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Albemarle Reports First Quarter Sales Growth of 36%, Raising Guidance

CHARLOTTE, N.C. – May 4, 2022 - Albemarle Corporation (NYSE: ALB) today announced its results for the first quarter ended March 31, 2022.

First Quarter 2022 and Recent Highlights

(Unless otherwise stated, all percentage changes represent year-over-year comparisons)

- Net sales of \$1.13 billion, an increase of 36%; Net sales increased 44% excluding Fine Chemistry Services (FCS) business sold in June 2021
- Net income of \$253.4 million, or \$2.15 per diluted share; Adjusted diluted EPS of \$2.38, an increase of 116%
- Adjusted EBITDA of \$432 million, an increase of 88%; Adjusted EBITDA increased 107% excluding FCS business sold in June 2021
- MARBL Lithium Joint Venture (MARBL) to start operation of the second train at Wodgina Lithium Mine with first spodumene concentrate production expected in July 2022
- 2022 guidance revised upward on increased prices in Lithium and Bromine businesses; net sales are now expected to increase approximately 60-70% year-over-year and adjusted EBITDA is now expected to increase approximately 100-140% year-over-year

“We achieved a strong start to the year by focusing on execution and building on the momentum we created in the second half of 2021,” said Albemarle CEO Kent Masters. “Many of the end markets we serve are critical for transitioning to greener energy and advancing electrification and digitalization. Our ongoing investments capitalize on the rapid growth and strong pricing trends in these markets. We continue to explore sustainable options to expand our conversion capacity and resources, including opportunities in North America and Europe.”

Outlook

Albemarle’s outlook for 2022 has improved based on expectations of continued demand growth and tightness in the markets it serves. Net sales guidance was revised upward primarily due to continued strength in pricing in its Lithium and Bromine businesses. Adjusted EBITDA guidance is higher based on pricing expectations partially offset by inflationary cost pressures, particularly for natural gas in Europe.

	FY 2022 Guidance
Net sales	\$5.2 - \$5.6 billion
Adjusted EBITDA	\$1.7 - \$2.0 billion
Adjusted EBITDA Margin	33% - 36%
Adjusted Diluted EPS	\$9.25 - \$12.25
Net Cash from Operations	\$500 - \$800 million
Capital Expenditures	\$1.3 - \$1.5 billion

First Quarter Results

<i>In millions, except per share amounts</i>	Q1 2022	Q1 2021	\$ Change	% Change
Net sales	\$ 1,127.7	\$ 829.3	\$ 298.4	36.0 %
Net income attributable to Albemarle Corporation	\$ 253.4	\$ 95.7	\$ 157.7	164.8 %
Adjusted EBITDA ^(a)	\$ 431.9	\$ 230.1	\$ 201.9	87.8 %
Diluted earnings per share	\$ 2.15	\$ 0.84	\$ 1.31	156.0 %
Non-operating pension and OPEB items ^(a)	(0.04)	(0.04)		
Non-recurring and other unusual items ^(a)	0.26	0.29		
Adjusted diluted earnings per share ^{(a)(b)}	<u>\$ 2.38</u>	<u>\$ 1.10</u>	\$ 1.28	116.4 %

(a) See Non-GAAP Reconciliations for further details.

(b) Totals may not add due to rounding.

Net sales of \$1.13 billion increased by \$298.4 million compared to the prior year quarter primarily due to increased pricing across Albemarle's business segments driven by strong demand from diverse end markets.

Net income attributable to Albemarle of \$253.4 million increased by \$157.7 million from the prior year quarter primarily due to higher net sales, partially offset by inflationary cost pressures including natural gas prices in Europe.

Adjusted EBITDA of \$431.9 million increased by \$201.9 million from the prior year quarter primarily due to higher net sales, partially offset by inflationary cost pressures including natural gas prices in Europe.

The effective income tax rate for the first quarter of 2022 was 26.9% compared to 17.9% in the same period of 2021. The difference is largely due to global intangible low-taxed income and the geographic mix of earnings. On an adjusted basis, the effective income tax rates were 18.9% and 17.5% for the first quarter of 2022 and 2021, respectively.

Business Segment Results

Lithium Results

<i>In millions</i>	Q1 2022	Q1 2021	\$ Change	% Change
Net Sales	\$ 550.3	\$ 279.0	\$ 271.3	97.2 %
Adjusted EBITDA	\$ 308.6	\$ 106.4	\$ 202.2	190.0 %

Lithium net sales of \$550.3 million increased \$271.3 million (+97%) due to higher pricing net of FX (+66%) and a one-time sale of spodumene produced during the initial startup of Wodgina. Volume was higher (+31%) from tolling to help meet growing customer demand. Adjusted EBITDA of \$308.6 million increased \$202.2 million primarily due to increased pricing from renegotiated variable price contracts as well as the sale of lower cost inventory.

Lithium Outlook

Adjusted EBITDA for the full year 2022 is expected to grow approximately 200-225% year over year, up from the previous outlook. Average realized pricing is now expected to be up approximately 100% year over year resulting from the renegotiated index-referenced variable price contracts and increased market pricing. Full-year 2022 volume is expected to be up 20-30% year over year (unchanged) primarily due to new capacity coming online. The revised outlook assumes the company's Q2 realized selling price remains constant for the remainder of the year. There is potential upside if market pricing remains at historically strong levels or if current contract renegotiations result in additional index-referenced, variable pricing. There is potential downside in the event of a material correction in lithium market pricing or potential volume shortfalls (e.g., delays in acquisitions or expansion projects).

Albemarle continues to progress the expansion of its global portfolio of conversion capacity and utilization of its world-class resource portfolio:

Chile

- La Negra III/IV conversion plant started up and is in commercial qualification; operations are progressing to plan

Australia

- Kemerton I conversion plant is in commissioning and is expected to achieve first product in May
- Kemerton II conversion plant remains on track for mechanical completion in the second half of 2022
- First production of spodumene concentrate from the first train at Wodgina expected in May
- The start of the second train at Wodgina has been accelerated with first production of spodumene concentrate expected in July

China

- Acquisition of Qinzhou conversion plant continues to progress through the regulatory approval process and now is expected to close in the second half of this year
- Site preparation and early construction works have started at the Meishan greenfield project site, ahead of schedule
- Zhangjiagang greenfield project is in the engineering phase

United States

- New wells and expansion projects at Silver Peak continue to progress ahead of schedule

Bromine Results

<i>In millions</i>	Q1 2022	Q1 2021	\$ Change	% Change
Net Sales	\$ 359.6	\$ 280.4	\$ 79.1	28.2 %
Adjusted EBITDA	\$ 129.2	\$ 94.6	\$ 34.6	36.6 %

Bromine net sales of \$359.6 million increased \$79.1 million (+28%) primarily due to increased pricing net of FX (+25%) and slightly higher volumes (+3%). Tight market conditions continue to drive strong demand and favorable pricing across the product portfolio. Adjusted EBITDA of \$129.2 million increased \$34.6 million as higher net sales were partially offset by higher costs for raw materials and freight.

Bromine Outlook

Adjusted EBITDA for the full year 2022 is expected to grow approximately 15-20% from 2021 based on higher volumes and pricing as a result of strength in demand for fire safety solutions in diverse end markets. Successful execution of growth projects in 2021 is expected to contribute to higher volumes in full-year 2022. Bromine's ongoing cost savings initiatives and favorable pricing are expected to offset higher freight and raw material costs.

Catalysts Results

<i>In millions</i>	Q1 2022	Q1 2021	\$ Change	% Change
Net Sales	\$ 217.9	\$ 220.2	\$ (2.4)	(1.1)%
Adjusted EBITDA	\$ 16.9	\$ 25.4	\$ (8.5)	(33.5)%

Catalysts net sales of \$217.9 million decreased by \$2.4 million (-1%) compared to the previous year due to lower volumes (-2%), partially offset by slightly higher pricing net of FX (+1%). Adjusted EBITDA of \$16.9 million declined \$8.5 million as higher sales were offset by cost pressures from increasing natural gas prices and raw materials.

Catalysts Outlook

Albemarle expects full-year 2022 adjusted EBITDA to be flat to down 65% year-over-year, down from the previous outlook due to continued volatility of natural gas pricing in Europe related to the war in Ukraine, partially offset by higher pricing.

The strategic review of the Catalysts business is ongoing. The company expects to provide an update in the second quarter.

All Other

<i>In millions</i>	Q1 2022	Q1 2021	\$ Change	% Change
Net Sales	\$ —	\$ 49.6	\$ (49.6)	(100.0)%
Adjusted EBITDA	\$ —	\$ 21.5	\$ (21.5)	(100.0)%

Other operations represent the FCS business which was sold on June 1, 2021.

Balance Sheet and Liquidity

As of March 31, 2022, Albemarle had estimated liquidity of approximately \$1.9 billion, including \$463.3 million of cash and equivalents, \$777.6 million remaining under its \$1 billion revolver, \$500 million remaining under its amended delayed draw term loan and \$176.9 million on other available credit lines. Total debt was \$2.5 billion, representing net debt to adjusted EBITDA of approximately 1.9 times.

Cash Flow and Capital Deployment

Cash from operations for the three months ended March 31, 2022, of \$206.2 million increased \$48.2 million versus the prior year driven by higher adjusted EBITDA partially offset by working capital changes. Capital expenditures of \$231.7 million increased by \$52.0 million versus the prior year as the company nears completion of its Wave 2 Lithium expansion projects and progresses the next wave of projects.

Albemarle's primary capital allocation priorities are to invest in organic and inorganic opportunities to drive profitable growth, maintain its financial flexibility and Investment Grade credit rating, and fund its dividend.

The company expects to publish its 2021 sustainability report on June 2 and will hold a conference call on June 28, 2022, to discuss highlights from the report, including progress on current sustainability-related targets, new targets, and our initial assessment of scope 3 greenhouse gas emissions.

Earnings Call

Date:	Thursday, May 5, 2022
Time:	9:00 AM Eastern time
Dial-in (U.S.):	844-200-6205
Dial-in (International):	929-526-1599
Passcode:	277103

The company's earnings presentation and supporting material are available on Albemarle's website at <https://investors.albemarle.com>.

About Albemarle

Albemarle Corporation (NYSE: ALB) is a global specialty chemicals company with leading positions in lithium, bromine and refining catalysts. Albemarle thinks beyond business-as-usual to power the potential of companies in many of the world's largest and most critical industries, such as energy, electronics, and transportation. Albemarle actively pursues a sustainable approach to managing its diverse global footprint of world-class resources. In conjunction with Albemarle's highly experienced and talented global teams, its deep-seated values, and its collaborative customer relationships, Albemarle creates value-added and performance-based solutions that enable a safer and more sustainable future.

Albemarle regularly posts information to www.albemarle.com, including notification of events, news, financial performance, investor presentations and webcasts, non-GAAP reconciliations, SEC filings and other information regarding the company, its businesses and the markets it serves.

Forward-Looking Statements

Some of the information presented in this press release, the conference call and discussions that follow, including, without limitation, information related to the timing of active and proposed projects, production capacity, committed volumes, pricing, financial flexibility, expected growth, anticipated return on opportunities, earnings and demand for its products, productivity improvements, tax rates, stock repurchases, dividends, cash flow generation, costs and cost synergies, capital projects, future acquisition and divestiture transactions including statements with respect to timing, expected benefits from proposed transactions, market and economic trends, statements with respect to 2022 outlook and all other information relating to matters that are not historical facts may constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Actual results could differ materially from the views expressed. Factors that could cause Albemarle's actual results to differ materially from the outlook expressed or implied in any forward-looking statement include, without limitation:

changes in economic and business conditions; changes in financial and operating performance of its major customers and industries and markets served by it; the timing of orders received from customers; the gain or loss of significant customers; market correction in lithium market pricing; changes with respect to contract renegotiations; potential production volume shortfalls; competition from other manufacturers; changes in the demand for its products or the end-user markets in which its products are sold; limitations or prohibitions on the manufacture and sale of its products; availability of raw materials; increases in the cost of raw materials and energy, and its ability to pass through such increases to its customers; technological change and development, changes in its markets in general; fluctuations in foreign currencies; changes in laws and government regulation impacting its operations or its products; the occurrence of regulatory actions, proceedings, claims or litigation (including with respect to the U.S. Foreign Corrupt Practices Act and foreign anti-corruption laws); the occurrence of cyber-security breaches, terrorist attacks, industrial accidents or natural disasters, the effect of climate change, including any regulatory changes to which it might be subject; hazards associated with chemicals manufacturing; the inability to maintain current levels of insurance, including product or premises liability insurance, or the denial of such coverage; political unrest affecting the global economy, including adverse effects from terrorism or hostilities; political instability affecting our manufacturing operations or joint ventures; changes in accounting standards; the inability to achieve results from its global manufacturing cost reduction initiatives as well as its ongoing continuous improvement and rationalization programs; changes in the jurisdictional mix of its earnings and changes in tax laws and rates or interpretation; changes in monetary policies, inflation or interest rates that may impact its ability to raise capital or increase its cost of funds, impact the performance of its pension fund investments and increase its pension expense and funding obligations; volatility and uncertainties in the debt and equity markets; technology or intellectual property infringement, including cyber-security breaches, and other innovation risks; decisions it may make in the future; future acquisition and divestiture transactions, including the ability to successfully execute, operate and integrate acquisitions and divestitures and incurring additional indebtedness; continuing uncertainties as to the duration and impact of the coronavirus (COVID-19) pandemic; performance of Albemarle's partners in joint ventures and other projects; changes in credit ratings; and the other factors detailed from time to time in the reports Albemarle files with the SEC, including those described under "Risk Factors" in Albemarle's most recent Annual Report on Form 10-K any subsequently filed Quarterly Reports on Form 10-Q. These forward-looking statements speak only as of the date of this press release. Albemarle assumes no obligation to provide any revisions to any forward-looking statements should circumstances change, except as otherwise required by securities and other applicable laws.

Albemarle Corporation and Subsidiaries
Consolidated Statements of Income
(In Thousands Except Per Share Amounts) (Unaudited)

	Three Months Ended	
	March 31,	
	2022	2021
Net sales	\$1,127,728	\$ 829,291
Cost of goods sold	678,698	565,604
Gross profit	449,030	263,687
Selling, general and administrative expenses	112,568	93,187
Research and development expenses	16,083	14,636
Loss on sale of interest in properties	8,400	—
Operating profit	311,979	155,864
Interest and financing expenses	(27,834)	(43,882)
Other expense, net	15,496	11,312
Income before income taxes and equity in net income of unconsolidated investments	299,641	123,294
Income tax expense	80,530	22,107
Income before equity in net income of unconsolidated investments	219,111	101,187
Equity in net income of unconsolidated investments (net of tax)	62,436	16,511
Net income	281,547	117,698
Net income attributable to noncontrolling interests	(28,164)	(22,021)
Net income attributable to Albemarle Corporation	<u>\$ 253,383</u>	<u>\$ 95,677</u>
Basic earnings per share	<u>\$ 2.16</u>	<u>\$ 0.85</u>
Diluted earnings per share	<u>\$ 2.15</u>	<u>\$ 0.84</u>
Weighted-average common shares outstanding – basic	117,066	112,592
Weighted-average common shares outstanding – diluted	117,653	113,330

Albemarle Corporation and Subsidiaries
Condensed Consolidated Balance Sheets
(In Thousands) (Unaudited)

	March 31, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 463,325	\$ 439,272
Trade accounts receivable	658,733	556,922
Other accounts receivable	71,225	66,184
Inventories	1,013,793	812,920
Other current assets	129,407	132,683
Total current assets	<u>2,336,483</u>	<u>2,007,981</u>
Property, plant and equipment	8,238,317	8,074,746
Less accumulated depreciation and amortization	2,209,664	2,165,130
Net property, plant and equipment	6,028,653	5,909,616
Investments	937,619	897,708
Other assets	240,279	252,239
Goodwill	1,575,617	1,597,627
Other intangibles, net of amortization	297,407	308,947
Total assets	<u>\$ 11,416,058</u>	<u>\$ 10,974,118</u>
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 845,710	\$ 647,986
Accrued expenses	667,610	763,293
Current portion of long-term debt	503,795	389,920
Dividends payable	46,091	45,469
Income taxes payable	40,132	27,667
Total current liabilities	<u>2,103,338</u>	<u>1,874,335</u>
Long-term debt	1,985,696	2,004,319
Postretirement benefits	43,397	43,693
Pension benefits	217,820	229,187
Other noncurrent liabilities	649,878	663,698
Deferred income taxes	380,877	353,279
Commitments and contingencies		
Equity:		
Albemarle Corporation shareholders' equity:		
Common stock	1,171	1,170
Additional paid-in capital	2,915,387	2,920,007
Accumulated other comprehensive loss	(393,619)	(392,450)
Retained earnings	3,303,661	3,096,539
Total Albemarle Corporation shareholders' equity	<u>5,826,600</u>	<u>5,625,266</u>
Noncontrolling interests	208,452	180,341
Total equity	<u>6,035,052</u>	<u>5,805,607</u>
Total liabilities and equity	<u>\$ 11,416,058</u>	<u>\$ 10,974,118</u>

Albemarle Corporation and Subsidiaries
Selected Consolidated Cash Flow Data
(In Thousands) (Unaudited)

	Three Months Ended March 31,	
	2022	2021
Cash and cash equivalents at beginning of year	\$ 439,272	\$ 746,724
Cash flows from operating activities:		
Net income	281,547	117,698
Adjustments to reconcile net income to cash flows from operating activities:		
Depreciation and amortization	66,574	62,260
Loss on sale of interest in properties	8,400	—
Stock-based compensation and other	4,245	2,560
Equity in net income of unconsolidated investments (net of tax)	(62,436)	(16,511)
Dividends received from unconsolidated investments and nonmarketable securities	39,168	4,950
Pension and postretirement benefit	(4,250)	(4,226)
Pension and postretirement contributions	(3,890)	(15,329)
Unrealized gain on investments in marketable securities	1,469	(1,762)
Loss on early extinguishment of debt	—	27,798
Deferred income taxes	27,747	(19,384)
Working capital changes	(219,397)	(49,185)
Non-cash transfer of 40% value of construction in progress of Kemerton plant to MRL	65,100	43,223
Other, net	1,899	5,857
Net cash provided by operating activities	<u>206,176</u>	<u>157,949</u>
Cash flows from investing activities:		
Capital expenditures	(231,698)	(179,683)
Sales of marketable securities, net	3,751	5,245
Investments in equity and other corporate investments	(146)	(286)
Net cash used in investing activities	<u>(228,093)</u>	<u>(174,724)</u>
Cash flows from financing activities:		
Proceeds from issuance of common stock	—	1,453,888
Repayments of long-term debt and credit agreements	—	(1,174,980)
Proceeds from borrowings of credit agreements	280,000	—
Other debt repayments, net	(166,615)	(325,159)
Fees related to early extinguishment of debt	—	(23,719)
Dividends paid to shareholders	(45,637)	(41,130)
Dividends paid to noncontrolling interests	—	(26,219)
Proceeds from exercise of stock options	419	1,183
Withholding taxes paid on stock-based compensation award distributions	(10,422)	(6,860)
Other	(126)	(253)
Net cash provided by (used in) financing activities	<u>57,619</u>	<u>(143,249)</u>
Net effect of foreign exchange on cash and cash equivalents	<u>(11,649)</u>	<u>(16,841)</u>
Increase (decrease) in cash and cash equivalents	<u>24,053</u>	<u>(176,865)</u>
Cash and cash equivalents at end of period	<u>\$ 463,325</u>	<u>\$ 569,859</u>

Albemarle Corporation and Subsidiaries
Consolidated Summary of Segment Results
(In Thousands) (Unaudited)

	Three Months Ended	
	March 31,	
	2022	2021
Net sales:		
Lithium	\$ 550,272	\$ 278,976
Bromine	359,579	280,447
Catalysts	217,877	220,243
All Other	—	49,625
Total net sales	<u>\$1,127,728</u>	<u>\$ 829,291</u>
Adjusted EBITDA:		
Lithium	\$ 308,615	\$ 106,436
Bromine	129,234	94,640
Catalysts	16,910	25,427
All Other	—	21,479
Corporate	(22,829)	(17,928)
Total adjusted EBITDA	<u>\$ 431,930</u>	<u>\$ 230,054</u>

See accompanying non-GAAP reconciliations below.

Additional Information

It should be noted that adjusted net income attributable to Albemarle Corporation, adjusted diluted earnings per share, non-operating pension and OPEB items per diluted share, non-recurring and other unusual items per diluted share, adjusted effective income tax rates, EBITDA, adjusted EBITDA, EBITDA margin and adjusted EBITDA margin are financial measures that are not required by, or presented in accordance with, accounting principles generally accepted in the United States, or GAAP. These non-GAAP measures should not be considered as alternatives to Net income attributable to Albemarle Corporation (“earnings”) or other comparable measures calculated and reported in accordance with GAAP. These measures are presented here to provide additional useful measurements to review the company’s operations, provide transparency to investors and enable period-to-period comparability of financial performance. The company’s chief operating decision maker uses these measures to assess the ongoing performance of the company and its segments, as well as for business and enterprise planning purposes.

A description of other non-GAAP financial measures that Albemarle uses to evaluate its operations and financial performance, and reconciliation of these non-GAAP financial measures to the most directly comparable financial measures calculated and reported in accordance with GAAP can be found on the following pages of this press release, which is also available on Albemarle’s website at <https://investors.albemarle.com>. The company does not provide a reconciliation of forward-looking non-GAAP financial measures to the most directly comparable financial measures calculated and reported in accordance with GAAP, as the company is unable to estimate significant non-recurring or unusual items without unreasonable effort. The amounts and timing of these items are uncertain and could be material to the company's results calculated in accordance with GAAP.

ALBEMARLE CORPORATION AND SUBSIDIARIES

Non-GAAP Reconciliations

(Unaudited)

See below for a reconciliation of adjusted net income attributable to Albemarle Corporation, EBITDA and adjusted EBITDA, the non-GAAP financial measures, to Net income attributable to Albemarle Corporation (“earnings”), the most directly comparable financial measure calculated and reported in accordance with GAAP. Adjusted net income attributable to Albemarle Corporation is defined as net income before the non-recurring, other unusual and non-operating pension and other post-employment benefit (OPEB) items as listed below. The non-recurring and unusual items may include acquisition and integration related costs, gains or losses on sales of businesses, restructuring charges, facility divestiture charges, certain litigation and arbitration costs and charges, and other significant non-recurring items. EBITDA is defined as net income attributable to Albemarle Corporation before interest and financing expenses, income tax expense, and depreciation and amortization. Adjusted EBITDA is defined as EBITDA plus or minus the non-recurring, other unusual and non-operating pension and OPEB items as listed below.

	Three Months Ended	
	March 31,	
	2022	2021
<i>In thousands, except percentages and per share amounts</i>		
Net income attributable to Albemarle Corporation	\$ 253,383	\$ 95,677
Add back:		
Non-operating pension and OPEB items (net of tax)	(4,139)	(4,267)
Non-recurring and other unusual items (net of tax)	30,903	32,761
Adjusted net income attributable to Albemarle Corporation	\$ 280,147	\$ 124,171
Adjusted diluted earnings per share	\$ 2.38	\$ 1.10
Weighted-average common shares outstanding – diluted	117,653	113,330
Net income attributable to Albemarle Corporation	\$ 253,383	\$ 95,677
Add back:		
Interest and financing expenses	27,834	43,882
Income tax expense	80,530	22,107
Depreciation and amortization	66,574	62,260
EBITDA	428,321	223,926
Non-operating pension and OPEB items	(5,280)	(5,465)
Non-recurring and other unusual items (excluding items associated with interest expense)	8,889	11,593
Adjusted EBITDA	\$ 431,930	\$ 230,054
Net sales	\$ 1,127,728	\$ 829,291
EBITDA margin	38.0 %	27.0 %
Adjusted EBITDA margin	38.3 %	27.7 %

See below for a reconciliation of adjusted EBITDA on a segment basis, the non-GAAP financial measure, to Net income attributable to Albemarle Corporation, the most directly comparable financial measure calculated and reported in accordance with GAAP (in thousands, except percentages).

	Lithium	Bromine	Catalysts	Reportable Segments Total	All Other	Corporate	Consolidated Total	% of Net Sales
Three months ended March 31, 2022								
Net income (loss) attributable to Albemarle Corporation	\$261,689	\$116,561	\$ 3,989	\$382,239	\$ —	\$(128,856)	\$253,383	22.5 %
Depreciation and amortization	38,526	12,673	12,921	64,120	—	2,454	66,574	5.9 %
Non-recurring and other unusual items	8,400	—	—	8,400	—	489	8,889	0.8 %
Interest and financing expenses	—	—	—	—	—	27,834	27,834	2.5 %
Income tax expense	—	—	—	—	—	80,530	80,530	7.1 %
Non-operating pension and OPEB items	—	—	—	—	—	(5,280)	(5,280)	(0.5)%
Adjusted EBITDA	\$308,615	\$129,234	\$ 16,910	\$454,759	\$ —	\$(22,829)	\$431,930	38.3 %
Three months ended March 31, 2021								
Net income (loss) attributable to Albemarle Corporation	\$ 74,630	\$ 82,113	\$ 12,916	\$169,659	\$ 20,016	\$(93,998)	\$ 95,677	11.5 %
Depreciation and amortization	31,806	12,527	12,511	56,844	1,463	3,953	62,260	7.5 %
Non-recurring and other unusual items (excluding items associated with interest expense)	—	—	—	—	—	11,593	11,593	1.4 %
Interest and financing expenses	—	—	—	—	—	43,882	43,882	5.3 %
Income tax expense	—	—	—	—	—	22,107	22,107	2.7 %
Non-operating pension and OPEB items	—	—	—	—	—	(5,465)	(5,465)	(0.7)%
Adjusted EBITDA	\$106,436	\$ 94,640	\$ 25,427	\$226,503	\$ 21,479	\$(17,928)	\$230,054	27.7 %

Non-operating pension and OPEB items, consisting of mark-to-market actuarial gains/losses, settlements/curtailments, interest cost and expected return on assets, are not allocated to Albemarle's operating segments and are included in the Corporate category. In addition, the company believes that these components of pension cost are mainly driven by market performance, and the company manages these separately from the operational performance of the company's businesses. In accordance with GAAP, these non-operating pension and OPEB items are included in Other income (expenses), net. Non-operating pension and OPEB items were as follows (in thousands):

	Three Months Ended	
	March 31,	
	2022	2021
Interest cost	\$ 5,932	\$ 5,428
Expected return on assets	(11,212)	(10,893)
Total	\$(5,280)	\$(5,465)

In addition to the non-operating pension and OPEB items disclosed above, the company has identified certain other items and excluded them from Albemarle's adjusted net income calculation for the periods presented. A listing of these items, as well as a detailed description of each follows below (per diluted share):

	Three Months Ended	
	March 31,	
	2022	2021
Acquisition and integration related costs ⁽¹⁾	\$ 0.01	\$ 0.02
Loss on sale of interest in properties ⁽²⁾	0.07	—
Loss on early extinguishment of debt ⁽³⁾	—	0.20
Other ⁽⁴⁾	(0.01)	0.06
Tax related items ⁽⁵⁾	0.19	0.01
Total non-recurring and other unusual items	<u>\$ 0.26</u>	<u>\$ 0.29</u>

- (1) Costs related to the acquisition, integration and divestitures for various significant projects, recorded in Selling, general and administrative expenses for the three months ended March 31, 2022 and 2021 were \$1.7 million and \$2.2 million (\$1.3 million and \$1.7 million after income taxes, or \$0.01 and \$0.02 per share), respectively.
- (2) Included in Loss on sale of interest in properties for the three months ended March 31, 2022 is an expense of \$8.4 million (\$0.07 per share after no income tax impact) related to post-measurement period Wodgina acquisition purchase price adjustment for a revised estimate of the obligation to construct the lithium hydroxide conversion assets in Kemerton due to anticipated cost overruns from supply chain, labor and COVID-19 pandemic related issues.
- (3) Included in Interest and financing expenses for the three months ended March 31, 2021 is a loss on early extinguishment of debt of \$27.8 million (\$23.0 million after income taxes, or \$0.20 per share), representing the tender premiums, fees, unamortized discounts and unamortized deferred financing costs from the redemption of \$1.5 billion in debt using the proceeds from the issuance of common stock.
- (4) Other adjustments for the three months ended March 31, 2022 included amounts recorded in:
- Selling, general and administrative expenses - \$4.3 million of gains from the sale of legacy properties not part of our operations, partially offset by \$2.8 million of charges for environmental reserves at sites not part of our operations and \$0.7 million of facility closure expenses related to offices in Germany.
 - Other income, net - \$0.6 million gain related to a settlement received from a legal matter in a prior period.

After income taxes, these charges totaled \$(0.9) million, or \$0.01 per share.

Other adjustments for the three months ended March 31, 2021 included amounts recorded in:

- Selling, general and administrative expenses - \$5.5 million of expenses primarily related to non-routine labor and compensation related costs that are outside normal compensation arrangements.
- Other income, net - \$3.9 million of expenses primarily related to asset retirement obligation charges to update of an estimate at a site formerly owned by Albemarle.

After income taxes, these net gains totaled \$7.1 million, or \$0.06 per share.

- (5) Included in Income tax expense for the three months ended March 31, 2022 is an expense of \$20.4 million (\$0.18 per share) related to global intangible low-taxed income associated with the payment due in 2022 to Huntsman Corporation for the settlement of a legacy legal matter. In addition, Income tax expense included discrete net tax expenses of \$1.6 million, or \$0.01 per share. The discrete net expense was primarily related to foreign return to provisions, partially offset by a benefit for excess tax benefits realized from stock-based compensation arrangements.

Included in Income tax expense for the three months ended March 31, 2021 are discrete net tax expenses of \$1.0 million, or \$0.01 per share. The net expense was primarily related to an out-of-period adjustment regarding an overstated deferred tax liability for the three-month period ended December 31, 2017, offset by a benefit due to the release of a foreign valuation allowance and excess tax benefits realized from stock-based compensation arrangements.

See below for a reconciliation of the adjusted effective income tax rate, the non-GAAP financial measure, to the effective income tax rate, the most directly comparable financial measure calculated and reported in accordance with GAAP (in thousands, except percentages).

	Income before income taxes and equity in net income of unconsolidated investments	Income tax expense	Effective income tax rate
Three months ended March 31, 2022			
As reported	\$ 299,641	\$ 80,530	26.9 %
Non-recurring, other unusual and non-operating pension and OPEB items	3,609	(23,155)	
As adjusted	<u>\$ 303,250</u>	<u>\$ 57,375</u>	18.9 %
Three months ended March 31, 2021			
As reported	\$ 123,294	\$ 22,107	17.9 %
Non-recurring, other unusual and non-operating pension and OPEB items	33,926	5,432	
As adjusted	<u>\$ 157,220</u>	<u>\$ 27,539</u>	17.5 %