Par Pacific

NEWS RELEASE

PAR PACIFIC HOLDINGS REPORTS STRONG SECOND QUARTER 2022 RESULTS

HOUSTON, August 8, 2022 - Par Pacific Holdings, Inc. (NYSE: PARR) ("Par Pacific" or the **"Company")** today reported its financial results for the quarter ended June 30, 2022.

- Net Income of $149.1 million, or $2.50 per diluted share
- Adjusted Net Income of $197.2 million, or $3.31 per diluted share
- Adjusted EBITDA of $242.1 million
- $70.1 million in debt reduction, or 12% of funded debt
- System-wide throughput of 141 Mbpd, including record quarterly rates at the Hawaii refinery

Par Pacific reported net income of $149.1 million, or $2.50 per diluted share, for the quarter ended June 30, 2022, compared to a net loss of $(109.0) million, or $(1.84) per diluted share, for the same quarter in 2021. Second quarter 2022 Adjusted Net Income was $197.2 million, compared to Adjusted Net Loss of $(14.7) million in the second quarter of 2021. Second quarter 2022 Adjusted EBITDA was $242.1 million, compared to $26.7 million in the second quarter of 2021. Adjusted financial results exclude an $(18.4) million RINs mark-to-market (MTM) expense. 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 are pleased to report strong quarterly financial results due to rebounding demand, record market conditions and excellent operational reliability across our regions," said William Pate, President and Chief Executive Officer. "We remain focused on reducing debt and generating strong free cash flow."

Refining

The Refining segment reported operating income of $168.8 million in the second quarter of 2022, compared to an operating loss of $(99.1) million in the second quarter of 2021. Adjusted Gross Margin for the Refining segment was $287.3 million in the second quarter of 2022, compared to $52.5 million in the second quarter of 2021.

Refining segment Adjusted EBITDA was $228.2 million in the second quarter of 2022, compared to $4.6 million in the second quarter of 2021. Second quarter 2022 Refining segment Adjusted EBITDA excludes a MTM expense of $(18.4) million related to increased RINs prices.

Hawaii

The 3-1-2 Singapore Crack Spread was $36.80 per barrel in the second quarter of 2022, compared to $4.38 per barrel in the second quarter of 2021. Throughput in the second quarter of 2022 was 84 thousand barrels per day (Mbpd), compared to 84 Mbpd for the same quarter in 2021. Production costs were $4.50 per throughput barrel in the second quarter of 2022, compared to $3.40 per throughput barrel in the same period of 2021.

The Hawaii refinery's Adjusted Gross Margin of $18.71 per barrel during the second quarter of 2022 excludes a RINs MTM expense of approximately $(10.6) million, or $(1.38) per barrel.

Washington

The Pacific Northwest 5-2-2-1 Index averaged $46.16 per barrel in the second quarter of 2022, compared to $16.05 per barrel in the second quarter of 2021. The Washington refinery's throughput was 40 Mbpd in the second quarter of 2022, compared to 39 Mbpd in the second quarter of 2021. Production costs were $3.40 per throughput barrel in the second quarter of 2022, compared to $3.28 per throughput barrel in the same period of 2021.

The Washington refinery's Adjusted Gross Margin of $20.50 per barrel during the second quarter of 2022 excludes a RINs MTM expense of approximately $(2.1) million, or $(0.57) per barrel.

Wyoming

During the second quarter of 2022, the Wyoming 3-2-1 Index averaged $54.55 per barrel, compared to $30.04 per barrel in the second quarter of 2021. The Wyoming refinery's throughput was 17 Mbpd in the second quarter of 2022, compared to 18 Mbpd in the second quarter of 2021. Production costs were $6.97 per throughput barrel in the second quarter of 2022, compared to $5.71 per throughput barrel in the same period of 2021.

The Wyoming refinery's Adjusted Gross Margin of $43.34 per barrel during the second quarter of 2022 excludes a RINs MTM expense of approximately $(5.7) million, or $(3.76) per barrel, and includes a FIFO benefit of approximately $7.5 million, or $4.96 per barrel.

Retail

The Retail segment reported operating income of $5.5 million in the second quarter of 2022, compared to $12.7 million in the second quarter of 2021. Adjusted Gross Margin for the Retail segment was $27.6 million in the second quarter of 2022, compared to $31.8 million in the same quarter of 2021.

Retail segment Adjusted EBITDA was $8.1 million in the second quarter of 2022, compared to $14.4 million in the second quarter of 2021. The Retail segment reported sales volumes of 25.9 million gallons in the second quarter of 2022, compared to 28.9 million gallons in the same quarter of 2021.

Logistics

The Logistics segment reported operating income of $15.9 million in the second quarter of 2022, compared to $14.5 million in the second quarter of 2021. Adjusted Gross Margin for the Logistics segment was $24.9 million in the second quarter of 2022, compared to $23.4 million in the same quarter of 2021.

Logistics segment Adjusted EBITDA was $21.1 million in the second quarter of 2022, compared to $19.9 million in the second quarter of 2021.

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 in the second quarter of 2022. Laramie's net income was $0.4 million in the second quarter of 2022, including unrealized losses on derivatives of $(10.7) million. These results compare to net income of $0.1 million in the second quarter of 2021. Laramie's total Adjusted EBITDAX was $24.2 million in the second quarter of 2022, compared to $15.2 million in the second quarter of 2021.

Liquidity

Net cash provided by operations totaled $35.3 million for the three months ended June 30, 2022, compared to $32.6 million for the three months ended June 30, 2021. Net cash provided by operations of $35.3 million for the three months ended June 30, 2022 includes $(0.8) million in deferred turnaround expenditures. Second quarter 2022 net working capital outflows totaled $(120.3) million, primarily related to increased sales volumes in Washington and collateral posting in support of Hawaii commercial activities. Based on July activities, we expect these net working capital outflows to partially reverse during the third quarter. Net cash used in investing activities totaled $(12.7) million for the three months ended June 30, 2022, primarily related to capital expenditures, compared to net cash used in investing activities of $(5.8) million for the three months ended June 30, 2021. Net cash provided by financing activities totaled $22.6 million for the three months ended June 30, 2022, compared to net cash used in financing activities of $(67.1) million for the three months ended June 30, 2021. Second quarter 2022 financing cash flows included $70.1 million of debt reduction, including open market repurchases of $41.9 million.

At June 30, 2022, Par Pacific's cash balance totaled $186.2 million, total debt was $519.9 million, and total liquidity was $285.8 million. In addition, the Company had $72.2 million in cash collateral posted to support its hedge positions and approximately $65 million in excess collateral above the working capital facility limits at June 30, 2022. Net debt was $345.5 million at June 30, 2022, a $115.4 million improvement from March 31, 2022.

Major Shareholder Transactions

As of July 29, 2022, Zell Credit Opportunities Master Fund, LP (ZCOF), through an affiliated fund, sold all remaining shares of Par Pacific held by its limited partner. The ZCOF general partner, Chai Trust Company, LLC (Chai Trust), through its affiliates, retains 3.3 million shares of the Company, or approximately 5.6% of total shares outstanding, and continues to be a major shareholder and supportive of the Company and its strategy. Chai Trust, through its division known as Equity Group Investments, is the private investment firm of Sam Zell.

Conference Call Information

A conference call is scheduled for Tuesday, August 9, 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 August 23, 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 2641408.

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; 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 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 June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenues	$ 2,106,332	$ 1,217,525	$ 3,456,625	$ 2,106,205
Operating expenses				
Cost of revenues (excluding depreciation)	1,808,925	1,197,298	3,159,174	2,086,161
Operating expense (excluding depreciation)	82,342	68,821	163,746	143,009
Depreciation and amortization	25,583	23,548	49,363	46,428
Loss (gain) on sale of assets, net	15	510	15	(64,402)
General and administrative expense (excluding depreciation)	15,438	12,201	31,331	24,086
Acquisition and integration costs	—	(352)	63	86
Total operating expenses	1,932,303	1,302,026	3,403,692	2,235,368
Operating income (loss)	174,029	(84,501)	52,933	(129,163)
Other income (expense)				
Interest expense and financing costs, net	(18,154)	(17,186)	(34,548)	(35,337)
Debt extinguishment and commitment costs	(5,672)	(6,628)	(5,672)	(8,135)
Gain on curtailment of pension obligation	—	—	—	2,032
Other income (expense), net	47	(36)	49	25
Total other expense, net	(23,779)	(23,850)	(40,171)	(41,415)
Income (loss) before income taxes	150,250	(108,351)	12,762	(170,578)
Income tax benefit (expense)	(1,125)	(607)	(688)	(607)
Net income (loss)	$ 149,125	$ (108,958)	$ 12,074	$ (171,185)
Weighted-average shares outstanding				
Basic	59,479	59,367	59,449	56,837
Diluted	59,642	59,367	59,644	56,837
Income (loss) per share				
Basic	$ 2.51	$ (1.84)	$ 0.20	$ (3.01)
Diluted	$ 2.50	$ (1.84)	$ 0.20	$ (3.01)

Balance Sheet Data

(Unaudited)

(in thousands)

	June 30, 2022	December 31, 2021
Balance Sheet Data		
Cash and cash equivalents	$ 186,178	$ 112,221
Working capital (1)	(433,884)	(327,002)
Debt, including current portion	519,871	564,558
Total stockholders' equity	278,729	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 Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Total Refining Segment				
Feedstocks throughput (Mbpd)	141.3	140.7	129.8	134.1
Refined product sales volume (Mbpd)	143.4	146.6	133.0	138.5
Hawaii Refinery				
Feedstocks throughput (Mbpd)	84.1	84.0	83.4	82.6
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	22.9 %	24.7 %	24.0 %	24.7 %
Distillates	38.0 %	46.8 %	39.6 %	44.9 %
Fuel oils	33.6 %	25.6 %	31.5 %	26.5 %
Other products	2.4 %	(0.4)%	1.4 %	0.5 %
Total yield	96.9 %	96.7 %	96.5 %	96.6 %
Refined product sales volume (Mbpd)				
On-island sales volume	80.2	87.3	79.2	82.6
Export sales volume	—	—	—	—
Total refined product sales volume	80.2	87.3	79.2	82.6
Adjusted Gross Margin per bbl ($/throughput bbl) (1)	$ 18.71	$ 2.73	$ 11.22	$ 3.51
Production costs per bbl ($/throughput bbl) (2)	4.50	3.40	4.45	3.69
D&A per bbl ($/throughput bbl)	0.66	0.65	0.66	0.66
Washington Refinery				
Feedstocks throughput (Mbpd)	40.5	38.7	30.4	35.2
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	24.2 %	23.6 %	24.4 %	24.0 %
Distillate	34.4 %	34.1 %	34.1 %	35.0 %
Asphalt	20.8 %	21.5 %	19.7 %	19.9 %
Other products	17.4 %	17.8 %	18.6 %	18.2 %
Total yield	96.8 %	97 %	96.8 %	97.1 %
Refined product sales volume (Mbpd)	44.6	40.9	37.1	40.1
Adjusted Gross Margin per bbl ($/throughput bbl) (1)	$ 20.50	$ 1.97	$ 14.17	$ 2.14
Production costs per bbl ($/throughput bbl) (2)	3.40	3.28	4.71	3.76
D&A per bbl ($/throughput bbl)	2.03	1.49	2.45	1.62

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Wyoming Refinery				
Feedstocks throughput (Mbpd)	16.7	18.0	16.0	16.3
Yield (% of total throughput)				
Gasoline and gasoline blendstocks	48.1 %	45.6 %	49.1 %	47.1 %
Distillate	43.6 %	46.6 %	43.4 %	45.9 %
Fuel oils	2.2 %	2.4 %	2.3 %	2.0 %
Other products	3.4 %	2.5 %	2.5 %	1.9 %
Total yield	97.3 %	97.1 %	97.3 %	96.9 %
Refined product sales volume (Mbpd)	18.6	18.4	16.7	15.8
Adjusted Gross Margin per bbl ($/throughput bbl) (1)	$ 43.34	$ 15.10	$ 34.97	$ 13.38
Production costs per bbl ($/throughput bbl) (2)	6.97	5.71	7.46	6.78
D&A per bbl ($/throughput bbl)	2.92	2.63	3.07	2.85
Market Indices ($ per barrel)				
3-1-2 Singapore Crack Spread (3)	$ 36.80	$ 4.38	$ 26.56	$ 4.09
Pacific Northwest 5-2-2-1 Index (4)	46.16	16.05	34.09	13.77
Wyoming 3-2-1 Index (5)	54.55	30.04	40.62	25.53
Crude Oil Prices ($ per barrel)				
Brent	$111.98	$ 69.08	$104.98	$ 65.22
WTI	108.52	66.17	101.80	62.18
ANS	115.84	69.44	107.74	65.57
Bakken Clearbrook	112.44	65.99	105.45	61.82
WCS Hardisty	93.35	53.33	87.97	49.77
Brent M1-M3	4.23	0.96	4.18	0.89
Retail Segment				
Retail sales volumes (thousands of gallons)	25,862	28,871	50,770	53,672

(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 condensed 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; beginning in 2022, this also includes the FIFO inventory (gains) losses associated with our titled manufactured inventory in Hawaii);
- 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; beginning with financial results reported for the second quarter of 2022, this also includes the mark-to-market losses (gains) associated with our net RINs liability); and
- unrealized loss (gain) on derivatives.

Adjusted Gross Margin can also be defined as revenues less cost of revenues (excluding depreciation) excluding:

- inventory valuation adjustment;
- unrealized loss (gain) on derivatives;
- LIFO layer liquidation impacts associated with our Washington inventory; and
- RINs mark-to-market adjustments (which represents the income statement effect of reflecting our RINs liability on a net basis; beginning with financial results reported for the second quarter of 2022, this also includes the mark-to-market losses (gains) associated with our net RINs liability).

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;
- certain hydrocarbon fees and taxes; and
- the unrealized gain (loss) on derivatives and the inventory valuation adjustment that we exclude from Adjusted Gross Margin.

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 June 30, 2022	**Refining**	**Logistics**	**Retail**
Operating income (loss)	$ 168,798	$ 15,898	$ 5,525
Operating expense (excluding depreciation)	59,101	3,797	19,444
Depreciation and amortization	16,979	5,211	2,600
Loss (gain) on sale of assets, net	—	(12)	—
Inventory valuation adjustment	(7,557)	—	—
RINs mark-to-market adjustments	78,548	—	—
Unrealized gain on derivatives	(28,607)	—	—
Adjusted Gross Margin (1)	$ 287,262	$ 24,894	$ 27,569

Three months ended June 30, 2021	**Refining**	**Logistics**	**Retail**
Operating income (loss)	$ (99,119)	$ 14,542	$ 12,651
Operating expense (excluding depreciation)	47,944	3,494	17,383
Depreciation and amortization	14,561	5,377	2,874
Loss (gain) on sale of assets, net	1,664	(21)	(1,133)
Inventory valuation adjustment	29,657	—	—
LIFO liquidation adjustment	2,263	—	—
RINs mark-to-market adjustments	54,158	—	—
Unrealized loss on derivatives	1,404	—	—
Adjusted Gross Margin (2)	$ 52,532	$ 23,392	$ 31,775

Six Months Ended June 30, 2022	Refining	Logistics	Retail
Operating income	$ 50,473	$ 25,750	$ 9,570
Operating expense (excluding depreciation)	117,401	7,570	38,775
Depreciation and amortization	32,312	10,298	5,291
Loss (gain) on sale of assets, net	—	(12)	—
Inventory valuation adjustment	73,096	—	—
RINs mark-to-market adjustments	89,850	—	—
Unrealized gain on derivatives	(13,155)	—	—
Adjusted Gross Margin (1)	$ 349,977	$ 43,606	$ 53,636

Six Months Ended June 30, 2021	Refining	Logistics	Retail
Operating income (loss)	$ (189,984)	$ 24,619	$ 62,006
Operating expense (excluding depreciation)	101,282	7,390	34,337
Depreciation and amortization	28,625	10,631	5,534
Loss (gain) on sale of assets, net	(19,595)	(21)	(44,786)
Inventory valuation adjustment	52,743	—	—
LIFO liquidation adjustment	4,151	—	—
RINs mark-to-market adjustments	131,060	—	—
Unrealized gain on derivatives	(2,608)	—	—
Adjusted Gross Margin (1) (2)	$ 105,674	$ 42,619	$ 57,091

(1) There was no LIFO liquidation adjustment or impairment expense for the three and six months ended June 30, 2022.
(2) There was no impairment expense for the three and six months ended June 30, 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; beginning in 2022, this also includes the FIFO inventory (gains) losses associated with our titled manufactured inventory in Hawaii);
- 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; beginning with financial results reported for the second quarter of 2022, this 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).

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 June 30,		Six Months Ended June 30,	
	2022	**2021**	**2022**	**2021**
Net income (loss)	$ 149,125	$ (108,958)	$ 12,074	$ (171,185)
Inventory valuation adjustment	(7,557)	29,657	73,096	52,743
LIFO liquidation adjustment	—	2,263	—	4,151
RINs mark-to-market adjustments	78,548	54,158	89,850	131,060
Unrealized loss (gain) on derivatives	(28,607)	1,404	(13,155)	(2,608)
Acquisition and integration costs	—	(352)	63	86
Debt extinguishment and commitment costs	5,672	6,628	5,672	8,135
Severance costs	35	—	2,263	16
Loss (gain) on sale of assets, net	15	510	15	(64,402)
Adjusted Net Income (Loss)	197,231	(14,690)	169,878	(42,004)
Depreciation and amortization	25,583	23,548	49,363	46,428
Interest expense and financing costs, net	18,154	17,186	34,548	35,337
Income tax expense	1,125	607	688	607
Adjusted EBITDA (1)	$ 242,093	$ 26,651	$ 254,477	$ 40,368

(1) For the three and six months ended June 30, 2022 and 2021, there was no 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 June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Adjusted Net Income (Loss)	$ 197,231	$ (14,690)	$ 169,878	$ (42,004)
Undistributed Adjusted Net Income allocated to participating securities	—	—	—	—
Adjusted Net Income (Loss) attributable to common stockholders	197,231	(14,690)	169,878	(42,004)
Plus: effect of convertible securities	—	—	—	—
Numerator for diluted income (loss) per common share	$ 197,231	$ (14,690)	$ 169,878	$ (42,004)
Basic weighted-average common stock shares outstanding	59,479	59,367	59,449	56,837
Add dilutive effects of common stock equivalents (1)	163	—	195	—
Diluted weighted-average common stock shares outstanding	59,642	59,367	59,644	56,837
Basic Adjusted Net Income (Loss) per common share	$ 3.32	$ (0.25)	$ 2.86	$ (0.74)
Diluted Adjusted Net Income (Loss) per common share	$ 3.31	$ (0.25)	$ 2.85	$ (0.74)

(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 and six months ended June 30, 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; beginning in 2022, this also includes the FIFO inventory (gains) losses associated with our titled manufactured inventory in Hawaii);
- 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; beginning with financial results reported for the second quarter of 2022, this 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 June 30, 2022			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	$ 168,798	$ 15,898	$ 5,525	$ (16,192)
Depreciation and amortization	16,979	5,211	2,600	793
Inventory valuation adjustment	(7,557)	—	—	—
RINs mark-to-market adjustments	78,548	—	—	—
Unrealized loss (gain) on derivatives	(28,607)	—	—	—
Acquisition and integration costs	—	—	—	—
Severance costs	3	4	22	6
Loss (gain) on sale of assets, net	—	(12)	—	27
Other income (loss), net	—	—	—	47
Adjusted EBITDA (1)	$ 228,164	$ 21,101	$ 8,147	$ (15,319)

	Three Months Ended June 30, 2021			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	$ (99,119)	$ 14,542	$ 12,651	$ (12,575)
Depreciation and amortization	14,561	5,377	2,874	736
Inventory valuation adjustment	29,657	—	—	—
LIFO liquidation adjustment	2,263	—	—	—
RINs mark-to-market adjustments	54,158	—	—	—
Unrealized loss (gain) on derivatives	1,404	—	—	—
Acquisition and integration costs	—	—	—	(352)
Loss (gain) on sale of assets, net	1,664	(21)	(1,133)	—
Other income (loss), net	—	—	—	(36)
Adjusted EBITDA (1)	$ 4,588	$ 19,898	$ 14,392	$ (12,227)

	Six Months Ended June 30, 2022			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	$ 50,473	$ 25,750	$ 9,570	$ (32,860)
Depreciation and amortization	32,312	10,298	5,291	1,462
Inventory valuation adjustment	73,096	—	—	—
RINs mark-to-market adjustments	89,850	—	—	—
Unrealized loss (gain) on derivatives	(13,155)	—	—	—
Acquisition and integration costs	—	—	—	63
Severance costs	40	4	22	2,197
Loss on sale of assets, net	—	(12)	—	27
Other income (loss), net	—	—	—	49
Adjusted EBITDA (1)	$ 232,616	$ 36,040	$ 14,883	$ (29,062)

	Six Months Ended June 30, 2021			
	Refining	Logistics	Retail	Corporate and Other
Operating income (loss) by segment	$ (189,984)	$ 24,619	$ 62,006	$ (25,804)
Depreciation and amortization	28,625	10,631	5,534	1,638
Inventory valuation adjustment	52,743	—	—	—
LIFO liquidation adjustment	4,151	—	—	—
RINs mark-to-market adjustments	131,060	—	—	—
Unrealized loss (gain) on derivatives	(2,608)	—	—	—
Acquisition and integration costs	—	—	—	86
Severance costs	—	16	—	—
Loss (gain) on sale of assets, net	(19,595)	(21)	(44,786)	—
Gain on curtailment of pension obligation	1,802	228	2	—
Other income (loss), net	—	—	—	25
Adjusted EBITDA (1)	$ 6,194	$ 35,473	$ 22,756	$ (24,055)

(1) For the three and six months ended June 30, 2022, there was no LIFO liquidation adjustment, impairment expense, or gain on curtailment of pension obligation. For the three months ended June 30, 2021, there was no impairment expense, severance cost, or gain on curtailment of pension obligation. For the six months ended June 30, 2021, there was no impairment expense.

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 June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Net income (loss)	$ 383	$ 133	$ (32,517)	$ 40,584
Commodity derivative loss (gain)	22,357	761	73,200	1,350
Gain (loss) on settled derivative instruments	(11,625)	(30)	(19,812)	(1,167)
Interest expense and loan fees	3,715	3,013	7,871	7,203
Non-cash preferred dividend	2,640	1,913	4,726	3,742
Depreciation, depletion, amortization, and accretion	5,990	8,777	12,135	16,497
Exploration and geological and geographical expense	—	308	—	342
Bonus accrual	—	27	—	602
Loss (gain) on disposal of assets	724	4	724	(39)
Expired acreage (non-cash)	44	246	47	338
Total Adjusted EBITDAX	$ 24,228	$ 15,152	$ 46,374	$ 69,452