

NEWS RELEASE

PAR PACIFIC HOLDINGS REPORTS FOURTH QUARTER AND FULL YEAR 2022 RESULTS

HOUSTON, February 22, 2023 - Par Pacific Holdings, Inc. (NYSE: PARR) ("Par Pacific" or the "Company") today reported its financial results for the fourth quarter and twelve months ended December 31, 2022.

- Fourth quarter Net Income of \$84.7 million, or \$1.40 per diluted share; Adjusted Net Income of \$132.8 million, or \$2.20 per diluted share; Adjusted EBITDA of \$174.9 million
- Full year Net Income of \$364.2 million, or \$6.08 per diluted share; Adjusted Net Income of \$474.7 million, or \$7.93 per diluted share; Adjusted EBITDA of \$643.4 million

Par Pacific reported net income of \$364.2 million, or \$6.08 per diluted share, for the twelve months ended December 31, 2022, compared to a net loss of \$(81.3) million, or \$(1.40) per diluted share, for the twelve months ended December 31, 2021. Adjusted Net Income for 2022 was \$474.7 million, compared to an Adjusted Net Loss of \$(36.1) million for 2021. 2022 Adjusted EBITDA was \$643.4 million, compared to \$125.6 million for 2021.

Par Pacific reported net income of \$84.7 million, or \$1.40 per diluted share, for the quarter ended December 31, 2022, compared to \$8.1 million, or \$0.14 per diluted share, for the same quarter in 2021. Fourth quarter 2022 Adjusted Net Income was \$132.8 million, compared to Adjusted Net Loss of \$(12.8) million in the fourth quarter of 2021. Fourth quarter 2022 Adjusted EBITDA was \$174.9 million, compared to \$27.0 million in the fourth quarter of 2021. 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.

"Historic market conditions, excellent commercial performance and operational reliability drove record 2022 financial results," said William Pate, Chief Executive Officer. "As we enter 2023, the market backdrop remains strong. Disciplined business execution, successfully closing and integrating the Billings acquisition and achievement of our growth initiatives will be key to our long term success."

Refining

The Refining segment generated operating income of \$401.9 million for the year ended December 31, 2022, compared to an operating loss of \$(88.8) million for the year ended December 31, 2021. Adjusted Gross Margin for the Refining segment in the year ended December 31, 2022 was \$812.8 million, compared to \$264.4 million in the year ended December 31, 2021.

Refining Adjusted EBITDA for the year ended December 31, 2022 was \$566.8 million, compared to \$53.2 million for the year ended December 31, 2021.

The Refining segment reported operating income of \$85.3 million in the fourth quarter of 2022, compared to \$14.8 million in the fourth quarter of 2021. Adjusted Gross Margin for the Refining segment was \$212.0 million in the fourth quarter of 2022, compared to \$65.2 million in the fourth quarter of 2021.

Refining segment Adjusted EBITDA was \$146.4 million in the fourth quarter of 2022, compared to \$9.0 million in the fourth quarter of 2021.

Hawaii

The 3-1-2 Singapore Crack Spread was \$22.84 per barrel in the fourth quarter of 2022, compared to \$10.49 per barrel in the fourth quarter of 2021. Throughput in the fourth quarter of 2022 was 81 thousand barrels per day (Mbpd), compared to 82 Mbpd for the same quarter in 2021. Production costs were \$5.42 per throughput barrel in the fourth quarter of 2022, compared to \$4.24 per throughput barrel in the same period of 2021.

The Hawaii refinery's Adjusted Gross Margin was \$14.23 per barrel during the fourth quarter of 2022, including a net price lag impact of approximately \$9.6 million, or \$1.30 per barrel, compared to \$5.22 per barrel during the fourth quarter of 2021.

Washington

The Pacific Northwest 5-2-2-1 Index averaged \$28.09 per barrel in the fourth quarter of 2022, compared to \$17.64 per barrel in the fourth quarter of 2021. The Washington refinery's throughput was 40 Mbpd in the fourth quarter of 2022, compared to 36 Mbpd in the fourth quarter of 2021. Production costs were \$3.57 per throughput barrel in the fourth quarter of 2022, compared to \$4.30 per throughput barrel in the same period of 2021.

The Washington refinery's Adjusted Gross Margin was \$21.74 per barrel during the fourth quarter of 2022, compared to \$4.02 per barrel during the fourth quarter of 2021.

Wyoming

The Wyoming 3-2-1 Index averaged \$37.90 per barrel in the fourth quarter of 2022, compared to \$23.67 per barrel in the fourth quarter of 2021. The Wyoming refinery's throughput was 16 Mbpd in the fourth quarter of 2022, compared to 17 Mbpd in the fourth quarter of 2021. Production costs were \$7.80 per throughput barrel in the fourth quarter of 2022, compared to \$5.50 per throughput barrel in the same period of 2021.

The Wyoming refinery's Adjusted Gross Margin was \$17.66 per barrel during the fourth quarter of 2022, including a FIFO impact of approximately \$(4.1) million, or \$(2.81) per barrel, compared to \$8.81 per barrel during the fourth quarter of 2021.

Retail

The Retail segment reported operating income of \$49.2 million for the twelve months ended December 31, 2022, compared to \$81.2 million in the twelve months ended December 31, 2021. 2021 operating income includes a \$45.0 million gain on sale of assets primarily related to the Hawaii sale-leaseback transactions. Adjusted Gross Margin for the Retail segment was \$141.5 million for the twelve months ended December 31, 2022, compared to \$118.9 million in twelve months ended December 31, 2021.

For the twelve months ended December 31, 2022, Retail Adjusted EBITDA was \$60.3 million, compared to \$47.1 million for the twelve months ended December 31, 2021. For the twelve months ended December 31, 2022, the Retail segment reported fuel sales volumes of 105.5 million gallons, compared to 109.2 million gallons for the twelve months ended December 31, 2021.

The Retail segment reported operating income of \$22.3 million in the fourth quarter of 2022, compared to \$8.0 million in the fourth quarter of 2021. Adjusted Gross Margin for the Retail segment was \$46.0 million in the fourth quarter of 2022, compared to \$29.3 million in the same quarter of 2021.

Retail segment Adjusted EBITDA was \$25.2 million in the fourth quarter of 2022, compared to \$10.5 million in the fourth quarter of 2021. The Retail segment reported sales volumes of 26.9 million gallons in the fourth quarter of 2022, compared to 26.7 million gallons in the same quarter of 2021.

Logistics

The Logistics segment generated operating income of \$54.0 million for the twelve months ended December 31, 2022, compared to \$51.2 million for the twelve months ended December 31, 2021. Adjusted Gross Margin for the Logistics segment was \$89.4 million for the twelve months ended December 31, 2022, compared to \$87.9 million for the twelve months ended December 31, 2021.

Adjusted EBITDA for the Logistics segment was \$74.4 million for the twelve months ended December 31, 2022, compared to \$73.4 million for the twelve months ended December 31, 2021.

The Logistics segment reported operating income of \$10.7 million in the fourth quarter of 2022, compared to \$13.2 million in the fourth quarter of 2021. Adjusted Gross Margin for the Logistics segment was \$19.6 million in the fourth quarter of 2022, compared to \$22.6 million in the same quarter of 2021.

Logistics segment Adjusted EBITDA was \$15.9 million in the fourth quarter of 2022, compared to \$19.1 million in the fourth quarter of 2021.

Liquidity and Capital Structure

Net cash provided by operations totaled \$83.6 million and \$452.6 million for the three months and twelve months ended December 31, 2022, respectively, compared to net cash used in operations of \$(82.2) million and \$(27.6) million for the three months and twelve months ended December 31, 2021, respectively. Net cash provided by operations of \$452.6 million includes \$(29.6) million in deferred turnaround expenditures for the twelve months ended December 31, 2022. There were no significant deferred turnaround expenditures for the three months ended December 31, 2022. Net cash used in investing activities totaled \$(49.6) million and \$(87.3) million for the three months and twelve months ended December 31, 2022, respectively, compared to net cash used in investing activities of \$(7.7) million and net cash provided by investing activities of \$74.6 million for the three months and twelve months ended December 31, 2021, respectively. Net cash used in investing activities of \$(49.6) million and \$(87.3) million for the three months and twelve months ended December 31, 2022, respectively, include a \$(30.0) million deposit for the previously announced acquisition of the ExxonMobil Billings refinery and associated marketing and logistics assets. Net cash provided by financing activities totaled \$47.9 million and \$13.4 million for the three months and twelve months ended December 31, 2022, respectively, compared to net cash provided by financing activities of \$0.9 million

and net cash used in financing activities of \$(1.1) million for the three months and twelve months ended December 31, 2021, respectively.

At December 31, 2022, Par Pacific's cash balance totaled \$490.9 million, gross debt totaled \$515.4 million, and total liquidity was \$577.2 million.

In February of 2023, Par Pacific announced a proposed \$550 million senior secured term loan B due 2030 (the "Facility") at an interest rate of SOFR + 4.25%. Proceeds of the Facility will be used for refinancing the Company's existing term loan B due 2026 and senior secured notes, and for general corporate purposes. The Facility is expected to close during the first quarter of 2023.

Laramie Energy

Total net income for Laramie Energy, LLC ("*Laramie*") was \$12.1 million for the twelve months ended December 31, 2022, compared to \$32.5 million in the twelve months ended December 31, 2021. Laramie's total Adjusted EBITDAX was \$102.0 million for the twelve months ended December 31, 2022, compared to \$121.0 million in the twelve months ended December 31, 2021. We recorded no equity earnings (losses) from Laramie for the twelve months ended December 31, 2022.

Laramie's total net income was \$49.8 million in the fourth quarter of 2022, including unrealized gains on derivatives of \$33.3 million. These results compare to net income of \$33.8 million in the fourth quarter of 2021. Laramie's total Adjusted EBITDAX was \$29.9 million in the fourth quarter of 2022, compared to \$25.4 million in the fourth quarter of 2021.

Laramie completed a refinancing in February of 2023, redeeming its preferred stock and replacing its existing term loan facility with a new credit facility. Par Pacific expects to receive a cash distribution of approximately \$10 million during the first quarter of 2023 in conjunction with the refinancing.

Conference Call Information

A conference call is scheduled for Thursday, February 23, 2023 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 9, 2023 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 6862182.

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 61,000 bpd of combined refining capacity, related multimodal logistics systems, and 31 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; the effects and timing of the closing of the acquisition of the Billings refinery and associated marketing and logistics assets ("Billings Acquisition"), the anticipated cash on hand and other financing for the Billings Acquisition and the acquisition of the hydrocarbon inventory, the anticipated synergies and other benefits of the Billings Acquisition, including renewable growth opportunities, the anticipated financial and operating results of the Billings Acquisition and the effect on Par Pacific's cash flows and profitability (including Adjusted EBITDA and Adjusted Net Income and Free Cash Flow per share), 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; the conflict between Russia and Ukraine and its potential impacts on global crude oil markets and our business; operating disruptions at our refineries resulting from unplanned maintenance events or natural disasters; environmental risks; changes in the labor market; 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 the potential resurgence of 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.

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Condensed Consolidated Statements of Operations

(Unaudited)

(in thousands, except per share data)

	Three Months Ended December 31,				Year Ended December 31,		
		2022	2021		2022	2021	
Revenues	\$ 1	,808,875	\$ 1,293,5	16	\$ 7,321,785	\$ 4,710,089	
Operating expenses							
Cost of revenues (excluding depreciation)	1	,574,214	1,153,89	91	6,376,014	4,338,474	
Operating expense (excluding depreciation)		90,134	78,6	01	342,209	299,669	
Depreciation and amortization		25,281	24,19	95	99,769	94,241	
Impairment expense			1,83	38	_	1,838	
Loss (gain) on sale of assets, net		1	(25	97)	(169)	(64,697)	
General and administrative expense (excluding depreciation)		14,846	11,5	37	62,396	48,096	
Acquisition and integration costs		3,600			3,663	87	
Total operating expenses	1	,708,076	1,269,7	65	6,883,882	4,717,708	
Operating income (loss)		100,799	23,7	51	437,903	(7,619)	
Other income (expense)							
Interest expense and financing costs, net		(16,888)	(15,7)	82)	(68,288)	(66,493)	
Debt extinguishment and commitment costs		_	-		(5,329)	(8,144)	
Gain on curtailment of pension obligation		_	-		_	2,032	
Other income (expense), net		762	(:	55)	613	(52)	
Total other expense, net		(16,126)	(15,8	37)	(73,004)	(72,657)	
Income (loss) before income taxes		84,673	7,9	14	364,899	(80,276)	
Income tax benefit (expense)		46	1	72	(710)	(1,021)	
Net income (loss)	\$	84,719	\$ 8,0	86	\$ 364,189	\$ (81,297)	
Weighted-average shares outstanding							
Basic		59,722	59,5	65	59,544	58,268	
Diluted		60,393	59,8	40	59,883	58,268	
Income (loss) per share							
Basic	\$	1.42	•	14	\$ 6.12	\$ (1.40)	
Diluted	\$	1.40	\$ 0.	14	\$ 6.08	\$ (1.40)	

Balance Sheet Data

(Unaudited)

(in thousands)

	Decem	December 31, 2022					
Balance Sheet Data				_			
Cash and cash equivalents	\$	490,925	\$	112,221			
Working capital (1)		(392,222)		(327,002)			
Debt, including current portion		505,532		564,558			
Total stockholders' equity		644,537		265,700			

⁽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 Mont	Year F Decemb		
	2022	2021	2022	2021
Total Refining Segment				
Feedstocks throughput (Mbpd)	136.7	135.1	133.8	135.2
Refined product sales volume (Mbpd)	146.1	133.9	140.3	138.8
Hawaii Refinery				
Feedstocks throughput (Mbpd)	80.5	81.8	81.8	82.0
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	26.3 %	26.7 %	25.6 %	24.8 %
Distillates	36.8 %	44.4 %	38.8 %	45.0 %
Fuel oils	32.4 %	28.3 %	31.4 %	26.6 %
Other products	0.7 %	(2.2)%	0.7 %	0.6 %
Total yield	96.2 %	97.2 %	96.5 %	97.0 %
Refined product sales volume (Mbpd)				
On-island sales volume	88.7	78.8	82.9	82.6
Export sales volume	2.6		1.1	
Total refined product sales volume	91.3	78.8	84.0	82.6
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 14.23	\$ 5.22	\$ 13.99	\$ 4.56
Production costs per bbl (\$/throughput bbl) (2)	5.42	4.24	4.86	3.98
D&A per bbl (\$/throughput bbl)	0.68	0.65	0.67	0.66
Washington Refinery				
Feedstocks throughput (Mbpd)	40.4	36.3	35.5	36.3
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	23.1 %	24.0 %	24.0 %	23.7 %
Distillate	34.8 %	35.0 %	34.3 %	34.5 %
Asphalt	21.3 %	20.3 %	20.3 %	20.7 %
Other products	17.7 %	17.9 %	18.2 %	18.3 %
Total yield	96.9 %	97.2 %	96.8 %	97.2 %
Refined product sales volume (Mbpd)	39.4	37.8	39.7	39.6
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 21.74	\$ 4.02	\$ 18.00	\$ 2.98
Production costs per bbl (\$/throughput bbl) (2)	3.57	4.30	4.01	3.86
D&A per bbl (\$/throughput bbl)	1.99	1.59	2.19	1.57

		nths Ended aber 31,		Ended iber 31,
	2022	2021	2022	2021
Wyoming Refinery				
Feedstocks throughput (Mbpd)	15.8	17.0	16.5	16.9
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	52.6 %	48.8 %	49.7 %	47.3 %
Distillate	41.6 %	44.6 %	43.1 %	45.7 %
Fuel oils	1.9 %	2.4 %	2.4 %	2.2 %
Other products	1.0 %	1.0 %	2.1 %	1.7 %
Total yield	97.1 %	96.8 %	97.3 %	96.9 %
Refined product sales volume (Mbpd)	15.4	17.3	16.6	16.6
Adjusted Gross Margin per bbl (\$/throughput bbl) (1)	\$ 17.66	\$ 8.81	\$ 26.50	\$ 14.47
Production costs per bbl (\$/throughput bbl) (2)	7.80	5.50	7.32	6.22
D&A per bbl (\$/throughput bbl)	2.90	3.00	2.85	2.86
Market Indices (\$ per barrel)				
3-1-2 Singapore Crack Spread (3)	\$ 22.84	\$ 10.49	\$ 25.43	\$ 6.22
Pacific Northwest 5-2-2-1 Index (4)	28.09	17.64	32.40	15.95
Wyoming 3-2-1 Index (5)	37.90	23.67	41.32	29.00
Crude Oil Prices (\$ per barrel)				
Brent	\$ 88.63	\$ 79.66	\$ 99.04	\$ 70.95
WTI	82.64	77.10	94.33	68.11
ANS	91.02	80.61	102.56	71.49
Bakken Clearbrook	86.33	77.98	98.09	68.20
WCS Hardisty	55.10	60.99	75.43	54.61
Brent M1-M3	1.66	1.33	3.49	1.12
Retail Segment				
Retail sales volumes (thousands of gallons)	26,856	26,732	105,456	109,150

⁽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. The definition of Adjusted Gross Margin was modified beginning with the financial results reported for periods in fiscal year 2022. We have recast Adjusted Gross Margin for prior periods when reported to conform to the current presentation. 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 in isolation or as substitutes or alternatives to their most directly comparable GAAP financial measures or any other measure of financial performance or liquidity presented in accordance with GAAP. These non-GAAP measures may not be comparable to similarly titled measures used by other companies since each company may define these terms differently.

We believe Adjusted Gross Margin (as defined below) 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 and amortization. Management uses Adjusted Gross Margin per barrel to evaluate operating performance and compare profitability to other companies in the industry and to industry benchmarks. We believe Adjusted Net Income (Loss) and Adjusted EBITDA (as defined below) 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. We believe Adjusted EBITDA by segment (as defined below) 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.

Beginning with financial results reported for periods in fiscal year 2022, the inventory valuation adjustment was modified to include the first-in, first-out ("FIFO") inventory gains (losses) associated with our titled manufactured inventory in Hawaii. This modification was made to better align Adjusted Net Income (Loss) and Adjusted EBITDA with the cash flow of the Hawaii refining business. Prior to 2022, the impacts of FIFO inventory gains (losses) associated with Hawaii titled manufactured inventory were eliminated through the inventory valuation adjustment. Beginning with financial results reported for the second quarter of 2022, Adjusted Gross Margin, Adjusted Net Income (Loss), and Adjusted EBITDA also exclude the mark-to-market losses (gains) associated with our net RINs liability. This modification was made to better reflect our operating performance and to improve comparability between periods. We have recast Adjusted Gross Margin, Adjusted Net Income (Loss), and Adjusted EBITDA for prior periods when reported to conform to the modified presentation.

Adjusted Gross Margin

Adjusted Gross Margin is defined as operating income (loss) excluding:

- operating expense (excluding depreciation);
- depreciation and amortization ("D&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") mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability); and
- unrealized loss (gain) on derivatives.

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, 2022	F	Refining	L	Logistics		Retail
Operating income (loss)	\$	85,337	\$	10,674	\$	22,348
Operating expense (excluding depreciation)		65,542		3,708		20,884
Depreciation and amortization		16,618		5,222		2,815
Loss (gain) on sale of assets, net		1				_
Inventory valuation adjustment		2,327		_		_
RINs mark-to-market adjustments		22,641		_		
Unrealized loss on derivatives		19,487				_
Adjusted Gross Margin (1)	\$	211,953	\$	19,604	\$	46,047
Three months ended December 31, 2021	F	Refining	L	ogistics		Retail
Operating income (loss)	\$	14,772	\$	13,183	\$	8,042
Operating expense (excluding depreciation)		56,207		3,578		18,816
Depreciation and amortization		14,885		5,868		2,716
Impairment expense		1,838		_		_
Loss (gain) on sale of assets, net		(64)				(248)
Inventory valuation adjustment		(23,686)		_		
RINs mark-to-market adjustments		7,377				_
Unrealized gain on derivatives		(6,103)				_
Adjusted Gross Margin (2)	\$	65,226	\$	22,629	\$	29,326
Year Ended December 31, 2022	F	Refining	L	ogistics		Retail
Year Ended December 31, 2022 Operating income		Refining 401,901	<u>L</u>	ogistics 54,049	\$	Retail 49,238
					\$	
Operating income		401,901		54,049	\$	49,238
Operating income Operating expense (excluding depreciation)		401,901 245,992		54,049 14,988	\$	49,238 81,229
Operating income Operating expense (excluding depreciation) Depreciation and amortization		401,901 245,992 65,472		54,049 14,988 20,579	\$	49,238 81,229 10,971
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net		401,901 245,992 65,472		54,049 14,988 20,579	\$	49,238 81,229 10,971
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment		401,901 245,992 65,472 1 (15,712)		54,049 14,988 20,579	\$	49,238 81,229 10,971
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments	\$	401,901 245,992 65,472 1 (15,712) 105,760		54,049 14,988 20,579		49,238 81,229 10,971
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives	\$	401,901 245,992 65,472 1 (15,712) 105,760 9,336	\$	54,049 14,988 20,579 (253) —		49,238 81,229 10,971 56 — —
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1)	\$	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750	\$ 	54,049 14,988 20,579 (253) — — — 89,363		49,238 81,229 10,971 56 — — — — 141,494
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 Refining	\$ 	54,049 14,988 20,579 (253) — — 89,363 ogistics	\$	49,238 81,229 10,971 56 — — — 141,494 Retail
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021 Operating income (loss)	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 Refining (88,799)	\$ 	54,049 14,988 20,579 (253) — 89,363 ogistics 51,159	\$	49,238 81,229 10,971 56 — — 141,494 Retail 81,249
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021 Operating income (loss) Operating expense (excluding depreciation)	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 Refining (88,799) 213,102	\$ 	54,049 14,988 20,579 (253) — 89,363 ogistics 51,159 14,722	\$	49,238 81,229 10,971 56 — — 141,494 Retail 81,249 71,845
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021 Operating income (loss) Operating expense (excluding depreciation) Depreciation and amortization	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 (88,799) 213,102 58,258	\$ 	54,049 14,988 20,579 (253) — 89,363 ogistics 51,159 14,722	\$	49,238 81,229 10,971 56 — — 141,494 Retail 81,249 71,845
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021 Operating income (loss) Operating expense (excluding depreciation) Depreciation and amortization Impairment expense	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 Refining (88,799) 213,102 58,258 1,838	\$ 	54,049 14,988 20,579 (253) — 89,363 ogistics 51,159 14,722 22,044 —	\$	49,238 81,229 10,971 56 — — 141,494 Retail 81,249 71,845 10,880 —
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021 Operating income (loss) Operating expense (excluding depreciation) Depreciation and amortization Impairment expense Loss (gain) on sale of assets, net	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 (88,799) 213,102 58,258 1,838 (19,659)	\$ 	54,049 14,988 20,579 (253) — 89,363 ogistics 51,159 14,722 22,044 —	\$	49,238 81,229 10,971 56 — — 141,494 Retail 81,249 71,845 10,880 —
Operating income Operating expense (excluding depreciation) Depreciation and amortization Loss (gain) on sale of assets, net Inventory valuation adjustment RINs mark-to-market adjustments Unrealized loss on derivatives Adjusted Gross Margin (1) Year Ended December 31, 2021 Operating income (loss) Operating expense (excluding depreciation) Depreciation and amortization Impairment expense Loss (gain) on sale of assets, net Inventory valuation adjustment	\$ <u>\$</u>	401,901 245,992 65,472 1 (15,712) 105,760 9,336 812,750 (88,799) 213,102 58,258 1,838 (19,659) 31,841	\$ 	54,049 14,988 20,579 (253) — 89,363 ogistics 51,159 14,722 22,044 —	\$	49,238 81,229 10,971 56 — — 141,494 Retail 81,249 71,845 10,880 —

⁽¹⁾ There was no LIFO liquidation adjustment or impairment expense for the three months and year ended December 31, 2022.

⁽²⁾ There was no LIFO liquidation adjustment for the three months and year ended December 31, 2021.

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 mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability);
- 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 defined as Adjusted Net Income (Loss) excluding:

- D&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) excluding the increase in (release of) tax valuation allowance.

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 Mon Decem		Year Ended December 31,				
	2022		2021		2022		2021
Net income (loss)	\$ 84,719	\$	8,086	\$	364,189	\$	(81,297)
Inventory valuation adjustment	2,327		(23,686)		(15,712)		31,841
RINs mark-to-market adjustments	22,641		7,377		105,760		66,350
Unrealized loss (gain) on derivatives	19,487		(6,103)		9,336		1,517
Acquisition and integration costs	3,600				3,663		87
Debt extinguishment and commitment costs			_		5,329		8,144
Severance costs			9		2,272		84
Loss (gain) on sale of assets, net	1		(297)		(169)		(64,697)
Impairment expense	 		1,838				1,838
Adjusted Net Income (Loss)	132,775		(12,776)		474,668		(36,133)
Depreciation and amortization	25,281		24,195		99,769		94,241
Interest expense and financing costs, net	16,888		15,782		68,288		66,493
Income tax expense	 (46)		(172)		710		1,021
Adjusted EBITDA (1)	\$ 174,898	\$	27,029	\$	643,435	\$	125,622
	 	_		_		_	

(1) For the three months and years ended December 31, 2022 and 2021, there was no LIFO liquidation adjustment, change in value of contingent consideration, change in valuation allowance and other deferred tax items, change in value of common stock warrants, or equity losses (earnings) from Laramie Energy, LLC, including impairments associated with our investment in Laramie Energy, our share of Laramie Energy's asset impairment losses in excess of our basis difference, and our share of Laramie Energy's unrealized loss (gain) on derivatives.

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,			
		2022		2021		2022		2021	
Adjusted Net Income (Loss)	\$	132,775	\$	(12,776)	\$	474,668	\$	(36,133)	
Plus: effect of convertible securities		_							
Numerator for diluted income (loss) per common share	\$	132,775	\$	(12,776)	\$	474,668	\$	(36,133)	
Basic weighted-average common stock shares outstanding		59,722		59,565		59,544		58,268	
Add dilutive effects of common stock equivalents (1)		671				339			
Diluted weighted-average common stock shares outstanding	_	60,393	_	59,565		59,883	_	58,268	
Basic Adjusted Net Income (Loss) per common share	\$	2.22	\$	(0.21)	\$	7.97	\$	(0.62)	
Diluted Adjusted Net Income (Loss) per common share	\$	2.20	\$	(0.21)	\$	7.93	\$	(0.62)	

⁽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.

Adjusted EBITDA by Segment

Adjusted EBITDA by segment is defined as Operating income (loss) excluding:

- D&A:
- 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 mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; this adjustment also includes the mark-to-market losses (gains) associated with our net RINs liability);
- unrealized (gain) loss on derivatives;
- acquisition and integration costs;
- severance costs;
- (gain) loss on sale of assets; and
- impairment expense.

Adjusted EBITDA by segment also includes Gain on curtailment of pension obligation and Other income (loss), net, which are presented below operating income (loss) on our condensed consolidated statements of operations.

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, 2022	Three Months	Ended	December	31.	2022
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	R	Refining	L	ogistics	Retail	orporate id Other
Operating income (loss) by segment	\$	85,337	\$	10,674	\$ 22,348	\$ (17,560)
Depreciation and amortization		16,618		5,222	2,815	626
Inventory valuation adjustment		2,327		_		_
RINs mark-to-market adjustments		22,641		_		_
Unrealized loss (gain) on derivatives		19,487		_		_
Acquisition and integration costs				_		3,600
Loss (gain) on sale of assets, net		1		_		_
Other income (loss), net				_	 	 762
Adjusted EBITDA (1)	\$	146,411	\$	15,896	\$ 25,163	\$ (12,572)

Three Months Ended December 31, 2021

	R	Refining	 Logistics	Retail	orporate id Other
Operating income (loss) by segment	\$	14,772	\$ 13,183	\$ 8,042	\$ (12,246)
Depreciation and amortization		14,885	5,868	2,716	726
Inventory valuation adjustment		(23,686)	_	_	_
RINs mark-to-market adjustments		7,377		_	
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 (loss), net		_		_	(55)
Adjusted EBITDA (1)	\$	9,027	\$ 19,052	\$ 10,510	\$ (11,560)

Year Ended December 31, 2022

	R	Refining	 Logistics	Retail	and Other		
Operating income (loss) by segment	\$	401,901	\$ 54,049	\$ 49,238	\$	(67,285)	
Depreciation and amortization		65,472	20,579	10,971		2,747	
Inventory valuation adjustment		(15,712)	_			_	
RINs mark-to-market adjustments		105,760	_			_	
Unrealized loss (gain) on derivatives		9,336	_			_	
Acquisition and integration costs		_		_		3,663	
Severance costs		40	13	22		2,197	
Loss on sale of assets, net		1	(253)	56		27	
Other income (loss), net			 	 		613	
Adjusted EBITDA (1)	\$	566,798	\$ 74,388	\$ 60,287	\$	(58,038)	

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 and amortization	58,258	22,044	10,880	3,059
Inventory valuation adjustment	31,841	_	_	_
RINs mark-to-market adjustments	66,350	_	_	_
Unrealized loss (gain) on derivatives	1,517	_	_	_
Acquisition and integration costs		_	_	87
Severance costs	61	23	_	_
Loss 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 (loss), net		_	_	(52)
Adjusted EBITDA (1)	\$ 53,209	\$ 73,435	\$ 47,097	\$ (48,119)

⁽¹⁾ For the three months ended and year ended December 31, 2022, there was no LIFO liquidation adjustment, impairment expense, or gain on curtailment of pension obligation. For the three months ended December 31, 2022, there was no severance expense. For the three months ended December 31, 2021, there was no acquisition and integration costs or gain on curtailment of pension obligation. For the three months and year ended December 31, 2021 there was no LIFO liquidation adjustment.

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):

		onths Ended nber 31,	Year Ended December 31,	
	2022	2021	2022	2021
Net income (loss)	\$ 49,768	\$ 33,784	\$ 12,065	\$ 32,476
Commodity derivative loss (gain)	(25,753)	(14,890)	78,532	42,995
Gain (loss) on settled derivative instruments	(7,505)	(7,732)	(41,034)	(10,578)
Interest expense and loan fees	3,695	4,728	14,930	17,155
Gain on extinguishment of debt		_	_	(695)
Non-cash preferred dividend	2,901	1,767	10,409	7,224
Depreciation, depletion, amortization, and accretion	6,657	5,815	25,982	28,860
Exploration and geological and geographical expense		_	_	342
Bonus accrual		_	_	602
Loss (gain) on disposal of assets	111	_	821	(6)
Expired acreage (non-cash)	(14)	1,942	292	2,667
Total Adjusted EBITDAX	\$ 29,860	\$ 25,414	\$ 101,997	\$ 121,042