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

FORM 10-Q

(Mark One)
☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended **March 31, 2023**

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ______ to _______

Commission File Number: **000-21467**

ALTO INGREDIENTS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**41-2170618**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1300 South Second Street, Pekin, Illinois	**61554**
(Address of principal executive offices)	(zip code)

(916) 403-2123
(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 Exchange on Which Registered
Common Stock, $0.001 par value	ALTO	The Nasdaq Stock Market LLC (Nasdaq Capital Market)

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 ☒

As of May 8, 2023, there were 76,105,690 shares of Alto Ingredients, Inc. common stock, $0.001 par value per share, and 896 shares of Alto Ingredients, Inc. non-voting common stock, $0.001 par value per share, outstanding.

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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS.

ALTO INGREDIENTS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands)

	March 31, 2023 (unaudited)	December 31, 2022 *
ASSETS		
Current Assets:		
Cash and cash equivalents	$ 21,173	$ 36,456
Restricted cash	5,263	13,069
Accounts receivable (net of allowance for credit losses of $66 and $105, respectively)	66,537	68,655
Inventories	67,147	66,628
Derivative instruments	6,267	4,973
Other current assets	5,217	9,340
Total current assets	171,604	199,121
Property and equipment, net	244,172	239,069
Other Assets:		
Right of use operating lease assets, net	23,046	18,937
Intangible assets, net	8,940	9,087
Goodwill	5,970	5,970
Other assets	6,172	6,137
Total other assets	44,128	40,131
Total Assets	$ 459,904	$ 478,321

* Amounts derived from the audited financial statements for the year ended December 31, 2022.

See accompanying notes to consolidated financial statements.

ALTO INGREDIENTS, INC.
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(in thousands, except par value)

LIABILITIES AND STOCKHOLDERS' EQUITY	March 31, 2023 (unaudited)	December 31, 2022 *
Current Liabilities:		
Accounts payable	$ 24,406	$ 28,115
Accrued liabilities	17,334	26,556
Current portion – operating leases	3,856	3,849
Derivative instruments	2,100	6,732
Other current liabilities	6,150	12,765
Total current liabilities	53,846	78,017
Long-term debt	83,739	68,356
Operating leases, net of current portion	19,678	15,062
Other liabilities	8,966	8,797
Total Liabilities	166,229	170,232
Commitments and Contingencies (Note 6)		
Stockholders' Equity:		
Preferred stock, $0.001 par value; 10,000 shares authorized; Series A: 1,684 shares authorized; no shares issued and outstanding as of March 31, 2023 and December 31, 2022; Series B: 1,581 shares authorized; 927 shares issued and outstanding as of March 31, 2023 and December 31, 2022; liquidation preference of $18,075 as of March 31, 2023	1	1
Common stock, $0.001 par value; 300,000 shares authorized; 76,187 and 75,154 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	76	75
Non-voting common stock, $0.001 par value; 3,553 shares authorized; 1 share issued and outstanding as of March 31, 2023 and December 31, 2022	—	—
Additional paid-in capital	1,039,897	1,040,834
Accumulated other comprehensive income	1,822	1,822
Accumulated deficit	(748,121)	(734,643)
Total Stockholders' Equity	293,675	308,089
Total Liabilities and Stockholders' Equity	$ 459,904	$ 478,321

* Amounts derived from the audited financial statements for the year ended December 31, 2022.

See accompanying notes to consolidated financial statements.

ALTO INGREDIENTS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited, in thousands, except per share data)

	Three Months Ended March 31,	
	2023	**2022**
Net sales	$ 313,891	$ 308,118
Cost of goods sold	317,055	303,345
Gross profit (loss)	(3,164)	4,773
Selling, general and administrative expenses	(7,882)	(7,629)
Asset impairments	(574)	—
Loss from operations	(11,620)	(2,856)
Interest expense, net	(1,565)	(200)
Other income, net	19	454
Loss before provision for income taxes	(13,166)	(2,602)
Provision for income taxes	—	—
Net loss	$ (13,166)	$ (2,602)
Preferred stock dividends	$ (312)	$ (312)
Net loss available to common stockholders	$ (13,478)	$ (2,914)
Net loss per share, basic and diluted	$ (0.18)	$ (0.04)
Weighted-average shares outstanding, basic	73,815	71,390
Weighted-average shares outstanding, diluted	73,815	71,390

See accompanying notes to consolidated financial statements.

ALTO INGREDIENTS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited, in thousands)

	Three Months Ended March 31,	
	2023	**2022**
Operating Activities:		
Net loss	$ (13,166)	$ (2,602)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization of intangibles	6,055	6,134
Losses (gains) on derivative instruments	1,777	(5,316)
Non-cash compensation	752	673
Asset impairments	574	—
Amortization of deferred financing fees	235	6
Amortization of debt discount	198	—
Bad debt expense (recovery)	(39)	31
Changes in operating assets and liabilities, net of business acquisition:		
Accounts receivable	2,157	11,775
Inventories	(519)	(2,773)
Other assets	4,027	14,119
Operating leases	(1,226)	(1,257)
Accounts payable and accrued liabilities	(24,172)	(9,726)
Net cash provided by (used in) operating activities	(23,347)	11,064
Investing Activities:		
Additions to property and equipment	(9,602)	(2,334)
Deferred purchase price payments for Eagle Alcohol	(3,500)	—
Purchase of Eagle Alcohol, net of cash acquired	—	(14,655)
Net cash used in investing activities	(13,102)	(16,989)
Financing Activities:		
Net proceeds from Kinergy's line of credit	15,354	3,314
Stock repurchases	(1,682)	—
Proceeds from principal payments on notes receivable	—	781
Preferred stock dividends paid	(312)	(312)
Net cash provided by financing activities	13,360	3,783
Net decrease in cash, cash equivalents and restricted cash	(23,089)	(2,142)
Cash, cash equivalents and restricted cash at beginning of period	49,525	62,125
Cash, cash equivalents and restricted cash at end of period	$ 26,436	$ 59,983
Reconciliation of total cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 21,173	$ 36,184
Restricted cash	5,263	23,799
Total cash, cash equivalents and restricted cash	$ 26,436	$ 59,983
Supplemental Information:		
Interest paid	$ 1,886	$ 195
Interest expense capitalized	$ 839	$ 45

See accompanying notes to consolidated financial statements.

ALTO INGREDIENTS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited, in thousands)

	Preferred Stock		Common Stock		Additional Paid-In	Accumulated	Accum. Other Comprehensive Income	
	Shares	Amount	Shares	Amount	Capital	Deficit	(Loss)	Total
Balances, January 1, 2023	927	$ 1	75,154	$ 75	$ 1,040,834	$ (734,643)	$ 1,822	$ 308,089
Stock-based compensation	—	—	—	—	752	—	—	752
Restricted stock issued to employees and directors, net of cancellations and tax	—	—	1,893	2	(8)	—	—	(6)
Stock repurchases	—	—	(860)	(1)	(1,681)	—	—	(1,682)
Preferred stock dividends	—	—	—	—	—	(312)	—	(312)
Net loss	—	—	—	—	—	(13,166)	—	(13,166)
Balances, March 31, 2023	927	$ 1	76,187	$ 76	$ 1,039,897	$ (748,121)	$ 1,822	$ 293,675
Balances, January 1, 2022	927	$ 1	72,778	$ 73	$ 1,037,205	$ (691,781)	$ (284)	$ 345,214
Stock-based compensation	—	—	—	—	673	—	—	673
Restricted stock issued to employees and directors, net of cancellations and tax	—	—	684	—	(9)	—	—	(9)
Shares issued for Eagle Alcohol acquisition	—	—	949	1	—	—	—	1
Preferred stock dividends	—	—	—	—	—	(312)	—	(312)
Net loss	—	—	—	—	—	(2,602)	—	(2,602)
Balances, March 31, 2022	927	$ 1	74,411	$ 74	$ 1,037,869	$ (694,695)	$ (284)	$ 342,965

See accompanying notes to consolidated financial statements.

ALTO INGREDIENTS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

1. ORGANIZATION AND BASIS OF PRESENTATION.

Organization and Business – The consolidated financial statements include, for all periods presented, the accounts of Alto Ingredients, Inc., a Delaware corporation, and its direct and indirect wholly-owned subsidiaries (collectively, the "Company"), including Kinergy Marketing LLC, an Oregon limited liability company ("Kinergy"), Alto Nutrients, LLC, a California limited liability company, Eagle Alcohol Company, LLC, a Delaware limited liability company, Alto Op Co., a Delaware corporation, Alto Pekin, LLC, a Delaware limited liability company, and Alto ICP, LLC, a Delaware limited liability company, and the Company's production facilities in Oregon and Idaho.

The Company is a leading producer and distributor of specialty alcohols and essential ingredients. The Company also produces and markets fuel-grade ethanol. The Company's production facilities in Pekin, Illinois are located in the heart of the Corn Belt. The Company's two production facilities in Oregon and Idaho are located in close proximity to both feed and fuel-grade ethanol customers.

The Company has a combined alcohol production capacity of 350 million gallons per year and produced in 2022 over 1.6 million tons of essential ingredients, such as dried yeast, corn gluten meal, corn gluten feed, corn germ, and distillers grains and liquid feed used in commercial animal feed and pet foods. In addition, the Company markets and distributes fuel-grade ethanol produced by third parties.

The Company focuses on four key markets: *Health, Home & Beauty*; *Food & Beverage*; *Essential Ingredients*; and *Renewable Fuels*. Products for the Health, Home & Beauty market include specialty alcohols used in mouthwash, cosmetics, pharmaceuticals, hand sanitizers, disinfectants and cleaners. Products for the Food & Beverage markets include grain neutral spirits used in alcoholic beverages and vinegar as well as corn germ used for corn oils. Products for Essential Ingredients markets include dried yeast, corn gluten meal, corn gluten feed, corn germ, and distillers grains and liquid feed used in commercial animal feed and pet foods. Renewable Fuels includes fuel-grade ethanol and distillers corn oil used as a feedstock for renewable diesel and biodiesel fuels.

As of March 31, 2023, all of the Company's production facilities were operating, except its Magic Valley facility in Idaho. On January 1, 2023, the Company temporarily hot-idled its Magic Valley production facility due to extreme natural gas prices, other unfavorable market conditions and to facilitate the installation of its new high protein systems. The Company restarted the facility in April 2023. All production facilities are currently operating. As market conditions change, the Company may increase, decrease or idle production at one or more operating facilities or resume operations at any idled facility.

Basis of Presentation–Interim Financial Statements – The accompanying unaudited consolidated financial statements and related notes have been prepared in accordance with accounting principles generally accepted in the United States for interim financial information and the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Results for interim periods should not be considered indicative of results for a full year. These interim consolidated financial statements should be read in conjunction with the consolidated financial statements and related notes contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2022. The accounting policies used in preparing these consolidated financial statements are the same as those described in Note 1 to the consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2022. In the opinion of management, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair statement of the results for interim periods have been included. All significant intercompany accounts and transactions have been eliminated in consolidation.

Accounts Receivable and Allowance for Credit Losses – Trade accounts receivable are presented at original invoice amount, net of the allowance for credit losses. The Company sells specialty alcohols to large consumer product companies, sells fuel-grade ethanol to gasoline refining and distribution companies, sells essential ingredients to animal feed customers, including distillers grains and other feed co-products to dairy operators and animal feedlots and corn oil to poultry and biodiesel customers, in each case generally without requiring collateral.

The carrying amount of accounts receivable is reduced by a valuation allowance that reflects the Company's best estimate of the amounts that will not be collected. The Company regularly reviews accounts receivable and based on assessments of current customer creditworthiness, estimates the portion, if any, of the customer balance that will not be collected.

Of the accounts receivable balance, approximately $53,655,000 and $55,667,000 at March 31, 2023 and December 31, 2022, respectively, were used as collateral under Kinergy's operating line of credit. The allowance for credit losses was $66,000 and $105,000 as of March 31, 2023 and December 31, 2022, respectively. The Company recorded a bad debt recovery of $39,000 and bad debt expense of $31,000 for the three months ended March 31, 2023 and 2022, respectively. The Company does not have any off-balance sheet credit exposure related to its customers.

Share Repurchase Program – On September 12, 2022, the Company announced a share repurchase program under which it may repurchase up to $50 million of its common stock with an initial purchase authorization of $10 million. The Company's lender has further limited the Company's purchase authorization to $5 million. Amounts in excess of the purchase authorization of $5 million will require additional lender consent and amounts in excess of the initial purchase authorization of $10 million will require additional board and preferred stockholder authorization. The share repurchase program does not have an expiration date, does not require the repurchase of any particular amount of shares, and may be implemented, modified, suspended or discontinued in whole or in part at any time and without further notice. As repurchases are made, the Company will retire the shares, resulting in a reduction of issued and outstanding shares. For the three months ended March 31, 2023, the Company repurchased an aggregate of 860,000 shares for $1,682,000 in cash. As of March 31, 2023, total repurchases under the program since its inception were $3,007,000.

Financial Instruments – The carrying values of cash and cash equivalents, restricted cash, accounts receivable, derivative assets, accounts payable, accrued liabilities and derivative liabilities are reasonable estimates of their fair values because of the short maturity of these items. The Company believes the carrying value of its long-term debt instruments are not considered materially different than fair value because they were just recently issued.

Estimates and Assumptions – The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates are required as part of determining the allowance for credit losses, net realizable value of inventory, long-lived asset impairments, valuation allowances on deferred income taxes, the potential outcome of future tax consequences of events recognized in the Company's financial statements or tax returns, and the valuation of assets acquired and liabilities assumed as a result of business combinations. Actual results and outcomes may materially differ from management's estimates and assumptions.

2. SEGMENTS.

The Company reports its financial and operating performance in three segments: (1) marketing and distribution, which includes marketing and merchant trading for Company-produced alcohols and essential ingredients on an aggregated basis, and sales of fuel-grade ethanol sourced from third parties (2) Pekin production, which includes the production and sale of alcohols and essential ingredients produced at the Company's Pekin, Illinois campus ("Pekin Campus"), and (3) Other production, which includes the production and sale of fuel-grade ethanol and essential ingredients produced at all of the Company's other production facilities on an aggregated basis ("Other production"), none of which are individually so significant to be considered a separately reportable segment.

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

	Three Months Ended March 31,	
	2023	2022
Net Sales		
Pekin Campus production, recorded as gross:		
Alcohol sales	$ 132,381	$ 116,050
Essential ingredient sales	63,631	55,280
Intersegment sales	313	256
Total Pekin Campus sales	196,325	171,586
Marketing and distribution:		
Alcohol sales, gross	$ 84,381	$ 53,926
Alcohol sales, net	114	351
Intersegment sales	2,843	2,996
Total marketing and distribution sales	87,338	57,273
Other production, recorded as gross:		
Alcohol sales	$ 20,932	$ 59,805
Essential ingredient sales	8,353	18,938
Intersegment sales	1	12
Total Other production sales	29,286	78,755
Corporate and other	4,099	3,768
Intersegment eliminations	(3,157)	(3,264)
Net sales as reported	$ 313,891	$ 308,118
Cost of goods sold:		
Pekin Campus production	$ 198,178	$ 168,881
Marketing and distribution	83,126	54,716
Other production	33,982	78,244
Corporate and other	2,369	2,872
Intersegment eliminations	(600)	(1,368)
Cost of goods sold as reported	$ 317,055	$ 303,345
Gross profit (loss):		
Pekin Campus production	$ (1,853)	$ 2,705
Marketing and distribution	4,212	2,557
Other production	(4,696)	511
Corporate and other	1,730	896
Intersegment eliminations	(2,557)	(1,896)
Gross profit (loss) as reported	$ (3,164)	$ 4,773
Loss before provision for income taxes:		
Pekin Campus production	$ (5,117)	$ 85
Marketing and distribution	2,010	785
Other production	(5,698)	(1,209)
Corporate and other	(4,361)	(2,263)
	$ (13,166)	$ (2,602)
Depreciation and amortization expense:		
Pekin Campus production	$ 4,819	$ 4,538
Other production	1,009	1,456
Corporate and other	227	140
	$ 6,055	$ 6,134
Interest expense, net of capitalized interest:		
Pekin Campus production	$ (485)	$ —
Marketing and distribution	494	200
Other production	(354)	—
Corporate and other	1,910	—
	$ 1,565	$ 200

The following table sets forth the Company's total assets by operating segment (in thousands):

	March 31, 2023	December 31, 2022
Total assets:		
Pekin Campus production	$ 254,293	$ 257,089
Marketing and distribution	116,135	114,755
Other production	46,832	51,886
Corporate and other	42,644	54,591
	$ 459,904	$ 478,321

3. INVENTORIES.

Inventories consisted primarily of bulk ethanol, specialty alcohols, corn, essential ingredients and unleaded fuel, and are valued at the lower of cost or net realizable value, with cost determined on a first-in, first-out basis. Inventory is net of a valuation adjustment of $0 and $4,612,000 as of March 31, 2023 and December 31, 2022, respectively. Inventory balances consisted of the following (in thousands):

	March 31, 2023	December 31, 2022
Finished goods	$ 44,309	$ 47,736
Work in progress	5,321	6,396
Raw materials	16,055	11,197
Other	1,462	1,299
Total	$ 67,147	$ 66,628

4. DERIVATIVES.

The business and activities of the Company expose it to a variety of market risks, including risks related to changes in commodity prices. The Company monitors and manages these financial exposures as an integral part of its risk management program. This program recognizes the unpredictability of financial markets and seeks to reduce the potentially adverse effects that market volatility could have on operating results.

Commodity Risk – Cash Flow Hedges – The Company uses derivative instruments to protect cash flows from fluctuations caused by volatility in commodity prices for periods of up to twelve months in order to protect gross profit margins from potentially adverse effects of market and price volatility on alcohol sales and purchase commitments where the prices are set at a future date and/or if the contracts specify a floating or index-based price. In addition, the Company hedges anticipated sales of alcohol to minimize its exposure to the potentially adverse effects of price volatility. These derivatives may be designated and documented as cash flow hedges and effectiveness is evaluated by assessing the probability of the anticipated transactions and regressing commodity futures prices against the Company's purchase and sales prices. Ineffectiveness, which is defined as the degree to which the derivative does not offset the underlying exposure, is recognized immediately in cost of goods sold. For the three months ended March 31, 2023 and 2022, the Company did not designate any of its derivatives as cash flow hedges.

Commodity Risk – Non-Designated Hedges – The Company uses derivative instruments to lock in prices for certain amounts of corn and alcohols by entering into exchange-traded futures contracts or options for those commodities. These derivatives are not designated for hedge accounting treatment. The changes in fair value of these contracts are recorded on the balance sheet and recognized immediately in cost of goods sold. The Company recognized net losses of $1,777,000 and net gains of $5,316,000 as the change in the fair value of these contracts for the three months ended March 31, 2023 and 2022, respectively.

Non Designated Derivative Instruments – The classification and amounts of the Company's derivatives not designated as hedging instruments, and related cash collateral balances, are as follows (in thousands):

	As of March 31, 2023			
	Assets		Liabilities	
Type of Instrument	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Cash collateral balance	Restricted cash	$ 5,263		
Commodity contracts	Derivative instruments	$ 6,267	Derivative instruments	$ 2,100

	As of December 31, 2022			
	Assets		Liabilities	
Type of Instrument	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Cash collateral balance	Restricted cash	$ 13,069		
Commodity contracts	Derivative instruments	$ 4,973	Derivative instruments	$ 6,732

The above amounts represent the gross balances of the contracts; however, the Company does have a right of offset with each of its derivative brokers, but the Company's intent is to close out positions individually, therefore the positions are reported at gross.

The classification and amounts of the Company's realized gains (losses) for its derivatives not designated as hedging instruments are as follows (in thousands):

		Realized Gains (Losses) For the three months Ended March 31,	
Type of Instrument	Statements of Operations Location	2023	2022
Commodity contracts	Cost of goods sold	$ (7,703)	$ 15,562
		$ (7,703)	$ 15,562

		Unrealized Gains (Losses) For the three months Ended March 31,	
Type of Instrument	Statements of Operations Location	2023	2022
Commodity contracts	Cost of goods sold	$ 5,926	$ (10,246)
		$ 5,926	$ (10,246)

5. DEBT.

Long-term borrowings are summarized as follows (in thousands):

	March 31, 2023	December 31, 2022
Kinergy line of credit	$ 33,430	$ 18,076
Orion term loan	60,000	60,000
	93,430	78,076
Less unamortized debt discount	(4,497)	(4,686)
Less unamortized debt financing costs	(5,194)	(5,034)
Less current portion	—	—
Long-term debt	$ 83,739	$ 68,356

Excess Availability – As of March 31, 2023, Kinergy had $41.6 million in unused borrowing availability under its line of credit.

6. COMMITMENTS AND CONTINGENCIES.

Sales Commitments – At March 31, 2023, the Company had entered into sales contracts with its major customers to sell certain quantities of alcohol and essential ingredients. The Company had open alcohol indexed-price contracts for 89,084,000 gallons as of March 31, 2023 and open fixed-price alcohol sales contracts totaling $110,251,000 as of March 31, 2023. The Company had open fixed-price sales contracts for essential ingredients totaling $13,652,000 and open indexed-price sales contracts of essential ingredients for 128,000 tons as of March 31, 2023. These sales contracts are scheduled to be completed throughout 2023.

Purchase Commitments – At March 31, 2023, the Company had indexed-price purchase contracts to purchase 21,049,000 gallons of alcohol and fixed-price purchase contracts to purchase $612,000 of alcohol from its suppliers. The Company had fixed-price purchase contracts to purchase $73,170,000 of corn from its suppliers as of March 31, 2023. The Company had fixed-price purchase contracts for natural gas totaling $487,000 as of March 31, 2023. The Company also had future commitments for certain capital projects totaling $21,730,000. These purchase commitments are scheduled to be satisfied throughout 2023 and 2024.

Litigation – General – The Company is subject to various claims and contingencies in the ordinary course of its business, including those related to litigation, business transactions, employee-related matters, environmental regulations, and others. When the Company is aware of a claim or potential claim, it assesses the likelihood of any loss or exposure. If it is probable that a loss will result and the amount of the loss can be reasonably estimated, the Company will record a liability for the loss. If the loss is not probable or the amount of the loss cannot be reasonably estimated, the Company discloses the claim if the likelihood of a potential loss is reasonably possible and the amount involved could be material. While the Company can provide no assurances, the Company does not expect that any of its pending legal proceedings will have a material impact on the Company's financial condition or results of operations.

7. PENSION PLANS.

The Company sponsors a defined benefit pension plan (the "Retirement Plan") and a healthcare and life insurance plan (the "Postretirement Plan").

The Retirement Plan is noncontributory and covers only "grandfathered" unionized employees at the Company's Pekin, Illinois facility who fulfill minimum age and service requirements. Benefits are based on a prescribed formula based upon the employee's years of service. The Retirement Plan, which is part of a collective bargaining agreement, covers only union employees hired prior to November 1, 2010.

The Company uses a December 31 measurement date for its Retirement Plan. The Company's funding policy is to make the minimum annual contribution required by applicable regulations. As of December 31, 2022, the Retirement Plan's accumulated projected benefit obligation was $18.0 million, with a fair value of plan assets of $16.7 million. The underfunded amount of $1.3 million is recorded on the Company's consolidated balance sheet in other liabilities. For the three months ended March 31, 2023, the Retirement Plan's net periodic expense was $39,000, comprised of $225,000 in interest cost and $62,000 in service cost, partially offset by $248,000 of expected return on plan assets. For the three months ended March 31, 2022, the Retirement Plan's net periodic expense (income) was ($8,000), comprised of $164,000 in interest cost and $101,000 in service cost, more than offset by $273,000 of expected return on plan assets.

The Postretirement Plan provides postretirement medical benefits and life insurance to certain "grandfathered" unionized employees at the Company's Pekin, Illinois facility. Employees hired after December 31, 2000 are not eligible to participate in the Postretirement Plan. The Postretirement Plan is contributory, with contributions required at the same rate as active employees. Benefit eligibility under the plan reduces at age 65 from a defined benefit to a defined dollar cap based upon years of service. As of December 31, 2022, the Postretirement Plan's accumulated projected benefit obligation was $3.9 million and is recorded on the Company's consolidated balance sheet in other liabilities. The Company's funding policy is to make the minimum annual contribution required by applicable regulations. For the three months ended March 31, 2023, the Postretirement Plan's net periodic expense was $36,000, comprised of $46,000 of interest cost and $3,000 of service cost, partially offset by $13,000 in amortization of gains. For the three months ended March 31, 2022, the Postretirement Plan's net periodic expense was $32,000, comprised of $26,000 of interest cost and $6,000 of service cost.

8. FAIR VALUE MEASUREMENTS.

The fair value hierarchy prioritizes the inputs used in valuation techniques into three levels, as follows:

- Level 1 – Observable inputs – unadjusted quoted prices in active markets for identical assets and liabilities;
- Level 2 – Observable inputs other than quoted prices included in Level 1 that are observable for the asset or liability through corroboration with market data; and
- Level 3 – Unobservable inputs – includes amounts derived from valuation models where one or more significant inputs are unobservable. For fair value measurements using significant unobservable inputs, a description of the inputs and the information used to develop the inputs is required along with a reconciliation of Level 3 values from the prior reporting period.

Pooled separate accounts – Pooled separate accounts invest primarily in domestic and international stocks, commercial paper or single mutual funds. The net asset value is used as a practical expedient to determine fair value for these accounts. Each pooled separate account provides for redemptions by the Retirement Plan at reported net asset values per share, with little to no advance notice requirement, therefore these funds are classified within Level 2 of the valuation hierarchy.

Other Derivative Instruments – The Company's other derivative instruments consist of commodity positions. The fair values of the commodity positions are based on quoted prices on the commodity exchanges and are designated as Level 1 inputs.

The following table summarizes recurring and nonrecurring fair value measurements by level at March 31, 2023 (in thousands):

	Fair Value	Level 1	Level 2	Level 3
Assets:				
Derivative financial instruments	$ 6,267	$ 6,267	$ —	$ —
Liabilities:				
Derivative financial instruments	$ (2,100)	$ (2,100)	$ —	$ —

The following table summarizes recurring and nonrecurring fair value measurements by level at December 31, 2022 (in thousands):

	Fair Value	Level 1	Level 2	Level 3	Benefit Plan Percentage Allocation
Assets:					
Derivative financial instruments	$ 4,973	$ 4,973	$ —	$ —	
Defined benefit plan assets(1) (pooled separate accounts):					
Large U.S. Equity(2)	4,586	—	4,586	—	28%
Small/Mid U.S. Equity(3)	2,986	—	2,986	—	18%
International Equity(4)	2,406	—	2,406	—	14%
Fixed Income(5)	6,710	—	6,710	—	40%
	$ 21,661	$ 4,973	$ 16,688	$ —	
Liabilities:					
Derivative financial instruments	$ 6,732	$ 6,732	$ —	$ —	

(1) Included in other assets in the consolidated balance sheets.

(2) This category includes investments in funds comprised of equity securities of large U.S. companies. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.

(3) This category includes investments in funds comprised of equity securities of small- and medium-sized U.S. companies. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.

(4) This category includes investments in funds comprised of equity securities of foreign companies including emerging markets. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.

(5) This category includes investments in funds comprised of U.S. and foreign investment-grade fixed income securities, high-yield fixed income securities that are rated below investment-grade, U.S. treasury securities, mortgage-backed securities, and other asset-backed securities. The funds are valued using the net asset value method in which an average of the market prices for the underlying investments is used to value the fund.

9. EARNINGS PER SHARE.

The following tables compute basic and diluted earnings per share (in thousands, except per share data):

	Three Months Ended March 31, 2023		
	Loss Numerator	**Shares Denominator**	**Per-Share Amount**
Net loss	$ (13,166)		
Less: Preferred stock dividends	(312)		
Basic and diluted loss per share:			
Net loss available to common stockholders	$ (13,478)	73,815	$ (0.18)

	Three Months Ended March 31, 2022		
	Loss Numerator	**Shares Denominator**	**Per-Share Amount**
Net loss	$ (2,602)		
Less: Preferred stock dividends	(312)		
Basic and diluted loss per share:			
Net loss available to common stockholders	$ (2,914)	71,390	$ (0.04)

There were an additional aggregate potentially dilutive weighted-average shares of 964,000 and 1,339,000 from convertible securities outstanding for the three months ended March 31, 2023 and 2022. These securities were not considered in calculating diluted net loss per share for the three months ended March 31, 2023 and 2022, as their effect would have been anti-dilutive.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this report. This report and our consolidated financial statements and notes to consolidated financial statements contain forward-looking statements, which generally include the plans and objectives of management for future operations, including plans and objectives relating to our future economic performance and our current beliefs regarding revenues we might generate and profits we might earn if we are successful in implementing our business and growth strategies. The forward-looking statements and associated risks may include, relate to or be qualified by other important factors, including:

- fluctuations in the market prices of alcohols and essential ingredients;
- fluctuations in the costs of key production input commodities such as corn and natural gas;
- the projected growth or contraction in the alcohol and essential ingredients markets in which we operate;
- our strategies for expanding, maintaining or contracting our presence in these markets;
- anticipated trends in our financial condition and results of operations; and
- our ability to distinguish ourselves from our current and future competitors.

You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this report, or in the case of a document incorporated by reference, as of the date of that document. We do not undertake to update, revise or correct any forward-looking statements, except as required by law.

Any of the factors described immediately above or referenced from time to time in our filings with the Securities and Exchange Commission or in the "Risk Factors" section below could cause our financial results, including our net income or loss or growth in net income or loss to differ materially from prior results, which in turn could, among other things, cause the price of our common stock to fluctuate substantially.

Overview

We are a leading producer and distributor of specialty alcohols and essential ingredients, and the largest producer of specialty alcohols in the United States.

We operate five alcohol production facilities. Three of our production facilities are located in Illinois, one is located in Oregon and another is located in Idaho. We have an annual alcohol production capacity of 350 million gallons, comprised of 210 million gallons of fuel-grade ethanol and up to 140 million gallons of specialty alcohols. We market and distribute all of the alcohols produced at our facilities as well as fuel-grade ethanol produced by third parties. In 2022, we marketed and distributed approximately 420 million gallons combined of our own alcohols as well as fuel-grade ethanol produced by third parties, and over 1.6 million tons of essential ingredients on a dry matter basis.

We report our financial and operating performance in three segments: (1) marketing and distribution, which includes marketing and merchant trading for company-produced alcohols and essential ingredients on an aggregated basis, and sales of fuel-grade ethanol sourced from third parties, (2) Pekin production, which includes the production and sale of alcohols and essential ingredients produced at our three production facilities located in Pekin, Illinois, which we refer to as our Pekin Campus, and (3) Other production, which includes the production and sale of renewable fuel and essential ingredients produced at all of our other production facilities on an aggregated basis, none of which are individually so significant as to be considered a separately reportable segment.

Our mission is to expand our business as a leading producer and distributor of specialty alcohols and essential ingredients. We intend to accomplish this goal in part by investing in our specialized and higher value specialty alcohol production and distribution infrastructure, expanding production in high-demand essential ingredients, expanding and extending the sale of our products into new regional and international markets, building efficiencies and economies of scale and by capturing a greater portion of the value stream.

Our wholly-owned subsidiary, Eagle Alcohol Company LLC, or Eagle Alcohol, specializes in break bulk distribution of specialty alcohols. Eagle Alcohol purchases bulk alcohol from suppliers and then stores, denatures, packages, and resells alcohol products in smaller sizes, including tank trucks, totes, and drums, that typically garner a premium price to bulk alcohols. Eagle Alcohol delivers products to customers in the beverage, food, industrial and related-process industries via its own dedicated trucking fleet and common carrier.

Production Segments

We produce specialty alcohols, fuel-grade ethanol and essential ingredients, focusing on four key markets: *Health, Home & Beauty*; *Food & Beverage*; *Essential Ingredients*; and *Renewable Fuels*. Products for the *Health, Home & Beauty* market include specialty alcohols used in mouthwash, cosmetics, pharmaceuticals, hand sanitizers, disinfectants and cleaners. Products for the *Food & Beverage* markets include grain neutral spirits, or GNS, used in alcoholic beverages and vinegar as well as corn germ used for corn oils. Products for *Essential Ingredients* markets include dried yeast, corn gluten meal, corn gluten feed, corn germ, and distillers grains and liquid feed used in commercial animal feed and pet foods. We also sell yeast for human consumption. Our *Renewable Fuels* products include fuel-grade ethanol and distillers corn oil used as a feedstock for renewable diesel and biodiesel fuels.

We produce our alcohols and essential ingredients at our production facilities described below. Our production facilities located in Illinois are in the heart of the Corn Belt, benefit from low-cost and abundant feedstock and enjoy logistical advantages that enable us to provide our products to both domestic and international markets via truck, rail or barge. Our production facilities located in Oregon and Idaho are near their respective fuel and feed customers, offering significant timing, transportation cost and logistical advantages.

Our production facilities were operating for all of the first quarter except our Magic Valley production facility in Idaho, which we temporarily hot-idled on January 1, 2023 due to extreme natural gas prices, other unfavorable market conditions and to facilitate the installation of our new high protein systems. The facility was restarted in April 2023. All of our production facilities are currently operating. As market conditions change, we may increase, decrease or idle production at one or more operating facilities or resume operations at any idled facility.

		Annual Alcohol Production Capacity (estimated, in gallons)	
Production Facility	**Location**	**Fuel-Grade Ethanol**	**Specialty Alcohol**
Pekin Campus	Pekin, IL	110,000,000	140,000,000
Magic Valley	Burley, ID	60,000,000	—
Columbia	Boardman, OR	40,000,000	—

Marketing and Distribution Segment

We market and distribute all of the alcohols and essential ingredients we produce at our facilities. We also market and distribute alcohol produced by third parties.

We have extensive and long-standing customer relationships, both domestic and international, for our specialty alcohols and essential ingredients. These customers include producers and distributors of ingredients for cosmetics, sanitizers and related products, distilled spirits producers, food products manufacturers, producers of personal health/consumer health and personal care hygiene products, and global trading firms.

Our renewable fuel customers are located throughout the Western and Midwestern United States and consist of integrated oil companies and gasoline marketers who blend fuel-grade ethanol into gasoline. Our customers depend on us to provide a reliable supply of fuel-grade ethanol and manage the logistics and timing of delivery. Our customers collectively require fuel-grade ethanol volumes in excess of the supplies we produce at our facilities. We secure additional fuel-grade ethanol supplies from third-party ethanol producers. We arrange for transportation, storage and delivery of fuel-grade ethanol purchased by our customers through our agreements with third-party service providers in the Western United States as well as in the Midwest from a variety of sources.

We market our essential ingredient feed products to dairies and feedlots, in many cases located near our production facilities. These customers use our feed products for livestock as a substitute for corn and other sources of starch and protein. We sell our corn oil to poultry and biodiesel customers. We do not market essential ingredients from other producers.

See “Note 2 – Segments” to our Notes to Consolidated Financial Statements included elsewhere in this report for financial information about our business segments.

Current Initiatives and Outlook

During the first quarter, crush margins improved sequentially each month compared to the prior month. The quarter ended with regional natural gas prices, corn basis and ethanol prices greatly improved compared to December 2022. For the month of March, we generated positive bottom-line financial results. In addition, the outlook for renewable fuel has further improved as the EPA recently approved E15 for summer blending. At current crush margin levels, we expect positive Adjusted EBITDA for the second quarter. We define Adjusted EBITDA as unaudited consolidated net income (loss) before interest expense, interest income, provision for income taxes, asset impairments, loss on extinguishment of debt, acquisition-related expense, fair value adjustments, and depreciation and amortization expense.

Overall, we are pleased with the current market improvements, which continue to positively impact our business. We cannot provide guidance for the full year 2023 but we expect to benefit from approximately $10 million in additional earnings before interest expense, interest income, provision for income taxes, and depreciation and amortization, or EBITDA, generated from the capital projects we have already completed or will complete this year.

Despite current positive crush margins, we have no control over commodity pricing, aside from our hedging activities which can be costly and of limited effect in the case of a prolonged negative market environment. For this reason, we continue to work toward implementing a series of near- and long-term projects aimed at reducing our exposure to volatile commodity markets. We continue to transform our business by further diversifying our products and optimizing our operations to expand margins and increase profitability. With the completion of our near-term projects, we expect to increase EBITDA on an annualized basis by over $65 million by the end of 2025 and expect to increase that amount to over $125 million by the end of 2026 when our carbon capture and sequestration, cogeneration and other initiatives are fully realized.

Our multi-path diversification strategy includes increased production of our most differentiated and highest quality products. Our near-term focus includes GNS, corn oil and high protein products, while our longer-term plan includes primary yeast as well as carbon capture and sequestration.

We also remain focused on reducing production costs. Our near-term initiatives in this regard include improvements to plant efficiency, reliability and redundancy by adding corn storage and installing our own natural gas pipeline. Our longer-term vision includes upgrading equipment, converting our biogas to renewable natural gas and building energy cogeneration capabilities at our Pekin Campus.

We are confident in our ability to fund our near-term capital projects through our term loan facility, current working capital resources and cash we expect to generate from our operations. For our longer-term projects, we continue to hold productive discussions with potential strategic partners and we will continue to assess our capital needs as the projects come further into focus.

We have completed the upgrade of our GNS distillation system at our Pekin Campus wet mill to produce the highest quality 190 proof and low-moisture 200 proof GNS products on the market. Recently, we have added new beverage customers and we are working to place our GNS products on a spot purchase basis for the remainder of 2023. This coming fall, we expect to contract for additional volumes with both new and existing customers during our annual contracting period for 2024 sales. Our product and process certifications will be invaluable as we work toward customer qualifications for these high-quality products. Beginning in 2024, we expect these products will contribute approximately $5 million in EBITDA annually and continue to grow as part of our business over time.

In December, we moderated production at our Columbia plant and temporarily idled our Magic Valley plant to minimize the impact of sustained high natural gas prices in the Pacific Northwest. This created an opportunity for us to focus our attention on completing the installation of our corn oil and high protein technologies at our Magic Valley facility. We have now completed all material installations of the CoProMax™ corn oil and high protein system and have resumed production at our Magic Valley plant. We are aligning the new and existing operating systems at the plant to ensure optimal efficiency. We expect to achieve full production of both higher corn oil volumes and high-quality dry protein at the facility by the end of the second quarter, with additional sales from these products to commence in the third quarter. We expect corn oil and high-quality protein from our Magic Valley facility to contribute in aggregate approximately $9 million in EBITDA annually.

We plan to begin a staged rollout in late 2023 of corn oil technology installations at our three other dry mills. Although each dry mill is slightly different in size, on average we expect to produce similar financial results to those anticipated from our Magic Valley plant. When fully installed, we expect the corn oil installations at our three other plants in aggregate will contribute over $14 million in EBITDA annually.

After our high protein system is fully and successfully operational at our Magic Valley facility, we will evaluate the system for rollout at our three other dry mills and anticipate similar economics. We expect the high protein installations at our three other plants in aggregate will contribute over $13 million in EBITDA annually.

In total, we expect our corn oil expansion and high protein systems, when fully operational at our Magic Valley plant and our three other dry mills, will together contribute over $36 million in EBITDA annually.

As to our longer-term initiatives for high-margin offerings, we plan to expand into primary yeast production. We have finished successful product trials and selected a highly qualified third-party engineering group to complete our front-end engineering and design, or FEED, study, with the conclusion of this work expected in the third quarter. Our primary yeast project would expand on our past upgrades made to our yeast operations. We expect our primary yeast product to contribute approximately $19 million in EBITDA in the first twelve months of production with a potential increase to over $25 million annually thereafter. Our target is to begin construction of the project in early 2024 and we anticipate project completion in the summer of 2025.

We have a significant opportunity for carbon capture and sequestration at our Pekin Campus, which produces approximately 700,000 metric tons of carbon annually. We are proceeding in earnest through advanced negotiations for this important project. We have selected a third-party FEED firm to determine capture, compression and engineering design. We expect this study will be completed in the third quarter. We are finalizing the selection of a development partner to provide turnkey transportation, sequestration and monitoring services. Our longer-term goal is to have our carbon capture and sequestration project operational in 2026. Based solely on our annual carbon production volume at $85 per metric ton, reflecting the 45Q tax incentive benefits established under the Inflation Reduction Act of 2022, we believe we can generate over $30 million in EBITDA annually, after accounting for operating and sequestration costs, and excluding any of the substantial additional economic benefits of the environmental attributes associated with low carbon ethanol.

We continue to advance our initiatives to improve plant efficiency, reliability, redundancy and capacity. Our new 850,000 bushel corn storage silo at our Pekin Campus is now fully operational and contributing to improved corn procurement costs, plant reliability and plant operating costs across the production facility. Our conservative estimate has the silo contributing over $2 million in EBITDA annually.

Our third-party FEED study for our new natural gas pipeline is complete. We are working on the initial routing steps, which will enable the project to advance to definitive land agreements and the construction permit application process. We have also initiated community interaction and initial feedback has been positive. We plan for the pipeline to bypass the current utility with the goal of optimizing energy procurement, usage and expense, which will contribute to our sustainability efforts. When fully operational, which we expect in 2024, we anticipate the pipeline will reduce our energy costs by approximately $3 million annually. The pipeline will also create the opportunity for us to convert and monetize our current biogas waste stream into renewable natural gas. Based on our current output, we estimate that production and sale of renewable natural gas would contribute more than $3 million in EBITDA annually.

Our third-party FEED study for cogeneration at our Pekin Campus is complete. The cogeneration design is intended to address our current needs, support increased energy requirements for both our primary yeast and carbon capture and sequestration projects, and offset grid electrical power consumption. Based on current energy prices, we expect cogeneration to contribute approximately $15 million in EBITDA annually.

Renewable products are part of our primary mission and producing them safely is one of our core tenets. Each of our capital projects advances sustainability. While these projects and our continual process improvements can be viewed as environmental, social and governance, or ESG, initiatives, our decisions to ensure safety, quality and sustainability are good for our overall business. Our other ESG initiatives include:

- Efforts with Nasdaq as a third-party consultant to review our ESG strategy which included a materiality survey to determine areas of focus. We have completed all initial "roadmap" action items, and we have:
  - Strengthened and communicated our environmental, health, safety and security policy and objectives;
  - Added consistent standards and details to our Code of Ethics and Supplier Code of Conduct;
  - Implemented a supplier transparency program with components such as supplier scorecards and on-site auditing in some cases; and
  - Partnered with SEDEX, a leading data platform with over 74,000 members, to improve our sustainability performance and to ensure that we are ethically sourcing our goods and services.
- Looking ahead, we have launched a three-year employee engagement program with Gallup to identify areas of opportunity and facilitate communication at all levels. We completed our first engagement survey in December 2022. Our employee engagement is more than a survey – it is a comprehensive program with tools and training to achieve our goals for supporting our employees, one of our most important resources. In addition, diversity has been a focus for employee recruiting and at the board level. We will publish further metrics in our mid-2023 sustainability reporting.
- Lowering our carbon footprint and delivering bio-based renewable products has been at the core of our business since inception. We have completed our Scope 1 & 2 greenhouse gas emissions inventory and have third party verification for both 2021 and 2022 at all production facilities. This information combined with our key projects such as carbon capture and sequestration, improving energy efficiencies with cogeneration and equipment upgrades, and maximizing biogas utilization will lead us to set and achieve carbon reduction targets and help us do our part to meet sustainable development goals. We look forward to sharing our ESG progress mid-year.

Use of Non-GAAP Financial Measures

Management believes that certain financial measures not in accordance with generally accepted accounting principles, or GAAP, are useful measures of operations. Management provides EBITDA and Adjusted EBITDA as non-GAAP financial measures so that investors will have the same financial information that management uses, which may assist investors in properly assessing our performance on a period-over-period basis. We define Adjusted EBITDA as unaudited consolidated net income (loss) before interest expense, interest income, provision for income taxes, asset impairments, loss on extinguishment of debt, acquisition-related expense, fair value adjustments, and depreciation and amortization expense. A table is provided below to reconcile Adjusted EBITDA to its most directly comparable GAAP measure, consolidated net income (loss). EBITDA and Adjusted EBITDA are not measures of financial performance under GAAP and should not be considered as alternatives to consolidated net income (loss) or any other measure of performance under GAAP, or to cash flows from operating, investing or financing activities as an indicator of cash flows or as a measure of liquidity. EBITDA and Adjusted EBITDA have limitations as analytical tools and you should not consider these measures in isolation or as a substitute for analysis of our results as reported under GAAP.

Information reconciling forward-looking EBITDA to forward-looking consolidated net income (loss) would require a forward-looking statement of consolidated net income (loss) prepared in accordance with GAAP, which is unavailable to us without unreasonable effort. We are not able to provide a quantitative reconciliation of forward-looking EBITDA to forward-looking consolidated net income (loss) because certain items required for reconciliation are uncertain, outside of our control and/or cannot reasonably be predicted, such as net sales, cost of goods sold, provision (benefit) for income taxes and asset impairments, which we view as the most material components of consolidated net income (loss) that are not presently estimable.

Reconciliation of Adjusted EBITDA to Consolidated Net Income (Loss)

	Three Months Ended March 31,	
(in thousands) (unaudited)	**2023**	**2022**
Net loss	$ (13,166)	$ (2,602)
Adjustments:		
Interest expense	1,565	200
Interest income	(221)	(158)
Asset impairments	574	—
Acquisition-related expense	700	875
Depreciation and amortization expense	6,055	6,134
Total adjustments	8,673	7,051
Adjusted EBITDA	$ (4,493)	$ 4,449

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of net sales and expenses for each period. We believe that of our significant accounting policies, the following critical accounting policies and estimates are those policies that we believe are the most important to the portrayal of our financial condition and results of operations and that require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain: accounting for business combinations; revenue recognition; impairment of long-lived assets and held-for-sale classification; valuation allowance for deferred taxes and derivative instruments. Except as noted below, these significant accounting principles are more fully described in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates" in our Annual Report on Form 10-K for the year ended December 31, 2022.

Results of Operations

The following selected financial information should be read in conjunction with our consolidated financial statements and notes to our consolidated financial statements included elsewhere in this report, and the other sections of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this report.

Certain performance metrics that we believe are important indicators of our results of operations include:

	Three Months Ended March 31,		Percentage
	2023	2022	Change
Renewable fuel production gallons sold (in millions)	37.1	49.2	(24.6)%
Specialty alcohol production gallons sold (in millions)	21.4	23.3	(8.2)%
Third party renewable fuel gallons sold (in millions)	33.9	30.7	10.4%
Total gallons sold (in millions)	92.4	103.2	(10.5)%
Total gallons produced (in millions)	60.6	74.3	(18.4)%
Production capacity utilization	70%	86%	(18.6)%
Average sales price per gallon	$ 2.43	$ 2.46	(1.2)%
Corn cost per bushel—CBOT equivalent	$ 6.61	$ 6.22	6.3%
Average basis[(1)]	0.46	0.64	(28.1)%
Delivered cost of corn	$ 7.07	$ 6.86	3.1%
Total essential ingredients tons sold (in thousands)	299.3	398.8	(24.9)%
Essential ingredients revenues as % of delivered cost of corn[(2)]	44.5%	36.4%	22.3%
Average CBOT ethanol price per gallon	$ 2.21	$ 2.16	2.3%
Average CBOT corn price per bushel	$ 6.54	$ 6.73	(2.8)%

(1) Corn basis represents the difference between the immediate cash price of delivered corn and the future price of corn for Chicago delivery.

(2) Essential ingredients revenues as a percentage of delivered cost of corn shows our yield based on sales of essential ingredients, including wet distillers grains and corn oil, generated from alcohol we produced.

Net Sales, Cost of Goods Sold and Gross Profit (Loss)

The following table presents our net sales, cost of goods sold and gross profit (loss) in dollars and gross profit (loss) as a percentage of net sales (in thousands, except percentages):

	Three Months Ended March 31,		Change in	
	2023	2022	Dollars	Percent
Net sales	$ 313,891	$ 308,118	$ 5,773	1.9%
Cost of goods sold	317,055	303,345	13,710	4.5%
Gross profit (loss)	$ (3,164)	$ 4,773	$ (7,937)	NM*
Percentage of net sales	*(1.0)%*	*1.5%*		

* *Not meaningful.*

Net Sales

The increase in our consolidated net sales for the three months ended March 31, 2023 as compared to the same period in 2022 was primarily due to an increase in total gallons sold on a gross basis, partially offset by a lower average sales price per gallon and lower volumes of essential ingredients sold. We marketed no third-party gallons on a net basis during the quarter as we ended our contractual relationship with the two fuel-grade ethanol plants for which we previously sold their production to focus on sales of our own fuel-grade ethanol production.

Pekin Campus Production Segment

Net sales of alcohol from our Pekin Campus production segment increased by $16.3 million, or 14%, to $132.4 million for the three months ended March 31, 2023 as compared to $116.1 million for the same period in 2022. Our total volume of production gallons sold increased by 0.3 million gallons, or 1%, to 49.6 million gallons for the three months ended March 31, 2023 as compared to 49.3 million gallons for the same period in 2022. At the segment's average sales price per gallon of $2.67 for the three months ended March 31, 2023, we generated $1.0 million in additional net sales from the 0.3 million additional gallons of alcohol sold in the three months ended March 31, 2023 as compared to the same period in 2022. The increase of $0.32, or 14%, in the segment's average sales price per gallon in the three months ended March 31, 2023 as compared to the same period in 2022 improved our net sales from the segment by $15.3 million.

Net sales of essential ingredients from our Pekin Campus production segment increased $8.3 million, or 15%, to $63.6 million for the three months ended March 31, 2023 as compared to $55.3 million for the same period in 2022. Our total volume of essential ingredients sold declined by 15,000 tons, or 6%, to 227,000 tons for the three months ended March 31, 2023 from 242,000 tons for the same period in 2022. At the segment's average sales price per ton of $280.44 for the three months ended March 31, 2023, we generated $4.3 million less in net sales from the 15,000 fewer tons of essential ingredients sold in the three months ended March 31, 2023 as compared to the same period in 2022. The increase of $52.10, or 23%, in the segment's average sales price per ton for the three months ended March 31, 2023 as compared to the same period in 2022 increased our net sales from the segment by $12.6 million.

Marketing and Distribution Segment

Net sales of alcohol from our marketing and distribution segment, excluding intersegment sales, increased by $30.3 million, or 56%, to $84.5 million for the three months ended March 31, 2023 as compared to $54.2 million for the same period in 2022.

Our volume of third party alcohol sold reported gross by the segment increased by 14.0 million gallons, or 70%, to 33.9 million gallons for the three months ended March 31, 2023 as compared to 19.9 million gallons for the same period in 2022. At the segment's average sales price per gallon of $2.49 for the three months ended March 31, 2023, we generated $34.9 million in additional net sales from the 14.0 million additional gallons of third-party alcohol sold gross in the three months ended March 31, 2023 as compared to the same period in 2022.

Our volume of alcohol sold reported net by the segment decreased by 10.8 million gallons, or 100%, to no gallons sold net for the three months ended March 31, 2023 as compared to 10.8 million gallons for the same period in 2022. This decline reduced net sales by $0.2 million.

The $0.22 per gallon, or 8%, decrease in the segment's average sales price per gallon for the three months ended March 31, 2023 as compared to the same period in 2022 resulted in a $4.4 million decline in our net sales from third-party fuel-grade ethanol sold by the segment.

Other Production Segment

Net sales of alcohol from our other production segment decreased by $38.9 million, or 65%, to $20.9 million for the three months ended March 31, 2023 as compared to $59.8 million for the same period in 2022. Our total volume of alcohol sold declined by 15.3 million gallons, or 66%, to 7.9 million gallons for the three months ended March 31, 2023 as compared to 23.2 million gallons for the same period in 2022. At the segment's average sales price per gallon of $2.64 for the three months ended March 31, 2023, we generated $40.2 million less in net sales from the 15.3 million fewer gallons of alcohol sold in the three months ended March 31, 2023 as compared to the same period in 2022. The increase of $0.06, or 2%, in the segment's average sales price per gallon for the three months ended March 31, 2023 as compared to the same period in 2022 improved our net sales from the segment by $1.3 million.

Net sales of essential ingredients from our other production segment decreased by $10.5 million, or 56%, to $8.4 million for the three months ended March 31, 2023 as compared to $18.9 million for the same period in 2022. Our total volume of essential ingredients sold declined by 85,000 tons, or 54%, to 72,000 tons for the three months ended March 31, 2023 from 157,000 tons for the same period in 2022. At the segment's average sales price per ton of $115.37 for the three months ended March 31, 2023, we generated $9.7 million less in net sales from the 85,000 fewer tons of essential ingredients sold in the three months ended March 31, 2023 as compared to the same period in 2022. The decrease of $5.48, or 5%, in our average sales price per ton for the three months ended March 31, 2023 as compared to the same period in 2022 decreased our net sales of essential ingredients from the segment by $0.8 million.

Corporate and other

Net sales of alcohol from corporate and other increased by $0.3 million, or 8%, to $4.1 million for the three months ended March 31, 2023 as compared to $3.8 million for the same period in 2022. These sales are from Eagle Alcohol's business.

Cost of Goods Sold and Gross Profit (Loss)

Our consolidated gross profit (loss) declined to a gross loss of $3.2 million for the three months ended March 31, 2023 from gross profit of $4.8 million for the same period in 2022, representing a gross margin of negative 1.0% for the three months ended March 31, 2023 compared to a gross margin of 1.5% for the same period in 2022. Our consolidated gross profit (loss) declined due to lower commodity margins as a result of higher production input costs. In addition, our cost of goods sold includes $1.8 million in net losses recorded on our forward derivative positions.

Pekin Campus Production Segment

Our Pekin Campus production segment's gross profit, net of intercompany activity, declined by $5.2 million to a loss of $1.6 million for the three months ended March 31, 2023 as compared to gross profit of $3.6 million for the same period in 2022. This decline in gross profit is primarily attributable to lower fuel-grade ethanol margins. In addition, although the segment achieved higher sales prices for our essential ingredients, the higher sales prices did not outweigh our higher production input costs, particularly corn prices, we experienced to produce the essential ingredients.

Marketing and Distribution Segment

Our marketing and distribution segment's gross profit (loss), net of intercompany activity, improved by $1.8 million to a gross profit of $1.4 million for the three months ended March 31, 2023 as compared to a gross loss of $0.4 million for the same period in 2022. Of this improvement, $1.2 million is attributable to higher margins from sales of third-party fuel-grade ethanol and $0.6 million is attributable to higher sales volumes for the three months ended March 31, 2023 as compared to the same period in 2022 as we met our customers' needs through sales of third-party fuel grade ethanol while our Magic Valley facility was temporarily idled.

Other Production Segment

Our other production segment's gross profit, net of intercompany activity, declined by $5.3 million to a gross loss of $4.6 million for the three months ended March 31, 2023 as compared to a gross profit of $0.7 million for the same period in 2022. Of this decline, $14.2 million is attributable to lower fuel-grade ethanol margins, partially offset by $8.9 million in reduced gross losses from fewer volumes sold at negative margins as a result of the temporary shutdown of our Magic Valley plant.

Corporate and other

Gross profit from corporate and other improved by $0.8 million to a gross profit of $1.7 million for the three months ended March 31, 2023 as compared to $0.9 million for the same period in 2022, all of which were from Eagle Alcohol's business.

Selling, General and Administrative Expenses

The following table presents our selling, general and administrative, or SG&A, expenses in dollars and as a percentage of net sales (in thousands, except percentages):

	Three Months Ended March 31,		Change in	
	2023	2022	Dollars	Percent
Selling, general and administrative expenses	$ 7,882	$ 7,629	$ 253	3.3%
Percentage of net sales	*2.5%*	*2.5%*		

Our SG&A expenses increased for the three months ended March 31, 2023 as compared to the same period in 2022. The $0.3 million period over period increase in SG&A expenses is primarily due to increased professional fees to support our assessments of future plant improvement projects and other strategic initiatives.

Interest Expense, net

The following table presents our interest expense, net, in dollars and as a percentage of net sales (in thousands, except percentages):

	Three Months Ended March 31,		Change in	
	2023	2022	Dollars	Percent
Interest expense, net	$ 1,565	$ 200	$ 1,365	682.5%
Percentage of net sales	*0.5%*	*0.1%*		

Our interest expense, net, increased for the three months ended March 31, 2023 as compared to the same period in 2022. The $1.4 million period over period increase in interest expense, net, is primarily due to increased borrowings under our Orion term loan, the proceeds of which we are using to accelerate and expand our plant improvement projects and other strategic initiatives.

Net Loss Available to Common Stockholders

The following table presents our net loss available to common stockholders in dollars and as a percentage of net sales (in thousands, except percentages):

	Three Months Ended March 31,		Change in	
	2023	2022	Dollars	Percent
Net loss available to Common Stockholders	$ (13,478)	$ (2,914)	$ 10,564	362.5%
Percentage of net sales	*(4.3)%*	*(0.9)%*		

The increase in net loss available to common stockholders is primarily due to lower margins resulting from higher commodity prices for the three months ended March 31, 2023 as compared to the same period in 2022. Interest expense was also higher for the first quarter of 2023 compared to the same period in 2022 due to higher debt balances from our term loan to support our capital improvement projects.

Liquidity and Capital Resources

During the three months ended March 31, 2023, we funded our operations primarily from proceeds from our line of credit and cash on hand. In addition to funding our operations, our capital resources were used to advance our capital improvement projects and make an annual payment for our acquisition of Eagle Alcohol. As of March 31, 2023, we had $26.4 million in cash, cash equivalents and restricted cash, $41.6 million available for borrowing under Kinergy's operating line of credit and $40 million available for borrowing under our Orion term loan. We believe we have sufficient liquidity to meet our anticipated working capital, debt service and other liquidity needs for the next twelve months from the date of this report.

Quantitative Year-End Liquidity Status

We believe that the following amounts provide insight into our liquidity and capital resources. The following selected financial information should be read in conjunction with our consolidated financial statements and notes to consolidated financial statements included elsewhere in this report, and the other sections of "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in this report (dollars in thousands).

	March 31, 2023	December 31, 2022	Change
Cash, cash equivalents and restricted cash	$ 26,436	$ 49,525	(46.6)%
Current assets	$ 171,604	$ 199,121	(13.8)%
Property and equipment, net	$ 244,172	$ 239,069	2.1%
Current liabilities	$ 53,846	$ 78,017	(31.0)%
Long-term debt	$ 83,739	$ 68,356	22.5%
Working capital	$ 117,758	$ 121,104	(2.8)%
Working capital ratio	3.19	2.55	25.1%

Changes in Working Capital and Cash Flows

Working capital declined to $117.8 million at March 31, 2023 from $121.1 million at December 31, 2022 as a result of a decrease of $27.5 million in current assets, partially offset by a decrease of $24.2 million in current liabilities.

Current assets declined primarily due to a decrease in cash and restricted cash as we used significant cash on hand for our operating activities and also used cash on hand to advance our capital improvement projects.

Our current liabilities decreased primarily due to lower accrued liabilities as a result of our payment of accrued contingent consideration for our acquisition of Eagle Alcohol, lower utility accruals in the current period and a decline in the value of derivative instruments due to the end of period change in commodity prices for open contracts.

Our cash, cash equivalents and restricted cash declined by $23.0 million primarily due to $23.3 million in cash used in our operating activities and $13.1 million in cash used in our investing activities, partially offset by $13.4 million in cash provided by our financing activities.

Cash used in our Operating Activities

We used $23.3 million in cash for our operating activities during the three months ended March 31, 2023 as compared to $11.1 million in cash provided by our operations for the same period in 2022. Specific factors that contributed to the change in cash from our operating activities include:

- an increase of $10.6 million in our net loss due to lower margins primarily caused by higher commodity prices;
- an increase of $14.4 million related to payments of accounts payable and accrued liabilities due to their timing;
- a decrease of $10.1 million related to other assets primarily related to lower hedging activities during the quarter; and
- an increase of $9.6 million related to higher accounts receivable balances due to the timing of collections.

These amounts were partially offset by:

- an increase of $7.1 million related to volatility from our derivative instruments; and
- a decrease of $2.3 million related to higher inventories due to increased commodity prices.

Cash used in our Investing Activities

We used $9.6 million of cash during the quarter to fund additions to property and equipment and $3.5 million of cash to make contingent purchase price payments for our acquisition of Eagle Alcohol.

Cash provided by our Financing Activities

Cash provided by our financing activities was $13.4 million for the three months ended March 31, 2023, which reflects net proceeds of $15.4 million from Kinergy's operating line of credit, partially offset by $1.7 million of stock repurchases and $0.3 million paid in preferred dividends.

Kinergy's Operating Line of Credit

Kinergy maintains an operating line of credit for an aggregate amount of up to $100.0 million. The credit facility matures on November 7, 2027. Interest accrues under the credit facility at a rate equal to (a) the daily Secured Overnight Financing Rate, plus (ii) a specified applicable margin ranging from 1.25% to 1.75%. The credit facility's monthly unused line fee is 0.25% to 0.375% of the amount by which the maximum credit under the facility exceeds the average daily principal balance during the immediately preceding month. Payments that may be made by Kinergy to Alto Ingredients, Inc. as reimbursement for management and other services provided by Alto Ingredients, Inc. to Kinergy are limited under the terms of the credit facility to $1.5 million per fiscal quarter. The credit facility also includes the accounts receivable of our indirect wholly-owned subsidiary, Alto Nutrients, LLC, or Alto Nutrients, as additional collateral. Payments that may be made by Alto Nutrients to Alto Ingredients, Inc. as reimbursement for management and other services provided by Alto Ingredients, Inc. to Alto Nutrients are limited under the terms of the credit facility to $0.5 million per fiscal quarter. Alto Nutrients markets our essential ingredients and also provides raw material procurement services to our subsidiaries. In addition, the amount of cash distributions that Kinergy or Alto Nutrients may make to us is also limited to up to 75% of excess cash flow.

For all monthly periods in which excess borrowing availability falls below a specified level, Kinergy and Alto Nutrients must collectively maintain a fixed-charge coverage ratio (calculated as a twelve-month rolling earnings before interest, taxes, depreciation and amortization divided by the sum of interest expense, capital expenditures, principal payments of indebtedness, indebtedness from capital leases and taxes paid during such twelve-month rolling period) of at least 1.1 and are prohibited from incurring certain additional indebtedness (other than specific intercompany indebtedness). The obligations of Kinergy and Alto Nutrients under the credit facility are secured by all of our tangible and intangible assets.

We believe Kinergy and Alto Nutrients are in compliance with the fixed-charge coverage ratio covenant as of the filing of this report. The following table sets forth the fixed-charge coverage ratio financial covenant and the actual results for the periods presented:

	Three Months Ended March 31,		Years Ended December 31,	
	2023	2022	2022	2021
Fixed-Charge Coverage Ratio Requirement	1.10	2.00	1.10	2.00
Actual	3.89	10.18	3.54	13.32
Excess	2.79	8.18	2.44	11.32

Alto Ingredients, Inc. has guaranteed all of Kinergy's obligations under the credit facility. As of March 31, 2023, Kinergy had an outstanding balance of $33.4 million and $41.6 million of unused borrowing availability under the credit facility.

Orion Term Loan

On November 7, 2022, we entered into a credit agreement with certain funds managed by Orion Infrastructure Capital, or Lenders, under which the Lenders extended a senior secured credit facility in the amount of up to $125,000,000, or Term Loan. The Term Loan is secured by a first priority lien on certain of our assets and a second priority lien on certain assets of Kinergy and Alto Nutrients.

The Lenders agreed to advance up to $100,000,000, with up to an additional $25,000,000 upon the satisfaction of certain conditions. We committed to issue to the Lenders pro rata an aggregate of 1,282,051 shares of our common stock at the initial funding and up to an additional 320,513 shares of our common stock based upon certain further fundings under the credit facility. On November 23, 2022, we received our initial funding of $60,000,000 under the credit facility and issued an aggregate of 1,282,051 shares of our common stock to the Lenders. We received no separate consideration for the shares of common stock issued.

Interest accrues on the unpaid principal amount of the Term Loan at a fixed rate of 10% per annum. The Term Loan matures on November 7, 2028, or earlier upon acceleration.

We must prepay amounts outstanding under the Term Loan on a semi-annual basis beginning with the six-month period ending December 31, 2023 in an amount equal to a percentage of our excess cash flow based on a specified leverage ratio, as follows: (a) if our leverage ratio is greater than or equal to 3.0x, then the mandatory prepayment amount will equal 100% of our excess cash flow, (b) if our leverage ratio is less than 3.0x and greater than or equal to 1.5x, then the mandatory prepayment amount will equal 50% of our excess cash flow, and (c) if our leverage ratio is less than 1.5x, then the mandatory prepayment amount will equal 25% of our excess cash flow.

As of March 31, 2023, the amount outstanding under the Term Loan was $60,000,000.

Share Repurchase Program

For the three months ended March 31, 2023, we repurchased 860,000 shares of our common stock as part of our publicly announced share repurchase program at an average price per share of $1.96 for an aggregate expenditure of $1.7 million during the period. See "Unregistered Sales of Equity Securities and Use of Proceeds – Purchases of Equity Securities by the Issuer and Affiliated Purchasers."

Other Cash Obligations

As of March 31, 2023, we had future commitments for certain capital projects totaling $21.7 million. These commitments are scheduled to be satisfied through 2024.

In connection with our acquisition of Eagle Alcohol, we committed to contingent payments of up to $5.5 million in cash over the next two years if certain targets are met.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

We are exposed to various market risks, including changes in commodity prices as discussed below. Market risk is the potential loss arising from adverse changes in market rates and prices. In the ordinary course of business, we may enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in commodity prices. We do not have material exposure to interest rate risk. We do not expect to have any exposure to foreign currency risk as we conduct all of our transactions in U.S. dollars.

We produce alcohol and essential ingredients. Our business is sensitive to changes in the prices of ethanol and corn. In the ordinary course of business, we may enter into various types of transactions involving financial instruments to manage and reduce the impact of changes in ethanol and corn prices. We do not enter into derivatives or other financial instruments for trading or speculative purposes.

We are subject to market risk with respect to ethanol and corn pricing. Ethanol prices are sensitive to global and domestic ethanol supply; crude-oil supply and demand; crude-oil refining capacity; carbon intensity; government regulation; and consumer demand for alternative fuels. Our alcohol sales are priced using contracts that are either based on a fixed price or an indexed price tied to a specific market, such as the CBOT or the Oil Price Information Service. Under these fixed-priced arrangements, we are exposed to risk of a decrease in the market price of ethanol between the time the price is fixed and the time the alcohol is sold.

We satisfy our physical corn needs, the principal raw material used to produce alcohol and essential ingredients, based on purchases from our corn vendors. Generally, we determine the purchase price of our corn at or near the time we begin to grind. Additionally, we also enter into volume contracts with our vendors to fix the purchase price. As such, we are also subject to market risk with respect to the price of corn. The price of corn is subject to wide fluctuations due to unpredictable factors such as weather conditions, farmer planting decisions, governmental policies with respect to agriculture and international trade, and global supply and demand. Under the fixed price arrangements, we assume the risk of a decrease in the market price of corn between the time the price is fixed and the time the corn is utilized.

Essential ingredients are sensitive to various demand factors such as numbers of livestock on feed, prices for feed alternatives, and supply factors, primarily production of ethanol co-products by ethanol plants and other sources.

As noted above, we may attempt to reduce the market risk associated with fluctuations in the price of ethanol or corn by employing a variety of risk management and hedging strategies. Strategies include the use of derivative financial instruments such as futures and options executed on the CBOT and/or the New York Mercantile Exchange, as well as the daily management of physical corn supplies.

These derivatives are not designated for special hedge accounting treatment, and as such, the changes in the fair values of these contracts are recorded on the balance sheet and recognized immediately in cost of goods sold. We recognized net losses of $1.8 million and net gains of $5.3 million related to the changes in the fair values of these contracts for the three months ended March 31, 2023 and 2022, respectively.

We prepared a sensitivity analysis as of March 31, 2023 to estimate our exposure to ethanol and corn. Market risk related to these factors was estimated as the potential change in pre-tax income resulting from a hypothetical 10% adverse change in the prices of our expected ethanol and corn volumes. The analysis uses average CBOT prices for the year and does not factor in future contracted volumes. The results of this analysis for the three months ended March 31, 2023, which may differ materially from actual results, are as follows (in millions):

Commodity	**Volume**	**Unit of Measure**	**Approximate Adverse Change to Pre-Tax Income**
Ethanol	92.4	Gallons	$ (12.7)
Corn	20.9	Bushels	$ (13.7)

ITEM 4. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by the company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures also include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded as of March 31, 2023 that our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on the Effectiveness of Controls

Management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control systems are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a cost-effective control system, no evaluation of internal control over financial reporting can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been or will be detected.

These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of controls effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

PART II - OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS.

We are subject to legal proceedings, claims and litigation arising in the ordinary course of business. While the amounts claimed may be substantial, the ultimate liability cannot presently be determined because of considerable uncertainties that exist. Therefore, it is possible that the outcome of those legal proceedings, claims and litigation could adversely affect our quarterly or annual operating results or cash flows when resolved in a future period. However, based on facts currently available, management believes such matters will not adversely affect in any material respect our financial condition, results of operations or cash flows.

ITEM 1A. RISK FACTORS.

Before deciding to purchase, hold or sell our common stock, you should carefully consider the risks described below in addition to the other information contained in this Report and in our other filings with the Securities and Exchange Commission, including subsequent reports on Forms 10-Q and 8-K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. If any of these known or unknown risks or uncertainties actually occurs with material adverse effects on Alto Ingredients, our business, financial condition, results of operations and/or liquidity could be seriously harmed. In that event, the market price for our common stock will likely decline, and you may lose all or part of your investment.

Risks Related to our Business

Our results of operations and our ability to operate at a profit are largely dependent on our ability to manage the costs of corn, natural gas and other production inputs, with the prices of our alcohols and essential ingredients, all of which are subject to volatility and uncertainty.

Our results of operations are highly impacted by commodity prices, including the cost of corn, natural gas and other production inputs that we must purchase, and the prices of alcohols and essential ingredients that we sell. Prices and supplies are subject to and determined by numerous market and other forces over which we have no control, such as weather, domestic and global demand, supply shortages, export prices, inflationary conditions, global geopolitical tensions and various governmental policies in the United States and throughout the world.

Price volatility of corn, natural gas and other production inputs, and alcohols and essential ingredients, may cause our results of operations to fluctuate substantially. We may fail to generate expected levels of net sales and profits even under fixed-price and other contracts for the sale of specialty alcohols used in consumer products. Our customers may not pay us timely or at all, even under longer-term, fixed-price contracts for our specialty alcohols, and may seek to renegotiate prices under those contracts during periods of falling prices or high price volatility.

Over the past several years, for example, the spread between corn and fuel-grade ethanol prices has fluctuated significantly. Fluctuations are likely to continue to occur. A sustained negative or narrow spread, whether as a result of sustained high or increased corn prices or sustained low or decreased alcohol or essential ingredient prices, would adversely affect our results of operations and financial condition. Revenues from sales of alcohols, particularly fuel-grade ethanol, and essential ingredients have in the past and could in the future decline below the marginal cost of production, which may force us to suspend production, particularly fuel-grade ethanol production, at some or all of our facilities.

In addition, some of our fuel-grade ethanol marketing and distribution activities will likely be unprofitable in a market of generally declining prices due to the nature of our business. For example, to satisfy customer demands, we maintain certain quantities of fuel-grade ethanol inventory for subsequent resale. Moreover, we procure much of our fuel-grade ethanol inventory outside of contracted third-party marketing and distribution arrangements and therefore must buy fuel-grade ethanol at a price established at the time of purchase and sell fuel-grade ethanol at an index price established later at the time of sale that is generally reflective of movements in the market price of fuel-grade ethanol. As a result, our margins for fuel-grade ethanol sold in these transactions generally decline and may turn negative as the market price of fuel-grade ethanol declines.

We can provide no assurance that corn, natural gas or other production inputs can be purchased at or near current or any particular prices, or that our alcohols or essential ingredients will sell at or near current or any particular prices. Consequently, our results of operations and financial condition may be adversely affected by increases in the prices of corn, natural gas and other production inputs or decreases in the prices of our alcohols and essential ingredients.

Inflation, including as a result of commodity price inflation or supply chain constraints due to the war in Ukraine, and higher prices in general may adversely impact our results of operations.

We have experienced inflationary impacts on key production inputs, wages and other costs of labor, equipment, services, and other business expenses. Commodity prices in particular have risen significantly over the past year. Inflation and its negative impacts could escalate in future periods.

Ukraine is the third largest exporter of grain in the world. Russia is one of the largest producers of natural gas and oil and is the largest exporter of fertilizers. The commodity price impact of the war in Ukraine has been a sharp and sustained rise in grain and energy prices, including for corn and natural gas, our two most important production input commodities. In addition, the war in Ukraine has adversely affected and may continue to adversely affect global supply chains resulting in further commodity price inflation for our production inputs. Lower fertilizer supplies may also impact future growing seasons, further impacting grain supplies and prices. Also, given high global grain prices, U.S. farmers may prefer to lock in prices and export additional volumes, reducing domestic grain supplies and resulting in further inflationary pressures on key production inputs.

Even if inflation stabilizes or abates, the prices of key production inputs, wages and other costs of labor, equipment, services, and other business expenses may remain at elevated levels. We may not be able to include these additional costs in the prices of the products we sell. As a result, inflation and higher prices in general may have a material adverse effect on our results of operations and financial condition.

Increased alcohol or essential ingredient production or higher inventory levels may cause a decline in prices for those products, and may have other negative effects, adversely impacting our results of operations, cash flows and financial condition.

The prices of our alcohols and essential ingredients are impacted by competing third-party supplies of those products. For example, we believe that the most significant factor influencing the price of fuel-grade ethanol has been the substantial increase in production. According to the Renewable Fuels Association, domestic fuel-grade ethanol production capacity increased from an annualized rate of 1.5 billion gallons per year in January 1999 to a record 16.1 billion gallons in 2018. In addition, if fuel-grade ethanol production margins improve, we anticipate that owners of production facilities operating at below capacity, or owners of idled production facilities, will increase production levels, thereby resulting in more abundant fuel-grade ethanol supplies and inventories. Increases in the supply of alcohols and essential ingredients may not be commensurate with increases in demand for alcohols and essential ingredients, thus leading to lower prices. Any of these outcomes could have a material adverse effect on our results of operations, cash flows and financial condition.

The prices of our products are volatile and subject to large fluctuations, which may cause our results of operations to fluctuate significantly.

The prices of our products are volatile and subject to large fluctuations. For example, the market price of fuel-grade ethanol is dependent upon many factors, including the supply of ethanol and the price of gasoline, which is in turn dependent upon the price of petroleum which itself is highly volatile, difficult to forecast and influenced by a wide variety of geopolitical and global economic conditions, including decisions concerning petroleum output by the Organization of Petroleum Exporting Countries (OPEC) and their allies, an intergovernmental organization that seeks to manage the price and supply of oil on the global energy market. Our fuel-grade ethanol sales are tied to prevailing spot market prices rather than long-term, fixed-price contracts. Fuel-grade ethanol prices, as reported by the CBOT, ranged from $2.00 to $2.88 per gallon in 2022, from $1.48 to $3.75 per gallon in 2021 and from $0.81 to $1.62 per gallon in 2020. In addition, even under longer-term, fixed-price contracts for our specialty alcohols, our customers may seek to renegotiate prices under those contracts during periods of falling prices or high price volatility. Fluctuations in the prices of our products may cause our results of operations to fluctuate significantly.

Disruptions in our production or distribution, including as a result of climate change and other weather effects, may adversely affect our business, results of operations and financial condition.

Our business depends on the continuing availability of rail, road, port, storage and distribution infrastructure. In particular, due to limited storage capacity at some of our production facilities and other considerations related to production efficiencies, certain facilities depend on just-in-time delivery of corn. The production of alcohols also requires a significant and uninterrupted supply of other raw materials and energy, primarily water, electricity and natural gas. Local water, electricity and gas utilities may fail to reliably supply the water, electricity and natural gas that our production facilities need or may fail to supply those resources on acceptable terms. In the past, poor weather has caused disruptions in rail transportation, which slowed the delivery of fuel-grade ethanol by rail, a key method by which fuel-grade ethanol from our Pekin Campus is transported to market.

For example, in 2022, a lightning strike at the utility servicing our Pekin Campus disrupted our operations, cutting power to our facilities and materially affecting our production, resulting in unexpected repair and maintenance costs, lost production and degradation in the quality of work-in-progress inventories. In addition, in 2020, we experienced closure of the Illinois River for lock repairs which required greater use of less cost-effective modes of product transport such as via rail and truck, which resulted in higher costs and negatively affected our results of operations.

Disruptions in production or distribution, whether caused by labor difficulties, unscheduled downtimes and other operational hazards inherent in the alcohol production industry, including equipment failures, fires, explosions, abnormal pressures, blowouts, pipeline ruptures, transportation accidents, climate change and natural disasters such as earthquakes, floods and storms, or other weather effects, or human error or malfeasance or other reasons, could prevent timely deliveries of corn or other raw materials and energy, and could delay transport of our products to market, and may require us to halt production at one or more production facilities, any of which could have a material adverse effect on our business, results of operations and financial condition.

Some of these operational hazards may also cause personal injury or loss of life, severe damage to or destruction of property and equipment or environmental damage, and may result in suspension of operations and the imposition of civil or criminal penalties. Our insurance may not fully cover the potential hazards described above or we may be unable to renew our insurance on commercially reasonable terms or at all.

Climate change, and governmental regulations aimed at addressing climate-related issues, may affect conditions to which our business is highly sensitive, many of which could materially and adversely harm our business, results of operations and financial condition.

Our business is highly sensitive to commodity prices, in particular the prices of corn and grain substitutes, and natural gas. Inclement weather from climate change, including extreme temperatures or drought, may adversely affect growing conditions, which may reduce available corn supplies, our primary production input, and other grain substitutes, driving up prices and thereby increasing our production input costs. In addition, governmental regulators may disfavor carbon-based energy sources, such as natural gas, leading to regulations that disincentivize their use or otherwise make their production more difficult and costly, driving up their prices. Higher natural gas prices would likewise increase our production input costs.

Other factors that may result from climate change, or that may result from governmental regulations aimed at addressing climate-related issues, may also adversely affect our business, including the following:

- Water is one of our key production inputs; water resource limitations may result from drought and other inclement weather; water resource limitations may also result from rationing and other governmental regulations limiting water use;

- Higher water temperatures due to increased global or regional temperatures may negatively affect production efficiencies due to water temperature production requirements given the poor cooling capacities of our older facilities;

- Flooding and other inclement weather may negatively affect our river access, other transportation logistics and costs, and storage requirements;

- An overall increase in energy costs will negatively impact our production costs generally and may critically impact certain high energy-intensive production technologies, such as our wet milling and multiple distillation processes for high-quality alcohol;

- Regulatory and market transition away from combustion fuels and fuel-grade ethanol blending may threaten the viability of our renewable fuels business; and

- Costs and regulatory burdens associated with governmental regulations that limit or tax greenhouse gas emissions, such as carbon dioxide, from alcohol production and distribution, or from truck transport and packaging associated with Eagle Alcohol's business and use of drums and totes, will negatively impact us.

New legislation in the United States to address climate change issues, including at the federal, state and local levels, likely will continue. This includes new or expanded cap-and-trade programs that may layer additional costs on any business that emits greenhouse gases. New legislation, including new or expanded cap-and-trade programs, could materially and adversely impact our production cost structure and the market viability of our products.

Any of these factors could materially and adversely harm our business, results of operations and financial condition.

We may engage in hedging transactions and other risk mitigation strategies that could harm our results of operations and financial condition.

In an attempt to partially offset the effects of production input and product price volatility, in particular, corn and natural gas costs and fuel-grade ethanol prices, we may enter into contracts to purchase a portion of our corn or natural gas requirements on a forward basis or fix the sale price of portions of our alcohol production. In addition, we may engage in other hedging transactions involving exchange-traded futures contracts for corn, natural gas and unleaded gasoline from time to time. The financial statement impact of these activities is dependent upon, among other things, the prices involved and our ability to sell sufficient products to use all of the corn and natural gas for which forward commitments have been made. Hedging arrangements also expose us to the risk of financial loss in situations where our counterparty to the hedging contract defaults on its contract or, in the case of exchange-traded contracts, where there is a change in the expected differential between the underlying price in the hedging agreement and the actual prices paid or received by us. In addition, our open contract positions may require cash deposits to cover margin calls, negatively impacting our liquidity. As a result, our hedging activities and fluctuations in the price of corn, natural gas, fuel-grade ethanol and unleaded gasoline may adversely affect our results of operations, financial condition and liquidity.

Risks Related to our Finances

We have incurred significant losses and negative operating cash flow in the past and we may incur losses and negative operating cash flow in the future, which may hamper our operations and impede us from expanding our business.

We have incurred significant losses and negative operating cash flow in the past. For example, for the three months ended March 31, 2023, three months ended March 31, 2022, three months and year ended December 31, 2022 and for the year ended December 31, 2020, we incurred consolidated net losses of approximately $13.2 million, $2.6 million, $33.1 million, $41.6 million and $17.3 million, respectively. For the three months ended March 31, 2023, we experienced negative operating cash flow of approximately $23.3 million. We may incur losses and negative operating cash flow in the future. We expect to rely on cash on hand, cash, if any, generated from our operations, borrowing availability under our lines of credit and proceeds from our future financing activities, if any, to fund all of the cash requirements of our business. Additional losses and negative operating cash flow may hamper our operations and impede us from expanding our business.

We incur significant expenses to maintain and upgrade our production facilities and operating equipment, and any interruption in our operations would harm our operating performance.

We regularly incur significant expenses to maintain and upgrade our production facilities and operating equipment. The machines and equipment we use to produce our alcohols and essential ingredients are complex, have many parts, and some operate on a continuous basis. We must perform routine equipment maintenance and must periodically replace a variety of parts such as motors, pumps, pipes and electrical parts. In addition, our production facilities require periodic shutdowns to perform major maintenance and upgrades. These scheduled shutdowns result in lower sales and increased costs in the periods during which a shutdown occurs and could result in unexpected operational issues in future periods as a result of changes to equipment and operational and mechanical processes made during shutdown.

Our indebtedness may expose us to risks that could negatively impact our business, prospects, liquidity, cash flows and results of operations.

We have incurred, and anticipate incurring additional, substantial indebtedness to engage in capital improvement projects. We expect that these projects, when completed, will generate financial returns sufficient to service and ultimately repay or refinance our indebtedness. However, the timing, cost and results of our capital improvement projects may not meet our projections. In addition, our indebtedness could:

- make it more difficult to pay or refinance our indebtedness if it becomes due during adverse economic and industry conditions;
- limit our flexibility to pursue strategic opportunities or react to changes in our business and the industries in which we operate and, consequently, place us at a competitive disadvantage to our competitors who have less debt;
- require a substantial portion of our cash flows from operations for debt service payments, thereby reducing the availability of our cash flows to fund working capital, additional capital expenditures, acquisitions, dividend payments and for other general corporate purposes; or
- limit our ability to procure additional financing for working capital or other purposes.

Our ability to generate sufficient cash to make all required principal and interest payments when due depends on our performance, which is subject to a variety of factors beyond our control, including the cost of key production inputs, the supply of and demand for specialty alcohols and essential ingredients, and many other factors related to the industries in which we operate. We cannot provide any assurance that we will be able to timely service or satisfy our debt obligations. Our failure to timely service or satisfy our debt obligations would have a material adverse effect on our business, business prospects, liquidity, cash flows and results of operations.

Our ability to utilize net operating loss carryforwards and certain other tax attributes may be limited.

Federal and state income tax laws impose restrictions on our use of net operating loss, or NOL, and tax credit carryforwards in the event that an “ownership change” occurs for tax purposes, as defined by Section 382 of the Internal Revenue Code, or Code. In general, an ownership change occurs when stockholders owning 5% or more of a corporation entitled to use NOL or other loss carryforwards have increased their ownership by more than 50 percentage points during any three-year period. The annual base limitation under Section 382 of the Code is calculated by multiplying the corporation’s value at the time of the ownership change by the greater of the long-term tax-exempt rate determined by the Internal Revenue Service in the month of the ownership change or the two preceding months. Our ability to utilize our NOL and other loss carryforwards may be substantially limited. These limitations could result in increased future tax obligations, which could have a material adverse effect on our financial condition and results of operations.

Risks Related to Legal and Regulatory Matters

We may be adversely affected by environmental, health and safety laws, regulations and liabilities, and which may not be adequately covered by insurance.

We are subject to various federal, state and local environmental laws and regulations, including those relating to the discharge of materials into the air, water and ground; the generation, storage, handling, use, transportation and disposal of hazardous materials and wastes; and the health and safety of our employees. In addition, some of these laws and regulations require us to operate under permits that are subject to renewal or modification. These laws, regulations and permits often require expensive pollution control equipment or operational changes to limit actual or potential impacts to the environment. A violation of these laws and regulations or permit conditions may result in substantial fines, natural resource damages, criminal sanctions, permit revocations and/or production facility shutdowns. In addition, we have made, and expect to make, significant capital expenditures on an ongoing basis to comply with increasingly stringent environmental laws, regulations and permits.

We may be liable for the investigation and cleanup of environmental contamination at each of our production facilities and at off-site locations where we arrange for the disposal of hazardous substances or wastes. If these substances or wastes have been or are disposed of or released at sites that undergo investigation and/or remediation by regulatory agencies, we may be responsible under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, or other environmental laws for all or part of the costs of investigation and/or remediation, and for damages to natural resources. We may also be subject to related claims by private parties alleging property damage and personal injury due to exposure to hazardous or other materials at or from those properties. Some of these matters may require us to expend significant amounts for investigation, cleanup or other costs not covered by insurance.

In addition, new laws, new interpretations of existing laws, increased governmental enforcement of environmental laws or other developments could require us to make significant additional expenditures. Continued government and public emphasis on environmental issues will likely result in increased future investments for environmental controls at our production facilities. Present and future environmental laws and regulations, and interpretations of those laws and regulations, applicable to our operations, more vigorous enforcement policies and discovery of currently unknown conditions may require substantial expenditures that could have a material adverse effect on our results of operations and financial condition.

The hazards and risks associated with producing and transporting our products (including fires, natural disasters, explosions and abnormal pressures and blowouts) may also result in personal injury claims or damage to property and third parties. As protection against operating hazards, we maintain insurance coverage against some, but not all, potential losses. However, we could sustain losses for uninsurable or uninsured risks, or in amounts in excess of existing insurance coverages. Events that result in significant personal injury or damage to our property or third parties or other losses that are not fully covered by insurance could have a material adverse effect on our results of operations and financial condition.

Future demand for fuel-grade ethanol is uncertain and may be affected by changes to federal mandates, public perception, consumer acceptance and overall consumer demand for transportation fuel, any of which could negatively affect demand for fuel-grade ethanol and our results of operations.

Although many trade groups, academics and governmental agencies support fuel-grade ethanol as a fuel additive that promotes a cleaner environment, others criticize fuel-grade ethanol production as consuming considerably more energy and emitting more greenhouse gases than other biofuels and potentially depleting water resources. Some studies suggest that corn-based ethanol is less efficient than ethanol produced from other feedstock and that it negatively impacts consumers by causing increased prices for dairy, meat and other food generated from livestock that consume corn. Additionally, critics of fuel-grade ethanol contend that corn supplies are redirected from international food markets to domestic fuel markets. If negative views of corn-based ethanol production gain broader acceptance, support for existing measures promoting use and domestic production of corn-based ethanol as a fuel additive could decline, leading to a reduction or repeal of federal ethanol usage mandates, which would materially and adversely affect the demand for fuel-grade ethanol. These views could also negatively impact public perception of the fuel-grade ethanol industry and acceptance of ethanol as an alternative fuel.

There are limited markets for fuel-grade ethanol beyond those established by federal mandates. Discretionary blending and E85 blending (i.e., gasoline blended with up to 85% fuel-grade ethanol by volume) are important secondary markets. Discretionary blending is often determined by the price of fuel-grade ethanol relative to the price of gasoline. In periods when discretionary blending is financially unattractive, the demand for fuel-grade ethanol may decline. Also, the demand for fuel-grade ethanol is affected by the overall demand for transportation fuel. Demand for transportation fuel is affected by the number of miles traveled by consumers and vehicle fuel economy. Lower demand for fuel-grade ethanol and co-products would reduce the value of our ethanol and related products, erode our overall margins and diminish our ability to generate revenue or to operate profitably. In addition, we believe that consumer acceptance of E15 and E85 fuels is necessary before fuel-grade ethanol can achieve any significant growth in market share relative to other transportation fuels.

The United States fuel-grade ethanol industry is highly dependent upon various federal and state laws and any changes in those laws could have a material adverse effect on our results of operations, cash flows and financial condition.

The EPA has implemented the Renewable Fuel Standard, or RFS, under the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. The RFS program sets annual quotas for the quantity of renewable fuels (such as fuel-grade ethanol) that must be blended into motor fuels consumed in the United States through 2022. After 2022, the EPA is to determine volume requirements in coordination with the Secretary of Energy and the Secretary of Agriculture. The EPA has proposed new post-2022 mandatory volumes of 15.0 billion and 15.25 billion gallons for 2023 and 2024, respectively, in compliance with a consent decree by the United States District Court for the District of Columbia.

Under the provisions of the Clean Air Act, as amended by the Energy Independence and Security Act of 2007, the EPA has limited authority to waive or reduce the mandated RFS requirements. This authority is subject to consultation with the Secretaries of Agriculture and Energy and is based on a determination that there is inadequate domestic renewable fuel supply or implementation of the applicable requirements would severely harm the economy or environment of a state, region or the United States in general. In particular, the EPA may issue small refinery waivers, in full or in part, to reduce or eliminate annual renewable fuel volume requirements for small refineries that process fewer than 75,000 barrels of petroleum daily. Our results of operations, cash flows and financial condition could be adversely impacted if the EPA reduces the RFS requirements from the statutory levels specified in the RFS or continues to issue significant small refinery waivers.

The domestic market for fuel-grade ethanol is significantly impacted by federal mandates under the RFS program for volumes of renewable fuels (such as ethanol) required to be blended with gasoline. Future demand for fuel-grade ethanol will largely depend on incentives to blend ethanol into motor fuels, including the price of ethanol relative to the price of gasoline, the relative octane value of ethanol, constraints on the ability of vehicles to use higher ethanol blends, the RFS and the EPA's established volumes from time to time, small refinery waivers, and other applicable environmental requirements.

Various bills in Congress introduced from time to time are also directed at altering existing renewable fuels energy legislation, but none have passed in recent years. Some legislative bills are directed at halting or reversing expansion of, or even eliminating, the renewable fuel program, while other bills are directed at bolstering the program or enacting further mandates or grants that would support the renewable fuels industry. Our results of operations, cash flows and financial condition could be adversely impacted if any legislation is enacted that reduces the RFS volume requirements.

Risks Related to Ownership of our Common Stock

Our stock price is highly volatile, which could result in substantial losses for investors purchasing shares of our common stock and in litigation against us.

The market price of our common stock has fluctuated significantly in the past and may continue to fluctuate significantly in the future. The market price of our common stock may continue to fluctuate in response to one or more of the following factors, or any of the other risks or uncertainties discussed in this report, many of which are beyond our control:

- fluctuations in the market prices of our products;
- fluctuations in the costs of key production input commodities such as corn and natural gas;
- the volume and timing of the receipt of orders for our products from major customers;
- competitive pricing pressures;
- anticipated trends in our financial condition and results of operations;
- changes in market valuations of companies similar to us;
- stock market price and volume fluctuations generally;
- regulatory developments or increased enforcement;
- fluctuations in our quarterly or annual operating results;
- additions or departures of key personnel;
- our ability to obtain any necessary financing;
- the timing, cost and results of our capital improvement projects;
- our financing activities and future sales of our common stock or other securities; and
- our ability to maintain contracts that are critical to our operations.

The price at which you purchase shares of our common stock may not be indicative of the price that will prevail in the trading market. You may be unable to sell your shares of common stock at or above your purchase price, which may result in substantial losses to you and which may include the complete loss of your investment. In the past, securities class action litigation has often been brought against a company following periods of high stock price volatility. We may be the target of similar litigation in the future. Securities litigation could result in substantial costs and divert management's attention and our resources away from our business.

Any of the risks described above could have a material adverse effect on our results of operations, the price of our common stock, or both.

Because we do not intend to pay any cash dividends on our shares of common stock in the near future, our stockholders will not be able to receive a return on their shares unless and until they sell them.

We intend to retain a significant portion of any future earnings to finance the development, operation and expansion of our business. We do not anticipate paying any cash dividends on our common stock in the near future. The declaration, payment, and amount of any future dividends will be made at the discretion of our board of directors, and will depend upon, among other things, our results of operations, cash flows, and financial condition, operating and capital requirements, compliance with any applicable debt covenants, and other factors our board of directors considers relevant. There is no assurance that future dividends will be paid, and, if dividends are paid, there is no assurance of the amount of any such dividend. Unless our board of directors determines to pay dividends, our stockholders will be required to look solely to appreciation in the value of our common stock to realize any gain on their investment. There can be no assurance that any such appreciation will occur.

Our bylaws contain an exclusive forum provision that could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Delaware Court of Chancery shall be the sole and exclusive forum for (a) any derivative action or proceeding brought on our behalf, (b) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of us to us or our stockholders, (c) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, or (d) any action asserting a claim governed by the internal affairs doctrine.

For the avoidance of doubt, the exclusive forum provision described above does not apply to any claims arising under the Securities Act of 1933, as amended, or the Securities Act, or the Securities Exchange Act of 1934, as amended, or the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder, and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder.

The choice of forum provision in our bylaws may limit our stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents even though an action, if successful, might benefit our stockholders. The applicable courts may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. With respect to the provision making the Delaware Court of Chancery the sole and exclusive forum for certain types of actions, stockholders who do bring a claim in the Delaware Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. Finally, if a court were to find this provision of our bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could have a material adverse effect on us.

General Risk Factors

Cyberattacks through security vulnerabilities could lead to disruption of our business, reduced revenue, increased costs, liability claims, or harm to our reputation or competitive position.

Security vulnerabilities may arise from our hardware, software, employees, contractors or policies we have deployed, which may result in external parties gaining access to our networks, data centers, cloud data centers, corporate computers, manufacturing systems, and/or access to accounts we have at our suppliers, vendors or customers. External parties may gain access to our data or our customers' data, or attack the networks causing denial of service or attempt to hold our data or systems in ransom. The vulnerability could be caused by inadequate account security practices such as the failure to timely remove employee access when terminated. To mitigate these security issues, we have implemented measures throughout our organization, including firewalls, backups, encryption, employee information technology policies and user account policies. However, there can be no assurance that these measures will be sufficient to avoid cyberattacks. If any of these types of security breaches were to occur and we were unable to protect sensitive data, our relationships with our business partners and customers could be materially damaged, our reputation could be materially harmed, and we could be exposed to a risk of litigation and possible significant liability.

Further, if we fail to adequately maintain our information technology infrastructure, we may have outages and data loss. Excessive outages may affect our ability to timely and efficiently deliver products to customers or develop new products. Such disruptions and data loss may adversely impact our ability to fulfill orders and interrupt other processes. Delayed sales or lost customers resulting from these disruptions could adversely affect our financial results, stock price and reputation.

Our and our business partners' or contractors' failure to fully comply with applicable data privacy or similar laws could lead to significant fines and require onerous corrective action. In addition, data security breaches experienced by us or our business partners or contractors could result in the loss of trade secrets or other intellectual property, public disclosure of sensitive commercial data, and the exposure of personally identifiable information (including sensitive personal information) of our employees, customers, suppliers, contractors and others.

Unauthorized use or disclosure of, or access to, any personal information maintained by us or on our behalf, whether through breach of our systems, breach of the systems of our suppliers or vendors by an unauthorized party, or through employee or contractor error, theft or misuse, or otherwise, could harm our business. If any such unauthorized use or disclosure of, or access to, such personal information was to occur, our operations could be seriously disrupted, and we could be subject to demands, claims and litigation by private parties, and investigations, related actions, and penalties by regulatory authorities. In addition, we could incur significant costs in notifying affected persons and entities and otherwise complying with the multitude of foreign, federal, state and local laws and regulations relating to the unauthorized access to, or use or disclosure of, personal information. Finally, any perceived or actual unauthorized access to, or use or disclosure of, such information could harm our reputation, substantially impair our ability to attract and retain customers and have an adverse impact on our business, financial condition and results of operations.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS.

Unregistered Sales of Equity Securities

None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table sets forth information about repurchases of our common stock for the three months ended March 31, 2023:

Period	Total number of shares purchased (1)	Average price paid per share	Total number of shares purchased as part of publicly-announced plans or programs (2)	Approximate dollar value of shares that may yet be purchased under plans or programs (2)(3)
January 1 to January 31, 2023	—	$ —	—	
February 1 to February 28, 2023	—	$ —	—	
March 1 to March 31, 2023	860,000	$ 1.96	860,000	
Three months ended March 31, 2023	860,000	$ 1.96	860,000	$ 46,993,000

(1) We repurchased 860,000 shares as part of our publicly announced share repurchase program during the three months ended March 31, 2023 and received no shares transferred from employees in satisfaction of minimum statutory tax withholding obligations upon the vesting of restricted stock during the period.

(2) On September 12, 2022, we announced a share repurchase program under which we may repurchase up to $50 million of our common stock with an initial purchase authorization of $10 million. Our lenders have further limited our purchase authorization to $5 million. Amounts in excess of our lenders' initial purchase authorization of $5 million will require additional lender consent and amounts in excess of the initial purchase authorization of $10 million will require additional board and preferred stockholder authorization. The share repurchase program does not have an expiration date, does not require the repurchase of any particular amount of shares, and may be implemented, modified, suspended or discontinued in whole or in part at any time and without further notice.

(3) Amount represents the share repurchase program size of $50 million less approximately $3.0 million in aggregate share repurchases, but is subject to authorizations for purchases in excess of our lenders' purchase authorization of $5 million and our board and preferred stockholders' initial purchase authorization of $10 million.

Dividends

Our current and future debt financing arrangements may limit or prevent cash distributions from our subsidiaries to us, depending upon the achievement of specified financial and other operating conditions and our ability to properly service our debt, thereby limiting or preventing us from paying cash dividends.

For the three months ended March 31, 2023 and 2022, we accrued and paid in cash an aggregate of $0.3 million in dividends on our Series B Cumulative Convertible Preferred Stock, or Series B Preferred Stock.

We have never declared or paid cash dividends on our common stock and do not currently intend to pay cash dividends on our common stock in the foreseeable future. We currently anticipate that we will retain any earnings for use in the continued development of our business.

The holders of our outstanding Series B Preferred Stock are entitled to dividends of 7% per annum, payable quarterly. Accrued and unpaid dividends in respect of our Series B Preferred Stock must be paid prior to the payment of any dividends in respect of shares of our common stock.

ITEM 3. DEFAULTS UPON SENIOR SECURITIES.

Not applicable.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

ITEM 5. OTHER INFORMATION.

Not applicable.

ITEM 6. EXHIBITS.

Exhibit Number	Description
31.1	Certifications Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (*)
31.2	Certifications Required by Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (*)
32.1	Certification of Chief Executive Officer and 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.INS	Inline XBRL Instance Document (*)
101.SCH	Inline XBRL Taxonomy Extension Schema Document (*)
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document (*)
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document (*)
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document (*)
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document (*)
104	Cover Page Interactive Data File (formatted as Inline XBRL with applicable taxonomy extension information contained in Exhibits 101) (*)

(*) Filed herewith.

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 thereunto duly authorized.

ALTO INGREDIENTS, INC.

Dated: May 9, 2023

By: /s/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXHIBIT 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Michael D. Kandris, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alto Ingredients, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 9, 2023

/s/ MICHAEL D. KANDRIS
Michael D. Kandris
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Bryon T. McGregor, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Alto Ingredients, 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

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

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

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: May 9, 2023

/s/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATIONS OF
CHIEF EXECUTIVE OFFICER AND 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 on Form 10-Q of Alto Ingredients, Inc. (the "Company") for the three months ended March 31, 2023 (the "Report"), the undersigned hereby certify in their capacities as Chief Executive Officer and Chief Financial Officer of the Company, respectively, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

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

Date: May 9, 2023

/s/ MICHAEL D. KANDRIS
Michael D. Kandris
President and Chief Executive Officer
(Principal Executive Officer)

Date: May 9, 2023

/s/ BRYON T. MCGREGOR
Bryon T. McGregor
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signatures that appear in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.