



NEWS RELEASE

PAR PACIFIC HOLDINGS REPORTS FOURTH QUARTER AND FULL YEAR 2021 RESULTS

HOUSTON, February 23, 2022 - Par Pacific Holdings, Inc. (NYSE: PARR) (“Par Pacific” or the “Company”) today reported its financial results for the fourth quarter and fiscal year ended December 31, 2021.

- Fourth quarter Net Income of \$8.1 million, or \$0.14 per diluted share; Adjusted Net Loss of \$(13.0) million, or \$(0.22) per diluted share
- Full year 2021 Net Loss of \$(81.3) million, or \$(1.40) per diluted share; Adjusted Net Loss of \$(100.3) million, or \$(1.72) per diluted share
- Full year 2021 Adjusted EBITDA of \$61.5 million includes a \$(46.1) million RINs mark-to-market (MTM) expense related to the 2019 and 2020 compliance years

Par Pacific reported a net loss of \$(81.3) million, or \$(1.40) per diluted share, for the full year 2021, compared to net loss of \$(409.1) million, or \$(7.68) per diluted share, for the full year 2020. 2021 Adjusted Net Loss was \$(100.3) million, compared to an Adjusted Net Loss of \$(249.8) million for 2020. 2021 Adjusted EBITDA was \$61.5 million, compared to \$(86.7) million for 2020.

Par Pacific reported net income of \$8.1 million, or \$0.14 per diluted share, for the quarter ended December 31, 2021, compared to a net loss of \$(131.9) million, or \$(2.47) per diluted share, for the same quarter in 2020. Fourth quarter 2021 Adjusted Net Loss was \$(13.0) million, compared to Adjusted Net Loss of \$(75.3) million in the fourth quarter of 2020. Fourth quarter 2021 Adjusted EBITDA was \$26.8 million, compared to \$(33.9) million in the fourth quarter of 2020. A reconciliation of reported non-GAAP financial measures to their most directly comparable GAAP financial measures can be found in the tables accompanying this news release.

“We benefited from improved market conditions during the second half of 2021 and have built significant financial and strategic momentum entering 2022,” said William Pate, President and Chief Executive Officer. “As the business environment improves, we shift our focus to operational reliability and meeting rising demand in our markets. In addition, we are reviewing opportunities for growth in our operating regions and energy transition projects within our asset base.”

Refining

The Refining segment generated an operating loss of \$(88.8) million for the full year 2021, compared to an operating loss of \$(331.8) million for the full year 2020. Adjusted Gross Margin for the Refining segment in 2021 was \$200.3 million, compared to \$31.1 million in 2020.

Refining Adjusted EBITDA for the full year 2021 was \$(10.9) million, compared to \$(168.3) million for the full year 2020. 2021 Refining segment Adjusted EBITDA was negatively impacted by a MTM expense of \$(46.1) million related to increased RINs prices.

The Refining segment reported operating income of \$14.8 million in the fourth quarter of 2021, compared to an operating loss of \$(121.4) million in the fourth quarter of 2020. Adjusted Gross Margin for the Refining segment was \$65.0 million in the fourth quarter of 2021, compared to \$(2.4) million in the fourth quarter of 2020.

Refining Adjusted EBITDA was \$8.8 million in the fourth quarter of 2021, compared to \$(50.3) million in the fourth quarter of 2020. Fourth quarter 2021 Refining segment Adjusted EBITDA was impacted by a MTM expense of \$(0.9) million related to increased RINs prices.

Hawaii

The 3-1-2 Singapore Crack Spread was \$10.49 per barrel in the fourth quarter of 2021, compared to \$2.63 per barrel in the fourth quarter of 2020. Throughput in the fourth quarter of 2021 was 82 thousand barrels per day (Mbpd), compared to 79 Mbpd for the same quarter in 2020. Production costs were \$4.24 per throughput barrel in the fourth quarter of 2021, compared to \$3.27 per throughput barrel in the same period in 2020.

The Hawaii refinery's Adjusted Gross Margin of \$5.42 per barrel during the fourth quarter of 2021 reflects a RINs MTM expense of approximately \$(0.1) million, or \$(0.01) per barrel.

Washington

The Pacific Northwest 5-2-2-1 Index averaged \$17.64 per barrel in the fourth quarter of 2021, compared to \$11.26 per barrel in the fourth quarter of 2020. The Washington refinery's throughput was 36 Mbpd in the fourth quarter of 2021, compared to 39 Mbpd in the fourth quarter of 2020. Production costs were \$4.30 per throughput barrel in the fourth quarter of 2021, compared to \$3.47 per throughput barrel in the same period in 2020.

The Washington refinery's Adjusted Gross Margin of \$3.70 per barrel during the fourth quarter of 2021 reflects a RINs MTM expense of approximately \$(0.6) million, or \$(0.18) per barrel.

Wyoming

During the fourth quarter of 2021, the Wyoming 3-2-1 Index averaged \$23.67 per barrel, compared to \$18.45 per barrel in the fourth quarter of 2020. The Wyoming refinery's throughput was 17 Mbpd in the fourth quarter of 2021, compared to 7 Mbpd in the fourth quarter of 2020. Production costs were \$5.50 per throughput barrel in the fourth quarter of 2021, compared to \$17.26 per throughput barrel in the same period in 2020, reflecting turnaround-related downtime during the period.

The Wyoming refinery's Adjusted Gross Margin of \$8.39 per barrel during the fourth quarter of 2021 reflects a RINs MTM expense of approximately \$(0.3) million, or \$(0.16) per barrel and a FIFO (first-in, first-out) benefit of approximately \$1.4 million, or \$0.88 per barrel.

Retail

The Retail segment reported operating income of \$81.2 million for the full year 2021, compared to \$24.2 million in 2020. 2020 operating income includes a non-cash impairment charge of \$(29.8) million related to our Pacific Northwest Retail locations. Adjusted Gross Margin for the Retail segment was \$118.9 million for 2021, compared to \$128.8 million in 2020.

For the full year 2021, Retail Adjusted EBITDA was \$47.1 million, compared to \$64.7 million for 2020. For the full year 2021, the Retail segment reported fuel sales volumes of 109.2 million gallons, compared to 102.8 million gallons for 2020.

The Retail segment reported operating income of \$8.0 million in the fourth quarter of 2021, compared to \$14.1 million in the fourth quarter of 2020. Adjusted Gross Margin for the Retail segment was \$29.3 million in the fourth quarter of 2021, compared to \$32.2 million in the same quarter of 2020.

Retail Adjusted EBITDA was \$10.5 million in the fourth quarter of 2021, compared to \$16.5 million in the fourth quarter of 2020. The Retail segment reported sales volumes of 26.7 million gallons in the fourth quarter of 2021, compared to 25.9 million gallons in the same quarter of 2020.

Logistics

The Logistics segment generated operating income of \$51.2 million for the full year 2021, compared to \$35.0 million for 2020. Adjusted Gross Margin for the Logistics segment was \$87.9 million for the full year 2021, compared to \$70.5 million for 2020.

Adjusted EBITDA for the Logistics segment was \$73.4 million for 2021, compared to \$57.0 million for 2020.

The Logistics segment reported operating income of \$13.2 million in the fourth quarter of 2021, compared to \$3.5 million in the fourth quarter of 2020. Adjusted Gross Margin for the Logistics segment was \$22.6 million in the fourth quarter of 2021, compared to \$13.0 million in the same quarter of 2020.

Logistics Adjusted EBITDA was \$19.1 million in the fourth quarter of 2021, compared to \$9.4 million in the fourth quarter of 2020.

Laramie Energy

Due to the discontinuation of the equity method of accounting as of June 30, 2020, we recorded no equity earnings (losses) from Laramie Energy, LLC ("*Laramie*") for the full year 2021. Laramie's total net income was \$32.5 million in 2021, compared to a net loss of \$(22.6) million in 2020. Laramie's total Adjusted EBITDAX was \$121.0 million in 2021, compared to \$40.6 million in 2020. Capital expenditures were \$1.4 million in 2021, allowing the company to reduce its debt by \$59.6 million throughout the year.

Laramie's total net income was \$33.8 million in the fourth quarter of 2021, including unrealized gains on derivatives of \$22.6 million. These results compare to net income of \$3.8 million in the fourth quarter of 2020. Laramie's total Adjusted EBITDAX was \$25.4 million in the fourth quarter of 2021, compared to \$15.2 million in the fourth quarter of 2020.

Liquidity

Net cash used in operations totaled \$(82.2) million and \$(27.6) million for the three months and year ended December 31, 2021, respectively, compared to net cash used in operations of \$(63.2) million and \$(37.2) million for the three months and year ended December 31, 2020, respectively. Net cash used in operations of \$(82.2) million and \$(27.6) million includes \$(3.2) million and \$(9.5) million in deferred turnaround expenditures for the three months and year ended December 31, 2021, respectively. Net cash used in investing activities totaled \$(7.7) million for the three months ended December 31, 2021 and net cash provided by investing activities totaled \$74.6 million for the year ended December 31, 2021, compared to net cash used in investing activities of \$(21.0) million and \$(63.5) million for the three

months and year ended December 31, 2020, respectively. Net cash provided by financing activities totaled \$0.9 million for the three months ended December 31, 2021 and net cash used in financing activities totaled \$(1.1) million for the year ended December 31, 2021, compared to net cash provided by financing activities of \$25.2 million and \$42.6 million for the three months and year ended December 31, 2020, respectively.

At December 31, 2021, Par Pacific's cash balance totaled \$112.2 million, long-term debt totaled \$564.6 million, and total liquidity was \$178.7 million. Year end liquidity was impacted by fourth quarter 2021 net working capital outflows totaling \$113.2 million, primarily due to a \$42.8 million increase in hydrocarbon inventory funding requirements, net of inventory financing obligations, \$23.9 million net increase in environmental credit inventory, and \$46.5 million in other working capital items. We expect these net working capital outflows to partially reverse during the first half of 2022.

Conference Call Information

A conference call is scheduled for Thursday, February 24, 2022 at 9:00 a.m. Central Time (10:00 a.m. Eastern Time). To access the call, please dial 1-833-974-2377 inside the U.S. or 1-412-317-5782 outside of the U.S. and ask for the Par Pacific call. Please dial in at least 10 minutes early to register. The webcast may be accessed online through the Company's website at <http://www.parpacific.com> on the Investors page. A telephone replay will be available until March 10, 2022 and may be accessed by calling 1-877-344-7529 inside the U.S. or 1-412-317-0088 outside the U.S. and using the conference ID 8722542.

About Par Pacific

Par Pacific Holdings, Inc. (NYSE: PARR), headquartered in Houston, Texas, owns and operates market-leading energy, infrastructure, and retail businesses. Par Pacific's strategy is to acquire and develop businesses in logistically complex, niche markets. Par Pacific owns and operates one of the largest energy networks in Hawaii with 94,000 bpd of operating refining capacity, a logistics system supplying the major islands of the state and 90 retail locations. In the Pacific Northwest and the Rockies, Par Pacific owns and operates 60,000 bpd of combined refining capacity, related multimodal logistics systems, and 29 retail locations. Par Pacific also owns 46% of Laramie Energy, LLC, a natural gas production company with operations and assets concentrated in Western Colorado. More information is available at www.parpacific.com.

Forward-Looking Statements

This news release (and oral statements regarding the subject matter of this news release, including those made on the conference call and webcast announced herein) includes certain "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which are intended to qualify for the "safe harbor" from liability established by the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements include, without limitation, statements about: expected market conditions; anticipated free cash flows; anticipated refinery throughput; anticipated cost savings; anticipated capital expenditures, including major maintenance costs, and their effect on our financial and operating results, including earnings per share and free cash flow; anticipated retail sales volumes and on-island sales; the anticipated financial and operational results of Laramie Energy, LLC; the amount of our discounted net cash flows and the impact of our NOL carryforwards thereon; our ability to identify, acquire and develop energy, related retailing and infrastructure businesses; the timing and expected results of certain development projects, as well as the impact of such investments on our product mix and on-island sales; and other risks and uncertainties detailed in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and any other documents that we file with the Securities and Exchange Commission. Additionally, forward looking statements are

subject to certain risks, trends, and uncertainties, such as changes to our financial condition and liquidity; the volatility of crude oil and refined product prices; operating disruptions at our refineries resulting from unplanned maintenance events or natural disasters; environmental risks; and risks of political or regulatory changes. We cannot provide assurances that the assumptions upon which these forward-looking statements are based will prove to have been correct. Should one of these risks materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those expressed or implied in any forward-looking statements, and investors are cautioned not to place undue reliance on these forward-looking statements, which are current only as of this date. Additionally, significant uncertainties remain with respect to COVID-19 and its economic effects. Due to the unpredictable and unprecedented nature of the COVID-19 pandemic, we cannot identify all potential risks to, and impacts on, our business, including the ultimate adverse economic impact to our results of operations, financial position and liquidity. There can be no guarantee that the operational and financial measures we have taken, and may take in the future, will be fully effective. We do not intend to update or revise any forward-looking statements made herein or any other forward-looking statements as a result of new information, future events or otherwise. We further expressly disclaim any written or oral statements made by a third party regarding the subject matter of this news release.

Contact:

Ashimi Patel

Senior Manager, Investor Relations

(832) 916-3355

apatel@parpacific.com

Condensed Consolidated Statements of Operations

(Unaudited)

(in thousands, except per share data)

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Revenues	\$ 1,293,516	\$ 715,505	\$ 4,710,089	\$ 3,124,870
Operating expenses				
Cost of revenues (excluding depreciation)	1,153,891	710,919	4,338,474	2,947,697
Operating expense (excluding depreciation)	78,601	67,551	299,669	277,427
Depreciation, depletion, and amortization	24,195	23,804	94,241	90,036
Impairment expense	1,838	17,884	1,838	85,806
Loss (gain) on sale of assets, net	(297)	—	(64,697)	—
General and administrative expense (excluding depreciation)	11,537	9,465	48,096	41,288
Acquisition and integration costs	—	14	87	614
Total operating expenses	<u>1,269,765</u>	<u>829,637</u>	<u>4,717,708</u>	<u>3,442,868</u>
Operating income (loss)	23,751	(114,132)	(7,619)	(317,998)
Other income (expense)				
Interest expense and financing costs, net	(15,782)	(17,611)	(66,493)	(70,222)
Debt extinguishment and commitment costs	—	—	(8,144)	—
Gain on curtailment of pension obligation	—	—	2,032	—
Other income (expense), net	(55)	(40)	(52)	1,049
Change in value of common stock warrants	—	—	—	4,270
Equity losses from Laramie Energy, LLC	—	—	—	(46,905)
Total other income (expense), net	<u>(15,837)</u>	<u>(17,651)</u>	<u>(72,657)</u>	<u>(111,808)</u>
Income (loss) before income taxes	<u>7,914</u>	<u>(131,783)</u>	<u>(80,276)</u>	<u>(429,806)</u>
Income tax benefit (expense)	172	(135)	(1,021)	20,720
Net income (loss)	<u>\$ 8,086</u>	<u>\$ (131,918)</u>	<u>\$ (81,297)</u>	<u>\$ (409,086)</u>
Weighted-average shares outstanding				
Basic	59,565	53,383	58,268	53,295
Diluted	59,840	53,383	58,268	53,295
Income (loss) per share				
Basic	\$ 0.14	\$ (2.47)	\$ (1.40)	\$ (7.68)
Diluted	\$ 0.14	\$ (2.47)	\$ (1.40)	\$ (7.68)

Balance Sheet Data

(Unaudited)

(in thousands)

	December 31, 2021	December 31, 2020
Balance Sheet Data		
Cash and cash equivalents	\$ 112,221	\$ 68,309
Working capital (1)	(327,002)	(250,587)
Debt, including current portion	564,558	708,593
Total stockholders' equity	265,700	246,274

- (1) Working capital is calculated as (i) total current assets excluding cash and cash equivalents less (ii) total current liabilities excluding current portion of long-term debt. Total current assets include inventories stated at the lower of cost or net realizable value.

Operating Statistics

The following table summarizes key operational data:

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Total Refining Segment				
Feedstocks throughput (Mbpd)	135.1	124.9	135.2	124.1
Refined product sales volume (Mbpd)	133.9	123.1	138.8	136.7
Hawaii Refinery				
Combined Feedstocks throughput (Mbpd)	81.8	78.5	82.0	72.7
Par East throughput (Mbpd)	81.8	78.5	82.0	66.5
Par West throughput (Mbpd)	—	—	—	6.2
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	26.7 %	26.1 %	24.8 %	24.6 %
Distillates	44.4 %	43.2 %	45.0 %	42.2 %
Fuel oils	28.3 %	27.7 %	26.6 %	29.5 %
Other products	(2.2)%	(1.3)%	0.6 %	(0.7)%
Total yield	<u>97.2 %</u>	<u>95.7 %</u>	<u>97.0 %</u>	<u>95.6 %</u>
Refined product sales volume (Mbpd)				
On-island sales volume	78.8	78.0	82.6	83.5
Export sales volume	—	—	—	0.6
Total refined product sales volume	<u>78.8</u>	<u>78.0</u>	<u>82.6</u>	<u>84.1</u>
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 5.42	\$ (0.17)	\$ 3.24	\$ (1.63)
Production costs per bbl (\$/throughput bbl) (2)	4.24	3.27	3.98	4.03
DD&A per bbl (\$/throughput bbl)	0.65	0.80	0.66	0.55
Washington Refinery				
Feedstocks throughput (Mbpd)	36.3	39.2	36.3	39.1
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	24.0 %	24.2 %	23.7 %	23.4 %
Distillate	35.0 %	35.7 %	34.5 %	35.3 %
Asphalt	20.3 %	18.5 %	20.7 %	18.8 %
Other products	17.9 %	20.3 %	18.3 %	19.8 %
Total yield	<u>97.2 %</u>	<u>98.7 %</u>	<u>97.2 %</u>	<u>97.3 %</u>
Refined product sales volume (Mbpd)				
	37.8	35.7	39.6	39.6
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 3.70	\$ (0.51)	\$ 1.96	\$ 3.88
Production costs per bbl (\$/throughput bbl) (2)	4.30	3.47	3.86	3.50
DD&A per bbl (\$/throughput bbl)	1.59	1.35	1.57	1.39

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Wyoming Refinery				
Feedstocks throughput (Mbpd)	17.0	7.2	16.9	12.3
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	48.8 %	53.5 %	47.3 %	49.2 %
Distillate	44.6 %	39.8 %	45.7 %	45.2 %
Fuel oils	2.4 %	1.9 %	2.2 %	1.9 %
Other products	1.0 %	1.2 %	1.7 %	1.3 %
Total yield	96.8 %	96.4 %	96.9 %	97.6 %
Refined product sales volume (Mbpd)	17.3	9.4	16.6	13.0
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 8.39	\$ 1.58	\$ 12.66	\$ 3.94
Production costs per bbl (\$/throughput bbl) (2)	5.50	17.26	6.22	8.69
DD&A per bbl (\$/throughput bbl)	3.00	6.17	2.86	4.34
Market Indices (\$ per barrel)				
3-1-2 Singapore Crack Spread (3)	\$ 10.49	\$ 2.63	\$ 6.22	\$ 3.15
Pacific Northwest 5-2-2-1 Index (4)	17.64	11.26	15.95	11.44
Wyoming 3-2-1 Index (5)	23.67	18.45	29.00	17.80
Crude Oil Prices (\$ per barrel)				
Brent	\$ 79.66	\$ 45.26	\$ 70.95	\$ 43.21
WTI	77.10	42.70	68.11	39.65
ANS	80.61	43.68	71.49	41.77
Bakken Clearbrook	77.98	40.67	68.20	37.19
WCS Hardisty	60.99	31.21	54.61	27.45
Brent M1-M3	1.33	(0.41)	1.12	(0.98)
Retail Segment				
Retail sales volumes (thousands of gallons)	26,732	25,856	109,150	102,798

- (1) We calculate Adjusted Gross Margin per barrel by dividing Adjusted Gross Margin by total refining throughput. Adjusted Gross Margin for our Washington refinery is determined under the last-in, first-out (“LIFO”) inventory costing method. Adjusted Gross Margin for our other refineries is determined under the first-in, first-out (“FIFO”) inventory costing method. Please see discussion of Adjusted Gross Margin below.
- (2) Management uses production costs per barrel to evaluate performance and compare efficiency to other companies in the industry. There are a variety of ways to calculate production costs per barrel; different companies within the industry calculate it in different ways. We calculate production costs per barrel by dividing all direct production costs, which include the costs to run the refineries including personnel costs, repair and maintenance costs, insurance, utilities, and other miscellaneous costs, by total refining throughput. Our production costs are included in Operating expense (excluding depreciation) on our consolidated statement of operations, which also includes costs related to our bulk marketing operations.
- (3) We believe the 3-1-2 Singapore Crack Spread (or three barrels of Brent crude oil converted into one barrel of gasoline and two barrels of distillates (diesel and jet fuel)) is the most representative market indicator for our operations in Hawaii.
- (4) We believe the Pacific Northwest 5-2-2-1 Index is the most representative market indicator for our operations in Tacoma, Washington. The Pacific Northwest 5-2-2-1 Index is computed by taking two parts gasoline (sub-octane), two parts middle distillates (ultra-low sulfur diesel (“ULSD”) and jet fuel), and one part fuel oil as created from five barrels of Alaskan North Slope (“ANS”) crude oil.
- (5) The profitability of our Wyoming refinery is heavily influenced by crack spreads in nearby markets. We believe the Wyoming 3-2-1 Index is the most representative market indicator for our operations in Wyoming. The Wyoming 3-2-1 Index is computed by taking two parts gasoline and one part distillates (ULSD) as created from three barrels of West Texas

Intermediate Crude Oil (“WTI”). Pricing is based 50% on applicable product pricing in Rapid City, South Dakota, and 50% on applicable product pricing in Denver, Colorado.

Non-GAAP Performance Measures

Management uses certain financial measures to evaluate our operating performance that are considered non-GAAP financial measures. These measures should not be considered a substitute for, or superior to, measures of financial performance prepared in accordance with GAAP and our calculations thereof may not be comparable to similarly titled measures reported by other companies.

Adjusted Gross Margin

Adjusted Gross Margin is defined as (i) operating income (loss) adjusted for operating expense (excluding depreciation); depreciation, depletion, and amortization (“DD&A”); impairment expense; loss (gain) on sale of assets, net; inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments); LIFO layer liquidation impacts associated with our Washington inventory; Renewable Identification Numbers (“RINs”) loss (gain) in excess of net obligation (which represents the income statement effect of reflecting our RINs liability on a net basis); and unrealized loss (gain) on derivatives or (ii) revenues less cost of revenues (excluding depreciation) plus inventory valuation adjustment, unrealized loss (gain) on derivatives, LIFO layer liquidation impacts associated with our Washington inventory, and RINs loss (gain) in excess of net obligation. We define cost of revenues (excluding depreciation) as the hydrocarbon-related costs of inventory sold, transportation costs of delivering product to customers, crude oil consumed in the refining process, costs to satisfy our RINs and environmental credit obligations, and certain hydrocarbon fees and taxes. Cost of revenues (excluding depreciation) also includes the unrealized gain (loss) on derivatives and the inventory valuation adjustment that we exclude from Adjusted Gross Margin.

Management believes Adjusted Gross Margin is an important measure of operating performance and uses Adjusted Gross Margin per barrel to evaluate operating performance and compare profitability to other companies in the industry and to industry benchmarks. Management believes Adjusted Gross Margin provides useful information to investors because it eliminates the gross impact of volatile commodity prices and adjusts for certain non-cash items and timing differences created by our inventory financing agreements and lower of cost and net realizable value adjustments to demonstrate the earnings potential of the business before other fixed and variable costs, which are reported separately in Operating expense (excluding depreciation) and Depreciation, depletion, and amortization.

Adjusted Gross Margin should not be considered an alternative to operating income (loss), cash flows from operating activities, or any other measure of financial performance or liquidity presented in accordance with GAAP. Adjusted Gross Margin presented by other companies may not be comparable to our presentation since each company may define this term differently as they may include other manufacturing costs and depreciation expense in cost of revenues.

The following tables present a reconciliation of Adjusted Gross Margin to the most directly comparable GAAP financial measure, operating income (loss), on a historical basis, for selected segments, for the periods indicated (in thousands):

Three months ended December 31, 2021	Refining	Logistics	Retail
Operating income (loss)	\$ 14,772	\$ 13,183	\$ 8,042
Operating expense (excluding depreciation)	56,207	3,578	18,816
Depreciation, depletion, and amortization	14,885	5,868	2,716
Impairment expense	1,838	—	—
Loss (gain) on sale of assets, net	(64)	—	(248)
Inventory valuation adjustment	(21,643)	—	—
RINs loss (gain) in excess of net obligation	5,093	—	—
Unrealized loss (gain) on derivatives	(6,103)	—	—
Adjusted Gross Margin (1)	\$ 64,985	\$ 22,629	\$ 29,326

Three months ended December 31, 2020	Refining	Logistics	Retail
Operating income (loss)	\$ (121,393)	\$ 3,531	\$ 14,080
Operating expense (excluding depreciation)	48,137	3,699	15,715
Depreciation, depletion, and amortization	14,721	5,817	2,400
Impairment expense	17,884	—	—
Inventory valuation adjustment	18,681	—	—
LIFO liquidation adjustment	(6,211)	—	—
RINs loss in excess of net obligation	26,086	—	—
Unrealized loss (gain) on derivatives	(297)	—	—
Adjusted Gross Margin (2)	\$ (2,392)	\$ 13,047	\$ 32,195

Year Ended December 31, 2021	Refining	Logistics	Retail
Operating income (loss)	\$ (88,799)	\$ 51,159	\$ 81,249
Operating expense (excluding depreciation)	213,102	14,722	71,845
Depreciation, depletion, and amortization	58,258	22,044	10,880
Impairment expense	1,838	—	—
Loss (gain) on sale of assets, net	(19,659)	(19)	(45,034)
Inventory valuation adjustment	17,089	—	—
RINs loss in excess of net obligation	16,967	—	—
Unrealized loss (gain) on derivatives	1,517	—	—
Adjusted Gross Margin (1)	\$ 200,313	\$ 87,906	\$ 118,940

Year Ended December 31, 2020	Refining	Logistics	Retail
Operating income (loss)	\$ (331,826)	\$ 35,044	\$ 24,211
Operating expense (excluding depreciation)	199,738	13,581	64,108
Depreciation, depletion, and amortization	53,930	21,899	10,692
Impairment expense	55,989	—	29,817
Inventory valuation adjustment	14,046	—	—
RINs loss in excess of net obligation	44,071	—	—
Unrealized loss (gain) on derivatives	(4,804)	—	—
Adjusted Gross Margin (1) (2)	\$ 31,144	\$ 70,524	\$ 128,828

(1) There was no LIFO liquidation adjustment for the three months and years ended December 31, 2021 and 2020,

(2) There was no loss (gain) on sale of assets for the three months and year ended December 31, 2020.

Adjusted Net Income (Loss) and Adjusted EBITDA

Adjusted Net Income (Loss) is defined as Net income (loss) excluding inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments), the LIFO layer liquidation impacts associated with our Washington inventory, RINs loss (gain) in excess of net obligation, unrealized (gain) loss on derivatives, acquisition and integration costs, debt extinguishment and commitment costs, increase in (release of) tax valuation allowance and other deferred tax items, changes in the value of contingent consideration and common stock warrants, severance costs, (gain) loss on sale of assets, impairment expense, impairment expense associated with our investment in Laramie Energy and our share of Laramie Energy's asset impairment losses in excess of our basis difference, and Par's share of Laramie Energy's unrealized loss (gain) on derivatives.

Adjusted EBITDA is Adjusted Net Income (Loss) excluding DD&A, interest expense and financing costs, equity losses (earnings) from Laramie Energy excluding Par's share of unrealized loss (gain) on derivatives, impairment of Par's

investment, and our share of Laramie Energy's asset impairment losses in excess of our basis difference, and income tax expense (benefit).

We believe Adjusted Net Income (Loss) and Adjusted EBITDA are useful supplemental financial measures that allow investors to assess:

- The financial performance of our assets without regard to financing methods, capital structure, or historical cost basis;
- The ability of our assets to generate cash to pay interest on our indebtedness; and
- Our operating performance and return on invested capital as compared to other companies without regard to financing methods and capital structure.

Adjusted Net Income (Loss) and Adjusted EBITDA should not be considered in isolation or as a substitute for operating income (loss), net income (loss), cash flows provided by operating, investing, and financing activities, or other income or cash flow statement data prepared in accordance with GAAP. Adjusted Net Income (Loss) and Adjusted EBITDA presented by other companies may not be comparable to our presentation as other companies may define these terms differently.

The following table presents a reconciliation of Adjusted Net Income (Loss) and Adjusted EBITDA to the most directly comparable GAAP financial measure, net income (loss), on a historical basis for the periods indicated (in thousands):

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Net income (loss)	\$ 8,086	\$ (131,918)	\$ (81,297)	\$ (409,086)
Inventory valuation adjustment	(21,643)	18,681	17,089	14,046
LIFO liquidation adjustment	—	(6,211)	—	—
RINs loss in excess of net obligation	5,093	26,086	16,967	44,071
Unrealized loss (gain) on derivatives	(6,103)	(297)	1,517	(4,804)
Acquisition and integration costs	—	14	87	614
Debt extinguishment and commitment costs	—	—	8,144	—
Changes in valuation allowance and other deferred tax items (1)	—	191	—	(20,896)
Change in value of common stock warrants	—	—	—	(4,270)
Severance costs	9	267	84	512
Loss (gain) on sale of assets, net	(297)	—	(64,697)	—
Impairment expense	1,838	17,884	1,838	85,806
Impairment of Investment in Laramie Energy, LLC (2)	—	—	—	45,294
Par's share of Laramie Energy's unrealized gain on derivatives (2)	—	—	—	(1,110)
Adjusted Net Loss (3)	(13,017)	(75,303)	(100,268)	(249,823)
Depreciation, depletion, and amortization	24,195	23,804	94,241	90,036
Interest expense and financing costs, net	15,782	17,611	66,493	70,222
Equity losses from Laramie Energy, LLC, excluding Par's share of unrealized loss (gain) on derivatives and impairment losses	—	—	—	2,721
Income tax expense	(172)	(56)	1,021	176
Adjusted EBITDA	\$ 26,788	\$ (33,944)	\$ 61,487	\$ (86,668)

(1) Includes increases in (releases of) our valuation allowance associated with business combinations and changes in deferred tax assets and liabilities that are not offset by a change in the valuation allowance. These tax expenses (benefits) are included in Income tax benefit (expense) on our condensed consolidated statements of operations.

(2) Included in Equity losses from Laramie Energy, LLC on our condensed consolidated statements of operations.

(3) For the three months and years ended December 31, 2021 and 2020, there was no change in value of contingent consideration.

The following table sets forth the computation of basic and diluted Adjusted Net Income (Loss) per share (in thousands, except per share amounts):

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Adjusted Net Loss	\$ (13,017)	\$ (75,303)	\$ (100,268)	\$ (249,823)
Undistributed Adjusted Net Income allocated to participating securities	—	—	—	—
Adjusted Net Loss attributable to common stockholders	(13,017)	(75,303)	(100,268)	(249,823)
Plus: effect of convertible securities	—	—	—	—
Numerator for diluted loss per common share	<u>\$ (13,017)</u>	<u>\$ (75,303)</u>	<u>\$ (100,268)</u>	<u>\$ (249,823)</u>
Basic weighted-average common stock shares outstanding	59,565	53,383	58,268	53,295
Add dilutive effects of common stock equivalents (1)	—	—	—	—
Diluted weighted-average common stock shares outstanding	<u>59,565</u>	<u>53,383</u>	<u>58,268</u>	<u>53,295</u>
Basic Adjusted Net Loss per common share	\$ (0.22)	\$ (1.41)	\$ (1.72)	\$ (4.69)
Diluted Adjusted Net Loss per common share	\$ (0.22)	\$ (1.41)	\$ (1.72)	\$ (4.69)

(1) Entities with a net loss from continuing operations are prohibited from including potential common shares in the computation of diluted per share amounts. We have utilized the basic shares outstanding to calculate both basic and diluted Adjusted Net Loss per common share for the three months and year ended December 31, 2021 and three months and year ended December 31, 2020.

Adjusted EBITDA by Segment

Adjusted EBITDA by segment is defined as Operating income (loss) by segment excluding depreciation, depletion, and amortization expense, inventory valuation adjustment (which adjusts for timing differences to reflect the economics of our inventory financing agreements, including lower of cost or net realizable value adjustments, the impact of the embedded derivative repurchase or terminal obligations, contango (gains) and backwardation losses associated with our Washington inventory and intermediation obligation, and purchase price allocation adjustments), the LIFO layer liquidation impacts associated with our Washington inventory, RINs loss (gain) in excess of net obligation, unrealized loss (gain) on derivatives, acquisition and integration costs, severance costs, loss (gain) on sale of assets, and impairment expense. Adjusted EBITDA by segment also includes Gain on curtailment of pension obligation and Other income (expense), net, which are presented below operating income (loss) on our condensed consolidated statements of operations.

We believe Adjusted EBITDA by segment is a useful supplemental financial measure to evaluate the economic performance of our segments without regard to financing methods, capital structure, or historical cost basis. The following table presents a reconciliation of Adjusted EBITDA by segment to the most directly comparable GAAP financial measure, operating income (loss) by segment, on a historical basis, for selected segments, for the periods indicated (in thousands):

	Three Months Ended December 31, 2021			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	\$ 14,772	\$ 13,183	\$ 8,042	\$ (12,246)
Depreciation, depletion, and amortization	14,885	5,868	2,716	726
Inventory valuation adjustment	(21,643)	—	—	—
RINs loss in excess of net obligation	5,093	—	—	—
Unrealized loss (gain) on derivatives	(6,103)	—	—	—
Severance costs	8	1	—	—
Loss (gain) on sale of assets, net	(64)	—	(248)	15
Impairment expense	1,838	—	—	—
Other income (expense), net	—	—	—	(55)
Adjusted EBITDA (1)	\$ 8,786	\$ 19,052	\$ 10,510	\$ (11,560)

	Three Months Ended December 31, 2020			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	\$ (121,393)	\$ 3,531	\$ 14,080	\$ (10,350)
Depreciation, depletion, and amortization	14,721	5,817	2,400	866
Inventory valuation adjustment	18,681	—	—	—
LIFO liquidation adjustment	(6,211)	—	—	—
RINs loss in excess of net obligation	26,086	—	—	—
Unrealized loss (gain) on derivatives	(297)	—	—	—
Acquisition and integration costs	—	—	—	14
Severance costs	224	8	—	35
Impairment expense	17,884	—	—	—
Other income (expense), net	—	—	—	(40)
Adjusted EBITDA (2)	\$ (50,305)	\$ 9,356	\$ 16,480	\$ (9,475)

	Year Ended December 31, 2021			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	\$ (88,799)	\$ 51,159	\$ 81,249	\$ (51,228)
Depreciation, depletion and amortization	58,258	22,044	10,880	3,059
Inventory valuation adjustment	17,089	—	—	—
RINs loss in excess of net obligation	16,967	—	—	—
Unrealized loss (gain) on derivatives	1,517	—	—	—
Acquisition and integration costs	—	—	—	87
Severance costs	61	23	—	—
Loss (gain) on sale of assets, net	(19,659)	(19)	(45,034)	15
Impairment expense	1,838	—	—	—
Gain on curtailment of pension obligation	1,802	228	2	—
Other income (expense), net	—	—	—	(52)
Adjusted EBITDA (3)	\$ (10,926)	\$ 73,435	\$ 47,097	\$ (48,119)

Year Ended December 31, 2020

	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	\$ (331,826)	\$ 35,044	\$ 24,211	\$ (45,427)
Depreciation, depletion, and amortization	53,930	21,899	10,692	3,515
Inventory valuation adjustment	14,046	—	—	—
RINs loss (gain) in excess of net obligation	44,071	—	—	—
Unrealized loss (gain) on derivatives	(4,804)	—	—	—
Acquisition and integration costs	—	—	—	614
Severance costs	312	8	—	192
Impairment expense	55,989	—	29,817	—
Other income (expense), net	—	—	—	1,049
Adjusted EBITDA (4)	\$ (168,282)	\$ 56,951	\$ 64,720	\$ (40,057)

- (1) For the three months ended December 31, 2021, there was no LIFO liquidation adjustment, acquisition and integration costs, or gain on curtailment of pension obligation.
- (2) For the three months ended December 31, 2020, there was no loss (gain) on sale of assets recorded in Operating income (loss) by segment or gain on curtailment of pension obligation.
- (3) For the year ended December 31, 2021, there was no LIFO liquidation adjustment recorded in Operating income (loss) by segment.
- (4) For the year ended December 31, 2020, there was no loss (gain) on sale of assets recorded in Operating income (loss) by segment, LIFO liquidation adjustment, or gain on curtailment of pension obligation.

Laramie Energy Adjusted EBITDAX

Adjusted EBITDAX is defined as net income (loss) excluding commodity derivative loss (gain), loss (gain) on settled derivative instruments, interest expense, gain on extinguishment of debt, non-cash preferred dividend, depreciation, depletion, amortization, and accretion, exploration and geological and geographical expense, bonus accrual, equity-based compensation expense, loss (gain) on disposal of assets, and expired acreage (non-cash). We believe Adjusted EBITDAX is a useful supplemental financial measure to evaluate the economic and operational performance of exploration and production companies such as Laramie Energy.

The following table presents a reconciliation of Laramie Energy's Adjusted EBITDAX to the most directly comparable GAAP financial measure, net income (loss) for the periods indicated (in thousands):

	Three Months Ended December 31,		Year Ended December 31,	
	2021	2020	2021	2020
Net income (loss)	\$ 33,784	\$ 3,829	\$ 32,476	\$ (22,589)
Commodity derivative loss (gain)	(14,890)	(665)	42,995	2,201
Gain (loss) on settled derivative instruments	(7,732)	(2,732)	(10,578)	2,045
Interest expense and loan fees	4,728	2,518	17,155	9,402
Gain on extinguishment of debt	—	—	(695)	—
Non-cash preferred dividend	1,767	1,801	7,224	6,810
Depreciation, depletion, amortization, and accretion	5,815	7,581	28,860	37,960
Exploration and geological and geographical expense	—	57	342	275
Bonus accrual	—	(562)	602	436
Equity-based compensation expense	—	—	—	16
Loss (gain) on disposal of assets	—	(335)	(6)	(102)
Expired acreage (non-cash)	1,942	3,699	2,667	4,099
Total Adjusted EBITDAX	\$ 25,414	\$ 15,191	\$ 121,042	\$ 40,553