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

FORM 10-Q

Quarterly Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the Quarterly Period Ended June 30, 2019

Commission File Number 001-32924

GREEN PLAINS INC.

(Exact name of registrant as specified in its charter)

Iowa	**84-1652107**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1811 Aksarben Drive, Omaha, NE 68106	**(402) 884-8700**
(Address of principal executive offices, including zip code)	(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $0.001 per share	GPRE	The Nasdaq Stock Market LLC

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" and "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 is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes ☒ No

The number of shares of common stock, par value $0.001 per share, outstanding as of August 2, 2019, was 38,186,133 shares.

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Commonly Used Defined Terms

The abbreviations, acronyms and industry terminology used in this quarterly report are defined as follows:

Green Plains Inc., Subsidiaries, and Partners:

Green Plains; the company	Green Plains Inc. and its subsidiaries
BioProcess Algae	BioProcess Algae LLC
Fleischmann’s Vinegar	Fleischmann’s Vinegar Company, Inc.
Green Plains Cattle	Green Plains Cattle Company LLC
Green Plains Grain	Green Plains Grain Company LLC
Green Plains Partners; the partnership	Green Plains Partners LP
Green Plains Trade	Green Plains Trade Group LLC

Accounting Defined Terms:

ASC	Accounting Standards Codification
Bgy	Billion gallons per year
EBITDA	Earnings before interest, income taxes, depreciation and amortization
EPS	Earnings per share
Exchange Act	Securities Exchange Act of 1934, as amended
GAAP	U.S. Generally Accepted Accounting Principles
LIBOR	London Interbank Offered Rate
LTIP	Long-Term Incentive Plan
R&D Credits	Research and development tax credits
SEC	Securities and Exchange Commission

Industry Defined Terms:

CAFE	Corporate Average Fuel Economy
D.C.	District of Columbia
E10	Gasoline blended with up to 10% ethanol by volume
E15	Gasoline blended with up to 15% ethanol by volume
E85	Gasoline blended with up to 85% ethanol by volume
EIA	U.S. Energy Information Administration
EPA	U.S. Environmental Protection Agency
MmBtu	Million British Thermal Units
Mmg	Million gallons
MTBE	Methyl tertiary-butyl ether
RFS II	Renewable Fuels Standard II
RIN	Renewable identification number
RVO	Renewable volume obligation
U.S.	United States
USDA	U.S. Department of Agriculture

PART 1 – FINANCIAL INFORMATION

Item 1. Financial Statements.

GREEN PLAINS INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(in thousands, except share amounts)

	June 30, 2019 (unaudited)	December 31, 2018
ASSETS		
Current assets		
Cash and cash equivalents	$ 193,280	$ 251,683
Restricted cash	40,628	66,512
Accounts receivable, net of allowances of $193 and $194, respectively	108,700	100,361
Income taxes receivable	12,879	12,418
Inventories	658,506	734,883
Prepaid expenses and other	11,993	14,470
Derivative financial instruments	60,202	26,315
Total current assets	1,086,188	1,206,642
Property and equipment, net of accumulated depreciation and amortization of $467,212 and $430,405, respectively	872,154	886,576
Operating lease right-of-use assets	58,092	-
Goodwill	34,689	34,689
Deferred income taxes	3,582	-
Other assets	86,022	88,525
Total assets	$ 2,140,727	$ 2,216,432
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 105,802	$ 156,901
Accrued and other liabilities	59,863	58,973
Derivative financial instruments	9,670	24,776
Operating lease current liabilities	16,667	-
Short-term notes payable and other borrowings	523,529	538,243
Current maturities of long-term debt	1,225	54,807
Total current liabilities	716,756	833,700
Long-term debt	370,880	298,190
Deferred income taxes	5,478	10,123
Operating lease long-term liabilities	44,108	-
Other liabilities	8,931	11,430
Total liabilities	1,146,153	1,153,443
Commitments and contingencies (Note 13)		
Stockholders' equity		
Common stock, $0.001 par value; 75,000,000 shares authorized; 46,918,984 and 46,637,549 shares issued, and 38,186,133 and 41,101,975 shares outstanding, respectively	47	47
Additional paid-in capital	726,068	696,222
Retained earnings	226,869	324,728
Accumulated other comprehensive income (loss)	24,177	(16,016)
Treasury stock, 8,732,851 and 5,535,574 shares, respectively	(98,032)	(58,162)
Total Green Plains stockholders' equity	879,129	946,819
Noncontrolling interests	115,445	116,170
Total stockholders' equity	994,574	1,062,989
Total liabilities and stockholders' equity	$ 2,140,727	$ 2,216,432

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(unaudited and in thousands, except per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenues				
Product revenues	$ 894,161	$ 985,217	$ 1,534,171	$ 2,028,876
Service revenues	1,692	1,620	3,997	3,248
Total revenues	895,853	986,837	1,538,168	2,032,124
Costs and expenses				

Cost of goods sold (excluding depreciation and amortization expenses reflected below)	888,257	910,625	1,523,832	1,898,960
Operations and maintenance expenses	6,234	7,893	13,098	16,293
Selling, general and administrative expenses	21,648	29,731	42,294	55,734
Depreciation and amortization expenses	19,094	26,823	38,329	53,297
Total costs and expenses	935,233	975,072	1,617,553	2,024,284
Operating income (loss)	(39,380)	11,765	(79,385)	7,840
Other income (expense)				
Interest income	923	709	2,186	1,346
Interest expense	(15,969)	(22,021)	(30,396)	(44,149)
Other, net	(406)	2,545	432	2,479
Total other expense	(15,452)	(18,767)	(27,778)	(40,324)
Loss before income taxes	(54,832)	(7,002)	(107,163)	(32,484)
Income tax benefit	14,653	10,753	29,113	16,780
Net income (loss)	(40,179)	3,751	(78,050)	(15,704)
Net income attributable to noncontrolling interests	5,163	4,745	10,091	9,407
Net loss attributable to Green Plains	$ (45,342)	$ (994)	$ (88,141)	$ (25,111)
Earnings per share:				
Net loss attributable to Green Plains - basic	$ (1.13)	$ (0.02)	$ (2.19)	$ (0.63)
Net loss attributable to Green Plains - diluted	$ (1.13)	$ (0.02)	$ (2.19)	$ (0.63)
Weighted average shares outstanding:				
Basic	40,081	40,194	40,200	40,168
Diluted	40,081	40,194	40,200	40,168
Cash dividend declared per share	$ 0.12	$ 0.12	$ 0.24	$ 0.24

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(unaudited and in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	**2018**	**2019**	**2018**
Net income (loss)	$ (40,179)	$ 3,751	$ (78,050)	$ (15,704)
Other comprehensive income (loss), net of tax:				
Unrealized gains (losses) on derivatives arising during the period, net of tax benefit (expense) of ($9,884), $1,145, ($7,804) and ($3,971), respectively	33,260	(4,277)	26,377	12,873
Reclassification of realized losses (gains) on derivatives, net of tax benefit (expense) of ($947), $185, ($4,087) and $365, respectively	3,440	(581)	13,816	(1,184)
Total other comprehensive income (loss), net of tax	36,700	(4,858)	40,193	11,689
Comprehensive loss	(3,479)	(1,107)	(37,857)	(4,015)
Comprehensive income attributable to noncontrolling interests	5,163	4,745	10,091	9,407
Comprehensive loss attributable to Green Plains	$ (8,642)	$ (5,852)	$ (47,948)	$ (13,422)

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(unaudited and in thousands)

	Six Months Ended June 30,	
	2019	**2018**
Cash flows from operating activities:		

	2019	2018
Net loss	$ (78,050)	$ (15,704)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	38,329	53,297
Amortization of debt issuance costs and debt discount	10,306	7,515
Gain from insurance proceeds	-	(2,624)
Deferred income taxes	(27,543)	(23,061)
Stock-based compensation	4,809	5,435
Undistributed equity loss of affiliates	109	239
Other	1,328	-
Changes in operating assets and liabilities before effects of business combinations and dispositions:		
Accounts receivable	(11,312)	14,054
Inventories	76,791	88,450
Derivative financial instruments	3,088	1,513
Prepaid expenses and other assets	2,830	2,797
Accounts payable and accrued liabilities	(51,901)	(96,295)
Current income taxes	(2,137)	10,540
Other	1,144	(297)
Net cash provided by (used in) operating activities	(32,209)	45,859
Cash flows from investing activities:		
Purchases of property and equipment, net	(23,467)	(14,640)
Proceeds from the sale of assets, net	3,155	-
Acquisition of businesses, net of cash acquired	-	(1,629)
Investments in unconsolidated subsidiaries	-	(2,253)
Other investing activities	-	7,500
Net cash used in investing activities	(20,312)	(11,022)
Cash flows from financing activities:		
Proceeds from the issuance of long-term debt	147,700	42,300
Payments of principal on long-term debt	(45,125)	(43,370)
Proceeds from short-term borrowings	1,444,516	2,089,208
Payments on short-term borrowings	(1,518,008)	(2,158,274)
Payments for repurchase of common stock	(39,870)	-
Payments of cash dividends and distributions	(20,692)	(20,580)
Proceeds from disgorgement of shareholder short-swing profits	6,699	-
Payments of loan fees	(4,892)	(2,622)
Payments related to tax withholdings for stock-based compensation	(2,094)	(3,013)
Proceeds from exercise of stock options	-	150
Net cash used in financing activities	(31,766)	(96,201)
Net change in cash, cash equivalents and restricted cash	(84,287)	(61,364)
Cash, cash equivalents and restricted cash, beginning of period	318,195	312,360
Cash, cash equivalents and restricted cash, end of period	$ 233,908	$ 250,996

Continued on the following page

GREEN PLAINS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(unaudited and in thousands)

Continued from the previous page

	Six Months Ended June 30,	
	2019	**2018**
Reconciliation of total cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 193,280	$ 235,133
Restricted cash	40,628	15,863
Total cash, cash equivalents and restricted cash	$ 233,908	$ 250,996
Non-cash financing activity:		
Exchange of common stock held in treasury stock for 3.25% convertible notes due 2018	$ -	$ 1
Supplemental investing and financing activities:		
Assets acquired in acquisitions, net of cash	$ -	$ 1,629
Supplemental disclosures of cash flow:		

Cash paid (refunded) for income taxes	$ 564	$ (3,163)
Cash paid for interest	$ 23,039	$ 36,923

See accompanying notes to the consolidated financial statements.

GREEN PLAINS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(unaudited)

1. BASIS OF PRESENTATION, DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

References to the Company

References to "Green Plains" or the "company" in the consolidated financial statements and in these notes to the consolidated financial statements refer to Green Plains Inc., an Iowa corporation, and its subsidiaries.

Consolidated Financial Statements

The consolidated financial statements include the company's accounts and all significant intercompany balances and transactions are eliminated. Unconsolidated entities are included in the financial statements on an equity basis. The company owns a 49.1% limited partner interest and a 2.0% general partner interest in Green Plains Partners LP. Public investors own the remaining 48.9% limited partner interest in the partnership. The company determined that the limited partners in the partnership with equity at risk lack the power, through voting rights or similar rights, to direct the activities that most significantly impact partnership's economic performance; therefore, the partnership is considered a variable interest entity. The company, through its ownership of the general partner interest in the partnership, has the power to direct the activities that most significantly affect economic performance and is obligated to absorb losses and has the right to receive benefits that could be significant to the partnership. Therefore, the company is considered the primary beneficiary and consolidates the partnership in the company's financial statements. The assets of the partnership cannot be used by the company for general corporate purposes. The partnership's consolidated total assets as of June 30, 2019 and December 31, 2018, excluding intercompany balances, are $103.2 million and $67.3 million, respectively, and primarily consist of property and equipment, operating lease right-of-use assets and goodwill. The partnership's consolidated total liabilities as of June 30, 2019 and December 31, 2018, excluding intercompany balances, are $196.6 million and $152.9 million, respectively, which primarily consist of long-term debt as discussed in *Note 8 – Debt* and operating lease liabilities. The liabilities recognized as a result of consolidating the partnership do not represent additional claims on our general assets. The company also owns a 90.0% interest in BioProcess Algae, a joint venture formed in 2008, and consolidates their results in its consolidated financial statements.

The accompanying unaudited consolidated financial statements are prepared in accordance with GAAP for interim financial information and the instructions to Form 10-Q and Article 10 of Regulation S-X. Because they do not include all of the information and notes required by GAAP, the consolidated financial statements should be read in conjunction with the company's annual report on Form 10-K for the year ended December 31, 2018, as filed with the SEC on February 20, 2019.

The unaudited financial information reflects adjustments, which are, in the opinion of management, necessary for a fair presentation of results of operations, financial position and cash flows for the periods presented. The adjustments are normal and recurring in nature, unless otherwise noted. Interim period results are not necessarily indicative of the results to be expected for the entire year.

Reclassifications

Certain prior year amounts were reclassified to conform to the current year presentation. These reclassifications did not affect total revenues, costs and expenses, net loss or stockholders' equity.

Use of Estimates in the Preparation of Consolidated Financial Statements

The preparation of consolidated financial statements in conformity with GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. The company bases its estimates on historical experience and assumptions it believes are proper and reasonable under the circumstances and regularly evaluates the appropriateness of its estimates and assumptions. Actual results could differ from those estimates. Key accounting policies, including but not limited to those relating to revenue recognition, depreciation of property and equipment, carrying value of intangible assets, operating leases, impairment of long-lived assets and goodwill, derivative financial instruments, accounting for income taxes and assets acquired and

liabilities assumed in acquisitions, are impacted significantly by judgments, assumptions and estimates used in the preparation of the consolidated financial statements.

Description of Business

The company operates within four business segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage, commodity marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feeding and food-grade corn oil operations and included vinegar production until the sale of Fleischmann's Vinegar during the fourth quarter of 2018 and (4) partnership, which includes fuel

storage and transportation services.

Cash and Cash Equivalents

Cash and cash equivalents includes bank deposits as well as short-term, highly liquid investments with original maturities of three months or less.

Restricted Cash

The company has restricted cash, which can only be used for funding letters of credit or for payment towards a revolving credit agreement. Restricted cash also includes cash margins and securities pledged to commodity exchange clearinghouses and at times, funds in escrow related to acquisition and disposition activities. To the degree these segregated balances are cash and cash equivalents, they are considered restricted cash on the consolidated statements of cash flows.

Revenue Recognition

The company recognizes revenue when obligations under the terms of a contract with a customer are satisfied. Generally this occurs with the transfer of control of products or services. Revenue is measured as the amount of consideration expected to be received in exchange for transferring goods or providing services. Sales, value add, and other taxes the company collects concurrent with revenue-producing activities are excluded from revenue.

Sales of ethanol, distillers grains, corn oil, natural gas and other commodities by the company's marketing business are recognized when obligations under the terms of a contract with a customer are satisfied. Generally, this occurs with the transfer of control of products or services. Revenues related to marketing for third parties are presented on a gross basis as the company controls the product prior to the sale to the end customer, takes title of the product and has inventory risk. Unearned revenue is recorded for goods in transit when the company has received payment but control has not yet been transferred to the customer. Revenues for receiving, storing, transferring and transporting ethanol and other fuels are recognized when the product is delivered to the customer.

The company routinely enters into physical-delivery energy commodity purchase and sale agreements. At times, the company settles these transactions by transferring its obligations to other counterparties rather than delivering the physical commodity. Energy trading transactions are reported net as a component of revenue. Revenues include net gains or losses from derivatives related to products sold while cost of goods sold includes net gains or losses from derivatives related to commodities purchased. Revenues also include realized gains and losses on related derivative financial instruments and reclassifications of realized gains and losses on cash flow hedges from accumulated other comprehensive income or loss.

Sales of products, including agricultural commodities, cattle and vinegar, are recognized when control of the product is transferred to the customer, which depends on the agreed upon shipment or delivery terms. Revenues related to grain merchandising are presented gross and include shipping and handling, which is also a component of cost of goods sold. Revenues from grain storage are recognized when services are rendered.

A substantial portion of the partnership revenues are derived from fixed-fee commercial agreements for storage, terminal or transportation services. The partnership recognizes revenue upon transfer of control of product from its storage tanks and fuel terminals, when railcar volumetric capacity is provided, and as truck transportation services are performed. To the extent shortfalls associated with minimum volume commitments in the previous four quarters continue to exist, volumes in excess of the minimum volume commitment are applied to those shortfalls. Remaining excess volumes generating operating lease revenue are recognized as incurred.

Shipping and Handling Costs

The company accounts for shipping and handling activities related to contracts with customers as costs to fulfill its promise to transfer the associated products. Accordingly, the company records customer payments associated with shipping and handling costs as a component of revenue, and classifies such costs as a component of cost of goods sold.

Cost of Goods Sold

Cost of goods sold includes direct labor, materials, shipping and plant overhead costs. Direct labor includes all compensation and related benefits of non-management personnel involved in ethanol production cattle feeding operations and vinegar production until the sale of Fleischmann's Vinegar during the fourth quarter of 2018. Grain purchasing and receiving costs, excluding labor costs for grain buyers and scale operators, are also included in cost of goods sold. Materials include the cost of corn feedstock, denaturant, process chemicals, cattle and veterinary supplies. Corn feedstock costs include gains and losses on related derivative financial instruments not designated as cash flow hedges, inbound freight charges, inspection costs and transfer costs, as well as reclassifications of gains and losses on cash flow hedges from accumulated other comprehensive income or loss. Plant overhead consists primarily of plant and feedlot utilities, repairs and maintenance, feedlot expenses and outbound freight charges. Shipping costs incurred by the company, including railcar costs, are also reflected in cost of goods sold.

The company uses exchange-traded futures and options contracts and forward purchase and sales contracts to attempt to minimize the effect of price changes on ethanol, grain, natural gas and cattle inventories. Exchange-traded futures and options contracts are valued at quoted market prices and settled predominantly in cash. The company is exposed to loss when counterparties default on forward purchase and sale contracts. Grain inventories held for sale and forward purchase and sale contracts are valued at market prices when available or other market quotes adjusted for differences, primarily in transportation, between the exchange-traded market and local market where the terms of the contract is based. Changes in forward purchase contracts and exchange-traded futures and options contracts are recognized as a component of cost of goods sold.

Operations and Maintenance Expenses

In the partnership segment, transportation expenses represent the primary component of operations and maintenance expenses. Transportation expenses include railcar leases, freight and shipping of the company's ethanol and co-products, as well as costs incurred storing ethanol at destination terminals.

Derivative Financial Instruments

The company uses various derivative financial instruments, including exchange-traded futures and exchange-traded and over-the-counter options contracts, to attempt to minimize risk and the effect of commodity price changes including but not limited to, corn, ethanol, cattle, natural gas and crude oil. The company monitors and manages this exposure as part of its overall risk management policy to reduce the adverse effect market volatility may have on its operating results. The company may hedge these commodities as one way to mitigate risk; however, there may be situations when these hedging activities themselves result in losses.

By using derivatives to hedge exposures to changes in commodity prices, the company is exposed to credit and market risk. The company's exposure to credit risk includes the counterparty's failure to fulfill its performance obligations under the terms of the derivative contract. The company minimizes its credit risk by entering into transactions with high quality counterparties, limiting the amount of financial exposure it has with each counterparty and monitoring their financial condition. Market risk is the risk that the value of the financial instrument might be adversely affected by a change in commodity prices or interest rates. The company manages market risk by incorporating parameters to monitor exposure within its risk management strategy, which limits the types of derivative instruments and strategies the company can use and the degree of market risk it can take using derivative instruments.

The company evaluates its physical delivery contracts to determine if they qualify for normal purchase or sale exemptions which are expected to be used or sold over a reasonable period in the normal course of business. Contracts that do not meet the normal purchase or sale criteria are recorded at fair value. Changes in fair value are recorded in operating income unless the contracts qualify for, and the company elects, cash flow hedge accounting treatment.

Certain qualifying derivatives related to ethanol production, agribusiness and energy services, and food and ingredients segments are designated as cash flow hedges. The company evaluates the derivative instrument to ascertain its effectiveness

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prior to entering into cash flow hedges. Unrealized gains and losses are reflected in accumulated other comprehensive income or loss until the gain or loss from the underlying hedged transaction is realized. When it becomes probable a forecasted transaction will not occur, the cash flow hedge treatment is discontinued, which affects earnings. These derivative financial instruments are recognized in current assets or other current liabilities at fair value.

At times, the company hedges its exposure to changes in inventory values and designates qualifying derivatives as fair value hedges. The carrying amount of the hedged inventory is adjusted in the current period for changes in fair value. Ineffectiveness of the hedges is recognized in the current period to the extent the change in fair value of the inventory is not offset by the change in fair value of the derivative.

Recent Accounting Pronouncements

Effective January 1, 2019, the company adopted the amended guidance in ASC 842, *Leases*. Please refer to *Note 13 – Commitments and Contingencies* for further details.

2. REVENUE

Revenue Recognition

Revenue is recognized when obligations under the terms of a contract with a customer are satisfied. Generally this occurs with the transfer of control of products or services. Revenue is measured as the amount of consideration expected to be received in exchange for transferring goods or providing services. Sales, value add, and other taxes the company collects concurrent with revenue-producing activities are excluded from revenue.

Revenue by Source

The following tables disaggregate revenue by major source for the three and six months ended June 30, 2019 and 2018 (in thousands):

	Three Months Ended June 30, 2019					
	Ethanol Production	Agribusiness & Energy Services	Food & Ingredients	Partnership	Eliminations	Total
Revenues:						
Revenues from contracts with customers under ASC 606:						
Ethanol	$ -	$ -	$ -	$ -	$ -	$ -
Distillers grains	12,315	-	-	-	-	12,315
Cattle	-	-	270,971	-	-	270,971
Service revenues	-	-	-	1,608	-	1,608
Other	1,773	442	-	-	-	2,215
Intersegment revenues	1,435	-	38	1,843	(3,316)	-
Total revenues from contracts with customers	15,523	442	271,009	3,451	(3,316)	287,109
Revenues from contracts accounted for as derivatives under ASC 815 (1):						
Ethanol	355,385	136,225	-	-	-	491,610
Distillers grains	64,069	8,833	-	-	-	72,902
Corn oil	12,993	10,463	-	-	-	23,456
Grain	-	17,987	-	-	-	17,987
Cattle	-	-	(85)	-	-	(85)
Other	903	1,887	-	-	-	2,790
Intersegment revenues	2,070	9,131	-	-	(11,201)	-
Total revenues from contracts accounted for as derivatives	435,420	184,526	(85)	-	(11,201)	608,660
Leasing revenues under ASC 842 (2):	-	-	-	17,374	(17,290)	84
Total Revenues	$ 450,943	$ 184,968	$ 270,924	$ 20,825	$ (31,807)	$ 895,853

	Six Months Ended June 30, 2019					
	Ethanol Production	**Agribusiness & Energy Services**	**Food & Ingredients**	**Partnership**	**Eliminations**	**Total**
Revenues:						
Revenues from contracts with customers under ASC 606:						
Ethanol	$ 620	$ -	$ -	$ -	$ -	$ 620
Distillers grains	29,993	-	-	-	-	29,993
Cattle	-	-	493,875	-	-	493,875
Service revenues	-	-	-	3,691	-	3,691
Other	2,008	620	-	-	-	2,628
Intersegment revenues	1,463	-	76	3,221	(4,760)	-
Total revenues from contracts with customers	34,084	620	493,951	6,912	(4,760)	530,807
Revenues from contracts accounted for as derivatives under ASC 815 [1]:						
Ethanol	556,543	213,302	-	-	-	769,845
Distillers grains	98,715	24,242	-	-	-	122,957
Corn oil	21,607	17,434	1,451	-	-	40,492
Grain	-	38,736	-	-	-	38,736
Cattle	-	-	(15,941)	-	-	(15,941)
Other	6,668	44,298	-	-	-	50,966
Intersegment revenues	4,159	15,544	-	-	(19,703)	-
Total revenues from contracts accounted for as derivatives	687,692	353,556	(14,490)	-	(19,703)	1,007,055
Leasing revenues under ASC 842 [2]:	-	-	-	35,000	(34,694)	306
Total Revenues	$ 721,776	$ 354,176	$ 479,461	$ 41,912	$ (59,157)	$ 1,538,168

	Three Months Ended June 30, 2018					
	Ethanol Production	**Agribusiness & Energy Services**	**Food & Ingredients**	**Partnership**	**Eliminations**	**Total**
Revenues:						
Revenues from contracts with customers under ASC 606:						
Ethanol	$ 634	$ -	$ -	$ -	$ -	$ 634
Distillers grains	62,657	-	-	-	-	62,657
Cattle and vinegar	-	-	222,059	-	-	222,059
Service revenues	-	-	-	1,229	-	1,229
Other	1,201	806	-	-	-	2,007
Intersegment revenues	875	-	38	-	(913)	-
Total revenues from contracts with customers	65,367	806	222,097	1,229	(913)	288,586
Revenues from contracts accounted for as derivatives under ASC 815 [1]:						
Ethanol	451,083	106,117	-	-	-	557,200
Distillers grains	49,940	32,706	-	-	-	82,646
Corn oil	19,132	3,488	5,350	-	-	27,970
Grain	337	22,843	-	-	-	23,180
Cattle and vinegar	-	-	(1,522)	-	-	(1,522)
Other	4,272	4,114	-	-	-	8,386
Intersegment revenues	3,344	14,128	-	2,517	(19,989)	-
Total revenues from contracts accounted for as derivatives	528,108	183,396	3,828	2,517	(19,989)	697,860
Leasing revenues under ASC 840 [2]:	-	-	-	22,094	(21,703)	391
Total Revenues	$ 593,475	$ 184,202	$ 225,925	$ 25,840	$ (42,605)	$ 986,837

	Six Months Ended June 30, 2018					
	Ethanol Production	**Agribusiness & Energy Services**	**Food & Ingredients**	**Partnership**	**Eliminations**	**Total**
Revenues:						
Revenues from contracts with customers under ASC 606:						
Ethanol	$ 3,100	$ -	$ -	$ -	$ -	$ 3,100
Distillers grains	119,902	-	-	-	-	119,902
Cattle and vinegar	-	-	489,475	-	-	489,475
Service revenues	-	-	-	2,447	-	2,447
Other	1,332	1,483	-	-	-	2,815
Intersegment revenues	1,537	-	80	-	(1,617)	-
Total revenues from contracts with customers	125,871	1,483	489,555	2,447	(1,617)	617,739
Revenues from contracts accounted for as derivatives under ASC 815 [1]:						
Ethanol	893,656	228,658	-	-	-	1,122,314
Distillers grains	90,401	53,918	-	-	-	144,319
Corn oil	35,602	12,158	7,637	-	-	55,397
Grain	470	37,129	-	-	-	37,599
Cattle and vinegar	-	-	6,884	-	-	6,884
Other	8,556	38,515	-	-	-	47,071
Intersegment revenues	4,635	25,557	-	4,689	(34,881)	-
Total revenues from contracts accounted for as derivatives	1,033,320	395,935	14,521	4,689	(34,881)	1,413,584
Leasing revenues under ASC 840 [2]:	-	-	-	44,589	(43,788)	801
Total Revenues	$ 1,159,191	$ 397,418	$ 504,076	$ 51,725	$ (80,286)	$ 2,032,124

(1) Revenues from contracts accounted for as derivatives represent physically settled derivative sales that are outside the scope of ASC 606, *Revenue from Contracts with Customers* (ASC 606), where the company recognizes revenue when control of the inventory is transferred within the meaning of ASC 606 as required by ASC 610-20, *Gains and Losses from the Derecognition of Nonfinancial Assets*.

(2) Leasing revenues do not represent revenues recognized from contracts with customers under ASC 606, and are accounted for under ASC 842, *Leases* for 2019 and ASC 840, *Leases* for 2018.

Payment Terms

The company has standard payment terms, which vary depending upon the nature of the services provided, with the majority falling within 10 to 30 days after transfer of control or completion of services. In instances where the timing of revenue recognition differs from the timing of invoicing, the company has determined that contracts generally do not include a significant financing component.

Contract Liabilities

The company records unearned revenue when consideration is received, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of service and lease agreements. Unearned revenue from service agreements, which represents a contract liability, is recorded for fees that have been charged to the customer prior to the completion of performance obligations. Unearned revenue is generally recognized in the subsequent quarter and is not material to the company. The company expects to recognize all of the unearned revenue associated with service agreements as of June 30, 2019, in the subsequent quarter when the inventory is withdrawn from the partnership's tank storage.

3. ACQUISITIONS AND DISPOSITIONS

ACQUISITIONS

Acquisition of Cattle Feeding Operations – Bartlett Cattle Company, L.P.

On August 1, 2018, the company acquired two cattle-feeding operations from Bartlett Cattle Company, L.P. for $16.2 million, plus working capital of approximately $106.6 million primarily consisting of work-in-process inventory. The transaction included the feed yards located in Sublette, Kansas and Tulia, Texas, which added combined feedlot capacity of 97,000 head of cattle to the company's operations. The transaction was financed using cash on hand and proceeds from the Green Plains Cattle senior secured asset-based revolving credit facility. There were no material acquisition costs recorded for the acquisition.

The following is a summary of the assets acquired and liabilities assumed (in thousands):

Amounts of Identifiable Assets Acquired and Liabilities Assumed		
Accounts receivable	$	1,897
Inventory		104,809
Property and equipment, net		16,190
Current liabilities		(118)
Total identifiable net assets	$	122,778

The amounts above reflect the final purchase price allocation, which included working capital true-up payments by the company of $0.9 million made during the third quarter of 2018.

DISPOSITIONS

Disposition of Fleischmann's Vinegar

On November 27, 2018, the company and Green Plains II LLC, an indirect wholly-owned subsidiary of the company, completed the sale of Fleischmann's Vinegar Company, Inc. to Kerry Holding Co. ("Kerry"). The company received as net consideration from Kerry $353.7 million in cash and restricted cash, including net working capital adjustments. The divested assets were reported within the company's food and ingredients segment. The company recorded a pre-tax gain on the sale of Fleischmann's Vinegar of $58.2 million, including offsetting related transaction costs of $7.4 million within the corporate segment.

The assets and liabilities of Fleischmann's Vinegar at closing on November 27, 2018 were as follows (in thousands):

Amounts of Identifiable Assets Disposed and Liabilities Relinquished		
Cash	$	2,107
Accounts receivable, net		15,935
Inventory		15,167
Prepaid expenses and other		853
Property and equipment		64,552
Other assets		79,389
Current liabilities		(8,587)
Deferred tax liabilities		(26,617)
Total identifiable net assets		142,799
Goodwill		142,002
Net assets disposed	$	284,801

The amounts above reflect the preliminary working capital true-up payments made to and received from Kerry.

Disposition of Bluffton, Lakota and Riga Ethanol Plants

On November 15, 2018, the company completed the sale of three ethanol plants located in Bluffton, Indiana, Lakota, Iowa, and Riga, Michigan, and certain related assets from subsidiaries, to Valero Renewable Fuels Company, LLC ("Valero") for the sale price of $323.2 million, including net working capital and other adjustments. Correspondingly, the partnership's storage assets located adjacent to such plants were sold to Green Plains Inc. for $120.9 million. The company received as consideration from Valero approximately $323.2 million, while the partnership received as consideration from the company 8.7 million partnership units and a portion of the general partner interest equating to 0.2 million equivalent limited partner units to maintain the general partner's 2% interest. In addition, the partnership also received additional consideration of approximately $2.7 million from Valero for the assignment of certain railcar operating leases. The divested assets were reported within the company's ethanol production, agribusiness and energy services and partnership segments. The company recorded a pre-tax gain on the sale of the three ethanol plants of $92.2 million, of which $89.5 million was recorded within the corporate segment and $2.7 million was recorded within the partnership segment, including offsetting transaction costs of $4.2 million, of which $3.7 million were recorded within the corporate segment and $0.5 million were recorded within the partnership segment.

The assets and liabilities of the Bluffton, Lakota and Riga ethanol plants are as follows (in thousands):

Amounts of Identifiable Assets Disposed and Liabilities Relinquished		
Inventory	$	36,812
Prepaid expenses and other		189
Property and equipment		184,970
Other assets		1,717
Current liabilities		(746)
Other liabilities		(4,706)
Total identifiable net assets		218,236
Goodwill		6,188
Net assets disposed	$	224,424

The amounts above reflect the final working capital true-up payments by Valero of $3.4 million received during the first quarter of 2019.

4. FAIR VALUE DISCLOSURES

The following methods, assumptions and valuation techniques were used in estimating the fair value of the company's financial instruments:

Level 1 – unadjusted quoted prices in active markets for identical assets or liabilities the company can access at the measurement date.

Level 2 – directly or indirectly observable inputs such as quoted prices for similar assets or liabilities in active markets other than quoted prices included within Level 1, quoted prices for identical or similar assets in markets that are not active, and other inputs that are observable or can be substantially corroborated by observable market data through correlation or other means. Grain inventories held for sale in the agribusiness and energy services segment are valued at nearby futures values, plus or minus nearby basis.

Level 3 – unobservable inputs that are supported by little or no market activity and comprise a significant component of the fair value of the assets or liabilities. The company currently does not have any recurring Level 3 financial instruments.

Derivative contracts include exchange-traded commodity futures and options contracts and forward commodity purchase and sale contracts. Exchange-traded futures and options contracts are valued based on unadjusted quoted prices in active markets and are classified in Level 1. The majority of the company's exchange-traded futures and options contracts are cash-settled on a daily basis.

There have been no changes in valuation techniques and inputs used in measuring fair value. The company's assets and liabilities by level are as follows (in thousands):

	Fair Value Measurements at June 30, 2019		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Total
Assets:			
Cash and cash equivalents	$ 193,280	$ -	$ 193,280
Restricted cash	40,628	-	40,628
Inventories carried at market	-	36,459	36,459
Unrealized gains on derivatives	-	15,924	15,924

Other assets	113	1	114
Total assets measured at fair value	$ 234,021	$ 52,384	$ 286,405
Liabilities:			
Accounts payable [1]	$ -	$ 7,263	$ 7,263
Unrealized losses on derivatives	-	9,670	9,670
Total liabilities measured at fair value	$ -	$ 16,933	$ 16,933

	Fair Value Measurements at December 31, 2018		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Total
Assets:			
Cash and cash equivalents	$ 251,683	$ -	$ 251,683
Restricted cash	66,512	-	66,512
Inventories carried at market	-	111,960	111,960
Unrealized gains on derivatives	-	9,976	9,976
Other assets	114	1	115
Total assets measured at fair value	$ 318,309	$ 121,937	$ 440,246
Liabilities:			
Accounts payable [1]	$ -	$ 16,573	$ 16,573
Unrealized losses on derivatives	-	7,852	7,852
Other liabilities	-	2	2
Total liabilities measured at fair value	$ -	$ 24,427	$ 24,427

(1) Accounts payable is generally stated at historical amounts with the exception of $7.3 million and $16.6 million at June 30, 2019 and December 31, 2018, respectively, related to certain delivered inventory for which the payable fluctuates based on changes in commodity prices. These payables are hybrid financial instruments for which the company has elected the fair value option.

The company believes the fair value of its debt approximated book value, which was $895.6 million at June 30, 2019 and $891.2 million at December 31, 2018. The company estimated the fair value of its outstanding debt using Level 2 inputs. The company believes the fair values of its accounts receivable approximated book value, which was $108.7 million and $100.4 million at June 30, 2019 and December 31, 2018, respectively.

Although the company currently does not have any recurring Level 3 financial measurements, the fair values of tangible assets and goodwill acquired and the equity component of convertible debt represent Level 3 measurements which were derived using a combination of the income approach, market approach and cost approach for the specific assets or liabilities being valued.

5. SEGMENT INFORMATION

The company reports the financial and operating performance for the following four operating segments: (1) ethanol production, which includes the production of ethanol, distillers grains and corn oil, (2) agribusiness and energy services, which includes grain handling and storage, commodity marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil and other commodities, (3) food and ingredients, which includes cattle feeding and food-grade corn oil operations and included vinegar production until the sale of Fleischmann’s Vinegar during the fourth quarter of 2018 and (4) partnership, which includes fuel storage and transportation services.

Corporate activities include selling, general and administrative expenses, consisting primarily of compensation, professional fees and overhead costs not directly related to a specific operating segment.

During the normal course of business, the operating segments conduct business with each other. For example, the agribusiness and energy services segment procures grain and natural gas and sells products, including ethanol, distillers grains and corn oil for the ethanol production segment. The partnership segment provides fuel storage and transportation services for the ethanol production segment. These intersegment activities are treated like third-party transactions with origination, marketing and storage fees charged at estimated market values. Consequently, these transactions affect segment performance; however, they do not impact the company’s consolidated results since the revenues and corresponding costs are eliminated.

The following tables set forth certain financial data for the company’s operating segments (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Revenues:				
Ethanol production:				
Revenues from external customers	$ 447,438	$ 589,256	$ 716,154	$ 1,153,019
Intersegment revenues	3,505	4,219	5,622	6,172
Total segment revenues	450,943	593,475	721,776	1,159,191
Agribusiness and energy services:				
Revenues from external customers	175,837	170,074	338,632	371,861
Intersegment revenues	9,131	14,128	15,544	25,557

Total segment revenues	184,968	184,202	354,176	397,418
Food and ingredients:				
Revenues from external customers	270,886	225,887	479,385	503,996
Intersegment revenues	38	38	76	80
Total segment revenues	270,924	225,925	479,461	504,076
Partnership:				
Revenues from external customers	1,692	1,620	3,997	3,248
Intersegment revenues	19,133	24,220	37,915	48,477
Total segment revenues	20,825	25,840	41,912	51,725
Revenues including intersegment activity	927,660	1,029,442	1,597,325	2,112,410
Intersegment eliminations	(31,807)	(42,605)	(59,157)	(80,286)
Revenues as reported	$ 895,853	$ 986,837	$ 1,538,168	$ 2,032,124

Refer to *Note 2 - Revenue*, for further disaggregation of revenue by operating segment.

	Three Months Ended June 30,		**Six Months Ended June 30,**	
	2019	**2018**	**2019**	**2018**
Cost of goods sold:				
Ethanol production	$ 483,352	$ 581,613	$ 776,839	$ 1,146,172
Agribusiness and energy services	176,214	165,174	335,840	366,886
Food and ingredients	259,906	206,440	465,979	466,205
Partnership	-	-	-	-
Intersegment eliminations	(31,215)	(42,602)	(54,826)	(80,303)
	$ 888,257	$ 910,625	$ 1,523,832	$ 1,898,960

	Three Months Ended June 30,		**Six Months Ended June 30,**	
	2019	**2018**	**2019**	**2018**
Operating income (loss):				
Ethanol production	$ (53,885)	$ (17,214)	$ (98,077)	$ (44,743)
Agribusiness and energy services	4,341	12,166	9,645	19,230
Food and ingredients	7,260	12,981	5,828	25,566
Partnership	13,156	16,129	25,707	31,489
Intersegment eliminations	(528)	144	(4,205)	212
Corporate activities	(9,724)	(12,441)	(18,283)	(23,914)
	$ (39,380)	$ 11,765	$ (79,385)	$ 7,840

	Three Months Ended June 30,		**Six Months Ended June 30,**	
	2019	**2018**	**2019**	**2018**
EBITDA:				
Ethanol production	$ (38,737)	$ 3,362	$ (67,240)	$ (3,733)
Agribusiness and energy services	4,899	12,796	10,761	20,498
Food and ingredients	8,906	19,044	9,163	35,041
Partnership	14,017	17,138	27,788	33,761
Intersegment eliminations	(528)	144	(4,205)	212
Corporate activities	(8,326)	(10,642)	(14,705)	(20,817)
	$ (19,769)	$ 41,842	$ (38,438)	$ 64,962

	Three Months Ended June 30,		**Six Months Ended June 30,**	
	2019	**2018**	**2019**	**2018**
Depreciation and amortization:				
Ethanol production	$ 15,437	$ 20,559	$ 30,777	$ 40,995
Agribusiness and energy services	552	618	1,101	1,248
Food and ingredients	1,583	3,444	3,194	6,848
Partnership	771	1,105	1,756	2,286
Corporate activities	751	1,097	1,501	1,920
	$ 19,094	$ 26,823	$ 38,329	$ 53,297

The following table reconciles net income (loss) to EBITDA (in thousands):

	Three Months Ended June 30,		**Six Months Ended June 30,**	
	2019	**2018**	**2019**	**2018**
Net income (loss)	$ (40,179)	$ 3,751	$ (78,050)	$ (15,704)
Interest expense	15,969	22,021	30,396	44,149
Income tax benefit	(14,653)	(10,753)	(29,113)	(16,780)

Depreciation and amortization [1]	19,094	26,823	38,329	53,297
EBITDA	$ (19,769)	$ 41,842	$ (38,438)	$ 64,962

(1) Excludes the amortization of operating lease right-of-use assets and amortization of debt issuance costs.

The following table sets forth total assets by operating segment (in thousands):

	June 30, 2019	December 31, 2018
Total assets [1]:		
Ethanol production	$ 853,906	$ 872,845
Agribusiness and energy services	390,846	399,633
Food and ingredients	559,879	552,459
Partnership	103,210	67,297
Corporate assets	247,751	334,236
Intersegment eliminations	(14,865)	(10,038)
	$ 2,140,727	$ 2,216,432

(1) Asset balances by segment exclude intercompany balances.

6. INVENTORIES

Inventories are carried at the lower of cost or net realizable value, except grain held for sale and fair-value hedged inventories. Commodities held for sale are reported at market value. As of June 30, 2019, the company recorded a $3.2 million lower of cost or market inventory adjustment reflected in cost of goods sold within the ethanol production segment.

The components of inventories are as follows (in thousands):

	June 30, 2019	December 31, 2018
Finished goods	$ 99,075	$ 99,765
Commodities held for sale	31,744	62,980
Raw materials	56,511	119,014
Work-in-process	440,410	423,840
Supplies and parts	30,766	29,284
	$ 658,506	$ 734,883

7. DERIVATIVE FINANCIAL INSTRUMENTS

At June 30, 2019, the company's consolidated balance sheet reflected unrealized gains of $24.2 million, net of tax, in accumulated other comprehensive income. The company expects these gains will be reclassified as operating income over the next 12 months as a result of hedged transactions that are forecasted to occur. The amount realized in operating income will differ as commodity prices change.

Fair Values of Derivative Instruments

The fair values of the company's derivative financial instruments and the line items on the consolidated balance sheets where they are reported are as follows (in thousands):

	Asset Derivatives' Fair Value		Liability Derivatives' Fair Value	
	June 30, 2019	December 31, 2018	June 30, 2019	December 31, 2018
Derivative financial instruments	$ 15,924 [1]	$ 9,976 [2]	$ 9,670	$ 7,852 [3]
Other assets	1	1	-	-
Other liabilities	-	-	-	2
Total	$ 15,925	$ 9,977	$ 9,670	$ 7,854

(1) At June 30, 2019, derivative financial instruments, as reflected on the balance sheet, includes net unrealized gains on exchange traded futures and options contracts of $44.3 million, which include $33.0 million of net unrealized gains on derivative financial instruments designated as cash flow hedging instruments.
(2) At December 31, 2018, derivative financial instruments, as reflected on the balance sheet, includes net unrealized gains on exchange traded futures and options contracts of

$16.3 million.

(3) At December 31, 2018, derivative financial instruments, as reflected on the balance sheet, includes net unrealized losses on exchange traded futures and options contracts of $16.9 million, which included $16.5 million of net unrealized losses on derivative financial instruments designated as cash flow hedging instruments.

Refer to *Note 4 - Fair Value Disclosures*, which contains fair value information related to derivative financial instruments.

Effect of Derivative Instruments on Consolidated Balance Sheets, Consolidated Statements of Operations and Consolidated Statements of Comprehensive Income

The gains or losses recognized in income and other comprehensive income related to the company's derivative financial instruments and the line items on the consolidated financial statements where they are reported are as follows (in thousands):

Location of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income into Income	Amount of Gain or (Loss) Reclassified from Accumulated Other Comprehensive Income into Income — Three Months Ended June 30, 2019	2018	Six Months Ended June 30, 2019	2018
Revenues	$ (4,352)	$ (313)	$ (17,711)	$ 1,448
Cost of goods sold	(35)	1,079	(192)	101
Net gain (loss) recognized in loss before tax	$ (4,387)	$ 766	$ (17,903)	$ 1,549

Gain (Loss) Recognized in Other Comprehensive Income on Derivatives	Gain or (Loss) Recognized in Other Comprehensive Income on Derivatives — Three Months Ended June 30, 2019	2018	Six Months Ended June 30, 2019	2018
Commodity contracts	$ 43,144	$ (5,422)	$ 34,181	$ 16,844

Derivatives Not Designated as Hedging Instruments	Location of Gain or (Loss) Recognized in Income on Derivatives	Amount of Gain or (Loss) Recognized in Income on Derivatives — Three Months Ended June 30, 2019	2018	Six Months Ended June 30, 2019	2018
Commodity contracts	Revenues	$ (7,381)	$ 7,027	$ (22,702)	$ 7,963
Commodity contracts	Costs of goods sold	(9,071)	7,121	(8,905)	123
Net gain (loss) recognized in loss before tax		$ (16,452)	$ 14,148	$ (31,607)	$ 8,086

The following amounts were recorded on the consolidated balance sheets related to cumulative basis adjustments for the fair value hedged items (in thousands):

Line Item in the Consolidated Balance Sheet in Which the Hedged Item is Included	June 30, 2019 — Carrying Amount of the Hedged Assets	June 30, 2019 — Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Assets	December 31, 2018 — Carrying Amount of the Hedged Assets	December 31, 2018 — Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Assets
Inventories	$ 22,010	$ (1,924)	$ 89,188	$ 2,430

Effect of Cash Flow and Fair Value Hedge Accounting on the Statements of Operations

The effect of cash flow and fair value hedges and the line items on the consolidated statements of operations where they are reported are as follows (in thousands):

	Location and Amount of Gain or (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships for the Three Months Ended June 30, 2019 — Revenue	2019 — Cost of Goods Sold	2018 — Revenue	2018 — Cost of Goods Sold
Gain (loss) on cash flow hedging relationships:				
Commodity contracts:				
Amount of gain (loss) reclassified from accumulated other comprehensive income into income	$ (4,352)	$ (35)	$ (313)	$ 1,079
Gain (loss) on fair value hedging relationships:				
Commodity contracts:				
Hedged item	-	723	-	1,103
Derivatives designated as hedging instruments	-	571	-	(446)

Total amounts of income and expense line items presented in the statement of operations in which the effects of cash flow or fair value hedges are recorded	$ (4,352)	$ 1,259	$ (313)	$ 1,736

	Location and Amount of Gain Recognized in Income on Cash Flow and Fair Value Hedging Relationships for the Six Months Ended June 30,			
	2019		2018	
	Revenue	Cost of Goods Sold	Revenue	Cost of Goods Sold
Gain (loss) on cash flow hedging relationships:				
Commodity contracts:				
Amount of gain reclassified from accumulated other comprehensive income into income	$ (17,711)	$ (192)	$ 1,448	$ 101
Gain (loss) on fair value hedging relationships:				
Commodity contracts:				
Hedged item	-	(831)	-	10,496
Derivatives designated as hedging instruments	-	4,431	-	(8,878)
Total amounts of income and expense line items presented in the statement of operations in which the effects of cash flow or fair value hedges are recorded	$ (17,711)	$ 3,408	$ 1,448	$ 1,719

There were no gains or losses from discontinuing cash flow or fair value hedge treatment during the three and six months ended June 30, 2019 and 2018.

The open commodity derivative positions as of June 30, 2019, are as follows (in thousands):

Derivative Instruments	Exchange Traded (1) Net Long & (Short)	Non-Exchange Traded (2) Long	Non-Exchange Traded (2) (Short)	Unit of Measure	Commodity
Futures	(46,875)			Bushels	Corn, Soybeans and Wheat
Futures	2,445 (3)			Bushels	Corn
Futures	(1,310)(4)			Bushels	Corn
Futures	(41,805)			Gallons	Ethanol
Futures	1,670			MmBTU	Natural Gas
Futures	(8,140)(4)			MmBTU	Natural Gas
Futures	(8,400)			Pounds	Cattle
Futures	(411,440)(3)			Pounds	Cattle
Options	4,858			Bushels	Corn and Soybeans
Options	(11,424)			Gallons	Ethanol
Options	2,349			MmBTU	Natural Gas
Options	(35,023)			Pounds	Cattle
Options	3			Barrels	Crude Oil
Forwards		49,542	(1,086)	Bushels	Corn and Soybeans
Forwards		14,391	(310,836)	Gallons	Ethanol
Forwards		148	(453)	Tons	DDG
Forwards		5,184	(78,529)	Pounds	Corn Oil
Forwards		14,616	(5,525)	MmBTU	Natural Gas

(1) Exchange traded futures and options are presented on a net long and (short) position basis. Options are presented on a delta-adjusted basis.
(2) Non-exchange traded forwards are presented on a gross long and (short) position basis including both fixed-price and basis contracts.
(3) Futures used for cash flow hedges.
(4) Futures or non-exchange traded forwards used for fair value hedges.

Energy trading contracts that do not involve physical delivery are presented net in revenues on the consolidated statements of operations. Included in revenues are net gains on energy trading contracts of $0.8 million and $9.3 million for the three and six months ended June 30, 2019, respectively and net gains on energy trading contracts of $4.1 million and $10.8 million for the three and six months ended June 30, 2018, respectively.

8. DEBT

The components of long-term debt are as follows (in thousands):

	June 30, 2019	December 31, 2018
Corporate:		
3.25% convertible notes due 2019	$ -	$ 53,457
4.125% convertible notes due 2022	145,906	142,708
4.00% convertible notes due 2024	73,886	-
Green Plains Partners:		
$200.0 million revolving credit facility	132,200	134,000
$8.1 million promissory note	8,100	8,100
Other	17,251	17,922
Total face value of long-term debt	377,343	356,187
Unamortized debt issuance costs	(5,238)	(3,190)
Less: current portion of long-term debt	(1,225)	(54,807)
Total long-term debt	$ 370,880	$ 298,190

The components of short-term notes payable and other borrowings are as follows:

	June 30, 2019	December 31, 2018
Green Plains Cattle:		
$500.0 million revolver	$ 334,698	$ 374,492
Green Plains Grain:		
$100.0 million revolver	42,000	41,000
$50.0 million inventory financing	-	-
Green Plains Trade:		
$300.0 million revolver	132,346	108,485
Green Plains Commodity Management:		
$20.0 million hedge line	14,485	14,266
	$ 523,529	$ 538,243

Corporate Activities

During the three months ended June 30, 2019, the company issued $105.0 million of 4.00% convertible senior notes due in 2024, or the 4.00% notes. The company used approximately $57.8 million of the net proceeds to repurchase the $56.8 million outstanding principal amount of its 3.25% convertible senior notes due October 1, 2019 in cash, including accrued and unpaid interest, in privately negotiated transactions concurrently with this offering.

At issuance, the company separately accounted for the liability and equity components of the 3.25% convertible notes by bifurcating the gross proceeds between the indebtedness, or liability component, and the embedded conversion option, or equity component, by estimating an effective interest rate on the date of issuance for similar notes. The embedded conversion option was recorded in stockholders' equity. Since the company did not exercise the embedded conversion option associated with the notes, pursuant to the guidance within ASC 470, *Debt*, the company recorded a loss upon extinguishment of $1.6 million, measured by the difference between the fair value and carrying value of the liability portion of the notes. As a result, the company recorded a charge to interest expense in the consolidated financial statements of approximately $1.6 million during the three months ended June 30, 2019. This charge included $0.1 million of unamortized debt issuance costs related to the principal balance extinguished. The remaining settlement consideration transferred was allocated to the reacquisition of the embedded conversion option and recognized as a reduction of additional paid-in capital.

The 4.00% notes are senior, unsecured obligations of the company, with interest payable on January 1 and July 1 of each year, beginning January 1, 2020, at a rate of 4.00% per annum. The 4.00% notes will mature on July 1, 2024, unless earlier converted, redeemed or repurchased. The 4.00% notes will be convertible, at the option of the holders, into consideration consisting of, at the company's election, cash, shares of the company's common stock, or a combination of cash and shares of the company's common stock until the close of business on the scheduled trading day immediately

preceding the maturity date. However, before January 1, 2024, the 4.00% notes will not be convertible unless certain conditions are satisfied. The initial conversion rate is 64.1540 shares of common stock per $1,000 of principal, which is equal to a conversion price of approximately $15.59 per share. The conversion rate will be subject to adjustment upon the occurrence of certain events. In addition, the company may be obligated to increase the conversion rate for any conversion that occurs in connection with certain corporate events, including the company's calling the 4.00% notes for redemption.

On and after July 1, 2022, and prior to the maturity date, the company may redeem all, but not less than all, of the 4.00% notes for cash if the sale price of the company's common stock equals or exceeds 140% of the applicable conversion price for a specified time period ending on the trading day immediately prior to the date the company delivers notice of the redemption. The redemption price will equal 100% of the principal amount of the 4.00% notes to be redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date. In addition, upon the occurrence of a fundamental change, holders of the 4.00% notes will have the right, at their option, to require the company to repurchase the 4.00% notes in cash at a price equal to 100% of the principal amount of the 4.00% notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

In August 2016, the company issued $170.0 million of 4.125% convertible senior notes due in 2022, or the 4.125% notes. The 4.125% notes are senior, unsecured obligations of the company, with interest payable on March 1 and September 1 of each year. The company may settle the 4.125% notes in cash, common stock or a combination of cash and common stock.

Prior to March 1, 2022, the 4.125% notes are not convertible unless certain conditions are satisfied. The initial conversion rate is 35.7143 shares of

common stock per $1,000 of principal, which is equal to a conversion price of approximately $28.00 per share. The conversion rate is subject to adjustment upon the occurrence of certain events, including upon redemption of the 4.125% notes.

The company may redeem all, but not less than all, of the 4.125% notes at any time on or after September 1, 2020, if the company's common stock equals or exceeds 140% of the applicable conversion price for a specified time period ending on the trading day immediately prior to the date the company delivers notice of the redemption. The redemption price will equal 100% of the principal plus any accrued and unpaid interest. Holders of the 4.125% notes have the option to require the company to repurchase the 4.125% notes in cash at a price equal to 100% of the principal plus accrued and unpaid interest when there is a fundamental change, such as change in control. If an event of default occurs, it could result in the 4.125% notes being declared due and payable.

Ethanol Production Segment

The company has small equipment financing loans, finance leases on equipment or facilities, and other forms of debt financing.

Agribusiness and Energy Services Segment

Green Plains Grain has a senior secured asset-based revolving credit facility, which was amended on June 28, 2019, to extend the existing maturity date from July 26, 2019 to June 28, 2022 and lower the maximum commitment from $125.0 million to $100.0 million. The credit facility finances working capital up to the maximum commitment based on eligible collateral equal to the sum of percentages of eligible cash, receivables and inventories, less miscellaneous adjustments. Advances are subject to an interest rate equal to LIBOR plus 3.00% or the lenders' base rate plus 2.00%. The credit facility also includes an accordion feature that enables the facility to be increased by up to $75.0 million with agent approval. The credit facility can also be increased by up to $50.0 million for seasonal borrowings. Total commitments outstanding cannot exceed $225.0 million. The total unused portion of the $100.0 million revolving credit facility is also subject to a commitment fee ranging from 0.375% to 0.50% per annum depending on utilization.

Lenders receive a first priority lien on certain cash, inventory, accounts receivable and other assets owned by Green Plains Grain. The terms impose affirmative and negative covenants for Green Plains Grain, including maintaining minimum working capital to be the greater of (i) $18,000,000 and (ii) 18% of the sum of the then total commitment plus the aggregate seasonal line commitments. Minimum tangible net worth is required to be greater than 21% of the sum of the then total commitment plus the aggregate seasonal line commitments. The credit facility also requires the company to maintain a maximum annual leverage of 6.00 to 1.00. Capital expenditures are limited to $8.0 million per year under the credit facility, plus equity contributions from the company and unused amounts of up to $8.0 million from the previous year. In addition, if the company has long-term indebtedness on the date of calculation of greater than $10.0 million, the credit facility requires

the company to maintain a minimum fixed charge coverage ratio of 1.25 to 1.00 and a maximum long term debt capitalization of 40%. As of June 30, 2019, Green Plains Grain had no long-term indebtedness.

Green Plains Trade has a $300.0 million senior secured asset-based revolving credit facility to finance working capital for marketing and distribution activities based on eligible collateral equal to the sum of percentages of eligible receivables and inventories, less miscellaneous adjustments. The credit facility matures on July 28, 2022 and consists of a $285 million credit facility and a $15 million first-in-last-out (FILO) credit facility, and includes an accordion feature that enables the credit facility to be increased by up to $70.0 million with agent approval. Advances are subject to variable interest rates equal to daily LIBOR plus 2.25% on the credit facility and daily LIBOR plus 3.25% on the FILO credit facility. The total unused portion of the revolving credit facility is also subject to a commitment fee of 0.375% per annum.

The terms impose affirmative and negative covenants for Green Plains Trade, including maintaining a minimum fixed charge coverage ratio of 1.15 to 1.00. Capital expenditures are limited to $1.5 million per year under the credit facility. The credit facility also restricts distributions related to capital stock, with an exception for distributions up to 50% of net income if, on a pro forma basis, (a) availability has been greater than $10.0 million for the last 30 days and (b) the borrower would be in compliance with the fixed charge coverage ratio on the distribution date.

Green Plains Grain has entered into short-term inventory financing agreements with a financial institution. The company has accounted for the agreements as short-term notes, rather than sales, and has elected the fair value option to offset fluctuations in market prices of the inventory. The company had no short-term notes payable related to these inventory financing agreements as of June 30, 2019.

Green Plains Commodity Management has an uncommitted $20.0 million revolving credit facility which matures April 30, 2023 to finance margins related to its hedging programs. Advances are subject to variable interest rates equal to LIBOR plus 1.75%.

Food and Ingredients Segment

Green Plains Cattle has a $500.0 million senior secured asset-based revolving credit facility, which matures on April 30, 2020, to finance working capital for the cattle feeding operations up to the maximum commitment based on eligible collateral equal to the sum of percentages of eligible receivables, inventories and other current assets, less miscellaneous adjustments. Advances are subject to variable interest rates equal to LIBOR plus 2.00% to 3.00%, or the base rate plus 1.00% to 2.00%, depending upon the preceding three months' excess borrowing availability. The credit facility also includes an accordion feature that enables the credit facility to be increased by up to $100.0 million with agent approval. The unused portion of the credit facility is also subject to a commitment fee of 0.20% to 0.30% per annum, depending on the preceding three months' excess borrowing availability.

Lenders receive a first priority lien on certain cash, inventory, accounts receivable, property and equipment and other assets owned by Green Plains Cattle. The terms impose affirmative and negative covenants, including maintaining a minimum working capital of 15% of the commitment amount, minimum tangible net worth of 20% of the commitment amount, plus 50% of net profit from the previous year, and a maximum total debt to tangible net worth ratio of 3.50 to 1.00. Capital expenditures are limited to $10.0 million per year under the credit facility, plus $10.0 million per year if funded by a contribution from parent, plus any unused amounts from the previous year.

Partnership Segment

Green Plains Partners, through a wholly owned subsidiary, has a $200.0 million revolving credit facility, which matures on July 1, 2020, to fund working capital, acquisitions, distributions, capital expenditures and other general partnership purposes. Advances under the credit facility are subject to a floating interest rate based on the preceding fiscal quarter's consolidated leverage ratio at a base rate plus 1.25% to 2.00% or LIBOR plus 2.25% to 3.00%. The credit facility can be increased by an additional $20.0 million without the consent of the lenders. The unused portion of the credit facility is also subject to a commitment fee of 0.35% to 0.50%, depending on the preceding fiscal quarter's consolidated leverage ratio.

The partnership's obligations under the credit facility are secured by a first priority lien on (i) the capital stock of the partnership's present and future subsidiaries, (ii) all of the partnership's present and future personal property, such as investment property, general intangibles and contract rights, including rights under agreements with Green Plains Trade, and (iii) all proceeds and products of the equity interests of the partnership's present and future subsidiaries and its personal property. The terms impose affirmative and negative covenants including restricting the partnership's ability to incur additional debt, acquire and sell assets, create liens, invest capital, pay distributions and materially amend the partnership's

commercial agreements with Green Plains Trade. The credit facility also requires the partnership to maintain a maximum consolidated net leverage ratio of no more than 3.50x and a minimum consolidated interest coverage ratio of no less than 2.75x, each of which is calculated on a pro forma basis with respect to acquisitions and divestitures occurring during the applicable period. The consolidated leverage ratio is calculated by dividing total funded indebtedness minus the lesser of cash in excess of $5.0 million or $30.0 million by the sum of the four preceding fiscal quarters' consolidated EBITDA. The consolidated interest coverage ratio is calculated by dividing the sum of the four preceding fiscal quarters' consolidated EBITDA by the sum of the four preceding fiscal quarters' interest charges.

The partnership, through a wholly owned subsidiary, has promissory notes payable of $8.1 million, which is recorded in long-term debt, and a note receivable of $8.1 million, which is recorded in other assets, to execute a New Markets Tax Credit transaction related to the Birmingham, Alabama terminal. Beginning in March 2020, the promissory notes and note receivable each require quarterly principal and interest payments of approximately $0.2 million. The partnership retains the right to call $8.1 million of the promissory notes in 2020. The promissory notes payable and note receivable will be fully amortized upon maturity in September 2031. Income tax credits were generated for the lender, which the company has guaranteed over their statutory life of seven years in the event the credits are recaptured or reduced. At the time of the transaction, the income tax credits were valued at $5.0 million. The partnership has not established a liability in connection with the guarantee because it believes the likelihood of recapture or reduction is remote.

Covenant Compliance

The company was in compliance with its debt covenants as of June 30, 2019.

Restricted Net Assets

At June 30, 2019, there were approximately $174.8 million of net assets at the company's subsidiaries that could not be transferred to the parent company in the form of dividends, loans or advances due to restrictions contained in the credit facilities of these subsidiaries.

9. STOCK-BASED COMPENSATION

The company has an equity incentive plan that reserves 4,110,000 shares of common stock for issuance to its directors and employees. The plan provides for shares, including options to purchase shares of common stock, stock appreciation rights tied to the value of common stock, restricted stock, performance shares, and restricted and deferred stock unit awards, to be granted to eligible employees, non-employee directors and consultants. The company measures stock-based compensation at fair value on the grant date, with no adjustments for estimated forfeitures. The company records noncash compensation expense related to equity awards in its consolidated financial statements over the requisite period on a straight-line basis.

Restricted Stock Awards and Deferred Stock Units

The non-vested stock award and deferred stock unit activity for the six months ended June 30, 2019, is as follows:

	Non-Vested Shares and Deferred Stock Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
Non-Vested at December 31, 2018	882,288	$ 19.12	
Granted	497,118	15.40	
Forfeited	(80,521)	17.60	
Vested	(440,891)	18.28	
Non-Vested at June 30, 2019	857,994	$ 17.54	1.9

Performance Shares

On February 19, 2019 and March 19, 2018, the board of directors granted performance shares to be awarded in the form of common stock to certain participants of the plan. Performance shares vest based on the company's average return on net assets (RONA) and the company's total shareholder return (TSR), as further described herein. The performance shares vest on the third anniversary of the grant, if the RONA and TSR criteria are achieved and the participant is then employed by the company. Fifty percent of the performance shares vest based upon the company's ability to achieve a predetermined RONA

during the three year performance period. The remaining fifty percent of the performance shares vest based upon the company's total TSR during the three year performance period relative to that of the company's performance peer group.

The performance shares were granted at a target of 100%, but each performance share will reduce or increase depending on results for the performance period for the company's RONA, and the company's TSR relative to that of the performance peer group. If the company's RONA and TSR achieve the maximum goals, the maximum amount of shares available to be issued pursuant to the 2018 and 2019 awards are 482,234 performance shares or 150% of the 321,489 performance shares which remain outstanding. The actual number of performance shares that will ultimately vest is based on the actual percentile ranking of the company's RONA, and the company's TSR compared to the peer performance at the end of the performance period.

The company used the Monte Carlo valuation model to estimate the fair value of the performance shares on the date of the grant. The weighted average assumptions used by the company in applying the Monte Carlo valuation model for performance share grants are illustrated in the following table:

	FY 2019 Performance Awards	FY 2018 Performance Awards
Risk-free interest rate	2.45 %	2.44 %
Dividend yield	3.13 %	2.64 %
Expected volatility	41.69 %	45.11 %
Monte Carlo valuation	99.62 %	97.39 %
Closing stock price on the date of grant	$ 15.34	$ 18.15

The non-vested performance share award activity for the six months ended June 30, 2019, is as follows:

	Performance Shares	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
Non-Vested at December 31, 2018	134,022	$ 17.92	
Granted	216,703	15.43	
Forfeited	(29,236)	16.23	
Non-Vested at June 30, 2019	321,489	$ 16.39	2.3

Stock Options

There remains 128,750 exercisable stock options outstanding at June 30, 2019, with a weighted-average exercise price of $12.72. The weighted average exercise price for options exercisable at June 30, 2019 was above the company's stock price at June 30, 2019. The weighted-average remaining contractual term of exercisable options was 0.5 years at June 30, 2019.

Option awards allow employees to exercise options through cash payment for the shares of common stock or simultaneous broker-assisted transactions in which the employee authorizes the exercise and immediate sale of the shares in the open market. The company uses newly issued shares of common stock to satisfy its stock-based payment obligations.

Green Plains Partners

Green Plains Partners has a long-term incentive plan (LTIP) intended to promote the interests of the partnership, its general partner and affiliates by providing unit-based incentive compensation awards to employees, consultants and directors to encourage superior performance. The LTIP reserves 2,500,000 common limited partner units for issuance in the form of options, restricted units, phantom units, distribution equivalent rights, substitute awards, unit appreciation rights, unit awards, profit interest units or other unit-based awards. The partnership measures unit-based compensation at fair value on the grant date, with no adjustments for estimated forfeitures. The partnership records noncash compensation expense related to the awards over the requisite service period on a straight-line basis.

The non-vested unit-based awards activity for the six months ended June 30, 2019, is as follows:

	Non-Vested Shares and Deferred Stock Units	Weighted-Average Grant-Date Fair Value	Weighted-Average Remaining Vesting Term (in years)
Non-Vested at December 31, 2018	18,582	$ 16.96	
Vested	(18,582)	16.96	
Non-Vested at June 30, 2019	-	$ -	0.0

Stock-Based and Unit-Based Compensation Expense

Compensation costs for stock-based and unit-based payment plans during the three and six months ended June 30, 2019 were approximately $2.3 million and $4.8 million, respectively, and $3.0 million and $5.4 million during the three and six months ended June 30, 2018. At June 30, 2019, there was $15.9 million of unrecognized compensation costs from stock-based and unit-based compensation related to non-vested awards. This compensation is expected to be recognized over a weighted-average period of approximately 2.0 years. The potential tax benefit related to stock-based payment is approximately 25.0% of these expenses.

10. EARNINGS PER SHARE

Basic earnings per share, or EPS, is calculated by dividing net income available to common stockholders by the weighted average number of common shares outstanding during the period.

The company computed diluted EPS by dividing net income on an if-converted basis, adjusted to add back net interest expense related to the convertible debt instruments, by the weighted average number of common shares outstanding during the period, adjusted to include the shares that would be issued if the convertible debt instruments were converted to common shares and the effect of any outstanding dilutive securities.

The basic and diluted EPS are calculated as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Basic EPS:				
Net loss attributable to Green Plains	$ (45,342)	$ (994)	$ (88,141)	$ (25,111)
Weighted average shares outstanding - basic	40,081	40,194	40,200	40,168
EPS - basic	$ (1.13)	$ (0.02)	$ (2.19)	$ (0.63)
EPS - diluted	$ (1.13)	$ (0.02)	$ (2.19)	$ (0.63)

The anti-dilutive effect of 7.4 million and 7.0 million shares related to the company's convertible debt and stock-based compensation awards have been excluded from diluted EPS for the three and six months ended June 30, 2019, respectively and 10.2 million and 10.1 million shares for the three and six months ended June 30, 2018, respectively, as the inclusion of these shares would have been antidilutive.

11. STOCKHOLDERS' EQUITY

Components of stockholders' equity for the three and six months ended June 30, 2019 and 2018 are as follows (in thousands):

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accum. Other Comp. Income	Treasury Stock		Total Green Plains Stockholders' Equity	Non-Controlling Interests	Total Stockholders' Equity
	Shares	Amount				Shares	Amount			
Balance, January 1, 2019	46,638	$ 47	$ 696,222	$ 324,728	$ (16,016)	5,536	$ (58,162)	$ 946,819	$ 116,170	$ 1,062,989
Net income (loss)	-	-	-	(42,799)	-	-	-	(42,799)	4,928	(37,871)
Cash dividends and distributions declared	-	-	-	(4,847)	-	-	-	(4,847)	(5,487)	(10,334)
Other comprehensive loss before reclassification	-	-	-	-	(6,883)	-	-	(6,883)	-	(6,883)
Amounts reclassified from accumulated other comprehensive loss	-	-	-	-	10,376	-	-	10,376	-	10,376
Other comprehensive income, net of tax	-	-	-	-	3,493	-	-	3,493	-	3,493
Proceeds from disgorgement of shareholders short-swing profits, net[1]	-	-	5,023	-	-	-	-	5,023	-	5,023
Stock-based compensation	284	-	428	-	-	-	-	428	79	507
Balance, March 31, 2019	46,922	47	701,673	277,082	(12,523)	5,536	(58,162)	908,117	115,690	1,023,807
Net income (loss)	-	-	-	(45,342)	-	-	-	(45,342)	5,163	(40,179)
Cash dividends and distributions declared	-	-	-	(4,871)	-	-	-	(4,871)	(5,487)	(10,358)
Other comprehensive loss before reclassification	-	-	-	-	33,260	-	-	33,260	-	33,260
Amounts reclassified from accumulated other comprehensive loss	-	-	-	-	3,440	-	-	3,440	-	3,440
Other comprehensive income, net of tax	-	-	-	-	36,700	-	-	36,700	-	36,700
Issuance of 4.00% convertible notes due 2024, net of tax	-	-	22,537	-	-	-	-	22,537	-	22,537
Settlement of 3.25% convertible notes due 2019, net of tax	-	-	(271)	-	-	-	-	(271)	-	(271)
Repurchase of common stock	-	-	-	-	-	3,197	(39,870)	(39,870)	-	(39,870)
Stock-based compensation	(3)	-	2,129	-	-	-	-	2,129	79	2,208
Balance, June 30, 2019	46,919	$ 47	$ 726,068	$ 226,869	$ 24,177	8,733	$ (98,032)	$ 879,129	$ 115,445	$ 994,574

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accum. Other Comp. Income	Treasury Stock		Total Green Plains Stockholders' Equity	Non-Controlling Interests	Total Stockholders' Equity
	Shares	Amount				Shares	Amount			
Balance, December 31, 2017	46,410	$ 46	$ 685,019	$ 325,411	$ (13,110)	5,326	$ (55,184)	$ 942,182	$ 116,954	$ 1,059,136
Reclassification of certain tax effects from other comprehensive loss[2]	-	-	-	2,787	(2,787)	-	-	-	-	-
Balance, January 1, 2018	46,410	46	685,019	328,198	(15,897)	5,326	(55,184)	942,182	116,954	1,059,136

Net income (loss)	-	-	-	(24,117)	-	-	-	(24,117)	4,662	(19,455)
Cash dividends and distributions declared	-	-	-	(4,831)	-	-	-	(4,831)	(5,420)	(10,251)
Other comprehensive income before reclassification	-	-	-	-	17,150	-	-	17,150	-	17,150
Amounts reclassified from accumulated other comprehensive income	-	-	-	-	(603)	-	-	(603)	-	(603)
Other comprehensive income net of tax	-	-	-	-	16,547	-	-	16,547	-	16,547
Stock-based compensation	284	1	(512)	-	-	-	-	(511)	60	(451)
Stock options exercised	5	-	50	-	-	-	-	50	-	50
Balance, March 31, 2018	46,699 $	47 $	684,557 $	299,250 $	650	5,326 $	(55,184) $	929,320 $	116,256 $	1,045,576
Net income (loss)	-	-	-	(994)	-	-	-	(994)	4,745	3,751
Cash dividends and distributions declared	-	-	-	(4,851)	-	-	-	(4,851)	(5,478)	(10,329)
Other comprehensive income before reclassification	-	-	-	-	(4,277)	-	-	(4,277)	-	(4,277)
Amounts reclassified from accumulated other comprehensive income	-	-	-	-	(581)	-	-	(581)	-	(581)
Other comprehensive income net of tax	-	-	-	-	(4,858)	-	-	(4,858)	-	(4,858)
Exchange of 3.25% convertible notes due 2018	-	-	-	-	-	-	1	1	-	1
Stock-based compensation	52	-	2,812	-	-	-	-	2,812	60	2,872
Stock options exercised	10	-	100	-	-	-	-	100	-	100
Balance, June 30, 2018	46,761 $	47 $	687,469 $	293,405 $	(4,208)	5,326 $	(55,183) $	921,530 $	115,583 $	1,037,113

(1) During the three months ended March 31, 2019, the company received $6.7 million from a shareholder of the company for disgorgement of shareholder short-swing profits under Section 16(b) under the Exchange Act. The amount was recorded as an increase to additional paid-in capital, net of tax.

(2) Effective January 1, 2018, the company early adopted the amended guidance in ASC 220, Income Statement – Reporting Comprehensive Income: Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, which allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. The amendment eliminates the stranded tax effects resulting from the Tax Cuts and Jobs Act and is intended to improve the usefulness of information reported. As a result, the company recorded a $2.8 million reclassification from accumulated other comprehensive income to retained earnings during the first quarter of 2018.

Amounts reclassified from accumulated other comprehensive income are as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,		Statements of Operations Classification
	2019	2018	2019	2018	
Gains (losses) on cash flow hedges:					
Commodity derivatives	$ (4,352)	$ (313)	$ (17,711)	$ 1,448	Revenues
Commodity derivatives	(35)	1,079	(192)	101	Cost of goods sold
Total	(4,387)	766	(17,903)	1,549	Loss before income taxes
Income tax expense (benefit)	(947)	185	(4,087)	365	Income tax benefit
Amounts reclassified from accumulated other comprehensive income (loss)	$ (3,440)	$ 581	$ (13,816)	$ 1,184	

12. INCOME TAXES

The company records actual income tax expense or benefit during interim periods rather than on an annual effective tax rate method. Certain items are given discrete period treatment and the tax effect of those items are reported in full in the relevant interim period. Green Plains Partners is a limited partnership, which is treated as a flow-through entity for federal

income tax purposes and is not subject to federal income taxes. As a result, the consolidated financial statements do not reflect income taxes on pre-tax income or loss attributable to the noncontrolling interest in the partnership.

The company recorded income tax benefit of $14.7 million and $29.1 million for the three and six months ended June 30, 2019, compared with $10.8 million and $16.8 million for the same periods in 2018. The amount of unrecognized tax benefits for uncertain tax positions was $51.6 million as of June 30, 2019 and December 31, 2018.

The 2019 effective tax rate can be affected by variances in the estimates and amounts of taxable income among the various states, entities and activity types, realization of tax credits, adjustments from resolution of tax matters under review, valuation allowances and the company’s assessment of its liability for uncertain tax positions.

13. COMMITMENTS AND CONTINGENCIES

Adoption of ASC 842

On January 1, 2019, the company adopted the amended guidance in ASC 842, *Leases*, and all related amendments (“new lease standard”) and applied it to all leases using the optional transition method which requires the amended guidance to be applied at the date of adoption. The standard does not require the guidance to be applied to the earliest comparative period presented in the financial statements. As such, comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. The new lease standard had a material impact on the company’s consolidated balance sheets, increasing total assets and total liabilities by $60.9 million upon adoption. It did not have an impact on the consolidated statement of operations for the six months ended June 30, 2019.

The impact on the consolidated balance sheet as of December 31, 2018 for the adoption of the new lease standard was as follows (in thousands):

	Balance at December 31,	Adjustments Due to	Balance at January 1,

	2018 (audited)	ASC 842	2019
Assets			
Operating lease right-of-use assets	$ -	$ 61,268	$ 61,268
Other assets	365	(365)	-
Liabilities			
Accounts payable	196	(196)	-
Operating lease current liabilities	-	18,315	18,315
Operating lease long-term liabilities	-	46,024	46,024
Other liabilities	3,240	(3,240)	-

The company's leases do not specify an implicit interest rate. Therefore, the incremental borrowing rate was used based on information available at commencement date to determine the present value of future payments.

Practical Expedients

Under the new lease standard, companies may elect various practical expedients upon adoption. The company elected the package of practical expedients related to transition, which states that an entity need not reassess initial direct costs for existing leases, the lease classification for any expired or existing leases, and whether any expired or existing contracts are or contain leases.

The company elected to utilize 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 company also elected the practical expedient for lessees to include both the lease and non-lease components as a single component and account for them as a lease. Certain of the company's railcar agreements provide for maintenance costs to be the responsibility of the company as incurred or charged by the lessor. This maintenance cost is a non-lease component that the company elected to combine with the monthly rental payment and account for the total cost as operating lease

expense. In addition, the company has a land lease that contains a non-lease component for the handling and unloading services the landlord provides. The company elected to combine the cost of services with the land lease cost and account for the total as operating lease expense.

A lessee may elect not to apply the recognition requirements in the new lease standard for short-term leases. Instead, the lease payments may be recognized into profit or loss on a straight-line basis over the lease term. The company has elected to use this short-term lease exemption, and therefore will not record a lease liability or right-of-use asset for leases with a term of one year or less. The company did not incur any short-term lease expense for the three and six months ended June 30, 2019.

Lease Expense

The company leases certain facilities, parcels of land, and equipment, with remaining terms ranging from less than one year to 18.3 years. The land and facility leases include renewal options. The renewal options are included in the lease term only for those sites or locations in which they are reasonably certain to be renewed. Equipment renewals are not considered reasonably certain to be exercised as they typically renew with significantly different underlying terms.

The company may sublease certain of its railcars to third parties on a short-term basis. The subleases are classified as operating leases, with the associated sublease income being recognized on a straight-line basis over the lease term.

The components of lease expense are as follows (in thousands):

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Lease expense		
Operating lease expense	$ 5,406	$ 10,955
Variable lease expense (1)	242	393
Total lease expense	$ 5,648	$ 11,348

(1) Represents amounts incurred in excess of the minimum payments required for the handling and unloading of railcars for a certain land lease, offset by railcar lease abatements provided by the lessor when railcars are out of service during periods of maintenance or upgrade.

Supplemental cash flow information related to operating leases is as follows (in thousands):

	Three Months Ended June 30, 2019	Six Months Ended June 30, 2019
Cash paid for amounts included in the measurement of lease liabilities:		
Operating cash flows from operating leases	$ 5,386	$ 10,936
Right-of-use assets obtained in exchange for lease obligations:		
Operating leases	$ 6,207	$ 6,207

Supplemental balance sheet information related to operating leases is as follows:

	June 30, 2019
Weighted average remaining lease term	6.7 years

Weighted average discount rate	5.45%

Aggregate minimum lease payments under the operating lease agreements for the remainder of 2019 and in future years are as follows (in thousands):

Year Ending December 31,		Amount
2019	$	10,143
2020		18,297
2021		10,349
2022		8,324
2023		4,747
Thereafter		22,024
Total		73,884
Less: Present value discount		(13,109)
Lease liabilities	$	60,775

Aggregate minimum lease payments remaining under the operating lease agreements under ASC 840, Leases as of December 31, 2018 are as follows (in thousands):

Year Ending December 31,		Amount
2019	$	23,552
2020		17,473
2021		9,812
2022		7,325
2023		3,594
Thereafter		28,542
Total	$	90,298

Lease Revenue

As described in *Note 2 – Revenue*, the majority of the partnership's segment revenue is generated though their storage and throughput services and rail transportation services agreements with Green Plains Trade and are accounted for as lease revenue. Leasing revenues do not represent revenues recognized from contracts with customers under ASC 606, and are accounted for under ASC 842, *Leases*. Lease revenue associated with agreements with Green Plains Trade are eliminated upon consolidation. The remaining lease revenue is not material to the company.

Refer to *Note 2 – Revenue* for further discussion on lease revenue.

Commodities

As of June 30, 2019, the company had contracted future purchases of grain, corn oil, natural gas, crude oil, ethanol, distillers grains and cattle, valued at approximately $433.9 million.

Legal

The company is currently involved in litigation that has arisen during the ordinary course of business, but does not believe any pending litigation will have a material adverse effect on its financial position, results of operations or cash flows.

14. RELATED PARTY TRANSACTIONS

Effective January 1, 2015, the company entered into two agreements with an entity controlled by Wayne Hoovestol for the lease of two aircrafts. Mr. Hoovestol is chairman of the company's board of directors. The company agreed to pay $9,766 per month for the combined use of up to 125 hours per year of the aircrafts. Flight time in excess of 125 hours per year will incur additional hourly charges. Payments related to these leases totaled $35 thousand and $69 thousand during the three and six months ended June 30, 2019, respectively, and $30 thousand and $87 thousand during the three and six months ended June 30, 2018, respectively. The company had $2 thousand in outstanding payables related to these agreements as of June 30, 2019 and no outstanding payables related to these agreements as of December 31, 2018.

15. SUBSEQUENT EVENTS

On July 19, 2019, the company closed on the issuance of the additional $10.0 million aggregate principal amount of the 4.00% convertible notes due in 2024 under the previously announced private offering which closed on June 21, 2019 (the "Option Notes") to the initial purchasers. The Option Notes resulted in net proceeds to the company, after deducting commissions and the company's offering expenses, of approximately $9.5 million. The company

intends to use the additional proceeds for general corporate purposes. After the issuance of the Option Notes, total aggregate principal of the 4.00% notes was $115.0 million.

The Option Notes will have the same terms as the 4.00% notes issued on June 21, 2019, and will be issued under the same Indenture dated as of June 21, 2019 between the company and Wilmington Trust, National Association, as trustee. For additional information related to the 4.00% notes, see *Note 8 – Debt* included as part of the notes to consolidated financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

General

The following discussion and analysis provides information we believe is relevant to understand our consolidated financial condition and results of operations. This discussion should be read in conjunction with the consolidated financial statements and notes to the consolidated financial statements contained in this report together with our annual report on Form 10-K for the year ended December 31, 2018.

Cautionary Information Regarding Forward-Looking Statements

Forward-looking statements are made in accordance with safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on current expectations that involve a number of risks and uncertainties and do not relate strictly to historical or current facts, but rather to plans and objectives for future operations. These statements may be identified by words such as "anticipate," "believe," "continue," "estimate," "expect," "intend," "outlook," "plan," "predict," "may," "could," "should," "will" and similar expressions, as well as statements regarding future operating or financial performance or guidance, business strategy, environment, key trends and benefits of actual or planned acquisitions.

Factors that could cause actual results to differ from those expressed or implied in the forward-looking statements include, but are not limited to, those discussed in Part I, Item 1A – Risk Factors of our annual report on Form 10-K for the year ended December 31, 2018, or incorporated by reference. Specifically, we may experience fluctuations in future operating results due to a number of economic conditions, including: competition in the ethanol industry and other industries in which we operate; commodity market risks, including those that may result from weather conditions; financial market risks; counterparty risks; risks associated with changes to government policy or regulation, including changes to tax laws; risks related to acquisition and disposition activities and achieving anticipated results; risks associated with merchant trading, cattle feeding operations and other factors detailed in reports filed with the SEC. Additional risks related to Green Plains Partners LP include compliance with commercial contractual obligations, potential tax consequences related to our investment in the partnership and risks disclosed in the partnership's SEC filings associated with the operation of the partnership as a separate, publicly traded entity.

We believe our expectations regarding future events are based on reasonable assumptions; however, these assumptions may not be accurate or account for all risks and uncertainties. Consequently, forward-looking statements are not guaranteed. Actual results may vary materially from those expressed or implied in our forward-looking statements. In addition, we are not obligated and do not intend to update our forward-looking statements as a result of new information unless it is required by applicable securities laws. We caution investors not to place undue reliance on forward-looking statements, which represent management's views as of the date of this report or documents incorporated by reference.

Overview

Green Plains is a diversified commodity-processing business with operations related to ethanol production, grain handling and storage, cattle feedlots, food ingredients, and commodity marketing and logistics services. We are focused on generating stable operating margins through our diversified business segments and risk management strategy. Green Plains Partners LP is our primary downstream logistics provider, storing and delivering the ethanol we produce. We own a 49.1% limited partner interest, a 2.0% general partner interest and all of the partnership's incentive distribution rights. The public owns the remaining 48.9% limited partner interest. The partnership is consolidated in our financial statements.

We are currently undergoing a number of project initiatives to improve margins. Through our Project 24 initiative, we anticipate reductions in operating expense per gallon across our non-ICM plants as a result of these investments. In addition, through our high-protein initiative, we expect to achieve increased margins per gallon as a result of the ability to produce various high protein animal feed products. The first installation is expected to be completed at our Shenandoah plant by the end of 2019, with the remaining locations being completed over the course of the next three years.

Recent Developments

4.00% Convertible Notes due in 2024

On June 21, 2019, we issued $105.0 million of 4.00% convertible senior notes due in 2024, or the 4.00% notes. We used approximately $57.8 million of the net proceeds to repurchase the $56.8 million outstanding principal amount of our 3.25%

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convertible senior notes due October 1, 2019, including accrued and unpaid interest, in privately negotiated transactions concurrently with the offering.

The 4.00% notes are senior, unsecured obligations, with interest payable on January 1 and July 1 of each year, beginning January 1, 2020, at a rate of 4.00% per annum. The initial conversion rate is 64.1540 shares of common stock per $1,000 of principal, which is equal to a conversion price of approximately $15.59 per share. The conversion rate will be subject to adjustment upon the occurrence of certain events. In addition, we may be obligated to increase the conversion rate for any conversion that occurs in connection with certain corporate events, including the calling of the 4.00% notes for

redemption. We may settle the 4.00% notes in cash, common stock or a combination of cash and common stock. At June 30, 2019, the outstanding principal balance was $73.9 million on the 4.00% notes. For additional information related to the 4.00% notes, see *Note 8 – Debt* included as part of the notes to consolidated financial statements.

On July 19, 2019, we closed on the issuance of the additional $10.0 million aggregate principal amount of the 4.00% notes to the initial purchasers. The Option Notes provided us with net proceeds, after deducting commissions and the company's offering expenses, of approximately $9.5 million. The Option Notes have the same terms as the 4.00% notes issued on June 21, 2019, and were issued under the same Indenture dated as of June 21, 2019. After the issuance of the Option Notes, total aggregate principal of the 4.00% notes was $115.0 million.

Extension of Offer Period – JGP Energy Partners

Effective June 30, 2019, we agreed with the partnership to extend the offer period related to the potential purchase of the Green Plains interest in the JGP Energy Partners Beaumont, Texas terminal until September 30, 2019.

Ninth Amendment to Credit Agreement – Green Plains Grain Company LLC

On June 28, 2019, we entered into an amendment of our senior secured asset-based revolving credit facility. This Ninth Amendment to the Credit Agreement was completed to renew and extend the existing maturity date from July 26, 2019 to June 28, 2022 and lowered the senior secured asset-based revolving credit facility from $125.0 million to $100.0 million.

Suspension of Quarterly Cash Dividend

On June 18, 2019, we announced that our board of directors has decided to suspend our quarterly cash dividend in order to retain and redirect cash flow to our Project 24 operating expense equalization plan, the deployment of high-protein technology and our stock repurchase program.

Results of Operations

During the second quarter of 2019, we continued to experience a weak margin environment. Our operating strategy, including the operating cost savings initiative, is to increase utilization rates and efficiency while reducing operating expenses to achieve improved margins in the current environment. As a result, capacity utilization increased from an average of 56.0% of capacity in the first quarter to 80.0% of capacity in the second quarter. Ethanol production was 224.0 mmg for the second quarter of 2019, compared with 296.3 mmg for the same quarter last year. We expect to continue to run at higher average utilization rates to achieve the cost savings anticipated. Additionally, overall performance at our ethanol plants and cattle feeding operations were negatively impacted by severe weather and associated flooding in areas where we transport products during the first half of 2019. The weather also drove corn prices up, negatively impacting margins.

U.S. Ethanol Supply and Demand

According to the EIA, domestic ethanol production averaged 1.05 million barrels per day during the second quarter of 2019, which was 1% higher than the 1.04 million barrels for the second quarter of last year. Refiner and blender input volume increased 1% to 938 thousand barrels per day for the second quarter of 2019, compared with 930 thousand barrels per day for the same quarter last year. Gasoline demand for the first quarter of 2019 increased slightly by 11 thousand barrels per day, or 0.1% compared to the same quarter last year. U.S. domestic ethanol ending stocks increased by approximately 0.9 million barrels, or 4%, to 22.8 million barrels for the second quarter of 2019. At the end of May 2019, the EPA finalized regulatory changes to apply the 1 pound per square inch Reid Vapor Pressure (RVP) waiver that currently applies to E10 during the summer months so that it applies to E15 as well. This removes a significant barrier to wider sales of E15 in the summer months, thus expanding the market for ethanol in transportation fuel. As of July 12, 2019, there were approximately 1,826 retail stations selling E15 in 31 states, up from 1,700 at the beginning of the year, according to Growth Energy.

Global Ethanol Supply and Demand

According to the USDA Foreign Agriculture Service, domestic ethanol exports for the first five months of 2019 were approximately 631.5 mmgy, down 19% from 776.2 mmgy for the same period of 2018. Brazil remained the largest export destination for U.S. ethanol, which accounted for 30% of domestic ethanol export volume despite the 20% tariff on U.S. ethanol imports in excess of 150 million liters, or 39.6 million gallons per quarter, imposed in September 2017 by Brazil's Chamber of Foreign Trade, or CAMEX. Canada, India and South Korea accounted for 18%, 15% and 7%, respectively, of U.S. ethanol exports.

On April 1, 2018, China announced it would add an additional 15% tariff to the existing 30% tariff it had earlier imposed on ethanol imports from the United States and Brazil. China later raised the tariff further to 70% as the trade war escalated. There continues to be negotiations between the U.S. and China with no certainty of when a trade agreement may be reached.

The cost to produce the equivalent amount of starch found in sugar from $3.50-per-bushel corn is 7 cents per pound. The average price of sugar remained at approximately 13 cents per pound during the second quarter of 2019. We currently estimate that net ethanol exports will reach between 1.4 billion gallons and 1.5 billion gallons in 2019 based on historical demand from a variety of countries and certain countries who seek to improve their air quality and eliminate MTBE from their own fuel supplies.

Co-Product Supply and Demand

During the second quarter of 2019, the market sentiment for cattle feeding remained positive on strong forward margins, while worries around feed cost have tempered some expectations due to the late planting of the domestic corn crop. Feeder supplies remain robust as a wet winter and spring have allowed stocker operations to expand. Domestic beef consumption per capita in 2019 is projected to increase 0.4 pounds to 57.6 pounds compared with 2018. Export demand for beef is forecasted to decrease approximately 0.3% in 2019 compared with 2018 according to the USDA.

Cow-calf operations continue to be profitable, which has supported a period of expansion. Excellent pasture conditions after a wet winter and spring will help to promote herd expansion, but supplemental feed cost could be a headwind in the near future. Year-to-date domestic cattle on feed increased 1.6% to 11.74 million head through June 1, 2019, compared to the same period last year.

Packer demand was driven by strong margins during the second quarter of 2019. Total fed cattle marketings through the end of May 2019 increased 0.8% compared with the first five months of 2018. Slaughter capacity constraints, primarily due to labor shortages, have limited the packers' ability to increase slaughter rates at the same pace as cattle on feed inventories, resulting in higher packer margins. However, these higher margins should incentivize the packers to increase slaughter capacity, which will be crucial for cattle feeding margins moving forward.

The U.S. looks poised to grow its global market share for animal protein while Australia continues to struggle with drought conditions, and African Swine Fever ("ASF") issues in China should result in larger world export demand for animal protein from the U.S.

Year-to-date U.S. distillers grains exports through May 31, 2019, were 4.4 million metric tons, or 5.3% lower than the same period last year, according to the USDA Foreign Agriculture Service. Mexico, South Korea, Vietnam, Indonesia, Turkey, Canada and Japan accounted for approximately 69% of total U.S. distillers export volumes.

While ASF may have a positive impact on animal protein demand from the U.S., it may have a negative impact on distillers grains exports and domestic usage. ASF may depress soybean meal demand in China which could make the animal feed more price competitive to distillers grains and allow for substitution of high-protein soybean meal worldwide.

Legislation and Regulation

We are sensitive to government programs and policies that affect the supply and demand for ethanol and other fuels, which in turn may impact the volume of ethanol and other fuels we handle. Various bills have been discussed in the House and Senate which would eliminate the RFS entirely, eliminate the corn based ethanol portion of the mandate, or make it more

difficult to sell fuel blends with higher levels of ethanol. However, we believe it is unlikely any of these bills will be passed in a divided Congress.

Federal mandates supporting the use of renewable fuels are a significant driver of ethanol demand in the U.S. Ethanol policies are influenced by environmental concerns, diversifying our fuel supply, and an interest in reducing the country's dependence on foreign oil. Consumer acceptance of flex-fuel vehicles and higher ethanol blends of ethanol in non-flex-fuel vehicles may be necessary before ethanol can achieve further growth in U.S. market share. Congress first enacted Corporate Average Fuel Economy (CAFE) in 1975 to reduce energy consumption by increasing the fuel economy of cars and light trucks. It provides a 54% efficiency bonus to flexible-fuel vehicles, which can operate on ethanol blends up to E85.

Another important factor is a waiver in the Clean Air Act, known as the One-Pound Waiver, which allows E10 to be sold year-round, even though it exceeds the Reid Vapor Pressure limitation of nine pounds per square inch. At the end of May 2019, the EPA finalized a rule which extended the One-Pound Waiver to E15 expanding it beyond flex-fuel vehicles during the June 1 to September 15 summer driving season. This rule is being challenged in an action filed in Federal District Court for the DC Circuit. However, the One-Pound Waiver is in effect, and E15 is being sold during the summer driving season.

When the RFS II was passed in 2007 and rulemaking finalized in October 2010, the required volume of conventional renewable fuel to be blended with gasoline was to increase each year until it reached 15.0 billion gallons in 2015. In November 2018, the EPA announced it would maintain the 15.0 billion gallon mandate for conventional ethanol in 2019. On July 5, 2019, the EPA released an annual proposal for RFS volumes, which included 15.0 billion gallons for conventional renewable fuel in 2020.

The EPA has the authority to waive the mandates in whole or in part if there is inadequate domestic renewable fuel supply or the requirement severely harms the economy or environment. According to the RFS II, if mandatory renewable fuel volumes are reduced by at least 20% for two consecutive years, the EPA is required to modify, or reset, statutory volumes through 2022. While conventional ethanol maintained 15 billion gallons, 2019 is the second year that the total proposed RVOs are more than 20% below statutory volumes levels. Thus, the EPA Administrator has directed his staff to initiate a reset rulemaking, wherein the EPA will modify statutory volumes through 2022, based on the same factors used to set the RVOs post-2022. These factors include environmental impact, domestic energy security, expected production, infrastructure impact, consumer costs, job creation, price of agricultural commodities, food prices, and rural economic development.

The EPA assigns individual refiners, blenders, and importers the volume of renewable fuels they are obligated to use based on their percentage of total domestic transportation fuel sales. Obligated parties use RINs to show compliance with RFS-mandated volumes. Ethanol producers assign RINs to renewable fuels and the RINs are detached when the renewable fuel is blended with transportation fuel domestically. Market participants can trade the detached RINs 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.

The EPA can, in consultation with the Department of Energy, waive the obligation for individual refineries that are suffering "disproportionate economic hardship" due to compliance with the RFS. To qualify, the refineries must be under total throughput of 75,000 barrels per day and state their case for an exemption in an application to the EPA each year.

The Trump administration waived the obligation for 19 of 20 applicants for compliance year 2016, totaling 790 million gallons, and 35 of 37 for compliance year 2017, totaling 1.82 billion gallons. These waivers effectively reduce the annual RVO by that amount, since the EPA does not reallocate the waived gallons to other obligated parties. The resulting surplus of RINs in the market has brought values down significantly to under $0.20. Since higher RIN values help to make higher blends of ethanol more cost competitive, lower RIN values could hinder or at least slow retailer and consumer adoption of E15 and higher blends. We believe there are 38 waiver applications pending for compliance year 2018, which could represent approximately 2 billion gallons of renewable fuel obligations.

Biofuels groups and biofuels opposition groups each have filed lawsuits related to RFS II. In addition to the E15 litigation discussed previously, biofuels groups have filed in the U.S. Federal District Court for the D.C. Circuit, challenging the 2019 RVO rule over the EPA's failure to address small refinery exemptions in the rulemaking. Biofuel opposition groups have filed also in the DC Circuit, with such action consolidated with similar cases, to review the EPA's 2018 RVO rulemaking. Biofuel groups have filed an action in the DC Circuit to compel EPA to produce information under the Freedom of Information Act related to small refinery exemptions. Certain biofuel groups have further filed suit in the Tenth Circuit Court of Appeals challenging small refinery exemption. Numerous other suits on related RFS II matters are also pending, namely involving RVOs and small refinery exemptions.

In 2017, the D.C. Circuit ruled in favor of biofuel groups against the EPA related to its decision to lower the 2016 volume requirements by 500 million gallons. As a result, the Court remanded to the EPA to make up for the 500 million gallons. Despite this, in the July 2019 proposed RVO rulemaking, the EPA stated it does not intend to make up the 500 million gallons as the court directed, citing potential burden on obligated parties. It is anticipated that litigation will ensue from this matter.

Government actions abroad can significantly impact the demand for U.S. ethanol. In September 2017, China's National Development and Reform Commission, the National Energy Board and 15 other state departments issued a joint plan to expand the use and production of biofuels containing up to 10% ethanol by 2020. China, the number three importer of U.S. ethanol in 2016, imported negligible volumes during fiscal year 2018 due to a 30% tariff on U.S. ethanol, which increased to 70% in early 2018. There is no assurance that China's joint plan will lead to increased imports of U.S. ethanol in the near term. Our exports also face tariffs, rate quotas, countervailing duties, and other hurdles in Brazil, the European Union, India, Peru, and elsewhere, which limits our ability to compete in some markets.

In Brazil, the Secretary of Foreign Trade issued an official written resolution, imposing a 20% tariff on U.S. ethanol imports in excess of 150 million liters, or 39.6 million gallons per quarter in September 2017. The ruling is valid for two years, and is set to expire at the end of August 2019. It remains unclear if Brazil will apply the 20% tariff to all gallons after that date, if they will expand the gallons they allow in duty free, or if they will reduce the tariff for all gallons.

In June 2017, the Energy Regulatory Commission of Mexico (CRE) approved the use of 10% ethanol blends, which was challenged by ten lawsuits. Four cases were dismissed. The six remaining cases follow one of two tracks: 1) to determine the constitutionality of the CRE regulation, or 2) to determine the benefits, or lack thereof, of introducing E10 to Mexico. An injunction was granted in October 2017, preventing the blending and selling of E10, but was overturned by a higher court in June 2018 making it legal to blend and sell E10 by PEMEX throughout Mexico except for its three largest metropolitan areas. U.S. ethanol exports to Mexico totaled 29.4 mmg in 2018.

Comparability of our Financial Results

We report the financial and operating performance for the following four operating segments: (1) ethanol production, which includes the production of ethanol and distillers grains, and recovery of corn oil, (2) agribusiness and energy services, which includes grain handling and storage, commodity marketing and merchant trading for company-produced and third-party ethanol, distillers grains, corn oil, natural gas and other commodities, (3) food and ingredients, which includes cattle feeding and food-grade corn oil operations and included vinegar production until the sale of Fleischmann's Vinegar during the fourth quarter of 2018 and (4) partnership, which includes fuel storage and transportation services.

The three and six months ended June 30, 2019 do not include operations of the Bluffton, Lakota, Hopewell and Riga ethanol plants which were either permanently closed or sold during the fourth quarter of 2018. Additionally, the three and six months ended June 30, 2019 do not include Fleischmann's Vinegar operations, which was also sold in the fourth quarter of 2018.

During the normal course of business, our operating segments do business with each other. For example, our agribusiness and energy services segment procures grain and natural gas and sells products, including ethanol, distillers grains and corn oil of our ethanol production segment. Our partnership segment provides fuel storage and transportation services for our agribusiness and energy services segment. These intersegment activities are treated like third-party transactions with origination, marketing and storage fees charged at estimated market values. Consequently, these transactions affect segment performance; however, they do not impact our consolidated results since the revenues and corresponding costs are eliminated.

Corporate activities include selling, general and administrative expenses, consisting primarily of compensation, professional fees and overhead costs not directly related to a specific operating segment. When we evaluate segment performance, we review the following segment information as well as earnings before interest, income taxes, depreciation and amortization, excluding amortization of operating lease right-of-use assets and amortization of debt issuance costs, or EBITDA.

The company also owns a 90.0% interest in BioProcess Algae, a joint venture formed in 2008. Beginning April 1, 2016, we consolidate the financial results of BioProcess Algae, and record a noncontrolling interest for the economic interest in the joint venture held by others.

As of June 30, 2019, we, together with our subsidiaries, own a 49.1% limited partner interest and a 2.0% general partner interest in the partnership and own all of the partnership's incentive distribution rights, with the remaining 48.9% limited partner interest owned by public common unitholders. We consolidate the financial results of the partnership, and record a noncontrolling interest for the economic interest in the partnership held by the public common unitholders.

Segment Results

The selected operating segment financial information are as follows (in thousands):

	Three Months Ended June 30,		%	Six Months Ended June 30,		%
	2019	**2018**	**Variance**	**2019**	**2018**	**Variance**
Revenues:						
Ethanol production:						
Revenues from external customers	$ 447,438	$ 589,256	(24.1%)	$ 716,154	$ 1,153,019	(37.9%)
Intersegment revenues	3,505	4,219	(16.9)	5,622	6,172	(8.9)
Total segment revenues	450,943	593,475	(24.0)	721,776	1,159,191	(37.7)

Agribusiness and energy services:						
Revenues from external customers	175,837	170,074	3.4	338,632	371,861	(8.9)
Intersegment revenues	9,131	14,128	(35.4)	15,544	25,557	(39.2)
Total segment revenues	184,968	184,202	0.4	354,176	397,418	(10.9)
Food and ingredients:						
Revenues from external customers	270,886	225,887	19.9	479,385	503,996	(4.9)
Intersegment revenues	38	38	0.0	76	80	(5.0)
Total segment revenues	270,924	225,925	19.9	479,461	504,076	(4.9)
Partnership:						
Revenues from external customers	1,692	1,620	4.4	3,997	3,248	23.1
Intersegment revenues	19,133	24,220	(21.0)	37,915	48,477	(21.8)
Total segment revenues	20,825	25,840	(19.4)	41,912	51,725	(19.0)
Revenues including intersegment activity	927,660	1,029,442	(9.9)	1,597,325	2,112,410	(24.4)
Intersegment eliminations	(31,807)	(42,605)	(25.3)	(59,157)	(80,286)	(26.3)
Revenues as reported	$ 895,853	$ 986,837	(9.2%)	$ 1,538,168	$ 2,032,124	(24.3%)

	Three Months Ended June 30,		%	Six Months Ended June 30,		%
	2019	2018	Variance	2019	2018	Variance
Cost of goods sold:						
Ethanol production	$ 483,352	$ 581,613	(16.9%)	$ 776,839	$ 1,146,172	(32.2%)
Agribusiness and energy services	176,214	165,174	6.7	335,840	366,886	(8.5)
Food and ingredients	259,906	206,440	25.9	465,979	466,205	(0.0)
Partnership	-	-	*	-	-	*
Intersegment eliminations	(31,215)	(42,602)	(26.7)	(54,826)	(80,303)	(31.7)
	$ 888,257	$ 910,625	(2.5%)	$ 1,523,832	$ 1,898,960	(19.8%)

	Three Months Ended June 30,		%	Six Months Ended June 30,		%
	2019	2018	Variance	2019	2018	Variance
Operating income (loss):						
Ethanol production	$ (53,885)	$ (17,214)	(213.0%)	$ (98,077)	$ (44,743)	(119.2%)
Agribusiness and energy services	4,341	12,166	(64.3)	9,645	19,230	(49.8)
Food and ingredients	7,260	12,981	(44.1)	5,828	25,566	(77.2)
Partnership	13,156	16,129	(18.4)	25,707	31,489	(18.4)
Intersegment eliminations	(528)	144	*	(4,205)	212	*
Corporate activities	(9,724)	(12,441)	21.8	(18,283)	(23,914)	23.5
	$ (39,380)	$ 11,765	*	$ (79,385)	$ 7,840	*

	Three Months Ended June 30,		%	Six Months Ended June 30,		%
	2019	2018	Variance	2019	2018	Variance
EBITDA:						
Ethanol production	$ (38,737)	$ 3,362	*	$ (67,240)	$ (3,733)	*
Agribusiness and energy services	4,899	12,796	(61.7)	10,761	20,498	(47.5)
Food and ingredients	8,906	19,044	(53.2)	9,163	35,041	(73.9)
Partnership	14,017	17,138	(18.2)	27,788	33,761	(17.7)
Intersegment eliminations	(528)	144	*	(4,205)	212	*
Corporate activities	(8,326)	(10,642)	21.8	(14,705)	(20,817)	29.4
	$ (19,769)	$ 41,842	*	$ (38,438)	$ 64,962	*

* Percentage variance not considered meaningful.

We use EBITDA as a segment measure of profitability to compare the financial performance of our reportable segments and manage those segments. We believe EBITDA is a useful measure to compare our performance against other companies. EBITDA should not be considered an alternative to, or more meaningful than, net income, which is prepared in accordance with GAAP. EBITDA calculations may vary from company to company. Accordingly, our computation of EBITDA may not be comparable with a similarly titled measure of other companies.

The following table reconciles net income (loss) to EBITDA (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2019	2018	2019	2018
Net income (loss)	$ (40,179)	$ 3,751	$ (78,050)	$ (15,704)
Interest expense	15,969	22,021	30,396	44,149
Income tax benefit	(14,653)	(10,753)	(29,113)	(16,780)
Depreciation and amortization [1]	19,094	26,823	38,329	53,297
EBITDA	$ (19,769)	$ 41,842	$ (38,438)	$ 64,962

(1) Excludes the amortization of operating lease right-of-use assets and amortization of debt issuance costs.

Three Months Ended June 30, 2019 Compared with the Three Months Ended June 30, 2018

Consolidated Results

Consolidated revenues decreased $91.0 million for the three months ended June 30, 2019 compared with the same period in 2018 primarily due to the disposition of three ethanol plants and the sale of Fleischmann's Vinegar during the fourth quarter of 2018, offset by increased cattle volumes due to the acquisition of two cattle feed lots in the third quarter of 2018.

Operating income decreased $51.1 million and EBITDA decreased $61.6 million for the three months ended June 30, 2019 compared with the same period last year primarily due to decreased margins on ethanol production as well as the disposition of Fleischmann's Vinegar during the fourth quarter of 2018. Interest expense decreased $6.1 million for the three months ended June 30, 2019, compared with the same period in 2018, primarily due to the repayment of the $500 million senior secured term loan during the fourth quarter of 2018. Income tax benefit was $14.7 million for the three months ended June 30, 2019 compared with $10.8 million for the same period in 2018.

The following discussion provides greater detail about our second quarter segment performance.

Ethanol Production Segment

Key operating data for our ethanol production segment is as follows:

	Three Months Ended June 30,		
	2019	**2018**	**% Variance**
Ethanol sold (thousands of gallons)	224,023	296,282	(24.4)
Distillers grains sold (thousands of equivalent dried tons)	586	739	(20.7)
Corn oil sold (thousands of pounds)	53,040	75,556	(29.8)
Corn consumed (thousands of bushels)	77,963	103,147	(24.4)

Revenues in our ethanol production segment decreased $142.5 million for the three months ended June 30, 2019 compared with the same period in 2018 primarily due to the disposition of three ethanol plants during the fourth quarter of 2018 as well as lower average realized prices for ethanol and distillers grains.

Cost of goods sold for our ethanol production segment decreased $98.3 million for the three months ended June 30, 2019 compared with the same period last year primarily due to the disposition of three ethanol plants. As a result of the factors identified above, operating income decreased $36.7 million and EBITDA decreased $42.1 million for the three months ended June 30, 2019 compared with the same period in 2018. Depreciation and amortization expense for the segment was $15.4 million for the three months ended June 30, 2019 compared with $20.6 million for the same period last year, primarily due to the disposition of three ethanol plants during the fourth quarter of 2018.

Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment increased $0.8 million while operating income decreased by $7.8 million and EBITDA decreased by $7.9 million for the three months ended June 30, 2019 compared with the same period in 2018. The increase in revenues was primarily due to an increase in ethanol and corn oil trading activity, offset by a decrease in distillers grain and grain trading activity and lower average realized prices for ethanol. Operating income and EBITDA decreased primarily as a result of decreased margins.

Food and Ingredients Segment

Revenues in our food and ingredients segment increased $45.0 million for the three months ended June 30, 2019 compared with the same period in 2018. The increase in revenues was primarily due to the Bartlett acquisition which increased the number of cattle volumes sold during the three months ended June 30, 2019 partially offset by the sale of Fleischmann's Vinegar during the fourth quarter of 2018. Cattle head sold for the three months ended June 30, 2019 and 2018 was approximately 164,000 and 118,000, respectively.

Operating income decreased by $5.7 million and EBITDA decreased $10.1 million for the three months ended June 30, 2019 compared with the same period in 2018 primarily due to the sale of Fleischmann's Vinegar during the fourth quarter of 2018 as well as decreased margins in our cattle feeding operations during the second quarter of 2019.

Partnership Segment

Revenues generated by our partnership segment decreased $5.0 million for the June 30, 2019 compared to the same period of 2018, primarily due to lower storage and throughput volumes due to disposition of three ethanol plants during the fourth quarter of 2018 as well as lower revenues generated from rail transportation services due to the assignment of various railcar operating leases as part of the disposition. Operating income decreased $3.0 million and EBITDA decreased $3.1 million for the June 30, 2019 compared with the same period in 2018 primarily due to the factors described above.

Intersegment Eliminations

Intersegment eliminations of revenues decreased by $10.8 million for the three months ended June 30, 2019 compared with the same period in 2018 due to a decrease in storage and throughput fees paid to the partnership segment due to the disposition of the three ethanol plants during the further quarter of 2018 as well as decreased intersegment corn purchases and marketing fees within the agribusiness and energy services segment.

Corporate Activities

Operating income was impacted by a decrease in operating expenses for corporate activities of $2.7 million for the three months ended June 30, 2019 compared with the same period in 2018 primarily as a result of a workforce reduction which occurred as part of our portfolio optimization program in the last half of 2018.

Income Taxes

We recorded income tax benefit of $14.7 million for the three months ended June 30, 2019, compared with $10.8 million for the same period in 2018. The change in income tax benefit was due to a higher loss before income taxes for the three months ended June 30, 2019, and R&D credits recorded during the same period in 2018.

Six Months Ended June 30, 2019 Compared with the Six Months Ended June 30, 2018

Consolidated Results

Consolidated revenues decreased $494.0 million for the six months ended June 30, 2019 compared with the same period in 2018 primarily due to the disposition of three ethanol plants and the sale of Fleischmann's Vinegar during the fourth quarter of 2018 as well as lower production volumes at our remaining plants.

Operating income decreased $87.2 million and EBITDA decreased $103.4 million for the six months ended June 30, 2019 compared with the same period last year primarily due to lower volume and decreased margins on ethanol production and cattle as well as the disposition of Fleischmann's Vinegar during the fourth quarter of 2018. Interest expense decreased $13.8 million for the six months ended June 30, 2019 compared with the same period in 2018, primarily due to the repayment of the $500 million senior secured term loan during the fourth quarter of 2018. Income tax benefit was $29.1 million for the six months ended June 30, 2019 compared with $16.8 million for the same period in 2018.

The following discussion provides greater detail about our year-to-date segment performance.

Ethanol Production Segment

Key operating data for our ethanol production segment is as follows:

	Six Months Ended June 30,		
	2019	**2018**	**% Variance**
Ethanol produced (thousands of gallons)	379,063	576,692	(34.3)
Distillers grains produced (thousands of equivalent dried tons)	984	1,468	(33.0)
Corn oil produced (thousands of pounds)	88,023	144,690	(39.2)
Corn consumed (thousands of bushels)	132,004	200,430	(34.1)

Revenues in our ethanol production segment decreased $437.4 million for the six months ended June 30, 2019 compared with the same period in 2018 primarily due to the disposition of three ethanol plants during the fourth quarter of 2018 as well as lower production volumes of ethanol, distillers grains and corn oil due to the depressed margin environment and lower average realized prices for ethanol and distillers grains.

Cost of goods sold for our ethanol production segment decreased $369.3 million for the six months ended June 30, 2019 compared with the same period last year primarily due to the disposition of three ethanol plants in addition to lower

production volumes. As a result of the factors identified above, operating income decreased $53.3 million and EBITDA decreased $63.5 million for the six

months ended June 30, 2019 compared with the same period in 2018. Depreciation and amortization expense for the segment was $30.8 million for the three months ended March 31, 2019 compared with $41.0 million for the same period last year, primarily due to the disposition of three ethanol plants during the fourth quarter of 2018.

Agribusiness and Energy Services Segment

Revenues in our agribusiness and energy services segment decreased $43.2 million while operating income decreased by $9.6 million and EBITDA decreased by $9.7 million for the six months ended June 30, 2019 compared with the same period in 2018. The decrease in revenues was primarily due to a decrease in ethanol, distillers grain and corn oil production and trading activity, as well as lower average realized prices for ethanol. Operating income and EBITDA decreased primarily as a result of decreased margins.

Food and Ingredients Segment

Revenues in our food and ingredients segment decreased $24.6 million for the six months ended June 30, 2019 compared with the same period in 2018. The decrease in revenues was primarily due to the sale of Fleischmann's Vinegar during the fourth quarter of 2018, partially offset by an increase in cattle volumes sold during the six months ended June 30, 2019. Cattle head sold for the six months ended June 30, 2019 and 2018 was approximately 291,000 and 255,000 respectively.

Operating income decreased by $19.7 million and EBITDA decreased $25.9 million for the six months ended June 30, 2019 compared with the same period in 2018 primarily due to the sale of Fleischmann's Vinegar during the fourth quarter of 2018, as well as overall performance at our cattle feeding operations, which was negatively impacted by severe winter weather and an abnormally negative basis during the first quarter of 2019.

Partnership Segment

Revenues generated by our partnership segment decreased $9.8 million for the six months ended June 30, 2019 compared to the same period of 2018, primarily due to lower storage and throughput volumes due to disposition of three ethanol plants during the fourth quarter of 2018 as well as lower production at our remaining plants and lower revenues generated from rail transportation services due to the assignment of various railcar operating leases as part of the disposition. Operating income decreased $5.8 million and EBITDA decreased $6.0 million for the six months ended June 30, 2019 compared with the same period in 2018 primarily due to the factors described above.

Intersegment Eliminations

Intersegment eliminations of revenues decreased by $21.1 million for the six months ended June 30, 2019 compared with the same period in 2018 due to a decrease in storage and throughput fees paid to the partnership segment as well as decreased intersegment corn purchases and marketing fees within the agribusiness and energy services segment.

Corporate Activities

Operating income was impacted by a decrease in operating expenses for corporate activities of $5.6 million for the six months ended June 30, 2019 compared with the same period in 2018 primarily as a result of a workforce reduction which occurred as part of our portfolio optimization program in the last half of 2018.

Income Taxes

We recorded income tax benefit of $29.1 million for the six months ended June 30, 2019, compared with $16.8 million for the same period in 2018. The change in income tax benefit was due to a higher loss before income taxes for the six months ended June 30, 2019, and R&D credits recorded during the same period in 2018.

Liquidity and Capital Resources

Our principal sources of liquidity include cash generated from operating activities and bank credit facilities. We fund our operating expenses and service debt primarily with operating cash flows. Capital resources for maintenance and growth expenditures are funded by a variety of sources, including cash generated from operating activities, borrowings under bank credit facilities, or issuance of senior notes or equity. Our ability to access capital markets for debt under reasonable terms depends on our financial condition, credit ratings and market conditions. We believe that our ability to obtain financing at

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reasonable rates and history of consistent cash flow from operating activities provide a solid foundation to meet our future liquidity and capital resource requirements.

On June 30, 2019, we had $193.3 million in cash and equivalents, excluding restricted cash, consisting of $133.6 million held at our parent company and the remainder held at our subsidiaries. Additionally, we had $40.6 million in restricted cash at June 30, 2019. We also had $458.8 million available under our committed revolving credit agreements, some of which were subject to restrictions or other lending conditions. Funds at certain subsidiaries are generally required for their ongoing operational needs and restricted from distribution. At June 30, 2019, our subsidiaries had approximately $174.8 million of net assets that were not available to us in the form of dividends, loans or advances due to restrictions contained in their credit facilities.

Net cash used in operating activities was $32.2 million for the six months ended June 30, 2019 compared with net cash provided by operating activities $45.9 million for the same period in 2018. Operating activities compared to the prior year were primarily affected by changes in working capital as well as decreases in operating income when compared to the same period of the prior year. Net cash used in investing activities was $20.3 million for the six months ended June 30, 2019 compared with $11.2 million for the same period in 2018, due primarily to increased capital expenditures at our existing ethanol plants partially offset by cash received from other investing activities in 2018. Net cash used in financing activities was $31.8 million for the six months ended June 30, 2019 compared with $96.2 million for the same period in 2018, with the decrease in cash used resulting from an increase in net borrowings offset by payments for the repurchase of common stock.

Additionally, Green Plains Trade, Green Plains Cattle and Green Plains Grain use revolving credit facilities to finance working capital requirements. We frequently draw from and repay these facilities which results in significant cash movements reflected on a gross basis within financing activities as proceeds from and payments on short-term borrowings.

We incurred capital expenditures of $23.5 million in the first half of 2019 primarily for a high-protein expansion project at one of our ethanol plants, and for various maintenance projects. Capital spending for the remainder of 2019 is expected to be between approximately $55.0 million and $65.0 million for various projects, which are expected to be financed with available borrowings under our credit facilities and cash provided by operating activities.

Our business is highly sensitive to the price of commodities, particularly for corn, ethanol, distillers grains, corn oil, natural gas and cattle. We use derivative financial instruments to reduce the market risk associated with fluctuations in commodity prices. Sudden changes in commodity prices may require cash deposits with brokers for margin calls or significant liquidity with little advanced notice to meet margin calls, depending on our open derivative positions. We continuously monitor our exposure to margin calls and believe we will continue to maintain adequate liquidity to cover margin calls from our operating results and borrowings.

On May 8, 2019, our board of directors declared a quarterly cash dividend of $0.12 per share. The dividend was paid on June 14, 2019, to shareholders of record at the close of business on May 24, 2019. On June 18, 2019, the company announced that its board of directors has decided to suspend its future quarterly cash dividend following the June 14, 2019 dividend payment, in order to retain and redirect cash flow to the company's Project 24 operating expense equalization plan, the deployment of high-protein technology and its stock repurchase program.

For each calendar quarter commencing with the quarter ended September 30, 2015, the partnership agreement requires the partnership to distribute all available cash, as defined, to its partners, including us, within 45 days after the end of each calendar quarter. Available cash generally means all cash and cash equivalents on hand at the end of that quarter less cash reserves established by our general partner plus all or any portion of the cash on hand resulting from working capital borrowings made subsequent to the end of that quarter. On July 18, 2019, the board of directors of the general partner of the partnership declared a cash distribution of $0.475 per unit on outstanding common and subordinated units. The distribution is payable on August 9, 2019, to unitholders of record at the close of business on August 2, 2019.

In August 2014, we announced a share repurchase program of up to $100 million of our common stock. Under the program, we may repurchase shares in open market transactions, privately negotiated transactions, accelerated share buyback programs, tender offers or by other means. The timing and amount of repurchase transactions are determined by our management based on market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time without prior notice. During the three months ended June 30, 2019, we purchased a total of 3,197,277 shares of our common stock for approximately $39.9 million. To date, we have repurchased 4,316,626 of common stock for approximately $59.6 million under the program.

We believe we have sufficient working capital for our existing operations. Furthermore, our liquidity position was improved as a result of the sale of three of our ethanol plants as well as the sale of Fleischmann's Vinegar during the fourth quarter of 2018. The majority of net cash proceeds from the sales, net of fees and taxes, was used to pay off the outstanding term loan balance. A continued sustained period of unprofitable operations, however, may strain our liquidity making it difficult to maintain compliance with our financing arrangements. We may sell additional assets or equity or borrow capital to improve or preserve our liquidity, expand our business or acquire existing businesses. We cannot provide assurance that we will be able to secure funding necessary for additional working capital or these projects at reasonable terms, if at all.

Debt

For additional information related to our debt, see *Note 8 – Debt* included as part of the notes to consolidated financial statements and *Note 12 – Debt* included as part of the notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2018.

We were in compliance with our debt covenants at June 30, 2019. Based on our forecasts, we believe we will maintain compliance at each of our subsidiaries for the next twelve months or have sufficient liquidity available on a consolidated basis to resolve noncompliance. We cannot provide assurance that actual results will approximate our forecasts or that we will inject the necessary capital into a subsidiary to maintain compliance with its respective covenants. In the event a subsidiary is unable to comply with its debt covenants, the subsidiary's lenders may determine that an event of default has occurred, and following notice, the lenders may terminate the commitment and declare the unpaid balance due and payable.

As outlined in *Note 8 - Debt*, we use LIBOR as a reference rate for certain revolving credit facilities. LIBOR is currently set to be phased out at the end of 2021. At this time, it is not possible to predict the effect of this change or the alternative reference rate to be used. We will need to renegotiate certain credit facilities to determine the interest rate to replace LIBOR with the new standard that is established. As such, the potential effect of any such event on interest expense cannot yet be determined.

Corporate Activities

On June 21, 2019, we issued $105.0 million of 4.00% convertible senior notes due in 2024, or the 4.00% notes. We used approximately $57.8 million of the net proceeds to repurchase the outstanding $56.8 million outstanding principal amount of our 3.25% convertible senior notes due October 1, 2019, including accrued and unpaid interest, in privately negotiated transactions concurrently with this offering. We used approximately $39.9 million of the net proceeds from the offering to repurchase approximately 3.2 million shares of common stock concurrently with the offering in privately negotiated transactions. The remaining proceeds will be used for general corporate purposes.

The 4.00% notes are senior, unsecured obligations, with interest payable on January 1 and July 1 of each year, beginning January 1, 2020, at a rate of 4.00% per annum. The initial conversion rate will be 64.1540 shares of our common stock per $1,000 principal amount of the 4.00% notes, which is equivalent to an initial conversion price of approximately $15.59 per share of our common stock. The conversion rate will be subject to adjustment upon the occurrence of certain events. In addition, we may be obligated to increase the conversion rate for any conversion that occurs in connection with certain corporate events, including our calling the 4.00% notes for redemption. We may settle the 4.00% notes in cash, common stock or a combination of cash and common stock. At June 30, 2019, the outstanding principal balance was $73.9 million on the 4.00% notes.

On July 19, 2019, we closed on the issuance of the additional $10.0 million aggregate principal amount of the 4.00% notes to the initial purchasers. The Option Notes provided us with net proceeds, after deducting commissions and our offering expenses, of approximately $9.5 million. The Option Notes will have the same terms as the 4.00% notes issued on June 21, 2019, and will be issued under the same Indenture dated as of June 21, 2019. After the issuance of the Option Notes, total aggregate principal of the 4.00% notes was $115.0 million.

In August 2016, we issued $170.0 million of 4.125% convertible senior notes due in 2022, or 4.125% notes, which are senior, unsecured obligations

with interest payable on March 1 and September 1 of each year. Prior to March 1, 2022, the 4.125% notes are not convertible unless certain conditions are satisfied. The initial conversion rate is 35.7143 shares of common stock per $1,000 of principal which is equal to a conversion price of approximately $28.00 per share. The conversion rate is subject to adjustment upon the occurrence of certain events, including when the quarterly cash dividend exceeds $0.12 per share. We may settle the 4.125% notes in cash, common stock or a combination of cash and common stock. At June 30, 2019, the outstanding principal balance was $145.9 million on the 4.125% notes.

Ethanol Production Segment

We have small equipment financing loans, finance leases on equipment or facilities, and other forms of debt financing.

Agribusiness and Energy Services Segment

Green Plains Grain has a $100.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral, which matures in June of 2022. This facility can be increased by up to $75.0 million with agent approval and up to $50.0 million for seasonal borrowings. Total commitments outstanding under the facility cannot exceed $225.0 million. On June 28, 2019, the company amended the credit facility to extend the existing maturity date from July 26, 2019 to June 28, 2022 and lower the maximum commitment from $125.0 million to $100.0 million. At June 30, 2019, the outstanding principal balance was $42.0 million on the facility and the interest rate was 6.76%.

Green Plains Grain has entered into short-term inventory financing agreements with a financial institution. The company has accounted for the agreements as short-term notes, rather than sales, and has elected the fair value option to offset fluctuations in market prices of the inventory. The company had no short-term notes payable related to these inventory financing agreements as of June 30, 2019.

Green Plains Trade has a $300.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral, which matures in July of 2022. This facility can be increased by up to $70.0 million with agent approval. Advances are subject to variable interest rates equal to a daily LIBOR rate plus 2.25% or the base rate plus 1.25%. The unused portion of the credit facility is also subject to a commitment fee of 0.375% per annum. At June 30, 2019, the outstanding principal balance was $132.3 million on the facility and the interest rate was 4.69%.

Green Plains Commodity Management has an uncommitted $20.0 million revolving credit facility which matures April 30, 2023 to finance margins related to its hedging programs. Advances are subject to variable interest rates equal to LIBOR plus 1.75%. At June 30, 2019, the outstanding principal balance was $14.5 million on the facility and the interest rate was 4.12%.

Food and Ingredients Segment

Green Plains Cattle has a $500.0 million senior secured asset-based revolving credit facility to finance working capital up to the maximum commitment based on eligible collateral, which matures in April of 2020. This facility can be increased by up to $100.0 million with agent approval and includes a swing-line sublimit of $20.0 million. At June 30, 2019, the outstanding principal balance was $334.7 million on the facility and our interest rate was 4.91%.

Advances under the revolving credit facility are subject to variable interest rates equal to LIBOR plus 2.0% to 3.0% or the base rate plus 1.0% to 2.0%, depending on the preceding three months' excess borrowing availability. The unused portion of the credit facility is also subject to a commitment fee of 0.20% to 0.30% per annum, depending on the preceding three months' excess borrowing availability. Interest is payable as required, but not less than quarterly in arrears and principal is due upon maturity.

Partnership Segment

Green Plains Partners, through a wholly owned subsidiary, has a $200.0 million revolving credit facility, which matures on July 1, 2020, to fund working capital, acquisitions, distributions, capital expenditures and other general partnership purposes. The credit facility can be increased by an additional $20.0 million without the consent of the lenders. At June 30, 2019, the outstanding principal balance of the facility was $132.2 million and our interest rate was 5.41%.

Contractual Obligations

Contractual obligations as of June 30, 2019, were as follows (in thousands):

	Payments Due By Period				
Contractual Obligations	**Total**	**Less Than 1 Year**	**1-3 Years**	**3-5 Years**	**More Than 5 Years**
Long-term and short-term debt obligations [1]	$ 956,081	$ 524,754	$ 134,285	$ 171,997	$ 125,045
Interest and fees on debt obligations [2]	90,326	45,965	24,776	11,820	7,765
Operating lease obligations [3]	73,884	19,224	23,495	10,675	20,490
Other	20,799	2,849	7,251	2,351	8,348
Purchase obligations:					

Forward grain purchase contracts [4]	291,754	288,150	2,187	1,417	-
Other commodity purchase contracts [5]	142,160	132,752	8,348	1,060	-
Other	41	41	-	-	-
Total contractual obligations	$ 1,575,045	$ 1,013,735	$ 200,342	$ 199,320	$ 161,648

(1) Includes the current portion of long-term debt and future finance lease obligations and excludes the effect of any debt discounts and issuance costs.
(2) Interest amounts are calculated over the terms of the loans using current interest rates, assuming scheduled principal and interest amounts are paid pursuant to the debt agreements. Includes administrative and/or commitment fees on debt obligations.
(3) Operating lease costs are primarily for railcars and office space.
(4) Purchase contracts represent index-priced and fixed-price contracts. Index purchase contracts are valued at current quarter-end prices.
(5) Includes fixed-price ethanol, dried distillers grains and natural gas purchase contracts.

Critical Accounting Policies and Estimates

Key accounting policies, including those relating to revenue recognition, depreciation of property and equipment, carrying value of intangible assets, impairment of long-lived assets and goodwill, derivative financial instruments, and accounting for income taxes, are impacted significantly by judgments, assumptions and estimates used in the preparation of the consolidated financial statements. Information about our critical accounting policies and estimates are included in our annual report on Form 10-K for the year ended December 31, 2018.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We use various financial instruments to manage and reduce our exposure to various market risks, including changes in commodity prices and interest rates. We conduct all of our business in U.S. dollars and are not currently exposed to foreign currency risk.

Interest Rate Risk

We are exposed to interest rate risk through our loans which bear interest at variable rates. Interest rates on our variable-rate debt are based on the market rate for the lender's prime rate or LIBOR. A 10% increase in interest rates would affect our interest cost by approximately $3.3 million per year. At June 30, 2019, we had $895.6 million in debt, $655.7 million of which had variable interest rates.

For additional information related to our debt, see *Note 8 – Debt* included as part of the notes to consolidated financial statements and *Note 12 – Debt* included as part of the notes to consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2018.

Commodity Price Risk

Our business is highly sensitive to commodity price risk, particularly for ethanol, corn, distillers grains, corn oil, natural gas, and cattle. Ethanol prices are sensitive to world crude oil supply and demand, the price of crude oil, gasoline and corn,

the price of substitute fuels, refining capacity and utilization, government regulation and consumer demand for alternative fuels. Corn prices are affected by weather conditions, yield, changes in domestic and global supply and demand, and government programs and policies. Distillers grains prices are impacted by livestock numbers on feed, prices for feed alternatives and supply, which is associated with ethanol plant production. 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 energy exploration and production, and the amount of natural gas in underground storage during injection and withdrawal seasons. Cattle prices are impacted by weather conditions, overall economic conditions and government regulations and packer processing disruptions.

To reduce the risk associated with fluctuations in the price of ethanol, corn, distillers grains, corn oil, natural gas and cattle, at times we use forward fixed-price physical contracts and derivative financial instruments, such as futures and options executed on the Chicago Board of Trade, the New York Mercantile Exchange and the Chicago Mercantile Exchange. We focus on locking in favorable operating margins, when available, using a model that continually monitors market prices for corn, natural gas and other inputs relative to the price for ethanol and distillers grains at each of our production facilities. We create offsetting positions using a combination of forward fixed-price purchases, sales contracts and derivative financial instruments. As a result, we frequently have gains on derivative financial instruments that are offset by losses on forward fixed-price physical contracts or inventories and vice versa. Our results are impacted by a mismatch of gains or losses associated with the derivative instrument during a reporting period when the physical commodity purchases or sale has not yet occurred. During the three and six months ended June 30, 2019, revenues included net losses of $11.7 million and $40.4 million, respectively, and cost of goods sold included net losses of $8.5 million and $4.7 million, respectively, associated with derivative financial instruments.

Ethanol Production Segment

In the ethanol production segment, net gains and losses from settled derivative instruments are offset by physical commodity purchases or sales to achieve the intended operating margins. To reduce commodity price risk caused by market fluctuations, we enter into exchange-traded futures and options contracts that serve as economic hedges.

Our exposure to market risk, which includes the impact of our risk management activities resulting from our fixed-price purchase and sale contracts and derivatives, is based on the estimated net income effect resulting from a hypothetical 10% change in price for the next 12 months starting on June 30, 2019, which is as follows (in thousands):

Commodity	Estimated Total Volume Requirements for the Next 12 Months (1)	Unit of Measure	Net Income Effect of Approximate 10% Change in Price
Ethanol	1,123,000	Gallons	$ 129,109

Corn	387,000	Bushels	$	129,632
Distillers grains	2,900	Tons (2)	$	29,573
Corn oil	292,000	Pounds	$	5,117
Natural gas	31,200	MmBTU	$	4,341

(1) Estimated volumes assume production at full capacity.
(2) Distillers grains quantities are stated on an equivalent dried ton basis.

Agribusiness and Energy Services Segment

In the agribusiness and energy services segment, our inventories, physical purchase and sale contracts and derivatives are marked to market. To reduce commodity price risk caused by market fluctuations for purchase and sale commitments of grain and grain held in inventory, we enter into exchange-traded futures and options contracts that serve as economic hedges.

The market value of exchange-traded futures and options used for hedging are highly correlated with the underlying market value of grain inventories and related purchase and sale contracts for grain. The less correlated portion of inventory and purchase and sale contract market values, known as basis, is much less volatile than the overall market value of exchange-traded futures and tends to follow historical patterns. We manage this less volatile risk by constantly monitoring our position relative to the price changes in the market. Inventory values are affected by the month-to-month spread in the futures markets. These spreads are also less volatile than overall market value of our inventory and tend to follow historical patterns, but cannot be mitigated directly. Our accounting policy for futures and options, as well as the underlying inventory

held for sale and purchase and sale contracts, is to reflect their current market values and include gains and losses in the consolidated statement of operations.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position was approximately $0.7 million for grain at June 30, 2019. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately $50 thousand.

Food and Ingredients Segment

In the food and ingredients segment, our physical cattle purchase and sale contracts and derivatives are marked to market. To reduce commodity price risk caused by market fluctuations for purchase and sale commitments of cattle, we enter into exchange-traded futures and options contracts that serve as hedges.

The market value of exchange-traded futures and options used for hedging are highly correlated with the underlying market value of purchase and sale contracts for cattle. The less correlated portion of inventory and purchase and sale contract market values, known as basis, is much less volatile than the overall market value of exchange-traded futures and tends to follow historical patterns. We manage this less volatile risk by constantly monitoring our position relative to the price changes in the market. Inventory values are affected by the month-to-month spread in the futures markets. These spreads are also less volatile than overall market value of our inventory and tend to follow historical patterns, but cannot be mitigated directly. Our accounting policy for futures and options, as well as the underlying inventory held for sale and purchase and sale contracts, is to reflect their current market values and include gains and losses in the consolidated statement of operations.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position was approximately $6.7 million for cattle at June 30, 2019. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately $0.5 million.

Our daily net commodity position consists of inventories related to purchase and sale contracts and exchange-traded contracts. The fair value of our position was approximately $13.3 million for grain and other cattle feed at June 30, 2019. Our market risk at that date, based on the estimated net income effect resulting from a hypothetical 10% change in price, was approximately $1.0 million.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures designed to ensure information that must be disclosed in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, as appropriate, to allow timely decisions regarding required financial disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

Under the supervision and participation of our chief executive officer and chief financial officer, management carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of June 30, 2019, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act and concluded that our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

Management is responsible for establishing and maintaining effective internal control over financial reporting to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our consolidated financial statements for external purposes in accordance with U.S. generally accepted accounting principles. There were no material changes in our internal control over financial reporting that occurred during the period covered by this report that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings.

We are currently involved in litigation that has arisen during the ordinary course of business. We do not believe this litigation will have a material adverse effect on our financial position, results of operations or cash flows.

Item 1A. Risk Factors.

Investors should carefully consider the discussion of risks and the other information in our annual report on Form 10-K for the year ended December 31, 2018, in Part I, Item 1A, "Risk Factors," and the discussion of risks and other information in Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations," under "Cautionary Information Regarding Forward-Looking Statements," of this report. Investors should also carefully consider the discussion of risks with the partnership under the heading "Risk Factors" and other information in their annual report on Form 10-K for the year ended December 31, 2018. Although we have attempted to discuss key factors, our investors need to be aware that other risks may prove to be important in the future. New risks may emerge at any time and we cannot predict such risks or estimate the extent to which they may affect our financial performance. The following risk factors supplement and/or updates risk factors previously disclosed and should be considered in conjunction with the other information included in, or incorporated by reference in, this quarterly report on Form 10-Q.

Our risk management and commodity trading strategies could be ineffective and expose us to decreased liquidity.

As market conditions warrant, we use forward contracts to sell some of our ethanol, distillers grains, corn oil, and live cattle or buy some of the corn, natural gas, or feeder cattle we need to partially offset commodity price volatility. We also engage in other hedging transactions and other commodity trading involving exchange-traded futures contracts for corn, natural gas, cattle and ethanol and other agricultural commodities. The financial impact of these activities depends on the price of the commodities involved and/or our ability to physically receive or deliver the commodities.

Hedging arrangements expose us to risk of financial loss when the counterparty defaults on its contract or, in the case of exchange-traded contracts, when the expected differential between the price of the underlying and physical commodity changes. Hedging activities can result in losses when a position is purchased in a declining market or sold in a rising market. Hedging losses may be offset by a decreased cash price for corn, natural gas and feeder cattle and an increased cash price for ethanol, distillers grains, live cattle and corn oil. We vary the amount of hedging and other risk mitigation strategies we undertake and sometimes choose not to engage in hedging transactions at all. We cannot provide assurance that our risk management and commodity trading strategies and decisions will be profitable or effectively offset commodity price volatility. If they are not our results of operations and financial position may be adversely affected.

The use of derivative financial instruments frequently involves cash deposits with brokers, or margin calls. Sudden changes in commodity prices may require additional cash deposits immediately. Depending on our open derivative positions, we may need additional liquidity with little advance notice to cover margin calls. While we continuously monitor our exposure to margin calls, we cannot guarantee we will be able to maintain adequate liquidity to cover margin calls in the future.

The interest rates under our revolving credit facility may be impacted by the phase-out of LIBOR.

LIBOR is the basic rate of interest widely used as a reference for setting the interest rates on loans globally. We use LIBOR as a reference rate for our revolving credit facilities. In 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. It is unclear if LIBOR will cease to exist at that time or if new methods of calculating LIBOR will be established such that it continues to exist after 2021. The U.S. Federal Reserve, in conjunction with the Alternative Reference Rates Committee, a steering committee comprised of large U.S. financial institutions, is considering replacing U.S. dollar LIBOR with a new index, the Secured Overnight Financing Rate ("SOFR"), calculated using short-term repurchase agreements backed by Treasury securities. We are evaluating the potential impact of the eventual replacement of the LIBOR benchmark interest rate, however, we are not able to predict whether LIBOR will cease to be available after 2021, whether SOFR will become a widely accepted benchmark in place of LIBOR, or what the impact of such a possible transition to SOFR may be on our business, financial condition, and results of operations.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds.

Employees surrender shares when restricted stock grants are vested to satisfy statutory minimum required payroll tax withholding obligations.

The following table lists the shares that were surrendered during the second quarter of 2019:

Period	Total Number of Shares Withheld for Employee Awards	Average Price Paid per Share
April 1 - April 30	-	$ -
May 1 - May 31	6,750	16.17
June 1 - June 30	-	-
Total	6,750	$ 16.17

In August 2014, we announced a share repurchase program of up to $100 million of our common stock. Under this program, we may repurchase shares in open market transactions, privately negotiated transactions, accelerated buyback programs, tender offers or by other means. The timing and amount of the transactions are determined by management based on its evaluation of market conditions, share price, legal requirements and other factors. The program may be suspended, modified or discontinued at any time, without prior notice.

The following table lists the shares repurchased under the share repurchase program during the second quarter of 2019.

Period	Number of Shares Repurchased	Average Price Paid per Share	Total Number of Shares Repurchased as Part of Repurchase Program	Approximate Dollar Value of Shares that may yet be Repurchased under the Program (in thousands)
April 1 - April 30	-	$ -	1,119,349	$ 80,290
May 1 - May 31	-	-	1,119,349	80,290
June 1 - June 30	3,197,277	12.47	4,316,626	40,420
Total	3,197,277	$ 12.47	4,316,626	$ 40,420

Since inception, the company has repurchased 4,316,626 shares of common stock for approximately $59.6 million under the program.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Index

Exhibit No.	Description of Exhibit
4.1	Indenture relating to the 4.00% Convertible Senior Notes due 2024, dated as of June 21, 2019, between Green Plains Inc. and Wilmington Trust, National Association, including the form of Global Note attached as Exhibit A thereto. (incorporated herein by reference to Exhibit 4.1 of the company's Current Report on Form 8-K filed on June 21, 2019)
10.1	Consent to Credit Agreement, dated July 15, 2019, by and among Green Plains Operating Company LLC and Bank of America, as Administrative Agent
10.2	Ninth Amendment to Credit Agreement, dated as of June 28, 2019, among Green Plains Grain Company LLC and BNP Paribas, as Administrative Agent, and the lenders party to the Credit Agreement (incorporated herein by reference to Exhibit 10.1 of the company's Current Report on Form 8-K filed on July 1, 2019)
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following information from Green Plains Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2019, formatted in Inline Extensible Business Reporting Language (iXBRL): i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Cash Flows, and (v) the Notes to Consolidated Financial Statements
104	The cover page from Green Plains Inc.'s Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2019, formatted in iXBRL.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

GREEN PLAINS INC.
(Registrant)

Date: August 6, 2019

By: */s/ Todd A. Becker*
Todd A. Becker
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 6, 2019

By: */s/ G. Patrich Simpkins Jr.*
G. Patrich Simpkins Jr.
Chief Financial Officer
(Principal Financial Officer)

Exhibit 10.1

July 15, 2019

Green Plains Operating Company LLC
1811 Aksarben Drive
Omaha, NE 68106

Re:

Consent re that certain Credit Agreement (as amended, restated or modified from time to time), dated as of July 1, 2015, among Green Plains Operating Company LLC (the "Borrower"), the guarantors party thereto, the lenders party thereto (the "Lenders") and Bank of America, N.A., as administrative agent (the "Administrative Agent")

Ladies and Gentlemen:

Reference is hereby made to the Credit Agreement described above. Capitalized terms used herein without definition shall have the meanings ascribed to such terms in the Credit Agreement.

The Borrower has requested that the Administrative Agent and the Required Lenders consent to an exception to the definition of "Portfolio Optimization Dispositions" in Section 1.01 of the Credit Agreement to permit the Loan Parties to sell up to seven ethanol storage terminals (and related assets) subject to the requirements and conditions applicable to Permitted Optimization Dispositions (the "Permitted Ethanol Sales"). Notwithstanding any provisions of the Credit Agreement to the contrary, the Administrative Agent and the Required Lenders hereby consent to the Permitted Ethanol Sales. The consent contained herein is a one-time consent and is expressly limited to the purposes and matters set forth herein. Nothing contained herein shall constitute a waiver or modification of any other rights or remedies the Administrative Agent or any Lender may have under any Loan Document or applicable Law. The Credit Agreement shall remain in full force and effect according to its terms (as modified by this letter).

This letter may be executed by the parties hereto in several counterparts, each of which shall be deemed to be an original and all of which shall constitute together but one and the same agreement. Delivery of an executed counterpart by facsimile or other secure electronic format (.pdf) shall be as effective as an original. This letter shall become effective upon (a) the Administrative Agent's receipt of counterparts hereof duly executed by the Required Lenders and the Loan Parties and (b) the Administrative Agent's receipt, for itself and for account of the Lenders executing this letter, of any fees and expenses required to be paid in connection with this letter. This letter is a Loan Document.

THE TERMS OF SECTIONS 11.14 AND 11.15 OF THE CREDIT AGREEMENT ARE INCORPORATED HEREIN BY REFERENCE, *MUTATIS MUTANDIS*.

[signature pages follow]

IN WITNESS WHEREOF, the parties hereto have caused this letter to be duly executed and delivered by their duly authorized officers as of the date first set forth above.

BORROWER:

GREEN PLAINS OPERATING COMPANY LLC,
a Delaware limited liability company
By: /s/ Phil Boggs
Name: Phil Boggs
Title: S V P , Finance & Treasurer

GUARANTORS:

GREEN PLAINS PARTNERS LP,
a Delaware limited liability company
By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

BBTL, LLC,
a Delaware limited liability company
By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

BIRMINGHAM BIOENERGY PARTNERS, LLC,
a Texas limited liability company
By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

BLENDSTAR LLC,
a Texas limited liability company
By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

BOSSIER CITY BIOENERGY PARTNERS, LLC,

a Texas limited liability company
By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

COLLINS BIOENERGY PARTNERS, LLC,
a Texas limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

GREEN PLAINS CAPITAL COMPANY LLC,
a Delaware limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

GREEN PLAINS ETHANOL STORAGE LLC,
a Delaware limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

GREEN PLAINS LOGISTICS LLC,
a Delaware limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

GREEN PLAINS TRUCKING II LLC,
a Delaware limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

LITTLE ROCK BIOENERGY PARTNERS LLC,
a Texas limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

LOUISVILLE BIOENERGY PARTNERS, LLC,
a Texas limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

NASHVILLE BIOENERGY PARTNERS, LLC,
a Texas limited liability company

By: /s/ Phil Boggs
Name: Phil Boggs
Title: SVP, Finance & Treasurer

OKLAHOMA CITY BIOENERGY PARTNERS, LLC
a Texas limited liability company

By: /s/ Phil Boggs

Name: Phil Boggs

Title: SVP, Finance & Treasurer

ADMINISTRATIVE AGENT:

BANK OF AMERICA, N.A.,
as Administrative Agent

By: /s/ Linda Lov

Name: Linda Lov

Title: Assistant Vice President

LENDERS:

BANK OF AMERICA, N.A.,
as a Lender, L/C Issuer
and Swing Line Lender,

By: /s/ Alok Jain
Name: Alok Jain
Title: Senior Vice President

LENDERS:

BARCLAYS BANK PLC, as a Lender

By: ____________________

Name: ____________________

Title: ____________________

LENDERS:

BANKERS TRUST COMPANY, as a Lender

By: /s/ Scott Leighton

Name: Scott Leighton

Title: Vice President

LENDERS:

ROYAL BANK OF CANADA, as a Lender

By: /s/ Katy Berkemeyer

Name: Katy Berkemeyer

Title: Authorized Signatory

LENDERS:

FARM CREDIT SERVICES OF AMERICA, FLCA, as a Lender

By: /s/ Brian Frevert

Name: Brian Frevert

Title: Vice President

LENDERS:

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, as a Lender

By: /s/ William O'Daly
Name: William O'Daly
Title: Authorized Signatory

By: /s/ Brady Bingham
Name: Brady Bingham
Title: Authorized Signatory

LENDERS:

DEUTSCHE BANK AG NEW YORK BRANCH,
as a Lender

By: /s/ Shai Bandner
Name: Shai Bandner
Title: Director

DEUTSCHE BANK AG NEW YORK BRANCH,
as a Lender

By: /s/ My Nguyen
Name: My Nguyen
Title: Analyst

Exhibit 31.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a) AND SECTION 302 OF THE SARBANES OXLEY ACT OF 2002

I, Todd A. Becker, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Green Plains Inc.;

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 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; and

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 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: August 6, 2019

/s/ Todd A. Becker
Todd A. Becker
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a) AND SECTION 302 OF THE SARBANES OXLEY ACT OF 2002

I, G. Patrich Simpkins Jr., certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Green Plains Inc.;

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 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; and

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 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: August 6, 2019

/s/ G. Patrich Simpkins Jr.
G. Patrich Simpkins Jr.
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER 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 Quarterly Report of Green Plains Inc. (the "company") on Form 10-Q for the fiscal quarter ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Todd A. Becker, President and 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 to my knowledge:

1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: August 6, 2019

/s/ Todd A. Becker
Todd A. Becker
President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER 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 Quarterly Report of Green Plains Inc. (the "company") on Form 10-Q for the fiscal quarter ended June 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, G. Patrich Simpkins Jr., 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 to my knowledge:

1) The Report fully complies with the requirements of Sections 13(a) or 15(d) of the Securities Exchange Act of 1934; 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: August 6, 2019

/s/ G. Patrich Simpkins Jr.
G. Patrich Simpkins Jr.
Chief Financial Officer