF to secure the Company
the right to appoint one director to the board of directors of Ringneck. GFE has appointed Jeffrey Oestmann, its CEO, to serve as its appointed dir

On June 29, 2018, GFE executed a subscription agreement for investment in Harvestone Group, LLC (“Harvestone”), a Delaware limited liabil to the Operating Agreement of Harvestone. In connection with the execution of the subscription agreement and joinder, GFE made a capital co exchange for twenty (20) preferred membership units. Harvestone is an ethanol marketing, logistics, and trading company headquartered in Frank is owned by several other ethanol producers and other private investors, and its primary business is marketing and trading for member and non- The marketing and trading commenced in January 2019.

On November 15, 2021, Harvestone redeemed GFE’s 20 units for $3,000,000. As a result of the Harvestone redemption, GFE no longer owns ar ceased to be a member of Harvestone. As a result of the ongoing negotiations as of fiscal year end, the Harvestone investment was impaired to $3,0 of approximately $300,000 was recorded within investment income on the consolidated statement of operations, at October 31, 2021. The Comp the $3,000,000 redemption in November 2021.

The investments are accounted for by the equity method, under which the Company’s share of the net income of the investee is recognized as Consolidated Statements of Operations and added to the investment account, and distributions received from the affiliates are treated as a reductio

Summarized financial information of Ringneck, which was a significant investment as of October 31, 2020, is as follows:

Current Assets	$
Total Assets	
Current Liabilities	
Total Liabilities	
Members' Equity	
	12 Months
Revenue	$
Gross Profit	
Operating Profit	
Net Profit	

Patronage Investment

Patronage Investment

Patronage investment consists of the patron equities of GFE’s electricity supplier. Non-cash patronage dividends are recognized when declared/c redemptions are recorded as a reduction of the investment. This investment is carried at the lower of cost or fair value. See **Note 2 - PATRONA CORRECTION OF ERROR**.

Fair Value of Financial Instruments

Fair Value of Financial Instruments

The Company’s accounting for fair value measurements of assets and liabilities that are recognized or disclosed at fair value in the financial s nonrecurring basis adhere to the Financial Accounting Standards Board (“FASB”) fair value hierarchy that prioritizes the inputs to valuation tech value. The Company has adopted guidance for fair value measurement related to nonfinancial items that are recognized and disclosed at fair valu on a nonrecurring basis. The guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority significant unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to acces
- Level 2 inputs include:
    1. Quoted prices in active markets for similar assets or liabilities.

2. Quoted prices in markets that are observable for the asset or liability either directly or indirectly, for substantially the full te

3. Inputs that derived primarily from or corroborated by observable market date by correlation or other means.

- Level 3 inputs are unobservable inputs for the asset or liability.

The level in the fair value hierarchy within which a fair measurement in its entirety falls is based on the lowest level input that is significant to th its entirety.

Except for those assets and liabilities which are required by authoritative accounting guidance to be recorded at fair value, the Company has ele assets or liabilities at fair value. Except for the impairment of the Harvestone investment to fair value, no events occurred during the fiscal years 2020 that required adjustment to the recognized balances of assets or liabilities, which are recorded at fair value on a nonrecurring basis.

The carrying value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximates fair value due to instruments. The Company obtains fair value measurements from an independent pricing service for corn derivative contracts. The fair va observable data that may include dealer quotes and live trading levels from the Chicago Board of Trade and New York Mercantile Exchange ma long-term debt is estimated based on anticipated interest rates which management believes would currently be available to the Company for simila account the current credit risk of the Company and other market factors. The Company believes the carrying value of the debt instruments approx

Income Taxes

Income Taxes

The Company is treated as a partnership for federal and state income tax purposes, and generally does not incur income taxes. Instead, its earni in the income tax returns of its members. Therefore, no provision or liability for federal or state income taxes has been included in these financ exist between financial statement basis of assets and tax basis of assets and financial statement basis of liabilities and tax basis of liabilities. In a the alternative depreciation system for tax depreciation instead of the straight-line method that is used for book depreciation, which also causes Company's tax year end is December 31.

The Company had no significant uncertain tax positions as of October 31, 2021 or 2020 that would require disclosure, primarily due to the Company recognizes and measures tax benefits when realization of the benefits is uncertain under a two-step approach. The first step is to det meets the more-likely-than-not condition for recognition and the second step is to determine the amount to be recognized based on the cumulati 50%. Primarily due to the Company's tax status as a partnership, the adoption of this guidance had no material impact on the Company's finan operations.

The Company files income tax returns in the U.S. federal and Minnesota state jurisdictions. For years before 2018, the Company is no longer sub income tax examinations.

Net Income (Loss) per Unit

Net Income (Loss) per Unit

Basic net income (loss) per unit is computed by dividing net income (loss) by the weighted average number of members' units outstanding du income per unit is computed by dividing net income by the weighted average number of members' units and members' unit equivalents outstandi were no member unit equivalents outstanding during the periods presented; accordingly, for all periods presented, the calculations of the Comp income per unit are the same.

Environmental Liabilities

Environmental Liabilities

The Company's operations are subject to environmental laws and regulations adopted by various governmental entities in the jurisdiction in wh require the Company to investigate and remediate the effects of the release or disposal of materials at its location. Accordingly, the Company has and procedures in the areas of pollution control, occupational health, and the production, handling, storage, and use of hazardous materials to prev or other damage, and to limit the financial liability, which could result from such events. Environmental liabilities are recorded when the liabili can be reasonably estimated. No expense has been recorded for the fiscal years ended October 31, 2021 or 2020.

Reportable Operating Segments

Reportable Operating Segments

Accounting Standards Codification ("ASC") 280, "Segment Reporting," establishes the standards for reporting information about segments in fina segments are defined as components of an enterprise for which separate financial information is available that is evaluated regularly by the chief deciding how to allocate resources and in assessing performance. Therefore, in applying the criteria set forth in ASC 280, the Company determi of the products and production process and the expected financial results, the Company's operations at GFE's ethanol plant and HLBE's plant, i sale of ethanol and its co-products, are aggregated into one reporting segment.

Additionally, the Company also realizes relatively immaterial revenue from natural gas pipeline operations at Agrinatural, HLBE's majority ow after accounting for intercompany eliminations, these revenues from Agrinatural's represent less than less than 1% of our consolidated revenues on the overall performance of the Company. Therefore, the Company does not separately review Agrinatural's revenues, cost of sales or o information. Rather, the Company reviews Agrinatural's natural gas pipeline financial data on a consolidated basis with the Company's ethanol pro The Company believes that the presentation of separate operating performance information for Agrinatural's natural gas pipeline operations wo information to a reader of the Company's consolidated financial statements and would not achieve the basic principles and objectives of ASC 280

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Tables)	12 Months Ended
	Oct. 31, 2021

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Schedule of property and equipment estimated useful lives

Asset Description	Years
Land improvements	5-20 years
Railroad improvements	5-20 years
Process equipment and tanks	5-40 years
Administration building	10-40 years
Office equipment	3-10 years
Rolling stock	5-10 years

Schedule of summarized financial information of equity method investment

	2020
Current Assets	$ 19,510,000
Total Assets	149,434,000
Current Liabilities	16,206,000
Total Liabilities	69,439,000
Members' Equity	79,995,000
	12 Months Ended October 31, 2020
Revenue	$ 114,768,000
Gross Profit	6,325,000
Operating Profit	7,758,000
Net Profit	424,000

REVENUE (Tables)	12 Months Ended Oct. 31, 2021

REVENUE

Schedule of disaggregated revenue by source

		Fiscal Year Ended October 31, 2021
		Total
Ethanol	$	240,874,504
Distillers’ Grains		49,185,948
Corn Oil		17,147,981
Other		1,221,727
Natural Gas Pipeline		1,185,216
Total Revenues	$	309,615,376

		Fiscal Year Ended October 31, 2020
		Total
Ethanol	$	126,605,211
Distillers’ Grains		29,672,577
Corn Oil		6,590,481
Other		678,226
Natural Gas Pipeline		1,407,346
Total Revenues	$	**164,953,841**

FAIR VALUE (Tables)	12 Months Ended Oct. 31, 2021

FAIR VALUE

Schedule of derivative assets and liabilities measured at fair value

The following table provides information on those derivative assets and liabilities measured at fair value on a recurring basis at October 31, 2021:

			Fair Value Measurement Using		
Financial Assets:	Carrying Amount in Consolidated Balance Sheet	Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Commodity Derivative instruments - Corn	$ 39,067	$ 39,067	$ 39,067	$ —	$ —
Financial Liabilities:					
Commodity Derivative instruments - Corn	$ 732,801	$732,801	$ 732,801	$ —	$ —
Accounts Payable (1)	$ 923,550	$923,550	$ —	$ 923,550	$ —

The following table provides information on those derivative assets measured at fair value on a recurring basis at October 31, 2020:

			Fair Value Measurement Using		
	Carrying Amount in Consolidated Balance Sheet	Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Financial Assets:					
Commodity Derivative Instruments - Ethanol	$ 56,050	$ 56,050	$ 56,050	$ —	$ —
Financial Liabilities:					
Commodity Derivative Instruments - Corn	$ 816,478	$816,478	$ 816,478	$ —	$ —
Accounts Payable (1)	$ 772,795	$772,795	$	$ 772,795	

CONCENTRATIONS (Tables)	12 Months Ended Oct. 31, 2021

Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Total revenues

Schedule of concentration risk

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	76.7%	77.0%
RPMG, Inc. - Distillers' Grains & Corn Oil	23.3%	23.0%

Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Accounts receivable

Schedule of concentration risk

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	82.9%	72.1%
RPMG, Inc. - Distillers' Grains & Corn Oil	15.0%	24.6%

Heron Lake BioEnergy, LLC | Total revenues

Schedule of concentration risk

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	78.7%	76.7%
Gavilon Ingredients, LLC - Distillers' Grains	14.3%	15.9%

Heron Lake BioEnergy, LLC | Accounts receivable

Schedule of concentration risk

	October 31, 2021	October 31, 2020
Eco-Energy, Inc. - Ethanol	66.5%	54.8%
Gavilon Ingredients, LLC - Distillers' Grains	22.2%	20.0%

INVENTORY (Tables)	12 Months Ended Oct. 31, 2021

INVENTORY

Schedule of Inventory

	October 31, 2021	October 31, 2020
Raw materials	$ 10,742,480	$ 4,893,502
Supplies	3,322,639	3,070,458
Work in process	2,023,966	1,480,871
Finished goods	4,660,746	4,346,974
Totals	$ 20,749,831	$ 13,791,805

DERIVATIVE INSTRUMENTS (Tables)	12 Months Ended Oct. 31, 2021
DERIVATIVE INSTRUMENTS	
Schedule of derivative instruments in Statements of Financial Position	The following tables provide details regarding the Company's derivative instruments at October 31, 2021, none of which were designated as hedging instruments:

	Consolidated Balance Sheet Location	Assets	Liabilities
Corn contracts - GFE	Commodity derivative instruments	$ —	$605,813
Corn contracts - HLBE	Commodity derivative instruments	—	126,988
Ethanol contracts - GFE	Commodity derivative instruments	8,813	—
Ethanol contracts - HLBE	Commodity derivative instruments	30,263	—
Totals		$39,076	$732,801

The following tables provide details regarding the Company's derivative instruments at October 31, 2020, none of which were designated as hedging instruments:

	Consolidated Balance Sheet Location	Assets	Liabilities
Corn contracts - GFE	Commodity derivative instruments	$ —	$642,550
Corn contracts - HLBE	Commodity derivative instruments	—	173,928
Ethanol contracts - GFE	Commodity derivative instruments	40,900	—
Ethanol contracts - HLBE	Commodity derivative instruments	15,150	—
Totals		$56,050	$816,478

Schedule of gains (losses) from derivative instruments

	Consolidated Statement of Operations Location	Fiscal Year Ended October 31, 2021	Fiscal Year Ended October 31, 2020
Corn contracts	Cost of Goods Sold	$ (8,172,806)	$ (2,369,337)
Ethanol contracts	Revenues	210,087	(350,360)
Total loss		$ (7,962,719)	$ (2,719,697)

PROPERTY AND EQUIPMENT (Tables)	12 Months Ended Oct. 31, 2021

PROPERTY AND EQUIPMENT

Schedule of property and equipment

	October 31, 2021	October 31, 2020
Land and improvements	$ 13,926,199	$ 13,926,199
Railroad improvements	9,045,112	9,045,112
Process equipment and tanks	139,934,099	134,233,838
Administration building	569,328	569,328
Office equipment	1,083,694	1,083,694
Rolling stock	2,151,700	2,150,700
Construction in progress	1,147,909	4,680,716
	167,858,041	165,689,587
Less: accumulated depreciation	(118,141,795)	(110,723,604)
Net property and equipment	$ 49,716,246	$ 54,965,983

DEBT FACILITIES (Tables)

12 Months Ended Oct. 31, 2021

DEBT FACILITIES

Schedule of debt financing

	October 31, 2021	October 31, 2020
GRANITE FALLS ENERGY:		
$20 million Revolving Credit Promissory Note, see terms above	$ —	$ —
$20 million Revolving term loan, see terms above	—	—
$25 million Single Advance Term Promissory Note, see terms above	25,000,000	—
$2.4 million Single Advance Term Promissory Note, see terms above	2,400,000	—
Term note payable to Project Hawkeye, see terms above	5,267,857	6,339,286
SBA Paycheck Protection Program loan, see terms above	—	703,900
HERON LAKE BIOENERGY:		
Amended revolving term note payable to lending institution, amended within the 2021 Credit Facility as noted above	—	7,891,426
Single advance term note payable to lending institution, amended within the 2021 Credit Facility as noted above	—	3,000,000
Short term revolving note, see notes above	—	—
Assessment payable as part of water supply agreement, due in semi-annual installments of $189,393 with interest at 6.55%, enforceable by statutory lien, with the final payment paid October 2021. HLBE made deposits for one year's worth of debt service payments of approximately $364,000, which is included with other current assets that are held on deposit to be applied with the final payments of the assessment.	—	300,551
SBA Paycheck Protection Program Loan, see terms above	—	595,693
Totals	32,667,857	18,830,856
Less: amounts due within one year	5,046,429	12,954,538
Net long-term debt	$ 27,621,428	$ 5,876,318

Schedule of annual maturities of debt

2022	$ 5,046,429
2023	6,171,429
2024	6,171,429
2025	6,171,429
2026	9,107,141
Total debt	$ 32,667,857

LEASES (Tables)	12 Months Ended Oct. 31, 2021

LEASES.

Summary of remaining annual maturities of operating lease liabilities

2022	$ 4,315,800
2023	4,056,600
2024	3,442,200
2025	3,034,200
2026	2,131,650
Thereafter	545,800
Totals	17,526,250
Less: Amount representing interest	1,770,855
Lease liabilities	$ 15,755,395

INCOME TAXES (Tables)

12 Months Ended Oct. 31, 2021

INCOME TAXES

Schedule of differences between financial statement basis and tax basis of assets

	October 31, 2021	October 31, 2020
Financial Statement basis of assets	* $145,136,914	$116,197,703
Organization & start-up costs capitalized for tax purposes, net	175,030	12,415
Tax depreciation greater than book depreciation	(58,514,418)	(6,156,300)
Impairment charge	27,844,579	—
Unrealized derivatives gains (losses) of commodity derivative instruments	(39,076)	(40,900)
Capitalized inventory	122,930	35,777
Operating lease right of use assets	(15,755,395)	(10,092,405)
Investment in other partnerships	(7,110,613)	—
Net effect of consolidation of acquired subsidiary	—	(37,161,919)
Income tax basis of assets	$ 91,859,951	$ 62,794,371
*The Financial Statement basis of assets is the total assets of GFE and HLBE. See consolidated balance sheet in financial statements.		
Financial Statement basis of liabilities	$ 71,215,181	$ 54,305,876
Accrued rail car maintenance	(252,797)	(825,000)
Other accruals	(1,467,848)	(122,041)
Operating lease liability	(15,755,395)	(10,092,405)
Net effect of consolidation of acquired subsidiary	—	(10,065,001)
Income tax basis of liabilities	$ 53,739,141	$ 33,201,429

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Details) gal in Millions	Sep. 29, 2021 USD ($)	12 Months Ended Oct. 31, 2021 gal	Jul. 31, 2021
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC			
Summary of significant accounting policies			
Plant production capacity		60.0	
Production volume permitted		70.0	
Heron Lake BioEnergy, LLC			
Summary of significant accounting policies			
Plant production capacity		65.0	
Production volume permitted		72.3	
Heron Lake BioEnergy, LLC			
Summary of significant accounting policies			
Ownership percentage		100.00%	50.70%
Payments to acquire non-controlling interest | $	$ 14,000,000		
Non-controlling interest ownership percentage			49.30%
Project Viking, LLC [Member]			
Summary of significant accounting policies			
Ownership percentage		100.00%	
Agrinatural, LLC			
Summary of significant accounting policies			
Ownership percentage		100.00%	
Non-controlling interest ownership percentage		27.00%	

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Other (Details)	12 Months Ended	
	Oct. 31, 2021 USD ($) segment shares	Oct. 31, 2020 USD ($) shares
Net Income per Unit		
Member units outstanding (in shares) | shares	0	0
Environmental Liabilities		
Environmental liability expense | $	$ 0	$ 0
Reportable Operating Segments		
Number of reportable segments | segment	1	
Agrinatural, LLC | Maximum		
Reportable Operating Segments		
Revenues of subsidiary, percentage	1.00%	

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Revenue Recognition (Details)	12 Months Ended Oct. 31, 2021 company mi
CONCENTRATIONS	
Number of distinct marketing companies | company	2
Agrinatural, LLC	
CONCENTRATIONS	
Length of natural gas pipeline owned | mi	190
Ethanol | Eco-Energy, Inc. | Revenue from product line | Product concentration risk	
CONCENTRATIONS	
Concentration percentage	100.00%
Distillers' Grains Product | RPMG, Inc. | Revenue from product line | Product concentration risk	
CONCENTRATIONS	
Concentration percentage	100.00%
Corn oil product | RPMG, Inc. | Revenue from product line | Product concentration risk	
CONCENTRATIONS	
Concentration percentage	100.00%

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Useful Life (Details)	12 Months Ended
	Oct. 31, 2021
Land Improvements [Member] | Minimum	
Property, Plant and Equipment	
Property and Equipment, useful life	5 years
Land Improvements [Member] | Maximum	
Property, Plant and Equipment	
Property and Equipment, useful life	20 years
Railroad improvements | Minimum	
Property, Plant and Equipment	
Property and Equipment, useful life	5 years
Railroad improvements | Maximum	
Property, Plant and Equipment	
Property and Equipment, useful life	20 years
Process equipment and tanks | Minimum	
Property, Plant and Equipment	
Property and Equipment, useful life	5 years
Process equipment and tanks | Maximum	
Property, Plant and Equipment	
Property and Equipment, useful life	40 years
Administration building | Minimum	
Property, Plant and Equipment	
Property and Equipment, useful life	10 years
Administration building | Maximum	
Property, Plant and Equipment	
Property and Equipment, useful life	40 years
Office equipment | Minimum	
Property, Plant and Equipment	
Property and Equipment, useful life	3 years
Office equipment | Maximum	
Property, Plant and Equipment	
Property and Equipment, useful life	10 years
Rolling stock | Minimum	
Property, Plant and Equipment	
Property and Equipment, useful life	5 years
Rolling stock | Maximum	
Property, Plant and Equipment	
Property and Equipment, useful life	10 years

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Investments (Details) $ / shares in Units, gal in Millions				1 Months Ended	12 Months Ended	
	Nov. 15, 2021 USD ($) shares	Jun. 29, 2018 USD ($) shares	Nov. 01, 2016 USD ($) director $ / shares shares gal	Nov. 30, 2021 USD ($)	Oct. 31, 2021 USD ($)	Oct. 31, 2020 USD ($)
Long-Lived Assets						
Impairment of long-lived assets					$ 0	$ 0
Investment						
Proceeds from long-term debt					36,157,195	66,305,585
Summarized Financial Information of Equity Method Investment						
Current Assets					64,813,688	31,715,428
Total Assets					145,136,914	116,197,703
Current Liabilities					30,023,641	31,252,239
Total Liabilities					71,215,181	54,305,876
Income Statement Summarized Financial Information of Equity Method Investment						
Gross Profit					26,768,224	(11,077,253)
Net Profit					26,029,906	(20,567,722)
Ringneck Energy and; Feed, LLC						
Investment						
Expected ethanol production capacity | gal			80			
Summarized Financial Information of Equity Method Investment						
Current Assets						19,510,000
Total Assets						149,434,000
Current Liabilities						16,206,000
Total Liabilities						69,439,000
Members' Equity						79,995,000
Income Statement Summarized Financial Information of Equity Method Investment						
Revenues						114,768,000
Gross Profit						6,325,000
Operating Profit						7,758,000
Net Profit						$ 424,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ringneck Energy and; Feed, LLC						
Investment						
Units purchased | shares			1,600			

Price per unit (in dollars per unit) | $ / shares			$ 5,000		
Total cost			$ 8,000,000		
Number of directors Company has the right to appoint | director			1		
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Harvestone Group, LLC					
Investment					
Units purchased | shares		20			
Payment for equity method investment		$ 2,000,000			
Number of units transferred | shares	20				
Impairment of investments					3,000,000
Proceeds from sale of equity method investments	$ 3,000,000			$ 3,000,000	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Harvestone Group, LLC | Investment income					
Investment					
Impairment of investments					$ 300,000

PATRONAGE INVESTMENT AND CORRECTION OF ERROR (Details) - USD ($)	12 Months Ended		
	Oct. 31, 2021	Oct. 31, 2020	Oct. 31, 2019
Error Corrections and Prior Period Adjustments Restatement [Line Items]			
Gain (Loss) on Investments	$ 3,182,690		
Revision of prior period, error correction, adjustment			
Error Corrections and Prior Period Adjustments Restatement [Line Items]			
Gain (Loss) on Investments	400,000	$ 400,000	$ 2,400,000
Investment recognized | Revision of prior period, error correction, adjustment			
Error Corrections and Prior Period Adjustments Restatement [Line Items]			
Gain (Loss) on Investments	3,200,000		
Investment balance	$ 2,900,000		

RISKS AND UNCERTAINTIES, Narrative (Details) - Product concentration risk	12 Months Ended Oct. 31, 2021
Minimum | Total revenues | Ethanol	
Concentration Risk	
Concentration percentage	75.00%
Minimum | Cost of goods sold | Corn	
Concentration Risk	
Concentration percentage	65.00%
Maximum | Total revenues | Ethanol	
Concentration Risk	
Concentration percentage	90.00%
Maximum | Cost of goods sold | Corn	
Concentration Risk	
Concentration percentage	85.00%

REVENUE (Details) - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Revenue Recognition		
Total Revenues	$ 309,615,376	$ 164,953,841
Payment terms	10 days	
Ethanol		
Revenue Recognition		
Total Revenues	$ 240,874,504	126,605,211
Distillers' Grains Product		
Revenue Recognition		
Total Revenues	49,185,948	29,672,577
Corn oil product		
Revenue Recognition		
Total Revenues	17,147,981	6,590,481
Other		
Revenue Recognition		
Total Revenues	1,221,727	678,226
Natural Gas Pipeline		
Revenue Recognition		
Total Revenues	$ 1,185,216	$ 1,407,346
Payment terms	20 days	

FAIR VALUE (Details) - USD ($)	Oct. 31, 2021	Oct. 31, 2020
Fair value		
Financial Assets	$ 39,076	$ 56,050
Financial Liabilities	732,801	816,478
Accounts Payable | Carrying Amount		
Fair value		
Financial Liabilities	923,550	772,795
Fair Value, Measurements, Recurring | Accounts Payable | Estimate of Fair Value Measurement		
Fair value		
Financial Liabilities	923,550	772,795
Fair Value, Inputs, Level 2 [Member] | Fair Value, Measurements, Recurring | Accounts Payable		
Fair value		
Financial Liabilities	923,550	772,795
Corn Contracts | Carrying Amount		
Fair value		
Financial Assets	39,067	
Financial Liabilities	732,801	816,478
Corn Contracts | Fair Value, Measurements, Recurring | Estimate of Fair Value Measurement		
Fair value		
Financial Assets	39,067	
Financial Liabilities	732,801	816,478
Corn Contracts | Fair Value, Inputs, Level 1 [Member] | Fair Value, Measurements, Recurring		
Fair value		
Financial Assets	39,067	
Financial Liabilities	$ 732,801	816,478
Ethanol Contracts | Carrying Amount		
Fair value		
Financial Assets		56,050
Ethanol Contracts | Fair Value, Measurements, Recurring | Estimate of Fair Value Measurement		
Fair value		
Financial Assets		56,050
Ethanol Contracts | Fair Value, Inputs, Level 1 [Member] | Fair Value, Measurements, Recurring		
Fair value		
Financial Assets		$ 56,050

CONCENTRATIONS (Details) - customer	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC		
Concentration Risk [Line Items]		
Number of Major Customers	2	2
Heron Lake BioEnergy, LLC		
Concentration Risk [Line Items]		
Number of Major Customers	3	3
Total revenues | Heron Lake BioEnergy, LLC		
Concentration Risk [Line Items]		
Number of Major Customers	2	2
Total revenues | Customer Concentration Risk | Eco-Energy, Inc. | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ethanol Production		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	76.70%	77.00%
Total revenues | Customer Concentration Risk | Eco-Energy, Inc. | Heron Lake BioEnergy, LLC | Ethanol Production		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	78.70%	76.70%
Total revenues | Customer Concentration Risk | Gavilon Ingredients, LLC | Heron Lake BioEnergy, LLC | Distillers' Grains		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	14.30%	15.90%
Total revenues | Customer Concentration Risk | RPMG, Inc. | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Distillers' Grains and Corn Oil		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	23.30%	23.00%
Accounts receivable | Heron Lake BioEnergy, LLC		
Concentration Risk [Line Items]		
Number of Major Customers	2	2
Accounts receivable | Credit Concentration Risk | Eco-Energy, Inc. | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ethanol Production		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	82.90%	72.10%
Accounts receivable | Credit Concentration Risk | Eco-Energy, Inc. | Heron Lake BioEnergy, LLC | Ethanol Production		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	66.50%	54.80%
Accounts receivable | Credit Concentration Risk | Gavilon Ingredients, LLC | Heron Lake BioEnergy, LLC | Distillers' Grains		
Concentration Risk [Line Items]		

Concentration Risk, Percentage	22.20%	20.00%
Accounts receivable | Credit Concentration Risk | RPMG, Inc. | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Distillers' Grains and Corn Oil		
Concentration Risk [Line Items]		
Concentration Risk, Percentage	15.00%	24.60%

INVENTORY (Details) - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Inventory		
Raw materials	$ 10,742,480	$ 4,893,502
Supplies	3,322,639	3,070,458
Work in process	2,023,966	1,480,871
Finished goods	4,660,746	4,346,974
Totals	20,749,831	13,791,805
Ethanol		
Inventory		
Loss on inventories	$ 0	$ (383,000)

DERIVATIVE INSTRUMENTS - Assets And Liabilities (Details)	12 Months Ended	
	Oct. 31, 2021 USD ($) bu	Oct. 31, 2020 USD ($) bu
Derivatives, Fair Value		
Cash collateral (restricted cash)	$ 1,641,123	$ 2,156,694
Financial Assets	39,076	56,050
Derivative liabilities	$ 732,801	$ 816,478
Commodity Contract		
Derivatives, Fair Value		
Maximum term of corn, ethanol and natural gas derivatives entered to protect cash flows (in months)	24 months	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Corn Contracts		
Derivatives, Fair Value		
Total nonmonetary notional amount outstanding | bu	6,385,000	4,275,000
Additional nonmonetary notional amount | bu	140,000	1,920,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Derivatives held by a broker		
Derivatives, Fair Value		
Cash collateral (restricted cash)	$ 1,365,000	$ 1,643,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Long/Purchase position | Corn Contracts		
Derivatives, Fair Value		
Total nonmonetary notional amount outstanding | bu	2,075,000	760,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Short/Sale position | Corn Contracts		
Derivatives, Fair Value		
Total nonmonetary notional amount outstanding | bu	4,310,000	3,515,000
Heron Lake BioEnergy, LLC | Corn Contracts		
Derivatives, Fair Value		
Total nonmonetary notional amount outstanding | bu	2,790,000	2,095,000
Additional nonmonetary notional amount | bu		1,380,000
Heron Lake BioEnergy, LLC | Derivatives held by a broker		
Derivatives, Fair Value		
Cash collateral (restricted cash)	$ 276,000	$ 514,000
Heron Lake BioEnergy, LLC | Long/Purchase position | Corn Contracts		
Derivatives, Fair Value		
Total nonmonetary notional amount outstanding | bu	1,105,000	325,000
Heron Lake BioEnergy, LLC | Short/Sale position | Corn Contracts		
Derivatives, Fair Value		
Total nonmonetary notional amount outstanding | bu	1,685,000	1,770,000

Not Designated as Hedging Instruments		
Derivatives, Fair Value		
Financial Assets	$ 39,076	$ 56,050
Derivative liabilities	732,801	816,478
Not Designated as Hedging Instruments | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Corn Contracts		
Derivatives, Fair Value		
Derivative liabilities	605,813	642,550
Not Designated as Hedging Instruments | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ethanol Contracts		
Derivatives, Fair Value		
Financial Assets	8,813	40,900
Not Designated as Hedging Instruments | Heron Lake BioEnergy, LLC | Corn Contracts		
Derivatives, Fair Value		
Financial Assets		15,150
Derivative liabilities	126,988	$ 173,928
Not Designated as Hedging Instruments | Heron Lake BioEnergy, LLC | Ethanol Contracts		
Derivatives, Fair Value		
Financial Assets	$ 30,263	

DERIVATIVE INSTRUMENTS - Income Statement (Details) - Not Designated as Hedging Instruments - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Derivative Instruments, Gain (Loss)		
Total loss	$ (7,962,719)	$ (2,719,697)
Cost of Goods Sold. | Corn Contracts		
Derivative Instruments, Gain (Loss)		
Total loss	(8,172,806)	(2,369,337)
Revenues | Ethanol Contracts		
Derivative Instruments, Gain (Loss)		
Total loss	$ 210,087	$ (350,360)

PROPERTY AND EQUIPMENT (Details) - USD ($)	3 Months Ended	12 Months Ended	
	Oct. 31, 2020	Oct. 31, 2021	Oct. 31, 2020
Property, Plant and Equipment			
Property and equipment, gross	$ 165,689,587	$ 167,858,041	$ 165,689,587
Less: accumulated depreciation	(110,723,604)	(118,141,795)	(110,723,604)
Net property and equipment	54,965,983	49,716,246	54,965,983
Depreciation		7,396,000	9,311,000
Loss on disposal of assets	1,800,000	21,728	1,833,928
Land and improvements			
Property, Plant and Equipment			
Property and equipment, gross	13,926,199	13,926,199	13,926,199
Railroad improvements			
Property, Plant and Equipment			
Property and equipment, gross	9,045,112	9,045,112	9,045,112
Process equipment and tanks			
Property, Plant and Equipment			
Property and equipment, gross	134,233,838	139,934,099	134,233,838
Administration building			
Property, Plant and Equipment			
Property and equipment, gross	569,328	569,328	569,328
Office equipment			
Property, Plant and Equipment			
Property and equipment, gross	1,083,694	1,083,694	1,083,694
Rolling stock			
Property, Plant and Equipment			
Property and equipment, gross	2,150,700	2,151,700	2,150,700
Construction in progress			
Property, Plant and Equipment			
Property and equipment, gross	$ 4,680,716	$ 1,147,909	$ 4,680,716

DEBT FACILITIES - Granite Falls Energy (Details)					12 Months Ended					
	Oct. 31, 2021 USD ($) installment	Jun. 19, 2020 USD ($)	Aug. 02, 2017 USD ($) shares	Nov. 01, 2016 shares	Oct. 31, 2021 USD ($)	Feb. 28, 2021 USD ($)	Feb. 04, 2021 USD ($)	Oct. 31, 2020 USD ($)	Jun. 11, 2020 USD ($)	Apr. 17, 2020 USD ($)
Line of Credit Facility										
Long-term Debt	$ 32,667,857				$ 32,667,857					
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC										
Line of Credit Facility										
Minimum maintenance of working capital	20,000,000.0				$ 20,000,000.0					
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Maximum										
Line of Credit Facility										
Minimum Debt service coverage ratio					1.75%					
$25 million Single Advance Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC										
Line of Credit Facility										
Principal installment amount	1,125,000									
Long-term Debt	$ 25,000,000				$ 25,000,000					
Number of quarterly installments | installment	18									
Interest rate, effective percentage	3.59%				3.59%					
Term of interest payment	1 year									
$25 million Single Advance Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Minimum										
Line of Credit Facility										
Amount of interest payment	$ 100,000									
Term note payable to Project Hawkeye | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC										
Line of Credit Facility										
Maximum amount			$ 7,500,000							
Interest rate (as a percent)	3.55%				3.55%					
Interest rate floor (as a percent)			3.55%							
Maximum period of annual interest payments only			2 years							
Debt instrument amortization period after first two years			7 years							

Long-term Debt	$ 5,267,857				$ 5,267,857		$ 6,339,286	
SBA Paycheck Protection Loan								
Line of Credit Facility								
Long-term Debt								$ 703,900
SBA Paycheck Protection Loan | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Line of Credit Facility								
Long-term Debt						$ 703,900	$ 703,900	
$2.4 million Single Advance Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Line of Credit Facility								
Principal installment amount	300,000							
Long-term Debt	$ 2,400,000				$ 2,400,000			
Interest rate, stated percentage	3.80%				3.80%			
Number of semi-annual installments | installment	7							
Commitment amount		$ 3,000,000.0						
One Month LIBOR | $25 million Single Advance Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Line of Credit Facility								
Spread above variable interest rate	3.50%							
One Month LIBOR | Term note payable to Project Hawkeye | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Line of Credit Facility								
Spread above variable interest rate			3.05%					
Ringneck Energy and; Feed, LLC | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Line of Credit Facility								
Units purchased | shares				1,600				
Ringneck Energy and; Feed, LLC | Term note payable to Project Hawkeye | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Line of Credit Facility								

Fair value collateral		$ 7,500,000		
Ringneck Energy and; Feed, LLC | Term note payable to Project Hawkeye | Equity securities | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC				
Line of Credit Facility				
Units purchased | shares		1,500		
Revolving Credit Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC				
Line of Credit Facility				
Maximum amount	$ 20,000,000.0		$ 20,000,000.0	
Interest rate (as a percent)	3.34%		3.34%	
Line of credit unused commitment fee (as a percent)	0.30%			
Amounts outstanding under the credit facility				$ 5,000,000
Revolving Credit Promissory Note | One Month LIBOR | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC				
Line of Credit Facility				
Spread above variable interest rate	3.25%			
Amended and Restated Letter of Credit Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC				
Line of Credit Facility				
Maximum amount	$ 500,000		$ 500,000	
Interest rate (as a percent)	3.34%		3.34%	
Amended and Restated Letter of Credit Promissory Note | LIBOR | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC				
Line of Credit Facility				
Spread above variable interest rate			3.25%	
Amended and Restated Revolving Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC				
Line of Credit Facility				
Maximum amount	$ 20,000,000.0		$ 20,000,000.0	
Interest rate (as a percent)	3.59%		3.59%	

Line of credit unused commitment fee (as a percent)	0.50%	
Amounts outstanding under the credit facility		$ 13,000,000
Amended and Restated Revolving Term Promissory Note | LIBOR | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC		
Line of Credit Facility		
Spread above variable interest rate	3.50%	

DEBT FACILITIES - Heron Lake Bio Energy (Details) - USD ($)	1 Months Ended	
	Apr. 18, 2020	Feb. 28, 2021
Heron Lake BioEnergy, LLC | SBA Paycheck Protection Loan		
Line of Credit Facility		
Loan received	$ 595,693	$ 595,693

DEBT FACILITIES (Details) - USD ($)	12 Months Ended Oct. 31, 2021	Feb. 28, 2021	Oct. 31, 2020	Apr. 17, 2020
Line of Credit Facility				
Long-term Debt	$ 32,667,857			
Less: amounts due within one year	5,046,429		$ 12,954,538	
Net long term debt	27,621,428		5,876,318	
Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt	32,667,857		18,830,856	
Term note payable to Project Hawkeye | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt	5,267,857		6,339,286	
SBA Paycheck Protection Loan | **Line of Credit Facility**				
Long-term Debt				$ 703,900
SBA Paycheck Protection Loan | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt		$ 703,900	703,900	
SBA Paycheck Protection Loan | Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt			595,693	
Amended revolving term note payable to lending institution, amended within the 2021 Credit Facility as noted above | Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt			7,891,426	
Single advance term note payable to lending institution, amended within the 2021 Credit Facility as noted above | Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt			3,000,000	
Assessments payable as part of water supply agreement, with interest at 6.55%, due in 2021 | Heron Lake BioEnergy, LLC | **Line of Credit Facility**				
Long-term Debt			$ 300,551	
Payment	$ 189,393			

Interest rate (as a percent)	6.55%
Period of worth of debt	1 year
Deposit on debt service payments	$ 364,000
$25 million Single Advance Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC	
Line of Credit Facility	
Long-term Debt	25,000,000
$2.4 million Single Advance Term Promissory Note | Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC	
Line of Credit Facility	
Long-term Debt	$ 2,400,000
Interest rate (as a percent)	3.80%

DEBT FACILITIES - Estimated Annual Maturities (Details)	Oct. 31, 2021 USD ($)
DEBT FACILITIES	
2022	$ 5,046,429
2023	6,171,429
2024	6,171,429
2025	6,171,429
2026	9,107,141
Long-term Debt	$ 32,667,857

MEMBERS' EQUITY (Details)	Dec. 22, 2021 USD ($) $ / shares	12 Months Ended Oct. 31, 2021 item $ / shares shares	Oct. 31, 2020 shares
Common Units Authorized		30,606	30,606
Common Units Issued		30,606	30,606
Common Units Outstanding		30,606	30,606
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC			
Number of classes of membership units | item		1	
Membership Units, Par value | $ / shares		$ 0	
Common Units Authorized		30,606	30,606
Common Units Issued		30,606	30,606
Common Units Outstanding		30,606	30,606
Distribution per unit declared (in dollars per unit) | $ / shares	$ 330.00		
Amount of distribution declared | $	$ 10,099,980		

LEASES (Details) - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Leases		
Weighted average discount rate	4.87%	
Operating Lease, Right-of-Use Asset	$ 15,755,395	$ 19,383,654
Operating Lease, Liability	$ 15,755,395	
Weighted average remaining lease term	4 years	
Minimum		
Leases		
Remaining term	1 year	
Maximum		
Leases		
Remaining term	6 years	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Cost of Goods Sold.		
Leases		
Operating lease costs	$ 3,324,000	3,181,000
Heron Lake BioEnergy, LLC | Cost of Goods Sold.		
Leases		
Operating lease costs	$ 2,666,000	$ 2,331,000

LEASES - Future minimum lease payments (Details)	Oct. 31, 2021 USD ($)
Remaining annual maturities of operating lease liabilities	
2022	$ 4,315,800
2023	4,056,600
2024	3,442,200
2025	3,034,200
2026	2,131,650
Thereafter	545,800
Totals	17,526,250
Less: Amount representing interest	1,770,855
Lease liabilities	$ 15,755,395

EMPLOYEE BENEFIT PLANS (Details) - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC		
Defined Contribution Plan Disclosure [Line Items]		
Employer match (as a percent)	50.00%	
Percentage of employee's salary (as a percent)	3.00%	
Employer contribution	$ 74,000	$ 76,000
Heron Lake Bio-energy LLC		
Defined Contribution Plan Disclosure [Line Items]		
Employer match (as a percent)	50.00%	
Percentage of employee's salary (as a percent)	4.00%	
Employer contribution	$ 91,000	$ 89,000

INCOME TAXES (Details) - USD ($)	Oct. 31, 2021	Oct. 31, 2020
INCOME TAXES		
Financial Statement basis of assets	$ 145,136,914	$ 116,197,703
Organization & start-up costs capitalized for tax purposes, net	175,030	12,415
Tax depreciation greater than book depreciation	(58,514,418)	(6,156,300)
Impairment charge	27,844,579	
Unrealized derivatives gains (losses) of commodity derivative instruments	(39,076)	(40,900)
Capitalized inventory	122,930	35,777
Operating lease right of use assets	(15,755,395)	(10,092,405)
Investment in other partnerships	(7,110,613)	
Net effect of consolidation of acquired subsidiary		(37,161,919)
Income tax basis of assets	91,859,951	62,794,371
Financial Statement basis of liabilities	71,215,181	54,305,876
Accrued rail car maintenance	(252,797)	(825,000)
Other accruals	(1,467,848)	(122,041)
Operating lease liability	(15,755,395)	(10,092,405)
Net effect of consolidation of acquired subsidiary		(10,065,001)
Income tax basis of liabilities	$ 53,739,141	$ 33,201,429

RELATED PARTY TRANSACTIONS - (Details) - Board of Governors - USD ($)	12 Months Ended	
	Oct. 31, 2021	Oct. 31, 2020
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC		
Related party transactions		
Purchased from related party	$ 5,824,000	$ 3,099,000
Accounts payable to related party	233,000	353,000
Heron Lake BioEnergy, LLC		
Related party transactions		
Purchased from related party	19,809,000	12,545,000
Accounts payable to related party	$ 0	$ 171,000

COMMITMENTS AND CONTINGENCIES (Details)		1 Months Ended		3 Months Ended	12 Months Ended			
	Oct. 31, 2021 USD ($) item	Sep. 30, 2019 USD ($) $ / Energy_per_Duration gal	May 31, 2006	Jul. 31, 2016 item	Oct. 31, 2021 USD ($) MMBTU mi item bu	Oct. 31, 2020 USD ($) bu	Oct. 31, 2007 USD ($)	Oct. 31, 2006 USD ($)
Corn Contracts								
Commitments and contingencies								
Forward purchase impairment loss					$ 0	$ 0		
Ethanol Marketing Agreement With Eco-Energy, Inc.								
Commitments and contingencies								
Fees and commissions					754,000	589,000		
RPMG, Inc. Marketing Agreement | Corn oil								
Commitments and contingencies								
Fees and commissions					$ 180,000	138,000		
Unrelated Company Construction And Maintenance Agreement | Minimum								
Commitments and contingencies								
Minimum volume of natural gas Company to receive annually | MMBTU					1,400,000			
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC								
Commitments and contingencies								
Rail Car Rehabilitation Liability					$ 825,000	$ 825,000		
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Corn Contracts								
Commitments and contingencies								
Quantity of commitment | bu					6,385,000	4,275,000		
Granite Falls Energy, LLC Excluding Heron Lake								

BioEnergy, LLC | Corn Contracts | Short/Sale position			
Commitments and contingencies			
Quantity of commitment | bu		4,310,000	3,515,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Corn Contracts | Long/Purchase position			
Commitments and contingencies			
Quantity of commitment | bu		2,075,000	760,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ethanol Contracts			
Commitments and contingencies			
Value of commitment	$ 19,612,000	$ 19,612,000	
Anticipated sales (as a percent)		85.00%	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Distillers' Grains | Short/Sale position			
Commitments and contingencies			
Value of commitment	1,349,000	$ 1,349,000	
Anticipated sales (as a percent)		45.00%	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Corn oil | Short/Sale position			
Commitments and contingencies			
Value of commitment	$ 1,693,000	$ 1,693,000	
Anticipated sales (as a percent)		85.00%	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Hopper rail cars			
Commitments and contingencies			
Equipment Lease, Quantity | item	75	75	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Corn Forward Cash and Basis Contracts Purchase Commitments			

Commitments and contingencies			
Quantity of commitment | bu		4,929,000	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ethanol Marketing Agreement With Eco-Energy, Inc. | Ethanol Contracts			
Commitments and contingencies			
Term of renewal periods		2 years	
Written notice for termination of agreement		90 days	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Ethanol Marketing Agreement With Eco-Energy, Inc. | Rail Cars			
Commitments and contingencies			
Equipment Lease, Quantity | item	43	43	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | RPMG, Inc. Marketing Agreement | Distillers' Grains			
Commitments and contingencies			
Initial term		1 year	
Fees and commissions		$ 277,000	$ 255,000
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | RPMG, Inc. Marketing Agreement | Distillers' Grains | Minimum			
Commitments and contingencies			
Written notice for termination of agreement		90 days	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | RPMG, Inc. Marketing Agreement | Corn oil			
Commitments and contingencies			
Initial term		1 year	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | RPMG, Inc.			

Marketing Agreement | Corn oil | Minimum		
Commitments and contingencies		
Written notice for termination of agreement		90 days
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Unrelated Company Construction And Maintenance Agreement		
Commitments and contingencies		
Distance of natural gas pipeline | mi		9.5
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Revolving Credit Promissory Note		
Commitments and contingencies		
Credit facility maximum	$ 20,000,000.0	$ 20,000,000.0
Interest rate (as a percent)	3.34%	3.34%
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Revolving Credit Promissory Note | One Month LIBOR		
Commitments and contingencies		
Spread above variable interest rate	3.25%	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Amended and Restated Letter of Credit Promissory Note		
Commitments and contingencies		
Credit facility maximum	$ 500,000	$ 500,000
Interest rate (as a percent)	3.34%	3.34%
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Amended and Restated Letter of Credit Promissory Note | LIBOR		
Commitments and contingencies		
Spread above variable interest rate		3.25%

Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Amended and Restated Revolving Term Promissory Note			
Commitments and contingencies			
Credit facility maximum	$ 20,000,000.0	$ 20,000,000.0	
Interest rate (as a percent)	3.59%	3.59%	
Granite Falls Energy, LLC Excluding Heron Lake BioEnergy, LLC | Amended and Restated Revolving Term Promissory Note | LIBOR			
Commitments and contingencies			
Spread above variable interest rate	3.50%		
Heron Lake BioEnergy, LLC			
Commitments and contingencies			
Rail Car Rehabilitation Liability		$ 643,000	$ 597,000
Heron Lake BioEnergy, LLC | Corn Contracts			
Commitments and contingencies			
Quantity of commitment | bu		2,790,000	2,095,000
Heron Lake BioEnergy, LLC | Corn Contracts | Short/Sale position			
Commitments and contingencies			
Quantity of commitment | bu		1,685,000	1,770,000
Heron Lake BioEnergy, LLC | Corn Contracts | Long/ Purchase position			
Commitments and contingencies			
Quantity of commitment | bu		1,105,000	325,000
Heron Lake BioEnergy, LLC | Ethanol Contracts			
Commitments and contingencies			
Value of commitment	$ 18,711,000	$ 18,711,000	
Anticipated sales (as a percent)		78.00%	
Heron Lake BioEnergy, LLC | Ethanol Contracts | Long/ Purchase position			

Commitments and contingencies				
Asset impairment charges				$ 47,000
Heron Lake BioEnergy, LLC | Distillers' Grains | Short/Sale position				
Commitments and contingencies				
Value of commitment	1,550,000		$ 1,550,000	
Anticipated sales (as a percent)			30.00%	
Heron Lake BioEnergy, LLC | Corn oil | Short/Sale position				
Commitments and contingencies				
Value of commitment	$ 1,470,000		$ 1,470,000	
Anticipated sales (as a percent)			70.00%	
Heron Lake BioEnergy, LLC | Hopper rail cars				
Commitments and contingencies				
Equipment Lease, Quantity | item	50		50	
Heron Lake BioEnergy, LLC | Corn Forward Cash and Basis Contracts Purchase Commitments				
Commitments and contingencies				
Quantity of commitment | bu			3,272,000	
Heron Lake BioEnergy, LLC | Ethanol Marketing Agreement With Eco-Energy, Inc.				
Commitments and contingencies				
Number of terms agreement automatically renews | item		3		
Term of renewal periods		3 years	1 year	
Percentage of products produced by the entity			100.00%	
Heron Lake BioEnergy, LLC | Ethanol Marketing Agreement With Eco-Energy, Inc. | Minimum				
Commitments and contingencies				
Written notice for termination of agreement		3 months	90 days	
Heron Lake BioEnergy, LLC | RPMG, Inc. Marketing Agreement | Corn oil				

Commitments and contingencies				
Initial term			1 year	
Heron Lake BioEnergy, LLC | RPMG, Inc. Marketing Agreement | Corn oil | Minimum				
Commitments and contingencies				
Written notice for termination of agreement			90 days	
Heron Lake BioEnergy, LLC | Gavilon Ingredients, LLC. Agreement				
Commitments and contingencies				
Initial term			6 months	
Fees and commissions			$ 326,000	187,000
Heron Lake BioEnergy, LLC | Gavilon Ingredients, LLC. Agreement | Minimum				
Commitments and contingencies				
Written notice for termination of agreement			60 days	
Heron Lake BioEnergy, LLC | Northern Border Pipeline Company				
Commitments and contingencies				
Distance of the natural gas pipeline from the ethanol plant | mi			16	
Heron Lake BioEnergy, LLC | Water Agreement				
Commitments and contingencies				
Monthly base fee paid	$ 1,500			
Initial term	2 years	30 years		
Term of agreement	10 years			
Initial volume per minute of capacity that is available from the well for which the entity has exclusive rights (in gallons) | gal	600			
Flow charges (in dollar $ percent) | $ / Energy_per_Duration	0.60			
Operating and maintenance expenses capped	$ 300,000		$ 300,000	

Percentage in excess of operating and maintenance cost capped	55.00%				
Average term	2 years				
City's water well bond payments	$ 735,000				
Administrative fee to be paid as water usage fees (as a percent)	5.00%				
Administrative fee	$ 594,000				
Percentage of profit to be paid as water usage fees	10.00%				
Assessment	$ 367,000			$ 500,000	$ 3,550,000
Operating and administrative/ maintenance expenses paid	$ 12,000	$ 59,000	$ 77,000		